Construction Completion Report

Beal Mountain Mine
Pond Removal and Run-On Control
Reclamation Project
Silver Bow County, Montana

Prepared for:

Montana Department of Environmental Quality

Abandoned Mine Lands Bureau
1100 Last Chance Gulch
Helena, MT 59620

Prepared by:

USDA Forest Service
1820 Meadowlark Lane
Butte, MT 59701
Phone (406) 494-2147
Fax (406) 494-0269

and

Tetra Tech
303 Irene St.
Helena, MT 59601
Phone (406) 443-5210
Fax (406)449-3729

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TABLE OF CONTENTS

Page

1.0 INTRODUCTION 1
1.1 Project Location 1
1.2 Goals and Objectives 1
1.3 Project Description 1
1.4 Construction Plans and Specifications 2

2.0 PRECONSTRUCTION 3
2.1 Bid Award and Preconstruction Conferences 3
2.2 Contractor Personnel 3
2.3 Quality Assurance (QA) 3

3.0 CONSTRUCTION 4
3.1 Construction Management 5
3.1.1 Communication with Contractor 5
3.1.2 Submittals 5
3.1.3 Weather Days 6
3.1.4 Project Closeout 6
3.2 Description of Design Changes During Construction 6
3.2.1 Run-On Control Ditch Alignment Adjustment 6
3.2.2 Quantities Completed 7
3.3 Project Costs 9
3.3.1 Work Directive Changes 10
3.3.2 Change Orders 11
3.3.3 Total Project Costs 12

4.0 QUALITY ASSURANCE 13

5.0 ISSUES/LESSONS LEARNED 14
5.1 Pre-Construction Surveying 14
5.2 Daily Construction Oversight 14

6.0 REFERENCES 15

LIST OF TABLES

TABLE 1 Construction Milestones 5
TABLE 2 Project Submittals 6
TABLE 3 Quantities Completed 7
TABLE 4 Work Directive Change Summary 11
TABLE 5 Change Order Summary 11
TABLE 6 Analysis of Engineering and Construction Costs 12

LIST OF APPENDICES

APPENDIX A AS-BUILT DRAWINGS
APPENDIX B BID TABULATIONS
APPENDIX C CONTRACT DOCUMENTS
APPENDIX D PRE-CONSTRUCTION MEETING
APPENDIX E DAILY CONSTRUCTION LOGS
APPENDIX F SUBMITTALS
APPENDIX G PROJECT CLOSEOUT DOCUMENTS
APPENDIX H PAYMENT REQUESTS
APPENDIX I WORK DIRECTIVES AND CHANGE ORDERS
APPENDIX J CONSTRUCTION PHOTOGRAPHS AND PHOTO LOG

1.0 INTRODUCTION

Tetra Tech, Inc. (Tetra Tech) received Task No. 57, pursuant to DEQ Contract No. 407036, from the Montana Department of Environmental Quality (DEQ), Abandoned Mine Lands Bureau to complete a reclamation design, prepare a construction bid document package (Contract Documents), and provide administrative and technical support for the Beal Mountain Mine Pond Removals and Run-On Control Reclamation Project (Project). This construction report includes documentation of the construction activities implemented during the Project.dr

1.1 PROJECT LOCATION

The Beal Mountain Mine is located in the headwaters of German Gulch in the Pioneer Mountains, Silver Bow County, Montana, approximately 16 miles west southwest of Butte and 10 miles southwest of Fairmont (Gregson) Hot Springs (site). The general site location and diversion channel location are displayed in the As-Built Drawings provided in **Appendix A**.

1.2 GOALS AND OBJECTIVES

The goal of the Project was to take positive incremental actions toward returning the area to its pre-mining multiple use status.

Specific Project objectives include:

- Promote highwall stability by constructing surface water diversions and run-on controls above the Main Beal Pit to reduce infiltration into a geotechnically unstable area in the pit highwall known as the “clay/sill slide.”
- Reclaim three (3) pond facilities (Minnesota Pond, located on Minnesota Ridge, and the Stormwater and Contingency Ponds, located adjacent to German Gulch) to restore pre-mining topography and to reduce operations and maintenance costs at the site.

The purpose of this report is to summarize the construction activities of the Project.

1.3 PROJECT DESCRIPTION

The Beal Mountain Mine completed open pit mining operations in 1997 and gold recovery from the heap leach pad in 1999, with reclamation of the mine disturbance continuing through 2003. With a filing of bankruptcy in 1998, and exhaustion of bonding funds to compete reclamation, the United States Department of Agriculture – Forest Service (USDA-FS), in cooperation with DEQ, became the lead agency responsible for final mine closure. As the land management agency, the USDA-FS placed the mine closure under its CERCLA (Comprehensive Environmental Responsibility, Compensation, and Liability Act) authority and determined that the non-time-critical removal action process would be followed for mine closure. The USDA-FS goal for the site is to close the mine and allow the area to return to multiple use status.

The Project consisted of the following work items:

1. Removal of the Minnesota Pond, including pond dewatering, debris removal/disposal, and regrading of the Pond surface.

2. Removal of the Stormwater Pond, including debris removal/disposal and regrading of the Pond surface.
3. Removal of the Contingency Pond, including debris removal/disposal and regrading of the Pond surface.
4. Placement of imported cover soil at the Stormwater and Contingency Pond work areas.
5. Removal of the check-dam in German Gulch and restoration of the stream channel.
6. Construction of a lined run-on control ditch to intercept flows above the main Beal Pit highwall and divert them away from the clay/sill slide area.
7. Revegetation of all areas disturbed by construction. Each area was fertilized, seeded, and covered with biodegradable erosion control mat.

1.4 CONSTRUCTION PLANS AND SPECIFICATIONS

The Project plans (Tetra Tech, 2012) consisted of nine (9) plan sheets included in **Appendix C**. As part of the Contract Documents, construction specifications were developed as Special Provisions and Technical Specifications.

2.0 PRECONSTRUCTION

2.1 BID AWARD AND PRECONSTRUCTION CONFERENCES

On July 18, 2012, sealed construction bids were opened at the Last Chance Gulch DEQ office in Helena, MT. The low bidder was Schnell Excavation, Inc. (Schnell), of Butte, MT with a bid of $68,049.66, including Alternative Bid Item 1, Run-On Controls. Three (3) other contractors submitted bids with prices of $81,436.10, $168,000.00, and $186,826.16. The bid tabulations are included as **Appendix B.** The contract was awarded to Schnell and the Notice of Award was issued on July 27, 2012. Contract related documents including the Notice of Award are presented in **Appendix C**.

A preconstruction meeting was held on August 9, 2012, at the Fairmont Hot Springs parking lot. Attending were representatives from Schnell, DEQ, USDA-FS, and Tetra Tech. The conference included a general discussion on the contractors bid price, site access, contractor's equipment, proposed Project approach and schedule, estimated startup date, work hours, Project construction oversight, key personnel, contract documents, Project health and safety, and overall Project priorities. During the meeting it was emphasized that German Gulch Road would be used as the main access road to the site and the private road through Dave Smith's property would only be used to transport equipment and materials to and from the site. The preconstruction meeting minutes are provided in **Appendix D**.

2.2 CONTRACTOR PERSONNEL

The following were key personnel for Schnell for the Project:

- Project Manager and Construction Superintendent: Larry Schnell
- Project Quality Control Manager: Larry Schnell
- Project Health and Safety Manager: Larry Schnell

2.3 QUALITY ASSURANCE (QA)

Tetra Tech was responsible for the engineering design and preparing the Contract Documents. General construction oversight and contract administration was conducted by USDA-FS, Tetra Tech and DEQ. Dan Brown and Associates provided construction staking for the run-on control ditch and topographic surveys of the reclaimed ponds for volume calculations. The following personnel were involved in the Project QA:

DEQ:	Pebbles Opp, Project Manager
USDA-FS:	Sonny Thornborrow, Resident Project Representative (Construction Inspector)
Tetra Tech:	Michael Hatten, Project Engineer
Brown and Associates:	Dan Brown, Project Surveyor Chad Ball, Project Surveyor

3.0 CONSTRUCTION

DEQ issued the Notice of Award to Schnell on July 27, 2012. The Notice to Proceed was issued on August 9, 2012, requiring work to begin no later than August 14, 2012. Equipment inspection and mobilization to the site began on August 13, 2012. Construction of the Project began on August 14, 2012, with a Contract Time of 30 consecutive calendar days, in accordance with the Contract Documents. A total of 42 additional contract days were added as described in Section 3.3.1 of this report.

Reclamation of the Minnesota Pond began on August 14, 2012, with dewatering of the Pond and removal of the perimeter fencing. Material originally excavated for Pond construction was then regraded to match the pre-mining topography as shown on Sheet 3 of the as-built drawings, **Appendix A**.

Work was then initiated concurrently at the Stormwater and Contingency Ponds. Schnell regraded a portion of the Stormwater Pond but chose to leave some material for potential use as backfill at the Contingency Pond in the event there was a deficit of material there. Work then focused on the Contingency Pond with removal of the pond liner and fencing materials. On August 23, 2012, Work Directive Change No. 2 was signed. This added removal of the check dam associated with the Contingency Pond and restoration of the German Gulch stream channel. Pond regrading and stream channel restoration work was completed on September 5, 2012.

Schnell then returned to the Stormwater Pond and regraded some of the material intentionally left there. Excavation of the run-on control ditch started on September 12, 2012. Liner was placed in the ditch on September 27, 2012. Imported cover soil was used as vegetative backfill in the ditch which was then fertilized, seeded, and covered with turf-reinforcement mat.

After completing the run-on control ditch, Schnell returned to the Stormwater Pond and continued regrading until the surface was acceptable to the QA team. Finally, seeding and fertilizing was completed by subcontractor Ueland-Western Reclamation. Schnell finished the Project by installing erosion control mat over all disturbed areas. **Table 1** lists construction milestones accomplished during the Project.

TABLE 1 Construction Milestones	
Milestone	**Date**
Bid Opening	July 18, 2012
Notice of Award	July 27, 2012
Notice to Proceed	August 9, 2012
Construction Startup	August 14, 2012
Completion of Minnesota Pond Regrading	August 21, 2012
Completion of German Gulch Check Dam Removal and Stream Restoration	August 29, 2012
Completion of Contingency Pond Regrading	September 5, 2012
Completion of Run-On Control Ditch Excavation	September 24, 2012
Completion of Run-On Control Ditch liner installation, vegetative backfill, and TRM installation	October 4, 2012
Completion of Stormwater Pond Regrading	October 4, 2012
Completion of cover soil placement at Stormwater and Contingency Ponds	October 11, 2012
Completion of fertilizing and seeding at Minnesota, Stormwater, and Contingency Ponds	October 17, 2012
Completion of erosion control mat installation	October 23, 2012
Contractor's Certificate of Completion	October 25, 2012
Final Inspection	October 25, 2012
Certificate of Acceptance	November 2, 2012

Daily construction logs and photographs detailing construction activities are included in **Appendix E**. In addition to the construction logs, a table summarizing construction equipment is also included in **Appendix E**. Additional Project photographs are included electronically in **Appendix J**.

3.1 CONSTRUCTION MANAGEMENT

A functional line of communication was established between Schnell and the QA team. Routine communication was verbal or through email. Change orders and design modifications were documented by written communication and submittals were handled through a standard engineer review process.

3.1.1 Communication with Contractor

Most communication with Schnell was handled informally and the need for written communication was limited to work directives and change orders.

3.1.2 Submittals

Submittals were handled in accordance with standard engineer review. **Table 2** lists Project submittals with dates submitted and dates approved for the Project. Copies of the material submittals are found in **Appendix F**.

TABLE 2 Project Submittals		
Submittal	**Date Received**	**Date Approved**
HAZWOPER Certs	8/7/2012	8/7/2012
Health and Safety Plan	8/7/2012	*
Construction Schedule	8/7/2012	8/7/2012
Contractor Documents and Resumes	8/7/2012	8/7/2012
Dust, Traffic, Weed, SWECP Plans	8/7/2012	8/7/2012
List of Subcontractors	8/7/2012	8/23/2012
Quality Control Plan	8/7/2012	8/7/2012
Imported Cover Soil	9/21/2012	9/25/12
Straw Wattles	8/15/2012	8/15/2012
Turf Reinforcement Mat	8/15/2012	8/15/2012
Erosion Control Mat	8/15/2012	8/15/2012
60-mil Geomembrane Liner	8/15/2012	8/15/2012
Revised Construction Schedule	9/28/2012	9/28/2012
Seed Submittal	10/17/2012	10/18/2012
Fertilizer Submittal	10/17/2012	10/18/2012

*Neither Approved or Disapproved

3.1.3 Weather Days

No weather days were requested for the Project.

3.1.4 Project Closeout

Construction of the Project was completed on October 23, 2012. The Contractor's Certificate of Completion was executed on October 25, 2012. The Certificate of Acceptance for the Project was executed on November 2, 2012. **Appendix G** contains copies of the Contractor's Certificate of Completion, Affidavit on Behalf of Contractor, Consent of Surety Company to Final Payment, and Certificate of Acceptance.

3.2 DESCRIPTION OF DESIGN CHANGES DURING CONSTRUCTION

In general, construction was accomplished according to plan; however, noteworthy changes to the design are described below. Construction components are displayed in the As-Built Drawings included in **Appendix A**.

3.2.1 Run-On Control Ditch Alignment Change – Centerline and Vertical Control Adjustments

On August 13, 1012, Brown and Associates (Brown) attempted to stake the run-on control ditch according to the channel alignment table on Sheet 9 of the Contract Documents. Once in the field, Brown encountered serious discrepancies between the elevations in the channel alignment table and the true elevations on the ground. Additionally, the horizontal alignment (i.e. channel centerline) was situated in the middle of the access road. Due to these problems, a decision was made by the QA team to move the centerline of the ditch to the toe of the road cut slope. Additionally, no cut and fill staking was completed because the channel centerline had been moved and the vertical controls were unusable. Therefore, Schnell was instructed by the

QA team to "field-fit" the ditch using the typical drawing shown on Sheet 7 of the Contract Documents as a guide. Ultimately, the field fitting process resulted in a ditch that was different from the design. The constructed ditch is generally shallower than the typical drawing and does not have the gradient depicted on the design drawing. This design change is displayed on Sheet 6 of the As-Built Drawings (**Appendix A**).

3.2.2 Quantities Completed

Work items were bid on a lump sum and unit price basis. Payment was made based on the actual quantity of each bid item completed. **Table 3** displays the bid items, bid item unit prices, units of measurement, and estimated and actual quantities. Actual quantities were determined by construction oversight personnel and topographic surveys.

TABLE 3
Quantities Completed

BID ITEM QUANTITIES						
Bid Item	**Description**	**Unit**	**Unit Price**	**Estimated Quantity**	**Actual Quantity**	**Quantity Difference**
1	Mobilization, Demobilization, Bonding, and Insurance	LS	$3943.00	1	1	0
2	**Minnesota Pond Removal**					
2-A	Pond Dewatering	LS	$500.00	1	1	0
2-B	Debris Removal and Disposal	Ton	$125.00	4	13.9	9.9
2-C	Strip and Stockpile Topsoil	CY	$15.00	150	179	+29
2-D	Regrade Pond Area	CY	$2.00	3900	3702	-198
2-E	Replace and Grade Topsoil	CY	$10.00	150	179	+29
2-F	Fertilize and Seed	AC	$723.60	1.25	0.98	-0.27
2-G	Erosion Control	SY	$1.98	5111	4731	-380
2-H	Straw Wattles	LF	$2.30	290	0	-290
3	**Storm Water Pond Removal**					
3-A	Remove and Stockpile Riprap	LS	$400.00	1	1	0
3-B	Debris Removal and Disposal	Ton	$400.00	0.5	0	-0.5

3-C	Regrade Pond Area	CY	$2.00	1435	839	-596
3-D	Fertilize and Seed	AC	$723.60	0.5	0.5	0
3-E	Erosion Control	SY	$1.98	2138	2542	+404
3-F	Straw Wattles	LF	$2.30	365	392	+27
4	**Contingency Pond Removal**					
4-A	Debris Removal and Disposal	Ton	$134.00	3	9.5	+6.5
4-B	Regrade Pond Area	CY	$2.00	700	1202	+502
4-C	Fertilize and Seed*	AC	$723.60	0.5	0.7	+0.2
4-D	Erosion Control*	SY	$1.98	1784	3286	+1502
4-E	Straw Wattles	LF	$2.30	260	357	+97
Alternative 1	**Run-On Controls**					
A-1	Regrade Access Road	LS	$500.00	1	1	0
A-2	Excavate Run-On Control Ditch	CY	$18.67	150	209	+59
A-3	Run-On Control Ditch Construction	LF	$33.13	634	607	-27
A-4	Fertilize and Seed	AC	$723.60	0.5	0.11	-0.4
WORK DIRECTIVE QUANTITIES						
Work Item No.	**Work Directive No. 2, Check Dam Removal**					
1	Clear and Grub	LS	$900.00	1	1	0
2	Check Dam Dewatering	LS	$2200.00	1	1	0
3	Check Dam Sediment Removal and Regrading	LS	$3000.00	1	1	0
4	Check Dam Structure Removal	LS	$1200.00	1	1	0

5	Channel Replacement	LF	$116.00	66	73	0
6	Access Road Reclamation	CY	$227.00	30	30	0
Work Item No.	**Work Directive No. 4, Imported Cover Soil**					
Storm Water Pond, Contingency Pond, and Check Dam Removal Area		CY	$21.00	601	760	+159

*Includes check dam removal work area (Work Directive Change No. 2)

Notable bid items that varied significantly from the estimated bid quantity are described below:

Bid Item 2-B, Debris Removal and Disposal at Minnesota Pond – this bid item was significantly higher than the estimate due to a larger amount of debris encountered and removed from the Minnesota Pond.

Bid Item 2-H, Straw Wattles at Minnesota Pond – no wattles were installed at the Minnesota Pond because of very low potential for erosion and because there are no live water sources near the Pond.

Bid Item 3-B, Debris Removal/Disposal at Stormwater Pond – Schnell agreed to consolidate the small amount of debris from this Pond with a load of debris from the Contingency Pond and not request payment for this item.

Bid Item 4-A, Debris Removal and Disposal at Contingency Pond - this bid item was significantly higher than the estimate because it includes debris that was removed at the check dam removal work area

Bid Item 4-B, Regrade Pond Area at Contingency Pond – this bid item was significantly higher than the estimate because it includes additional regrading for the check dam removal work area.

Bid Item 4-D, Erosion Control Mat at Contingency Pond – this bid item was significantly higher than the estimate because it includes erosion control mat placed at the check dam removal work area.

Bid Item A-4, Fertilize and Seed Run-On Control Ditch – the amount of disturbance at the run-on control ditch work area was much less than anticipated in the engineering design.

3.3 PROJECT COSTS

Schnell's base bid for the Project contract was $68,049.66. A total of five (5) work directives were issued for the Project which added work to the contract. These changes, in combination with the reconciliation of the contract quantities, increased the overall contract price by $53,603.82. The total Project construction contract price was $121,653.48. Actual amount paid to Schnell was $120,436.94 after a 1% tax withholding of $1,216.54. Two payments were made to Schnell. These payment requests are presented in **Appendix H**.

3.3.1 Work Directive Changes

Five (5) work directive changes were approved for the Project.

- **Work Directive Change No. 1** - Added the supply and transport of 60 cubic yards of imported cover soil to the run-on control ditch construction area. This change was done in order to provide better quality vegetative backfill for Bid Item A-3, Run-on Control Ditch Construction.

- **Work Directive Change No. 2** - Added the German Gulch Check Dam Removal and Access Road Reclamation work. This change was done in order to fully reclaim the area surrounding the Contingency Pond.

- **Work Directive Change No. 3** - Added additional mobilization costs for Schnell to return equipment to the Stormwater Pond and finish regrading the area. During construction there were two (2) instances where Schnell determined they had finished regrading the Pond as depicted on Sheet 4 of the Contract Documents. The first occasion was on August 24, 2012, when Schnell moved equipment from the Stormwater Pond to the Contingency Pond. The Resident Project Representative (RPR) was not on-site that day to advise Schnell that the Stormwater Pond regrading was unacceptable. Following this incident, Schnell on September 7, 2012, returned to the Stormwater Pond and completed additional regrading work. However, the RPR was once again not on-site and Schnell moved their equipment before the work was inspected. Following inspection on September 11, 2012, it was determined the work was still insufficient despite the additional regrading. Therefore, Schnell was requested to return to the Stormwater Pond for a third time to complete the regrading work. Additional compensation for re-mobilizing a third time was agreed upon by the QA team.

- **Work Directive Change No.4** - Added the supply, transport, and placement of 760 cubic yards of imported cover soil on the Contingency and Stormwater Ponds. The purpose of this change was to increase the success of revegetation efforts. No topsoil was stockpiled at the time of initial pond construction and therefore the topsoil on the regraded ponds was of poor quality.

- **Work Directive Change No. 5** - Added regrading of a portion of the site access road. This change was done in order to provide a suitable driving surface for trucks delivering the imported cover soil.

Table 4 gives a summary of each work directive change. Copies of the work directives are provided in **Appendix I**.

TABLE 4 WORK DIRECTIVE CHANGE SUMMARY					
No.	**Date of Issuance**	**Reason**	**Change in Contract Time**	**Estimated Change in Contract Price**	**Actual Change in Contract Price**
1	8/23/2012	Work Directive No. 1: Supply and transport 60 cubic yards of cover soil for vegetative backfill in the run-on control ditch.	1 day	$900.00	$900.00
2	8/23/2012	Work Directive No. 2: German Gulch Check Dam Removal and Access Road Reclamation	14 days	$21,766.00	$21,766.00
3	9/14/2012	Work Directive No. 3: Remobilize equipment to the Stormwater Pond	3 days	$400.00	$400.00
4	9/28/2012	Work Directive No. 4: Supply, transport, and place cover soil at the Stormwater and Contingency Ponds	8 days	$22,121.00	$25,460.00
5	10/4/2012	Work Directive No. 5: Regrade Access Road	1 day	$500.00	$500.00
TOTAL				**-**	**$49,026.00**

3.3.2 Change Orders

Three (3) change orders were approved for the Project.

- **Change Order No. 1** – Included costs for changes under Work Directive Change Nos. 1, 2, and 3. This change order added 18 calendar days to the contract time to account for the additional work and added $23,066.00 to the contract price.

- **Change Order No. 2** – Included costs for changes under Work Directive Change Nos. 4 and 5. This change order added nine (9) calendar days to the contract time to account for the additional work and added $25,960.00 to the contract price.

- **Change Order No. 3** – Reconciled the contract quantities, added 15 calendar days to account for delays in scheduling the seeder subcontractor, and added $4,577.82 to the contract price.

Table 5 gives a summary of each change order. Copies of the change orders are provided in **Appendix I.**

TABLE 5 CHANGE ORDER SUMMARY				
No.	**Date Executed**	**Reason**	**Change in Contract Time**	**Change in Contract Price**
1	9/26/2012	Incorporated Work Directive Change Nos. 1, 2, 3 work and costs into the contract	18	$23,066.00
2	11/2/2012	Incorporated Work Directive Change Nos. 4 and 5 work and costs into the contract	9	$25,960.00
3	11/2/2012	Reconciled the contract quantities and associated change in bid item costs into the contract	15	$4,577.82
TOTAL			**42**	**$53,603.82**

3.3.3 Total Project Costs

As discussed above, construction costs for the Project totaled $121,653.48, including change orders. The cost for engineering reclamation design, Contract Document preparation, and construction surveying totaled $24,415.16, which results in a total DEQ Project cost of $146,068.64. An analysis of DEQ's engineering and construction costs for the Project is presented in **Table 6**.

TABLE 6
Analysis of Engineering and Construction Costs

Engineering Services	Amount	Percentage of Total Construction Costs	Percentage of Total Project Costs
Task Order No. 57. DEQ Contract No. 407036. Reclamation Design, Contract Document Preparation, Construction Surveying (Tetra Tech)	$24,415.16	20.1%	16.7%
Construction Oversight (USDA-FS)*	Paid by USDA-FS		
Construction Engineering Support and Administration**	Paid by USDA-FS		
Construction Completion Report (Tetra Tech, USDA-FS, DEQ)***	Paid by USDA-FS		
Total Engineering Costs, DEQ	**$24,415.16**	**20.1%**	**16.7%**
Construction Services	**Amount**	**Percentage Of Total Construction Costs**	**Percentage Of Total Project Costs**
Schnell Excavation, Inc. (Contract 413006)	$68,049.66	55.9%	46.6%
Change Orders	$53,603.82	44.1%	36.7%
Total Construction Costs	**$121,653.48**	**100.0%**	**83.3%**
Total Project Costs (Engineering + Construction)	**$146,068.64**	**-**	**100.0%**

*Construction oversight was provided by USDA-FS personnel.
** USDA-FS paid for all construction engineering services.
***Construction Completion Report was prepared jointly by USDA-FS, DEQ, and Tetra Tech personnel. USDA-FS paid for all Construction Completion Report preparation engineering services.

4.0 QUALITY ASSURANCE

Construction quality control (QC) was the responsibility of Schnell and QC requirements were identified in the Contract Documents. Due to the limited scope and nature of the Project QC requirements were minimal.

Quality assurance (QA) was conducted by Tetra Tech to assure standards presented in the construction drawings and specifications were met. The main QA activities conducted during construction included the following verification:

- Verified all pond debris was removed and disposed of in accordance with the Contract Documents;
- Verified pond reclamation construction in accordance with the Contract Documents;
- Verified run-on control ditch construction in accordance with the Contract Documents and Engineer's direction;
- Verified German Gulch stream channel construction in accordance with the Contract Documents.
- Verified fertilize and seed requirements in accordance with the Contract Documents.
- Verified all materials provided to the Project (straw wattles, turf reinforcement mat, erosion control mat, 60-mil geomembrane liner) were in accordance with the contract specifications and contractor submittals.

5.0 ISSUES/LESSONS LEARNED

5.1 PRE-CONSTRUCTION SURVEYING

The contract drawings for the Run-On Control Ditch construction, (Sheet 6) of the Contract Documents, contained errors in the existing topography. This resulted in having to construct the ditch by “field-fitting” because no vertical and horizontal control staking could be established. Field fitting the ditch proved a cumbersome task and required multiple field meetings between Schnell and the QA team in order to reach agreement on the final product.

For future contracts at Beal Mountain Mine, it is recommended that pre-design surveying be completed for any areas thought to have errors in the existing survey information. Additionally, if a work item is known to require surveys for determining construction quantities (e.g. pond regrading), it may make sense to complete an initial survey as part of the engineering design process instead of waiting until construction is imminent.

5.2 DAILY CONSTRUCTION OVERSIGHT

During the Project there were several days when the RPR was not on-site. In the case of the Stormwater Pond, Schnell twice moved equipment from the Pond after thinking their work was completed. In both instances, Schnell was asked to complete additional regrading after the RPR returned and deemed the work insufficient. The extra time and cost for re-mobilizing equipment could have been avoided if the RPR were on-site every day.

For future contracts, it is recommended that whenever possible the RPR be available every day. Such availability would help minimize delays and/or increased costs that result from not accepting work in a timely manner.

6.0 REFERENCES

Tetra Tech, Inc. 2012. Construction Specifications, Drawings and Bidding Documents, Beal Mountain Mine Pond Removals and Run-On Control Reclamation Project, Beal Mountain Mine.

APPENDIX A

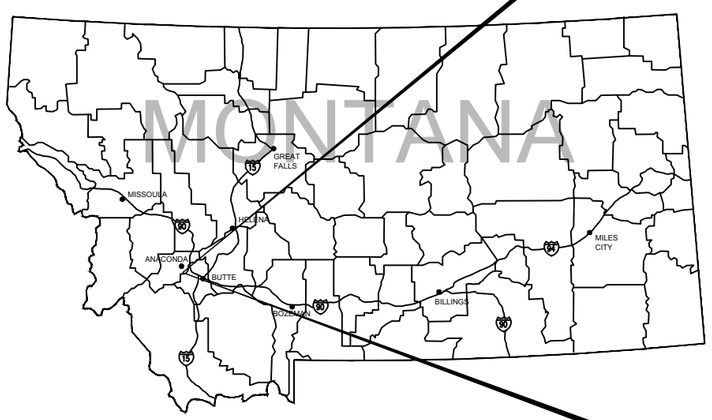
As-Built Drawings

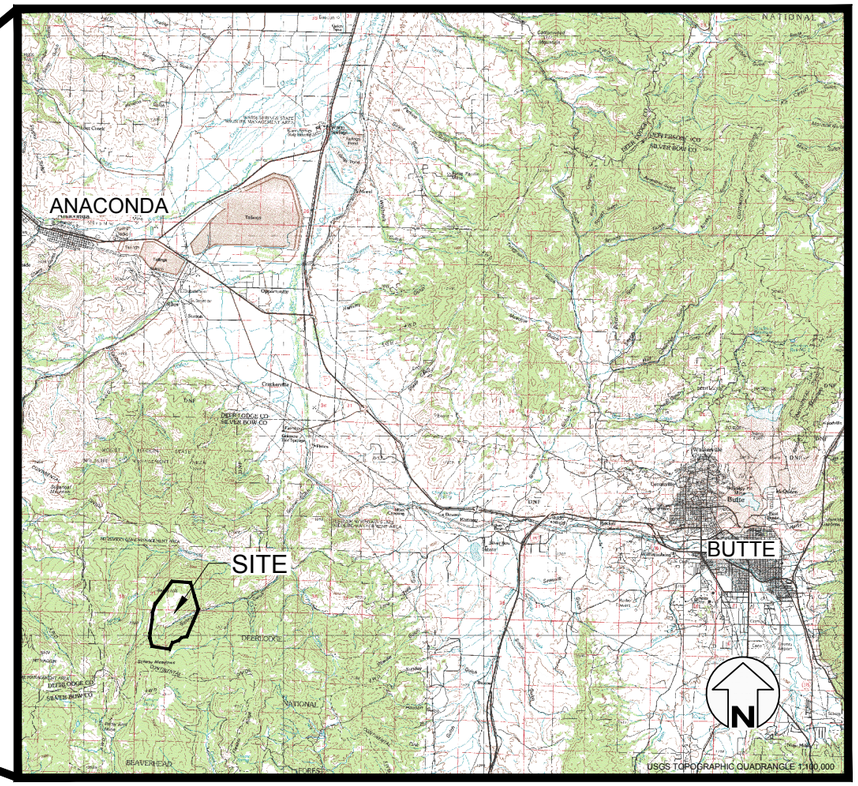
BEAL MOUNTAIN MINE: POND REMOVALS AND RUN-ON CONTROL RECLAMATION PROJECT

SILVER BOW COUNTY, MONTANA
CONTRACT NO. 413006

Sheet Index

Sheet	Title
1	Site Location & Sheet Index
2	Site Plan and Survey Control
3	Minnesota Pond Removal Plan and Profile
4	Storm Water Pond Removal Plan and Profile
5	Contingency Pond Removal Plan and Profile
6	Run-On Control Ditch 0+00 to 6+34
7	Standard Details
8	Drainage Dip Details
9	Run-On Control Ditch Staking Table





Owner
Montana Department of Environmental Quality

Engineer
Tetra Tech
Mike Hatten, PE
303 Irene Street
Helena, MT 59602
406-443-5210

AS BUILT

MONTANA
MWCB

MONTANA
MICHAEL L. HATTEN
No. 16272 PE
LICENSED
PROFESSIONAL ENGINEER

REVISIONS

NO.	DESCRIPTION	DATE	BY:

Montana DEQ Beal Mine Pond Removals and Run-On Control Project

Site Location and Sheet Index

TETRA TECH
303 Irene Street
Helena, MT 59601
PHONE: 406.443.5210

PROJECT NUMBER **114-560346**
DESIGN BY: **MLH**
DRAWN BY: **RED**
CHK'D BY: **MLH**
APPR. BY: **MLH**
DATE: **June 2012**
SHEET **1** OF **9**

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NOTE

1. ALL MATERIALS AND WORKMANSHIP SHALL CONFORM TO THE THESE PLANS AND THE MINE WASTE CLEANUP BUREAU STANDARDS AND SPECIFICATIONS. WHERE A DISCREPANCY BETWEEN THE PLANS AND SPECIFICATIONS OCCUR, THE MORE STRINGENT SHALL APPLY OR AS DETERMINED BY THE ENGINEER.

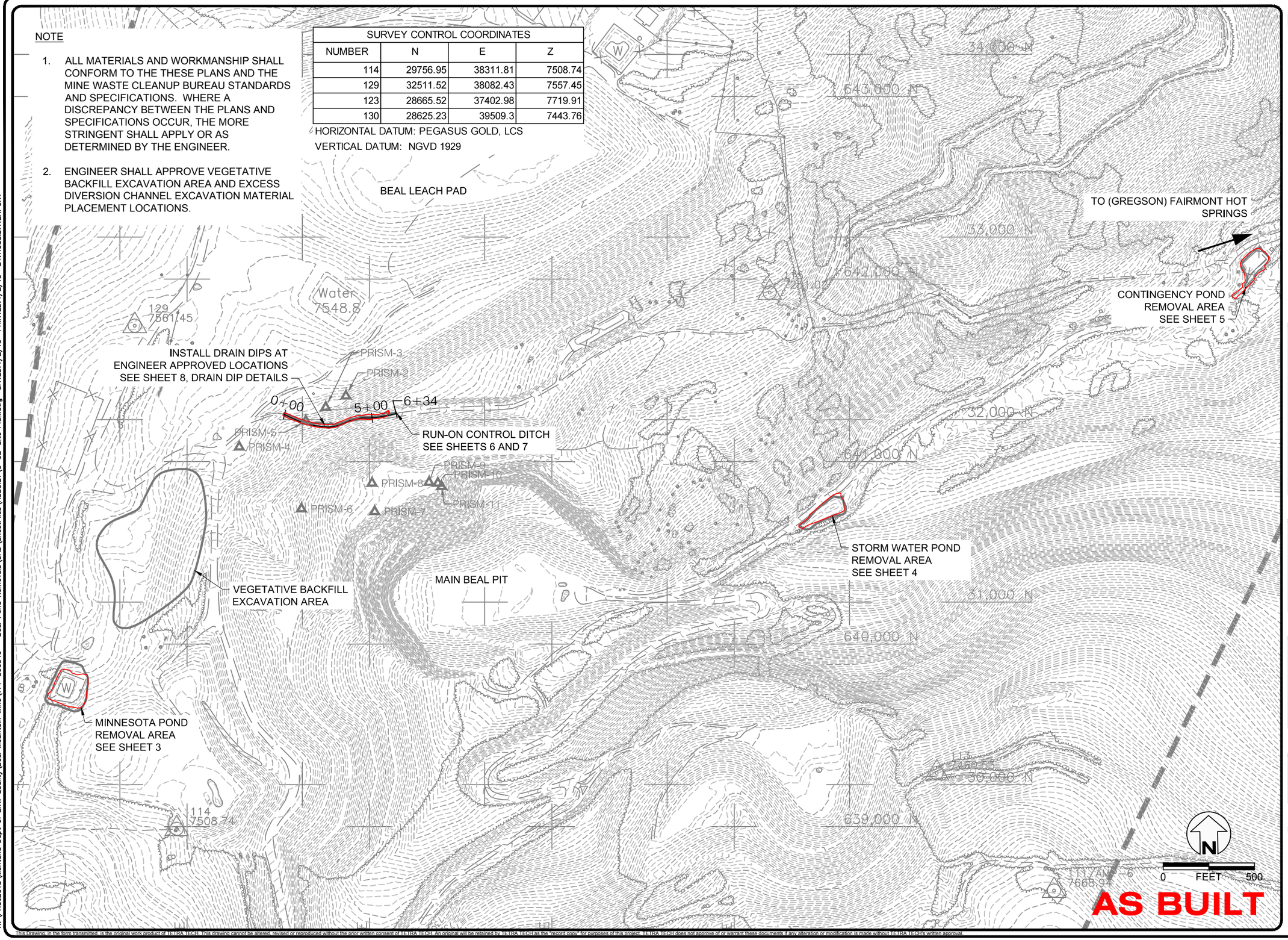
2. ENGINEER SHALL APPROVE VEGETATIVE BACKFILL EXCAVATION AREA AND EXCESS DIVERSION CHANNEL EXCAVATION MATERIAL PLACEMENT LOCATIONS.

SURVEY CONTROL COORDINATES

NUMBER	N	E	Z
114	29756.95	38311.81	7508.74
129	32511.52	38082.43	7557.45
123	28665.52	37402.98	7719.91
130	28625.23	39509.3	7443.76

HORIZONTAL DATUM: PEGASUS GOLD, LCS

VERTICAL DATUM: NGVD 1929



MONTANA MWCB

MONTANA MICHAEL L. HATTEN No. 16272 PE LICENSED PROFESSIONAL ENGINEER

REVISIONS

NO.	DESCRIPTION	DATE	BY:

Montana DEQ Beal Mine Pond Removals and Run-On Control Project

Site Plan and Survey Control

TETRA TECH
303 Irene Street
Helena, MT 59601
PHONE: 406.443.5210

PROJECT NUMBER	114-560346
DESIGN BY:	MLH
DRAWN BY:	RED
CHK'D BY:	MLH
APPR. BY:	MLH
DATE:	June 2012

SHEET 2 OF 9

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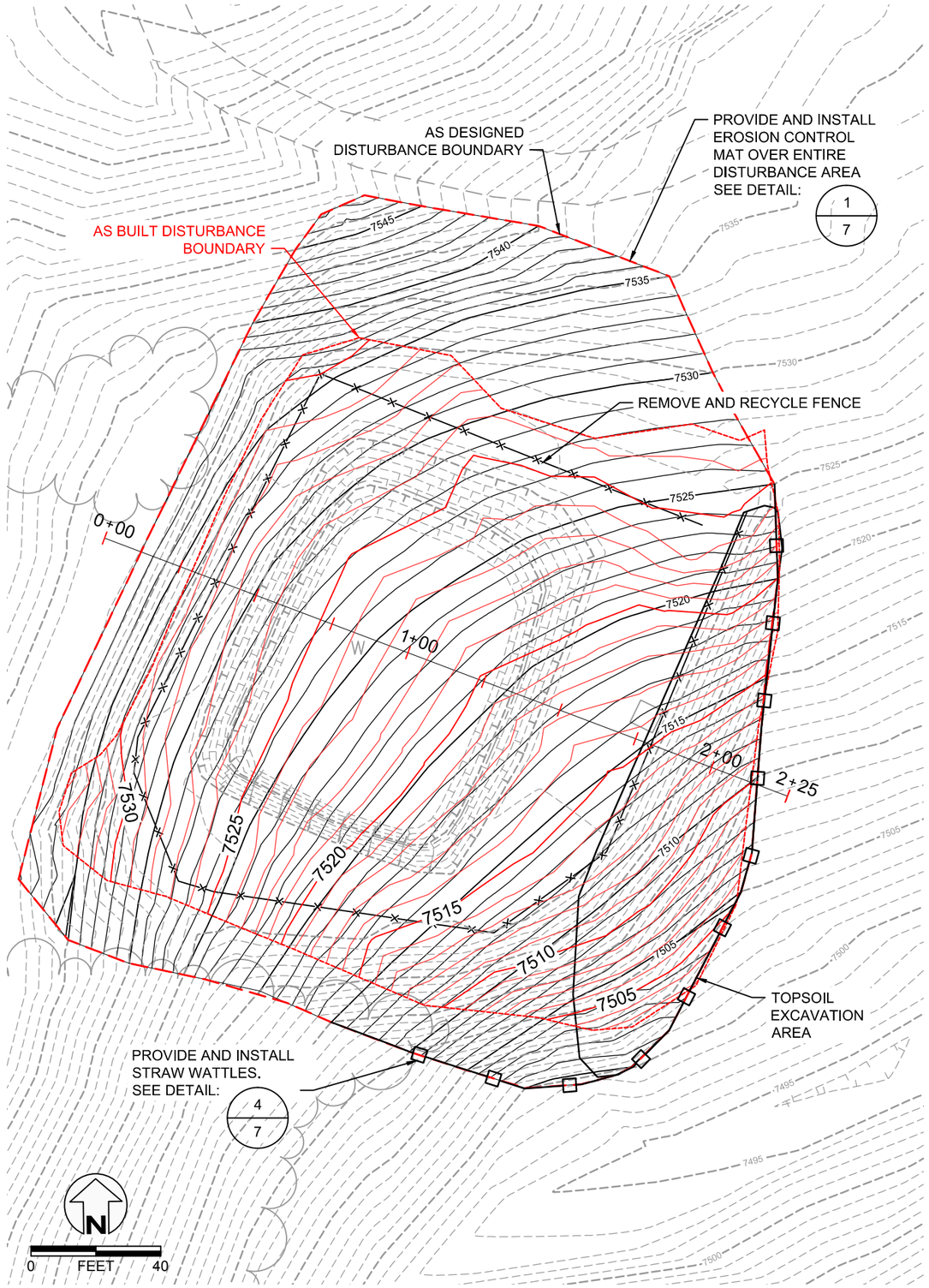

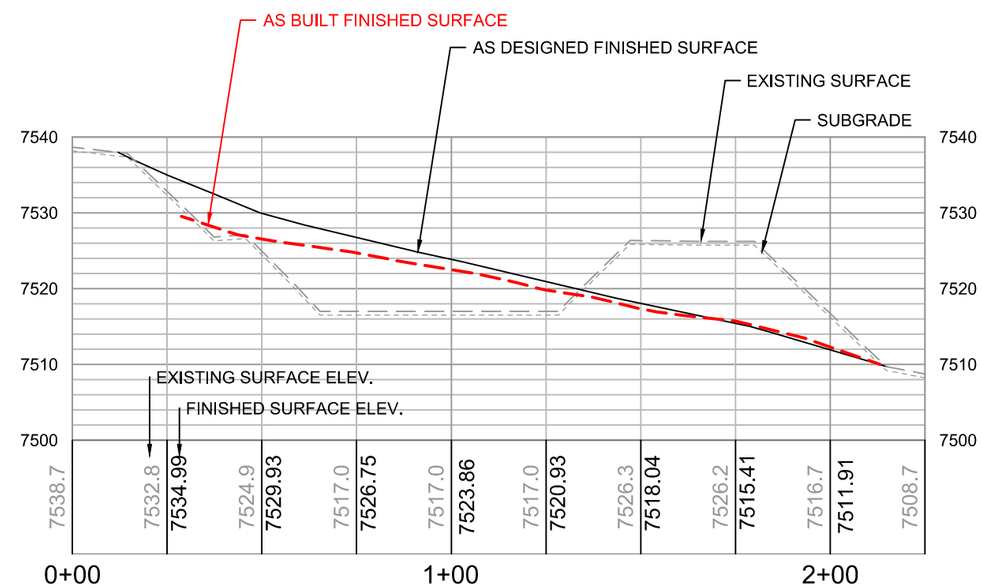

1 / --
PROFILE VIEW - MINNESOTA POND
VERT SCALE = 2X

AS BUILT

MONTANA
MWCB

MONTANA
MICHAEL L. HATTEN
No. 16272 PE
LICENSED
PROFESSIONAL ENGINEER

REVISIONS

NO.	DESCRIPTION	DATE	BY:

Montana DEQ Beal Mine
Pond Removals and Run-On
Control Project

Minnesota Pond Removal
Plan and Profile

TETRA TECH

PROJECT NUMBER **114-560346**
DESIGN BY: **MLH**
DRAWN BY: **RED**
CHK'D BY: **MLH**
APPR. BY: **MLH**
DATE: **June 2012**

SHEET **3** OF **9**

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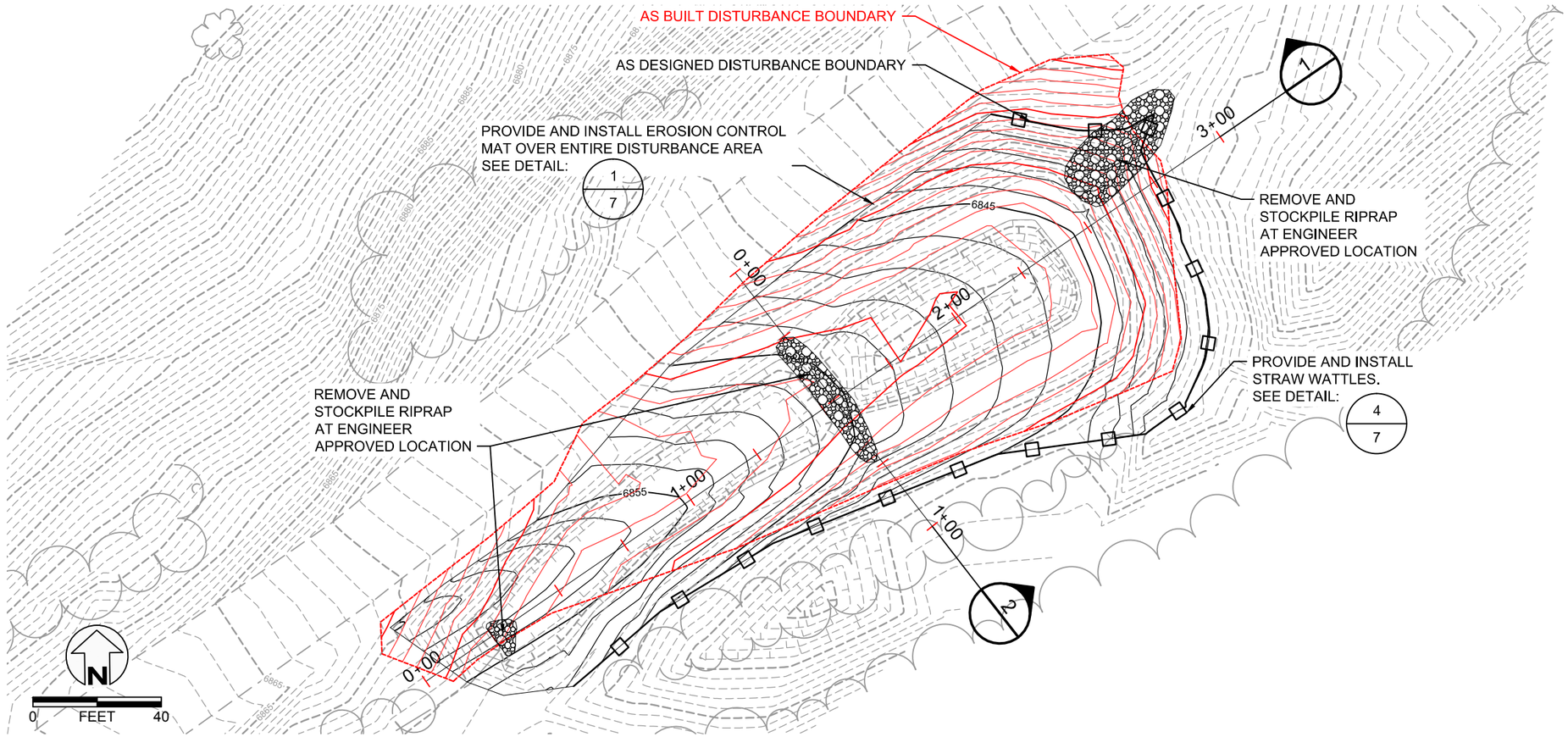
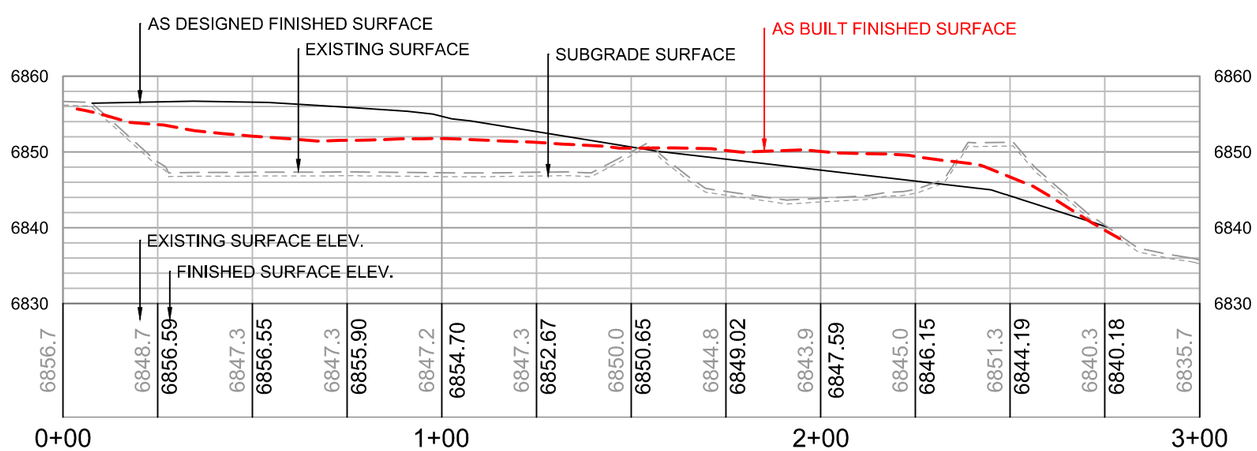
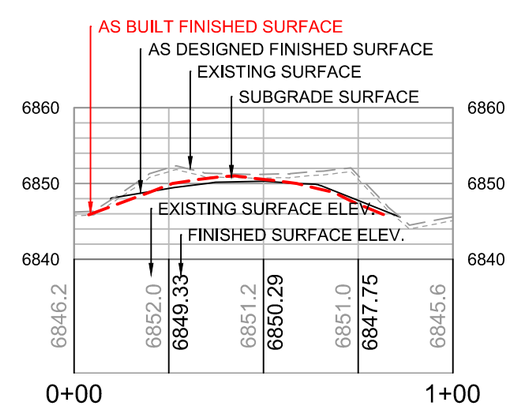




1 -- PROFILE VIEW - STORM WATER
VERT SCALE = 2X



2 -- PROFILE VIEW - STORM WATER
VERT SCALE = 2X

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MONTANA
MWCB

MONTANA
MICHAEL L. HATTEN
No. 16272 PE
LICENSED
PROFESSIONAL ENGINEER

REVISIONS

NO.	DESCRIPTION	DATE	BY:

Montana DEQ Beal Mine Pond Removals and Run-On Control Project

Storm Water Pond Removal Plan and Profile

TETRA TECH

PROJECT NUMBER	114-560346
DESIGN BY:	MLH
DRAWN BY:	RED
CHK'D BY:	MLH
APPR. BY:	MLH
DATE:	June 2012

SHEET 4 OF 9

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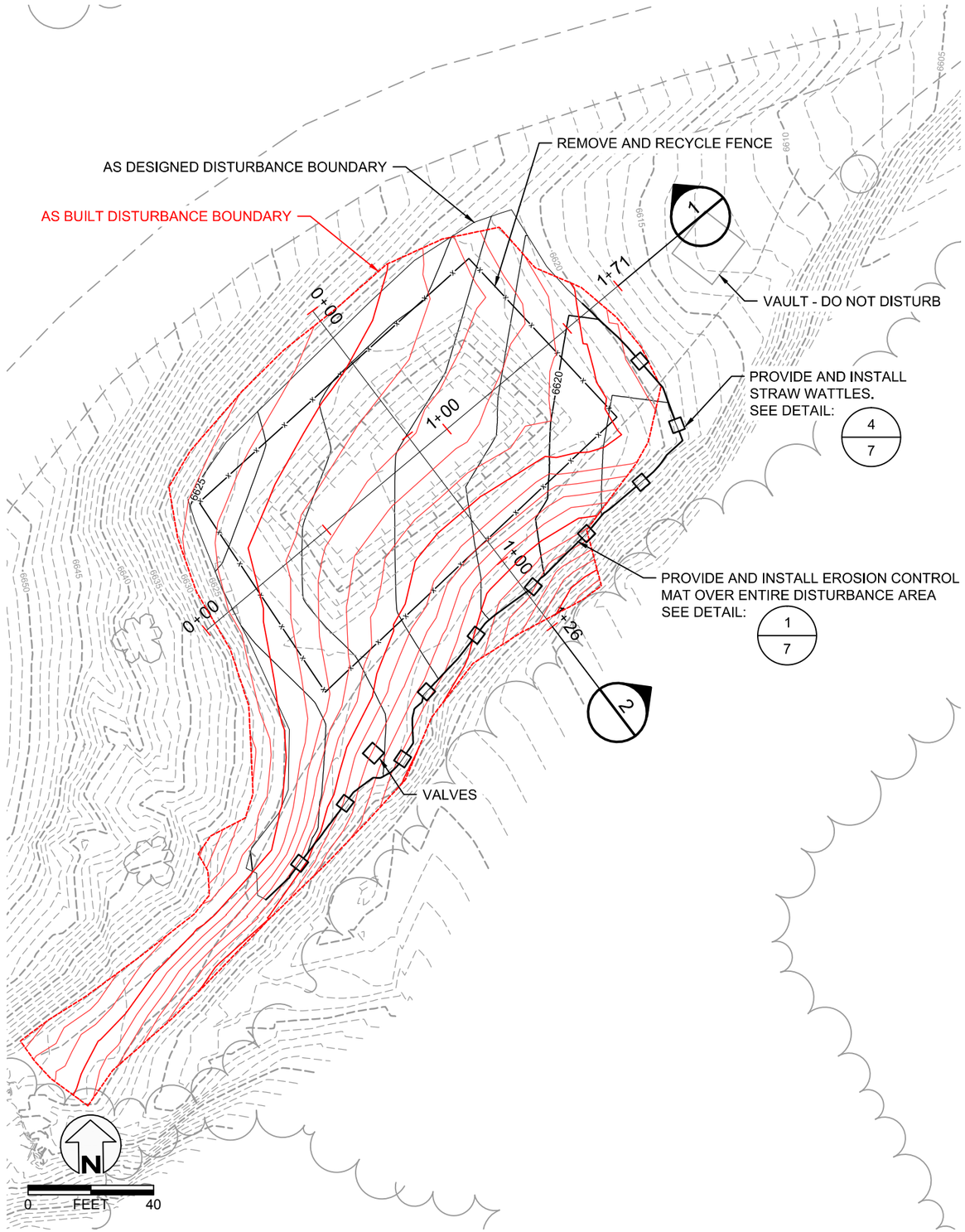
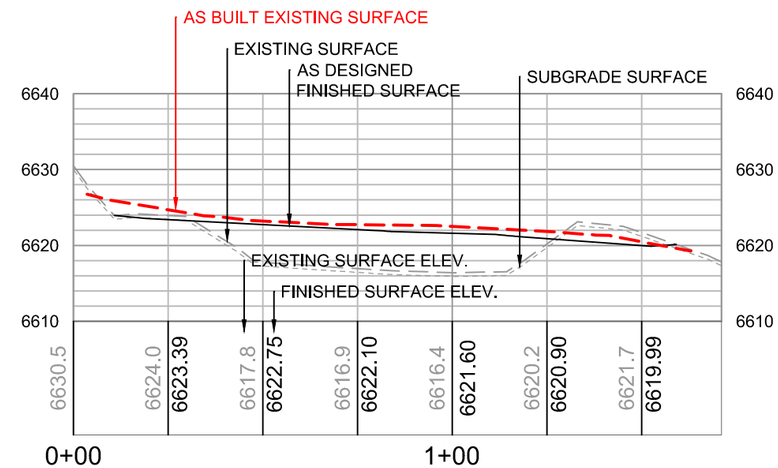
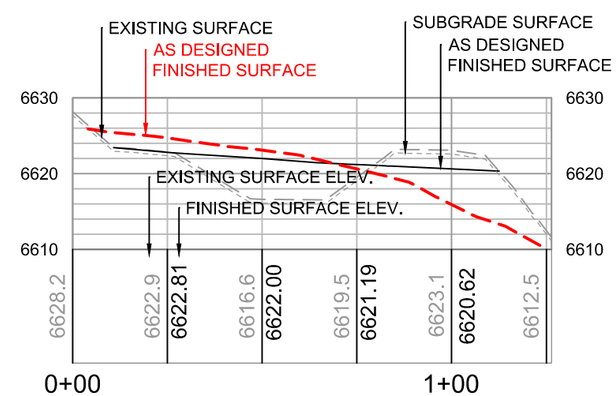




1 -- PROFILE VIEW - CONTINGENCY POND
VERT SCALE = 2X



2 -- PROFILE VIEW - CONTINGENCY POND
VERT SCALE = 2X

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MWCB

MONTANA
MICHAEL L. HATTEN
No. 16272 PE
LICENSED
PROFESSIONAL ENGINEER

REVISIONS

NO.	DESCRIPTION	DATE	BY:

Montana DEQ Beal Mine
Pond Removals and Run-On
Control Project

Contingency Pond Removal Plan and Profile

TETRA TECH

PROJECT NUMBER	114-560346
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DATE:	June 2012

SHEET 5 OF 9

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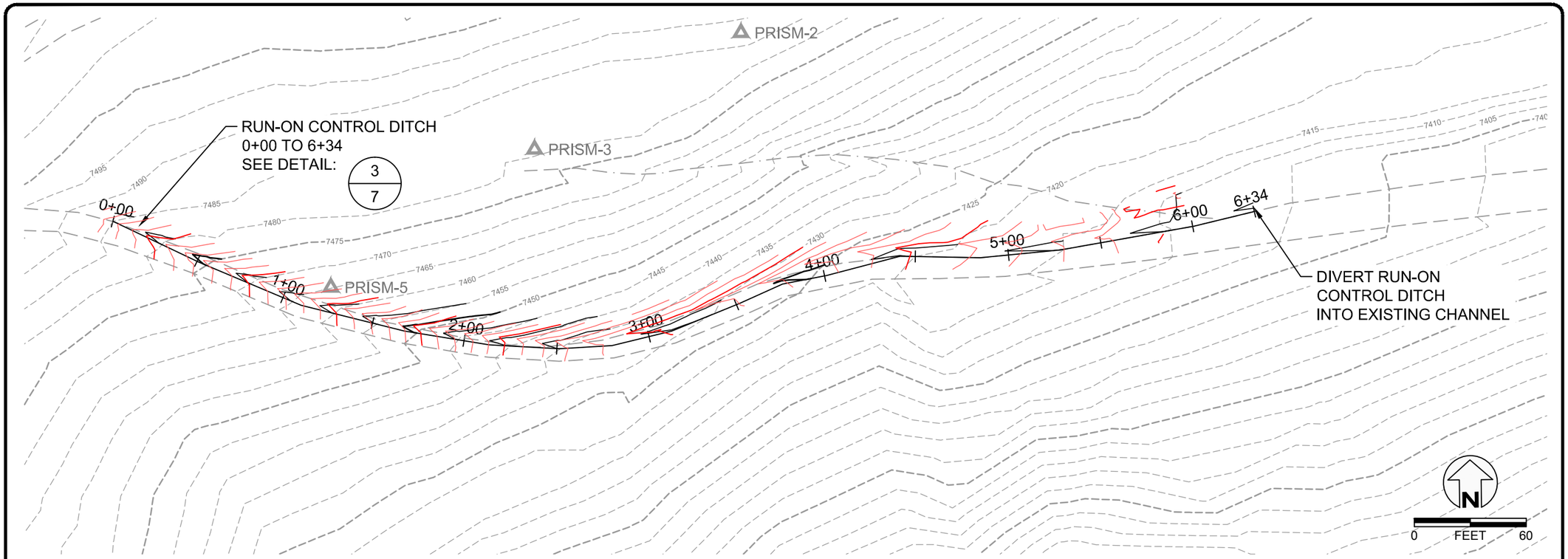

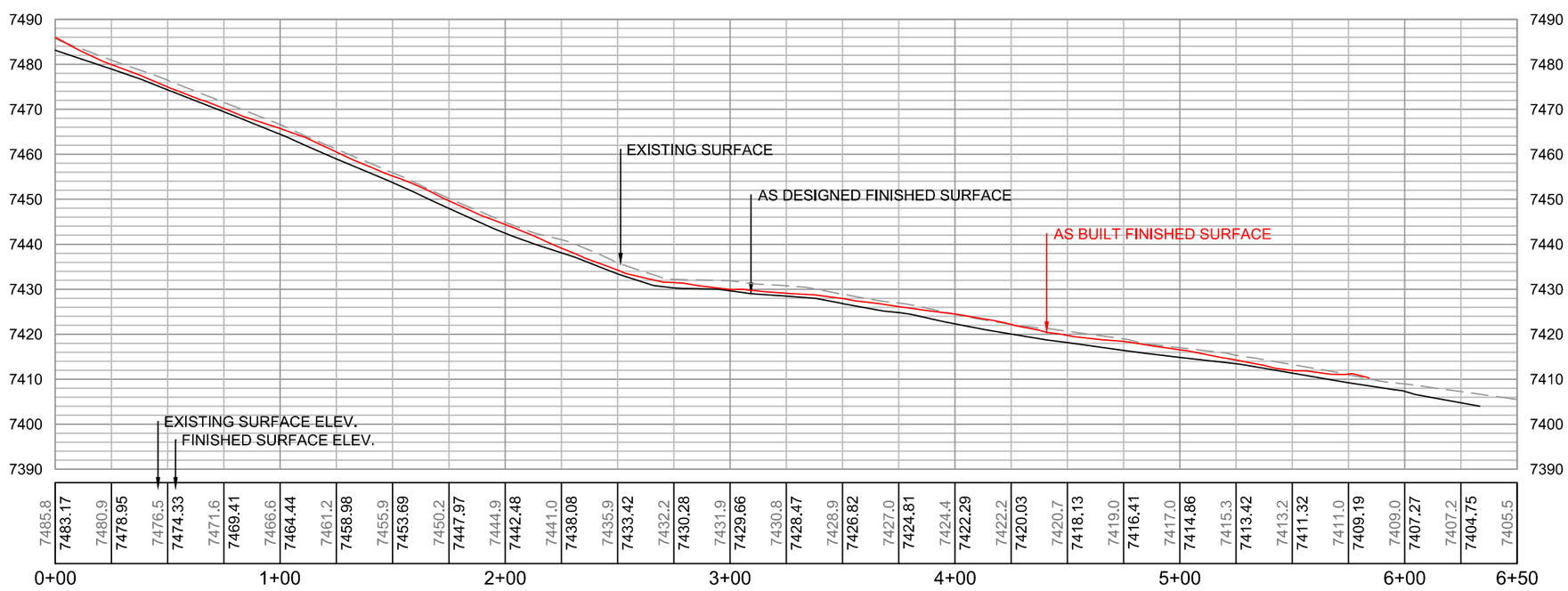

1 / --
PROFILE VIEW - 0+00 TO 6+34
VERT SCALE = 2X

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MONTANA
MWCB

MONTANA
MICHAEL L. HATTEN
No. 16272 PE
LICENSED
PROFESSIONAL ENGINEER

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NO.	DESCRIPTION	DATE	BY:

Montana DEQ Beal Mine Pond Removals and Run-On Control Project

Run-On Control Ditch 0+00 to 6+34

TETRA TECH

PROJECT NUMBER	114-560346
DESIGN BY:	MLH
DRAWN BY:	RED
CHK'D BY:	MLH
APPR. BY:	MLH
DATE:	June 2012

SHEET 6 OF 9

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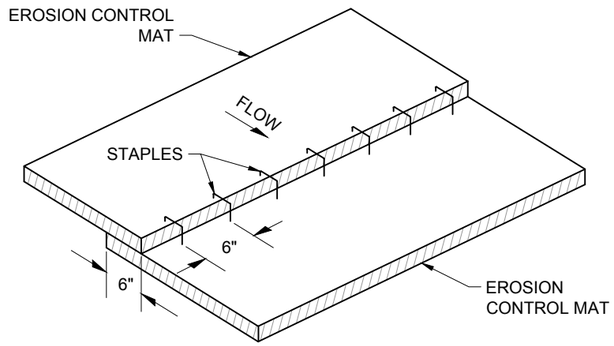
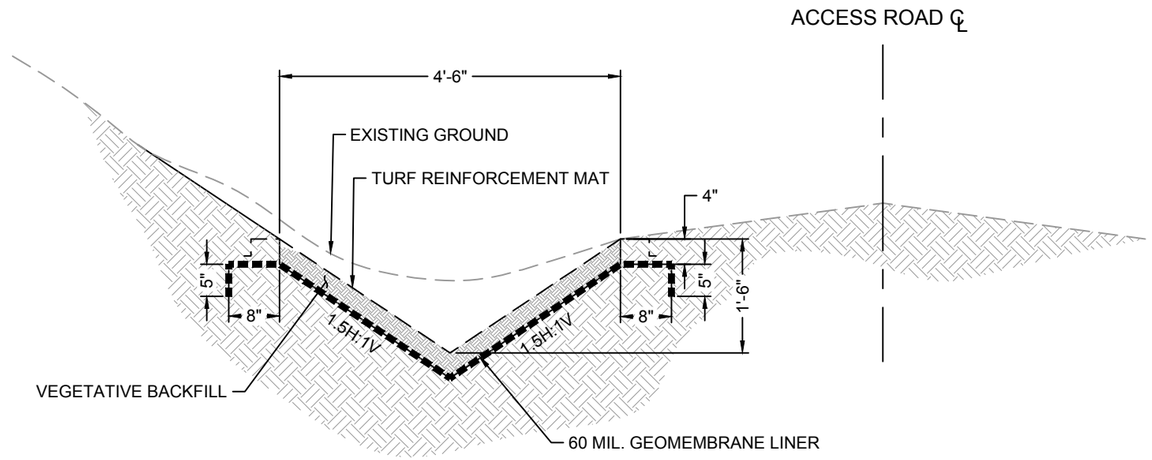
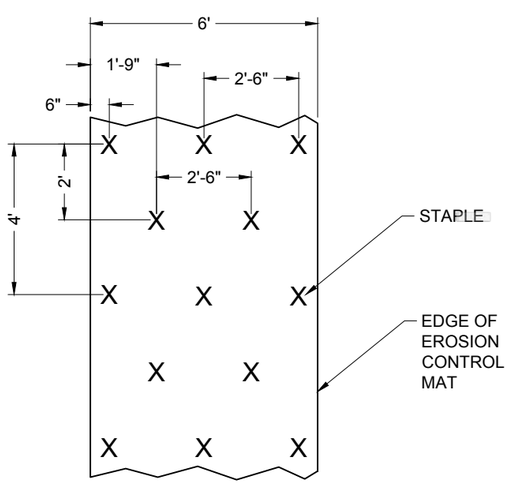


1/7 EROSION CONTROL MAT OVERLAP DETAIL
NOT TO SCALE

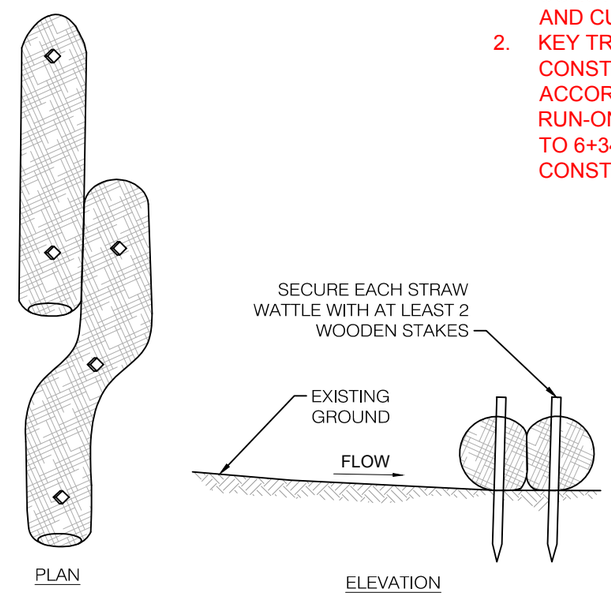


3/7 RUN-ON CONTROL DITCH 0+00 TO 6+34
NOT TO SCALE

NOTES:
1. RUN-ON CONTROL DITCH DOES NOT FOLLOW DIMENSIONS AS DISPLAYED IN DETAIL 3, RUN-ON CONTROL DITCH 0+00 TO 6+34, DUE TO SITE CONSTRUCTION LIMITATIONS AND CUT SLOPE CONDITIONS.
2. KEY TRENCHES WERE NOT CONSTRUCTED IN ACCORDANCE WITH DETAIL 3, RUN-ON CONTROL DITCH 0+00 TO 6+34 DUE TO CONSTRUCTION LIMITATIONS.



2/7 EROSION CONTROL MAT STAPLE PATTERN DETAIL
NOT TO SCALE



4/7 STRAW WATTLE DETAIL
NOT TO SCALE

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MONTANA
MWCB

MONTANA
MICHAEL L. HATTEN
No. 16272 PE
LICENSED
PROFESSIONAL ENGINEER

REVISIONS

NO.	DESCRIPTION	DATE	BY:

Montana DEQ Beal Mine Pond Removals and Run-On Control Project

Standard Details

TETRA TECH
303 Irene Street
Helena, MT 59601
PHONE: 406.443.5210

PROJECT NUMBER 114-560346
DESIGN BY: MLH
DRAWN BY: RED
CHK'D BY: MLH
APPR. BY: MLH
DATE: June 2012
SHEET 7 OF 9

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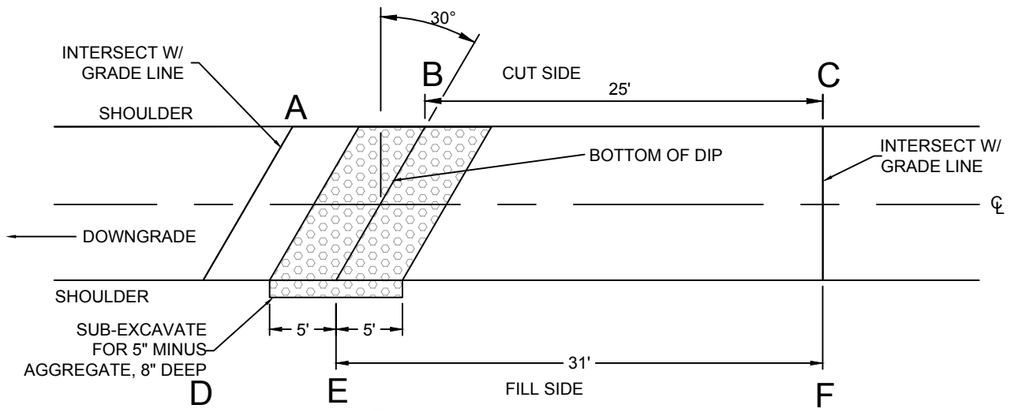
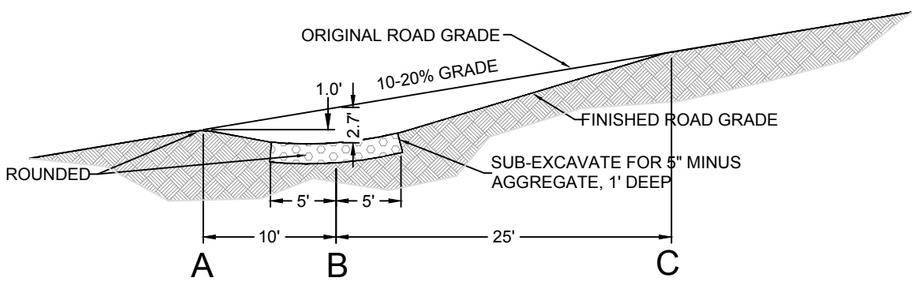
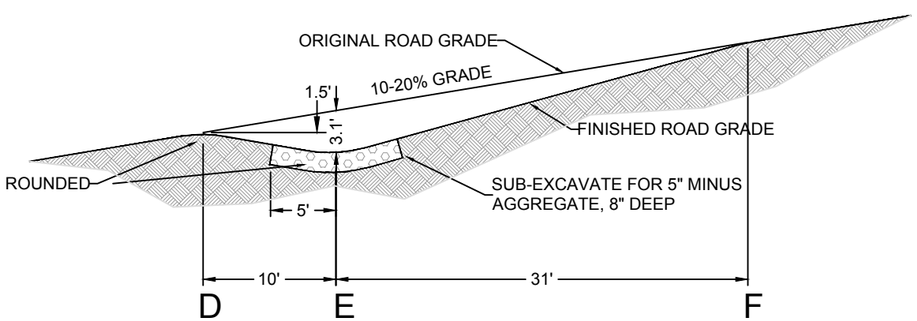


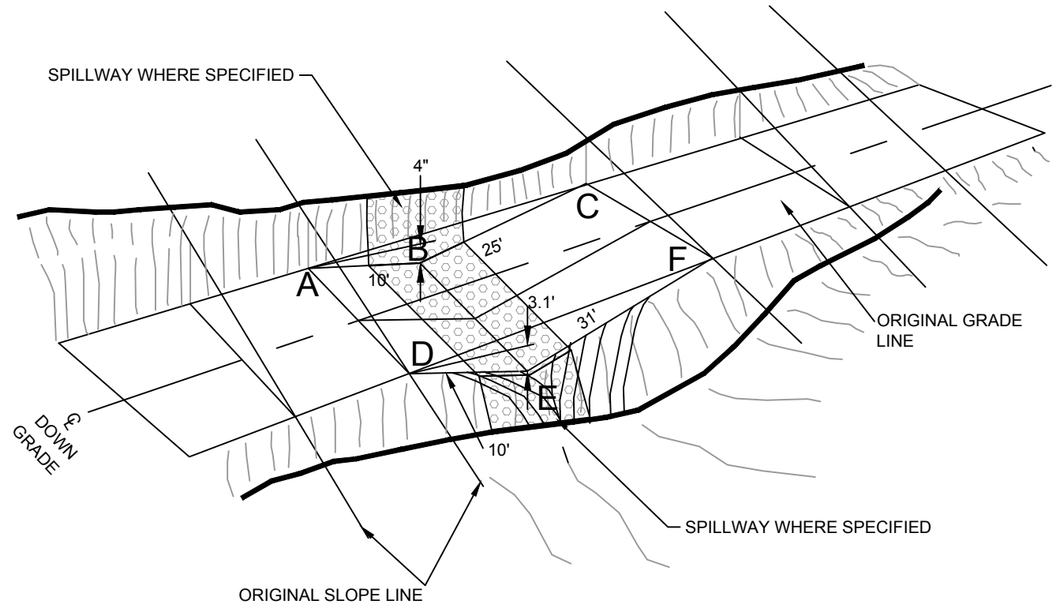
1/8 PLAN OF DRAIN DIP
Not To Scale



2/8 ROAD PROFILE ALONG CUT SIDE OF DRAIN DIP
Not To Scale



3/8 ROAD PROFILE ALONG FILL SIDE OF DRAIN DIP
Not To Scale



4/8 PERSPECTIVE VIEW
Not To Scale

NOTES:

1. FINAL LOCATION OF DRAIN DIPS WILL BE APPROVED BY ENGINEER PRIOR TO CONSTRUCTION OF DIPS.
2. EXCESS EXCAVATION FROM DRAIN DIPS SHALL BE INCORPORATED IN THE ADJACENT ROAD SURFACE. UNSUITABLE EXCAVATION SHALL BE WASTED EVENLY OVER THE FILL, AND ALL DISTURBED AREAS SHALL BE REVEGETATED.
3. VERTICAL CUTS AT "B" AND "E" SHALL BE BELOW THE HORIZONTAL ELEVATIONS OF "A" AND "D".
4. ARMOR MATERIAL FOR DRAINAGE DIPS IS AVAILABLE ON SITE, AT A LOCATION IDENTIFIED BY ENGINEER.

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MONTANA
MWCB

MONTANA
MICHAEL L.
HATTEN
No. 16272 PE
LICENSED
PROFESSIONAL ENGINEER

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NO.	DESCRIPTION	DATE	BY:

Montana DEQ Beal Mine
Pond Removals and Run-On
Control Project

Drainage Dip Details

TETRA TECH
303 Irene Street
Helena, MT 59601
PHONE: 406.443.5210

PROJECT NUMBER **114-560346**
DESIGN BY: **MLH**
DRAWN BY: **RED**
CHK'D BY: **MLH**
APPR. BY: **MLH**
DATE: **June 2012**
SHEET **8** OF **9**

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	DITCH EDGE RIGHT		DITCH CENTERLINE		DITCH EDGE LEFT		EXCAVATION DAYLIGHT	
STATION	OFFSET	ELEVATION	OFFSET	ELEVATION	OFFSET	ELEVATION	OFFSET	ELEVATION
0+00	0.00	7484.67	2.25	7483.17	4.50	7484.67	9.12	7488.11
0+50	0.00	7475.74	2.25	7474.25	4.50	7475.76	6.50	7477.43
1+00	0.00	7465.87	2.25	7464.38	4.50	7465.88	6.62	7467.69
1+50	0.00	7455.20	2.25	7453.70	4.50	7455.20	8.94	7458.46
2+00	0.00	7444.02	2.25	7442.53	4.50	7444.01	20.01	7454.76
2+50	0.00	7435.00	2.25	7433.51	4.50	7435.01	14.31	7441.65
3+00	0.00	7431.23	2.25	7429.73	4.50	7431.23	10.91	7435.84
3+50	0.00	7428.45	2.25	7426.95	4.50	7428.46	5.32	7429.37
4+00	0.00	7423.89	2.25	7422.39	4.50	7423.89	5.85	7425.16
4+50	0.00	7419.67	2.25	7418.17	4.50	7419.67	8.49	7422.70
5+00	0.00	7416.40	2.25	7414.90	4.50	7416.40	5.55	7417.47
5+50	0.00	7412.91	2.25	7411.41	4.50	7412.91	5.37	7413.85
6+00	0.00	7408.62	2.25	7407.12	4.50	7408.62	4.63	7409.07
6+34	0.00	7406.52	3.25	7403.99	6.48	7406.19	6.97	7406.82

1/9 CHANNEL ALIGNMENT TABLE

AS BUILT

MONTANA
MWCB

MONTANA
MICHAEL L. HATTEN
No. 16272 PE
LICENSED PROFESSIONAL ENGINEER

REVISIONS

NO.	DESCRIPTION	DATE	BY:

Montana DEQ Beal Mine Pond Removals and Run-On Control Project

RUN-ON CONTROL DITCH STAKING TABLE

TETRA TECH
303 Irene Street
Helena, MT 59601
PHONE: 406.443.5210

PROJECT NUMBER **114-560346**
DESIGN BY: **MLH**
DRAWN BY: **RED**
CHK'D BY: **MLH**
APPR. BY: **MLH**
DATE: **June 2012**

SHEET **9** OF **9**

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APPENDIX B

Bid Tabulations

Beal Mountain Mine: Pond Removals and Run-On Control Reclamation Project
SilverBow County
DEQ Contract No. 413006
Bid Tabulation

		Engineer's Estimate				Intermountain Construction Services, LLC				C. Davies Enterprises Inc.				Sealand Enviro				Schnell Excavating			
	BID ITEM	UNIT	UNIT COST	ESTIMATED QUANTITY	SUBTOTAL	UNIT	UNIT COST	ESTIMATED QUANTITY	SUBTOTAL	UNIT	UNIT COST	ESTIMATED QUANTITY	SUBTOTAL	UNIT	UNIT COST	ESTIMATED QUANTITY	SUBTOTAL	UNIT	UNIT COST	ESTIMATED QUANTITY	SUBTOTAL
	1 - Beal Mountain Mine: Pond Removals and Run-On Control Reclamation Project Mobilization																				
1	**Mobilization, Demobilization, Bonding and Insurance (Maximum 10% of total bid)**	LS	---	1	$ 11,932.00	LS	---	1	$ 4,400.00	LS	---	1	$ 14,000.00	LS	---	1	$ 42,335.00	LS	---	1	$ 3,943.00
	2 - Beal Mountain Mine Minnesota Pond Removal																				
2-A	**Pond Dewatering**	LS	$1,000.00	1	$ 1,000.00	LS	$525.00	1	$525.00	LS	$3,100.00	1	$ 3,100.00	LS	$2,500.00	1	$ 2,500.00	LS	$500.00	1	$ 500.00
2-B	**Debris Removal and Disposal**	Ton	$750.00	4	$ 3,000.00	Ton	$510.00	4	$2,040.00	Ton	$805.00	4	$ 3,220.00	Ton	$100.00	4	$ 400.00	Ton	$125.00	4	$ 500.00
2-C	**Strip and Stockpile Topsoil**	CY	$3.25	150	$ 487.50	CY	$5.00	150	$750.00	CY	$11.74	150	$ 1,761.00	CY	$15.00	150	$ 2,250.00	CY	$15.00	150	$ 2,250.00
2-D	**Regrade Pond Area**	CY	$2.15	3900	$ 8,385.00	CY	$2.75	3900	$10,725.00	CY	$1.90	3900	$ 7,410.00	CY	$5.00	3900	$ 19,500.00	CY	$2.00	3900	$ 7,800.00
2-E	**Replace and Grade Topsoil**	CY	$3.25	150	$ 487.50	CY	$10.00	150	$1,500.00	CY	$16.15	150	$ 2,422.50	CY	$10.00	150	$ 1,500.00	CY	$10.00	150	$ 1,500.00
2-F	**Fertilize and Seed**	AC	$2,130.00	1.25	$ 2,662.50	AC	$830.00	1.25	$1,037.50	AC	$1,790.00	1.25	$ 2,237.50	AC	$3,000.00	1.25	$ 3,750.00	AC	$723.60	1.25	$ 904.50
2-G	**Erosion Control**	SY	$4.50	5111	$ 22,999.50	SY	$2.50	5111	$12,777.50	SY	$7.55	5111	$ 38,588.05	SY	$5.00	5111	$ 25,555.00	SY	$1.98	5111	$ 10,119.78
2-H	**Straw Wattles**	LF	$3.80	290	$ 1,102.00	LF	$3.75	290	$1,087.50	LF	7.58	290	$ 2,198.20	LF	$5.00	290	$ 1,450.00	LF	$2.30	290	$ 667.00
	3 - Beal Mountain Mine Storm Water Pond Removal																				
3-A	**Remove and Stockpile Riprap**	LS	$2.50	1	$ 2.50	LS	$650.00	1	$ 650.00	LS	$1,700.00	1	$ 1,700.00	LS	$2,000.00	1	$ 2,000.00	LS	$400.00	1	$ 400.00
3-B	**Debris Removal and Disposal**	Ton	$750.00	0.5	$ 375.00	Ton	$1,000.00	0.5	$500.00	Ton	$2,916.00	0.5	$ 1,458.00	Ton	$100.00	0.5	$ 50.00	Ton	$400.00	0.5	$ 200.00
3-C	**Regrade Pond Area**	CY	$5.50	1435	$ 7,892.50	CY	$3.75	1435	$5,381.25	CY	$4.74	1435	$ 6,801.90	CY	$5.00	1435	$ 7,175.00	CY	$2.00	1435	$ 2,870.00
3-D	**Fertilize and Seed**	AC	$2,130.00	0.5	$ 1,065.00	AC	$830.00	0.5	$415.00	AC	$2,481.74	0.5	$ 1,240.87	AC	$3,000.00	0.5	$ 1,500.00	AC	$723.60	0.5	$ 361.80
3-E	**Erosion Control**	SY	$4.50	2138	$ 9,621.00	SY	$2.50	2138	$5,345.00	SY	$8.82	2138	$ 18,857.16	SY	$5.00	2138	$ 10,690.00	SY	$1.98	2138	$ 4,233.24
3-F	**Straw Wattles**	LF	$3.80	365	$ 1,387.00	LF	$3.75	365	$1,368.75	LF	$6.36	365	$ 2,321.40	LF	$5.00	365	$ 1,825.00	LF	$2.30	365	$ 839.50
	4 - Beal Mountain Mine Contingency Pond Removal																				
4-A	**Debris Removal and Disposal**	Ton	$750.00	3	$ 2,250.00	Ton	$750.00	3	$ 2,250.00	Ton	$3,149.00	3	$ 9,447.00	Ton	$100.00	3	$ 300.00	LS	$134.00	3	$ 402.00
4-B	**Regrade Pond Area**	CY	$5.50	700	$ 3,850.00	CY	$4.25	700	$ 2,975.00	CY	$9.71	700	$ 6,797.00	CY	$5.00	700	$ 3,500.00	Ton	$2.00	700	$ 1,400.00
4-C	**Fertilize and Seed**	AC	$2,130.00	0.5	$ 1,065.00	AC	$830.00	0.5	$ 415.00	AC	$2,481.76	0.5	$ 1,240.88	AC	$3,000.00	0.5	$ 1,500.00	CY	$723.60	0.5	$ 361.80
4-D	**Erosion Control**	SY	$4.50	1784	$ 8,028.00	SY	$2.50	1784	$ 4,460.00	SY	$9.28	1784	$ 16,555.52	SY	$5.00	1784	$ 8,920.00	AC	$1.98	1784	$ 3,532.32
4-E	**Straw Wattles**	LF	$3.80	260	$ 988.00	LF	$3.75	260	$ 975.00	LF	$8.29	260	$ 2,155.40	LF	$5.00	260	$ 1,300.00	SY	$2.30	260	$ 598.00
	TOTAL BASE BID PRICE				**$ 88,580.00**				**$ 59,577.50**				**$ 143,512.38**				**$ 138,000.00**				**$ 43,382.94**
	Alternative 1: Beal Mountain Mine Run-On Controls																				
A-1	**Regrade Access Road**	LS	$1,000.00	1	$ 1,000.00	LS	$700.00	1	$ 700.00	LS	$5,683.50	1	$ 5,683.50	LS	$8,900.00	1	$ 8,900.00	LS	$500.00	1	$ 500.00
A-2	**Excavate Run-on Control Ditch**	CY	$5.50	150	$ 825.00	CY	$9.80	150	$ 1,470.00	CY	$68.24	150	$ 10,236.00	CY	$25.00	150	$ 3,750.00	CY	$18.67	150	$ 2,800.50
A-3	**Run-on Control Ditch Construction**	LF	$46.00	634	$ 29,164.00	LF	$30.40	634	$ 19,273.60	LF	$42.42	634	$ 26,894.28	LF	$25.00	634	$ 15,850.00	LF	$33.13	634	$ 21,004.42
A-4	**Fertilize and Seed**	AC	$2,130.00	0.5	$ 1,065.00	AC	$830.00	0.5	$ 415.00	AC	$1,000.00	0.5	$ 500.00	AC	$3,000.00	0.5	$ 1,500.00	AC	$723.60	0.5	$ 361.80
	TOTAL ALTERNATIVE BID PRICE				**$ 32,054.00**				**$ 21,858.60**				**$ 43,313.78**				**$ 30,000.00**				**$ 24,666.72**
	TOTAL BID PRICE				**$ 120,634.00**				**$ 81,436.10**				**$ 186,826.16**				**$ 168,000.00**				**$ 68,049.66**

NOTES:

AC = acres LS = lump sum

CY = cubic yards SL = square yard

LF = linear feet

APPENDIX C

Contract Documents

NOTICE OF AWARD

TO: Schnell Excavating, Inc.

122133 Nissler Road

Butte, MT 59701

DATE: July 27, 2012

PROJECT: Beal Mountain Mine: Pond Removal and Run-on Control Reclamation Project

DEQ Contract No.: 413006

PROJECT DESCRIPTION: The work consists of but is not limited to, providing all labor, material and equipment associated with the removal and regrading of three ponds, debris removal and disposal, regrading an access road, construction of a run-on control ditch, installation of BMPs, and fertilizing and seeding of disturbed areas.

The Owner has considered the Bid submitted by you for the above-described Work in response to its Invitation for Bid dated July 18, 2012 and Instructions to Bidders.

You are hereby notified that your bid has been accepted for items in the amount of $68,049.66.

Within five (5) days after receipt of this Notice of Award (Saturdays, Sundays and legal holidays excluded) or as Owner and Contractor otherwise mutually agree, you are required (Article 13, Instructions to Bidders) to execute and deliver to Owner a copy of the Acceptance of Notice of Award, all executed copies of the Agreement and the properly issued and effective Performance and Payment Bonds, Certificates of Insurance and copies of applicable insurance policies.

If you fail to execute said Agreement and to furnish said Bonds and Insurance within five (5) days from the date of this Notice, said Owner will be entitled to consider all your rights (arising out of the Owner's acceptance of your Bid) as abandoned and to forfeit your Bid Bond. The Owner will be entitled to exercise such other and further rights as may be granted by law.

Please return an acknowledged copy of this Notice of Award to the Owner.

Dated 23rd day of July, 2012.

OWNER: DEPARTMENT OF ENVIRONMENTAL QUALITY

By: Pebbles Clark for John Koetz

Title: AMLB Bureau Chief

ACCEPTANCE OF NOTICE OF AWARD

Receipt of the above Notice of Award is hereby acknowledged this 28th day of July, 2012.

CONTRACTOR: Schnell Excavating Inc

By: Jerry Schnell

Title: president

AGREEMENT

OWNER:	The Montana Department of Environmental Quality
CATEGORY OF IMPROVEMENTS:	Mine Waste Reclamation
CONTRACT TITLE:	Beal Mountain Mine: Pond Removals and Run-on Control Reclamation Project
CONTRACT NUMBER:	DEQ Contract No. 413006

THIS AGREEMENT made as of the 27th day of July, 2012, by and between the Montana Department of Environmental Quality, hereinafter called Owner, and **Schnell Excavating, Inc.** with legal address and principal place of business at **122133 Nissler Road, Butte, Montana 59701** hereinafter called Contractor. Owner and Contractor in consideration of the mutual covenants hereinafter set forth, agree as follows:

ARTICLE 1. WORK

1.1 Contractor shall perform the work as indicated in the Contract Documents. The work is summarized in the Special Provisions.

ARTICLE 2. ENGINEER

2.1 Tetra Tech, Helena, MT, 59601, will act as Engineer in connection with completion of the work in accordance with the Contract Documents, unless another engineer is designated by Owner.

ARTICLE 3. CONTRACT TIMES

3.1 The work will commence as provided in Article 2 of the Conditions of the Contract. All Work shall be substantially complete, as defined in the General Conditions, **within thirty (30) consecutive calendar days**, as adjusted under Article 12 of the Contract Documents.

3.2 Contractor agrees that the work shall be prosecuted regularly, diligently and uninterruptedly at such rate of progress as will insure full completion thereof within the Contract Times stated above. It is expressly understood and agreed that the Contract Times are reasonable for the completion of the work, taking into consideration the average climatic range and usual industrial conditions prevailing in this locality.

ARTICLE 4. CONTRACT PRICE

4.1 Owner will pay Contractor for performance of the work in accordance with the Contract Documents in current funds at the Total Contract Price appearing in the Contractor's Bid Form attached to this Agreement.

ARTICLE 5. APPLICATIONS FOR PAYMENT

5.1 Contractor shall submit Applications for Payment in accordance with Article 14 of the General Conditions. Applications for Payment will be processed by Engineer as provided in the General Conditions.

ARTICLE 6. PROGRESS AND FINAL PAYMENTS

6.1 Owner will make progress payments on account of the Contract Price on the basis of Contractor's Applications for Payment as recommended by Engineer, monthly during construction as provided below. All progress payments will be on the basis of the progress of the work provided for in Paragraph 14.02 of the General Conditions.

6.2 Prior to Substantial Completion, and so long as Contractor is performing by the terms of the Agreement, progress payments will be in an amount equal to 95 percent of the value of the work completed, less, in each case, the aggregate of payments previously made [less the additional retainage of $1000 dollars per Section 18-2-404(2)]. Owner reserves the right, without prejudice to any other remedy, to increase the retainage, if Owner determines that Contractor is not performing in accordance with the terms of this Agreement.

6.3 Upon Substantial Completion of the principal elements of the Work, Owner may, at its discretion, deliver a portion of the retainage to Contractor.

6.4 Upon final inspection and acceptance of all of the work, in accordance with Paragraph 14.07. of the General Conditions, and site access key has been returned to Owner or proof of return of site access key to United States Forest Service has been provided to Owner, Owner will pay the remainder of the Contract Price as recommended by Engineer, retaining $1,000 until termination of the Agreement as required by Section 18-2-404(2), MCA.

ARTICLE 7. LIQUIDATED DAMAGES

7.1 Owner and Contractor acknowledge that time is of the essence in the performance of the work required under this Agreement and that Owner will suffer financial and other losses if the work is not completed within the Contract Times (specified in Article 3 above, plus any extensions thereof allowed in accordance with Article 12 of the General Conditions). They also recognize the delay, expense, and difficulty involved in proving, in a legal or arbitration proceeding, the actual loss suffered by Owner if the work is not completed on time. Accordingly, to avoid the time, expense, delay, and difficulty in proving or disputing such damages and to provide certainty and predictability for both parties, Owner and Contractor agree that Contractor shall pay Owner as liquidated damages for delay (and not as a penalty) the amount of $750.00 per day for each day beyond the Contract Time that the work is not substantially complete.

The completion dates specified here are subject to adjustment in accordance with Paragraph 12.03 of the General Conditions, provided that Contractor shall furnish Owner the required notification of such delays in accordance with Paragraph 12.02 of the General Conditions.

ARTICLE 8. CONTRACT DOCUMENTS

8.1 The Contract Documents which, together with this executed document, comprise the Agreement between Owner and Contractor are attached hereto and made a part hereof and consist of the following:

8.1.1 The Instructions to Bidders

8.1.2 Contractor's submitted Bid Form and Questionnaire Responses, together with any properly and timely submitted amendments or supplements thereto, and other documentation requested by Owner and submitted by Contractor with the Bid or prior to the Notice of Award;

8.1.3 The required and properly issued Construction Performance Bond, Construction Payment Bond and other required bonds and certificates of insurance;

8.1.4 Notice of Award;

8.1.5 Notice to Proceed;

8.1.6 General Conditions, EJCDC Document 1910-8, 1996 Edition (modified);

8.1.7 Supplementary Conditions, Parts I and II;

8.1.8 Special Provisions;

8.1.9 Technical Specifications;

8.1.10 Drawings: Sheets 1 through 9;

8.1.11 Addenda numbers ____NA____ through ____NA____ modifying documents which are part of this Agreement; and

8.1.12 All properly executed or issued amendments and modifications of this Agreement, including Written Amendments, Change Orders, Work Change Directives, Field Orders or Engineer's written interpretations and clarifications issued after execution of this Agreement.

ARTICLE 9. LIAISONS

9.1 Notices to be given by one party to the other shall, unless the Contract Documents provide otherwise, be sent to the following contacts for each party. Required written notices shall be sent by registered or certified mail, return receipt requested, or by similar service. A party may change a contact person(s) or address given below by notifying the other party in writing.

For DEQ/Owner:

Department of Environmental Quality
Attention: Pebbles Clark
Remediation Division
P.O. Box 201001
1100 N. Last Chance Gulch
Helena, MT 59620
(406) 841-5028

For Contractor:

Schnell Excavating, Inc.
Attention: Larry Schnell
122133 Nissler Road
Butte, Montana 59701
(406) 723-5700

with a copy to:

Department of Environmental Quality
Attention: Mr. Thomas E. Root - Legal Counsel
P.O. Box 201001
1100 N. Last Chance Gulch
Helena, MT 59620
(406) 841-5022

ARTICLE 10. MISCELLANEOUS

10.1 Terms used in this Agreement which are defined in Article 1 of the Conditions of the Contract shall have the meanings assigned in the Conditions of the Contract.

10.2 Neither Owner nor Contractor shall, without the prior written consent of the other, assign or sublet in whole or in part his/her interest under any of the Contract Documents; and, specifically but without limitation, Contractor shall not assign any monies due or to become due without the prior written consent of Owner. In case Contractor, with Owner's written consent, assigns all or any part of any monies due or to become due under this Contract, the instrument of assignment shall contain a clause providing that the right of the assignee in and to any monies due or to become due to Contractor shall be subject to prior claims of all persons, firms, and corporations for services rendered or materials supplied for the performance of the work called for in this Contract.

10.3 Owner and Contractor each binds himself, his/her partners, successors, assigns, and legal representatives in respect to all covenants, agreements, and obligations contained in the Contract Documents.

10.4 The Contract Documents constitute the entire agreement between Owner and Contractor and, except as expressly provided in the Contract Documents themselves, may be altered, amended, or repealed only by a Written Modification signed by both parties.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement. All portions of the Contract Documents have been signed or identified by Owner and Contractor or by Engineer on their behalf.

This Agreement shall become effective on August 08**, 2012.**

OWNER:

Montana Department of Environmental Quality

By: Vicki J. Woodrow

VICKI J. WOODROW
Contracts Officer
Financial Services
1520 E. Sixth Avenue, P.O. Box 200901
Helena, MT 59620-0901

Approved for legal content by:

Bill Kirley
Legal Counsel, DEQ

CONTRACTOR:

Name: Schnell Excavating, Inc.

By: Larry Schnell Date: 7-28-12

Larry Schnell
Owner, Schnell Excavating, Inc.
122133 Nissler Road
Butte, Montana 59701

(CORPORATE SEAL)(If Applicable)

Note: If Contractor is a corporation, a certificate evidencing the principal's authority to sign on behalf of the corporation must accompany the executed Agreement.

Payment Bond

Bond No. KO861233A

Any singular reference to Contractor, Surety, Owner or other party shall be considered plural where applicable.

CONTRACTOR (Name and Address):
Schnell Excavating, Inc.
122133 Nissler Road
Butte, MT 59701

OWNER (Name and Address):
Montana Department of Environmental Quality
1100 N. Last Chance Gulch
Helena, MT 59604

SURETY (Name and Address of Principal Place of Business):
Westchester Fire Insurance Company
5619 South Curtice Street
Littleton, CO 80120

CONTRACT
Date: August 08/2012 - yw
Amount: ($68,049.66) Sixty Eight Thousand Forty Nine Dollars and 66/100
Description (Name and Location):
Beal Mountain Mine: Pond Removal and Run-on Control Reclamation Project, DEQ Contract No. 413006

BOND
Date (Not earlier than Contract Date): August 08, 2012 - yw
Amount: ($68,049.66) Sixty Eight Thousand Forty Nine Dollars and 66/100
Modifications to this Bond Form:
None

Surety and Contractor, intending to be legally bound hereby, subject to the terms printed on the reverse side hereof, do each cause this Payment Bond to be duly executed on its behalf by its authorized officer, agent, or representative.

CONTRACTOR AS PRINCIPAL
Company: (Corp. Seal)
Schnell Excavating, Inc.
Signature: Larry Schnell
Name and Title: Larry Schnell, President

SURETY
Company: (Corp. Seal)
Westchester Fire Insurance Company
Signature: [signature]
Name and Title: Levi T. Downey Attorney-in-Fact
(Attach Power of Attorney)

(Space is provided below for signatures of additional parties, if required.)

CONTRACTOR AS PRINCIPAL
Company: (Corp. Seal)

Signature: _____
Name and Title:

SURETY
Company: (Corp. Seal)

Signature: _____
Name and Title:

EJCDC No. 1910-28-B (1996 Edition)
Originally prepared through the joint efforts of the Surety Association of America, Engineers Joint Contract Documents Committee, the Associated General Contractors of America, the American Institute of Architects, the American Subcontractors Association, and the Associated Specialty Contractors.

1. The CONTRACTOR and the Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors and assigns to the OWNER to pay for labor, materials and equipment furnished for use in the performance of the Contract, which is incorporated herein by reference.

2. With respect to the OWNER, this obligation shall be null and void if the CONTRACTOR:

2.1. Promptly makes payment, directly or indirectly, for all sums due Claimants, and

2.2. Defends, indemnifies and holds harmless the OWNER from all claims, demands, liens or suits by any person or entity who furnished labor, materials or equipment for use in the performance of the Contract, provided the OWNER has promptly notified the CONTRACTOR and the Surety (at the addresses described in paragraph 12) of any claims, demands, liens or suits and tendered defense of such claims, demands, liens or suits to the CONTRACTOR and the Surety, and provided there is no OWNER Default.

3. With respect to Claimants, this obligation shall be null and void if the CONTRACTOR promptly makes payment, directly or indirectly, for all sums due.

4. The Surety shall have no obligation to Claimants under this Bond until:

4.1. Claimants who are employed by or have a direct contract with the CONTRACTOR have given notice to the Surety (at the addresses described in paragraph 12) and sent a copy, or notice thereof, to the OWNER, stating that a claim is being made under this Bond and, with substantial accuracy, the amount of the claim.

4.2. Claimants who do not have a direct contract with the CONTRACTOR:

1. Have furnished written notice to the CONTRACTOR and sent a copy, or notice thereof, to the OWNER, within 90 days after having last performed labor or last furnished materials or equipment included in the claim stating, with substantial accuracy, the amount of the claim and the name of the party to whom the materials were furnished or supplied or for whom the labor was done or performed; and

2. Have either received a rejection in whole or in part from the CONTRACTOR, or not received within 30 days of furnishing the above notice any communication from the CONTRACTOR by which the CONTRACTOR had indicated the claim will be paid directly or indirectly; and

3. Not having been paid within the above 30 days, have sent a written notice to the Surety and sent a copy, or notice thereof, to the OWNER, stating that a claim is being made under this Bond and enclosing a copy of the previous written notice furnished to the CONTRACTOR.

5. If a notice required by paragraph 4 is given by the OWNER to the CONTRACTOR or to the Surety, that is sufficient compliance.

6. When the Claimant has satisfied the conditions of paragraph 4, the Surety shall promptly and at the Surety's expense take the following actions:

6.1. Send an answer to the Claimant, with a copy to the OWNER, within 45 days after receipt of the claim, stating the amounts that are undisputed and the basis for challenging any amounts that are disputed.

6.2. Pay or arrange for payment of any undisputed amounts.

7. The Surety's total obligation shall not exceed the amount of this Bond, and the amount of this Bond shall be credited for any payments made in good faith by the Surety.

8. Amounts owed by the OWNER to the CONTRACTOR under the Contract shall be used for the performance of the Contract and to satisfy claims, if any, under any Performance Bond. By the CONTRACTOR furnishing and the OWNER accepting this Bond, they agree that all funds earned by the CONTRACTOR in the performance of the Contract are dedicated to satisfy obligations of the CONTRACTOR and the Surety under this Bond, subject to the OWNER's priority to use the funds for the completion of the Work.

9. The Surety shall not be liable to the OWNER, Claimants or others for obligations of the CONTRACTOR that are unrelated to the Contract. The OWNER shall not be liable for payment of any costs or expenses of any Claimant under this Bond, and shall have under this Bond no obligations to make payments to, give notices on behalf of, or otherwise have obligations to Claimants under this Bond.

10. The Surety hereby waives notice of any change, including changes of time, to the Contract or to related Subcontracts, purchase orders and other obligations.

11. No suit or action shall be commenced by a Claimant under this Bond other than in a court of competent jurisdiction in the location in which the Work or part of the Work is located or after the expiration of one year from the date (1) on which the Claimant gave the notice required by paragraph 4.1 or paragraph 4.2.3, or (2) on which the last labor or service was performed by anyone or the last materials or equipment were furnished by anyone under the Construction Contract, whichever of (1) or (2) first occurs. If the provisions of this paragraph are void or prohibited by law, the minimum period of limitation available to sureties as a defense in the jurisdiction of the suit shall be applicable.

12. Notice to the Surety, the OWNER or the CONTRACTOR shall be mailed or delivered to the addresses shown on the signature page. Actual receipt of notice by Surety, the OWNER or the CONTRACTOR, however accomplished, shall be sufficient compliance as of the date received at the address shown on the signature page.

13. When this Bond has been furnished to comply with a statutory or other legal requirement in the location where the Contract was to be performed, any provision in this Bond conflicting with said statutory or legal requirement shall be deemed deleted herefrom and provisions conforming to such statutory or other legal requirement shall be deemed incorporated herein. The intent is, that this Bond shall be construed as a statutory Bond and not as a common law bond.

14. Upon request of any person or entity appearing to be a potential beneficiary of this Bond, the CONTRACTOR shall promptly furnish a copy of this Bond or shall permit a copy to be made.

15. DEFINITIONS

15.1. Claimant: An individual or entity having a direct contract with the CONTRACTOR or with a Subcontractor of the CONTRACTOR to furnish labor, materials or equipment for use in the performance of the Contract. The intent of this Bond shall be to include without limitation in the terms "labor, materials or equipment" that part of water, gas, power, light, heat, oil, gasoline, telephone service or rental equipment used in the Contract, architectural and engineering services required for performance of the Work of the CONTRACTOR and the CONTRACTOR's Subcontractors, and all other items for which a mechanic's lien may be asserted in the jurisdiction where the labor, materials or equipment were furnished.

15.2. Contract: The agreement between the OWNER and the CONTRACTOR identified on the signature page, including all Contract Documents and changes thereto.

15.3. OWNER Default: Failure of the OWNER, which has neither been remedied nor waived, to pay the CONTRACTOR as required by the Contract or to perform and complete or comply with the other terms thereof.

(FOR INFORMATION ONLY--Name, Address and Telephone)

AGENCY or BROKER: Payne Financial Group, Inc.

OWNER'S REPRESENTATIVE (Engineer or other party): 1200 N. Montana Avenue Helena, MT 59604

Power of Attorney

WESTCHESTER FIRE INSURANCE COMPANY

Know all men by these presents: That **WESTCHESTER FIRE INSURANCE COMPANY,** a corporation of the Commonwealth of Pennsylvania pursuant to the following Resolution, adopted by the Board of Directors of the said Company on December 11, 2006, to wit:

"RESOLVED, that the following authorizations relate to the execution, for and on behalf of the Company, of bonds, undertakings, recognizances, contracts and other written commitments of the Company entered into the ordinary course of business (each a "Written Commitment"):

(1) Each of the Chairman, the President and the Vice Presidents of the Company is hereby authorized to execute any Written Commitment for and on behalf of the Company, under the seal of the Company or otherwise.

(2) Each duly appointed attorney-in-fact of the Company is hereby authorized to execute any Written Commitment for and on behalf of the Company, under the seal of the Company or otherwise, to the extent that such action is authorized by the grant of powers provided for in such persons written appointment as such attorney-in-fact.

(3) Each of the Chairman, the President and the Vice Presidents of the Company is hereby authorized, for and on behalf of the Company, to appoint in writing any person the attorney-in-fact of the Company with full power and authority to execute, for and on behalf of the Company, under the seal of the Company or otherwise, such Written Commitments of the Company as may be specified in such written appointment, which specification may be by general type or class of Written Commitments or by specification of one or more particular Written Commitments.

(4) Each of the Chairman, the President and Vice Presidents of the Company in hereby authorized, for and on behalf of the Company, to delegate in writing any other officer of the Company the authority to execute, for and on behalf of the Company, under the Company's seal or otherwise, such Written Commitments of the Company as are specified in such written delegation, which specification may be by general type or class of Written Commitments or by specification of one or more particular Written Commitments.

(5) The signature of any officer or other person executing any Written Commitment or appointment or delegation pursuant to this Resolution, and the seal of the Company, may be affixed by facsimile on such Written Commitment or written appointment or delegation.

FURTHER RESOLVED, that the foregoing Resolution shall not be deemed to be an exclusive statement of the powers and authority of officers, employees and other persons to act for and on behalf of the Company, and such Resolution shall not limit or otherwise affect the exercise of any such power or authority otherwise validly granted or vested.

Does hereby nominate, constitute and appoint Carol Gonzalez, Henry Abel Boomer, John McGree, Levi T Downey, Racquel C Kaelberer, Ted Fedyk, Thomas J Downey, all of the City of BUTTE, Montana, each individually if there be more than one named, its true and lawful attorney-in-fact, to make, execute, seal and deliver on its behalf, and as its act and deed any and all bonds, undertakings, recognizances, contracts and other writings in the nature thereof in penalties not exceeding One million Two hundred Fifty thousand dollars & zero cents ($1,250,000.00) and the execution of such writings in pursuance of these presents shall be as binding upon said Company, as fully and amply as if they had been duly executed and acknowledged by the regularly elected officers of the Company at its principal office,

IN WITNESS WHEREOF, the said Stephen M. Haney, Vice-President, has hereunto subscribed his name and affixed the Corporate seal of the said **WESTCHESTER FIRE INSURANCE COMPANY** this 29 day of September 2011.

WESTCHESTER FIRE INSURANCE COMPANY

Stephen M. Haney

Stephen M. Haney, Vice President

COMMONWEALTH OF PENNSYLVANIA
COUNTY OF PHILADELPHIA ss.

On this 29 day of September, AD. 2011 before me, a Notary Public of the Commonwealth of Pennsylvania in and for the County of Philadelphia came Stephen M. Haney ,Vice-President of the **WESTCHESTER FIRE INSURANCE COMPANY** to me personally known to be the individual and officer who executed the preceding instrument, and he acknowledged that he executed the same, and that the seal affixed to the preceding instrument is the corporate seal of said Company; that the said corporate seal and his signature were duly affixed by the authority and direction of the said corporation, and that Resolution, adopted by the Board of Directors of said Company, referred to in the preceding instrument, is now in force.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed my official seal at the City of Philadelphia the day and year first above written.

COMMONWEALTH OF PENNSYLVANIA
NOTARIAL SEAL
KAREN E. BRANDT, Notary Public
City of Philadelphia, Phila. County
My Commission Expires September 28, 2014

Karen E. Brandt

Notary Public

I, the undersigned Assistant Secretary of the **WESTCHESTER FIRE INSURANCE COMPANY,** do hereby certify that the original POWER OF ATTORNEY, of which the foregoing is a substantially true and correct copy, is in full force and effect.

In witness whereof, I have hereunto subscribed my name as Assistant Secretary, and affixed the corporate seal of the Corporation, this 8th day of August, 2012

William L. Kelly

William L. Kelly, Assistant Secretary

THIS POWER OF ATTORNEY MAY NOT BE USED TO EXECUTE ANY BOND WITH AN INCEPTION DATE AFTER September 29, 2013.

FORM NO. 8800S

THE BACK OF THIS DOCUMENT LISTS VARIOUS SECURITY FEATURES THAT WILL PROTECT AGAINST COPY COUNTERFEIT AND ALTERATION.

006151132

Please look for the following additional security features before accepting this document. IF NOT PRESENT, DO NOT ACCEPTANCE THE DOCUMENT.

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- **Security void** pattern on front if copied.

Standard Register

Performance Bond

Bond No. KO861233A

Any singular reference to Contractor, Surety, Owner or other party shall be considered plural where applicable.

CONTRACTOR (Name and Address):
Schnell Excavating, Inc.
122133 Nissler Road
Butte, MT 59701

OWNER (Name and Address):
Montana Department of Environmental Quality
1100 N. Last Chance Gulch
Helena, MT 59604

SURETY (Name and Address of Principal Place of Business):
Westchester Fire Insurance Company
5619 South Curtice Street
Littleton, CO 80120

CONTRACT
Date: August 08, 2012 yw
Amount: ($68,049.66) Sixty Eight Thousand Forty Nine Dollars and 66/100
Description (Name and Location):
Beal Mountain Mine: Pond Removal and Run-on Control Reclamation Project, DEQ Contract No. 413006

BOND
Date (Not earlier than Contract Date): August 08, 2012 yw
Amount: ($68,049.66) Sixty Eight Thousand Forty Nine Dollars and 66/100
Modifications to this Bond Form:
None

Surety and Contractor, intending to be legally bound hereby, subject to the terms printed on the reverse side hereof, do each cause this Performance Bond to be duly executed on its behalf by its authorized officer, agent or representative.

CONTRACTOR AS PRINCIPAL
Company: (Corp. Seal)
Schnell Excavating, Inc.
Signature: Larry Schnell
Name and Title: LARRY SCHNELL, President

SURETY
Company: (Corp. Seal)
Westchester Fire Insurance Company
Signature:
Name and Title: Levi T. Downey Attorney-in-Fact
(Attach Power of Attorney)

(Space is provided below for signatures of additional parties, if required.)

CONTRACTOR AS PRINCIPAL
Company: (Corp. Seal)

Signature:
Name and Title:

SURETY
Company: (Corp. Seal)

Signature:
Name and Title:

EJCDC No. 1910-28-A (1996 Edition)
Originally prepared through the joint efforts of the Surety Association of America, Engineers Joint Contract Documents Committee, the Associated General Contractors of America, and the American Institute of Architects.

1. The CONTRACTOR and the Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors and assigns to the Owner for the performance of the Contract, which is incorporated herein by reference.

2. If the CONTRACTOR performs the Contract, the Surety and the CONTRACTOR have no obligation under this Bond, except to participate in conferences as provided in paragraph 3.1.

3. If there is no OWNER Default, the Surety's obligation under this Bond shall arise after:

3.1. The OWNER has notified the CONTRACTOR and the Surety at the addresses described in paragraph 10 below, that the OWNER is considering declaring a CONTRACTOR Default and has requested and attempted to arrange a conference with the CONTRACTOR and the Surety to be held not later than fifteen days after receipt of such notice to discuss methods of performing the Contract. If the OWNER, the CONTRACTOR and the Surety agree, the CONTRACTOR shall be allowed a reasonable time to perform the Contract, but such an agreement shall not waive the OWNER's right, if any, subsequently to declare a CONTRACTOR Default; and

3.2. The OWNER has declared a CONTRACTOR Default and formally terminated the CONTRACTOR's right to complete the Contract. Such CONTRACTOR Default shall not be declared earlier than twenty days after the CONTRACTOR and the Surety have received notice as provided in paragraph 3.1; and

3.3. The OWNER has agreed to pay the Balance of the Contract Price to:

3.3.1. The Surety in accordance with the terms of the Contract;

3.3.2 Another contractor selected pursuant to paragraph 4.3 to perform the Contract.

4. When the OWNER has satisfied the conditions of paragraph 3, the Surety shall promptly and at the Surety's expense take one of the following actions:

4.1. Arrange for the CONTRACTOR, with consent of the OWNER, to perform and complete the Contract; or

4.2. Undertake to perform and complete the Contract itself, through its agents or through independent contractors; or

4.3. Obtain bids or negotiated proposals from qualified contractors acceptable to the OWNER for a contract for performance and completion of the Contract, arrange for a contract to be prepared for execution by the OWNER and the contractor selected with the OWNER's concurrence, to be secured with performance and payment bonds executed by a qualified surety equivalent to the Bonds issued on the Contract, and pay to the OWNER the amount of damages as described in paragraph 6 in excess of the Balance of the Contract Price incurred by the OWNER resulting from the CONTRACTOR Default; or

4.4. Waive its right to perform and complete, arrange for completion, or obtain a new contractor and with reasonable promptness under the circumstances:

4.4.1 After investigation, determine the amount for which it may be liable to the OWNER and, as soon as practicable after the amount is determined, tender payment therefor to the OWNER; or

4.4.2 Deny liability in whole or in part and notify the OWNER citing reasons therefor.

5. If the Surety does not proceed as provided in paragraph 4 with reasonable promptness, the Surety shall be deemed to be in default on this Bond fifteen days after receipt of an additional written notice from the OWNER to the Surety demanding that the Surety perform its obligations under this Bond, and the OWNER shall be entitled to enforce any remedy available to the OWNER. If the Surety proceeds as provided in paragraph 4.4, and the OWNER refuses the payment tendered or the Surety has denied liability, in whole or in part, without further notice the OWNER shall be entitled to enforce any remedy available to the OWNER.

6. After the OWNER has terminated the CONTRACTOR's right to complete the Contract, and if the Surety elects to act under paragraph 4.1, 4.2, or 4.3 above, then the responsibilities of the Surety to the OWNER shall not be greater than those of the CONTRACTOR under the Contract, and the responsibilities of the OWNER to the Surety shall not be greater than those of the OWNER under the Contract. To a limit of the amount of this Bond, but subject to commitment by the OWNER of the Balance of the Contract Price to mitigation of costs and damages on the Contract, the Surety is obligated without duplication for:

6.1. The responsibilities of the CONTRACTOR for correction of defective Work and completion of the Contract;

6.2. Additional legal, design professional and delay costs resulting from the CONTRACTOR's Default, and resulting from the actions or failure to act of the Surety under paragraph 4; and

6.3. Liquidated damages, or if no liquidated damages are specified in the Contract, actual damages caused by delayed performance or non-performance of the CONTRACTOR.

7. The Surety shall not be liable to the OWNER or others for obligations of the CONTRACTOR that are unrelated to the Contract, and the Balance of the Contract Price shall not be reduced or set off on account of any such unrelated obligations. No right of action shall accrue on this Bond to any person or entity other than the OWNER or its heirs, executors, administrators, or successors.

8. The Surety hereby waives notice of any change, including changes of time, to the Contract or to related subcontracts, purchase orders and other obligations.

9. Any proceeding, legal or equitable, under this Bond may be instituted in any court of competent jurisdiction in the location in which the Work or part of the Work is located and shall be instituted within two years after CONTRACTOR Default or within two years after the CONTRACTOR ceased working or within two years after the Surety refuses or fails to perform its obligations under this Bond, whichever occurs first. If the provisions of this paragraph are void or prohibited by law, the minimum period of limitation available to sureties as a defense in the jurisdiction of the suit shall be applicable.

10. Notice to the Surety, the OWNER or the CONTRACTOR shall be mailed or delivered to the address shown on the signature page.

11. When this Bond has been furnished to comply with a statutory or other legal requirement in the location where the Contract was be performed, any provision in this Bond conflicting with said statutory or legal requirement shall be deemed deleted here from and provisions conforming to such statutory or other legal requirement shall be deemed incorporated herein. The intent is that this Bond shall be construed as a statutory bond and not as a common law bond.

12. Definitions.

12.1 Balance of the Contract Price: The total amount payable by the OWNER to the CONTRACTOR under the Contract after all proper adjustments have been made, including allowance to the CONTRACTOR of any amounts received or to be received by the OWNER in settlement of insurance or other Claims for damages to which the CONTRACTOR is entitled, reduced by all valid and proper payments made to or on behalf of the CONTRACTOR under the Contract.

12.2. Contract: The agreement between the OWNER and the CONTRACTOR identified on the signature page, including all Contract Documents and changes thereto.

12.3. CONTRACTOR Default: Failure of the CONTRACTOR, which has neither been remedied nor waived, to perform or otherwise to comply with the terms of the Contract.

12.4. OWNER Default: Failure of the OWNER, which has neither been remedied nor waived, to pay the CONTRACTOR as required by the Contract or to perform and complete or comply with the other terms thereof.

(FOR INFORMATION ONLY--Name, Address and Telephone)
AGENT or BROKER: OWNER'S REPRESENTATIVE (Engineer or other party):
Payne Financial Group, Inc. 1200 N. Montana Avenue Helena, MT 59604 ,

CERTIFICATE OF LIABILITY INSURANCE

OP ID H7
SCHNELL

DATE (MM/DD/YYYY)
08/06/12

PRODUCER

Western States of Great Falls
600 Smelter Ave NE
Great Falls MT 59404
Phone: 406-771-7334 Fax: 406-771-7656

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW.

INSURED

Schnell Excavating, Inc.
Jan Schnell
122133 Nissler Road
Butte MT 59701

INSURERS AFFORDING COVERAGE		NAIC #
INSURER A:	State Compensation Ins Fund	
INSURER B:	Western National Mutual	
INSURER C:		
INSURER D:		
INSURER E:		

COVERAGES

THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. AGGREGATE LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	ADD'L INSRD	TYPE OF INSURANCE	POLICY NUMBER	POLICY EFFECTIVE DATE (MM/DD/YYYY)	POLICY EXPIRATION DATE (MM/DD/YYYY)	LIMITS	
B		GENERAL LIABILITY X COMMERCIAL GENERAL LIABILITY CLAIMS MADE X OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: POLICY PRO-JECT LOC	CPP1056679	05/08/12	05/08/13	EACH OCCURRENCE DAMAGE TO RENTED PREMISES (Ea occurence) MED EXP (Any one person) PERSONAL & ADV INJURY GENERAL AGGREGATE PRODUCTS - COMP/OP AGG	$ 1,000,000 $ 300,000 $ 5,000 $ 1,000,000 $ 3,000,000 $ 3,000,000
B		AUTOMOBILE LIABILITY X ANY AUTO ALL OWNED AUTOS SCHEDULED AUTOS HIRED AUTOS NON-OWNED AUTOS	CPP1056679	05/08/12	05/08/13	COMBINED SINGLE LIMIT (Ea accident) BODILY INJURY (Per person) BODILY INJURY (Per accident) PROPERTY DAMAGE (Per accident)	$ 1,000,000 $ $ $
		GARAGE LIABILITY ANY AUTO				AUTO ONLY - EA ACCIDENT OTHER THAN AUTO ONLY: EA ACC AGG	$ $ $
B		EXCESS / UMBRELLA LIABILITY X OCCUR CLAIMS MADE DEDUCTIBLE X RETENTION $ 0	CPP1056679	05/08/12	05/08/13	EACH OCCURRENCE AGGREGATE	$ 5,000,000 $ $ $ $
A		WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? Y / N (Mandatory in NH) If yes, describe under SPECIAL PROVISIONS below	033233610	06/27/12	06/27/13	WC STATU-TORY LIMITS OTH-ER E.L. EACH ACCIDENT E.L. DISEASE - EA EMPLOYEE E.L. DISEASE - POLICY LIMIT	$ 500000 $ 500000 $ 500000
B		OTHER Equipment Floater	CPP1056679	05/08/12	05/08/13		
B		Pollution Coverage	CPP1056679	05/08/12	05/08/13	Pollution	same as GL

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES / EXCLUSIONS ADDED BY ENDORSEMENT / SPECIAL PROVISIONS

Project: Beal Mountain Mine: Pond Removals and Run-On-Control Reclaimation Project, Silverbow County
DEQ Contract #413006
Cerrificate Holder is also Additional Insured.

CERTIFICATE HOLDER

Department of Environmental Quality
Redemption Division
1100 N Last Chance Gulch
Helena MT 59604

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, THE ISSUING INSURER WILL ENDEAVOR TO MAIL 10 DAYS WRITTEN NOTICE TO THE CERTIFICATE HOLDER NAMED TO THE LEFT, BUT FAILURE TO DO SO SHALL IMPOSE NO OBLIGATION OR LIABILITY OF ANY KIND UPON THE INSURER, ITS AGENTS OR REPRESENTATIVES.

AUTHORIZED REPRESENTATIVE

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IMPORTANT

If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

DISCLAIMER

This Certificate of Insurance does not constitute a contract between the issuing insurer(s), authorized representative or producer, and the certificate holder, nor does it affirmatively or negatively amend, extend or alter the coverage afforded by the policies listed thereon.

NOTICE TO PROCEED

TO: Schnell Excavating, Inc.
122133 Nissler Road

Butte, MT 59701

DATE: August 9, 2012

PROJECT: **Beal Mountain Mine – Pond Removal and Run-on Control Reclamation Project**

DEQ Contract No. 413006

In accordance with the Agreement executed August 8, 2012, you are hereby notified to commence Work no later than August 14, 2012, and you are to complete the Work within 30 consecutive calendar days thereafter. The date of completion of all Work is, therefore, September 13, 2012.

OWNER: DEPARTMENT OF ENVIRONMENTAL QUALITY

By: [signature]

Title: Project Manager, DEQ-AMLB

ACCEPTANCE OF NOTICE TO PROCEED

Receipt of the above Notice to Proceed is hereby acknowledged this 8th day of August, 2012.

CONTRACTOR: Schnell Excavating, Inc.

By: [signature]

Title: President

APPENDIX D

Pre-Construction Meeting

Beal Mountain Mine: Pond Removals & Run-on Control Reclamation Project
Silver Bow County
DEQ Contract No. 413006

PRECONSTRUCTION MEETING
August 9, 2012 10:00 am
Fairmont Hot Springs Parking Lot

MEETING MINUTES

Attendees
Pebbles Clark, DEQ
Sonny Thornborrow, Forest Service
Mike Hatten, Tetra Tech
Larry Schnell, Schnell Excavating
Josh Henderson, Schnell Excavating

Topics Discussed

1. **Introductions/Key Personnel**
   - Owner – MDEQ, Pebbles Clark, Project Manager
   - On-Scene Coordinator – Mary Beth Marks, Forest Service
   - On-Scene Coordinator – Sonny Thornborrow, Forest Service
   - Randy Scott - Resident Project Representative – Forest Service
   - Engineer – Tetra Tech, Mike Hatten, Lead Project Engineer
   - Contractor – Schnell Excavating, Inc., Larry Schnell, Owner

2. **Project Overview/Construction Bidding Documents, Specifications, and Drawings Questions**
   - Standard General Conditions of the Construction Contract
   - Special Provisions
   - Technical Specifications
   - Construction Drawings
   - Pay Requests on 30 day cycle – DEQ required format, Engineer will help complete
   - 30 day consecutive day construction contract
   - $750 per day liquidated damages
   - Montana Prevailing Wage Rates for Heavy & Highway Construction / Davis- Bacon. Schnell Excavating must submit copies of employee pay stubs showing their hourly rate to ensure compliance. Submit monthly with pay request.

3. **Construction Schedule**
   - Overall schedule – Schnell Excavating, Inc. shall submit revised schedule upon request from Engineer
   - Daily/weekly schedule and coordination with Engineer
   - Working hours
   - No work on weekends without prior approval in writing from DEQ

4. **Submittals**
   - Submittal Status
   - Material certifications
   - Substitutions – all substitution requests must be submitted in writing and approved in writing by DEQ (materials, work hours, etc.)

5. **Interaction and Cooperation**
   - Communication
   - Responsiveness
   - Work Directive – agreed upon prior to work being performed
   - Change Order - agreed upon prior to work being performed

6. **Health and Safety**
   - Site Safety Officer(s)

- Health and Safety Plans - include 40-hr training certification
- Regular Safety Meetings

7. Quantity Measurement and Quality Control

- Tetra Tech will determine the quantity measurement of bid items as specified in Contract Documents
- Minimum of weekly quantity reconciliation meeting between Schnell Excavating and Engineer
- Tetra Tech will hire surveyor to stake initial control points
- Schnell Excavating shall ensure compliance with design grades per Quality Control Plan
- If a survey boundary point is removed during excavation, Contractor is responsible for replacement, including survey if necessary

8. Site Access/Security

- Access through Dave Smith's property
- Locking/unlocking gate
- Staging Area
- Parking areas
- Authorized/unauthorized visitors

9. Priorities

- Human health and safety
- Equipment Weed Inspection – before mobilize onsite
- Dust control
- Quality construction
- BMPs

10. Use of Premises (Article 16 of Special Provisions)

- Supplies required in each piece of powered equipment
  - ✓ 1 – fire extinguisher
  - ✓ 1 – shovel
  - ✓ 1 – axe or pulaski
  - ✓ 1 – water container
- No smoking onsite
- No camping onsite

11. Other

- Schnell Working Hours – 7:30am – 5:30pm
- Sonny discussed access through Dave Smith's property and closing gates
- Sonny gave Schnell 2 placards, 2 gate keys, and combos to gates
- Preconstruction survey planned for Monday, August 13, 2012
- Weed inspection to occur Monday, August 13, 2012. Sonny and/or Randy will stop by Schnell's equipment yard around 8:00am to inspect equipment.
- Discussed tracking of debris loads using different pay quantities for the bid item at each pond. Larry stated they planned on stockpiling the debris and taking it all out at the end. We all agreed that Larry and Randy would agree on the quantity of debris from each area before it was hauled out so everyone agrees with payment quantity from each pond.
- Mike discussed the following edits to submittals that he would like to see:
  - ✓ Miles Hazwoper card is out of date. Need current Hazwoper cert
  - ✓ Health and Safety Plan – need to add directions and map to hospital and emergency contact info
  - ✓ Dust Control Plan – add in information about the equipment that will be used for dust control
  - ✓ Traffic Control Plan – provide map showing proposed haul routes. Pebbles will email a map to use.
- Larry is working on getting me the "Subcontractor Approval Form". Northwest Lining is being unresponsive with submittals so he may use someone else. Will get it to me once he has the lining sub in place.

APPENDIX E

Daily Constrcution Logs

USDA - Forest Service

CONTRACT DAILY DIARY
(Reference FSH 6309.11)

1. FOREST: BDNF
2. CONTRACT NO.: DEQ 413006
3. PROJECT: Beal Mtn. Mine Pond Removal + Run-on Controls
4. CONTRACTOR: Schnell Excavation
5. CONTRACTOR REPRESENTATIVE ON SITE: Larry Schnell
6. GOVERNMENT OFFICIALS ON SITE: S. Thornborrow

7. DATE	8. DAY OF WEEK	9. TIME ARRIVED	10. TIME DEPARTED	11. WEATHER
8/13/2012	Monday	1000	1600	hot, dry

12. TEMPERATURE °F. Min. Max.	13. GROUND CONDITION	14. CONTRACT TIME	15. DAYS USED	16. COMPLETION DATE
	dry	—	—	—

17. TIME USED (%)	18. WORK COMPLETED (%)	19. WORK ON SCHEDULE	20. CONTRACTOR'S WORK - (X Appropriate Box)
—	—	☒ YES ☐ NO	☒ Acceptable ☐ Unacceptable - *Explain in narrative*

21. CHANGE ORDERS/AMENDMENTS ISSUED: —

22. WORK ORDERS ISSUED *(Include SUSPEND/RESUME)*: —

23. MATERIALS FURNISHED TO JOB SITE *(Furnished By: G-Govt.; C-Cont.; S-Subcont.)*

Trash pumps (x2)	C

24. LIST EQUIPMENT ON SITE *(Furnished by G-Govt.; C-Cont.; S-Subcont.)*

Type	Contract Item Number and Location of Use	Hours Used	
CAT	D5 Dozer	—	C
Ford	F-350 Pickup		C

25. LIST CONTRACT PAYMENTS, REPORTS, CORRESPONDENCE, ETC.

Item	Prep	Submit
—	—	—

26. WORKERS ON SITE

Classification	Number PRIME	Number SUB
Larry Schnell	x	
Mike ~~Dan~~ Mihelic	x	
Dan Brown (surveyor)		x
JR (surveyor)		x

27. GOVERNMENT PROVIDED SERVICES ADEQUATELY AND TIMELY
☐ YES ☐ NO - Explain in narrative N/A

28. NARRATIVE REPORT

• Arrived at Schnell Excavation equipment yard 0800 to inspect equipment for weeds and petroleum leaks. Looked over the following equipment:

1) Caterpillar D5C XL Dozer
2) Komatsu 200 LC Excavator
3) Semi-truck w/ low boy trailer

All equipment was clean and free of caked mud. No indication of leaks. I told Larry Schnell the equipment looked good and

29. SIGNATURE: Sonny Thornborrow

30. TITLE: RPR

31. ADDTL SPACE NEEDED ☒
(continued on 6300-21)

Distribution: Original - CO *(weekly)*; COR, SO, PROJ ENG
Previous editions of this form are obsolete.

USDA - Forest Service
CONTRACT DAILY DIARY
Narrative Continuation
(Reference FSH 6309.11)

1. PROJECT: Beal Pond Removal
2. PAGE: 2 of 2
3. CONTRACT NUMBER: DEQ 413006
4. DATE: 8/13/12

5. NARRATIVE REPORT *(continued from 6300-20)*

could be mobilized.

- Met Larry Schnell and Mike Mihelic (truck driver) at the main Beal gate at approximately 1000. Drove to the Minnesota Pond and set up 2 trash pumps to begin dewatering the pond. Mike left after helping start the pumps and unloading the dozer.

- Larry and I drove to each of the work areas (Stormwater Pond, Contingency Pond, Run-on ditch) and discussed the work to be completed at each area. We met the surveyors (Brown + Associates, Butte, MT) at the run-on ditch. They were having trouble with the vertical controls for the ditch. They discussed the problem with Mike Hatten and it was decided that only the horizontal alignment would be staked. Vertical alignment will be made as the ditch is excavated. The surveyors also surveyed the Minnesota Pond, which was completely dewatered by the time they got there.

- Larry Schnell left at approximately 1330 to get the excavator. He called later at approximately 1530 and said the excavator wouldn't start. He was trying to get it fixed and hoped to mobilize later today or in the morning.

- Left site 1600 - Surveyors still on site.

6. SIGNATURE: Sonny Thurman
7. TITLE: RPR
8. ADDTL SPACE NEEDED ☐ *(continued on 6300-21)* On page ____ of ____

Distribution: Original - CO *(weekly)*; copies: COR, SO, PROJ ENG.
Previous editions of this form are obsolete.

FS-6300-21 (11/78)

USDA - Forest Service

CONTRACT DAILY DIARY

(Reference FSH 6309.11)

1. FOREST: BDNF

2. CONTRACT NO.: DEQ 413006

3. PROJECT: Beal Mtn. Mine Pond Removal + Run-on controls

4. CONTRACTOR: Schnell Excavation

5. CONTRACTOR REPRESENTATIVE ON SITE: L. Schnell; J. Henderson

6. GOVERNMENT OFFICIALS ON SITE: S. Thornborrow

7. DATE	8. DAY OF WEEK	9. TIME ARRIVED	10. TIME DEPARTED	11. WEATHER
8/14/2012	Tuesday	0800	1730	hot, dry, windy in afternoon

12. TEMPERATURE °F. Min. — Max.	13. GROUND CONDITION	14. CONTRACT TIME	15. DAYS USED	16. COMPLETION DATE
	dry	—	—	—

17. TIME USED (%)	18. WORK COMPLETED (%)	19. WORK ON SCHEDULE	20. CONTRACTOR'S WORK - (X Appropriate Box)
—	—	☒ YES ☐ NO	☒ Acceptable ☐ Unacceptable - Explain in narrative

21. CHANGE ORDERS/AMENDMENTS ISSUED: —

22. WORK ORDERS ISSUED (Include SUSPEND/RESUME): —

23. MATERIALS FURNISHED TO JOB SITE (Furnished By: G-Govt.; C-Cont.; S-Subcont.)

~~Trees~~

24. LIST EQUIPMENT ON SITE (Furnished by G-Govt.; C-Cont.; S-Subcont.)

Type	Contract Item Number and Location of Use	Hours Used	
LS	Dewatering equipment (2-A)	—	C
LS	Mobilization - Excavator	—	C
	(1) Komatsu 200	—	C
	- water truck	—	C
CAT	D5 C Dozer	—	C
Komatsu	200 LC Excavator	—	C
UNK.	water truck	—	C
Ford	F-350 Pickup	—	C

25. LIST CONTRACT PAYMENTS, REPORTS, CORRESPONDENCE, ETC.

Item	Prep	Submit
—	—	—

26. WORKERS ON SITE

Classification	Number PRIME	Number SUB
Larry Schnell	x	
Mike Mihelic	↓	
Josh Henderson		
Don Bailey		
Myles Carpenter		

27. GOVERNMENT PROVIDED SERVICES ADEQUATELY AND TIMELY
☐ YES ☐ NO - Explain in narrative N/A

28. NARRATIVE REPORT

- Met Don Bailey, Larry Schnell, and Josh Henderson at the main gate 0810. Drove to Contingency Pond. Larry stated he didn't think there was enough material to fill in the pond. He proposed the following course of action:

1). Regrade the stormwater pond using the southern edge of the pond first and leaving any excess material on the northern edge to make up for shortages at the Contingency Pond.

2). Complete work at the Contingency Pond. If short of material,

29. SIGNATURE: Sonny Thornborrow

30. TITLE: RPR

31. ADDTL SPACE NEEDED ☒ (continued on 6300-21)

Distribution: Original - CO (weekly); COR, SO, PROJ ENG
Previous editions of this form are obsolete.

USDA - Forest Service
CONTRACT DAILY DIARY
Narrative Continuation
(Reference FSH 6309.11)

1. PROJECT: Beal Pond Removal
2. PAGE: 2 of 2
3. CONTRACT NUMBER: DEQ 413006
4. DATE: 8/14/12

5. NARRATIVE REPORT *(continued from 6300-20)*

haul excess from Stormwater Pond to Contingency Pond. If not short of material, return to Stormwater Pond and push northern edge of pond over existing filled area. I told Larry the contract was put together to reflect there was enough material available at the Contingency Pond and that we would start with that assumption. I also said his proposed sequencing was acceptable and that we would work with him in the event more material was needed at the Contingency Pond. We inspected the material at the northern perimeter of the Stormwater Pond and it appears to be similar in quality (as a cover material) as the rest of the material at the ponds.

- Excavator dropped off at top of hill 0845 - Larry and Myles left after it arrived.
- Josh and Don began work at Minnesota Pond - stripping and stockpiling topsoil, dewatering the small amount of water in the pond, and debris removal. The majority of the debris was removed and segregated for recycling and disposal. The liner material proved cumbersome to remove but they were able to get most of it. A small portion of topsoil still needs stripped and stockpiled - will be completed tomorrow.
- Mike and Myles brought water truck to site 1245. Dropped off and left.
- Per my direction, straw wattles will not be installed at the toe of the pond.
- Left site 1730.

6. SIGNATURE: Sonny Thurman
7. TITLE: RPR
8. ADDTL SPACE NEEDED ☐ *(continued on 6300-21)* On page ____ of ____

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Previous editions of this form are obsolete.

FS-6300-21 (11/78)

USDA - Forest Service

CONTRACT DAILY DIARY

(Reference FSH 6309.11)

1. FOREST: **Beaverhead-Deerlodge NF**

2. CONTRACT NO.: **DEQ 413006**

3. PROJECT: **Beal Mtn. Mine Pond Removal and Run-On Control Project**

4. CONTRACTOR: **Schnell Excavation**

5. CONTRACTOR REPRESENTATIVE ON SITE: J. Henderson

6. GOVERNMENT OFFICIALS ON SITE: **S. Thornborrow**

7. DATE	8. DAY OF WEEK	9. TIME ARRIVED	10. TIME DEPARTED	11. WEATHER
8/15/2012	Wednesday	1050	1700	light drizzle in a.m. cool

12. TEMPERATURE °F.	13. GROUND CONDITION	14. CONTRACT TIME	15. DAYS USED	16. COMPLETION DATE
Min. - — Max. -	Moist	-	-	-

17. TIME USED (%)	18. WORK COMPLETED (%)	19. WORK ON SCHEDULE	20. CONTRACTOR'S WORK - *(X Appropriate Box)*
-	-	☒ 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	↓
	Equipment:		C
CAT	D5 C Dozer		C
Kom	200 LC Excavator		C
UNK	Water Truck		C
2-A	Dewatering Equipment (not used)		C
	Bid Items		
2-B	Debris removal		
2-C	Strip + Stockpile topsoil		
2-D	Regrade Pond Area		

25. LIST CONTRACT PAYMENTS, REPORTS, CORRESPONDENCE, ETC.

Item	Prep	Submit
—	—	—

26. WORKERS ON SITE

Classification	Number PRIME	Number SUB
Josh Henderson	x	
Don Bailey	x	

27. GOVERNMENT PROVIDED SERVICES ADEQUATELY AND TIMELY
☐ YES ☐ NO - Explain in narrative N/A

28. NARRATIVE REPORT

Arrived at Site 1050. Josh (excavator) and Don (dozer) working to regrade the Minnesota Pond. Spoke with Josh - only he and Don on-site today. Some additional topsoil has been stripped and stockpiled and there is a small amount left to go. The entire topsoil excavation area shown on Sheet #3 will not be stripped - a portion of the area was covered with unsuitable material last year when the pond was breached and it is impossible to separate the good from the bad. Overall, I feel the topsoil was worth stripping and that it appears to contain less rocks than the underlying material. Josh and I discussed measurement of the stockpile once it is completed. The plan is to measure the volume by using GPS for an area measurement and a tape measure and grade rod for height measurements.

1530 - spoke with Larry Schnell and confirmed that straw wattles would not be placed at the toe of the disturbance at the Minnesota Pond. I also reiterated that straw wattles would be required at the Stormwater and Contingency Ponds before earthwork could begin. Larry said he understood and was already planning to install wattles before work began in those areas. Larry again brought up his concern that bedding material would be needed for the ditch work and suggested that we use the gravel pile located on the road and adjacent the leach

29. SIGNATURE	30. TITLE	31. ADDTL SPACE NEEDED ☒
Sonny Thurman	RPR	*(continued on 6300-21)*

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USDA - Forest Service **CONTRACT DAILY DIARY** **Narrative Continuation** *(Reference FSH 6309.11)*	1. PROJECT **Beal Mtn. Pond Removal Project**	2. PAGE 2 of 2
	3. CONTRACT NUMBER **DEQ 413006**	4. DATE 8/15/12

5. NARRATIVE REPORT *(continued from 6300-20)*

pad. I agreed this was probably the most suitable material on site and said I thought there was no reason it couldn't be used in the event bedding material is deemed necessary after excavation begins. I reminded Larry that we will have to go through Mike Hatten and Pebbles prior to changing the contract and using this material. I went and looked at the gravel pile. It appears to be 1/4" or 1/2" minus and there is approximately 100 cubic yards of material.

Inspected the run-on control ditch centerline staking and found some problems:

1). Some of the stakes have fallen over (stations 2+00, 2+50, 4+00, 4+50, and 5+00). I could see where the stakes were standing at each of the stations other than 2+50 but did not reset them.

2). The centerline from approximately 2+75 to 4+40 is situated in the middle and outside (fill slope) edge of the road. If the ditch is constrcuted as staked, it will cut off vehicular access because there will not be room to get a truck around the ditch. I recommend "field fitting" this area by moving the centerline closer to the cut slope of the road. The centerline from approximately 0+50 to 2+75 may also need slightly adjusted for the same reason.

3). As staked, the ditch is longer than it needs to be. The new ditch intersects the existing ditch at approximately 5+60, meaning the last 74 feet of the ditch is not needed. Recommend tying into the existing ditch at 5+60.

I recommend Mike Hatten inspect the staking next time he is on-site - maybe next Tuesday (8/21) during the stream channel construction meeting.

Left site 1700.

6. SIGNATURE	7. TITLE	8. ADDTL SPACE NEEDED ☐
Sonny Thurman	RPR	*(continued on 6300-21)* On page ____ of ____

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FS-6300-21 (11/78)

USDA - Forest Service

CONTRACT DAILY DIARY

(Reference FSH 6309.11)

1. FOREST: **Beaverhead-Deerlodge NF**

2. CONTRACT NO.: **DEQ 413006**

3. PROJECT: **Beal Mtn. Mine Pond Removal and Run-On Control Project**

4. CONTRACTOR: **Schnell Excavation**

5. CONTRACTOR REPRESENTATIVE ON SITE: J. Henderson, L. Schnell

6. GOVERNMENT OFFICIALS ON SITE: **S. Thornborrow**

7. DATE	8. DAY OF WEEK	9. TIME ARRIVED	10. TIME DEPARTED	11. WEATHER
8/16/2012	Thursday	1200	1805	clear, dry

12. TEMPERATURE °F.	13. GROUND CONDITION	14. CONTRACT TIME	15. DAYS USED	16. COMPLETION DATE
Min. - — Max. - —	dry	—	—	—

17. TIME USED (%)	18. WORK COMPLETED (%)	19. WORK ON SCHEDULE	20. CONTRACTOR'S WORK - (X Appropriate Box)
—	-	☒ 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	
	Equipment:		
CAT	D5 C Dozer		C
Kom	200 LC Excavator		C
UNK	Water truck		C
2-A	Dewatering Equipment (not used)		C
	Items:		
2-B	Debris removal		
2-C	Strip + stockpile topsoil		
2-D	Regrade Pond Area		

25. LIST CONTRACT PAYMENTS, REPORTS, CORRESPONDENCE, ETC.

Item	Prep	Submit

26. WORKERS ON SITE

Classification	Number PRIME	Number SUB
Josh Henderson	x	
Larry Schnell	x	
Don Bailey	x	
Daniel Wiegand (WT Plant operator)		
NW Energy truck (meter reader)		

27. GOVERNMENT PROVIDED SERVICES ADEQUATELY AND TIMELY
☐ YES ☐ NO - Explain in narrative N/A

28. NARRATIVE REPORT

Arrived at Site 1200. Don (excavator) working on moving east embankment of the Minnesota Pond. Josh was troubleshooting the dozer, which had not been running right since Wednesday afternoon. The dozer was repeatedly losing throttle after running for a few minutes. Josh had changed the fuel and air filters this morning but to no avail. Larry Scnell arrived at the Site at 1300 to help. Larry rerouted the fuel line to bypass the fuel separator and this solved the problem. Larry ran both pieces of equipment for a while and gave instructions to Don and Josh on how to continue pond regrading operations. He thought they could be more efficient in how they moved the dirt.

Larry and I discussed seedbed preparation. He thought that discing or ripping the surface with the dozer would be detrimental because it would pull large rocks to the surface. He suggested tracking the surface with the dozer. He thought this would retain the most topsoil. I told him it was my experience that discing or ripping rocky ground did tend to bring rocks to the surface and that the problem was usually excaberated by putting the implement too deep in the ground. I advised the contract required a disc, harrow, or other implement as approved by the Engineer and that the soil had to be friable to a depth of 6 inches (Special Provisions, Page III-17).

29. SIGNATURE	30. TITLE	31. ADDTL SPACE NEEDED ☒
Sam Thornborrow	RPR	*(continued on 6300-21)*

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USDA - Forest Service **CONTRACT DAILY DIARY** **Narrative Continuation** *(Reference FSH 6309.11)*	1. PROJECT **Beal Mtn. Pond Removal Project**	2. PAGE 2 of 2
	3. CONTRACT NUMBER **DEQ 413006**	4. DATE 8/16/2012

5. NARRATIVE REPORT *(continued from 6300-20)*

Larry said dozer tracking would work well because the tracks would roughen the surface without compacting the underlying soil as it is a relatively small dozer (D5). I told Larry I would discuss the matter with Mike Hatten and get back to him on how we want to proceed. I feel a good course of action would be to first try ripping the surface with the dozer as shallow as possible. If this doesn't provide good results we can try tracking.

Larry and I also discussed the ditch work again. He is still concerned the liner will be punctured if no bedding material is used under the liner. Additionally, he's concerned cover material from the designated borrow source will cause punctures because it is too rocky. I said I'd discussed this with Hatten and that we would look at changing the contract to use on-site gravel as bedding under the liner. I told him I didn't think we had enough fine material on-site for use on top of the liner and that we'd most likely end up using the designated source material. We then tried to determine the volume of cover soil required by looking at the typical drawing on Sheet 7. However, the cover soil depth is not indicated on the drawing. This depth needs to be determined. Larry said his fabric staples are 6" or 8" so it would have to be at least that deep. We agreed to look at options and discuss next Tuesday when everyone is at the Site. Larry left at 1500. I later noted to myself the ditch is to be paid for by the linear foot and there isn't a separate bid item for cover material.

Measured the topsoil stockpile area at the toe of the slope using a Trimble Juno SB GPS unit. Tomorrow I will measure the height of the pile and calculate the volume of the stockpile.

Josh and Don fueled the equipment and left the site at 1800. I finished GPS work on the topsoil stockpile and left at 1805.

6. SIGNATURE	7. TITLE	8. ADDTL SPACE NEEDED ☐ *(continued on 6300-21)* On page ____ of ____
Scott Thurman	RPR	

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FS-6300-21 (11/78)

USDA - Forest Service

CONTRACT DAILY DIARY

(Reference FSH 6309.11)

1. FOREST: **Beaverhead-Deerlodge NF**

2. CONTRACT NO.: **DEQ 413006**

3. PROJECT: **Beal Mtn. Mine Pond Removal and Run-On Control Project**

4. CONTRACTOR: **Schnell Excavation**

5. CONTRACTOR REPRESENTATIVE ON SITE: J. Henderson

6. GOVERNMENT OFFICIALS ON SITE: **S. Thornborrow**

7. DATE	8. DAY OF WEEK	9. TIME ARRIVED	10. TIME DEPARTED	11. WEATHER
8/17/2012	Friday	1330	1500	warm, dry, clear

12. TEMPERATURE °F.	13. GROUND CONDITION	14. CONTRACT TIME	15. DAYS USED	16. COMPLETION DATE
Min. - Max. -	dry	-	-	-

17. TIME USED (%)	18. WORK COMPLETED (%)	19. WORK ON SCHEDULE	20. CONTRACTOR'S WORK - (X Appropriate Box)
-	-	☒ 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	↓
	Equipment:		C
CAT	D5 C Dozer		C
KOM	200 LC Excavator		C
MACK	Water truck		C
2-A	Dewatering Equipment (not used)		C
	Items:		
2-B	Debris stockpile / removal		
2-C	Strip + stockpile topsoil		
2-D	Regrade Pond Area		

25. LIST CONTRACT PAYMENTS, REPORTS, CORRESPONDENCE, ETC.

Item	Prep	Submit
—	—	—

26. WORKERS ON SITE

Classification	Number PRIME	Number SUB
Josh Henderson	x	
Don Bailey	x	

27. GOVERNMENT PROVIDED SERVICES ADEQUATELY AND TIMELY: ☒ YES ☐ NO - Explain in narrative

28. NARRATIVE REPORT

Arrived at Site 1330. Josh (excavator) and Don (dozer) regrading Minnesota Pond area. The dozer had continued to run better today. Regrading operations approximately 80% complete.

I worked on measuring the main topsoil stockpile. A much smaller stockpile located near the southeast portion of the embankment will be measured next week. Josh and Don left the Site at 1445. I finished measuring the pile and left at 1500. Topsoil stockpile volume measured at 149 cubic yards (see attached map with measurements and calculations).

29. SIGNATURE: Sonny Thornborrow

30. TITLE: RPR

31. ADDTL SPACE NEEDED ☐ *(continued on 6300-21)*

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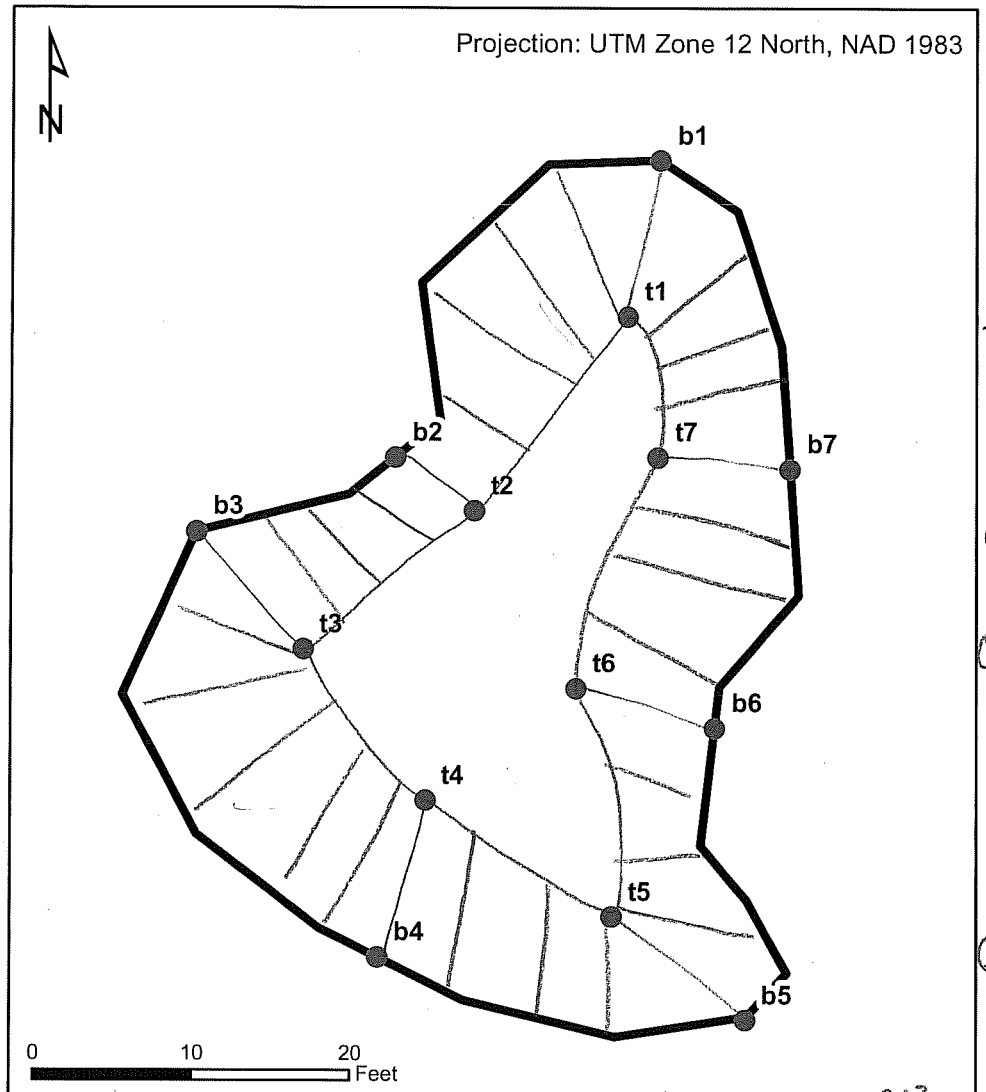
Beal Mountain Mine
DEQ Contract 413006
Minnesota Pond Topsoil Stockpile
August 17, 2012



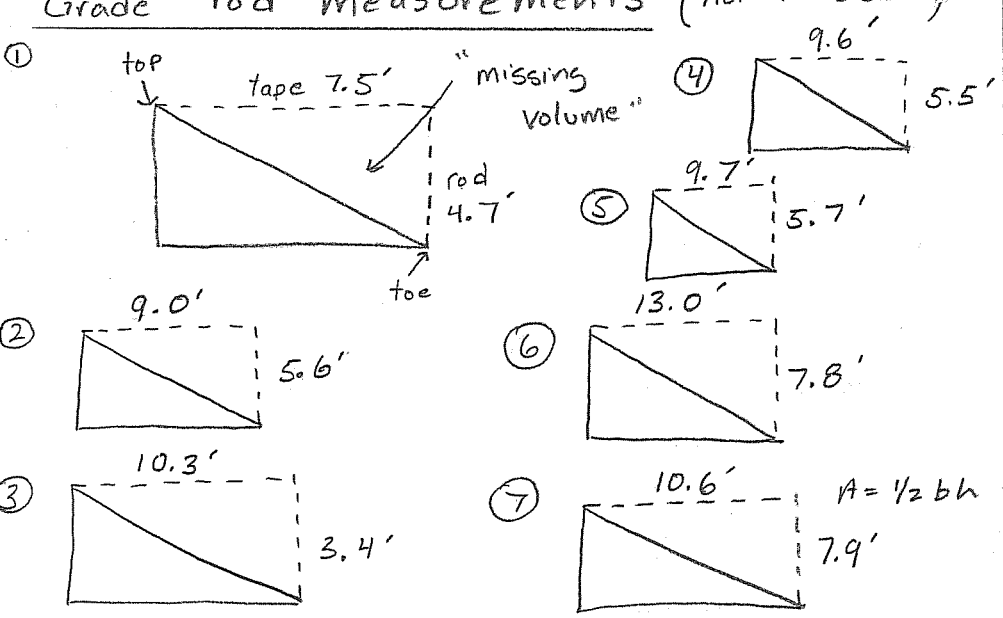
Area at toe of pile (from GPS): 1516 ft^2
Perimeter at toe of pile (from GPS): 165 ft

Goal: Determine volume of topsoil stockpile.

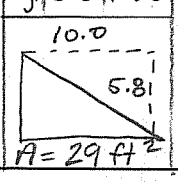
Approach:

1. Measure area of pile at the toe using GPS.
2. Measure height of pile and horizontal distance from top to toe at several locations using a grade rod and tape.
3. Use GPS and grade rod measurements to calculate an "ideal" volume and the volume missing from the ideal pile.

Grade rod measurements (not to scale)



#	H	W
1)	4.7	7.5
2)	5.6	9.0
3)	3.4	10.3
4)	5.5	9.6
5)	5.7	9.7
6)	7.8	13.0
7)	7.9	10.6
Avg.	5.8	10.0



"Ideal" volume = Area toe · avg. height
$\Rightarrow$ 1516 ft^2 · 5.8 ft
= 8793 ft^3
= 326 yd^3

"Missing" volume = Avg. triangle · perimeter
$\Rightarrow$ 29 ft^2 · 165 ft
= 4785 ft^3
= 177 yd^3

"Actual" volume = 326 yd^3 − 177 yd^3 = 149 yd^3

USDA - Forest Service

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(Reference FSH 6309.11)

1. FOREST: **Beaverhead-Deerlodge NF**

2. CONTRACT NO.: **DEQ 413006**

3. PROJECT: **Beal Mtn. Mine Pond Removal and Run-On Control Project**

4. CONTRACTOR: **Schnell Excavation**

5. CONTRACTOR REPRESENTATIVE ON SITE: J. Henderson

6. GOVERNMENT OFFICIALS ON SITE: **S. Thornborrow**; Stewart Deschamps

7. DATE	8. DAY OF WEEK	9. TIME ARRIVED	10. TIME DEPARTED	11. WEATHER
8/20/2012	Monday	1220	1610	mild, dry

12. TEMPERATURE °F.	13. GROUND CONDITION	14. CONTRACT TIME	15. DAYS USED	16. COMPLETION DATE
Min. - Max. -	dry	-	-	-

17. TIME USED (%)	18. WORK COMPLETED (%)	19. WORK ON SCHEDULE	20. CONTRACTOR'S WORK - (X Appropriate Box)
-	-	☒ 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	
	Equipment:		C
CAT	D5 C Dozer		C
KOM	200 LC Excavator		C
MACK	Water Truck		C
2-A	Dewatering Equipment (not used)		C
	Items:		
2-D	Regrade Pond Area		

25. LIST CONTRACT PAYMENTS, REPORTS, CORRESPONDENCE, ETC.

Item	Prep	Submit
—	—	—

26. WORKERS ON SITE

Classification	Number PRIME	Number SUB
Josh Henderson	x	
Don Bailey	x	

27. GOVERNMENT PROVIDED SERVICES ADEQUATELY AND TIMELY

☐ YES ☐ NO - Explain in narrative N/A

28. NARRATIVE REPORT

Arrived at Site 1220 with Stewart Deschamps. Josh (excavator) and Don (dozer) working on regrading the Minnesota Pond. Don was pushing material into the NW corner of the pond area while Josh was working to bury some very rocky material uncovered at the eastern embankment ahead of the dozer. We discussed the rocky area as being a priority for topsoil covering.

The smaller topsoil pile pushed to the toe of the eastern embankment was visually inspected by myself and Josh and agreed to contain 30 cubic yards of usable material. The total volume for bid item 2-C (stripping and stockpiling of topsoil) is 179 cubic yards; 30 cubic yards from this stockpile plus 149 cubic yards in the main topsoil stockpile measured Friday 8/17/12. The contract estimate was 150 cubic yards. Schnell's bid was $15.00 per cubic yard for a total price of $2685.

Josh finished on the excavator at 1500 and greased and fueled the machine. He then walked the excavator to the Stormwater Pond. Josh planned to work on straw wattles at the Stormwater Pond while Don finished with the dozer at the Minnesota Pond. Don should be starting on topsoil replacement and grading tomorrow.

29. SIGNATURE	30. TITLE	31. ADDTL SPACE NEEDED ☐
Sam Thornborrow	RPR	*(continued on 6300-21)*

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USDA - Forest Service **CONTRACT DAILY DIARY** **Narrative Continuation** *(Reference FSH 6309.11)*	1. PROJECT **Beal Mtn. Pond Removal Project**	2. PAGE 2 of 2
	3. CONTRACT NUMBER **DEQ 413006**	4. DATE 8/20/12

5. NARRATIVE REPORT *(continued from 6300-20)*

Tomorrow Larry Schnell, Pebbles Clark, Mike Hatten, and Mary Beth Marks will meet on-site to go over the proposed stream channel work at the Contingency Pond. Other items to discuss include:

1). Bedding material for 60-mil ditch liner material.
2). Ditch liner cover material - source and volume (look at Sheet 7)
3). Seedbed preparation at the Minnesota Pond - dozer ripping vs. tracking.

Stewart and I left the Site at 1410. Josh and Don were still on Site.

6. SIGNATURE	7. TITLE	8. ADDTL SPACE NEEDED ☐ *(continued on 6300-21)* On page ____ of ____
Sonny Thurman	RPR	

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FS-6300-21 (11/78)

USDA - Forest Service

CONTRACT DAILY DIARY

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1. FOREST: **Beaverhead-Deerlodge NF**

2. CONTRACT NO.: **DEQ 413006**

3. PROJECT: **Beal Mtn. Mine Pond Removal and Run-On Control Project**

4. CONTRACTOR: **Schnell Excavation**

5. CONTRACTOR REPRESENTATIVE ON SITE: Larry Schnell

6. GOVERNMENT OFFICIALS ON SITE: **S. Thornborrow**, Stewart Deschamps, Mary Beth Marks

7. DATE	8. DAY OF WEEK	9. TIME ARRIVED	10. TIME DEPARTED	11. WEATHER
8/21/2012	Tuesday	0940	1530	mild, hazy

12. TEMPERATURE °F.	13. GROUND CONDITION	14. CONTRACT TIME	15. DAYS USED	16. COMPLETION DATE
Min. - Max. -	dry	-	-	-

17. TIME USED (%)	18. WORK COMPLETED (%)	19. WORK ON SCHEDULE	20. CONTRACTOR'S WORK - (X Appropriate Box)
-	-	☒ 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.)*: none

24. LIST EQUIPMENT ON SITE *(Furnished by G-Govt.; C-Cont.; S-Subcont.)*

Type	Contract Item Number and Location of Use	Hours Used	
	Equipment:		C
CAT	D5 C Dozer		C
KOM	200 LC Excavator ~~idle~~		C
MACK	Water Truck		C
2-A	Dewatering Equipment (idle)		C
FORD	F-250 Pickup		C
DODGE	2500 Pickup		C
	Items:		
2-D	Regrade Pond Area		
2-E	Replace and Grade Topsoil - 179 yd3		
3-A	Remove and Stockpile Riprap		

25. LIST CONTRACT PAYMENTS, REPORTS, CORRESPONDENCE, ETC.

Item	Prep	Submit
—	—	—

26. WORKERS ON SITE

Classification	Number PRIME	Number SUB
Larry Schell	X	
Don Bailey	X	
Mike Hatten	TT	
Pebbles Clark	DEQ	
Mary Beth Marks	FS	
Stewart Deschamps	FS	

27. GOVERNMENT PROVIDED SERVICES ADEQUATELY AND TIMELY
☐ YES ☐ NO - Explain in narrative N/A

28. NARRATIVE REPORT

Arrived at Site 0940. Don was on the dozer pushing the large topsoil stockpile over the regraded Minnesota Pond. I told Don the grading looked good and to focus on placing topsoil over the rockiest areas of the regraded surface, the rockiest of which is where the east pond embankment was.

At 1000 hours Larry Schnell, Mary Beth Marks, Pebbles Clark, Mike Hatten and I met at the Contingency Pond to discuss the proposed German Gulch stream channel restoration work. Specific items discussed include:

> Stream dewatering. Larry proposed using a 6" self priming pump and a short section of pipe to dewater German Gulch during the project. He thought this setup would work as long as gas is kept in the pump. Otherwise, installing a pipe to directly capture the stream flow would require more disturbance (e.g. more cleared area for the pipe, a larger dam, etc.) and require more time to construct. The group agreed this was a viable approach and that it was important to keep the stream dewatered so as to not interfere with the work and also to keep from washing sediment down the channel. I later noted to myself I should discuss with the contractor fueling the pump away from live water and also the need to have a second pump available. A second pump

29. SIGNATURE	30. TITLE	31. ADDTL SPACE NEEDED ☒
Sonny Thornborrow	RPR	*(continued on 6300-21)*

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USDA - Forest Service **CONTRACT DAILY DIARY** Narrative Continuation *(Reference FSH 6309.11)*	1. PROJECT **Beal Mtn. Pond Removal Project**	2. PAGE 2 of 3
	3. CONTRACT NUMBER **DEQ 413006**	4. DATE 8/21/12

5. NARRATIVE REPORT *(continued from 6300-20)*

would provide valuable backup in the event of a problem with the first pump and would also allow for cooling of the main pump prior to refueling. It is a fire and safety hazard to refuel a running or hot pump.

> Rip-Rap Material. It is expected that some usable material will be found within the exisitng channel once sediments are removed. In additon, there is some angular material available in the hillside adjacent to the dam and also at the Stormwater pond. The group agreed there should be no problem obtaining enough suitable material. The specification in the contract is for a maximum diameter of 2 feet. D30 is 1 foot and D90 is 1.5 feet.

>The access road between the stream channel work and the Contingency Pond will be completely recontoured. There is a short section of the road on drawing "Supplemental 2" where recontouring is not shown. Larry agreed to incorporate this portion of the road at no additional cost beyond what he bids.

Next the group went to the Stormwater Pond and discussed the upcoming work there:

> Work will begin with rip rap and liner removal from inside the pond. Straw wattles will be placed before earthwork begins.

> Larry has doubts there is enough material at the Contingency Pond to properly regrade the surface. He brought up his plan to leave a portion of the Stormwater Pond's north embankment available as additional backfill material for the Contingency Pond. The group agreed this was a viable approach but that hauling the additional material will only be evaluated after all available material is moved at the Contingency Pond.

Next the group went to the Minnesota Pond and looked at the regrading effort there. Don Bailey had finished spreading the topsoil stockpiles by the time the group arrived. He managed to get the majority of the rocky areas covered, although a few small areas remain. The group discussed seedbed preparation and it was agreed that discing or dozer ripping the regraded surface would be detrimental in terms of bringing rocks to the surface. The plan is to track the surface with a dozer and/or excavator perpendicular to the flow of water before the area is fertilized, seeded, and covered with the erosion control mat.

Next the group went to the run-on control ditch area. The following items were discussed:

> The channel centerline will be field adjusted to follow the toe of the cut slope instead of in the middle or fill slope side of the road as it is laid out. Larry plans to use some of the excavated material as additional fill on the road surface in order to slope the road back toward the constructed ditch.

> As staked, the ditch is longer than it needs to be. The group agreed to tie together the new and existing ditches at a shorter distance.

> At least 3 water bars will be constructed on the steepest portion of the road. These will be constructed after the channel is completed. Make Hatten and/or Peter Werner will help field fit the water bars when the time comes.

> The 3/8" minus material stockpiled along the road will be used as bedding material for the liner. Larry agreed to haul this material at no additional cost, it will be included in the cost for hauling vegetative cover material. Cover material may not come from the designated on-site borrow source. Instead, Pebbles and Larry are trying to work out a way to have 60 cubic yards of topsoil hauled from off-site. This is dependent on paperwork getting done before Friday as Pebbles is gone on vacation starting next week.

6. SIGNATURE	7. TITLE	8. ADDTL SPACE NEEDED ☒
Sonny Thlemmer	RPR	*(continued on 6300-21)* On page 3 of 3

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Previous editions of this form are obsolete.

FS-6300-21 (11/78)

USDA - Forest Service **CONTRACT DAILY DIARY** **Narrative Continuation** *(Reference FSH 6309.11)*	1. PROJECT **Beal Mtn. Pond Removal Project**	2. PAGE 3 of 3
	3. CONTRACT NUMBER **DEQ 413006**	4. DATE 8/21/12

5. NARRATIVE REPORT *(continued from 6300-20)*

Mike Hatten, Mary Beth Marks and Pebbles Clark left the Site approximately 1145. Larry Schnell and Don Bailey shuttled Don's pickup to the Stormwater Pond. Stewart Deschamps and myself went to work pulling dripline.

Stewart and I left the top of the hill at 0315. We talked to Don Bailey at the Stormwater Pond on our way out. Don had brought the dozer down from the Minnesota Pond and was on the excavator removing liner and rip-rap material from inside the pond. He had finished removing rip-rap from two of the areas and thought he should be done by the end of the day. The rip-rap will be stockpiled at the designated location at a later time. Tomorrow Don planned to stake the straw wattles and begin using the excavator to move the southern pond embankment.

Left site 0330. Don Bailey still on site.

6. SIGNATURE	7. TITLE	8. ADDTL SPACE NEEDED ☐
Sonny T Lhuneur	RPR	*(continued on 6300-21)* On page ____ of ____

Distribution: Original - CO *(weekly)*; copies: COR, SO, PROJ ENG.
Previous editions of this form are obsolete.

FS-6300-21 (11/78)

USDA - Forest Service

CONTRACT DAILY DIARY

(Reference FSH 6309.11)

1. FOREST: **Beaverhead-Deerlodge NF**

2. CONTRACT NO.: **DEQ 413006**

3. PROJECT: **Beal Mtn. Mine Pond Removal and Run-On Control Project**

4. CONTRACTOR: **Schnell Excavation**

5. CONTRACTOR REPRESENTATIVE ON SITE: J. Henderson

6. GOVERNMENT OFFICIALS ON SITE: **S. Thornborrow**, Stewart Deschamps

7. DATE	8. DAY OF WEEK	9. TIME ARRIVED	10. TIME DEPARTED	11. WEATHER
8/22/2012	Wednesday	1030	1515	mild, breezy, dry

12. TEMPERATURE °F.	13. GROUND CONDITION	14. CONTRACT TIME	15. DAYS USED	16. COMPLETION DATE
Min. - Max. -	dry	-	-	-

17. TIME USED (%)	18. WORK COMPLETED (%)	19. WORK ON SCHEDULE	20. CONTRACTOR'S WORK - (X Appropriate Box)
-	-	☒ 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.)*

Straw wattles - approximately 45 rolls at 25' per roll = 1125 ft	C

24. LIST EQUIPMENT ON SITE *(Furnished by G-Govt.; C-Cont.; S-Subcont.)*

Type	Contract Item Number and Location of Use	Hours Used	
	Equipment		C
CAT	D5 C Dozer		C
Kom	200 LC Excavator		C
MACK	Water Truck - at MN Pond		C
FORD	9000 Dump Truck		C
FORD	F-250 Pickup		C
DODGE	2500 Pickup		C
UNK	Flatbed Trailer		C
2-A	Dewatering Equipment (not used)		C
	Items:		
3-A	Remove + stockpile rip-rap		
3-B	Debris removal + disposal		
3-C	Regrade Pond Area		
3-F	Straw wattles		

25. LIST CONTRACT PAYMENTS, REPORTS, CORRESPONDENCE, ETC.

Item	Prep	Submit
—	—	—

26. WORKERS ON SITE

Classification	Number PRIME	Number SUB
Josh Henderson	X	
Don Bailey	X	
Mike Mihelic	X	
Myles Carpenter	X	

27. GOVERNMENT PROVIDED SERVICES ADEQUATELY AND TIMELY
☐ YES ☐ NO - Explain in narrative

28. NARRATIVE REPORT

Arrived at Site 1030. Mike Mihelic (dump truck) and Josh Henderson (excavator) removing rip-rap material from the Stormwater Pond and stockpiling in the designated location. Mike and Josh were waiting on straw wattles to arrive so they could get them staked and begin moving dirt. We discussed the wattle location and Josh felt he had a good handle on it. I went to the top of the hill and worked pulling drip line with Stewart Deschamps, who had arrived earlier in a separate vehicle.

1430 - Went back to the Stormwater Pond. Straw wattles had been laid on a portion of the southwestern perimeter. Mike Mihelic was expecting another load of wattles to arrive soon. Since I was at the Pond earlier, Josh and Mike had finished with rip-rap removal and stockpiling. Approximately 40 yards of material had been stockpiled adjacent to the road. The stockpile location is acceptable, although a few loose rocks need some adjustment.

3 loads (approximately 30 cubic yards) of angular rip-rap material was excavated from the southwestern corner of Stormwater Pond and trucked to the Contingency Pond for use in the stream channel restoration.

29. SIGNATURE	30. TITLE	31. ADDTL SPACE NEEDED ☒
Sam Thornborrow	RPR	*(continued on 6300-21)*

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Previous editions of this form are obsolete.

FS-6300-20 (12/85)

USDA - Forest Service **CONTRACT DAILY DIARY** **Narrative Continuation** *(Reference FSH 6309.11)*	1. PROJECT **Beal Mtn. Pond Removal Project**	2. PAGE 2 of 2
	3. CONTRACT NUMBER **DEQ 413006**	4. DATE 8/22/12

5. NARRATIVE REPORT *(continued from 6300-20)*

The cost of this work will be included in the price Larry bids for the stream channel project and will not be paid unless the stream work is added to the contract.

Don Bailey and Myles Carpenter arrived with the second load of wattles on a flatbed trailer at approximately 1445. I asked Don if there was paperwork for the wattles showing they were the same as shown in the wattle submittal. There was no papaerwork, so I said I would talk to Larry Schnell about getting a packing slip or invoice.

Don Bailey, Mike Mihelic, Myles Carpenter, and Josh Henderson began unloading wattles and setting them in place for staking. I inspected the wattles installed earlier and noticed they were not overlapped at the ends as shown in the contract. I showed the crew the drawing in the contract and had them fix the wattles already staked. They fixed these to my satisfaction and said they would make sure the rest of the wattles were staked as shown.

Stewart and I left the Site 1515. Josh said the plan for the rest of the day was to continue staking wattles and backfilling the Pond with the excavator.

6. SIGNATURE	7. TITLE	8. ADDTL SPACE NEEDED ☐ *(continued on 6300-21)* On page ____ of ____
Tony Thurman	RPR	

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FS-6300-21 (11/78)

USDA - Forest Service

CONTRACT DAILY DIARY

(Reference FSH 6309.11)

1. FOREST: **Beaverhead-Deerlodge N.**

2. CONTRACT NO.: **DEQ 413006**

3. PROJECT: **Beal Mtn. Mine Pond Removal and Run-On Control Project**

4. CONTRACTOR: **Schnell Excavation**

5. CONTRACTOR REPRESENTATIVE ON SITE: J. Henderson

6. GOVERNMENT OFFICIALS ON SITE: **S. Thornborrow**, Stewart Deschamps

7. DATE	8. DAY OF WEEK	9. TIME ARRIVED	10. TIME DEPARTED	11. WEATHER
8/23/2012	Thursday	1130	1515	mild, hazy

12. TEMPERATURE °F.	13. GROUND CONDITION	14. CONTRACT TIME	15. DAYS USED	16. COMPLETION DATE
Min. - Max. -	dry	-	-	-

17. TIME USED (%)	18. WORK COMPLETED (%)	19. WORK ON SCHEDULE	20. CONTRACTOR'S WORK - (X Appropriate Box)
-	-	☒ 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	
	Equipment		C
CAT	D-5 C Dozer		C
Kom	200 LC Excavator		C
MACK	Water truck - MN Pond		C
FORD	F-250 Pickup		C
2-A	Dewatering Equipment (not used)		C
	Items:		
3-C	Regrade Pond Area	4	

25. LIST CONTRACT PAYMENTS, REPORTS, CORRESPONDENCE, ETC.

Item	Prep	Submit
—	—	—

26. WORKERS ON SITE

Classification	Number PRIME	Number SUB
Josh Henderson	K	
Daniel Wiegand, Randy English — TT Contractors	water	treatment

27. GOVERNMENT PROVIDED SERVICES ADEQUATELY AND TIMELY
☐ YES ☐ NO - Explain in narrative N/A

28. NARRATIVE REPORT

0830 - Telephone conversation with Larry Schnell regarding a packing slip or invoice for straw wattles delivered Wednesday afternoon. I told Larry there was no paperwork with the wattles and that I needed some sort of documentation showing the delivered wattles met the specifications from the materials submittal. Larry didn't think the paperwork he received with the wattles showed specifications and said he would go back to the vendor (Northwest Linings and Geotextile Products, Inc.) and get that information for me.

Arrived at Site 1130 with Stewart Deschamps. Josh Henderson (excavator) working to backfill the Stormwater Pond with material from the southern pond embankment. Josh was at the Site by himself, no other Schnell employees on-site today. His plan was to first excavate material and then use the dozer to fill and grade the Pond area.

Josh and I discussed grading of the Stormwater Pond. It will be difficult to match the east-west grading plan as shown on Sheet 4, Profile View #1. Even with the Pond depression backfilled, Station 0+00 will still be lower in elevation than Station 2+75, which is opposite of what is indicated on the drawing.

29. SIGNATURE	30. TITLE	31. ADDTL SPACE NEEDED ☒
Sonny Thornborrow	RPR	*(continued on 6300-21)*

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Previous editions of this form are obsolete.

FS-6300-20 (12/85)

USDA - Forest Service **CONTRACT DAILY DIARY** **Narrative Continuation** *(Reference FSH 6309.11)*	1. PROJECT **Beal Mtn. Pond Removal Project**	2. PAGE 2 of 2
	3. CONTRACT NUMBER **DEQ 413006**	4. DATE 8/23/2012

5. NARRATIVE REPORT *(continued from 6300-20)*

I told Josh the east-west profile was more important than the north-south profile and that the most important aspect of the work was to ensure that water does not pool on the reclaimed surface. Josh said he would keep working on the grade and that he would ensure proper drainage.

I checked the rest of the straw wattles installed Wednesday and they were all correctly staked. Additionally, all incorrectly staked wattles have been redone to make the ends overlap. Once I receive the requested paperwork from Larry I will measure the wattles for payment.

Two trees were removed from the pond area and stockpiled adjacent to the road. The trees will be placed over the erosion control mat once work at the Stormwater Pond is complete.

Stewart and I went to former land application areas and loaded our trailer with PVC pipe and wooden fence posts for disposal at the landfill. We returned to the Stormwater Pond at approximately 1500. Josh was on the dozer pushing material east-to-west in order to fill low spots. Josh and I discussed working on Friday. He anticipated again working by himself and said he would focus the regrading effort. I told him I had another project on Friday morning and that I wasn't sure whether I would come to Beal once that was over. Josh had worked a lot of hours this week and anticipated only working until 1300 on Friday. We agreed to catch up on Monday if we didn't see each other on Friday.

Left Site 1515. Josh Henderson still on-site.

6. SIGNATURE	7. TITLE	8. ADDTL SPACE NEEDED ☐ *(continued on 6300-21)* On page ____ of ____
Sonny Thurmer	RPR	

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FS-6300-21 (11/78)

USDA - Forest Service

CONTRACT DAILY DIARY

(Reference FSH 6309.11)

1. FOREST: **Beaverhead-Deerlodge NF**

2. CONTRACT NO.: **DEQ 413006**

3. PROJECT: **Beal Mtn. Mine Pond Removal and Run-On Control Project**

4. CONTRACTOR: **Schnell Excavation**

5. CONTRACTOR REPRESENTATIVE ON SITE: J. Henderson

6. GOVERNMENT OFFICIALS ON SITE: **S. Thornborrow**, Steve Kelley

7. DATE	8. DAY OF WEEK	9. TIME ARRIVED	10. TIME DEPARTED	11. WEATHER
8/27/2012	Monday	1115	1315	mild, dry

12. TEMPERATURE °F. Min. Max.	13. GROUND CONDITION	14. CONTRACT TIME	15. DAYS USED	16. COMPLETION DATE
	dry	—	—	—

17. TIME USED (%)	18. WORK COMPLETED (%)	19. WORK ON SCHEDULE	20. CONTRACTOR'S WORK - (X Appropriate Box)
—	—	☒ 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	↓
	Equipment		
CAT	D5 C Dozer		C
KOM	200 LC Excavator		C
MACK	Water Truck - at MN Pond		C
FORD	F-350 Pickup		C
CHEVY	S-10 Pickup		C
2-A	Dewatering Equipment (not used)		C
	Items		
4-A	Debris Removal + Disposal		
4-E	Straw wattles		
1	Clear + Grub - German Gulch		

25. LIST CONTRACT PAYMENTS, REPORTS, CORRESPONDENCE, ETC.

Item	Prep	Submit
—	—	—

26. WORKERS ON SITE

Classification	Number PRIME	Number SUB
Josh Henderson	x	
Mike Mihelic	x	
Dan Rosenkrans	x	

27. GOVERNMENT PROVIDED SERVICES ADEQUATELY AND TIMELY: ☐ YES ☐ NO - Explain in narrative N/A

28. NARRATIVE REPORT

Arrived at Site 1115 with Steve Kelley (USFS, Butte). Steve will be filling in as Proect Representative on 8/28 and from September 3 through September 10.

Josh Henderson (excavator) working on clearing and grubbing of the Contingency Pond area. He had earlier cleared vegetation along German Gulch for the dam removal and stream channel reconstruction work. The vegetation removed from the stream channel and Contingency Pond is being stockpiled outside of the disturbance boundary adjacent to the access road. The vegetation stockpile will be disposed of at the landfill or scattered as appropriate. Straw wattles have been installed along German Gulch and are adequate. Larry Schnell still needs to provide a packing slip for the wattles before the wattles can be accepted.

Mike Mihelic and Dan Rosenkrans working on removing the HDPE pond liner by cutting and rolling the fabric. There is a layer of bentonite bedding material underneath the liner; care should taken to make sure the bentonite is sufficiently buried.

29. SIGNATURE: Sonny Thurmond

30. TITLE: RPR

31. ADDTL SPACE NEEDED ☒ *(continued on 6300-21)*

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USDA - Forest Service **CONTRACT DAILY DIARY** **Narrative Continuation** *(Reference FSH 6309.11)*	1. PROJECT **Beal Mtn. Pond Removal Project**	2. PAGE 2 of 2
	3. CONTRACT NUMBER **DEQ 413006**	4. DATE 8/27/2012

5. NARRATIVE REPORT *(continued from 6300-20)*

Steve and I drove to the Stormwater Pond to look at the regrading effort there. The pond area is completely filled and the regraded surface appears it will provide adequate drainage. However, there are some areas that could use some touch-up work. These include the flatter area on the west side of the regraded surface and the lip that exists where the northern pond embankment was regraded. I discussed these areas with Josh. He said that Larry had done the final regrading of the area last Friday and thought he had completed the job. Josh added he would be happy to go back and look at what I was suggesting on the ground. We agreed to inspect the area together some time this week.

Steve and I observed the completed work at the Minnesota Pond and also looked at the run-on control ditch work to be completed. I forsee work on the Contingency Pond and German Gulch to be ongoing next week while Steve is acting as Project Representative. I'm not sure if the Schnell crew will get working on the ditch by next week.

After reviewing the work areas Steve and I drove back to the Contingency Pond. Additional liner had been removed from the Pond. Josh was waiting for Larry to arrive with the diesel pump so they would be ready to dewater German Gulch once the liner was removed from the Pond. The plan is to excavate the accumulated sediments and place them in the Pond before reconstructing the German Gulch channel.

Left Site 1315. Josh Henderson, Mike Mihelic, and Dan Rosenkrans still on-site.

6. SIGNATURE	7. TITLE	8. ADDTL SPACE NEEDED ☐
Sonne Thurman	RPR	*(continued on 6300-21)* On page ____ of ____

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FS-6300-21 (11/78)

USDA - Forest Service

CONTRACT DAILY DIARY

(Reference FSH 6309.11)

1. FOREST: B-D

2. CONTRACT NO.: DEQ 413006

3. PROJECT: BEAL MT POND REMOVAL

4. CONTRACTOR: SCHNELL EXCAVATION

5. CONTRACTOR REPRESENTATIVE ON SITE:

6. GOVERNMENT OFFICIALS ON SITE: STEVE KELLEY

7. DATE	8. DAY OF WEEK	9. TIME ARRIVED	10. TIME DEPARTED	11. WEATHER
8-28-2012	TUESDAY	11:05	12:15	WARM CLEAR 80+°

12. TEMPERATURE °F. Min. Max.	13. GROUND CONDITION	14. CONTRACT TIME	15. DAYS USED	16. COMPLETION DATE
	DRY			

17. TIME USED (%)	18. WORK COMPLETED (%)	19. WORK ON SCHEDULE	20. CONTRACTOR'S WORK - *(X Appropriate Box)*
		☐ YES ☐ NO	☐ Acceptable ☐ Unacceptable - *Explain in narrative*

21. CHANGE ORDERS/AMENDMENTS ISSUED:

22. WORK ORDERS ISSUED *(Include SUSPEND/RESUME)*:

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
CAT	D-5 C DOZER	
KOM	200 CC EXCAVATOR	
FORD	F-250 PICK UP	
CHEVY	DUMP TRUCK	
	DEWATERING EQUIPMENT (PUMP, PIPE + HOSES)	

25. LIST CONTRACT PAYMENTS, REPORTS, CORRESPONDENCE, ETC.

Item	Prep	Submit

26. WORKERS ON SITE

Classification	Number PRIME	Number SUB
JOSH HENDERSON	X	
MIKE MIHELIE	X	

27. GOVERNMENT PROVIDED SERVICES ADEQUATELY AND TIMELY
☐ YES ☐ NO - Explain in narrative

28. NARRATIVE REPORT

JOSH WAS IN EXCAVATOR REMOVING TREES + SHRUBS FROM AROUND POND. MIKE WAS ROLLING FENCE TO BE REMOVED. ROLLS OF PLASTIC LINER WERE MOVED UP ON ROAD. PUMP WAS INSTALLED IN STREAM TO DIVERT WATER AROUND DAM THAT IS TO BE REMOVED. PUMP WORKING AND DIVERTING ALL THE WATER AROUND DAM AND IS DRYING OUT SEDIMENT THAT NEEDS TO BE REMOVED. JOSH THOUGHT HE WOULD BE STARTING TO REMOVE SEDIMENT LATER TODAY.

29. SIGNATURE	30. TITLE	31. ADDTL SPACE NEEDED ☐
Steve Kelley	INSPECTOR	*(continued on 6300-21)*

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FS-6300-20 (12/85)

Below are the rolls of plastic liner removed from the pond and placed on the road for removal.

Below is the pond with the majority of the liner removed. There is still liner needing removed where it is tied into the banks and the seams. The fence is down and about ¼ of the fence posts have been removed.

Below is the pump installed to dewater the dam. All the flow is being diverted around the dam.

Below is the dewatered dam.

Here is another view of the dewatered dam from downstream.

Below is the water flowing back into the stream channel.

USDA - Forest Service

CONTRACT DAILY DIARY

(Reference FSH 6309.11)

1. FOREST: **Beaverhead-Deerlodge NF**

2. CONTRACT NO.: **DEQ 413006**

3. PROJECT: **Beal Mtn. Mine Pond Removal and Run-On Control Project**

4. CONTRACTOR: **Schnell Excavation**

5. CONTRACTOR REPRESENTATIVE ON SITE: L. Schnell ; J. Henderson

6. GOVERNMENT OFFICIALS ON SITE: **S. Thornborrow**

7. DATE	8. DAY OF WEEK	9. TIME ARRIVED	10. TIME DEPARTED	11. WEATHER
8/29/2012	Wednesday	0900	1610	warm, smoky

12. TEMPERATURE °F. Min. Max.	13. GROUND CONDITION	14. CONTRACT TIME	15. DAYS USED	16. COMPLETION DATE
	dry	—	—	—

17. TIME USED (%)	18. WORK COMPLETED (%)	19. WORK ON SCHEDULE	20. CONTRACTOR'S WORK - *(X Appropriate Box)*
—	—	☒ 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.)*

erosion control blanket ~300 sy	C

24. LIST EQUIPMENT ON SITE *(Furnished by G-Govt.; C-Cont.; S-Subcont.)*

Type	Contract Item Number and Location of Use	Hours Used	
	Equipment		C
CAT	D5 C Dozer		C
KOM	200 LC Excavator		C
MACK	Water Truck - at MN Pond		C
FORD	9000 Dump truck - left at 1300		C
FORD	F-350 Pickup		C
DODGE	2500 Pickup		C
UNK	Flatbed trailer		C
2-A	Dewatering equipment (not used)		C
UNK	Rental 6" pump (rented)		C
	Items		
4-A	Debris removal / disposal		
4-B	Regrade pond area		
A2-2	check dam dewatering		

Items (cont'd)

A2-3 - Sediment removal	
A2-4 - check dam removal	
A2-5 - Channel replacement	

25. LIST CONTRACT PAYMENTS, REPORTS, CORRESPONDENCE, ETC.

Item	Prep	Submit
A2-6 - Access road reclamation	—	—

26. WORKERS ON SITE

Classification	Number PRIME	Number SUB
Mike Mihelic (left 1300)	x	
Josh Henderson	x	
Larry Schnell	x	
TT/WP water treatment contractors: Daniel Wiegand, Ross Davenport, Randy English		

27. GOVERNMENT PROVIDED SERVICES ADEQUATELY AND TIMELY
☐ YES ☐ NO - Explain in narrative N/A

28. NARRATIVE REPORT

Arrived at Site 0900. Additional work completed since I was at the Site on Monday includes:

- Accumulated sediments behind the diversion dam have been placed in the Contingency Pond. The dam lumber and concrete have been removed; the concrete will was placed in the bottom of the pond for burial while the lumber was stockpiled for disposal at the BSB landfill.

- 5 rolls of liner have been removed from the pond and rolled up for transport. There are also piles of liner that are not rolled, and there is more liner still to be removed from the perimeter of the pond. I need to check if A&S Metals in Butte will recycle the liner, otherwise it will have to go to the BSB landfill.

- The chain link fence and approximately 1/3 of the metal posts have been removed. Josh is planning to bring a skid steer to Site and use it for breaking concrete off the posts. The concrete will be buried and the posts recycled.

29. SIGNATURE	30. TITLE	31. ADDTL SPACE NEEDED ☒
David Thornborrow	RPR	(continued on 6300-21)

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Previous editions of this form are obsolete.

USDA - Forest Service **CONTRACT DAILY DIARY** Narrative Continuation *(Reference FSH 6309.11)*	1. PROJECT DEQ 413006	2. PAGE 2 of 3
	3. CONTRACT NUMBER Beal Pond Removal	4. DATE 8/29/12

5. NARRATIVE REPORT *(continued from 6300-20)*

Josh (excavator) and Mike Mihelic (laborer, truck driver) were working on the German Gulch stream channel reconstruction. Channel excavation was completed and the dewatering pump turned off approximately 5 minutes before I arrived.

I inspected the stream channel work and made the following observations:

- The constructed stream channel conforms to the specifications shown on drawing "Suplemental 2." The stream gradient, stream bed width and height, and streambank slopes are acceptable. Erosion control blanket has been keyed into the stream bank and spread over the disturbed ground. The blanket will not be stapled down until seeding is completed; this way the area can be uncovered and seeded prior to stapling the fabric down. I inspected two rolls of the erosion control blanket and found they were different material than what was quoted in the contractor submittals. The submittal blanket is "PermeaTex/Permealock S1 - Bio Net," a product trademarked Northwest Linings. The sticker on the packaged rolls is "Excel SR-1 All Natural Temprary Erosion Control Blanket" manufactured by Western Excelsior Corporation. I called Mike Hatten at 1050 to discuss the situation with him. Mike said we needed Schnell to submit a Substitution Request Form (Appendix A of the contract) and provide the certified specification information so he could determine if the different blanket was acceptable. After talking with Mike I explained the situation to Josh Henderson. Josh said Larry Schnell was planning to be on-site later today and we could bring it up with him at that time. My conversation with Larry is documented later in the daily diary.

- The 30 cubic yards of rip-rap material brought from the Stormwater Pond was close to the correct volume of material needed for lining the channel. The imported rip-rap blends naturally with other rock in the stream.

- The contractor did a good job of minimizing disturbance. I believe the disturbed area will revegetate well based on the dense riparian communities adjacent to the distubed area.

Josh used the excavator to transport the pump away from the stream channel. After this, Josh loaded Mike's dump truck with 1 load of landfill-bound waste from the Contingency Pond area and Mike left the Site.

Larry Schnell arrived on-site 1345. I discussed the erosion control blanket with Larry. He was upset with NW Linings for sending him a different product than what they sent specs for. Larry will get specification information from NW Linings and submit for review along with the Substitution Request Form. Larry and I agreed that if the replacement blanket is deemed unacceptable he will have to work out a replacement with NW Linings. I also asked Larry about the straw wattle documentation I still need to receive. Larry showed me a packing slip and invoice that indicated the wattles were of the type shown in the submittal. However, we both agreed that given there are no tags on the wattles and the situation with the erosion blanket, there was no way to tell whether the wattles at the Site were actually the same as shown in the submittal. Larry said he would make me a copy of the paperwork he had and that he would raise the issue with NW Linings when he called about the erosion control blanket.

I also talked with Larry about my concerns with the grading at the Stormwater Pond, particularly the abrubt angle where the northern pond embankment meets the regraded surface. Larry and I traveled to the Pond where I explained the additional grading I wanted to see done. Larry felt the additional work was uncalled for, based on the following:

6. SIGNATURE	7. TITLE	8. ADDTL SPACE NEEDED
Sonny Thimmons	RPR	On page ___ of ___

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FS-6300-21 (11/78)

USDA - Forest Service **CONTRACT DAILY DIARY** Narrative Continuation *(Reference FSH 6309.11)*	1. PROJECT **Beal Mtn. Pond Removal Project**	2. PAGE 3 of 3
	3. CONTRACT NUMBER **DEQ 413006**	4. DATE 8/29/12

5. NARRATIVE REPORT *(continued from 6300-20)*

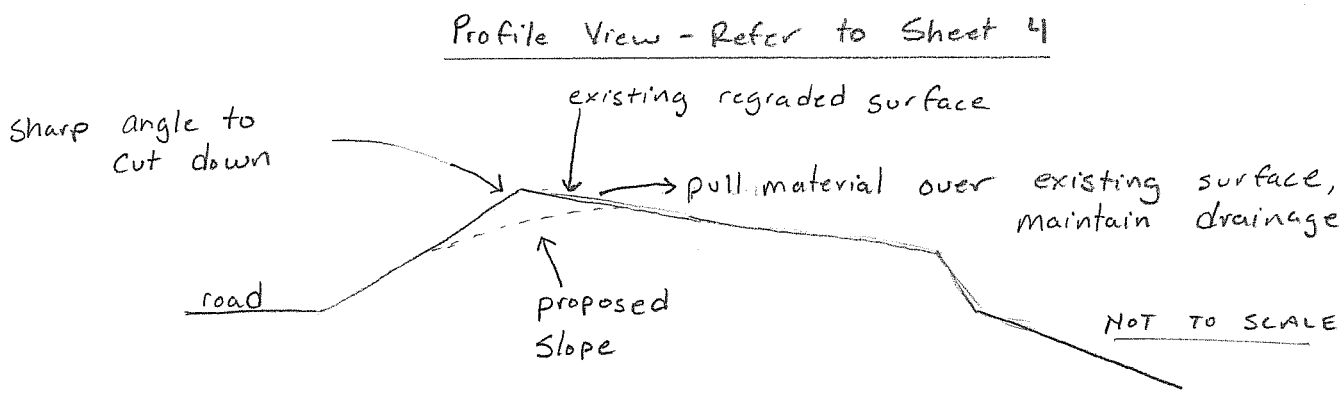
1). He thought the grading was close to what was discussed on Tuesday, August 21 when the pond work was reviwed on the ground with Pebbles Clark, Mike Hatten, Mary Beth Marks.

2). He thought Mike Hatten was happy with the work when they reviewed it together yesterday, August 28. He said Mike wanted some minor work done to reshape a small berm adjacent to the road but that he was happy with the regrading in the area I was talking about.

3). Returning to the Pond would require additional walking of the tracked equipment, which he avoids if possible because it is hard on equipment, particularly the excavator. It would also mean additional time on the project and would add to the time he had already spent doing surface preparations that would be covered by the work I am suggesting. He was frustrated that nobody told him additional grading was necesarry while the equipment was there working on that Pond.

I told Larry I understood where he was coming from and that I was not trying to cause him a hardship, that I was only trying to get the best possible product. I showed Larry the profile sections of Sheet 4; we both agreed that these cross sections were not feasible given the conditions on the ground. I told Larry I was primarily concerned with the second profile view, and that my regrading suggestions were put forward as an attempt to get the final product closer to this alignment.

Despite his concerns, Larry said he would do the work if it would make me happy. I told him it would make me happy and that I appreciated him working with me. The plan is to use the excavator to remove the sharp angle on the northern edge of the regraded pond surface:



Larry will also regrade the small berm adjacent to road on the west end of the Pond area. This work falls under contract item 3-C, Regrade Pond Area. No additional payment will be made for the extra time spent by the contractor.

After reviewing the Stormwater Pond, Larry returned to the Contingency Pond and helped Josh with more debris removal.

Left Site 1610. Josh Henderson and Larry Schnell still on-site.

6. SIGNATURE	7. TITLE	8. ADDTL SPACE NEEDED ☐
Tom Thurman	RPR	*(continued on 6300-21)* On page ____ of ____

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Previous editions of this form are obsolete.

FS-6300-21 (11/78)

USDA - Forest Service

CONTRACT DAILY DIARY

(Reference FSH 6309.11)

1. FOREST: **Beaverhead-Deerlodge NF**

2. CONTRACT NO.: **DEQ 413006**

3. PROJECT: **Beal Mtn. Mine Pond Removal and Run-On Control Project**

4. CONTRACTOR: **Schnell Excavation**

5. CONTRACTOR REPRESENTATIVE ON SITE: J. Henderson

6. GOVERNMENT OFFICIALS ON SITE: **S. Thornborrow**

7. DATE	8. DAY OF WEEK	9. TIME ARRIVED	10. TIME DEPARTED	11. WEATHER
8/30/2012	Thursday	1330	1350	warm, smoky

12. TEMPERATURE °F. Min. Max.	13. GROUND CONDITION	14. CONTRACT TIME	15. DAYS USED	16. COMPLETION DATE
	dry	—	—	—

17. TIME USED (%)	18. WORK COMPLETED (%)	19. WORK ON SCHEDULE	20. CONTRACTOR'S WORK - (X Appropriate Box)
—	—	☒ 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	
	Equipment		C
CAT	D5 C Dozer		C
KOM	200 LC Excavator		C
CAT	Skid steer		C
MACK	Water truck - MN Pond		C
FORD	F-350 Pickup		C
2-A	Dewatering Equipment (not used)		C
	Items		
4-A	Debris removal / disposal		
4-B	Regrade Pond area		
A2-6	Access road reclamation		

25. LIST CONTRACT PAYMENTS, REPORTS, CORRESPONDENCE, ETC.

Item	Prep	Submit
none		

26. WORKERS ON SITE

Classification	Number PRIME	Number SUB
Josh Henderson	1	
Mary Beth Marks, Jim Yarbrough - FS		

27. GOVERNMENT PROVIDED SERVICES ADEQUATELY AND TIMELY
☐ YES ☐ NO - Explain in narrative N/A

28. NARRATIVE REPORT

Before visiting the construction work Mary Beth Marks, Jim Yarbrough (BDNF roads engineer), I inspected the Beal access road to assess the scope of repairs and maintenance needed on the road.

The three of us stopped at the Contingency Pond 1330 hours. Josh Henderson (excavator) was pulling material from the road/south pond embankment and placing into pond. More blue PVC pipes and the cast iron valves have also been removed from the road and stockpiled for disposal. A CAT Skid steer at the Site was used to break concrete from the fence posts. The concrete will be buried in the pond and the metal posts recycled.

Mary Beth, Jim, and I inspected the stream channel reconstruction. Everyone was happy to have the dam removed and thought the work was progressing well.

Spoke with Josh before leaving the Site:

1. He will make sure all bentonite and concrete are sufficiently buried within the pond.

29. SIGNATURE	30. TITLE	31. ADDTL SPACE NEEDED ☒
Sonny Thornborrow	RPR	*(continued on 6300-21)*

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FS-6300-20 (12/85)

USDA - Forest Service **CONTRACT DAILY DIARY** **Narrative Continuation** *(Reference FSH 6309.11)*	1. PROJECT **Beal Mtn. Pond Removal Project**	2. PAGE 2 of 2
	3. CONTRACT NUMBER **DEQ 413006**	4. DATE 8/30/2012

5. NARRATIVE REPORT *(continued from 6300-20)*

2. Josh was planning to work until approximately 1400 on Friday. No Schnell employees will be working at the Site on the Labor Day holiday (Monday 9/3).

3. Josh provided a copy of the packing slip Larry showed me yesterday and a second page showing the labels found on the erosion control blanket and the turf reinforcement mat. Josh asked if these were sufficient. I told him we needed to have the certification spec page and showed him one from the submittal package. I told him Larry and I talked about this and that I thought Larry was probably working on getting them.

4. Mike Mihelic, Dan Rosenkrans, and Don Bailey are no longer employees of Schnell Excavation. Josh didn't think this would be a problem for the project as he has completed the majority of work to day by himself.

Left site 1350. Josh Henderson still on-site. No photos taken today. The stream channel replacement work needs measured for payment.

6. SIGNATURE	7. TITLE	8. ADDTL SPACE NEEDED ☐ *(continued on 6300-21)* On page ____ of ____
Sonny Tillman	RPR	

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FS-6300-21 (11/78)

NORTHWEST LININGS &
GEOTEXTILE PRODUCTS, INC.
"Helping to Protect the Environment"
P.O. Box 1248
21000 77th Avenue South
Kent, WA 98032
(253) 872-0244 * (800) 729-6954
FAX: (253) 872-0245
www.northwestlinings.com

Picking Sheet

Order Number: G60009
Order Date: 8/20/2012
Salesperson: 0007
MT, WY, CO, & Dakotas
Warehouse: 000
KENT MAIN WAREHOUSE

Sonny

Sold To: SCH5700
Schnell Excavating Inc
122133 Nissler RD
Butte, MT 59701

Ship To:
Schnell Excavating Inc
122133 Nissler RD
Butte, MT 59701

Confirm To: LARRY 406-723-5700 CMK

Ship Date: 8/23/2012

Customer P.O.	Ship VIA	F. O. B.	Terms
BEAL MNT	OLD DOMINION	JOBSITE	NET 30 DAYS

Item Number	Quantity Ordered:			Shipped	Backordered
EPPSSR1-BIO PermeaLok S1 / SR-1 STRAW BLANKET - 8' BIODEGRADABLE NET 8' X 112.5' = 100 yd² / ROLL	58 ROLL	=	5,800.00 SY	45 rolls	13 rolls
EWFSTRAW-GREEN PermeaTex LOG S9-25 / STRAW LOG 9" X 25' / EACH GREEN BIODEGRADABLE NETTING	37 LOG	=	925.00 LF	37 logs	ϕ
GSFPOSTW1X1X24 WOOD STAKE, 1" X 1" X 24" 50 PIECES EACH BUNDLE 70 BUNDLES PER PALLET = 3,500 PIECES (4.5 oz each - 14 lbs per bundle)	250		250.00 EACH	250 stakes	ϕ
EPPSPP5-8 PP5-8 PermeaLok POLYPROPYLENE MAT 7.5' X 120' = 100 yd² / ROLL	5 ROLL	=	500.00 SY	5 rolls	ϕ
GMSTAPLE-6 STAPLE, SOD, 11 GA, 6"X1"X6" 1 BOX = 1,000 STAPLES11 GAUGE	19		19.00 EACH	19 boxes	ϕ

Received by Signature:

Name: (Printed):

Ship Date: 8 / 20 / 2012

Warehouse:
Pulled by: RJ / JW
Checked by: RJ / JW

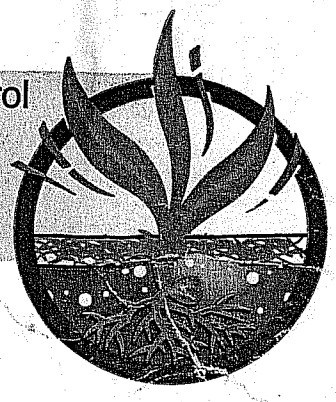
WESTERN EXCELSIOR CORPORATION

PP5 - 8

Turf Reinforcement Mat

100% Synthetic Matrix
UV Stabilized, Heavy Duty Netting,
8 oz Permanent TRM

- Immediate Erosion Control
- Seed Bed Protection
- Permanent Turf Reinforcement



Unroll

"Blanketing Nature with Nature"

WESTERN EXCELSIOR
901 Grand Avenue, Mancos,
Colorado 81328
Telephone: 866-540-9810
Fax: 812-867-8928
westernexcelsior.com

EXCEL SR-1

All Natural

100% Straw • Single Net
100% Biodegradable
Temporary Erosion Control Blanket

Unroll

WESTERN EXCELSIOR CORPORATION

"Blanketing Nature with Nature"

WESTERN EXCELSIOR
901 Grand Ave • Mancos, Colorado 81328
Telephone 866-540-9810 • Fax 812-867-8928
westernexcelsior.com

USDA - Forest Service

CONTRACT DAILY DIARY

(Reference FSH 6309.11)

1. FOREST: **Beaverhead-Deerlodge NF**

2. CONTRACT NO.: **DEQ 413006**

3. PROJECT: **Beal Mtn. Mine Pond Removal and Run-On Control Project**

4. CONTRACTOR: **Schnell Excavation**

5. CONTRACTOR REPRESENTATIVE ON SITE: L. Schnell

6. GOVERNMENT OFFICIALS ON SITE: **S. Thornborrow**

7. DATE	8. DAY OF WEEK	9. TIME ARRIVED	10. TIME DEPARTED	11. WEATHER
8/31/2012	Friday	1045	1330	mild, smoky

12. TEMPERATURE °F. Min. Max.	13. GROUND CONDITION	14. CONTRACT TIME	15. DAYS USED	16. COMPLETION DATE
	dry	—	—	—

17. TIME USED (%)	18. WORK COMPLETED (%)	19. WORK ON SCHEDULE	20. CONTRACTOR'S WORK - (X Appropriate Box)
—	—	☒ 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	↓
CAT	D5 C Dozer		C
KOM	200 LC Excavator		C
CAT	236 B Skid Steer		C
MACK	Water truck - MN Pond		C
FORD	F350 P.U.		C
DODGE	3500 P.U.		C
UNK	bumper pull flatbed trailer		C
UNK	goosenecck flatbed trailer		C
2-A	dewatering equipment - MN Pond (not used)		C
	Items:		
4-A	Debris removal / disposal		
4-B	Regrade pond area		

25. LIST CONTRACT PAYMENTS, REPORTS, CORRESPONDENCE, ETC.

Item	Prep	Submit
none		

26. WORKERS ON SITE

Classification	Number PRIME	Number SUB
Larry Schnell	X	
Josh Henderson	X	
Daniel Wiegand - TT water treatment contractor		
John Koerth / Thad Adkins - DEQ		

27. GOVERNMENT PROVIDED SERVICES ADEQUATELY AND TIMELY
☐ YES ☐ NO - Explain in narrative N/A

28. NARRATIVE REPORT

Arrived at Site 1045. Josh Henderson (excavator) was moving the south Contingency Pond embankment and Larry Schnell (dozer) was pushing the excavated material into the Pond depression. John Koerth and Thad Adkins (Montana DEQ) arrived at the Site at the same time as me. John was giving Thad a tour of the mine reclamation projects DEQ is involved with. Thad is the new lawyer that will be suporting the DEQ's AML projects. I showed John and Thad the Contingency Pond and German Gulch reconstruction work before they went up the hill to tour the rest of the SIte.

Larry Schnell provided the certified specifications for some of the geotextiles (erosion blanket, turf mat, and wattles) that were ordered for the project. I told Larry I would send the documents to Mike Hatten and he would determine if the products are acceptable.

Larry and I discussed the additional grading to be completed at the Stormwater Pond. Larry will transport the excavator and dozer back to the Stormwater Pond once work at the Contingency Pond is completed. I told Larry that I had discussed the grading with Mary Beth Marks and Mike Hatten and that we agreed more grading was

29. SIGNATURE	30. TITLE	31. ADDTL SPACE NEEDED ☒
Sonny Thornborrow	RPR	*(continued on 6300-21)*

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USDA - Forest Service **CONTRACT DAILY DIARY** **Narrative Continuation** *(Reference FSH 6309.11)*	1. PROJECT **Beal Mtn. Pond Removal Project**	2. PAGE 2 of 2
	3. CONTRACT NUMBER **DEQ 413006**	4. DATE 9/31/2012

5. NARRATIVE REPORT *(continued from 6300-20)*

required to get the Pond closer to the lines and grades depicted in the contract. I showed Larry cross-section 2 on Sheet 4 and told him this was the alignment that needed to be met. I also told him we are trying to arrange to have a Tetra Tech engineer on-site while the additional grading is completed so that we could agree on a final product. Mike and Josh will work with Steve Kelley so Steve knows when the Stormwater Pond will be regraded. Steve will coordinate with Mike Hatten at Tetra Tech regarding when the work will be done.

I suggested that in the event the Tetra Tech engineer was not available, Schnell could work on the run-on control ditch and come back to the Stormwater Pond. Larry was adamant the Stormwater Pond work be done immediately following completion of the Contingency Pond regardless of whether the engineer was present. Larry said he can't be moving equipment all around the hill and that re-mobilizing to portions of the project was frustrating and costly. I said I understood his frustration and that the reason I wanted the engineer on-site for the regrading was so agreement could be reached on a final product. I told Larry if the regrading was done without the engineer it was possible they would have to come back a third time if their work is not sufficient. Larry said he won't come back a third time. We agreed every effort will be made to have the engineer on-site when the work is done in order to avoid this scenario.

I measured the stream channel reconstruction length - 73 feet. The contract estimate was 66 feet.

The skid steer was used to place 5 rolls of liner material on a gooseneck flatbed trailer for recycling. Larry and Josh left the Site approximately 1300. I left the Site at 1330 after reviewing other ongoing projects at Beal.

6. SIGNATURE	7. TITLE	8. ADDTL SPACE NEEDED ☐
Sonny Thurman	RPR	*(continued on 6300-21)* On page ____ of ____

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schnellexcavating@rfwave.net

From: "Cara Kryzsko" <carak@northwestlinings.com>
Date: Thursday, August 30, 2012 2:41 PM
To: <schnellexcavating@rfwave.net>
Cc: <rachels@northwestlinings.com>
Attach: schnell permea letters.pdf
Subject: Material delivered

Sorry

Larry,

Attached is a letter stating how our private label name of PermeaTex is associated with the items that were sent to the Beal Mnt project. All materials are per the specification on the data sheets submitted by Rachel. If you have any further questions please let me know. Thank you

I have also attached the data sheets from the Manufacturer's also. Thank you again

Regards,

Cara Kryzsko
Geosynthetic Inside Sales
Northwest Linings & Geotextile Products, Inc.
21000 77th Ave South
Kent, WA 98032
P: 253-867-5366 Direct Line
P: 253-872-0244 Sales Line
P: 253-796-0012 Construction Line
F: 253-872-0245
carak@northwestlinings.com
www.northwestlinings.com
"Helping to Protect the Environment"

NORTHWEST LININGS &
GEOTEXTILE PRODUCTS, Inc.
"Helping to Protect the Environment"
21000 77th Avenue South
Kent, WA 98032
(253) 872-0244 • (800) 729-6954
FAX: (253) 872-0245
www.northwestlinings.com

Date: August 30, 2012
Subject: PermeaTex / PermeaLok Trade Name

To Whom It May Concern:

Please find the attached specification for your review. The product you've requested information on is the PermeaLok S-1 Straw Blanket with biodegradable netting. They are manufactured and called Western Excelsior SR-1 Straw Blanket Bio Net. Northwest Linings markets this geotextile by the name 'PermeaLok S1 BioNet'.

We have a broad line of products that are marketed and distributed under our PermeaCell, PermeaTex, PermeaLok, and PermeaGrid brand names, but sold under the manufacturer's name too. Private labeling is done by hundreds of manufacturer's and companies in the construction industry to protect their respective products, customers and/or market niches.

In summary, the PermeaLok S1 BioNet that we are submitting for your project is labeled with the Manufacturer name of Western Excelsior SR-1 BioNet. This product meets all standards on our specification sheets.

Please call me at 253-872-0244, Ext. 102 or email me if you need further assistance.

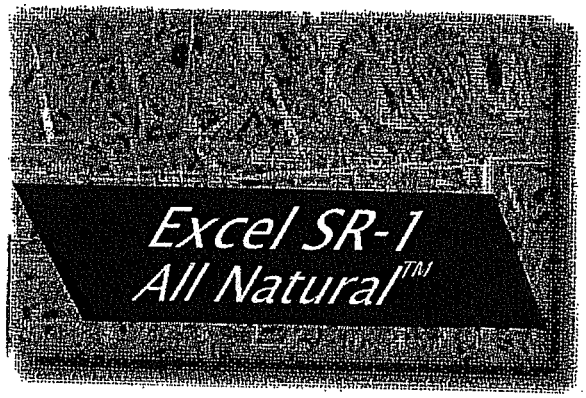
Thank you.

Sincerely,

Cara Kryzsko

Cara Kryzsko
Northwest Linings & Geotextile Products, Inc.

Material Properties and Dimensions



Description

Western Excelsior manufactures a full line of Rolled Erosion Control Products (RECPs). Excel SR-1 All Natural temporary Erosion Control Blanket is composed of a certified weed free agricultural straw matrix mechanically (stitch) bonded on two inch centers to a single biodegradable, jute/scrim net. Straw utilized in manufacturing the SR-1 All Natural is certified weed free. Thread utilized in the construction of the blanket is biodegradable cotton. Excel SR-1 All Natural blanket is recommended for use in channels or slopes requiring erosion protection for a period up to twelve months. Actual field longevity is dependent on soil and climatic conditions.

Specifications

Each roll of EXCEL SR-1 All Natural is manufactured under Western Excelsior's Quality Assurance Program to ensure a continuous distribution of fibers and consistent thickness. Verifiable values are provided in Table 1 and product characteristics are provided in Tables 2 and 3. Values provided in Tables 1, 2 and 3 represent expected values at the time of manufacture. Installation instructions and performance data are available from Western Excelsior's Technical Support Division.

Table 1 - Verified Values

Tested Property	Test Method	Value	Units
Tensile Strength	ASTM D6818	9.0 (MD) 6.3 (TD)	lb/in
Elongation	ASTM D6818	20.0 (MD) 20.0 (TD)	%
Mass per Unit Area	ASTM D6475	8.0	oz/yd²
Thickness	ASTM D6525	7.0	mm
Light Penetration	ASTM D6567	22	% open
Water Absorption	ASTM D1117	450	%

Table 2 - Netting

Top Net	Biodegradable Jute/Scrim (Leno Weave)
Bottom Net	N/A
Top Net Opening	0.5 in x 1.0 in (Nominal)
Bottom Net Opening	N/A

Table 3 - Roll Dimensions

Style	Narrow	Wide
Roll Width	8.0 ft	16.0 ft
Roll Length	112.5 ft	112.5 ft
Coverage	100 yd²	200 yd²
Roll Weight	55 lbs	110 lbs

Document # WE_EXCEL_SR1AN_SPEC. This document has been developed to provide the characteristic properties of the product described. For questions, to request performance data or installation recommendations, contact Western Excelsior at 800-967-4009 or wexcotech@westernexcelsior.com. Updated 02/10.

NORTHWEST LININGS &
GEOTEXTILE PRODUCTS, Inc.
"Helping to Protect the Environment"
21000 77th Avenue South
Kent, WA 98032
(253) 872-0244 • (800) 729-6954
FAX: (253) 872-0245
www.northwestlinings.com

Date: August 30, 2012
Subject: PermeaTex / PermeaLok Trade Name

To Whom It May Concern:

Please find the attached specification for your review. The product you've requested information on is the PermeaLok TRM 8. They are manufactured and called Western Excelsior PP5-8. Northwest Linings markets this geotextile by the name 'PermeaLok TRM 8.

We have a broad line of products that are marketed and distributed under our PermeaCell, PermeaTex, PermeaLok, and PermeaGrid brand names, but sold under the manufacturer's name too. Private labeling is done by hundreds of manufacturer's and companies in the construction industry to protect their respective products, customers and/or market niches.

In summary, the PermeaLok TRM 8 that we are submitting for your project is labeled with the Manufacturer name of Western Excelsior PP5-8. This product meets all standards on our specification sheets.

Please call me at 253-872-0244, Ext. 102 or email me if you need further assistance.

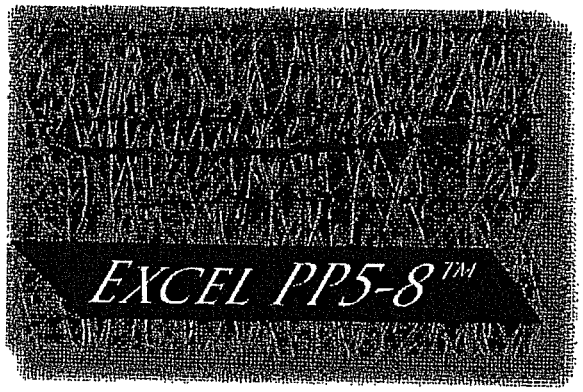
Thank you.

Sincerely,

Cara Kryzsko

Cara Kryzsko
Northwest Linings & Geotextile Products, Inc.

Material Properties and Dimensions



Description

Western Excelsior manufactures a full line of Rolled Erosion Control Products (RECPs). Excel PP5-8 Turf Reinforcment Mat is composed of 100% synthetic components. A matrix of green polypropylene fibers is mechanically (stitch) bound between two UV stabilized, heavy duty synthetic nets. Stitching is secured on two inch centers using UV stabilized, heavy duty polypropelene thread. Excel PP5-8 is a permanent RECP that provides immediate erosion protection and long term turf reinforcement and is intended for slope or channel applications requiring erosion protection for greater than thirty-six months.

Specifications

Each roll of EXCEL PP5-8 is manufactured under Western Excelsior's Quality Assurance Program to ensure a continuous distribution of fibers and consistent thickness. Verified values are provided in Table 1 and product characteristics are provided in Table 2. Values provided in Tables 1 and 2 represent expected values at the time of manufacture. Installation instructions and performance data are available from Western Excelsior's Technical Support Division.

Table 1 - Verified Values

Tested Property	Test Method	Value	Units
Tensile Strength	ASTM D6818	20.8 (MD), 17.7 (TD)	lb/in
Elongation	ASTM D6818	30 (MD), 20 (TD)	%
Mass per Unit Area	ASTM D6566	8.0	oz/yd²
Thickness	ASTM D1777	8.6	mm
Light Penetration	ECTC TASC 00197	35	% open
Resiliency	ASTM D6524	89	%
UV Stability	ASTM 4355	100	%
Porosity	Computed	97	%

Table 2 - Netting

Top Net	Synthetic, UV Stable
Bottom Net	Synthetic, UV Stable
Top Net Opening	0.75 in x 0.75 in (Nominal)
Bottom Net Opening	0.75 in x 0.75 in (Nominal)

Table 3 - Roll Dimensions

Style	Narrow	Wide
Roll Width	7.5 ft	15.0 ft
Roll Length	120 ft	120 ft
Coverage	100 yd²	200 yd²
Roll Weight	50 lbs	100 lbs

Document # WE_EXCEL_PP58_SPEC. This document has been developed to provide the characteristic properties of the product described. For questions, to request performance data or installation recommendations, contact Western Excelsior at 800-967-4009 or wexcotech@westernexcelsior.com. Updated 06/07.

NORTHWEST LININGS &
GEOTEXTILE PRODUCTS, Inc.
"Helping to Protect the Environment"
21000 77th Avenue South
Kent, WA 98032
(253) 872-0244 • (800) 729-6954
FAX: (253) 872-0245
www.northwestlinings.com

Date: August 30, 2012
Subject: PermeaTex / PermeaLok Trade Name

To Whom It May Concern:

Please find the attached specification for your review. The product you've requested information on is the PermeaLok Straw Wattle with BioNet. They are manufactured and called Earthsaver Straw Wattle with BioNet. Northwest Linings markets this geotextile by the name 'PermeaLok Straw Wattle'.

We have a broad line of products that are marketed and distributed under our PermeaCell, PermeaTex, PermeaLok, and PermeaGrid brand names, but sold under the manufacturer's name too. Private labeling is done by hundreds of manufacturer's and companies in the construction industry to protect their respective products, customers and/or market niches.

In summary, the PermeaLok Straw Wattle with BioNet that we are submitting for your project is labeled with the Manufacturer name of Earthsaver Straw Wattle with BioNet. This product meets all standards on our specification sheets.

Please call me at 253-872-0244, Ext. 102 or email me if you need further assistance.

Thank you.

Sincerely,

Cara Kryzsko
Northwest Linings & Geotextile Products, Inc.

Earthsaver 9" x 25' Straw Wattle

Property	Test Method	Units	Min. Value
Mass per Unit Weight	Field Measured	(lbs/ft)	1.6
Dimension	Field Measured	(Dia/Inches) (Length/FT)	9.0 25.0
Net Strand Thickness	Field Measured	(Inches)	0.030
Net Knot Thickness	Field Measured	(Inches)	0.055
Netting Unit Weight	Certified	(Ounces/ft)	0.35
Sediment Retention Capacity	Rainfall Sim. [1]	(lbs/ft)	30
Installed Free-Board Ht.	Field Measured	(Height/Inches)	6.0 — 7.0
Straw Fiber	Field Measured	Avg. Length (in)	3.0
Soil Loss[1]	Rainfall Sim. [1]	% Effectiveness	58[2]
De-Stabilizing Moisture	Rainfall Sim. [1]	% Retained (Max.)	11
Fiber Content	Certified	% Rice Straw	100

- Better filtering of runoff waters
- Stop check dam blowouts
- Protect water from going around check dams
- Prevent spread of non-native vegetation
- Easier to handle and install than straw bales
- Non-food source for animals

Minimum of three 10 year predicted storm events on 1V:3H slope with Clayey Sand type soil.

[2] Minimum sediment yield reduction value.

USDA - Forest Service

CONTRACT DAILY DIARY

(Reference FSH 6309.11)

1. FOREST: Beaverhead-Deerlodge NF

2. CONTRACT NO.: DEQ 413006

3. PROJECT: Beal Mtn. Mine Pond Removal and Run-On Control Project

4. CONTRACTOR: Schnell Excavation

5. CONTRACTOR REPRESENTATIVE ON SITE: J HENDERSON

6. GOVERNMENT OFFICIALS ON SITE: ~~S. Thornborrow~~ STEVE KELLEY

7. DATE	8. DAY OF WEEK	9. TIME ARRIVED	10. TIME DEPARTED	11. WEATHER
9-4-12	TUESDAY	10:15	11:30	SUNNY WARM SMOKY

12. TEMPERATURE °F. Min. Max.	13. GROUND CONDITION	14. CONTRACT TIME	15. DAYS USED	16. COMPLETION DATE
	DRY			

17. TIME USED (%)	18. WORK COMPLETED (%)	19. WORK ON SCHEDULE	20. CONTRACTOR'S WORK - (X Appropriate Box)
		☑ YES ☐ NO	☑ Acceptable ☐ Unacceptable - Explain in narrative

21. CHANGE ORDERS/AMENDMENTS ISSUED

22. WORK ORDERS ISSUED (Include SUSPEND/RESUME)

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
CAT	D5 C DOZER	
KOM	200 CC EXCAVATOR	
FORD	F 350 P.U.	

25. LIST CONTRACT PAYMENTS, REPORTS, CORRESPONDENCE, ETC.

Item	Prep	Submit

26. WORKERS ON SITE

Classification	Number PRIME	Number SUB
JOSH HENDERSON	X	

27. GOVERNMENT PROVIDED SERVICES ADEQUATELY AND TIMELY
☐ YES ☐ NO - Explain in narrative

28. NARRATIVE REPORT

JOSH ONLY ONE WORKING ON POND. HE WAS IN EXCAVATOR PULLING MATERIAL FROM STREAM SIDE INTO POND, JOSH NEVER STOPPED WORKING SO I FIGURED HE DID NOT HAVE ANY QUESTIONS AND WANTED TO KEEP WORKING, ABOUT 1/3 OF THE POND HAS BEEN FILLED AND CONTOURED,

29. SIGNATURE: Steve Kelley

30. TITLE: INSPECTOR

31. ADDTL SPACE NEEDED ☐
(continued on 6300-21)

Distribution: Original - CO (weekly); COR, SO, PROJ ENG
Previous editions of this form are obsolete.

Below is Josh working with the excavator pulling material from the stream side into the pond.

You can see the pond has been partially filled in and contoured. You can see the dozer in the background. Below is a different angle of Josh removing material from the stream side of the pond.

USDA - Forest Service

CONTRACT DAILY DIARY

(Reference FSH 6309.11)

1. FOREST: **Beaverhead-Deerlodge NF**

2. CONTRACT NO.: **DEQ 413006**

3. PROJECT: **Beal Mtn. Mine Pond Removal and Run-On Control Project**

4. CONTRACTOR: **Schnell Excavation**

5. CONTRACTOR REPRESENTATIVE ON SITE: NONE

6. GOVERNMENT OFFICIALS ON SITE: ~~S. Thornborrow~~ STEVE KELLEY

7. DATE	8. DAY OF WEEK	9. TIME ARRIVED	10. TIME DEPARTED	11. WEATHER
9-5-12	WED	2:30	3:00	SUNNY WARM, SMOKEY

12. TEMPERATURE °F. Min. Max.	13. GROUND CONDITION	14. CONTRACT TIME	15. DAYS USED	16. COMPLETION DATE
	DRY			

17. TIME USED (%)	18. WORK COMPLETED (%)	19. WORK ON SCHEDULE	20. CONTRACTOR'S WORK - (X Appropriate Box)
		☑ YES ☐ NO	☑ Acceptable ☐ Unacceptable - Explain in narrative

21. CHANGE ORDERS/AMENDMENTS ISSUED

22. WORK ORDERS ISSUED *(Include SUSPEND/RESUME)*

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
CAT	D5 c DOZER	
KOM	EXCAVATOR	

25. LIST CONTRACT PAYMENTS, REPORTS, CORRESPONDENCE, ETC.

Item	Prep	Submit

26. WORKERS ON SITE

Classification	Number PRIME	Number SUB

27. GOVERNMENT PROVIDED SERVICES ADEQUATELY AND TIMELY
☐ YES ☐ NO - Explain in narrative

28. NARRATIVE REPORT

NO ONE ON SITE POND AREA HAS BEEN REGRADED AND APPEARS TO BE ADEQUATE. THERE IS CHUNKS OF BROKEN BLUE PVC PIPE SCATTERED AROUND THAT NEEDS TO BE PICKED UP. ALSO FOUND SOME LINER STICKING OUT OF THE MATERIAL THAT NEEDS TO BE REMOVED. I PULLED ON IT BUT THE MAJORITY HAS TO BE BURIED BECAUSE IT DID NOT COME UP. BESIDES CHUNKS OF PIPE + LINER IN THE REGRADE IT LOOKS GOOD. THERE IS ALSO A LOT OF ROCKS THAT GOT PUSHED DOWN ALONG THE STRAW WATTLES THAT SHOULD BE REMOVED. THERE ARE 2 PILES OF DEBRIS NEEDING REMOVED ON THE ROAD 1 PILE OF LINER + 1 PILE OF PIPE, VAULT HAS NOT BEEN DISTURBED

29. SIGNATURE: Stan Kelly

30. TITLE: INSPECTOR

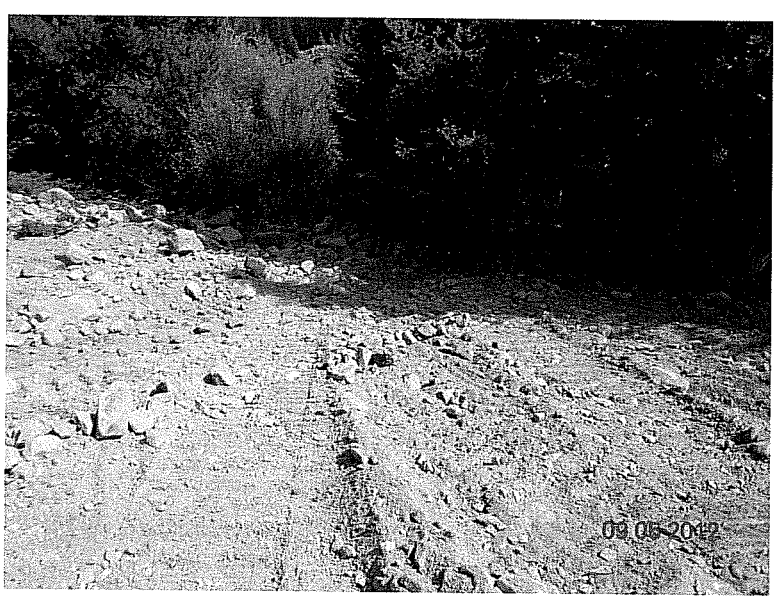
31. ADDTL SPACE NEEDED ☐
(continued on 6300-21)

Distribution: Original - CO *(weekly)*; COR, SO, PROJ ENG
Previous editions of this form are obsolete.

Above is the contoured pond. Below is another view.

This view shows the buried liner and some of the chunks of blue plastic PVC pipe.

Below are all the rocks pushed down by the brush and straw wattles.



Another view of the rocks below.

Below are the piles of debris.

USDA - Forest Service

CONTRACT DAILY DIARY

(Reference FSH 6309.11)

1. FOREST: **Beaverhead-Deerlodge NF**

2. CONTRACT NO.: **DEQ 413006**

3. PROJECT: **Beal Mtn. Mine Pond Removal and Run-On Control Project**

4. CONTRACTOR: **Schnell Excavation**

5. CONTRACTOR REPRESENTATIVE ON SITE: NONE

6. GOVERNMENT OFFICIALS ON SITE: ~~S. Thornborrow~~ STEVE KELLEY

7. DATE	8. DAY OF WEEK	9. TIME ARRIVED	10. TIME DEPARTED	11. WEATHER
9-6-12	THURS	11:00	11:20	SUNNY WARM SMOKEY

12. TEMPERATURE °F. Min. Max.	13. GROUND CONDITION	14. CONTRACT TIME	15. DAYS USED	16. COMPLETION DATE
	DRY			

17. TIME USED (%)	18. WORK COMPLETED (%)	19. WORK ON SCHEDULE	20. CONTRACTOR'S WORK - (X Appropriate Box)
		☑ YES ☐ NO	☑ Acceptable ☐ Unacceptable - *Explain in narrative*

21. CHANGE ORDERS/AMENDMENTS ISSUED

22. WORK ORDERS ISSUED *(Include SUSPEND/RESUME)*

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
CAT	DOZER	
KOM	EXCAVATOR	

25. LIST CONTRACT PAYMENTS, REPORTS, CORRESPONDENCE, ETC.

Item	Prep	Submit

26. WORKERS ON SITE

Classification	Number PRIME	Number SUB

27. GOVERNMENT PROVIDED SERVICES ADEQUATELY AND TIMELY
☐ YES ☐ NO - Explain in narrative

28. NARRATIVE REPORT

NO ONE ON SITE I CALLED LARRY SCHNELL TO FIND OUT WHAT THEIR PLAN WAS FOR FRIDAY. LARRY SAID THEY LEFT WED AROUND 1:00 SO I JUST MISSED THEM AND TODAY THEY WOULD GET THERE SOMETIME AROUND 1 OR 1:30 TO MOVE THE EXCAVATOR AND DOZER TO THE AREA THAT NEEDS RESHAPED AS LARRY DISCUSSED WITH SONNY. HE WANTS SOMEONE THAT CAN APPROVE THE WORK THERE AROUND NOON. I CALLED AND INFORMED MARYBETH AND SHE SAID I COULD APPROVE THE WORK. I CALLED LARRY AGAIN AND TOLD HIM I WOULD BE THERE AROUND 12:00

29. SIGNATURE: Steve Kelley

30. TITLE: INSPECTOR

31. ADDTL SPACE NEEDED ☐
(continued on 6300-21)

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USDA - Forest Service

CONTRACT DAILY DIARY

(Reference FSH 6309.11)

1. FOREST: **Beaverhead-Deerlodge NF**

2. CONTRACT NO.: **DEQ 413006**

3. PROJECT: **Beal Mtn. Mine Pond Removal and Run-On Control Project**

4. CONTRACTOR: **Schnell Excavation**

5. CONTRACTOR REPRESENTATIVE ON SITE: JOSH HENDERSON

6. GOVERNMENT OFFICIALS ON SITE: ~~S. Thornborrow~~ STEVE KELLEY

7. DATE	8. DAY OF WEEK	9. TIME ARRIVED	10. TIME DEPARTED	11. WEATHER
9-7-12	FRIDAY	12:45	3:35	SUNNY WARM

12. TEMPERATURE °F. Min. Max.	13. GROUND CONDITION	14. CONTRACT TIME	15. DAYS USED	16. COMPLETION DATE
	DRY			

17. TIME USED (%)	18. WORK COMPLETED (%)	19. WORK ON SCHEDULE	20. CONTRACTOR'S WORK - *(X Appropriate Box)*
		☐ YES ☐ NO	☐ Acceptable ☐ Unacceptable - *Explain in narrative*

21. CHANGE ORDERS/AMENDMENTS ISSUED

22. WORK ORDERS ISSUED *(Include SUSPEND/RESUME)*

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
CAT	DOZER	
KOM	EXCAVATOR	
SEMI-SIDE DUMP		

25. LIST CONTRACT PAYMENTS, REPORTS, CORRESPONDENCE, ETC.

Item	Prep	Submit

26. WORKERS ON SITE

Classification	Number PRIME	Number SUB
JOSH HENDERSON	X	
BRIAN ?	X	

27. GOVERNMENT PROVIDED SERVICES ADEQUATELY AND TIMELY
☐ YES ☐ NO - Explain in narrative

28. NARRATIVE REPORT

ARRIVED AT 12:45 TO FIND JOSH USING THE EXCAVATOR TO LOAD THE SIDE DUMP WITH TREE LIMBS AND BRUSH THAT WAS REMOVED TO RECLAIM THE CONTINGENCY POND. THE DRIVER WAS NEW AND JOSH DID NOT KNOW HIS LAST NAME. JOSH SAID WE NEEDED TO TAKE A RIDE AND DISCUSS REGRADING OF THE STORM WATER POND. WE DROVE UP TO THE POND AND AS WE DID JOSH EXPLAIND THAT A TETRA-TECH PERSON STOPPED BY AND SAID THE REGRADING LOOKED NOTHING LIKE THE PLANNED DRAWINGS. JOSH EXPLAINED TO HIM (RANDY ENGLISH) THAT SONNY AND LARRY AGREED TO SOMETHING OTHER THAN WHAT THE DRAWINGS SHOWED. I LEFT JOSH AT THE POND SO HE COULD WORK ON IT MORE AND WENT ON TOP TO TALK WITH RANDY. AFTER HOURS OF TALKS BETWEEN RANDY ENGLISH, JOSH, MYSELF AND PHONE CALLS WITH MARYBETH MARKS AND MIKE HATTEN IT WAS DECIDED TO WAIT FOR SONNY TO GET BACK AND DETERMINE IF IT IS ACCEPTABLE. SONNY HAD MADE A DRAWING ON 8-29 TO SHOW WHAT HE WANTED DONE. LARRY WHO WAS NOT THERE TOLD JOSH WHAT NEEDED DONE AND NOTHING MORE. JOSH DECIDED TO FINISH GRADING AS HE WAS TOLD TO BY LARRY AND KEEP WITH THE PLAN TO MOVE THE EXCAVATOR + DOZER TO THE RUN-ON CONTROL DITCH WORK MONDAY.

29. SIGNATURE	30. TITLE	31. ADDTL SPACE NEEDED ☐
Steve Kelley	INSPECTOR	*(continued on 6300-21)*

Distribution: Original - CO *(weekly)*; COR, SO, PROJ ENG
Previous editions of this form are obsolete.

Below is Josh in the side dump getting ready to pull the tarp over the load.

Below is Josh putting the finishing grade to the storm water pond as he was instructed by Larry Schnell.

USDA - Forest Service

CONTRACT DAILY DIARY

(Reference FSH 6309.11)

1. FOREST: **Beaverhead-Deerlodge NF**

2. CONTRACT NO.: **DEQ 413006**

3. PROJECT: **Beal Mtn. Mine Pond Removal and Run-On Control Project**

4. CONTRACTOR: **Schnell Excavation**

5. CONTRACTOR REPRESENTATIVE ON SITE: NONE

6. GOVERNMENT OFFICIALS ON SITE: ~~S. Thornborrow~~ STEVE KELLEY

7. DATE	8. DAY OF WEEK	9. TIME ARRIVED	10. TIME DEPARTED	11. WEATHER
9-10-12	MONDAY	10:50	11:00	WARM SUNNY SMOKEY

12. TEMPERATURE °F. Min. Max.	13. GROUND CONDITION	14. CONTRACT TIME	15. DAYS USED	16. COMPLETION DATE

17. TIME USED (%)	18. WORK COMPLETED (%)	19. WORK ON SCHEDULE	20. CONTRACTOR'S WORK - (X Appropriate Box)
		☐ YES ☐ NO	☐ Acceptable ☐ Unacceptable - Explain in narrative

21. CHANGE ORDERS/AMENDMENTS ISSUED

22. WORK ORDERS ISSUED (Include SUSPEND/RESUME)

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
CAT	D5 DOZER	
KOM	EXCAVATOR	

25. LIST CONTRACT PAYMENTS, REPORTS, CORRESPONDENCE, ETC.

Item	Prep	Submit

26. WORKERS ON SITE

Classification	Number PRIME	Number SUB

27. GOVERNMENT PROVIDED SERVICES ADEQUATELY AND TIMELY
☐ YES ☐ NO - Explain in narrative

28. NARRATIVE REPORT

LAST FRIDAY JOSH TOLD ME THAT MONDAY THE LOW BOY WOULD BE HERE TO MOVE THE EXCAVATOR & DOZER UP TOP TO START THE CONTROL DITCH WORK. THE EXCVATOR WAS MOVED BUT NO ONE AROUND. THEY MUST HAVE MOVED IT THIS WEEKEND. THE DOZER WAS STILL ON THE STORM WATER POND HE WAS WORKING LAST FRIDAY. MAYBE THEY DECIDED THAT UNTIL SONNY LOOKS AT IT THEY WOULD JUST LEAVE IT THERE.

29. SIGNATURE: Steve Kelley

30. TITLE: INSPECTOR

31. ADDTL SPACE NEEDED ☐
(continued on 6300-21)

Distribution: Original - CO (weekly); COR, SO, PROJ ENG
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USDA - Forest Service

CONTRACT DAILY DIARY

(Reference FSH 6309.11)

1. FOREST: **Beaverhead-Deerlodge NF**

2. CONTRACT NO.: **DEQ 413006**

3. PROJECT: **Beal Mtn. Mine Pond Removal and Run-On Control Project**

4. CONTRACTOR: **Schnell Excavation**

5. CONTRACTOR REPRESENTATIVE ON SITE: J. Henderson

6. GOVERNMENT OFFICIALS ON SITE: **S. Thornborrow**

7. DATE	8. DAY OF WEEK	9. TIME ARRIVED	10. TIME DEPARTED	11. WEATHER
9/12/2012	Wednesday	1045	1715	warm, hazy

12. TEMPERATURE °F. Min. Max.	13. GROUND CONDITION	14. CONTRACT TIME	15. DAYS USED	16. COMPLETION DATE
	dry	—	—	—

17. TIME USED (%)	18. WORK COMPLETED (%)	19. WORK ON SCHEDULE	20. CONTRACTOR'S WORK - (X Appropriate Box)
—	—	■ 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
	Equipment	
CAT	D5 C Dozer	
Kom	200 LC Excavator	
MICH	C-120 F.E. Loader	
MACK	Water truck- moved from	
	MN Pond to main road	
FORD	F-350 Pickup	
KEN	Tractor w/ Low-boy transport	
2-A	Dewatering equipment (not used)	
	Items:	
1	Mobilization - Loader	
2-B	Debris removal / disposal	
A-2	Ditch construction	
WPC-2	Topsoil	

25. LIST CONTRACT PAYMENTS, REPORTS, CORRESPONDENCE, ETC.

Item	Prep	Submit
—	—	—

26. WORKERS ON SITE

Classification	Number PRIME	Number SUB
Josh Henderson	X	
Myles Carpenter	X	
Brian Jones	X	

27. GOVERNMENT PROVIDED SERVICES ADEQUATELY AND TIMELY
☐ YES ☐ NO - Explain in narrative N/A

28. NARRATIVE REPORT

Arrived at Site 1045. Stopped at Contingency Pond and limbed damaged trees for approximately 15 minutes. Drove to top of hill; 2 loads of topsoil are located near the run-on ditch work area in the location agreed to with Josh Henderson. The topsoil is free of rocks and debris and is of much better quality than anything available from the on-site borrow source.

No Schnell or Tetra Tech employees on-site. I went to the north perimeter of the leach pad and worked on fixing an erosion problem in the ditch contructed last year.

1350 - Driver Brian Jones delivered the third load of topsoil in a side-dump truck. Brian said Josh Henderson and Myles Carpenter would be at the Site shortly. Josh and Myles transported a Michigan C-120 front-end loader and the dozer from the Stormwater Pond to the ditch work area using a tractor and low-boy transport trailer. Josh then took the excavator to the Minnesota Pond and loaded Brian's side-dump with a load of landfill waste. Brian left the Site. I looked over the loader and it appeared free of caked mud and petroleum leaks.

29. SIGNATURE	30. TITLE	31. ADDTL SPACE NEEDED
Sonny Thornborrow	RPR	■ (continued on 6300-21)

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Previous editions of this form are obsolete.

FS-6300-20 (12/85)

USDA - Forest Service **CONTRACT DAILY DIARY** **Narrative Continuation** *(Reference FSH 6309.11)*	1. PROJECT **Beal Mtn. Pond Removal Project**	2. PAGE 2 of 2
	3. CONTRACT NUMBER **DEQ 413006**	4. DATE 9/12/2012

5. NARRATIVE REPORT *(continued from 6300-20)*

Josh returned to the ditch work and began cutting the rough form of the ditch with the dozer. He worked on the ditch for about an hour before it was time to go. Josh was able to start defining the centerline of the ditch but it will take a lot of additional effort to get the correct dimensions. Josh thought he may be able to make use of the excavator and said he was going to try some different techniques tomorrow.

Josh and I discussed the 60-mil ditch liner material. Josh remembered Larry said the liner rolls were six (6) feet wide and Josh was concerned this wouldn't be wide enough to cover the ditch. I did some calculations on the typical drawing and determined the liner needs to be 7.6 feet wide to fit properly. I went over my calculations with Josh; he said if there was a problem with the rolls that NW Linings would have to send new ones because they bid the liner for Schnell based on the typical ditch drawing.

I later noted to myself I need to ask Josh if they have received the liner. If they have, it should be checked for sufficient width. If they haven't, I will advise Schnell to contact NW Linings and make sure they get liner rolls of sufficient width. I inspected at the packing slip provided by Larry and the turf reinforcement mat rolls are 7.5 feet wide, which may indicate NW Linings is aware of how wide the materials in the ditch need to be.

Josh told me that the upper Dave Smith gate had been vandalized and was layed over in the road when the topsoil trucks came through in the morning. The drivers had leaned the gate up and locked it, but Josh thought it would need to be fixed. I told him I would look at the gate on my way out.

Left Site 1715. Stopped at the upper Smith gate and observed the damage. One of the gate hinge brackets has been destroyed and the gate has come of the hinge posts. The gate panel itself is OK, but a new hinge bracket will be needed. I will look for a replacement part tomorrow and get the gate fized ASAP.

6. SIGNATURE	7. TITLE	8. ADDTL SPACE NEEDED ☐
Sammy Thlummus	RPR	*(continued on 6300-21)* On page ____ of ____

Distribution: Original - CO *(weekly)*; copies: COR, SO, PROJ ENG.
Previous editions of this form are obsolete.

FS-6300-21 (11/78)

USDA - Forest Service

CONTRACT DAILY DIARY
(Reference FSH 6309.11)

1. FOREST: **Beaverhead-Deerlodge NF**
2. CONTRACT NO.: **DEQ 413006**
3. PROJECT: **Beal Mtn. Mine Pond Removal and Run-On Control Project**
4. CONTRACTOR: **Schnell Excavation**
5. CONTRACTOR REPRESENTATIVE ON SITE: J. Henderson, J. Schnell
6. GOVERNMENT OFFICIALS ON SITE: **S. Thornborrow**

7. DATE	8. DAY OF WEEK	9. TIME ARRIVED	10. TIME DEPARTED	11. WEATHER
9/13/2012	Thursday	1130	1730	warm, hazy

12. TEMPERATURE °F. Min. Max.	13. GROUND CONDITION	14. CONTRACT TIME	15. DAYS USED	16. COMPLETION DATE
	dry	—	—	—

17. TIME USED (%)	18. WORK COMPLETED (%)	19. WORK ON SCHEDULE	20. CONTRACTOR'S WORK - (X Appropriate Box)
—	—	☒ 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	
CAT	D6 C Dozer	C	~~C~~
KOM	200 LC Excavator	C	~~C~~
MICH	C-120 Loader	C	~~C~~
MACK	Water Truck		C
DODGE	3500 Pickup		C
	Items		
A-2	Ditch Excavation		

25. LIST CONTRACT PAYMENTS, REPORTS, CORRESPONDENCE, ETC.

Item	Prep	Submit
—	—	—

26. WORKERS ON SITE

Classification	Number PRIME	Number SUB
Josh Henderson	Y	
Brian Varner	X	
Jan Schnell	X	
Mike Hatten, Pebbles Clark, Daniel Wiesand, Jim Maus		

27. GOVERNMENT PROVIDED SERVICES ADEQUATELY AND TIMELY
☐ YES ☐ NO - Explain in narrative N/A

28. NARRATIVE REPORT

Arrived at Site 1130. Drove to top of hill where Josh Henderson and Brian Varner were working on the run-on control ditch. The rough form of the ditch is completed to where it ties in with the existing ditch. A small section of ditch, approximately 30 feet, has been covered with pea gravel. Josh explained he ran out of material to use for in-sloping the road and that much more material (100+ cubic yards) would have to be hauled in if the entire road was to be in-sloped. I agreed it was a problem and suggested we discuss with Mike Hatten and Pebbles Clark as to whether the road would be left as-is or a change to the contract would be made for more material to be hauled and placed on the road. I pointed out some other problems with the channel to Josh - a low spot where the ditch didn't meet grade and some areas where the ditch dimensions were incorrect. Josh said he was working to fix the low spot and that he could get the correct dimensions on the channel as he laid pea gravel. Josh said the liner crew was scheduled to arrive tomorrow and that he had stayed at the Site until 2000 hours the previous evening in order to have the ditch ready for lining. I told Josh I saw no way the liner could go in tomorrow because there was still a lot of work to be done before that could happen.

Mike Hatten and Pebbles Clark arrived at the Site 1315. The ditch was inspected again with Josh.

29. SIGNATURE	30. TITLE	31. ADDTL SPACE NEEDED ☐
Sam Thornborrow	RPR	(continued on 6300-21)

Distribution: Original - CO *(weekly)*; COR, SO, PROJ ENG
Previous editions of this form are obsolete.

FS-6300-20 (12/85)

USDA - Forest Service **CONTRACT DAILY DIARY** Narrative Continuation *(Reference FSH 6309.11)*	1. PROJECT **Beal Mtn. Pond Removal Project**	2. PAGE 2 of 3
	3. CONTRACT NUMBER **DEQ 413006**	4. DATE 9/13/12

5. NARRATIVE REPORT *(continued from 6300-20)*

It was agreed the additional work required for in-sloping the remaining portion of the road, approximately 75 feet, was too burdensome for the benefit it would provide. Everyone agreed the road would function better than before, and that the ditch was the most important part of the work. We instructed Josh to continue bringing the ditch to the grade and dimensions shown on the drawing and not to worry about in-sloping that portion of the road.

The ditch excavation is complete and needs surveyed in order to determine the volume of material excavated (contract item A-2). Mike Hatten called the surveyor (Brown and Associates, Butte, MT) and asked them to complete the survey tomorrow. Brown has another job, but may be able to fit it in. If not Friday, then Monday. I will keep Josh Henderson informed as to when the survey is complete so he can continue placing pea gravel in the ditch. Josh called the liner subcontractor and put them off until the survey is complete.

1430 - Pebbles, Mike, and I met with Josh Henderson and Jan Schnell at the Stormwater Pond to discuss the situation with the regrading. We looked at the cross-section on Sheet 4 and some areas on the perimeter of the Pond where additional material could be moved to the center of the Pond in order to create more of the mound shape shown on the drawing. Jan will provide a cost for re-mobilizing equipment to the Pond and Pebbles will decide whether to accept her proposal. Additional contract days may be added if the change is agreed to. No additional payment will be made for movement of material; Schnell will get paid on the cubic yard basis described in the contract. The additonal mobilization costs are being considered because a representative was not on-site to accept or reject the regrading work when Schnell thought it was complete.

Pebbles raised the issue of topsoil and asked Jan if Schnell would consider selling us more topsoil if Pebbles had the budget for it. Jan said she would have to check with Larry but she thought he would entertain the idea. Pebbles agreed to give Jan an estimate for the volume required to cover the reclaimed ponds.

Jan left the Site after the meeting. Josh Henderson and Brian Varner left at 1545. I measured the straw wattles at the Stormwater and Contingency Ponds and came up with the following numbers:

Stormwater Pond:

374 feet (length by measuring wheel) + 18 feet overlap (measured by tape) = 392 feet total.
The contract estimate was 365 feet, a difference of +27 feet. The unit rate in the contract is $2.30/foot, for a total cost of $901.60.

Contingency Pond:

337 feet (wheel) + 20 feet overlap (tape) = 357 feet total.
The contract estimate was 260 feet, a difference of +97 feet. Total cost $821.10.

No straw wattles were installed at the Minnesota Pond.

A GPS unit was used to estimate the disturbance boundaries at the Contingency and Stormwater Ponds. These measurements will be used to estimate the volume of topsoil to request from Schnell and to check if the erosion control mat and seed/fertilize estimates in the contract are close. I came up with the following measurements:

Stormwater Pond: 2245 square yards / 0.46 acres
Contingency Pond / German Gulch: 3151 square yards / 0.65 acres

6. SIGNATURE	7. TITLE	8. ADDTL SPACE NEEDED ☐ *(continued on 6300-21)* On page 3 of 3
Sonny Thurmer	RPR	

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FS-6300-21 (11/78)

USDA - Forest Service **CONTRACT DAILY DIARY** **Narrative Continuation** *(Reference FSH 6309.11)*	1. PROJECT **Beal Mtn. Pond Removal Project**	2. PAGE 3 of 3
	3. CONTRACT NUMBER **DEQ 413006**	4. DATE 9/13/12

5. NARRATIVE REPORT *(continued from 6300-20)*

The disturbance boudnary at the Minnesota Pond was not measured because the GPS battery was low. I will measure this tomorrow while at the Site.

Left Site 1730. Jim Maus (TT water treatment contractor) still on-site.

6. SIGNATURE	7. TITLE	8. ADDTL SPACE NEEDED ☐ *(continued on 6300-21)* On page ____ of ____
Sam Thurner	RPR	

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FS-6300-21 (11/78)

USDA - Forest Service

CONTRACT DAILY DIARY

(Reference FSH 6309.11)

1. FOREST: **Beaverhead-Deerlodge NF**

2. CONTRACT NO.: **DEQ 413006**

3. PROJECT: **Beal Mtn. Mine Pond Removal and Run-On Control Project**

4. CONTRACTOR: **Schnell Excavation**

5. CONTRACTOR REPRESENTATIVE ON SITE: J. Henderson, L. Schnell

6. GOVERNMENT OFFICIALS ON SITE: **S. Thornborrow**

7. DATE	8. DAY OF WEEK	9. TIME ARRIVED	10. TIME DEPARTED	11. WEATHER
9/27/2012	Thursday	0915	1700	warm, hazy

12. TEMPERATURE °F.	13. GROUND CONDITION	14. CONTRACT TIME	15. DAYS USED	16. COMPLETION DATE
Min. — Max. —	dry	—	—	—

17. TIME USED (%)	18. WORK COMPLETED (%)	19. WORK ON SCHEDULE	20. CONTRACTOR'S WORK - (X Appropriate Box)
		☒ 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.)*

60-mil PVC Liner (see attached stickers)	S

24. LIST EQUIPMENT ON SITE *(Furnished by G-Govt.; C-Cont.; S-Subcont.)*

Type	Contract Item Number and Location of Use	Hours Used	
CAT	D5C Dozer		C
Kom	200 LC Excavator		C
MICH	C 120 Loader		C
MACK	Water Truck		C
DODGE	3500 Pickup		C
FORD	F-350 Pickup		C
CHEVY	3500 Pickup		S
KAW	ATV		S
UNK	Double Axle Flatbed Trailer		S
A-3	Run-on Control Ditch Construction		

25. LIST CONTRACT PAYMENTS, REPORTS, CORRESPONDENCE, ETC.

Item	Prep	Submit
none		

26. WORKERS ON SITE

Classification	Number PRIME	Number SUB
Josh Henderson	x	
Larry Schnell	x	
Travis Looney		x
Robert Sheehan		x

27. GOVERNMENT PROVIDED SERVICES ADEQUATELY AND TIMELY
☐ YES ☐ NO - Explain in narrative N/A

28. NARRATIVE REPORT

0915 - Arrived at main gate with Josh Henderson and crew from Headwater Linings (HL). Went to the run-on control ditch and walked the excavated channel. HL crew started unrolling liner. 3 sections of liner were welded together to create a single piece. The two welds are located at approximately STA 3+20 and 5+10. I retrieved the stickers from the liner packaging. There is no specification information on the stickers, just the manufacturer (Lange Containment Systems, Inc.) and material type (60-mil PVC). I asked Travis Looney about the specification information. Travis explained he'll test a sample of the welded liner from STA 3+20 at his office and send a Quality Control package to Schnell. Travis hoped to send this information this afternoon or tomorrow.

After completing the two welds HL crew loaded their generator and got ready to leave. At this time Josh came over said there was a problem - he had just spoken with Larry Schnell and Larry said the HL crew was supposed to do a full installation, including fitting the liner in the ditch. Travis told Josh he would lay the liner on the ledge constructed on the fill slope side of the ditch but that they couldn't do a full install because there were no defined key trenches. Travis and Robert went to work laying the liner on the ledge. Meanwhile, Josh said Larry was going to have to figure this out and he left the Site, approximately 1130. HL crew finished what they were doing and

29. SIGNATURE	30. TITLE	31. ADDTL SPACE NEEDED ☒
Sammy Thornborrow	RPR	*(continued on 6300-21)*

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USDA - Forest Service **CONTRACT DAILY DIARY** **Narrative Continuation** *(Reference FSH 6309.11)*	1. PROJECT **Beal Mtn. Pond Removal Project**	2. PAGE 2 of 2
	3. CONTRACT NUMBER **DEQ 413006**	4. DATE 9/27/12

5. NARRATIVE REPORT *(continued from 6300-20)*

left the Site approximately 1145.

Mike Hatten called after speaking with Larry Schnell. I told Mike about the disagreement between HL and Schnell and said I wasn't sure why Josh had left. I told Mike they needed to figure it out between themselves and get the ditch lined.

Larry Schnell arrived at the Site 1300. He was upset when he saw what the HL crew had done and insisted they didn't do the job they were paid to do. Larry said he had explained the excess fabric from the 11 foot wide rolls would have to be cut, not laid over in the ditch like HL had done. Larry was also concerned with the wrinkles in the PVC that had formed when it was laid around corners. Larry made several calls to Tony, a supervisor at HL, asking him to have the crew return.

Larry and I discussed keying of the liner. The fill slope (downhill) side will have the liner laid on the constructed ledge and buried. The cut slope (uphill) side of the ditch will have the liner laid on the constructed ledge from STA 2+50 to 5+41. From STA 0+00 to 2+50 there is no ledge and the liner will simply lay against the slope and be buried. I believe any future erosion of the topsoil fill in this area could create a problem by exposing the edge of the liner. Therefore, it will be important to ensure the TRM is installed over the edge of the liner and that it is correctly keyed in. Keying the TRM will have to be done, even if it requires intensive hand labor. This is required in the contract (Special Provisions III-30).

1330 - Larry finished laying the liner into position on the cut slope side of ditch and then used the excavator to dig a hole and bury the liner at STA 0+00. Larry then cut the liner to fit along the fill slope ledge. The HL crew returned to the Site 1415 and helped Larry with what he was doing. Travis told Larry they were not comfortable cutting the liner earlier because they were not clear on how it was being keyed and didn't want to make the liner un-usable by cutting it. Larry apologized for not being on-site to explain things. HL left Site 1545. Larry Schnell left the Site 1600 after dumping several piles of topsoil into the ditch to hold the liner in place overnight. I left at 1700 after completing some planning work for other upcoming projects at the Site.

Schnell plans to return to the ditch in the morning and continue backfilling with topsoil. Larry will also meet with Pebbles Opp to sign paperwork and work on an updated construction schedule.

6. SIGNATURE	7. TITLE	8. ADDTL SPACE NEEDED ☐
Sonny Thurmer	RPR	*(continued on 6300-21)* On page ____ of ____

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FS-6300-21 (11/78)

LANGE CONTAINMENT SYSTEMS , INC.
5150 RACE COURT
DENVER, CO 80216
(303) 446-8644 FAX (303) 446-8798

Headwater Lining

Travis Looney
Manager of Field Operations
265 High K Street
Belgrade, Montana 59714
Direct (406) 924-4090
Cell (406) 599-7411
Fax (406) 388-5408
travis@headwaterlining.com
headwaterlining.com

Headwater Ponds, LLC

JOB #: 112-0314
BLANKET #: 101-102
TYPE: 60 Mil PVC

TOP: 102 11.92' x 317'
BOTTOM: 101 11.92' x 317'

LANGE CONTAINMENT SYSTEMS , INC.
5150 RACE COURT
DENVER, CO 80216
(303) 446-8644 FAX (303) 446-8798

Headwater Ponds, LLC

BLANKET #: 102
JOB #: 112-0314

SIZE: 11.92' x 317'
TYPE: 60 Mil PVC

LANGE CONTAINMENT SYSTEMS , INC.
5150 RACE COURT
DENVER, CO 80216
(303) 446-8644 FAX (303) 446-8798

Headwater Ponds, LLC

BLANKET #: 101
JOB #: 112-0314

SIZE: 11.92' x 317'
TYPE: 60 Mil PVC

USDA - Forest Service

CONTRACT DAILY DIARY

(Reference FSH 6309.11)

1. FOREST: **Beaverhead-Deerlodge NF**

2. CONTRACT NO.: **DEQ 413006**

3. PROJECT: **Beal Mtn. Mine Pond Removal and Run-On Control Project**

4. CONTRACTOR: **Schnell Excavation**

5. CONTRACTOR REPRESENTATIVE ON SITE: J. Henderson

6. GOVERNMENT OFFICIALS ON SITE: **S. Thornborrow**

7. DATE	8. DAY OF WEEK	9. TIME ARRIVED	10. TIME DEPARTED	11. WEATHER
9/18/12	Tuesday	1530	1730	warm, hazy

12. TEMPERATURE °F. Min. Max.	13. GROUND CONDITION	14. CONTRACT TIME	15. DAYS USED	16. COMPLETION DATE
	dry	—	—	—

17. TIME USED (%)	18. WORK COMPLETED (%)	19. WORK ON SCHEDULE	20. CONTRACTOR'S WORK - (X Appropriate Box)
—	—	☒ 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	↓
CAT	D5 C Dozer		C
CAT	236 B Skid Steer		C
KOM	200 LC Excavator		C
MICH	C 120 Loader		C
MACK	water truck		C
DODGE	3500 Pickup		C
	Items:		
A-3	Run-on control ditch construction		

25. LIST CONTRACT PAYMENTS, REPORTS, CORRESPONDENCE, ETC.

Item	Prep	Submit
—	—	—

26. WORKERS ON SITE

Classification	Number PRIME	Number SUB
Josh Henderson	X	
Brian Varner	X	
Myles Carpenter	X	

27. GOVERNMENT PROVIDED SERVICES ADEQUATELY AND TIMELY
☐ YES ☐ NO - Explain in narrative N/A

28. NARRATIVE REPORT

1300 - Message from Josh on my cell phone that the crew was headed to Beal to work on the ditch. I arrived at the ditch 1530 hours. Myles (loader), Josh (skid steer), and Brian (shovel) working to line the ditch with pea gravel. I spoke with Josh regarding the ditch work:

1. Josh wasn't sure there would be enough gravel to line the entire ditch. They will use-up the entire stockpile and see how far they get.

2. Josh anticipated trouble constructing the anchor trench on the cut slope side of the ditch due to the extremely rocky and hard nature of the soil in this area. He plans to cut the trench by hand with a shovel. I agreed this wouldn't be an easy task and would probably require hand work. Later I showed Brian the anchor trench details on Sheet 7 and told him the liner was to be keyed 8 inches into the hillside and 5 inches down.

I told Josh my biggest concern with the work so far was the grade of the ditch. I reiterated the ditch had to be downgradient for it's entire length as shown on Sheet 6. Josh said he understood and thought he could keep

29. SIGNATURE	30. TITLE	31. ADDTL SPACE NEEDED ☒
Sam T Thurner	RPR	*(continued on 6300-21)*

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FS-6300-20 (12/85)

USDA - Forest Service **CONTRACT DAILY DIARY** **Narrative Continuation** *(Reference FSH 6309.11)*	1. PROJECT **Beal Mtn. Pond Removal Project**	2. PAGE 2 of 2
	3. CONTRACT NUMBER **DEQ 413006**	4. DATE 9/18/12

5. NARRATIVE REPORT *(continued from 6300-20)*

using gravel to bring the ditch to grade. I went and repaired fences; Schnell crew was gone by 1715 when I returned to the ditch area. Approximately one-half of the ditch is now lined with pea gravel. There is a low spot near station 5+00 and another where they are working now (near station 3+00). The ditch will not be approved for lining until it is downgradient for it's entire length and the dimensions are close to those shown on Sheet 7. Left Site 1730 hours.

6. SIGNATURE	7. TITLE	8. ADDTL SPACE NEEDED ☐
Sam Thurman	RPR	*(continued on 6300-21)* On page ____ of ____

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FS-6300-21 (11/78)

USDA - Forest Service

CONTRACT DAILY DIARY
(Reference FSH 6309.11)

1. FOREST: **Beaverhead-Deerlodge NF**

2. CONTRACT NO.: **DEQ 413006**

3. PROJECT: **Beal Mtn. Mine Pond Removal and Run-On Control Project**

4. CONTRACTOR: **Schnell Excavation**

5. CONTRACTOR REPRESENTATIVE ON SITE: J. Henderson

6. GOVERNMENT OFFICIALS ON SITE: **S. Thornborrow**

7. DATE	8. DAY OF WEEK	9. TIME ARRIVED	10. TIME DEPARTED	11. WEATHER
9/20/2012	Thursday	1230	1700	warm, hazy

12. TEMPERATURE °F. Min. Max.	13. GROUND CONDITION	14. CONTRACT TIME	15. DAYS USED	16. COMPLETION DATE
	dry	—	—	—

17. TIME USED (%)	18. WORK COMPLETED (%)	19. WORK ON SCHEDULE	20. CONTRACTOR'S WORK - (X Appropriate Box)
—	—	■ 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	
CAT	D5 E Dozer		C
CAT	236 B Skid Steer		C
Kom	200 LC Excavator		C
MICH	C 120 Loader		C
MACK	Water truck		C
DODGE	3500 Pickup		C
Z-A	Dewatering Pump (1)		C
	Items:		
A-3	Run-on control ditch construction		

25. LIST CONTRACT PAYMENTS, REPORTS, CORRESPONDENCE, ETC.

Item	Prep	Submit
—	—	—

26. WORKERS ON SITE

Classification	Number PRIME	Number SUB
Josh Henderson	x	
Myles Carpenter	x	
Brian Varner	x	

27. GOVERNMENT PROVIDED SERVICES ADEQUATELY AND TIMELY
☐ YES ☐ NO - Explain in narrative

28. NARRATIVE REPORT

Arrived at Site 1230. Josh, Brian, and Myles working pea gravel into the run-on ditch near STA 0+50. Josh and I discussed the work; he suggested we talk to Larry about hauling in road base or sand material to make the road surface better. The surface is extremely rocky and uneven due to the material added from ditch excavation. I agreed it would make for a better finished product.

I walked down and looked at the low spots in the ditch. The low area near STA 3+00 has been brought up so that it will drain toward the tie-in ditch. However, runoff may not entirely reach the tie-in because the low spot at STA 4+20 still exists. Additionally, the area of ditch filled near STA 3+00 is now very shallow (only 4-6 inches deep). I went to approximately STA 5+20 and used a shovel to shape the ditch to the typical dimensions shown on Sheet 7. I showed Josh the dimensions of the ditch and told him the crew needed to start thinking about how they would construct the ditch to the correct dimensions AND get it to be downgradient for the entire length.

Josh told me the problem was that if they dug the ditch to the right dimensions they would once again be too low at the low spot near STA 3+00. After more discussion and additional shovel work by the crew, it was agreed

29. SIGNATURE	30. TITLE	31. ADDTL SPACE NEEDED
Sam Thornborrow	RPR	*(continued on 6300-21)*

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FS-6300-20 (12/85)

USDA - Forest Service **CONTRACT DAILY DIARY** **Narrative Continuation** *(Reference FSH 6309.11)*	1. PROJECT **Beal Mtn. Pond Removal Project**	2. PAGE 2 of 2
	3. CONTRACT NUMBER **DEQ 413006**	4. DATE 9/20/12

5. NARRATIVE REPORT *(continued from 6300-20)*

to be impossible to have the ditch be downgradient while keeping close to the typical dimensions. If the low spot at 3+00 is filled you completely lose depth on the ditch and would need additional fill material to make a ditch bank once the liner is laid.

If you solve the problem by excavating the ditch deeper from STA 4+20 to STA 5+41, the ditch would have a lower elevation than the tie-in area.

Josh said they could lay the liner how it was (flat or upgradient in some locations) and just backfill over the liner in a way that would make the final ditch completely downgradient. I told Josh that I thought this would still require additonal fill material on the road and that I didn't want the liner to be upgradient even if the backfilled ditch was downgradient.

In my mind, the easiest way to fix the problem is to first fill the low spots in the ditch and to then add additonal material on the road to create a ditch bank of the correct height. Josh and I discussed needing to add material to the road from approximately STA 2+90 to 4+20 to a depth of approximately 18 inches. This equates to 72 cubic yards of material. There are some other stockpiles on-site that may be of use. A meeting has been scheduled for Friday 9/21 between myself, Pebbles Clark, Larry Schnell to discuss fixing the problems with the ditch and covering the reclaimed ponds with topsoil. The crew left the Site at 1515 and will not return to work until the situation with the ditch is resolved.

The lack of survey information prior to ditch design has proven to be a problem. The existing ground is nowhere near what is shown on Sheet 6. The drawing indicates the existing ground drops 20 feet between STA 3+00 and 5+75. The true existing ground drops far less, leading to a situation where material must be added to create a functional ditch.

I left the Site at 1700 after looking at other material sources and fixing some fence. The total ditch length (541 feet) was measured with a measuring wheel for the purposes of estimating costs. The length will be re-measured once the ditch is finished.

6. SIGNATURE	7. TITLE	8. ADDTL SPACE NEEDED ☐ *(continued on 6300-21)* On page ____ of ____
Sonne Thurman	RPR	

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USDA - Forest Service

CONTRACT DAILY DIARY

(Reference FSH 6309.11)

1. FOREST: **Beaverhead-Deerlodge NF**

2. CONTRACT NO.: **DEQ 413006**

3. PROJECT: **Beal Mtn. Mine Pond Removal and Run-On Control Project**

4. CONTRACTOR: **Schnell Excavation**

5. CONTRACTOR REPRESENTATIVE ON SITE: L. Schnell

6. GOVERNMENT OFFICIALS ON SITE: **S. Thornborrow**

7. DATE	8. DAY OF WEEK	9. TIME ARRIVED	10. TIME DEPARTED	11. WEATHER
9/21/2012	Friday	1300	1500	warm, dry, hazy

12. TEMPERATURE °F.	13. GROUND CONDITION	14. CONTRACT TIME	15. DAYS USED	16. COMPLETION DATE
Min. – Max. –	dry	–	–	–

17. TIME USED (%)	18. WORK COMPLETED (%)	19. WORK ON SCHEDULE	20. CONTRACTOR'S WORK - *(X Appropriate Box)*
–	–	☒ 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	
CAT	D5 c Dozer		C
KOM	200 LC Excavator		C
MICH	C-120 Loader		C
MACK	Water Truck		C
DODGE	3500 Pickup		C
2-A	Dewatering pump (1)		C

25. LIST CONTRACT PAYMENTS, REPORTS, CORRESPONDENCE, ETC.

Item	Prep	Submit
–	–	–

26. WORKERS ON SITE

Classification	Number PRIME	Number SUB
Larry Schnell	x	
Josh Henderson	x	
Pebbles Opp (DEQ)		
Mike Hatten (LTT)		

27. GOVERNMENT PROVIDED SERVICES ADEQUATELY AND TIMELY
☐ YES ☐ NO - Explain in narrative

28. NARRATIVE REPORT

1500 hours - Met Mike Hatten and Pebbles Opp at the run-on control ditch. We inspected the low spots in the ditch. Mike felt it was not cost effective to complete the additional work I was recommending (adding material to the road shoulder in order to make the ditch downgradient and of the dimensions in the contract). Mike explained that a few small flat or upgradient sections would not prevent the majority of runoff from reaching the tie-in ditch. When water collected in the upper reaches of the ditch reaches the flatter portion near STA 3+00 it should have enough hydraulic head to force the water to the end of the ditch. Mike was OK with the channel dimensions, despite the ditch being approximately 2-3 inches shallower than shown on Sheet 7. I agreed with MIke the ditch would more or less function properly as presently constructed and that any remaining money was better spent on topsoil.

Josh Henderson and Larry Schnell arrrived at the Site 1515. Mike Hatten and I explained that the ditch was acceptable and that it could be lined. Larry asked why if the ditch was acceptable I had pulled the crew off work yesterday and why I told Josh they were going to have to come back and fill-in the ditch where they had dug it out. I told Larry yesterday I explained to Josh I wanted the ditch to be downgradient AND have the dimensions

29. SIGNATURE	30. TITLE	31. ADDTL SPACE NEEDED ☒
Sonny Thornborrow	RPR	*(continued on 6300-21)*

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USDA - Forest Service **CONTRACT DAILY DIARY** Narrative Continuation *(Reference FSH 6309.11)*	1. PROJECT **Beal Mtn. Pond Removal Project**	2. PAGE 2 of 2
	3. CONTRACT NUMBER **DEQ 413006**	4. DATE 9/21/2012

5. NARRATIVE REPORT *(continued from 6300-20)*

shown in the contract. I explained that after the crew had shovelled-out the ditch I realized it was impossible to be downgradient and meet the specified dimensions. At that point, I told Josh we needed Mike Hatten back to the Site and that I was going to recommend changing the contract for adding more material to the road shoulder, which would mean putting some of the pea-gravel back in the ditch. I said Mike had today convinced me the ditch would function properly despite not meeting specification and that I was OK with that. I told Larry I wasn't trying to cost them time or money and that regardless of the circumstances an engineer would have had to inspect the ditch and recommend approval because it didn't match what was in the contract.

Larry was frustrated by the stoppage of work and said we should have a different inspector if the current inspector (me) was unable to make a decision and gave conflicting information. I apologized for not being able to make that call myself but reiterated I was not comfortable with recommending approval of a ditch that was outside the specifications in the contract. The group agreed field fitting the ditch had proven cumbersome and required both parties to reach an agreement on what the final product would look like. Larry said he wouldn't ask for additional payment for the lost time but would if this sort of thing happened again in the future. The group agreed that the ditch would be ready for lining once a lip is constructed for the liner; Larry said he might finish this on Saturday that he would call NW Linings to set an appointment for next week.

The group discussed topsoil cover for the Contingency and SW Ponds. The plan is to cover both of these Ponds with 4 inches of topsoil. Once the final quantity surveys are completed for the regraded areas (Minnesota Pond, Stormwater Pond, Contingency Pond, Check-dam area) the budget will will be checked and any additional money will be spent to cover with topsoil the rocky portions of the Minnesota Pond.

The group travelled to the SW Pond and reviewed the additional grading to take place. The straw wattles will be lowered on the south embankment and the edge will be pulled back and rounded. This material and additional soil from the northern edge will be placed in the middle of the pond in order to create a mound shape and eliminate the flatness of the area. Josh and Larry thought it would take about a day to do this work using the dozer and excavator.

All 5 left Site approximately 1700 hours.

6. SIGNATURE	7. TITLE	8. ADDTL SPACE NEEDED ☐ *(continued on 6300-21)* On page ____ of ____
Sonny Thurman	RPR	

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USDA - Forest Service

CONTRACT DAILY DIARY

(Reference FSH 6309.11)

1. FOREST: **Beaverhead-Deerlodge NF**

2. CONTRACT NO.: **DEQ 413006**

3. PROJECT: **Beal Mtn. Mine Pond Removal and Run-On Control Project**

4. CONTRACTOR: **Schnell Excavation**

5. CONTRACTOR REPRESENTATIVE ON SITE: J. Henderson

6. GOVERNMENT OFFICIALS ON SITE: **S. Thornborrow**

7. DATE	8. DAY OF WEEK	9. TIME ARRIVED	10. TIME DEPARTED	11. WEATHER
9/24/2012	Monday	1350	1500	warm, hazy

12. TEMPERATURE °F.	13. GROUND CONDITION	14. CONTRACT TIME	15. DAYS USED	16. COMPLETION DATE
Min. — Max. —	dry	—	—	—

17. TIME USED (%)	18. WORK COMPLETED (%)	19. WORK ON SCHEDULE	20. CONTRACTOR'S WORK - (X Appropriate Box)
		☒ 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	
CAT	D5 C Dozer		C
KOM	200 LC Excavator		C
MICH	C-120 Loader		C
MACK	Water Truck		C
2-A	Dewatering Pump (1)		C

25. LIST CONTRACT PAYMENTS, REPORTS, CORRESPONDENCE, ETC.

Item	Prep	Submit

26. WORKERS ON SITE

Classification	Number PRIME	Number SUB
Josh Henderson	X	
Ross Davenport (TT)		

27. GOVERNMENT PROVIDED SERVICES ADEQUATELY AND TIMELY
☐ YES ☐ NO - Explain in narrative N/A

28. NARRATIVE REPORT

0930 - Called Josh Henderson. He was at the Site working to prepare the ditch for lining. Josh said Larry was going to call NW Linings and set an appointment for the liner to be installed. He said he wasn't sure if NW Linings would be on-site tomorrow but would let me know when he knew something.

1300 - Josh called and said he was done with the ditch preparation and was leaving the Site. He still didn't know if an appointment had been made with NW Linings but said he would let me know if he heard something. I told Josh I was in Deer Lodge and would stop by to look at the ditch. I briefly talked with Josh on the German Gulch road as he was leaving the Site.

1350 - Arrived at the Site with Rebecca McNamara (B-D Hydrologist, Butte). We inspected the reclaimed pond areas and then went to the run-on control ditch. The ditch has been prepared for lining by creating a flat shelf for the keying the liner. From approximately STA 0+00 to 2+00 the cut slope side of the ditch does not have a shelf and is blended into the hillside (Photo 2). I'm not clear what the plan is for keying the liner in this area but will reiterate to the contractor the liner must be keyed along it's entire length. Left Site 1500. Ross Davenport (TT)

29. SIGNATURE	30. TITLE	31. ADDTL SPACE NEEDED ☒
Sonny Thornborrow	RPR	*(continued on 6300-21)*

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USDA - Forest Service **CONTRACT DAILY DIARY** **Narrative Continuation** *(Reference FSH 6309.11)*	1. PROJECT **Beal Mtn. Pond Removal Project**	2. PAGE 2 of 2
	3. CONTRACT NUMBER **DEQ 413006**	4. DATE 9/24/12

5. NARRATIVE REPORT *(continued from 6300-20)*

was on-site backwashing the RO plant and looking at portions of the waste rock dump capture system.

6. SIGNATURE	7. TITLE	8. ADDTL SPACE NEEDED ☐ *(continued on 6300-21)* On page ____ of ____
Tony Thurner	RPR	

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FS-6300-21 (11/78)

USDA - Forest Service

CONTRACT DAILY DIARY

(Reference FSH 6309.11)

1. FOREST: **Beaverhead-Deerlodge NF**

2. CONTRACT NO.: **DEQ 413006**

3. PROJECT: **Beal Mtn. Mine Pond Removal and Run-On Control Project**

4. CONTRACTOR: **Schnell Excavation**

5. CONTRACTOR REPRESENTATIVE ON SITE: none

6. GOVERNMENT OFFICIALS ON SITE: **S. Thornborrow**

7. DATE	8. DAY OF WEEK	9. TIME ARRIVED	10. TIME DEPARTED	11. WEATHER
10/1/2012	Monday	1715	1800	warm, clear

12. TEMPERATURE °F. Min. Max.	13. GROUND CONDITION	14. CONTRACT TIME	15. DAYS USED	16. COMPLETION DATE
	dry	—	—	—

17. TIME USED (%)	18. WORK COMPLETED (%)	19. WORK ON SCHEDULE	20. CONTRACTOR'S WORK - (X Appropriate Box)
—	—	☒ 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.)*

TRM	C

24. LIST EQUIPMENT ON SITE *(Furnished by G-Govt.; C-Cont.; S-Subcont.)*

Type	Contract Item Number and Location of Use	Hours Used	
CAT	D5 C Dozer		C
140M	200 LC Excavator		C
MICH	C 120 Loader		C
MACK	Water truck		C
IA-3	Run-on control ditch construction		

25. LIST CONTRACT PAYMENTS, REPORTS, CORRESPONDENCE, ETC.

Item	Prep	Submit
—	—	—

26. WORKERS ON SITE

Classification	Number PRIME	Number SUB

27. GOVERNMENT PROVIDED SERVICES ADEQUATELY AND TIMELY

☐ YES ☐ NO - Explain in narrative

28. NARRATIVE REPORT

Arrived at Site 1715. No Schnell employees present. The following work on the run-on control ditch has has been completed since I was last at the Site on Thursday 9/27:

- Ditch backfilled with topsoil. The topsoil stockpile has been completely used. The PVC liner appears to be adequately covered.
- TRM installed from STA 0+00 to 5+60. The TRM is not keyed into an anchor trench as per discussion with Mike Hatten.
- 3 water bars have been installed at STA 0+00, 2+53, and 5+80. The water bars are constructed as discussed with the contractor and should function properly. The road is still passable.

- I forgot to check whether seed and fertilizer had been applied. I will look at this again tomorrow and will also ask Schnell for tags from the seed and fertilizer.

The length of the ditch was measured at 600 feet using a measuring wheel. On 9/20/12 the excavated ditch

29. SIGNATURE	30. TITLE	31. ADDTL SPACE NEEDED ☒
Sam Thornborrow	RPR	*(continued on 6300-21)*

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FS-6300-20 (12/85)

USDA - Forest Service **CONTRACT DAILY DIARY** Narrative Continuation *(Reference FSH 6309.11)*	1. PROJECT **Beal Mtn. Pond Removal Project**	2. PAGE 2 of 2
	3. CONTRACT NUMBER **DEQ 413006**	4. DATE 10/1/2012

5. NARRATIVE REPORT *(continued from 6300-20)*

channel was measured at only 541 feet. I suspect the error in the earlier measurement was due to the wheel not being in complete contact with the ground due to rocky material present in the ditch channel at that time. Also, approximately 20' of ditch has been constructed beyond where I ended the earlier measurement. This additional ditch length is located in the existing tie-in channel and was not present on 9/20. The unit rate for the ditch is $33.13 per foot, representing an increase of $1954.67 above the 9/20 estimate for the additional 59 feet. The available budget will need to be evaluated to account for the additional ditch length and the pond regrading quantities.

A decision will need to be made regarding the portion of ditch with no TRM installed. I recommend if Schnell has an additional roll of TRM fabric they install it. If Schnell does not have an additional roll, an agreement will need to be made as to what the payment will be for the length of ditch with no TRM. It is my opinion that TRM is not absolutely necessary in the ditch from STA 5+60 to 6+00. The ditch is grade is very flat in this area and I don't think erosion will be an issue. Mike Hatten will be included in discussions on how to proceed.

Left Site 1800.

6. SIGNATURE	7. TITLE	8. ADDTL SPACE NEEDED ☐ *(continued on 6300-21)* On page ____ of ____
Sonny Thurman	RPR	

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FS-6300-21 (11/78)

USDA - Forest Service

CONTRACT DAILY DIARY

(Reference FSH 6309.11)

1. FOREST: **Beaverhead-Deerlodge NF**

2. CONTRACT NO.: **DEQ 413006**

3. PROJECT: **Beal Mtn. Mine Pond Removal and Run-On Control Project**

4. CONTRACTOR: **Schnell Excavation**

5. CONTRACTOR REPRESENTATIVE ON SITE: none

6. GOVERNMENT OFFICIALS ON SITE: **S. Thornborrow**

7. DATE	8. DAY OF WEEK	9. TIME ARRIVED	10. TIME DEPARTED	11. WEATHER
10/2/2012	Tuesday	0945	1115	warm, hazy

12. TEMPERATURE °F. Min. Max.	13. GROUND CONDITION	14. CONTRACT TIME	15. DAYS USED	16. COMPLETION DATE
	dry	—	—	—

17. TIME USED (%)	18. WORK COMPLETED (%)	19. WORK ON SCHEDULE	20. CONTRACTOR'S WORK - (X Appropriate Box)
		☒ 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	
CAT	D5 C Dozer		C
KOM	200 LC Excavator		C
MCH	C 120 Loader		C
MACK	Water truck		C

25. LIST CONTRACT PAYMENTS, REPORTS, CORRESPONDENCE, ETC.

Item	Prep	Submit
—	—	—

26. WORKERS ON SITE

Classification	Number PRIME	Number SUB
—	—	—

27. GOVERNMENT PROVIDED SERVICES ADEQUATELY AND TIMELY
☐ YES ☐ NO - Explain in narrative

28. NARRATIVE REPORT

Arrived at Site 0945. No Schnell employees present. Inspected the run-on control ditch - it has been seeded only where there is TRM in the channel. I could not tell if any fertilizer had been applied.

1015 - Called Larry Schnell. He had ordered another roll of TRM fabric and hoped it would arrive today or tomorrow. Larry said he will seed the remainder of the ditch and install TRM on the rest of the channel. Larry plans to resume work at the Site tomorrow. He was hesitant to move the equipment from the run-on control ditch to the Stormwater Pond without knowing if the drain dips were OK. I told Larry I had inspected the drain dips and would recommend approval as I thought they were both functional and constructed close to what was discussed with Mike Hatten and Pebbles Opp during the on-site meeting on 9/21/2012. During that meeting it was determined the drain dips could not be constructed as shown on Sheet 8. There are several reasons for this. First, without adding additional surfacing material to the road, the spillway for the drain dips would be well below the elevation of the ditch liner. The material available on-site was not suitable for surfacing (too rocky) and a change to the contract would have been required to import appropriate material. Second, there are too many large rocks on and near the existing road surface to accurately shape the water bars to the correct dimensions

29. SIGNATURE	30. TITLE	31. ADDTL SPACE NEEDED ☒
Tony Thornborrow	RPR	*(continued on 6300-21)*

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FS-6300-20 (12/85)

USDA - Forest Service **CONTRACT DAILY DIARY** **Narrative Continuation** *(Reference FSH 6309.11)*	1. PROJECT **Beal Mtn. Pond Removal Project**	2. PAGE 2 of 2
	3. CONTRACT NUMBER **DEQ 413006**	4. DATE 10/2/12

5. NARRATIVE REPORT *(continued from 6300-20)*

or excavate a basin to add 5" minus subgrade.

Larry said he would have a truck at the Site tomorrow to move the equipment to the Stormwater Pond and take a load of debris from the Minnesota Pond.

1100 - Spoke with Pebbles Opp. She plans to be at the Site on Wednesday while Schnell is working on the additional regrading at the Stormwater Pond. I told Pebbles I had a meeting in Butte until lunch time and planned to be at the Site in the early afternoon.

Left Site 1115.

1615 - Spoke with Mike Hatten regarding scheduling the surveyors to complete the quantity surveys on the regraded areas. Mike will ask the surveyors to be at the Site on Thursday 11/4. If Schnell begins the additional regrading work on Wednesday they should have it completed by Thursday. The surveyors can work on the Minnesota Pond, Contingency Pond, and Check-Dam removal areas before going to the Stormwater Pond. Mike and I also discussed the run-on control ditch. Mike asked me to request that Schnell attempt to key in the TRM fabric where they could, particularly on edge adjacent to the road. I said I would bring this up with Larry. We also discussed fertilizer in the ditch. I will ask Schnell if they applied fertilizer. If not, they can go back and broadcast the fertilizer; otherwise they will not be paid the full amount for contract item A-4, fertilize and seed. It will also be pointed out to Schnell that the regraded pond areas must be fertilized in accordance with the specifications in the contract.

6. SIGNATURE	7. TITLE	8. ADDTL SPACE NEEDED ☐ *(continued on 6300-21)* On page ____ of ____
Sonny Tiberius	RPR	

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FS-6300-21 (11/78)

USDA - Forest Service

CONTRACT DAILY DIARY

(Reference FSH 6309.11)

1. FOREST: **Beaverhead-Deerlodge NF**

2. CONTRACT NO.: **DEQ 413006**

3. PROJECT: **Beal Mtn. Mine Pond Removal and Run-On Control Project**

4. CONTRACTOR: **Schnell Excavation**

5. CONTRACTOR REPRESENTATIVE ON SITE: —

6. GOVERNMENT OFFICIALS ON SITE: **S. Thornborrow**

7. DATE	8. DAY OF WEEK	9. TIME ARRIVED	10. TIME DEPARTED	11. WEATHER
10/3/2012	Wednesday	—	—	—

12. TEMPERATURE °F. Min. Max.	13. GROUND CONDITION	14. CONTRACT TIME	15. DAYS USED	16. COMPLETION DATE
	—	—	—	—

17. TIME USED *(%)*	18. WORK COMPLETED *(%)*	19. WORK ON SCHEDULE	20. CONTRACTOR'S WORK - *(X Appropriate Box)*
—	—	☐ 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

25. LIST CONTRACT PAYMENTS, REPORTS, CORRESPONDENCE, ETC.

Item	Prep	Submit
—	—	—

26. WORKERS ON SITE

Classification	Number PRIME	Number SUB
—		

27. GOVERNMENT PROVIDED SERVICES ADEQUATELY AND TIMELY: ☐ YES ☐ NO - Explain in narrative

28. NARRATIVE REPORT

Did not visit Site.

0845 - Called Larry Schnell and discussed the following:

1). The surveyors were scheduled to return to the Site Thursday 10/4. After further discussion, this has been pushed back to Friday 10/5.

2). Run-on control ditch: fertilizer. Larry said he had raked in the fertilizer and will do the same on the portion of channel still needing TRM installed.

3). Run-on control ditch: TRM key. I told Larry I wanted them to make an effort at keying-in the TRM fabric on the side adjacent to the road. Larry said the TRM was stapled down very well and that attempting a key would require removing the staples. He thought the rocks removed by digging the key would make a mess of the ditch and that it was his opinion the staples would hold the fabric better than a trench. After discussing with Mike Hatten it was

29. SIGNATURE: Sonny Thornborrow

30. TITLE: RPR

31. ADDTL SPACE NEEDED ☒

(continued on 6300-21)

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USDA - Forest Service **CONTRACT DAILY DIARY** **Narrative Continuation** *(Reference FSH 6309.11)*	1. PROJECT **Beal Mtn. Pond Removal Project**	2. PAGE 2 of 2
	3. CONTRACT NUMBER **DEQ 413006**	4. DATE 10/3/2012

5. NARRATIVE REPORT *(continued from 6300-20)*

determined the staples will be sufficient; this was relayed to Larry.

4). Run-on control ditch: touch-up work. Larry will spread the leftover pea gravel over the road, approximately 2 cubic yards. He will also spread the leftover topsoil where it is sitting now, approximately 3 cubic yards. Larry will reserve a small amount of fertilizer and seed to put over the topsoil.

1515 - Email from Pebbles Opp regarding grading of the road behind Dave Smith's property. I discussed the proposed road grading with FWP manager Vanna Boccadori, who gave verbal approval for the work. Tomorrow Larry and I will look at the property boudaries and work to be completed.

6. SIGNATURE	7. TITLE	8. ADDTL SPACE NEEDED ☐ *(continued on 6300-21)* On page ____ of ____
Sonny Tilmann	RPR	

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FS-6300-21 (11/78)

USDA - Forest Service

CONTRACT DAILY DIARY

(Reference FSH 6309.11)

1. FOREST: **Beaverhead-Deerlodge NF**

2. CONTRACT NO.: **DEQ 413006**

3. PROJECT: **Beal Mtn. Mine Pond Removal and Run-On Control Project**

4. CONTRACTOR: **Schnell Excavation**

5. CONTRACTOR REPRESENTATIVE ON SITE: L. Schnell

6. GOVERNMENT OFFICIALS ON SITE: **S. Thornborrow**

7. DATE	8. DAY OF WEEK	9. TIME ARRIVED	10. TIME DEPARTED	11. WEATHER
10/4/2012	Thursday	0945	1615	cold, cloudy

12. TEMPERATURE °F. Min. Max.	13. GROUND CONDITION	14. CONTRACT TIME	15. DAYS USED	16. COMPLETION DATE
	wet	—	—	—

17. TIME USED (%)	18. WORK COMPLETED (%)	19. WORK ON SCHEDULE	20. CONTRACTOR'S WORK - (X Appropriate Box)
—	—	☒ YES ☐ NO	☒ Acceptable ☐ Unacceptable - *Explain in narrative*

21. CHANGE ORDERS/AMENDMENTS ISSUED: ~~None~~ work directive for road grading

22. WORK ORDERS ISSUED *(Include SUSPEND/RESUME)*: none

23. MATERIALS FURNISHED TO JOB SITE *(Furnished By: G-Govt.; C-Cont.; S-Subcont.)*

TRM
Fertilizer / tags will be
Seed / supplied when
seeding is done
on the regraded
Ponds.

24. LIST EQUIPMENT ON SITE *(Furnished by G-Govt.; C-Cont.; S-Subcont.)*

Type	Contract Item Number and Location of Use	Hours Used	
CAT	D5 C Dozer		C
Kom	200 LC Excavator		C
CHA	730 A Grader		C
FORD	F-350 Pickup		C
DODGE	3500 Pickup		C
MACK	Water truck		C
KEN	Tractor w/ low-boy transport		C
KEN	Side-dump tractor / trailer		C
	Items:		
A-3	run-on control ditch construction		
A-4	Fertilize / seed		
3C	Regrade pond area		
4A	Debris removal / disposal		

25. LIST CONTRACT PAYMENTS, REPORTS, CORRESPONDENCE, ETC.

Item	Prep	Submit
—	—	—

26. WORKERS ON SITE

Classification	Number PRIME	Number SUB
Larry Schnell	X	
Josh Henderson	X	
Myles Carpenter	X	
Pebbles Opp (DEQ)		
Randy English, TT		
David Wiesand		

27. GOVERNMENT PROVIDED SERVICES ADEQUATELY AND TIMELY: ☒ YES ☐ NO - Explain in narrative

28. NARRATIVE REPORT

Arrived at Site 0945. No Schnell employees present. The following work was completed yesterday (10/3):

- The excavator and dozer have been moved from the run-on control ditch work area to the Stormwater Pond. The loader has been removed from the Site.
- The touch-up items at the run-on control ditch (spread remaining pea gravel and topsoil) have been completed as discussed with Larry Schnell.
- All remaining debris has been removed from the Minnesota Pond.

Josh Henderson arrived at the Site 1030 and finished work at the run-on control ditch, including fertilizing, seeding, and installing TRM fabric. Larry Schnell arrived at the Site 1130; after speaking with Josh he went to the Stormwater Pond and started regrading the pond surface.

1230 - Met Pebbles Opp, Larry Schnell, Josh Henderson, and Myles Carpenter at the Stormwater Pond. Myles had delivered the motor grader (Champion 730A) to the Contingency Pond. After helping Josh move the straw wattles

29. SIGNATURE	30. TITLE	31. ADDTL SPACE NEEDED ☒
Doug Thornborrow	RPR	*(continued on 6300-21)*

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USDA - Forest Service **CONTRACT DAILY DIARY** **Narrative Continuation** *(Reference FSH 6309.11)*	1. PROJECT **Beal Mtn. Pond Removal Project**	2. PAGE 2 of 2
	3. CONTRACT NUMBER **DEQ 413006**	4. DATE 10/4/12

5. NARRATIVE REPORT *(continued from 6300-20)*

further down the slope of the Stormwater Pond they left the Site. Pebbles and I went and inspected the run-on control ditch. We noted two spots where the TRM had slid into the channel from the uphill side due to snow loading and trampling by elk. The fabric staples had been pulled out of the ground. Pebbles brought this to Larry's attention and told him he would need to re-staple those areas. Larry said he had already re-stapled some areas and that he would leave us with some leftover staples once the job was over. It appears that keeping the TRM fabric stapled into the hillside may be a recurring problem. I believe the staples on the road side of the ditch will function fine but we may need to devise a better way to anchor the uphill side.

Pebbles and Larry signed the work directive for grading the access road behind Dave Smith's property and Pebbles left the Site approximately 1330. Larry continued regrading the Stormwater Pond using the excavator, dozer, and grader. The small pile of debris at the Stormwater Pond was moved to the Contingency Pond. Myles Carpenter returned to the Site at 1510 with a side-dump truck; Larry loaded him with debris and Myles left the Site. There is one more load of debris left to remove from the Contingency Pond work area. Larry returned to the Stormwater Pond and finished regrading. The surface of the former pond is now much closer to the second profile drawing on Sheet 4; the large flat area is now a rounded mound. I told Larry the work was acceptable.

1430. Mike Hatten called and said the surveyors had requested to be at the Site Monday 10/8 instead of Friday 10/5. I discussed this with Larry, who said that was fine with him. The surveyors will be at the Site at 1000 hours on Monday. I will not be there because Monday is a federal holiday; however, I will deliver a key to the office of Brown and Associates so they are able to open the gate in case Schnell is not there when they arrive.

Larry Schnell left the Site 1600. I left at 1615. Tetra Tech employees (R. English, D. Wiegand) still on-site.

6. SIGNATURE	7. TITLE	8. ADDTL SPACE NEEDED ☐
Sonny Thurman	RPR	*(continued on 6300-21)* On page ____ of ____

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FS-6300-21 (11/78)

USDA - Forest Service

CONTRACT DAILY DIARY

(Reference FSH 6309.11)

1. FOREST: **Beaverhead-Deerlodge NF**

2. CONTRACT NO.: **DEQ 413006**

3. PROJECT: **Beal Mtn. Mine Pond Removal and Run-On Control Project**

4. CONTRACTOR: **Schnell Excavation**

5. CONTRACTOR REPRESENTATIVE ON SITE: Larry Schnell

6. GOVERNMENT OFFICIALS ON SITE: **S. Thornborrow**

7. DATE	8. DAY OF WEEK	9. TIME ARRIVED	10. TIME DEPARTED	11. WEATHER
10/9/2012	Tuesday	0945	1610	cloudy, cool

12. TEMPERATURE °F. Min. Max.	13. GROUND CONDITION	14. CONTRACT TIME	15. DAYS USED	16. COMPLETION DATE
	dry	—	—	—

17. TIME USED (%)	18. WORK COMPLETED (%)	19. WORK ON SCHEDULE	20. CONTRACTOR'S WORK - (X Appropriate Box)
		☐ 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.)*

Topsoil - 14 loads @ 20 yd³/load = 280 yd³	C
(2 loads were brought Monday 10/8)	

24. LIST EQUIPMENT ON SITE *(Furnished by G-Govt.; C-Cont.; S-Subcont.)*

Type	Contract Item Number and Location of Use	Hours Used	
CAT	D5 C Dozer		C
CASE	backhoe		C
MACK	water truck		C
KEN	Tractor trailer w/ low boy transport #312		C
KEN	Tractor w/ side dump # 303		C
KEN	Tractor w/ side dump # 311		C
PBT	Tractor w/ end dump + pup (LaVelle)		S
	Items:		
WDC #4	- provide/spread topsoil		

25. LIST CONTRACT PAYMENTS, REPORTS, CORRESPONDENCE, ETC.

Item	Prep	Submit
—	—	—

26. WORKERS ON SITE

Classification	Number PRIME	Number SUB
Larry Schnell	X	
Myles Carpenter	X	
Chad Davis	X	
Brandon Queer		X

27. GOVERNMENT PROVIDED SERVICES ADEQUATELY AND TIMELY
☐ YES ☐ NO - Explain in narrative N/A

28. NARRATIVE REPORT

0945 - Arrived at Site after passing 3 dump trucks (2 side dumps and one end dump w/ pup trailer) on the German Gulch road. Upon arrival I found 2 side-sump loads of topsoil present at the Contingency Pond and 3 loads of topsoil (2 side dump and 1 end dump) present at the Stormwater Pond.

1030 - Larry Schnell arrived in a tractor-trailer with a backhoe. Larry unloaded the backhoe at the Contingency Pond. He then walked the dozer from the Stormwater Pond to the Contingency Pond and started moving the 2 loads of topsoil to create an access road to the check dam removal work area. Larry said he had removed the excavator from the Site on Friday 10/5; on Monday 10/8 he had graded the access road behind Dave Smith's property and hauled the two loads of topsoil to the Contingency Pond. We agreed that all loads of topsoil contained 20 cubic yards. Larry said the end-dump truck (subcontracted from LaVelle Trucking Co., Butte MT) held more than 20 yards but that he was only loading it with 20 yards so it would be easier to track the topsoil volume.

The Dave Smith gates have been left open while Schnell is hauling topsoil. Larry has paid someone to sit at

29. SIGNATURE: Sam Thornborrow

30. TITLE: RPR

31. ADDTL SPACE NEEDED ■
(continued on 6300-21)

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Previous editions of this form are obsolete.

USDA - Forest Service **CONTRACT DAILY DIARY** **Narrative Continuation** *(Reference FSH 6309.11)*	1. PROJECT **Beal Mtn. Pond Removal Project**	2. PAGE 2 of 2
	3. CONTRACT NUMBER **DEQ 413006**	4. DATE 10/9/12

5. NARRATIVE REPORT *(continued from 6300-20)*

the lower gate and make sure no unauthorized vehicles enter Smith's property. I told Larry this was acceptable in lieu of closing the gates with each pass through.

By the end of the day a total of 16 loads of topsoil had been brought to the Site (13 to the Contingency Pond and 3 to the Stormwater Pond). The north bank of the check-dam removal area and approximately 1/2 of the Pond area has been covered. The south bank of the check-dam removal area will not be covered as discussed with Larry Schnell and Pebbles Opp on 10/4. Larry believes it will take a total of 21 loads to completely cover the pond area including the access road. The original estimate for this area was 17.5 loads. I believe the topsoil depth is greater than 4 inches in some areas; however, I also believe Larry is spreading the topsoil as thin as possible without dragging rocks to the surface.

Larry left the Site 1600. I left at 1610 after taking pictures of the Contingency Pond.

6. SIGNATURE	7. TITLE	8. ADDTL SPACE NEEDED ☐
Sam Thomas	RPR	*(continued on 6300-21)* On page ____ of ____

Distribution: Original - CO *(weekly)*; copies: COR, SO, PROJ ENG.
Previous editions of this form are obsolete.

FS-6300-21 (11/78)

APPENDIX F

Submittals

SAFETY & HEALTH SERVICES

CERTIFIES THAT

Larry Schnell

HAS SUCCESSFULLY COMPLETED

8-HOUR OSHA 1910.120
HAZARDOUS WASTE OPERATIONS &
EMERGENCY RESPONSE REFRESHER COURSE

February 9, 2012
DATE

Butte Plaza Inn - Butte, MT
LOCATION

#P125
CERTIFICATE NUMBER

Tony Olson
INSTRUCTOR

Safety & Health Services . 12 Redwood Drive . Butte, MT . (406) 494-7710

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LITHO. IN U.S.A.

SAFETY & HEALTH SERVICES

CERTIFIES THAT

Josh Henderson

HAS SUCCESSFULLY COMPLETED

8-HOUR OSHA 1910.120
HAZARDOUS WASTE OPERATIONS &
EMERGENCY RESPONSE REFRESHER COURSE

February 9, 2012
DATE

Butte Plaza Inn - Butte, MT
LOCATION

#P128
CERTIFICATE NUMBER

Tony Olson
INSTRUCTOR

Safety & Health Services . 12 Redwood Drive . Butte, MT . (406) 494-7710

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LITHO. IN U.S.A.

Doto's Safety
Specialist

Certifies that
Myles Carpenter
Has Completed a
Hazardous Waste Refresher Course 29CFR 1910.120

4/21/11 — Date

4/21/13 — Instructor
Mike Doto

Schnell

EXCAVATING, INC.

A locally owned and operated MONTANA company!

122133 Nissler Rd
Butte, MT 59701
406-723-5700 office/fax
schnellexcavating@rfwave.net

1. COMPANY SAFETY & HEALTH POLICY

Welcome to the *SCHNELL EXCAVATING INC* team! Our philosophy is to deliver the finest construction projects and management services while being a firm that is enjoyable to work for and rewarding to work with. In order to further this philosophy certain performance and safety standards will apply to every individual at *SCHNELL EXCAVATING INC*. These standards are listed in this handbook and will be reinforced through regular safety meetings.

Our policy is to provide and maintain safe and healthful working conditions and to follow operating practices that will safeguard all employees and the public. There is no project or job that can justify the willful performance-of-unsafe actions or the taking of unnecessary risks. Safety and efficient production go hand-in-hand. All levels of management have the primary responsibility for safety and well being of all employees and public exposed to our work environment. This responsibility can be met only by working continuously to promote safe work practices and to maintain property and equipment in safe operating condition.

All employees will abide by Federal, State and Local regulations as they pertain to our construction operations. It is a condition of continuing employment with *SCHNELL EXCAVATING INC.* that all employees adhere to the requirements of this policy as well as the safety rules, instructions and procedures issued in conjunction with it. Each employee will be responsible for his or her actions and accountable .for them.

The final responsibility for professional conduct and safety rests with each individual employee. Do a job you can be **PROUD** of in a **SAFE & EFFICIENT** manner that will stand as a testament to your hard work and skill.

Larry Schnell, President- April 1, 2010

2. SAFETY PROGRAM

SCHNELL EXCAVATING INC has an active and ongoing safety program. You will be briefed on the program prior to starting work .and throughout your course of employment during weekly safety meetings and periodic safety training. The Safety Director administers the safety program.

The Safety Director is responsible and accountable for coordinating and implementing the procedures, training, directives and any other actions deemed necessary to accomplish the goals of the Safety Policy. The Safety Director reports directly to the President.

Each Project Manager is responsible and accountable to ensure that the safety policy and its procedures are followed and that all OSHA, MSHA, and similar safety standards are met in his/her area of control and responsibility.

Each job Superintendent is responsible and accountable for the overall job site safety of ***SCHNELL EXCAVATING INC*** employees. He functions as the Competent Person on the job site. Maintains and has on hand required safety material including the Safety Manual and Hazard Communication Program & MSDS book. Conducts weekly safety meetings, periodic safety committee meetings, and ensures all accident / incident reports are completed and sent to the main office. Ensures all employees are properly trained in safe operations and are provided and use appropriate safety equipment.

ALL PERSONNEL will abide by the safety rules and regulations of each construction site. Employees and subcontractors will strive to make all operations safe and keep all work areas clean and free of debris. Additionally all

personnel will assess the result of work performance and work in a safe manner, not in a way that will create a hazard for self or others.

ALL EMPLOYEES AND SUBCONTRACTORS are required to treat safety as a PRIORITY!

3. GENERAL WORK RULE GUIDE

All company employees are required to treat safety as a **PRIORITY**. As such, employees are expected to report to work in good mental and physical condition to safely perform assigned duties. Before any task, employees must consider the possible effects of their actions.

One significant mark of a mature employee is an enthusiastic approach to work. This precludes clock-watching and half-done jobs; you should consider no assignment unimportant or unworthy of your **BEST EFFORTS.**

4. EXPECTATIONS OF SCHNELL EXCAVATING INC EMPLOYEES

1. **SHOW UP TO WORK ON TIME**. If you are going to be late or cannot make it to work then notify the Superintendent or Main office that morning.
2. **TOOLS.** Have the required tools for the job and make sure they are in good working condition.
3. **DRESS APPROPRIATELY FOR WORK**. Have cold weather gear / steel toe boots / hard hat / safety glasses available and ready to use. Loose clothing and excess jewelry must not be worn.
4. **WEAR YOUR HARD HAT** on the job at all times.
5. **REPORT ALL UNSAFE CONDITIONS** to your supervisor
6. **PROMPTLY REPORT ALL ON THE JOB INJURIES** to your superintendent.
7. **PROPERLY USE AND CARE FOR ALL EQUIPMENT AND TOOLS**. When you are done using a tool, clean I up and put it back in its storage space. If you are operating a piece of equipment, check the oil and operation of all the parts prior to using it. If something needs to be repaired, then report it immediately and do not use the equipment.
8. **KEEP THE JOB SITE CLEAN**. If it is messy, clean it up! Do not wait for somebody to tell you to do it.
9. **KNOW YOUR JOB**. Be professional. If you have a question about a task, ask your supervisor on the job site Superintendent. There is not excuse for poor or sloppy work.
10. **THINK SAFETY!** A true professional is someone who can do the job safer and of better quality and efficiency than the next guy. Strive to be that Professional.

All employees will be expected to follow these rules. Anyone found in violation of these items will be disciplined which may include termination.

5. SAFETY IS YOUR RESPONSIBILITY

You have the responsibility to yourself and to your company safety program to obey all safety and health standards, rules and regulations that apply to your actions and conduct on the job. As an employee or subcontractor of *SCHNELL EXCAVATING INC* you are expected to:

1. Strive to make all operations safe.

2. Keep all work areas clean and free of debris.

3. Assess the result of work performance. Work in a safe manner and not in a way that will create a hazard for yourself or others.

4. Abide by the safety rules and regulations established for the company and each construction site. Perform work in strict conformance with federal, state, and local regulations.

5. • Promptly report all injuries, near misses, or unsafe conditions to your foreman or job site superintendent immediately.
6. Operate only equipment that you are qualified to operate. We welcome any recommendations that you have to improve the safety of our operations. If you have any questions or comments on safety, feel free to call the **Safety Director, Larry Schnell at the office/home 406-723-5700**

6. GENERAL SAFETY RULES

1. Comply at all times with company rules and all Federal, State & local safety laws, employer regulations and policies.
2. Treat all coworkers with respect.
3. Report **ALL ACCIDENTS & NEAR MISSES** to supervisor or job site superintendent promptly!
4. Obey all posted warning signs and signals.
5. Only authorized personnel will operate equipment or perform welding.
6. Be alert and do not walk under suspended loads. Crewmembers are absolutely forbidden to ride the hook or the load. Only authorized personnel will make repairs to equipment or electrical equipment. No equipment will be operated within 10 feet of energized overhead electrical wires. For lines greater than 50kV add 4" for each 10kY.
7. Machine guards must not be removed or rendered ineffective.
8. Equipment must be inspected regularly for defects.
9. Fall protection (safety harness, lanyard, and guardrails) is required when employees are exposed to falls greater than 6 FEET. Clarifications and exceptions to this rule will be briefed during your fall protection training
10. HARD HATS will be worn at all times.
11. Safety glasses will be worn when there is exposure to flying objects.
12. Hearing protection will be worn in areas where sound level exceeds 85 dB.
13. Possessing, using or being under the influence of alcohol or unauthorized controlled substances (drugs) during workings hours are grounds for immediate discharge.
14. Seat & safety belts will be worn at all times when operating equipment.
15. Avoid back injuries. Learn to lift properly and ask for help.
16. Keep all unauthorized persons away from work area.
17. Horseplay causes accidents and will not be tolerated.

7. CLOTHING FOR CONSTRUCTION

DRESS RIGHT

When you dress for construction jobs, remember that you're not out to model the latest fashions.

KEEP YOUR SHIRT ON

Always wear a heavy-duty shirt, preferably long sleeved with the cuffs buttoned at the wrist. Don't wear it loose or baggy. Keep it tucked in to avoid snagging. Your shirt will protect you from sunburn, so keep it on even when the weather is hot. It will protect you from scrapes and from skin-irritating material, such as concrete, water and poison ivy. Don't wear anything around your neck that can dangle and get caught in machinery.

NO BAGGY PANTS / NO SHORTS

Wear straight-line pants of proper length without pocket flaps or cuffs. They should not be baggy or so long that your heels get caught in them. You probably can't keep your pants up without a belt. If your belt is too long cut off the extra length or run it through additional belt loops. In this way it won't get caught and pull you into machinery.

LEAVE JEWERLY HOME

One of the most common causes of amputated fingers is jewelry, such as rings, wristwatches and bracelets. They may look nice, but if caught in machinery, you could loose more than a ring.

PUT YOUR BEST FOOT FORWARD

Different jobs call for different kinds of footwear but generally properly fitted safety boots should be worn. They give more support than other boots and more protection, i.e. if something were to fall on your foot. Wear rubber boots when working in and around wet material such as concrete or mud.

WINTER WEAR

During cold weather, layer your clothing. You should always have insulated pants or overalls, an insulated coat, hat, gloves and boots available when working in Montana.

8. PERSONAL EQUIPMENT

HARD HATS

Everyone on the job site will wear a hard hat at all times. This will protect you from impact, falling or flying objects or electrical shock or burns. Exceptions to this policy in certain cases will only be by the direction of the superintendent or policy in certain cases will only be by the direction of the superintendent or safety director.

SAFETY GLASSES / GOGGLES

These are required when there is potential exposure to eye injury caused by flying objects. This is 90% of the time on a construction site. When grinding or drilling wear goggles.

4. Longer than 5 feet (1.52 meters) but less than or equal to 10 feet (3.04 meters) in length, irrespective of the weight.
5. Two tiedowns if the article is longer than 10 feet (3.04 meters) and one additional tiedown for every 10 feet (3.04 meters) of article length, or fraction thereof, beyond the first 10 feet (3.04 meters) of length
6. If an individual article is required to be blocked, braced or immobilizes to prevent movement in the forward direction by a headerboard, bulkhead, other articles which are adequately secured or by an appropriate blocking or immobilization method, it must be secured by at least one tiedown for every 3.04 meter (10 feet) or article length of fraction thereof.
7. Special rule for special purpose vehicles. The rules in this section to not apply to a vehicle transporting one or more articles of cargo such as, but not limited to, machinery or fabricated structural items (e.g., steel or concrete beams, crane booms, girders and trusses, etc.) which, because of their design, size, shape, or weight, must be fastened by special methods. However, any article of cargo carried on that vehicle must be securely and adequately fastened to the vehicle.
8. Also, one tiedown for any moving or unanchored part such as a blade on a grader, boom or backhoe.

Remember when in doubt of load limits and tiedown securement contact the safety director.

10. MAINTENANCE

1. All trucks and trailers will be greased weekly.
2. All trucks and trailers will be inspected daily with the inspection sheet turned into the business office daily.
3. All trucks and trailers will have an annual inspection.
4. Any reported nonworking on all trucks and trailers will be repaired immediately.

11. MEDICAL TREATMENT AND FIRST AID

ON THE JOB INJURIES

All on the job injuries, even those that appear slight- are to be reported immediately to the superintendent. Many of the minor injuries that you might sustain can be treated from the first aid boxes. You will find these located in various locations around the job site (tool van, office trailer and trucks). If the injury is severe enough seek professional medical attention and notify your supervisor immediately.

On the job injuries are covered by worker's compensation insurance. Keep in mind that this is for **ON THE JOB INJURS ONLY**. Fraudulent claims cost taxpayers billions of dollars each year. Worker's compensation fraud is a **FELONY** and punishable to the fullest extent of the law.

12. COMPANY VEHICLES

All company vehicles require you to have a valid driver's license and management approval prior to operating. Certain vehicles will require you to have a Commercial Drivers License (CDL).

WHO CAN OPERATE COMPANY VEHICLES

Only authorized licensed drivers may operate company vehicles.

PRE- TRIP INSPECTION

Prior to operating the vehicle give it a good inspection. This includes brakes, steering, horn, wipers, tires, mirrors, lights and reflectors. Also check the oil level and service sticker and note when service is due. If something needs to be repaired or replaced, report it to the superintendent and make sure it gets fixed prior to operating the vehicle.

ADDITIONAL OPERATING RULES

1. The driver and passengers will wear seat belts at all times.
2. Do not pick up hitchhikers or carry unauthorized passengers.
3. Observe all posted speed limits and comply with traffic laws and warning signs.
4. When transporting materials, equipment, etc., make certain the load is secure and balanced and within the running lines of the vehicle.
5. Park only in authorized areas.
6. DO NOT DRINK AND DRIVE - anyone found in violation of this rule will be immediately discharged.
7. Drive defensively and be courteous.

REMEMBER, YOU REPRESENT *SCHNELL EXCAVATING INC* TO THE PUBLIC!

PARTICULATE AND HALF / FULL FACE RESPIRATORS
In certain instances you may be required to wear a particulate (dusk mask type) or canister type respirator. This is to protect you from dust, silica, welding fumes or other hazardous substances. You will be briefed and trained in accordance with the ***SCHNELL EXCAVATING INC*** respirator program. If you are making dust or creating fumes be aware of other workers and trades in your vicinity and don't expose them unnecessarily.

GLOVES
Often these are overlooked. Have a good pair of work gloves available and use them. Also, have cold weather gloves available and ready for use.

BOOTS
Have a good pair on to protect your feet from exposure to banging or crushing. If you are involved in a task that has potential to crush your feet (Using a whacker, sledgehammer, etc.) you must wear steel toe boots or guards.

FALL PROTECTION
All workers will have some sort of fall protection when exposed to falls greater than 6 feet. Often this will involve wearing a full body harness with lanyard. Your supervisor will brief you on when and where to have the harness.

9. CARGO TIEDOWNS

TIE DOWNS
A cargo tiedown is any combination of securing devices which forms an assembly that attaches articles of cargo to, or restrains articles of cargo on a vehicle or trailer and is attached to anchor points. Tiedowns include chains, ropes, webbing steel straps, binders, buckles and other devices. Tiedowns are obviously a very important part of a safe trucking operation. Because they prevent the shifting or loss of cargo.

WORKING LOAD LIMITS
Working load limits are used to specify the minimum strength of tiedowns and other cargo securement devices. The working load limit is the maximum load that may be applied to a component of a cargo securement system during normal service. The load limit is usually assigned by the manufacturer of the component, and is generally equal to 1/3 of the ultimate breaking strength of that device.

DERTERMING WORKING LOAD LIMITS
The working load limits may be determined by using either:
1. The tiedown manufacturer's marking, or
2. The tables in section 393.108

The working load limits listed in the tables are to be used when the tiedown material is not marked by the manufacturer with the working load limit. Then the values in the tables and on marked tiedowns differ, the marked value is to be used. When in doubt of load limits contact the safety director.

AGGREGATE WORKING LOAD LIMITS.
The aggregate working load limit of any securement system must be at least ½ times the weight of the articles secured. For example, the tiedowns used to secure cargo weighing 30,000 pounds would have to have an aggregate working load limit of 15,000 pounds. According to guidance from the FMCSA, the aggregate working load limit is determined by adding together:
1. One-half the working load limit of each tiedown that goes from an anchor point on the vehicle to an attachment point on an article of cargo (a direct tiedown); and
2. The working load limit for each tiedown that goes from an anchor point on the vehicle, through, over or around the cargo and then attaches to another anchor point on the vehicle (an indirect tiedown).

Tiedowns and associated connectors and mechanisms (except steel strapping) must allow for in-transit adjustment.

In addition to the requirements of 393.106, the minimum number of tiedowns required to secure an article or group of articles against movement depends on the length of the articles being secured, and the requirements of paragraphs (b) and (c) of this section.

When an article is not blocked or positioned to prevent movement in the forward direction by a headerboard, bulkhead, other cargo that is positioned to prevent movement, or other appropriate blocking devices, it must be secured by at least:
1. One tiedown for articles 5 feet (1.52 meters) or less in length, and 1,100 pounds (500 kg) or less in weight.
2. Two tiedowns if the article is:
3. 5 feet (1.52 meters) or less in length and more than 1,100 pounds (500 kg) in weight: or

13. TOOLS

TOOLS THE COMPANY PROVIDES

SCHNELL EXCAVATING INC provides a broad range of hand and power tools for you to use on the job site. These tools augment those that you have in your tool belt / box and range from screwdrivers to power saws. The variety and application of the tools are too great to cover here, but the safety precautions are basic.

TOOL SAFETY

Always use the proper tool for the job. Before using tools, examine them for flaws, correct size and cutting edges. Keep tools clean and free of grease at all times. Tools with mushroomed heads or hammers with split or loose handles should not be used. Portable electric power tools must be grounded or double insulated. Before using any electric hand tool, inspect it for obvious defects. Check to see that it is grounded. This includes the extension cord if one is being used. When using tools, keep them in your immediate work area. Don't leave them where another employee might trip over them.

Return tools to their proper place when the work is finished. If the tool is broken, let your supervisor know so it can be fixed. **NEVER PUT A BROKEN TOOL BACK IN THE TOOL VAN WITHOUT TAGGING IT!**

14. ANTI-DISCRIMINATION POLICY

SCHNELL EXCAVATING INC provides equal employment opportunity to qualified persons without regard to race, color, religion, sex, national origin, age, known handicaps, or veteran status. Our policy relates to all phases of employment, including recruitment, placement, promotion, training, demotion, transfer, layoff recall, termination, rates of pay, employee benefits and participation in all employer sponsored employee activities.

15. SEXUAL HARASSMENT POLICY

SCHNELL EXCAVATING INC will not allow any form of sexual harassment or any such conduct that has the purpose or effect of interfering with an individual's work performance or creating an intimidating, hostile, or offensive work environment. Such conduct, when experienced or observed, must be reported to the employee's supervisor. The supervisor will conduct an investigation and will be required to report the findings to the President or his designated representative. The privacy of the employee reporting this conduct and the employee under investigation shall be respected at all times. Any intentional sexual harassment is considered to be a major violation of company policy and will be dealt with accordingly by corrective counseling and/or suspension or termination depending upon the severity of the violation. It is the intent of SCHNELL EXCAVATING INC. to provide a work environment free from verbal, physical, and visual forms of sexual harassment. All employees are expected to be sensitive to the individual rights of their co-workers.

16. AT WILL STATEMENT

This Employee Manual is not intended to and does not create an employment contract between ***SCHNELL EXCAVATING INC.*** and its employees. Your employment is for no specific period of time and this employee manual does not limit your right or ***SCHNELL EXCAVATING INC*** right to terminate your employment at any time. Company policy and procedures will change over time. If you have any questions please contact management.

17. STEPS TO SAFE

1. Keep **FEET PARTED** - one alongside, one behind the object.
2. Keep **BACK STRAIGHT** - nearly vertical
3. Tuck your **CHIN IN.**
4. **GRIP THE OBJECT FIRMLY** with the whole hand.
5. **TUCK ELBOWS AND ARMS IN.**
6. Keep **BODY WEIGHT DIRECTLY OVER FEET.**

It is very important that you know your own limits. Get help with heavy loads and use mechanical handling equipment whenever possible. Back injuries are painful and can be permanently disabling. Don't jeopardize your future earning capacity by ignoring safe lifting procedures. Remember, **IF YOU NEED HELP LIFTING SOMETHING, ASK!**

_____ _____

EMPLOYEE **DATE**

Schnell
EXCAVATING, INC.
122133 Nissler Rd • Butte, MT 59701
(406) 723-5700 office/fax

August 3, 2012

BEAL MOUNTAIN MINE: POND REMOVALS AND RUN-ON CONTROLS

Reclamation Project,
Silverbow County
DEQ Contract No. 413006

CONTRUCTION PROJECT SCHDULE

1. Project pre-construction meeting on site August 9, 2012 at 10:00 a.m.
2. Mobe to project site starting August 14, & 15, 2012
3. Project construction will start with Minnesota Pond starting approximately August 17, 2012.
4. August 30, 2012 (approximately) will construct the run off ditch.
5. Project to be completed September 14, 2012.

Larry Schnell

Larry Schnell 8-13-12

Schnell
EXCAVATING, INC.
122133 Nissler Rd • Butte, MT 59701
(406) 723-5700 office/fax

August 3, 2012

BEAL MOUNTAIN MINE: POND REMOVALS AND RUN-ON CONTROLS

Reclamation Project,
Silverbow County
DEQ Contract No. 413006

EMPLOYEE LIST

Larry Schnell- (President/Owner) operator/laborer

Josh Henderson- (Foreman) operator/laborer

Jan Schnell- (Secretary) administrative

Myles Carpenter- truck driver/laborer

Larry Schnell

Larry Schnell 8/13/12

Schnell
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schnellexcavating@rfwave.net
August 3, 2012

JOSHUA HENDERSON- Resume

SCHNELL EXCAVATING INC.- Butte, MT
April 2011 through Present
Forman and equipment operator and laborer. Observes work sites, equipment conditions and protects against unsafe or hazardous situations. Projects include commercial, residential and industrial sewer/water utility installation along with all phases of the excavation projects. Foreman on the City of Butte Tunnels Project with included installing and rehab of storm water tunnels in uptown Butte, MT

WASLEY EXCAVATION, Butte, MT
April 2010 through April 2011
Duties include removal of old waterline and installation of new water lines and manholes in residential and commercial areas. Operated a pipe laser and transit along with operating all heavy equipment.

SMITH CONTRACTING INC- Butte, MT
April 2008 through April 2010
Installed water lines with hydrants. Backfilled and compacted ditches. Worked on streamside project constructing the streamside channel and pond development. Reported daily to engineer on project. Operated the asphalt paver and all heavy equipment. Worked on all phases of dirt excavation including residential, commercial and industrial projects.

HENDERSON MASONARY, Billings, MT
April 2000 through April 2008
Owned and operated masonry company. Projects included residential, commercial and industrial projects. Responsible for all project safety and health compliance.

I have current HASWOPER, MSHAW, FIRT AID/CPR certificates.

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August 3, 2012

Myles Carpenter- Resume

SCHNELL EXCAVATING INC.- Butte, MT
June 2012 to Present
Operate semi-trucks, dump trucks, side dumps, and lowboys. Responsible for loading and unloading of equipment along with hauling materials to project sites. Also laborer when needed. Perform maintenance on trucks and equipment along with safety inspections.

CARPENTER TRUCKING.- Butte, MT
June 2000 to June 2012
Owner/operator of Carpenter Trucking. Hauled dirt/equipment/livestock over the road. Responsible for all day to day business operations.

I have all current HASWOPER, MSHAW, FIRST AID/CPR certificates.

JAN BROSA SCHNELL
122133 Nissler Rd
Butte MT 59701-9600
406-723-5700 office

EXPERIENCE

SCHNELL EXCAVATING, INC.
Butte, MT 59701
Administrative Manager, July 13, 2007 to Present
Set up accounting system for company on QuickBooks. Prepare reports, accounts payable, accounts receivable and payroll. Prepare bids, spreadsheets, compile correspondence along with answering phone calls.

TOWN PUMP
Butte, MT 59701
Collection Specialist, May 25, 2004 to July 13, 2007
Collected returned checks for the western division of the state. Prepared accounts for the credit bureau and county attorney. Preformed skip tracing and research in order to collect money owed. Prepared spreadsheets, updates on accounts, compiled power point presentation for MIT training and any other duties assigned.

HEADWATERS RC&D AREA, INC.
Butte MT 59701
Administrative Assistant, May 19, 2004 to Present
Primary office and phone receptionist. Answer and direct consumer inquiries along with the scheduling of appointments for the Small Business Development Center, Loan Administrator, Economic Development Planner and USDA Director. Coordinate the Headwaters Board and committee meetings along with the recording of all minutes for permanent record. Prepare press releases, flyers, brochures for upcoming seminars and training classes. Input data entry and maintain spreadsheets. Duties also include ordering and reconciliation of supplies. Developed and maintain the access master mailing database. Audit/review loan files and adhering to a strict consumer confidentiality.

POWDER RIVER ENERGY CORPORATION
Gillette WY 82717
Engineering Project Clerk, December 2003 to May 2004
Engineering Technician Clerk, July 2002 to December 2003
Initial contact for consumers on new and existing line extensions. Responded to extensive consumer inquiries on rates, billing, company guidelines/policies and complaints for the Engineering department. Corresponded with the consumers via telephone, internet, mail, and in person.

Released jobs to the operations department along with maintaining 450 pending work orders. Assisted in developing and maintaining an access database for all line extension requests.

Prepared the consumer contracts which included the researching of credit and collected money for bad debts before releasing the construction jobs to engineering.

Data entry input for weekly and monthly reports. Provided administrative support to accounting, staking, ROW, and billing. Maintained a strict company consumer confidentiality policy.

POWDER RIVER ENERGY CORPORATION
Gillette WY 82717
Consumer Credit Representative, September 1998 to July 2002
Primary company representative for consumer payment arrangements and the collection of money on active and inactive accounts.
Responsible for preparing and filing small claims, scheduling and attending court proceedings along with preparing and executing garnishments. Prepared and physically drove to consumer locations to hang company door notes on delinquent accounts.

Set up new consumer accounts including the data entry and file maintenance. Maintained manuals for procedures, map books, board polices, rates, and the Public Service Commission rules and regulations.

Duties also included the processing of address changes, filing, receipting of payments and front counter back up. Responded to numerous consumer inquiries via telephone, mail, internet, and in person. Maintained a strict confidentiality of all consumer and business information.

POWDER RIVER ENERGY CORPORATION
Gillette WY 82717
Meter Reader, September 1992 to 1998
Responsible for the daily reading of 18 consumer/commercial routes- approximately 1500 meters per month. Disconnect/connection of meters for residential/commercial consumers.

Record mapping of new services along with installing meter pole tags. Tested meters for accuracy. Disconnected meters for non-payment.

EDUCATION

High School Diploma- Moorcroft, WY 1974
Eastern Wyoming College- Torrington, WY 1974 to 1988
*Associate of Applied Science Degree in Business Administration
Northern Wyo Community College District- Gillette, WY Campus 1994 to 2000
*Industrial Electricity Program
*General Studies (business communication, language skills, and multimedia)
*Marketing
Rocky Mountain Metering- Fort Collins, CO 1995
Computer Geek's- Butte, MT 11/2004 to Present
*Continuing training in computer software

REFERENCES

Available upon request

Schnell
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August 3, 2012

Larry Schnell

SMITH CONTRACTING- Butte, MT
April 1999 through April 2004
Gregory Mine Reclamation- MT
Jefferson City Mine Cleanup- MT
Streamside Restoration- MT
Forman and excavation operator for the hazardous waste recovery and remediation of streamside bank and flood plain restoration with actual in-stream excavating.

YELLOWSTONE CLUB RESORT- Big Sky, MT
June 2006 through October 2008
Tim Blixeth- company went bankrupt
Big Sky, MT
Installation of approximately 45,000 feet of new sewer and water utilities in rugged mountain terrain for the resort lodge, golf course and surrounding home sites.

GRIFF DAVIDSON- Butte, MT
September 2009
Griff Davidson @406-491-2296 or 406-494-1312
634 Basin Creek Rd
Butte, MT
Constructed a livestock water access or ford stream crossing at a water access point that allows livestock to cross or to drink with minimal disturbance to the stream bank and channel through the Boulder River. Project engineered by the Natural Resources Conservation Service and consisted of construction of the pipeline for watering and performing work to control erosion and minimize the production of sediment and other pollutants to water and air during construction. Project included revetments, blankets and placement of rock riprap.

BUTTE SILVERBOW LEAD PROGRAM- Butte, MT
June 2006 through present
Eric Hassler @406-497-5040
Butte Health Department
25 W Front ST.
Butte, MT 59701
Projects consisted of the removal and disposal of contaminated soils and reclaiming sites along with re-vegetation or areas.

West Central Environmental- Butte, MT
May 2011
Nat Olson @
1030 S Avenue West
Missoula, MT 59801
Clean up oil spill on Homestake Pass- Butte, MT. Disposed of contaminated soil with clean topsoil.

ATLANTIC RICHFIELD RECLAMATION- Butte & Anaconda, MT
April 2007 through November 2011
Pat Sampson @406-490-0706 cell or 406-782-5177 office
Pioneer Technical Services
307 E Park
Butte, MT 59701
Scraped, piled and trucked approximately 400,000 yards of topsoil to various locations for reclamation projects.

NORTHWEST FUEL SYSTEMS- Butte, Malta, Lewiston, Hamilton, MT
June 2008 through October 2011
Kenny Griffin @406-498-5057
Northwest Fuel Systems
115 Industrial Court
Kalispell, MT 59903
Installation, removal and disposal of bulk underground fuel storage tanks ranging from 600 to 30,000 gallon. Construction included in prevention of any contaminations of area ground or into water sources.

MINE SHAFT CLOSURE AND REPLACEMENT PRJOECT- Butte, MT
August 2010 through April 2011.
Tom Malloy (Butte Silverbow Planning Department) @406-490-4286
Will Goldberg@ 406-490-6625
Pioneer Technical Services
63 W Broadway
Butte, MT 59702
Project consisted of removing the concrete shaft caps of 5 mine shafts that settled and exhibiting instability along with backfilling shafts with waste rock, establishing runoff grades, re-vegetation areas and installing security fencing around the shafts.

CRYSTAL MINE TEST PIT EXCAVATING- Basin, MT
September 2010 through September 2011
Heather L. Smith @972-663-2245 (Heather can direct you to site engineer)
CH2MHILL
12377 Merit Drive, 10th Floor
Dallas, Texas 75251
Provided excavating services to dig test pits in alpine wetlands workings and streamside. Test pits determined the depth to bedrock throughout this area. Installed 72" culvert at mine shaft opening.

YEAR 2011 MANHOLE REPLACEMENT PROJECT- City of Dillon
November 2011 through December 2011
JS Turner- City of Dillon @406-683-4245
125 North Idaho
Dillon, MT 59725
Scope of work included the installation and replacement of approximately 11 manholes including appurtenant work. Project completion was time sensitive while the ground water level was low to allow for construction. Project was completed within the 28 days as per contract.

ANACONDA STORM WATER TUNNEL REHABILITATION-Butte, MT
October 2010 through January 2011
John Trudnoswski @406-782-5220
Water & Environmental Technologies
480 East Park
Butte, MT 59701
The project consisted of new and rehabilitated manholes along the storm water tunnel approximately 2,110 ft. long using spiral pipe (trenchless lining) and grouting.

BUFFALO GULCH TUNNEL REHABILITATION PROJECT- Butte, MT
September 2011 through March 2012
Josh Vincent @406-723-1534
Water & Environmental Technologies
480 East Park
Butte, MT 59701
The project consisted of setting new and rehabilitated existing manholes along the upper portion of Buffalo Gulch Storm Water Tunnel using spiral pipe (trenchless lining) and grouting to convey storm water. The tunnel was approximately 5,700 ft. long.

BUTTE METRO SERVICES-Butte, MT
February 2011
Doug Sanderson @406-497-6550
Metro Sewer
Butte, MT 59701
Dig and replace approximately 700 feet of 8" sanitary sewer in paved city street.

BUTTE SILVERBOW COUNTY- Butte, MT
August 2011
Tom Malloy@ 406-490-4286
155 W Granite
Butte, MT 59701
Delivered topsoil to the Kelly Mine and other dump sites in Butte, MT for reclamation along with grading of topsoil.

NORTH BUXTON ROAD DEVELOPMENT- Buxton, MT
April 2010 through September 2011
Larry Schnell @ 406-723-5700
122133 Nissler Rd
Butte, MT 59701
Engineered and constructed a new road and installed culverts for approximately 5 miles while adhering to the Storm Water Discharge regulations.

West Central Environmental- Butte, MT
May 2012
Nat Olson @406-549-8487
1030 S Avenue West
Missoula, MT 59801
Clean up oil spill on Interstate at Elk Park, Butte, MT. Disposed of contaminated soil with clean topsoil and preventing spill to leak into water source.

If you should need any additional references or have any questions, contact me at 406-723-5700 office or my cell 406-490-2499.

Thank you for your time and attention.

Respectfully,
Larry Schnell

Schnell
EXCAVATING, INC.
122133 Nissler Rd • Butte, MT 59701
(406) 723-5700 office/fax

August 3, 2012

BEAL MOUNTAIN MINE: POND REMOVALS AND RUN-ON CONTROLS
Reclamation Project,
Silverbow County
DEQ Contract No. 413006

Project Superintendent/Alternates

PROJECT SUPERVISOR:
Larry Schnell- President/Owner/Operator:
Larry will be the lead supervisory personnel along with operating equipment and will be on site for the day to day construction progress.

ALTERNATE PROJECT SUPERVISOR:
Josh Henderson- Foreman:
Josh will oversee the day to day project construction including operating equipment, manual labor and safety compliance.

Larry Schnell
Larry Schnell 8-13-12

Schnell
EXCAVATING, INC.
A locally owned and operated MONTANA company!

122133 Nissler Rd
Butte, MT 59701
406-723-5700 office/fax
schnellexcavating@rfwave.net

August 3, 2012

BEAL MOUNTAIN MINE: POND REMOVALS AND RUN-ON-CONTROLS RECLAMATION PROJECT,
SILVERBOW COUNTY
DEQ Contract No. 413006

1. **Dust Control Plan**
   Schnell Excavating will have a water truck on site for dust control and fire protection during construction.

2. **Traffic Control Plan**
   Schnell Excavating employees will follow all speed restrictions as set on site. Employees will respect and abide by landowners property and regulations along with the safety of all personnel in the area

3. **Weed Plan**
   Schnell Excavating will power wash all equipment/trucks/vehicles before entering the project site. Trucks/equipment/vehicles/employees will work in minimized areas to complete site work as described.

4. **SWECP**
   All work areas will use straw waddles as BMP's to control any run-off. If necessary Schnell Excavating will build small sediment basin/s to control any run- off due to weather during construction.

Larry Schnell 8/13/12
Larry Schnell, President

Schnell
EXCAVATING, INC.
122133 Nissler Rd • Butte, MT 59701
(406) 723-5700 office/fax

August 3, 2012

BEAL MOUNTAIN MINE: POND REMOVALS AND RUN-ON CONTROLS
Reclamation Project,
Silverbow County
DEQ Contract No. 413006

BEAL MOUNTAIN MINE PROJECT- Subcontractors

1. Northwest Linings & Geotextile Products Inc.- Kent, WA
2. Western Reclamation, Butte, MT.

Larry Schnell

Larry Schnell 8-13-12

RECEIVED
AUG 07 2012
Dept. of Environmental Quality
Remediation Division

APPROVAL OF SUBCONTRACTORS

PROJECT TITLE: **Beal Mountain Mine: Pond Removals and Run-on Control Reclamation Project**

DEQ Contract No. 413006

CONTRACTOR: Schnell Excavating Inc.

Listed below are all of the subcontractors which we propose to use on this project. Your approval of these subcontractors is requested.

We certify that these subcontractors, as listed, have been advised of the labor standards and provisions applicable to this project and that these provisions, as incorporated in the Contract between the Owner and the undersigned Contractor, will be incorporated in the contracts between the Contractor and the listed subcontractors.

Name And Address of Subcontractor	Montana Contractor Registration Number & Effective Date	Type of Work	Approximate Value of Subcontract
Headwater Liner	#162557 8/10/2011 to 8/10/2013	Lay 60 mil liner	$9000.00
Western Reclamation	#151868 11/29/2011 to 11/28/2013	Seed.	$1900.00
		TOTAL	$10,900.00

Any deviation from this list shall be approved by the Owner prior to the subcontractor conducting the work.

Signed by [signature] Contractor — 8-16-12 Date

Checked by [signature] Engineer — 8/23/12 Date

Approved by [signature] Owner — 8/23/12 Date

Schnell
EXCAVATING, INC.
A locally owned and operated MONTANA company!

122133 Nissler Rd
Butte, MT 59701
406-723-5700 office/fax
schnellexcavating@rfwave.net

August 3, 2012

BEAL MOUNTAIN MINE: POND REMOVALS AND RUN-ON-CONTROLS RECLAMATION PROJECT,
SILVERBOW COUNTY
DEQ Contract No. 413006

QUALITY CONTROL PLAN

Schnell Excavating Inc. is a locally owned corporation with 25 years of experience in the excavating and construction field including residential, commercial and industrial.

Larry Schnell- Project Manager/Quality Control Manager
Any control testing will be supervised by Larry Schnell or project alternate
All testing paper work will be delivered to Jan Schnell for processing
Daily operations meeting with project foreman

⬇

Josh Henderson- Project Foreman/Quality Control Alternate
Control testing as appointed by Control Manager
Reports directly to Project Manager- Larry Schnell
Responsible for paperwork to Office Administrator

⬇

Jan Schnell- Office Administrator
Maintains all records and reports directly to Project Manager
Testing submittals will be recorded and submitted to the appropriate personnel
Scheduling/managing submittals- subcontractors, supplies and purchasing agents

Larry Schnell 8/13/12
Larry Schnell, President

Opp, Pebbles

From: Hatten, Michael [Michael.Hatten@tetratech.com]
Sent: Tuesday, September 25, 2012 2:25 PM
To: schnellexcavating@rfwave.net
Cc: Opp, Pebbles
Subject: RE: Beal MTN Topsoil

Hi Jan,

The topsoil looks good, so you should be good to go.

Thanks
Mike

Michael Hatten, PE | Project Engineer
Phone: 406.443.5210 | Fax: 406.449.3729
michael.hatten@tetratech.com

Tetra Tech | Complex World, CLEAR SOLUTIONS™
303 Irene Street | Helena, MT 59601 | www.tetratech.com

PLEASE NOTE: This message, including any attachments, may include privileged, confidential and/or inside information. Any distribution or use of this communication by anyone other than the intended recipient is strictly prohibited and may be unlawful. If you are not the intended recipient, please notify the sender by replying to this message and then delete it from your system.

From: schnellexcavating@rfwave.net [mailto:schnellexcavating@rfwave.net]
Sent: Tuesday, September 25, 2012 7:26 AM
To: Hatten, Michael
Subject: Beal MTN Topsoil

Hi Mike,
Larry wanted to know if the topsoil is approved as he wants to start hauling Thursday or Friday this week.
Jan

Invoice No: 0907187

REMIT TO: **MSE Lab Services**
Accounts Receivable
P.O. Box 4078
Butte, MT 59702
TEL: (406) 494-7177

INVOICE

INV DATE: *August 17, 2009*
Print DATE: *August 17, 2009*

Invoice TO: Pioneer Technical Services
P.O. Box 3445
Butte, MT 59701

PO Number:
13044-047002

Attn:
Phone: (406) 782-5711
Work Order: 0907187 Order Name BPSOU TOPSOIL; 13044-0470

Date Reported: 8/17/2009
Date Received 7/23/2009

Item	Remarks	Matrix	Qty	Unit Price	Mult	Quoted	Test Total
AVAILABLE N, P, AND K		Soil	3	$54.00	1	$54.00	$162.00
ELECTRICAL CONDUCTIVITY - SOILS		Soil	3	$16.00		$16.00	$48.00
ICP-MS METALS, SOLID SAMPLES		Solid	3	$180.00	0.33	$60.00	$180.00
ORGANIC MATTER-WALKLEY BLACK		Soil	3	$20.00		$20.00	$60.00
PERCENT COARSE MATERIAL		Soil	3	$15.00	2	$30.00	$90.00
PERCENT SATURATION		Solid	3	$15.00		$15.00	$45.00
pH (Saturation Extract)		Soil	3	$16.00		$16.00	$48.00
Rapid Hydrometer (2 Hour) Mod ASA 15-5		Soil	3	$30.00		$30.00	$90.00
SAMPLE PREP - DRYING AND SIEVING		Solid	3	$5.00		$5.00	$15.00
Sodium Adsorption Ratio		Soil	3	$25.00		$25.00	$75.00
SW846 METHOD 3050B PREP - ICPMS		Solid	3	$15.00		$15.00	$45.00

Subtotal:	**$858.00**
Discount:	10.00%
Misc Charges:	$0.00
INVOICE Total:	**$772.20**

MSE Lab Services

Sample Receipt Checklist

Client Name PTS-BUTTE | Date and Time Received: 7/23/2009 1:44:28 PM

Work Order Number 0907187 | RcptNo: 1 | Received by MC

COC_ID: | CoolerID:

Checklist completed by [signature] 7-23-09 (Signature / Date) | Reviewed by DW 7/24/09 (Initials / Date)

Matrix: | Carrier name: Hand-Delivered

Shipping container/cooler in good condition?	Yes ☐	No ☐	Not Present ☑
Custody seals intact on shipppling container/cooler?	Yes ☐	No ☐	Not Present ☑
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☐	No ☑	
Water - VOA vials have zero headspace?	No VOA vials submitted ☑	Yes ☐	No ☐
Water - pH acceptable upon receipt? Na	Yes ☐	No ☐	Blank ☐
Soils Adjusted?		Checked by RO 7-24-09	

Any No and/or NA (not applicable) response must be detailed in the comments section bel

Client contacted: | Date contacted: | Person contacted

Contacted by: | Regarding:

Comments: TEMP=N/A(SOLID)

Corrective Action

FORM MSE-169
(Init. 06/06)

MSE Technology Applications, Inc.
Laboratory Services

CHAIN OF CUSTODY

PROJECT ID: BPSOU Topsoil; 13044-047002

LABORATORY PERFORMING ANALYSIS: MSE

SAMPLERS (Signature): Ben Sorensen

SAMPLE ID	LAB ID	DATE	TIME	USDA Texture	% Rock Content	pH; sat. paste	SAR;	N, P, K	Walkley-Black % organics	As, Cd, Cu, Pb, Zn	% saturation	E.C.
Schnell - Hay Meadow	0907187-001A	7/16/09	17:10	X	X	X	X	X	X	X	X	X
Schnell - Cul de Sac Road	002A	7/16/09	17:15									
Schnell - North Section	003A	7/16/09	17:30									

ANALYSIS REQUESTED

REMARKS

Turnaround Time (TAT)

☒ Standard TAT

☐ Rush TAT (please contact laboratory personnel for arrangements)

RELINQUISHED BY (Signature)	DATE	TIME	RECEIVED BY (Signature)	DATE	TIME
Ben Sorensen	7/22/09	1520	[signature]	7/22/09	1520
PRINTED NAME: Ben Sorensen	COMPANY: Pioneer Technical		PRINTED NAME: M. Cameron	COMPANY: MSE	
RELINQUISHED BY (Signature)	DATE	TIME	RECEIVED BY (Signature)	DATE	TIME
PRINTED NAME	COMPANY		PRINTED NAME	COMPANY	
RELINQUISHED BY (Signature)	DATE	TIME	RECEIVED BY (Signature)	DATE	TIME
PRINTED NAME	COMPANY		PRINTED NAME	COMPANY	

COMMENTS
Please mail & email results.
- Ben Sorensen, Pioneer Technical
63½ W. Broadway
Butte, MT 59701
- bsorensen@pioneer-technical.com

MSE LABORATORY SERVICES
200 Technology Way, P.O. Box 4078
Butte, MT 59701
PH: (406) 494-7334 / FAX: (406) 494-7230

MSE Analytical Laboratory
P.O. Box 4078
200 Technology Way
Butte, MT 59701
Lab: 406-494-73..
Fax: 406-494-7230
labinfo@mse-ta.com

Date: 17-Aug-09
Report Date: 17-Aug-09

QA/QC SUMMARY REPORT

Client: Pioneer Technical Services
Project: BPSOU TOPSOIL; 13044-047002
Work Order: 0907187
BatchID: R10423

Analyte	Result	RL	Units	Spike Lvl	% Rec	Low Limit	High Limit	RPD	RPD Limit	Qualifier
*Sample ID: **0907187-001A D***			*Method: **USDA-27A***		*Batch ID: **R10423***			*Analysis Date: **8/17/2009***		
Percent Saturation	51.7	0.1	%					0.609	35	

dl

Review

Qualifiers: S Spike Recovery outside accepted recovery limits R RPD outside accepted recovery limits

MSE Analytical Laboratory
P.O. Box 4078
200 Technology Way
Butte, MT 59701
Lab: 406-494-73..
Fax: 406-494-7230
labinfo@mse-ta.com

Date: 17-Aug-09
Report Date: 17-Aug-09

QA/QC SUMMARY REPORT

Client: Pioneer Technical Services
Project: BPSOU TOPSOIL; 13044-047002
Work Order: 0907187
BatchID: R10319

Analyte	Result	RL	Units	Spike Lvl	% Rec	Low Limit	High Limit	RPD	RPD Limit	Qualifier
*Sample ID: **0907187-001AD***			*Method: **OM_WALKLE***	*Batch ID: **R10319***				*Analysis Date: **8/6/2009***		
Organic Matter - Walkl	5.88	0.05	%					0.840	35	
*Sample ID: **LCS***			*Method: **OM_WALKLE***	*Batch ID: **R10319***				*Analysis Date: **8/6/2009***		
Organic Matter - Walkl	1.31	0.05	%	1.383	94.6	80	120			
*Sample ID: **ABLANK***			*Method: **OM_WALKLE***	*Batch ID: **R10319***				*Analysis Date: **8/6/2009***		
Organic Matter - Walkl	ND	0.05	%							

Review

Qualifiers: S Spike Recovery outside accepted recovery limits R RPD outside accepted recovery limits

MSE Analytical Laboratory
P.O. Box 4078
200 Technology Way
Butte, MT 59701
Lab: 406-494-7
Fax: 406-494-7230
labinfo@mse-la.com

Date: 17-Aug-09
Report Date: 17-Aug-09

QA/QC SUMMARY REPORT

Client: Pioneer Technical Services
Project: BPSOU TOPSOIL; 13044-047002
Work Order: 0907187
BatchID: R10318

Analyte	Result	RL	Units	Spike Lvl	% Rec	Low Limit	High Limit	RPD	RPD Limit	Qualifier
*Sample ID: **0907187-001A DUP***			*Method: **MSA15-5***		*Batch ID: **R10318***			*Analysis Date: **8/6/2009***		
% Clay	20.0 ok	0.1	%					0	35	
% Sand	58.0	0.1	%					0	35	
% Silt	22.0	0.1	%					0	35	
Soil Class	NDY CLAY LO		%					0		
*Sample ID: **10318-BLANK***			*Method: **MSA15-5***		*Batch ID: **R10318***			*Analysis Date: **8/6/2009***		
% Clay	ND	0.1	%							
% Sand	ND	0.1	%							
% Silt	ND	0.1	%							
Soil Class	ND		%							

Review

Qualifiers: S Spike Recovery outside accepted recovery limits R RPD outside accepted recovery limits

MSE Analytical Laboratory
P.O. Box 4078
200 Technology Way
Butte, MT 59701
Lab: 406-494-7
Fax: 406-494-7230
labinfo@mse-ta.com

Date: 17-Aug-09
Report Date: 17-Aug-09

QA/QC SUMMARY REPORT

Client: Pioneer Technical Services
Project: BPSOU TOPSOIL; 13044-047002
Work Order: 0907187
BatchID: R10298

Analyte	Result	RL	Units	Spike Lvl	% Rec	Low Limit	High Limit	RPD	RPD Limit	Qualifier
Sample ID: 0907187-001A DUP			*Method: MSA10-2.3.1/*		*Batch ID: R10298*			*Analysis Date:*	*8/3/2009*	
EC	310.0 dk	1.0	µmhos/cm					1.60	20	
Sample ID: EC BLANK			*Method: MSA10-2.3.1/*		*Batch ID: R10298*			*Analysis Date:*	*8/3/2009*	
EC	ND	1.0	µmhos/cm							
Sample ID: EC LCS			*Method: MSA10-2.3.1/*		*Batch ID: R10298*			*Analysis Date:*	*8/3/2009*	
EC	437.0	1.0	µmhos/cm	439.0	99.5	80	120			
Sample ID: 0907187-001A DUP			*Method: MSA10-2.3.1/*		*Batch ID: R10298*			*Analysis Date:*	*8/3/2009*	
pH (saturation extract)	5.08	0.10	SU					0.592	35	
Sample ID: PH BLANK			*Method: MSA10-2.3.1/*		*Batch ID: R10298*			*Analysis Date:*	*8/3/2009*	
pH (saturation extract)	7.08	0.10	SU							
Sample ID: PH LCS			*Method: MSA10-2.3.1/*		*Batch ID: R10298*			*Analysis Date:*	*8/3/2009*	
pH (saturation extract)	8.02	0.10	SU	8.000	100	80	120			

SW Review

Qualifiers: S Spike Recovery outside accepted recovery limits R RPD outside accepted recovery limits

MSE Analytical Laboratory
P.O. Box 4078
200 Technology Way
Butte, MT 59701
Lab: 406-494-73
Fax: 406-494-7230
labinfo@mse-ta.com

Date: 17-Aug-09
Report Date: 17-Aug-09

QA/QC SUMMARY REPORT

Client: Pioneer Technical Services
Project: BPSOU TOPSOIL; 13044-047002
Work Order: 0907187
BatchID: 2581

Analyte	Result	RL	Units	Spike Lvl	% Rec	Low Limit	High Limit	RPD	RPD Limit	Qualifier
Sample ID: 2581 PB UNFILTERED			*Method: SW6020*		*Batch ID: 2581*			*Analysis Date:*	*8/12/2009*	
Arsenic	ND	0.150	mg/Kg							
Cadmium	ND	0.010	mg/Kg							
Copper	ND	0.125	mg/Kg							
Lead	ND	0.020	mg/Kg							
Zinc	ND	0.300	mg/Kg							
Sample ID: 2581 PB FILTERED			*Method: SW6020*		*Batch ID: 2581*			*Analysis Date:*	*8/12/2009*	
Arsenic	ND	0.150	mg/Kg							
Cadmium	ND	0.010	mg/Kg							
Copper	ND	0.125	mg/Kg							
Lead	ND	0.020	mg/Kg							
Zinc	ND	0.300	mg/Kg							
Sample ID: 2581 LCS			*Method: SW6020*		*Batch ID: 2581*			*Analysis Date:*	*8/12/2009*	
Arsenic	64.7	0.150	mg/Kg	70.60	91.6	80	120			
Cadmium	200	0.010	mg/Kg	215.0	93.0	80	120			
Copper	167	0.125	mg/Kg	178.0	94.0	80	120			
Lead	80.8	0.020	mg/Kg	84.90	95.2	80	120			
Zinc	587	0.300	mg/Kg	656.0	89.5	80	120			
Sample ID: 0907187-001A MS			*Method: SW6020*		*Batch ID: 2581*			*Analysis Date:*	*8/12/2009*	
Arsenic	130	0.343	mg/Kg-dry	80.80	89.8	75	125			
Cadmium	221	0.023	mg/Kg-dry	246.1	89.4	75	125			
Copper	236	0.286	mg/Kg-dry	203.7	89.2	75	125			
Lead	105	0.046	mg/Kg-dry	97.17	87.2	75	125			
Zinc	711	0.687	mg/Kg-dry	750.8	85.9	75	125			
Sample ID: 0907187-001A MSD			*Method: SW6020*		*Batch ID: 2581*			*Analysis Date:*	*8/12/2009*	
Arsenic	128	0.343	mg/Kg-dry	80.64	87.5	75	125	1.56	20	
Cadmium	220	0.023	mg/Kg-dry	245.6	89.2	75	125	0.428	20	
Copper	239	0.286	mg/Kg-dry	203.3	90.9	75	125	1.31	20	
Lead	104	0.046	mg/Kg-dry	96.98	86.1	75	125	1.18	20	
Zinc	708	0.685	mg/Kg-dry	749.3	85.7	75	125	0.383	20	
Sample ID: 0907187-001A MST			*Method: SW6020*		*Batch ID: 2581*			*Analysis Date:*	*8/12/2009*	
Arsenic	131	0.345	mg/Kg-dry	81.12	90.4	75	125	0.608	20	
Cadmium	225	0.023	mg/Kg-dry	247.1	90.9	75	125	2.08	20	
Copper	240	0.287	mg/Kg-dry	204.5	91.0	75	125	1.80	20	
Lead	107	0.046	mg/Kg-dry	97.56	88.5	75	125	1.47	20	
Zinc	723	0.689	mg/Kg-dry	753.8	87.1	75	125	1.59	20	

Review

Qualifiers: S Spike Recovery outside accepted recovery limits R RPD outside accepted recovery limits

MSE Analytical Laboratory
P.O. Box 4078
200 Technology Way
Butte, MT 59701
Lab: 406-494-7
Fax: 406-494-7230
labinfo@mse-ta.com

Date: 17-Aug-09
Report Date: 17-Aug-09

QA/QC SUMMARY REPORT

Client: Pioneer Technical Services
Project: BPSOU TOPSOIL; 13044-047002
Work Order: 0907187
BatchID: 2580

Analyte	Result	RL	Units	Spike Lvl	% Rec	Low Limit	High Limit	RPD	RPD Limit	Qualifier
*Sample ID: **2580-BLANK***			*Method: **MSA13-3.3.1***	*Batch ID: **2580***				*Analysis Date: **8/6/2009***		
Available Potassium	ND	2.0	mg/Kg							
*Sample ID: **LCS @INST***			*Method: **MSA13-3.3.1***	*Batch ID: **2580***				*Analysis Date: **8/6/2009***		
Available Potassium	1.8	1.0	mg/L	2.000	89.2	80	120			
*Sample ID: **0907187-001A DUP***			*Method: **MSA13-3.3.1***	*Batch ID: **2580***				*Analysis Date: **8/6/2009***		
Available Potassium	491	2.3	mg/Kg-dry					1.55	35	

Review

Qualifiers: S Spike Recovery outside accepted recovery limits R RPD outside accepted recovery limits

MSE Analytical Laboratory
P.O. Box 4078
200 Technology Way
Butte, MT 59701
Lab: 406-494-7
Fax: 406-494-7230
labinfo@mse-ta.com

Date: 17-Aug-09
Report Date: 17-Aug-09

QA/QC SUMMARY REPORT

Client: Pioneer Technical Services
Project: BPSOU TOPSOIL; 13044-047002
Work Order: 0907187
BatchID: 2579

Analyte	Result	RL	Units	Spike Lvl	% Rec	Low Limit	High Limit	RPD	RPD Limit	Qualifier
*Sample ID: **2579-BLANK***			*Method: **OBM-SAR***		*Batch ID: **2579***			*Analysis Date: **8/6/2009***		
Sodium Adsorption Ra	0.06	0.04								
*Sample ID: **LCS @INST***			*Method: **OBM-SAR***		*Batch ID: **2579***			*Analysis Date: **8/6/2009***		
Sodium Adsorption Ra	0.24	0.04		0.2429	96.9	80	120			
*Sample ID: **0907187-001A DUP***			*Method: **OBM-SAR***		*Batch ID: **2579***			*Analysis Date: **8/6/2009***		
Sodium Adsorption Ra	0.31	0.04						9.54	35	

SW Review

Qualifiers: S Spike Recovery outside accepted recovery limits R RPD outside accepted recovery limits

MSE Analytical Laboratory
P.O. Box 4078
200 Technology Way
Butte, MT 59701
Lab: 406-494-7
Fax: 406-494-7230
labinfo@mse-ta.com

Date: 17-Aug-09
Report Date: 17-Aug-09

QA/QC SUMMARY REPORT

Client: Pioneer Technical Services
Project: BPSOU TOPSOIL; 13044-047002
Work Order: 0907187
BatchID: 2578

Analyte	Result	RL	Units	Spike Lvl	% Rec	Low Limit	High Limit	RPD	RPD Limit	Qualifier
Sample ID: ***2578-BLANK***			*Method:* ***MSA24-5.4.1***	*Batch ID:* ***2578***				*Analysis Date:*	***8/6/2009***	
Available Phosphorus	0.3	1.0	mg/Kg							J
Sample ID: ***LCS @INST***			*Method:* ***MSA24-5.4.1***	*Batch ID:* ***2578***				*Analysis Date:*	***8/6/2009***	
Available Phosphorus	2.0	0.5	mg/L	2.000	98.9	80	120			
Sample ID: ***0907187-001A DUP***			*Method:* ***MSA24-5.4.1***	*Batch ID:* ***2578***				*Analysis Date:*	***8/6/2009***	
Available Phosphorus	24.8	1.2	mg/Kg-dry					29.0	35	

Review

Qualifiers: S Spike Recovery outside accepted recovery limits R RPD outside accepted recovery limits

MSE Analytical Laboratory
P.O. Box 4078
200 Technology Way
Butte, MT 59701
Lab: 406-494-73.
Fax: 406-494-7230
labinfo@mse-ta.com

Date: 17-Aug-09
Report Date: 17-Aug-09

QA/QC SUMMARY REPORT

Client: Pioneer Technical Services
Project: BPSOU TOPSOIL; 13044-047002
Work Order: 0907187
BatchID: 2577

Analyte	Result	RL	Units	Spike Lvl	% Rec	Low Limit	High Limit	RPD	RPD Limit	Qualifier
Sample ID: ***2577-BLANK***			*Method:* ***MSA33-8.3***		*Batch ID:* ***2577***			*Analysis Date:*	***8/4/2009***	
Nitrogen, Nitrate-Nitrit	ND	2.50	mg/Kg							
Sample ID: ***2577-LCS***			*Method:* ***MSA33-8.3***		*Batch ID:* ***2577***			*Analysis Date:*	***8/4/2009***	
Nitrogen, Nitrate-Nitrit	342	2.50	mg/Kg	380.0	90.0	80	120			
Sample ID: ***0907187-001A DUP***			*Method:* ***MSA33-8.3***		*Batch ID:* ***2577***			*Analysis Date:*	***8/4/2009***	
Nitrogen, Nitrate-Nitrit	8.04	2.50	mg/Kg					3.41	35	

Review

Qualifiers: S Spike Recovery outside accepted recovery limits R RPD outside accepted recovery limits

MSE Lab Services

Date: *17-Aug-09*

CLIENT: Pioneer Technical Services
Lab Order: 0907187
Project: BPSOU TOPSOIL; 13044-047002
Lab ID: 0907187-003

Client Sample ID: SCHNELL-NORTH SECTION
Collection Date: 7/16/2009 5:30:00 PM
Matrix: SOIL

Analyses	Result	MDL	Rpt Limit	Qualifier	Units	DF	Date Analyzed
ICP-MS METALS, SOLID SAMPLES			**SW6020**	**SW3050B**			Analyst: **SW**
Arsenic	96.1	0.218	0.750		mg/Kg-dry	2	8/12/2009
Cadmium	0.333	0.013	0.050		mg/Kg-dry	2	8/12/2009
Copper	41.7	0.205	0.625		mg/Kg-dry	2	8/12/2009
Lead	7.43	0.023	0.100		mg/Kg-dry	2	8/12/2009
Zinc	51.2	0.457	1.50		mg/Kg-dry	2	8/12/2009
AVAILABLE POTASSIUM			**MSA13-3.3.1**	**MSA33-8.3**			Analyst: **js**
Available Potassium	407	0.7	5.0		mg/Kg-dry	2	8/6/2009
AVAILABLE NITROGEN			**MSA33-8.3**	**MSA33-8.3**			Analyst: **kgw**
Nitrogen, Nitrate-Nitrite	1.65	0.500	2.50		mg/Kg	5	8/4/2009
AVAILABLE PHOSPHORUS			**MSA24-5.4.1**	**MSA24-5.4.1**			Analyst: **js**
Available Phosphorus	10.8	0.4	2.5		mg/Kg-dry	2	8/6/2009
ELECTRICAL CONDUCTIVITY - SOILS			**MSA10-2.3.1/10-3.3**				Analyst: **bo/dbp/**
EC	1571		1.0		µmhos/cm	1	8/3/2009
ORGANIC MATTER-WALKLEY BLACK			**OM_WALKLEYBLACK**				Analyst: **YF**
Organic Matter - Walkley Black	13.6	0.03	0.05		%	1	8/6/2009
PERCENT SATURATION			**USDA-27A**				Analyst: **SW**
Percent Saturation	65.3		0.1		%	1	8/17/2009
PERCENT COARSE MATERIAL			**ASTMD422**				Analyst: **bo/dk**
1" Gradation	ND		0.05		%	1	7/30/2009
2mm Gradation	0.35		0.05		%	1	7/30/2009
PH (SATURATION EXTRACT)			**MSA10-2.3.1/10-3.2**				Analyst: **bo/dbp/**
pH (saturation extract)	6.23		0.10		SU	1	8/3/2009
RAPID HYDROMETER (2 HOUR) MOD ASA 15-5			**MSA15-5**				Analyst: **BO**
% Clay	28.0		0.1		%	1	8/6/2009
% Sand	34.0		0.1		%	1	8/6/2009
% Silt	38.0		0.1		%	1	8/6/2009
Soil Class	CLAY LOAM				%	1	8/6/2009
SODIUM ADSORPTION RATIO			**OBM-SAR**	**OBM-SAR**			Analyst: **js**
Sodium Adsorption Ratio	0.51	0.01	0.04			1	8/6/2009

Review

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below the Reporting Limit	Limit	Instrument Reporting Limit
MDL	Method Detection Limit	ND	Not Detected at the Method Detection Limit (MDL)

MSE Lab Services

Date: *17-Aug-09*

CLIENT: Pioneer Technical Services
Lab Order: 0907187
Project: BPSOU TOPSOIL; 13044-047002
Lab ID: 0907187-002

Client Sample ID: SCHNELL-CULDE SAC RD
Collection Date: 7/16/2009 5:15:00 PM
Matrix: SOIL

Analyses	Result	MDL	Rpt Limit	Qualifier	Units	DF	Date Analyzed
ICP-MS METALS, SOLID SAMPLES			**SW6020**	**SW3050B**			Analyst: **SW**
Arsenic	41.0	0.099	0.341		mg/Kg-dry	2	8/12/2009
Cadmium	0.840	0.006	0.023		mg/Kg-dry	2	8/12/2009
Copper	39.8	0.093	0.284		mg/Kg-dry	2	8/12/2009
Lead	15.1	0.010	0.046		mg/Kg-dry	2	8/12/2009
Zinc	55.2	0.208	0.683		mg/Kg-dry	2	8/12/2009
AVAILABLE POTASSIUM			**MSA13-3.3.1**	**MSA33-8.3**			Analyst: **js**
Available Potassium	385	0.3	2.3		mg/Kg-dry	2	8/6/2009
AVAILABLE NITROGEN			**MSA33-8.3**	**MSA33-8.3**			Analyst: **kgw**
Nitrogen, Nitrate-Nitrite	4.42	0.500	2.50		mg/Kg	5	8/4/2009
AVAILABLE PHOSPHORUS			**MSA24-5.4.1**	**MSA24-5.4.1**			Analyst: **js**
Available Phosphorus	14.9	0.2	1.1		mg/Kg-dry	2	8/6/2009
ELECTRICAL CONDUCTIVITY - SOILS			**MSA10-2.3.1/10-3.3**				Analyst: **bo/dbp/**
EC	241.0		1.0		µmhos/cm	1	8/3/2009
ORGANIC MATTER-WALKLEY BLACK			**OM_WALKLEYBLACK**				Analyst: **YF**
Organic Matter - Walkley Black	3.35	0.03	0.05		%	1	8/6/2009
PERCENT SATURATION			**USDA-27A**				Analyst: **SW**
Percent Saturation	43.7		0.1		%	1	8/17/2009
PERCENT COARSE MATERIAL			**ASTMD422**				Analyst: **bo/dk**
1" Gradation	ND		0.05		%	1	7/30/2009
2mm Gradation	15.9		0.05		%	1	7/30/2009
PH (SATURATION EXTRACT)			**MSA10-2.3.1/10-3.2**				Analyst: **bo/dbp/**
pH (saturation extract)	5.74		0.10		SU	1	8/3/2009
RAPID HYDROMETER (2 HOUR) MOD ASA 15-5			**MSA15-5**				Analyst: **BO**
% Clay	21.0		0.1		%	1	8/6/2009
% Sand	54.0		0.1		%	1	8/6/2009
% Silt	25.0		0.1		%	1	8/6/2009
Soil Class	SANDY CLAY LOAM				%	1	8/6/2009
SODIUM ADSORPTION RATIO			**OBM-SAR**	**OBM-SAR**			Analyst: **js**
Sodium Adsorption Ratio	0.47	0.01	0.04			1	8/6/2009

Review

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below the Reporting Limit	Limit	Instrument Reporting Limit
MDL	Method Detection Limit	ND	Not Detected at the Method Detection Limit (MDL)

MSE Lab Services

Date: *17-Aug-09*

CLIENT: Pioneer Technical Services
Lab Order: 0907187
Project: BPSOU TOPSOIL; 13044-047002
Lab ID: 0907187-001

Client Sample ID: SCHNELL-HAY MEADOW
Collection Date: 7/16/2009 5:10:00 PM
Matrix: SOIL

Analyses	Result	MDL	Rpt Limit	Qualifier	Units	DF	Date Analyzed
ICP-MS METALS, SOLID SAMPLES			**SW6020**	**SW3050B**			Analyst: **SW**
Arsenic	57.3	0.100	0.345		mg/Kg-dry	2	8/12/2009
Cadmium	0.777	0.006	0.023		mg/Kg-dry	2	8/12/2009
Copper	53.8	0.094	0.287		mg/Kg-dry	2	8/12/2009
Lead	20.3	0.010	0.046		mg/Kg-dry	2	8/12/2009
Zinc	66.1	0.210	0.689		mg/Kg-dry	2	8/12/2009
AVAILABLE POTASSIUM			**MSA13-3.3.1**	**MSA33-8.3**			Analyst: **js**
Available Potassium	483	0.3	2.3		mg/Kg-dry	2	8/6/2009
AVAILABLE NITROGEN			**MSA33-8.3**	**MSA33-8.3**			Analyst: **kgw**
Nitrogen, Nitrate-Nitrite	7.78	0.500	2.50		mg/Kg	5	8/4/2009
AVAILABLE PHOSPHORUS			**MSA24-5.4.1**	**MSA24-5.4.1**			Analyst: **js**
Available Phosphorus	18.5	0.2	1.2		mg/Kg-dry	2	8/6/2009
ELECTRICAL CONDUCTIVITY - SOILS			**MSA10-2.3.1/10-3.3**				Analyst: **bo/dbp/**
EC	315.0		1.0		µmhos/cm	1	8/3/2009
ORGANIC MATTER-WALKLEY BLACK			**OM_WALKLEYBLACK**				Analyst: **YF**
Organic Matter - Walkley Black	5.93	0.03	0.05		%	1	8/6/2009
PERCENT SATURATION			**USDA-27A**				Analyst: **SW**
Percent Saturation	52.0		0.1		%	1	8/17/2009
PERCENT COARSE MATERIAL			**ASTMD422**				Analyst: **bo/dk**
1" Gradation	ND		0.05		%	1	7/30/2009
2mm Gradation	6.70		0.05		%	1	7/30/2009
PH (SATURATION EXTRACT)			**MSA10-2.3.1/10-3.2**				Analyst: **bo/dbp/**
pH (saturation extract)	5.05		0.10		SU	1	8/3/2009
RAPID HYDROMETER (2 HOUR) MOD ASA 15-5			**MSA15-5**				Analyst: **BO**
% Clay	20.0		0.1		%	1	8/6/2009
% Sand	58.0		0.1		%	1	8/6/2009
% Silt	22.0		0.1		%	1	8/6/2009
Soil Class	SANDY CLAY LOAM				%	1	8/6/2009
SODIUM ADSORPTION RATIO			**OBM-SAR**	**OBM-SAR**			Analyst: **js**
Sodium Adsorption Ratio	0.28	0.01	0.04			1	8/6/2009

Review

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below the Reporting Limit	Limit	Instrument Reporting Limit
MDL	Method Detection Limit	ND	Not Detected at the Method Detection Limit (MDL)

MSE-TA Analytical Laboratory
P.O. Box 4078
200 Technology Way
Butte, MT 59701
Lab: 406-494-7334
Fax: 406-494-7230
labinfo@mse-ta.com

Monday, August 17, 2009

Analytical Laboratory

Ben Sorensen
Pioneer Technical Services
P.O. Box 3445
Butte, MT 59701

RE: BPSOU TOPSOIL; 13044-047002 Work Order: 0907187

Dear Ben Sorensen:

MSE Lab Services received 3 sample(s) on 7/23/2009 for the analyses presented in the following report.

Please find enclosed analytical results for the sample(s) received at the MSE Laboratory.

If you have any questions regarding these test results, please feel free to call.

Sincerely,

Marcee Cameron

Marcee Cameron
Laboratory Director/ Chemist
406-494-7371

Enclosure

MSE Analytical Laboratory
P.O. Box 4078
200 Technology Way
Butte, MT 59701
Lab: 406-494-7334
Fax: 406-494-7230
labinfo@mse-ta.com

E-MAILED
8/18 MC

MSE Lab Services

Date: *26-Jul-12*

CLIENT: Pioneer Technical Services
Lab Order: 1207031
Project: TOPSOIL
Lab ID: 1207031-001

Client Sample ID: TOPSOIL
Collection Date: 7/5/2012 1:00:00 PM
Matrix: SOIL

Analyses	Result	MDL	Rpt Limit	Qualifier	Units	DF	Date Analyzed
ICP-MS METALS, SOLID SAMPLES			**SW6020**	**SW3050B**			Analyst: **SW**
Arsenic	24.7	0.097	0.334		mg/Kg-dry	2	7/19/2012 8:55:00 AM
Cadmium	0.605	0.006	0.022		mg/Kg-dry	2	7/19/2012 8:55:00 AM
Copper	45.2	0.091	0.278		mg/Kg-dry	2	7/19/2012 8:55:00 AM
Lead	9.07	0.010	0.045		mg/Kg-dry	2	7/19/2012 8:55:00 AM
Zinc	53.8	0.203	0.668		mg/Kg-dry	2	7/19/2012 8:55:00 AM
AVAILABLE POTASSIUM			**MSA13-3.3.1**	**MSA33-8.3**			Analyst: **kgw**
Available Potassium	408	0.8	5.6		mg/Kg-dry	5	7/19/2012 12:02:00 PM
AVAILABLE NITROGEN			**MSA33-8.3**	**MSA33-8.3**			Analyst: **jc**
Nitrogen, Nitrate-Nitrite	ND	0.500	2.50		mg/Kg	5	7/18/2012 6:58:00 PM
AVAILABLE PHOSPHORUS			**MSA24-5.4.1**	**MSA24-5.4.1**			Analyst: **kgw**
Available Phosphorus	18.3	0.5	2.8		mg/Kg-dry	5	7/20/2012 7:00:00 AM
ELECTRICAL CONDUCTIVITY - SOILS			**MSA10-2.3.1/10-3.3**				Analyst: **dk/df**
EC	1133	0.5	1.0		µmhos/cm	1	7/18/2012 4:00:00 PM
ORGANIC MATTER-WALKLEY BLACK			**OM_WALKLEYBLACK**				Analyst: **dk**
Organic Matter - Walkley Black	9.20	0.09	0.20		%	1	7/24/2012 10:19:00 AM
PERCENT SATURATION			**USDA-27A**				Analyst: **SW**
Percent Saturation	55.4		0.1		%	1	7/25/2012 6:27:00 PM
PERCENT COARSE MATERIAL			**ASTMD422**				Analyst: **dk/jr**
1" Gradation	ND	0.05	0.10		%	1	7/9/2012 10:00:00 AM
2mm Gradation	7.11	0.05	0.10		%	1	7/9/2012 10:00:00 AM
PH (SATURATION EXTRACT)			**MSA10-2.3.1/10-3.2**				Analyst: **df**
pH (saturation extract)	7.90	0.10	0.50		SU	1	7/10/2012 10:00:00 AM
RAPID HYDROMETER (2 HOUR) MOD ASA 15-5			**MSA15-5**				Analyst: **dk/jr**
% Clay	16.0	0.1	0.1		%	1	7/9/2012 10:30:00 AM
% Sand	70.0	0.1	0.1		%	1	7/9/2012 10:30:00 AM
% Silt	14.0	0.1	0.1		%	1	7/9/2012 10:30:00 AM
Soil Class	SANDY LOAM					1	7/9/2012 10:30:00 AM
SODIUM ADSORPTION RATIO			**OBM-SAR**	**OBM-SAR**			Analyst: **kgw**
Sodium Adsorption Ratio	0.64	0.01	0.04			1	7/19/2012 12:02:00 PM
PERCENT MOISTURE			**D2216**				Analyst: **df**
Percent Moisture	10.2	0.01	0.05		wt%	1	7/10/2012 12:15:00 PM

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below the Reporting Limit	Limit	Reporting Limit
MDL	Method Detection Limit	ND	Not Detected at the Method Detection Limit (MDL)

MSE-TA Analytical Laboratory
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Butte, MT 59701
Lab: 406-494-7334
Fax: 406-494-7230
labinfo@mse-ta.com

MSE Analytical Laboratory
P.O. Box 4078
200 Technology Way
Butte, MT 59701
Lab: 406-494-7334
Fax: 406-494-7230
labinfo@mse-ta.com

Date: 26-Jul-12
Report Date: 26-Jul-12

QA/QC SUMMARY REPORT

Client: Pioneer Technical Services
Project: TOPSOIL
Work Order: 1207031
BatchID: 5730

Analyte	Result	RL	Units	Spike Lvl	% Rec	Low Limit	High Limit	RPD	RPD Limit	Qualifier
*Sample ID: **LCS@INS***			*Method: **OBM-SAR***	*Batch ID: **5730***			*Analysis Date: 7/19/2012 12:02:00 PM*			
Sodium Adsorption Ra	0.23	0.04		0.2429	94.0	80	120			
*Sample ID: **1207031-001A-D***			*Method: **OBM-SAR***	*Batch ID: **5730***			*Analysis Date: 7/19/2012 12:02:00 PM*			
Sodium Adsorption Ra	0.58	0.04						11.2	35	
*Sample ID: **5730-PB***			*Method: **OBM-SAR***	*Batch ID: **5730***			*Analysis Date: 7/19/2012 12:02:00 PM*			
Sodium Adsorption Ra	ND	0.04								

Qualifiers: NA Sample conc. is > 4*spike level
S* Spike Recovery outside limits; within Manufacturer Limits

MSE Analytical Laboratory
P.O. Box 4078
200 Technology Way
Butte, MT 59701
Lab: 406-494-7334
Fax: 406-494-7230
labinfo@mse-ta.com

Date: 26-Jul-12
Report Date: 26-Jul-12

QA/QC SUMMARY REPORT

Client: Pioneer Technical Services
Project: TOPSOIL
Work Order: 1207031
BatchID: 5734

Analyte	Result	RL	Units	Spike Lvl	% Rec	Low Limit	High Limit	RPD	RPD Limit	Qualifier
Sample ID: 5734-PB UNFILTERED			*Method: SW6020*		*Batch ID: 5734*		*Analysis Date: 7/19/2012 8:55:00 AM*			
Arsenic	ND	0.300	mg/Kg							
Cadmium	0.008	0.020	mg/Kg							
Copper	0.692	0.250	mg/Kg							J
Lead	0.407	0.040	mg/Kg							
Zinc	1.86	0.600	mg/Kg							
Sample ID: 5734-PB FILTERED			*Method: SW6020*		*Batch ID: 5734*		*Analysis Date: 7/19/2012 8:55:00 AM*			
Arsenic	ND	0.300	mg/Kg							
Cadmium	0.016	0.020	mg/Kg							
Copper	0.673	0.250	mg/Kg							J
Lead	0.322	0.040	mg/Kg							
Zinc	1.08	0.600	mg/Kg							
Sample ID: LCS-5734			*Method: SW6020*		*Batch ID: 5734*		*Analysis Date: 7/19/2012 8:55:00 AM*			
Arsenic	61.2	0.300	mg/Kg	59.10	103	80	120			
Cadmium	245	0.020	mg/Kg	274.0	89.4	80	120			
Copper	253	0.250	mg/Kg	242.0	105	80	120			
Lead	230	0.040	mg/Kg	240.0	95.6	80	120			
Zinc	218	0.600	mg/Kg	198.0	110	80	120			
Sample ID: 1207031-001A-MS			*Method: SW6020*		*Batch ID: 5734*		*Analysis Date: 7/19/2012 8:55:00 AM*			
Arsenic	97.6	0.334	mg/Kg-dry	65.81	111	75	125			
Cadmium	273	0.022	mg/Kg-dry	305.1	89.4	75	125			
Copper	335	0.278	mg/Kg-dry	269.5	107	75	125			
Lead	261	0.045	mg/Kg-dry	267.3	94.4	75	125			
Zinc	298	0.668	mg/Kg-dry	220.5	111	75	125			
Sample ID: 1207031-001A-MSD			*Method: SW6020*		*Batch ID: 5734*		*Analysis Date: 7/19/2012 8:55:00 AM*			
Arsenic	101	0.334	mg/Kg-dry	65.81	116	75	125	3.51	20	
Cadmium	280	0.022	mg/Kg-dry	305.1	91.5	75	125	2.28	20	
Copper	342	0.278	mg/Kg-dry	269.5	110	75	125	2.11	20	
Lead	269	0.045	mg/Kg-dry	267.3	97.2	75	125	2.87	20	
Zinc	325	0.668	mg/Kg-dry	220.5	123	75	125	8.58	20	
Sample ID: 1207031-001A-MST			*Method: SW6020*		*Batch ID: 5734*		*Analysis Date: 7/19/2012 8:55:00 AM*			
Arsenic	96.1	0.334	mg/Kg-dry	65.81	109	75	125	1.48	20	
Cadmium	266	0.022	mg/Kg-dry	305.1	87.1	75	125	2.61	20	
Copper	321	0.278	mg/Kg-dry	269.5	102	75	125	4.33	20	
Lead	257	0.045	mg/Kg-dry	267.3	92.7	75	125	1.75	20	
Zinc	295	0.668	mg/Kg-dry	220.5	109	75	125	1.11	20	

Qualifiers: NA Sample conc. is > 4*spike level S* Spike Recovery outside limits; within Manufacturer Limits

MSE Analytical Laboratory
P.O. Box 4078
200 Technology Way
Butte, MT 59701
Lab: 406-494-7334
Fax: 406-494-7230
labinfo@mse-ta.com

Date: 26-Jul-12
Report Date: 26-Jul-12

QA/QC SUMMARY REPORT

Client: Pioneer Technical Services
Project: TOPSOIL
Work Order: 1207031
BatchID: 5755

Analyte	Result	RL	Units	Spike Lvl	% Rec	Low Limit	High Limit	RPD	RPD Limit	Qualifier
*Sample ID: **1207031-001A-D***			*Method: **MSA33-8.3***		*Batch ID: **5755***			*Analysis Date: 7/18/2012 6:58:00 PM*		
Nitrogen, Nitrate-Nitrite	ND	1.50	mg/Kg					0	35	
*Sample ID: **LCS-5755***			*Method: **MSA33-8.3***		*Batch ID: **5755***			*Analysis Date: 7/18/2012 6:58:00 PM*		
Nitrogen, Nitrate-Nitrite	272	1.50	mg/Kg	280.0	97.2	80	120			
*Sample ID: **5755-PB***			*Method: **MSA33-8.3***		*Batch ID: **5755***			*Analysis Date: 7/18/2012 6:58:00 PM*		
Nitrogen, Nitrate-Nitrite	ND	1.50	mg/Kg							

Qualifiers: NA Sample conc. is > 4*spike level S* Spike Recovery outside limits; within Manufacturer Limits

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Butte, MT 59701
Lab: 406-494-7334
Fax: 406-494-7230
labinfo@mse-ta.com

Date: 26-Jul-12
Report Date: 26-Jul-12

QA/QC SUMMARY REPORT

Client: Pioneer Technical Services
Project: TOPSOIL
Work Order: 1207031
BatchID: 5759

Analyte	Result	RL	Units	Spike Lvl	% Rec	Low Limit	High Limit	RPD	RPD Limit	Qualifier
*Sample ID: **5759-PB***			*Method: **MSA24-5.4.1***	*Batch ID: **5759***				*Analysis Date: 7/20/2012 7:00:00 AM*		
Available Phosphorus	0.2	0.5	mg/Kg							J
*Sample ID: **5759-LCS:Q5857***			*Method: **MSA24-5.4.1***	*Batch ID: **5759***				*Analysis Date: 7/20/2012 7:00:00 AM*		
Available Phosphorus	205	12.5	mg/Kg	222.0	92.5	80	120			
*Sample ID: **1207031-001A-D***			*Method: **MSA24-5.4.1***	*Batch ID: **5759***				*Analysis Date: 7/20/2012 7:00:00 AM*		
Available Phosphorus	13.3	2.8	mg/Kg-dry					31.6	35	

Qualifiers: NA Sample conc. is > 4*spike level S* Spike Recovery outside limits; within Manufacturer Limits

MSE Analytical Laboratory
P.O. Box 4078
200 Technology Way
Butte, MT 59701
Lab: 406-494-7334
Fax: 406-494-7230
labinfo@mse-ta.com

Date: 26-Jul-12
Report Date: 26-Jul-12

QA/QC SUMMARY REPORT

Client: Pioneer Technical Services
Project: TOPSOIL
Work Order: 1207031
BatchID: 5762

Analyte	Result	RL	Units	Spike Lvl	% Rec	Low Limit	High Limit	RPD	RPD Limit	Qualifier
*Sample ID: **5762-PB***			*Method: **MSA13-3.3.1***		*Batch ID: **5762***			*Analysis Date: 7/19/2012 12:02:00 PM*		
Available Potassium	6.1	5.0	mg/Kg							
*Sample ID: **LCS@INS***			*Method: **MSA13-3.3.1***		*Batch ID: **5762***			*Analysis Date: 7/19/2012 12:02:00 PM*		
Available Potassium	1.9	1.0	mg/Kg	2.000	95.2	80	120			
*Sample ID: **1207031-001A-D***			*Method: **MSA13-3.3.1***		*Batch ID: **5762***			*Analysis Date: 7/19/2012 12:02:00 PM*		
Available Potassium	386	5.6	mg/Kg-dry					5.60	35	

Qualifiers: NA Sample conc. is > 4*spike level S* Spike Recovery outside limits; within Manufacturer Limits

MSE Analytical Laboratory
P.O. Box 4078
00 Technology Way
Butte, MT 59701
Lab: 406-494-733
Fax: 406-494-7230
labinfo@mse-ta.com

Date: 26-Jul-12
Report Date: 26-Jul-12

QA/QC SUMMARY REPORT

Client: Pioneer Technical Services
Project: TOPSOIL

Work Order: 1207031
BatchID: R20177

Analyte	Result	RL	Units	Spike Lvl	% Rec	Low Limit	High Limit	RPD	RPD Limit	Qualifier
Sample ID: 1207031-001A-D			*Method: ASTMD422*		*Batch ID: R20177*			*Analysis Date: 7/9/2012 10:00:00 AM*		
1" Gradation	ND	0.10	%					0	35	
2mm Gradation	5.53	0.10	%					25.0	35	

Qualifiers: NA Sample conc. is > 4*spike level S* Spike Recovery outside limits; within Manufacturer Limits

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Lab: 406-494-7334
Fax: 406-494-7230
labinfo@mse-ta.com

Date: 26-Jul-12
Report Date: 26-Jul-12

QA/QC SUMMARY REPORT

Client: Pioneer Technical Services
Project: TOPSOIL
Work Order: 1207031
BatchID: R20189

Analyte	Result	RL	Units	Spike Lvl	% Rec	Low Limit	High Limit	RPD	RPD Limit	Qualifier
*Sample ID: **1207031-001A-D***			*Method: **MSA15-5***		*Batch ID: **R20189***			*Analysis Date: 7/9/2012 10:30:00 AM*		
% Clay	18.0	0.1	%					11.8	35	
% Sand	68.0	0.1	%					2.90	35	
% Silt	14.0	0.1	%					0	35	
Soil Class	SANDY LOAM									

Qualifiers: NA Sample conc. is > 4*spike level S* Spike Recovery outside limits; within Manufacturer Limits

MSE Analytical Laboratory
P.O. Box 4078
200 Technology Way
Butte, MT 59701
Lab: 406-494-7334
Fax: 406-494-7230
labinfo@mse-ta.com

Date: 26-Jul-12
Report Date: 26-Jul-12

QA/QC SUMMARY REPORT

Client: Pioneer Technical Services
Project: TOPSOIL
Work Order: 1207031
BatchID: R20227

Analyte	Result	RL	Units	Spike Lvl	% Rec	Low Limit	High Limit	RPD	RPD Limit	Qualifier
*Sample ID: **1207031-001A-DUP***			*Method: **D2216***		*Batch ID: **R20227***			*Analysis Date: 7/10/2012 12:15:00 PM*		
Percent Moisture	9.00	0.05	wt%					12.5	35	

Qualifiers: NA Sample conc. is > 4*spike level
S* Spike Recovery outside limits; within Manufacturer Limits

MSE Analytical Laboratory
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200 Technology Way
Butte, MT 59701
Lab: 406-494-7334
Fax: 406-494-7230
labinfo@mse-ta.com

Date: 26-Jul-12
Report Date: 26-Jul-12

QA/QC SUMMARY REPORT

Client: Pioneer Technical Services
Project: TOPSOIL
Work Order: 1207031
BatchID: R20254

Analyte	Result	RL	Units	Spike Lvl	% Rec	Low Limit	High Limit	RPD	RPD Limit	Qualifier
*Sample ID: **1207031-001A-D***			*Method: **MSA10-2.3.1/***		*Batch ID: **R20254***			*Analysis Date: 7/10/2012 10:00:00 AM*		
pH (saturation extract)	7.94	0.50	SU					0.505	35	
*Sample ID: **BLANK***			*Method: **MSA10-2.3.1/***		*Batch ID: **R20254***			*Analysis Date: 7/10/2012 10:00:00 AM*		
pH (saturation extract)	7.24	0.50	SU							
*Sample ID: **LCS***			*Method: **MSA10-2.3.1/***		*Batch ID: **R20254***			*Analysis Date: 7/10/2012 10:00:00 AM*		
pH (saturation extract)	7.47	0.50	SU	7.400	101	80	120			

Qualifiers: NA Sample conc. is > 4*spike level S* Spike Recovery outside limits; within Manufacturer Limits

MSE Analytical Laboratory
P.O. Box 4078
0 Technology Way
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Lab: 406-494-7334
Fax: 406-494-7230
labinfo@mse-ta.com

Date: 26-Jul-12
Report Date: 26-Jul-12

QA/QC SUMMARY REPORT

Client: Pioneer Technical Services
Project: TOPSOIL
Work Order: 1207031
BatchID: R20362

Analyte	Result	RL	Units	Spike Lvl	% Rec	Low Limit	High Limit	RPD	RPD Limit	Qualifier
*Sample ID: **1207031-001A-D***			*Method: **MSA10-2.3.1/***	*Batch ID: **R20362***				*Analysis Date: 7/18/2012 4:00:00 PM*		
EC	1399	1.0	µmhos/cm					21.0	35	
*Sample ID: **ECLCS:Q5960***			*Method: **MSA10-2.3.1/***	*Batch ID: **R20362***				*Analysis Date: 7/18/2012 4:00:00 PM*		
EC	515.0	1.0	µmhos/cm	500.0	103	80	120			
*Sample ID: **ECSTND:Q6113***			*Method: **MSA10-2.3.1/***	*Batch ID: **R20362***				*Analysis Date: 7/18/2012 4:00:00 PM*		
EC	1407	1.0	µmhos/cm	1414	99.5	80	120			
*Sample ID: **PB***			*Method: **MSA10-2.3.1/***	*Batch ID: **R20362***				*Analysis Date: 7/18/2012 4:00:00 PM*		
EC	ND	1.0	µmhos/cm							

Qualifiers: NA Sample conc. is > 4*spike level S* Spike Recovery outside limits; within Manufacturer Limits

MSE Analytical Laboratory
P.O. Box 4078
200 Technology Way
Butte, MT 59701
Lab: 406-494-7334
Fax: 406-494-7230
labinfo@mse-ta.com

Date: 26-Jul-12
Report Date: 26-Jul-12

QA/QC SUMMARY REPORT

Client: Pioneer Technical Services
Project: TOPSOIL

Work Order: 1207031
BatchID: R20366

Analyte	Result	RL	Units	Spike Lvl	% Rec	Low Limit	High Limit	RPD	RPD Limit	Qualifier
*Sample ID: **1207031-001A-D***			*Method: **OM_WALKLE***	*Batch ID: **R20366***				*Analysis Date: 7/24/2012 10:19:00 AM*		
Organic Matter - Walkl	9.00	0.20	%					2.17	35	
*Sample ID: **LCS:Q6129***			*Method: **OM_WALKLE***	*Batch ID: **R20366***				*Analysis Date: 7/24/2012 10:19:00 AM*		
Organic Matter - Walkl	49.9	0.20	%	35.00	143	70.7	109			S*
*Sample ID: **PB***			*Method: **OM_WALKLE***	*Batch ID: **R20366***				*Analysis Date: 7/24/2012 10:19:00 AM*		
Organic Matter - Walkl	ND	0.20	%							

Qualifiers:
NA Sample conc. is > 4*spike level
S* Spike Recovery outside limits; within Manufacturer Limits
Manufacturer's limits for OM 0 - 63%.

MSE Analytical Laboratory
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200 Technology Way
Butte, MT 59701
Lab: 406-494-7334
Fax: 406-494-7230
labinfo@mse-ta.com

Date: 26-Jul-12
Report Date: 26-Jul-12

QA/QC SUMMARY REPORT

Client: Pioneer Technical Services
Project: TOPSOIL
Work Order: 1207031
BatchID: R20395

Analyte	Result	RL	Units	Spike Lvl	% Rec	Low Limit	High Limit	RPD	RPD Limit	Qualifier
*Sample ID: **1207031-001A-D***			*Method: **USDA-27A***		*Batch ID: **R20395***			*Analysis Date: 7/26/2012 6:27:00 PM*		
Percent Saturation	55.8	0.1	%					0.759	35	

Qualifiers: NA Sample conc. is > 4*spike level S* Spike Recovery outside limits; within Manufacturer Limits

bp rm

Laboratory Management Program LaMP Chain of Custody Record 207715

BP Site Node Path: _____

BP Facility No: _____

Req Due Date (mm/dd/yy): _____

Lab Work Order Number: 1207031

Page ____ of ____

Rush TAT: Yes ____ No X

Lab Name:	Facility Address:	Consultant/Contractor:
Lab Address:	City, State, ZIP Code:	Consultant/Contractor Project No:
Lab PM:	Lead Regulatory Agency:	Address:
Lab Phone:	California Global ID No.:	Consultant/Contractor PM:
Lab Shipping Accnt:	Enfos Proposal No:	Phone: Email:
Lab Bottle Order No:	Accounting Mode: Provision ____ OOC-BU ____ OOC-RM ____	Email EDD To: and to lab.enfosdoc@bp.com
Other Info:	Stage: Activity:	Invoice To: BP ____ Contractor ____

BP Project Manager (PM): Pat Sampson

BP PM Phone: 490-0706

BP Email: psampson@pioneer-technical.com

Report Type & QC Level: Standard ____ Full Data Package ____

Lab No.	Sample Description	Date	Time	Matrix: Soil / Solid	Matrix: Water / Liquid	Matrix: Air / Vapor	Matrix: Is this location a well?	No. Containers / Preservative: Total Number of Containers	Unpreserved	H2SO4	HNO3	HCl	Methanol	Requested Analyses	Comments
01A	top soil	7-5	1:00pm	Same as last sample											

Note: If sample not collected, indicate "No Sample" in comments and single-strike out and initial any preprinted sample description.

Sampler's Name: Dana St. John 490-5602

Sampler's Company: Pioneer Tech

Shipment Method: Ship Date:

Shipment Tracking No:

Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
Dana St John	7/5	2:43	B O Donnell	7/5/12	1443

Special Instructions:

THIS LINE - LAB USE ONLY: Custody Seals In Place: Yes / No | Temp Blank: Yes / No | Cooler Temp on Receipt: _____ °F/C | Trip Blank: Yes / No | MS/MSD Sample Submitted: Yes / No

MSE Lab Services

Sample Receipt Checklist

Client Name PTS-BUTTE

Date and Time Received: 7/5/2012 2:43:00 PM

Work Order Number 1207031 RcptNo: 1

Received by BO

COC_ID: 1207031 CoolerID:

Checklist completed by Debbie Ortega 7-5-12 (Signature / Date) Reviewed by SW 7/6/12 (Initials / Date)

Matrix: Carrier name Hand-Delivered

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shippping container/cooler?	Yes ☐	No ☐	Not Present ☑
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☐	No ☑	
Water - VOA vials have zero headspace?	No VOA vials submitted ☑	Yes ☐	No ☐
Water - pH acceptable upon receipt?	Yes ☐	No ☐	Blank ☐

Adjusted? _____ Checked by _____

Any No and/or NA (not applicable) response must be detailed in the comments section be

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding: _____

Comments: H/D IN ZIPLOC BAG. TEMP=N/A SOIL

Corrective Action _____

Beal Mountain Pond Removal and Run-On Control Project
Geo-synthetic Submittal—60 mil PVC Geomembrane

General Contractor—Schnell Excavating
Geo-synthetic Subcontractor—Headwater Lining
Design Engineer—Tetra Tech

Table of Contents

1) 60 mil PVC Specification

2) Proposed Panel Layout

3) Manufacturer Material Certification and Fabrication QA/QC

4) PVC Installation Guidelines

5) Headwater Lining QA/QC Forms

6) Certificate of Subgrade Acceptance

7) Headwater Lining Project Reference

8) Warranties

Lange Containment Systems Inc.

PGI PVC GEOMEMBRANE INSTITUTE

PVC Geomembrane Specifications

PGI 1104 Specifications[1]

Certified Properties	ASTM	PVC 10	PVC 20	PVC 30	PVC 40	PVC 50	PVC 60
Thickness	D-5199	10 ±0.5 mil 0.25±.013mm	20 ±1 mil 0.51 ± .03 mm	30 ±1.5 mil 0.76 ± .04 mm	40 ±2 mil 1.02 ± .05 mm	50 ±2.5 mil 1.27 ± .06 mm	60 ± 3 mil 1.52 ± .08 mm
Tensile Properties[3]	D-882[4] Min						
Strength at Break		24 lbs/in 4.2 kN/m	48 lbs/in 8.4 kN/m	73 lbs/in 12.8 kN/m	97 lbs/in 17.0 kN/m	116 lbs/in 20.3 kN/m	137 lbs/in 24.0 kN/m
Elongation		250%	360%	380%	430%	430%	450%
Modulus at 100%		10 lbs/in 1.8 kN/m	21 lbs/in 3.7 kN/m	32 lbs/in 5.6 kN/m	40 lbs/in 7.0 kN/m	50 lbs/in 8.8 kN/m	60 lbs/in 10.5 kN/m
Tear Strength	D-1004[4] Min	2.5 lbs 11 N	6 lbs 27 N	8 lbs 35 N	10 lbs 44 N	13 lbs 58 N	15 lbs 67 N
Dimensional Stability	D-1204[4] Max Chg	4%	4%	3%	3%	3%	3%
Low Temperature Impact	D-1790[4] Pass	-10° F -23° C	-15° F -26° C	-20° F -29° C	-20° F -29° C	-20° F -29° C	-20° F -29° C

Index Properties	ASTM	PVC 10	PVC 20	PVC 30	PVC 40	PVC 50	PVC 60
Specific Gravity	D-792 Typical	1.2 g/cc	1.2 g/cc	1.2 g/cc	1.2 g/cc	1.2 g/cc	1.2 g/cc
Water Extraction Percent Loss (max)	D-1239[4] Max Loss	0.15%	0.15%	0.15%	0.20%	0.20%	0.20%
Average Plasticizer Molecular Weight	D-2124[4,5]	400	400	400	400	400	400
Volatile Loss Percent Loss (max)	D-1203[4] Max Loss	1.5%	0.9%	0.7%	0.5%	0.5%	0.5%
Soil Burial	G160[4] Max Chg						
Break Strength		5%	5%	5%	5%	5%	5%
Elongation		20%	20%	20%	20%	20%	20%
Modulus at 100%		20%	20%	20%	20%	20%	20%
Hydrostatic Resistance	D-751[4] Min	42 psi 290 kPa	68 psi 470 kPa	100 psi 690 kPa	120 psi 830 kPa	150 psi 1030 kPa	180 psi 1240 kPa

Seam Strengths	ASTM	PVC 10	PVC 20	PVC 30	PVC 40	PVC 50	PVC 60
Shear Strength[3]	D-882[4] Min	20 lbs/in 3.47 kN/m	38.4 lbs/in 6.7 kN/m	58.4 lbs/in 10 kN/m	77.6 lbs/in 14 kN/m	96 lbs/in 17 kN/m	116 lbs/in 20kN/m
Peel Strength[3]	D-882[4] Min	10 lbs/in 1.8 kN/m	12.5 lbs/in 2.2 kN/m	15 lbs/in 2.6 kN/m	15 lbs/in 2.6 kN/m	15 lbs/in 2.6 kN/m	15 lbs/in 2.6 kN/m

Notes:
1. PGI 1104 replaces PGI 1103 Specification effective 1/1/04.
2. Certified properties are tested by lot as specified in PGI 1104 Appendix A.
3. Metric values are converted from US values and are rounded to the available significant digits.
4. Modifications or further details of test are described in PGI 1104 Appendix B.
5. Index properties are tested once per formulation as specified in PGI 1104 Appendix A.

The PGI 1104 Specification was developed with the cooperation of PGI member companies in order to meet the stringent requirements of today's geosynthetic applications. To assure this level of quality, be sure to specify that your PVC geomembrane is produced and fabricated by a PGI member.

Phone: (800) 446-4898 Fax: (303) 446-8798 E-mail: LinerGeeks@langecontainment.com langecontainment.com

PGI 1104 APPENDIX A
TESTING FREQUENCIES

MANUFACTURING TESTING FREQUENCIES

Certified Properties

Certified properties are tested based on a quantity of material produced. Certified properties are tested once per lot, or once every 40,000 lbs of material (18,000 kg), whichever is more frequent. The certification properties include thickness, tensile break strength, elongation at break, modulus at 100% strain, tear resistance, dimensional stability, and low temperature impact. Thickness is to be tested once per roll unless automatic thickness measuring equipment is installed on the production equipment. Certified test reports (Mill Certificates) for the tested properties are to be provided with every order on request.

Index Properties

Index tests are performed when preparing and approving a geomembrane formulation. The tests are performed on the final production formulation of a geomembrane. The index properties include specific gravity, water extraction, volatile loss, hydrostatic resistance, and soil burial resistance. A certified statement of the test results for the formulation is to be made available to the customer on request.

PGI 1104 Appendix B
TESTING CLARIFICATIONS AND DETAILS

General When both US and metric values are shown the value for acceptance is the US value. Metric values are conversions and may contain rounding errors.

Test Method Clarification and Details

ASTM **D751** Test Methods for Coated Fabrics
- For Hydrostatic Burst use Section 33, Procedure A, "Pressure Application by Mullen Type Hydrostatic Tester"
- Units of pressure in pounds per square inch (psi) or kiloPascals (kPa)

ASTM **D882** Tensile Properties of Thin Plastic Sheeting
- Use Method A
- D882 method may be used for PVC film up to 60 mil (1.5mm) thick
- Units are in pounds of force per inch of width (lbs/in)
- Metric units are in kiloNewtons per meter of width (kN/m), or Newtons per millimeter of width (N/mm) which are equivalent units
- Factory Seam Shear Testing
  - Use ASTM D882 Method A
  - ASTM D882 may be used for thicknesses greater than 1.0 mm (40 mil) for seam testing
  - Use 25.4 mm wide (1") specimens
  - Use grip separation of 51 mm (2 in) plus the seam width
  - Crosshead speed of 510 mm/min (20 in/min)
- Factory Seam Peel Testing
  - Use ASTM D882 Method A
  - Use 25.4 mm wide (1") specimens
  - Position grips 13 mm (1/2") on either side of seam
  - Crosshead speed of 51 mm/min (2 in/min)

ASTM **D1004** Initial Tear Resistance of Plastic Film and Sheeting
- Units are in pounds of force to initiate tear in the specially die-cut specimen (lbs) or in Newtons of force (N)

ASTM **D1203** Volatile Loss from Plastics Using Activated Carbon Methods
- Use method A

ASTM **D1204** Linear Dimensional Changes of Thermoplastic Film at Elevated Temp.
- Test specimens at 100C for 15 minutes
- Measure percent change in lineal dimensions

ASTM **D1239** Resistance of Plastic Films to Extraction by Chemicals
- ASTM D1239 may be used for thicknesses greater than 1.0 mm (40 mil)
- Test specimens in 50° C (122° F) water for twenty-four hours
- Measure percent change in weight

ASTM **D1790** Brittleness Temperature of Plastic Sheeting by Impact
- 50% of specimens must pass at specified temperature

ASTM **D 2124** Forplasticizer extraction, followed by GC or GCMS for identification and molecularweight determination.

ASTM **D5199** Measuring the Nominal Thickness of Geosynthetics
- US units of thousandths of an inch (0.001 inches = 1 mil)
- Metric unit of millimeters of thickness (mm)

ASTM **G160** Evaluating Microbial Susceptibility of Nonmetallic Materials by Soil Burial
- Bury sample in prepared soil for 30 days
- Perform test on actual liner sheet samples
- Measure maximum change in properties as shown in specification

LINER INSTALLATION GUIDELINE

I. LINER STORAGE

The fabricated panels of liner are accordion folded in both directions and banded on a wooden pallet or accordion folded in the width and rolled on a core in length then banded on a wooden pallet. Prior to shipping, the product is covered with plastic water repellent stretch wrap. Upon arrival at the jobsite, the material is to be unloaded with a forklift type of equipment with a 5,000 pound minimum capacity. Fabricated panels are to be stored in a central location for field deployment. Pallets must not be stacked. In the event of long term outdoor storage, it may be necessary to cover the product with a opaque, water proof material such as visqueon to protect from exposure.

II. LAYOUT

The onsite installation manager will determine the layout sequence to facilitate and expedite the installation process. Overall coordination between all concerned parties is essential, to minimize conflicts in operations and schedules.

Panel installation should be performed only under reasonably calm conditions with ambient temperatures in excess of 40 degrees F. Installation is possible in colder climates with the aid of heaters, pre-heating panels prior to deployment, etc. It should be noted that cold weather installations are considerably slower. Liner installation should not be attempted during precipitation.

Liner installation should not begin until the subgrade has been inspected. All concerned parties will be notified immediately if substandard areas exist. As a general guideline; the installed geomembrane liner is a direct reflection of the substrate it is placed upon. Base material shall be free from angular rocks, roots, grass and vegetation. Foreign materials and protrusions shall be removed, and all cracks and voids shall be filled and made level. The surface shall be smooth and well compacted. It shall be the responsibility of the General contractor to maintain the subgrade in the event of heavy rain, etc. Anchor trenching must be completed prior to liner placement.

After subgrade acceptance, the panel layout can begin. A general rule of thumb is: only place the number of panels that can be seamed together on the same day, however adverse weather conditions will dictate planning. Potential wind damage to the installed product is minimized when the panels are adhered and adequately ballasted, it is recommended for all keyways to be backfilled immediately after liner placement.

III. SEAMING

Prior to the start of seaming, the installer will review seaming operations and procedures with each crew. Safety procedures will be discussed and equipment will be issued. A sample seam will be constructed to verify field conditions. A sample seam will be made on a daily basis or in the event that weather conditions change drastically during field seaming operations.

The seaming crews will construct a nominal 2" wide fully bonded seam without wrinkles or voids. If wrinkles (fish mouths) occur, they will be cut and patched with a minimum 4 inches of material beyond the cut in all directions.

IV. TESTING

All field seams will be air lance tested per ASTM Method D4437. The air lance test consists of directing a flow of pressurized air through a 3\16 inch orifice regulated at 55 psi. The air lance wand shall be held 4" away from and perpendicular to the seam. Where visual or audible signs occur, which indicate unbonded seam areas; they will be repaired by a technician.

V. FINAL INSPECTION

At the completion of the project, LCS will conduct a final inspection or walk through with Owner and General Contractor.

Headwater Lining

Headwater Lining

265 High K Street, Belgrade MT 59714
406.924.4090 Fax:406.388.5408

Date ______________________________

Project ______________________________

Work Location ______________________________

Air Test: Pressure ________ Time ________

Vaccuum Test: Pressure ________ Time ________

Geomembrane Seam Test Record

Seam Number	Starting Location	Ending Location	Test Type	Start Time	End Time	Start Pressure	End Pressure	Test Date

265 High -K Street, Belgrade, MT 59714
406-924-4090, 406-388-5408 FAX

Headwater Lining

Certificate of Acceptance of Soil Subgrade

Project No. _____ Date _____

Project Name _____ Project Location _____

Area to _____
Be Accepted _____

I, the undersigned, the authorized representative of Headwater Lining do hereby accept the soil subgrade conditions. I do not accept any responsibility for the conditions or character of the subsurface soil, or any effects the soil might have on the liner system.

Exceptions _____

Headwater Lining, Representative:

Name: _____

Signature _____

Title: _____

Date: _____

Headwater Lining
256 High-K Street
Belgrade, MT 59714

Project Experience

Square Feet Installed

Headwater Lining

Customer/Contractor Name	Location	Date work Performed	Material Installed	Project Type	Square Footage
Morton Salt Company	Chicago IL	1997 - 2000	PE and PVC	Covers	600,000
United States Government	Washington DC	1998 - 2001	Woven Coated PE	Relief Tarps	9,500,000
Los Angeles County Sanitation	Whitter, CA	1998 - 2005	Polyethylene	Liner/covers	4,960,000
Mountain West Oilfield Service	Vernal, UT	1999 -2005	RPP, PVC, PE	Lagoon, pitliners	6,000,000
Amalgamated Sugar	Twin Falls, ID	1999-2000	36 mil RPP	Cooling Manifolds	250,000
Schindler Excavation	Gallatin Valley	1999 -2005	Polyethylene	Pond	165,000
Robert's Field Service	Granger, WY	2000 - 2005	PVC & PE	2nd Contain. & Pit liners	6,000,000
Binning Construction	Pinedale, WY	2000 - 2001	PVC	Large & Small Lake	1,100,000
Eoff Construction	Bozeman, MT	2000	PVC	BFI - Waste Water	14,400
Wilson Supply/ Shell Oil	Boulder WY.	2003 - 2005	PVC	Various impoundments	3,000,000
Wagner Landscape Co.	Whitehall, MT	2003 - 2004	PVC	Various Ponds	20,000
Menth Excavating Inc.	E. Helena, MT	2003	PE	2nd Containment/Tank	14,500
Urbani & Associates	Bozeman, MT	2004-2005	Polyethylene	Various Ponds	146,000
Bozeman Sand & Gravel	Bozeman, MT	2004	Polyethylene	Fire Pond	23,000
Sime Construction	Bozeman, MT	2004	Polyethylene	Ponds	80,500
RMI	Phillipsburg, MT	2004	Polyethylene	Mine Cap	138,000
Sierra Rock & Dirt	Jefferson City, MT	2004	Polyethylene	Reclamation pit	38,000
Accelerated Paving	Pocatello, ID	2004	Polyethylene	Remediation canal	23,000
Milligan Construction	Big Sky, MT	2004	Polyethylene	Fire Pond	16,600
Williams Plumbing & Heating	Bozeman, MT	2005	Polyethylene	Ponds	92,000
Bill Feldpausch	White Sulphur Springs, MT	2004	PVC	Pond	4,500
DLM Contracting	Bozeman, MT	2004	PVC	Waste Water Liner	3,000
Zemljak Excavating Inc	Butte, MT	2004	RPP	2nd Containment	5,000
Century Construction	Lewistown MT	2005	Polyethylene	Pond	2,400
Jason Lea	Bozeman, MT	2005	Polyetheylene	Pond and Stream	16,700
Anadarko-Osborne Constuction	Gillette, WY	2005	Polyetheylene	Pond	22,500

Headwater Lining
256 High-K Street
Belgrade, MT 59714

Project Experience

Square Feet Installed

Headwater Lining

Customer/Contractor Name	Location	Date work Performed	Material Installed	Project Type	Square Footage
Moen Excavation	Ennis MT	2005	60 LLDPE	Pond	126,500
Urbani and Associates	MT	2005	Polyethylene	ponds	150,000
Powder River Co. Landfill	Broadus, MT	2005	Composite System	Landfill	510,000
Osborne Construction	Gillette, WY	2005	60 HDT	Evaporation/Storage	230,000
Osborne Construction	Gillette, WY	2006	60 HDT	Evaporation/Storage	700,000
Williams Plumbing and Heating	Gardiner, MT	2005	60 HDT	Mine Cap	250,000
BP Amoco	Granger, WY	2005	60 HDT	Evaporation Ponds	350,000
Montana DEQ-Sierra Rock & Dirt	Wickes, MT	2006	60 mil HDPE/GCL	Reclamation pit	600,000
Sylvan Nursery	Billings, MT	2006	60 mil HDPE/Geotextile	Pond	10,500
Moltz Constructors	Tishomingo, OK	2006	60 mil HDPE	Canal Liner	44,500
Urbani and Associates	Livingston, MT	2006	60 mil HDPE	Pond	33,700
Dave Smith Contracting	Big Sky	2006	60 mil HDPE	Pond	12,000
Dave Smith Contracting	Big Sky	2006	40 mil HDPE	Pon	11,000
Construction Management Services	Bozeman, MT	2006	60 mil HDPE	Fire Pond	17,500
Townsend Brothers, LLC	White Sulphur Springs, MT	2006	40 mil HDPE	Ag Pond	63,700
Urbani and Associates	Wilsall, MT	2006	60 mil HDPE	Pond	55,400
Urbani and Associates	Townsend, MT	2006	60 mil HDPE/Geocompo:	Pond	27,100
Voorhees Excavation	Absarokee, MT	2006	60 mil HDPE	Lagoon containment	19,600
Otrogge Construction	Absarokee, MT	2006	40 mil HDPE	Pond	15,000
DJ Engineering	Three Forks, MT	2006	60 mil HDPE	Livestock Ponds	12,400
Eoff Construction	Three Forks, MT	2006	60 mil HDPE	Pond	132,000
Farris Enterprises	Whitefish, MT	2006	60 mil HDPE	Fire Pond	72,000
Flathead County Solid Waste District	Kalispell, MT	2006	60 mil HDPE/GCL/Geote	Landfill	1,064,000
Dave Smith Contracting	Big Sky, MT	2006	40 mil HDPE/Geotextile	Pond	36,000
Hy Adelman	Bozeman, MT	2006	36 mil RPP	Pond	10,000

Headwater Lining
256 High-K Street
Belgrade, MT 59714

Project Experience

Square Feet Installed

Headwater Lining

Customer/Contractor Name	Location	Date work Performed	Material Installed	Project Type	Square Footage
Milford Colony	Augusta, MT	2006	60 mil HDPE/Geotex	AG Waste Pond	220,000
Montana Ponds & Streams	Bozeman, MT	2006	60 mil HDPE/Geotex	Pond	27,000
Wisdom Wastewater Districts	Wisdom, MT	2006	36 mil RPP/Geotex	Wastewater Ponds	500,000
Rick Moronick	East Helena, MT	2006	45 RPP/Geotex/GCL	Ponds	15,000
Urbani & Assoc.--Rainbow Ranch	Big Sky, MT	2006	60 mil HDPE/Geotex	Pond	34,000
Urbani & Assoc.--Woods	Bozeman, MT	2006	60 mil HDPE	Pond	22,000
Wiliams Plumbing--Bickerstaff	Bozeman, MT	2006	40 mil HDPE/Geotextile	Pond	36,000
Williams Plumbing--Dairyland Farms	Bozeman, MT	2006	40 mil HDPE	Ag Waste Ponds	80,000
Williams Plumbing--Sally Uhlman	Bozeman, MT	2006	60 mil HDPE	Pond	90,000
Wyoming Landscape Contractors	Jackson, WY	2006	60 mil HDPE/Geotex	Pond	46,300
Montana DEQ-Sierra Rock & Dirt	Wickes, MT	2006-2007	GCL/Geocomposite	Reclamation Cap	630,000
Anadarko--Earthwork Solutions	Gillette, WY	2007	60 mil HDPE/Geotex	Evaporation Ponds	90,000
Willams Plumbing--Snowy River.	Three Forks, MT	2007	60 HDPE/Geotx/GeoCP	Detention Pond	105,000
Urbani & Assoc.--Conisi Ponds	Easton, CT	2007	30 mil PVC/GCL/Geotex	Ponds	75,000
Urbani & Assoc.--Reynolds Pass	Ennis, MT	2007	60 mil HDPE/Geotex	Pond	92,000
Urbani & Assoc.--Hollenback	Superior, MT	2007	60 mil HDPE/Geotex	Detention Ponds	128,000
Moltz Construction--Boring Pond	Cody, WY	2007	40 mil HDPE/Geotex	Pond	80,000
Urbani & Assoc.--3 Creek GC	Jackson, WY	2007	60 mil HDPE/Geotex	Pond	300,000
Biota--Huhn Residence	Pinedale, WY	2007	60 mil HDPE/Geotex	Pond	132,000
Westwood Curtis--Boreczky	Jackson, WY	2007	60 mil HDPE/Geotex	Pond	45,000
Williams Plumbing--Campbell	Bozeman, MT	2007	60 mil HDPE/Geotex	Ponds	75,000
CHS, Inc.--Missoula Fuel Farm	Missoula, MT	2007	60 mil HDPE/Geocomp	Secondary Containment	220,000
Chevron--Craig	Craig, CO	2007	30 mil PVC	Secondary Containment	26,000

Headwater Lining
256 High-K Street
Belgrade, MT 59714

Project Experience

Square Feet Installed

Headwater Lining

Customer/Contractor Name	Location	Date work Performed	Material Installed	Project Type	Square Footage
NRCS--Huls Dairy	Hamilton, MT	2007	60 mil HDPE/Geotex	Ag Waste Pond	160,000
NRCS--Prewitt Feed Lot	Fairview, MT	2007	60 mil HDPE/Geotex	Ag Waste Pond	102,000
Earthworks--Rio Tinto Energy	Jacobs Ranch, WY	2007	60 mil HDPE/Geotex	Coal Ash Ponds	120,000
En Cana--Jonah Field Facilities	Jonah Field, WY	2007	60 mil HDPE	Evaporation Pond	90,000
Kirk Engineering--Millstream Mine	Sheridan, MT	2007	60 mil HDPE/GCL	Containment Pond	56,000
Melgaard Construction-Marathon Oi	Sheridan, WY	2007	60 mil HDPE/Geotex	Containment Pond	220,000
Rendevous Eng.--Petersen	Jackson, WY	2007	60 HD/Geotex/EPDM	Decorative Ponds	130,000
Alicia Lingle	Ennis, MT	2007	60 HDT/Geotex	Pond	45,000
Urbani & Assoc.--Young Residence	Big Sky, MT	2007	60 HD/Geotx/30 PVC	Ponds	42,000
Yellow Iron--Kerr Residence	Wilson, WY	2007	60 HD/Geotex	Pond	55,000
Yellow Iron--Woodside Subdivision	Jackson, WY	2008	60 HD/Geotex	Ponds	260,000
CHS, Inc.-Logan Fuel Farm	Logan, MT	2008	60HD/Geotex/Geocomp	Secondary Containment	350,000
Northern Antelope Rocelle Mine	Wright, WY	2008	40 mil HDPE	Coal Wash Pond	150,000
NRCS--Jones Canal	Glasgow, MT	2008	45 EPDM	Irrigation Canal	45,000
Williams Plumbing--Randy Bowe	Butte, MT	2008	60 HDPE/Geotex	Pond	120,000
Rendevous Eng.--Solitaire	Jackson, WY	2008	60 HDPE/Geotex	Pond	30,000
Moen Excavation-Madison Mining	Virginia City, MT	2008	60 HDPE/GCL	Containment Pond	34,000
Melgaard Construction-Willow Crk	Gillette, WY	2008	60 HDPE/Geotex	Evaporation Pond	80,000
NRCS--Springwater Colony	Harlowtown, MT	2008	60 HDPE/Geotex/GCL	Ag Waste Ponds	554,000
Yellow Iron--Reynolds Residence	Jackson, WY	2008	30 PVC/Geotex	Decorative Ponds	275,000
Firewise, Inc--Moose Creek	Wilson, WY	2008	60 HD/30 PVC	Pond & Stream	25,000
Westwood Curtis--Dodge Road	Teton Village, WY	2008	60 HD/30 PVC/Geotex	Pond & Stream	70,000
3 Creek Golf Course	Jackson, WY	2008	30 PVC	Pond	20,000

Headwater Lining
256 High-K Street
Belgrade, MT 59714

Project Experience

Square Feet Installed

Headwater Lining

Customer/Contractor Name	Location	Date work Performed	Material Installed	Project Type	Square Footage
NRCS--Pust Farm	Sidney, MT	2008	60 HD/Geotex	Ag Waste Pond	74,000
Yellowstone Club--Lot 309	Big Sky, WY	2008	60 HD/Geotex	Pond	66,000
Black Thunder Mine	Wright, WY	2008	60 HD/Geotex	Coal Wash Pond	120,000
Western Conservation--Springhill	Bozeman, MT	2008	30 PVC/Geotex	Pond	55,000
Caballo Mine	Gillette, WY	2008	60 HDPE/Geotex	Secondary Containment	12,000
Williams Plumbing--MSU Snowmake	Lewiston, MT	2008	36 RPP/Geotex	Storage Pond	60,000
Rawhide Mine	Gillette, WY	2008	60 HDPE/Geotex	Secondary Containment	19,000
Northern Antelope Rochelle Mine	Wright, WY	2008	60 HDPE/Geotex	Coal Wash Pond	207,000
Earthwork Solutions--Utran Facility	Upton, WY	2008	60 HDPE/Geotex	Tank Farm Containment	42,000
Billings Water Association	Billings, MT	2009	60 HDPE/Geotex	Canal	145,000
NRCS--Elk Creek Colony	Augusta, MT	2009	60 HDPE	Wastewater Ponds	205,000
Yellow Iron--Bar B Bar Ranch	Jackson, WY	2009	60 HDPE/Geotex/Comp	Pond	315,000
Encana Oil & Gas	Jonah Field, WY	2009	40/60 HDPE/Geonet/GT	Processed Water Storage	140,000
BP Amoco	Granger, WY	2009	40/60 HDPE/Geonet/GT	Processed Water Storage	330,000
Brady WWTP	Brady, MT	2009	60 HDPE/Geocomp	Wastewater Ponds	300,000
Billings Landfill	Billings, MT	2009	60 HDPE/Geotex	Landfill	834,000
Chester Raw Water Storage	Chester, MT	2009	60 HDPE	Water Storage	350,000
Granger WWTP	Granger, WY	2009	45 RPP/Geotex/Mech	Wastewater Pond	45,000
Centana Feedlot	Joilet, MT	2009	60 HDPE	Ag Waste Ponds	225,000
Earthwork Solutions	Gillette, WY	2009	60 HDPE/Mechanical	Tank Farm Containment	46,000
Encana Oil & Gas	Parachute, CO	2010	40/60 HDPE/Geonet	Processed Water Storage	98,000
Exxon	Billings, MT	2010	60 HDPE/Mechanical	Containment	150,000
Encana Oil & Gas	Rifle, CO	2010	40/60 HDPE/Geotex	Water Storage	365,000

Headwater Lining
256 High-K Street
Belgrade, MT 59714

Project Experience

Square Feet Installed

Headwater Lining

Customer/Contractor Name	Location	Date work Performed	Material Installed	Project Type	Square Footage
Bainter Excavation	Livingston, MT	2010	60 HDPE	Pond	20,000
BNSF Haslet	Haslet, TX	2010	80 mil HDPE Conductive	Pond	57,600
BNSF Haslet	Haslet, TX	2010	60 HDPE	Pond	6,120
Basin Electric, Dry Fork Station	Gillette, WY	2010	60 mil RPP	Pond	130,000
Hillcrest Coloy	Power, MT	2010	60 mil HDPE/ 8 oz GeoT	Pond	104,000
Encana Oil & Gas	Parachute, CO	2010	60 mil HDPE / 8 oz		332,762
Denver International Airport	Denver, CO	2010	60 mill RPP		138,488
Total Experience for Headwater Lining and Field Supervisor					**47,881,270**

WyMont Construction, Inc.
Headwater Lining
Workmanship Limited Warranty

Headwater Lining warrants for "normal use" the workmanship of its installation of the **60 Mil PVC** infield seams to be free from defects for a period from the date of in-field substantial completion of field work seaming until _____ 201_ subject to each and all of the following definitions, limitations, disclaimers, terms and conditions.

The term "Installer" shall refer solely to Headwater Lining and/or it's duly authorized agents or representatives. The term "Customer / Project Owner" shall refer to any of the following persons or entities: _____

The term "in-field seam(s)", as used herein, means only those seams used to fit, attach and secure the liner, as originally installed by Headwater Lining or its authorized agents, and does not include any subsequent alteration, modification, re-manufacture, or other change in the original assembly and condition of the seams so installed, by any person, for any reason. If any in-field seam of the **60 Mil Liner System,** as originally installed by Headwater Lining, are altered for any reason, after the initial installation by Headwater Lining personnel or authorized agents, whether by Installee or any other person or entity, the entire Limited Warranty as granted herein shall be NULL AND VOID thereafter.

The term "normal weathering and use", as used herein, specifically excludes exposure of the **60 Mil Liner System** to winds in excess of 30 miles per hour in all circumstances and which is specifically excluded from this Limited Warranty.

The term "normal weathering and use" also does not include, among other things: exposure to harmful and/or caustic chemicals; abuse of the **60 Mil Liner System** by machinery or equipment; specifically, but not limited to, damage done to lining system resulting from covering the membrane with soil or other materials, damage due to people or animals, or application of excessive pressures from any source; nor exposure to any other abnormal stresses from any source which exceed the physically specified strengths of the material used to construct the membrane. This Limited Warranty is intended for commercial use only and is not in effect for a "consumer" as defined in the Magnuson-Moss Warranty Act or any similar federal, state, or local statues.

This Workmanship Warranty is limited to the installation of the **60 Mil PVC System** only and HEADWATER LINING makes no warranties with respect to the Carlisle Liner System itself.

This Limited Warranty does not include damage or defects in the **60 Mil Liner System** workmanship installation caused by Acts of God, or by casualty or catastrophe, including, but not limited to fire, earthquakes, floods, piercing hail, tornadoes or force majeure.

This Workmanship Warranty does not include any damages or defects in the liner system itself, except to the extent solely caused by Headwater Lining installation of the Liner System. Should defects or premature loss of use within the scope of the above Workmanship Warranty occur, HEADWATER LINING will repair the **60 Mil Liner System**. HEADWATER LINING will have the right to inspect and determine the cause of any alleged defect in the installation of the Liner System and to take appropriate steps to repair the Liner System if a covered defect exists and is within the term of this Workmanship Warranty.

Headwater Lining shall have reasonable access to the site, as often as quarterly, upon notice to site personnel during the term of this limited warranty to inspect the covered **60 Mil Liner System** for any signs of potential warranty work. The site agrees to inform Headwater Lining of any pending damage to the geomembrane as soon as it is noticed to mitigate the cost of repair. Any claim for any alleged breach of warranty must be submitted in writing, by certified mail, to the Managing Member of Headwater Lining within Ten (10) days after the first notice of an alleged defect. Should the required notice not be given, the defect and all warranties shall be deemed to

have been WAIVED by the Installee and the Installee shall have no right of recovery against Headwater Lining, nor its agents, principals or assigns. In the event repairs or replacements are to be provided, said repairs and/or replacements shall not become due until the area subject to replacement or repair is available to Headwater Lining, in a clean, dry, unencumbered condition wherein work can be safely performed. This includes, but is not limited to, a requirement that the area made available for repair or replacement and be reasonably free from water, dirt, sludge, residuals and liquids of any kind.

Headwater Lining's liability under this warranty shall in no event EXCEED the REPLACEMENT COST of the geomembrane material sold to the Installee. Further, under no circumstances shall Headwater Lining be liable for any special, direct, indirect or consequential damages or losses arising form loss of production, loss of goods or product or any other losses, including losses due to personal injuries and product liability owing to the failure of the material. No allowance will be made for repairs, replacements or alterations made by the Installee without the express written consent of Headwater Lining. Headwater Lining neither assumes nor authorizes any person other than an officer of Headwater Lining to assume any other additional liability in connection with the **60 Mil Liner System**.

This Limited Warranty is given in lieu of all other possible warranties, wither expressed or implied, and by accepting delivery of the material, Purchaser waives all other possible warranties, except those specifically given.

This Workmanship Warranty is made to the original Purchaser and is non-transferable and non-assignable.

Headwater Lining makes no warranty of any kind other than that given above and hereby disclaims all warranties, both expressed or implied of merchantability and fitness for a particular purpose.

It is understood and agreed that if this warranty is not signed by a duly authorized representative of the "Customer/Project Owner", and the original returned to Headwater Lining, within Ten (10) days, the warranty will be voided. Further no warranty is given on any installation which has not been paid in-full, per original quote terms, contract dates or in absence of such documents, the work must be paid for within 30 days of original invoice date including retainage.

I hereby state I have read and understand the above and foregoing Limited Warranty and agree to the limited warranty by signing hereunder.

Customer/ Project Owner: _____

Signature _____ Date _____

Installer: Headwater Lining LLC

Signature _____ Date _____

Opp, Pebbles

From: Opp, Pebbles
Sent: Friday, September 28, 2012 2:50 PM
To: Thornborrow, Sonny
Cc: Mary Beth Marks (mmarks@fs.fed.us); Mike Hatten (Michael.Hatten@tetratech.com)
Subject: Beal Top Soil and Updated Schedule
Attachments: Work Directive 04_signed.pdf

Happy Friday Everyone!

I got the paperwork signed this morning to give Schnell the official go ahead to bring in cover soil for the storm water, contingency pond, and check dam removal areas (see attached).

Sonny-as we discussed last week, keeping track of the truck count for delivery is probably the easiest way of keeping track of the volume of soil they are bringing in. They will get paid for the actual number of cubic yards brought in and lump sums for spreading it. We are shooting for 4" of cover soil at the work areas.

I also spoke with Larry this morning about his schedule. This is tentatively the plan for today and next week.

Today (9/28): they are working on placing top soil in the ditch
Mon (10/1): they will be hand seeding the ditch and installing the TRM
Tues (10/2): finishing the TRM if not complete on Monday and starting to regrade the storm water pond area
Wed (10/3): regrading storm water pond area
Thurs (10/4) & Fri (10/5): hauling in top soil

Mike is going to get in touch with the surveyor so that they will be available to survey toward the end of next week. I have some other business in Butte next week too, so I plan on going up to the site next tues, wed, and thurs to check things out.

Pebbles Opp
Reclamation Specialist
DEQ Abandoned Mine Section
Ph: (406) 841-5028
Fx: (406) 841-5024

Circle S Seeds of Montana, Inc

(406)285-3269

lison Frontage Rd.

MT 59752

lbs.	Variety		Lot #	Pur	Ger	Ha	rm	Via		ed	Org	Mix
1.98	Gulf	Annual Ryegrass	L195-11-A24	99.86	98		0	98		4/30/2012	OR	4.12
				0	0		0	0				0.00
6.93	Secar Cert.	Snake River Whe	145.68550	95.93	90		0	90		2/9/2012	ID	13.85
				0	0		0	0				0.00
4.45	VNS	Rough Fescue	RF-SGH-10	95.2	0		0	96	96	7/30/2012	MT	8.85
					0		0	0				0.00
2.97	Nezpurs Cert.	Idaho Fescue	74.559.00	99.8	69		0	69		2/2/2012	ID	6.16
				0	0		0	0				0.00
4.45	Revenue	Slender Wheatgr	11-093	94.48	95		0	95		8/21/2012	CAN	8.77
				0	0		0	0				0.00
0.30	VNS	Yarrow	J16-9-VR36	96.98	65		2	67		1/31/2012	OR	0.60
				0	0		0	0				0.00
6.14	Appar Cert.	Blue Flax	FLA[illegible]V	99.91	89		8	97		8/14/2012	WY	12.76
				0	0		0	0				0.00
[illegible]	VNS	Blanketflower	GC10221-4	96.99	0		0	73	73	2/7/2012	OR	17.00
				0	0		0	0				0.00
11.88	VNS	Mountain Brome	012-6140	97.14	0		0	88	88	11/12/2011	WA	24.03
				0	0		0	0				0.00
0.49	Source ID LaGra	Prairie Junegrass	BFI-11-10157544	98.32	85		0	85		9/12/2011	WA	1.01
				0	0		0	0				0.00

Other Crop	Weed	Prohibited	Restricted/#	Inert	Weight	Name:
0.05	0.03	0.00	0.00	2.78	48	Beal Mountain Mine Mix 4 Acres

Wyoming Seed Analysis Laboratory

749 Road 9

Powell, WY 82435

Laboratory Report of Analysis

Account No.	Date Received	Date Completed	Lab Number
284	03/29/10	04/13/10	09-2804

Circle S Seeds
Box 130
Three Forks MT 59752

Sender's Information*

Product	VNS
Kind	Yarrow, common
Genus/Species	Achillea millefolium L.
Lot Number	J16-9-VR36
Class	Service

*The information provided here is that of the sender and not of the laboratory.

Purity Analysis

Pure Seed Components

In .6253 grams.

		Purity
Yarrow, common	*Achillea millefolium L.*	96.99%

Purity Grams Required	.4	Weed Seed	0.00%
Noxious Grams Required	4	Crop Seed	0.02%
Grams Submitted	276.85	Inert Matter	2.99%

Viability Analysis

Germ Date	Germination %	Dormant %	Hard %	Total Viable	PLS%
04/13/10	70	0	-N-	70	67.89

Other Crop Seeds

Daisy, Aspen *Erigeron speciosus* 725 per lb

Noxious Weed Seeds: **None Found**

States: WESTERN

In 4 Grams.

(P)Prohibited Noxious (R)Restricted Noxious

Weed Seeds: **None Found**

Status: None.

Additional Sender's Information*

Origin: OR

Remarks

Inert Matter: Chaff, floral parts.

Tests Requested Purity, Germination, Noxious exam. No other tests requested.

WARRANTY: We warrant that the purity and germination test results reported on this form have been carried out in accordance with AOSA rules unless otherwise specified. Test results reflect the condition of the submitted sample and may not reflect the condition of the seed lot from which the sample was taken.

DISCLAIMER OF WARRANTIES: WE MAKE NO OTHER WARRANTIES OF ANY KIND, EXPRESSED OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

Signature: Gil Waibel

Registered Seed Technologist Seal #45

 Printed: 04-13-10 18:07:18

Wyoming Seed Analysis Laboratory

749 Road 9

Powell, WY 82435

Laboratory Report of Analysis

Account No.	Date Received	Date Completed	Lab Number
284	07/23/12	08/21/12	12-0278

Circle S Seeds
Box 130
Three Forks MT 59752

Sender's Information*

Product	Revenue
Kind	Wheatgrass, slender
Genus/Species	Elymus trachycaulus subsp. trachyc
Lot Number	11-093
Class	Service

*The information provided here is that of the sender and not of the laboratory.

Purity Analysis

Pure Seed Components

In 7.4248 grams.

		Purity
Wheatgrass, slender	*Elymus trachycaulus subsp. trachycaulus*	94.49%

Purity Grams Required	7	Weed Seed	0.00%
Noxious Grams Required	70	Crop Seed	0.02%
Grams Submitted	157.40	Inert Matter	5.49%

Viability Analysis

Germ Date	Germination %	Dormant %	Hard %	Total Viable	PLS%
08/21/12	95	0	-N-	95	89.77

Other Crop Seeds

Squirreltail, bottlebrush	*Elymus elymoides*	61 per lb

Noxious Weed Seeds: **None Found**

States: WESTERN

In 70 Grams.

(P)Prohibited Noxious (R)Restricted Noxious

Weed Seeds: **None Found**

Status: None.

Additional Sender's Information*

Origin: Canada

Remarks

Inert Matter: Chaff and floral parts.

Tests Requested Purity, Germination, Noxious exam. No other tests requested.

WARRANTY: We warrant that the purity and germination test results reported on this form have been carried out in accordance with AOSA rules unless otherwise specified. Test results reflect the condition of the submitted sample and may not reflect the condition of the seed lot from which the sample was taken.

DISCLAIMER OF WARRANTIES: WE MAKE NO OTHER WARRANTIES OF ANY KIND, EXPRESSED OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

Signature: Neil Waibel

Registered Seed Technologist Seal #45

 Printed: 08-21-12 16:25:33

Wyoming Seed Analysis Laboratory

749 Road 9

Powell, WY 82435

Laboratory Report of Analysis

Account No.	Date Received	Date Completed	Lab Number
284	09/02/11	09/16/11	11-0573

Circle S Seeds
Box 130
Three Forks MT 59752

Sender's Information*

Product	Appar
Kind	Flax, blue
Genus/Species	Linum perenne
Lot Number	FLAX1V
Class	Certified

*The information provided here is that of the sender and not of the laboratory.

Purity Analysis

Pure Seed Components

In 4.3311 grams.

		Purity
Flax, blue	*Linum perenne*	99.82%

Purity Grams Required	4	Weed Seed	0.00%
Noxious Grams Required	40	Crop Seed	0.04%
Grams Submitted	478.56	Inert Matter	0.14%

Viability Analysis

Germ Date	Germination %	Dormant %	Hard %	Total Viable	PLS%
09/16/11	87	10	-N-	97	96.83

Other Crop Seeds

Ryegrass *Lolium spp.* 105 per lb

Noxious Weed Seeds: None Found

States: WESTERN

In 40 Grams.

(P)Prohibited Noxious (R)Restricted Noxious

Weed Seeds: None Found

Other Determinations

Flax, blue TZ test 98 %

Status: None.

Additional Sender's Information*

Cert. # : W84-427-2871C
Origin: WY

Tests Requested Purity, Germination, Noxious exam, TZ test. No other tests requested.

Services Requested Rush.

WARRANTY: We warrant that the purity and germination test results reported on this form have been carried out in accordance with AOSA rules unless otherwise specified. Test results reflect the condition of the submitted sample and may not reflect the condition of the seed lot from which the sample was taken.

DISCLAIMER OF WARRANTIES: WE MAKE NO OTHER WARRANTIES OF ANY KIND, EXPRESSED OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

Signature:

Registered Seed Technologist Seal #45

 Printed: 09-16-11 16:45:25

MONTANA SEED GROWERS ASSOCIATION (406) 994-5121
Grade: CERTIFIED
Remarks

Wyoming Seed Analysis Laboratory

749 Road 9

Powell, WY 82435

Laboratory Report of Analysis

Account No.	Date Received	Date Completed	Lab Number
284	07/20/12	08/14/12	12-0251

Circle S Seeds
Box 130
Three Forks MT 59752

Sender's Information*

Product	Appar
Kind	Flax, blue
Genus/Species	Linum perenne
Lot Number	FLAX1V
Class	Certified

*The information provided here is that of the sender and not of the laboratory.

		Viability Analysis					
		Germ Date	Germination %	Dormant %	Hard %	Total Viable	PLS%
Flax, blue	*Linum perenne*	08/14/12	89	8	-N-	97	-N-

Status: None.

Additional Sender's Information*

Cert. # : W84-427-2871C
Origin: WY

Tests Requested Germination. No other tests requested.

WARRANTY: We warrant that the purity and germination test results reported on this form have been carried out in accordance with AOSA rules unless otherwise specified. Test results reflect the condition of the submitted sample and may not reflect the condition of the seed lot from which the sample was taken.

DISCLAIMER OF WARRANTIES: WE MAKE NO OTHER WARRANTIES OF ANY KIND, EXPRESSED OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

Signature: Neil Waibel

Registered Seed Technologist Seal #45

 Printed: 08-14-12 18:05:34

Washington State Department of Agriculture
21 North First Avenue
Yakima, WA 98902
Laboratory Report of Analysis

Account No.	Received Date	Date Completed	Lab Number
2044	08/22/11	09/12/11	11-0928

Sender's Information*

Variety/Germplasm	LaGrande
Kind	Junegrass, prairie
Genus/Species	Koeleria macrantha syn. cristata
Lot Number	BFI-11-10157544
Class	Source ID Generation 1

*The information provided is that of the sender and not of the laboratory

Purity Analysis

Pure Seed Components In 1.25 grams.			Purity
Junegrass, prairie *Koeleria macrantha syn. cristata*			98.32%
Purity Grams Required	1	Weed Seed	0.08%
Noxious Grams Required	10	Crop Seed	0.16%
Grams Submitted	170	Inert Matter	1.44%

Viability Analysis

Germ Date	Germination %	Dormant %	Hard %	Total Viable
09/12/11	85	-N-	-N-	85

Other Crop Seeds: In 1.25 grams.

	# Per lb
Fescue, fine-leaved *Festuca spp.*	726

Noxious Weed Seeds:
States: All States
In 10.35 grams

	# Seeds	# Per lb
Barnyardgrass *Echinochloa crus-galli*	1	44
Hairy nightshade *Solanum sarrachoides*	1	44

(P)Prohibited Noxious in WA (R)Restricted Noxious in WA

Weed Seeds: None Found

Other Determinations:

TZ test, Junegrass, prairie 89 %

Inert matter: Empty florets, staminate seed, stems, chaff, soil, non-seed inert matter

Status: None.

Additional Sender's Information*

245-MG-93
Bill To: (2894)BFI Native Seeds

Remarks

Analyzed using AOSA rules as a guideline.
All States Noxious Weeds except H1. "All States Noxious Examination excludes species declared Undesirable Grass Seed by DE, MD, NJ, PA, VA and WV."
TZ - Fluecid, dead, light and missing embryos.
Grower: Benson Farms
Germ-Soft dead moldy seed, insufficient roots and shoots.

Tests Requested Purity, Germination, Noxious exam - All states, TZ test. No other tests requested.
Services Requested Rush.

WARRANTY: We warrant that the test results reported on this form have been carried out with AOSA rules used as a guideline unless otherwise specified. Test results reflect the condition of a submitted sample and may not reflect the condition of the seed lot from which the sample was taken. Officially drawn samples represent the condition of the lot at the time of sampling.
DISCLAIMER OF WARRANTIES: WE MAKE NO OTHER WARRANTIES OF ANY KIND, EXPRESSED OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

Signature:

WASHINGTON STATE DEPARTMENT OF AGRICULTURE
SEED PROGRAM - ISO 9001:2008 CERTIFIED

012-6140

PH (509) 736-6330
FAX (509) 736-6303
aqt@agriqualitytesting.com

Agri-Quality Testing, Inc.

1900 Fowler St. Suite G
Richland, Washington 99352

Report of Seed Analysis

NAMES AND ADDRESSES:	DATE RECEIVED	DATE COMPLETED	TEST NO.
	11/10/2011	11/12/2011	18606

SENDERS INFORMATION*

KIND:	Mountain Brome
VARIETY:	Not Stated
GENUS/SPECIES:	Bromus marginatus
LOT NUMBER:	BFI-11-10117999
SIZE OF LOT:	Not stated
FIELD NUMBER:	N/A
OTHER INFORMATION:	

*The information provided here is that of the sender and not of the laboratory.

PURITY ANALYSIS

(20.10 GRAMS ANALYZED)

PURE SEED COMPONENT(S):

BROMUS SPP. 97.15 %

OTHER CROP SEED	.00 %
INERT MATTER	2.78 %
WEED SEED	0.07 %

VIABILITY ANALYSIS

Germination %	Dormant %	Hard Seed %	Total Viable %	No. Seeds (Germ)	Days Tested	TFL %	TZ %
x	x	x	x	x	x	x	88

COMMENTS:

OTHER CROP SEED: in 20.10 grams
None found

INERT MATTER: Empty Florets, Stems, Smut

WEED SEED: in 20.10 grams

Bromus tectorum (Downy Brome)	68 per lb.
Hordeum spp. (Wild Barley)	23 per lb.

ALL STATES NOX. WEED SEEDS 200.83 GMS. ANALYZED:
(EXCEPT HAWAII) [and except for Undesirable Grass Seeds]

7 Bromus commutatus (Hairy Chess)	16 per lb.

OTHER DETERMINATIONS:
N/A

Date issued: 11/12/2011

SIGNATURE Vicky A Caldon

REGISTERED SEED TECHNOLOGISTS - SEAL NO. 003

REGISTERED MEMBER SOCIETY OF COMMERCIAL SEED TECHNOLOGISTS

TESTED IN ACCORDANCE WITH AOSA RULES.

NOTICE: EXCLUSION OF WARRANTY AND LIMITATION OF DAMAGES AND REMEDY. Tests and reports completed on a sample provided by the requesting party shall apply only to the sample as it was received. Agri-Quality Testing, Inc. MAKES NO WARRANTIES, EXPRESS OR IMPLIED, INCLUDING WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR CONDITIONS CONCERNING THE TRUE IDENTITY OF THE LOT OF SEED. Liability for damages for any claim, including breach of warranty and negligence, with respect to this testing report is limited to a refund of the price of testing the seed. This remedy is exclusive. In no event shall we be liable for any incidental or consequential damages, including loss of profits.

Wyoming Seed Analysis Laboratory

749 Road 9

Powell, WY 82435

Laboratory Report of Analysis

Account No.	Date Received	Date Completed	Lab Number
284	01/23/12	02/07/12	11-2165

Circle S Seeds
Box 130
Three Forks MT 59752

Sender's Information*

Product	VNS
Kind	Blanketflower
Genus/Species	Gaillardia aristata
Lot Number	GC10221-4
Class	Service

*The information provided here is that of the sender and not of the laboratory.

Purity Analysis

Pure Seed Components In 7.1324 grams.		Purity
Blanketflower	*Gaillardia aristata*	97.01%

Purity Grams Required	7	Weed Seed	0.00%
Noxious Grams Required	70	Crop Seed	0.00%
Grams Submitted	32.67	Inert Matter	2.99%

Viability Analysis

Germ Date	Germination %	Dormant %	Hard %	Total Viable
-N-	-N-	-N-	-N-	-N-

Other Crop Seeds None Found

Noxious Weed Seeds: None Found
States: WESTERN
In 70 Grams.
(P)Prohibited Noxious (R)Restricted Noxious

Weed Seeds: None Found

Other Determinations
Blanketflower TZ test 73 %

Status: None.

Additional Sender's Information*
Origin: OR

Remarks
Worked Noxious portion short by 37.33 grams
Inert Matter: Chaff. Floral and seed parts.

Tests Requested Purity, Noxious exam, TZ test. No other tests requested.

WARRANTY: We warrant that the purity and germination test results reported on this form have been carried out in accordance with AOSA rules unless otherwise specified. Test results reflect the condition of the submitted sample and may not reflect the condition of the seed lot from which the sample was taken.

DISCLAIMER OF WARRANTIES: WE MAKE NO OTHER WARRANTIES OF ANY KIND, EXPRESSED OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

Signature: Gil Waibel

Registered Seed Technologist Seal #45

 Printed: 02-07-12 15:05:51

Wyoming Seed Analysis Laboratory

749 Road 9

Powell, WY 82435

Laboratory Report of Analysis

Account No.	Date Received	Date Completed	Lab Number
284	11/16/10	12/02/10	10-1329

Circle S Seeds
Box 130
Three Forks MT 59752

Sender's Information*

Product	Nezpurs
Kind	Fescue, Idaho
Genus/Species	Festuca idahoensis
Lot Number	74.559.00
Class	Certified

*The information provided here is that of the sender and not of the laboratory.

Purity Analysis				Viability Analysis					
Pure Seed Components In 2.1245 grams.			Purity	Germ Date	Germination %	Dormant %	Hard %	Total Viable	PLS%
Fescue, Idaho	*Festuca idahoensis*		99.62%	12/02/10	73	5	-N-	78	77.70
Purity Grams Required	2	Weed Seed	0.00%						
Noxious Grams Required	20	Crop Seed	0.00%						
Grams Submitted	149.36	Inert Matter	0.38%						

Other Crop Seeds None Found

Noxious Weed Seeds: None Found
States: WESTERN
In 20 Grams.
(P)Prohibited Noxious (R)Restricted Noxious

Weed Seeds: None Found

Status: None.

Additional Sender's Information*
Origin: ID

Remarks
No AOSA seed testing rules for: Fescue, Idaho.
Inert Matter: Chaff

Tests Requested Purity, Germination, Noxious exam. No other tests requested.

WARRANTY: We warrant that the purity and germination test results reported on this form have been carried out in accordance with AOSA rules unless otherwise specified. Test results reflect the condition of the submitted sample and may not reflect the condition of the seed lot from which the sample was taken.

DISCLAIMER OF WARRANTIES: WE MAKE NO OTHER WARRANTIES OF ANY KIND, EXPRESSED OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

Signature: Neil Waibel

Registered Seed Technologist Seal #45

 Printed: 12-02-10 18:07:09

Wyoming Seed Analysis Laboratory

749 Road 9

Powell, WY 82435

Laboratory Report of Analysis

Account No.	Date Received	Date Completed	Lab Number
284	01/11/12	02/02/12	11-2016

Circle S Seeds
Box 130
Three Forks MT 59752

Sender's Information*

Product	Nezpurs
Kind	Fescue, Idaho
Genus/Species	Festuca idahoensis
Lot Number	74.559.00
Class	Certified

*The information provided here is that of the sender and not of the laboratory.

		Viability Analysis					
		Germ Date	Germination %	Dormant %	Hard %	Total Viable	PLS%
Fescue, Idaho	*Festuca idahoensis*	02/02/12	69	0	-N-	69	-N-

Status: None.

Additional Sender's Information*

Origin: ID

Remarks

No AOSA seed testing rules for: Fescue, Idaho.

Tests Requested Germination. No other tests requested.

WARRANTY: We warrant that the purity and germination test results reported on this form have been carried out in accordance with AOSA rules unless otherwise specified. Test results reflect the condition of the submitted sample and may not reflect the condition of the seed lot from which the sample was taken.

DISCLAIMER OF WARRANTIES: WE MAKE NO OTHER WARRANTIES OF ANY KIND, EXPRESSED OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

Signature: Gil Waibel

Registered Seed Technologist Seal #45

 Printed: 02-03-12 08:25:47

MONTANA STATE UNIVERSITY

Montana State Seed Testing Laboratory
Department of Plant Sciences
Room 40 Marsh Lab • P.O. Box 173145
Bozeman, MT 59717-3145
Tel (406) 994-21
Fax (406) 994-37

Account No.	Date Received	Date Completed	Lab Number
1029	07/28/11	07/28/11	12-0031

Sender's Information*

Product	VNS
Kind	Fescue, rough
Genus/Species	Festuca altaica (scabrella)
Lot Number	RF-SGH-10
Class	Service

*The information provided here is that of the sender and not of the laboratory.

Purity Analysis

Pure Seed Components

In 6.5723 grams.

		Purity
Fescue, rough	*Festuca altaica (scabrella)*	95.38%

Purity Grams Required	5	Weed Seed	0.00%
Noxious Grams Required	50	Crop Seed	0.33%
Grams Submitted	207	Inert Matter	4.29%

Viability Analysis

Germ Date	Germination %	Dormant %	Hard %	Total Viable	PLS%
-N-	-N-	-N-	-N-	-N-	-N-

Other Crop Seeds

Wheatgrass, Bluebunch	*Pseudoroegneria spicata*	690 per lb
Bluegrass, Sandberg	*Poa sandbergii*	69 per lb
Fescue, Idaho	*Festuca idahoensis*	69 per lb

Noxious Weed Seeds: None Found

States: All States

In 60 Grams.

(P)Prohibited Noxious (R)Restricted Noxious

Weed Seeds: None Found

Other Determinations

Fescue, rough TZ test 94 %

Status: None.

Tests Requested Noxious exam - all states, Purity, TZ test. No other tests requested.

WARRANTY: We warrant that the purity and germination test results reported on this form have been carried out in accordance with AOSA rules unless otherwise specified. Test results reflect the condition of the submitted sample and may not reflect the condition of the seed lot from which the sample was taken.
DISCLAIMER OF WARRANTIES: WE MAKE NO OTHER WARRANTIES OF ANY KIND, EXPRESSED OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

Signature: Bridget A Westfall

Bridget Westfall, RST

 Printed: 07-28-11 16:45:51

ORIGIN MONTANA

Wyoming Seed Analysis Laboratory

749 Road 9

Powell, WY 82435

Laboratory Report of Analysis

Account No.	Date Received	Date Completed	Lab Number
284	07/13/12	07/30/12	12-0193

Circle S Seeds
Box 130
Three Forks MT 59752

Sender's Information*

Product	VNS
Kind	Fescue, rough
Genus/Species	Festuca campestris
Lot Number	RF-SGH-10
Class	Service

*The information provided here is that of the sender and not of the laboratory.

		Viability Analysis					
		Germ Date	Germination %	Dormant %	Hard %	Total Viable	PLS%
Fescue, rough	*Festuca campestris*	-N-	-N-	-N-	-N-	-N-	-N-

Other Determinations

Fescue, rough TZ test 96 %

Status: None.

Additional Sender's Information*

Origin: MT

Remarks

No AOSA seed testing rules for: Fescue, rough.

Tests Requested TZ test. No other tests requested.

WARRANTY: We warrant that the purity and germination test results reported on this form have been carried out in accordance with AOSA rules unless otherwise specified. Test results reflect the condition of the submitted sample and may not reflect the condition of the seed lot from which the sample was taken.

DISCLAIMER OF WARRANTIES: WE MAKE NO OTHER WARRANTIES OF ANY KIND, EXPRESSED OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

Signature: Neil Waibel

Registered Seed Technologist Seal #45

 Printed: 07-30-12 16:05:44

Wyoming Seed Analysis Laboratory

749 Road 9

Powell, WY 82435

Laboratory Report of Analysis

Account No.	Date Received	Date Completed	Lab Number
284	02/21/11	03/08/11	10-2307

Circle S Seeds
Box 130
Three Forks MT 59752

Sender's Information*

Product	Secar
Kind	Wheatgrass, Snake River
Genus/Species	Elymus wawawaiensis
Lot Number	145.68550
Class	Certified

*The information provided here is that of the sender and not of the laboratory.

Purity Analysis				Viability Analysis					
Pure Seed Components In 8.0426 grams.			Purity	Germ Date	Germination %	Dormant %	Hard %	Total Viable	PLS%
Wheatgrass, Snake River	*Elymus wawawaiensis*		95.95%	03/08/11	94	1	-N-	95	91.15
Purity Grams Required	8	Weed Seed	0.00%						
Noxious Grams Required	80	Crop Seed	0.00%						
Grams Submitted	144.83	Inert Matter	4.05%						

Other Crop Seeds **None Found**

Noxious Weed Seeds: **None Found**
States: WESTERN
In 80 Grams.
(P)Prohibited Noxious (R)Restricted Noxious

Weed Seeds: **None Found**

Status: None.

Additional Sender's Information*
Origin: ID
Cert. # : 51050019

Remarks
No AOSA seed testing rules for: Wheatgrass, Snake River.
Inert Matter: Chaff and floral parts.

Tests Requested Purity, Germination, Noxious exam. No other tests requested.

WARRANTY: We warrant that the purity and germination test results reported on this form have been carried out in accordance with AOSA rules unless otherwise specified. Test results reflect the condition of the submitted sample and may not reflect the condition of the seed lot from which the sample was taken.

DISCLAIMER OF WARRANTIES: WE MAKE NO OTHER WARRANTIES OF ANY KIND, EXPRESSED OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

Signature: Neil Waibel

Registered Seed Technologist Seal #45

 Printed: 03-08-11 19:36:28

Wyoming Seed Analysis Laboratory

749 Road 9

Powell, WY 82435

Laboratory Report of Analysis

Account No.	Date Received	Date Completed	Lab Number
284	01/13/12	02/09/12	11-2046

Circle S Seeds
Box 130
Three Forks MT 59752

Sender's Information*

Product	Secar
Kind	Wheatgrass, Snake River
Genus/Species	Elymus wawawaiensis
Lot Number	145.68550
Class	Certified

*The information provided here is that of the sender and not of the laboratory.

		Viability Analysis					
		Germ Date	Germination %	Dormant %	Hard %	Total Viable	PLS%
Wheatgrass, Snake River	*Elymus wawawaiensis*	02/09/12	90	0	-N-	90	-N-

Status: None.

Additional Sender's Information*

Origin: ID
Cert#: 51050019

Remarks

No AOSA seed testing rules for: Wheatgrass, Snake River.

Tests Requested Germination. No other tests requested.

WARRANTY: We warrant that the purity and germination test results reported on this form have been carried out in accordance with AOSA rules unless otherwise specified. Test results reflect the condition of the submitted sample and may not reflect the condition of the seed lot from which the sample was taken.

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Signature: Neil Waibel

Registered Seed Technologist Seal #45

 Printed: 02-09-12 15:05:59

Wyoming Seed Analysis Laboratory

749 Road 9

Powell, WY 82435

Laboratory Report of Analysis

Account No.	Date Received	Date Completed	Lab Number
284	03/31/12	04/30/12	11-3231

Circle S Seeds
Box 130
Three Forks MT 59752

Sender's Information*

Product	Gulf
Kind	Ryegrass, annual
Genus/Species	Lolium multiflorum
Lot Number	L195-11-A24
Class	Service

*The information provided here is that of the sender and not of the laboratory.

Purity Analysis

Pure Seed Components

In 5.3115 grams.

		Purity
Ryegrass, annual	*Lolium multiflorum*	99.88%
Purity Grams Required	5	Weed Seed 0.00%
Noxious Grams Required	50	Crop Seed 0.00%
Grams Submitted	137.29	Inert Matter 0.12%

Viability Analysis

Germ Date	Germination %	Dormant %	Hard %	Total Viable
04/30/12	98	-N-	-N-	98

Other Crop Seeds None Found

Noxious Weed Seeds: None Found

States: WESTERN

In 50 Grams.

(P)Prohibited Noxious (R)Restricted Noxious

Weed Seeds: None Found

Status: None.

Additional Sender's Information*

Origin: OR

Remarks

Inert Matter: Chaff

Tests Requested Purity, Germination, Noxious exam. No other tests requested.

WARRANTY: We warrant that the purity and germination test results reported on this form have been carried out in accordance with AOSA rules unless otherwise specified. Test results reflect the condition of the submitted sample and may not reflect the condition of the seed lot from which the sample was taken.

DISCLAIMER OF WARRANTIES: WE MAKE NO OTHER WARRANTIES OF ANY KIND, EXPRESSED OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

Signature: Gil Waibel

Registered Seed Technologist Seal #45

 Printed: 05-02-12 11:45:29

AMMONIUM NITRATE
Granular Fertilizer Grade
34-0-0

CHEMICAL ANALYSIS	MIN	MAX	TYPICAL
TOTAL NITROGEN (wt. %N)	34.0		34.7
• AMMONIUM FORM (wt. %N)	17.0		
• NITRATE FORM (wt. %N)	17.0		
COATING (wt. % Organic Surfactant)			0.10
MOISTURE (wt. %H_2O)			0.12
pH of 10% wt./wt. AQUEOUS SOLUTION			4.5 - 6.0
PHYSICAL ANALYSIS			
COLOR			White
ANGLE OF REPOSE (Degrees)			32
BULK DENSITY (kg per m^3/lbs par ft^3)			
• LOOSE			883/54.6
• TAPPED			922/57.0
SIZE GUIDE NUMBER (SGN)			255
UNIFORMITY INDEX			92
BOILING POINT			85% 275° F (1
FREEZING POINT			85% 170° F (7

SCREEN ANALYSIS (% By Weight)

	Tyler	Millimeters				
	+8					54.5
	+10					97.8
	+14					99.8
	+20					99.9

Simplot

PRODUCT DATA SHEET

MONOAMMONIUM PHOSPHATE 11-52-0

GUARANTEED ANALYSIS

Total Nitrogen (N) 11.0%
11.0% Ammoniacal Nitrogen
Available Phosphate (P_2O_5) 52.0%

Derived from Monoammonium Phosphate.

Warning: This product contains a chemical known to the State of California to cause cancer, birth defects or other reproductive harm. Proposition 65, the Safe Drinking Water and Toxic Enforcement Act of 1986, requires notification of potential exposure to substances identified by the State of California as causing cancer, birth defects or other reproductive harm.	**Information regarding the contents and levels of metals in this product is available on the Internet at http://www.regulatory-info-jr.com**

PHYSICAL CHARACTERISTICS

Lbs. of Nutrients/Ton:	Nitrogen (N)	220
	Phosphate (P_2O_5)	1040
	Combined Nutrient Total	**1260**
Angle of Repose:	30°	
Bulk Density:	59 lbs. per cubic foot (poured) 64 lbs. per cubic foot (packed)	
pH (20% solution):	4.0	
Solubility in Water:	94% (% of total P_2O_5)	
Granule Size:	96% passes through a 4mm (5 Tyler) and is retained by a 2.0mm (9 Tyler) screen. 100% retained by a 1.18mm (14 Tyler) screen. Average granule size 2.64mm.	

USES

1. Is an ideal combination of N and P_2O_5 for use as a starter fertilizer on small grains, row crops, tree crops and forages. The monoammonium form reduces the risk of fertilizer injury to germinating seeds.
2. Chemically compounded N and P_2O_5. The ammonium phosphate combination in each pellet enhances the uptake of phosphorus by the plant. The highly water soluble phosphate goes to work quickly allowing efficient utilization by plants. The ammoniacal form of nitrogen reduces nitrogen losses by leaching.
3. Has a slight acidic effect, which helps counteract nutritional problems in calcareous soils.
4. This product is a commercial fertilizer used as plant food in agricultural crop production. For specific application rates follow the recommendation of a qualified individual or institution, such as, but not limited to, a certified crop advisor, agronomist, university crop extension publication, or apply according to recommendations in your approved nutrient management plan.

ADVANTAGES

1. Is well adapted to a wide range of application methods–preplant broadcast, banded at planting time, drilled with small grains at seeding time, sidedressed, or broadcast on pasture or alfalfa stubble.
2. An excellent product for use in custom-mixed dry blends on all crops requiring nitrogen and phosphorus.
3. Has uniform pellet size: free flowing, blends well, spreads evenly, dust free, resists crusting and bridging in storage bins.
4. Is a high analysis product: allows for more nutrient to be stored in the same bin space and reduces handling and freight costs per pound of nutrient.

SAFETY

Slight abrasion may result from eye contact or prolonged skin contact. Not generally considered toxic. Nonflammable.

14010 (PDS R1-10-06)

Hogan's Rancher's Ag
P.O. Box 100
Hall, MT 59837

Plant Copy
October 17, 2012

Quote Number: 101712 - 095103

Acres : 12.2 Acres
Rate : 98.3 Lbs/Acre

Material System is Dry Mixing
Density = 61.41 Lb./(Cu. Ft.)

29-10-0

Material Name	Percent	Units/Batch	Scale (Lbs)	Actual
NIT (34-0-0).....	80.44	965 Lbs	**965**	_____
11-52-0.....	19.56	235 Lbs	**1,200**	_____

1 Batch

MEMORANDUM

DATE: August 15, 2012

TO: Pebbles Clark – DEQ
Sonny Thornborrow - USFS

COPY: Larry Schnell – Schnell Excavating, Inc.

FROM: Mike Hatten – Tetra Tech

SUBJECT: Submittal for Erosion Control Mat, Turf Reinforcement Mat, Straw Wattles, and 60 Mil PVC (Tetra Tech Submittal Tracking No. 5)

Schnell Excavating, Inc. submitted their material submittals for Erosion Control Mat, Turf Reinforcement Mat, Straw Wattles, and 60 Mil PCV Geomembrane for the Beal Mountain Mine: Pond Removals and Run-on Controls Reclamation Project on August 15, 2012. Copies of their submittals are attached.

These submittals are **approved as submitted**.

NORTHWEST LININGS &
GEOTEXTILE PRODUCTS, Inc.
"Helping to Protect the Environment"
21000 77th Avenue South
Kent, WA 98032
(253) 872-0244 • (800) 729-6954
FAX: (253) 872-0245
www.northwestlinings.com

PermeaTex / PermeaLok S1 – Bio Net

The PermeaLok S1 one sided straw erosion control blanket is constructed of a weed free straw matrix encased by biodegradable jute scrim top net. The product is designed for effective, versatile erosion control for stabilized slopes and shallow channels. PermeaTex S1 is sewn together with a biodegradable thread on 2" centers and has the following specifications.

PROPERTY	TEST METHOD	UNITS
Roll Size		7.5' x 120'
Roll Weight		55 lbs
Weight		0.55 lbs / SY
Flow Velocities		7' per sec
Netting Size		One sided 0.5" x 1.0" top biodegradable
Tensile Strength	ASTM D6818	4.8 (MD) lb / in 4.8 (TD) lb / in
Elongation	ASTM D6818	15 (MD) % 20 (TD) %
Mass Per Unit Area	ASTM D6475	8.0 oz / SY
Thickness	ASTM D6526	7.5 mm
Light Penetration	ECTC TASC 00197	15% open
Water Absorption	ASTM D1117	425%

PermeaLok™ is a trade name of Northwest Linings and any use of this name without the express written consent of Northwest Linings is strictly prohibited.

The information and data contained herein are believed to be accurate and reliable. Northwest Linings makes no warranty of any kind. Northwest Linings accepts no responsibility or liability for the results obtained through application of this information.

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PermeaLok / PermeaTex TRM 8
Turf Reinforcement Mat

This blanket is composed of 100% green polypropylene fiber enclosed in a polypropylene top and bottom net stitched together with polypropylene heavy-duty thread. P-8 will meet the properties stated in this certification. This product is designed to control erosion, establish and reinforce vegetation on slopes and channels where design conditions exceed the performance limits of unreinforced vegetation.

PROPERTY	TEST METHOD	UNITS	VALUES
Roll Width x Length			7.5' x 120' (100 SY)
Roll Weight		LBS	50
Thickness	ASTM D1777	MM	8.6
Tensile Strength	ASTM D6818	LBS/IN	20.8 (MD) 17.7 (MD)
Elongation	ASTM D6818	%	30 (MD) 20 (TD)
Mass per Unit Area	ASTM D6566	OZ/SY	8.0
Light Penetration	ECTC TASC 00197	% OPEN	35
UV Stability	ASTM 4355	%	100
Resiliency	ASTM D6524	%	89
Porosity	Computed	%	97

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PermeaTex / PermeaLok 9" x 25' Straw Wattle Biodegradable Netting

The PermeaLok Straw Wattle shall be a straw-filled tube of burlap netting material exhibiting the following properties. It is a tube of compacted rice straw that is Certified Noxious Weed Free. The netting shall consist of a 7oz. burlap seamed to create a continuous biodegradable tube. The ends are secured with a rebar speed tie.

Property	Test Method	Units	Min. Value
Mass per Unit Weight	Field Measured	(lbs/ft)	1.6
Dimension	Field Measured	(Dia/Inches) (Length/FT)	8.0 25.0
Netting Unit Weight	Certified	(Ounces/SY)	7.0
Biodegradation of Netting	Field Measured	% Biodegradation	100%
Functional Longevity	Field Measured	Months	18 to 24
Sediment Retention Capacity	Rainfall Sim. [1]	(lbs/ft)	30
Installed Free-Board Ht.	Field Measured	(Height/Inches)	6.0 — 7.0
Straw Fiber	Field Measured	Avg. Length (in)	3.0
Soil Loss[1]	Rainfall Sim. [1]	% Effectiveness	58[2]
De-Stabilizing Moisture	Rainfall Sim. [1]	% Retained (Max.)	11
Fiber Content	Certified	% Rice Straw	100

- Better filtering of runoff waters
- Stop check dam blowouts
- Protect water from going around check dams
- Prevent spread of non-native vegetation
- Easier to handle and install than straw bales
- Non-food source for animals

Minimum of three 10 year predicted storm events on 1V:3H slope with Clayey Sand type soil.

[2] Minimum sediment yield reduction value.

Beal Mountain Pond Removal and Run-On Control Project
Geo-synthetic Submittal—60 mil PVC Geomembrane

General Contractor—Schnell Excavating
Geo-synthetic Subcontractor—Headwater Lining
Design Engineer—Tetra Tech

Table of Contents

1) 60 mil PVC Specification

2) Proposed Panel Layout

3) Manufacturer Material Certification and Fabrication QA/QC

4) PVC Installation Guidelines

5) Headwater Lining QA/QC Forms

6) Certificate of Subgrade Acceptance

7) Headwater Lining Project Reference

8) Warranties

Lange Containment Systems Inc.

PGI PVC GEOMEMBRANE INSTITUTE

PVC Geomembrane Specifications

PGI 1104 Specifications[1]

Certified Properties	ASTM	PVC 10	PVC 20	PVC 30	PVC 40	PVC 50	PVC 60
Thickness	D-5199	10 ±0.5 mil 0.25±.013mm	20 ±1 mil 0.51 ± .03 mm	30 ±1.5 mil 0.76 ± .04 mm	40 ±2 mil 1.02 ± .05 mm	50 ±2.5 mil 1.27 ± .06 mm	60 ± 3 mil 1.52 ± .08 mm
Tensile Properties[3]	D-882[4] Min						
Strength at Break		24 lbs/in 4.2 kN/m	48 lbs/in 8.4 kN/m	73 lbs/in 12.8 kN/m	97 lbs/in 17.0 kN/m	116 lbs/in 20.3 kN/m	137 lbs/in 24.0 kN/m
Elongation		250%	360%	380%	430%	430%	450%
Modulus at 100%		10 lbs/in 1.8 kN/m	21 lbs/in 3.7 kN/m	32 lbs/in 5.6 kN/m	40 lbs/in 7.0 kN/m	50 lbs/in 8.8 kN/m	60 lbs/in 10.5 kN/m
Tear Strength	D-1004[4] Min	2.5 lbs 11 N	6 lbs 27 N	8 lbs 35 N	10 lbs 44 N	13 lbs 58 N	15 lbs 67 N
Dimensional Stability	D-1204[4] Max Chg	4%	4%	3%	3%	3%	3%
Low Temperature Impact	D-1790[4] Pass	-10° F -23° C	-15° F -26° C	-20° F -29° C	-20° F -29° C	-20° F -29° C	-20° F -29° C

Index Properties	ASTM	PVC 10	PVC 20	PVC 30	PVC 40	PVC 50	PVC 60
Specific Gravity	D-792 Typical	1.2 g/cc	1.2 g/cc	1.2 g/cc	1.2 g/cc	1.2 g/cc	1.2 g/cc
Water Extraction Percent Loss (max)	D-1239[4] Max Loss	0.15%	0.15%	0.15%	0.20%	0.20%	0.20%
Average Plasticizer Molecular Weight	D-2124[4,5]	400	400	400	400	400	400
Volatile Loss Percent Loss (max)	D-1203[4] Max Loss	1.5%	0.9%	0.7%	0.5%	0.5%	0.5%
Soil Burial	G160[4] Max Chg						
Break Strength		5%	5%	5%	5%	5%	5%
Elongation		20%	20%	20%	20%	20%	20%
Modulus at 100%		20%	20%	20%	20%	20%	20%
Hydrostatic Resistance	D-751[4] Min	42 psi 290 kPa	68 psi 470 kPa	100 psi 690 kPa	120 psi 830 kPa	150 psi 1030 kPa	180 psi 1240 kPa

Seam Strengths	ASTM	PVC 10	PVC 20	PVC 30	PVC 40	PVC 50	PVC 60
Shear Strength[3]	D-882[4] Min	20 lbs/in 3.47 kN/m	38.4 lbs/in 6.7 kN/m	58.4 lbs/in 10 kN/m	77.6 lbs/in 14 kN/m	96 lbs/in 17 kN/m	116 lbs/in 20kN/m
Peel Strength[3]	D-882[4] Min	10 lbs/in 1.8 kN/m	12.5 lbs/in 2.2 kN/m	15 lbs/in 2.6 kN/m	15 lbs/in 2.6 kN/m	15 lbs/in 2.6 kN/m	15 lbs/in 2.6 kN/m

Notes:
1. PGI 1104 replaces PGI 1103 Specification effective 1/1/04.
2. Certified properties are tested by lot as specified in PGI 1104 Appendix A.
3. Metric values are converted from US values and are rounded to the available significant digits.
4. Modifications or further details of test are described in PGI 1104 Appendix B.
5. Index properties are tested once per formulation as specified in PGI 1104 Appendix A.

The PGI 1104 Specification was developed with the cooperation of PGI member companies in order to meet the stringent requirements of today's geosynthetic applications. To assure this level of quality, be sure to specify that your PVC geomembrane is produced and fabricated by a PGI member.

Phone: (800) 446-4898 Fax: (303) 446-8798 E-mail: LinerGeeks@langecontainment.com langecontainment.com

PGI 1104 APPENDIX A
TESTING FREQUENCIES

MANUFACTURING TESTING FREQUENCIES

Certified Properties

Certified properties are tested based on a quantity of material produced. Certified properties are tested once per lot, or once every 40,000 lbs of material (18,000 kg), whichever is more frequent. The certification properties include thickness, tensile break strength, elongation at break, modulus at 100% strain, tear resistance, dimensional stability, and low temperature impact. Thickness is to be tested once per roll unless automatic thickness measuring equipment is installed on the production equipment. Certified test reports (Mill Certificates) for the tested properties are to be provided with every order on request.

Index Properties

Index tests are performed when preparing and approving a geomembrane formulation. The tests are performed on the final production formulation of a geomembrane. The index properties include specific gravity, water extraction, volatile loss, hydrostatic resistance, and soil burial resistance. A certified statement of the test results for the formulation is to be made available to the customer on request.

PGI 1104 Appendix B
TESTING CLARIFICATIONS AND DETAILS

General When both US and metric values are shown the value for acceptance is the US value. Metric values are conversions and may contain rounding errors.

Test Method Clarification and Details

ASTM **D751** Test Methods for Coated Fabrics
- For Hydrostatic Burst use Section 33, Procedure A, "Pressure Application by Mullen Type Hydrostatic Tester"
- Units of pressure in pounds per square inch (psi) or kiloPascals (kPa)

ASTM **D882** Tensile Properties of Thin Plastic Sheeting
- Use Method A
- D882 method may be used for PVC film up to 60 mil (1.5mm) thick
- Units are in pounds of force per inch of width (lbs/in)
- Metric units are in kiloNewtons per meter of width (kN/m), or Newtons per millimeter of width (N/mm) which are equivalent units
- Factory Seam Shear Testing
  - Use ASTM D882 Method A
  - ASTM D882 may be used for thicknesses greater than 1.0 mm (40 mil) for seam testing
  - Use 25.4 mm wide (1") specimens
  - Use grip separation of 51 mm (2 in) plus the seam width
  - Crosshead speed of 510 mm/min (20 in/min)
- Factory Seam Peel Testing
  - Use ASTM D882 Method A
  - Use 25.4 mm wide (1") specimens
  - Position grips 13 mm (1/2") on either side of seam
  - Crosshead speed of 51 mm/min (2 in/min)

ASTM **D1004** Initial Tear Resistance of Plastic Film and Sheeting
- Units are in pounds of force to initiate tear in the specially die-cut specimen (lbs) or in Newtons of force (N)

ASTM **D1203** Volatile Loss from Plastics Using Activated Carbon Methods
- Use method A

ASTM **D1204** Linear Dimensional Changes of Thermoplastic Film at Elevated Temp.
- Test specimens at 100C for 15 minutes
- Measure percent change in lineal dimensions

ASTM **D1239** Resistance of Plastic Films to Extraction by Chemicals
- ASTM D1239 may be used for thicknesses greater than 1.0 mm (40 mil)
- Test specimens in 50° C (122° F) water for twenty-four hours
- Measure percent change in weight

ASTM **D1790** Brittleness Temperature of Plastic Sheeting by Impact
- 50% of specimens must pass at specified temperature

ASTM **D 2124** Forplasticizer extraction, followed by GC or GCMS for identification and molecularweight determination.

ASTM **D5199** Measuring the Nominal Thickness of Geosynthetics
- US units of thousandths of an inch (0.001 inches = 1 mil)
- Metric unit of millimeters of thickness (mm)

ASTM **G160** Evaluating Microbial Susceptibility of Nonmetallic Materials by Soil Burial
- Bury sample in prepared soil for 30 days
- Perform test on actual liner sheet samples
- Measure maximum change in properties as shown in specification

LINER INSTALLATION GUIDELINE

I. LINER STORAGE

The fabricated panels of liner are accordion folded in both directions and banded on a wooden pallet or accordion folded in the width and rolled on a core in length then banded on a wooden pallet. Prior to shipping, the product is covered with plastic water repellent stretch wrap. Upon arrival at the jobsite, the material is to be unloaded with a forklift type of equipment with a 5,000 pound minimum capacity. Fabricated panels are to be stored in a central location for field deployment. Pallets must not be stacked. In the event of long term outdoor storage, it may be necessary to cover the product with a opaque, water proof material such as visqueon to protect from exposure.

II. LAYOUT

The onsite installation manager will determine the layout sequence to facilitate and expedite the installation process. Overall coordination between all concerned parties is essential, to minimize conflicts in operations and schedules.

Panel installation should be performed only under reasonably calm conditions with ambient temperatures in excess of 40 degrees F. Installation is possible in colder climates with the aid of heaters, pre-heating panels prior to deployment, etc. It should be noted that cold weather installations are considerably slower. Liner installation should not be attempted during precipitation.

Liner installation should not begin until the subgrade has been inspected. All concerned parties will be notified immediately if substandard areas exist. As a general guideline; the installed geomembrane liner is a direct reflection of the substrate it is placed upon. Base material shall be free from angular rocks, roots, grass and vegetation. Foreign materials and protrusions shall be removed, and all cracks and voids shall be filled and made level. The surface shall be smooth and well compacted. It shall be the responsibility of the General contractor to maintain the subgrade in the event of heavy rain, etc. Anchor trenching must be completed prior to liner placement.

After subgrade acceptance, the panel layout can begin. A general rule of thumb is: only place the number of panels that can be seamed together on the same day, however adverse weather conditions will dictate planning. Potential wind damage to the installed product is minimized when the panels are adhered and adequately ballasted, it is recommended for all keyways to be backfilled immediately after liner placement.

III. SEAMING

Prior to the start of seaming, the installer will review seaming operations and procedures with each crew. Safety procedures will be discussed and equipment will be issued. A sample seam will be constructed to verify field conditions. A sample seam will be made on a daily basis or in the event that weather conditions change drastically during field seaming operations.

The seaming crews will construct a nominal 2" wide fully bonded seam without wrinkles or voids. If wrinkles (fish mouths) occur, they will be cut and patched with a minimum 4 inches of material beyond the cut in all directions.

IV. TESTING

All field seams will be air lance tested per ASTM Method D4437. The air lance test consists of directing a flow of pressurized air through a 3\16 inch orifice regulated at 55 psi. The air lance wand shall be held 4" away from and perpendicular to the seam. Where visual or audible signs occur, which indicate unbonded seam areas; they will be repaired by a technician.

V. FINAL INSPECTION

At the completion of the project, LCS will conduct a final inspection or walk through with Owner and General Contractor.

Headwater Lining

Headwater Lining

265 High K Street, Belgrade MT 59714
406.924.4090 Fax:406.388.5408

Date ____________________ Air Test: Pressure __________ Time __________

Project ____________________

Work Location ____________________ Vaccuum Test: Pressure __________ Time __________

Geomembrane Seam Test Record

Seam Number	Starting Location	Ending Location	Test Type	Start Time	End Time	Start Pressure	End Pressure	Test Date

265 High -K Street, Belgrade, MT 59714
406-924-4090, 406-388-5408 FAX

Headwater Lining

Certificate of Acceptance of Soil Subgrade

Project No. _____ Date _____

Project Name _____ Project Location _____

Area to _____
Be Accepted _____

I, the undersigned, the authorized representative of Headwater Lining do hereby accept the soil subgrade conditions. I do not accept any responsibility for the conditions or character of the subsurface soil, or any effects the soil might have on the liner system.

Exceptions _____

Headwater Lining, Representative:

Name: _____

Signature _____

Title: _____

Date: _____

Headwater Lining
256 High-K Street
Belgrade, MT 59714

Project Experience

Square Feet Installed

Headwater Lining

Customer/Contractor Name	Location	Date work Performed	Material Installed	Project Type	Square Footage
Morton Salt Company	Chicago IL	1997 - 2000	PE and PVC	Covers	600,000
United States Government	Washington DC	1998 - 2001	Woven Coated PE	Relief Tarps	9,500,000
Los Angeles County Sanitation	Whitter, CA	1998 - 2005	Polyethylene	Liner/covers	4,960,000
Mountain West Oilfield Service	Vernal, UT	1999 -2005	RPP, PVC, PE	Lagoon, pitliners	6,000,000
Amalgamated Sugar	Twin Falls, ID	1999-2000	36 mil RPP	Cooling Manifolds	250,000
Schindler Excavation	Gallatin Valley	1999 -2005	Polyethylene	Pond	165,000
Robert's Field Service	Granger, WY	2000 - 2005	PVC & PE	2nd Contain. & Pit liners	6,000,000
Binning Construction	Pinedale, WY	2000 - 2001	PVC	Large & Small Lake	1,100,000
Eoff Construction	Bozeman, MT	2000	PVC	BFI - Waste Water	14,400
Wilson Supply/ Shell Oil	Boulder WY.	2003 - 2005	PVC	Various impoundments	3,000,000
Wagner Landscape Co.	Whitehall, MT	2003 - 2004	PVC	Various Ponds	20,000
Menth Excavating Inc.	E. Helena, MT	2003	PE	2nd Containment/Tank	14,500
Urbani & Associates	Bozeman, MT	2004-2005	Polyethylene	Various Ponds	146,000
Bozeman Sand & Gravel	Bozeman, MT	2004	Polyethylene	Fire Pond	23,000
Sime Construction	Bozeman, MT	2004	Polyethylene	Ponds	80,500
RMI	Phillipsburg, MT	2004	Polyethylene	Mine Cap	138,000
Sierra Rock & Dirt	Jefferson City, MT	2004	Polyethylene	Reclamation pit	38,000
Accelerated Paving	Pocatello, ID	2004	Polyethylene	Remediation canal	23,000
Milligan Construction	Big Sky, MT	2004	Polyethylene	Fire Pond	16,600
Williams Plumbing & Heating	Bozeman, MT	2005	Polyethylene	Ponds	92,000
Bill Feldpausch	White Sulphur Springs, MT	2004	PVC	Pond	4,500
DLM Contracting	Bozeman, MT	2004	PVC	Waste Water Liner	3,000
Zemljak Excavating Inc	Butte, MT	2004	RPP	2nd Containment	5,000
Century Construction	Lewistown MT	2005	Polyethylene	Pond	2,400
Jason Lea	Bozeman, MT	2005	Polyetheylene	Pond and Stream	16,700
Anadarko-Osborne Constuction	Gillette, WY	2005	Polyetheylene	Pond	22,500

Headwater Lining
256 High-K Street
Belgrade, MT 59714

Project Experience

Square Feet Installed

Headwater Lining

Customer/Contractor Name	Location	Date work Performed	Material Installed	Project Type	Square Footage
Moen Excavation	Ennis MT	2005	60 LLDPE	Pond	126,500
Urbani and Associates	MT	2005	Polyethylene	ponds	150,000
Powder River Co. Landfill	Broadus, MT	2005	Composite System	Landfill	510,000
Osborne Construction	Gillette, WY	2005	60 HDT	Evaporation/Storage	230,000
Osborne Construction	Gillette, WY	2006	60 HDT	Evaporation/Storage	700,000
Williams Plumbing and Heating	Gardiner, MT	2005	60 HDT	Mine Cap	250,000
BP Amoco	Granger, WY	2005	60 HDT	Evaporation Ponds	350,000
Montana DEQ-Sierra Rock & Dirt	Wickes, MT	2006	60 mil HDPE/GCL	Reclamation pit	600,000
Sylvan Nursery	Billings, MT	2006	60 mil HDPE/Geotextile	Pond	10,500
Moltz Constructors	Tishomingo, OK	2006	60 mil HDPE	Canal Liner	44,500
Urbani and Associates	Livingston, MT	2006	60 mil HDPE	Pond	33,700
Dave Smith Contracting	Big Sky	2006	60 mil HDPE	Pond	12,000
Dave Smith Contracting	Big Sky	2006	40 mil HDPE	Pon	11,000
Construction Management Services	Bozeman, MT	2006	60 mil HDPE	Fire Pond	17,500
Townsend Brothers, LLC	White Sulphur Springs, MT	2006	40 mil HDPE	Ag Pond	63,700
Urbani and Associates	Wilsall, MT	2006	60 mil HDPE	Pond	55,400
Urbani and Associates	Townsend, MT	2006	60 mil HDPE/Geocompo:	Pond	27,100
Voorhees Excavation	Absarokee, MT	2006	60 mil HDPE	Lagoon containment	19,600
Otrogge Construction	Absarokee, MT	2006	40 mil HDPE	Pond	15,000
DJ Engineering	Three Forks, MT	2006	60 mil HDPE	Livestock Ponds	12,400
Eoff Construction	Three Forks, MT	2006	60 mil HDPE	Pond	132,000
Farris Enterprises	Whitefish, MT	2006	60 mil HDPE	Fire Pond	72,000
Flathead County Solid Waste District	Kalispell, MT	2006	60 mil HDPE/GCL/Geote	Landfill	1,064,000
Dave Smith Contracting	Big Sky, MT	2006	40 mil HDPE/Geotextile	Pond	36,000
Hy Adelman	Bozeman, MT	2006	36 mil RPP	Pond	10,000

Headwater Lining
256 High-K Street
Belgrade, MT 59714

Project Experience

Square Feet Installed

Headwater Lining

Customer/Contractor Name	Location	Date work Performed	Material Installed	Project Type	Square Footage
Milford Colony	Augusta, MT	2006	60 mil HDPE/Geotex	AG Waste Pond	220,000
Montana Ponds & Streams	Bozeman, MT	2006	60 mil HDPE/Geotex	Pond	27,000
Wisdom Wastewater Districts	Wisdom, MT	2006	36 mil RPP/Geotex	Wastewater Ponds	500,000
Rick Moronick	East Helena, MT	2006	45 RPP/Geotex/GCL	Ponds	15,000
Urbani & Assoc.--Rainbow Ranch	Big Sky, MT	2006	60 mil HDPE/Geotex	Pond	34,000
Urbani & Assoc.--Woods	Bozeman, MT	2006	60 mil HDPE	Pond	22,000
Wiliams Plumbing--Bickerstaff	Bozeman, MT	2006	40 mil HDPE/Geotextile	Pond	36,000
Williams Plumbing--Dairyland Farms	Bozeman, MT	2006	40 mil HDPE	Ag Waste Ponds	80,000
Williams Plumbing--Sally Uhlman	Bozeman, MT	2006	60 mil HDPE	Pond	90,000
Wyoming Landscape Contractors	Jackson, WY	2006	60 mil HDPE/Geotex	Pond	46,300
Montana DEQ-Sierra Rock & Dirt	Wickes, MT	2006-2007	GCL/Geocomposite	Reclamation Cap	630,000
Anadarko--Earthwork Solutions	Gillette, WY	2007	60 mil HDPE/Geotex	Evaporation Ponds	90,000
Willams Plumbing--Snowy River.	Three Forks, MT	2007	60 HDPE/Geotx/GeoCP	Detention Pond	105,000
Urbani & Assoc.--Conisi Ponds	Easton, CT	2007	30 mil PVC/GCL/Geotex	Ponds	75,000
Urbani & Assoc.--Reynolds Pass	Ennis, MT	2007	60 mil HDPE/Geotex	Pond	92,000
Urbani & Assoc.--Hollenback	Superior, MT	2007	60 mil HDPE/Geotex	Detention Ponds	128,000
Moltz Construction--Boring Pond	Cody, WY	2007	40 mil HDPE/Geotex	Pond	80,000
Urbani & Assoc.--3 Creek GC	Jackson, WY	2007	60 mil HDPE/Geotex	Pond	300,000
Biota--Huhn Residence	Pinedale, WY	2007	60 mil HDPE/Geotex	Pond	132,000
Westwood Curtis--Boreczky	Jackson, WY	2007	60 mil HDPE/Geotex	Pond	45,000
Williams Plumbing--Campbell	Bozeman, MT	2007	60 mil HDPE/Geotex	Ponds	75,000
CHS, Inc.--Missoula Fuel Farm	Missoula, MT	2007	60 mil HDPE/Geocomp	Secondary Containment	220,000
Chevron--Craig	Craig, CO	2007	30 mil PVC	Secondary Containment	26,000

Headwater Lining
256 High-K Street
Belgrade, MT 59714

Project Experience

Square Feet Installed

Headwater Lining

Customer/Contractor Name	Location	Date work Performed	Material Installed	Project Type	Square Footage
NRCS--Huls Dairy	Hamilton, MT	2007	60 mil HDPE/Geotex	Ag Waste Pond	160,000
NRCS--Prewitt Feed Lot	Fairview, MT	2007	60 mil HDPE/Geotex	Ag Waste Pond	102,000
Earthworks--Rio Tinto Energy	Jacobs Ranch, WY	2007	60 mil HDPE/Geotex	Coal Ash Ponds	120,000
En Cana--Jonah Field Facilities	Jonah Field, WY	2007	60 mil HDPE	Evaporation Pond	90,000
Kirk Engineering--Millstream Mine	Sheridan, MT	2007	60 mil HDPE/GCL	Containment Pond	56,000
Melgaard Construction-Marathon Oi	Sheridan, WY	2007	60 mil HDPE/Geotex	Containment Pond	220,000
Rendevous Eng.--Petersen	Jackson, WY	2007	60 HD/Geotex/EPDM	Decorative Ponds	130,000
Alicia Lingle	Ennis, MT	2007	60 HDT/Geotex	Pond	45,000
Urbani & Assoc.--Young Residence	Big Sky, MT	2007	60 HD/Geotx/30 PVC	Ponds	42,000
Yellow Iron--Kerr Residence	Wilson, WY	2007	60 HD/Geotex	Pond	55,000
Yellow Iron--Woodside Subdivision	Jackson, WY	2008	60 HD/Geotex	Ponds	260,000
CHS, Inc.-Logan Fuel Farm	Logan, MT	2008	60HD/Geotex/Geocomp	Secondary Containment	350,000
Northern Antelope Rocelle Mine	Wright, WY	2008	40 mil HDPE	Coal Wash Pond	150,000
NRCS--Jones Canal	Glasgow, MT	2008	45 EPDM	Irrigation Canal	45,000
Williams Plumbing--Randy Bowe	Butte, MT	2008	60 HDPE/Geotex	Pond	120,000
Rendevous Eng.--Solitaire	Jackson, WY	2008	60 HDPE/Geotex	Pond	30,000
Moen Excavation-Madison Mining	Virginia City, MT	2008	60 HDPE/GCL	Containment Pond	34,000
Melgaard Construction-Willow Crk	Gillette, WY	2008	60 HDPE/Geotex	Evaporation Pond	80,000
NRCS--Springwater Colony	Harlowtown, MT	2008	60 HDPE/Geotex/GCL	Ag Waste Ponds	554,000
Yellow Iron--Reynolds Residence	Jackson, WY	2008	30 PVC/Geotex	Decorative Ponds	275,000
Firewise, Inc--Moose Creek	Wilson, WY	2008	60 HD/30 PVC	Pond & Stream	25,000
Westwood Curtis--Dodge Road	Teton Village, WY	2008	60 HD/30 PVC/Geotex	Pond & Stream	70,000
3 Creek Golf Course	Jackson, WY	2008	30 PVC	Pond	20,000

Headwater Lining
256 High-K Street
Belgrade, MT 59714

Project Experience

Square Feet Installed

Headwater Lining

Customer/Contractor Name	Location	Date work Performed	Material Installed	Project Type	Square Footage
NRCS--Pust Farm	Sidney, MT	2008	60 HD/Geotex	Ag Waste Pond	74,000
Yellowstone Club--Lot 309	Big Sky, WY	2008	60 HD/Geotex	Pond	66,000
Black Thunder Mine	Wright, WY	2008	60 HD/Geotex	Coal Wash Pond	120,000
Western Conservation--Springhill	Bozeman, MT	2008	30 PVC/Geotex	Pond	55,000
Caballo Mine	Gillette, WY	2008	60 HDPE/Geotex	Secondary Containment	12,000
Williams Plumbing--MSU Snowmake	Lewiston, MT	2008	36 RPP/Geotex	Storage Pond	60,000
Rawhide Mine	Gillette, WY	2008	60 HDPE/Geotex	Secondary Containment	19,000
Northern Antelope Rochelle Mine	Wright, WY	2008	60 HDPE/Geotex	Coal Wash Pond	207,000
Earthwork Solutions--Utran Facility	Upton, WY	2008	60 HDPE/Geotex	Tank Farm Containment	42,000
Billings Water Association	Billings, MT	2009	60 HDPE/Geotex	Canal	145,000
NRCS--Elk Creek Colony	Augusta, MT	2009	60 HDPE	Wastewater Ponds	205,000
Yellow Iron--Bar B Bar Ranch	Jackson, WY	2009	60 HDPE/Geotex/Comp	Pond	315,000
Encana Oil & Gas	Jonah Field, WY	2009	40/60 HDPE/Geonet/GT	Processed Water Storage	140,000
BP Amoco	Granger, WY	2009	40/60 HDPE/Geonet/GT	Processed Water Storage	330,000
Brady WWTP	Brady, MT	2009	60 HDPE/Geocomp	Wastewater Ponds	300,000
Billings Landfill	Billings, MT	2009	60 HDPE/Geotex	Landfill	834,000
Chester Raw Water Storage	Chester, MT	2009	60 HDPE	Water Storage	350,000
Granger WWTP	Granger, WY	2009	45 RPP/Geotex/Mech	Wastewater Pond	45,000
Centana Feedlot	Joilet, MT	2009	60 HDPE	Ag Waste Ponds	225,000
Earthwork Solutions	Gillette, WY	2009	60 HDPE/Mechanical	Tank Farm Containment	46,000
Encana Oil & Gas	Parachute, CO	2010	40/60 HDPE/Geonet	Processed Water Storage	98,000
Exxon	Billings, MT	2010	60 HDPE/Mechanical	Containment	150,000
Encana Oil & Gas	Rifle, CO	2010	40/60 HDPE/Geotex	Water Storage	365,000

Headwater Lining
256 High-K Street
Belgrade, MT 59714

Project Experience

Square Feet Installed

Headwater Lining

Customer/Contractor Name	Location	Date work Performed	Material Installed	Project Type	Square Footage
Bainter Excavation	Livingston, MT	2010	60 HDPE	Pond	20,000
BNSF Haslet	Haslet, TX	2010	80 mil HDPE Conductive	Pond	57,600
BNSF Haslet	Haslet, TX	2010	60 HDPE	Pond	6,120
Basin Electric, Dry Fork Station	Gillette, WY	2010	60 mil RPP	Pond	130,000
Hillcrest Coloy	Power, MT	2010	60 mil HDPE/ 8 oz GeoT	Pond	104,000
Encana Oil & Gas	Parachute, CO	2010	60 mil HDPE / 8 oz		332,762
Denver International Airport	Denver, CO	2010	60 mill RPP		138,488
Total Experience for Headwater Lining and Field Supervisor					**47,881,270**

WyMont Construction, Inc.
Headwater Lining
Workmanship Limited Warranty

Headwater Lining warrants for "normal use" the workmanship of its installation of the **60 Mil PVC** infield seams to be free from defects for a period from the date of in-field substantial completion of field work seaming until _____ 201_ subject to each and all of the following definitions, limitations, disclaimers, terms and conditions.

The term "Installer" shall refer solely to Headwater Lining and/or it's duly authorized agents or representatives. The term "Customer / Project Owner" shall refer to any of the following persons or entities: _____

The term "in-field seam(s)", as used herein, means only those seams used to fit, attach and secure the liner, as originally installed by Headwater Lining or its authorized agents, and does not include any subsequent alteration, modification, re-manufacture, or other change in the original assembly and condition of the seams so installed, by any person, for any reason. If any in-field seam of the **60 Mil Liner System,** as originally installed by Headwater Lining, are altered for any reason, after the initial installation by Headwater Lining personnel or authorized agents, whether by Installee or any other person or entity, the entire Limited Warranty as granted herein shall be NULL AND VOID thereafter.

The term "normal weathering and use", as used herein, specifically excludes exposure of the **60 Mil Liner System** to winds in excess of 30 miles per hour in all circumstances and which is specifically excluded from this Limited Warranty.

The term "normal weathering and use" also does not include, among other things: exposure to harmful and/or caustic chemicals; abuse of the **60 Mil Liner System** by machinery or equipment; specifically, but not limited to, damage done to lining system resulting from covering the membrane with soil or other materials, damage due to people or animals, or application of excessive pressures from any source; nor exposure to any other abnormal stresses from any source which exceed the physically specified strengths of the material used to construct the membrane. This Limited Warranty is intended for commercial use only and is not in effect for a "consumer" as defined in the Magnuson-Moss Warranty Act or any similar federal, state, or local statues.

This Workmanship Warranty is limited to the installation of the **60 Mil PVC System** only and HEADWATER LINING makes no warranties with respect to the Carlisle Liner System itself.

This Limited Warranty does not include damage or defects in the **60 Mil Liner System** workmanship installation caused by Acts of God, or by casualty or catastrophe, including, but not limited to fire, earthquakes, floods, piercing hail, tornadoes or force majeure.

This Workmanship Warranty does not include any damages or defects in the liner system itself, except to the extent solely caused by Headwater Lining installation of the Liner System. Should defects or premature loss of use within the scope of the above Workmanship Warranty occur, HEADWATER LINING will repair the **60 Mil Liner System**. HEADWATER LINING will have the right to inspect and determine the cause of any alleged defect in the installation of the Liner System and to take appropriate steps to repair the Liner System if a covered defect exists and is within the term of this Workmanship Warranty.

Headwater Lining shall have reasonable access to the site, as often as quarterly, upon notice to site personnel during the term of this limited warranty to inspect the covered **60 Mil Liner System** for any signs of potential warranty work. The site agrees to inform Headwater Lining of any pending damage to the geomembrane as soon as it is noticed to mitigate the cost of repair. Any claim for any alleged breach of warranty must be submitted in writing, by certified mail, to the Managing Member of Headwater Lining within Ten (10) days after the first notice of an alleged defect. Should the required notice not be given, the defect and all warranties shall be deemed to

have been WAIVED by the Installee and the Installee shall have no right of recovery against Headwater Lining, nor its agents, principals or assigns. In the event repairs or replacements are to be provided, said repairs and/or replacements shall not become due until the area subject to replacement or repair is available to Headwater Lining, in a clean, dry, unencumbered condition wherein work can be safely performed. This includes, but is not limited to, a requirement that the area made available for repair or replacement and be reasonably free from water, dirt, sludge, residuals and liquids of any kind.

Headwater Lining's liability under this warranty shall in no event EXCEED the REPLACEMENT COST of the geomembrane material sold to the Installee. Further, under no circumstances shall Headwater Lining be liable for any special, direct, indirect or consequential damages or losses arising form loss of production, loss of goods or product or any other losses, including losses due to personal injuries and product liability owing to the failure of the material. No allowance will be made for repairs, replacements or alterations made by the Installee without the express written consent of Headwater Lining. Headwater Lining neither assumes nor authorizes any person other than an officer of Headwater Lining to assume any other additional liability in connection with the **60 Mil Liner System**.

This Limited Warranty is given in lieu of all other possible warranties, wither expressed or implied, and by accepting delivery of the material, Purchaser waives all other possible warranties, except those specifically given.

This Workmanship Warranty is made to the original Purchaser and is non-transferable and non-assignable.

Headwater Lining makes no warranty of any kind other than that given above and hereby disclaims all warranties, both expressed or implied of merchantability and fitness for a particular purpose.

It is understood and agreed that if this warranty is not signed by a duly authorized representative of the "Customer/Project Owner", and the original returned to Headwater Lining, within Ten (10) days, the warranty will be voided. Further no warranty is given on any installation which has not been paid in-full, per original quote terms, contract dates or in absence of such documents, the work must be paid for within 30 days of original invoice date including retainage.

I hereby state I have read and understand the above and foregoing Limited Warranty and agree to the limited warranty by signing hereunder.

Customer/ Project Owner: _____

Signature _____ Date _____

Installer: Headwater Lining LLC

Signature _____ Date _____

APPENDIX G

Project Closeout Documents

CONTRACTOR'S CERTIFICATE OF COMPLETION

TO (Owner): Montana DEQ

DATE: October 25, 2012

PROJECT TITLE: Beal Mountain Mine: Pond Removals and Run-On Control Reclamation Project

DEQ Contract No. 413006

ATTN: Engineer, Mike Hatten, Tetra Tech

CONTRACT DATE: August 8, 2012

FROM: Schnell Excavating, Inc.
(Firm or Corporation)

This is to certify that I, Larry Schnell, am an authorized official of Schnell Excavating, Inc., working in the capacity of President and have been properly authorized by said firm or corporation to sign the following statements pertaining to the subject contract:

I know of my own personal knowledge, and do hereby certify, that the work of the contract described above has been performed, and materials used and installed in every particular, in accordance with, and in conformity to, the Contract Plans and Specifications.

The contract work is now complete in all parts and requirements and ready for your substantial completion inspection.

I understand that neither the determination of the Engineer that the work is complete nor the acceptance thereof by the Owner shall operate as a bar to claim against the Contractor under the terms of the guarantee provisions of the Contract Documents.

CONTRACTOR: Larry Schnell Schnell Excavatin

By: Larry Schnell Pres
Title

Distribution:
1. Project Manager
2. Engineer
3. File

AFFIDAVIT ON BEHALF OF CONTRACTOR

STATE OF Montana)
: ss
COUNTY OF Silver Bow)

DEQ Contract No.: 413006

DATE: October 25, 2012

I certify to the best of my knowledge and belief that all work has been performed and materials supplied in strict conformance with the terms and conditions of the corresponding contract documents between Montana Department of Environmental Quality, the Owner, and Schnell Excavating, Inc., the Contractor, dated August 8, 2012 for the Beal Mountain Mine: Pond Removals and Run-On Control Reclamation Project, DEQ Contract No. 413006, and further declare that all bills for materials, supplies, utilities, and for all other things furnished or caused to be furnished by the above-named Contractor and used in the execution of the above Contract have been fully paid, and there are no unpaid claims or demands of State Agencies, subcontractors, material, men, mechanics, laborers or any others resulting from or arising out of work done or ordered to be done by said Contractor under the above-identified Contract.

In consideration of the prior and final payments made and all payments made for authorized changes, the Contractor releases and forever discharges the Owner from any and all obligations and liabilities arising by virtue of said Contract and authorized changes between the parties hereto, either verbal or in writing, and any and all claims and demands of every kind and character whatsoever against the Owner, arising out of or in any way relating to said Contract, and authorized changes.

This affidavit is made for the purpose of inducing the Owner to make Final Payment under the terms of the Contract, relying on the truth and statements contained therein.

Dated this 26th day of October, 2012, at Butte, Montana.

CONTRACTOR: Schnell Excavating, Inc.

By: Jan Schnell
Title: Secretary

Subscribed and sworn to before me this 26 day of October, 2012.

(SEAL)

RICHARD C. O'LEARY, III
NOTARY PUBLIC for the
State of Montana
Residing at Butte, Montana
My Commission Expires
October 15, 2014

Notary Public for the State of Montana
Residing at Butte
My commission expires 10/15/2014

CONSENT OF SURETY COMPANY TO FINAL PAYMENT

(From AIA Document G707)

OWNER	[ ]
ENGINEER	[ ]
CONTRACTOR	[ ]
SURETY	[ ]
OTHER	

PROJECT: Beal Mountain Mine: Pond Removals and Run-On Control Reclamation Project

TO (Owner)
Montana Dept. of Environmental Quality
Remediation Division
Abandoned Mine Lands Bureau
P.O. Box 200901
Helena, MT 59620-0901

DEQ Contract No.: 413006

CONTRACT FOR: Reclamation Construction

CONTRACT DATE: August 8, 2012

CONTRACTOR: Schnell Excavating, Inc.

In accordance with the provisions of the contract between the Owner and the Contractors indicated above,

The, Westchester Fire Insurance Company, SURETY COMPANY, on bond of, Schnell Excavating, Inc., CONTRACTOR, hereby approves of the final payment to the Contractor, and agrees that final payment to the Contractor shall not relieve the Surety Company of any of its obligations to Montana Department of Environmental Quality, P.O. Box 200901, Helena, MT 59620-0901, OWNER, as set forth in the said Surety Company's bond.

IN WITNESS WHEREOF, the Surety Company has hereunto set its hand this 25 day of OCTOBER, 2012.

Westchester Fire Insurance Company
Surety Company

Attest:
(Seal)

Signature of Authorized Representative

ATTORNEY-IN-FACT
Title

NOTE: This form is to be used as a companion document to the Affidavit on Behalf of Contractor (current edition)

CERTIFICATE OF ACCEPTANCE

TO: State of Montana, Department of Environmental Quality (OWNER)

PROJECT TITLE: Beal Mountain Mine: Pond Removals and Run-On Control Reclamation Project

DEQ Contract No. 413006
CONTRACT DATE: August 8, 2012
LOCATION: Beal Mountain Mine, Silver Bow County
PROJECT OR PART SHALL INCLUDE: Beal Mountain Mine – Pond Removals and Run-On Control Ditch Construction
CONTRACTOR: Schnell Excavating, Inc.,
ADDRESS: 122133 Nissler Rd., Butte, MT 59701
TELEPHONE NO: (406) 723-5700

FINAL ACCEPTANCE DATE: November 2, 2012
DEQ INSPECTION DATE: October 25, 2012
ENGINEER: Tetra Tech. Inc.

PERFORMANCE BOND NO: KO861233A
DATE OF BOND: August 8, 2012
SURETY: Westchester Fire Insurance Company

MONTANA AGENT: Jonathan Emmons

ADDRESS: Payne Financial Group, 1200 N. Montana Ave Helena, MT 59601

The Work performed under this Contract has been inspected by authorized representatives of the Owner, Contractor, and Engineer, and the Project (or specified part of the Project, as indicated above) is hereby declared to be totally completed and accepted on the above date.

ENGINEER: Tetra Tech, Inc.

By Michael Letts 10/25/12
Authorized Representative Date

The Contractor accepts the above Certificate of Acceptance and agrees to abide by the conditions of the one-year warranty period which began on the substantial completion date.

CONTRACTOR: Schnell Excavating, Inc.

By Larry Schnell 10-25-12
Authorized Representative Date

The Owner accepts the Project as totally complete, and final payment is due to the Contractor as provided in the contract documents.

OWNER: Montana Department of Environmental Quality

By Pebbles Opp 11/2/12
Authorized Representative Date

APPENDIX H

Payment Requests

DEQ PAYMENT REQUEST

PAYMENT REQUEST NO. 1 **PAYMENT PERIOD: 08/21/12**
PROJECT NAME: Beal Mountain Mine Pond Removals & Run-On Control **DEQ CONTRACT NO.: 413006**
NAME OF THE CONTRACTOR: Schnell Excavating, Inc.
ADDRESS OF THE CONTRACTOR: 122133 Nissler Rd., Butte, MT 59701

PAYMENT SUMMARY INFORMATION							
DATE	PAYMENT REQUEST #	EARNED	RETAINAGE WITHHELD*	RETAINAGE RELEASED	GROSS PAYMENT	TAX 1%	NET PAYMENT
	1	$ 38,450.23	$ 2,922.51		$ 35,527.72	$ 355.28	$ 35,172.44
			$ -		$ -	$ -	$ -
			$ -		$ -	$ -	$ -
			$ -		$ -	$ -	$ -
	FINAL REQUEST			$ -	$ -	$ -	$ -
TOTAL TO DATE		$ 38,450.23	$ 2,922.51	$ -	$ 35,527.72	$ 355.28	$ 35,172.44

DATE	CONTRACT PRICE SUMMARY	
8/2/2012	Orignial	$ 68,049.66
9/21/2012	CO #1	$ 23,066.00
CONTRACT PRICE TO DATE		$ 91,115.66

MISCELLANEOUS INFORMATION	
TOTAL UNCOMPLETED TO DATE	57.80%
PERCENT COMPLETE TO DATE	42.20%

*RETAINAGE WITHHELD IS 5% PLUS $1,000
LIGHTLY SHADED AREAS ARE AUTOMATICALLY CALCULATED

CURRENT PAYMENT REQUEST		
EARNED	$	38,450.23
RETAINAGE WITHHELD	$	2,922.51
RETAINAGE RELEASED	$	-
GROSS PAYMENT	$	35,527.72
TAX (1%)	$	355.28
NET PAYMENT	$	35,172.44

REQUESTED BY: CONTRACTOR: Schnell Excavating Inc
SIGNATURE: [signature]
DATE: 9-28-12

RECOMMENDED BY: ENGINEER: Michael Hatto
COMPANY: Tetra Tech
DATE: 9/27/12

APPROVED BY: OWNER: MT DEQ
SIGNATURE: [signature]
DATE: 09/28/12

Beal Mountain Mine - Pond Removals & Run-on Control Reclamation Project, DEQ Contract No.413006								
BID ITEMS				Schnell Excavating, Inc.		Pay Request No. 1 Totals		
Bid Item	*ESTIMATED QUANTITY*	*UNIT*	*DESCRIPTION*	*UNIT PRICE*	*TOTAL PRICE*	*% Complete*	*Quantity*	*Present Dollars*
1	***Beal Mountain Mine: Pond Removals and Run-On Control Reclamation Project Mobilization***							
1	1	LS	Mobilization, Demobilization, Bonding, and Insurance	$ 3,943.00	$ 3,943.00	50.0%	0.5	$ 1,971.50
2	**Beal Mountain Mine Minnesota Pond Removal**							
2-A	1	LS	Pond Dewatering	$ 500.00	$ 500.00	100.0%	1.0	$ 500.00
2-B	4	Ton	Debris Removal and Disposal	$ 125.00	$ 500.00	195.0%	7.8	$ 975.00
2-C	150	CY	Strip and Stockpile Topsoil	$ 15.00	$ 2,250.00	119.3%	179.0	$ 2,685.00
2-D	3900	CY	Regrade Pond Area	$ 2.00	$ 7,800.00	0.0%	0.0	$ -
2-E	150	CY	Replace and Grade Topsoil	$ 10.00	$ 1,500.00	119.3%	179.0	$ 1,790.00
2-F	1.25	AC	Fertilize and Seed	$ 723.60	$ 904.50	0.0%	0.0	$ -
2-G	5111	SY	Erosion Control	$ 1.98	$ 10,119.78	0.0%	0.0	$ -
2-H	290	LF	Straw Wattles	$ 2.30	$ 667.00	0.0%	0.0	$ -
3	**Beal Mountain Mine Storm Water Pond Removal**							
3-A	1	LS	Remove and Stockpile Riprap	$ 400.00	$ 400.00	100.0%	1.0	$ 400.00
3-B	0.5	Ton	Debris Removal and Disposal	$ 400.00	$ 200.00	0.0%	0.0	$ -
3-C	1435	CY	Regrade Pond Area	$ 2.00	$ 2,870.00	0.0%	0.0	$ -
3-D	0.5	AC	Fertilize and Seed	$ 723.60	$ 361.80	0.0%	0.0	$ -
3-E	2138	SY	Erosion Control	$ 1.98	$ 4,233.24	0.0%	0.0	$ -
3-F	365	LF	Straw Wattles	$ 2.30	$ 839.50	107.4%	392.0	$ 901.60
4	**Beal Mountain Mine Contingency Pond Removal**							
4-A	3	Ton	Debris Removal and Disposal	$ 134.00	$ 402.00	233.3%	7.0	$ 938.00
4-B	700	CY	Regrade Pond Area	$ 2.00	$ 1,400.00	0.0%	0.0	$ -
4-C	0.5	AC	Fertilize and Seed	$ 723.60	$ 361.80	0.0%	0.0	$ -
4-D	1784	SY	Erosion Control	$ 1.98	$ 3,532.32	0.0%	0.0	$ -
4-E	260	LF	Straw Wattles	$ 2.30	$ 598.00	137.3%	357.0	$ 821.10
Alternative 1	**Beal Mountain Mine Run-On Controls**							
A-1	1	LS	Regrade Access Road	$ 500.00	$ 500.00	100.0%	1.0	$ 500.00
A-2	150	CY	Excavate Run-on Control Ditch	$ 18.67	$ 2,800.50	139.3%	209.0	$ 3,902.03
A-3	634	LF	Run-on Control Ditch Construction	$ 33.13	$ 21,004.42	0.0%	0.0	$ -
A-4	0.5	AC	Fertilize and Seed	$ 723.60	$ 361.80	0.0%	0.0	$ -
CO #1			WD#1: Top soil, WD#2: Check Dam Removal, Stream Reconstruction, Reclamation, WD#3: Additional grading					$ 23,066.00
			TOTAL BID		$ 68,049.66			
			PERCENT COMPLETE			42.2%		$ 38,450.23
			CHANGE ORDER NO. 1 CONTRACT PRICE		$ 91,115.66			
			FINAL CONTRACT PRICE					

DEQ PAYMENT REQUEST

PAYMENT REQUEST NO. 12 **PAYMENT PERIOD: 09/28/12-10/25/12**
PROJECT NAME: Beal Mountain Mine Pond Removals & Run-On Control **DEQ CONTRACT NO.: 413006**
NAME OF THE CONTRACTOR: Schnell Excavating, Inc.
ADDRESS OF THE CONTRACTOR: 122133 Nissler Rd., Butte, MT 59701

PAYMENT SUMMARY INFORMATION							
DATE	PAYMENT REQUEST #	EARNED	RETAINAGE WITHHELD*	RETAINAGE RELEASED	GROSS PAYMENT	TAX 1%	NET PAYMENT
9/27/2012	1	$ 38,450.23	$ 2,922.51		$ 35,527.72	$ 355.28	$ 35,172.44
			$ -		$ -	$ -	$ -
			$ -		$ -	$ -	$ -
			$ -		$ -	$ -	$ -
10/31/2012	**FINAL REQUEST**	$ 83,203.25		$ 2,922.51	$ 86,125.76	$ 861.26	$ 85,264.50
TOTAL TO DATE		$ 121,653.48	$ 2,922.51	$ 2,922.51	$ 121,653.48	$ 1,216.54	$ 120,436.94

DATE	CONTRACT PRICE SUMMARY	
8/2/2012	Orignial	$ 68,049.66
9/21/2012	CO #1	$ 23,066.00
10/31/2012	CO#2	$ 25,960.00
10/31/2012	CO#3	$ 4,577.82
CONTRACT PRICE TO DATE		$ 121,653.48

MISCELLANEOUS INFORMATION	
TOTAL UNCOMPLETED TO DATE	0.00%
PERCENT COMPLETE TO DATE	100.00%

*RETAINAGE WITHHELD IS 5% PLUS $1,000

LIGHTLY SHADED AREAS ARE AUTOMATICALLY CALCULATED

CURRENT PAYMENT REQUEST		
EARNED	$	83,203.25
RETAINAGE WITHHELD	$	-
RETAINAGE RELEASED	$	2,922.51
GROSS PAYMENT	$	86,125.76
TAX (1%)	$	861.26
NET PAYMENT	$	85,264.50

REQUESTED BY: CONTRACTOR: Schnell Excavating Inc
SIGNATURE: [signature]
DATE: 10-31-12

RECOMMENDED BY: ENGINEER: Michael Hatton
COMPANY: Tetra Tech, Inc.
DATE: 11/1/12

APPROVED BY: OWNER: MT DEQ
SIGNATURE: Pebbles Opp
DATE: 11/2/12

Beal Mountain Mine - Pond Removals & Run-on Control Reclamation Project, DEQ Contract No.413006

BID ITEMS				Schnell Excavating, Inc.		Pay Request No. 1 Totals			Pay Request No. 2 Totals			Totals			Reconciliation	
Bid Item	*ESTIMATED QUANTITY*	*UNIT*	*DESCRIPTION*	*UNIT PRICE*	*TOTAL PRICE*	*% Complete*	*Quantity*	*Present Dollars*	*% Complete*	*Quantity*	*Present Dollars*	*% Complete*	*Quantity*	*Present Dollars*	*Quantity Change*	*Cost Change*
1	***Beal Mountain Mine: Pond Removals and Run-On Control Reclamation Project Mobilization***															
1	1	LS	Mobilization, Demobilization, Bonding, and Insurance	$ 3,943.00	$ 3,943.00	50.0%	0.5	$ 1,971.50	50.0%	0.5	$ 1,971.50	100.0%	1.0	$ 3,943.00	0.0	$ -
2	**Beal Mountain Mine Minnesota Pond Removal**															
2-A	1	LS	Pond Dewatering	$ 500.00	$ 500.00	100.0%	1.0	$ 500.00	0.0%	0.0	$ -	100.0%	1.0	$ 500.00	0.0	$ -
2-B	4	Ton	Debris Removal and Disposal	$ 125.00	$ 500.00	195.0%	7.8	$ 975.00	152.5%	6.1	$ 762.50	347.5%	13.9	$ 1,737.50	9.9	$ 1,237.50
2-C	150	CY	Strip and Stockpile Topsoil	$ 15.00	$ 2,250.00	119.3%	179.0	$ 2,685.00	0.0%	0.0	$ -	119.3%	179.0	$ 2,685.00	29.0	$ 435.00
2-D	3900	CY	Regrade Pond Area	$ 2.00	$ 7,800.00	0.0%	0.0	$ -	94.9%	3702.0	$ 7,404.00	94.9%	3702.0	$ 7,404.00	-198.0	$ (396.00)
2-E	150	CY	Replace and Grade Topsoil	$ 10.00	$ 1,500.00	119.3%	179.0	$ 1,790.00	0.0%	0.0	$ -	119.3%	179.0	$ 1,790.00	29.0	$ 290.00
2-F	1.25	AC	Fertilize and Seed	$ 723.60	$ 904.50	0.0%	0.0	$ -	80.0%	1.0	$ 723.60	80.0%	1.0	$ 723.60	-0.3	$ (180.90)
2-G	5111	SY	Erosion Control	$ 1.98	$ 10,119.78	0.0%	0.0	$ -	92.6%	4731.0	$ 9,367.38	92.6%	4731.0	$ 9,367.38	-380.0	$ (752.40)
2-H	290	LF	Straw Wattles	$ 2.30	$ 667.00	0.0%	0.0	$ -	0.0%	0.0	$ -	0.0%	0.0	$ -	-290.0	$ (667.00)
3	**Beal Mountain Mine Storm Water Pond Removal**															
3-A	1	LS	Remove and Stockpile Riprap	$ 400.00	$ 400.00	100.0%	1.0	$ 400.00	0.0%	0.0	$ -	100.0%	1.0	$ 400.00	0.0	$ -
3-B	0.5	Ton	Debris Removal and Disposal	$ 400.00	$ 200.00	0.0%	0.0	$ -	0.0%	0.0	$ -	0.0%	0.0	$ -	-0.5	$ (200.00)
3-C	1435	CY	Regrade Pond Area	$ 2.00	$ 2,870.00	0.0%	0.0	$ -	58.5%	839.0	$ 1,678.00	58.5%	839.0	$ 1,678.00	-596.0	$ (1,192.00)
3-D	0.5	AC	Fertilize and Seed	$ 723.60	$ 361.80	0.0%	0.0	$ -	100.0%	0.5	$ 361.80	100.0%	0.5	$ 361.80	0.0	$ -
3-E	2138	SY	Erosion Control	$ 1.98	$ 4,233.24	0.0%	0.0	$ -	118.9%	2542.0	$ 5,033.16	118.9%	2,542.0	$ 5,033.16	404.0	$ 799.92
3-F	365	LF	Straw Wattles	$ 2.30	$ 839.50	107.4%	392.0	$ 901.60	0.0%	0.0	$ -	107.4%	392.0	$ 901.60	27.0	$ 62.10
4	**Beal Mountain Mine Contingency Pond Removal**															
4-A	3	Ton	Debris Removal and Disposal	$ 134.00	$ 402.00	233.3%	7.0	$ 938.00	83.3%	2.5	$ 335.00	316.7%	9.5	$ 1,273.00	6.5	$ 871.00
4-B	700	CY	Regrade Pond Area	$ 2.00	$ 1,400.00	0.0%	0.0	$ -	171.7%	1202.0	$ 2,404.00	171.7%	1,202.0	$ 2,404.00	502.0	$ 1,004.00
4-C	0.5	AC	Fertilize and Seed	$ 723.60	$ 361.80	0.0%	0.0	$ -	140.0%	0.7	$ 506.52	140.0%	0.7	$ 506.52	0.2	$ 144.72
4-D	1784	SY	Erosion Control	$ 1.98	$ 3,532.32	0.0%	0.0	$ -	184.2%	3286.0	$ 6,506.28	184.2%	3,286.0	$ 6,506.28	1,502.0	$ 2,973.96
4-E	260	LF	Straw Wattles	$ 2.30	$ 598.00	137.3%	357.0	$ 821.10	0.0%	0.0	$ -	137.3%	357.0	$ 821.10	97.0	$ 223.10
Alternative 1	**Beal Mountain Mine Run-On Controls**															
A-1	1	LS	Regrade Access Road	$ 500.00	$ 500.00	100.0%	1.0	$ 500.00	0.0%	0.0	$ -	100.0%	1.0	$ 500.00	0.0	$ -
A-2	150	CY	Excavate Run-on Control Ditch	$ 18.67	$ 2,800.50	139.3%	209.0	$ 3,902.03	0.0%	0.0	$ -	139.3%	209.0	$ 3,902.03	59.0	$ 1,101.53
A-3	634	LF	Run-on Control Ditch Construction	$ 33.13	$ 21,004.42	0.0%	0.0	$ -	95.7%	607.0	$ 20,109.91	95.7%	607.0	$ 20,109.91	-27.0	$ (894.51)
A-4	0.5	AC	Fertilize and Seed	$ 723.60	$ 361.80	0.0%	0.0	$ -	22.0%	0.1	$ 79.60	22.0%	0.11	$ 79.60	-0.4	$ (282.20)
CO #1			WD#1: Top soil, WD#2: Check Dam Removal, Stream Reconstruction, Reclamation, WD#3: Additional grading					$ 23,066.00				100.0%		$ 23,066.00		
CO #2			WD#4: Top soil for ponds, WD#5: Road Grading,								$ 25,960.00	100.0%		$ 25,960.00		
CO #3			Reconciliation													$ 4,577.82
			TOTAL BID		$ 68,049.66											
			TOTAL COMPLETE			42.2%		$ 38,450.23	71.1%		$ 83,203.25	103.9%		$ 121,653.48		
			CHANGE ORDER NO. 1 CONTRACT PRICE		$ 91,115.66											
			CHANGE ORDER NO. 2 CONTRACT PRICE		$ 117,075.66											
			CHANGE ORDER NO. 3 CONTRACT PRICE		$ 121,653.48											
			FINAL CONTRACT PRICE		**$ 121,653.48**											

APPENDIX I

Work Directives and Change Orders

CHANGE ORDER

ORDER NO. 1

PROJECT TITLE: Beal Mountain Mine: Pond Removals and Run-on Control Reclamation Project

DEQ Contract No. 413006

CONTRACT DATE: August 8, 2012

OWNER: Montana Department of Environmental Quality

CONTRACTOR: Schnell Excavating, Inc.

Change Orders must include an itemized cost breakdown. You shall comply with the following changes from the Contract Documents. (Show separate costs for materials, labor, equipment, and miscellaneous. Show percent where applicable.)

ITEM NO.	DESCRIPTION OF CHANGES - ESTIMATED QUANTITIES & UNITS	COST OF CHANGES					TOTAL COST
		MAT'LS.	LABOR	EQUIP.	MISC.	TOTAL UNIT COST	
1-1	Work Directive No. 1: Supply and transport 60 cy of cover soil to site. 1 Contract day added.	-	-	-	-	$900.00	$900.00
1-2	Work Directive No. 2: Check dam removal, stream reconstruction, and associated reclamation. 14 Contract days added.	-	-	-	-	$21,766.00	$21,766.00
1-3	Work Directive No. 3: Remobilize equipment and complete additional grading at Storm Water Pond work area.	-	-	-	-	$400.00	$400.00
						TOTAL COST	$23,066.00
						GRAND TOTAL - THIS CHANGE ORDER	$23,066.00

TOTAL PRICE (IN WORDS): Twenty three thousand sixty six dollars and no cents

Original Contract Price: $68,049.66

Current Contract Price Adjusted by Previous Change Order: $68,049.66

Cost this Change Order (+ or -_): + $23,066.00

New Contract Price including this Change Order: $91,115.066

Rev. 6/04

The completion date as set forth in the Contract Documents shall be (unchanged, increased, decreased) by 18 calendar days.

The date for completion of all work will be October 1, 2012.

Description and Justification for Change:

1. Work Directive No. 1: Topsoil material that was free of sharp rocks was brought in so that the liner material could be installed according the manufactures specifications. The onsite material speced to be placed was too rocky and may have possible caused the liner to puncture.

2. A diversion dam associated with the Contingency Pond was removed, the stream channel was reconstructed, and this area was reclaimed.

3. Additional grading at the Storm Water pond work area was necessary as to achieve a more natural looking topography. This additional grading was requested by project representatives.

SURETY CONSENT

The Surety hereby consents to the aforementioned Contract Change Order and agrees that its bond or bonds shall apply and extend to the Contract as thereby modified or amended per this Change Order. The Principal and the Surety further agree that on or after execution of this consent, the penalty of the applicable Performance Bonds or Bonds is hereby increased by $23,066.00 (100 percent of the Change Order amount) and the penalty of the applicable Labor and Material Bond or Bonds is hereby increased by $23,066.00 (100 percent of the Change Order amount).

COUNTERSIGNED BY MONTANA RESIDENT AGENT

Kyle Hager

SURETY

Westchester Fire Insurance Company

By: Kyle Hager

Seal

Kyle Hager, Attorney-in-Fact

Recommended by: Michael Hall — Engineer — 9/28/12 Date

Accepted by: Larry Schell — Contractor — 9/26/12 Date

Approved by: Pebble Opp — Owner — 9/28/12 Date

Rev. 6/04

Power of Attorney

WESTCHESTER FIRE INSURANCE COMPANY

Know all men by these presents: That **WESTCHESTER FIRE INSURANCE COMPANY**, a corporation of the Commonwealth of Pennsylvania pursuant to the following Resolution, adopted by the Board of Directors of the said Company on December 11, 2006, to wit:

"RESOLVED, that the following authorizations relate to the execution, for and on behalf of the Company, of bonds, undertakings, recognizances, contracts and other written commitments of the Company entered into the ordinary course of business (each a "Written Commitment")

(1) Each of the Chairman, the President and the Vice Presidents of the Company is hereby authorized to execute any Written Commitment for and on behalf of the Company, under the seal of the Company or otherwise.

(2) Each duly appointed attorney-in-fact of the Company is hereby authorized to execute any Written Commitment for and on behalf of the Company, under the seal of the Company or otherwise, to the extent that such action is authorized by the grant of powers provided for in such persons written appointment as such attorney-in-fact.

(3) Each of the Chairman, the President and the Vice Presidents of the Company, is hereby authorized, for and on behalf of the Company, to appoint in writing any person the attorney-in-fact of the Company with full power and authority to execute, for and on behalf of the Company, under the seal of the Company or otherwise, such Written Commitments of the Company as may be specified in such written appointment, which specification may be by general type or class of Written Commitments or by specification of one or more particular Written Commitments.

(4) Each of the Chairman, the President and Vice Presidents of the Company in hereby authorized, for and on behalf of the Company, to delegate in writing any other officer of the Company the authority to execute, for and on behalf of the Company, under the Company's seal or otherwise, such Written Commitments of the Company as are specified in such written delegation, which specification may be by general type or class of Written Commitments or by specification of one or more particular Written Commitments.

(5) The signature of any officer or other person executing any Written Commitment or appointment or delegation pursuant to this Resolution, and the seal of the Company, may be affixed by facsimile on such Written Commitment or written appointment or delegation.

FURTHER RESOLVED, that the foregoing Resolution shall not be deemed to be an exclusive statement of the powers and authority of officers, employees and other persons to act for and on behalf of the Company, and such Resolution shall not limit or otherwise affect the exercise of any such power or authority otherwise validly granted or vested.

Does hereby nominate, constitute and appoint Abe Boomer, Cara Marie Piccono, Colleen Marie Sullivan, Colleen O Elmquist, Jonathan M Emmons, Kathy L Burt, Kyle Hager, Patrick S McCutcheon, Sharon M Pfeiffer, Shirley S Bartenhagen, all of the City of HELENA, Montana, each individually if there be more than one named, its true and lawful attorney-in-fact, to make, execute, seal and deliver on its behalf, and as its act and deed any and all bonds, undertakings, recognizances, contracts and other writings in the nature thereof in penalties not exceeding One million Two hundred Fifty thousand dollars & zero cents ($1,250,000.00) and the execution of such writings in pursuance of these presents shall be as binding upon said Company, as fully and amply as if they had been duly executed and acknowledged by the regularly elected officers of the Company at its principal office.

IN WITNESS WHEREOF, the said Stephen M. Haney, Vice-President, has hereunto subscribed his name and affixed the Corporate seal of the said **WESTCHESTER FIRE INSURANCE COMPANY** this 28 day of September 2011.

WESTCHESTER FIRE INSURANCE COMPANY

Stephen M. Haney, Vice President

COMMONWEALTH OF PENNSYLVANIA
COUNTY OF PHILADELPHIA ss.

On this 28 day of September, AD. 2011 before me, a Notary Public of the Commonwealth of Pennsylvania in and for the County of Philadelphia came Stephen M. Haney, Vice-President of the **WESTCHESTER FIRE INSURANCE COMPANY** to me personally known to be the individual and officer who executed the preceding instrument, and he acknowledged that he executed the same, and that the seal affixed to the preceding instrument is the corporate seal of said Company; that the said corporate seal and his signature were duly affixed by the authority and direction of the said corporation, and that Resolution, adopted by the Board of Directors of said Company, referred to in the preceding instrument, is now in force.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed my official seal at the City of Philadelphia the day and year first above written.

COMMONWEALTH OF PENNSYLVANIA
NOTARIAL SEAL
KAREN E. BRANDT, Notary Public
City of Philadelphia, Phila. County
My Commission Expires September 28, 2014

Notary Public

I, the undersigned Assistant Secretary of the **WESTCHESTER FIRE INSURANCE COMPANY**, do hereby certify that the original POWER OF ATTORNEY, of which the foregoing is a substantially true and correct copy, is in full force and effect.

In witness whereof, I have hereunto subscribed my name as Assistant Secretary, and affixed the corporate seal of the Corporation, this 25 day of September 2012

William L. Kelly, Assistant Secretary

THIS POWER OF ATTORNEY MAY NOT BE USED TO EXECUTE ANY BOND WITH AN INCEPTION DATE AFTER September 28, 2013

FORM NO. 8600S

CHANGE ORDER

ORDER NO. 2

PROJECT TITLE: Beal Mountain Mine: Pond Removals and Run-on Control Reclamation Project

DEQ Contract No. 413006

CONTRACT DATE: August 8, 2012

OWNER: Montana Department of Environmental Quality

CONTRACTOR: Schnell Excavating, Inc.

Change Orders must include an itemized cost breakdown. You shall comply with the following changes from the Contract Documents. (Show separate costs for materials, labor, equipment, and miscellaneous. Show percent where applicable.)

ITEM NO.	DESCRIPTION OF CHANGES - ESTIMATED QUANTITIES & UNITS	COST OF CHANGES					TOTAL COST
		MAT'LS.	LABOR	EQUIP.	MISC.	TOTAL UNIT COST	
2-1	Work Directive No. 4: Supply and transport cover soil to Storm Water Pond, Contingency Pond, and German Gulch Dam Removal work areas. 8 Contract days added. Total 760 cy cover soil imported and spread. See Attached	-	-	-		$25,460.00	$25,460.00
2-2	Work Directive No. 5: Grade site access road. 1 Contract days added.	-	-	-	-	$500.00	$500.00
						TOTAL COST	$25,960.00
						GRAND TOTAL - THIS CHANGE ORDER	$25,960.00

TOTAL PRICE (IN WORDS): Twenty five thousand nine hundred sixty dollars and no cents

Original Contract Price: $68,049.66

Current Contract Price Adjusted by Previous Change Order: $91,115.66

Cost this Change Order (+ or -_): + $25,960.00

New Contract Price including this Change Order: $117,075.66

The completion date as set forth in the Contract Documents shall be (unchanged, increased, decreased) by 9 calendar days.

The date for completion of all work will be October 10, 2012.

Description and Justification for Change:

1. Work Directive No. 4: Soil at the Contingency Pond, Storm Water Pond, and German Gulch Dam Removal areas was very rocky. Offsite cover soil material was imported and spread to allow better growth media for establishment of vegetation. Below is summary of final lump sum (LS) and unit prices for Work Directive No. 4

Spreading Top Soil-Contingency Pond, LS: $2,200.00
Spreading Top Soil-German Gulch Dam Removal, LS: $5,000.00
Spreading Top Soil-Storm Water Pond, LS: $2,300.00

Top Soil-Unit Cost: $21.00/cubic yard
Top Soil-Total Volume: 760 cubic yards

Total Work Directive No. 4 Cost: $25,460.00

2. Work Directive No. 5: Light grading of the Beal access road is necessary to remove large rocks for the transport of cover soil to the site.

SURETY CONSENT

The Surety hereby consents to the aforementioned Contract Change Order and agrees that its bond or bonds shall apply and extend to the Contract as thereby modified or amended per this Change Order. The Principal and the Surety further agree that on or after execution of this consent, the penalty of the applicable Performance Bonds or Bonds is hereby increased by $25,960.00 (100 percent of the Change Order amount) and the penalty of the applicable Labor and Material Bond or Bonds is hereby increased by $25,960.00 (100 percent of the Change Order amount).

COUNTERSIGNED BY MONTANA RESIDENT AGENT	SURETY
[signature]	Westchester Fire Insurance Company
Jonathan M. Emmons	By: [signature]
	Seal

Recommended by: [signature] 11/1/12
Engineer Date

Accepted by: [signature] 10-31-12
Contractor Date

Approved by: [signature] 11/2/12
Owner Date

CHANGE ORDER

CHANGE ORDER NO.: 3

PROJECT TITLE: Beal Mountain Mine: Pond Removal and Run-on Control Reclamation Project

DEQ Contract No.: 413006

CONTRACT DATE: August 8, 2012

OWNER: Montana Department of Environmental Quality

CONTRACTOR: Schnell Excavating, Inc.

Change Orders must include an itemized cost breakdown. You shall comply with the following changes from the Contract Documents. (Show separate costs for materials, labor, equipment, and miscellaneous. Show percent where applicable.)

ITEM NO.	DESCRIPTION OF CHANGES - ESTIMATED QUANTITIES & UNITS	COST OF CHANGES					TOTAL COST
		MAT'LS.	LABOR	EQUIP	MISC	UNIT COST	
3-1	Reconciliation of Bid Item 1: Mobilization, Demobilization, Bonding, and Insurance	0.0				$3,943.00	$0.00
3-2	Reconciliation of Bid Item 2A: Pond Dewatering	0.0				$500.00	$0.00
3-3	Reconciliation of Bid Item 2B: Debris Removal and Disposal	9.9				$125.00	$1,237.50
3-4	Reconciliation of Bid Item 2C: Strip and Stockpile Topsoil	29.0				$15.00	$435.00
3-5	Reconciliation of Bid Item 2D: Regrade Pond Area	-198.0				$2.00	($396.00)
3-6	Reconciliation of Bid Item 2E: Replace and Grade Topsoil	29.0				$10.00	$290.00
3-7	Reconciliation of Bid Item 2F: Fertilize and Seed	-0.3				$723.60	($180.90)
3-8	Reconciliation of Bid Item 2G: Erosion Control	-380.0				$1.98	($752.40)
3-9	Reconciliation of Bid Item 2H: Straw Wattles	-290.0				$2.30	($667.00)
3-10	Reconciliation of Bid Item 3A: Remove and Stockpile Riprap	0.0				$400.00	$0.00
3-11	Reconciliation of Bid Item 3B: Debris Removal and Disposal	-0.5				$400.00	($ 200.00)
3-12	Reconciliation of Bid Item 3C: Regrade Pond Area	-596.0				$2.00	($1,192.00)
3-13	Reconciliation of Bid Item 3D: Fertilize and Seed	0.0				$723.60	$0.00
3-14	Reconciliation of Bid Item 3E: Erosion Control	404.0				$1.98	$799.92
3-15	Reconciliation of Bid Item 3F: Straw Wattles	27.0				$2.30	$62.10

3-16	Reconciliation of Bid Item 4A: Debris Removal and Disposal	6.5				$134.00	$ 871.00
3-17	Reconciliation of Bid Item 4B: Regrade Pond Area	502.0				$2.00	$1,004.00
3-18	Reconciliation of Bid Item 4C: Fertilize and Seed	0.2				$723.60	$144.72
3-19	Reconciliation of Bid Item 4D: Erosion Control	1,502.0				$1.98	$2,973.96
3-20	Reconciliation of Bid Item 4E: Straw Wattles	97.0				$2.30	$223.10
3-21	Reconciliation of Bid Item A-1: Regrade Access Road	0.0				$500.00	$ 0.00
3-22	Reconciliation of Bid Item A-2: Excavate Run-on Control Ditch	59.0				$18.67	$1,101.53
3-23	Reconciliation of Bid Item A-3: Run-on Control Ditch Construction	-27.0				$33.13	($894.51)
3-24	Reconciliation of Bid Item A-4: Fertilize and Seed	-0.4				$723.60	($ 282.20)
					TOTAL COST		$4,577.82
					GRAND TOTAL - THIS CHANGE ORDER		$4,577.82

Original Contract Price:	**$ 68,049.66**
Current Contract Price Adjusted by Previous Change Order:	**$ 117,075.66**
Cost this Change Order (+ or -_):	**$ 4,577.82**
New Contract Price including this Change Order:	**$ 121,653.48**

The completion date as set forth in the Contract Documents shall be increased by 15 calendar days.

The date for completion of all work will be October 25, 2012.

Description and Justification for Change:

1. Reconciliation of bid pay quantities to final pay quantities.

2. Additional contract days added to compensate for delays in scheduling the seeder subcontractor and erosion control mat laying crew due to more cover soil being imported (as requested by Owner) and spread than originally planned and to compensate for scheduling of site inspections by Owner, Engineer, and USDA Forest Service.

SURETY CONSENT

The Surety hereby consents to the aforementioned Contract Change Order and agrees that its bond or bonds shall apply and extend to the Contract as thereby modified or amended per this Change Order. The Principal and the Surety further agree that on or after execution of this consent, the penalty of the applicable Performance Bonds or Bonds is hereby increased by $4,577.82 (100 percent of the Change Order amount) and the penalty of the applicable Labor and Material Bond or Bonds is hereby increased by $4,577.82 (100 percent of the Change Order amount).

COUNTERSIGNED BY MONTANA RESIDENT AGENT	SURETY
[signature]	Westchester Fire Insurance Company
Jonathan M. Emmons	By: [signature] Seal

Recommended by: [signature] Engineer — 11/1/12 Date

Accepted by: [signature] Contractor — 10-31-12 Date

Approved by: [signature] Owner — 11/2/12 Date

WORK DIRECTIVE CHANGE

(Instructions on Reverse Side) No. 01

PROJECT: Beal Mountain Mine: Pond Removals and Run-on Control Reclamation Project
DATE OF ISSUANCE: August 23, 2012

CONTRACTOR: Schnell Excavating, Inc.
122133 Nissler Rd.
Butte, Montana 59702

OWNER: Montana DEQ, Abandoned Mine Lands Bureau

DEQ Contract No.: 413006

CONTRACT FOR: AMLReclamation

ENGINEER: Tetra Tech Inc.

You are directed to proceed promptly with the following change(s):

Description: Contractor shall supply and transport 60 cubic yards to the diversion ditch construction area at a cost to Owner of $15.00 per cubic yard.

Purpose of Work Directive Change: Onsite cover soil material that was planned to be used as cover soil in the diversion ditch contains too much angular material and is likely to puncture the liner material thus voiding the manufacturer's warranty. Bringing in offsite cover soil material that does not contain angular material will not damage the liner thus keeping the manufacturer's warranty valid.

Attachments: Contractor's price quotation.

If a claim is made that the above change(s) have affected Contract Price or Contract Time, any claim for a Change Order based thereon will involve one of the following methods of determining the effect of the change(s).

Method of determining change in Contract Price:

- [ ] Time and Materials
- [ ] Unit Prices
- [x] Lump Sum
- [ ] Other_____

Estimated increase in Contract Price: $900.00. If the change involves an increase, the estimated amount is not to be exceeded without further authorization.

Method of determining change in Contract Time:

- [ ] Contractor's Records
- [ ] Engineer's Records
- [x] Other _____

Estimated increase in Contract Time: 1 day. If the change involves an increase, the estimated time is not to be exceeded without further authorization.

RECOMMENDED:

By: Michael Hatton
Engineer

ACCEPTED:

By: Gary Schnell
Contractor

AUTHORIZED:

By Pebbles Clark
Owner

Rev. 6/04

WORK DIRECTIVE CHANGE

INSTRUCTIONS

A. GENERAL INFORMATION

This document was developed for use in situations involving changes in the Work which, if not processed expeditiously, might delay the Project. These changes are often initiated in the field and may affect the Contract Price or the Contract Time. This is not a Change Order, but only a directive to proceed with Work that may be included in a subsequent Change Order.

For supplemental instructions and minor changes not involving a change in the Contract Price or the Contract Time, a Field Order may be issued.

B. COMPLETING THE WORK DIRECTIVE CHANGE

Engineer initiates the form, including a description of the items involved and attachments.

Based on conversations between Engineer and Contractor, Engineer to indicate the following and attach the same hereto:

> METHOD OF DETERMINING CHANGE, IF ANY, IN CONTRACT PRICE: Indicate the method to be used in determining the final cost of Work involved and the net effect on the Contract Price. If the change involves an increase in the Contract Price and the estimated amount is approached before the additional or changed work is completed, another Work Directive Change must be issued to change the time or Contractor may stop the changed Work when the estimated time is reached. If the Work Directive Change is not likely to change the Contract Price, the space for estimated increase (decreased) should be marked "Not Applicable".
>
> METHOD OF DETERMINING CHANGE, IF ANY, IN CONTRACT TIME: Indicate the method to be used in determining the change in Contract Time and the estimated increase or decrease in Contract Time. If the change involves and increase in the Contract Time and the estimated time is approached before additional or changed Work is completed, another Work Directive Change must be issued to change the time or Contractor may stop the changed Work when the estimated time is reached. If the Work Directive Change is not likely to change the Contract Time, the space for estimated increase (decrease) should be marked "Not Applicable".

Once Engineer has completed and signed this form, all copies should be sent to Owner for authorization because Engineer alone does not have authority to authorize changes in Price or Time. Once authorized by Owner, a copy should be sent by Engineer to Contractor.

Once the Work covered by this directive is completed for final cost and time determined, Contractor should submit documentation for inclusion in a Change Order.

THIS IS A DIRECTIVE TO PROCEED WITH A CHANGE THAT MAY AFFECT THE CONTRACT PRICE OR THE CONTRACT TIME. A CHANGE ORDER, IF ANY, SHOULD BE CONSIDERED PROMPTLY.

Clark, Pebbles

From: schnellexcavating@rfwave.net
Sent: Wednesday, August 22, 2012 7:07 AM
To: Clark, Pebbles
Subject: Re: price quote

The topsoil price delivered is $15.00 per yard.
Thank you,
Jan

From: Clark, Pebbles
Sent: Tuesday, August 21, 2012 3:09 PM
To: schnellexcavating@rfwave.net
Subject: price quote

Hi Larry and Jan,

Larry and I chatted about bringing in ~60cy of topsoil to place over the ditch liner. The onsite material is to angular and would void the manufactures warranty.

Please send me an email with a price quote for supplying and transporting 60cy of cover soil to the site.

Pebbles Clark
Reclamation Specialist
DEQ Abandoned Mine Section
Ph: (406) 841-5028
Fx: (406) 841-5024

WORK DIRECTIVE CHANGE

(Instructions on Reverse Side) No. 02

PROJECT: Beal Mountain Mine: Pond Removals and Run-on Control Reclamation Project
DATE OF ISSUANCE: August 23, 2012

CONTRACTOR: Schnell Excavating, Inc.
122133 Nissler Rd.
Butte, Montana 59702

OWNER: Montana DEQ, Abandoned Mine Lands Bureau

DEQ Contract No.: 413006

CONTRACT FOR: AMLReclamation

ENGINEER: Tetra Tech Inc.

You are directed to proceed promptly with the following change(s):

Description: See attached Request for Quotation, Beal Mountain Mine – Check Dam Removal.

Purpose of Work Directive Change: To fully reclaim the Contingency Pond and associated piping from the check dam to the Contingency Pond, removal of the check dam, access road, and reconstruction of the stream is necessary. Removal of these mine features will reclaim the area and return the area to its premining condition. If the check dam is not reclaimed at the same time as the Contingency, construction of an access road through the reclaimed Contingency Pond area would be required to access the check dam at a later date. Construction of an access road at a later date would damage previously reclaimed areas.

Attachments: Request for Quotation, Beal Mountain Mine – Check Dam Removal and Contractor's price quotation.

If a claim is made that the above change(s) have affected Contract Price or Contract Time, any claim for a Change Order based thereon will involve one of the following methods of determining the effect of the change(s).

Method of determining change in Contract Price:

- [ ] Time and Materials
- [x] Unit Prices
- [x] Lump Sum
- [ ] Other_____

Estimated increase in Contract Price: $21,766.00. If the change involves an increase, the estimated amount is not to be exceeded without further authorization.

Method of determining change in Contract Time:

- [ ] Contractor's Records
- [x] Engineer's Records
- [ ] Other _____

Estimated increase in Contract Time: 14 days. If the change involves an increase, the estimated time is not to be exceeded without further authorization.

RECOMMENDED:

By: Michael Stitt
Engineer

AUTHORIZED:

By Pebbles Clark
Owner

ACCEPTED:

By: Gary Schnell
Contractor

Rev. 6/04

WORK DIRECTIVE CHANGE

INSTRUCTIONS

A. GENERAL INFORMATION

This document was developed for use in situations involving changes in the Work which, if not processed expeditiously, might delay the Project. These changes are often initiated in the field and may affect the Contract Price or the Contract Time. This is not a Change Order, but only a directive to proceed with Work that may be included in a subsequent Change Order.

For supplemental instructions and minor changes not involving a change in the Contract Price or the Contract Time, a Field Order may be issued.

B. COMPLETING THE WORK DIRECTIVE CHANGE

Engineer initiates the form, including a description of the items involved and attachments.

Based on conversations between Engineer and Contractor, Engineer to indicate the following and attach the same hereto:

> METHOD OF DETERMINING CHANGE, IF ANY, IN CONTRACT PRICE: Indicate the method to be used in determining the final cost of Work involved and the net effect on the Contract Price. If the change involves an increase in the Contract Price and the estimated amount is approached before the additional or changed work is completed, another Work Directive Change must be issued to change the time or Contractor may stop the changed Work when the estimated time is reached. If the Work Directive Change is not likely to change the Contract Price, the space for estimated increase (decreased) should be marked "Not Applicable".
>
> METHOD OF DETERMINING CHANGE, IF ANY, IN CONTRACT TIME: Indicate the method to be used in determining the change in Contract Time and the estimated increase or decrease in Contract Time. If the change involves and increase in the Contract Time and the estimated time is approached before additional or changed Work is completed, another Work Directive Change must be issued to change the time or Contractor may stop the changed Work when the estimated time is reached. If the Work Directive Change is not likely to change the Contract Time, the space for estimated increase (decrease) should be marked "Not Applicable".

Once Engineer has completed and signed this form, all copies should be sent to Owner for authorization because Engineer alone does not have authority to authorize changes in Price or Time. Once authorized by Owner, a copy should be sent by Engineer to Contractor.

Once the Work covered by this directive is completed for final cost and time determined, Contractor should submit documentation for inclusion in a Change Order.

THIS IS A DIRECTIVE TO PROCEED WITH A CHANGE THAT MAY AFFECT THE CONTRACT PRICE OR THE CONTRACT TIME. A CHANGE ORDER, IF ANY, SHOULD BE CONSIDERED PROMPTLY.

QUOTE FORM
BEAL MOUNTIAN MINE – CHECK DAM REMOVAL
BEAL MOUNTAIN MINE
SILVER BOW COUNTY, MONTANA
AUGUST, 2012

Work Item No.	Description	Unit	Estimated Quantity	Unit Price	Total
1	Clear and Grub	LS	1	900.00	900.00
2	Check Dam Dewatering	LS	1	2200.00	2200.00
3	Check Dam Sediment Removal and Regrading	LS	1	3000.00	3000.00
4	Check Dam Structure Removal	LS	1	1200.00	1200.00
5	Channel Replacement	LF	66	116.00	7656.00
6	Access Road Reclamation	CY	30	227.00	6810.00
				TOTAL PRICE	21,766.00

TOTAL QUOTE PRICE (IN WORDS):
TWENTY ONE THOUSAND ONE THOUSAND SEVEN HUNDRED SIXTY SIX dollars and no cents

Signed by Gary Schell
Contractor

AC = Acre
LS = Lump Sum
CY = Cubic Yard
LF = Lineal Feet
SY = Square Yard

REQUEST FOR QUOTATION
BEAL MOUNTIAN MINE – CHECK DAM REMOVAL
SILVER BOW COUNTY, MONTANA
AUGUST, 2012

DESCRIPTION OF WORK

The Contractor shall furnish all labor, materials, equipment, and supervision of activities associated with Beal Check Dam Removal as shown on the attached Drawings and in accordance with the Contract Documents.

All debris encountered during the Beal Check Dam Removal shall be disposed of in accordance with Bid Item No. 4-A "Debris Removal and Disposal" of the Contract Documents. Contractor will be paid in accordance with Bid Item No. 4-A "Debris Removal and Disposal" of the Contract Documents.

All areas disturbed by the Beal Check Dam Removal and Access Road Reclamation shall be fertilized and seeded in accordance with Bid Item No. 4-C "Fertilize and Seed" of the Contract Documents. Contractor will be paid in accordance with Bid Item No. 4-C "Fertilize and Seed" of the Contract Documents.

Contractor shall install erosion control as shown on the attached Drawings and in accordance with Bid Item No. 4-D "Erosion Control" of the Contract Documents. Contractor will be paid in accordance with Bid Item No. 4-D "Erosion Control" of the Contract Documents.

Work Item 1: Clear and Grub

General: This Work Item shall consist of clearing and grubbing as shown on the Drawings. Contractor shall clear and grub the minimum area needed to complete the Work. Work shall include removal of trees, stumps, large shrubs, bushes and all other objects as necessary to complete the Work. All debris shall be removed and disposed of in accordance with Bid Item No. 4-A "Debris Removal and Disposal" of the Contract Documents.

Work Included:

- Clear and grub work area.

Measurement: There will be no direct measurement for this work item.

Payment: Payment will be made at the lump sum price quoted for "Work Item No. 1, Clear and Grub" as shown on the quote form, which payment will constitute full compensation for labor, equipment, tools, materials, and incidentals necessary to accomplish the Work as specified.

Work Item 2: Check Dam Dewatering:

General: This Work Item shall consist of diverting water flow in German Gulch Creek and any back water accumulated from the Beal Check Dam within the Beal Check Dam disturbance boundary. Prior to and during construction, all water within the Beal Check Dam pond and German Gulch Creek shall be diverted. Contractor shall supply all pump(s), pipelines, hoses, connections of appropriate size, and all other equipment necessary to dewater the Beal Check Dam and divert German Gulch Creek prior to sediment removal, check dam removal, and channel replacement.

Contractor shall protect the discharge and inlet portions of the Beal Check Dam and German Gulch Creek dewatering system from erosion and shall not allow pumping activities to generate added sediment load to the system.

Work Included:

- Diversion of German Gulch and dewatering of the Beal Check Dam;
- Provide pump and all other equipment necessary to remove water from Beal Check Dam and German Gulch Creek; and
- Provide all appropriate hoses, connections, pipelines or other necessary equipment, and power source for pump.

Contractor shall provide all labor, tools, equipment, materials, and incidentals necessary to complete the work as specified.

Measurement: There will be no direct measurement for this work item.

Payment: Payment will be made at the lump sum price quoted for "Work Item No. 2, Check Dam Dewatering" as shown on the quote form, which payment will constitute full compensation for labor, equipment, tools, materials, and incidentals necessary to accomplish the Work as specified.

Work Item 3: Check Dam Sediment Removal and Regrading:

General: This Work Item shall consist of removing or regrading accumulated sediments above the Beal Check Dam. Accumulated sediments shall be regraded to the contours and grades shown on the Drawings. Contractor shall reserve fine grained accumulated sediments for placement in the regraded streambanks particularly for the top six inches within the regraded area. Excess sediment not necessary to fill the contours and grades shown on the drawing shall be deposited in the Beal Contingency Pond after all liner material and related pipes/valves have been removed. All debris shall be removed and disposed of in accordance with Bid Item No. 4-A "Debris Removal and Disposal" of the Contract Documents.

Work Included:

- Removal of accumulated sediment from the Beal Check Dam; and
- Placement of sediment in the Beal Contingency Pond.

Contractor shall provide all labor, tools, equipment, materials, and incidentals necessary to complete the work as specified.

Measurement: There will be no direct measurement for this item.

Payment: Payment will be made at the lump sum price quoted for "Work Item 3, Check Dam Sediment Removal and Regrading" as shown on the quote form, which payment will constitute full compensation for all labor, equipment, tools, materials and incidentals necessary to accomplish the Work as specified.

Work Item No. 4: Check Dam Structure Removal

General: This Work Item shall consist of removal of the Check Dam Structure. The Beal Check Dam Structure shall be dismantled with the material separated into categories for disposal. All debris resulting from removal of the Check Dam Structure shall be removed and disposed of in accordance with Bid Item No. 4-A "Debris Removal and Disposal" of the Contract Documents.,

Work Included:

- Removal of the Beal Check Dam Structure; and
- Separation of dismantled materials for transportation and disposal.

Measurement: There will be no direct measurement for this work item.

Payment: Payment will be made at the lump sum price quoted for "Work Item 4, Check Dam Structure Removal" as shown on the quote form, which payment will constitute full compensation for all labor, equipment, tools, materials, and incidentals necessary to accomplish the Work as specified.

Work Item No. 5: Channel Replacement

General: This Work Item shall consist of excavation of the channel subgrade to the neat lines of the Channel Replacement, and placement of riprap and stream channel rock as shown on the Drawings. In accordance with the SWECP, Contractor shall prevent sediment transport away from the site during construction.

(1.) Preparing the Channel Subgrade: The Channel Subgrade shall be excavated to the neat lines as shown on the Drawings. Contractor shall stockpile excavated material as necessary for backfill or otherwise haul and dispose excess sediment to the Beal Contingency Pond.

(2.) Riprap Placement: Riprap and stream channel rock shall be provided and installed in accordance with the Drawings. Riprap and stream channel rock shall meet the size requirements as shown on the Drawings.

Contractor shall provide all labor, equipment, materials and incidentals necessary to construct the bank treatment shown on the drawings.

Work Included: This work includes the following:

- Preparing the Channel Replacement subgrade;
- Placement of riprap and stream bed rock.

Measurement: Measurement will be by the number of linear feet of Channel Replacement installed to the nearest linear foot as measured by Engineer. The measurement shall be taken along the replacement channel thalweg (lowest point of the channel) from the most upstream point of the channel replacement to the most downstream point of the channel replacement.

Payment: Payment will be made at the unit price quoted for "Work Item 5, Channel Replacement" as shown on the quote form, which payment will constitute full compensation for all labor, equipment, tools, materials and incidentals necessary to accomplish the Work as specified. No additional compensation will be made to repair and maintain functioning sediment control measures during construction.

Work Item No. 6: Access Road Reclamation

General: This Work Item includes regrading the access road to the neat lines and grades as shown on the Drawings. Excess material from the access road regrading shall be used in the Channel Replacement Work Item or, if not needed there, deposited in the Beal Contingency Pond. In accordance with the SWECP, Contractor shall prevent sediment transport away from the site during construction.

Contractor shall provide all labor, equipment, materials and incidentals necessary to construct the bank treatment shown on the drawings.

Work Included: This work includes the following:

- Regrade the access road to the neat lines and grades as shown on the Drawings.

Measurement: Measurement will be by the number of cubic yards of regraded material as determined by Engineer based on topographic surveys before and after regrading.

Payment: Payment will be made at the unit price bid for "Work Item No. 6, Access Road Reclamation" as shown on the quote form, which payment will constitute full compensation for all labor, equipment, tools, materials and incidentals necessary to accomplish the Work as specified.

Quote Form

QUOTE FORM
BEAL MOUNTIAN MINE – CHECK DAM REMOVAL
BEAL MOUNTAIN MINE
SILVER BOW COUNTY, MONTANA
AUGUST, 2012

Work Item No.	Description	Unit	Estimated Quantity	Unit Price	Total
1	Clear and Grub	LS	1	900.00	900.00
2	Check Dam Dewatering	LS	1	2200.00	2200.00
3	Check Dam Sediment Removal and Regrading	LS	1	3000.00	3000.00
4	Check Dam Structure Removal	LS	1	1200.00	1200.00
5	Channel Replacement	LF	66	116.00	7656.00
6	Access Road Reclamation	CY	30	227.00	6810.00
				TOTAL PRICE	21,766.00

TOTAL QUOTE PRICE (IN WORDS):
TWENTY ONE THOUSAND ONE THOUSAND SEVEN HUNDRED SIXTY SIX dollars and no cents

Signed by Gary Schell
Contractor

AC = Acre
LS = Lump Sum
CY = Cubic Yard
LF = Lineal Feet
SY = Square Yard

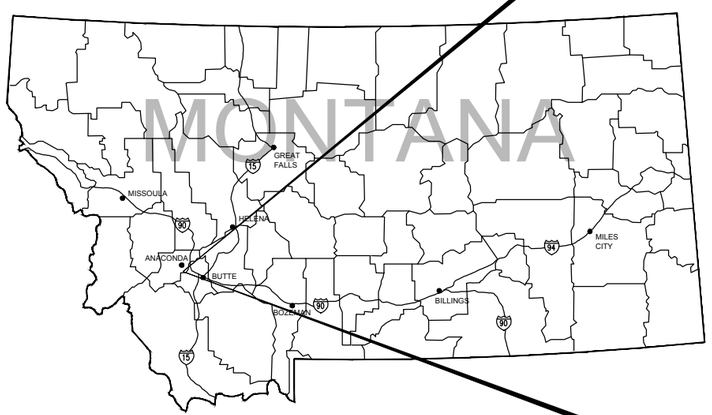
Drawings

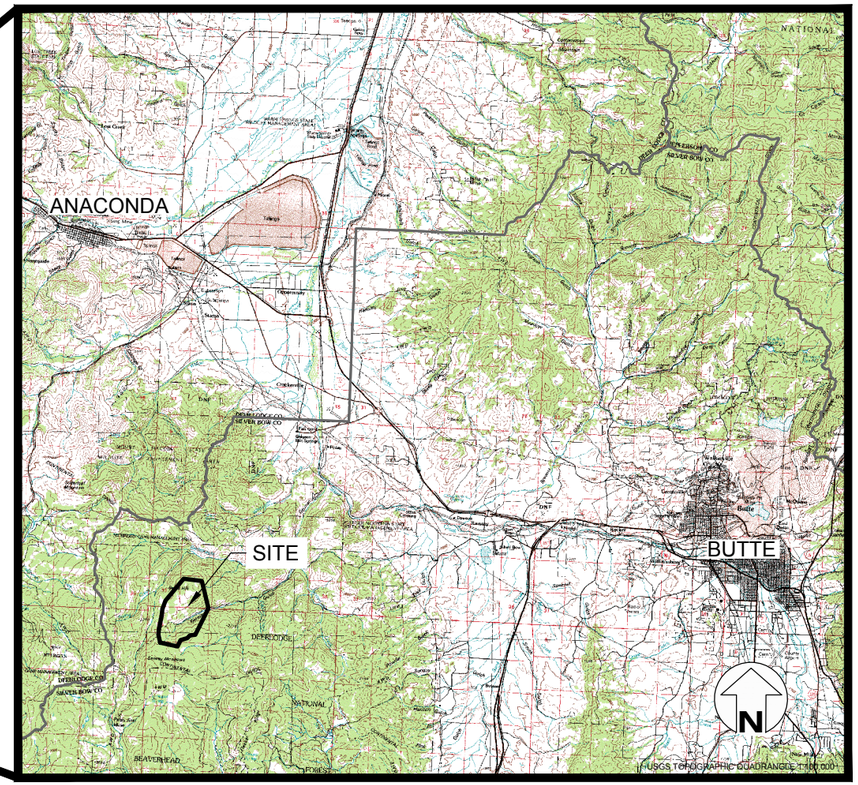
BEAL MOUNTAIN MINE: CHECK DAM REMOVAL PROJECT

SILVER BOW COUNTY, MONTANA
CONTRACT NO. 413006

Sheet Index

Sheet	Title
1	Cover, Location and Sheet Index
2	Plan, Profile and Sections





Owner
Montana Department of
Environmental Quality

Engineer
Tetra Tech
Mike Hatten, PE
303 Irene Street
Helena, MT 59602
406-443-5210

MONTANA
MWCB

MONTANA
MICHAEL L. HATTEN
No. 16272 PE
LICENSED
PROFESSIONAL ENGINEER

REVISIONS

NO.	DESCRIPTION	DATE	BY:

Montana DEQ Beal Mine
Check Dam Removal
Project

Cover, Location and Sheet Index

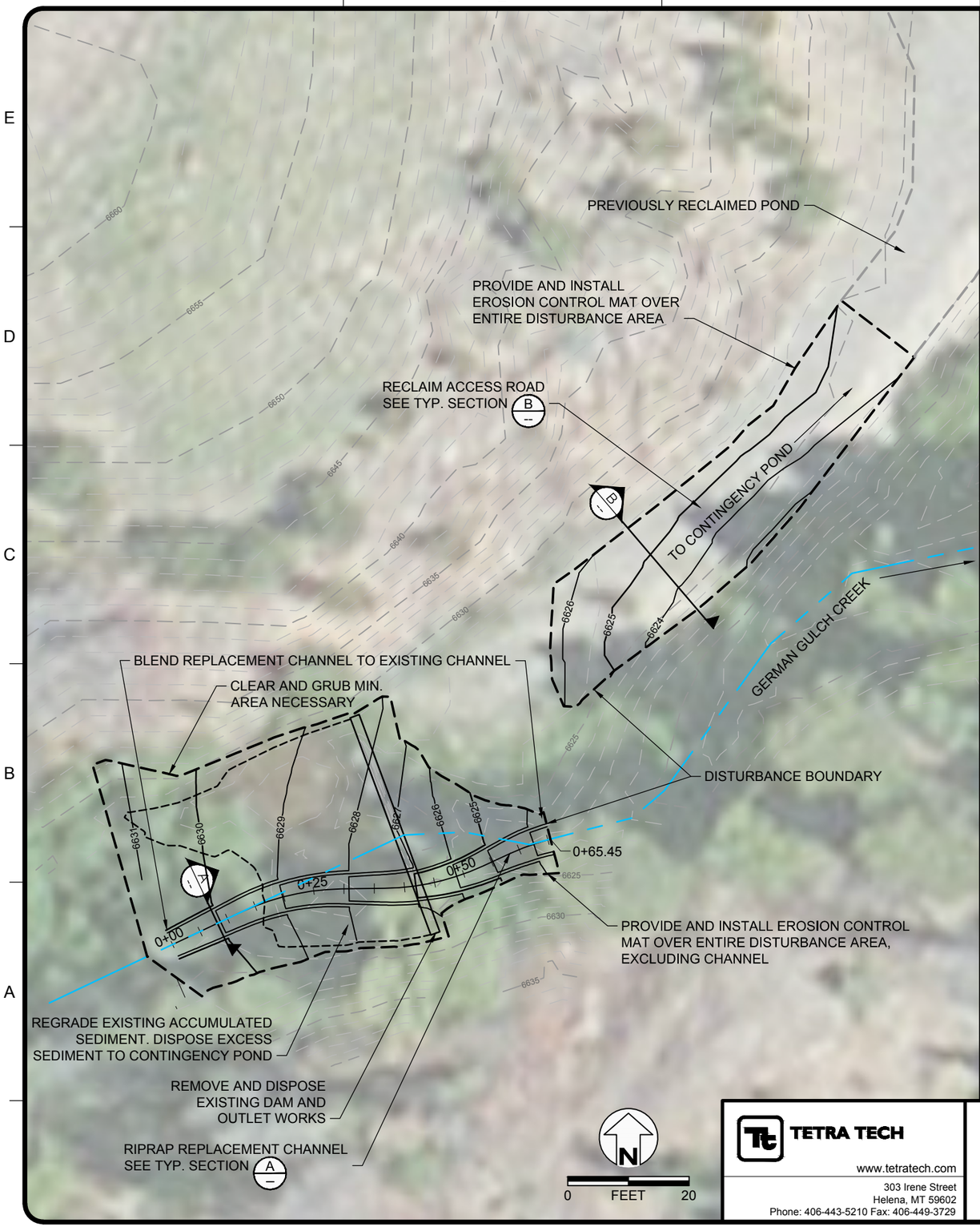
TETRA TECH
303 Irene Street
Helena, MT 59601
PHONE: 406.443.5210

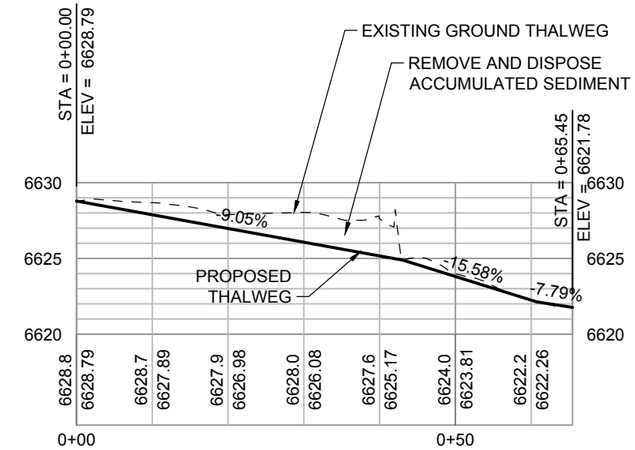
PROJECT NUMBER	**114-710318**
DESIGN BY:	**MLH**
DRAWN BY:	**SEF**
CHK'D BY:	**MLH**
APPR. BY:	**MLH**
DATE:	**August 2012**

SHEET 1 OF 2

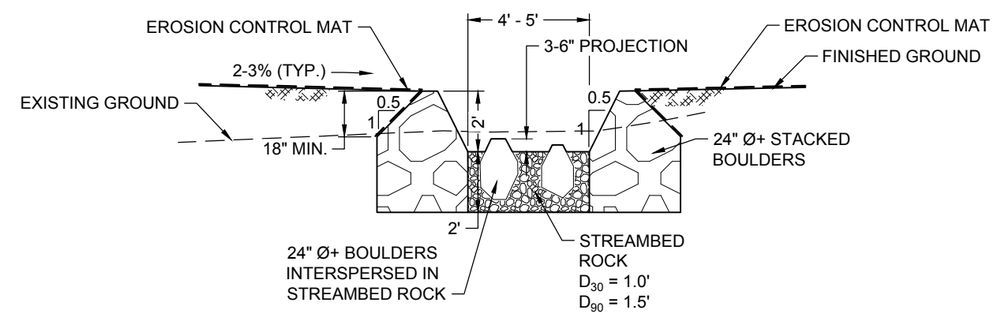
N:\PROJECTS\USFS\Beal_Mine\114-710318 - Beal Mtn 2012 Monitoring_Engineering\CAD\SheetFiles\Stormwater Pond\G-01-Cover.dwg SAVED: 8/9/12 PRINTED: 8/9/12 BY: STEVE.FIELD

This drawing, in the form transmitted, is the original work product of TETRA TECH. This drawing cannot be altered, revised or reproduced without the prior written consent of TETRA TECH. An original will be retained by TETRA TECH as the "record copy" for purposes of this project. TETRA TECH does not approve of or warrant these documents if any alteration or modification is made without TETRA TECH's written approval.

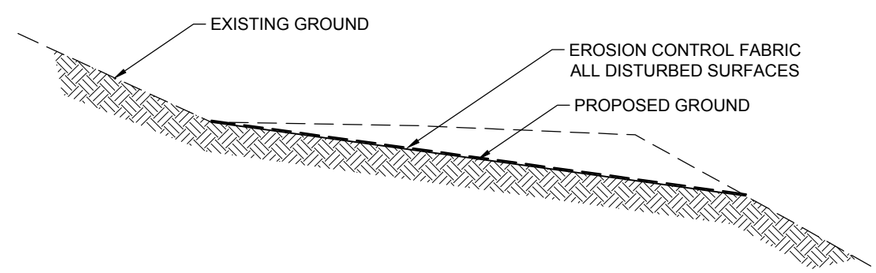




REPLACEMENT CHANNEL PROFILE
H: 1"=20', V:1"=10'



A REPLACEMENT CHANNEL TYPICAL SECTION
1" = 5'



B ACCESS ROAD RECLAMATION TYPICAL SECTION
1" = 5'

TETRA TECH
www.tetratech.com
303 Irene Street
Helena, MT 59602
Phone: 406-443-5210 Fax: 406-449-3729

MARK	DATE	DESCRIPTION	BY

U.S. Forest Service - Northern Region
Silver Bow County, Montana

CHECK DAM REMOVAL AND RECLAMATION
BEAL MOUNTAIN MINE

PLAN, PROFILE AND SECTIONS

Project No.:	114-710318
Date:	August 2012
Designed By:	LC

Supplemental

2

Copyright: Tetra Tech

8/10/2012 10:42:25 AM - N:\PROJECTS\USFS\BEAL_MINE\114-710318 - BEAL MTN 2012 MONITORING_ENGINEERING\CAD\SHEETFILES\STORMWATER POND\C-02-PLAN, PROFILE AND SECTIONS.DWG - FIELD, STEVE

FAX: 406-841-5024
Attn: Pebbles

WORK DIRECTIVE CHANGE

(Instructions on Reverse Side) No. 03

PROJECT: Beal Mountain Mine: Pond Removals and Run-on Control Reclamation Project
DATE OF ISSUANCE: September 14, 2012

CONTRACTOR: Schnell Excavating, Inc.
122133 Nissler Rd.
Butte, Montana 59702

OWNER: Montana DEQ, Abandoned Mine Lands Bureau

DEQ Contract No.: 413006

CONTRACT FOR: AMLReclamation

ENGINEER: Tetra Tech Inc.

You are directed to proceed promptly with the following change(s):

Description: Remobilize equipment to the Storm Water Pond work area and complete additional regrading.

Purpose of Work Directive Change: Additional grading is necessary at the Storm Water Pond work area. At the time of completion of initial grading, a project representative was not on-site to accept or reject the grading work when Contractor thought it was complete. Contractor mobilized equipment to the next work area so as to not hold up other work. Subsequent inspections by project representatives determined that additional grading would be a benefit to the work area. Since an on-site representative was not present at the time of completion of the initial grading, it was agreed upon that Contractor would be compensated to remobilize equipment back to the Storm Water Pond work area and complete the additional grading work.

Attachments:

If a claim is made that the above change(s) have affected Contract Price or Contract Time, any claim for a Change Order based thereon will involve one of the following methods of determining the effect of the change(s).

Method of determining change in Contract Price:

- [ ] Time and Materials
- [ ] Unit Prices
- [x] Lump Sum
- [ ] Other_____

Estimated increase in Contract Price: $400.00. If the change involves an increase, the estimated amount is not to be exceeded without further authorization.

Method of determining change in Contract Time:

- [ ] Contractor's Records
- [x] Engineer's Records
- [ ] Other_____

Estimated increase in Contract Time: 3 days. If the change involves an increase, the estimated time is not to be exceeded without further authorization.

RECOMMENDED:

By: Michael [illegible]
Engineer

AUTHORIZED:

By Pebbles [illegible]
Owner

ACCEPTED:

By: Jim Schnell
Contractor

Rev. 6/04

WORK DIRECTIVE CHANGE

(Instructions on Reverse Side) No. 04

PROJECT: Beal Mountain Mine: Pond Removals and Run-on Control Reclamation Project
DATE OF ISSUANCE: September 28, 2012

CONTRACTOR: Schnell Excavating, Inc.
122133 Nissler Rd.
Butte, Montana 59702

OWNER: Montana DEQ, Abandoned Mine Lands Bureau

DEQ Contract No.: 413006

CONTRACT FOR: AMLReclamation

ENGINEER: Tetra Tech Inc.

You are directed to proceed promptly with the following change(s):

Description: Supply, transport, and spread imported cover soil at the Storm Water Pond, Contingency Pond, and Check Dam Removal work areas. Cover soil shall be spread to a thickness of 4 inches at each area. The estimated volume of cover soil required is 601 cubic yards. Owner will pay Contractor the actual number of cubic yards of cover soil imported as measured by Engineer. Payment will be made at the unit price for cover soil at each work area as specified on the attached cost estimate form. Owner will pay Contractor the total lump sum for spreading cover soil at each work area as specified on the attached cost estimate form.

Purpose of Work Directive Change: Due to the very rocky nature of the soils at the pond work areas and the availability of funding, cover soil is being imported and spread at the Storm Water Pond, Contingency Pond, and Check Dam Removal Work Areas. Importation of quality cover soil will allow better establishment of vegetation.

Attachments: Cover Soil Cost Estimate

If a claim is made that the above change(s) have affected Contract Price or Contract Time, any claim for a Change Order based thereon will involve one of the following methods of determining the effect of the change(s).

Method of determining change in Contract Price:

- [ ] Time and Materials
- [x] Unit Prices
- [x] Lump Sum
- [ ] Other_____

Estimated increase in Contract Price: $22,121.00. If the change involves an increase, the estimated amount is not to be exceeded without further authorization.

Method of determining change in Contract Time:

- [ ] Contractor's Records
- [x] Engineer's Records
- [ ] Other _____

Estimated increase in Contract Time: 8 days. If the change involves an increase, the estimated time is not to be exceeded without further authorization.

RECOMMENDED:

By: Michael Hatt
Engineer

ACCEPTED:

By: Larry Schnell
Contractor

AUTHORIZED:

By Pebbles Opp
Owner

Rev. 6/04

WORK DIRECTIVE CHANGE

INSTRUCTIONS

A. GENERAL INFORMATION

This document was developed for use in situations involving changes in the Work which, if not processed expeditiously, might delay the Project. These changes are often initiated in the field and may affect the Contract Price or the Contract Time. This is not a Change Order, but only a directive to proceed with Work that may be included in a subsequent Change Order.

For supplemental instructions and minor changes not involving a change in the Contract Price or the Contract Time, a Field Order may be issued.

B. COMPLETING THE WORK DIRECTIVE CHANGE

Engineer initiates the form, including a description of the items involved and attachments.

Based on conversations between Engineer and Contractor, Engineer to indicate the following and attach the same hereto:

> METHOD OF DETERMINING CHANGE, IF ANY, IN CONTRACT PRICE: Indicate the method to be used in determining the final cost of Work involved and the net effect on the Contract Price. If the change involves an increase in the Contract Price and the estimated amount is approached before the additional or changed work is completed, another Work Directive Change must be issued to change the time or Contractor may stop the changed Work when the estimated time is reached. If the Work Directive Change is not likely to change the Contract Price, the space for estimated increase (decreased) should be marked "Not Applicable".
>
> METHOD OF DETERMINING CHANGE, IF ANY, IN CONTRACT TIME: Indicate the method to be used in determining the change in Contract Time and the estimated increase or decrease in Contract Time. If the change involves and increase in the Contract Time and the estimated time is approached before additional or changed Work is completed, another Work Directive Change must be issued to change the time or Contractor may stop the changed Work when the estimated time is reached. If the Work Directive Change is not likely to change the Contract Time, the space for estimated increase (decrease) should be marked "Not Applicable".

Once Engineer has completed and signed this form, all copies should be sent to Owner for authorization because Engineer alone does not have authority to authorize changes in Price or Time. Once authorized by Owner, a copy should be sent by Engineer to Contractor.

Once the Work covered by this directive is completed for final cost and time determined, Contractor should submit documentation for inclusion in a Change Order.

THIS IS A DIRECTIVE TO PROCEED WITH A CHANGE THAT MAY AFFECT THE CONTRACT PRICE OR THE CONTRACT TIME. A CHANGE ORDER, IF ANY, SHOULD BE CONSIDERED PROMPTLY.

Beal, DEQ Contract No. 413006
Cover Soil Cost Estimate
By: Pebbles Opp
Date: 9/27/12

Minnesota Pond			
Area		4955	SY
Area		1.02	AC
Cover Soil Thickness		0	Inches
Total Cover Soil		0	CY
Cover Soil, Supply/Deliver	$	23.00	per CY
Total Cost, Cover Soil	$	-	
Total Cost, Spreading ($4000)	$	-	
Total Minnesota Pond	$	-	

Storm Water Pond			
Area		2245	SY
Area		0.46	AC
Cover Soil Thickness		4	Inches
Total Cover Soil		250	CY
Cover Soil, Supply/Deliver	$	21.00	per CY
Total Cost, Cover Soil	$	5,250.00	
Total Cost, Spreading	$	2,300.00	
Total Storm Water Pond	$	**7,550.00**	

Contingency Pond/Dam Removal Area			
Area		3151	SY
Area		0.65	AC
Cover Soil Thickness		4	inches
Total Cover Soil		351	CY
Cover Soil, Supply/Deliver	$	21.00	per CY
Total Cost, Cover Soil	$	7,371.00	
Total Cost, Spreading	$	2,200.00	
Total Cost, Spreading Reclaimed Stream Channel Area ($5000)	$	5,000.00	
Total Contingency Pond	$	**14,571.00**	w/ German Gulch
TOTAL	$	**22,121.00**	
Total Cover Soil		601.0	cy

Opp, Pebbles

From: schnellexcavating@rfwave.net
Sent: Monday, September 17, 2012 10:48 PM
To: Clark, Pebbles
Subject: Beal Mtn Project

Follow Up Flag: Follow up
Flag Status: Completed

Evening Pebbles,
Spoke with Larry and this is the break down:

1. To spread topsoil on the top pond is $4000.00 and since the trucks would have to go all the way to the top- topsoil would be $23.00 per yard

2. To spread topsoil on the middle pone where Josh is going to move some more dirt/rock would be $2300.00 with topsoil at $21.00 per yard

3. To spread topsoil on the bottom pond would be $2200.00. If we have to reclaim back to where we built the stream channel a topsoil road would have to be built
into the area. A dump truck would have to back in and out to get it back to the stream channel to dump topsoil at a cost of $5000.00. This topsoil would be at the $21.00 per yard.

Now that Larry knows the quantity the topsoil will come from a different pile. I can get those test results at anytime. This pile is what Arco loves and is a lot more clumpy. This is what they
really prefer for the reclamation. The topsoil earlier is from a different pile that is more fine but do not have that kind of quantity.

4. This would add more days to the contract!

Let me know if there is anything else that I need to clarify.
Also, Josh plans to be at the Beal tomorrow afternoon with a crew and then will be in Butte on Wednesday with the possibly of going up in the afternoon. I will touch base with Sonny
Again, thank you for all of your help.
Jan

WORK DIRECTIVE CHANGE

(Instructions on Reverse Side) No. 05

PROJECT: Beal Mountain Mine: Pond Removals and Run-on Control Reclamation Project
DATE OF ISSUANCE: October 4, 2012

CONTRACTOR: Schnell Excavating, Inc.
122133 Nissler Rd.
Butte, Montana 59702

OWNER: Montana DEQ, Abandoned Mine Lands Bureau

DEQ Contract No.: 413006

CONTRACT FOR: AMLReclamation

ENGINEER: Tetra Tech Inc.

You are directed to proceed promptly with the following change(s):

Description: Grade Beal access road.

Purpose of Work Directive Change: Light grading of the Beal access road is necessary to remove large rocks for the transport of cover soil to the site.

Attachments: Road Grading Cost Estimate

If a claim is made that the above change(s) have affected Contract Price or Contract Time, any claim for a Change Order based thereon will involve one of the following methods of determining the effect of the change(s).

Method of determining change in Contract Price:

- [ ] Time and Materials
- [ ] Unit Prices
- [x] Lump Sum
- [ ] Other_____

Estimated increase in Contract Price: $500.00. If the change involves an increase, the estimated amount is not to be exceeded without further authorization.

Method of determining change in Contract Time:

- [ ] Contractor's Records
- [x] Engineer's Records
- [ ] Other _____

Estimated increase in Contract Time: 1 days. If the change involves an increase, the estimated time is not to be exceeded without further authorization.

RECOMMENDED:

By: Michael [illegible]
Engineer

AUTHORIZED:

By Pebble Opp
Owner

ACCEPTED:

By: Gary Schnell
Contractor

Rev. 6/04

WORK DIRECTIVE CHANGE

INSTRUCTIONS

A. GENERAL INFORMATION

This document was developed for use in situations involving changes in the Work which, if not processed expeditiously, might delay the Project. These changes are often initiated in the field and may affect the Contract Price or the Contract Time. This is not a Change Order, but only a directive to proceed with Work that may be included in a subsequent Change Order.

For supplemental instructions and minor changes not involving a change in the Contract Price or the Contract Time, a Field Order may be issued.

B. COMPLETING THE WORK DIRECTIVE CHANGE

Engineer initiates the form, including a description of the items involved and attachments.

Based on conversations between Engineer and Contractor, Engineer to indicate the following and attach the same hereto:

> METHOD OF DETERMINING CHANGE, IF ANY, IN CONTRACT PRICE: Indicate the method to be used in determining the final cost of Work involved and the net effect on the Contract Price. If the change involves an increase in the Contract Price and the estimated amount is approached before the additional or changed work is completed, another Work Directive Change must be issued to change the time or Contractor may stop the changed Work when the estimated time is reached. If the Work Directive Change is not likely to change the Contract Price, the space for estimated increase (decreased) should be marked "Not Applicable".
>
> METHOD OF DETERMINING CHANGE, IF ANY, IN CONTRACT TIME: Indicate the method to be used in determining the change in Contract Time and the estimated increase or decrease in Contract Time. If the change involves and increase in the Contract Time and the estimated time is approached before additional or changed Work is completed, another Work Directive Change must be issued to change the time or Contractor may stop the changed Work when the estimated time is reached. If the Work Directive Change is not likely to change the Contract Time, the space for estimated increase (decrease) should be marked "Not Applicable".

Once Engineer has completed and signed this form, all copies should be sent to Owner for authorization because Engineer alone does not have authority to authorize changes in Price or Time. Once authorized by Owner, a copy should be sent by Engineer to Contractor.

Once the Work covered by this directive is completed for final cost and time determined, Contractor should submit documentation for inclusion in a Change Order.

THIS IS A DIRECTIVE TO PROCEED WITH A CHANGE THAT MAY AFFECT THE CONTRACT PRICE OR THE CONTRACT TIME. A CHANGE ORDER, IF ANY, SHOULD BE CONSIDERED PROMPTLY.

Opp, Pebbles

From: schnellexcavating@rfwave.net
Sent: Wednesday, October 03, 2012 3:04 PM
To: Opp, Pebbles; micheal.hatten@tetratech.com; mmarks@fs.fed.us
Subject: Road Grading

Follow Up Flag: Follow up
Flag Status: Completed

Larry would like to grade the road before the trucks come in for topsoil.
He took the our lowboy up today and said it is almost to rough to travel.
He would knock out the rocks in the road.
The cost would be $500.00 to grade.

Please contact Larry on his cell phone 406-490-2499 or you can contact me at 406-723-5700.

Thank you,
Jan

APPENDIX J

Construction Photographs and Photo Log

Beal Mountain Mine Pond Removal Project
Photographic Log

Photo Number	Photo Description
8/13/2012	
1	Larry Schnell setting up the dewatering pumps at the Minnesota Pond
2	Minnesota Pond after dewatering
3	Surveyors (Brown and Associates, Butte MT) working on staking the run-on control ditch near the West Wall Slide.

2

3

Beal Mountain Mine Pond Removal Project
Photographic Log

Photo Number	Photo Description
8/14/2012	
1	Left to right: Don Bailey, Josh Henderson and Larry Schnell removing wire from the fence posts at the Minnesota Pond.
2	Don Bailey (in dozer) stripping topsoil from the perimeter of the Minnesota Pond.
3	Don Bailey (dozer) and Josh Henderson (excavator) working to backfill the Minnesota Pond.

2

3

Beal Mountain Mine Pond Removal Project
Photographic Log

Photo Number	Photo Description
8/15/2012	
1	Topsoil stockpile at the Minnesota Pond.
2	View of work at Minnesota Pond from the waste rock dump.
3	Run-on ditch centerline stakes at stations 3+00 and 3+50.

2

3

Beal Mountain Mine Pond Removal Project
Photographic Log

Photo Number	Photo Description
8/16/2012	
1	Josh Henderson troubleshooting the dozer.
2	Regrading the Minnesota Pond.
3	Debris stockpile at the Minnesota Pond.

2

3

Beal Mountain Mine Pond Removal Project
Photographic Log

Photo Number	Photo Description
8/17/2012	
1	View of the Minnesota Pond regrading from the waste rock dump.

Beal Mountain Mine Pond Removal Project
Photographic Log

Photo Number	Photo Description
8/20/2012	
1	View of the Minnesota Pond from the south.
2	View of the Minnesota Pond from the waste rock dump. The smaller topsoil pile is located at the toe of the slope behind the pile of woody debris.
3	Don Bailey (dozer) pushing material into the Minnesota Pond.

2

3

Beal Mountain Mine Pond Removal Project
Photographic Log

Photo Number	Photo Description
8/21/2012	
1	Regraded surface of the Minnesota Pond. View from SW corner.
2	Regraded surface of the Minnesota Pond. View from waste rock dump
3	Rip-rap removal at the Stormwater Pond.

2

3
KOMATSU

Beal Mountain Mine Pond Removal Project
Photographic Log

Photo Number	Photo Description
8/22/2012	
1	Josh Henderson (in excavator) stockpiling rip-rap material from the Stormwater Pond.
2	Load of straw wattles delivered to the Stormwater Pond.
3	Straw wattles installed along the southern perimeter of the Stormwater Pond.

2

3

Beal Mountain Mine Pond Removal Project
Photographic Log

Photo Number	Photo Description
8/23/2012	
1	Josh Henderson (in excavator) removing the south embankment from the Stormwater Pond.
2	Josh Henderson (in dozer) regrading the Stormwater Pond.

2

Beal Mountain Mine Pond Removal Project
Photographic Log

Photo Number	Photo Description
8/27/2012	
1	Cleared and grubbed vegetation from German Gulch
2	Regraded surface of the Stormwater Pond
3	Liner removal at the Contingency Pond.

2

3

Beal Mountain Mine Pond Removal Project
Photographic Log

Photo Number	Photo Description
8/29/2012	
1	Accumulated sediments from the German Gulch diversion dam placed in the Contingency Pond.
2	Reconstructed German Gulch channel. View upstream.
3	Recontoured access road between German Gulch and the Contingency Pond

2

3

Beal Mountain Mine Pond Removal Project
Photographic Log

Photo Number	Photo Description
8/31/2012	
1	Josh Henderson (excavator) and Larry Schnell (dozer) working to regrade the Contingency Pond.
2	View of the south Contingency Pond embankment from near German Gulch.
3	Loading rolls of liner material onto a flatbed trailer for recycling.

2

3

Beal Mountain Mine Pond Removal Project
Photographic Log

Photo Number	Photo Description
9/11/2012	
1	Debris stockpiles at the Contingency Pond.
2	Regraded surface of the Contingency Pond.
3	Excavator staged near the run-on control ditch work area.

2

3

Beal Mountain Mine Pond Removal Project
Photographic Log

Photo Number	Photo Description
9/12/2012	
1	Topsoil stockpile and loader near the run-on control ditch work area.
2	Loading landfill debris from the Minnesota Pond.
3	Josh Henderson (dozer) cutting the rough shape of the run-on control ditch.

2

3

Beal Mountain Mine Pond Removal Project
Photographic Log

Photo Number	Photo Description
9/14/2012	
1	View to the east of the run-on control ditch from approximately STA 2+00.
2	View to the west of the run-on control ditch from approximately STA 5+60.

2

Beal Mountain Mine Pond Removal Project
Photographic Log

Photo Number	Photo Description
9/14/2012	
1	View to the east of the run-on control ditch from approximately STA 2+00.
2	View to the west of the run-on control ditch from approximately STA 5+60.

2

Beal Mountain Mine Pond Removal Project
Photographic Log

Photo Number	Photo Description
9/24/2012	
1	View to the west of the run-on control ditch from approximately STA 5+00.
2	View to the west of the run-on control ditch from approximately STA 2+50. Note transition on the cut-slope side of the ditch from a flat shelf to being blended into the hillside

1

2

Beal Mountain Mine Pond Removal Project
Photographic Log

Photo Number	Photo Description
9/27/2012	
1	Robert Sheehan (Headwater Lining, Inc.) unrolling the 60-mil liner material for the run-on control ditch.
2	Larry Schnell burying the start of the liner at STA 0+00.
3	View of the run-on control ditch looking east from STA 0+00.

2

3

Beal Mountain Mine Pond Removal Project
Photographic Log

Photo Number	Photo Description
10/1/2012	
1	View to east of run-on control ditch from approximately STA 0+75.
2	Water bar constructed at STA 2+53.
3	View to east of the run-on control ditch from approximately STA 5+00. Note the TRM fabric ends before the end of the ditch.

2

3

Beal Mountain Mine Pond Removal Project
Photographic Log

Photo Number	Photo Description
10/4/2012	
1	Leftover topsoil at the run-on control ditch work area spread evenly over ground surface.
2	Regraded Stormwater Pond surface.
3	Larry Schnell and Myles Carpenter removing debris from the Contingency Pond work area.

2

3
KOMATSU

Beal Mountain Mine Pond Removal Project
Photographic Log

Photo Number	Photo Description
10/9/2012	
1	Topsoil access road built to reach check-dam removal area.
2	North bank of the check-dam removal areas covered with imported topsoil.
3	View to the northeast of the Contingency Pond work area.

2

3

Beal Mountain Mine Pond Removal Project
Photographic Log

Photo Number	Photo Description
10/10/2012	
1	View to the east of the finished topsoil at the Contingency Pond.
2	View to the west of the finished topsoil at the Contingency Pond near the vault area.
3	View to the east of the partial topsoil cover at the Stormwater Pond.

2

3