
J. E. STOVER & ASSOCIATES, INC.

2352 NORTH 7TH STREET, UNIT B
GRAND JUNCTION, COLORADO 81501
PHONE: (970) 245-4101, FAX: (970) 242-7908

MINE ENGINEERING
MINE RECLAMATION

CIVIL ENGINEERING
CONST. MANAGEMENT

March 21, 2022

Rob Zuber
Division of Reclamation, Mining & Safety
1313 Sherman St., Room 215
Denver, CO 80203

Re: Bowie No. 2 Mine, Permit C-1996-083,
Permit Renewal five (RN-05),
Adequacy Response #1

Dear Mr. Zuber:

On behalf of Bowie Resources, LLC, enclosed is the response to DRMS' adequacy response number one, dated November 24, 2021.

1. **DRMS:** Please confirm the acreages in the application form, and explain any discrepancies with recent Annual Reclamation Reports (ARRs) or other documents related to this permit. For example, the area reclaimed in the previous permit period is quantified as 96.9 acres, but recent ARR's indicate fewer acres. Another example is the number of acres that have been bond released; the application indicates no acres have been released, however the application should reflect the acreages released by SL-01 and SL-02. After making revisions to the form, please mail a hard copy with an original signature to the Division office on Sherman Street (in addition to an electronic submittal of your entire response to this PAR).

BRL: The application form has been revised to reflect that shown in the most recent annual reclamation reports. Please see revised **page 3 from the ARR**.

PAP Text, Appendices and Maps

2. **DRMS:** Vol I, Section 2.03.6 - In the adequacy response, please indicate if all right of entry and lease agreements are current. If they are not current, please update the PAP accordingly.

BRL: There are two revised Right of Entry documents to be inserted into **Volume III, Tab 1**. The first is between the Kevin M Keeling Revocable Trust and BRL and *replaces* the Turkey Track Surface Access and Use Agreement. The second right of Entry is between John H and Sandra J George and BRL and is for the parcel of land west of the train loadout and south of Bowie Road. There is a revision to the agreement between BRL and Wayside farms which changes the terms of the agreement. A Special Warranty Deed has been executed that allows BRL to maintain an easement along the existing access road to access the Union Pacific Rail Road but no longer includes use of the property for construction, operation and maintenance of the loadout. This Special Warranty Deed should be inserted into **Volume III, Tab 1**. Please also see revised **page 2.03-16**.

3. **DRMS:** Vol I, Section 2.04.11 - In the adequacy response, please indicate if the Threatened and Endangered Species discussion in this section (including the table of species) is based on current lists issued by the U.S. Fish and Wildlife Service and the Colorado Division of Parks and Wildlife (per Rule 2.04.11(4)). If it is not based on current lists, please check the current lists and update the PAP accordingly.

BRL: Since there has been no new disturbance since the most recent T&E report, a comparison between the T&E report in the PAP and a search in the FWS ECOS website shows that there have been no new species listed within the permit boundary. The Mexican Spotted Owl did show up on the report, however, upon further investigation, there is no critical habitat within the boundary. There is a new candidate species listed, which is the Monarch Butterfly, but it is not officially listed as an endangered species at this time.

4. **DRMS:** Vol II, Map 09 – The map legend (key) appears to be missing the symbols for the monitoring locations under Gob Pile #3. Please explain this or update the map. Also, it is recommended that BRL check that all symbols used on the map are included in the legend.

BRL: The vibrating wire piezometers (VWP) under Gob Pile #3 are not part of the hydrologic monitoring plan and do not belong on Map-09. The VWPs are for geotechnical monitoring purposed only.

5. **DRMS:** Vol III, Exhibit 8 – Pages 11 and 12 appear to have incorrect dates in the footer, and page 31 does not have “TR-122” in the footer. These pages should be revised.

BRL: Please see revised **pages Exh. 8-11, 12 & 31**

6. **DRMS:** Vol XI – Within the figure on page 4b, the typical section of the underdrain shows filter fabric above the rock and perforated pipe. Please clarify if this is accurate.

Perhaps the fabric should be shown encircling the rock and pipe. If necessary, revise this figure.

BRL: The filter fabric wrap is intended to wrap the rock and act as a separator between the rock and dirt interface. No revisions necessary.

7. **DRMS:** Vol XI – Please clarify if Appendix A includes the additional coverfill material that BRL salvaged in 2020. If not, the table should be revised.

BRL: Please see revised **Volume XI Appendix A**.

Stipulations

8. **DRMS:** Please clarify the status of the wells discussed in Stipulation 43, 2015-1B and 2015-1SS. The stipulation states that these wells will be drilled in 2015. If they were never drilled or if other changes to the stipulation should be made, this stipulation will need to be updated. The process for this update will be determined by discussion between BRL and the Division.

BRL: The findings and compliance dated November 20, 2017 for permit renewal 4 added to the following discussion about stipulation no. 43: "This stipulation is categorized as Future/Ongoing. The Spruce Stomp Lease Area has not been affected by mining activities due to BRL not obtaining right of entry for the area."

DRMS: Attached to this letter is a summary from an update of the Reclamation Cost Estimate for the Bowie No. 2 Mine. Please let me know if you would like to review the entire estimate. The updated liability is \$11,798,961. The active corporate surety for this site is \$10,971,057.58, and additional surety will be needed, per our estimate. We can discuss this more in the near future or after this permit renewal is approved by the Division (following the adequacy process).

BRL: BRL has gone through the reclamation estimate prepared by DRMS as part of the RN-05 adequacy process. Please understand, the Operator is not questioning the overall escalation as that is a normal part of bonding and understands that year by year costs may require adjustments. *The intent of this exercise is to evaluate and compare tasks to ensure consistency throughout, and where applicable, propose changes.* BRL has suggested evaluating hourly rates used in CIRCES to make them more comparable to local contractor rates, but is not questioning why the hourly rates themselves have increased in the last five years.

BRL would like to request a conference call with DRMS to explain, in detail the work that has been done, and answer any questions that may arise. In addition, BRL can submit a red-line

reclamation estimate demonstrating what changes we are suggesting in relation to each individual Task. A red-lined copy may be the clearest way to communicate the changes being proposed, so please let us know if this would be useful.

Attached to this review is an excel spreadsheet breakdown by equipment type and proposed changes for each, as well as two local contractor rate sheets. The spreadsheet and contractor rate sheets are for review purposes only and not intended to be part of the PAP.

General Questions/Comments:

1. The % swell is inconsistent not only in its amount but also when it is applied. The Operator proposes the swell factor be eliminated.

When the bond was originally written the quantity of soil to be moved was determined and variables considered. The quantities of soil within the bond are rounded numbers since BRL understands that the handling of soils during reclamation is not an exact science. The number provided allows for the quantity of soil anticipated to be handled during the action designated in the bonding tasks. Additional quantities being added by applying a swell % are not necessary.

Consider also that the soil/material being moved is compacted as it lies thus when it is collected and loaded, it remains the same, i.e. 3 CY on the ground, 3 CY is placed in the truck to be hauled. The same 3 CY are unloaded.

2. Please remove the Chisel plow from Tasks 150 & 154 as they are not necessary.
3. A CAT D10T-10SU comes standard from a CAT dealer/manufacturer with a ripper shank attached. The ripper ownership and operation cost should be removed from the following tasks referenced on page 5.
4. The average push distance for tasks listed on page 3 should be changed to a consistent to 100 feet. The average push distance is used as part of a calculation by the CIRCES software, the various amounts throughout the bond do not reflect the correct information for the use of the specified equipment at each task location. The designation of 100 feet can be universally applied to the equipment and the task it performs without having to consider the variables.
5. The discussion of job correction factor is shown on page 4, and should be revised down from 0.83 to 0.52. The two changes made to the equation are the "Operator Skill", and "Job Efficiency". The Operator submits that contractors in the area are above average with at least 10-years reclamation experience, and should be considered as such for calculation purposes (change from 0.75 to 0.85). In regards to the Job Efficiency factor, the Operator recommends that it should be changed from 0.83,

which is 50 minutes of every hour being worked, to 0.85, which is 51 minutes of every hour being worked.

6. The TRUCK1 tasks within the bond include a Truck and Loader combination. The majority of the payload capacity amounts are consistent except for Tasks 27, 40 and 75. These tasks need to be revised to match the other information in the other TRUCK1 tasks.

The Truck Bed Volume needs to be made consistent for Task 14 with Task1. The Final Truck Volume needs to be made consistent in Tasks 27, 40, 45, 45B, 45C, 45D and 45E.

Loading Tool Capacity in Task 40 need to match Task 45.

According to the CAT Handbook the soils being designated in the CIRCES Software tasks have a Bucket Fill Factor of 1, therefore all Bucket Fill Factor's throughout the task calculations should be 1.

Altitudes within the site fall within a specified range listed in the CAT Handbook for the CAT Equipment specified in the bond and should be 1 throughout the tasks.

7. The distance a Scraper will be required to haul material needs to be revised for Tasks 13, 42, 43, 46, 71, 73, 80, 110, 111, 112, 113, 115, 121, 123, 124, 125, and 127. The revised distances presented on page 5 have been rounded to the nearest foot.

8. DRMS provided the name of the company used to determine Equipment rates which is Everwatch Equipment which appears to be a nationwide company. The rates used in the reclamation estimate are far too high for the local area. Please see the attached cost sheets from two local contractors. Both of these contractors have worked for Bowie and other coal mines in the area. In addition, the hourly rate for the local contractors is a total cost. Hourly rates listed on individual task sheets are not a total cost, they are also subject to the additional 10% Profit. Please consider lowering the hourly rates to be more in line with local contractor rates. For example,

- 9.

Task Nos. 14, 22:

Truck/Loader combo = \$736.74/hour

Local contractor charges \$155/hour for a haul truck and \$160 for the loader for a total of \$315/hour.

10. Task Nos. 39 & 41: Compacted thickness listed as 8" and 10" respectively. The Rules allow for compaction at two-foot intervals on gob piles. Why is the Division using such small lifts?

11. Task No. 261 "Backfill shaft" lists the closure method of 6900 cy of backfilling to be done by hand. How can a shaft be backfilled by hand?
12. Task No. 140. 75 CFR 1711-2 only requires 25' of non-combustible material to seal a portal. Therefore, TR-123 has been submitted to specify only 25' of fill be required to seal the portals, and to remove the bulkhead requirement.
13. For task 157, where does 838 acres come from?
14. For Task 47, the visibility factor is shown as 0.8 in the net correction table and should be changed to 1.0.
15. For Task 45, the altitude adjustment is shown as 0.96, it should be changed to 1.0.
16. Task 093 needs to have the Total area changed to 78.6 acres.
17. Task 165 is Demolition Work, with the following changes being suggested to provide consistency throughout the task.

Contact with salvage companies verified that tanks hauled for disposal would be taken as is, since no salvage value is being accessed and no compensation will be exchanged. Thus, bonding for sludge collection, disposal and filling the tank with CO2 are not necessary.

The structures, floor and footing will have on-site/in-place disposal, without being hauled to an excavated pit as currently specified. Thus, the reference under the heading Demolition Menu Selection needs to be revised removing reference to haul distance (Max. 10,000 ft. haul) and reference to "in excavated pit". In addition, Max. 200 ft. push needs to be removed. The location adjustment of 2.2% should not apply to these adjustments, because the demolished rubble will be buried in the immediate area and will not change locations.

Various dimensions have been updated to be more specific.

Unit costs have been made consistent throughout the task. Unit costs appear to correspond with RS Means Catalog numbers, therefore places where unit costs were missing or appeared to be too low or too high, RS Means numbers were substituted and the number referenced.

As required by EPA and State regulation the hazardous waste has been removed regularly from the site, thus it should not be included in the bond.

Examples of various changes have been provided on page 7 of the attached

information.

Please let me know if you have any questions.

Sincerely,

Tamme Bishop

Tamme Bishop, P.E.

Project Engineer

Enclosures:

ARR: Page 3

Volume I: Page 2.03-16

Volume III: Pages Exh. 8-11,12 & 31, Surface Accuse and Use Agreement(s) Tab 1 (Two documents – John and Sandra George SUA, and Keeling Revocable Trust SUA), Special Warranty Deed between Wayside Farms and BRL.

Volume XI: Appendix A

Enclosures for review purposes only:

Rate Sheet – Tribble & Sons

Rate Sheet – Con-Sy Construction

Reclamation Review Spreadsheet

Cc via email: Basil Bear, Bowie Resources, LLC
Vicky Miller, Wolverine Fuels, LLC

General Description (Miles and direction from nearest town and approximate elevation):

<i>(Not for DP Entry)</i>			
	Permitted	Actual	Proposed
8. Mineral ownership: Indicate currently permitted acreage for each			
Federal: _____ acres			
State: _____ acres			
Private: _____ acres			
Indian: _____ acres			
9. Surface ownership: Indicate currently permitted acreage for each			
Federal: _____ acres			
State: _____ acres			
Private: _____ acres			
Indian: _____ acres			
10. Affected area (in acres)			
11. Disturbed area (in acres)			
12. Acreage of area reclaimed in previous permit term			
A. Backfilled and graded	N/A		N/A
B. Retopsoiled	N/A		N/A
C. Reseeded	N/A		N/A
13. Acreage for which bond has been released			
A. 60 percent	N/A		N/A
B. 85 percent	N/A		N/A
C. 100 percent	N/A		N/A
14. Renewal Term Requested (Years)	N/A	N/A	
<i>Note: If the application contains proposed (new) acreage, then a permit revision application form must also be completed for those acreages.</i>			

15. Type of Mine (Check one): ☐ Underground ☐ Surface
☐ Combined Surface and Underground
☐ Loadout ☐ Other

VOLUME I

a.k.a. Rose Marie Fraizer) and Robert Barnes have granted the Operator the right to use and easement along the existing access road to access the Union Pacific Rail Road. The special warranty Deed is presented in Volume III, Tab 1. The Wayside Farm and Cattle Company is now owned by Norton Seybert Colorado Holdings, LLC.

Through a Surface Access Agreement dated December 8th, 2017, Kevin M Keeling Revocable Trust granted the Operator permission to enter upon their lands and perform activities necessary to support the Operator's coal mining operation. The Memorandum of Surface Access Agreement is presented in Volume III, Tab 1.

Through a Surface Access Agreement dated April 3rd, 2019, John and Sandra George granted the Operator permission to enter upon their lands and perform activities necessary to support the Operators coal mining operation. The Memorandum of Surface Access Agreement is presented in Volume III, Tab1.

Through a Surface Access Agreement dated October 27, 2011, Tamara Burdzinski aka Tamara Morrell granted the Operator permission to enter upon their lands and perform activities necessary to support the Operator's coal mining operation. The Memorandum of Surface Access Agreement is presented in Volume III, Tab 1.

- (2) Not applicable to an underground mine.
- (3) No response required.

2.03.7 Relationships to Areas Designated Unsuitable for Mining

- (1) The permit area is not within an area designated unsuitable for surface mining activities as defined in Rule 7 or 30 CFR 764 and 765, or under study for designation in an administrative proceeding under Rule 7 or 30 CFR 764 and 765.
- (2) No response required. Not applicable.
- (3) There are no occupied dwellings within 300 feet measured horizontally of the surface operations or facilities.

VOLUME III

PAGE INTENTIONALLY LEFT BLANK

Ditch D-D2

Ditch D-D2 is formed when the flow from ditch D-D1 and ditch D-E1 join below sediment pond C. From the intersection of the two flows the ditch becomes a V-Ditch that must be capable of handling the combined flow from the two ditches.

Ditches D1, D2, Culvert D1, Drainage area E, and Ditch E-1 have been incorporated into Volume XI

** SEE DESIGN BEGINNING ON PAGE VOLUME XI, APP. B-29

Culvert C-D1, D2 & E1

** SEE DESIGN BEGINNING ON PAGE VOLUME XI, APP. B-41

Culvert C-E1

Culvert C-E1 was deleted from the design Jan. 1998

Culvert Summary and Minimum Size Requirements							
					Maximum Flow CFS	Minimum Culvert Inches	
		Drainage or Culvert Contributing Flow					
Culverts	C-B1	Ditch B1	1.88		1.88	12	
	C-B2	Deleted from Design					
	C-B3	Drainage Area	0.67		0.67	12	
	C-B4	Deleted from Design					
	C-B5	Deleted from Design					
	C-B6	Deleted from Design					
	C-B7	Ditch B9	0.24	Ditch B8	0.67	0.91	12
	C-B8	Ditch B10	1.17			1.17	12
	C-B9	Ditch B12	1.62	Ditch B36	0.16	1.78	12
	C-B10	Deleted from Design					
	C-B11	Ditch B15	3.56			3.56	18
	C-B12	Drainage Area	1.76	Ditch B20	0.55	2.31	18
	C-B13	Ditch B37	0.42			0.42	12
	C-B14	Ditch B16	4.44			4.44	18
	C-B15	Ditch B21	7.69	Ditch B24	2.63	10.32	24
	C-B16	Ditch B23	10.71			10.71	24
	C-B17	Ditch B-19	6.46	Ditch B-26	0.45	6.91	24
	C-B18	Ditch B27 & 32	1.24	Ditch B22	0.45	1.69	12
	C-B19	Culvert B18	1.69	Culvert B16	10.71	12.40	24
	C-B20	Deleted from Design				0.00	
	C-B21	Drainage Area B - 25 Year Event				22.43	36
	C-B22	Ditch B15	3.56			3.56	18
	C-B23	Ditch B16	4.44			4.44	18
	C-B24	Ditch B13	0.78			0.78	12
	C-B25	Ditch B35	0.82			0.82	12
	C-B26	Ditch B25	0.64			0.64	12
	C-B27	Culvert B19	12.40			12.40	24
	C-B28	Ditch B29	13.33			13.33	30
	C-B29	Pond B/C Diversion Structure				0.00	18
Culverts	C-C1	Ditch C1	1.42			1.42	12
	C-C2	Deleted from Design - Plugged with TR-119				0.00	12
	C-C3	Ditch C2	1.46			1.46	12
	C-C4	Ditch C4	6.38			6.38	24
	C-C5	Culvert C13	11.57	Culvert C4	6.38	17.95	30
	C-C6	Deleted from Design					
	C-C7	Ditch C8	33.95			33.95	36
	C-C8	Drainage Area	0.09			0.09	12
	C-C9	Deleted from Design					
	C-C10	Ditch C15	0.75			0.75	12
	C-C11	Ditch C12	6.84			6.84	24
	C-C12	Ditch C17	1.33	Ditch C24	6.84	8.17	24
	C-C13	Drainage Area D-C5 renamed C-C13 (page 63)				11.57	24
	C-C14	Ditch C12	6.84			6.84	24
	C-C15	Ditch C21	1.02	Ditch C22	8.87	9.89	24
	C-C16	Ditch C18	8.50			8.50	24
	C-C17	Ditch C19	0.29			0.29	12
	C-C18	Deleted from Design					
	C-C19	Ditch C17	1.33			1.33	12
	C-C20	Ditch C11	37.54			37.54	36
	C-C21	Ditch C-C20	0.93			0.93	12
	C-C22	Drainage Area	0.25			0.25	12
	C-C23	Drainage Area	0.21			0.21	12
	C-C24	Ditch C1	1.42			1.42	12
	C-C25	Mine Water	0.50			0.50	12
	C-C26	Drainage Area	1.66			1.66	36*
	C-C27	Ditch B3	0.43			0.43	12
	Culverts	C-D1	SEE DESIGN BEGINNING ON PAGE VOLUME XI, B-41				
		C-D2	SEE DESIGN BEGINNING ON PAGE VOLUME XI, B-42				
C-E1		Ditch E-1	0.00		0.00	12	
C-G1		Deleted from design					
C-G2		Ditch D-D4	0.42		0.42	12	
C-G3		Ditch D-D3 & D6	1.07		1.07	24	
C-G4		Ditch D-5	0.86			12	
C-G5		Culvert D-1	9.70		9.70	36	
C-G6		Pond C Primary Discharge			0.72	12	
		C-H1	Ditch H1	2.57		23.73	36**
		CW Ditch	8.79	Ponds C & D Discharge	12.37		
	"J" Culvert designs located in Volume XI, Appendix B						
	** 36" in-place, design of C-26 requires a minimum of 10" be installed						
	** 42" in-place, design of C-H1 requires a minimum of 36" be installed						
	C-K1	Ditch K1	0.46	Ditch K2	0.97	1.43	12
	C-K2	Ditch K3	1.70			1.70	12
	C-K3	Wash down water	1.00			1.00	24
	C-L1	Deleted from design.					
Culverts	SAE1	Deleted from design.					
	SAE2	Deleted from design.					
Note 1	End sections must conform to fill slopes.						
Note 2	An 18-inch culvert will handle 11 cfs with a HW/D ratio of 2.0. If an 18-inch culvert is to be used, assure rock headwall or road will provide 1.5' of head over top of culvert.						
Note 3	Culverts C-B19, B20,B21 & SAE2 are located under old State Highway 133. Maintenance and repair of these culverts is the responsibility of the operator.						
Note 4	Culvert B29 is the Pond B/C diversion structure. Water will be diverted to C-B29 only during times when maintenance or clean out of Pond C is necessary.						

SURFACE USE and ACCESS AGREEMENT

This Surface Use and Access Agreement ("Agreement"), dated effective this 3rd day of April 2019, is made by and between John H. and Sandra J. George, with an address of 16118 Farmers Mine Rd, Paonia, CO 81428 ("Grantor"), and Bowie Resources, LLC, a Delaware limited liability company, with an address at 1401 North 1st St., Suite A, Grand Junction, CO 81501 ("Grantee")

Recitals

WHEREAS, Grantee owns and operates certain industrial facilities in Delta County, Colorado which are serviced by a rail road siding located upon Grantor's property.

WHEREAS, Grantor owns certain private property in Delta County, Colorado as further described on **Exhibit A** attached hereto, (the "Property") a portion of which contains Grantee's permitted rail road siding and associated facilities (the "Permitted Area").

WHEREAS, Grantor is willing to permit Grantee access to perform all necessary surface operations associated with the operation and use of the Permitted Area subject to the terms and conditions described herein.

Agreement

NOW, THEREFORE, in consideration of the mutual promises, terms and conditions herein, the receipt and sufficiency whereof are acknowledged by each of the parties hereto, it is agreed as follows:

1. Allowed Uses and Restrictions.

(a) Grantee, its employees, agents and contractors, and their respective successors and assigns, have permission to enter upon and through the Property, together with the right to occupy and use the Permitted Area in conjunction with the continued operation of Grantee's industrial site and to perform reclamation or repairs to the Permitted Area as set forth in any applicable permit or regulation.

(b) Prior to commencing any new building construction on the Property, Grantee shall obtain the written consent of Grantor, which shall not be unreasonably withheld, conditioned or delayed.

(c) Grantee at all times will fully and promptly comply with all applicable laws, permits, rules and regulations of any lawful governmental authority which apply to its use of the Permitted Area for the hereinabove stated purposes;

2. Term. The term of this Agreement shall commence on the effective date hereof, and shall continue for so long as the Permitted Area is incorporated with the State of Colorado Department of Reclamation, Mining and Safety Permit C-1996-083, unless terminated earlier by

Grantee for any reason upon thirty (30) days' prior written notice to Grantor, upon which Grantee shall thereafter shall be released and relieved from any and all further liability hereunder, except as otherwise incurred prior to termination of this Agreement.

3. Waste. Grantee shall not commit or knowingly allow another to commit any waste or nuisance upon the Property. Grantee shall not destroy, deface or damage any part of the improvements on the Property or knowingly permit any other person to do so.

4. Encumbrances. Grantee shall keep the Property free and clear of any and all liens and encumbrances arising or which might arise, for any reason, out of Grantee's use of the Permitted Area.

5. Further Assurances. Grantor, at the request of Grantee, shall execute and deliver to Grantee any available instruments, agreements, documents, permits or applications, or any other papers reasonably required by Grantee, and Grantor shall do such other acts as may be reasonably requested by Grantee, all to effect the purposes of this Agreement. Conversely, Grantee, at the request of Grantor, shall execute and deliver to Grantor any available instruments, agreements, documents, permits or applications, or any other papers reasonably required by Grantor, and Grantee shall do such other acts as may be reasonably requested by Grantor, all to effect the purposes of this Agreement. Grantor agrees to support Grantee's efforts to obtain any necessary federal, state, and local governmental agencies approval of any leases, NEPA actions, permits, licenses, and any other agreements with landowners, water rights owners, and water users associations in conjunction with Grantee's coal mining operations and/or reclamation activities, or in conjunction with any industrial use of Permitted Area (by Grantee or any successor or assign of Grantee). Grantor, including all heirs, agents, assigns, tenants and occupants of the Property, shall not oppose any of Grantee's permitting activities, including reclamation activities, on or adjacent to the Property and the Permitted Area.

6. Amendment. This Agreement may be amended only by a written amendment executed by both parties.

7. Notices. All notices shall be given (i) by personal delivery, or (ii) by electronic communication, capable of producing a printed transmission, or (iii) by registered or certified mail return receipt requested; or (iv) by overnight or other express courier service. Notices shall be effective and shall be deemed given on the date of receipt at the principal address if received during normal business hours, and, if not received during normal business hours, on the next business day following receipt. Any party may change its address by written notice to the other party.

If to Grantor:

John and Sandra George
16118 Farmers Mine Rd
Paonia, CO 81428
Phone: (970) 208-3515
Fax: (970) 527-3218

If to Grantee

Bowie Resources, LLC
Attn: Land Department
1401 N 1st St., Suite A
Grand Junction, CO 81501
Phone: (970) 852-0110
Fax: (970) 263-5161
Email: rwilson@wolverinefuels.com

8. Entire Agreement. This instrument constitutes the entire agreement and understanding between the parties hereto, and all parties executing this instrument have received a copy of the same.

9. Recordation. This Agreement shall not be recorded. The parties shall execute a Memorandum of Surface Access for the purpose of recording in the records of Delta County, Colorado.

10. Governing Law. This Agreement shall be construed in accordance with and governed by the laws of the State of Colorado. Each party hereto consents to the jurisdiction of any appropriate court in the State of Colorado in the event there is a dispute or disagreement arising out of this Agreement. Except as otherwise provided in this Agreement, the parties shall be entitled to any and all remedies provided by law.

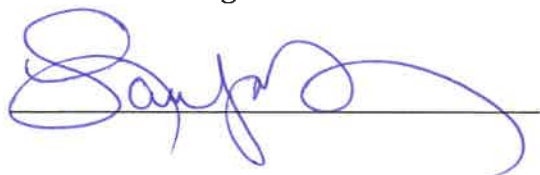
11. Binding Effect. All the terms, conditions and covenants of this Agreement shall be binding upon and shall inure to the benefit of the successors and assigns, respectively, of each party hereto.

IN WITNESS WHEREOF, Grantor and Grantee have executed this Surface Use and Access Agreement in duplicate effective the date first above written.

John H. George

A handwritten signature in blue ink, appearing to read "John H. George", written over a horizontal line.

Sandra J. George

A handwritten signature in blue ink, appearing to read "Sandra", written over a horizontal line.

Bowie Resources, LLC

By: A handwritten signature in blue ink, appearing to read "BS", written over a horizontal line.

Brian S. Settles
Chief Administrative Officer and General Counsel

EXHIBIT A
Legal Description

Parcel 318715400014

A part of the SW $\frac{1}{4}$ SE $\frac{1}{4}$ of Section 15, Township 13 South, Range 91 West of the 6th Principal Meridian, described as follows: Beginning at the Northwest corner of said SW $\frac{1}{4}$ SE $\frac{1}{4}$; thence South, along the West line of said SW $\frac{1}{4}$ SE $\frac{1}{4}$, a distance of 60 rods; thence due East, 20 rods, thence Northeasterly to the Northeast corner of said SW $\frac{1}{4}$ SE $\frac{1}{4}$; thence West, along the North line of said SW $\frac{1}{4}$ SE $\frac{1}{4}$, a distance of 80 rods, more or less, to the point of beginning.

Also,

All that part of the NW $\frac{1}{4}$ SE $\frac{1}{4}$ of Section 15, Township 13 South, Range 91 West of the 6th Principal Meridian, lying Southerly and Easterly of the Southerly right of way of the Denver and Rio Grande Western Railway Company

EXCEPT that portion deed by Quit Claim Deed recorded November 4, 1985 in Book 541 at Page 367 by deed recorded August 9, 1989 in Book 632 at Page 162.

Parcel 318715300009

Beginning at a point on the South line of Section 15, Township 13 South, Range 91 West of the 6th Principal Meridian, 739 feet East of the Southwest corner of thereof; thence East on said South line 415 feet; thence North 20°38' West 542 feet to the intersection of the East line of the right of way of the Denver and Rio Grande Railroad; thence in a Southwesterly direction along the East line of said right of way to point of beginning.

Together with a road right of way 30 feet in width along the East boundary of the following described property: Part of the SW $\frac{1}{4}$ SW $\frac{1}{4}$ of Section 15, Township 13 South, Range 91 West of the 6th Principal Meridian more particularly described as follows: Beginning at a point on the South right of way line of Highway No. 133 whence the Southwest corner of said Section 15 bears South 18°05' West 616.9 feet; thence North 7°18' East 47.3 feet; thence along the arc of a curve to the right 205.7 feet, with a radius of 211.5 feet and whose long chord is North 34°53' East 197.7 feet; thence North 62°55' East 566 feet; thence leaving said Highway South 3°18' East 433.2 feet; thence South 3°20' East 101.3 feet to the Northerly right of way of the Denver and Rio Grande Railroad as described in deed recorded in Book 53 at Page 313; thence along said railroad along the arc of an curve to the left 344.1 feet, with a radius of 711.3 feet and whose long chord is South 33°50' West 340.7 feet; thence leaving said railroad right of way North 52°59' West 582.0 feet to the point of beginning.

EXHIBIT A (continued)**Parcel 318715300010**

A parcel located in the S½SW¼ of Section 15, Township 13 South, Range 91 West of the 6th Principal Meridian having bearings based on GLO bearing of N°06 East, between GLO Brass Caps marking the SW corner and the W¼ corners respectively of said Section 15, with all other bearings relative thereto, and described as follows: Beginning at a point on the South line of said Section 15, from which the SW corner bears North 88°53'48" West 1154.0 feet; thence running North 20°38' West 516.97 feet, more or less, to the South R.O.W. line of the D&RGW R.R. Co at a point in a curve; thence following the R.O.W. along a curve to the right, said curve ending at a point which bears North 55°10'20" East 211.64 feet; thence continuing along said R.O.W. line North 71°29' East 903.7 feet to Sta. 1972+30 at which point the R.O.W. changes from a 75 foot half width to a 50 foot width; thence North 18°31' West 25.0 feet along said station line; thence North 71°29' East 658.0 feet more or less, to the North-South centerline of Section 15; thence leaving said R.O.W. and following said centerline South 0°16'47" East 1152.65 feet to a point in the North Fork River which is the S¼ corner of said Section 15, marked by Witness Corner on Line 396.03 feet North 0°16'47" West, from said corner; thence following the South line of said Section 15 North 88°53'48" West 1470.42 feet to the Point of Beginning. EXCEPT that part as conveyed to the State Department of Highways in Deed recorded November 5, 1990 in Book 665 at Page 533 described as follows: A tract of land beginning at a point from which the SW corner of Section 15, Township 13 South, Range 91 West of the 6th Principal Meridian, a GLO brass cap monument, bears South 86°31'00" West, a distance of 2,289.85 feet; thence North 68°40'20" East, a distance of 368.85 feet to the East property line of that parcel described by Book 525 at Page 643 of the Delta County records; thence North 0°12'10" East, along said East line 173.22 feet; thence South 68°40'20" West, a distance of 435.22 feet; thence South 71°36'30" West, a distance of 1,076.46 feet to the intersection with the South line of said Section 15; thence South 87°33'30" East, along the South line, a distance of 599.11 feet; thence North 65°48'40" East, a distance of 527 feet, more or less, to the Point of Beginning. ALSO EXCEPT that part conveyed into the State Department of Highways in Deed recorded November 5, 1990 in Book 665 at Page 535 described as follows: A tract of land beginning at a point from which the SW corner of Section 15, Township 13 South, Range 91 West of the 6th Principal Meridian, a GLO brass cap monument, bears South 86°31'00" West, a distance of 2,289.85 feet; thence South 65°48'40" West, 527.41 feet to the intersection with the South line of the SE¼SW¼, Section 15; thence South 87°33'30" East, along said South line 817.34 feet to the intersection with the East property line of that parcel described in Book 525 at Page 643 of the Delta County records; thence North 01°12'10" East along said East line 385.16 feet; thence South 68°40'20" West, 368.84 feet, more or less, to the Point of Beginning.

Delta County, State of Colorado

SPECIAL WARRANTY DEED

THIS DEED is dated December 14, 2018, and is made between Bowie Resources, LLC, a Delaware limited liability company (whether one, or more than one), the "Grantor", of the _____ County of _____ and State of _____, and Kirk Morgan and Sarah Morgan, as joint tenants (whether one, or more than one), the "Grantee," whose legal address is _____ of the County of Delta and State of Colorado.

WITNESS, that the Grantor, for and in consideration of the sum of Twenty eight thousand and no/100ths—
_____ DOLLARS, (\$28,000.00), the receipt and sufficiency of which is hereby acknowledged, hereby grants, bargains, sells, conveys and confirms unto the Grantee and the Grantee's heirs and assigns forever, all the real property, together with any improvements thereon, located in the _____ County of Delta and State of Colorado, described as follows:

Part of the SW $\frac{1}{4}$ SW $\frac{1}{4}$ of Section 15, Township 13 South, Range 91 West of the 6th Principal Meridian, more particularly described as follows:

Beginning at a point on the South right of way line of Highway No. 133 whence the Southwest corner of said Section 15 bears South 19°05' West 616.9 feet; thence North 7°18' East 47.3 feet; thence along the arc of a curve to the right 205.7 feet, with a radius of 211.5 feet and whose long chord is North 34°53' East 197.7 feet; thence North 62°55' East 566.0 feet; thence leaving said highway South 3°17' East 433.2 feet; thence South 3°20' East 101.2 feet to the Northerly right of way of the Denver and Rio Grande Railroad as described in deed recorded in Book 53 at Page 313; thence along said railroad along the arc of a curve to the left 344.1 feet, with a radius of 711.3 feet and whose long chord is South 33°50' West 340.7 feet; thence leaving said railroad right of way North 52°59' West 582.0 feet to the point of beginning.

Delta County, State of Colorado

Grantor shall retain an easement along the existing access road to access the Union Pacific Rail Road.

also known by street address as: vacant ground, Paonia, Co 81428
and assessor's schedule or parcel number: R023167

TOGETHER with all and singular the hereditaments and appurtenances thereunto belonging, or in anywise appertaining, the reversions, remainders, rents, issues and profits thereof, and all the estate, right, title, interest, claim and demand whatsoever of the Grantor, either in law or equity, of, in and to the above bargained premises, with the hereditaments and appurtenances;

TO HAVE AND TO HOLD the said premises above bargained and described, with the appurtenances, unto the Grantee and the Grantee's heirs and assigns forever. The Grantor, for the Grantor and the Grantor's heirs and assigns, does covenant and agree that the Grantor shall and will WARRANT THE TITLE AND DEFEND the above described premises, *but not any adjoining vacated street or alley*, if any, in the quiet and peaceable possession of the Grantee and the heirs and assigns of the Grantee, against all and every person or persons claiming the whole or any part thereof, by, through or under the Grantor except and subject to: ☐ none; or ☒ the following matters:
Taxes and assessments for the current year and subsequent years and those specific exceptions described by reference to recorded documents as reflected in the Title Documents accepted by the Buyer in accordance with Section 8.1 ("Title Review") of the contract between the parties hereto for the sale and purchase of the herein described property

IN WITNESS WHEREOF, the Grantor has executed this deed on the date set forth above.

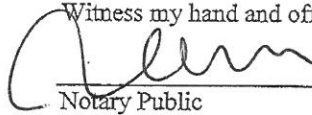
Bowie Resources, LLC, a Delaware limited liability
company

BY: Brian S. Settles, Chief Administrative Officer

STATE OF Kentucky
County of Jefferson

The foregoing instrument was acknowledged before me this 17th day of December, 2018, by
Brian S. Settles, Chief Administrative Officer of Bowie Resources, LLC, a Delaware limited liability
company

Witness my hand and official seal.



Notary Public

My commission expires: 7/23/22

Name and Address of Person Creating Newly Created Legal Description (§38-35-106.5, C.R.S.)

SURFACE ACCESS AND USE AGREEMENT

This Surface Access and Use Agreement ("Agreement"), dated effective this 8 day of December 2017, is made by and between Kevin M. Keeling and Melanie J. Keeling, or their successors as Co-Trustees of KEVIN M. KEELING REVOCABLE TRUST AGREEMENT, dated April 20, 2007, with an address of PO Box 326, Monett, MO 65708 ("Grantor"), and Bowie Resources, LLC, a Delaware limited liability company, with an address at 225 North 5th St, Suite 900, Grand Junction, CO 81501 ("Grantee")

Recitals

WHEREAS, Grantor owns certain private property in Delta County, Colorado in the vicinity of Stevens Gulch Road, as shown in Attachment A (property map) and as described as follows, hereinafter referred to as "the Lands":

A tract of land located in Sections 5, 6, 7, 8, 17, 18 and 19 of Township 13 South, Range 91 West of the 6th P.M. and in Sections 1, 11, 12, 13 and 14 of Township 13 South, Range 92 West of the 6th P.M., more particularly described in the deeds recorded at Reception Numbers: 700035 and 700033 of the Delta County Clerk and Recorder's records.

WHEREAS, Grantee owns and operates an underground coal mine in Delta County, Colorado adjacent to and underlying the Lands.

WHEREAS, Grantor is willing to permit Grantee to perform all necessary surface operations associated with active coal leases on the Lands subject to the terms and conditions described herein.

Agreement

NOW, THEREFORE, in consideration of the mutual promises, terms and conditions, the receipt and sufficiency whereof are acknowledged by each of the parties hereto, it is agreed as follows:

1. Allowed Uses and Restrictions.

(a) Grantee, its employees, agents and contractors, have permission to enter upon and through the Lands, together with the right to construct, maintain and use on or within the Lands all equipment installed on the Lands, for the following purposes:

i. to survey, place markers, do future surveying and monitoring of actual or potential surface effects reasonably related to Grantee's mining operation below the Lands, and to do the restoration or repair of surface effects on the Lands resulting from said activities;

ii. to explore or vent mine gases by constructing drill sites and access roads and installing drill holes at such site(s) and in such manner mutually agreed to by both Grantor and Grantee, such agreement not to be unreasonably withheld; and,

iii. to conduct other activities related to gathering baseline data as may be necessary or required to fulfill all permitting, leasing, and reclamation requirements.

iv. to perform reclamation or repairs as necessary to any roadways, drill sites, or monitoring sites to the standards set forth in any applicable permit or regulation.

v. to perform Grantee's reclamation and monitoring obligations with respect to the Land under the Colorado Surface Coal Mining Reclamation Act, C.R.S. 34-33-101, et. seq. (the "Act") and associated regulations, Grantee's permit(s) issued under the Act, and any orders of the Office of Mined Land Reclamation within the Division of Reclamation Mining and Safety ("DRMS") or the Colorado Mined Land Reclamation Board ("MLRB"), as such obligations now exist or may later be modified, including the right to bring all equipment, supplies, and personnel onto the Land which may be necessary or convenient to perform such reclamation and monitoring activities.

(b) Prior to commencing any new surface disturbance, including drill sites and access roads. Grantee shall obtain written consent of Grantor. Where possible, site selection and road routes will be mutually agreed to by both Grantor and Grantee.

(c) Grantee at all times will fully and promptly comply with all applicable laws, permits, rules and regulations of any lawful governmental authority which apply to its use of the Lands for the hereinabove stated purposes;

(d) Operations During Archery, Muzzleloading, and Rifle Big Game Hunting Seasons. Grantee understands that Grantor is concerned that Grantee's operations and activities under this agreement will interfere with or negatively impact Grantor's use of the Lands for wildlife habitat improvement and for hunting by Grantor and Grantor's agents, guests and invitees during the above mentioned hunting seasons as established from time to time by Colorado Parks and Wildlife. Grantee agrees that, when reasonable¹ to do so, Grantee's rights of access and use of the Lands under this paragraph 1 shall be subject to the following provisions: To the extent not otherwise required by law, the terms of its permit(s) under the Act, the lawful orders of DRMS, MLRB, or other legal authority, or as necessary to protect public health, safety, and welfare, Grantee will schedule such operations and activities to take place on the Lands at times which do not fall within designated hunting seasons that Grantor, and Grantor's agents, guests and invitees have valid hunting permits for during the months of September, October, and November of each year during the term of this Agreement; and Grantee shall coordinate such activities with Grantor so as to minimize the impact of said inspection on Grantor's hunting and/or Grantor's wildlife habitat improvement activities.

(e) Grantee agrees that its access to the Lands is limited to its employees and contractors, and that this Agreement does not grant to Grantee the right to use the Lands for any purpose other than those specified herein. No firearms, crossbows, other weapons, pets, illegal drugs, alcoholic beverages or hunting will be permitted on the Lands by Grantee's employees and contractors.

2. Term. The term of this Agreement shall commence on the effective date hereof, and shall continue for so long as access to the Lands is required for compliance with State of

¹ By "reasonable", this means Grantee will make every effort possible to avoid accessing the Lands for monitoring and permitting activities during Grantor's desired Colorado Parks and Wildlife sanctioned big game hunting seasons. Grantor shall provide Grantee with written notice annually on or before July 1 of Grantor's desired seasons ("Grantor's Hunting Seasons"), and of any areas of wildlife habitat improvement. Grantee will make every effort possible to avoid access to the Lands during Grantor's Hunting Seasons and habitat improvement areas. Grantor acknowledges that weather and other adverse conditions may affect Grantee's ability to access the Lands and as such Grantee may require access to the Lands during Grantor's Hunting Seasons. If such condition exists, Grantee will coordinate with Grantor to access the Lands at times and/or areas as needed between the parties.

Colorado Division of Reclamation, Mining and Safety Permits C-1981-038 and C-1996-083 unless terminated earlier as provided for below. This Agreement may be terminated sooner as follows:

(a) Grantee may terminate this Agreement for any reason upon thirty (30) days' prior written notice to Grantor and thereafter shall be released and relieved from any and all further liability hereunder, except as otherwise incurred prior to termination of this Agreement; and,

(b) Grantor may terminate this Agreement for Grantee's material breach of any of the terms and conditions of this Agreement as provided below.

3. Surface Disturbance Fee. In the event Grantee elects to construct/install new drill sites, drill holes, and access roads pursuant to Section 1(a)(ii) above, then Grantee shall pay to Grantor a one-time payment in the sum of \$1,500 for each new drill site or monitoring site and \$100 per 100 feet for new road construction upon receiving Grantor's written consent and prior to commencement of the activity/construction.

4. Reimbursement for Damages. Grantee agrees to either promptly repair, or pay Grantor for, any damages to the Lands or related structures or facilities thereon resulting from Grantee's mining or mining related activities, or from Grantee's operations and/or activities hereunder.

5. Drill Sites. Drill sites or pads will be designed to minimize surface disturbance. The maximum size of the drill pad will be 200' x 200'. The estimated surface disturbance for the drill pad will be 0.9 of an acre. Construction of the pad would proceed by first selectively clearing brush/vegetation, removing and stockpiling topsoil for future use in later reclamation, and leveling the subsoil to form a flat pad.

6. Access Roads. If the construction of new roads is required the road surface will be approximately 16 feet wide. All existing roads used by Grantee will be maintained in their existing condition or upgraded for ease of access, depending on existing road condition. Drill and monitoring well sites will be accessed from new and existing roads. The sections of existing roads used will be maintained in their existing condition or improved for ease of access. New roads shall be constructed as narrow as possible to safely allow access for the drilling equipment and personnel. Typical constructed road widths can be 16 feet wide. All roads shall be used in a reasonable and prudent manner so as to prevent any unnecessary damage. Any damage that occurs will be repaired by Grantee in a timely manner.

7. Gates and Fences. The rights of access granted herein are subject to the right of Grantor to maintain all existing fences and gates, and to modify and/or add such new fences and gates as Grantor deems necessary in its discretion. Gate that are locked by Grantor shall be kept locked by Grantee. Grantor agrees to either provide Grantee with keys or combinations to such locks or Grantee may provide its own locks and, in such event, Grantee shall provide Grantor with keys or combinations to Grantee's locks prior to such installation. All gates utilized by Grantee, whether locked or not, shall be kept closed.

8. Waste. Grantee shall not commit or knowingly allow another to commit any waste or nuisance upon the Lands. Grantee shall not destroy, deface or damage any part of the improvements on the Lands or knowingly permit any other person to do so.

9. Encumbrances. Grantee shall keep the Lands free and clear of any and all liens and encumbrances arising or which might arise, for any reason, out of Grantee's activities on, and use of, the Lands.

10. Hold Harmless. Grantee shall defend, indemnify and save Grantor, or its duly authorized agent, harmless from and against any and all losses, costs, expenses, claims, liabilities, suits or actions (including all reasonable expense, court costs, and attorney's fees) arising out of injuries to or death of any person or person, or arising out of loss of or damage to the property of any person or persons caused by or resulting from, directly or indirectly, any act or omission of Grantee, or any of its agents or employees.

11. Breach and Re-entry. If Grantee commits a material breach of any term of this Agreement and fails or refuses to commence in good faith to remedy the breach within thirty (30) days after Grantor delivers written notice to Grantee, then Grantor may terminate this Agreement upon ten (10) days' written notice to Grantee.

12. Amendment. This Agreement may be amended only by a written amendment executed by both parties.

13. Notices. All notices shall be given (i) by personal delivery, or (ii) by electronic communication, capable of producing a printed transmission, or (iii) by registered or certified mail return receipt requested; or (iv) by overnight or other express courier service. Notices shall be effective and shall be deemed delivered on the date of receipt at the principal address if received during normal business hours, and, if not received during normal business hours, on the next business day following receipt. Any party may change its address or other contact information by written notice to the other party.

If to Grantor

Kevin M. Keeling Revocable Trust

PO Box 326

Monett, MO 65708

Phone: 417.236.9602

Email: kim@3dsolutions.com

If to Grantee

Bowie Resources, LLC

Attn: Land Department

225 North 5th St., Suite 900

Grand Junction, CO 81501

Phone: (970) 263-5144

Email: rwilson@bowieresources.com

14. Entire Agreement. This instrument constitutes the entire agreement and understanding between the parties hereto, and all parties executing this instrument have received a copy of the same.

15. Recordation. This Agreement shall not be recorded. Concurrently with the execution of this Agreement, the parties shall execute and record a Memorandum of Surface Access and Use Agreement for recording in the form attached hereto as Attachment "B".

16. Governing Law. This Agreement shall be construed in accordance with and governed by the laws of the State of Colorado. Each party hereto consents to the jurisdiction of any appropriate court in the State of Colorado in the event there is a dispute or disagreement arising out of this Agreement. Except as otherwise provided in this Agreement, the parties shall be entitled to any and all remedies provided by law.

17. Binding Effect. All the terms, conditions and covenants of this Agreement shall be binding upon and shall inure to the benefit of the successors and assigns, respectively, of each party hereto. Grantee shall provide a copy of this Agreement to any person who may acquire ownership of the Grantee's surface rights to the Lands.

IN WITNESS WHEREOF, Grantor and Grantee have executed this Surface Access and Use Agreement in duplicate effective the date first above written.

Signatures on Following Page

Grantor:

Kevin M. Keeling Revocable Trust Agreement dated April 20, 2007

By: 
Kevin M. Keeling

Its: Co-Trustee

Grantor:

Kevin M. Keeling Revocable Trust Agreement dated April 20, 2007

By: 
Melanie J. Keeling

Its: Co-Trustee

Grantee:

Bowie Resources, LLC

By: _____
Gene DiClaudio

Its: Chief Operating Officer

Grantor:

Kevin M. Keeling Revocable Trust Agreement dated April 20, 2007

By: _____
Kevin M. Keeling

Its: Co-Trustee

Grantor:

Kevin M. Keeling Revocable Trust Agreement dated April 20, 2007

By: _____
Melanie J. Keeling

Its: Co-Trustee

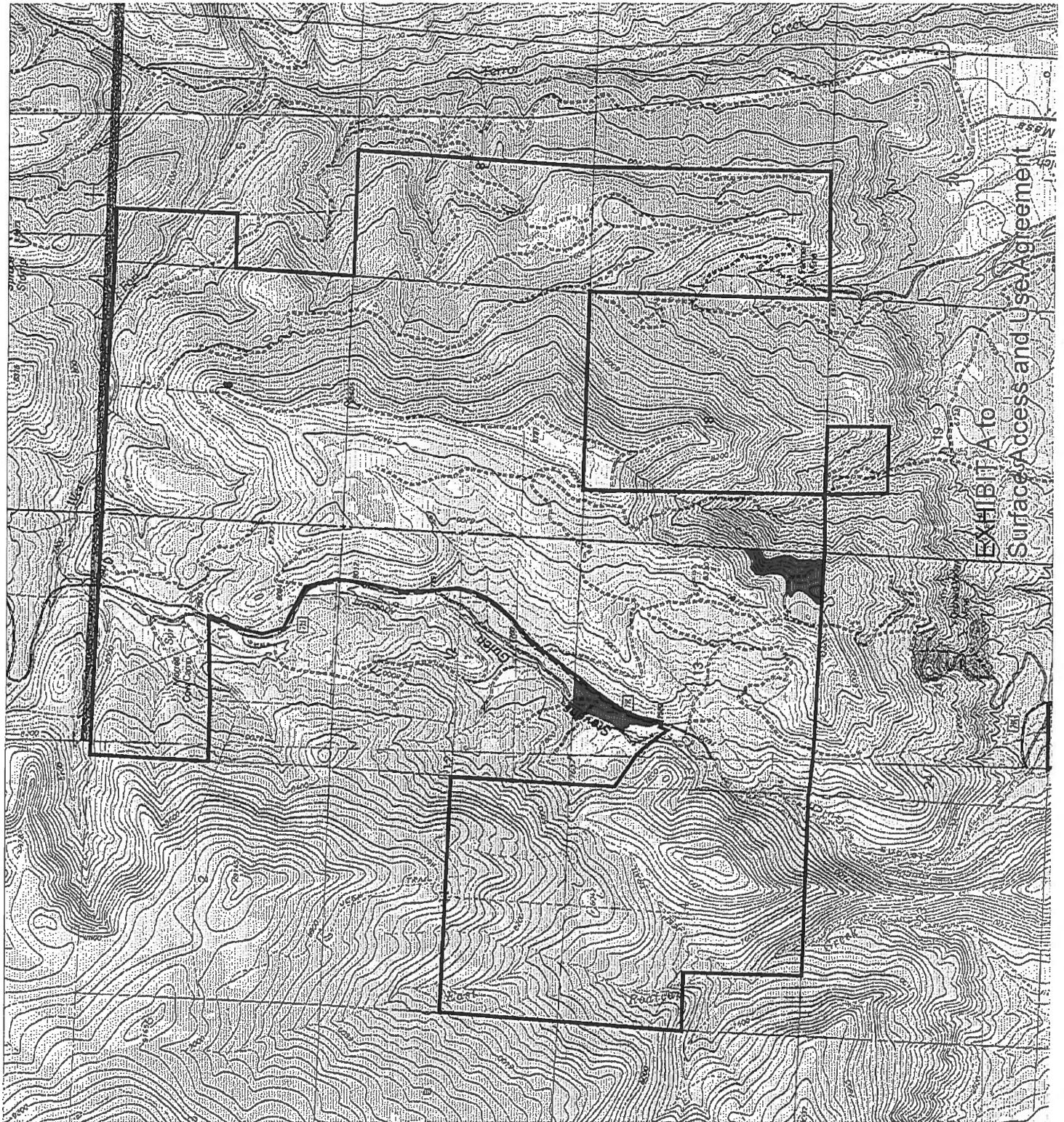
Grantee:

Bowie Resources, LLC

By:  _____
Gene DiClaudio

Its: Chief Operating Officer

Attachment A



VOLUME XI

*PAGES FOR
REVIEW
PURPOSES
ONLY*

RN-05 Reclamation Estimate Review

CHANGE APPLIES TO TRUCK/LOADER, DOZER, EXCAVATOR, SCRAPER			
MATERIAL QUANTITIES (LCY)			
Task	Initial (LCY)	Swell %	Swell Quantity in Bond
1	260953	1.165	304010
2	260593	1.165	303591
5	3620	1.165	4229
6	9790	1.165	11405
7	9790	1.165	11405
8	67920	1.165	79127
9	67920	1.165	79127
10	231495	1	231495
11	231495	1	231495
12	9259	1.165	10787
13	39000	1.165	45435
14	53000	1.165	61745
15	32000	1.165	37280
19	15173	1.165	17677
20	500	1.165	583
21	61000	1.165	71065
22	700	1.165	816
23	25600	1.25	32000
25	1500	1.25	1875
27	2000	1	2000
36	200000	1	200000
37	225000	1	225000
39	NA		
40	325000	1	325000
41	NA		
42	966	1	966
43	6324	1.165	7367
44	92937	1.165	108272
45	58943	1.165	68669
45A	134142	1	134142
45B	7200	1.165	8388
45C	30000	1.165	34950
45D	5000	1.165	5825
45E	14000	1.165	16310
46	78050	1.165	90928
47	5500	1	5500
50-53	NA		
60-66	NA		
70	NA		
71	7484	1	7484
73	6000	1	6000
74	NA		
75	60564	1.165	70557
76	60564	1.165	70557
77	NA		
78	5963	1.165	6947
79	NA		
80	1928	1	1928
81	3296	1.33	4384
83	600	1.165	699
84	NA		
85	37998	1.165	44268
86	115458	1.165	134506
90-93	NA		
95	4290	1.33	5706

RN-05 Reclamation Estimate Review

[illegible]

RN-05 Reclamation Estimate Review

92	\$5.52	6.92
93	\$5.52	50.65
95	\$38.93	7.63
96	\$25.19	11.61
97	\$25.19	8.18
98	\$25.19	10.87
99	\$25.19	24.64
100	\$25.19	1.52
119	\$38.93	25.96
120	\$25.19	27.04
122	\$38.93	0.18
126	\$38.93	0.17
129	\$38.93	5.44
		611.34
Remove Chisel Plowing		
Task 150 :Drill Seeding		
154:Broadcast Seed		
CHANGE APPLIES TO DOZER - All to be Changed to 100 Feet (1718.9 LCY/HR)		
HOURLY PRODUCTION		
AVERAGE PUSH DISTANCE		
Task		
2	100	
5	100	
7	150	
9	100	
11	200	
12	100	
15	150	
19	100	
20	200	
21	100	
23	175	
36	200	
37	200	
47	200	
76	75	
78	200	
81	100	
83	150	
86	100	
95	75	
96	100	
97	100	
98	100	
99	100	
100	100	
116	300	
119	100	
120	120	
122	200	
126	150	
129	200	
130	100	
241	125	
242	125	
302	200	

RN-05 Reclamation Estimate Review

[illegible]

RN-05 Reclamation Estimate Review

[illegible]

RN-05 Reclamation Estimate Review

CHANGES APPLIES TO MOTOR GRADER						
Task 093 needs to have the Total area changed to 53.88 acres						
CHANGES APPLY TO DEMOLITION WORK						
Demolish and Removal of Structures						
Examples provided below of Changes to Task 165. The task is 22 pages long and can be provided in a redline/strike-out version. The redline/strikeout version will be provided when requested. Changes are redlined - deletions are relined and struck through.						
Task #:	165	Filename:	C083-165			
Date:	11/22/2021					
User:	RDZ	Agency or organization name: DRMS				
		Location adjustment: 102.20 %				
UNIT COSTS						
Structure or Item Description	Dimensions	Demolition Menu Selection	Quantity	Unit	Unit Cost	Total Cost
Office and Bath House	120'x50'x24'	Bldg. (MN) demo./on- site	144,000.00	CF	\$0.24	\$33,984.00
Superstructure		disposal in-excavated-pit- Max-10,000-ft.-haul				
floor	120'x50'x6"	Demo. and on-site disposal	6,000.00	SF	\$1.05	\$6,318.00
		in-excavated-pit-6-in.-thick- Max-200-ft.-push				
footing	1.5'x2'	Demo. and on-site disposal	340	LF	\$6.32	\$2,148.80
		in-excavated-pit-1.5'-x-2'- Max-200-ft.-push				
MCC Building Superstructure	18'x42'x11'	Bldg. (SC) demo./on- site	8,316.00	CF	\$0.24	\$2,253.64
D-Sean Portal		disposal in-excavated-pit- Max-10,000-ft.-haul			\$0.24	\$1,995.84
floor	18'x42'x6"	Demo. and on-site disposal	756.00	SF	\$1.05	\$796.07
		in-excavated-pit,6-in.-thick- Max-200-ft.-push				
footing	1.5'x2'	Demo. and on-site disposal	120	LF	\$6.32	\$758.40
		in-excavated-pit,1.5-ft.-x-2-ft.- Max-200-ft.-push				
2k gal oil tank remove/haul	NA	Haul tank to certified salvage dump - 3,000 to 5,000 gal	1.00	EA	\$760.00	\$760.00
sludge removal	NA	tank Remove sludge, water and rem. product from tank- 3,000 to 5,000 gal.	1.00	EA	\$238.00	\$238.00
sludge disposal	NA	Dispose of tank sludge off-site Average	200	GAL	\$6.80	\$1,360.00
insert CO2	NA	insert dry ice (CO2) into tank to produce inert gas-1.5 lbs/ 100 gal.	90	LB	\$1.71	\$51.30
Stacking Tube	12' diam. X 100' x 12"	Demo. and on-site disposal	3,770.00	SF	\$2.21	\$8,331.70
		in-excavated-pit,12-in.-thick- Max-200-ft.-push				Is the tube metal or concrete or both? Should the unit be SF, LF, or CF?
foundation	2' x 3'	Demo. and on-site disposal	38	LF	\$12.64	\$480.32

RN-05 Reclamation Estimate Review

		in excavated pit, 2.0 ft x 3 ft—Max. 200 ft push					
Concrete Fan Housing	6'x6'x8'	Bldg. (SN) demo./on-site disposal in excavated pit—Max. 10,000 ft haul	288	CF	\$0.22	\$61.92	Is the housing metal or concrete or both? Should the unit be SF, LF, or CF?
Hazardous Waste Removal	NA	Hazardous waste removal—Drum solids/liquids, per drum, (7+ drum job)	20	DRUM	\$572.93	\$11,458.60	
test	NA	Hazardous waste sampling and analysis, per sample	20	EA	\$224.64	\$4,492.20	
transport to dump	NA	Solid transport, large truck (max 80 drums, 25 cy or 18 tons)—Maximum	150	MT	\$7.25	\$1,087.50	
dump charges	NA	Dumpsite disposal charge—Average	6	TON	\$277.50	\$1,665.00	
Haul road pavement removal	RS Means 32.01 16.71 5330	Pavement, bituminous, demolition only—3 in. thick	33,367.00	SY	\$4.66	\$155,490.22	
disposal	RS Means 31.23 23.20 1018	Loading and 2 mile haul, no salvage—Machine loading	5,578	CY	\$18.25	\$101,798.50	
					\$4.84	\$26,997.52	
Task 165 DEMOLITION WORK – Explanation and Justification							
Unit Costs have been rectified to make the cost throughout the tables the same. In conjunction the Total Costs have been corrected to correspond. Suggested changes are present in red.							
Unit costs appear to correspond with cost data from the RS Means Catalog, where recommended costs include equipment and labor, it is also possible that the costs may include overhead and profit as well.							
the column labeled “Dem Unit Selection” changes have been made to the description of the removal of reference to an “existing pit or excavated pit”. The rubble created during demolition will be buried on site against a highwall or buried in place beneath the permitted quantity of fill/soil. The terminology “max. foot hauled or pushed” therefore does not apply.							
Dimensions have been added or corrected as necessary to make the information more clear. A few changes have been made in the “structure or items description” column for clarity.							
The line for “job hours” at the bottom of the task description should be removed, there appears to be no correlation between the hours and the work being performed.							
Contact was made with Salvage companies concerning the disposal of tanks. The companies contacted verified that they would accept the tanks “as is” since no salvage value was being assessed and no compensation would be exchanged. Therefore, bonding costs for cleaning the tanks has been recommended for removal from the bond. Hauling costs have remained in the bond.							
The permittee recommends that the “location adjustment” of 2.2% be removed from the demotion costs. The hauling costs are included in the unit costs and the majority of the demolition rubble will remain in the vicinity of its original location.							
In addition, the mine site has employed contractors for 15+ years who are familiar and accustomed to the characteristics of the mine property and facilities.							

EQUIPMENT RATE SCHEDULE

General Service Work for
Snowcap Coal Company, Inc.
Service Agreement SNCPRE010

HEAVY EQUIPMENT

Fueled Maintained and Operated

<u>Description</u>	<u>Model and Make</u>	<u>Hourly Rate</u>
Dozer w/ Ripper	D8N Caterpillar	\$ 150.00
	D5C Caterpillar	\$ 90.00
	D6H Caterpillar	\$ 90.00
Loader	3 CY 950-Rubber Tire Cat	\$ 75.00
	85XT Case Skidsteer	\$ 50.00
	310 John Deere Back hoe loader	\$ 75.00
Backhoe Excavator	310D Rubber Tire John Deere	\$ 60.00
	200 John Deere w/ Thumb	\$ 115.00
	200 John Deere w/ Hydra Hammer	\$ 160.00
	450 DLC John Deere	\$ 190.00
	235X3 Linkbelt	\$ 170.00
	350G John Deere	\$ 180.00
Grader w/ Ripper	140G Caterpillar	\$ 75.00
	143H Caterpillar	\$ 95.00
Roller	Ingersol Rand Compactor	\$ 55.00
	815B Cat Roller	\$ 120.00
Heavy Trucks Trucks	Deere 6x6 Articulated Dump Truck	\$ 155.00
	3/4 Ton 4x4 Pickup	\$ 10.00
	12 CY Tandem Dump Truck	\$ 75.00
	35 Ton Tractor/Lowboy	\$ 115.00
	Tractor/Float	\$ 115.00
	2000 Gallon Water Truck	\$ 65.00
	Peterbilt 386 Tractor w/side dump	\$ 195.00

Add \$15.00 per hour for rock excavation
Add \$15.00 per hour over 40 hours per week for overtime

LABOR RATES

<u>Designation</u>	<u>Straight Time</u>	<u>Overtime Hourly</u>
Superintendent	\$ 34.70	\$ 44.70
Foreman	\$ 30.75	\$ 40.75
Operator	\$ 27.25	\$ 37.25
Driver	\$ 24.50	\$ 34.50
Carpenter	\$ 29.75	\$ 39.75
Ironworker	\$ 32.25	\$ 42.25
Welder (In house)	\$ 35.25	\$ 45.25
General Laborer	\$ 25.50	\$ 35.50
Field Mechanic	\$ 65.00	\$ 75.00

SMALL EQUIPMENT

<u>Without Fuel or Operator</u>	<u>Daily Rate</u>
Jack Hammer	\$ 10.00
Wacker	\$ 50.00
185 CFM Air Compressor	\$ 90.00
4 KW Generator	\$ 50.00
15 KW Generator	\$ 80.00
2" Submersible Pump	\$ 40.00
3" Submersible Pump	\$ 50.00

MOBILIZATION

Subcontract Rate : Cost + 10%

MISCELLANEOUS

Materials/Subcontractors/Subscriptions: Cost + 15%
Hourly Concrete Work: Labor Rate + 15% for Small Tools
Additional \$1.50 per Square Foot of Forming for Consumables
\$5.00 per day per concrete blanket
Concrete Heating is cost + 12%

**** ISNetworld subscription required by AEP of \$1,410.00 annually with one time sign up fee \$200.00.

***Reflect current fuel prices (Based on Dyed Diesel @ \$3.50 per gallon) and are subject to change



Revised 9/23/19

31258 J ROAD
HOTCHKISS, CO 81419
FAX (970) 872-3258
JAKE: 201-0079 SETH: 234-4263



Tribble & Sons Construction Equipment List:

Labor	\$40.00
Cat 345B Excavator	\$200.00
Cat D-8 R Dozer	\$210.00
John Deere 470 G Excavator	\$200.00
Cat 315C Excavator	\$130.00
Volvo 235E Excavator	\$150.00
John Deere 50 G Excavator	\$90.00
Cat D-6N Dozer	\$130.00
Cat D-6N Dozer with GPS	\$180.00
4000 Gallon Water Truck	\$100.00
Volvo 30 Ton Haul Truck	\$145.00
Volvo 35 Ton Haul Truck	\$155.00
Cat 14M Grader	\$150.00
Compactor 54"	\$110.00
10 Yard Highway Dumptrucks	\$ 100.00
Skid Steers	\$ 100.00
Backhoe	\$ 100.00
PC88-18,000# Excavator	\$ 100.00
Hammer Hoe	\$200.00
Loader(3 yard)	\$140.00
Cat 330 Excavator	\$160.00
Transport	\$120.00
Pickup	\$ 40.00
Side Dumps	\$120.00
Cat 615 Scaper	\$160.00
Cat 815 Compactor	\$160.00
Scalper 107 Track screening plant	\$150.00