

Zuber - DNR, Rob <rob.zuber@state.co.us>

# **RN5 letter with updated RCE**

1 message

**Zuber - DNR, Rob** <rob.zuber@state.co.us> To: Basil Bear <basilbear@wolverinefuels.com>, Tamme Bishop <tamme.jestover@bresnan.net>

Fri, Apr 1, 2022 at 9:24 AM

Basil and Tamme -

Please see attached letter. Tamme, in my email yesterday I said that it would be next week that I send this, but I got it done sooner. So, do not expect a different letter next week.

Rob

Rob Zuber, P.E. Environmental Protection Specialist Active Mines Regulatory Program



I am working remotely and can be reached by cell at 720.601.2276.

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April 1, 2022

Basil Bear Bowie Resources, LLC P.O. Box 1488 Paonia, CO 81428

# **RE:** Bowie No. 2 Mine, DRMS File No. C-1996-083, Second Adequacy Letter for RN-05, Questions related to the Reclamation Cost Estimate (RCE)

Dear Mr. Bear:

As part of the March 21<sup>st</sup> response to my adequacy review for RN-05, Tamme Bishop (Stover & Associates) asked many questions about the Division's RCE. The following are Division responses to these questions.

The Division stands by the unit costs in our RCE. The Division's reclamation cost estimating software (CIRCES) does take account of local costs. Cost indices for Grand Junction and Montrose are used in the software.

1. The Division stands by our position that stockpiled soil becomes compacted over time, so the use of soil in a stockpile should have a swell factor applied to it. This factor is smaller than the factor that would be used for bank material. If BRL can point to particular tasks in which the use of a swell factor is inappropriate, we will certainly consider making the appropriate changes for those tasks.

## 2. The Division has removed the use of a chisel plow from Tasks 150 and 154.

- 3. The Division stands by the way we performed the RCE. Based on the information provided by Caterpillar for the Cat D10T-SU, the ripper hydraulics do come standard with this model. However, the D10T-SU is designed for interchangeable attachments such as the single and multi-shanks. Since attachments are interchangeable and have different associated ownership costs (per EquipmentWatch), the costs for attachments are separated out from the dozer itself. If the task requires a specific ripper attachment, those costs are then applied and included with the dozer costs.
- 4. The Division does not believe that using a standard push distance of 100 feet is appropriate. Before adjusting any push distances, BRL should provide specific details. Ideally, this will include sections of maps (or perhaps screenshots from Google Earth) showing the length anticipated for a given task.



- 5. No changes to the RCE have been made. The Division choices for operator skill and job efficiency are standard.
- 6. The Division has not changed the RCE based on this item and provides the following general comments on truck tasks. If BRL provides particular suggestions, we will consider those.
  - 1. The payload capacities for Tasks 27, 40, and 75 appear appropriate for the respective trucks.
  - 2. The bed volumes and loading tool capacities appear appropriate as different loaders are used for different tasks.
  - 3. Regarding bucket fill factors, values less than 1.0 are appropriate for some material.
  - 4. It appears that appropriate altitude values have been used in the RCE tasks.
- 7. Before adjusting any push distances, BRL should provide details for each task on maps or aerial photographs.
- 8. As noted above, the Division's reclamation cost estimating software takes account of local costs.
- 9. Please see answer to number 8.
- 10. The Division has not changed Tasks 39 and 41. In the PAP the reference to 24-inch lifts refers to the maximum thickness of the material <u>prior to compaction</u>. In the CIRCES software, the maximum allowable <u>compaction</u> thickness is 10 inches.

# 11. The Division has updated Task 261, backfilling the Terror Creek Vent Shaft, and it now utilizes a bulldozer.

## 12. The Division has updated Task 140 to remove the bulkhead seals.

13. The division has not changed Task 157. The large number of acres accounts for multiple years of weed control.

# 14. The Division has updated Task 047. We agree that the visibility factor should be changed to 1.0.

15. The division has not changed Task 045. The altitude value appears correct.

## 16. The Division has updated Task 093 with the area value of 78.6 acres, per the BRL request.

17. The Division stands by the requirement of removing sludge from tanks and filling the tanks with CO<sub>2</sub>. We believe this prudent practice for protecting the environment and insuring the safety of workers and the public. Also, if tanks are filled with gasoline or diesel fuel, there will be a cost for disposing of this fluid as hazardous material.

Attached to this letter is a portion of the current RCE for the Bowie No. 2 Mine. I have included the tasks that were revised based on the adequacy response from Stover & Associates. The updated liability is

\$11,448,977, approximately \$350,000 less than the RCE update from November. As a reminder, the active corporate surety for this site is \$10,971,057.58, and it appears that additional surety will be needed, per our estimate.

If you have any questions or comments, please do not hesitate to contact me at <u>Rob.Zuber@state.co.us</u> or 720.601.2276. If you wish to discuss this letter in detail, we can plan a conference call with your consultant, Division management, and possibly one of the Division's experts with the CIRCES software.

Sincerely,

Phot D. Zh

Robert D. Zuber, P.E. Environmental Protection Specialist

Enclosure: CIRCES cost summary and updated tasks

# COST SUMMARY WORK

Task description:		Cost Summary for RN-05							
Site: Bowie No. 2 Mine			Permit Action: RN5		Permit/Jol	o#: C1996083			
<u>P</u> ]	ROJECT Task #: Date: User:	IDENTIFIC 000 3/31/2022 RDZ	CATION Co	State: ounty:	Colorado Delta		Abbreviation: Filename:	None C083-000	

Agency or organization name: DRMS

# TASK LIST (DIRECT COSTS)

Tack		Form	Fleet	Task	
Task	Description	Used	Size	Hours	Cost
001	Pull back and Haul Portal Bench Fill Material to	TRUCK1	1	609.56	\$520,741
	Cut Slope				
002	Regrade D-Portal Bench	DOZER	4	158.03	\$238,849
005	Rip and Regrade Material Storage Area at Gob Pile	DOZER	4	1.73	\$2,616
006	Pull Back Material @ Old Truck Loadout Material	EXCAVATE	2	21.27	\$15,283
	Storage Area				
007	Regrade Old Truck Loadout Material Storage Area	DOZER	4	8.21	\$12,407
008	Pull Back Material at Truck Loadout/Coal	EXCAVATE	2	147.57	\$106,027
	Stockpile		-		
009	Regrade New Truck Loadout and Coal Stockpile	DOZER	4	32.38	\$48,940
010	Pull Material Back onto Train L/O Facil. and	EXCAVATE	2	431.74	\$310,194
	Railbed Benches		-		
011	Regrade Train Loadout Facilities and Railbed	DOZER	4	171.56	\$259,289
	Benches	-			
012	Backfill and Regrade Train L/O Overland	DOZER	4	5.62	\$8,486
	Conveyor Corridor		-		_
013	Haul Fill from Upper Mat'l Strge Area to B-Seam	SCRAPER1	1	60.63	\$47,237
	Portal Bench				
014	Haul Fill fr Adj. Mat'l Storage Area to B-Seam	TRUCKI	1	89.33	\$65,814
015	Portal Bench	DOZED		20.70	<b><b>(</b>1,<b>5)</b>1</b>
015	Backfill and Regrade B-Seam Portal Bench	DOZER	4	38.70	\$64,521
019	Regrade Drill Pads from MRs and TRs	DOZER	4	8.01	\$12,108
020	Regrade Material Storage Area from TR-29	DOZER	4	0.48	\$725
021	Backfill and Regrade New Prep Plant Bench	DOZER	4	36.99	\$55,910
022	Replace Fill from Material Storage Area to Water	SCRAPER1	1	1.51	\$1,177
	Tank Bench	DOTED		10.14	
023	Regrade Borrow Area	DOZER	4	19.14	\$28,933
025	Regrade Upper Parking Lot Expansion Area	EXCAVATE	1	3.65	\$1,314
027	Haul Rock to Vent Shafts for Disposal	TRUCKI	1	18.81	\$7,233
036	Spread Uncompacted Refuse on Gob Pile #2	DOZER	4	89.54	\$135,325
037	Spread Uncompacted Refuse at Gob Pile #3	DOZER	4	100.73	\$152,241
038	Compact Material Hauled to Gob Pile #1	COMPACT	1	11.85	\$3,911
039	Compact Refuse on Gob Pile #2	COMPACT	1	135.94	\$44,861
040	Haul refuse out of Gob Pile #2/#3 drying areas for	TRUCK1	1	909.13	\$344,705
	placement		-		
041	Compact Refuse at Gob Pile #3	COMPACT	1	147.84	\$48,787
042	Haul Topsoil from Stockpile Area to Gob Pile #1	SCRAPER1	1	2.18	\$1,702
043	Place 3.5' of Coverfill on Gob Pile #1	SCRAPER1	1	15.80	\$12,312
044	Place Coverfill from Stockpiles on Gob Pile #2	SCRAPER1	1	173.74	\$135,358

045	Haul Cover Material from Gob Pile #3 to Gob Pile	TRUCK1	1	235.64	\$90,596
045 4	#2 Distribute Cab Dile #2 second bouled by T/I	DOZED	1	275.26	¢141.701
045A	Distribute Gob Pile #2 cover hauled by 1/L	DUZEK		3/5.26	\$141,791
045B	Haul Cover Material from Borrow Area #1 to Gob Pile #2	IRUCKI	1	50.03	\$9,156
045C	Haul Cover Material from Borrow Area #2 to Gob Pile #2	TRUCK1	1	228.88	\$41,887
045D	Haul Cover Material from Borrow Area #3 to Gob Pile #2	TRUCK1	1	41.55	\$7,604
045E	Haul Cover Material from B Portal Storage to Gob Pile #2	TRUCK1	1	108.83	\$41,841
046	Place 2.5' of Coverfill on Gob Pile #3, from stockpile	SCRAPER1	1	196.56	\$153,130
047	Push temp coverfill mat. to face of Gob pile #3	DOZER	1	13.42	\$4,143
050	Compact Backfilled D-Portal Bench, Roads, & Utility Corridor	COMPACT	1	511.43	\$168,767
051	Compact Backfilled Material at Truck Loadout/Coal Stockpile	COMPACT	1	56.10	\$18,515
052	Compact Backfilled Train Loadout	COMPACT	1	191.23	\$63,104
053	Compact B-Seam Portal Bench	COMPACT	1	113.99	\$37,618
060	Rip Utility Bench	RIPPER	4	0.30	\$516
061	Rip D-Portal Bench	RIPPER	4	3.71	\$6,192
062	Rip Truck Loadout/Coal Stockpile Area	RIPPER	4	2.06	\$3,440
063	Rip Regraded Mine Area Prior to Topsoil Replacement	RIPPER	4	59.09	\$98,515
064	Rip Train Loadout Facilities and Railbed Benches	RIPPER	4	7.69	\$12,824
065	Rip B-Seam Portal Bench	RIPPER	4	3.71	\$6,192
066	Rip Rock Laydown Pad Topsoil	RIPPER	1	0.43	\$180
070	Rip Haul Roads (Portion Being Reclaimed) & Old Truck Loadout	RIPPER	4	116.47	\$195,928
071	Remove Haul Road Subbase and Place on Gob Pile #1	SCRAPER1	1	30.02	\$23,385
072	Rip Truck Loadout Road	RIPPER	4	2.14	\$3,610
073	Haul Truck Loadout Subbase to Gob Pile #1	SCRAPER1	1	12.75	\$9,930
074	Rip Upper Haul Road Asphalt Prior to Road Narrowing	RIPPER	4	2.95	\$4,964
075	Pull Back/Haul Fill Mat'l from Upper Haul Rd Narrowing	TRUCK1	1	141.47	\$120,858
076	Regrade Narrowed Section of Haul Road	DOZER	4	26.11	\$39,461
077	Rip Gob Pile #1 Road	RIPPER	4	2.35	\$3,969
078	Regrade Gob Pile #1 Road	DOZER	4	5.17	\$8,612
079	Rip Access Road	RIPPER	4	0.73	\$1,240
080	Haul Access Road Surface to Gob Pile #1	SCRAPER1	1	4.86	\$3,785
081	Regrade Access Road	DOZER	4	1.79	\$2.711
083	Backfill and Regrade Haul Road to Gob Pile #2	DOZER	4	0.44	\$730
084	Rip Lower Haul Road	RIPPER	4	0.95	\$1.591
085	Regrade Lower Haul Road	DOZER	4	36.46	\$60 775
086	Regrade Light Use Roads from MRs and TRs	DOZER	4	60.96	\$101.631
090	Finish Grade Disturbed Mine Area	GRADER	1	129.92	\$23.423
091	Finish Grade Train Loadout	GRADER	1	16.91	\$3.049
092	Finish Grade B-Seam Portal Bench	GRADER	$\frac{1}{1}$	6.91	\$1 247
092	Finish Grade Gob Piles #1 #2 #3 and #4	GRADER	1	60.42	\$10.89/
095	Backfill and Regrade Pond R	DOZER	$\frac{1}{1}$	7.63	\$3 178
096	Backfill and Regrade Pond C	DOZER	$\frac{1}{1}$	11.61	\$4 680
097	Backfill and Regrade Gob Pile Dond D	DOZER	1	8 18	\$3.298
07/	Dackini and Regiaue OOU Flie Fond D	DOTER		0.10	ψ0,290

999         Backfill and Regrade Pond K         DOZER         1         24.64         99.933           100         Backfill and Regrade Pond K         DOZER         1         1.52         \$614           101         Excavate for Post-mining Channel af B-Seam         EXCAVATE         2         0.63         \$453           102         Install Ripray, Gravel, and Geotextile in B-Seam         POSTMININ         1         43.66         \$7.361           106ag         Ping and seal AW-15         BOREHOLE         1         6.00         \$1.452           106ai         Ping and seal AW-17         BOREHOLE         1         6.00         \$1.432           106ai         Ping and seal BD-103         BOREHOLE         1         6.00         \$1.432           106ai         Ping and seal BD-105         BOREHOLE         1         6.00         \$1.392           106ar         Ping and seal BL-102         BOREHOLE         1         6.00         \$1.392           106ar         Ping and seal BL-102         BOREHOLE         1         6.00         \$1.392           106ar         Ping and seal BL-102         BOREHOLE         1         1.00         \$7.193           106ar         Ping and seal MR133 Unitity Hole #2         BOREHOLE	098	Backfill and Regrade Pond F	DOZER	1	10.87	\$4,381
	099	Backfill and Regrade Pond J	DOZER	1	24.64	\$9,933
101         Excavate for post-mining Channel at B-Seam         EXCAVATE         2         0.63         \$453           102         Install Ripray, Gravel, and Geotextile in B-Seam         POSTMININ         1         43.66         \$7,361           106a         Ping and seal AW-15         BOREHOLE         1         6.00         \$1,452           106ai         Ping and seal AW-17         BOREHOLE         1         6.00         \$1,452           106ai         Ping and seal BD-103         BOREHOLE         1         6.00         \$1,443           106ai         Ping and seal BD-103         BOREHOLE         1         7.00         \$1,644           106a         Ping and seal BD-102         BOREHOLE         1         6.00         \$1,395           106an         Ping and seal BL-102         BOREHOLE         1         6.00         \$1,392           106ao         Ping and seal BL-102         BOREHOLE         1         6.00         \$1,392           106ao         Ping and seal BL-102         BOREHOLE         1         10.00         \$7,193           106ao         Ping and seal BL-102         BOREHOLE         1         10.00         \$7,193           106ao         Ping and seal MR133 Unility Hole #1         BOREHOLE	100	Backfill and Regrade Pond K	DOZER	1	1.52	\$614
Portals         Post Ministry           102         Install Riprg, Gravel, and Geotextile in B-Seam         POSTMINN         1         43.66         \$7,361           106ag         Plug and seal AW-15         BOREHOLE         1         6.00         \$1,452           106ah         Plug and seal AW-16         BOREHOLE         1         6.00         \$1,432           106ah         Plug and seal BD-101         BOREHOLE         1         6.00         \$1,443           106ah         Plug and seal BD-103         BOREHOLE         1         6.00         \$1,644           106ah         Plug and seal BD-105         BOREHOLE         1         6.00         \$1,392           106an         Plug and seal BL-102         BOREHOLE         1         6.00         \$1,392           106an         Plug and seal BL-102         BOREHOLE         1         6.00         \$1,392           106an         Plug and seal BL-102         BOREHOLE         1         10.00         \$7,193           106an         Plug and seal BL-102         BOREHOLE         1         10.00         \$7,193           106an         Plug and seal BL-102         BOREHOLE         1         10.00         \$7,193           106an         Plug and seal MR	101	Excavate for Post-mining Channel at B-Seam	EXCAVATE	2	0.63	\$453
102         Install Riprag, Gravel, and Geotextile in B-Seam         POSTMINN         1         43.66         \$7,361           106ap         Plug and seal AW-15         BOREHOLE         1         6.00         \$1,452           106ah         Plug and seal AW-17         BOREHOLE         1         6.00         \$1,432           106ai         Plug and seal BD-101         BOREHOLE         1         6.00         \$1,432           106ak         Plug and seal BD-103         BOREHOLE         1         6.00         \$1,431           106a         Plug and seal BD-103         BOREHOLE         1         7.00         \$1,644           106a         Plug and seal BD-102         BOREHOLE         1         6.00         \$1,392           106a0         Plug and seal BL-102A         BOREHOLE         1         6.00         \$1,392           106a0         Plug and seal BL-102A         BOREHOLE         1         10.00         \$7,193           106a0         Plug and seal BL-102A         BOREHOLE         1         11.00         \$5,342           106a0         Plug and seal RL-102A         BOREHOLE         1         10.00         \$7,193           106a0         Plug and seal RL-102A         BOREHOLE         1         10.0		Portals				
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Iotem         Plug and seal AW16         BOREHOLE         1         6.00         \$1,432           Iotem         Plug and seal AW-17         BOREHOLE         1         6.00         \$1,432           Iotem         Plug and seal BD-101         BOREHOLE         1         6.00         \$1,432           Iotem         Plug and seal BD-103         BOREHOLE         1         6.00         \$1,401           Iotem         Plug and seal BD-105         BOREHOLE         1         6.00         \$1,392           Iotem         Plug and seal BL-102         BOREHOLE         1         6.00         \$1,392           Iotem         Plug and seal BL-102         BOREHOLE         1         6.00         \$1,392           Iotem         Plug and seal BL-102         BOREHOLE         1         10.00         \$1,392           Iotem         Plug and seal BL-102         BOREHOLE         1         10.00         \$1,392           Iotem         Plug and seal BL-102         BOREHOLE         1         10.00         \$1,392           Iotem         Plug and seal MR133 Unitry Hole #1         BOREHOLE         1         10.00         \$1,393           Iotem         Plug and seal MR133 Unitry Hole #2         BOREHOLE         1         10.00 </td <td>106ag</td> <td>Plug and seal AW-15</td> <td>BOREHOLE</td> <td>1</td> <td>6.00</td> <td>\$1,452</td>	106ag	Plug and seal AW-15	BOREHOLE	1	6.00	\$1,452
Iotai         Plug and seal AW-17         BOREHOLE         1         6.00         S1.421           Iotai         Plug and seal BD-101         BOREHOLE         1         6.00         S1.401           Iotai         Plug and seal BD-103         BOREHOLE         1         6.00         S1.441           Iotai         Plug and seal BD-105A         BOREHOLE         1         7.00         S1.644           Iotai         Plug and seal BD-102         BOREHOLE         1         6.00         S1.392           Iotai         Plug and seal BL-102         BOREHOLE         1         6.00         S1.392           Iotai         Plug and seal BL-102         BOREHOLE         1         6.00         S1.392           Iotai         Plug and seal BL-102         BOREHOLE         1         10.00         S7.193           Iotai         Plug and seal WR133 Utility Hole #1         BOREHOLE         1         10.00         S7.193           Iotai         Plug and seal MR133 Utility Hole #2         BOREHOLE         1         10.00         S7.193           Iotai         S7.193         Iotai         S7.193         S7.193         S7.193           Iotai         S3.043         Iotai         S7.193         S7.193	106ah	Plug and seal AW16	BOREHOLE	1	6.00	\$1,443
Ibis         Plug and scal BD-101         BOREHOLE         1         4.00         \$939           106ak         Plug and scal BD-103         BOREHOLE         1         6.00         \$1,401           106al         Plug and scal BD-105         BOREHOLE         1         6.00         \$1,392           106an         Plug and scal BD-102         BOREHOLE         1         6.00         \$1,392           106an         Plug and scal BL-102         BOREHOLE         1         6.00         \$1,392           106an         Plug and scal BL-102         BOREHOLE         1         6.00         \$1,392           106ap         Plug and scal BL-102         BOREHOLE         1         6.00         \$1,392           106ap         Plug and scal MR133 Utility Hole #1         BOREHOLE         1         10.00         \$7,193           106cr         Plug and scal MR133 Utility Hole #2         BOREHOLE         1         10.00         \$7,193           106cr         Plug and scal GVB-D-3A (aka GVB-D-3A)         BOREHOLE         1         10.00         \$7,193           106cr         Plug and scal GVB-D-5A (aka GVB-D-6A)         BOREHOLE         1         10.00         \$3,637           106dr         Plug and scal GVB-D-5A (aka GVB-D-6A) <td< td=""><td>106ai</td><td>Plug and seal AW-17</td><td>BOREHOLE</td><td>1</td><td>6.00</td><td>\$1,432</td></td<>	106ai	Plug and seal AW-17	BOREHOLE	1	6.00	\$1,432
Horak         Plug and seal BD-103         BOREHOLE         1         6.00         \$\$1,401           Horak         Plug and seal BD-105A         BOREHOLE         1         7.00         \$\$1,644           Horak         BOREHOLE         1         6.00         \$\$1,395           Indian         BOREHOLE         1         6.00         \$\$1,392           Horak         BOREHOLE         1         10.00         \$\$7,193           Horak         BOREHOLE         1	106aj	Plug and seal BD-101	BOREHOLE	1	4.00	\$939
Io6al Plug and seal BD-105         BOREHOLE BOREHOLE         1         7.00         \$1.644           Plug and seal BD-105A         BOREHOLE         1         6.00         \$1.395           I06an         Plug and seal BD-102         BOREHOLE         1         6.00         \$1.392           I06an         Plug and seal BL-101A         BOREHOLE         1         6.00         \$1.392           I06ap         Plug and seal BL-102A         BOREHOLE         1         6.00         \$1.392           I06b         Plug and seal MR133 Utility Hole #1         BOREHOLE         1         11.00         \$6.542           I06co         Plug and seal MR133 Utility Hole #2         BOREHOLE         1         10.00         \$7.193           I06co         Plug and seal GVB-D-3A (aka GVB-D3-A)         BOREHOLE         1         10.00         \$7.193           I06co         Plug and seal GVB-D-5A (aka GVB-D3-A)         BOREHOLE         1         10.00         \$7.193           I06cd         Plug and seal GVB-D-5A (aka GVB-D3-B)         BOREHOLE         1         10.00         \$3.638           I06dd         Plug and seal GVB-D-5A (aka GVB-D3-B)         BOREHOLE         1         10.00         \$3.643           I06dd         Plug and seal GVB-D-7B (aka GVB-D3-B)	106ak	Plug and seal BD-103	BOREHOLE	1	6.00	\$1,401
IOGa m         Plug and seal BD-105A         BOREHOLE         1         6.00         \$1,395           IOGan Plug and seal BL-102         BOREHOLE         1         6.00         \$1,392           IOGap Plug and seal BL-102         BOREHOLE         1         6.00         \$1,392           IOGap Plug and seal BL-102A         BOREHOLE         1         6.00         \$1,392           IOGap Plug and seal MR133 Utility Hole #1         BOREHOLE         1         6.00         \$1,392           IOGco Plug and seal MR133 Utility Hole #2         BOREHOLE         1         10.00         \$7,193           IOGco Plug and seal MR133 Utility Hole #3         BOREHOLE         1         10.00         \$7,193           IOGco Plug and seal GVB-D-7A (aka GVB-D3-A)         BOREHOLE         1         10.00         \$7,193           IOGcd Plug and seal GVB-D-5A         BOREHOLE         1         10.00         \$3,638           IOGdd Plug and seal GVB-D-5A         BOREHOLE         1         10.00         \$3,643           IOGdd Plug and seal GVB-D-7B (aka GVB-D-7B)         BOREHOLE         1         10.00         \$3,643           IOGdd Plug and seal GVB-D-7B (aka GVB-D-7B)         BOREHOLE         1         10.00         \$3,643           IOGdd Plug and seal GVB-D-7B (aka GVB-D-7B) <td>106al</td> <td>Plug and seal BD-105</td> <td>BOREHOLE</td> <td>1</td> <td>7.00</td> <td>\$1,644</td>	106al	Plug and seal BD-105	BOREHOLE	1	7.00	\$1,644
m         C         C           106an         Plug and seal BD-102         BOREHOLE         1         6.00         \$1,392           106ap         Plug and seal BL-101A         BOREHOLE         1         6.00         \$1,392           106ap         Plug and seal BL-102A         BOREHOLE         1         6.00         \$1,392           106bb         Plug and seal MR133 Utility Hole #1         BOREHOLE         1         10.00         \$7,193           106co         Plug and seal MR133 Utility Hole #2         BOREHOLE         1         10.00         \$7,193           106co         Plug and seal MR133 Utility Hole #3         BOREHOLE         1         10.00         \$7,193           106co         Plug and seal GVB-D-3A (aka GVB-D3-A)         BOREHOLE         1         10.00         \$7,193           106db         Plug and seal GVB-D-5A (aka GVB-D6-A)         BOREHOLE         1         10.00         \$3,638           106db         Plug and seal GVB-D-6A (aka GVB-D6-B)         BOREHOLE         1         10.00         \$3,633           106db         Plug and seal GVB-D-6B (aka GVB-D6-B)         BOREHOLE         1         10.00         \$3,637           106db         Plug and seal GVB-D-7G (aka GVB-D7-B)         BOREHOLE         1	106a	Plug and seal BD-105A	BOREHOLE	1	6.00	\$1,395
106an         Plug and seal BD-102         BOREHOLE         1         6.00         \$1,392           106ap         Plug and seal BL-101A         BOREHOLE         1         6.00         \$1,392           106ap         Plug and seal BL-102         BOREHOLE         1         6.00         \$1,392           106ap         Plug and seal GVB-6A         BOREHOLE         1         6.00         \$1,392           106bb         Plug and seal MR133 Utility Hole #1         BOREHOLE         1         10.00         \$7,193           106cn         Plug and seal MR133 Utility Hole #2         BOREHOLE         1         10.00         \$7,193           106cq         Plug and seal GVB-3A (aka GVB-D7A)         BOREHOLE         1         10.00         \$7,193           106cq         Plug and seal GVB-D-7A (aka GVB-D7A)         BOREHOLE         1         10.00         \$3,643           106dd         Plug and seal GVB-D-7A (aka GVB-D7B)         BOREHOLE         1         10.00         \$3,643           106dd         Plug and seal GVB-D-7A (aka GVB-D7B)         BOREHOLE         1         10.00         \$3,643           106dd         Plug and seal GVB-D-7B (aka GVB-D7B)         BOREHOLE         1         10.00         \$3,627           106dd         Plu	m					
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	106an	Plug and seal BD-102	BOREHOLE	1	6.00	\$1,392
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	106ao	Plug and seal BL-101A	BOREHOLE	1	6.00	\$1,392
106aq         Phg and seal BL-102A         BOREHOLE         1         6.00         \$1,392           106bb         Plug and seal GVB-6A         BOREHOLE         1         11.00         \$6,342           106cn         Plug and seal MR133 Utility Hole #1         BOREHOLE         1         10.00         \$7,193           106co         Plug and seal MR133 Utility Hole #2         BOREHOLE         1         10.00         \$7,193           106co         Plug and seal MR133 Utility Hole #3         BOREHOLE         1         10.00         \$7,193           106cq         Plug and seal MR133 Utility Hole #3         BOREHOLE         1         10.00         \$7,193           106cq         Plug and seal GVB-D-7A (aka GVB-D3-A)         BOREHOLE         1         10.00         \$3,638           106dd         Plug and seal GVB-D-5A (aka GVB-D6-A)         BOREHOLE         1         10.00         \$3,632           106dd         Plug and seal GVB-D-5B (aka GVB-D-B)         BOREHOLE         1         10.00         \$3,632           106dd         Plug and seal GVB-D-7S (aka GVB-D-B)         BOREHOLE         1         11.00         \$4,266           106dd         Plug and seal GVB-D-7C (aka GVB-D1-B)         BOREHOLE         1         12.00         \$1,381	106ap	Plug and seal BL-102	BOREHOLE	1	6.00	\$1.394
106bb         Plug and seal GVB-6A         BOREHOLE         1         11.00         \$6,342           106cn         Plug and seal MR133 Uility Hole #1         BOREHOLE         1         10.00         \$7,193           106co         Plug and seal MR133 Uility Hole #2         BOREHOLE         1         10.00         \$7,193           106cp         Plug and seal MR133 Uility Hole #3         BOREHOLE         1         10.00         \$7,193           106cy         Plug and seal GVB-D-3A (aka GVB-D3-A)         BOREHOLE         1         10.00         \$5,477           106db         Plug and seal GVB-D-5A (aka GVB-D6-A)         BOREHOLE         1         10.00         \$5,638           106dd         Plug and seal GVB-D-6A (aka GVB-D6-B)         BOREHOLE         1         10.00         \$5,678           106dd         Plug and seal GVB-D-7B (aka GVB-D6-B)         BOREHOLE         1         10.00         \$4,573           106dd         Plug and seal GVB-D-7B (aka GVB-D7-B)         BOREHOLE         1         10.00         \$4,266           106ed         Plug and seal GVB-D7C-0.30 (aka GVB-D8-C)         BOREHOLE         1         10.00         \$4,266           106ed         Plug and seal GVB-17C (aka GVB-B17C)         BOREHOLE         1         12.00         \$13,381 <td>106ag</td> <td>Plug and seal BL-102A</td> <td>BOREHOLE</td> <td>1</td> <td>6.00</td> <td>\$1.392</td>	106ag	Plug and seal BL-102A	BOREHOLE	1	6.00	\$1.392
IOGen         Plug and seal MR133 Utility Hole #1         BOREHOLE         1         IO.00         \$7,193           IOGen         Plug and seal MR133 Utility Hole #2         BOREHOLE         1         IO.00         \$7,193           IOGen         Plug and seal MR133 Utility Hole #3         BOREHOLE         1         IO.00         \$7,193           IOGeq         Plug and seal MR133 Utility Hole #4         BOREHOLE         1         IO.00         \$7,193           IOGeq         Plug and seal GVB-D-3A (aka GVB-D3-A)         BOREHOLE         1         IO.00         \$7,193           IOGed         Plug and seal GVB-D-6A (aka GVB-D7-A)         BOREHOLE         1         IO.00         \$3,638           IO6dd         Plug and seal GVB-D-6B (aka GVB-D7-B)         BOREHOLE         1         IO.00         \$3,627           IO6dq         Plug and seal GVB-D-7B (aka GVB-D7-B)         BOREHOLE         1         IO.00         \$4,257           IO6de         Plug and seal GVB-D7C (aka GVB-D7-B)         BOREHOLE         1         IO.00         \$4,266           IO6ee         Plug and seal GVB-17C (aka GVB-B17C)         BOREHOLE         1         IO.00         \$4,266           IO6ge         Plug and seal GVB-17C (aka GVB-B17C)         BOREHOLE         1         IO.00 <t< td=""><td>106bb</td><td>Plug and seal GVB-6A</td><td>BOREHOLE</td><td>1</td><td>11.00</td><td>\$6.342</td></t<>	106bb	Plug and seal GVB-6A	BOREHOLE	1	11.00	\$6.342
Instruction         Instruction         Instruction         Instruction         Instruction           106co         Plug and seal MR133 Utility Hole #2         BOREHOLE         1         10.00         \$7,193           106cq         Plug and seal MR133 Utility Hole #3         BOREHOLE         1         10.00         \$7,193           106cq         Plug and seal MR133 Utility Hole #4         BOREHOLE         1         10.00         \$7,193           106cy         Plug and seal GVB-D-3A (aka GVB-D3-A)         BOREHOLE         1         10.00         \$3,638           106db         Plug and seal GVB-D-6A (aka GVB-D6-A)         BOREHOLE         1         10.00         \$3,627           106db         Plug and seal GVB-D-6B (aka GVB-D6-B)         BOREHOLE         1         10.00         \$3,527           106dd         Plug and seal GVB-D-7B (aka GVB-D6-B)         BOREHOLE         1         10.00         \$4,573           106de         Plug and seal GVB-D7C (aka GVB-D8-C)         BOREHOLE         1         10.00         \$4,266           106ed         Plug and seal GVB-17C (aka GVB-B17C)         BOREHOLE         1         10.00         \$4,266           106e         Plug and seal GVB-17D (aka GVB-B17C)         BOREHOLE         1         12.00         \$11,531	106cn	Plug and seal MR133 Utility Hole #1	BOREHOLE	1	10.00	\$7,193
Integrand sear         Integra	106co	Plug and seal MR133 Utility Hole #2	BOREHOLE	1	10.00	\$7 193
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	106cp	Plug and seal MR133 Utility Hole #3	BOREHOLE	1	10.00	\$7 193
Hug and seal AW-12         BOREHOLE         1         12.00         55,477           106cy         Plug and seal GVB-D-3A (aka GVB-D3-A)         BOREHOLE         1         10.00         \$3,638           106db         Plug and seal GVB-D-5A (aka GVB-D6-A)         BOREHOLE         1         10.00         \$3,638           106db         Plug and seal GVB-D-6A (aka GVB-D6-A)         BOREHOLE         1         10.00         \$3,627           106dp         Plug and seal GVB-D-6A (aka GVB-D6-B)         BOREHOLE         1         10.00         \$4,267           106dq         Plug and seal GVB-D-6A (aka GVB-D7-B)         BOREHOLE         1         11.00         \$4,266           106ded         Plug and seal GVB-D-8C (aka GVB-D7-B)         BOREHOLE         1         10.00         \$4,266           106ee         Plug and seal GVB-17C (aka GVB-B17C)         BOREHOLE         1         10.00         \$4,266           106ge         Plug and seal GVB-17E (aka GVB-B17C)         BOREHOLE         1         12.00         \$15,975           106ge         Plug and seal GVB-17E (aka GVB-B17F)         BOREHOLE         1         12.00         \$16,299           106gr         Plug and seal AW-1         BOREHOLE         1         7.00         \$1,828           106geg	106cg	Plug and seal MR133 Utility Hole #4	BOREHOLE	1	10.00	\$7 193
106db         Plug and seal GVB-D7A (aka GVB-D7A)         BOREHOLE         1         12.00         33,477           106db         Plug and seal GVB-D7A (aka GVB-D7A)         BOREHOLE         1         9.00         \$3,043           106db         Plug and seal GVB-D-6A (aka GVB-D6-A)         BOREHOLE         1         10.00         \$3,627           106dq         Plug and seal GVB-D-6B (aka GVB-D6-B)         BOREHOLE         1         10.00         \$4,573           106du         Plug and seal GVB-D-7B (aka GVB-D6-B)         BOREHOLE         1         11.00         \$4,573           106du         Plug and seal GVB-D-7B (aka GVB-D8-C)         BOREHOLE         1         10.00         \$4,266           106ee         Plug and seal FTC-03-01 (aka TC-03-02)         BOREHOLE         1         10.00         \$4,266           106ge         Plug and seal GVB-17D (aka GVB-B17C)         BOREHOLE         1         12.00         \$11,631           106ge         Plug and seal GVB-17F (aka GVB-B17D)         BOREHOLE         1         12.00         \$13,381           106ge         Plug and seal AW-1         BOREHOLE         1         12.00         \$13,784           106ge         Plug and seal AW-3         BOREHOLE         1         7.00         \$1,784 <tr< td=""><td>106cy</td><td>Plug and seal GVB D 3A (aka GVB D3 A)</td><td>BOREHOLE</td><td>1</td><td>12.00</td><td>\$5 177</td></tr<>	106cy	Plug and seal GVB D 3A (aka GVB D3 A)	BOREHOLE	1	12.00	\$5 177
106dd       Plug and seal GVB-D-7A (aka GVB-D/A)       BOREHOLE       1       1060       \$3,033         106dd       Plug and seal GVB-D-5A       BOREHOLE       1       1000       \$3,043         106dp       Plug and seal GVB-D-6A (aka GVB-D6-B)       BOREHOLE       1       1000       \$3,043         106dp       Plug and seal GVB-D-7B (aka GVB-D7-B)       BOREHOLE       1       11.00       \$4,573         106du       Plug and seal GVB-D-8C (aka GVB-D8-C)       BOREHOLE       1       12.00       \$5,578         106de       Plug and seal GVB-D-8C (aka GVB-D8-C)       BOREHOLE       1       10.00       \$4,266         106ee       Plug and seal P-TC-03-01 (aka TC-03-01)       BOREHOLE       1       12.00       \$11,631         106ge       Plug and seal GVB-17C (aka GVB-B17C)       BOREHOLE       1       12.00       \$11,631         106ge       Plug and seal GVB-17E (aka GVB-B17D)       BOREHOLE       1       12.00       \$13,381         106ge       Plug and seal GVB-17F (aka GVB-B17F)       BOREHOLE       1       12.00       \$15,975         106gi       Plug and seal AW-1       BOREHOLE       1       7.00       \$1,828         106ge       Plug and seal AW-2       BOREHOLE       1       7.00 <td>106db</td> <td>Plug and scal GVB D 7A (aka GVB D7 A)</td> <td>BOREHOLE</td> <td>1</td> <td>10.00</td> <td>\$3,477</td>	106db	Plug and scal GVB D 7A (aka GVB D7 A)	BOREHOLE	1	10.00	\$3,477
106d0       Plug and seal GVB-D-6A (aka GVB-D6-A)       BOREHOLE       1       2.00       \$3.043         106d0       Plug and seal GVB-D-6A (aka GVB-D6-A)       BOREHOLE       1       10.00       \$3.67         106dq       Plug and seal GVB-D-6A (aka GVB-D7-B)       BOREHOLE       1       11.00       \$4.573         106dq       Plug and seal GVB-D-7B (aka GVB-D7-B)       BOREHOLE       1       12.00       \$5.578         106de       Plug and seal GVB-D-8C (aka GVB-D8-C)       BOREHOLE       1       10.00       \$4,266         106ee       Plug and seal P-TC-03-01 (aka TC-03-01)       BOREHOLE       1       10.00       \$4,266         106gb       Plug and seal GVB-17C (aka GVB-B17C)       BOREHOLE       1       12.00       \$11,631         106gc       Plug and seal GVB-17E (aka GVB-B17D)       BOREHOLE       1       12.00       \$15,975         106gi       Plug and seal GVB-17F (aka GVB-B17E)       BOREHOLE       1       12.00       \$15,975         106gn       Plug and seal AW-1       BOREHOLE       1       12.00       \$15,975         106gn       Plug and seal AW-1       BOREHOLE       1       7.00       \$1,784         106go       Plug and seal AW-2       BOREHOLE       1       6.00	106dd	Plug and scal GVB D 5A	BOREHOLE	1	0.00	\$3,038
10000Flug and seal GVB-D-0A (aka GVB-D6-A)BOREHOLE11000 $33,27$ 106dpPlug and seal GVB-D-7B (aka GVB-D6-B)BOREHOLE111.00 $$3,27$ 106duPlug and seal GVB-D-7B (aka GVB-D7-B)BOREHOLE111.00 $$4,573$ 106duPlug and seal GVB-D-8C (aka GVB-D8-C)BOREHOLE111.00 $$4,266$ 106eePlug and seal P-TC-03-01 (aka TC-03-02)BOREHOLE110.00 $$4,266$ 106eePlug and seal GVB-17C (aka GVB-B17C)BOREHOLE112.00\$11,631106gcPlug and seal GVB-17C (aka GVB-B17C)BOREHOLE112.00\$15,975106giPlug and seal GVB-17E (aka GVB-B17F)BOREHOLE112.00\$16,299106gnPlug and seal AW-1BOREHOLE17.00\$1,784106gpPlug and seal AW-2BOREHOLE16.00\$1,471106gpPlug and seal AW-3BOREHOLE16.00\$1,471106gpPlug and seal AW-3BOREHOLE16.00\$1,471106grPlug and seal AW-3BOREHOLE16.00\$1,471106grPlug and seal AW-4BOREHOLE16.00\$1,471106grPlug and seal AW-5BOREHOLE16.00\$1,471106grPlug and seal AW-6BOREHOLE16.00\$1,471106grPlug and seal AW-1BOREHOLE16.00\$1,471106grPlug and seal AW-12BOREHOLE16.00 </td <td>106do</td> <td>Plug and scal GVP D 6A (also GVP D6 A)</td> <td>POPEHOLE</td> <td>1</td> <td>9.00</td> <td>\$2,677</td>	106do	Plug and scal GVP D 6A (also GVP D6 A)	POPEHOLE	1	9.00	\$2,677
100dpFug and sea GVB-D-BC (aka GVB-D6-B)BOREHOLE1 $6.00$ $53,299$ 106dqPlug and seal GVB-D-BC (aka GVB-D7-B)BOREHOLE1 $11.00$ $$4,573$ 106dePlug and seal GVB-D-C (aka GVB-D8-C)BOREHOLE1 $12.00$ $$5,578$ 106dePlug and seal P-TC-03-01 (aka TC-03-01)BOREHOLE1 $10.00$ $$4,266$ 106gePlug and seal GVB-17C (aka GVB-B17C)BOREHOLE1 $10.00$ $$4,266$ 106gePlug and seal GVB-17D (aka GVB-B17C)BOREHOLE1 $12.00$ $$11,631$ 106gePlug and seal GVB-17F (aka GVB-B17E)BOREHOLE1 $12.00$ $$15,975$ 106giPlug and seal GVB-17F (aka GVB-B17F)BOREHOLE1 $12.00$ $$16,299$ 106gnPlug and seal AW-1BOREHOLE1 $7.00$ $$1,784$ 106goPlug and seal AW-2BOREHOLE1 $6.00$ $$1,471$ 106grPlug and seal AW-3BOREHOLE1 $6.00$ $$1,471$ 106grPlug and seal AW-5BOREHOLE1 $6.00$ $$1,471$ 106grPlug and seal AW-6BOREHOLE1 $6.00$ $$1,471$ 106grPlug and seal AW-7BOREHOLE1 $6.00$ $$1,471$ 106grPlug and seal AW-8BOREHOLE1 $6.00$ $$1,471$ 106grPlug and seal AW-9BOREHOLE1 $6.00$ $$1,471$ 106grPlug and seal AW-1BOREHOLE1 $6.00$ $$1,441$ 106grPlug	10000	Plug and seal CVD D 6D (aka CVD D6 D)	BOREHOLE	1	6.00	\$5,027
106du       Flug and seal GVB-D-B (aka GVB-DF-B)       BOREHOLE       1       11:00       \$4,375         106du       Plug and seal GVB-D-SC (aka GVB-D8-C)       BOREHOLE       1       10:00       \$4,266         106ee       Plug and seal P-TC-03-01 (aka TC-03-01)       BOREHOLE       1       10:00       \$4,266         106ge       Plug and seal GVB-17C (aka GVB-B17C)       BOREHOLE       1       12:00       \$11,631         106ge       Plug and seal GVB-17E (aka GVB-B17C)       BOREHOLE       1       12:00       \$11,631         106ge       Plug and seal GVB-17E (aka GVB-B17D)       BOREHOLE       1       12:00       \$15,975         106gi       Plug and seal GVB-17F (aka GVB-B17F)       BOREHOLE       1       12:00       \$16,299         106gi       Plug and seal AW-1       BOREHOLE       1       7:00       \$1,784         106go       Plug and seal AW-2       BOREHOLE       1       6:00       \$1,471         106gg       Plug and seal AW-3       BOREHOLE       1       6:00       \$1,471         106gg       Plug and seal AW-5       BOREHOLE       1       6:00       \$1,471         106gg       Plug and seal AW-6       BOREHOLE       1       6:00       \$1,471	106da	Plug and seal GVP D 7P (aka GVP D7 P)	BOREHOLE POPEHOLE	1	0.00	\$J,299 \$4 572
106dd       Pilug and seal P-TC-03-01 (aka GVB-D-C)       BOREHOLE       1       12.00       \$3,376         106ed       Pilug and seal P-TC-03-01 (aka TC-03-01)       BOREHOLE       1       10.00       \$4,266         106ee       Pilug and seal GVB-17C (aka GVB-B17C)       BOREHOLE       1       12.00       \$11,631         106gc       Pilug and seal GVB-17D (aka GVB-B17D)       BOREHOLE       1       12.00       \$13,381         106gd       Pilug and seal GVB-17E (aka GVB-B17E)       BOREHOLE       1       12.00       \$15,975         106gi       Pilug and seal GVB-17F (aka GVB-B17F)       BOREHOLE       1       12.00       \$16,299         106gn       Pilug and seal AW-1       BOREHOLE       1       7.00       \$1,784         106go       Pilug and seal AW-2       BOREHOLE       1       7.00       \$1,828         106gq       Pilug and seal AW-3       BOREHOLE       1       7.00       \$1,828         106gg       Pilug and seal AW-5       BOREHOLE       1       6.00       \$1,471         106gr       Pilug and seal AW-5       BOREHOLE       1       6.00       \$1,471         106gr       Pilug and seal AW-5       BOREHOLE       1       6.00       \$1,416	106du	Plug and seal CVD D SC (also CVD DSC)	BOREHOLE	1	12.00	94,373 \$5 579
Hug and seal P-TC-03-01 (aka TC-03-01)       BOREHOLE       1       10.00       \$4,266         106ee       Plug and seal GVB-17C (aka GVB-B17C)       BOREHOLE       1       12.00       \$11,631         106ge       Plug and seal GVB-17C (aka GVB-B17C)       BOREHOLE       1       12.00       \$11,631         106ge       Plug and seal GVB-17D (aka GVB-B17D)       BOREHOLE       1       12.00       \$13,381         106gd       Plug and seal GVB-17F (aka GVB-B17E)       BOREHOLE       1       12.00       \$15,975         106gi       Plug and seal GVB-17F (aka GVB-B17F)       BOREHOLE       1       12.00       \$15,975         106gi       Plug and seal AW-1       BOREHOLE       1       7.00       \$1,784         106go       Plug and seal AW-2       BOREHOLE       1       7.00       \$1,828         106gg       Plug and seal AW-3       BOREHOLE       1       6.00       \$1,471         106gr       Plug and seal AW-5       BOREHOLE       1       6.00       \$1,471         106gr       Plug and seal AW-6       BOREHOLE       1       6.00       \$1,471         106gr       Plug and seal AW-7       BOREHOLE       1       6.00       \$1,417         106gr       Plug and s	10000 106ad	Plug and seal D TC 02 01 (aka GV B-D8-C)	DOREHOLE	1	12.00	\$3,378
106ee       Plug and seal GVB-17C (aka GVB-B17C)       BOREHOLE       1       12.00       \$4,266         106gb       Plug and seal GVB-17C (aka GVB-B17C)       BOREHOLE       1       12.00       \$11,631         106gc       Plug and seal GVB-17D (aka GVB-B17D)       BOREHOLE       1       12.00       \$13,381         106gd       Plug and seal GVB-17E (aka GVB-B17E)       BOREHOLE       1       12.00       \$16,299         106gi       Plug and seal AW-1       BOREHOLE       1       7.00       \$1,784         106go       Plug and seal AW-2       BOREHOLE       1       7.00       \$1,828         106gq       Plug and seal AW-3       BOREHOLE       1       6.00       \$1,471         106gr       Plug and seal AW-3       BOREHOLE       1       6.00       \$1,471         106gr       Plug and seal AW-3       BOREHOLE       1       6.00       \$1,471         106gr       Plug and seal AW-6       BOREHOLE       1       6.00       \$1,471         106gr       Plug and seal AW-7       BOREHOLE       1       8.00       \$1,940         106gu       Plug and seal AW-7       BOREHOLE       1       6.00       \$1,416         106gv       Plug and seal AW-10	106ed	Plug and seal P-TC-03-01 (aka TC-03-01)	BOREHOLE		10.00	\$4,200
106gb       Plug and seal GVB-17C (aka GVB-B17C)       BOREHOLE       1       12.00       \$11,651         106gc       Plug and seal GVB-17D (aka GVB-B17D)       BOREHOLE       1       12.00       \$13,381         106gd       Plug and seal GVB-17E (aka GVB-B17E)       BOREHOLE       1       12.00       \$15,975         106gi       Plug and seal GVB-17F (aka GVB-B17F)       BOREHOLE       1       12.00       \$16,299         106gn       Plug and seal AW-1       BOREHOLE       1       7.00       \$1,784         106gp       Plug and seal AW-2       BOREHOLE       1       7.00       \$1,828         106gp       Plug and seal AW-3       BOREHOLE       1       6.00       \$1,471         106gr       Plug and seal AW-4       BOREHOLE       1       6.00       \$1,471         106gr       Plug and seal AW-5       BOREHOLE       1       6.00       \$1,471         106gr       Plug and seal AW-6       BOREHOLE       1       7.00       \$1,772         106gt       Plug and seal AW-7       BOREHOLE       1       6.00       \$1,416         106gv       Plug and seal AW-11       BOREHOLE       1       6.00       \$1,427         106gx       Plug and seal AW-12	106ee	Plug and seal P-TC-03-02 (aka TC-03-02)	BOREHOLE		10.00	\$4,266
106gc       Plug and seal GVB-1/D (aka GVB-B17D)       BOREHOLE       1       12.00       \$13,381         106gd       Plug and seal GVB-17E (aka GVB-B17E)       BOREHOLE       1       12.00       \$16,299         106gi       Plug and seal GVB-17F (aka GVB-B17F)       BOREHOLE       1       12.00       \$16,299         106gn       Plug and seal AW-1       BOREHOLE       1       7.00       \$1,784         106go       Plug and seal AW-2       BOREHOLE       1       6.00       \$1,471         106gr       Plug and seal AW-3       BOREHOLE       1       6.00       \$1,471         106gr       Plug and seal AW-4       BOREHOLE       1       6.00       \$1,72         106gr       Plug and seal AW-5       BOREHOLE       1       7.00       \$1,72         106gr       Plug and seal AW-6       BOREHOLE       1       6.00       \$1,417         106gr       Plug and seal AW-6       BOREHOLE       1       8.00       \$1,403         106gv       Plug and seal AW-7       BOREHOLE       1       6.00       \$1,416         106gv       Plug and seal AW-11       BOREHOLE       1       6.00       \$1,427         106gv       Plug and seal AW-12       BOREHOLE	106gb	Plug and seal GVB-1/C (aka GVB-B1/C)	BOREHOLE		12.00	\$11,031
106gd       Plug and seal GVB-17E (aka GVB-B17E)       BOREHOLE       1       12.00       \$15,975         106gi       Plug and seal GVB-17F (aka GVB-B17F)       BOREHOLE       1       12.00       \$16,299         106gn       Plug and seal AW-1       BOREHOLE       1       7.00       \$1,784         106go       Plug and seal AW-2       BOREHOLE       1       6.00       \$1,471         106gp       Plug and seal AW-3       BOREHOLE       1       6.00       \$1,471         106gr       Plug and seal AW-3       BOREHOLE       1       6.00       \$1,471         106gr       Plug and seal AW-4       BOREHOLE       1       6.00       \$1,531         106gr       Plug and seal AW-5       BOREHOLE       1       6.00       \$1,772         106gr       Plug and seal AW-6       BOREHOLE       1       8.00       \$1,940         106gr       Plug and seal AW-6       BOREHOLE       1       6.00       \$1,416         106gv       Plug and seal AW-7       BOREHOLE       1       6.00       \$1,427         106gv       Plug and seal AW-11       BOREHOLE       1       6.00       \$1,427         106gv       Plug and seal AW-12       BOREHOLE       1	106gc	Plug and seal GVB-1/D (aka GVB-B1/D)	BOREHOLE	1	12.00	\$13,381
106gi       Plug and seal GVB-1/F (aka GVB-B1/F)       BOREHOLE       1       12.00       \$16,299         106gi       Plug and seal AW-1       BOREHOLE       1       7.00       \$1,784         106go       Plug and seal AW-2       BOREHOLE       1       6.00       \$1,471         106gp       Plug and seal AW-3       BOREHOLE       1       7.00       \$1,828         106gq       Plug and seal AW-4       BOREHOLE       1       6.00       \$1,471         106gr       Plug and seal AW-4       BOREHOLE       1       6.00       \$1,471         106gr       Plug and seal AW-5       BOREHOLE       1       6.00       \$1,471         106gr       Plug and seal AW-5       BOREHOLE       1       6.00       \$1,471         106gr       Plug and seal AW-5       BOREHOLE       1       8.00       \$1,940         106gr       Plug and seal AW-7       BOREHOLE       1       6.00       \$1,416         106gv       Plug and seal AW-9       BOREHOLE       1       6.00       \$1,427         106gr       Plug and seal AW-11       BOREHOLE       1       6.00       \$1,411         w	106gd	Plug and seal GVB-1/E (aka GVB-B1/E)	BOREHOLE	1	12.00	\$15,975
106gn       Plug and seal AW-1       BOREHOLE       1       7.00       \$1,784         106go       Plug and seal AW-2       BOREHOLE       1       6.00       \$1,471         106gp       Plug and seal AW-3       BOREHOLE       1       7.00       \$1,828         106gq       Plug and seal AW-3       BOREHOLE       1       6.00       \$1,471         106gr       Plug and seal AW-4       BOREHOLE       1       6.00       \$1,471         106gr       Plug and seal AW-5       BOREHOLE       1       6.00       \$1,471         106gr       Plug and seal AW-6       BOREHOLE       1       6.00       \$1,722         106gt       Plug and seal AW-6       BOREHOLE       1       8.00       \$1,940         106gu       Plug and seal AW-7       BOREHOLE       1       6.00       \$1,416         106gv       Plug and seal AW-9       BOREHOLE       1       6.00       \$1,427         106g       Plug and seal AW-11       BOREHOLE       1       6.00       \$1,411         w	106g1	Plug and seal GVB-1/F (aka GVB-B1/F)	BOREHOLE		12.00	\$16,299
106go       Plug and seal AW-2       BOREHOLE       1       6.00       \$1,471         106gp       Plug and seal AW-3       BOREHOLE       1       7.00       \$1,828         106gq       Plug and seal AW-4       BOREHOLE       1       6.00       \$1,471         106gr       Plug and seal AW-4       BOREHOLE       1       6.00       \$1,471         106gr       Plug and seal AW-5       BOREHOLE       1       6.00       \$1,531         106gs       Plug and seal AW-6       BOREHOLE       1       7.00       \$1,772         106gt       Plug and seal AW-6       BOREHOLE       1       8.00       \$1,940         106gu       Plug and seal AW-7       BOREHOLE       1       6.00       \$1,416         106gv       Plug and seal AW-8       BOREHOLE       1       6.00       \$1,427         106g       Plug and seal AW-9       BOREHOLE       1       6.00       \$1,411         w	106gn	Plug and seal AW-1	BOREHOLE	I	7.00	\$1,784
106gp       Plug and seal AW-3       BOREHOLE       1       7.00       \$1,828         106gq       Plug and seal AW-4       BOREHOLE       1       6.00       \$1,471         106gr       Plug and seal AW-5       BOREHOLE       1       6.00       \$1,531         106gs       Plug and seal AW-6       BOREHOLE       1       7.00       \$1,772         106gt       Plug and seal AW-7       BOREHOLE       1       8.00       \$1,940         106gu       Plug and seal AW-8       BOREHOLE       1       6.00       \$1,416         106gv       Plug and seal AW-9       BOREHOLE       1       6.00       \$1,427         106gv       Plug and seal AW-9       BOREHOLE       1       6.00       \$1,411         w	106go	Plug and seal AW-2	BOREHOLE	I	6.00	\$1,471
106gq       Plug and seal AW-4       BOREHOLE       1       6.00       \$1,471         106gr       Plug and seal AW-5       BOREHOLE       1       6.00       \$1,531         106gs       Plug and seal AW-6       BOREHOLE       1       7.00       \$1,772         106gt       Plug and seal AW-7       BOREHOLE       1       8.00       \$1,940         106gu       Plug and seal AW-8       BOREHOLE       1       6.00       \$1,416         106gv       Plug and seal AW-9       BOREHOLE       1       6.00       \$1,427         106g       Plug and seal AW-11       BOREHOLE       1       6.00       \$1,411         w	106gp	Plug and seal AW-3	BOREHOLE	1	7.00	\$1,828
106gr       Plug and seal AW-5       BOREHOLE       1       6.00       \$1,531         106gs       Plug and seal AW-6       BOREHOLE       1       7.00       \$1,772         106gt       Plug and seal AW-7       BOREHOLE       1       8.00       \$1,940         106gu       Plug and seal AW-8       BOREHOLE       1       6.00       \$1,416         106gv       Plug and seal AW-9       BOREHOLE       1       6.00       \$1,416         106gv       Plug and seal AW-9       BOREHOLE       1       6.00       \$1,417         106g       Plug and seal AW-11       BOREHOLE       1       6.00       \$1,411         w	106gq	Plug and seal AW-4	BOREHOLE	1	6.00	\$1,471
106gs       Plug and seal AW-6       BOREHOLE       1       7.00       \$1,772         106gt       Plug and seal AW-7       BOREHOLE       1       8.00       \$1,940         106gu       Plug and seal AW-8       BOREHOLE       1       6.00       \$1,416         106gv       Plug and seal AW-9       BOREHOLE       1       6.00       \$1,427         106g       Plug and seal AW-11       BOREHOLE       1       6.00       \$1,411         w	106gr	Plug and seal AW-5	BOREHOLE	1	6.00	\$1,531
106gt       Plug and seal AW-7       BOREHOLE       1       8.00       \$1,940         106gu       Plug and seal AW-8       BOREHOLE       1       6.00       \$1,416         106gv       Plug and seal AW-9       BOREHOLE       1       6.00       \$1,427         106g       Plug and seal AW-9       BOREHOLE       1       6.00       \$1,427         106g       Plug and seal AW-11       BOREHOLE       1       6.00       \$1,411         w	106gs	Plug and seal AW-6	BOREHOLE	1	7.00	\$1,772
106gu       Plug and seal AW-8       BOREHOLE       1       6.00       \$1,416         106gv       Plug and seal AW-9       BOREHOLE       1       6.00       \$1,427         106g       Plug and seal AW-11       BOREHOLE       1       6.00       \$1,411         w	106gt	Plug and seal AW-7	BOREHOLE	1	8.00	\$1,940
106gv       Plug and seal AW-9       BOREHOLE       1       6.00       \$1,427         106g       Plug and seal AW-11       BOREHOLE       1       6.00       \$1,411         w	106gu	Plug and seal AW-8	BOREHOLE	1	6.00	\$1,416
106g       Plug and seal AW-11       BOREHOLE       1       6.00       \$1,411         106gx       Plug and seal AW-12       BOREHOLE       1       6.00       \$1,403         106gy       Plug and seal AW-13       BOREHOLE       1       6.00       \$1,403         106gz       Plug and seal AW-13       BOREHOLE       1       6.00       \$1,411         106gz       Plug and seal AW-14       BOREHOLE       1       6.00       \$1,411         106hd       Plug and seal DH-13       BOREHOLE       1       6.00       \$1,392         106he       Plug and seal DH-15       BOREHOLE       1       12.00       \$4,234         106hf       Plug and seal DH-15       BOREHOLE       1       8.00       \$2,149         106hf       Plug and seal DH-15       BOREHOLE       1       9.00       \$2,671	106gv	Plug and seal AW-9	BOREHOLE	1	6.00	\$1,427
W         Image: Wight of the search of	106g	Plug and seal AW-11	BOREHOLE	1	6.00	\$1,411
106gx       Plug and seal AW-12       BOREHOLE       1       6.00       \$1,403         106gy       Plug and seal AW-13       BOREHOLE       1       6.00       \$1,411         106gz       Plug and seal AW-14       BOREHOLE       1       6.00       \$1,392         106hd       Plug and seal DH-13       BOREHOLE       1       12.00       \$4,234         106he       Plug and seal DH-15       BOREHOLE       1       8.00       \$2,149         106hf       Plug and seal DH-15       BOREHOLE       1       9.00       \$2,671	w					
106gy         Plug and seal AW-13         BOREHOLE         1         6.00         \$1,411           106gz         Plug and seal AW-14         BOREHOLE         1         6.00         \$1,392           106hd         Plug and seal DH-13         BOREHOLE         1         12.00         \$4,234           106he         Plug and seal DH-15         BOREHOLE         1         8.00         \$2,149           106hf         Plug and seal DH-15         BOREHOLE         1         9.00         \$2,671	106gx	Plug and seal AW-12	BOREHOLE	1	6.00	\$1,403
106gz         Plug and seal AW-14         BOREHOLE         1         6.00         \$1,392           106hd         Plug and seal DH-13         BOREHOLE         1         12.00         \$4,234           106he         Plug and seal DH-15         BOREHOLE         1         8.00         \$2,149           106hf         Plug and seal DH-15         BOREHOLE         1         9.00         \$2,671	106gy	Plug and seal AW-13	BOREHOLE	1	6.00	\$1,411
106hd         Plug and seal DH-13         BOREHOLE         1         12.00         \$4,234           106he         Plug and seal DH-15         BOREHOLE         1         8.00         \$2,149           106hf         Plug and seal DH-15         BOREHOLE         1         9.00         \$2,671	106gz	Plug and seal AW-14	BOREHOLE	1	6.00	\$1,392
106he         Plug and seal DH-15         BOREHOLE         1         8.00         \$2,149           106hf         Plug and seal DH-15         BOREHOLE         1         9.00         \$2,671	106hd	Plug and seal DH-13	BOREHOLE	1	12.00	\$4,234
106hf         Plug and seal DH-15         BOREHOLE         1         9.00         \$2,671	106he	Plug and seal DH-15	BOREHOLE	1	8.00	\$2,149
	106hf	Plug and seal DH-15	BOREHOLE	1	9.00	\$2,671

106hg	Plug and seal DH-25	BOREHOLE	1	9.00	\$2,579
106hq	Plug and seal DH-34C	BOREHOLE	1	7.00	\$1,824
106hr	Plug and seal DH-38	BOREHOLE	1	10.00	\$2,948
106hs	Plug and seal DH-39	BOREHOLE	1	8.00	\$2,096
106hv	Plug and seal CWI-DH-47	BOREHOLE	1	12.00	\$5,381
106h	Plug and seal CWI-DH-48	BOREHOLE	1	12.00	\$5,971
W					
106hx	Plug and seal DH-49	BOREHOLE	1	9.00	\$2,531
106if	Plug and seal DH-57B (aka 98-57B)	BOREHOLE	1	12.00	\$4,012
106ii	Plug and seal DH-58B (aka DH-58A)	BOREHOLE	1	12.00	\$4,113
106ij	Plug and seal CWI-DH-60 (aka Mon Well)	BOREHOLE	1	12.00	\$3,119
106ip	Plug and seal DH-67B	BOREHOLE	1	10.00	\$2,690
106iq	Plug and seal DH-67-D	BOREHOLE	1	9.00	\$2,279
106ir	Plug and seal DH-67-Abv	BOREHOLE	1	8.00	\$1,963
106is	Plug and seal DH-67-Blw	BOREHOLE	1	9.00	\$2,260
106it	Plug and seal CWI-DH-69 (aka B-1 Mon Well)	BOREHOLE	1	12.00	\$3,443
106iu	Plug and seal CWI-DH-70 (aka B-1 Mon Well)	BOREHOLE	1	11.00	\$3,527
106iy	Plug and seal 2010-1B	BOREHOLE	1	12.00	\$4,525
106iz	Plug and seal 2010-1SS	BOREHOLE	1	12.00	\$4,407
110	Replace Topsoil from Stockpile A to Portal/Utility Bench	SCRAPER1	1	652.39	\$508,253
111	Replace Topsoil from Stockpile A to Truck Loadout/Coal Stkpl	SCRAPER1	1	45.95	\$35,795
112	Replace Topsoil from Stockpile F to Train Loadout	SCRAPER1	1	39.98	\$31,146
113	Replace Topsoil from Stockpile A to B-Seam Portal Bench	SCRAPER1	1	87.66	\$68,292
115	Replace Topsoil fm Stockpiles C/D to Pond C and Gob Pond D	SCRAPER1	1	13.12	\$10,218
116	Replace topsoil from Stockpile to Pond F	DOZER	1	3.95	\$1,648
117	Replace topsoil from Stockpile F to Pond J	SCRAPER1	1	2.85	\$2,222
118	Replace topsoil from Stockpile F to Pond K	SCRAPER1	1	1.92	\$1,494
119	Replace topsoil fm stockpile to MR/TR Light-Use Roads	DOZER	4	25.96	\$43,274
120	Replace topsoil from stockpiles to MR/TR drill pads	DOZER	4	27.04	\$43,599
121	Replace topsoil from Stockpile A to Prep Plant Bench	SCRAPER1	1	22.41	\$17,459
122	Replace topsoil from stockpile to Material Storage Area	DOZER	4	0.18	\$305
123	Replace topsoil from Stockpile E to Gob Pile #2	SCRAPER1	1	83.69	\$65,203
124	Replace Topsoil from Stockpile D to Gob Pile #4	SCRAPER1	1	7.01	\$5,463
125	Replace topsoil from stockpile to Gob Pile #3	SCRAPER1	1	85.33	\$66,479
126	Replace topsoil from stockpile to Haul Road	DOZER	4	0.17	\$279
127	Replace topsoil from stockpile to Water Tank	SCRAPER1	1	1.71	\$1,333
	Bench				
128	Replace topsoil from Stockpile G to TR35 road/pad	SCRAPER1	1	5.01	\$3,906
129	Replace topsoil from stockpile to Borrow Area	DOZER	4	5.44	\$9,072
130	Replace topsoil fm stockpile to Upper Parking Lot Expansion	DOZER	1	0.46	\$175
140	Seal Portals and Shafts - Bulkhead Removed from Costs	MINESEAL	1	0.00	\$27,966
150	Drill Seed Mix 3 on Disturbed Area	REVEGE	1	225.02	\$574,253
151	Drill Seed Drill Pads	REVEGE	1	82.97	\$145,953
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390	Remove Culvert C27 (from TR-119)	DEMOLISH	1	0.25	\$2,140 \$302
380 381	Re-topsoil Section 5 Road	DOZER	1	5.46	\$1,687 \$2,146
379	Regrade Section 5 Road	DOZER	1	12.88	\$3,975
374	Seal CWI-DH-58A	BOREHOLE	1	12.00	\$7,949
369	Seal Well DH-67blw	BOREHOLE	1	12.00	\$6,782
353	Reseed Pitkin Mesa Pipeline Corridor	REVEGE	1	2.00	\$3,518
352	Re-topsoil Pitkin Mesa Pipeline corridor	DOZER	1	10.60	\$3,273
302	Regrade Fan Bench - Utility Borehole Mudpit	DOZER	1	4.06	\$1,252
301	Reseed Add'l Disturbance from Utility Boreholes	REVEGE	1	1.00	\$686
261	Concrete Plug and Backfill Terror Creek Vent	MINESEAL	1	40.00	\$142,543
242	Replace Topsoil from Stockpile to Terror Creek	DOZER	1	22.45	\$6,931
241	Maintenance Regrade Terror Creek Light-Use Road	DOZER	1	29.73	\$9.178
182	Mobilize/Demobilize Equipment for Yearly Site	MOBILIZE	1	14.00	\$30,637
101	Construction Season Mobilize/Demobilize Equipment for Pond Removal	MOBILIZE	1	6 50	\$57,909
180	Mobilize/Demobilize Equipment for First Construction Season	MOBILIZE	1	12.00	\$57,969
1/4	Support Equipment for Scraper Hauling	ENANCE	1	449.16	\$124,405
173	Support Equipment for Coron on Hauling	ENANCE	1	292.00	\$124.405
172	Backfill Material		1	202.00	\$255.108
172	Water Truck for Moisture Augmentation of	ENANCE	1	1 437 02	\$139,716
171	Nuclear Density Testing of Backfill	ENANCE SITEMAINT	1	0.00	\$133.001
170	Proctor Testing of Backfill (5 tests)	SITEMAINT	1	0.00	\$702
157	Demolish and Remove all Structures		1	400.00	\$32,339 \$1,666,302
150	Dhill Seed Rock Laydown Area Wood Control Over 10 Veer Liebility Deried	REVEGE	1	0.50	\$332 \$52,550
155	Drill Seed Hubbard Creek Vent Shart Pad	REVEGE	1	1.20	\$2,111 \$252
154	Broadcast Seed Mix 3 on Gob Pile #3	REVEGE	1	60.63	\$110,911
152	Creek		1	02.01	\$109,002
152	Drill Seed Lt-Use Roads to Drill Pads and Terror	REVEGE	1	62.01	\$109.082

## **INDIRECT COSTS**

OVERHEAD AND PROFIT:

Liability insurance:	2.02
Performance bond:	1.05
Job superintendent:	5,743.67
Profit:	10.00

Total = \$18	83,524
Total =	5,396
Total =	13,717
Total =	08,536
TOTAL O & P = $\$1$ ,	,601,172
CONTRACT AMOUNT (direct + O & P) = $\$10$	0,686,527

### LEGAL - ENGINEERING - PROJECT MANAGEMENT:

Financial warranty processing (legal/related costs):	\$500	Total =	\$500
Engineering work and/or contract/bid preparation:	4.00	Total =	\$427,461
Reclamation management and/or administration:	3.13	-	\$334,488
CONTINGENCY:	0.00	Total =	\$0

TOTAL INDIRECT COST = \$2,363,622

TOTAL BOND AMOUNT (direct + indirect) = \$11,448,977

## BULLDOZER WORK

- ash accomption.	I ush temp cover	IIII IIIai, to I	ace of Gob pile #5		
Bowie No. 2 Mine	Per	mit Action:	RN5	Permit/Job#:	C1996083
PROJECT IDENTI	FICATION				
Task #· 047	State:	Colorado		Abbreviation	None
Date: $3/31/202$	2 County:	Delta		Filename:	C083-047
User: RDZ					
Agency or org	ganization name:	RMS			
HOURLY EQUIPM	<u>IENT COST</u>				
Basic Machine:	Cat D9T - 9SU				
Horsepower: 4	05				
Blade Type: S	Semi-Universal				
Attachment: N	NA				
Shift Basis: 1	per day				
Data Source: (0	UKG)				
Cost Breakdown:			<b></b>		
0 11 0 7-		<b>419</b> - 6 -	<u>Utilization %</u>		
Ownership Cost/Hour	:	\$126.01	NA		
Operating Cost/Hour	••	\$141.41	100		
Kipper own. Cost/Hour	••	\$0.00	NA		
Ripper op. Cost/Hour	••	\$0.00	0		
Operator Cost/Hour	••	\$41.30	NA		
MATERIAL OUAN	\$308.72 JTITIES				
MATERIAL QUAN Initial Volume: 5,5	\$308.72 <u>VTITIES</u> 500				
MATERIAL QUAN         Initial Volume:       5,5         Swell factor:       1.0         Loose volume:       5,5	\$308.72 <b>VTITIES</b> 500 000 500 LCY				
MATERIAL QUAN         Initial Volume:       5,5         Swell factor:       1.0         Loose volume:       5,5         Source of estimated vol	\$308.72 <u>NTITIES</u> 500 500 500 LCY MR199 a				
MATERIAL QUAN         Initial Volume:       5,5         Swell factor:       1.0         Loose volume:       5,5         Source of estimated vol       Source of estimated swell	\$308.72 <u>VTITIES</u> 500 000 500 LCY lume: <u>MR199 a</u> cat Hand	  			
MATERIAL QUAN         Initial Volume:       5,5         Swell factor:       1.0         Loose volume:       5,5         Source of estimated vol         Source of estimated swell	\$308.72 <u>VTITIES</u> 500 000 500 LCY lume: <u>MR199 a</u> cat Hand	 pp book			
MATERIAL QUAN         Initial Volume:       5,5         Swell factor:       1.0         Loose volume:       5,5         Source of estimated vol         Source of estimated sweet         HOURLY PRODUCE	\$308.72 <u>VTITIES</u> 500 500 500 LCY lume: <u>MR199 a</u> cat Hand <u>CTION</u>	  ipp ibook			
MATERIAL QUAN         Initial Volume:       5,5         Swell factor:       1.0         Loose volume:       5,5         Source of estimated vol         Source of estimated swe         HOURLY PRODUC         Average push distance:	\$308.72 <u>VTITIES</u> 500 500 CTION 200 feet	  ipp ibook			
MATERIAL QUAN         Initial Volume:       5,5         Swell factor:       1.0         Loose volume:       5,5         Source of estimated vol       5,000         Source of estimated swoth       6         HOURLY PRODUC       Average push distance:         Unadjusted hourly product       1000	\$308.72 <u>VTITIES</u> 500 500 500 LCY lume: <u>MR199</u> a Cat Hand CTION 200 feet luction: <u>200 feet</u>	 			
MATERIAL QUAN         Initial Volume:       5,5         Swell factor:       1.0         Loose volume:       5,5         Source of estimated vol         Source of estimated swell         HOURLY PRODUC         Average push distance:         Unadjusted hourly prod         Materials consistency d	\$308.72 <u>VTITIES</u> 500 500 500 500 LCY lume: <u>MR199 a</u> Cat Hand CTION Loose s	/hr stockpile 1.2			
MATERIAL QUAN         Initial Volume:       5,5         Swell factor:       1.0         Loose volume:       5,5         Source of estimated vol       5,0         Source of estimated vol       5,0         Source of estimated swo       6         HOURLY PRODUC       Average push distance:         Unadjusted hourly prod       Materials consistency d         Average push gradient:       100	\$308.72 <u>VTITIES</u> 500 500 500 500 CTION 100 100 100 100 100 100 100 10	/hr stockpile 1.2			
MATERIAL QUAN         Initial Volume:       5,5         Swell factor:       1.0         Loose volume:       5,5         Source of estimated vol       5,0         Source of estimated vol       5,0         Source of estimated swo       4000000000000000000000000000000000000	$\frac{\$308.72}{\texttt{VTITIES}}$ $\frac{500}{500}$ $\frac{500 \text{ LCY}}{\texttt{lume:}}$ $\frac{\text{MR199 a}}{\text{Cat Hand}}$ $\frac{\texttt{CTION}}{\texttt{CTION}}$ $\frac{200 \text{ feet}}{\texttt{700.0 \text{ LCY}}}$ $\frac{5 \%}{\texttt{5,900 \text{ feet}}}$	/hr stockpile 1.2			
MATERIAL QUAN         Initial Volume:       5,5         Swell factor:       1.0         Loose volume:       5,5         Source of estimated vol       5,0         Source of estimated vol       5,0         Source of estimated swo       6         HOURLY PRODUC       10         Average push distance:       10         Unadjusted hourly prod       10         Materials consistency d       10         Average site altitude:       10         Material weight:       10	$\frac{\$308.72}{\text{VTITIES}}$ 500 500 500 CCY lume: MR199 a cat Hand CTION luction: 200 feet luction: 700.0 LCY/ lescription: Loose s $\frac{5\%}{5,900 \text{ feet}}$ 2,650 lbs/LCY	/hr stockpile 1.2			
MATERIAL QUAN         Initial Volume:       5,5         Swell factor:       1.0         Loose volume:       5,5         Source of estimated vol       Source of estimated swell         HOURLY PRODUC         Average push distance:         Unadjusted hourly prod         Materials consistency d         Average push gradient:         Average site altitude:         Material weight:         Weight description:	$\frac{\$308.72}{\text{VTITIES}}$ $\frac{500}{000}$ $\frac{500 \text{ LCY}}{\text{lume:}}$ $\frac{\text{MR199 a}}{\text{Cat Hand}}$ $\frac{200 \text{ feet}}{\text{Cat Hand}}$ $\frac{200 \text{ feet}}{100.0 \text{ LCY}}$ $\frac{5 \%}{5,900 \text{ feet}}$ $\frac{2,650 \text{ lbs/LCY}}{\text{Decomposed rock}}$	 pp. book /hr stockpile 1.2  - 25% Rock,			
MATERIAL QUAN         Initial Volume:       5,5         Swell factor:       1.0         Loose volume:       5,5         Source of estimated vol         Source of estimated vol         Source of estimated swo         HOURLY PRODUC         Average push distance:         Unadjusted hourly prod         Materials consistency d         Average site altitude:         Material weight:         Weight description:         Job Condition Correction	$\frac{\$308.72}{\text{NTITIES}}$ $\frac{500}{000}$ $\frac{500 \text{ LCY}}{\text{lume:}} \qquad \frac{\text{MR199 a}}{\text{Cat Hand}}$ $\frac{\text{CTION}}{\text{CTION}}$ $\frac{200 \text{ feet}}{for a loss of a l$				
MATERIAL QUAN         Initial Volume:       5,5         Swell factor:       1.0         Loose volume:       5,5         Source of estimated vol       Source of estimated vol         Source of estimated swo       HOURLY PRODUC         Average push distance:       Unadjusted hourly prod         Materials consistency d       Average push gradient:         Average site altitude:       Material weight:         Weight description:       Job Condition Correction         Operato       Operato	$\frac{\$308.72}{\text{NTITIES}}$ $\frac{500}{000}$ $\frac{500 \text{ LCY}}{\text{lume:}} \qquad \frac{\text{MR199 a}}{\text{Cat Hand}}$ $\frac{1}{\text{Cat Hand}}$ $\frac{200 \text{ feet}}{\text{Cat Hand}}$ $\frac{200 \text{ feet}}{100.0 \text{ LCY}}$ $\frac{5 \%}{5,900 \text{ feet}}$ $\frac{5 \%}{2,650 \text{ lbs/LCY}}$ $\frac{5 \text{ becomposed rock}}{1000 \text{ becomposed rock}}$ $\frac{5 \text{ kill:}}{0.000 \text{ becomposed}}$		, 75% Earth <u>Source</u> (AVG.)		
MATERIAL QUAN         Initial Volume:       5,5         Swell factor:       1.0         Loose volume:       5,5         Source of estimated vol       Source of estimated vol         Source of estimated swo       HOURLY PRODUC         Average push distance:       Unadjusted hourly prod         Materials consistency d       Average push gradient:         Average site altitude:       Material weight:         Weight description:       Job Condition Correction         Operato       Material consi	\$308.72         VTITIES         500         000         500 LCY         lume:       MR199 a         ell factor:       Cat Hand         CTION         luction:       200 feet         luction:       700.0 LCY         lescription:       Loose s         5 %       5,900 feet         2,650 lbs/LCY       Decomposed rock         on Factor       0.         or Skill:       0.         istency:       1.		, 75% Earth		
MATERIAL QUAN         Initial Volume:       5,5         Swell factor:       1.0         Loose volume:       5,5         Source of estimated vol       Source of estimated vol         Source of estimated swo       HOURLY PRODUC         Average push distance:       Unadjusted hourly prod         Materials consistency d       Average push gradient:         Average site altitude:       Material weight:         Weight description:       Job Condition Correction         Operato       Material consi         Dozing n       Dozing n	$\begin{array}{r c c c c c c c c c c c c c c c c c c c$		, 75% Earth 		

Task # 047

Job efficience	cy: 0.830	(1 SHIFT/DAY)
Spoil pi	le: 1.000	(DOZ-OC)
Push gradie	nt: 0.903	(CAT HB)
Altitud	le: 1.000	(CAT HB)
Material Weig	ht: 0.868	(CAT HB)
Blade typ	be: 1.000	(PAT)
Net correction	on: 0.5855	
Adjusted unit production:	409.85 LCY/hr	
Adjusted fleet production:	409.85 LCY/hr	

## JOB TIME AND COST

Fleet size:	1 Dozer(s)
Unit cost:	\$0.753/LCY
Total job time:	<b>13.42</b> Hours
Total job cost:	\$4,143

## MOTOR GRADER WORK

Task description:	Finish Grade G	Gob Piles #1, #	<sup>‡</sup> 2, #3, and #4			
Bowie No. 2 Mine	Pe	ermit Action:	RN5	F	ermit/Job#:	C1996083
PROJECT IDENT	<b>IFICATION</b>					
Task #: 093	State	: Colorado		Abb	previation:	None
Date: $3/31/202$	22 County:	Delta			Filename:	C083-093
User: RDZ						
Agency or or	ganization name:	ORMS				
HOURLY EQUIPM	MENT COST					
Basic Mach	ine: CAT 14M			Horsepower:		259
Ripper Attachm	ent: Multi-Shank R	Ripper		Shift Basis:	1 r	ber day
11				Data Source:	((	CRG)
Cost Proskdown						,
COSt Dieakuowii.				Utilization %		
Ом	nership Cost/Hour:		\$85.80	NA		
O	perating Cost/Hour:		\$60.40	100	_	
Ripper Ow	vnership Cost/Hour:		\$5.52	NA		
Ripper Op	perating Cost/Hour:		\$0.00	0		
(	Operator Cost/Hour:		\$28.56	NA	_	
То	tal Unit Cost/Hour:		\$180.28			
To	tal Fleet Cost/Hour	\$18	0.28			
Sou	urce of estimated acrea	age: Permit	Volume IX			
HOURLY PRODU	CTION					
	Average Grader S	Speed:	1.25	mph		
	Selected Applic	cation:	Proc	duction Deration	- 1.25	
	Selected Blade	Angle:	30	degrees	8	
	Effective Blade L	ength:	12.10	feet		
Wid	th of blade overlap per	r pass:	2.00	feet		
Net gradir	ng or ripping width pe	r pass:	10.10	feet		
Unadjus	ted Hourly Unit Produ	iction:	1.5303	acres/h	our	
Job Condition Correcti	ion Factors	<b>C</b>	S1	te Altitude: <u>6100</u>	<u>)</u> feet	
Altitude Adi	1.00	Source	3)			
Job Efficiency:	0.85	(1sh/d. mo	od.)			
Net Correction:	0.8500	multiplier				
		• F •••	1 2000			
	Adjusted Hourly Un	n Production:	1.3008	acres/Hour	•	
	Aujusteu nourry Flee		1.3008			
JOB TIME AND C	<u>COST</u>					
Fleet size:	1 Grader(s	3)	Total job time	e: 60.4	43	Hours
Unit cost: \$	138.60 per acre		Total job cost	t: <b>\$10,</b> 8	894	-

## SAFEGUARDING UNDERGROUND OPENINGS

]	Task description:       Seal Portals and Shafts - Bulkhead Removed from Costs					
Site:	Bowie No. 2 Mine		Permit Action:	RN5	Permit/.	Job#: C1996083
<u>PROJE</u>	CT IDENTIFICATIO	<u>N</u>				
Task #: Date: User:	140 3/31/2022 RDZ	State: County:	Colorado Delta		Abbreviation: Filename:	None C083-140
	Agency or organiza	tion name:	DRMS			

## UNIT COSTS

Opening Description	Dimensions	Closure Method	Quantity	Unit	Unit Cost	Total Cost
D Portals - Backfill	185 CY x 3	Adit closure - backfilling	3.00	EA	\$2,723.90	\$8,171.70
(intake, beltline, and		(per opening)				
return)						
- drainpipe	165 LF x 3	PVC drain pipe, 6 in. diameter (per ln. ft. incl. mat. & labor)	495.00	LF	\$11.74	\$5,811.30
B Portals - Backfill (intake, beltline, and return)	185 CY x 3	Adit closure - backfilling (per opening)	3.00	EA	\$2,723.90	\$8,171.70
- drainpipe	165 LF x 3	PVC drain pipe, 6 in. diameter (per ln. ft. incl. mat. & labor)	495.00	LF	\$11.74	\$5,811.30

Job Hours: 0.00

Total Cost: \$27,966.00

# **REVEGETATION WORK**

Т	ask descrip	otion:	Drill Seed Mix 3 on	Disturbed Area		
ite:	Bowie No	. 2 Mine	Permit	Action: <u>RN5</u>	Permit/Jo	b#: C1996083
<u>P</u>	ROJECT	IDENTIFIC	CATION States Co	lanada		Nama
	Task #:	150	State: Co	lorado	Abbreviation:	None
	E.	0 10 1 10 0 0 0				COOC 150
	Date:	3/31/2022	County: De	lta	Filename:	C083-150

## **FERTILIZING**

#### Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
			\$	\$
			Total Fertilizer Materials	<b>*</b> 0.00
			Cost/Acre	<b>\$0.00</b>

## Application

Description		Cost /Acre
		\$
Total	Fertilizer Application Cost/Acre	\$0.00

## **TILLING**

Description	Cost /Acre
	\$
Total Tilling Cost/Acre	\$0.00

# **SEEDING**

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Beardless Wheatgrass - Whitmar	1.30	4.24	\$15.24
Bitterbrush, Antelope	8.30	2.55	\$161.85
Aster, Smooth	0.30	5.22	\$43.95
Great Basin Wildrye - Magnar	1.20	4.88	\$13.86
Kentucky Bluegrass - Ginger	0.10	4.94	\$0.32
Ryegrass, Perennial - Belramo	0.70	3.97	\$1.26
Intermediate Wheatgrass - Oahe	1.80	3.84	\$5.04
Smooth Brome - Manchar	1.20	3.99	\$3.99
Alfalfa - Ranger (inoculated)	0.70	3.37	\$1.79

Burnett, Small (or Little) - Delar	2.80	3.54	\$7.00
Sheep Fescue - Covar	0.20	3.12	\$1.22
Milk Vetch, Cicer - Lutana	1.10	3.66	\$9.02
Tall Wheatgrass - Jose	2.00	3.63	\$6.75
Western Wheatgrass - Arriba	1.40	3.54	\$9.10
Rose, Wood's	2.70	0.00	\$55.35
Flax, Lewis Blue	0.50	3.32	\$8.25
Sagebrush, Silver	0.10	1.94	\$3.10
Saltbush, Four Wing	2.40	3.31	\$30.00
Serviceberry	4.80	8.82	\$295.20
Siberian Wheatgrass	0.90	2.27	\$5.15
Totals Seed Mix	34.50	74.14	\$677.44

## Application

Description	Cost /Acre
Drill Seeding (DRMS Survey Cost)	\$232.00
Total Seed Application Cost/Acre	\$232.00

#### **MULCHING and MISCELLANEOUS**

#### Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
Straw, delivered {MEANS 31 25 14.16 1200}	2.00	TON	\$307.02	\$614.04
Total Mulch Materials Cost/Acre				\$614.04

## Application

Description	Cost /Acre
Crimping, with tractor {DMG survey data}	\$71.57
Power mulcher (MEANS 32 91 13.16 0350)	\$106.29
Total Mulch Application Cost/Acre	\$177.86

## NURSERY STOCK PLANTING

Common Name	No / Acre	Type and Size	Planting Cost	Fertilizer Pellet Cost	Cost /Acre
					\$
	-				
		Totals	Nursery Stoc	k Cost / Acre	\$0.00

## JOB TIME AND COST

	No. of Acres:	225.02	Cost /Acre:	\$1,701.34
Estimated Failure Rate:		50%	Cost /Acre*:	\$1,701.34
*Selected Replanting	ng Work Items:	SEEDING, MULCHIN	G	
Initial Job Cost:	\$382,835.53			
Reseeding Job Cost:	\$191,417.76			
Total Job Cost:	\$574,253			

Task # 150

Job Hours: 225.02

# **REVEGETATION WORK**

Task des	cription:	Broadcast Seed M	lix 3 on Go	b Pile #3		
ite: <b>Bowi</b>	e No. 2 Mine	Perm	nit Action:	RN5	Permit/Job	o#: C1996083
<u>PROJE</u>	CT IDENTIFIC	CATION				
		States	Colorado		Abbroviation	Nono
Task	#: 154	State.	Colorado		Abbieviation.	None
Task Da	#: $\frac{154}{3/31/2022}$	County:	Delta		Filename:	C083-154

## **FERTILIZING**

#### Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
			\$	\$
			Total Fertilizer Materials	<b>*</b> 0.00
			Cost/Acre	<b>\$0.00</b>

## Application

Description		Cost /Acre
		\$
Total	Fertilizer Application Cost/Acre	\$0.00

## **TILLING**

Description	Cost /Acre
	\$
Total Tilling Cost/Acre	\$0.00

# **SEEDING**

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Beardless Wheatgrass - Whitmar	2.60	8.48	\$30.49
Bitterbrush, Antelope	16.60	5.11	\$323.70
Aster, Smooth	0.60	10.44	\$87.90
Great Basin Wildrye - Magnar	2.40	9.75	\$27.72
Kentucky Bluegrass - Ginger	0.20	9.87	\$0.64
Ryegrass, Perennial - Belramo	1.40	7.94	\$2.52
Intermediate Wheatgrass - Oahe	3.60	7.69	\$10.08
Smooth Brome - Manchar	2.40	7.99	\$7.98
Alfalfa - Ranger (inoculated)	1.40	6.75	\$3.57

Burnett, Small (or Little) - Delar	5.60	7.07	\$14.00
Sheep Fescue - Covar	0.40	6.24	\$2.44
Milk Vetch, Cicer - Lutana	2.20	7.32	\$18.04
Tall Wheatgrass - Jose	4.00	7.25	\$13.50
Western Wheatgrass - Arriba	2.80	7.07	\$18.20
Rose, Wood's	5.40	0.00	\$110.70
Flax, Lewis Blue	1.00	6.63	\$16.50
Sagebrush, Silver	0.20	3.88	\$6.20
Saltbush, Four Wing	4.80	6.61	\$60.00
Serviceberry	9.60	17.63	\$590.40
Siberian Wheatgrass	1.80	4.55	\$10.31
Totals Seed Mix	69.00	148.28	\$1,354.88

## Application

Description	Cost /Acre
Broadcast seeding [DMG]	\$267.22
Total Seed Application Cost/Acre	\$267.22

#### **MULCHING and MISCELLANEOUS**

#### Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
Straw, delivered {MEANS 31 25 14.16 1200}	2.00	TON	\$307.02	\$614.04
Total Mulch Materials Cost/Acre				\$614.04

## Application

Description	Cost /Acre
Crimping, with tractor {DMG survey data}	\$71.57
Power mulcher (MEANS 32 91 13.16 0350)	\$106.29
Total Mulch Application Cost/Acre	\$177.86

## NURSERY STOCK PLANTING

Common Name	No / Acre	Type and Size	Planting Cost	Fertilizer Pellet Cost	Cost /Acre
					\$
	-				
		Totals	Nursery Stoc	k Cost / Acre	\$0.00

#### JOB TIME AND COST

No. of Acres:		30.63	Cost /Acre	: \$2,414.00
Estimated Failure Rate:		50%	Cost /Acre*	: \$2,414.00
*Selected Replanting Work Items:		SEEDING, MULC	THING	
	<b>#72</b> 0 40 02			
Initial Job Cost:	\$73,940.82			
Reseeding Job Cost:	\$36,970.41			
Total Job Cost:	\$110,911			

Job Hours: **60.63** 

## SAFEGUARDING UNDERGROUND OPENINGS

Т	Task description:	Concrete Plug and Back	xfill Terror Creek	x Vent Shaft	
Site:	Bowie No. 2 Mine	Permit Actio	on: RN5	Permit/.	Job#: C1996083
PROJE(	CT IDENTIFICATIO	<u>DN</u>			
Task #:	261	State: Colorado		Abbreviation:	None
Date:	3/31/2022	County: Delta		Filename:	C083-261
User:	RDZ				
	Agency or organiz	ation name: DRMS			

## UNIT COSTS

Opening Description	Dimensions	Closure Method	Quantity	Unit	Unit Cost	Total Cost
Concrete Cap	269.00 cf	Shaft closure - concrete cap, poured-in-place (per Cubic Feet)	269.00	CF	\$13.89	\$3,736.41
Backfill Shaft	6900 cy	Shaft closure - backfilling, Machine Backfill	6,900.00	CY	\$20.00	\$138,000.00
- Equipment to Backfill	1717 hr/cy	Cat D7R DS XR Series II	4.00	EA	\$201.65	\$806.60

Job Hours: 40.00

Total Cost: \$142,543.01