

Reilley - DNR, Robin <robin.reilley@state.co.us>

Prelim Adq Lockhart Pit

1 message

Reilley - DNR, Robin <robin.reilley@state.co.us> To: Ben Langenfeld <benl@lewicki.biz>, Robin Reilley - DNR <robin.reilley@state.co.us> Fri, Jun 28, 2024 at 10:32 AM

Good Morning Ben,

Please find attached the Divisions preliminary adequacy questions regarding the Lockhart Pit for your resolution. Decision date for this permitting action is 21 August 2024. Please assure adequacy responses are submitted to DRMS by 1 August or before for ample review time, or request an extension of that date.

I'm available to answer any questions that come up.

Best Regards

Robin Reilley, M.S. GISP Environmental Protection Specialist II



P 303.866.3567 ext 8105 | F 303.832.8106 Physical Address: 1313 Sherman Street St., Suite 215, Denver, CO 80203 Mailing Address: DRMS Room 215, 1001 E 62nd Ave, Denver, CO 80216 robin.reilley@state.co.us | http://mining.state.co.us

ADQ_Prelim_2024June.pdf



Mr. Ben Langenfeld Lewicki and Associates 3375 W Powers Circle Littleton, Co 80123

28 June 2024

Re: Lockhart Pit; Permit M2024017 DRMS Preliminary Adequacy

Dear Mr. Langenfeld

Please find the Divisions preliminary adequacy questions regarding the Lockhart Pit for your resolution. DRMS found the proposed application incomplete on 6 May 2024. The Division found the Kremmling All Seasons's Rental LLC, Lockhart Pit 112c application complete on 23 May 2025 having received the application on 25 April 2024.

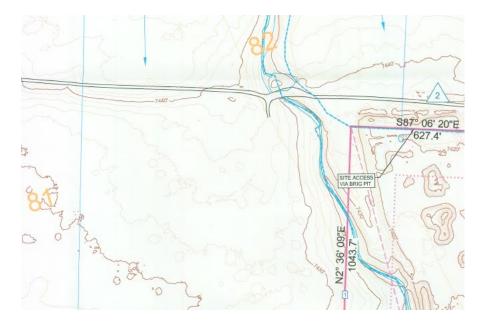
Adequacy items are numbered and listed below. Please resubmit in their entirety all Exhibits with changes to text.

- 1. Address for Mitch Lockhart listed in the application (110 West Park Ave, Kremmling, CO 80459 is incorrect as DRMS incompleteness correspondence was returned. Please provide correct mailing and email addresses for the operator.
- 2. Please provide: Newspaper publication of a notice (published once a week for four consecutive weeks) regarding the filing of your application.
- 3. Please provide: evidence of transmittal of a copy of the notice of publication to all owners of record of surface and mineral rights, holders of any recorded easements, and all owners of record of lands that are within 200 feet of the boundary of the affected land. This is required within 10 days of submittal. You must submit proof of the notice and mailings, such as Certified Mail Return Receipt Requested, to the Division prior to the decision date.
- 4. Please be reminded that all operators must contact the Colorado Department of Public Health and Environment, Water Quality Control Division regarding storm water permits. Please submit correspondence.

Rule 6.4.1 Exhibit A

- 5. The C-1 Baseline Map indicates site access through the Brigg Pit/Bumgarner Pit. This appears to be a private road to the Brigg Pit. If the operation utilizes the private road for access to the Lockhart Pit, please demonstrate to DRMS that you have right of entry through the Brig Pit /Bumgarner Pit for stated mining operations.
- 6. Legal description places the site in Range 80 West, however Map C-1 exhibits labels for Ranges 81 and 82. Please clarify and change the map accordingly and resubmit the corrected map.



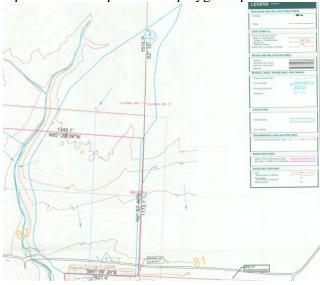


7. Surface owners of record are not labeled on Map C-1. Please label any and all surface owners of record and resubmit the map.

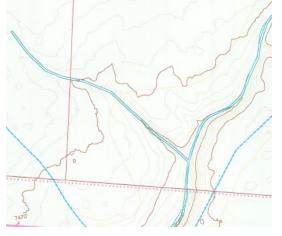
Rule 6.4.3 EXHIBIT C

The legend is ambiguous in the hydrology section as it relates to the map (Maps C-1 and C-2) as it proposes legend items that are not employed on the map. Please use a bespoke legend pertinent to the maped items.

8. Please, in the legend indicate what the blue dashed polygons (appear to be hydrologic basins) represent and the pink dotted polygon represents.



9. It appears that unnamed ephemeral waterways are depicted. It is unclear between the legend and the map depiction whether the below illustration depicts perennial or ephemeral streams, please clarify and call out ephemeral drainages in the legend to correspond with the map depiction



The name and location of all creeks, roads, buildings, oil and gas wells and lines, and power and communication lines on the area of affected land and within two hundred (200) feet of all boundaries of such area must be depicted on the map.

- 10. Please depict any structures, fences, buildings, or wells within 200 feet of the affected area on the Exhibie C maps.
- 11. Show the owner's name, type of structures, and location of all significant, valuable, and permanent man-made structures contained on the area of affected land and within two hundred (200) feet of the affected land.

Rule 6.4.4 Exhibit D Mining Plan

- 12. Page D-3: it appears that the paragraph below the mining timetable misconstrued the mining sequence between the two pods. Please, revise the text and resubmit Exhibit D in it's entirety.
- 13. Please indicate in Exhibit D the following acreages at any one time:
 - a. Acres in active mining
 - b. Acres disturbed
 - c. Acres undergoing reclamation
- 14. The Brig Pit and an existing pit are mentioned throughout the Lockhart application. DRMS understands this to be the Bumgarner Ranches Gravel Pit (M1980-027). The permitee of this pit is Bumgarner Ranches, Inc. Please update the exhibit with "Brig Pit"/Bumgarner permit number and owner/operator information.
- 15. Overburden is mentioned to be stripped and stockpiled for reclamation, yet it is mentioned that no overburden is acticipated to be found. Please adjust and clarify the language regarding overburden in both Exhibit D and Exhibit E and resubmit the Exhibits in their entirety. Language such as: *should overburden be encountered*... or

any overburden encounterd not suitable as product....

could clear up the topic of how overburden shall be handled.

Rule 6.4.5 Exhibit E Reclamation Plan

- 16. Page E-1 of the Reclamation Plan, Exhibit E mentionse the stockpiling of fines for final backfilling. Please indicate in the text where these fines will be procured.
- 17. Overburden yardage is called out for backfilling. Please indicate where the overburden will be procured, stockpiled and approximate costs of procurement.
- 18. Overburden stockpile is mentioned throughout the application. If overburden will not be stockpiled and utilized in the reclamation process please remove ithis terminology throughout the application and resubmit.
- 19. The reclamation plan map does not indicate where topsoil will be stockpiled. Please update the map to show where topsoil stockpiles and or fines/ overburdenwill be placed and stored.
- 20. What are the average push and haul distances for backfill and grading and topsoil placement.
- 21. What are the average gradients associated with backfill and grading, and with topsoil placement.
- 22. Will you be utilizing any fertilizer in the revegetation operations.
- 23. What type if weed control will be employed?
- 24. What is the total acreage of topsoil stockpiles for the temporary seed operation.
- 25. Where will the 1800 CY of fines be stockpiled on the site. Please show this on the reclamation map.
- 26. Two reclaimed mining ponds are referenced in Exhibit E. It is unclear to DRMS where these ponds are located and no ponds are called out in the map legend. Please address this and update the map (Exhibit F), as appropriate and resubmit.
- 27. Exhibit F appears to indicate the reclaimed higwall elevations. The pit floor is not described topographically. Please add additional topography pertinent to the pit floor and resubmit the exhibit.

Rule 6.4.7 Exhibit G Water Information

The Operator/Applicant shall affirmatively state that the Operator/Applicant has acquired (or has applied for) a National Pollutant Discharge Elimination System (NPDES) permit from the Water Quality Control Division at the Colorado Department of Health, if necessary.

- 28. DRMS assumes the blue triangles on the map indicae discharge points. Please clarify by describing the location, locate and label the referenced discharge points on map for any accumulated stormwater and indicate in the text approximately when this discharge point will be placed.
- 29. Please detail your modelling methodology.
- 30. Please detail your assumptions.
- 31. Please state how you determined runoff coefficients or where they were obtained.
- 32. Please indicate where all inputs were derived form.
- 33. Please explain the purpose of the hydrologic calculations for premining conditions.
- 34. Please provide documentation that stormwater designs have been submitte to and approved by Grand County.
- 35. The legend on Maps C-I and C-2 have nothing to do with the information presented on the map. Please create a bespoke legend explaining all the symbology utilized on them.
- 36. Please reference and place all inputs for hydrologic modelling of ponds and ditches in one place or page.
- 37. The hydrologic variables are the same on both Maps C-1 and C-2, please explain.
- 38. Runoff coefficients are called out for West Pond Drainage Basin, but East Pond Drainage Basin references Curve numbers. Please correct as necessary.
- 39. Map F-1 is referenced in the application. Map F-1 appears to be missing from the application.

- 40. Map G-1 is referenced in the submittal. Map G-1 appears to be missing from the application.
- 41. Please show on the map where the drainage/diversion ditches will be constructed.
- 42. DRMS assumes the diagram above the Drainage Basin information constitutes ditch information. Please label the diagram.
- 43. Please describe the diversion ditches:
 - a. width
 - b. depth
 - c. slope
 - d. lining material
 - e. length

Please resubmit Exhibit G text and maps in their entirety.

Rule 6.4.10 Exhibit J Soils

The Operator/Applicant shall include in this Exhibit a narrative of the following items:

- a. descriptions of present vegetation types, which include quantitative estimates of cover and height for the principal species in each life-form represented (i.e., trees, tall shrubs, low shrubs, grasses, forbs);
- b. the relationship of present vegetation types to soil types, or alternatively, the information may be presented on a map.
- 44. Please update Exhibit J with the above information and resubmit in its entirety.

Rule 6.4.11 Exhibit K Climate Information

Climate information provided spans 1948 through 2005. What about the last 20 years because as of 2020 a new climate modeling regine is in place.

45. Please provide climatological data for the last 20 years.

Rule 6.4.12 Exhibit L Reclamation Cost Estimate

Circes: DRMS enclosed a reclamation cost estimate for your review. Please review the estimate carefully and provide the following information in your response. The development of the estimate triggered several questions. Please refer to questions 20 through 26 above.

Rule 6.4.13 Exhibit M - Other Permits and Licenses

Please assure DRMS that the Permitee has contacted all of the following permitting agencies, licenses and approvals the Operator/Applicant holds or will be seeking in order to conduct the proposed mining and reclamation operations: effluent discharge permits, air quality emissions permits, the State Historic Preservation Office clearance, , highway access permits, U.S. Forest Service permits, Bureau of Land Management permits, county zoning and land use permits, and city zoning and land use permits.

DRMS notes that certain of the above permits are in process.

A technical revision will be required at some point for the impoundment ponds. This will most likely involve the Division of Water Resources.

Rule 6.4.14 Exhibit N - Source of Legal Right to Enter

The quit claim deed supplied as a result of incompleteness names Michael and Christina Lockhart as receiving the township north range 80 property.

Entry is via the Bumgarner Ranches Pit/Britt Pit. It is unclear to DRMS that the quit claim deed grants legal right of entry to the permittee thorough the Bumgarner Pit.

46. Please provide supporting documentation that the permittee has legal right of entry through the Bumgarner Ranches Pit.

Rule 6.4.15 Exhibit O - Owner(s) of Record of Affected Land (Surface Area) and Owners of Substance to be Mined.

The quit claim deed indicates that the Lockhart's may be the Owner of Record. Exhibit O states that Bumgarner Raches as the owners of record (surface and subsurface).

The complete list of all owners can be submitted as a list or on a map in Exhibit C.

47. Please submit a complete list of all owners of record and by parcles indicate the owners on Exhibit C.

Rule 6.4.17 Exhibit R - Proof of Filing with County Clerk and Recorder

DRMS received a letter on Lewicki & Associates letterhead addressed to the Grand County Clerk and Recorder as a result of incompleteness. The letter references the Hayden Gravel Pit and applicant Oldcastle SW Group. This does not appear to apply to the Lockhart Pit, nor to constitute proof of filing with the Couty as the information appears to reference a different entity and permitting action.

Rule 6.4.19 Exhibit S Structures

Where the mining operation will adversely affect the stability of any significant, valuable and permanent man-made structure located within two hundred (200) feet of the affected land, the applicant may either:

- a. provide a notarized agreement between the applicant and the person(s) having an interest in the structure, that the applicant is to provide compensation for any damage to the structure; or
- b. where such an agreement cannot be reached, the applicant shall provide an appropriate engineering evaluation that demonstrates that such structure shall not be damaged by activities occurring at the mining operation; or.
- c. where such structure is a utility, the Applicant may supply a notarized letter, on utility letterhead, from the owner(s) of the utility that the mining and reclamation activities, as proposed, will have "no negative effect" on their utility.

The text refers two fences (the Bumgarner Fence by parcel number), and a well. Are there any other structures present in the vicinity of the permit. It does not appear that these structues are depicted on (Map C-1) provided to DRMS. Owners of structures must be notified of the proposed operation. It is not clear that notification was made.

- 48. Any structures, wells, buildings or fences in the vicinity of the proposed operation should be listed in the text and depicted on the appropriate map.
- 49. The presence of a potentially abandoned well was referenced in the mine plan. Please indicate the location of the well on the appropriate map or address in the text the distance from the permit boundary.
- 50. Please add text as to the distance of the well with respect to the permit area.
- 51. Please determine the owner of the well and make sure the owner is aware of the activites proposed.

52. Please outline and label the Bungarner parcel with name and parcle number on the map.

Rule 6.5 Geotechnical Exhibit

Appears conservative and is deemed adequate.

Decision date for this permitting action is 21 August 2024. Please assure adequacy responses are submitted to DRMS by 1 August or before for ample review time, or request an extension of that date.

Public notice is required once the application is deemed complete, commencing a public comment period of 20 (twenty) calendar days as per Rule 1.6.5. This notice must be provided to DRMS.

I'm available to answer any questions that come up. So, please reach out to me.

Sincerely,

Robin Reilley M.S. GISP Environmental Protection Specialist II Robin.reilley@state.co.us

COST SUMMARY WORK

	Cost estimate Lockhart App				
Site:	Lockhart Pit Permit Action:	Lockhart Applic	ation	Permit/Job	#: <u>M2024017</u>
P	ROJECT IDENTIFICATION				
	Task #: 000 State: Colorado		/	Abbreviation:	None
	Date: $\frac{6}{20}$ Date: $\frac{6}{20}$ County: Grand			Filename:	M017-000
	User: RAR			-	
	Agency or organization name: DRMS				
T	ASK LIST (DIRECT COSTS)				
Fask		Form	Fleet	Task	
	Description	Used	Size	Hours	Cost
01 002	Reduce 1000' of highwall to 3H:1V Replace 12 inches Topsoil 98.2 acres	DOZER DOZER	1	50.78 59.25	\$22,758
)02)03	Revegetation	REVEGE	1 1	20.00	\$26,552 \$15,679
)03)04	mob demob	MOBILIZE	1	0.26	\$581
		<u>SUBTO'</u>	ГАLS:	130.29	\$65,570
IN	DIRECT COSTS				
				<u> </u>	
	VERHEAD AND PROFIT:			Total = \$1	325
	VERHEAD AND PROFIT: Liability insurance: 2.02				, <u>325</u> 88
	VERHEAD AND PROFIT: Liability insurance: 2.02			Total = \$6	,325 ,325 ,240
	VERHEAD AND PROFIT: Liability insurance: 2.02 Performance bond: 1.05			$\begin{array}{r} \text{Total} = & \$6\\ \text{Total} = & \$4\\ \text{Total} = & \$6\end{array}$.,240 .,557
	VERHEAD AND PROFIT: Liability insurance: 2.02 Performance bond: 1.05 Job superintendent: 65.15 Profit: 10.00			Total = $Total = $ $Total = $ $Total = $ $C 0 & P = $ $S 1$	88 ,240 ,557 2,810
	VERHEAD AND PROFIT: Liability insurance: 2.02 Performance bond: 1.05 Job superintendent: 65.15 Profit: 10.00	RACT AMOUNT (Total = $Total = $ $Total = $ $Total = $ $C 0 & P = $ $S 1$	
<u>0</u>	VERHEAD AND PROFIT: Liability insurance: 2.02 Performance bond: 1.05 Job superintendent: 65.15 Profit: 10.00			Total = $Total = $ $Total = $ $Total = $ $C 0 & P = $ $S 1$	88 ,240 ,557 2,810
<u>0</u>	VERHEAD AND PROFIT: Liability insurance: 2.02 Performance bond: 1.05 Job superintendent: 65.15 Profit: 10.00 CONT			Total = $Total = $ $Setimate = $ $Setima$	88 ,240 ,557 2,810
<u>0</u>	VERHEAD AND PROFIT: Liability insurance: 2.02 Performance bond: 1.05 Job superintendent: 65.15 Profit: 10.00 CONT EGAL - ENGINEERING - PROJECT MANAGEMENT Financial warranty processing (legal/related costs): Engineering work and/or contract/bid preparation:	\$500 4.25		Total = $Second For the second se$	88 ,240 ,557 2,810 8,380 00 ,331
<u>0</u>	VERHEAD AND PROFIT: Liability insurance: 2.02 Performance bond: 1.05 Job superintendent: 65.15 Profit: 10.00 CONT EGAL - ENGINEERING - PROJECT MANAGEMENT Financial warranty processing (legal/related costs):	\$500		Total = $Second For the second se$	88 ,240 ,557 2,810 8,380
<u>0</u>	VERHEAD AND PROFIT: Liability insurance: 2.02 Performance bond: 1.05 Job superintendent: 65.15 Profit: 10.00 CONT EGAL - ENGINEERING - PROJECT MANAGEMENT Financial warranty processing (legal/related costs): Engineering work and/or contract/bid preparation:	\$500 4.25		$Total = \frac{\$6}{Total} = \frac{\$6}{Total} = \frac{\$6}{Total} = \frac{\$6}{Total} = \frac{\$6}{Total} = \frac{\$7}{Total} = \frac{\$7}{Total} = \frac{\$7}{\$3}$	88 ,240 ,557 2,810 8,380 00 ,331
<u>0</u> '	VERHEAD AND PROFIT: Liability insurance: 2.02 Performance bond: 1.05 Job superintendent: 65.15 Profit: 10.00 CONT EGAL - ENGINEERING - PROJECT MANAGEMENT Financial warranty processing (legal/related costs): Engineering work and/or contract/bid preparation: Reclamation management and/or administration:	\$500 4.25 5.00	(direct +	$Total = \frac{\$6}{Total} = \frac{\$6}{Total} = \frac{\$6}{Total} = \frac{\$6}{Total} = \frac{\$6}{Total} = \frac{\$7}{Total} = \frac{\$7}{Total$	88 ,240 ,557 2,810 8,380 00 ,331 ,919
<u>0</u> '	VERHEAD AND PROFIT: Liability insurance: 2.02 Performance bond: 1.05 Job superintendent: 65.15 Profit: 10.00 CONT EGAL - ENGINEERING - PROJECT MANAGEMENT Financial warranty processing (legal/related costs): Engineering work and/or contract/bid preparation: Reclamation management and/or administration:	\$500 4.25 5.00 3.00	(direct + DIRECT	$Total = \frac{\$6}{Total} = \frac{\$6}{Total} = \frac{\$6}{Total} = \frac{\$6}{Total} = \frac{\$6}{Total} = \frac{\$7}{Total} = \frac{\$7}{Total} = \frac{\$7}{Total} = \frac{\$1}{Total} = \frac{\$1}{Total$	88 ,240 ,557 2,810 8,380 00 ,331 ,919 ,967

BULLDOZER WORK

te: Lockhart Pit		3H:1V		
	Permit Action:	Lockhart Application	Permit/Jol	b#: <u>M2024017</u>
PROJECT IDENTIFIC	CATION			
Task #: 001	State: Colorado		Abbreviation:	None
Date: 6/18/2024	County: Grand		Filename:	M017-001
User: RAR				
Agency or organ	ization name: DRMS			
HOURLY EQUIPMEN	NT COST			
	D8T - 8SU			
Horsepower: 310				
	ni-Universal			
• I	ank ripper			
	er day			
Data Source: (CR	· · · · · · · · · · · · · · · · · · ·			
Cost Breakdown:				
		Utilization %		
Ownership Cost/Hour:	\$241.38	NA		
Operating Cost/Hour:	\$143.92	100		
Ripper own. Cost/Hour:	\$14.11	NA		
Ripper op. Cost/Hour:	\$7.45	100		
Operator Cost/Hour:	\$41.30	NA		
MATERIAL QUANTI	<u>TIES</u>			
Source of estimated volu Source of estimated swel factor: HOURLY PRODUCT Average push distance: Unadjusted hourly) 00 LCY me: <u>Division of Reclamat</u> l Cat Handbook	ion, Mining & Safety 		
Swell factor: 1.000 Loose volume: 12,00 Source of estimated volu Source of estimated swel factor: HOURLY PRODUCT Average push distance: Unadjusted hourly production:	DO LCY DO LCY me: l Cat Handbook ION 80 feet 984.2 LCY/hr			
Swell factor: 1.000 Loose volume: 12,00 Source of estimated volu Source of estimated swel Source of estimated swel factor: HOURLY PRODUCTION Average push distance: Unadjusted hourly production: Materials consistency dest	DO LCY DO LCY me: Division of Reclamat Cat Handbook ION 80 feet 984.2 LCY/hr scription: Compacted fill or e			
Swell factor: 1.000 Loose volume: 12,00 Source of estimated volu Source of estimated swel Source of estimated swel factor: HOURLY PRODUCTION Average push distance: Unadjusted hourly production: Materials consistency dest Average push	DO LCY DO LCY me: l Cat Handbook ION 80 feet 984.2 LCY/hr			
Swell factor: 1.000 Loose volume: 12,00 Source of estimated volu Source of estimated swel Source of estimated swel factor: HOURLY PRODUCTION Average push distance: Unadjusted hourly production: Materials consistency dest Average push Average push gradient:	DO LCY DO LCY me: Division of Reclamat Cat Handbook ION 80 feet 984.2 LCY/hr scription: Compacted fill or e 10 %			
Swell factor: 1.000 Loose volume: 12,00 Source of estimated volu Source of estimated swel Source of estimated swel factor: HOURLY PRODUCTION Average push distance: Unadjusted hourly production: Materials consistency dest Average push	DO LCY DO LCY me: Division of Reclamat Cat Handbook ION 80 feet 984.2 LCY/hr scription: Compacted fill or e			
Swell factor: 1.000 Loose volume: 12,00 Source of estimated volu Source of estimated swel Source of estimated swel factor: HOURLY PRODUCTION Average push distance: Unadjusted hourly production: Materials consistency dest Average push Average push gradient:	DO LCY DO LCY me: Division of Reclamat Cat Handbook ION 80 feet 984.2 LCY/hr scription: Compacted fill or e 10 %			

Job Condition Correction Factor		Source
Operator Skill:	0.750	(AVG.)
Material consistency:	0.900	(CAT HB))
Dozing method:	1.200	(SLOT)
Visibility:	1.000	(AVG.)
Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	1.000	(DOZ-OC)
Push gradient:	0.786	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.568	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.3001

Adjusted unit production:	295.36 LCY/hr
Adjusted fleet production:	295.36 LCY/hr

JOB TIME AND COST

Fleet size:	1 Dozer(s)
Unit cost:	\$1.517/LCY

Total job time:	40.63 Hours
Total job cost:	\$18,208

BULLDOZER WORK

Task description:	Replace 12 inches Topsoil 9	8.2 acres		
Lockhart Pit	Permit Action:	Lockhart Application	Permit/Jo	b#: <u>M202401</u>
PROJECT IDENTIFI	CATION			
Task #: 002 Date: 6/20/2024 User: RAR	State: Colorado County: Grand		Abbreviation: Filename:	None M017-002
Agency or organ				
HOURLY EQUIPME	<u>NT COST</u>			
	t D8T - 8SU	_		
Horsepower: <u>310</u> Blade Type: Ser	ni-Universal	_		
	hank ripper	_		
Shift Basis: 1 p	er day	_		
Data Source: (Cl	RG)	_		
Cost Breakdown:	1	TT. 11 .1		
Ownership Cost/Hour:	\$241.38	<u>Utilization %</u> NA		
Operating Cost/Hour:	\$143.92	100		
Ripper own.	\$14.11	NA		
Cost/Hour: Ripper op. Cost/Hour:	\$7.45	100		
Operator Cost/Hour:	\$41.30	NA		
MATERIAL QUANT				
Initial Volume: <u>16,1</u> Swell factor: <u>1.00</u>				
	33 LCY			
Source of estimated volu		ion Mining & Safaty		
Source of estimated work Source of estimated swe factor:				
HOURLY PRODUCT	<u>'ION</u>			
Average push distance: Unadjusted hourly production:	50 feet 1,400.0 LCY/hr			
Materials consistency description:	Consolidated stock	pile 1.0		
Average push gradient:	10 %			
Average site altitude:	7,500 feet			
Material weight:	4,050 lbs/LCY		-	
Weight description:	Sand and clay - Compacted			

Job Condition Correction Factor		Source
Operator Skill:	0.750	(AVG.)
Material consistency:	1.000	(CAT HB)
Dozing method:	1.000	(GEN.)
Visibility:	1.000	(AVG.)
Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.700	(FND-MF)
Push gradient:	0.786	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.568	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.1945

Adjusted unit production:	272.30 LCY/hr
Adjusted fleet production:	272.3 LCY/hr

JOB TIME AND COST

Fleet size:	1 Dozer(s)
Unit cost:	\$1.646/LCY

Total job time:	59.25 Hours	
Total job cost:	\$26,552	_

REVEGETATION WORK

: Lockhar	t Pit	Per	rmit Action:	Lockhart Application	Permit/Job	#: <u>M2024017</u>
PROJECT	IDENTIFIC	CATION				
Task #:	003	State:	Colorado		Abbreviation:	None
Date:	6/20/2024	County:	Grand		Filename:	M017-003
Date.						

FERTILIZING

Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
			\$	\$
			Total Fertilizer Materials	
			Cost/Acre	\$0.00

Application

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

TILLING

Description	Cost /Acre
Disc harrowing, 6" deep (MEANS 32 91 13.23 6100)	\$112.82
Total Tilling Cost/Acre	\$112.82

SEEDING

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Indian Ricegrass - Native	3.00	9.71	\$19.50
Bottlebrush Squirreltail	0.50	2.20	\$8.11
Burnett, Small (or Little) - Delar	3.00	3.79	\$7.50
Galleta	4.00	14.60	\$89.40
Rabbitbrush, Rubber	0.50	7.45	\$32.15
Western Wheatgrass - Native	4.00	10.10	\$24.00
Saltbush, Four Wing	0.50	0.69	\$6.25
Totals Seed Mix	15.50	48.54	\$186.91

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
Hay, delivered {MEANS 31 25 14.16 1200}	1.00	TON	\$429.79	\$429.79
Total Mulch Materials Cost/Acre				\$429.79

Application

Description		Cost /Acre
Crimping, with tractor {DMG survey data}		\$74.46
Weed spray, hand, non-aquatic area, nox. [DMG]		\$183.16
	Total Mulch Application Cost/Acre	\$257.62

NURSERY STOCK PLANTING

Common Name	No / Acre	Type and Size	Planting Cost	Fertilizer Pellet Cost	Cost /Acre	
	Totals Nursery Stock Cost / Acre					

JOB TIME AND COST

No. of Acres:	10	Cost /Acre:	\$1,254.36
Estimated Failure Rate:	25%	Cost /Acre*:	\$1,254.36
*Selected Replanting Work Items:	TILLING,SEEDIN	G,MULCHING	

Initial Job Cost:	\$12,543.60
Reseeding Job Cost:	\$3,135.90
Total Job Cost:	\$15,679
Job Hours:	20.0

Task # 001

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EQUIPMENT MOBILIZATION/DEMOBILIZATION

Task description: Mo	b demob			
te: Lockhart Pit	Permi	t Action: Lockha	art Application	Permit/Job#: <u>M2024017</u>
PROJECT IDENTIFICATI	ON			
Task #: 004 Date: 6/20/2024 User: RAR		olorado irand	A1	bbreviation: <u>None</u> Filename: <u>M017-004</u>
Agency or organization	n name: DRMS	5		
EQUIDMENT TO ANGROD	T DIC COST			
EQUIPMENT TRANSPOR	I KIG CUSI			
			Shif	t basis: <u>1 per day</u>
			Cost Data S	Source: CRG Data
Truck Tractor Desc	ription: GENE	ERIC ON-HIGHW	AY TRUCK TRA 400 HP (2ND HA	CTOR, 6X4, DIESEL POWERED LF, 2006)
Truck Trailer Desc	ription:	ENERIC FOLDIN	`	DROP DECK EQUIPMENT
	r		AILER (25T, 50T	-
Cost Breakdown:				
Available Rig Capacities	0-25 Tons	26-50 Tons	51+ Tons	-
Ownership Cost/Hour:	\$20.26	\$36.04	\$47.05	-
Operating Cost/Hour:	\$39.51	\$76.08	\$82.85	_
Operator Cost/Hour:	\$22.52	\$22.52	\$22.52	-
Helper Cost/Hour:	\$0.00	\$23.53	\$23.53	-
Total Unit Cost/Hour:	\$82.29	\$158.17	\$175.95	

NON ROADABLE EQUIPMENT:

Machine Description	Weight/ Unit (TONS)	Owner ship Cost/hr/ unit	Haul Rig Cost/hr/unit	Fleet Size	Haul Trip Cost/hr/ fleet	Return Trip Cost/hr/ fleet	DOT Permit Cost/ fleet
Cat D8T - 8SU	53.08	\$255.49	\$175.95	1	\$431.44	\$175.95	\$250.00
				Subtotals:	\$431.44	\$175.95	\$250.00

ROADABLE EQUIPMENT:

Machine Description	Total Cost/hr/ unit	Fleet Size	Haul Trip Cost/hr/ fleet	Return Trip Cost/hr/ fleet
		Subtotals:	\$0.00	\$0.00

EQUIPMENT HAUL DISTANCE and Time

KREMMLING, CO	
3.00	miles
45.00	mph
\$580.99	
\$0.00	
	3.00 45.00 \$580.99

Transportation Cycle Time:

	Non- Roadable	Roadable	
	Equipment	Equipment	
Haul Time (Hours):	0.07	0.07	
Return Time (Hours):	0.07	0.07	
Loading Time (Hours):	0.00	NA	
Unloading Time (Hours):	0.00	NA	
Subtotals:	0.13	0.13	

JOB TIME AND COST

Total job time: **0.27** Hours

Total job cost: ______\$581_____