

# MINERALS PROGRAM INSPECTION REPORT PHONE: (303) 866-3567

The Division of Reclamation, Mining and Safety has conducted an inspection of the mining operation noted below. This report documents observations concerning compliance with the terms of the permit and applicable rules and regulations of the Mined Land Reclamation Board.

MINE NAME:		MINE/PROSPECTING ID#:	MINERAL:	COUNTY:
Cedar Point		M-1994-108	Sand and gravel	Montezuma
INSPECTION TYPE:		WEATHER: Clear	INSP. DATE:	INSP. TIME:
Monitoring			June 12, 2024	09:00
OPERATOR: OPERATOR REPRESENTATIVE: TYPE OF OPERATOR		TION:		
Noland Inc		Rick Noland	112c - Construction Regular Operation	
REASON FOR INSPECTION:		BOND CALCULATION TYPE:	BOND AMOUNT:	
Normal I&E Program		Complete Bond	\$163,029.00	
DATE OF COMPLAINT:		POST INSP. CONTACTS:	JOINT INSP. AGE	NCY:
NA		None	None	
INSPECTOR(S):	INSPE	CTOR'S SIGNATURE:	SIGNATURE DAT	E:
Todd Jesse			July 11, 2024	
	Tale	Rese		

#### **GENERAL INSPECTION TOPICS**

This list identifies the environmental and permit parameters inspected and gives a categorical evaluation of each. No problems or possible violations were noted during the inspection. The mine operation was found to be in full compliance with Mineral Rules and Regulations of the Colorado Mined Land Reclamation Board for the Extraction of Construction Materials and/or for Hard Rock, Metal and Designated Mining Operations. Any person engaged in any mining operation shall notify the office of any failure or imminent failure, as soon as reasonably practicable after such person has knowledge of such condition or of any impoundment, embankment, or slope that poses a reasonable potential for danger to any persons or property or to the environment; or any environmental protection facility designed to contain or control chemicals or waste which are acid or toxic-forming, as identified in the permit.

(AR) RECORDS <u>N</u>	(FN) FINANCIAL WARRANTY Y	(RD) ROADS <u>N</u>
(HB) HYDROLOGIC BALANCE <u>Y</u>	(BG) BACKFILL & GRADING <u>N</u>	(EX) EXPLOSIVES <u>N</u>
(PW) PROCESSING WASTE/TAILING N	(SF) PROCESSING FACILITIES $\underline{N}$	(TS) TOPSOIL $\underline{Y}$
(MP) GENL MINE PLAN COMPLIANCE- Y	(FW) FISH & WILDLIFE $\underline{N}$	(RV) REVEGETATION <u>Y</u>
(SM) SIGNS AND MARKERS <u>Y</u>	(SP) STORM WATER MGT PLAN N	(RS) RECL PLAN/COMP Y
(ES) OVERBURDEN/DEV. WASTE <u>N</u>	(SC) EROSION/SEDIMENTATION N	(ST) STIPULATIONS <u>N</u>
(AT) ACID OR TOXIC MATERIALS N	(OD) OFF-SITE DAMAGE <u>N</u>	

 $Y = Inspected \ / \ N = Not \ inspected \ / \ NA = Not \ applicable \ to \ this \ operation \ / \ PB = Problem \ cited \ / \ PV = Possible \ violation \ cited$ 

#### **OBSERVATIONS**

This inspection report was conducted as part of the normal monitoring program established by the Colorado Division of Reclamation, Mining, and Safety's Active Mines Program. Cedar Point is a 112c Operation operated by Nolan, Inc. The site is located 3 miles west of Mancos, CO at an elevation of approximately 6,750 feet. Public access is controlled by a gate off the Hwy 160. Rick Nolan of Nolan Inc was present during the inspection.

#### **Financial Warranty:**

The Division currently holds a financial warranty in the amount of \$163,029 The last bond calculation was done in 2014. In an effort to ensure the financial warranty remains adequate to reclaim this site per the requirements of the approved reclamation plan, DRMS has updated the Reclamation Cost Estimate. The updated estimate is attached to this inspection report. Calculations estimate that the financial warranty currently held by the Division is sufficient to cover the cost of reclamation.

### **Hydrologic Balance:**

Tailwaters from irrigation practices on the adjoining property are flowing into the permit area. Water was observed entering the permit area along the eastern boundary (Photo 1). The operator has directed the tailwater into a channel which moved the water into an infiltration pond (Photo 2). The water then flows to a seep on the western side of the permit. No groundwater has been exposed through the mining process.

At the time of inspection, no hydrocarbons were being stored on site and there was no evidence of past hydrocarbon spills. There is an empty fuel tank on site that is within secondary containment (Photo 3). All stormwater is contained within the pit. The operator has berms to control water along the western portions of the site.

#### Gen. Compliance With Mine Plan:

The mine site was not active at the time of the inspection. The operator is currently grazing cattle on reclaimed areas within the permit boundary. The southern area of the permit area has been mined and reclaimed. The central portion of the permit area is where the current mining area is when active. Multiple stockpiles are located in the mining area. The northern portions of the permit area are undisturbed with the exception of a small historic pre-law disturbance.

#### **Reclamation Success:**

The operator has reclaimed roughly 20 acres within the permit boundary. Reclaimed land is located in the southern portion of the permit area near the entrance off Hwy 160. The area has been graded to final grade with topsoil spread. Revegetation efforts appear successful for the post mine land use of pastureland (Photo 4)

### Revegetation:

No state listed invasive species were identified within the permit boundary during the inspection. The revegetated species are principally grass with sparce sage.

#### Support Facilities On-site:

On-site support facilities include an office and scale (Photo 5). Vegetation has begun to grow around the facilities. No signs of displacement or erosion were noted around the base of any of the structures.

#### Signs and Markers:

The mine identification sign and affected area boundary markers are in place and in compliance with Rule

PERMIT #: M-1994-108 INSPECTOR'S INITIALS: TJ1 INSPECTION DATE: June 12, 2024

3.1.12. The permit boundary is marked with posts or fence lines that are easily identifiable. The mine ID sign is posted at the entrance to the site in accordance with the Rules (Photo 6).

### Topsoil:

Topsoil is being stored in multiple stockpiles in the permit boundary. The stockpiles are protected by vegetation. No signs of erosion or slumping were observed on the topsoil piles. There appears to be sufficient topsoil to complete reclamation.

All responses to this report should be directed to Todd Jesse with the Division's Active Mines Program at DRMS, Room 215, 1001 E. 62nd Ave. Denver, CO 80216. Direct contact can be made at the Division's Grand Junction Field Office, by phone at (720) 688-0626 or by email at todd.jesse@state.co.us.

### **PHOTOGRAPHS**



Photo 1: View to the east of tailwater entering the mine site.



Photo 2: View to the north of infiltration pond to manage tailwater.



Photo 3: View to the south of empty fuel storage within secondary containment.



Photo 4: View to the north of revegetated area along haul road.



Photo 5: View to the southwest of scale and office on site.



Photo 6: View to the west of Mine ID sign at the entrance to the site.

PERMIT #: M-1994-108 INSPECTOR'S INITIALS: TJ1 INSPECTION DATE: June 12, 2024

## Inspection Contact Address Rick Noland

Rick Noland Noland Inc P.O. Box 23 Mancos, CO 81328

Enclosure: Reclamation Cost Estimate

CC: Travis Marshall, DRMS

Task description:  te: Cedar Point Permit Action: 2024 Permit/Job#: M1994108						#· M1994108
.c. <sub>-</sub>	Cedar Form					
PF	ROJECT IDENTIFICATIO	<u>N</u>				
	Task #: 000 State: Colorado			,	Abbreviation:	None
	Date: 7/11/2024	County: Monte			Filename:	M108-000
	User: TJ1	•			<del>-</del>	
	Agency or organization n	ame: DRMS				
	Agency of organization in	anic. Dixis				
$\mathbf{T}^{A}$	ASK LIST (DIRECT COST)	S)				
sk	Description		Form Used	Fleet Size	Task Hours	Cost
1	Demolish and remove mine r	elated structures	DEMOLISH	1	0.00	\$2,456
2	Highwall reduction from 0.5H:1V to 3H:1V		DOZER	1	2.94	\$228
3	Highwall reduction from 2H:1V to 3H:1V		DOZER	1	0.90	\$69
4		Rip and grade 53 acres pit floor area			59.77	\$10,383
5	Topsoil replacement for 3H:1		DOZER	$\frac{2}{1}$	3.84	\$297
	Topsoil replacement for 50 ac		SCRAPER1	1	38.33	\$53,966
כ	Revegetate 50 acres pit floor	area	REVEGE	1	40.00	\$39,032
			REVEGE	1	8.00	\$11,921
7	Revegetate 5 acres of 3H:1V	Haul reclamation equipment to and from job site			3.60	\$10,051
7 8		to and from job site	MOBILIZE			\$1,669
6 7 8 9 0		to and from job site	MOBILIZE	1	3.60	Ψ1,002
7 3 9	Haul reclamation equipment	to and from job site		1		
7 8 9	Haul reclamation equipment	to and from job site	MOBILIZE	1 DTALS:	3.60 <b>160.98</b>	\$130,072

### **OVERHEAD AND PROFIT:**

Liability insurance: 2.02 Total = \$2,627 Performance bond: 1.05 Total = \$1,366 Job superintendent: 0.00 Total = \$0 Profit: 10.00 Total = \$13,007

> TOTAL O & P = \$17,000

CONTRACT AMOUNT (direct + O & P) =  $\overline{}$ \$147,072

#### LEGAL - ENGINEERING - PROJECT MANAGEMENT:

Financial warranty processing (legal/related costs): \$500 Total = \$500 Engineering work and/or contract/bid preparation: 0.00 Total = \$0 Reclamation management and/or administration: 5.00 \$7,354

> CONTINGENCY: 3.00 Total = \$3,902

> > TOTAL INDIRECT COST = \$28,756

TOTAL BOND AMOUNT (direct + indirect) = \$158,828

### **DEMOLITION WORK**

Task description	on: <b>Demol</b>	lish and remove mine relate	ed structures			
Site: Cedar Point		Permit Action: 2024			ermit/Job#:	M1994108
PROJECT IDENTI	FICATION					
Date: 7/11/2024 County: Montezuma User: TJ1  Agency or organization name: DRMS					tion: None mme: M108  adjustment:	3-001
Structure or Item Description	Dimensions	Demolition Menu Selection	Quantity	Unit	Unit Cost	<b>Total Cost</b>
Truck scales	2 x (12'L x 2'W x 2'H)	Demo. and on-site disposal in existing pit, 2.0 ft. x 3 ft Max. 10,000 ft. haul	24.00	LF	\$13.88	\$333.08
Scale house	10'L x 8'W x 8'H	Push demolished materials/rubble/debris	640.00	CY	\$1.92	\$1,226.88

Total Cost
Subtotal (adjusted for

Job Hours: 0.00 (unadjusted): \$2,759.39 location): \$2,455.86

MI

CY

20.00

300.00

\$10.14

\$3.32

\$202.83

\$996.60

into pit - Max. 100 ft.

Hauling only, per mile,

materials/rubble/debris into pit - Max. 200 ft.

average speed
Push demolished

12-18 CY truck - 30 mph

push

push

1 fuel tank

10' x 10' x 3'

Fuel tanks

scrap & misc. debris

### **BULLDOZER WORK**

Task description:	Highwall	reduction fron	a 0.5H:1V to	3H:1V		
Cedar Point		Permit Acti	on: 2024		Permit/Job#:	M1994108
PROJECT IDEN	TIFICATION					
Task #: 002		State: Colora	ado		Abbreviation:	None
Date: $\frac{-002}{7/11/2}$	2024 C		ezuma		Filename:	M108-002
User: TJ1						
Agency or	organization nam	e: DRMS				
HOURLY EQUI	PMENT COST					
Basic Machine:	OBSOLETE- C	-				
Horsepower:	405					
Blade Type:	Universal					
Attachment:	3-shank ripper					
Shift Basis:	1 per day					
Data Source:	(CRG)					
Cost Breakdown:						
				Utilization %		
Ownership Cost/H	our:	\$10.		NA		
Operating Cost/H	our:	\$10.	.00	100		
Ripper own. Cost/H		\$18.		NA		
Ripper op. Cost/H		\$0.	.00	0		
Operator Cost/H	our:	\$38.	.59	NA		
The state of the s	Φ77.20					
Total unit Cost/Hou Total Fleet Cost/Hou						
MATERIAL QU	<u>ANTITIES</u>					
Initial Volume:	2,533					
Swell factor:	1.124					
Loose volume:	<b>2,846</b> LCY					
Source of estimated	volume: S	see attached "Dra	awing 1"			
Source of estimated		Cat Handbook	uwing i			
HOURLY PROD		c .				
Average push distant Unadjusted hourly p		feet 22.9 LCY/hr				
Materials consistence	ey description:	Compacted fill	or embankm	nent 0.9		
Average push gradie Average site altitude						
Material weight:	2,900 lbs/l	LCY			_	
Weight description:	Sand and	gravel - Dry				
Job Condition Corre	ection Factor			Source		
	rator Skill:	0.750		(AVG.)		
Material co		0.900		(CAT HB))		
	g method:	1.000		(GEN.)		
	Visibility:	1.000		(AVG.)		

Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.800	(FND-RF)
Push gradient:	1.225	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.793	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.4354

Adjusted unit production: 967.85 LCY/hr
Adjusted fleet production: 967.85 LCY/hr

### **JOB TIME AND COST**

Fleet size: 1 Dozer(s)
Unit cost: \$0.080/LCY

Total job time: 2.94 Hours
Total job cost: \$228

### **BULLDOZER WORK**

Cedar Point	P	ermit Action: 20	)24	Permit/Job#:	M1994108
PROJECT IDENTI	<u>IFICATION</u>				
Task #: 003	State	: Colorado		Abbreviation:	None
Date: $\frac{-360}{7/11/202}$				Filename:	M108-003
User: TJ1				-	
Agency or or	ganization name:	DRMS			
HOURLY EQUIPN	MENT COST				
	DBSOLETE- Cat D9	Γ - 9U			
Horsepower: 4	105				
Blade Type: U	Universal				
Attachment: 3	3-shank ripper				
	per day				
Data Source:(	CRG)				
Cost Breakdown:		I	There is no		
O		\$10.00	<u>Utilization %</u>		
Ownership Cost/Hour		\$10.00 \$10.00	NA 100		
Operating Cost/Hour Ripper own. Cost/Hour		\$10.00	NA	<del></del>	
Ripper own. Cost/Hou		\$0.00	0		
Operator Cost/Hou		\$38.59			
Operator Cost/fiou	·	φ30.37	NA		
Total unit Cost/Hour:	\$77.38				
Total Fleet Cost/Hour:	\$77.38				
MATERIAL QUAN	NTITIES				
Initial Volume: 77					
	124 66 L CV				
Loose volume: 86	66 LCY				
Source of estimated vo		ached "Drawing 2	,,		
Source of estimated sw	vell factor: Cat Ha	ndbook		_	
	CITY O. Y.				
HOURLY PRODU	<u>CTION</u>				
Average push distance					
Unadjusted hourly pro-	duction: 2,222.9 I	.CY/hr	<u> </u>		
Materials consistency	description: Com	pacted fill or emb	ankment 0.9		
Average push gradient	: -10 %				
Average site altitude:	6,770 feet				
Material weight:	2,900 lbs/LCY			<u></u>	
Weight description:	Sand and grave	- Dry			
Job Condition Correcti	on Factor		Source		
	or Skill:	0.750	(AVG.)		
Material cons		0.900	(CAT HB))		
Dozing 1		1.000	(GEN.)		
	eibility:	1.000	(AVG)		

Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.800	(FND-RF)
Push gradient:	1.225	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.793	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.4354

Adjusted unit production: 967.85 LCY/hr
Adjusted fleet production: 967.85 LCY/hr

### **JOB TIME AND COST**

Fleet size: 1 Dozer(s)
Unit cost: \$0.080/LCY

Total job time: 0.90 Hours
Total job cost: \$69

### **BULLDOZER WORK**

Cedar Point         Permit Action: 2024           PROJECT IDENTIFICATION           Task #: 004	Abbreviation: Filename:	None M108-004
Task #: 004	-	
Date:   7/11/2024   County:   Montezuma	-	
Date:   7/11/2024   County:   Montezuma	-	
Material Quantities   Section		
Basic Machine:		
Basic Machine:		
Basic Machine: OBSOLETE- Cat D9T - 9U     Horsepower: 405     Blade Type: Universal     Attachment: 3-shank ripper     Shift Basis: 1 per day     Data Source: (CRG)		
Horsepower:   405   Universal   Attachment:   3-shank ripper   Shift Basis:   1 per day   Data Source:   (CRG)      Cost Breakdown:   Utilization %   NA   Operating Cost/Hour:   \$10.00   NA   NA   Operating Cost/Hour:   \$110.00   100   NA   NA   NA   NA   NA   NA   NA		
Blade Type:		
Attachment: 3-shank ripper Shift Basis: 1 per day Data Source: (CRG)   Cost Breakdown:  Ownership Cost/Hour: \$10.00 NA Operating Cost/Hour: \$10.00 100 Ripper own. Cost/Hour: \$18.79 NA Ripper op. Cost/Hour: \$9.48 100 Operator Cost/Hour: \$38.59 NA  Total unit Cost/Hour: \$86.86 Total Fleet Cost/Hour: \$173.71   MATERIAL QUANTITIES  Initial Volume: 64,130 Swell factor: 1.060 Loose volume: 67,978 LCY  Source of estimated volume: (53ac)(43560sf/ac)(0.75'D) / 27 = 85,506.67		
Shift Basis:   1 per day   (CRG)		
Data Source: (CRG)           Cost Breakdown:           Utilization %           Ownership Cost/Hour:         \$10.00         NA           Operating Cost/Hour:         \$10.00         100           Ripper own. Cost/Hour:         \$18.79         NA           Ripper op. Cost/Hour:         \$9.48         100           Operator Cost/Hour:         \$38.59         NA           Total unit Cost/Hour:           \$86.86         \$173.71           MATERIAL QUANTITIES           Initial Volume:         64,130           Swell factor:         1.060           Loose volume:         67,978 LCY           Source of estimated volume:         (53ac)(43560sf/ac)(0.75'D) / 27 = 85,506.67		
Cost Breakdown:           Ownership Cost/Hour:         \$10.00         NA           Operating Cost/Hour:         \$10.00         100           Ripper own. Cost/Hour:         \$18.79         NA           Ripper op. Cost/Hour:         \$9.48         100           Operator Cost/Hour:         \$38.59         NA           Total unit Cost/Hour:         \$86.86           Total Fleet Cost/Hour:         \$173.71           MATERIAL QUANTITIES           Initial Volume:         64,130           Swell factor:         1.060           Loose volume:         67,978 LCY           Source of estimated volume:         (53ac)(43560sf/ac)(0.75'D) / 27 = 85,506.67		
Ownership Cost/Hour:         \$10.00         NA           Operating Cost/Hour:         \$10.00         100           Ripper own. Cost/Hour:         \$18.79         NA           Ripper op. Cost/Hour:         \$9.48         100           Operator Cost/Hour:         \$38.59         NA           Total unit Cost/Hour:         \$86.86           Total Fleet Cost/Hour:         \$173.71           MATERIAL QUANTITIES           Initial Volume:         64,130           Swell factor:         1.060           Loose volume:         67,978 LCY           Source of estimated volume:         (53ac)(43560sf/ac)(0.75°D) / 27 = 85,506.67		
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Ripper own. Cost/Hour:       \$18.79       NA         Ripper op. Cost/Hour:       \$9.48       100         Operator Cost/Hour:       \$38.59       NA         Total unit Cost/Hour:       \$86.86         Total Fleet Cost/Hour:         \$173.71         MATERIAL QUANTITIES         Initial Volume:       64,130         Swell factor:       1.060         Loose volume:       67,978 LCY         Source of estimated volume:       (53ac)(43560sf/ac)(0.75'D) / 27 = 85,506.67		
Ripper op. Cost/Hour:       \$9.48       100         Operator Cost/Hour:       \$38.59       NA         Total unit Cost/Hour:       \$86.86         Total Fleet Cost/Hour:       \$173.71         MATERIAL QUANTITIES         Initial Volume:       64,130         Swell factor:       1.060         Loose volume:       67,978 LCY         Source of estimated volume:       (53ac)(43560sf/ac)(0.75'D) / 27 = 85,506.67		
Operator Cost/Hour:         \$38.59         NA           Total unit Cost/Hour:         \$86.86		
Total unit Cost/Hour: \$86.86  Total Fleet Cost/Hour: \$173.71   MATERIAL QUANTITIES  Initial Volume: 64,130 Swell factor: 1.060 Loose volume: 67,978 LCY  Source of estimated volume: (53ac)(43560sf/ac)(0.75'D) / 27 = 85,506.67		
Total Fleet Cost/Hour:         \$173.71           MATERIAL QUANTITIES           Initial Volume:         64,130           Swell factor:         1.060           Loose volume:         67,978 LCY           Source of estimated volume:         (53ac)(43560sf/ac)(0.75°D) / 27 = 85,506.67		
Source of estimated volume: $(53ac)(43560sf/ac)(0.75^{\circ}D) / 27 = 85,506.67$		
Source of estimated swell factor: Cat Handbook	cy	
HOURLY PRODUCTION		
Average push distance: 75 feet		
Unadjusted hourly production: 1,600.0 LCY/hr		
Materials consistency description: Compacted fill or embankment 0.9		
Average push gradient: 0 % Average site altitude: 6,770 feet		
Material weight: 2,900 lbs/LCY		
Weight description: Sand and gravel - Dry		
Job Condition Correction Factor  Source  O 750		
Operator Skill: 0.750 (AVG.)		
Material consistency: 0.900 (CAT HB))		
Dozing method: 1.000 (GEN.) Visibility: 1.000 (AVG.)		

Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.800	(FND-RF)
Push gradient:	1.000	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.793	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.3554

Adjusted unit production: 568.64 LCY/hr
Adjusted fleet production: 1137.28 LCY/hr

### **JOB TIME AND COST**

Fleet size: 2 Dozer(s)
Unit cost: \$0.153/LCY

Total job time: 59.77 Hours
Total job cost: \$10,383

### **BULLDOZER WORK**

Task description:	Topsoi	l replacement for 3H:1	V slopes		
: Cedar Point		Permit Action:	2024	Permit/Job#:	M1994108
PROJECT IDE	NTIFICATIO	<u>N</u>			
Task #: 005		State: Colorado		Abbreviation:	None
Date: 7/11	/2024	County: Montezuma		Filename:	M108-005
User: TJ1				_	
Agency	or organization na	me: DRMS			
HOURLY EQU	JIPMENT COS	<u>T</u>			
Basic Machine		Cat D9T - 9U	_		
Horsepower			=		
Blade Type			-		
Attachment Shift Basis		r	-		
Data Source			_		
	· (CRO)		-		
Cost Breakdown:			Utilization %		
Ownership Cost/	Hour.	\$10.00	NA		
Operating Cost		\$10.00	100	<del></del>	
Ripper own. Cost		\$18.79	NA		
Ripper op. Cost/	Hour:	\$0.00	0		
Operator Cost/	Hour:	\$38.59	NA		
Initial Volume: Swell factor:	4,033 1.000				
Loose volume:	4,033 LCY				
Source of estimate Source of estimate	—	(5ac)(43560sf/ac)(0.50° Cat Handbook	D) / 27 = 6050 cy		
HOURLY PRO	DUCTION				
Average push dist Unadjusted hourly		5 feet ,600.0 LCY/hr			
Materials consiste			ooknila 1 1		
		Partly consolidated st	оскрие 1.1		
Average push grad Average site altitu		et			
Material weight:		s/LCY			
Weight description	n: Earth - l	Ory packed			
Job Condition Con	rrection Factor perator Skill:	0.750	Source (AVG.)		
	consistency:	1.100	(CAT HB)		
Doz	zing method:	1.000	(GEN.)		
	Visibility:	1.000	(AVG.)	-	

Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.800	(FND-RF)
Push gradient:	1.329	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.902	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.6567

Adjusted unit production: 1,050.72 LCY/hr
Adjusted fleet production: 1050.72 LCY/hr

### **JOB TIME AND COST**

Fleet size: 1 Dozer(s)
Unit cost: \$0.074/LCY

Total job time: 3.84 Hours \$297

## **SCRAPER TEAM WORK**

Task # 006

Task description:	Topsoil rep	olacemen	t for 50 a	acres of pit floor			
Site: Cedar Point		Permit	Action:	2024	Perr	mit/Job#: <u>M199</u> 4	4108
PROJECT IDEN	<b>TIFICATION</b>						
Task #: 006			Colorado			viation: None	
Date: 7/11/20 User: TJ1	024 Co	unty: <u>N</u>	Montezun	na	Fil	ename: <u>M108-0</u>	)06
Agency or	organization name:	DRM	S				
<b>HOURLY EQUIP</b>	PMENT			COSTSI	nift basis: 1 per d	<u>ay</u>	
		scraper:		ent Description G w/push-pull			
		-Dozer:	NA				
Suppo	ort Equipment -Loa Dum-	d Area: p Area:		LETE- Cat D9T - LETE- Cat D9T -			
Road Ma	Grader:	NA				<del></del>	
	-Water	Truck:	NA				
Cost Breakdown:	Scraper Wo	rk Team		Support Equip	oment	Maintenance	
	Scraper	Doz	er	Load Area	Dump Area	Motor Grader	Water Truck
%Utilization-machine:	100		NA	50	50	NA	NA
Ownership cost/hour:	\$281.32		NA	\$10.00	\$10.00	NA	NA
Operating cost/hour:	\$319.35		NA	\$5.00	\$5.00	NA	NA
%Utilization-ripper:	NA		NA	0	0	NA	NA
Ripper own. cost/hour:	NA		NA	\$18.79	\$18.79	NA	NA
Ripper op. cost/hour:	NA		NA	\$0.00	\$0.00	NA	NA
Operator cost/hour:	\$30.90		NA	\$38.59	\$38.59	NA	NA
Unit Subtotals:	\$631.57		NA	\$72.38	\$72.38	NA	NA
Number of Units:	2		0	1	1	0	C
Group Subtotals:	Work:	\$1,26	3.14	Support:	\$144.76	Maint:	\$0.00
Total work team cost	t/hour: <b>\$1,407.90</b>						
MATERIAL QUA	<u>ANTITIES</u>						
Initial volume: Loose volume:	40,333 <b>45,375</b>		CCY LCY	Swell fact	or: 1.125		
Sou	rce of estimated vo			3560sf/ac)(0.50°E	0) / 27 – 60 500 cs	J	
	of estimated swell t		Cat Hand		7)	,	
HOURLY PROD	<u>UCTION</u>						
				Scraper Bo	owl (volume) Basi	is:	
Material weight:	2,550 lbs/LCY			Struck '	Volume: 24.00	Lo	CY
Material description:	Earth - Dry pack	ed		Heaped '			CY
Rated Payload:	81,600 pounds			Average			CY
Payload Capacity:	32.00 LCY			Adjusted C	Capacity: <b>29.00</b>	Lo	CY

Site Altitude: 6770 feet

$\sim$	1	<b>TD</b> :	
( '7	ICLE	Time	٠.
$\mathbf{C}$	y CIC	1 1111	٠.

Scraper Loading Time: 1.00 Minutes
Maneuver and Spread Time: 0.60 Minutes

Job Condition Correction:

	Scraper	Push Dozer	Source
Altitude Adj:	1.000	NA	(CAT HB)
Job Efficiency:	0.830	NA	(CAT HB)
Net Correction:	0.830	NΔ	

#### **Travel Time:**

Road Condition: Rutted dirt, little maintenance, no water, 2" tire penetration 5.0

#### Haul Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res	Total Res	Velocity (fpm)	Travel Time (min)
1	600.00	0.00	5.00	5.00	1867	0.45

Haul Time: \_\_\_\_\_\_ 0.45 \_\_\_ minutes

#### Return Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	600.00	0.00	5.00	5.00	2795	0.39

**0.39** minutes Return Time: Total Scraper team cycle time: 2.44 minutes Adjusted for job conditions: 1,183.77 LCY/Hour Selected Number of Scrapers: 2 Scraper(s) Adjusted single scraper team (unit) hourly production: 1,183.77 LCY/Hour Adjusted multiple scraper team (fleet) hourly production: 1,183.77 LCY/Hour Unadjusted unit production/hour: 1,426.23 LCY/Hour

Unadjusted unit production/hour: 1,426.23 LCY/Hou
Optimal Number of Scrapers per push dozer:

#### **JOB TIME AND COST**

Fleet size:	1	Team(s)	Total job time:	38.33	Hours
Unit cost:	\$1.189	/LCY	Total job cost:	\$53,966	

### **REVEGETATION WORK**

Cedar Point         Permit Action: 2024           ROJECT IDENTIFICATION           Task #: 007	Unit pound		breviation:	None M108-007
Task #: 007 State: Colorado Date: 7/11/2024 County: Montezuma User: TJ1  Agency or organization name: DRMS  ERTILIZING aterials  Units / Acre		Cos	Filename:	
Task #: 007 State: Colorado Date: 7/11/2024 County: Montezuma User: TJ1  Agency or organization name: DRMS  ERTILIZING aterials  Units / Acre		Cos	Filename:	
Date: 7/11/2024 County: Montezuma User: TJ1  Agency or organization name: DRMS  ERTILIZING  aterials  Units / Acre		Cos	Filename:	
User: TJ1  Agency or organization name: DRMS  ERTILIZING  aterials  Units / Acre				
ERTILIZING aterials  Description  Units / Acre			st / Unit	
Description Units / Acre			st / Unit	
Description Units / Acre			st / Unit	
<b>Description</b> Acre			st / Unit	
-			ot / Omt	Cost /Acre
10-34-0, 16-40-0, 3-10-3	pound			
		Ψ0	01	\$102.32
		To	tal Fertilizer Materials Cost/Acre	\$102.32
Total	Fertilizer A	pplicatio	on Cost/Acre	\$17.86
<u>LLING</u>				, .
Description				Cost /Acre
Disc harrowing, 6" deep (MEANS 32 91 13.23 6100)				\$117.61
	То	tal Tillir	ng Cost/Acre	\$117.61
CEDING .				
		Rate –		
	l l	PLS	Seeds per SO	Cost /Acre
Seed Mix	]	LBS / Acre	per SQ. FT	
Seed Mix Orchardgrass - Paiute	]			\$4.59
	1 A	Acre	FT	\$4.59 \$7.95
Orchardgrass - Paiute	1 1 2	<b>Acre</b> 1.00	FT 12.40	

**Totals Seed Mix** 8.25

Application

Description

Drill Seeding (DRMS Survey Cost)

\$236.64

\$34.18

Cost /Acre

Total Seed Application Cost/Acre	\$236.64

### **MULCHING and MISCELLANEOUS**

#### Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
Herbicide - Curtail @ 4.0 pt/ac	1.00	ACRE	\$36.14	\$36.14
Total Mulch Materials Cost/Acre				\$36.14

**Application** 

Description		Cost /Acre
Weed spray, truck, aquatic area, nox. [DMG]		\$79.77
	<b>Total Mulch Application Cost/Acre</b>	\$79.77

### **NURSERY STOCK PLANTING**

Common Name	No / Acre	Type and Size	Planting Cost	Fertilizer Pellet Cost	Cost /Acre
					\$
		Totals 1	Nursery Stoc	k Cost / Acre	\$0.00

### **JOB TIME AND COST**

 No. of Acres:
 50
 Cost /Acre:
 \$624.52

 Estimated Failure Rate:
 25%
 Cost /Acre\*:
 \$624.52

\*Selected Replanting Work Items: FERTILIZING,TILLING,SEEDING,MU

LCHING

Initial Job Cost: \$31,226.00

Reseeding Job Cost: \$7,806.50

Total Job Cost: Job Hours: 40.00

### **REVEGETATION WORK**

ask description:	Revegetate 5 acres of 3	H:1V slope	areas			
Cedar Point	Permit Action: 2024 Permit/Job#				: <u>M1994108</u>	
ROJECT IDENTIF	ICATION					
	<u></u>	1		A 1	1	N
Task #: 008 Date: 7/11/2024	State: Colo			At		None M108-008
Date: 7/11/2024 User: TJ1	County: Mon	tezuma			Filename: _	M108-008
USE1. 111						
Agency or orga	nization name: DRMS					
ERTILIZING						
aterials						
<b>5</b>		Units /	<b>T</b> T 1.	<b>C</b> -	-4 / TT24	C 4 / 4
Description		Acre	Unit		st / Unit	Cost /Acre
10-34-0, 18-46-0, 5-1	0-5	200.00	pound	\$0.	51	\$102.32
				To	tal Fertilizer	
					Materials	
					Cost/Acre	\$102.32
		Total	Fertilizer	Application	on Cost/Acre	\$43.12
LLING						T
Description						Cost /Acre
	ep (MEANS 32 91 13.23 61	00)				\$117.61
		,				,
			r	Fotal Tilli	ng Cost/Acre	\$117.61
					0	Ψ117.01
<u>CEDING</u>						
				Rate –		
Seed Mix				PLS	Seeds	Cost /Acre
				LBS /	per SQ.	
				Acre	FT	
Crested Wheatgrass -	Hy-Crest			2.50	11.48	\$12.62
Alfalfa - Ladak (inocu				2.00	9.64	\$7.95
Russian Wildrye - Vii				2.00	8.03	\$14.46
Pubescent Wheatgrass				5.70	11.78	\$28.53

Cost /Acre Description Drill Seeding (DRMS Survey Cost) \$236.64

Application

**Totals Seed Mix** 

12.20

\$63.55

Total Seed Application Cost/Acre	\$236.64

### **MULCHING and MISCELLANEOUS**

#### Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
Herbicide - Curtail @ 4.0 pt/ac	1.00	ACRE	\$36.14	\$36.14
Straw, delivered {MEANS 31 25 14.16 1200}	2.00	TON	\$492.78	\$985.56
Total Mulch Materials Cost/Acre				\$1,021.70

Application

Description		Cost /Acre
Crimping, with tractor {DMG survey data}		\$85.37
Power mulcher (MEANS 32 91 13.16 0350)		\$157.25
Weed spray, truck, aquatic area, nox. [DMG]		\$79.77
	<b>Total Mulch Application Cost/Acre</b>	\$322.39

### **NURSERY STOCK PLANTING**

Common Name	No / Acre	Type and Size	Planting Cost	Fertilizer Pellet Cost	Cost /Acre
					\$
	\$0.00				

#### **JOB TIME AND COST**

No. of Acres: 5 Cost /Acre: \$1,907.33

Estimated Failure Rate: 25% Cost /Acre\*: \$1,907.33

\*Selected Replanting Work Items: FERTILIZING,TILLING,SEEDING,MU

LCHING

Initial Job Cost: \$9,536.65

Reseeding Job Cost: \$2,384.16

Total Job Cost: \$11,921 8.00

### EQUIPMENT MOBILIZATION/DEMOBILIZATION

rask descrip	puon: <b>na</b>	ui reciamation (	equipment to and n	rom job site			
ite: Cedar Po	oint	Perm	it Action: 2024	Permit/Jo	Permit/Job#: <u>M1994108</u>		
PROJECT	IDENTIFICATI	<u>ION</u>					
Task #:	009	State:	Colorado	Abbreviation:	None		
Date:	7/11/2024	County:	Montezuma	Filename:	M108-009		
User:	TJ1						
Age	ency or organization	n name: DRM	IS				
<b>EQUIPME</b>	NT TRANSPOR	T RIG COST					
				Shift basis:	1 man days		
				Cost Data Source:	1 per day CRG Data		
				Cost Data Source.	CRO Data		
	Truck Tractor Desc	cription: GEN		AY TRUCK TRACTOR, 6X4	, DIESEL POWERED,		
				400 HP (2ND HALF, 2006)			
	Truck Trailer Desc	cription:		G GOOSENECK, DROP DE	-		
			TR	AILER (25T, 50T, AND 100T			
Cost Breakdo	own:						
Available l	Rig Capacities	0-25 Tons	26-50 Tons	51+ Tons			
	ership Cost/Hour:	\$10.44	\$22.18	\$23.94			
Ope	rating Cost/Hour:	\$26.48	\$54.55	\$55.65			
Op	erator Cost/Hour:	\$22.52	\$22.52	\$22.52			
I	Helper Cost/Hour:	\$0.00	\$23.53	\$23.53			
Tota	1 Unit Cost/Hour:	\$59.44	\$122.78	\$125.64			

#### **NON ROADABLE EQUIPMENT:**

Machine	Weight/	Owner ship	Haul Rig	Fleet	Haul Trip	Return Trip	DOT Permit
Description	Unit	Cost/hr/ unit	Cost/hr/uni	Size	Cost/hr/	Cost/hr/ fleet	Cost/ fleet
	(TONS)		t		fleet		
Cat D9T - 9SU	60.01	\$253.16	\$125.64	2	\$757.60	\$251.28	\$500.00
Cat 637G w/push-	59.59	\$281.32	\$125.64	2	\$813.92	\$251.28	\$500.00
pull							
Drill/Broadcast	25.00	\$41.02	\$59.44	2	\$200.92	\$118.88	\$500.00
Seeder with							
Tractor							
Power Mulcher	6.00	\$27.21	\$59.44	2	\$173.30	\$118.88	\$500.00
(Bowie LD-90)							

Subtotals: **\$1,945.74** \$740.32 \$2,000.00

#### **ROADABLE EQUIPMENT:**

Machine Description	hine Description Total Cost/hr/unit		et Size Haul Trip Cost/hr/ fleet	
Light Duty Pickup, 4x4, 3/4 T.	\$13.77	1	\$13.77	\$13.77

Subtotals:	\$13.77	\$13.77	

### **EQUIPMENT HAUL DISTANCE and Time**

Nearest Major City or Town within project area region:

Total one-way travel distance:

Average Travel Speed:

CORTEZ

miles

### Major City or Town within project area region:

18.00

mph

#### **Transportation Cycle Time:**

	Non-	
	Roadable	Roadable
	Equipment	Equipment
Haul Time (Hours):	0.40	0.40
Return Time (Hours):	0.40	0.40
Loading Time (Hours):	0.50	NA
Unloading Time (Hours):	0.50	NA
Subtotals:	1.80	0.80

#### **JOB TIME AND COST**

Total job time:	3.60	Hours
Total job cost:	\$10,051	

### EQUIPMENT MOBILIZATION/DEMOBILIZATION

Task description: Se	econdary mobiliza	ntion		
ite: Cedar Point	Permi	t Action:2024	Permit/Jo	b#: M1994108
PROJECT IDENTIFICAT	<u>rion</u>			
Task #: 010 Date: 7/11/2024 User: TJ1		Colorado Montezuma	Abbreviation: Filename:	None M108-010
Agency or organizati	on name: DRMS	S		
EQUIPMENT TRANSPO	RT RIG COST			
				1 per day CRG Data
Truck Tractor De	scription: GENI		AY TRUCK TRACTOR, 6X4, 400 HP (2ND HALF, 2006)	DIESEL POWERED,
Truck Trailer De	scription:	GENERIC FOLDIN	G GOOSENECK, DROP DEC AILER (25T, 50T, AND 100T)	_
Cost Breakdown:				
Available Rig Capacities	0-25 Tons	26-50 Tons	51+ Tons	
Ownership Cost/Hour:	\$10.44	\$22.18	\$23.94	
Operating Cost/Hour:	\$26.48	\$54.55	\$55.65	
Operator Cost/Hour:	\$22.52	\$22.52	\$22.52	
Helper Cost/Hour	\$0.00	\$23.53	\$23.53	

### **NON ROADABLE EQUIPMENT:**

Total Unit Cost/Hour:

\$59.44

Machine Description	Weight/ Unit (TONS)	Owner ship Cost/hr/ unit	Haul Rig Cost/hr/uni t	Fleet Size	Haul Trip Cost/hr/ fleet	Return Trip Cost/hr/ fleet	DOT Permit Cost/ fleet
Drill/Broadcast Seeder with Tractor	25.00	\$41.02	\$59.44	2	\$200.92	\$118.88	\$500.00

\$122.78

\$125.64

Subtotals: \$200.92 \$118.88 \$500.00

### **ROADABLE EQUIPMENT:**

Machine Description	Total Cost/hr/ unit	Fleet Size	Haul Trip Cost/hr/ fleet	Return Trip Cost/hr/ fleet
Light Duty Pickup, 4x4, 3/4 T.	\$13.77	1	\$13.77	\$13.77

Subtotals: \$13.77 \$13.77

### **EQUIPMENT HAUL DISTANCE and Time**

Nearest Major City or Town within project area region: CORTEZ

Total one-way travel distance: 18.00 miles

Average Travel Speed: 45.00 mph

#### **Transportation Cycle Time:**

	Non-	
	Roadable	Roadable
	Equipment	Equipment
Haul Time (Hours):	0.40	0.40
Return Time (Hours):	0.40	0.40
Loading Time (Hours):	0.50	NA
Unloading Time (Hours):	0.50	NA
Subtotals:	1.80	0.80

### **JOB TIME AND COST**

Total job cost: 3.60 Hours

Total job cost: \$1,669