COLORADO DIVISION OF RECLAMATION, MINING AND SAFETY
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: Cucharas Pit	**MINE/PROSPECTING ID#:** M-2002-109	**MINERAL:** Borrow material	**COUNTY:** Huerfano
INSPECTION TYPE: Surety-Related Inspection	**INSPECTOR(S):** Amy Eschberger	**INSP. DATE:** May 21, 2015	**INSP. TIME:** 11:30
OPERATOR: A. Blasi & Son Trucking & Earthmoving, LLC	**OPERATOR REPRESENTATIVE:** Anthony Blasi	**TYPE OF OPERATION:** 110c - Construction Limited Impact	

REASON FOR INSPECTION: Surety Related	**BOND CALCULATION TYPE:** Complete Bond	**BOND AMOUNT:** $28,731.00
DATE OF COMPLAINT: NA	**POST INSP. CONTACTS:** None	**JOINT INSP. AGENCY:** None
WEATHER: Clear	**INSPECTOR'S SIGNATURE:** Amy Eschberger	**SIGNATURE DATE:** June 11, 2015

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

Y = Inspected and found in compliance / N = Not inspected / NA = Not applicable to this operation / PB = Problem cited / PV = Possible violation cited

OBSERVATIONS

This was a surety-related inspection of the Cucharas Pit (Permit No. M-2002-109) conducted by Amy Eschberger of the Division of Reclamation, Mining and Safety (Division) in response to a Surety Reduction request (SR-01) and an Acreage Reduction request (AR-01) that were received by the Division on 05/15/2015. Both of the requests submitted will be discussed in this report. Mr. Anthony Blasi of A. Blasi & Son Trucking & Earthmoving, LLC was present for the inspection. The site is located approximately 14 miles northeast of Walsenburg, Colorado in Huerfano County, on land owned by Mr. Jim Pace. Access to the site is off of Co Rd 121. The original access road was not used for this inspection, as it is being reclaimed per the landowner's request (Photo 1). The access road to the adjacent permitted site (Permit No. M-2011-003) operated by Huerfano County was used to access the Cucharas Pit (with their permission). In doing this, one must park on the county side and cross the barbed wire fence that runs north-south separating the two sites.

This is a 110c operation permitted for 9.97 acres to mine sand and gravel for use in road construction and maintenance. Mining consists of extracting approximately 8 feet of material from the top of a small plateau, leaving a relatively flat surface. Mined material is processed on site with mobile equipment. The approved reclamation plan calls for grading all mined slopes to 3H:1V or flatter, replacing topsoil at an average depth of 6 inches, and revegetating disturbed land to a post-mining land use of rangeland.

At the time of the inspection, the weather was partly cloudy and cool, and pools of standing water were present on the ground due to recent storm events. A permit sign was posted at the main entrance to the site off of Co Rd 121. The approved permit boundary was properly delineated by metal posts (Photo 2). The site was not active during the inspection, and no equipment was present on site. According to the annual report received by the Division on 01/21/2015, the site has been inactive since 2007. If mining activities (e.g., material extraction, processing, stockpile removal) do not occur at the site every year, the operator will need to either file for Temporary Cessation (if mining activities are expected to continue in the future; see enclosed form) or begin final reclamation of the entire affected area. Pursuant to C.R.S. 34-32.5-116(4)(q)(I), upon completion of mining, final reclamation shall be completed prior to the expiration of five (5) years after the date the operator reports that mining has been completed.

The Division estimates that the operation disturbed a total of approximately 5.5 acres, of which approximately 3.25 acres in the central and southern portions of the site have been reclaimed. The reclaimed areas were graded to nearly flat, retopsoiled, and seeded several years ago. Although the topsoil is fairly rocky in these areas, its vegetation is fairly well-established and diverse, comprised of native grasses, some forbs, fringed sagebrush, and yucca (Photos 3-7). The Division believes that these 3.25 acres have been reclaimed in accordance with the approved reclamation plan.

Disturbed (unreclaimed) areas include a small circular pit approximately 1.25 acres in size encircled by overburden berms approximately 3 feet in height (Photos 8 and 9), a small product stockpile located just southwest of the pit (Photo 10), a small topsoil stockpile located just southeast of the pit (Photo 11), and a larger topsoil stockpile located farther southeast of the pit (Photo 12). Mr. Blasi indicated the landowner may wish to have the small product stockpile remain for his personal use. As stated during the inspection, the stockpile can remain after reclamation if the operator submits a signed and dated letter from the landowner stating his desire to leave the stockpile.

During the inspection, the Division measured current disturbance with a handheld Trimble GPS unit and compared this data with a recent Google Earth image of the site. Based on this information, the Division estimates current (unreclaimed) disturbance to consist of approximately 2.25 acres, which includes the pit, the berms, and the topsoil stockpiles (see enclosed Google Earth image). To complete reclamation of the site, the

berms would need to be pushed into the pit and/or graded out to 3H:1V slopes or flatter, topsoil would need to be replaced at an average depth of 6 inches, and the disturbed land would need to be revegetated using the approved seed mixture. Based on existing liability at this site, the Division estimates the required financial warranty to be in the amount of $7,756.00 (see enclosed bond calculation). This is a reduction of $20,975.00 from the currently held bond of $28,731.00. No written comments or objections regarding SR-01 or AR-01 were received by the Division within the public comment period that ended on 06/11/2015. Therefore, the Division will approve SR-01 for a reduction in the amount listed above.

The Division will also approve AR-01 for a reduction of 3.57 acres, giving a new total permit area of 6.4 acres (see enclosed Google Earth image). The new permit boundary will utilize existing corner markers in the northern half of the site, with only one new marker required near the tree located just south of the topsoil stockpile. Although this new permit boundary is different than what was proposed in AR-01, it should allow the operator ample space to complete final reclamation of the site.

The approval letters for SR-01 and AR-01 are enclosed with this report.

PHOTOGRAPHS

Photo 1. View looking south from Co Rd 121, showing main access road in reclamation.

Photo 2. View of marker at southwest permit boundary corner (indicated).

Photo 3. View looking northeast from western edge of permit area, showing reclaimed portion with fairly well-established vegetation.

Photo 4. View looking east from western edge of permit area, showing reclaimed portion with fairly well-established vegetation. Note topsoil stockpile located on eastern edge of reclaimed area.

Photo 5. View looking north from southeastern edge of permit area, showing reclaimed portion with fairly well-established vegetation.

Photo 6. View looking northeast from southeastern edge of permit area, showing reclaimed portion with fairly well-established vegetation.

Photo 7. View looking west from southeastern edge of permit area, showing reclaimed portion with fairly well-established vegetation.

Photo 8. View looking east across southeastern portion of pit.

Photo 9. View looking northwest across western portion of pit.

Photo 10. View of small product stockpile located southwest of pit.

Photo 11. View of topsoil stockpile located just southeast of pit.

Photo 12. View of topsoil stockpile located farther southeast of pit.

Inspection Contact Address

Anthony Blasi
A. Blasi & Son Trucking & Earthmoving, LLC
38043 CR 32.4
Trinidad, CO 81082

Enclosure(s): Temporary Cessation form
Google Earth image of permit area with Division markings
Bond Calculation
Approval Letter for SR-01
Approval Letter for AR-01

CC: Wally Erickson, DRMS

COLORADO DIVISION OF RECLAMATION, MINING AND SAFETY
1313 Sherman Street, Room 215, Denver, Colorado 80203 Phone (303) 866-3567

TEMPORARY CESSATION NOTICE

(mining activities temporarily cease for more than a one-year period)

Today's date:_____

Permit number: M- _____ Site name:_____

County:_____ TC number: *(DRMS use only)*

Permittee making request:_____

Operator (if other than permittee):_____

Date the initial five-year period of Temporary Cessation begins: _____

Reason mining activities (materials extraction, processing, hauling) have ceased:

_____

_____

Description of plan to resume operations:

_____

_____

Description of plan to meet performance standards of Rule 3.1 during temporary cessation (reclamation, weed control, monitoring, signs, markers, etc.):

_____

_____

Number of affected acres:_____

Amount of financial warranty (bond) on deposit with the state: $_____

Required fees for Temporary Cessation by permit type (please mark the correct fee and submit it with this request for Temporary Cessation):

Permit type	**Required TR fee**	**Submitted (mark only one)**
Construction Materials	$144	☑
Hard Rock/ Metal Mining	$115	☐

The above-referenced permit has entered Temporary Cessation. This site has reserves remaining to be mined.

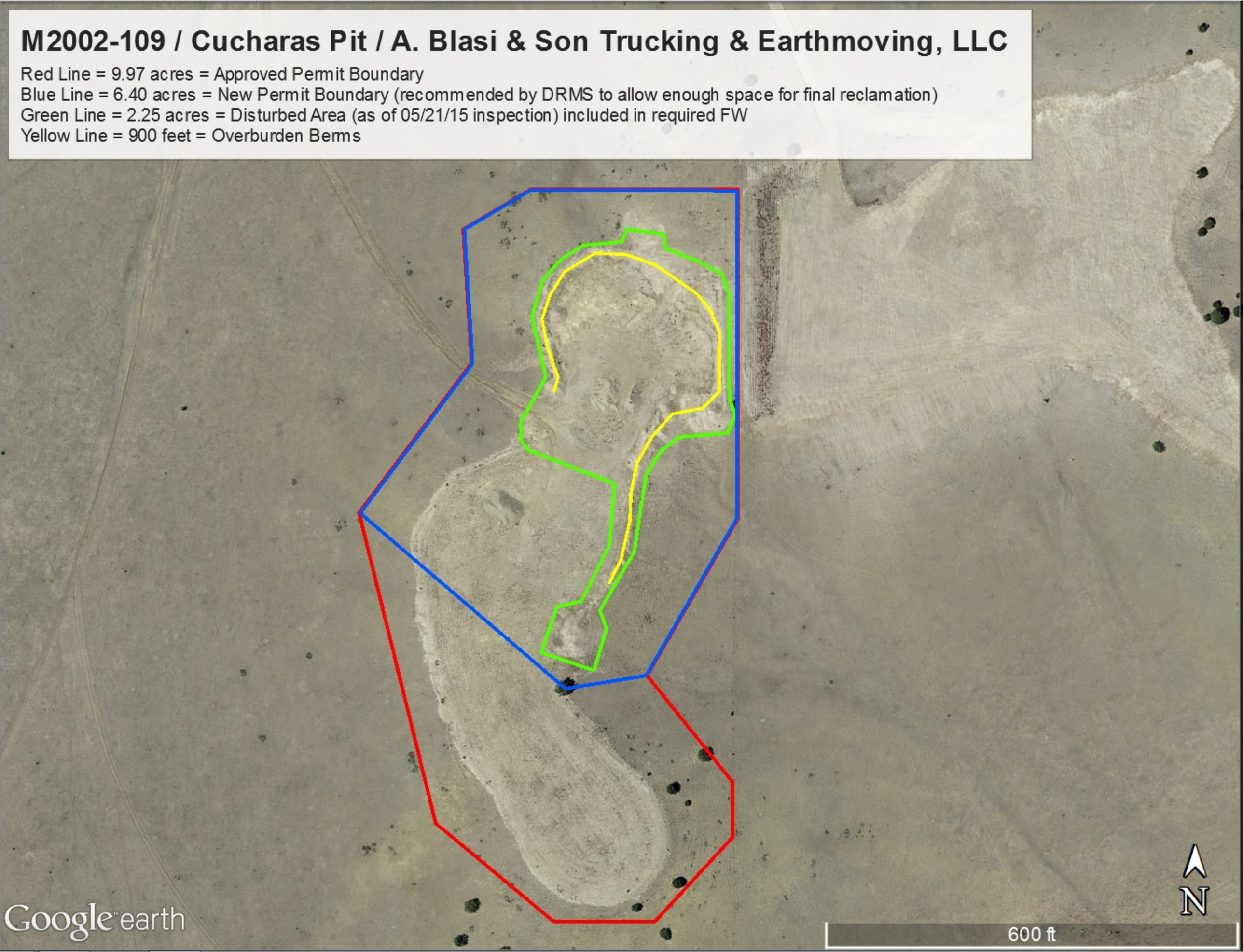
Operator's signature:_____

Please note:

1. *While in Temporary Cessation, the operator must continue to comply with the Rules and Act, including maintaining the site, and must continue to file an annual report and annual fee.*

M2002-109 / Cucharas Pit / A. Blasi & Son Trucking & Earthmoving, LLC

Red Line = 9.97 acres = Approved Permit Boundary
Blue Line = 6.40 acres = New Permit Boundary (recommended by DRMS to allow enough space for final reclamation)
Green Line = 2.25 acres = Disturbed Area (as of 05/21/15 inspection) included in required FW
Yellow Line = 900 feet = Overburden Berms



COST SUMMARY WORK

Task description: **Cost Summary**

Site: **Cucharas Pit** Permit Action: SR-01 2015 Permit/Job#: M2002109

PROJECT IDENTIFICATION

Task #: 000 State: Colorado Abbreviation: None
Date: 6/10/2015 County: Huerfano Filename: M109-000
User: AME

Agency or organization name: DRMS

TASK LIST (DIRECT COSTS)

Task	Description	Form Used	Fleet Size	Task Hours	Cost
001	Push overburden berms into pit	DOZER	1	0.76	$130.00
002	Spread topsoil across 2.25 acres, 6 inches deep	DOZER	1	15.56	$2,670.00
003	Revegetate 2.25 acres to rangeland	REVEGE	1	9.00	$2,891.00
004	Mobilization/Demobilization	MOBILIZE	1	2.62	$842.00
	SUBTOTALS:			**27.94**	**$6,533**

INDIRECT COSTS

OVERHEAD AND PROFIT:

Liability insurance:	2.02%	Total =	$131.97
Performance bond:	1.05%	Total =	$68.60
Job superintendent:	0.00 hrs	Total =	$0.00
Profit:	10.00%	Total =	$653.30
		TOTAL O & P =	$853.87
		CONTRACT AMOUNT (direct + O & P) =	$7,386.87

LEGAL - ENGINEERING - PROJECT MANAGEMENT:

Financial warranty processing (legal/related costs):	0.00	Total =	0.00
Engineering work and/or contract/bid preparation:	0.00%	Total =	$0.00
Reclamation management and/or administration:	5.00%		$369.34
CONTINGENCY:	0.00	Total =	$0.00
		TOTAL INDIRECT COST =	$1,223.21
		TOTAL BOND AMOUNT (direct + indirect) =	**$7,756.21**

BULLDOZER WORK

Task description: **Push overburden berms into pit**

Site: **Cucharas Pit** Permit Action: SR-01 2015 Permit/Job#: M2002109

PROJECT IDENTIFICATION

Task #: 001 State: Colorado Abbreviation: None
Date: 6/10/2015 County: Huerfano Filename: M109-001
User: AME

Agency or organization name: DRMS

HOURLY EQUIPMENT COST

Basic Machine: Cat D7R DS Series II LGP
Horsepower: 238
Blade Type: Straight
Attachment: 3-shank ripper
Shift Basis: 1 per day
Data Source: (CRG)

Cost Breakdown:

		Utilization %
Ownership Cost/Hour:	$49.84	NA
Operating Cost/Hour:	$83.73	100
Ripper op. Cost/Hour:	$0.00	100
Operator Cost/Hour:	$38.01	NA

Total unit Cost/Hour: 0
Total Fleet Cost/Hour: **$171.57**

MATERIAL QUANTITIES

Initial Volume: 150
Swell factor: 1.165
Loose volume: **175** LCY

Source of estimated volume: DRMS; berm= 900'L x 3'H x 3'D
Source of estimated swell factor: Cat Handbook

HOURLY PRODUCTION

Average push distance: 100 feet
Unadjusted hourly production: 496.4 LCY/hr

Materials consistency description: Partly consolidated stockpile 1.1

Average push gradient: -5 %
Average site altitude: 5,800 feet

Material weight: 2,900 lbs/LCY

Weight description: Decomposed rock - 50% Rock, 50% Earth

Job Condition Correction Factor		Source
Operator Skill:	0.750	(AVG.)
Material consistency:	1.100	(CAT HB)
Dozing method:	1.100	(50% SL)
Visibility:	1.000	(AVG.)
Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.700	(FND-MF)

Push gradient:	1.115	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.793	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.4662

Adjusted unit production: 231.42 LCY/hr

Adjusted fleet production: **231.42** LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s)

Unit cost: $0.741/LCY

Total job time: **0.76** Hours

Total job cost: **$130**

BULLDOZER WORK

Task description: **Spread topsoil across 2.25 acres, 6 inches deep**

Site: **Cucharas Pit** Permit Action: SR-01 2015 Permit/Job#: M2002109

PROJECT IDENTIFICATION

Task #:	002	State:	Colorado	Abbreviation:	None
Date:	6/10/2015	County:	Huerfano	Filename:	M109-002
User:	AME				

Agency or organization name: DRMS

HOURLY EQUIPMENT COST

Basic Machine:	Cat D7R DS Series II LGP
Horsepower:	238
Blade Type:	Straight
Attachment:	3-shank ripper
Shift Basis:	1 per day
Data Source:	(CRG)

Cost Breakdown:

		Utilization %
Ownership Cost/Hour:	$49.84	NA
Operating Cost/Hour:	$83.73	100
Ripper op. Cost/Hour:	$0.00	100
Operator Cost/Hour:	$38.01	NA

Total unit Cost/Hour: 0
Total Fleet Cost/Hour: **$171.57**

MATERIAL QUANTITIES

Initial Volume:	1,494
Swell factor:	1.215
Loose volume:	**1,815** LCY

Source of estimated volume: Division of Reclamation, Mining & Safety
Source of estimated swell factor: Cat Handbook

HOURLY PRODUCTION

Average push distance: 400 feet
Unadjusted hourly production: 180.4 LCY/hr

Materials consistency description: Consolidated stockpile 1.0

Average push gradient: 5 %
Average site altitude: 5,800 feet

Material weight: 1,600 lbs/LCY

Weight description: Top Soil

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:	0.800	(FND-RF)

Push gradient:	0.903	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	1.438	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.6467

Adjusted unit production: 116.66 LCY/hr

Adjusted fleet production: **116.66** LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s)

Unit cost: $1.471/LCY

Total job time: **15.56** Hours

Total job cost: **$2,670**

REVEGETATION WORK

Task description: **Revegetate 2.25 acres to rangeland**

Site: **Cucharas Pit** Permit Action: SR-01 2015 Permit/Job#: M2002109

PROJECT IDENTIFICATION

Task #: 003 State: Colorado Abbreviation: None
Date: 6/10/2015 County: Huerfano Filename: M109-003
User: AME

Agency or organization name: DRMS

FERTILIZING

Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
0-10-20, 3-9-18	40.00	pound	$0.19	$7.60
			Total Fertilizer Materials Cost/Acre	**$7.60**

Application

Description	Cost /Acre
Push rotary spreader (MEANS 32 01 90.13 0110)	$87.56
Tractor towed spreader (MEANS 32 01 90.13 0120)	$52.71
Total Fertilizer Application Cost/Acre	**$140.27**

TILLING

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

SEEDING

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Indian Ricegrass - Nespar	12.00	38.84	$84.96
Blue Grama - Lovington	3.00	48.97	$32.58
Sideoats Grama - Vaughn	9.00	29.55	$101.16
Western Wheatgrass - Arriba	16.00	40.40	$58.88
Totals Seed Mix	40.00	157.76	**$277.58**

Application

Description	Cost /Acre
Broadcast seeding [DMG]	$261.28

Total Seed Application Cost/Acre	**$261.28**

MULCHING and MISCELLANEOUS

Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
Straw, delivered {MEANS 31 25 14.16 1200}	1.50	TON	$265.00	$397.50
Total Mulch Materials Cost/Acre				**$397.50**

Application

Description	Cost /Acre
Crimping, with tractor {DMG survey data}	$65.89
Total Mulch Application Cost/Acre	**$65.89**

NURSERY STOCK PLANTING

Common Name	No / Acre	Type and Size	Planting Cost	Fertilizer Pellet Cost	Cost /Acre
					$
				Totals Nursery Stock Cost / Acre	**$0.00**

JOB TIME AND COST

No. of Acres: 2.25
Estimated Failure Rate: 25%
*Selected Replanting Work Items: SEEDING

Cost /Acre: $1,150.12
Cost /Acre*: $538.86

Initial Job Cost: **$2,587.77**
Reseeding Job Cost: **$303.11**
Total Job Cost: **$2,891**
Job Hours: **9.00**

EQUIPMENT MOBILIZATION/DEMOBILIZATION

Task description: **Mobilization/Demobilization**

Site: **Cucharas Pit** Permit Action: SR-01 2015 Permit/Job#: M2002109

PROJECT IDENTIFICATION

Task #: 004 State: Colorado Abbreviation: None
Date: 6/10/2015 County: Huerfano Filename: M109-004
User: AME

Agency or organization name: DRMS

EQUIPMENT TRANSPORT RIG COST

Shift basis: 1 per day
Cost Data Source: CRG Data

Truck Tractor Description: GENERIC ON-HIGHWAY TRUCK TRACTOR, 6X4, DIESEL POWERED, 400 HP (2ND HALF, 2006)

Truck Trailer Description: GENERIC FOLDING GOOSENECK, DROP DECK EQUIPMENT TRAILER (25T, 50T, AND 100T)

Cost Breakdown:

Available Rig Capacities	**0-25 Tons**	**26-50 Tons**	**51+ Tons**
Ownership Cost/Hour:	$16.63	$18.37	$22.33
Operating Cost/Hour:	$44.38	$46.13	$50.07
Operator Cost/Hour:	$27.66	$27.66	$27.66
Helper Cost/Hour:	$0.00	$25.39	$25.39
Total Unit Cost/Hour:	$88.67	$117.55	$125.45

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 D7R DS Series II LGP	38.49	$0.00	$117.55	1	$117.55	$117.55	$250.00
Subtotals:					**$117.55**	**$117.55**	**$250.00**

ROADABLE EQUIPMENT:

Machine Description	Total Cost/hr/ unit	Fleet Size	Haul Trip Cost/hr/ fleet	Return Trip Cost/hr/ fleet
Truck Tractor, 6x4, 50K GVW	$59.88	1	$59.88	$59.88
Subtotals:			**$59.88**	**$59.88**

EQUIPMENT HAUL DISTANCE and Time

Nearest Major City or Town within project area region:	WALSENBURG	
Total one-way travel distance:	14.00	miles
Average Travel Speed:	50.00	mph

Total Non-Roadable Mob/Demob Cost *	$807.98
'* two round trips with haul rig:	
Total Roadable Mob/Demob Cost **	$33.53
** one round trip, no haul rig:	

Transportation Cycle Time:

	Non-Roadable Equipment	Roadable Equipment
Haul Time (Hours):	0.28	0.28
Return Time (Hours):	0.28	0.28
Loading Time (Hours):	0.25	NA
Unloading Time (Hours):	0.50	NA
Subtotals:	1.31	0.56

JOB TIME AND COST

Total job time:	**2.62**	Hours
Total job cost:	**$842**	