

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:
Valco T Pit	M-2004-043	Sand and gravel	Las Animas
INSPECTION TYPE:	INSPECTOR(S):	INSP. DATE:	INSP. TIME:
Surety-Related Inspection	Amy Eschberger	September 9, 2015	13:00
OPERATOR:	<b>OPERATOR REPRESENTATIVE:</b>	TYPE OF OPERAT	TION:
Universal Landscape & Aggregate Supply, Inc.	Brad Blasi	112c - Construction	Regular Operation

BOND CALCULATION TYPE:	BOND AMOUNT:
Complete Bond	\$48,000.00
POST INSP. CONTACTS:	JOINT INSP. AGENCY:
None	None
INSPECTOR'S SIGNATURE:	SIGNATURE DATE:
Aman Sucherger	September 15, 2015
-	Complete Bond POST INSP. CONTACTS: None INSPECTOR'S SIGNATURE:

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

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 Valco T Pit (Permit No. M-2004-043) conducted by Amy Eschberger of the Division of Reclamation, Mining and Safety (Division) in response to a Succession of Operators application (Revision No. SO-03) that was received by the Division on 07/23/2015. With approval of SO-03, the permit would be transferred to Larry and Christine Tortorice, the surface and subsurface owners of the affected land. Brad Blasi represented the current operator, Universal Landscape & Aggregate Supply, Inc. during the inspection. Larry and Christine Tortorice were also present for the inspection. The site is located approximately 6 miles northeast of Trinidad, Colorado in Las Animas County. The site can be accessed from the north via a dirt private road that runs south off of Hwy 160. There are several active and reclaimed gravel mines in the region due to the local geology consisting of ridge top alluvial gravel deposits. The portion of the ridge located north of the permit area (passed through to reach the Valco T Pit) was mined previously under Permit No. M-1986-097, which was released by the Division in 2009.

This is a 112c operation permitted for 32.62 acres to mine sand and gravel for use in ready mix concrete, asphalt, and road base. The site is situated on top of a north-south trending ridge with a larger valley on the west and a smaller valley on the east (**Photo 1**). The creek beds in these valleys are typically dry throughout most of the year, only carrying water during big storm events. When carrying water, these tributaries flow north into the Purgatoire River. Mining at the site consists of removing the ridge top down to an elevation of approximately 6,020 feet. The maximum mining depth is approximately 30-40 feet. Mining began in the northern portion of the permitted area and will follow the ridge southward. Mined material is processed on site with mobile equipment. In the approved permit application, the operator committed to leaving an earthen berm along the western edge of the pit to act as a visual barrier for a residence located in the western valley. The maximum allowed disturbed area at any time is 10 acres.

At the time of the inspection, the weather was partly cloudy and warm, and the ground was dry. The creek bed in the eastern valley (partially included in the permit area) was dry. A permit identification sign was posted at the main site entrance off of Hwy 160 (**Photo 2**). However, with approval of the permit transfer, the new operator will need to replace the operator name on the permit sign. The corners of the permit boundary were marked with metal posts (**Photo 3**). The mine was not active during the inspection, and no mining-related equipment was present on site. According to Google Earth images of the site, it appears that the pit was last expanded in 2012. However, Mr. Blasi indicated that material has been processed and/or hauled off site every year since that time. Currently, only a few small material stockpiles remain (**Photo 4**). As discussed with the Tortorices (the successor operator) during the inspection, if material extracting, processing, and/or hauling off does not occur every year, then the operator is required to either file for Temporary Cessation (see enclosed form) or begin final reclamation. By filing for Temporary Cessation, the operator would be allowed a 5 year period of inactivity. If mining activities were to resume at any time within this 5 year period, the operator would need only to notify the Division so that the permit status could be changed back to active.

A mainly east-facing highwall (approximately 10-12 feet in height and 670 feet in length) is present along the western and southern edges of the disturbed area (**Photos 5-7**). The slope gradients of the highwall are near vertical (**Photo 8**). Salvaged topsoil is stockpiled at the northeastern edge of the pit (**Photo 9**). Additionally, a low-lying berm of topsoil was constructed around the outer edges of the pit (**Photo 10**). This berm appears to help divert stormwater runoff around the pit, and reduce pit stormwater from draining into the adjacent valley. The topsoil stockpiles appeared to be stable with vegetative cover. Native grasses, forbs, shrubs, and annual weeds were volunteering into the pit. The operator should continue to monitor weed growth in disturbed areas, and implement the approved weed control and management plan as necessary. The Division estimates that approximately 6.7 acres have been disturbed by the operation (see enclosed Google Earth image), which is in compliance with the approved maximum. However, it should be noted here for the successor operator, that

before disturbing more than 10 acres, either a Technical Revision will need to be submitted to increase the maximum allowed disturbed acreage (see enclosed form), or disturbed land will need to be reclaimed.

The approved reclamation plan for this site includes grading all mined slopes to 3H:1V or flatter, replacing any salvaged overburden, replacing approximately 6 inches of topsoil on disturbed land, and revegetating the site to rangeland (by planting a cover crop of oats by May 1st, then drill-seeding the rangeland seed mixture into the cover crop during November). The existing ranch road used to access the site will not be reclaimed. After conducting this inspection, the Division has determined that the currently held bond in the amount of \$48,000.00 is adequate for reclaiming current disturbance. Therefore, the Division can approve the SO-03 application once the successor operator submits a properly executed financial warranty for this amount.

As discussed with the Tortorices during the inspection, a Surety Reduction request (see enclosed form) may be submitted once the permit transfer has been finalized. <u>The Division's recent bond estimate indicates that the required financial warranty for the site at this time is \$27,565.00 (see enclosed bond estimate). The successor operator may refer to this amount in the Surety Reduction request, as long as the request is submitted within 60 days of the SO-03 approval.</u>

No problems were observed during the inspection.

#### PERMIT #: M-2004-043 INSPECTOR'S INITIALS: AME INSPECTION DATE: September 9, 2015

## **PHOTOGRAPHS**



**Photo 1.** View looking east from northern permit boundary, showing portion of adjacent valley included in permit area. Northeastern boundary marker located on hill across valley (not visible here).



**Photo 2.** View of permit identification sign posted at main site entrance off of Hwy 160. The successor operator will need to replace the operator name. A permit sign is required to have the permit number, a statement that the permit was issued by the CO MLRB, and the operator name.



**Photo 3.** View looking west from site entrance at northwestern corner of permit boundary, marked by metal post near property fence (indicated).



Photo 4. View of few small material stockpiles remaining (indicated) near eastern edge of pit.



**Photo 5.** View looking northwest across pit from southeastern corner of disturbance. Note highwall along western edge, approximately 10-12 feet in height.



**Photo 6.** View looking south from pit floor, showing southern portion of highwall (most recently mined).



**Photo 7.** View looking southwest from near site entrance, showing northern portion of highwall (earlier mined), stable with vegetative cover (mainly annual weeds).



Photo 8. Closer view of southern highwall, showing slope gradients of near vertical.



Photo 9. View of topsoil stockpile stable with vegetative cover, stored at northeastern edge of pit.



Photo 10. View of topsoil berm stored along southern edge of pit.

#### PERMIT #: M-2004-043 INSPECTOR'S INITIALS: AME INSPECTION DATE: September 9, 2015

## **Inspection Contact Address**

Brad Blasi Universal Landscape & Aggregate Supply, Inc. 36862 Commerce Circle Trinidad, CO 81082

- Enclosure(s): Temporary Cessation form Google Earth image of site with Division markings Technical Revision form Surety Reduction form Division's recent bond estimate
- CC: Larry and Christine Tortorice 17512 County Road 83 Trinidad, CO 81082

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 o	f Temporary Cessation begins	S:	
Reason mining activities (materia	ls extraction, processing, hau	ling) have ceased:	
Description of plan to resume ope	erations:		
Description of plan to meet perfo monitoring, signs, markers, etc.):	rmance standards of Rule 3.1	during temporary cessation	n (reclamation, weed control
Number of affected acres:			
Amount of financial warranty (bo	ond) on deposit with the state:	\$	
Required fees for Temporary Ces for Temporary Cessation):	sation by permit type (please	mark the correct fee and su	bmit it with this request
Permit type Construction Materials	<b><u>Required 7</u></b> \$144	<u>FR fee</u> <u>Submit</u>	<u>ted</u> (mark only one)
Hard Rock/ Metal Mining	\$115		
The above-referenced permit h	as entered Temporary Cessa	ation. This site has reserv	ves 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.

# M2004-043 / Valco T Pit / Universal Landscape & Aggregate Supply, Inc.

Red Outline = 32.62 acres = Approved Permit Area Blue Outline = 6.7 acres = Disturbed Area (as of 9/9/2015 inspection) Yellow Line = 670 feet = Approximate Length of Highwall

Google earth

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COLORADO DIVISION OF RECLAMATION, MINING AND SAFETY

1313 Sherman Street, Room 215, Denver, Colorado 80203 ph(303) 866-3567

## **REQUEST FOR TECHNICAL REVISION (TR) COVER SHEET**

File No.: M	Site Name:	
County	TR#	(DRMS Use only)
Permittee:		
Operator (If Other than Permit	ee):	
Permittee Representative:		
Please provide a brief descripti	on of the proposed revision:	

As defined by the Minerals Rules, a Technical Revision (TR) is: "a change in the permit or application which does not have more than a minor effect upon the approved or proposed Reclamation or Environmental Protection Plan." The Division is charged with determining if the revision as submitted meets this definition. If the Division determines that the proposed revision is beyond the scope of a TR, the Division may require the submittal of a permit amendment to make the required or desired changes to the permit.

The request for a TR is not considered "filed for review" until the appropriate fee is received by the Division (as listed below by permit type). Please submit the appropriate fee with your request to expedite the review process. After the TR is submitted with the appropriate fee, the Division will determine if it is approvable within 30 days. If the Division requires additional information to approve a TR, you will be notified of specific deficiencies that will need to be addressed. If at the end of the 30 day review period there are still outstanding deficiencies, the Division must deny the TR unless the permittee requests additional time, in writing, to provide the required information.

There is no pre-defined format for the submittal of a TR; however, it is up to the permittee to provide sufficient information to the Division to approve the TR request, including updated mining and reclamation plan maps that accurately depict the changes proposed in the requested TR.

Required Fees for Technical Revision by Permit Type - Please mark the correct fee and submit it with your request for a Technical Revision.

<u>Permit Type</u>	<b>Required TR Fee</b>	Submitted (mark only one)
110c, 111, 112 construction materials, and 112 quarries	\$216	
112 hard rock (not DMO)	\$175	
110d, 112d(1, 2 or 3)	\$1006	



## **REQUEST FOR FULL OR PARTIAL RELEASE OF PERMIT AREA/SURETY REDUCTION**

Please indicate if you are requesting: FULL/FINAL RELEASE OF ENTIRE PERMITTED AREA (per Rule 4.17)

ACREAGE REDUCTION (PARTIAL RELEASE per Rule 4.17)

I wish to release \_\_\_\_\_\_ acres at this time.

You will need to submit with this request: a map showing the acreage to be released from the current permit <u>and</u> updated mining and reclamation plan maps that will accurately depict the new permit boundary if the release is approved.

SURETY (Bond) REDUCTION (per Rule 4.14)

If you are requesting a surety (bond) reduction you will need to include with this request a new estimate of the actual cost to reclaim the site based on what it would cost an independent contractor to complete reclamation, including unit costs for reclamation activities as appropriate to the operation to comply with the provisions of Rule 3.1 and the Permit's approved Reclamation Plan.

File No.: M	Site Name:
County:	
Permittee:	
Operator (If Other than Peri	mittee):
Permittee Representative:	
Certified Mail#	
	7.1(2) the Operator shall include the names, addresses and phone numbers are affected land. Please attach additional sheets for this information if

In accordance with Rule 4.17.1(4), if requesting a full or partial acreage release the Operator or their agent MUST sign that they have complied with the following statement: "All applicable portions of the Reclamation Plan requirements have been satisfied in accordance with these Rules and all applicable requirements under the Act."

Signature of Permittee, Operator or their authorized agent Date

Important: In accordance with Rules 4.14.2(a) and 4.17.1(3)This release request must be submitted to the Division via certified mail and separate from any other correspondence to the Division.

# COST SUMMARY WORK

State:	Colorado	Abbreviation:	None
015 County:	Las Animas	Filename:	M043-000
	015 County:	015 County: Las Animas	D15 County: Las Animas Filename:

	Form	Fleet	Task	
Description	Used	Size	Hours	Cost
Grade highwall from 0H:1V to 3H:1V	DOZER	2	0.61	\$321.00
Spread 6" topsoil across 7 acres	DOZER	2	14.58	\$7,688.00
Revegetate 7 acres to rangeland	REVEGE	1	28.00	\$8,113.00
Cover crop of oats on 7 acres	REVEGE	1	14.00	\$3,572.00
Mobilization/Demobilization	MOBILIZE	1	4.43	\$3,103.00
	<u>SUBTO</u>	TALS:	61.62	\$ \$22,797
	Grade highwall from 0H:1V to 3H:1V Spread 6" topsoil across 7 acres Revegetate 7 acres to rangeland Cover crop of oats on 7 acres	Grade highwall from 0H:1V to 3H:1VDOZERSpread 6" topsoil across 7 acresDOZERRevegetate 7 acres to rangelandREVEGECover crop of oats on 7 acresREVEGEMobilization/DemobilizationMOBILIZE	DescriptionUsedSizeGrade highwall from 0H:1V to 3H:1VDOZER2Spread 6" topsoil across 7 acresDOZER2Revegetate 7 acres to rangelandREVEGE1Cover crop of oats on 7 acresREVEGE1	DescriptionUsedSizeHoursGrade highwall from 0H:1V to 3H:1VDOZER20.61Spread 6" topsoil across 7 acresDOZER214.58Revegetate 7 acres to rangelandREVEGE128.00Cover crop of oats on 7 acresREVEGE114.00Mobilization/DemobilizationMOBILIZE14.43

# **INDIRECT COSTS**

#### **OVERHEAD AND PROFIT:**

Liability insurance:	2.02	Total =	\$460.50
Performance bond:	1.05	Total =	\$239.37
Job superintendent:	0.00	Total =	\$0.00
Profit:	10.00	Total =	\$2,279.70
		TOTAL O & P =	\$2,979.57
		CONTRACT AMOUNT (direct + $O \& P$ ) =	\$25,776.57

#### LEGAL - ENGINEERING - PROJECT MANAGEMENT:

Financial warranty processing (legal/related costs):	500.00	Total =	500.00
Engineering work and/or contract/bid preparation:	0.00	Total =	\$0.00
Reclamation management and/or administration:	5.00		\$1,288.83
CONTINGENCY:	0.00	Total =	\$0.00
	TOTAL	L INDIRECT COST =	\$4,768.40
			¢ 1,700.10

TOTAL BOND AMOUNT (direct + indirect) = \_\_\_\_\$27,565.40

# BULLDOZER WORK

Task description:	Grade	e highwall from 0H:1V	to 3H:1V		
: Valco T Pit		Permit Action:	SO-03 2015	Permit/Job#:	M2004043
PROJECT IDEN	<u>TIFICATIO</u>	<u>N</u>			
Task #: 001		State: Colorado		Abbreviation:	None
Date: $9/11/2$	015	County: Las Anima	as	Filename:	M2004043-001
User: AME	010				112001010 001
Agency or	organization n	ame: DRMS			
HOURLY EQUI	PMENT CO	<u>ST</u>			
Basic Machine:		XR Series II			
Horsepower:	238	1			
Blade Type:	Semi-Univer				
Attachment:	3-shank ripp	er			
Shift Basis:	1 per day				
Data Source:	(CRG)				
Cost Breakdown:					
Ownership Cost/II	~	\$46.88	<u>Utilization %</u> NA		
Ownership Cost/He					
Operating Cost/He		\$79.23	100 15		
Ripper op. Cost/He		\$0.00			
Operator Cost/He	our:	\$38.01	NA		
Total unit Cost/Hour Total Fleet Cost/Hou MATERIAL QUA	ur: \$328.2	3			
Total Fleet Cost/Hou MATERIAL QUA Initial Volume: Swell factor:	ur: <b>\$328.2</b> <b>ANTITIES</b> 931 1.250	3			
Total Fleet Cost/Hou MATERIAL QUA Initial Volume: Swell factor: Loose volume:	\$328.2         ANTITIES         931         1.250         1,164 LCY				
Total Fleet Cost/Hou MATERIAL QUA Initial Volume: Swell factor: Loose volume: Source of estimated	ur: \$328.2. ANTITIES 931 1.250 1,164 LCY volume:	 DRMS Inspection 9/9	//15: 670'L x 10'H		
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Total Fleet Cost/Hou MATERIAL QUA Initial Volume: Swell factor: Loose volume: Source of estimated Source of estimated HOURLY PROD Average push distan Unadjusted hourly p Materials consistence Average push gradie Average site altitude Material weight: Weight description: Job Condition Corre	Ir:       \$328.2.         ANTITIES       931         1.250       1,164 LCY         volume:       swell factor:         wolume:	DRMS Inspection 9/9 Cat Handbook 50 feet 1,022.9 LCY/hr Compacted fill or e Feet bs/LCY posed rock - 25% Rock			
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Task # 001

Push gradient:	1.601	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.868	(CAT HB)
Blade type:	1.000	(PAT)

Net correction	on: 0.9343
Adjusted unit production:	955.70 LCY/hr
Adjusted fleet production:	<b>1911.4</b> LCY/hr

## JOB TIME AND COST

Fleet size:	2 Dozer(s)
Unit cost:	\$0.172/LCY

Total job time:	<b>0.61</b> Hours
Total job cost:	\$200

Page 1 of 2

# BULLDOZER WORK

Task description:	Spre	ead 6" topsoil across 7 ac	res		
: Valco T Pit		Permit Action:	SO-03 2015	Permit/Job#:	M2004043
PROJECT IDEN	TIFICATI	<u>ON</u>			
Task #: 002		State: Colorado		Abbreviation:	None
Date: 9/11/2	2015	County: Las Anima	S	Filename:	M043-002
User: AME		-			
Agency or	organization	name: DRMS			
HOURLY EQUI	PMENT CO	OST			
Basic Machine:		S XR Series II			
Horsepower:	238				
Blade Type:	Semi-Univ	ersal			
Attachment:	3-shank rip	oper	_		
Shift Basis:	1 per day	•			
Data Source:	(CRG)				
Cost Breakdown:					
			Utilization %		
Ownership Cost/H	our:	\$46.88	NA		
Operating Cost/H	our:	\$79.23	100		
Ripper op. Cost/H	our:	\$0.00	15		
Operator Cost/H	our:	\$38.01	NA		
Total unit Cost/Hou					
Total unit Cost/Hou	r: 0				
Total Fleet Cost/Ho MATERIAL QU	ANTITIES				
MATERIAL QU Initial Volume: Swell factor:	ANTITIES 4,648 1.215				
MATERIAL QU Initial Volume: _	<b>ANTITIES</b> 4,648				
MATERIAL QU Initial Volume: Swell factor: Loose volume: Source of estimated	ANTITIES 4,648 1.215 5,647 LCY volume:	 DRMS inspection 9/9/	(15: 7ac x 6" deep		
MATERIAL QU Initial Volume: Swell factor: Loose volume: Source of estimated Source of estimated	ANTITIES 4,648 1.215 5,647 LCY volume: swell factor:	 DRMS inspection 9/9/	(15: 7ac x 6" deep		
MATERIAL QU Initial Volume: Swell factor: Loose volume: Source of estimated Source of estimated HOURLY PROE	ANTITIES 4,648 1.215 5,647 LCY volume: swell factor: DUCTION	DRMS inspection 9/9/ Cat Handbook	/15: 7ac x 6" deep		
MATERIAL QU Initial Volume: Swell factor: Loose volume: Source of estimated Source of estimated	ANTITIES 4,648 1.215 5,647 LCY volume: swell factor: DUCTION ace:	 DRMS inspection 9/9/	 '15: 7ac x 6" deep		
MATERIAL QU Initial Volume: Swell factor: Loose volume: Source of estimated Source of estimated HOURLY PROD	ANTITIES 4,648 1.215 5,647 LCY volume: swell factor: DUCTION ice: production:	DRMS inspection 9/9/ Cat Handbook 300 feet 311.1 LCY/hr			
MATERIAL QU Initial Volume: Swell factor: Loose volume: Source of estimated Source of estimated HOURLY PROD Average push distar Unadjusted hourly p	ANTITIES 4,648 1.215 5,647 LCY volume: swell factor: PUCTION ace: production: cy description ent: 5 %	DRMS inspection 9/9/ Cat Handbook 300 feet 311.1 LCY/hr consolidated stockp			
MATERIAL QU Initial Volume: Swell factor: Loose volume: Source of estimated Source of estimated HOURLY PRODE Average push distar Unadjusted hourly p Materials consistence Average push gradie	ANTITIES 4,648 1.215 5,647 LCY volume: swell factor: PUCTION ace: production: cy description ent: 5 % e: 6,020	DRMS inspection 9/9/ Cat Handbook 300 feet 311.1 LCY/hr consolidated stockp			
MATERIAL QU Initial Volume: Swell factor: Loose volume: Source of estimated Source of estimated HOURLY PROE Average push distar Unadjusted hourly p Materials consistence Average push gradie Average site altitude	ANTITIES 4,648 1.215 5,647 LCY volume: swell factor: PUCTION ace: production: cy description ent: 5 % e: 6,020	DRMS inspection 9/9/ Cat Handbook 300 feet 311.1 LCY/hr a: Consolidated stockp 0 feet 0 lbs/LCY			
MATERIAL QU Initial Volume: Swell factor: Loose volume: Source of estimated Source of estimated HOURLY PROD Average push distar Unadjusted hourly p Materials consistence Average push gradie Average site altitude Material weight:	ANTITIES $4,648$ $1.215$ $5,647$ LCYvolume:swell factor: <b>DUCTION</b> ace:production:cy descriptionent: $5 \%$ $6,020$ $1,600$ Top S	DRMS inspection 9/9/ Cat Handbook 300 feet 311.1 LCY/hr a: Consolidated stockp 0 feet 0 lbs/LCY			
MATERIAL QU Initial Volume: Swell factor: Loose volume: Source of estimated Source of estimated MOURLY PRODE Average push distar Unadjusted hourly p Materials consistence Average push gradie Average site altitude Material weight: Weight description: Job Condition Correc Oper	ANTITIES 4,648 1.215 5,647 LCY volume: swell factor: DUCTION ace: oroduction: cy description ent: 5 % e: 6,020 1,600 Top S ection Factor rator Skill:	DRMS inspection 9/9/ Cat Handbook 300 feet 311.1 LCY/hr a: Consolidated stockp 0 feet 0 lbs/LCY Soil 0.750			
MATERIAL QU Initial Volume: Swell factor: Loose volume: Source of estimated Source of estimated MOURLY PROE Average push distan Unadjusted hourly p Materials consistence Average push gradie Average site altitude Material weight: Weight description: Job Condition Correc Oper Material co	ANTITIES 4,648 1.215 5,647 LCY volume: swell factor: DUCTION ace: DUCTION ace: DICCTION ace: DICCTIO	DRMS inspection 9/9/ Cat Handbook 300 feet 311.1 LCY/hr a: Consolidated stockp 0 feet 0 lbs/LCY Soil 0.750 1.000			
MATERIAL QU Initial Volume: Swell factor: Loose volume: Source of estimated Source of estimated MOURLY PRODE Average push distar Unadjusted hourly p Materials consistence Average push gradid Average site altitude Material weight: Weight description: Job Condition Correc Oper Material cc Dozir	ANTITIES 4,648 1.215 5,647 LCY volume: swell factor: PUCTION ace: oroduction: cy description ent: 5 % e: 6,020 1,600 Top S ection Factor rator Skill: onsistency: ng method: 	DRMS inspection 9/9/ Cat Handbook 300 feet 311.1 LCY/hr a: Consolidated stockp 0 feet 0 lbs/LCY Soil 0.750 1.000 1.100			
MATERIAL QU Initial Volume: Swell factor: Loose volume: Source of estimated Source of estimated HOURLY PRODE Average push distar Unadjusted hourly p Materials consistence Average push gradie Average site altitude Material weight: Weight description: Job Condition Correc Oper Material co Dozir	ANTITIES 4,648 1.215 5,647 LCY volume: swell factor: PUCTION ace: oroduction: cy description ent: 5 % e: 6,020 1,600 Top S ection Factor rator Skill: onsistency: og method: Visibility:	DRMS inspection 9/9/ Cat Handbook 300 feet 311.1 LCY/hr a: Consolidated stockp 0 feet 0 lbs/LCY Soil 0.750 1.000 1.100 1.000			
MATERIAL QU Initial Volume: Swell factor: Loose volume: Source of estimated Source of estimated HOURLY PRODE Average push distar Unadjusted hourly p Materials consistence Average push gradie Average site altitude Material weight: Weight description: Job Condition Correc Oper Material co Dozir	ANTITIES 4,648 1.215 5,647 LCY volume: swell factor: PUCTION ace: oroduction: cy description ent: 5 % e: 6,020 1,600 Top S ection Factor rator Skill: onsistency: ng method: 	DRMS inspection 9/9/ Cat Handbook 300 feet 311.1 LCY/hr a: Consolidated stockp 0 feet 0 lbs/LCY Soil 0.750 1.000 1.100			

Task # 002

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

Net correctio	on: 0.6224	
Adjusted unit production:	193.63 LCY/hr	
Adjusted fleet production:	<b>387.26</b> LCY/hr	

## JOB TIME AND COST

Fleet size:	2 Dozer(s)
Unit cost:	\$0.848/LCY

Total job time:	14.58 Hours
Total job cost:	\$4,787

# **REVEGETATION WORK**

Task descri	ption:	Revegetate 7 acres to rangeland		
te: Valco T	Pit	Permit Action: SO-03 2015	Permit/Job#:	M2004043
	<u>IDENTIFIC</u>			_
Task #:	003	State: Colorado	Abbreviation: 1	None
Date:	9/11/2015	County: Las Animas	Filename: N	M043-003
User:	AME			

# **FERTILIZING**

#### Materials

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

# 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
Blue Grama - Lovington	3.00	48.97	\$32.58
Little Bluestem - Pastura	7.00	41.78	\$110.67
Sideoats Grama - Vaughn	9.00	29.55	\$101.16
Western Wheatgrass - Barton	16.00	40.40	\$58.88
Totals Seed Mix	35.00	160.70	\$303.29

**Application** 

Description		Cost /Acre
Drill seeding (MEANS 32 92 19.13 0020)		\$404.00
	Total Seed Application Cost/Acre	\$404.00

## **MULCHING and MISCELLANEOUS**

#### Materials

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

Application

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

## NURSERY STOCK PLANTING

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

#### JOB TIME AND COST

No. of Acres:	7	Cost /Acre:	\$707.29
Estimated Failure Rate:	50%	Cost /Acre*:	\$707.29
*Selected Replanting Work Items:	SEEDING		

Initial Job Cost:	\$4,951.03
Reseeding Job Cost:	\$2,475.52
Total Job Cost:	\$7,427
Job Hours:	28.00

# **REVEGETATION WORK**

Task descr	iption:	Cover crop of oats on 7 acres		
ite: Valco T	Pit	Permit Action: SO-03 2015	Permit/Job	#: <u>M2004043</u>
PROJECT Task #:	<u>T <b>IDENTIFI</b>(</u> 004	CATION State: Colorado	Abbreviation:	None
Date:		County: Las Animas	Filename:	M043-004
	AME			

# **FERTILIZING**

#### Materials

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

# Application

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

# **TILLING**

Description	Cost /Acre
Disc harrowing, 6" deep (MEANS 32 91 13.23 6100)	\$98.01
Total Tilling Cost/Acre	\$98.01

#### **SEEDING**

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Oats - Hytest	25.00	7.46	\$8.25
Totals Seed Mix	25.00	7.46	\$8.25

# Application

Description	Cost /Acre
Drill seeding (MEANS 32 92 19.13 0020)	\$404.00
	\$404.00

## **Total Seed Application Cost/Acre**

## **MULCHING and MISCELLANEOUS**

#### Materials

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

## Application

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

## **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:	7	Cost /Acre:	\$510.26
Estimate	ed Failure Rate:	0%	Cost /Acre*:	\$0.00
*Selected Replanti	ng Work Items:	NONE		
Initial Job Cost:	\$3,571.82			
Reseeding Job Cost:	\$0.00			
Total Job Cost:	\$3,572			
Job Hours:	14.00			

# EQUIPMENT MOBILIZATION/DEMOBILIZATION

Task description:	Мо	bilization/Demob	ilization				
Valco T Pit		Permit	Action: SO-0	03 2015		Permit/Job#:	M2004043
PROJECT IDEN	NTIFICATI	ON					
Task #: 005		State: Co	olorado		Abbro	eviation: Nor	ne
Date: 9/11	/2015	County: La	s Animas		F	ilename: M0	43-005
User: AM	E						
Agency o	r organizatio	n name: DRMS					
EQUIPMENT T	RANSPOR	T RIG COST					
					Shift ba	usis: 1 per	dav
				(	Cost Data Sou		
Truck	Tractor Desc	ription: CENE	DIC ON UIGU				EL POWERED,
TTUCK	Tractor Desc		KIC ON-IIIOII		(2ND HALF,		ELFOWERED,
Truck	Trailer Desc	ription: G	ENERIC FOLI			ROP DECK EQ	UIPMENT
Trues	Trailer Dese				(25T, 50T, Al		
					(,,,,,		
Cost Breakdown:							
Available Rig Ca	pacities	0-25 Tons	26-50 Tons	51+	Tons		
Ownership		\$16.63	\$18.37		2.33		
	Cost/Hour:	\$44.38	\$46.13	\$5	0.07		
Operator	Cost/Hour:	\$27.66	\$27.66	\$2	7.66		
Helper	Cost/Hour:	\$0.00	\$25.39	\$2	5.39		
Total Unit	Cost/Hour:	\$88.67	\$117.55	\$12	25.45		
NON ROADABI	LE EQUIPN	MENT:					
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
Ĩ	(TONS)		t		fleet		
Cat D7R DS XR Series II	35.93	\$0.00	\$117.55	2	\$235.10	\$235.10	\$500.00
Drill/Broadcast Seeder with Tractor	25.00	\$39.59	\$88.67	1	\$128.26	\$88.67	\$250.00
				0.1	<b>#0 : 0 :</b>	¢242 ==	
				Subtotals:	\$363.36	\$323.77	\$750.00

## **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**

Nearest Major City or Town within project area region: Total one-way travel distance: Average Travel Speed:	TRINIDAD 6.00 55.00	miles
Total Non-Roadable Mob/Demob Cost * '* two round trips with haul rig:	\$3,103.36	
Total Roadable Mob/Demob Cost ** ** one round trip, no haul rig:	\$0.00	

Transportation Cycle Time:

Haul Time (Hours):	Non- Roadable Equipment 0.11	Roadable Equipment 0.11
Return Time (Hours):	0.11	0.11
Loading Time (Hours):	1.00	NA
Unloading Time (Hours):	1.00	NA
Subtotals:	2.22	0.22

## JOB TIME AND COST

Total job time: **4.44** Hours

Total job cost: \$3,103