




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: Gallegos Pit	MINE/PROSPECTING ID#: M-1983-164	MINERAL: Sand and gravel	COUNTY: Conejos
INSPECTION TYPE: Monitoring	INSPECTOR(S): Wallace H. Erickson	INSP. DATE: April 10, 2014	INSP. TIME: 11:10
OPERATOR: George F. Gallegos	OPERATOR REPRESENTATIVE: George Gallegos	TYPE OF OPERATION: 112c - Construction Regular Operation	
REASON FOR INSPECTION: Normal I&E Program	BOND CALCULATION TYPE: Complete Bond	BOND AMOUNT: \$28,034.00	
DATE OF COMPLAINT: NA	POST INSP. CONTACTS: None	JOINT INSP. AGENCY: None	
WEATHER: Cloudy	INSPECTOR'S SIGNATURE: 	SIGNATURE DATE: May 16, 2014	

The following inspection topics were identified as having Problems or Possible Violations. OPERATORS SHOULD READ THE FOLLOWING PAGES CAREFULLY IN ORDER TO ASSURE COMPLIANCE WITH THE TERMS OF THE PERMIT AND APPLICABLE RULES AND REGULATIONS. If a Possible Violation is indicated, you will be notified under separate cover as to when the Mined Land Reclamation Board will consider possible enforcement action.

GENERAL INSPECTION TOPICS

The following list identifies the environmental and permit parameters inspected and gives a categorical evaluation of each

(AR) RECORDS----- <u>Y</u>	(FN) FINANCIAL WARRANTY----- <u>PB</u>	(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----- <u>NA</u>	(TS) TOPSOIL----- <u>PB</u>
(MP) GENL MINE PLAN COMPLIANCE----- <u>Y</u>	(FW) FISH & WILDLIFE----- <u>Y</u>	(RV) REVEGETATION----- <u>Y</u>
(SM) SIGNS AND MARKERS----- <u>Y</u>	(SP) STORM WATER MGT PLAN----- <u>N</u>	(SB) COMPLETE INSP----- <u>Y</u>
(ES) OVERBURDEN/DEV. WASTE----- <u>Y</u>	(SC) EROSION/SEDIMENTATION----- <u>Y</u>	(RS) RECL PLAN/COMP----- <u>Y</u>
(AT) ACID OR TOXIC MATERIALS----- <u>Y</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

INSPECTION TOPIC: Financial Warranty

PROBLEM: The Division has reviewed the current cost of reclamation totaling \$70,290.97. Therefore, the existing \$28,034 financial warranty is not adequate to reclaim the site in accordance with the approved reclamation plan and applicable requirements of the Act and Rules. This is a failure to maintain a proper amount of financial warranty as necessary to complete reclamation of the affected lands pursuant to section 34-32.5-117(4)(b), C.R.S.

CORRECTIVE ACTIONS: Pursuant to Rule 4.2.1(2), the Operator has 60 days from the signature date of this report, due July 15, 2014, to provide \$42,256.97 additional surety, to ensure a total financial warranty not less than \$70,290.97, or advance the reclamation and thereby render the existing financial warranty adequate.

CORRECTIVE ACTION DUE DATE: July 15, 2014

INSPECTION TOPIC: Topsoil: locations, volumes, and protection of topsoil stockpiles

PROBLEM: The approved mining and reclamation plans indicate topsoil will be salvaged and stockpiled along the north side of the pit area and maintained for reclamation purposes. Topsoil was observed stockpiled not only at the north side of the pit area, but also at unspecified locations along the east, south and west sides of the pit area. Pursuant to section 34-32.5-112(4) C.R.S., the locations and volumes of topsoil stockpiles must be identified within the permit documents. Additionally, the topsoil stockpiles did not exhibit a protective vegetative cover and are thereby susceptible to erosion and/or contamination due to infestation by noxious weeds. Pursuant to section 34-32.5-116(4)(g) C.R.S., topsoil shall be salvaged and segregated from other spoil. If such topsoil is not replaced on a backfill area within a period of time short enough to avoid deterioration of the topsoil, vegetative cover or other means shall be employed so that such topsoil is preserved from wind and water erosion, remains free of contamination, and is in a useable condition for sustaining vegetation when restored during reclamation. The Division has specified one year as the period of time whereby the Operator shall establish a protective vegetative cover for stockpiled topsoil.

CORRECTIVE ACTIONS: Within 60 days of the signature date of this inspection report, due July 15, 2014, the Operator must file with the Division a modification to the permit identifying all locations and volumes of topsoil stockpiles and addressing how topsoil stockpiles will be preserved from wind and water erosion, remains free of contamination, and is in a useable condition for sustaining vegetation when restored during reclamation. The modification shall be filed with the Division through either the Technical Revision process, described under Rules 1.1(49) and 1.9, or the Amendment process, described under Rules 1.1(6) and 1.10.

CORRECTIVE ACTION DUE DATE: July 15, 2014

OBSERVATIONS

This inspection occurred as part of the Division's routine monitoring plan for permitted operations. The Gallegos Pit is approved for 65.19 acres affected lands for the extraction and processing of construction materials. Affected lands will be reclaimed to support rangeland post-mining land use. The Division holds \$28,034 financial warranty. This report is accompanied by two images from Google Earth, four photographs taken during the inspection, and an updated reclamation cost estimation totaling \$70,290.97.

As shown on the enclosed images from Google Earth, the affected lands were appropriately contained within the approved boundaries. The Google 1 image represents the view from approximately 2,700 feet above ground surface, resulting in a scale of approximately 1:3,678 or 1 inch = 306 feet. The Google 2 image represents the view from approximately 1,500 feet above ground surface, resulting in a scale of approximately 1:2,160 or 1 inch = 180 feet. Based upon observations made during the inspection, measurements taken from

the maps of the permit, and measurements taken from the Google Earth images, the Division estimates the current area of the affected lands at approximately 20 acres. This is in conflict with the most recent annual report, signed by the Operator on August 2, 2013, which reported the extent of affected lands at seven acres.

The annual reports are critical permit documents intended to record the progress of the operation. Pursuant to section 34-32.5-116(3)(a) C.R.S. and Rule 1.15(1), the annual report must specify the number of acres currently affected. Please review section 34-32.5-116(3)(a) C.R.S., Rule 1.15(1), and the annual report form provided by the Division for a complete listing of information required from the Operator on an annual basis. The information provided on the annual report form must be illustrated on a map accompanying the report. The information provided on the report form and map must be in agreement; the information provided on the annual report map must not contradict the information provided on the annual report form. Incomplete, misleading, and/or contradictory information on the annual report and associated map may be interpreted as a failure to comply with the requirements of section 34-32.5-116(3)(a) C.R.S. and Rule 1.15(1).

Given the date of the Operator's signature on the annual report (August 2, 2013) and the date of the Google Earth images (November 17, 2013), the Division at this time has insufficient evidence to pursue enforcement action for failure to comply with the requirements of section 34-32.5-116(3)(a) C.R.S. and Rule 1.15(1). The Operator is strongly encouraged to provide all of the information requested on the annual report form and to ensure the accuracy and consistency of all information provided in future annual reports and associated maps.

As shown on the enclosed Google Earth images and the photographs taken during the inspection, the slopes of the pit highwalls ranged from 1H:1V to 3H:1V. The 3H:1V slopes were limited to the north highwall (see Google 2 and Photo 3). The Operator indicated the 3H:1V slope represented the final configuration of the reclaimed slope. This is in conflict with the conditions of the approved reclamation plan, which indicate final slopes will be no steeper than 10H:1V. If the Operator desires final slopes at 3H:1V and not 10H:1V, the Operator must modify the conditions of the approved reclamation plan through either the Technical Revision process, described under Rules 1.1(49) and 1.9, or the Amendment process, described under Rules 1.1(6) and 1.10. In the absence of such modification the Division will require the Operator to reduce all pit slopes to no steeper than 10H:1V, as currently stated in the approved reclamation plan.

The approved mining and reclamation plans indicate topsoil will be salvaged and stockpiled along the north side of the pit area and maintained for reclamation purposes. Topsoil was observed stockpiled not only at the north side of the pit area, but also at unspecified locations along the east, south and west sides of the pit area. Pursuant to section 34-32.5-112(4) C.R.S., the locations and volumes of topsoil stockpiles must be identified within the permit documents. Additionally, the topsoil stockpiles did not exhibit a protective vegetative cover. As shown in Photos 1 through 4, evidence of wind erosion was observed for the topsoil stockpile located at the north end of the pit area. The wind erosion is evident due to the cover of cobbles and pebbles, which have been concentrated on the surface due to the removal of the fine particles. The local winds are sufficient to remove the fine particles but insufficient to remove the larger sized particles. Pursuant to section 34-32.5-116(4)(g) C.R.S., topsoil shall be salvaged and preserved for reclamation purposes.

Therefore, the Division has noted a problem regarding the unspecified locations and volumes of stockpiled topsoil, and the absence of a protective vegetative cover for the topsoil stockpiles, and has imposed corrective actions and a deadline whereby the corrective actions must be resolved. Details of the corrective actions and deadline are provided on page two of this inspection report.

Notice to Increase the Financial Warranty

The conditions of the approved permit indicate a phased mine plan with contemporaneous reclamation whereby the un-reclaimed affected lands are limited to approximately three acres at any given time. Such permit conditions limit the reclamation liability to a minimum amount. The amount of reclamation liability incurred by the operation is reflected in the amount of financial warranty required by the Division. Thus, Operators who voluntarily place such conditions within their permit benefit by correspondingly low financial warranties, but only if the Operator complies with the self-imposed limitation on liability.

Observations made during the inspection and recorded in this report estimate the un-reclaimed affected lands at approximately 20 acres. Clearly, the Operator is not conducting contemporaneous reclamation, as indicated in the approved plan, and is not complying with the self-imposed limitation on liability.

Pursuant to Rule 4.2.1(4), the Division has reviewed the current cost of reclamation totaling \$70,290.97. Please find enclosed 14 pages of summary, drawing and task sheets utilized by the Division to calculate the current cost of reclamation. The Division's reclamation cost estimation is based on current site conditions, conditions of the approved reclamation plan, and the applicable requirements of the Act and Rules.

Therefore, the existing \$28,034 financial warranty is insufficient to ensure the completion of reclamation. The Division has noted a problem regarding the amount of financial warranty and has imposed corrective actions and a deadline whereby the corrective actions must be resolved. Additional details of the corrective actions and deadline are provided on page two of this inspection report.

Attachment: Certificate of Service

Enclosures: 1) Two images from Google Earth;
2) Four photographs taken during the inspection; and
3) Updated reclamation cost estimation totaling \$70,290.97

Ec w/enclosures: Russ Means, DRMS GJFO

Certificate of Service

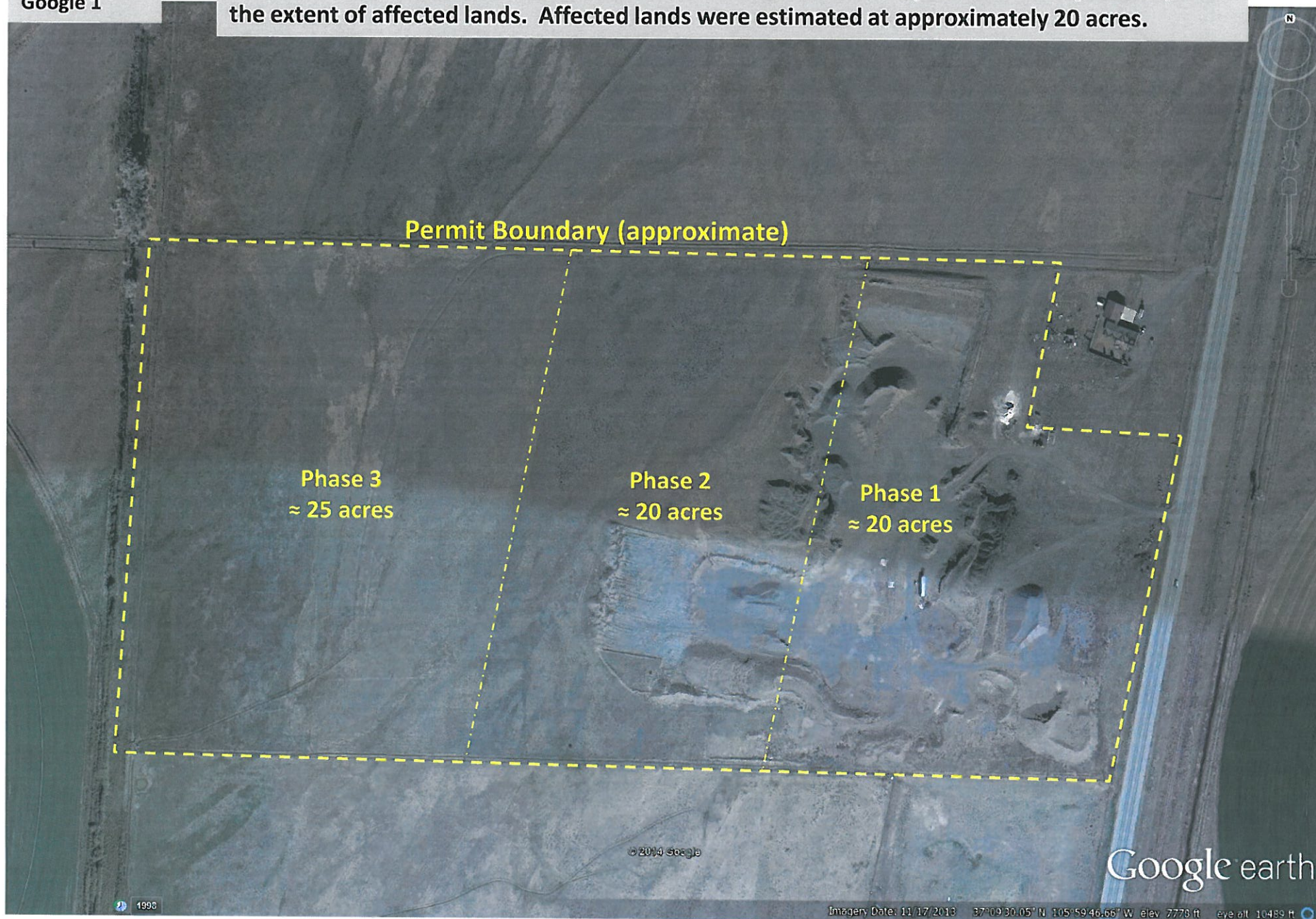
I, Wallace H. Erickson, hereby certify that on this 16th day of May, 2014, placed a true copy of the foregoing inspection report generated from the April 10, 2014, inspection of the Gallegos Pit, Permit No. M-1983-164, signed May 16, 2014, with enclosures, in the US Mail, first class postage affixed and addressed to the following:

George F. Gallegos
P.O. Box 575
Romeo, CO 81148

 5/16/14

Gallegos Pit
M-1983-164
Google 1

Google Earth imagery, dated November 17, 2013 (north half of image) and September 28, 2013 (south half of image), showing the permit boundary, the various phases of the operation, and the extent of affected lands. Affected lands were estimated at approximately 20 acres.



Gallegos Pit
M-1983-164
Google 2

Google Earth imagery, dated November 17, 2013 (north half of image) and September 28, 2013 (south half of image), showing the locations of four photographs taken during the inspection (**red**).



Gallegos Pit
M-1983-164
April 10, 2014
Photo 1

View west, taken from the top of a topsoil stockpile located at the north end of the Phase 1 area. Vegetative cover for the stockpiled topsoil appeared sparse and weedy, relative to the native vegetative cover, as shown in photos 1 through 4. Evidence of erosion of the stockpiled topsoil was limited to minor wind erosion.

**Fence line delineates the
north permit boundary**

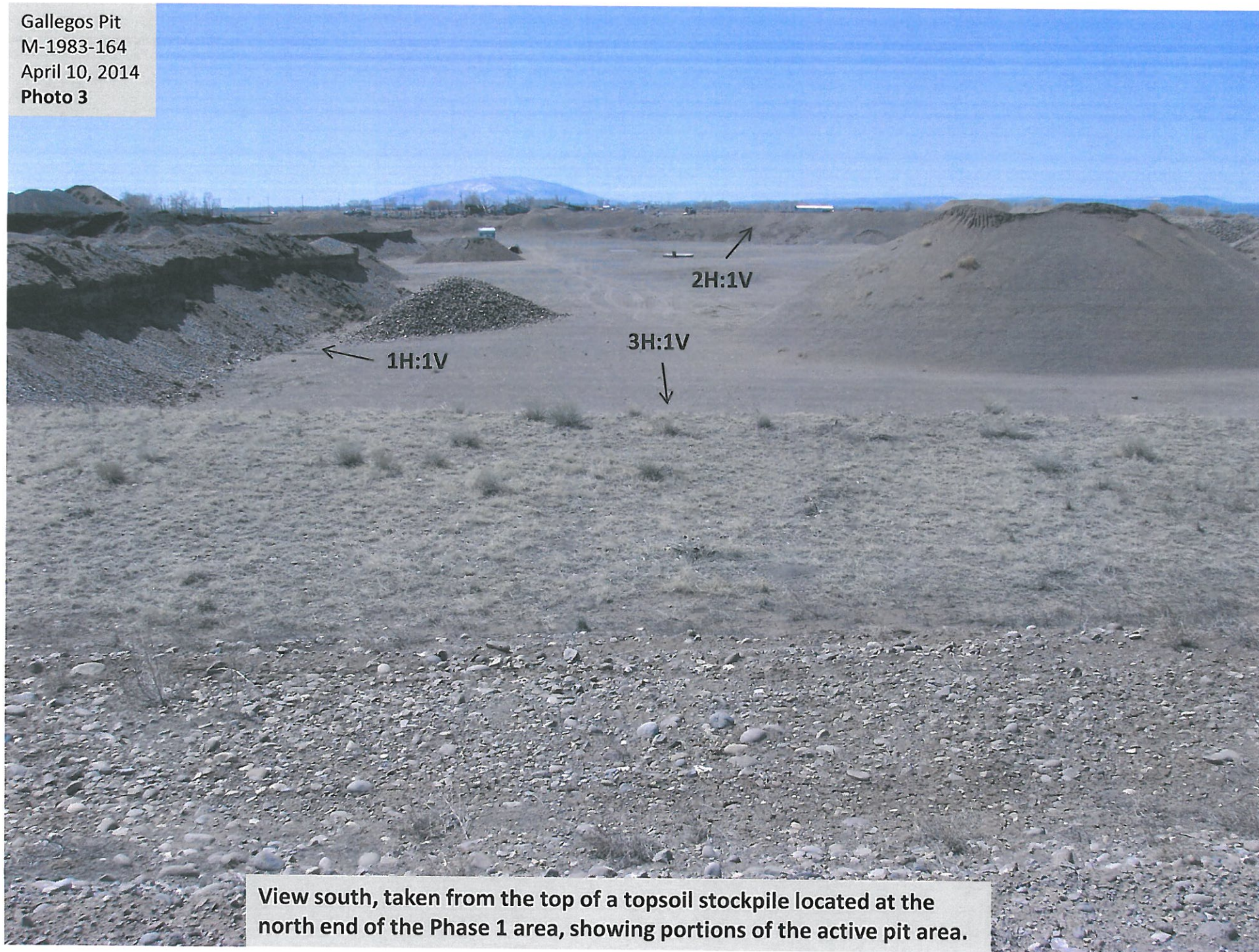


Gallegos Pit
M-1983-164
April 10, 2014
Photo 2



View southwest, taken from the top of a topsoil stockpile located at the north end of the Phase 1 area, showing portions of the active pit area.

Gallegos Pit
M-1983-164
April 10, 2014
Photo 3



View south, taken from the top of a topsoil stockpile located at the north end of the Phase 1 area, showing portions of the active pit area.

Gallegos Pit
M-1983-164
April 10, 2014
Photo 4



View southeast, taken from the top of a topsoil stockpile located at the north end of the Phase 1 area, showing portions of the active pit area.

COST SUMMARY WORK

Task description: Summary of reclamation tasks and costs

Site: Gallegos Pit

Permit Action: Routine bond
update

Permit/Job#: M1983164

PROJECT IDENTIFICATION

Task #: 000

State: Colorado

Abbreviation: None

Date: 5/15/2014

County: Conejos

Filename: M164-000

User: WHE

Agency or organization name: DRMS

TASK LIST (DIRECT COSTS)

Task	Description	Form Used	Fleet Size	Task Hours	Cost
001	Highwall reduction from 1.5H:1V to 3H:1V	DOZER	1	3.73	\$985.78
002	Rough grade and rip 15 acres affected lands	DOZER	1	14.61	\$3,929.54
003	Topsoil replacement for 3H:1V reduced highwalls	DOZER	1	3.55	\$930.22
004	Topsoil replacement for 15 acres, pit floor and flat areas	DOZER	1	70.90	\$18,595.14
005	Revegetate 20 acres affected lands	REVEGE	1	20.00	\$29,414.50
006	Haul reclamation equipment to and from job site	MOBILIZE	1	3.84	\$4,929.27
<u>SUBTOTALS:</u>				116.63	\$58,784.45

INDIRECT COSTS

OVERHEAD AND PROFIT:

Liability insurance: 2.02%
Performance bond: 1.05%
Job superintendent: 0.00 hrs
Profit: 10.00%

Total = \$1,187.45

Total = \$617.24

Total = \$0.00

Total = \$5,878.45

TOTAL O & P = \$7,683.14

CONTRACT AMOUNT (direct + O & P) = \$66,467.59

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%

\$3,323.38

CONTINGENCY: 0.00

Total = \$0.00

TOTAL INDIRECT COST = \$11,506.52

TOTAL BOND AMOUNT (direct + indirect) = \$70,290.97

BULLDOZER WORKTask description: Highwall reduction from 1.5H:1V to 3H:1VSite: Gallegos PitPermit Action: Routine bond updatePermit/Job#: M1983164PROJECT IDENTIFICATIONTask #: 001State: ColoradoAbbreviation: NoneDate: 5/15/2014County: ConejosFilename: M164-001User: WHEAgency or organization name: DRMSHOURLY EQUIPMENT COSTBasic Machine: Cat D9T - 9UHorsepower: 405Blade Type: UniversalAttachment: 3-shank ripperShift Basis: 1 per dayData Source: (CRG)Cost Breakdown:

		<u>Utilization %</u>
Ownership Cost/Hour:	\$81.10	NA
Operating Cost/Hour:	\$143.16	100
Ripper op. Cost/Hour:	\$2.23	25
Operator Cost/Hour:	\$38.01	NA

Total unit Cost/Hour: \$264.49Total Fleet Cost/Hour: \$264.49MATERIAL QUANTITIESInitial Volume: 3,483Swell factor: 1.124Loose volume: 3,914 LCYSource of estimated volume: See attached drawing, "Highwall Reduction"Source of estimated swell factor: Cat HandbookHOURLY PRODUCTIONAverage push distance: 50 feetUnadjusted hourly production: 2,222.9 LCY/hrMaterials consistency description: Compacted fill or embankment 0.9Average push gradient: -15 %Average site altitude: 7,700 feetMaterial weight: 2,900 lbs/LCYWeight description: Sand and gravel - DryJob Condition Correction Factor

		<u>Source</u>
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:	1.329	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.793	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.4724

Adjusted unit production: 1,050.10 LCY/hr

Adjusted fleet production: 1050.1 LCY/hr

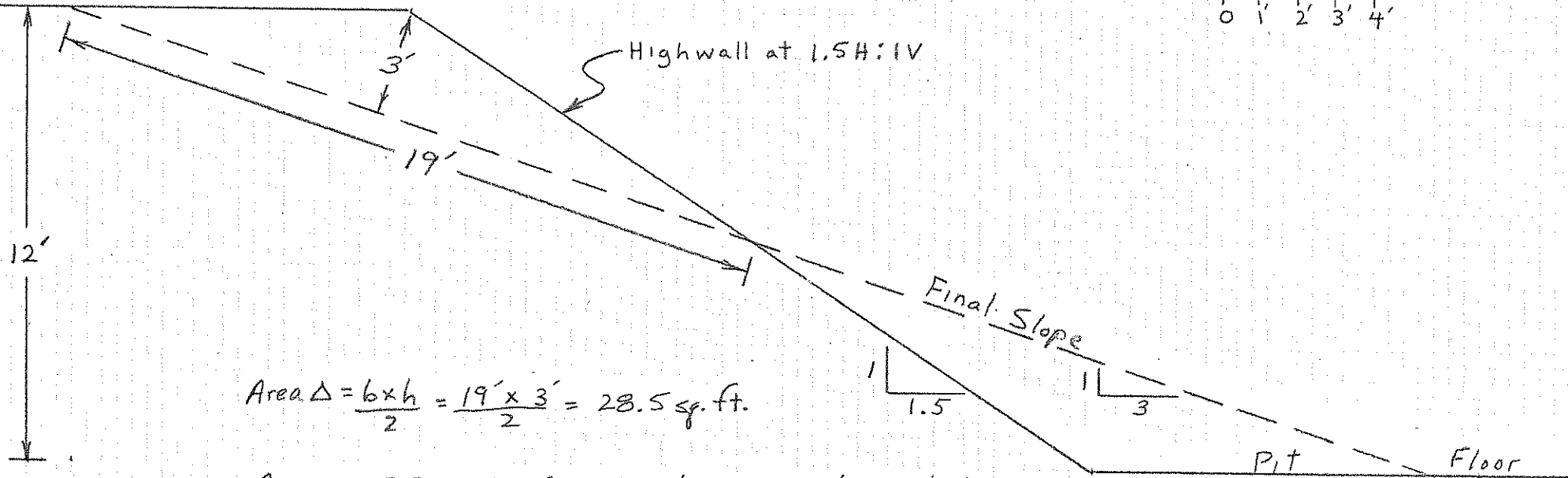
JOB TIME AND COST

Fleet size: 1 Dozer(s)
 Unit cost: \$0.252/LCY

Total job time: 3.73 Hours
 Total job cost: \$985.78

Highwall Reduction Balanced Cut and Fill

Gallegos Pit
M-1983-164
5/15/14 WHE
Scale 1" = 4'



$$\text{Area } \Delta = \frac{b \times h}{2} = \frac{19' \times 3'}{2} = 28.5 \text{ sq. ft.}$$

Assume 3,300 LF of highwall requires slope reduction

$$\begin{aligned} \text{Material Quantity} &= 3,300 \text{ LF} \times 28.5 \text{ sq. ft.} \\ &= 94,050 \text{ cu. ft} \\ &= 3,483.33 \text{ cy} \end{aligned}$$

$$\begin{aligned} \text{Area of final 3H:1V slope} &= 3,300 \text{ LF} \times 37.9 \text{ ft.} \\ &= 125,070 \text{ sq. ft} \\ &+ 9,096 \text{ sq. ft.} \\ \hline &134,166 \text{ sq. ft.} = 3.08 \text{ acres} \end{aligned}$$

Approximately 240 LF highwall
already at 3H:1V
 $240 \text{ LF} \times 37.9 \text{ ft}$
 $= 9,096 \text{ sq. ft.}$

BULLDOZER WORKTask description: Rough grade and rip 15 acres affected landsSite: Gallegos PitPermit Action: Routine bond updatePermit/Job#: M1983164PROJECT IDENTIFICATIONTask #: 002State: ColoradoAbbreviation: NoneDate: 5/15/2014County: ConejosFilename: M164-002User: WHEAgency or organization name: DRMSHOURLY EQUIPMENT COSTBasic Machine: Cat D9T - 9UHorsepower: 405Blade Type: UniversalAttachment: 3-shank ripperShift Basis: 1 per dayData Source: (CRG)Cost Breakdown:

		<u>Utilization %</u>
Ownership Cost/Hour:	\$81.10	NA
Operating Cost/Hour:	\$143.16	100
Ripper op. Cost/Hour:	\$6.68	75
Operator Cost/Hour:	\$38.01	NA

Total unit Cost/Hour: \$268.94Total Fleet Cost/Hour: \$268.94MATERIAL QUANTITIESInitial Volume: 12,100Swell factor: 1.060Loose volume: 12,826 LCYSource of estimated volume: $(15\text{ac})(43560\text{sf/ac})(0.5'\text{D}) / 27 = 12,100 \text{ cy}$ Source of estimated swell factor: Cat HandbookHOURLY PRODUCTIONAverage push distance: 50 feetUnadjusted hourly production: 2,222.9 LCY/hrMaterials consistency description: Consolidated stockpile 1.0Average push gradient: 0 %Average site altitude: 7,700 feetMaterial weight: 2,900 lbs/LCYWeight description: Sand and gravel - DryJob Condition Correction Factor

		<u>Source</u>
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:	1.000	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.793	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.3949

Adjusted unit production: 877.82 LCY/hr

Adjusted fleet production: 877.82 LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s)
 Unit cost: \$0.306/LCY

Total job time: 14.61 Hours
 Total job cost: \$3,929.54

BULLDOZER WORKTask description: Topsoil replacement for 3H:1V reduced highwallsSite: Gallegos PitPermit Action: Routine bond updatePermit/Job#: M1983164PROJECT IDENTIFICATIONTask #: 003State: ColoradoAbbreviation: NoneDate: 5/15/2014County: ConejosFilename: M164-003User: WHEAgency or organization name: DRMSHOURLY EQUIPMENT COSTBasic Machine: Cat D9T - 9UHorsepower: 405Blade Type: UniversalAttachment: 3-shank ripperShift Basis: 1 per dayData Source: (CRG)Cost Breakdown:

		<u>Utilization %</u>
Ownership Cost/Hour:	\$81.10	NA
Operating Cost/Hour:	\$143.16	100
Ripper op. Cost/Hour:	\$0.00	0
Operator Cost/Hour:	\$38.01	NA

Total unit Cost/Hour: \$262.26Total Fleet Cost/Hour: \$262.26MATERIAL QUANTITIESInitial Volume: 3,313Swell factor: 1.125Loose volume: 3,727 LCYSource of estimated volume: $(134,166 \text{ sq. ft.}) (0.67' D) / 27 = 3,312.74 \text{ cy}$ Source of estimated swell factor: Cat HandbookHOURLY PRODUCTIONAverage push distance: 75 feetUnadjusted hourly production: 1,600.0 LCY/hrMaterials consistency description: Partly consolidated stockpile 1.1Average push gradient: -15 %Average site altitude: 7,700 feetMaterial weight: 2,550 lbs/LCYWeight description: Earth - Dry packedJob Condition Correction Factor

		<u>Source</u>
Operator Skill:	0.750	(AVG.)
Material consistency:	1.100	(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:	1.329	(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: \$0.250/LCY

Total job time: 3.55 Hours

Total job cost: \$930.22

BULLDOZER WORKTask description: Topsoil replacement for 15 acres, pit floor and flat areasSite: Gallegos PitPermit Action: Routine bond updatePermit/Job#: M1983164PROJECT IDENTIFICATIONTask #: 004State: ColoradoAbbreviation: NoneDate: 5/15/2014County: ConejosFilename: M164-004User: WHEAgency or organization name: DRMSHOURLY EQUIPMENT COSTBasic Machine: Cat D9T - 9UHorsepower: 405Blade Type: UniversalAttachment: 3-shank ripperShift Basis: 1 per dayData Source: (CRG)Cost Breakdown:

		<u>Utilization %</u>
Ownership Cost/Hour:	\$81.10	NA
Operating Cost/Hour:	\$143.16	100
Ripper op. Cost/Hour:	\$0.00	0
Operator Cost/Hour:	\$38.01	NA

Total unit Cost/Hour: \$262.26Total Fleet Cost/Hour: \$262.26MATERIAL QUANTITIESInitial Volume: 16,141Swell factor: 1.125Loose volume: 18,159 LCYSource of estimated volume: (15ac)(43560sf/ac)(0.667'D) / 27 = 16,141.4 cySource of estimated swell factor: Cat HandbookHOURLY PRODUCTIONAverage push distance: 300 feetUnadjusted hourly production: 464.9 LCY/hrMaterials consistency description: Partly consolidated stockpile 1.1Average push gradient: -5 %Average site altitude: 7,700 feetMaterial weight: 2,550 lbs/LCYWeight description: Earth - Dry packedJob Condition Correction Factor

		<u>Source</u>
Operator Skill:	0.750	(AVG.)
Material consistency:	1.100	(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:	1.115	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.902	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.5509

Adjusted unit production: 256.11 LCY/hr

Adjusted fleet production: **256.11** LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s)
 Unit cost: \$1.024/LCY

Total job time: **70.90** Hours
 Total job cost: **\$18,595.14**

REVEGETATION WORKTask description: Revegetate 20 acres affected landsSite: Gallegos PitPermit Action: Routine bond updatePermit/Job#: M1983164PROJECT IDENTIFICATIONTask #: 005State: ColoradoAbbreviation: NoneDate: 5/15/2014County: ConejosFilename: M164-005User: WHEAgency or organization name: DRMSFERTILIZINGMaterials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
10-34-0, 18-46-0, 5-10-5	200.00	pound	\$0.33	\$65.40
			Total Fertilizer Materials Cost/Acre	\$65.40

Application

Description	Cost /Acre
Tractor towed spreader (MEANS 32 01 90.13 0120)	\$52.71
Total Fertilizer Application Cost/Acre	\$52.71

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
Alkali Sacaton	0.10	3.90	\$2.28
Sand Dropseed	0.10	11.94	\$0.70
Crested Wheatgrass - Nordan	2.00	9.18	\$4.66
Thickspike Wheatgrass - Critana	3.00	10.61	\$15.51
Western Wheatgrass - Native	5.00	12.63	\$15.20
Sagebrush, Mountain or Big	0.10	5.28	\$3.37
Globemallow, Scarlet (or copper)	0.50	5.66	\$70.24
Totals Seed Mix	10.80	59.20	\$111.96

Application

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Description	Cost /Acre
Drill seeding (DRMS Cost Data)	\$88.20
Total Seed Application Cost/Acre	\$88.20

MULCHING and MISCELLANEOUS**Materials**

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
Hay, delivered {MEANS 31 25 14.16 1200}	2.00	TON	\$265.00	\$530.00
Herbicide - Curtail @ 4.0 pt/ac	1.00	ACRE	\$16.24	\$16.24
Total Mulch Materials Cost/Acre				\$546.24

Application

Description	Cost /Acre
Crimping, with tractor {DMG survey data}	\$65.89
Power mulcher (MEANS 32 91 13.16 0250)	\$86.68
Weed spray, truck, non-aquatic area, nox. [DMG]	\$61.49
Total Mulch Application Cost/Acre	\$214.06

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: 20 Cost /Acre: \$1,176.58
 Estimated Failure Rate: 25% Cost /Acre*: \$1,176.58
 *Selected Replanting Work Items: FERTILIZING,TILLING,SEEDING,MU
LCHING

Initial Job Cost: \$23,531.60
 Reseeding Job Cost: \$5,882.90
 Total Job Cost: \$29,414.50
 Job Hours: 20.00

EQUIPMENT MOBILIZATION/DEMOBILIZATIONTask description: Haul reclamation equipment to and from job siteSite: Gallegos PitPermit Action: Routine bond updatePermit/Job#: M1983164**PROJECT IDENTIFICATION**Task #: 006State: ColoradoAbbreviation: NoneDate: 5/15/2014County: ConejosFilename: M164-006User: WHEAgency or organization name: DRMS**EQUIPMENT TRANSPORT RIG COST**Shift basis: 1 per dayCost Data Source: CRG DataTruck 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 D9T - 9U	66.78	\$81.10	\$125.45	1	\$206.55	\$125.45	\$250.00
Drill/Broadcast Seeder with Tractor	25.00	\$39.59	\$88.67	2	\$256.51	\$177.34	\$500.00
Power Mulcher (Reinco M90)	6.00	\$7.03	\$88.67	2	\$191.40	\$177.34	\$500.00

Subtotals: **\$654.46** **\$480.13** **\$1,250.00****ROADABLE EQUIPMENT:**

Machine Description	Total Cost/hr/ unit	Fleet Size	Haul Trip Cost/hr/ fleet	Return Trip Cost/hr/ fleet
Flatbed Truck, 4x2, 30K GVW	\$83.18	1	\$83.18	\$83.18

Subtotals: **\$83.18** **\$83.18**

EQUIPMENT HAUL DISTANCE and Time

Nearest Major City or Town within project area region:	ALAMOSA	
Total one-way travel distance:	23.00	miles
Average Travel Speed:	50.00	mph
Total Non-Roadable Mob/Demob Cost *	\$4,852.74	
* two round trips with haul rig:		
Total Roadable Mob/Demob Cost **	\$76.53	
** one round trip, no haul rig:		

Transportation Cycle Time:

	Non-Roadable Equipment	Roadable Equipment
Haul Time (Hours):	0.46	0.46
Return Time (Hours):	0.46	0.46
Loading Time (Hours):	0.50	NA
Unloading Time (Hours):	0.50	NA
Subtotals:	1.92	0.92

JOB TIME AND COST

Total job time:	3.84	Hours
Total job cost:	\$4,929.27	