




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: Costilla Pit	MINE/PROSPECTING ID#: M-1987-040	MINERAL: Sand and gravel	COUNTY: Costilla
INSPECTION TYPE: Monitoring	INSPECTOR(S): Wallace H. Erickson	INSP. DATE: January 23, 2013	INSP. TIME: 13:30
OPERATOR: Southway Construction Company, Inc.	OPERATOR REPRESENTATIVE: Roy Burtraw	TYPE OF OPERATION: 110c - Construction Limited Impact	

REASON FOR INSPECTION: Normal I&E Program	BOND CALCULATION TYPE: Complete Bond	BOND AMOUNT: \$16,942.00
DATE OF COMPLAINT: NA	POST INSP. CONTACTS: None	JOINT INSP. AGENCY: None
WEATHER: Cloudy	INSPECTOR'S SIGNATURE: 	SIGNATURE DATE: February 4, 2013

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>N</u>	(FN) FINANCIAL WARRANTY----- PB	(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>NA</u>	(SF) PROCESSING FACILITIES----- <u>Y</u>	(TS) TOPSOIL----- <u>Y</u>
(MP) GENL MINE PLAN COMPLIANCE- <u>N</u>	(FW) FISH & WILDLIFE----- <u>Y</u>	(RV) REVEGETATION---- <u>Y</u>
(SM) SIGNS AND MARKERS----- PB	(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>N</u>
(AT) ACID OR TOXIC MATERIALS----- <u>Y</u>	(OD) OFF-SITE DAMAGE----- <u>N</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 \$40,354.07. Therefore, the existing \$16,942 financial warranty is not adequate to reclaim the site in accordance with the approved reclamation plan. This is a failure to maintain the proper financial warranty amount to complete reclamation of the affected lands pursuant to C.R.S. 34-32.5-117(4)(b) of the Act.

CORRECTIVE ACTIONS: Pursuant to Construction Materials Rule 4.2.1(2), the Operator shall submit adequate financial warranty, totaling not less than \$40,354.07, within 60 days, due April 5, 2013.

CORRECTIVE ACTION DUE DATE: April 5, 2013

INSPECTION TOPIC: Signs & Markers

PROBLEM: The affected area boundary markers are missing or incorrectly placed. This is a problem for failure to maintain boundary markers around the affected area as required by Construction Materials Rule 3.1.12(2).

CORRECTIVE ACTIONS: Within 60 days, by April 5, 2013, the Operator shall conduct a survey and replace the boundary markers in the correct location(s). The operator shall provide photographic evidence of the newly placed markers and an updated map of the affected lands to the Division by the corrective action date. The updated map shall satisfy the applicable requirements of Rules 6.2.1(2) and 6.3.5.

CORRECTIVE ACTION DUE DATE: April 5, 2013

OBSERVATIONS

This inspection occurred as part of the Division's routine monitoring program of permitted operations. The Costilla Pit is approved for 9.7 acres affected land for the extraction and processing of construction materials. Affected lands will be reclaimed to support rangeland post-mining land use. The Division holds \$16,942 financial warranty. This report is accompanied by five photos, a screen shot from Google Earth, and an updated reclamation cost estimation totaling \$40,354.07.

Mine identification sign was posted at the access road from Hwy 159, approximately 2,800 feet from the permit area. Public access from Hwy 159 is controlled by locked gate. However, as shown in the photos, the permit area exhibited evidence of unauthorized access by unknown individuals. The Operator's representative observed evidence of recent removal and/or relocation of stockpiled materials by unknown individuals. Numerous tracks of vehicles, including off-road recreational vehicles, were observed throughout the permit area and in the surrounding lands. The recreational vehicle users appear to have constructed an informal race track including jump ramps and banked turns. Vehicle tracks indicate the permit area is being accessed by unknown individuals from the north and from the west, across Costilla Creek.

Records indicate the existing permit area, and possibly portions of the surrounding lands, were previously permitted as a Special 111 type permit. As noted above, the 9.7-acre permit area was not well delineated. Given the historic mining activity and more recent surface disturbance created by unknown individuals and the absence of a well defined permit boundary, the Division could not verify whether permitted activities have been appropriately confined to permitted lands. Unfortunately, the maps of the permit application and the maps submitted by the Operator with the annual reports are of little assistance in delineating a clear permit boundary and reconciling the existing disturbance with the conditions of the permit. As shown in the screen shot from Google Earth, there appears potentially 17 acres of affected lands. Therefore, the Division requires the Operator to conduct a survey of affected lands and delineate the permit boundary on the ground and on an updated map. The updated map(s) shall satisfy the applicable requirements of Rules 6.2.1(2) and 6.3.5. Photographic evidence of the newly placed boundary markers and the updated map(s) must be received by

the Division within 60-days, by April 5, 2013.

The main pit area extended approximately 825 feet south of the access road, a greater distance south from the access road than indicated on the maps of the permit application. The main pit area was estimated at 6 acres area, with existing excavations at 10-foot depth. Observations indicate approximately 2000 lineal feet of highwall will require slope reduction to 3H:1V during final reclamation. Reclamation materials were stockpiled above the crest of the highwall and available for downhill push during final reclamation. Numerous smaller excavations, with associated stockpiles of excavated materials, were observed at various locations extending north from the main pit area, terminating approximately 350 feet north of the access road.

Based upon observations made during the inspection and recorded in this report and enclosed photographs, the Division has reviewed the current cost of reclamation totaling \$40,354.07. Please find enclosed 14 pages of summary, drawing, and tasks sheet utilized by the Division to estimate the current cost of reclamation. As indicated on the tasks sheets, the Division's updated reclamation cost estimation is limited to 9.7 acres affected land. Therefore, the existing \$16,942 financial warranty appears insufficient to ensure the completion of reclamation. Pursuant to Rule 4.2.1(2), the Operator has 60 days, due April 5, 2013, to submit \$23,412.07 additional financial warranty to ensure a total financial warranty not less than \$40,354.07, or complete portions of the approved reclamation plan sufficient to render the existing financial warranty adequate.

Response to this inspection report should be addressed to Wally Erickson at the Division's office in Durango at 691 County Road 233, Suite A-2, Durango, CO 81301, phone (970) 247-5469.

Inspection Contact Address

Roy Burtraw
Southway Construction Company, Inc.
117 White Pine Dr
Alamosa, CO 81101

Attachment: Certificate of Service

Enclosure: 5 photos and a reclamation cost estimation totaling \$40,354.07.

ec w/enclosure: Russ Means, DRMS GJFO

Certificate of Service

I, Wallace H. Erickson, certify that on this 4th day of February, 2013, I placed copy of the foregoing inspection report generated from the January 23, 2013 inspection of the Costilla Pit, Permit No. M-1987-040, with enclosures, in the US Mail, postage affixed, and addressed to the following individual:

Roy Burtraw
Southway Construction Company, Inc.
117 White Pine Drive
Alamosa, CO 81101

Wallace H. Erickson
2/4/13



Google earth

feet
meters

1000

600

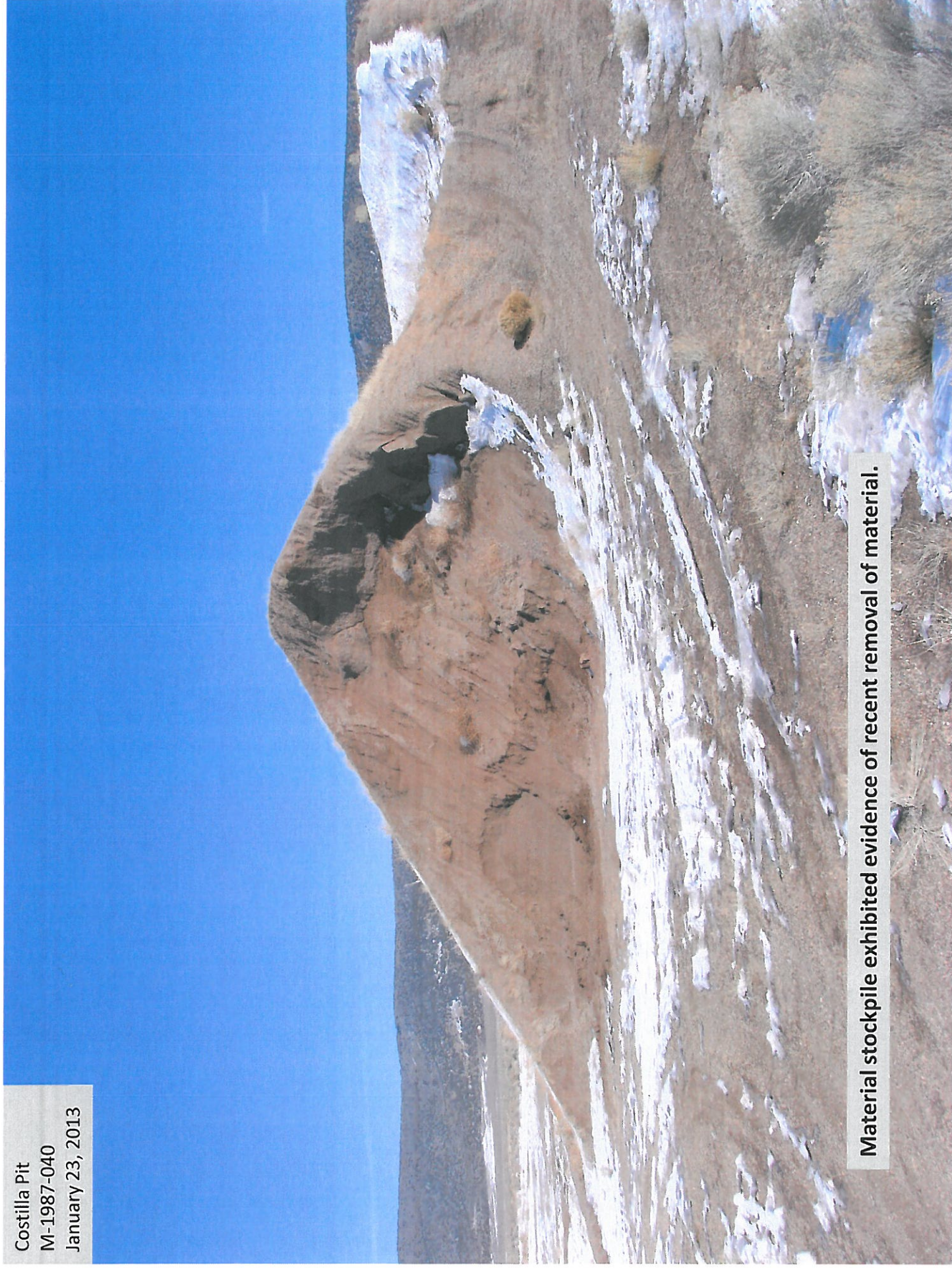
Imagery Date 6/10/12

Castilla Pit M-1987-040

DRMS inspection 1/23/13
WHE observations

Affected Land $\approx \frac{1130' \times 685'}{43560 \text{ sf/ac}} \approx 17.8 \text{ acres}$

Costilla Pit
M-1987-040
January 23, 2013



Material stockpile exhibited evidence of recent removal of material.

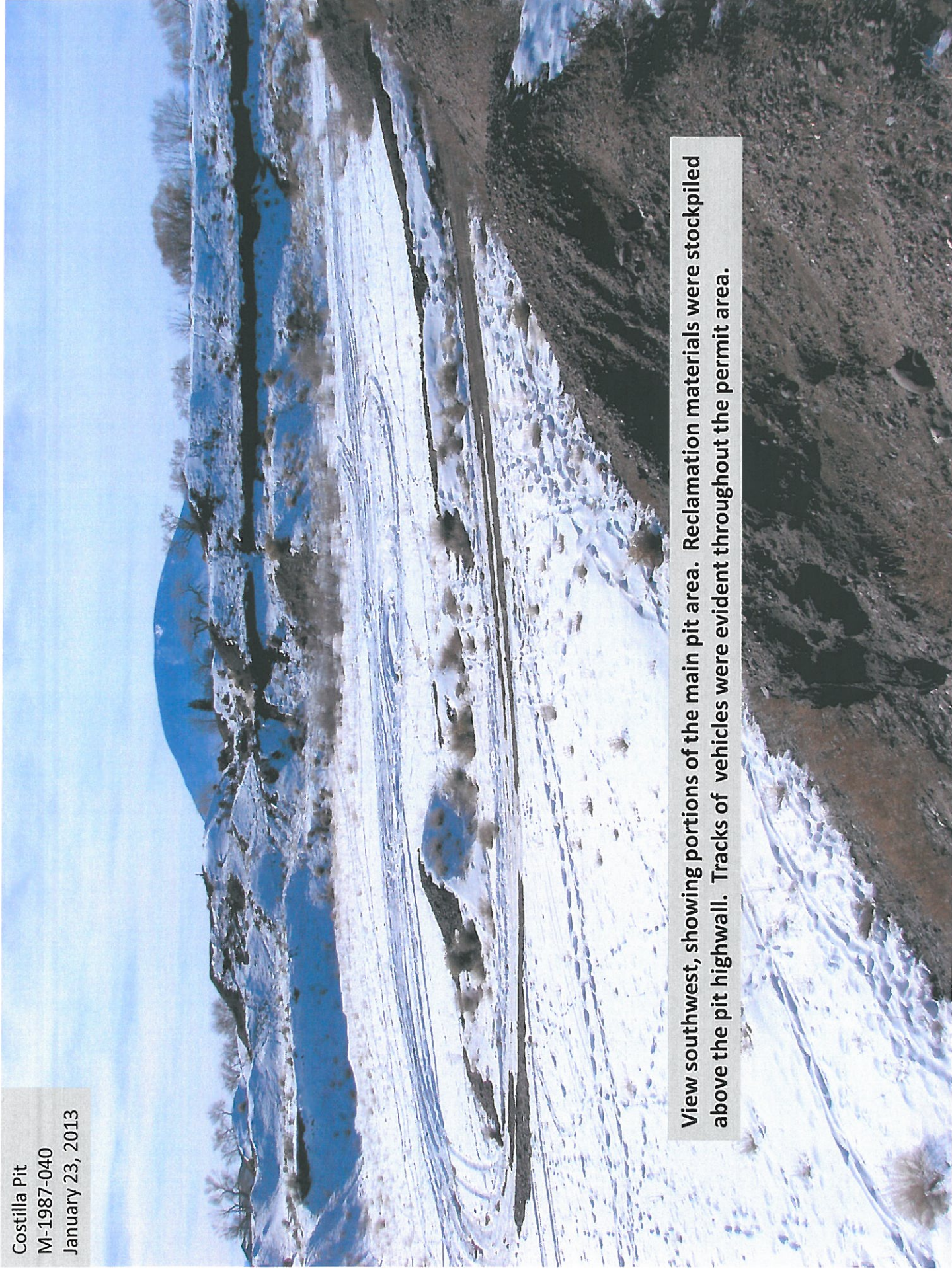
Costilla Pit
M-1987-040
January 23, 2013



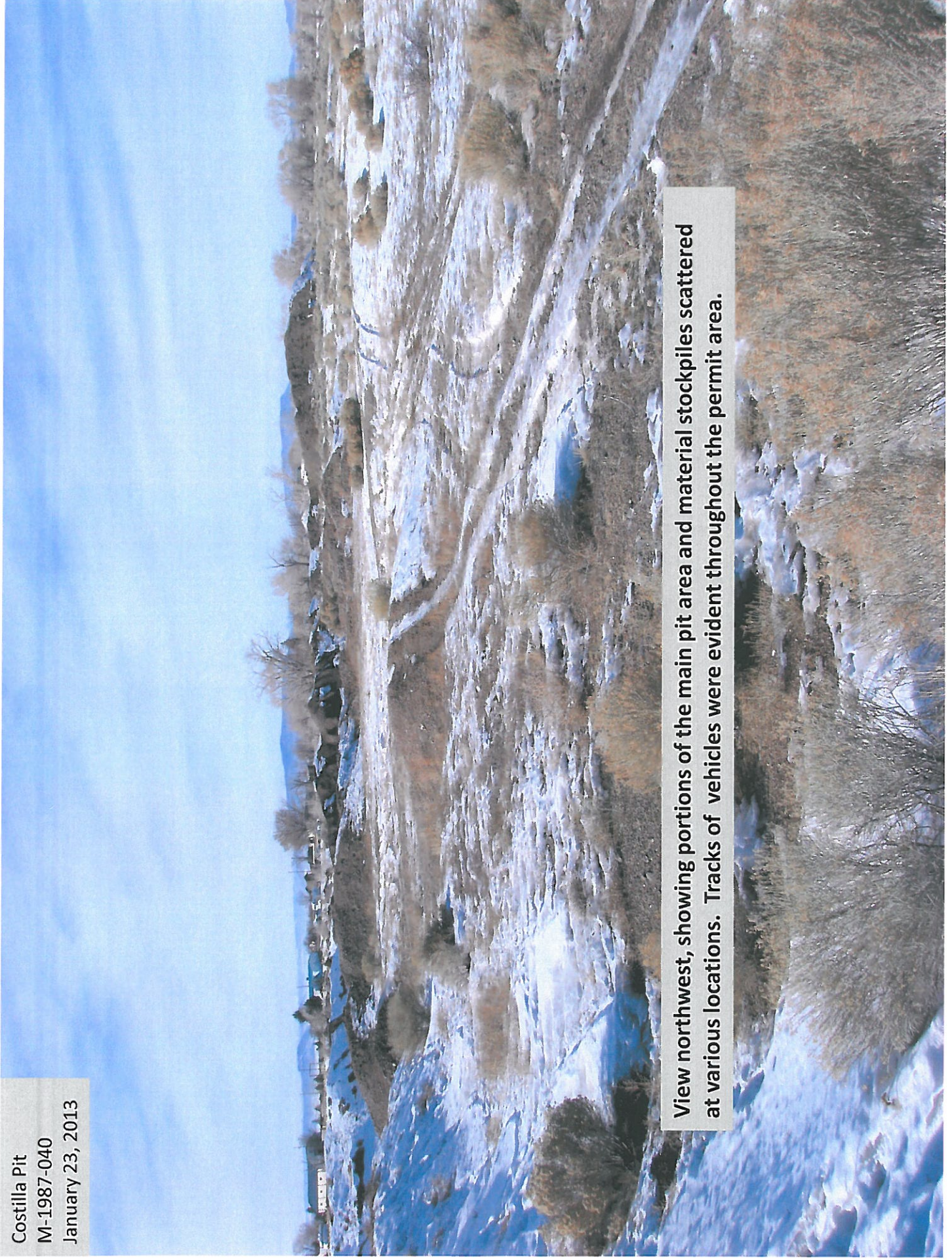
View east, showing portions of the main pit area. Reclamation materials were stockpiled above the pit highwall.

Costilla Pit
M-1987-040
January 23, 2013

View southwest, showing portions of the main pit area. Reclamation materials were stockpiled above the pit highwall. Tracks of vehicles were evident throughout the permit area.

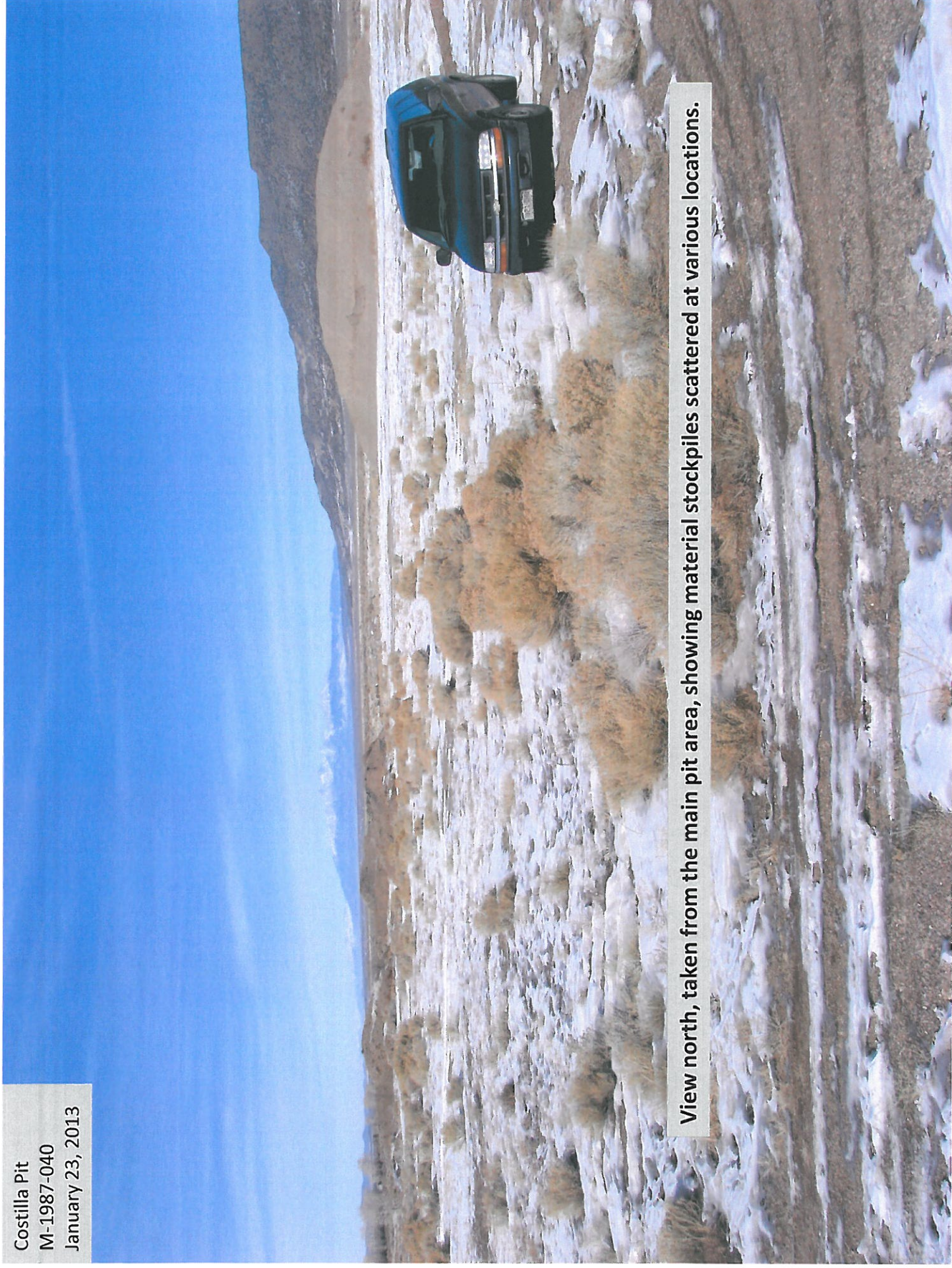


Costilla Pit
M-1987-040
January 23, 2013



View northwest, showing portions of the main pit area and material stockpiles scattered at various locations. Tracks of vehicles were evident throughout the permit area.

Costilla Pit
M-1987-040
January 23, 2013



View north, taken from the main pit area, showing material stockpiles scattered at various locations.

COST SUMMARY WORK

Task description: Summary of cost for reclamation tasks

Site: Costilla Pit Permit Action: Routine update Permit/Job#: M1987040

PROJECT IDENTIFICATION

Task #: 000 State: Colorado Abbreviation: None
Date: 2/4/2013 County: Costilla Filename: M040-000
User: WHE

Agency or organization name: DRMS

TASK LIST (DIRECT COSTS)

Task	Description	Form Used	Fleet Size	Task Hours	Cost
001	Highwall reduction from 0.5H:1V to 3H:1V	DOZER	1	2.77	\$567.97
002	General grade and rip, prepare for topsoil replacement	DOZER	1	23.02	\$4,781.94
003	Topsoil replacement for main pit area	DOZER	1	9.78	\$1,999.56
004	Load & carry topsoil replacement for 5.7 acres	LOADER	1	46.68	\$4,848.00
005	Revegetate 9.7 acres affected lands	REVEGE	1	16.00	\$12,800.00
006	Haul reclamation equipment to and from job site	MOBILIZE	1	4.40	\$4,296.65
<u>SUBTOTALS:</u>				102.65	\$ \$29,294.12

INDIRECT COSTS

OVERHEAD AND PROFIT:

Liability insurance:	2.02	Total =	\$591.74
Performance bond:	1.05	Total =	\$307.59
Job superintendent:	51.32	Total =	\$3,356.84
Profit:	10.00	Total =	\$2,929.41
		TOTAL O & P =	\$7,185.58
		CONTRACT AMOUNT (direct + O & P) =	\$36,479.70

LEGAL - ENGINEERING - PROJECT MANAGEMENT:

Financial warranty processing (legal/related costs):	500.00	Total =	500.00
Engineering work and/or contract/bid preparation:	4.25	Total =	\$1,550.39
Reclamation management and/or administration:	5.00		\$1,823.99

CONTINGENCY: 0.00 Total = \$0.00

TOTAL INDIRECT COST = \$11,059.95

TOTAL BOND AMOUNT (direct + indirect) = \$40,354.07

BULLDOZER WORKTask description: Highwall reduction from 0.5H:1V to 3H:1VSite: Costilla PitPermit Action: Routine updatePermit/Job#: M1987040**PROJECT IDENTIFICATION**Task #: 001State: ColoradoAbbreviation: NoneDate: 2/4/2013County: CostillaFilename: M040-001User: WHEAgency or organization name: DRMS**HOURLY EQUIPMENT COST**Basic Machine: Cat D8T - 8UHorsepower: 310Blade Type: UniversalAttachment: 3-shank ripperShift Basis: 1 per dayData Source: (CRG)**Cost Breakdown:**

		<u>Utilization %</u>
Ownership Cost/Hour:	\$63.00	NA
Operating Cost/Hour:	\$104.06	100
Ripper op. Cost/Hour:	\$0.65	10
Operator Cost/Hour:	\$37.41	NA

Total unit Cost/Hour: \$205.13Total Fleet Cost/Hour: \$205.13**MATERIAL QUANTITIES**Initial Volume: 2,341Swell factor: 1.000Loose volume: 2,341 LCYSource of estimated volume: See attached drawing, "Highwall Reduction..."Source of estimated swell factor: NA**HOURLY PRODUCTION**Average push distance: 50 feetUnadjusted hourly production: 1,627.0 LCY/hrMaterials consistency description: Compacted fill or embankment 0.9Average push gradient: -15 %Average site altitude: 7,720 feetMaterial weight: 2,900 lbs/LCYWeight description: Decomposed rock - 50% Rock, 50% Earth**Job Condition Correction Factor**

		<u>Source</u>
Operator Skill:	0.750	(AVG.)
Material consistency:	0.900	(CAT HB))
Dozing method:	1.100	(50% SL)

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: 0.5196

Adjusted unit production: 845.39 LCY/hr

Adjusted fleet production: **845.39** LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s)
 Unit cost: \$0.243/LCY

Total job time: **2.77** Hours
 Total job cost: **\$567.97**

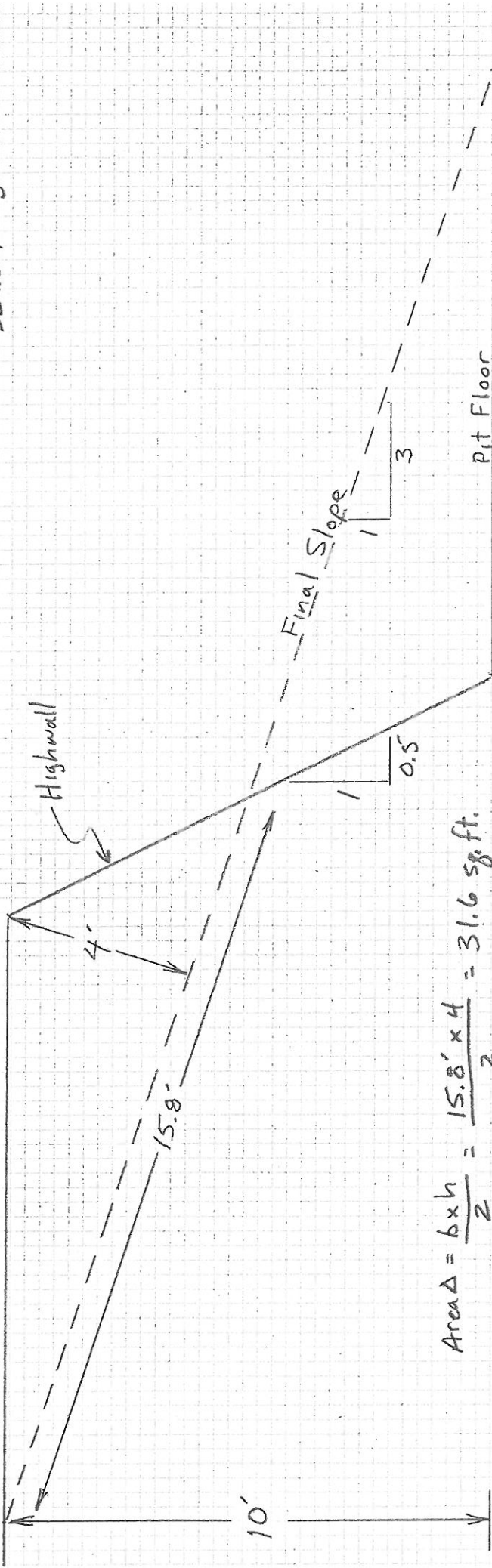
Highwall Reduction from 0.5H:1V to 3H:1V

Castilla Pit

M-1987-040

2/4/13 WHE

Scale 1" = 3'



$$\text{Area } \Delta = \frac{b \times h}{2} = \frac{15.8' \times 4}{2} = 31.6 \text{ sq. ft.}$$

Length of highwall $\approx 2000'$

Material Quantity = $2000' \times 31.6 \text{ sq. ft.}$

$$= 63,200 \text{ cu. ft.}$$

$$= 2,340.7 \text{ cy}$$

BULLDOZER WORKTask description: General grade and rip, prepare for topsoil replacementSite: Costilla PitPermit Action: Routine updatePermit/Job#: M1987040PROJECT IDENTIFICATIONTask #: 002State: ColoradoAbbreviation: NoneDate: 2/2/2013County: CostillaFilename: M040-002User: WHEAgency or organization name: DRMSHOURLY EQUIPMENT COSTBasic Machine: Cat D8T - 8UHorsepower: 310Blade Type: UniversalAttachment: 3-shank ripperShift Basis: 1 per dayData Source: (CRG)Cost Breakdown:

		<u>Utilization %</u>
Ownership Cost/Hour:	\$63.00	NA
Operating Cost/Hour:	\$104.06	100
Ripper op. Cost/Hour:	\$3.27	50
Operator Cost/Hour:	\$37.41	NA

Total unit Cost/Hour: \$207.75Total Fleet Cost/Hour: \$207.75MATERIAL QUANTITIESInitial Volume: 13,310Swell factor: 1.000Loose volume: 13,310 LCYSource of estimated volume: (8.25ac)(43560sf/ac)(1'D) / 27 = 13,310 cySource of estimated swell factor: Cat HandbookHOURLY PRODUCTIONAverage push distance: 50 feetUnadjusted hourly production: 1,627.0 LCY/hrMaterials consistency description: Compacted fill or embankment 0.9Average push gradient: 0 %Average site altitude: 7,720 feetMaterial weight: 2,900 lbs/LCYWeight description: Decomposed rock - 50% Rock, 50% EarthJob 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:	1.000	(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: 578.24 LCY/hr

Adjusted fleet production: **578.24** LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s)

Unit cost: \$0.359/LCY

Total job time: **23.02** Hours

Total job cost: **\$4,781.94**

BULLDOZER WORKTask description: Topsoil replacement for main pit areaSite: Costilla PitPermit Action: Routine updatePermit/Job#: M1987040PROJECT IDENTIFICATIONTask #: 003State: ColoradoAbbreviation: NoneDate: 2/4/2013County: CostillaFilename: M040-003User: WHEAgency or organization name: DRMSHOURLY EQUIPMENT COSTBasic Machine: Cat D8T - 8UHorsepower: 310Blade Type: UniversalAttachment: 3-shank ripperShift Basis: 1 per dayData Source: (CRG)Cost Breakdown:

		<u>Utilization %</u>
Ownership Cost/Hour:	\$63.00	NA
Operating Cost/Hour:	\$104.06	100
Ripper op. Cost/Hour:	\$0.00	0
Operator Cost/Hour:	\$37.41	NA

Total unit Cost/Hour: \$204.48Total Fleet Cost/Hour: \$204.48MATERIAL QUANTITIESInitial Volume: 4,840Swell factor: 1.000Loose volume: 4,840 LCYSource of estimated volume: (4ac)(43560sq/ac)(0.75'D) / 27 = 4840 cySource of estimated swell factor: Cat HandbookHOURLY PRODUCTIONAverage push distance: 120 feetUnadjusted hourly production: 817.7 LCY/hrMaterials consistency description: Consolidated stockpile 1.0Average push gradient: -10 %Average site altitude: 7,720 feetMaterial weight: 2,550 lbs/LCYWeight description: Earth - Dry packedJob Condition Correction Factor

		<u>Source</u>
Operator Skill:	0.750	(AVG.)
Material consistency:	1.000	(CAT HB)
Dozing method:	1.100	(50% SL)

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:	0.902	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.6053

Adjusted unit production: 494.95 LCY/hr
 Adjusted fleet production: **494.95 LCY/hr**

JOB TIME AND COST

Fleet size: 1 Dozer(s)
 Unit cost: \$0.413/LCY

Total job time: **9.78 Hours**
 Total job cost: **\$1,999.56**

WHEEL LOADER – LOAD AND CARRY WORKTask description: Load & carry topsoil replacement for 5.7 acresSite: Costilla PitPermit Action: Routine updatePermit/Job#: M1987040**PROJECT IDENTIFICATION**Task #: 004State: ColoradoAbbreviation: NoneDate: 2/4/2013County: CostillaFilename: M040-004User: WHEAgency or organization name: DRMS**HOURLY EQUIPMENT COST**Basic Machine: CAT 950HHorsepower: 197Attachment 1: ROPS CabShift Basis: 1 per dayData Source: (CRG)**Cost Breakdown:**

		Utilization %
Ownership Cost/Hour:	\$24.98	NA
Operating Cost/Hour:	\$43.03	100
Operator Cost/Hour:	\$35.82	NA
Total Unit Cost/Hour:	\$103.83	
Total Fleet Cost/Hour:	\$103.83	

MATERIAL QUANTITIESInitial volume: 6,897

CCY

Swell factor: 1.000Loose volume: 6,897

LCY

Source of estimated volume: (5.7ac)(43560sf/ac)(0.75'D) / 27 = 6897 cySource of estimated swell factor: NA**HOURLY PRODUCTION**Loader Cycle Time: Unadjusted Basic Cycle Time (load, dump, maneuver): 0.500 minutes

Cycle Time Factors		Factor (min.)	Source
Material:	Material up to 1/8" diameter 0.02	0.020	(Cat HB)
Stockpile:	Conveyor or dozer piled 10 ft. high or less 0.01	0.010	(Cat HB)
Truck Ownership:	No adjustment - factor not applicable 0.00	0.000	(Cat HB)
Operation:	Inconsistent operation 0.04	0.040	(Cat HB)
Dump Target:	Fragile target 0.05	0.050	(Cat HB)
Net Cycle Time Adjustment:		0.120	minutes
Adjusted Basic Cycle Time:		0.620	minutes

Rolling Resistance – Road ConditionsHaul: Rutted dirt, little maintenance, no water, 2" tire penetration 5.0Return: Rutted dirt, little maintenance, no water, 2" tire penetration 5.0**Haul and Return Time**

	Length (feet)	Grade Res. (%)	Rolling Res. (%)	Total Res. (%)	Travel Time (minutes)	Source
Haul Route:	500	0.00	5.00	5.00	0.4782	(Cat HB)
Return Route:	500	0.00	5.00	5.00	0.4238	(Cat HB)

Total Travel Time: 0.9021 minutes
Total Cycle Time: 1.5221 minutes

Load Bucket Capacity

Rated Capacity: 4.30 LCY (heaped)
Bucket Fill Factor: 1.050 Other - moist loam (100-110%) 1.050
Adjusted Capacity: 4.52 LCY

Job Condition Correction FactorsSite Altitude: 7720 feet

Altitude Adj:	<u>1.00</u>	Source
Job Efficiency:	<u>0.83</u>	(CAT HB)
Net Correction:	<u>0.83</u>	(1 shift/day)
		multiplier

Unadjusted Hourly Unit Production: 177.98 LCY/Hour
Adjusted Hourly Unit Production: 147.73 LCY/Hour
Adjusted Hourly Fleet Production: 147.73 LCY/Hour

JOB TIME AND COST

Fleet size: 1 Loader(s) Total job time: 46.69 Hours
Unit cost: \$0.703 /LCY Total job cost: \$4,848.00

REVEGETATION WORKTask description: Revegetate 9.7 acres affected landsSite: Costilla PitPermit Action: Routine updatePermit/Job#: M1987040PROJECT IDENTIFICATIONTask #: 005State: ColoradoAbbreviation: NoneDate: 2/2/2013County: CostillaFilename: M040-005User: 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
Blue Grama - Lovington	0.90	14.69	\$9.77
Indian Ricegrass - Paloma	1.25	4.05	\$10.89
Crested Wheatgrass - Nordan	1.00	4.59	\$2.33
Western Wheatgrass - Arriba	8.00	20.20	\$29.44
Winter Fat	0.50	1.27	\$16.35
Totals Seed Mix	11.65	44.80	\$68.78

Application

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

Total Seed Application Cost/Acre	\$88.20
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MULCHING and MISCELLANEOUS**Materials**

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
Straw, delivered {MEANS 31 25 14.16 1200}	2.00	TON	\$265.00	\$530.00
Total Mulch Materials Cost/Acre				\$530.00

Application

Description	Cost /Acre
Crimping, with tractor {DMG survey data}	\$65.89
Power mulcher (MEANS 32 91 13.16 0250)	\$86.68
Total Mulch Application Cost/Acre	\$152.57

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:	9.7	Cost /Acre:	\$1,055.67
Estimated Failure Rate:	25%	Cost /Acre*:	\$1,055.67
*Selected Replanting Work Items:	FERTILIZING,TILLING,SEEDING,MU LCHING		

Initial Job Cost:	\$10,240.00
Reseeding Job Cost:	\$2,560.00
Total Job Cost:	\$12,800.00
Job Hours:	16.00

EQUIPMENT MOBILIZATION/DEMOBILIZATIONTask description: Haul reclamation equipment to and from job siteSite: Costilla PitPermit Action: Routine updatePermit/Job#: M1987040PROJECT IDENTIFICATIONTask #: 006State: ColoradoAbbreviation: NoneDate: 2/4/2013County: CostillaFilename: M040-006User: WHEAgency or organization name: DRMSEQUIPMENT TRANSPORT RIG COSTShift 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 D8T - 8U	53.70	\$63.00	\$125.45	1	\$188.45	\$125.45	\$250.00
CAT 950H	20.13	\$24.98	\$88.67	1	\$113.65	\$88.67	\$250.00
Drill/Broadcast Seeder with Tractor	25.00	\$39.59	\$88.67	2	\$256.51	\$177.34	\$500.00

Subtotals: **\$558.61** **\$391.46** **\$1,000.00**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	\$32.79	1	\$32.79	\$32.79

Subtotals: **\$32.79** **\$32.79**

EQUIPMENT HAUL DISTANCE and Time

Nearest Major City or Town within project area region:	ANTONITO	
Total one-way travel distance:	30.00	miles
Average Travel Speed:	50.00	mph

Total Non-Roadable Mob/Demob Cost *	\$4,257.30
** two round trips with haul rig:	
Total Roadable Mob/Demob Cost **	\$39.35
** one round trip, no haul rig:	

Transportation Cycle Time:

	Non-Roadable Equipment	Roadable Equipment
Haul Time (Hours):	0.60	0.60
Return Time (Hours):	0.60	0.60
Loading Time (Hours):	0.50	NA
Unloading Time (Hours):	0.50	NA
Subtotals:	2.20	1.20

JOB TIME AND COST

Total job time:	4.40	Hours
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Total job cost:	\$4,296.65
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