




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: Pit 1	MINE/PROSPECTING ID#: M-1999-073	MINERAL: Sand	COUNTY: Costilla
INSPECTION TYPE: Monitoring	INSPECTOR(S): Wallace H. Erickson	INSP. DATE: January 18, 2013	INSP. TIME: 14:00
OPERATOR: Evan L. Melby, Inc.	OPERATOR REPRESENTATIVE: None	TYPE OF OPERATION: 110c - Construction Limited Impact	

REASON FOR INSPECTION: Normal I&E Program	BOND CALCULATION TYPE: Complete Bond	BOND AMOUNT: \$8,500.00
DATE OF COMPLAINT: NA	POST INSP. CONTACTS: None	JOINT INSP. AGENCY: None
WEATHER: Clear	INSPECTOR'S SIGNATURE: 	SIGNATURE DATE: January 28, 2013

One of the following inspection topics was 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>NA</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>Y</u>	(SF) PROCESSING FACILITIES----- <u>NA</u>	(TS) TOPSOIL----- <u>N</u>
(MP) GENL MINE PLAN COMPLIANCE- <u>Y</u>	(FW) FISH & WILDLIFE----- <u>Y</u>	(RV) REVEGETATION---- <u>N</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 \$15,504.59. Therefore, the existing \$8,500 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 Construction Materials Act.

CORRECTIVE ACTIONS: Pursuant to Construction Materials Rule 4.2.1(2), the Operator shall submit adequate financial warranty, totaling not less than \$15,504.59, within 60 days, due March 28, 2013.

CORRECTIVE ACTION DUE DATE: March 28, 2013

OBSERVATIONS

This inspection occurred as part of the Division's routine monitoring program for permitted operations. The permit is approved for 9.8 acres affected lands for the extraction of construction materials. Affected lands will be reclaimed to support pastureland post-mining land use. During final reclamation affected lands shall be graded to ensure no slopes are steeper than 3H:1V; topsoil shall be replaced at six to eight inch depth; and a revegetation seed mix composed of Crested wheatgrass, Yellow sweet clover, Milk vetch, and Salt bush shall be applied. The Division holds \$8,500 financial warranty. This report is accompanied by five photographs and an updated reclamation cost estimation totaling \$15,504.59.

Mining activities were dormant during the inspection. On-site equipment included one small bulldozer, two tandem axel end dump trucks and one belly dump trailer. A near vertical highwall, approximately ten feet high and 100 feet long, was located at the approximate center of affected lands. Excavation activity had created a smaller highwall, approximately six feet high at 1H:1V, along the west side of affected lands. Various stockpiles of mined materials were scattered within the permit boundary. Affected lands were estimated at five acres.

The Division last reviewed the cost of reclamation on December 26, 2006, totaling \$7,926. The cost estimation dated December 26, 2006, was based on approximately one acre affected lands. As noted above, the area affected by mining and reclamation activities has increased considerably and an updated reclamation cost estimation is warranted. The Division has reviewed the current cost of reclamation totaling \$15,504.59. Please find enclosed 12 pages of summary, drawing and task sheets utilized by the Division to estimate the current cost of reclamation. Therefore, the existing \$8,500 financial warranty appears insufficient to ensure the completion of reclamation. Pursuant to Rule 4.2.1(2), the Operator has 60 days, due March 28, 2013, to post \$7,004.59 additional financial warranty, to ensure a total financial warranty not less than \$15,504.59, or complete portions of the reclamation plan and thereby ensure the sufficiency of the existing financial warranty.

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

Evan L. Melby, Inc.
P.O. Box 4159
Ventura, CA 93007

Attachment: Certificate of Service
Enclosure: 5 photos and reclamation cost estimation totaling \$15,504.59
ec w/enclosure: Russ Means, DRMS GJFO

Certificate of Service

I, Wallace H. Erickson, hereby certify that on this 28th day of January, 2013, did place the forgoing inspection report generated from the January 18, 2013 inspection of the Evan L. Melby, Inc., Pit 1, Permit No. M-1999-073, with enclosures, in the US Mail, postage affixed and addressed to the following:

Evan Melby
Evan L. Melby, Inc.
P.O. Box 4159
Ventura, CA 93007

Wallace H. Erickson 1/28/13

Pit 1

M-1999-073

January 18, 2013

**THIS IS NOT A GARBAGE
DUMP - THIS IS A
GRAVEL PIT.**
**IF YOU ARE CAUGHT DUMPING
YOU WILL BE PROSECUTED &
YOUR WATER WILL BE CUT OFF!**
-MANAGEMENT

EVAN L. MELBY, INC

10000 E. 10000 S. RD.
VINTAGE, COLORADO 80651
(303) 542-1000
OPERATED UNDER A RECLAMATION PERMIT
ISSUED BY THE COLORADO DEPARTMENT OF LAND RECLAMATION ROAD
PROJECT 11-000000, CO 80651
(303) 542-1000

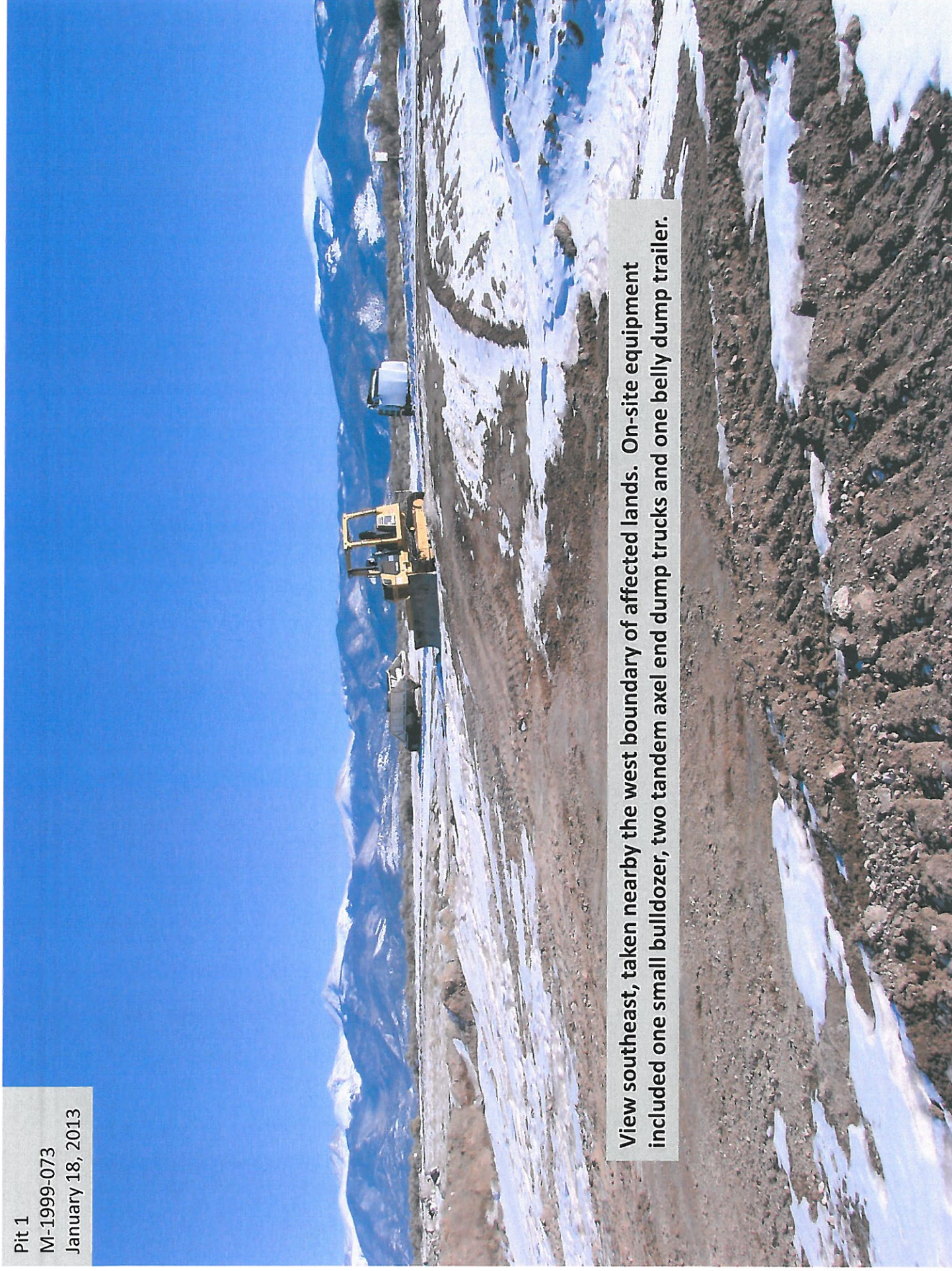
PERMIT M-1999-073

Mine identification signs were numerous, approximately 2 signs were posted at each of the access roads for the permit area. Evidence of illegal dumping at the permit area was limited to one kitchen appliance, a cook stove located in the far southwest corner of affected lands.

Pit 1

M-1999-073

January 18, 2013

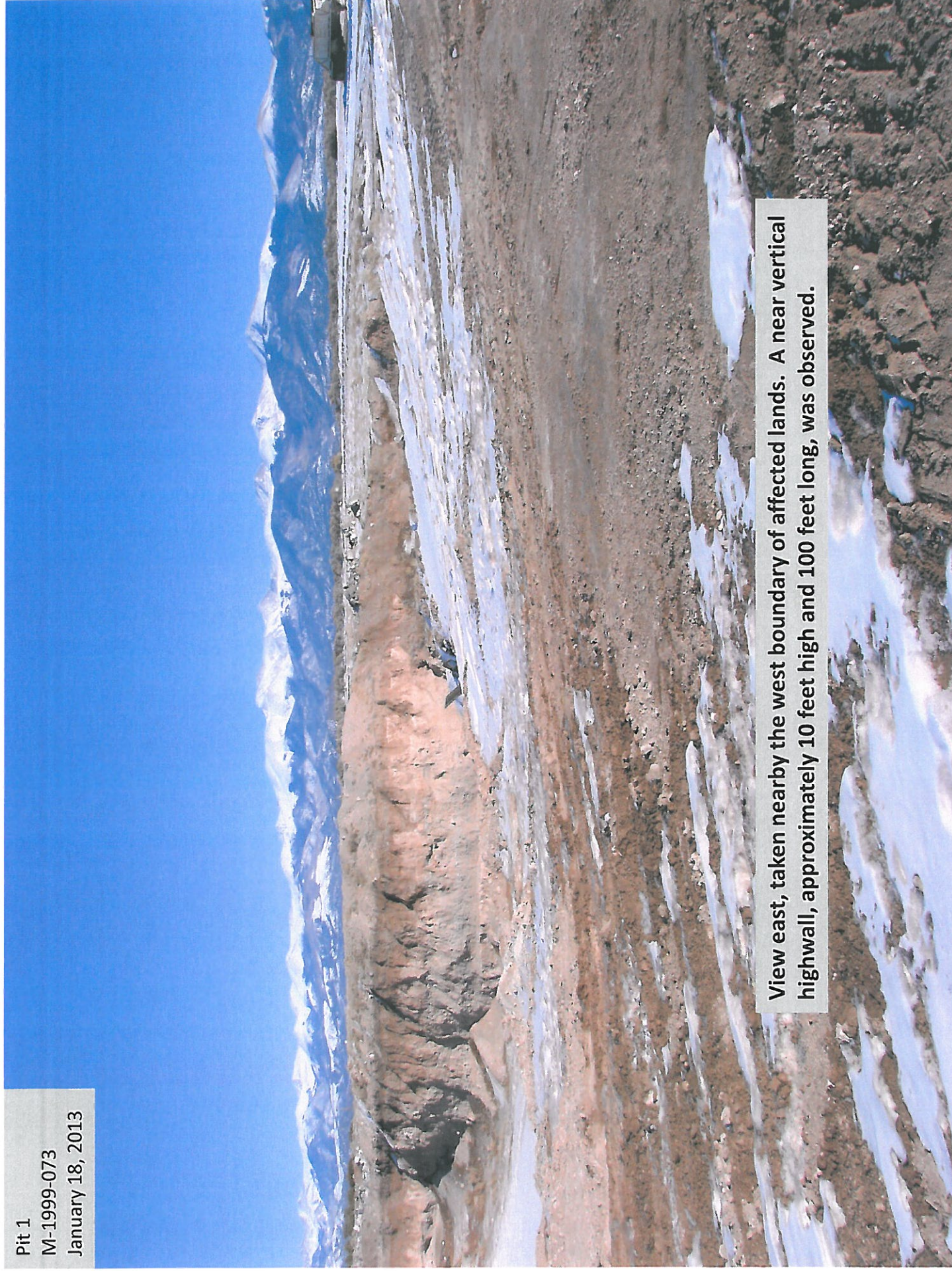


View southeast, taken nearby the west boundary of affected lands. On-site equipment included one small bulldozer, two tandem axel end dump trucks and one belly dump trailer.

Pit 1

M-1999-073

January 18, 2013

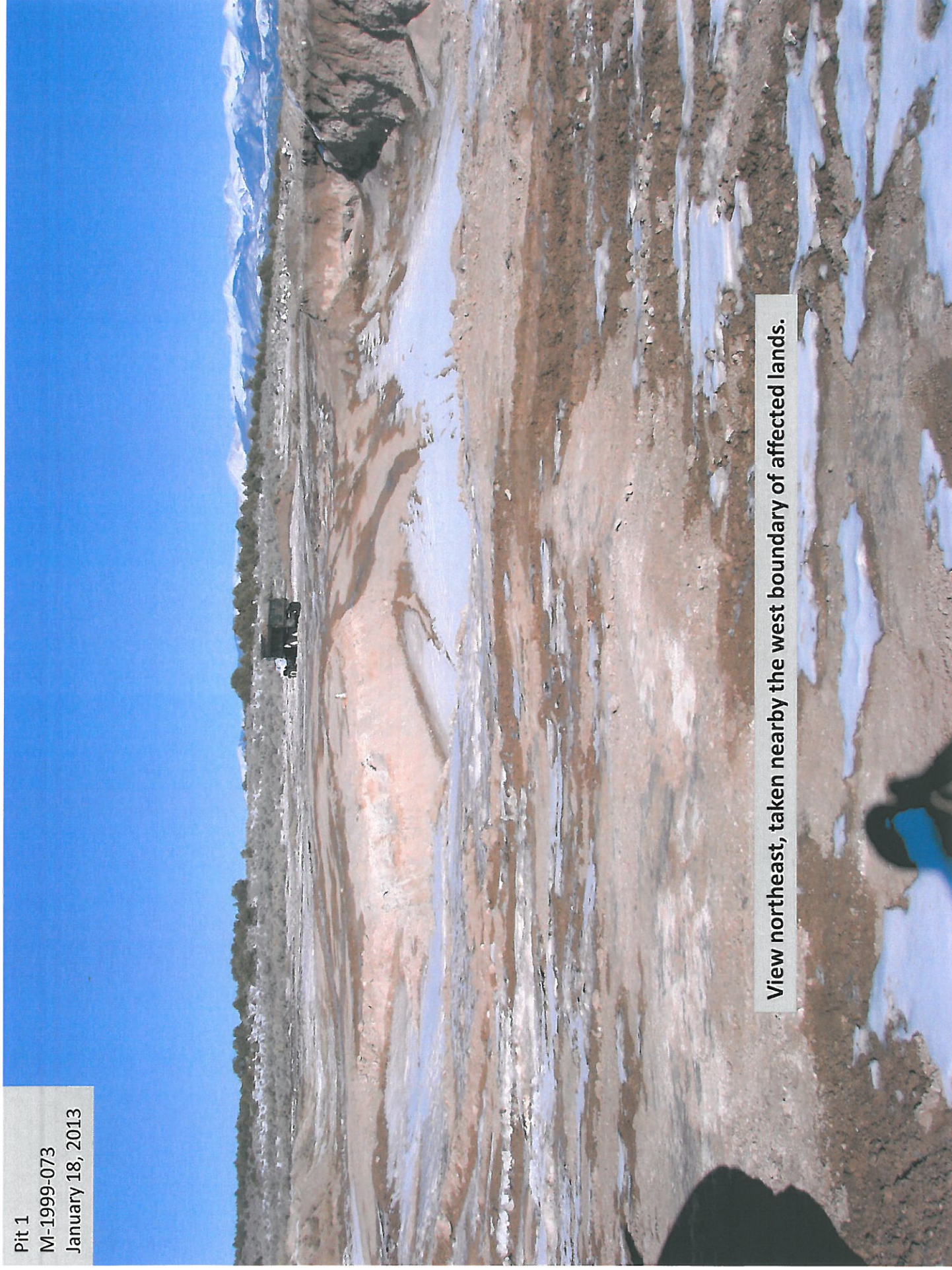


View east, taken nearby the west boundary of affected lands. A near vertical highwall, approximately 10 feet high and 100 feet long, was observed.

Pit 1

M-1999-073

January 18, 2013

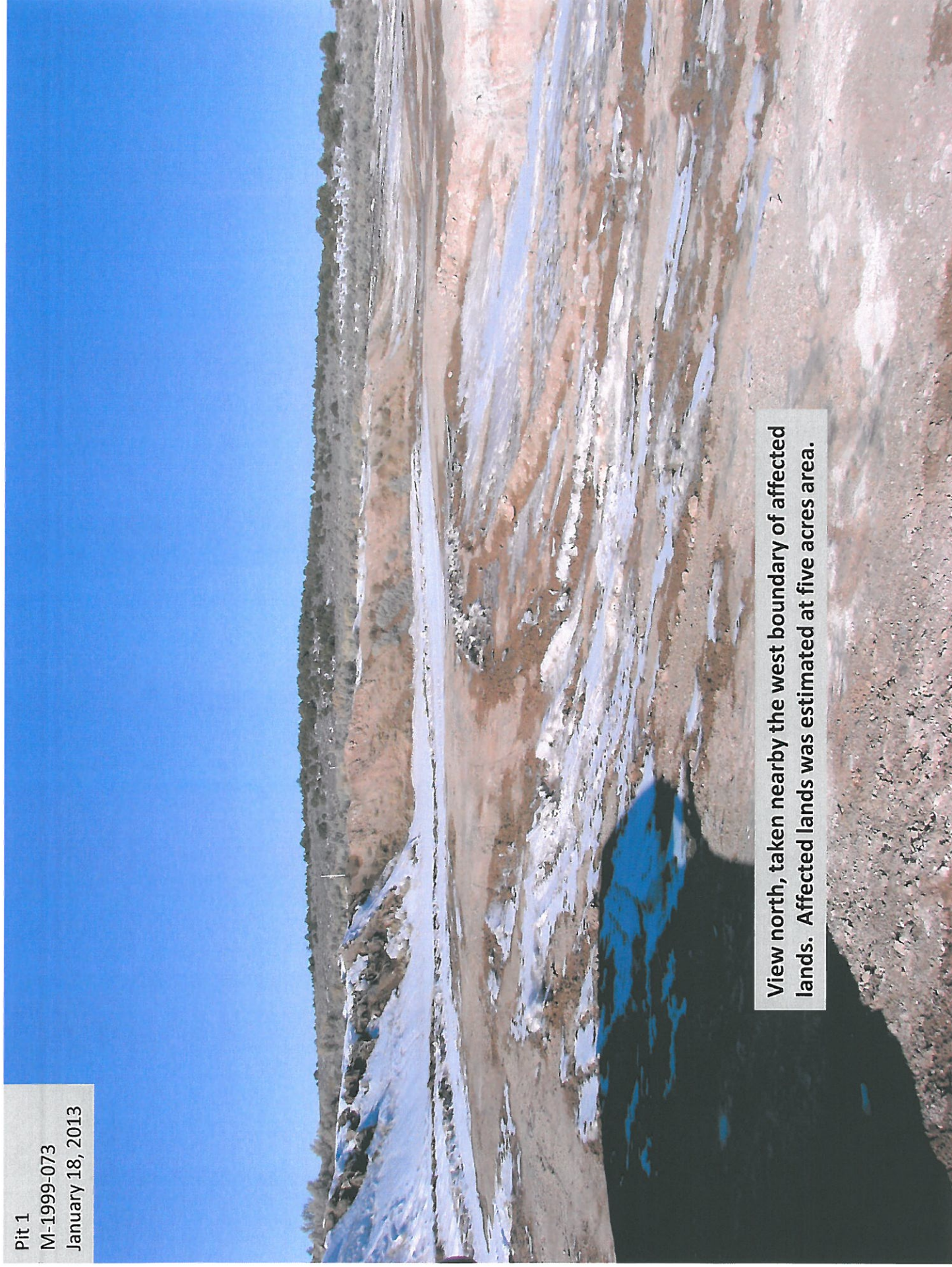


View northeast, taken nearby the west boundary of affected lands.

Pit 1

M-1999-073

January 18, 2013



View north, taken nearby the west boundary of affected lands. Affected lands was estimated at five acres area.

COST SUMMARY WORK

Task description: Summary of cost for reclamation tasks

Site: Pit 1 Permit Action: Routine update Permit/Job#: M1999073

PROJECT IDENTIFICATION

Task #: 000 State: Colorado Abbreviation: None
Date: 1/28/2013 County: Costilla Filename: M073-000
User: WHE

Agency or organization name: DRMS

TASK LIST (DIRECT COSTS)

Task	Description	Form Used	Fleet Size	Task Hours	Cost
001	Highwall reduction	DOZER	1	0.17	\$34.61
002	Grade & rip, prepare for topsoil replacement	DOZER	1	12.75	\$2,647.85
003	Topsoil replacement	DOZER	1	13.09	\$2,681.81
004	Revegetate 5 acres affected lands.	REVEGE	1	0.00	\$3,074.25
005	Haul reclamation equipment to and from job site	MOBILIZE	1	7.80	\$4,558.40
006	Remove misc debris, assume 5'Hx5'Wx5'L @ \$0.50/cf	NA	1	2.00	\$62.50
<u>SUBTOTALS:</u>				35.81	\$ \$13,059.42

INDIRECT COSTS

OVERHEAD AND PROFIT:

Liability insurance:	2.02	Total =	\$263.80
Performance bond:	1.05	Total =	\$137.12
Job superintendent:	0.00	Total =	\$0.00
Profit:	10.00	Total =	\$1,305.94
		TOTAL O & P =	\$1,706.86
		CONTRACT AMOUNT (direct + O & P) =	\$14,766.28

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		\$738.31
CONTINGENCY:	0.00	Total =	\$0.00

TOTAL INDIRECT COST = \$2,445.17

TOTAL BOND AMOUNT (direct + indirect) = \$15,504.59

BULLDOZER WORKTask description: Highwall reductionSite: Pit 1Permit Action: Routine updatePermit/Job#: M1999073**PROJECT IDENTIFICATION**Task #: 001State: ColoradoAbbreviation: NoneDate: 1/28/2013County: CostillaFilename: M073-001User: 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:	\$1.63	25
Operator Cost/Hour:	\$37.41	NA

Total unit Cost/Hour: \$206.11Total Fleet Cost/Hour: \$206.11**MATERIAL QUANTITIES**Initial Volume: 119Swell factor: 1.000Loose volume: 119 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: -5 %Average site altitude: 8,600 feetMaterial weight: 2,650 lbs/LCYWeight description: Decomposed rock - 25% Rock, 75% Earth**Job 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:	1.115	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.868	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.4338

Adjusted unit production: 705.79 LCY/hr
 Adjusted fleet production: **705.79** LCY/hr

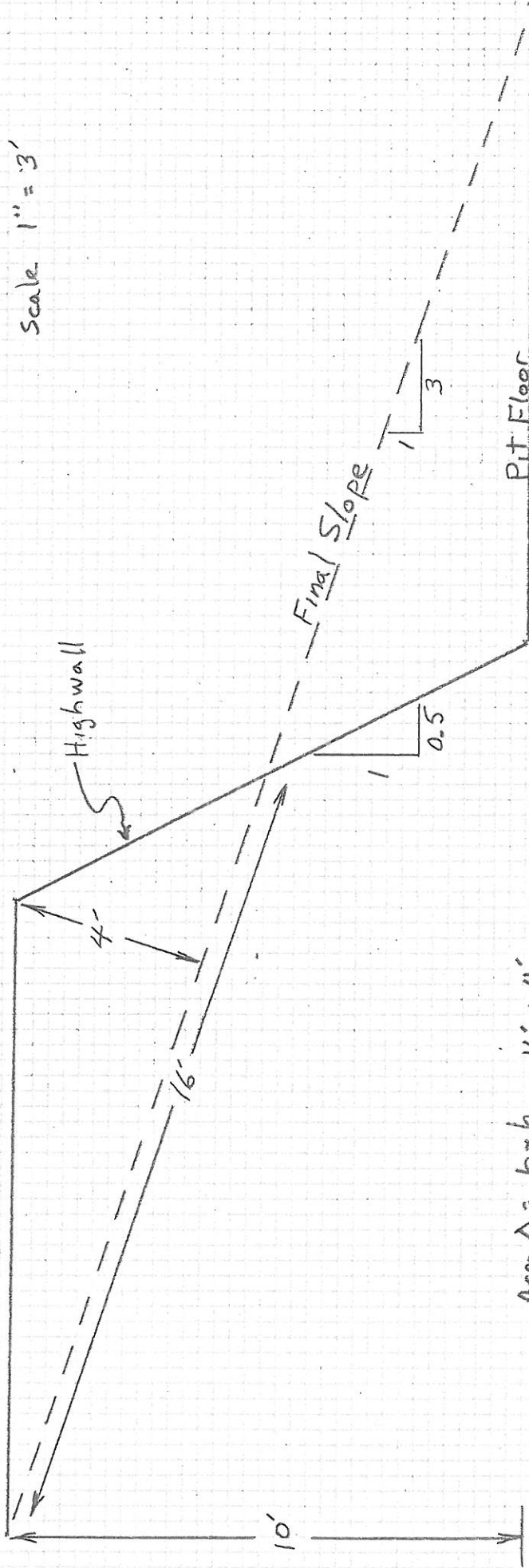
JOB TIME AND COST

Fleet size: 1 Dozer(s)
 Unit cost: \$0.292/LCY

Total job time: **0.17** Hours
 Total job cost: **\$34.61**

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

Evan L Melby Inc
 Pit 1 M-1999-073
 1/28/15 WHE
 Scale 1" = 3'



$$\text{Area } \Delta = \frac{b \times h}{2} = \frac{16' \times 4'}{2} = 32 \text{ sq. ft.}$$

Highwall Length $\approx 100'$

$$\begin{aligned} \text{Material Quantity} &= 32 \text{ sq. ft.} \times 100' \\ &= 3200 \text{ cu. ft.} \\ &= 118.5 \text{ cu. yd.} \end{aligned}$$

BULLDOZER WORKTask description: Grade & rip, prepare for topsoil replacementSite: Pit 1Permit Action: Routine updatePermit/Job#: M1999073PROJECT IDENTIFICATION

Task #: 002 State: Colorado Abbreviation: None
 Date: 1/28/2013 County: Costilla Filename: M073-002
 User: WHE

Agency or organization name: DRMSHOURLY EQUIPMENT COST

Basic Machine: Cat D8T - 8U
 Horsepower: 310
 Blade Type: Universal
 Attachment: 3-shank ripper
 Shift Basis: 1 per day
 Data 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: \$207.75
 Total Fleet Cost/Hour: \$207.75

MATERIAL QUANTITIES

Initial Volume: 8,067
 Swell factor: 1.000
 Loose volume: 8,067 LCY

Source of estimated volume: (5ac)(43560sf/ac)(1'D) / 27 = 8,066.67 cy
 Source of estimated swell factor: NA

HOURLY PRODUCTION

Average push distance: 50 feet
 Unadjusted hourly production: 1,627.0 LCY/hr

Materials consistency description: Compacted fill or embankment 0.9

Average push gradient: 0 %
 Average site altitude: 8,600 feet

Material weight: 2,650 lbs/LCYWeight description: Decomposed rock - 25% Rock, 75% 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:	0.868	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.3890

Adjusted unit production: 632.90 LCY/hr
Adjusted fleet production: **632.9** LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s)
Unit cost: \$0.328/LCY

Total job time: **12.75** Hours
Total job cost: **\$2,647.85**

BULLDOZER WORKTask description: Topsoil replacementSite: Pit 1Permit Action: Routine updatePermit/Job#: M1999073PROJECT IDENTIFICATIONTask #: 003State: ColoradoAbbreviation: NoneDate: 1/28/2013County: CostillaFilename: M073-003User: 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:	\$0.33	5
Operator Cost/Hour:	\$37.41	NA

Total unit Cost/Hour: \$204.81Total Fleet Cost/Hour: \$204.81MATERIAL QUANTITIESInitial Volume: 4,033Swell factor: 1.000Loose volume: 4,033 LCYSource of estimated volume: (5ac)(43560sf/ac)(0.5'D) / 27 = 4,033.33 cySource of estimated swell factor: NAHOURLY PRODUCTIONAverage push distance: 150 feetUnadjusted hourly production: 685.7 LCY/hrMaterials consistency description: Consolidated stockpile 1.0Average push gradient: 0 %Average site altitude: 8,600 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:	1.000	(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:	0.902	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.4492

Adjusted unit production: 308.02 LCY/hr
Adjusted fleet production: **308.02** LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s)
Unit cost: \$0.665/LCY

Total job time: **13.09** Hours
Total job cost: **\$2,681.81**

REVEGETATION WORKTask description: Revegetate 5 acres affected lands.Site: Pit 1Permit Action: Routine updatePermit/Job#: M1999073PROJECT IDENTIFICATIONTask #: 004State: ColoradoAbbreviation: NoneDate: 1/28/2013County: CostillaFilename: M073-004User: WHEAgency or organization name: DRMSFERTILIZING**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
Crested Wheatgrass - Ephraim	8.00	36.73	\$17.84
Yellow Sweet Clover - Madrid	1.00	5.97	\$2.55
Milk Vetch, Cicer - Lutana	7.00	23.30	\$35.56
Saltbush, Four Wing - Dewinged	4.00	6.43	\$76.64
Totals Seed Mix	20.00	72.43	\$132.59

Application

Description	Cost /Acre
Broadcast seeding [DMG]	\$261.28

Total Seed Application Cost/Acre	\$261.28
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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: 5 Cost / Acre: \$491.88
 Estimated Failure Rate: 25% Cost / Acre*: \$491.88
 *Selected Replanting Work Items: TILLING, SEEDING

Initial Job Cost: \$2,459.40
 Reseeding Job Cost: \$614.85
 Total Job Cost: \$3,074.25
 Job Hours: 8.00

EQUIPMENT MOBILIZATION/DEMobilIZATIONTask description: Haul reclamation equipment to and from job siteSite: Pit 1Permit Action: Routine updatePermit/Job#: M1999073PROJECT IDENTIFICATIONTask #: 005State: ColoradoAbbreviation: NoneDate: 1/28/2013County: CostillaFilename: M073-005User: 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
Drill/Broadcast Seeder with Tractor	25.00	\$39.59	\$88.67	2	\$256.51	\$177.34	\$500.00

Subtotals: **\$444.96** **\$302.79** **\$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:	<u>ALAMOSA</u>	
Total one-way travel distance:	<u>58.00</u>	miles
Average Travel Speed:	<u>40.00</u>	mph

Total Non-Roadable Mob/Demob Cost *	<u>\$4,558.40</u>
** two round trips with haul rig:	
Total Roadable Mob/Demob Cost **	<u>\$0.00</u>
** one round trip, no haul rig:	

Transportation Cycle Time:

	Non-Roadable Equipment	Roadable Equipment
Haul Time (Hours):	1.45	1.45
Return Time (Hours):	1.45	1.45
Loading Time (Hours):	0.50	NA
Unloading Time (Hours):	0.50	NA
Subtotals:	3.90	2.90

JOB TIME AND COST

Total job time:	<u>7.80</u>	Hours
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Total job cost:	<u>\$4,558.40</u>
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