



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: Malouff Pit	MINE/PROSPECTING ID#: M-1982-033	MINERAL: Sand & Gravel	COUNTY: Conejos
INSPECTION TYPE: Monitoring	INSPECTOR(S): Wallace H. Erickson	INSP. DATE: May 14, 2013	INSP. TIME: 11:35
OPERATOR: Absmeier Landscaping & Construction, LL	OPERATOR REPRESENTATIVE: Adrian Absmeier	TYPE OF OPERATION: 112c - Construction Regular Operation	
REASON FOR INSPECTION: Normal I&E Program	BOND CALCULATION TYPE: Complete Bond	BOND AMOUNT: \$4,035.00	
DATE OF COMPLAINT: NA	POST INSP. CONTACTS: None	JOINT INSP. AGENCY: None	
WEATHER: Cloudy	INSPECTOR'S SIGNATURE: <i>Wallace H. Erickson</i>	SIGNATURE DATE: August 29, 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-----	<u>PB</u>	(RD) ROADS-----	<u>Y</u>
(HB) HYDROLOGIC BALANCE-----	<u>Y</u>	(BG) BACKFILL & GRADING-----	<u>Y</u>	(EX) EXPLOSIVES-----	<u>N</u>
(PW) PROCESSING WASTE/TAILING--	<u>N</u>	(SF) PROCESSING FACILITIES-----	<u>Y</u>	(TS) TOPSOIL-----	<u>NA</u>
(MP) GENL MINE PLAN COMPLIANCE-	<u>Y</u>	(FW) FISH & WILDLIFE-----	<u>Y</u>	(RV) REVEGETATION---	<u>NA</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>N</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 \$15,371.10. Therefore, the existing \$4,035 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 \$15,371.10, within 60 days, due October 28, 2013.

CORRECTIVE ACTION DUE DATE: October 28, 2013

OBSERVATIONS

This inspection occurred as part of the Division's monitoring program of permitted operations. The Malouff Pit is approved for 90 acres affected land. Affected lands will be reclaimed to support general agriculture post-mining land use (lambling area and sheep pens). The Division holds \$4,035 financial warranty. This report is accompanied by six photos and an updated reclamation cost estimation totaling \$15,371.10.

As shown in the photos, mining and reclamation activities were active during the time of this inspection. The pit area is totally incised and exhibits internal drainage. Evidence of ground water being exposed by the excavation activity was not observed. Mining activities approach completion at the Phase 1 area and have advanced into the Phase 2 area. No portions of the Phase 3 area have been affected. The extent of affected lands was estimated at approximately 15 acres.

The affected land boundary delineates a 200 foot setback for excavation activity from pre-permit man-made structures. Man-made structures addressed by the 200 foot setback include the following:

- East County Road 12 South is located 200 feet from the north boundary of affected lands for the Phase 1 and 2 areas. Portions of the excavation activity associated with the original 110c permit approached East County Road 12 South to within 40 feet. The 200 foot setback was imposed under CN-01, approved July 28, 1997.
- South County Road 3 East is located 200 feet from the east boundary of affected lands for Phase 1 and 2 areas. Portions of the affected lands associated with the original 110c permit approached South County Road 3 East to within 100 feet. The 200 foot setback was imposed under CN-01.
- A fence line is located 200 feet from the west boundary of affected lands for Phase 3 area.
- A fence line is located 200 feet from the south boundary of affected lands for Phase 3 area.
- A concrete lined irrigation ditch divides the Phase 1-2 areas from the Phase 3 area, with a 200 foot setback on each side of the ditch designating a no-mining corridor totaling 400 feet in width.

Mining activities appeared compliant with the 200 foot setback, with the exception of the areas associated with the original 110c permit and pre-dating the 200 foot setback requirements of CN-01.

According to the approved reclamation plan, the pit floor will be graded flat and stabilized with a gravel surface, and the pit slopes will be reduced to 3H:1V. The approved reclamation plan does not address topsoil replacement and/or the establishment of a protective vegetative cover for any portion of the reclaimed areas. As shown in the photos, the reclaimed slopes exhibit evidence of erosion, partly due to the absence of a stabilizing vegetative cover. The bare slopes are vulnerable to invasion by undesirable weed species, including regulated noxious weeds.

Pursuant to Rules 3.1.5(3) and 3.1.6(3), the Operator is obligated to control erosion and siltation of the affected lands. Pursuant to Rule 3.1.10(8), stabilization of surfaces is required. Pursuant to Rule 6.4.5(2)(c), the reclamation plan must demonstrate how the operation will comply with the performance standards of Rule 3.1. However, the approved reclamation plan does not clarify how the 3H:1V slopes will be stabilized against erosion or protected against invasion by weeds. The approved reclamation plan appears to not address the specific requirements of Rules 3.1.5(3), 3.1.6(3), and 3.1.10(8). Therefore, the Division strongly encourages the Operator to revise the reclamation plan, through either the Technical Revision process described under Rule 1.9, or the Amendment process described under Rule 1.10, to address the long-term stabilization of the 3H:1V slopes. This request for a revision to the permit to address reclamation of the 3H:1V slopes is repeated from the inspection report generated from the site-inspection occurring March 31, 2009, signed June 13, 2009.

The permit status is approved as an intermittently active operation. Therefore, the operation may remain dormant for periods up to one year before submitting a Notice of Temporary Cessation, per Rule 1.13.5(6).

NOTICE TO INCREASE THE FINANCIAL WARRANTY

Based on observations made during the inspection and recorded in this report, and the requirements of the Act and Rules, the Division has reviewed the current cost of reclamation totaling \$15,371.10. Please find enclosed eight pages of summary, drawing, and task sheets utilized by the Division to estimate the current cost of reclamation. Therefore, the exiting \$4,035 financial warranty appears insufficient to ensure the completion of reclamation. Pursuant to Rule 4.2.1(2), the Operator has 60 days, due October 28, 2013, to submit \$11,336.10 additional financial warranty to ensure a total financial warranty not less than \$15,371.10.

Inspection Contact Address

Adrian Absmeier
Absmeier Landscaping & Construction, LLC
P.O. Box 1134
1424 21st Street
Alamosa, CO 81101

Enclosure: Six photos and a reclamation cost estimation totaling \$15,341.10.

ec w/enclosure: Russ Means, DRMS GJFO

CERTIFICATE OF SERVICE

I, Wallace H. Erickson, certify that on this 29th day of August, 2013, I placed a copy of the foregoing inspection report generated from the May 14, 2013 inspection of the Malouff Pit, Permit No. M-1982-033, with enclosures, in the United States Mail, postage affixed, and addressed to the following individual:

Adrian Absmeier
Absmeier Landscaping & Construction, LLC
P.O. Box 1134
1424 21st Street
Alamosa, CO 81101

 8/29/13

COST SUMMARY WORK

Task description: Summary of reclamation tasks and costs

Site: Malouff Pit

Permit Action: Routine bond
update

Permit/Job#: M1982033

PROJECT IDENTIFICATION

Task #: 001

State: Colorado

Abbreviation: None

Date: 8/29/2013

County: Conejos

Filename: M033-001

User: WHE

Agency or organization name: DRMS

TASK LIST (DIRECT COSTS)

Task	Description	Form Used	Fleet Size	Task Hours	Cost
002	Highwall reduction from 1.5H:1V to 3H:1V	DOZER	1	5.51	\$1,144.42
003	Grade pit floor flat, 1% slope to southeast	DOZER	1	42.15	\$8,755.62
004	Haul reclamation equipment to and from job site	MOBILIZE	1	4.00	\$1,216.99
005	Remove misc debris, assume 10'Lx10'Wx10'H @ \$0.22/cu.ft.	NA	1	4.00	\$220.00
<u>SUBTOTALS:</u>				55.66	\$11,337.03

INDIRECT COSTS

OVERHEAD AND PROFIT:

Liability insurance: 2.02%

Total = \$229.01

Performance bond: 1.05%

Total = \$119.04

Job superintendent: 27.83 hrs

Total = \$1,820.36

Profit: 10.00%

Total = \$1,133.70

TOTAL O & P = \$3,302.11

CONTRACT AMOUNT (direct + O & P) = \$14,639.14

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%

\$731.96

CONTINGENCY: 0.00

Total = \$0.00

TOTAL INDIRECT COST = \$4,034.07

TOTAL BOND AMOUNT (direct + indirect) = \$15,371.10

BULLDOZER WORKTask description: Highwall reduction from 1.5H:1V to 3H:1VSite: Malouff PitPermit Action: Routine bond updatePermit/Job#: M1982033PROJECT IDENTIFICATIONTask #: 002State: ColoradoAbbreviation: NoneDate: 8/29/2013County: ConejosFilename: M033-002User: WHEAgency or organization name: DRMSHOURLY EQUIPMENT COSTBasic Machine: Cat D8T - 8SUHorsepower: 310Blade Type: Semi-UniversalAttachment: 3-shank ripperShift Basis: 1 per dayData Source: (CRG)Cost Breakdown:

		<u>Utilization %</u>
Ownership Cost/Hour:	\$63.00	NA
Operating Cost/Hour:	\$104.03	100
Ripper op. Cost/Hour:	\$3.27	50
Operator Cost/Hour:	\$37.41	NA

Total unit Cost/Hour: \$207.72Total Fleet Cost/Hour: \$207.72MATERIAL QUANTITIESInitial Volume: 4,389Swell factor: 1.000Loose volume: 4,389 LCYSource of estimated volume: See attached drawing, "Highwall Reduction"Source of estimated swell factor: NAHOURLY PRODUCTIONAverage push distance: 50 feetUnadjusted hourly production: 1,400.0 LCY/hrMaterials consistency description: Compacted fill or embankment 0.9Average push gradient: -30 %Average site altitude: 7,800 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:	1.601	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.793	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.5690

Adjusted unit production: 796.60 LCY/hr

Adjusted fleet production: 796.6 LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s)
 Unit cost: \$0.261/LCY

Total job time: 5.51 Hours
 Total job cost: \$1,144.42

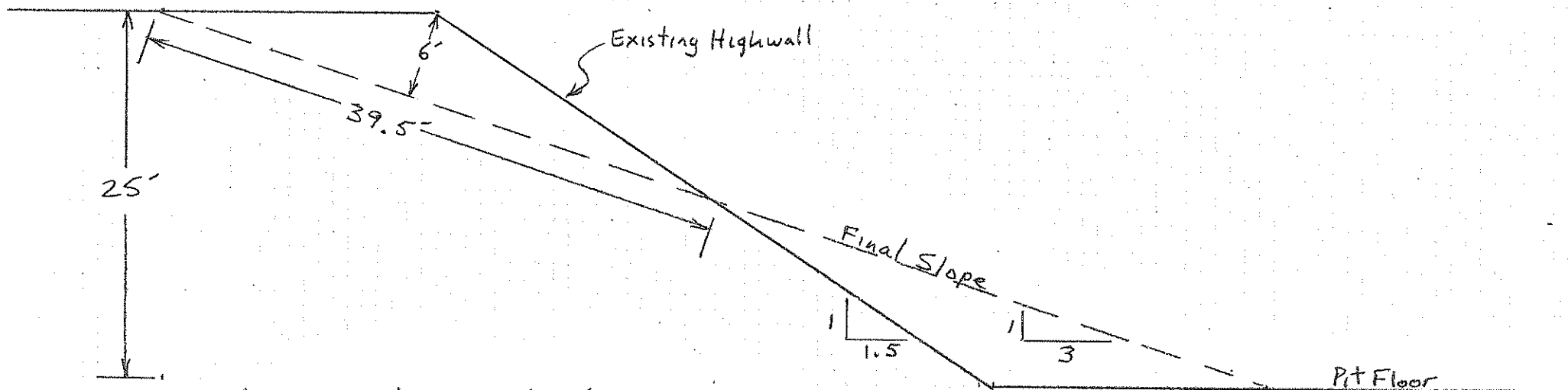
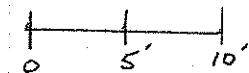
Highwall Reduction from 1.5H:1V to 3H:1V

Malouff P,†

M-1982-033

8/29/13 WHE

Scale 1" = 10'



$$\text{Area } \Delta = \frac{b \times h}{2} = \frac{39.5' \times 6'}{2} = 118.5 \text{ sq ft}$$

Length of highwall to be reduced $\approx 1,000'$

$$\begin{aligned} \text{Material Quantity} &= 118.5 \text{ sq ft} \times 1000' = 118,500 \text{ cu ft} \\ &= 4388.9 \text{ cy} \end{aligned}$$

BULLDOZER WORKTask description: Grade pit floor flat, 1% slope to southeastSite: Malouff PitPermit Action: Routine bond updatePermit/Job#: M1982033PROJECT IDENTIFICATIONTask #: 003State: ColoradoAbbreviation: NoneDate: 8/29/2013County: ConejosFilename: M033-003User: WHEAgency or organization name: DRMSHOURLY EQUIPMENT COSTBasic Machine: Cat D8T - 8SUHorsepower: 310Blade Type: Semi-UniversalAttachment: 3-shank ripperShift Basis: 1 per dayData Source: (CRG)Cost Breakdown:

		<u>Utilization %</u>
Ownership Cost/Hour:	\$63.00	NA
Operating Cost/Hour:	\$104.03	100
Ripper op. Cost/Hour:	\$3.27	50
Operator Cost/Hour:	\$37.41	NA

Total unit Cost/Hour: \$207.72Total Fleet Cost/Hour: \$207.72MATERIAL QUANTITIESInitial Volume: 20,973Swell factor: 1.000Loose volume: 20,973 LCYSource of estimated volume: (13ac)(43560sf/ac)(1'D) / 27 = 20,973 cySource of estimated swell factor: NAHOURLY PRODUCTIONAverage push distance: 50 feetUnadjusted hourly production: 1,400.0 LCY/hrMaterials consistency description: Compacted fill or embankment 0.9Average push gradient: 0 %Average site altitude: 7,800 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: 497.56 LCY/hr
Adjusted fleet production: 497.56 LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s)
Unit cost: \$0.417/LCY

Total job time: 42.15 Hours
Total job cost: \$8,755.62

EQUIPMENT MOBILIZATION/DEMOBILIZATIONTask description: Haul reclamation equipment to and from job siteSite: Malouff PitPermit Action: Routine bond updatePermit/Job#: M1982033**PROJECT IDENTIFICATION**Task #: 004State: ColoradoAbbreviation: NoneDate: 8/29/2013County: ConejosFilename: M033-004User: 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 D8T - 8SU	53.08	\$63.00	\$125.45	1	\$188.45	\$125.45	\$250.00
Subtotals:					\$188.45	\$125.45	\$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, 15K GVW	\$26.19	1	\$26.19	\$26.19
Subtotals:			\$26.19	\$26.19

EQUIPMENT HAUL DISTANCE and Time

Nearest Major City or Town within project area region:	ALAMOSA	
Total one-way travel distance:	15.00	miles
Average Travel Speed:	30.00	mph

Total Non-Roadable Mob/Demob Cost *	\$1,190.80
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 ** two round trips with haul rig:

Total Roadable Mob/Demob Cost **	\$26.19
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 ** one round trip, no haul rig:

Transportation Cycle Time:

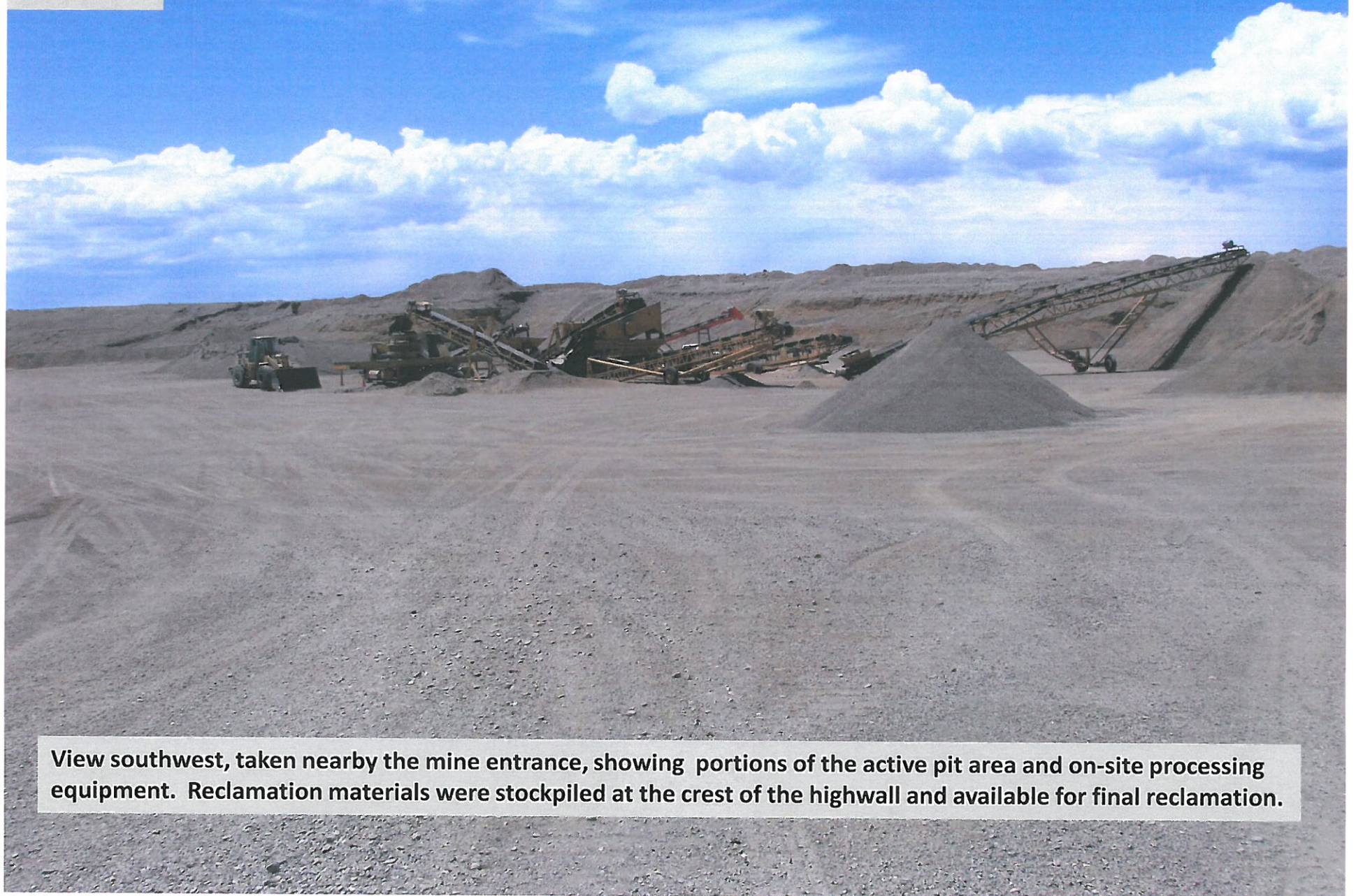
	Non-Roadable Equipment	Roadable Equipment
Haul Time (Hours):	0.50	0.50
Return Time (Hours):	0.50	0.50
Loading Time (Hours):	0.50	NA
Unloading Time (Hours):	0.50	NA
Subtotals:	2.00	1.00

JOB TIME AND COST

Total job time:	4.00	Hours
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Total job cost:	\$1,216.99
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Malouff Pit
M-1982-033
May 14, 2013
Photo 1



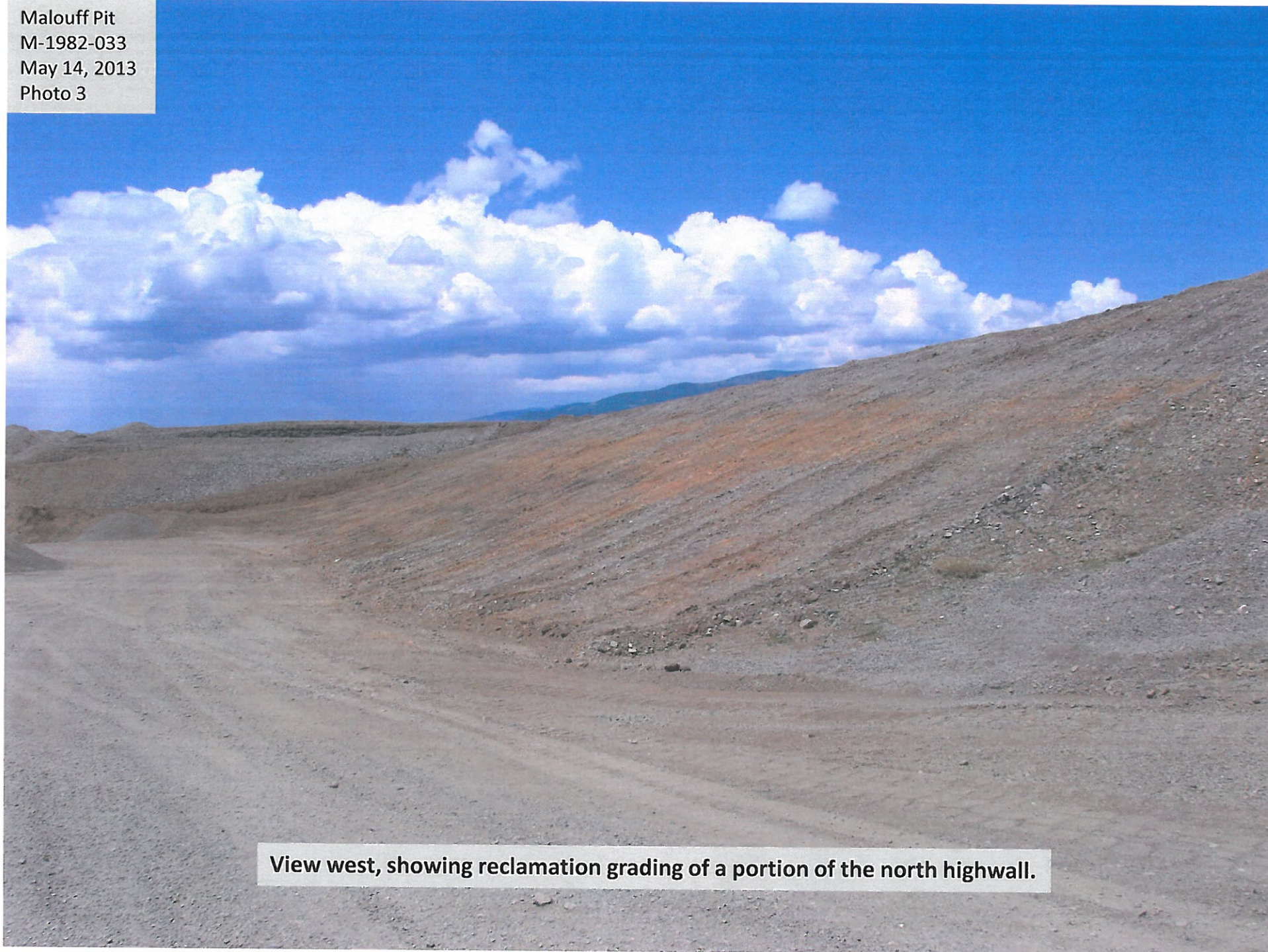
View southwest, taken nearby the mine entrance, showing portions of the active pit area and on-site processing equipment. Reclamation materials were stockpiled at the crest of the highwall and available for final reclamation.

Malouff Pit
M-1982-033
May 14, 2013
Photo 2



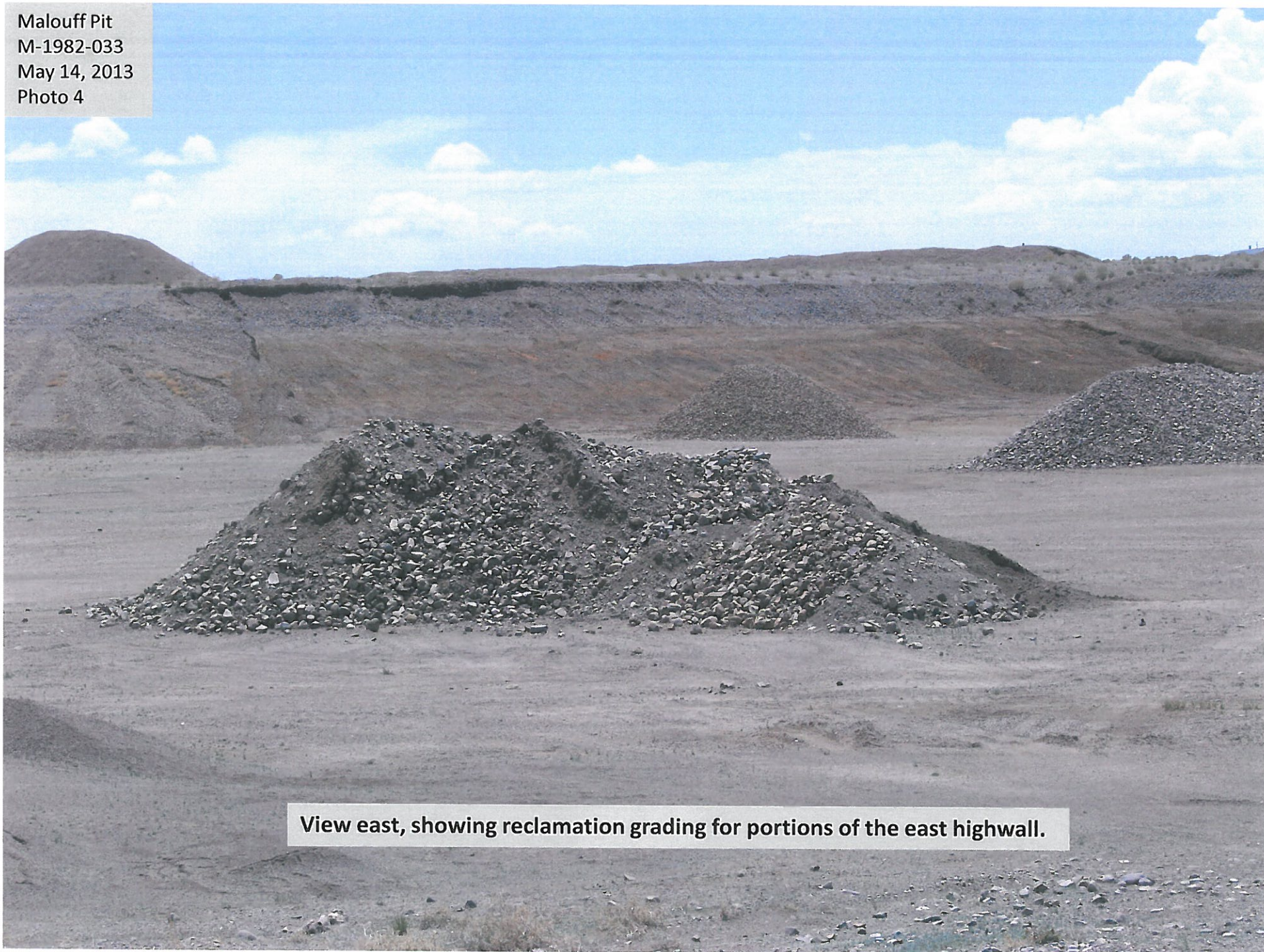
View south, showing portions of the active highwall, advancing towards the west, and reclaimed portions of the highwall in the background.

Malouff Pit
M-1982-033
May 14, 2013
Photo 3



View west, showing reclamation grading of a portion of the north highwall.

Malouff Pit
M-1982-033
May 14, 2013
Photo 4



View east, showing reclamation grading for portions of the east highwall.

Malouff Pit
M-1982-033
May 14, 2013
Photo 5



View south, showing reclamation grading of portions of the south highwall, and erosion of final slopes.

Malouff Pit
M-1982-033
May 14, 2013
Photo 6



View south, showing portions of active reclamation grading and erosion of slopes.