



**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.

<b>MINE NAME:</b> Bridalveil Pit	<b>MINE/PROSPECTING ID#:</b> M-2001-054	<b>MINERAL:</b> Gravel	<b>COUNTY:</b> Ouray
<b>INSPECTION TYPE:</b> Multi Person Inspection	<b>INSPECTOR(S):</b> Wallace H. Erickson & G. Russell Means	<b>INSP. DATE:</b> August 29, 2012	<b>INSP. TIME:</b> 10:30
<b>OPERATOR:</b> Bridal Veil Construction	<b>OPERATOR REPRESENTATIVE:</b> Emery Lynn Olin	<b>TYPE OF OPERATION:</b> 110c - Construction Limited Impact	
<b>REASON FOR INSPECTION:</b> Normal I&E Program	<b>BOND CALCULATION TYPE:</b> Complete Bond	<b>BOND AMOUNT:</b> \$4,942.00	
<b>DATE OF COMPLAINT:</b> NA	<b>POST INSP. CONTACTS:</b> None	<b>JOINT INSP. AGENCY:</b> None	
<b>WEATHER:</b> Cloudy	<b>INSPECTOR'S SIGNATURE:</b> <i>Wallace H. Erickson</i>	<b>SIGNATURE DATE:</b> September 12, 2012	

**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----- <b>PB</b>	(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>NA</u>
(MP) GENL MINE PLAN COMPLIANCE- <b>PB</b>	(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>NA</u>	(SC) EROSION/SEDIMENTATION--- <b>PB</b>	(RS) RECL PLAN/COMP-- <u>Y</u>
(AT) ACID OR TOXIC MATERIALS----- <u>NA</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/POSSIBLE VIOLATION:** Problem: The Division has reviewed the current cost of reclamation totaling \$15,015.46. Therefore, the existing \$4,942 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).

**CORRECTIVE ACTIONS:** Pursuant to Construction Materials Rule 4.2.1(2), the Operator shall submit adequate financial warranty, totaling not less than \$15,015.46, within 60 days, due November 12, 2012.

**CORRECTIVE ACTION DUE DATE:** November 12, 2012

**INSPECTION TOPIC:** Sediment Control

**PROBLEM/POSSIBLE VIOLATION:** Problem: The Operator is not maintaining the stormwater control channel or its associated sediment basin in accordance with the approved plan. The approved plan was designed and certified by a licensed professional engineer. Evidence of excessive erosion and sedimentation were observed. Pursuant to C.R.S. 34-32.5-116(4)(i) and (j), the Operator is required to stabilize affected lands so as to effectively control erosion and protect outside areas from damage.

**CORRECTIVE ACTIONS:** Within 30 days, due October 12, 2012, the Operator shall repair the stormwater control channel and basin to fully comply with the approved plan, control erosion, and protect outside areas from damage. By October 12, 2012, the Operator shall provide photo documentation to the Division verifying the completion of repairs for all portions of the stormwater control structures.

**CORRECTIVE ACTION DUE DATE:** October 12, 2012

**INSPECTION TOPIC:** Gen. Compliance With Mine Plan

**PROBLEM/POSSIBLE VIOLATION:** Problem: The site is utilizing off-site fill without prior approval by the Division, per Construction Materials Rule 3.1.5(9).

**CORRECTIVE ACTIONS:** Within 30 days, due October 12, 2012, the Operator shall provide a notarized affidavit, stating that the fill is, in fact, inert and addressing all requirements of Rule 3.1.5(9), which describes the intended use of inert/off-site fill by the corrective action date.

**CORRECTIVE ACTION DUE DATE:** October 12, 2012

**OBSERVATIONS**

This inspection occurred as part of the Division's review process of TR-02. This report is accompanied by an updated reclamation cost estimation totaling \$15,015.46, and eight photos.

The Bridalveil Pit is approved to extract construction materials from the alluvial fan of Bridalveil Creek. The 3.64-acre permit area is located entirely within the boundaries of the active alluvial fan. Bridalveil Creek exhibits steep gradient with high energy flow and high sediment loads. Permit documents describe Bridalveil Creek as being an *extremely unstable drainage*; the channel can migrate *hundreds of feet laterally during a typical intense storm event*. Nearby man-made structures, also located on the alluvial fan and within 200 feet of the permit boundary, include 5 residential dwellings, a motel, gas station, RV campground, and Hwy 550. The combination of steep slopes, high-energy run-on and run-off, numerous structures nearby, and Hwy 550 immediately down slope of affected lands result in a high potential for off-site damage. The potential for off-site damage is somewhat minimized by the stormwater control structures, which include the stormwater channel and its sediment basin, designed and certified to address the 10 year, 24 hour, storm event. As shown in photos 4 through 8, the stormwater control structures have not been maintained in accordance with the approved designs. As noted above, the Division has identified the issue as a problem and has imposed a 30-

day corrective action deadline whereby the stormwater structures must be repaired and maintained in accordance with the approved designs. The approved designs provide critical dimensions, minimum capacities, and specify riprap lining for the inlet and outlet of the sediment basin. The approved riprap lining is composed of 12-inch diameter rock, a minimum of 2-feet deep, 12-feet wide and extending 20 feet upstream and 20 feet downstream of the inlet and outlet of the basin.

As shown in photos 2 and 3, earthen materials appear to have been imported from off-site areas and are being utilized as backfill. Permit documents do not indicate importation of materials was intended or that imported materials would be utilized as structural fill. Permit documents do not include the notice from the Operator required under Rule 3.1.5(9), addressing the imported materials. As noted above, the Division has identified the issue as a problem and has imposed a 30-day corrective action deadline whereby the issue must be resolved.

Based on observation made during the inspection and recorded in this report the Division has reviewed the current cost of reclamation totaling \$15,015.46. Please find enclosed 13 pages of summary and work sheets utilized by the Division to estimate the cost of reclamation. Therefore, the existing \$4,942 financial warranty appears insufficient to ensure the completion of reclamation. As noted above, the Division has identified the issue as a problem and has imposed a 60-day corrective action deadline whereby the issue must be resolved.

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

**Inspection Contact Address**

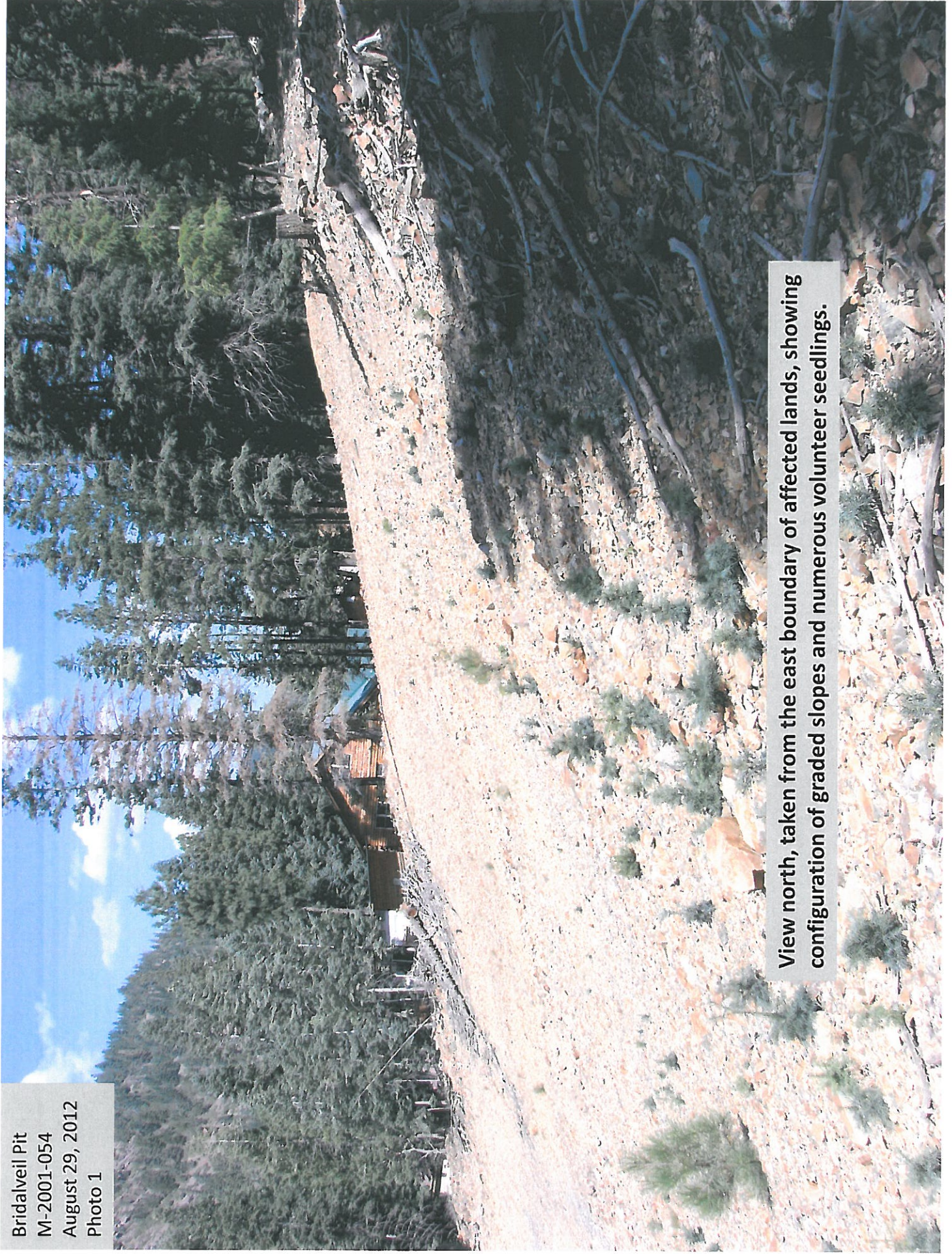
Emery Lynn Olin  
Bridal Veil Construction  
P.O. Box 1821  
1796 N. Main St.  
Ouray, CO 81427

Enclosure: 8 photos and an updated reclamation cost estimation totaling \$15,015.46

cc w/enclosure: Connie Wurst, Bridal Veil Construction  
Russ Means, DRMS GJFO



Bridalveil Pit  
M-2001-054  
August 29, 2012  
Photo 1



View north, taken from the east boundary of affected lands, showing configuration of graded slopes and numerous volunteer seedlings.



Bridalveil Pit  
M-2001-054  
August 29, 2012  
Photo 2



View northwest, taken from the east boundary of affected lands, showing configuration of graded slopes and numerous volunteer seedlings.



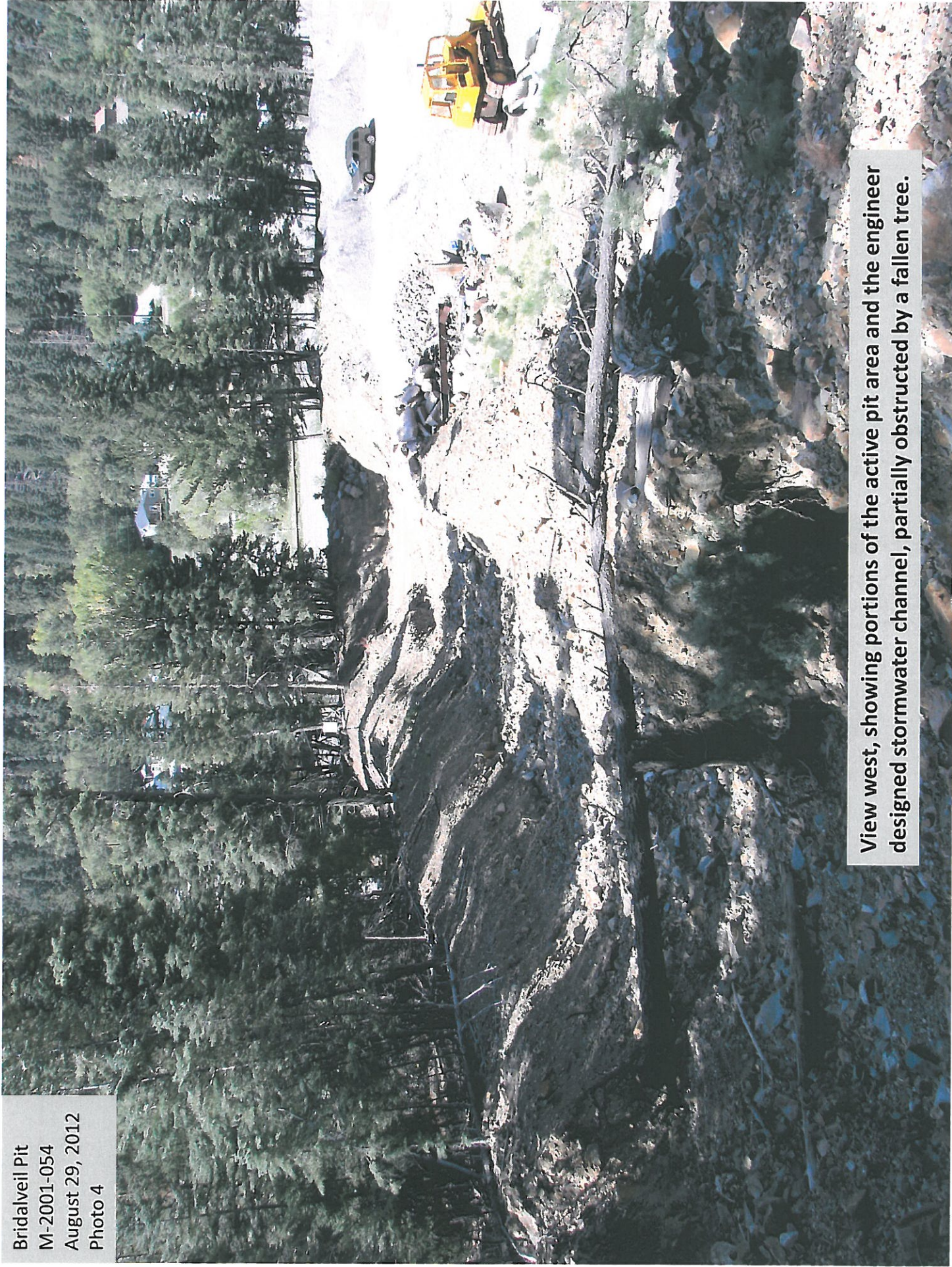
Bridalveil Pit  
M-2001-054  
August 29, 2012  
Photo 3



View west, taken from the east boundary of affected lands, showing the active pit area. The stockpiled materials and portions of the backfill materials exhibiting grey coloration appear to have been imported from off-site areas.



Bridalveil Pit  
M-2001-054  
August 29, 2012  
Photo 4



View west, showing portions of the active pit area and the engineer designed stormwater channel, partially obstructed by a fallen tree.



Bridalveil Pit  
M-2001-054  
August 29, 2012  
Photo 5



View east, showing upslope view of the stormwater channel. According to the approved design, the channel is to be trapezoidal in cross section with 12 foot wide base, 2H:1V side slopes, and 5 feet deep. As shown in this photo, the channel has not been maintained in accordance with the approved design.



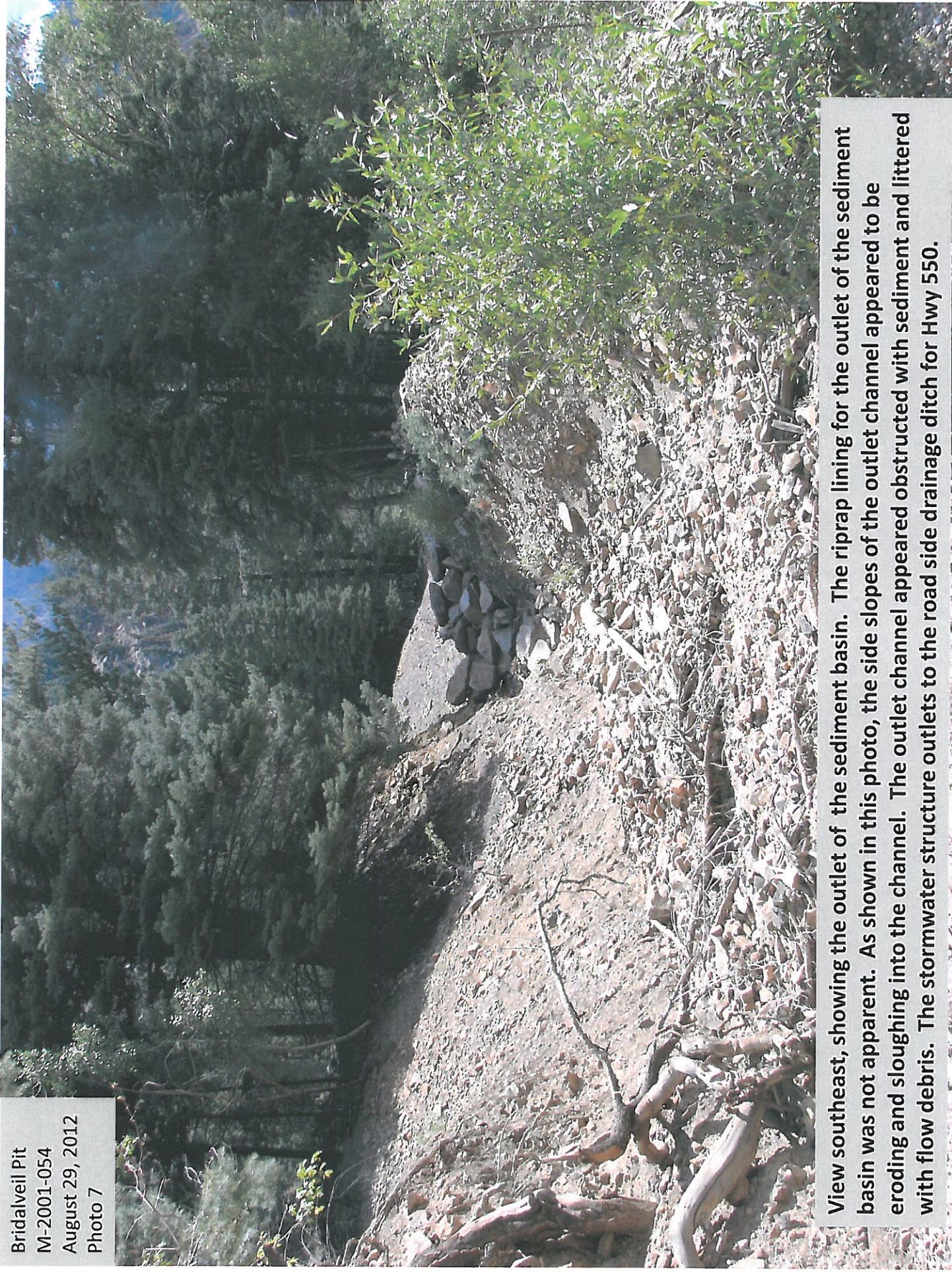
Bridalveil Pit  
M-2001-054  
August 29, 2012  
Photo 6



View west, showing the sediment basin for the stormwater channel. According to the approved design, the basin is to be approximately 50 feet wide, 35 feet long, with 0.7H:1V side slopes and 12 feet deep. The inlet and outlet for the basin are to be lined with riprap. As shown in this photo, the sediment basin has not been maintained in accordance with the approved design.



Bridalveil Pit  
M-2001-054  
August 29, 2012  
Photo 7



View southeast, showing the outlet of the sediment basin. The riprap lining for the outlet of the sediment basin was not apparent. As shown in this photo, the side slopes of the outlet channel appeared to be eroding and sloughing into the channel. The outlet channel appeared obstructed with sediment and littered with flow debris. The stormwater structure outlets to the road side drainage ditch for Hwy 550.



Bridalveil Pit  
M-2001-054  
August 29, 2012  
Photo 8

View west, showing the outlet channel  
of the sediment basin, erosion of the  
side slopes, and proximity to Hwy 550.

