



State of Utah

DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER
Executive Director

Division of Oil, Gas and Mining

JOHN R. BAZA
Division Director

Inspection Report

Permit Number:	C0250005
Inspection Type:	COMPLETE
Inspection Date:	Tuesday, September 27, 2016
Start Date/Time:	9/27/2016 9:00:00 AM
End Date/Time:	9/28/2016 12:00:00 PM
Last Inspection:	Wednesday, August 31, 2016

Representatives Present During the Inspection:	
OGM	Priscilla Burton
OGM	Amanda Daniels
OGM	Cheryl Parker
Company	Kirk Nicholes
Company	Drew Christensen
Company	Riley Anderson

Inspector: Priscilla Burton,

Weather: sun 75F

InspectionID Report Number: 5649

Accepted by:

Permittee: **ALTON COAL DEVELOPMENT LLC**
 Operator: **ALTON COAL DEVELOPMENT LLC**
 Site: **COAL HOLLOW**
 Address: **463 North 100 West, Suite 1, CEDAR CITY UT 84720**
 County: **KANE**
 Permit Type: **PERMANENT COAL PROGRAM**
 Permit Status: **ACTIVE**

Current Acreages

721.00	Total Permitted
394.00	Total Disturbed
144.50	Phase I
	Phase II
	Phase III

Mineral Ownership

- Federal
- State
- County
- Fee
- Other

Types of Operations

- Underground
- Surface
- Loadout
- Processing
- Reprocessing

Report summary and status for pending enforcement actions, permit conditions, Division Orders, and amendments:

The UG mine is idle. Pit 5 in the North Lease is being mined. Spoil is being replaced into Pit 4 North End. Pit 4 South slopes are being reduced to grade. Three haul trucks, the PC 2000, a loader and a dozer were dedicated to reclamation activity. The 490 trackhoe and road 4 box trucks were moving coal. A road grader was smoothing out the haul road to the South Lease topsoil stockpile #2. Recent storms filled Ponds 1-4 in the South Lease and some water to Pond 5 in the North Lease. Water ponded on the Excess Spoil Pile is being pumped to Pond 3. Water is also ponded at the toe of the Topsoil pile in the NE corner surveyed for Pit 5 in the North Lease. Maintenance crews were busy clearing culverts and ASCA's in the North and South Lease.

Priscilla Burton, Kirk Nicholes, and Riley Anderson conducted an inspection of the site on Tuesday, September 27, 2016. A blast in Pit 5 North Lease was observed on Wednesday, September 28, by Amanda Daniels, Cheryl Parker, Drew Christensen, Bob Nead and others.

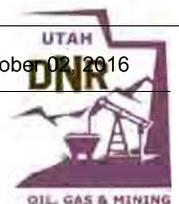
Inspector's Signature: **Priscilla Burton**

Priscilla Burton,

Inspector ID Number: 37

Digitally signed by Priscilla Burton
 DN: cn=Priscilla Burton, o, ou,
 email=priscillaburton@utah.gov, c=US
 Date: 2016.10.06 19:32:20 -06'00'

Date Sunday, October 02, 2016



REVIEW OF PERMIT, PERFORMANCE STANDARDS PERMIT CONDITION REQUIREMENTS

1. Substantiate the elements on this inspection by checking the appropriate performance standard.
 - a. For COMPLETE inspections provide narrative justification for any elements not fully inspected unless element is not appropriate to the site, in which case check Not Applicable.
 - b. For PARTIAL inspections check only the elements evaluated.
2. Document any noncompliance situation by reference the NOV issued at the appropriate performance standard listed below.
3. Reference any narratives written in conjunction with this inspection at the appropriate performance standard listed below.
4. Provide a brief status report for all pending enforcement actions, permit conditions, Divison Orders, and amendments.

	Evaluated	Not Applicable	Comment	Enforcement
1. Permits, Change, Transfer, Renewal, Sale	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Signs and Markers	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Topsoil	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4.a Hydrologic Balance: Diversions	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4.b Hydrologic Balance: Sediment Ponds and Impoundments	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4.c Hydrologic Balance: Other Sediment Control Measures	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4.d Hydrologic Balance: Water Monitoring	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.e Hydrologic Balance: Effluent Limitations	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Explosives	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
6. Disposal of Excess Spoil, Fills, Benches	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
7. Coal Mine Waste, Refuse Piles, Impoundments	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Noncoal Waste	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Protection of Fish, Wildlife and Related Environmental Issues	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
10. Slides and Other Damage	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Contemporaneous Reclamation	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
12. Backfilling And Grading	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
13. Revegetation	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
14. Subsidence Control	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. Cessation of Operations	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16.a Roads: Construction, Maintenance, Surfacing	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16.b Roads: Drainage Controls	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17. Other Transportation Facilities	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18. Support Facilities, Utility Installations	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19. AVS Check	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20. Air Quality Permit	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
21. Bonding and Insurance	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
22. Other	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

1. Permits, Change, Transfer, Renewal, Sale

DEQ issued a discharge permit for Ponds 5, 6, 7, 8, and 9 in the North Lease. Mr. Nicholes will forward the discharge permit to me.

Abatement of NOV 21164 was extended to August 12, 2016. Abatement was received on 8/17/2016. Findings were completed on 8/31/2016. NOV 21164 was terminated on 8/31/2016. A response to deficiencies in the Pit 10 reclamation plan was requested as a separate task (email from Ddean 9/0/2016 and from Dhaddock 9/26/2016). Date for response was set as October 6, 2016 (Outgoing 9282016.5261).

NOV 21165 was terminated on 6/30/2016, because as-built Drawing 5-3B was conditionally approved on 6/27/2016.

NOV 21167 abatement was extended to July 11, 2016 (Outgoing folder 6/28/2016). NOV 21167 was terminated on July 28, 2016 when Pit 10 drainage control designs in Appendix 5-2 Sediment Impoundment and Diversion Structure and Analysis and Drawing 5-3C Underground Facilities and Structures and Dwg 5-3D Underground Watersheds were approved (July 22, 2016). Field changes to Dwg 5-3C were approved 8/12/2016.

Abatement of NOV 21183 (issued 6/3/2016) was extended to September 23, 2016 and is currently under Division review as Task 5278.

NOV 21185 was issued 9/7/2016 regarding ASCA-1 sediment control maintenance as designed in App. 5-14 of the MRP. The abatement date was 9/21/2016. Progress towards abatement was photographed for the issuing inspector.

Task 5287 MRP revisions per OSM revegetation oversight, received 9/30/2016.

Task 5278 Pit B1 received 9/23 includes Chapter 3 revisions as well as abatement of NOV 21183.

Task 5272 Area 1-A returned deficient 9/14.

Task 5264 received 8/23 superceded by Task 5272.

3. Topsoil

Approximately 5,000 CY (1/2 acre x 7 ft deep) of topsoil stockpile #2 was recently utilized in reclamation of Phase 1 bond release areas in the South Lease (the county road, the spoil road and HWT 2). The volume of material remaining will be surveyed. The open end of the topsoil stockpile will be reseeded and bermed this fall.

Survey markers on the North Lease topsoil pile indicate the material that will be removed in reclamation of Pits 1 - 3. The topsoil pile sits above the NE corner of Pit 5. Further protection measures may be necessary.

Subsoil stockpile #2 in the South Lease has been graded to lower its profile. The subsoil stockpile slopes were groomed to be very smooth in preparation for drill seeding this fall.

Subsoil beneath the excess spoil pile at the North lease is being pushed into Pit 5 and collected in haul trucks and deposited with the subsoil pile above Pit 2. Volumes salvaged by this method should also be surveyed upon completion of pit 5 development.

Topsoil stockpiled around the water filling station at Pond 4 will be collected into a single pile/berm and seeded.

4.a Hydrologic Balance: Diversions

Most of the Pit 10 drainage control measures outlined on Dwg 5-3C (dated 8/5/2016) have been completed. The only remaining work is to complete Ditch P10-S01 at its upper end. The underground yard was dry after the recent storm, although the run-off plugged culverts P10-03, -04, -05, and -06. The run-off eroded the slope above the inlet to P10-10 and P10-08. The storm washed riprap protection from the length of P10-R04 and the outlets of P10-08, P10-09, and P10-10. Ditches will be maintained and erosion rock will be replaced. A d50 of 6 inches is required (Appendix 5-2).

The Lower Robinson Creek temporary diversion is eroded at its outlet, see photographs. This area needs repair. The straw bales at the ASCA in reconstructed Robinson Creek were soaked, but stable.

Ditch 6 had breached just south of Pond 5. Ditch 6 was repaired during the inspection.

4.b Hydrologic Balance: Sediment Ponds and Impoundments

Photos of all ponds are attached. Ponds 1 and 1B discharged during the last week. All ponds were holding water from the storm last week. Pond 3 was 1/2 cleaned out before the storm. The water elevation was approximately 1 foot below the spillway. Water was being pumped to pond three from the excess spoil pile during the inspection.

Pond 1 is scheduled for sediment cleanout in the near future.
Maintenance of excelsior logs around the Pond 6 emergency overflow is necessary.

4.c Hydrologic Balance: Other Sediment Control Measures

ASCA-1 at the North Lease was being maintained to abate NOV 21185. ASCA's at the North Lease entrance to the facilities yard were recently cleaned out.

Pit 10 benched slopes and ditches will be seeded this fall.

5. Explosives

Six blasts occurred at the North Lease in the third quarter. Blasting records for blasts on July 7, July 25, August 9, August 19, and September 16 were reviewed. The sixth blast, Blast #10, took place on Wednesday, 9/28/2016, and was observed during the inspection. Division engineers: Amanda Daniels and Cheryl Parker were present along with Drew Christensen and Bob Nead. The charges were set in the center of Pit 5 by SouthWest Energy LLC, Matt Raddon Certified Blaster. A SW breeze carried the plume towards the observers and Alton.

6. Disposal of Excess Spoil, Fills, Benches

The second quarter 2016 engineering inspection of the excess spoil pile was received by email (Incoming file July 11, 2016). Mr. Dan Guy, P.E. had inspected the site last week. Mr. Nicholes will forward his third quarter report by email when it is completed.

9. Protection of Fish, Wildlife and Related Environmental Issues

A bluebird was noted in the fields around the North Lease.

Within the permit area, a large patch of thistle needs to be controlled along the County Road right of way. Technically outside the disturbed area, the location was a laydown area for hay bales and equipment. The thistle patch is adjacent to hundreds of acres of reclaimed ground. This thistle patch must be controlled. Mr Nicholes will contact Kane County roads department.

11. Contemporaneous Reclamation

Approximate 8-9 acres will be seeded in the North and South leases this fall (end of October).

12. Backfilling And Grading

Pit 5 in the North Lease is being mined. Spoil is being replaced into Pit 4 North End. Pit 4 South slopes are being reduced to grade. Three haul trucks, the PC 2000, a loader and a dozer were dedicated to reclamation activity. The 490 trackhoe and road haul trucks were moving coal.

Pits 1 and 2 are graded to contour. Pits 1 & 2 spoil was sampled 8/29/2016 at locations 1 - 3, shown on Dwg 5-76A , for suitability characteristics. Samples were analyzed by Intermountain Labs and results were reported on 9/15/2016. The results were reviewed during the inspection. Results will be provided to the Division.

For the most part, the spoil at sample locations 1 through 3 is poor or unsuitable due to SAR values greater than 10, saturation percent between 80-90, and clay texture.

At sample location 3 (the south end of Pits 1 & 2), the SAR was greater than 15 (unsuitable). The Permittee has already covered this area with three feet of subsoil from the subsoil stockpile.

Sample locations 1 & 2 (north end pits 1 & 2 & 3) rated poor in the surface foot and unsuitable in the lower two feet. One foot of subsoil was recently applied to the area represented by sample locations 1 & 2.

We discussed the potential value of "poor" spoil in achieving replacement of the best available material in the permit area (R645-301-233.100). We compared the chemical characteristics of the "poor" spoil with the baseline sampling at location 12ASO17 (Dwg 2-3). The baseline data indicated 34 inches of suitable topsoil and subsoil was salvaged from areas represented by 12ASO17. Therefore Mr. Nicholes agreed that "poor" quality spoil, represented by sample locations 1 & 2 (north end of Pits 1, 2, & 3), would be covered by a minimum of 20 inches of subsoil and 13 inches of topsoil to recreate pre-mining conditions. Therefore, another 8 inches of subsoil would be applied prior to topsoil coverage of the "poor" rated areas.

Excess spoil above Pit 3 is being graded into Pit 4.

13. Revegetation

Above Pit 21, cheat grass has emerged and is very noticeable. The area was seeded with Triticale in January 2016 and topsoiled in June. Mr. Nicholes plans a cheat grass control prior to seeding with the final mix.

20. Air Quality Permit

Air Quality Approval order DAQE AN140470004-15 was modified April 21, 2015 to include two generators and a stacker belt for the underground mine.

21. Bonding and Insurance

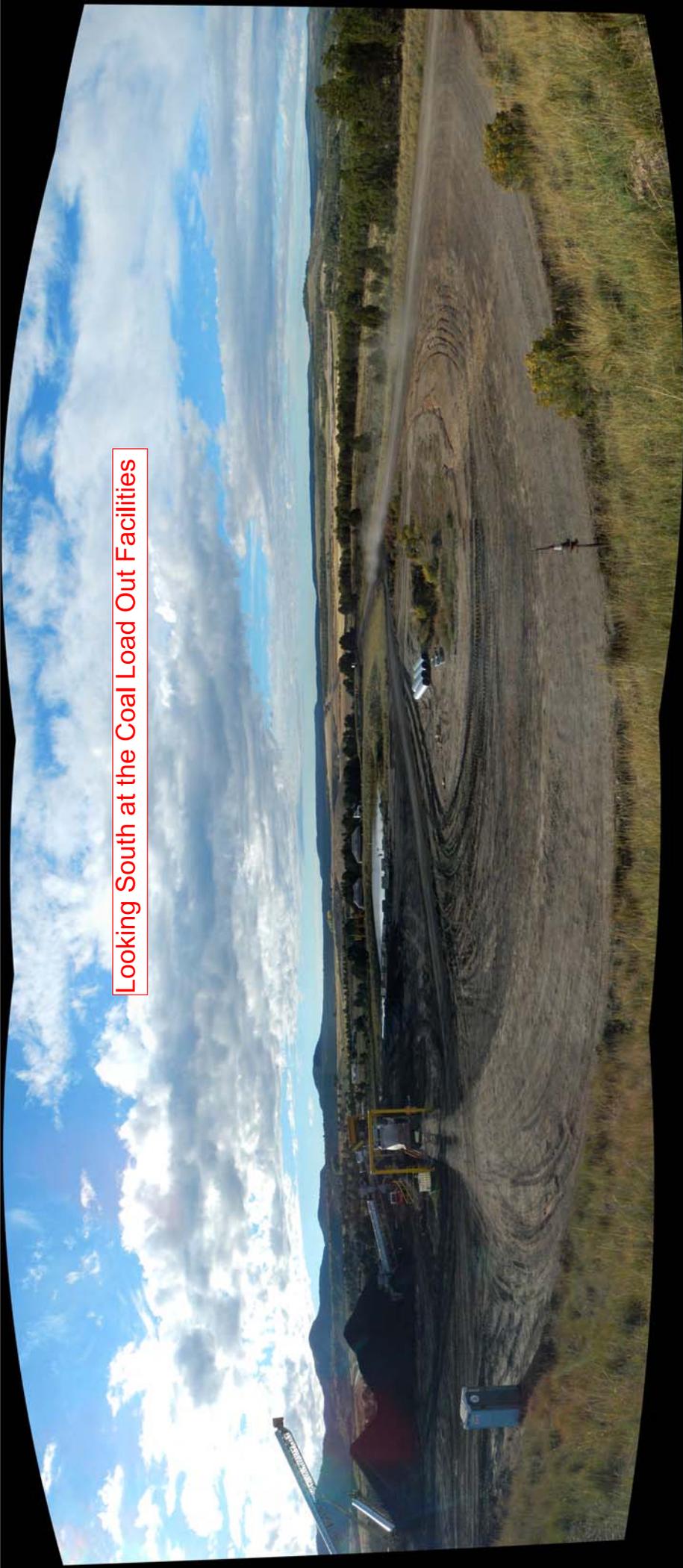
Liability insurance is current through December 10, 2016. The General Liability Policy (including blasting coverage) is held through Berkley National Insurance Co. A reclamation surety bond was issued by Ironshore Indemnity Inc. in 2013 and increased in December 2014 to the current \$12.75 M.

22. Other

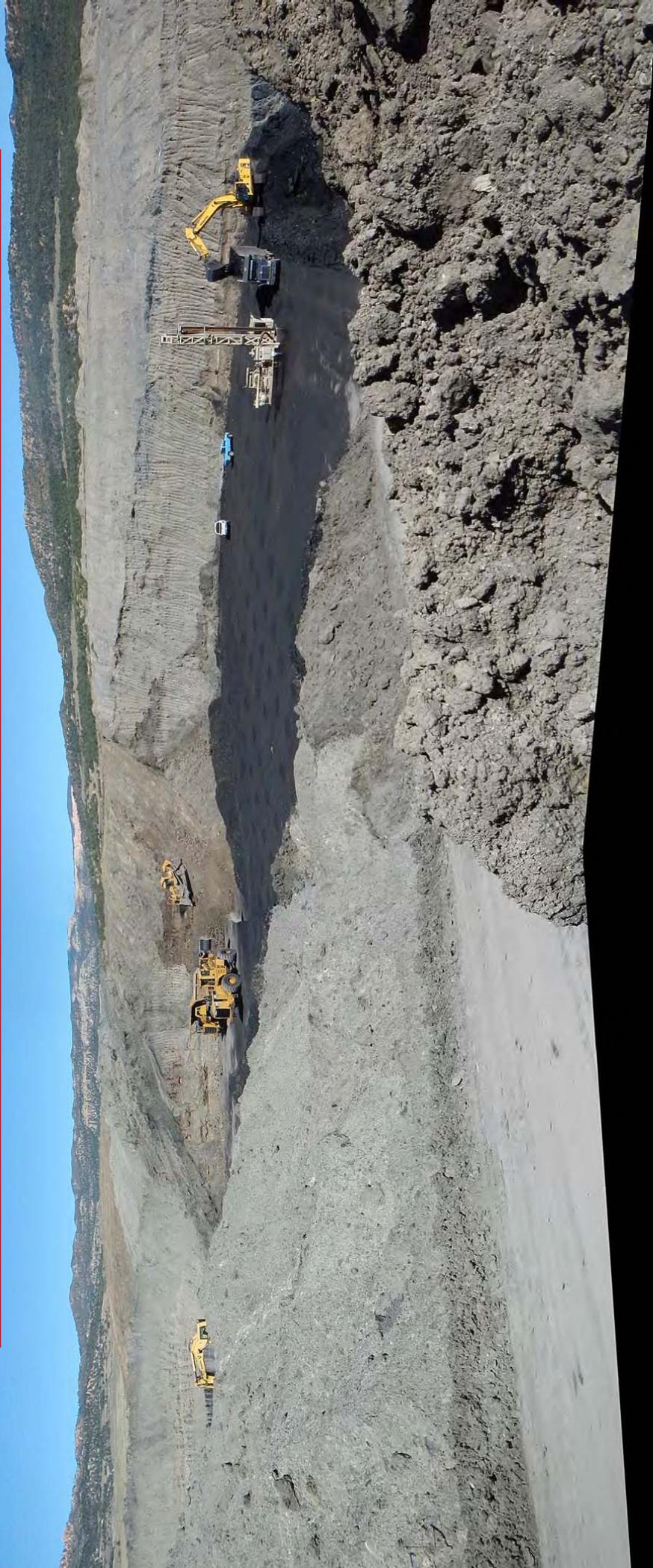
Task 5287 updates the MRP (as requested during the June 13, 2016 OSM oversight inspection, refer to Insp Rpt 5548) as follows:

1. Reference area GPS coordinates are listed on Dwg 3-1, however the GPS locations are not shown. The drawing will be revised to show locations.
2. ACD, OGM and DWR have determined the woody plant density requirement to be 10% for the sagebrush grass seeded areas to post mining land use (email correspondence between Lisa Reinhart and Rhett Boswell, August 23 2016).
3. The reclaimed areas were quantitatively evaluated and found to meet the 10% woody plant density standard.
4. The baseline pastureland productivity is proposed as the success standard for pastureland seeded areas.
5. In the South lease, areas seeded to sagebrush grass will be compared with the sagebrush/grass reference area, regardless of original plant community.
6. Musk thistle was sprayed within the permit boundary in June 2016.

Looking South at the Coal Load Out Facilities



right side: Pit 5 loading coal and drilling holes for blast
left side: dozer pushes spoil down, loader fills trucks for haul to Pit
4 or subsoil pile. PC 2000 just out of frame is loading overburden
into haul trucks.



Looking North at Pit 5 activity:
drilling and loading coal



Looking East at Pit 10



Inspection Report 5649 September 27 & 28, 2016, ATTACHMENT A – Photos



PHOTO 1
Pond 1



PHOTO 2
Pond 1



PHOTO 3
Pond 1B



PHOTO 4
Pond 2 and graded subsoil pile

ATTACHMENT A – Photos continued



PHOTO 5

Looking E across spillway at Pond 3



PHOTO 6

Looking SE at excess spoil pond and pipe to pond 3



PHOTO 7

Looking SW at Pond 3 receiving water from excess spoil pond



PHOTO 8

Looking E at Pond 4

ATTACHMENT A – Photos continued



PHOTO 9
Looking SW at Pond 5



PHOTO 10
Looking E at Pond 6 (dry)

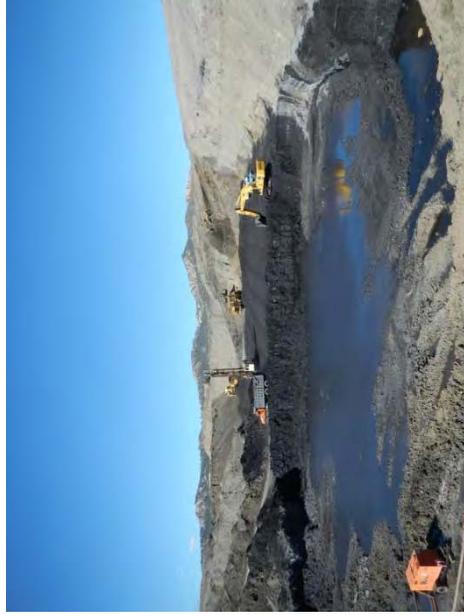


PHOTO 11
Looking N of Pond 6 at Pit 5



PHOTO 12
Looking S at backfilling of Pit 4 (foreground) with spoil pile. South end of Pit 5 is in the distance.

<p>ATTACHMENT A – Photos continued</p>	
	
<p>PHOTO 13 Outlet of ditch P10-S03 geotextile remains riprap washed away</p>	<p>PHOTO 14 Pit 10 catch basin and inlet to P10-08</p>
	
<p>PHOTO 15 Outlet P10-08 riprap washed away</p>	<p>PHOTO 16 Culvert P10-09 lower left and P10-10 upper right</p>

ATTACHMENT A – Photos continued



PHOTO 17
Pit 10 sump



PHOTO 18
Ditch P10-F03 and unnamed culvert to sump



PHOTO 19
Outlet P10-09 requires new rip rap



PHOTO 20
Inlet to P10-10 need repair

ATTACHMENT A – Photos continued



PHOTO 21

Blocked flow at outlet P10-10 and inlet ditch P10-S03



PHOTO 22

Looking NE at incomplete construction of ditch P10-S01



PHOTO 23

Looking SW at incomplete construction of ditch P10-S01



PHOTO 24

Ditch P10-S02

<p>ATTACHMENT A – Photos continued</p>	
	<p>PHOTO 26 Soil removed from E end Topsoil Pile #2</p>
	<p>PHOTO 25 Access across ditch P10-S02</p>
	<p>PHOTO 27 Amanda Daniels and Cheryl Parker set up seismograph near Area 1 subsoil pile</p>
	<p>PHOTO 28 Looking SE at Topsoil pile in Area 1 as Haul trucks evacuate for blast.</p>

ATTACHMENT A – Photos continued



PHOTO 29

View of blast from closed County road location



PHOTO 30

Dust cloud moves NW after blast



ASCA #1 Area 1



ASCA #1 Area 1