



GARY R. HERBERT  
Governor

GREG BELL  
Lieutenant Governor

# 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:	TECHNICAL
Inspection Date:	Tuesday, June 30, 2015
Start Date/Time:	6/30/2015 8:00:00 AM
End Date/Time:	6/30/2015 1:00:00 PM
Last Inspection:	Tuesday, June 16, 2015

### Representatives Present During the Inspection:

Company	Kirk Nicholes
OGM	Cheryl Parker

Inspector: Cheryl Parker

Weather: Sunny 78 to 89F

InspectionID Report Number: 4234

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	<b>Total Permitted</b>
342.00	<b>Total Disturbed</b>
	<b>Phase I</b>
	<b>Phase II</b>
	<b>Phase III</b>

### 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:

An inspection of the surface facilities at the Coal Hollow mine was complete on June 30, 2015. Surface activities included reclamation and backfilling. The Permittee was in the progress of reclamation activities. The highwall miner was out on the surface for repairs/maintenance. A dozer was working the east side of the excess spoil pile. Excavator and haul trucks were moving overburden and subsoil around Pit's 21 and HWT 1. There was little to no activity at the Burton #1 mine.

Inspector's Signature

Date

Tuesday, June 30, 2015

Cheryl Parker,

Inspector ID Number: 70

**Note:** This inspection report does not constitute an affidavit of compliance with the regulatory program of the Division of Oil, Gas and Mining. telephone (801) 538-5340 • facsimile (801) 359-3940 • TTY (801) 538-7458 • www.ogm.utah.gov



**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 type="checkbox"/>	<input checked="" 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 type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.e Hydrologic Balance: Effluent Limitations	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Explosives	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input 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 checked="" 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 checked="" 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 type="checkbox"/>	<input checked="" type="checkbox"/>	<input 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 checked="" type="checkbox"/>	<input type="checkbox"/>
16.b Roads: Drainage Controls	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
17. Other Transportation Facilities	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
18. Support Facilities, Utility Installations	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
19. AVS Check	<input type="checkbox"/>	<input checked="" 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**

The underground mining plan, Task 4814, was given final approval on 6/19/15. The North Lease application was resubmitted, Task 4942, to the Division on 6/22 and is currently under review.

The following is from previous inspection reports:  
Inspection 4219 : The Robinson Creek stream alteration permit comment period ended 6/16/15. Once the stream alteration permit is passed the work on Robinson Reconstruction can continue. NOV 16149 abatement date is August 27, 2015 and payment of the fine is due. NOV 16150 has been terminated and payment of fine is due. A response to NOV 18150 was received and is under review as Task 4897 and the fine is being assessed

### **3. Topsoil**

Topsoil was being applied by equipment on the north side of Dames access road, previous pits 21-20. The topsoil pile north of Pit 10 remains stable.

The following is from stated previous inspection reports:  
Inspection 4219: The Division will research the subject and provide recommendations for cheat grass and foxtail grass control.

#### **4.a Hydrologic Balance: Diversions**

Maintenance was completed on a leaking valve at the water tanks located on the far east side of the facilities area. The area around the south side of the water tanks was saturated and had clearly been worked by equipment. In the process of the repairs to Ditch C7 a stockpile of saturated soil sits south of the tanks. The June 16th inspection requested that the weeds and sediment be cleared from C7. While some work was clearly done, the area still requires some fine grading to establish flow to ditch C7. The Permittee was told to move the stockpiled soil south of the water tanks to the appropriate stockpile area and to stabilize it. See photos 1 through 6 for details.

Diversion Ditch DD#4 berms had been recently worked. A high spot still remains just south of where the road drainage ditch connects with the newly constructed DD#4. The area is still ponding water but is dry enough that equipment should be able to clear the high spot so that drainage may free flow to Pond 3. The Permittee was told to remove the final high area within DD#4 that is acting like a plug in the flow of the ditch. See photos 7 through 8 for details.

The following is from previous inspection reports:

Inspection 4219: The ditch controlling flow to C7 requires maintenance prior to the next inspection. Weeds and sediments must be cleared from C7. DD#4 requires work where a high spot needs to be graded out.

Inspection 4212: The waddles in D1 near pond 4 were inspected. Proper inletting and an additional layer on each waddle needs to be completed by no later than Tuesday June 30.

#### **4.b Hydrologic Balance: Sediment Ponds and Impoundments**

The Permittee stated that the second quarter certified pond and spoil inspections were completed the previous week and the final copies had yet to be received. The water truck was pulling water from Pond three at the time of the inspection. All ponds were inspected and found that the levels were relatively low with sediment levels below all the clean out marks. See Photos 12 for an example of water level height. Pond 1 has a gully on the east bank that still needs repairing along with riprap placed in the outlet. These maintenance tasks were required to be completed in the June 16 inspection by June 30. The Permittee submitted a design to modify the current inlet to Pond one. The Modification showed that the stated maintenance will be repaired during the construction of the modifications. The Pond one amendment was sent back deficient, Task 4894, on 6/9/15 and the Division has yet to receive the amended application. In the meantime, the maintenance needs to be completed before the rain season starts so riprap should be placed no later than 7/13/15, per as build drawing C9.0 for pond 1 attached. If the intent is to complete the required maintenance during the amendment's construction, Task 4894, the Permittee needs to resubmit the plans by 7/13/15. See photo 9.

Tamarisk plants at all the ponds one through four were cut and treated with Garland on 6/25/15. This action meets the requirements stated in the June 16th inspection and R645-301-742.123. See photo 10 for example of treatment at Pond 1B.

Pond three still requires maintenance on the inlet armoring. The June 16th inspection stated the need for maintenance on the inlet to repair the pond to the Asbuilt design. The water level of the pond is low creating an opportune time to make said improvements.

There was a discussion with the Permittee for upcoming amendments that would include improvements to Pond 3. The Permittee should submitted amendments to the Division on or before July 21st. See Photos 12 through 14.

The following is from previous inspection reports:  
Inspection 4219: As discussed during the inspection: the material dredged from pond 1 is now dried and should be removed from the pond embankment. The inlet to pond 1 should be rip rapped to accurately resemble the design by no later than Tuesday, June 30th. A large gully on the embankment of the pond 1 needs to be repaired prior to the next inspection. See also R645-301-742.123 for required maintenance on sediment ponds.

#### **4.c Hydrologic Balance: Other Sediment Control Measures**

The main entrance ASCA and culvert were inspected, see photos 15 through 17 for details. The June 16th inspection report 4219 detailed that the area has been sufficiently dry for some time and that maintenance needed to be completed prior to the next inspection. NOV 20153 is being issued for failure to maintain this ASCA and the entrance culvert.

## **6. Disposal of Excess Spoil, Fills, Benches**

Work on the excess spoil pile has begun again. A dozer was pushing spoil east down off the excess spoil onto the old Pit 7 site at the time of the inspection. Wiggle wagons were hauling wet alluvium to be placed into HWT 1 along with Haul trucks hauling subsoil from the subsoil pile #2. See Photos 18 through 23. East of Pit 10 berms had not been installed at the time of this inspection.

The following is from previous inspection reports:

Inspection 4219: East of Pit 10 highwall, the alluvium has been graded to create a level area. The area will be seeded, leaving a bermed roadway for light truck traffic.

## **8. Noncoal Waste**

The June 16th inspection 4219 stated two locations of non-coal waste that need to be shown on Drawings 5-3 and 5-3a. There are several laydown yards throughout the mine that also need to be documented on Drawings 5-3. The Division has not received any amendment updating Drawing 5-3 as of July 1, 2015. The Permittee will submit drawings detailing the various laydown yards across the site by July 21st.

The following is from previous inspection reports:

Inspection 4219: Trash along the road to the mine office and in the vicinity of UD#3 and C7 should be picked up. Two locations of non-coal waste (broken machinery, metal recycling bins, industrial sized tires, etc must be shown on Drawings 5-3.

## **9. Protection of Fish, Wildlife and Related Environmental Issues**

A section of fence was broken during reclamation activities around Pit 21. The fence is now laying down and requires maintenance. Photo 24 shows how the fence is on the ground. Cattle have been entering the mine site due to the broken fence. The cattle were witnessed at Pond 4 during the time of this inspection as well as the previous July 16th inspection. The Permittee has contacted the rancher and will follow up with fence maintenance.

The following is from previous inspection reports:

Inspection 4219: Five cows had gotten into the reclaimed area and were grazing newly seeded reclaimed area east of Dame's ranch house. (the south gate was found open).

Inspection 4212: The commitment to provide sage grouse collars in the 2014 annual report was discussed; the report is currently under review by the Division. Mitigation for the North Lease consists of approximately 225 acres and another 25 for the Kanab creek buffer area. At a 4 to 1 mitigation ratio that would be 1000 acres. Mr. Nicholes was informed that the mitigation would need to be completed prior to the commencement of mining activity in the North Lease area.

## **10. Slides and Other Damage**

Within Pit 10 along the south slope there has been a series of sloughing as the slope is sloughing back. The Permittee stated that the area is no longer receiving water and is expected to remain stable now. See photo 25.

The following is from previous inspection reports:

Inspection 4219: When the south side of Pit 10 dries sufficiently, it will be graded to continue the MSHA bench around the pit. The slope will be graded 2:1. A Spray tackifier, hydromulch and seed might help control erosion on that slope.

## **11. Contemporaneous Reclamation**

The ponding area adjacent to the reconstruction of Dames access road was witnessed during inspection. Top soil piles were witnessed in the vicinity to be placed shortly over the area north of the Dames's access road. The Permittee was advised to grade the area to drain so as to avoid salt pooling at the site that would hinder vegetation growth. As discussed, a culvert should not be placed due to the continuing maintenance required. With proper grading the area will drain to the south and flow through the gravel surface which will be placed on the Dames's access road. See Photo 23. The Division wishes to reiterate that top soil should not be used for grading. The Division will conduct tests to verify the topsoil depth in bond release areas during a bond release inspection.

The following is from previous inspection reports:

Inspection 4219: Water is ponding in a low spot adjacent to the reconstructed Dames's access road. This area should be graded so that the surface flow does not pond and create a saline surface on the reclaimed area and muddy condition on the road.

## **12. Backfilling And Grading**

The Excess spoil pile was being worked above former Pit 2 and Pit 7 by the removal and storage of subsoil. The subsoil pile will need to be signed stabilized if it is not placed for final reclamation. Trucks were hauling subsoil and alluvium to HWT 1 at the time of inspection.

## **16.a Roads: Construction, Maintenance, Surfacing**

The grader was witnessed surfacing the current haul road. The water truck was also witnessed maintaining dust control. See photo 26.

### **16.b Roads: Drainage Controls**

The roadway on the alluvium east of Pit 10 highwall remains unchanged from the previous May inspection with no roadway defined and no berms along the eastern edge of the disturbance area. A roadway will be defined with berms on the graded alluvium east of Pit 10 highwall by July 13, 2015 to prevent equipment from traveling on the undisturbed area not covered by the bond.

The following is from previous inspection reports:  
Inspection 4219 : The borrow ditch on the County Road should be re-established to prevent drainage flowing into the reclaimed Pit 6 area. A roadway will be defined with berms on the graded alluvium east of Pit 10 highwall.

### **17. Other Transportation Facilities**

The loadout area drainage control has been an issue since the May inspection. The Division sent back Task 4894 to the Permittee on June 6, 2015 and has not received any further information in regards to the Pond 1 amendment since July 6, 2015.

The following is from previous inspection reports:  
Inspection 4219 : The loadout equipment is sprayed down with clean water from the water tanks once each shift (2x/day). Water from the cleaning flows overland and enters Pond 1. This water has created a gully on the embankment of pond 1. The direction of surface flow in this area is currently being redesigned and a revision to the plan is expected shortly, in response to the Division's review of Task 4894.

### **18. Support Facilities, Utility Installations**

The secondary containment area was inspected to insure that the SPCC plan was being followed. See photo 27. Approximately 2 inches of water was observed within the fuel containment structure.

The following is from previous inspection reports:  
Inspection 4219: About two inches of water was in the fuel containment structure. Diesel fuel stacked outside the containment structure was placed within the structure during the inspection.

The following is from stated previous inspection reports:  
Inspection 4219: About two inches of water was in the fuel containment structure. Diesel fuel stacked outside the containment structure was placed within the structure during the inspection. UG mining equipment is stored between the haul road and pond2. This storage area must be designated on the facilities map Drawing 5-3. Berms installed along the haul road in the repair yard must also be shown on DWG 5-3

### **20. Air Quality Permit**

At the time of inspection coal was being crushed and coal fines were witnessed along the conveyor area. There was limited to no wind at the time of the inspection.

## **21. Bonding and Insurance**

The following is from previous inspection reports:

Inspection 4219 : Task 4788 Phase I bond release application information was unacceptable and was returned on May 13, 2015. A second Phase I bond release application Task 4903 was returned as unacceptable on June 11, 2015.

## **22. Other**

The Permittee contacted the Division on June 30th and requested an extension to the deadline to have plans submitted to the Division for the excess spoil gulley repair and burying of the water pipe from Pit 10 to pond 3. The extension was granted to July 21st.

The following is from previous inspection reports:

Inspection 4219 : A former topsoil pit location just south of pond 4 should be filled in.  
Inspection 4212: Plans for the burying of the water pipe that runs from pit 10 to pond 3 needs to be submitted to the Division by no later than Tuesday June 30.

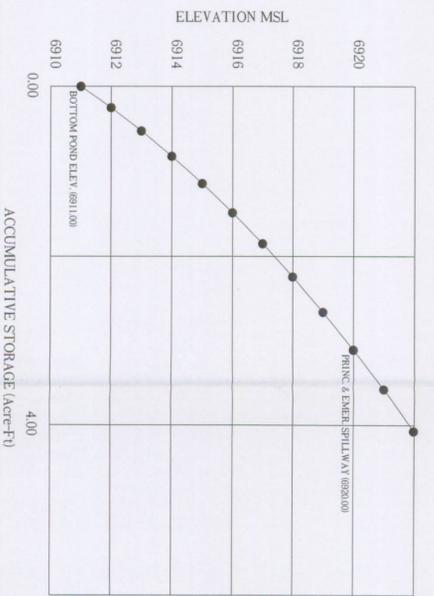
The following is from stated previous inspection reports:

Inspection 4219 : A former topsoil pit location just south of pond 4 should be filled in.  
Inspection 4212: Plans for the burying of the water pipe that runs from opit 10 to pond 3 needs to be submitted to the Division by no later than Tuesday June 30

GEOTECHNICAL REPORT APPENDIX F  
RECOMMENDED EARTHWORK SPECIFICATIONS

1. AREAS TO RECEIVE FILL AND/OR BACKFILL SHOULD BE STERILIZED OF ALL VEGETATION, ORGANIC MATERIAL, AND DEBRIS BY EXCAVATING UNDOCKMENTED OR NON-STRUCTURAL FILLBACKFILL MATERIALS AND OTHER UNSUITABLE MATERIALS SHOULD BE EXCAVATED IN THEIR ENTIRETY. ALL AREAS THAT ARE TO RECEIVE FILL SHOULD BE PREVIOUSLY GRADDED BY THE GEOTECHNICAL ENGINEER PRIOR TO PLACEMENT OF FILL.
2. FILL SHOULD BE COMPACTED TO 85% OF THE MAXIMUM DENSITY AS DETERMINED BY THE PROCTOR TEST AND 90% FOR THE SEDIMENTATION DISEMBARKMENTS.
3. LIFT THICKNESS FOR THE SEDIMENTATION PONDS SHOULD NOT EXCEED 12 INCHES. THE LIFT THICKNESS MAY BE INCREASED OR DECREASED RELATIVE TO THE RESULTS OF COMPACTION TEST AS APPROVED BY THE GEOTECHNICAL ENGINEER.
4. SATURATED SOILS SHOULD BE PLACED IN AN AREA THAT WILL HAVE MINIMAL EFFECT ON THE PERFORMANCE OF THE SLOPES.
5. NATIVE UNDISTURBED SOILS TO BE SUBGRADE FOR THE POND EMBANKMENTS SHOULD BE SCARIFIED TO A MINIMUM DEPTH OF 12 INCHES. MOISTURE CONTENT SHOULD BE ADJUSTED TO OPTIMUM MOISTURE CONTENT AND RECOMPACTED TO AT LEAST 90% RELATIVE COMPACTION.
6. A QUALIFIED GEOTECHNICAL ENGINEER'S FIRM SHOULD OBSERVE THE FILL TO CHECK FOR ADEQUATE MOISTURE CONTENT AND RELATIVE COMPACTION AS OUTLINED HEREIN. IF LESS THAN THE SPECIFIED RELATIVE COMPACTION IS OBTAINED, ADDITIONAL MOISTURE COMPACTED AS NECESSARY UNTIL THE SPECIFIED RELATIVE COMPACTION IS ATTAINED. THE CONTRACTOR SHOULD PROVIDE LEVEL TESTING PADS ON WHICH GEOTECHNICAL ENGINEER SHOULD PROVIDE SAFE AND TIMELY ACCESS FOR ALLOW CONTINUED MONITORING AND TESTING.
7. WHEREVER, IN THE OPINION OF THE OWNER'S REPRESENTATIVES AN UNSTABLE CONDITION IS BEING CREATED EITHER BY CUTTING OR FILLING, THE WORK SHOULD NOT PROCEED IN THAT AREA UNTIL AN EVALUATION HAS BEEN MADE AND THE GRADING OPERATIONS REVISED, IF FOUND NECESSARY.
8. FILL SHOULD NOT BE PLACED, SPREAD OR ROLLED DURING UNFAVORABLE WEATHER CONDITIONS. WHEN THE WORK IS RESUMED, THE CONTRACTOR SHOULD NOT BE RESUMED UNTIL FIELD INSPECTIONS INDICATE THAT THE MOISTURE CONTENT AND DENSITY OF THE FILL ARE PREVIOUSLY SPECIFIED.
9. WHENEVER THE WORDS "SUPERVISION", "INSPECTION", OR "CONTROL" APPEAR THEY SHOULD MEAN OBSERVATION BY THE GEOTECHNICAL ENGINEER OF THE FILL PLACEMENT NECESSARY FOR THE COMPLIANCE WITH PLANS, SPECIFICATIONS AND DESIGN CONCEPTS.

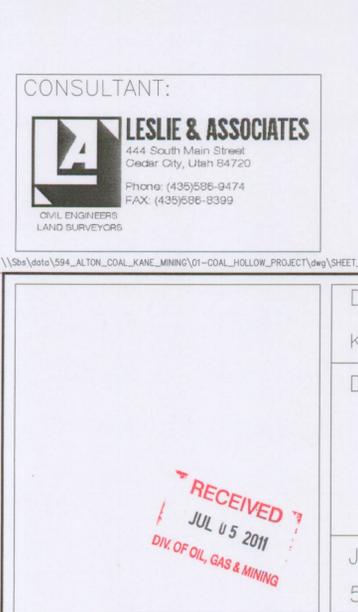
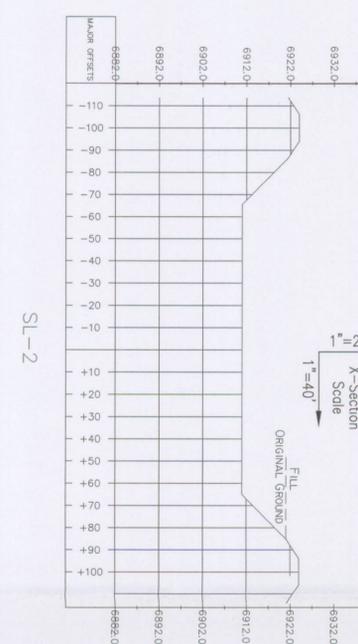
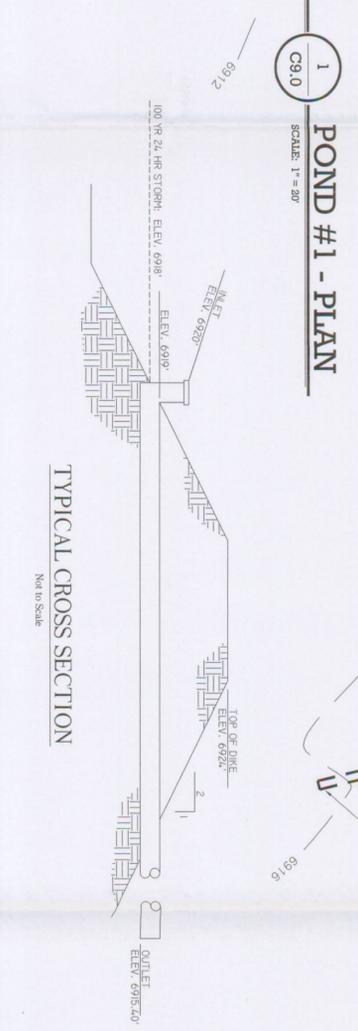
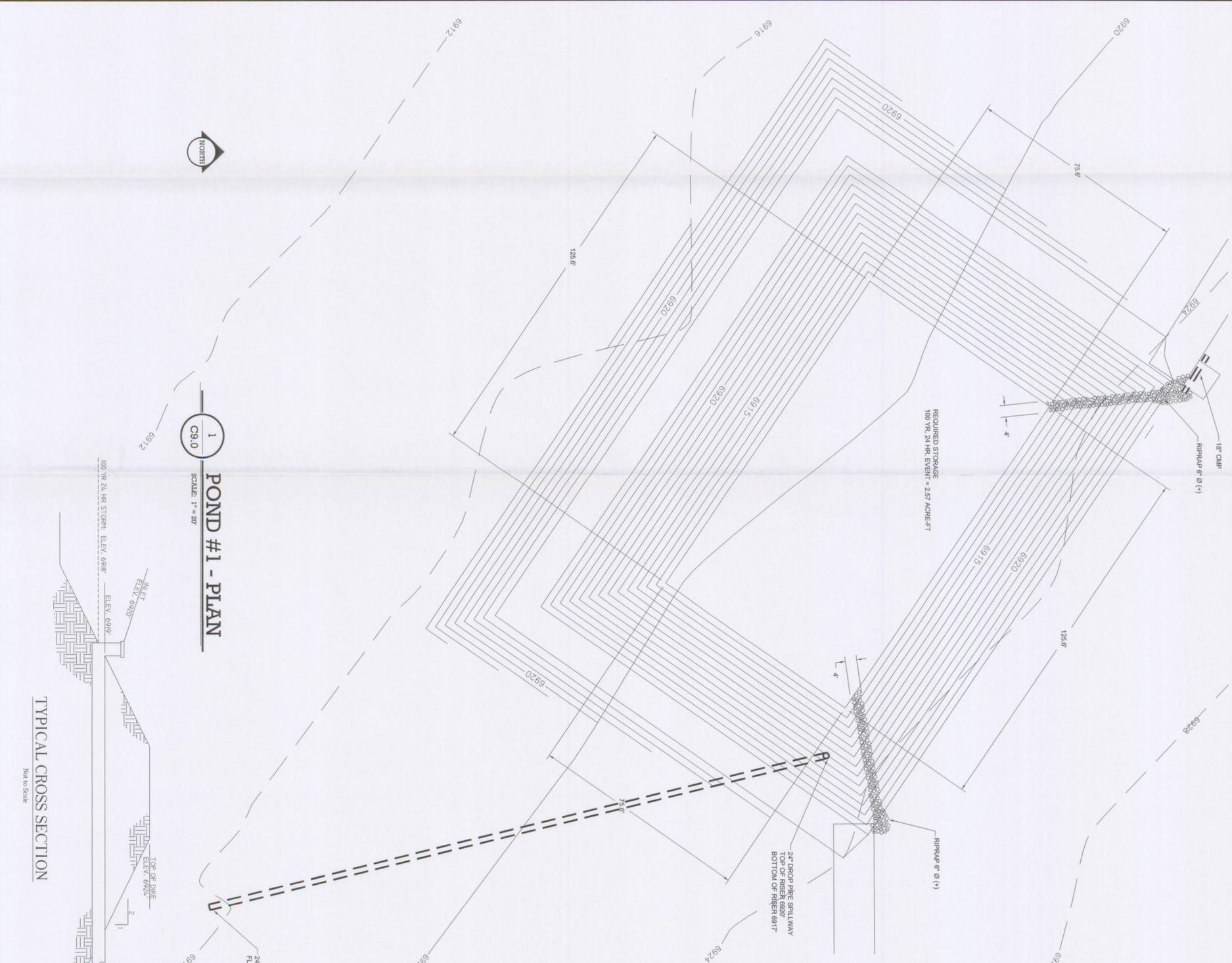
STAGE STORAGE CURVE  
Sediment Control Structure No. 1



STORAGE VOLUME COMPUTATIONS  
Sediment Control Structure No. 1

ELEV. (ft)	WIDTH (ft)	LENGTH (ft)	AREA (sq ft)	AVG. AREA (sq ft)	INTERVAL (ft)	STORAGE (cu-ft)	ACC. STORAGE (cu-ft)	STAGE INTERVAL (ft)
6911.00	NA	NA	0.2320	0.2485	1.00	0.2485	0.2485	1.00
6912.00	NA	NA	0.2850	0.2760	1.00	0.2760	0.5345	2.00
6913.00	NA	NA	0.2970	0.2980	1.00	0.2980	0.8325	3.00
6914.00	NA	NA	0.3090	0.3200	1.00	0.3200	1.1425	4.00
6915.00	NA	NA	0.3310	0.3425	1.00	0.3425	1.4850	5.00
6916.00	NA	NA	0.3540	0.3655	1.00	0.3655	1.8505	6.00
6917.00	NA	NA	0.3770	0.3885	1.00	0.3885	2.2490	7.00
6918.00	NA	NA	0.4020	0.4135	1.00	0.4135	2.6535	8.00
6919.00	NA	NA	0.4290	0.4440	1.00	0.4440	3.0995	9.00
6920.00	NA	NA	0.4590	0.4725	1.00	0.4725	3.5790	10.00
6921.00	NA	NA	0.4920	0.5055	0.98	0.4954	3.5790	10.00
6922.00	NA	NA	0.5190	0.5055	0.98	0.4954	4.0704	10.98
6924.00	NA	NA	NA	NA	NA	NA	NA	NA

RECORD DRAWING



CONSULTANT:  
**LESLIE & ASSOCIATES**  
444 South Main Street  
Cedar City, Utah 84720  
Phone: (435)586-9474  
FAX: (435)586-9399  
CIVIL ENGINEERS  
LAND SURVEYORS

\\sbs\p01\594\_ALTON\_COAL\_KANE\_MINING\01-COAL\_HOLLOW\_PROJECT\Draw\SHEET\_C9.0.dwg April 18 2011 4:42pm By:Owner

DRAWN BY: KRB	CHECKED BY: JL
DRAWING:	DATE: 11/08/2010
	SCALE: AS NOTED
JOB NUMBER: 594-01-01	

REVISIONS	
DATE:	BY:
4/19/2011	KRB

**SEDIMENT IMPOUNDMENT POND 1 DETAILS**

COAL HOLLOW PROJECT  
ALTON, UTAH

DRAWING: C 9.0



**Coal Hollow Project**  
Alex Coal Development

463 North 100 West, Suite 1  
Cedar City, Utah 84720  
Phone (435)867-5331  
Fax (435)867-1192



1. Water tanks on East side of the facilities area



2. Soil pile from maintenance work completed at water tanks



3. Wet material still present where pipe was repaired



4. Material pushed onto undisturbed area



5. Flow from water tanks into ditch C7



6. Road drainage before junction with DD#4



7. Junction of Road drainage and DD#4



8. Flow West of DD#4 after junction to Pond 3



9. Pond 1 inlet



10. Pond 1B with Tamarisk cut



11. Pond 1B inlet



12. Sediment deposit fan at Pond 3 inlet



13. DD#4 armoring at inlet to Pond 3 were maintenance is required



14. Exposed Tamarisk within Pond 3 that were not treated due to limited access



15. Main entrance North side ASCA sediment and straw bales.



16. Main entrance South Side ASCA



17. Main Entrance Culvert



18. Dozer pushing subsoil off excess spoil pile.



19. Subsoil Pile at base of excess spoil pile



20. Working face of excess spoil pile



21. Trucks hauling sub soil to HWT 1



22. Topsoil being stockpiled for dozing in southern area.



23. Dames Access low spot



24. Fence down around Pit 21 and cattle at Pond 4



25. Pit 10 southern slope sloughing



26. Water truck watering the mine access road



27. Spill containment Area

