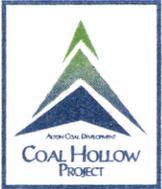


C/025/005 Incoming

# 4099

&



**Alton Coal Development, LLC**

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

**RECEIVED**

**MAY 21 2012**

**DIV. OF OIL, GAS & MINING**

Date: May 17, 2012

Daron R. Haddock  
Coal Program Manager  
Oil, Gas & Mining  
1594 West North Temple, Suite 1210  
Salt Lake City, UT 84114-5801

Subject: Changes to the Notice of Intent - Minor Coal Exploration  
Task ID #4066

Dear Mr. Haddock,

Enclosed is three copies of a Revised Minor Exploration Plan (first submitted on March 30, 2012) which serves as the Notice of Intention (NOI) to conduct borehole drilling activities associated with the Coal Hollow Project. This NOI has been completely reformatted to address all issues from your letter of April 10, 2012.

All Drilling is requested for fee lands within Township 39 South, Range 5 West, Sections 7 and 18, and Range 6 West, Sections 12 and 13, in Kane County, Utah. The NOI is accompanied by maps showing the proposed locations of eight boreholes in reference to surface and coal ownership. Tables are also included reflecting location and seed mix.

One copy has been sent to Mr. Steve Demczak at the Price, Utah office.

Please let me know if you have any questions or concerns.

Sincerely,

Larry W. Johnson  
Alton Coal Development, LLC

# MINOR COAL EXPLORATION PLAN

## COAL HOLLOW PROJECT

### FEE COAL

### FEE SURFACE

## KANE COUNTY, UTAH

Submitted by:

Alton Coal Development, LLC

May, 2012

RECEIVED

MAY 21 2012

DIV. OF OIL, GAS & MINING



**R645-200 Coal Exploration: Introduction**

Alton Coal Development, LLC (ACD) is submitting this Notice of Intent (NOI) to conduct Minor Coal Exploration. This exploration plan serves as Alton Coal Development, LLC's ("Alton Coal's") notice of intent ("NOI") to conduct minor coal exploration activities in conjunction with the Coal Hollow Project, Kane County, Utah ("Project")

This NOI concerns borehole drilling activities on fee lands associated with the Project. Eight boreholes are proposed within Township 39 South, Range 5, Sections 7 and 18 and Township 39 South, Range 6, Sections 12 and 13, Kane County, Utah ("Exploration Area"), using rubber-tired drilling rigs to obtain spot cores of the coal seam and associated strata. Core samples of the coal bed will result in removal of far less than 250 tons of coal and qualifies as minor exploration pursuant to R645-201-210. Alton Coal would appreciate the Division's review of this NOI.

**R645-200-100. Scope Minor Coal Exploration**

**122. Minor Coal Exploration**

Alton Coal Development, LLC intends to conduct coal exploration and agrees to conduct these activities in compliance with the Utah State Coal Program and the requirements of R645-200 through R645-203. ACD intends to drill in order to verify the thickness, perceived mining conditions and quality of the Smirl coal seam in Fee Coal. Less than 250 tons of coal will be removed during this drilling program.

Alton Coal Development is hereby filing a NOI to conduct Minor Exploration under the requirements of R645-201-200.

**R645-200-200 Responsibilities**

**210. Responsibility to Comply with Regulations**

ACD will comply with the requirements of R645-200 through R645-303

**220. Responsibility of the Division to Review And Reply**

Rules and regulations state that the Division will review and reply to this NOI within 15 days of submission

**230. Responsibility of the Division to Coordinate with Other Agencies**

Rules and regulations state that the Division will coordinate review of this NOI with the other appropriate government agencies.

**R645-201 Coal Exploration: Requirements for Exploration Approval**

**R645-201-100 Responsibilities for Coal Exploration Plan Review**

**110. Coal Exploration Plan Review, Responsibility of the Division**

The lands upon which exploration will be conducted is Fee Land. The exploration plan review will be the responsibility of the Division.

**120. Requirements of 43 CFR 3480-3487**

This requirement does not apply to this Notice of Intent

**130. Division Responsibility to Coordinate with other Agencies**

This NOI will be submitted to the Division as the lead agency for review and approval.

**R645-201-200 Notices of Intention to Conduct Minor Coal Exploration**

**210. Division Review Requirement**

ACD is submitting a Notice of Intention to Conduct Minor Coal Exploration where removal of 250 tons or less of coal is planned

**220. Required Applicant Information.**

**221. Name, Address and Telephone Number of Applicant**

Applicant: Alton Coal Development, LLC  
463 N. 100 W., Suite 1  
Cedar City, UT 84720  
Phone: (435) 867-5331  
Fax: (435) 867-1192  
E-mail: [ljohnson@altoncoal.com](mailto:ljohnson@altoncoal.com)

**222. Name, Address and Telephone of Applicant's Representative**

Applicant's Representative: Larry Johnson  
Alton Coal Development, LLC  
463 N. 100 W., Suite 1  
Cedar City, UT 84720  
  
Erik C. Petersen, P.G.  
Petersen Hydrologic, LLC  
2695 North 600 East  
Lehi, Utah 84043  
Phone: (801)766-4006

**223. Description of Exploration Area**

Alton Coal proposes to drill eight coreholes on the following lands held in private ownership in Kane County, Utah:

Corehole Number	Township Range	Section
13-39-06-001	Township 39 South, Range 6 West	13: SW1 4NE1 4
13-39-06-002	Township 39 South, Range 6 West	13: SE1 4NE1 4

13-39-06-003	Township 39 South, Range 6 West	13: SE1/4NE1/4
12-39-06-004	Township 39 South, Range 6 West	12: SE1/4SE1/4
12-39-06-005	Township 39 South, Range 6 West	12: SE1/4SE1/4
7-39-05-008	Township 39 South, Range 5 West	7: SW1/4WW1/4
18-39-05-009	Township 39 South, Range 5 West	18: NW1/4NW1/4
18-39-05-010	Township 39 South, Range 5 West	18: SW1/4NW1/4

Table 1 attached hereto shows the UTM and Latitude/Longitude of the eight coreholes. Table 2 reflects the seed mix for reclamation. Maps number 3 and 4 attached hereto show the location of the eight boreholes in relation to surface and mineral ownership of the Project. The surface and mineral estate of the Exploration Area in which the coreholes are proposed has been leased, has been made by Alton Coal pursuant to an agreement with the following property owners:

Heaton Brothers, LLC  
Glen Ferril and Dorothy M. Heaton  
Dean R. Heaton

A copy of each agreement is provided in this document - These agreements are located in Appendix 1.

The eight coreholes are planned in areas with relatively flat grades (not greater than 4% slopes), near pre-existing access routes. The Exploration Area is pasture lands and farm lands, used primarily for grazing of livestock and farming.

**Threatened and Endangered Species-** Initial consultations have been made to the appropriate state and federal agencies regarding threatened, endangered, and sensitive plant and animal species and their habitats in and adjacent to the Project Area. Additionally, field studies have been conducted of the Project area and adjacent areas for potential threatened and endangered species and their habitats by Mt. Nebo Scientific, Inc. Based on information from these field studies, no threatened or endangered species have been located within the Project area. Appendix F, Alton Coal Tract LBA EIS Report of Reconnaissance Surveys, an appendix to the Bureau of Land Management Environmental Impact Statement of the Alton Coal Tract Lease by Application reflects that no Threatened and Endangered Species are within the project area. This document can be found in the Draft Environmental Impact Statement document dated November, 2011.

The project area has potential for nesting of the Greater Sage Grouse, reflected on Map 2.6 of the Alton Coal Lease by Application DRAFT EIS. These nesting areas will be identified prior to any drilling or access and will be avoided. Routes will be changed and drill sites will be relocated if Sage Grouse are found to be nesting within the proposed

areas of drill pads and access roads. Any bird that is observed will be avoided during equipment mobilization.

**Vegetation-** The land where the proposed project will be conducted has been initially disturbed by farmers and ranchers. The land has been planted in pasture grasses or alfalfa.

**Wildlife-** During the conducting of the drilling project, wildlife will not be harassed nor threatened if encountered.

**Cultural Resources-** Montgomery Archeological Consultants has conducted a cultural resource inventory of the Project area. A Cultural Resource Management Plan (CRMP), dated March 10, 2008 was generated and shows Cultural Resource locations in and around the project area. Figure 1, page 2 of that plan reflects three sites, 42KA3077, 42KA3097, and 42KA8080 that are partially or completely within the project area. These areas have been mapped and can be viewed on page 2, Figure 1, of the Cultural Resource Management Plan. This plan was submitted as part of the Coal Hollow – Mining and Reclamation Plan (October, 2009). The plan can be found in Volume 9 (Confidential) in the Cultural Resource Inventory section. Map 5 shows the ten boreholes in relationship with the cultural sites.

Based on this mapping of the eligible sites, these sites will not be disturbed by the proposed Exploration activities. Locations of the eight boreholes were chosen to avoid these areas.

#### **224. Period of Intended Exploration**

Exploration activities will commence upon approval of this application and will terminate January 2013.

#### **225. Method of Exploration**

Exploration will be conducted using a rubber-tired truck mounted drill rig. The anticipated drilling methods are as follows:

- Hollow stem auger drill the alluvium layer
- Air rotary drill the shale formation
- Core drill the coal bed
- Core drill the Dakota Formation under burden as determined by the geologist.

Wet drilling is not anticipated. This will eliminate the need for water, "mud pits" and impoundments and will minimize disturbance. Whenever possible, existing roads and trails will be used to access the corehole sites. Logs will be kept of activities associated with the drilling process and will be provided to DOGM. The company selected to perform the drilling is AGECE, Applied Geo Tech located in St George, Utah. The on site geologist for the Exploration Project will be Erik Petersen of Petersen Hydrologic, LLC.

Mr. Petersen (Register Utah Professional Geologist #5373615-2250) will provide oversight for proper collecting of material samples and corehole logging.

Generally, samples for geochemical analysis will be collected at every two foot interval. In the lithologic units that are thicker than 10 feet, where practical, the samples will be composited into intervals no greater than 10 feet for analysis purposes. Levels at which appreciable water is contacted will be documented and provided to DOGM.

Support equipment will consist of two pickups trucks used to transport supplies and personnel.

All gasoline and diesel powered equipment will be equipped with mufflers or spark arresters. Fire suppression equipment will be available to personnel on the project site.

There are no occupied dwellings and no pipelines located in the exploration area. No trenches will be dug and no structures will be constructed.

The potential for water pollution will be minimized by keeping pollutants away from the drill hole and in their containers. Materials used during drilling operations will be selected to be biodegradable. All spills of polluting materials will be removed from the area and disposed of in a proper manner

Brattice will be laid out at each drill site during drilling for the drill rig and support trucks to park over, thus avoiding any contamination to the ground due to possible oil, grease, and fuel leaks

**Amount of Coal to be Removed-** Coal will be removed in a 2" diameter core from one intercept of the seam per hole with an average intercept thickness of 14 feet, resulting in 0.0127 short tons of coal to be removed per hole and 0.102 short tons of coal for the ten hole project per the following calculations:

$$\text{Volume of coal in ft}^3 \text{ in one corehole} = \pi r^2 h$$
$$\blacktriangleright 3.14 * 0.0833^2 * 14 = 0.305 \text{ ft}^3$$

Where:	constant	$\pi = 3.14$
	radius of core	$r = 0.0833 \text{ ft}$
	height of core	$h = 14 \text{ feet}$

$$\text{Density of coal relative to density of water} = 1.34$$
$$\blacktriangleright 1.34 * 62.349 = 83.55 \text{ lbs/ft}^3$$

Where:	density of water = 62.439 lbs/ft <sup>3</sup>
--------	---

$$\text{Short Tons of Coal in one hole} = (\text{volume in ft}^3 * \text{density of coal in ft}^3) / 2000$$
$$\blacktriangleright (0.305 * 83.55) / 2000 = 0.0127 \text{ short tons}$$

$$\text{Total Short Tons removed from ten holes} = 0.0127 * 8 = 0.102 \text{ tons}$$

**Environmental Protection and Reclamation:** Alton Coal will employ the following practices to protect the area from adverse impacts of exploration:

- minimize off-road activities;
- coreholes are located near pre-existing access routes or disturbed ground to minimize disturbance.
- coreholes are located in areas that are relatively flat grades (not greater than a 4% slope) thus eliminating the need for excavation at drill pads;
- wet drilling is not anticipated to be utilized eliminating the need for “mud pits”
- use industry standards for drilling boreholes;
- use of a spill prevention plan and protocol to prevent and contain spills;
- drill location disturbance will be ripped and seeded using the seed mix provided in Table 2 to further promote a diverse, effective and permanent vegetative cover. Any disturbance that may be caused by the drill rig and truck traffic to the drill location will also be ripped and seeded using the seed mix provided in Table 2
- Sealing and abandonment of holes will be accomplished by filling the open borehole with unhydrated bentonite. Sufficient water from the existing well used by the Coal Hollow mine will be used to hydrate the bentonite for sealing the hole and minimizing disturbance to the hydrologic balance. Reference for utilizing unhydrated bentonite for sealing and abandonment is found in R655-4-2 Definitions.
- All equipment will be promptly removed from the Exploration Area when they are no longer needed for exploration.

By utilizing dry drilling methods, a truck mounted drill rig and locating the boreholes in relatively flat areas, the need for removing topsoil is not necessary. The disturbance to the ground surface and vegetation will be minimal using these practices. This disturbance will occur from the rubber tire (truck) mounted drill rig, pickup trucks and possibly pallets containing bags of bentonite. The approximate disturbance at each drill site will be an area 30 feet wide by 40 feet in length. The table below breaks down acreage for access and pad. See Map 4 for approximate location of access roads and drill sites.

Possible Disturbed Acreage

Hole ID	13-39-06-001	13-39-06-002	13-39-06-003	12-39-06-004	12-39-15-005
Access	0.19	0.10	0.01	0.32	0.02
Pad	0.03	0.03	0.03	0.03	0.03
Total	0.22	0.13	0.04	0.35	0.05

Hole ID	7-39-05-008	18-39-05-009	18-39-05-010		
Access	0.01	0.54	0.55		
Pad	0.03	0.03	0.03		
Total	0.04	0.57	0.58		

<b>Total Possible acreage disturbed</b>	<b>1.76</b>
---	-------------

The drill pad sites are located near preexisting routes that have been previously disturbed. Activities outside of these previously disturbed routes will be minimized. Roads will not be constructed to the drill site from these preexisting roads. Routes to the drill sites will be undeveloped paths, used by rubber tired equipment. Any disturbance that might occur due to this equipment will be repaired by ripping and seeding.

**R645-202 Coal Exploration: Compliance Duties**

**R645-202-100: Required Documents**

A copy of the NOI to Conduct Minor Coal Exploration including appendices will be available to personnel at the site and will be available for review by an authorized representative of the Division upon request. No road use or special permits are required for the project site.

**R645-202-200 Performance Standards**

**210. Requirements of the State Program**

ACD will comply with all coal exploration requirements of the State Program, and any conditions on approval of the Exploration Plan

**220. Inspection and Enforcement**

ACD accepts the Division's rights to inspect the exploration operations

**230. Operational Standards**

**231. Non-Disturbance of Habitats**

ACD will apply all methods necessary to minimize disturbances or any adverse effects to habitats of unique or unusually high value to T & E species.

**232. Road Construction and Use**

There are no plans to construct any new roads associated with this drilling project. The roads existing prior to the starting of the exploration program will not be reclaimed. Regulations cited under R645-202-232 relative to roads will be followed. when they apply to existing roads.

### **233. Topsoil Removal and Storage**

Topsoil/vegetation will be selectively removed at the drill location, stored, and redistributed on the areas disturbed by drill activities as necessary to assure successful re-vegetation or as required by the Division.

### **234. Diversion of Overland Flows**

No diversions of overland flows and ephemeral, perennial, or intermittent streams will be made in association with the drill project. There will be no adverse impacts to any stream channel if any pumping occurs.

### **235. Minimizing Disturbance to Hydrologic Balance**

Coal exploration will be conducted in a manner which minimizes the disturbance to the prevailing hydrologic balance in accordance with R645-301-356.300 and R645-301-763.

### **236. Acid-or Toxic Forming Materials**

It is not anticipated that acid- or toxic-forming materials will be encountered during exploration. In the unlikely event unsuitable material is encountered, the excess cores will be buried under four feet of cover on site.

## **240. Reclamation Standards**

### **241. Excavations**

Any disturbance on a site, upon completion of drilling activities, will be reasonably restored to its approximate original contour. It is anticipated that only in the immediate vicinity of drill hole will there be disturbance.

New roads will not be constructed. Any disturbance that might occur moving equipment to and from the drill location will be ripped and seeded.

### **242. Re-vegetation**

The method of revegetation is intended to encourage prompt revegetation and recovery of a diverse, effective, and permanent vegetative cover. See Table 2 for the seed mix to be used.

If the drill site is within a farmed area, the proper crop seed will be used as directed by the farmer.

### **243. Reclamation of Boreholes**

Sealing and abandonment of holes will be accomplished by filling the open borehole with unhydrated bentonite. It is anticipated that sufficient formation water will be present to hydrate the bentonite for sealing the hole and minimizing disturbance to the hydrologic balance. If dry conditions are encountered, water of suitable quality will be added to hydrate the placed bentonite. Reference for utilizing unhydrated bentonite for sealing and abandonment is found in R655-4-2 Definitions.

## **244. Removal of Equipment**

All equipment will be removed from the exploration site upon completion of the program

### **R645-203**

#### **Coal Exploration: Public Availability of Information**

##### **100. Public Records**

Except as provided in R645-203-200, all information submitted to the Division under R645-200 will be available for public inspection.

##### **200. Confidentiality**

ACD requests that the Division not make any drilling information available for public inspection relative to coal seam thickness or quality. This information is considered crucial to ACD's competitive rights in the future. ACD will retain all drill and geophysical logs. In addition, all information submitted within this NOI is designated "confidential" and will be made unavailable for public inspection.

### **R645-301**

#### **Regulation Information and Commitments**

##### **R645-301-358**

ACD will to the extent possible using the best technology currently available, minimize disturbances and adverse impacts on fish, wildlife, and related environmental values and will achieve enhancement of such resources where practicable

Sites will not be constructed or operated where they might jeopardize the existence of any endangered or threatened species. State or federally listed endangered or threatened species will be reported to the Division upon its discovery.

ACD understands that there is no permission implied by these regulations for the taking of endangered or threatened species, their nests, or eggs.

The project area contains places with wetlands and riparian vegetation. No proposed sites or routes contain nor transect these wetlands or riparian vegetation.

No potential barriers will exist at any of the well sites. No ponds exist on the well sites.

R645-301-512.250, R645-301-534.100 through 300, and R645-301-542.600 do not apply to this NOI. No roads will be constructed. Any disturbance by rubber tired equipment that might occur will be repaired by ripping and seeding.

##### **R645-301-526-200**

No major utilities pass over, under, or through the project area. Use of roads and development of the exploration site will not disrupt or damage any utility service.

##### **R645-301-527.100, 230, 240**

The roads within the permit area that are not owned by the county (primary) are private roads and all roads are preexisting. The Alton Road is a county road and intersects the project area on the south. This is a primary road and the remainder of the roads within the project area are ancillary.

If a road is damaged due to the drilling project, the road will be repaired as soon as practical after the damage occurs.

R645-301-731.100

It is anticipated that water will not be used in the drilling of these bore holes. If it becomes necessary to utilize water in the drilling process, water or drilling fluids will be used only after the Division of Oil, Gas and Mining has been notified and approval for the use of these materials is granted.

It is not anticipated that acid- or toxic-forming materials will be encountered during exploration. In the unlikely event that acid- or toxic-forming material is encountered, the excess cores will be buried under four feet of cover on site, or the material will be removed from the site and properly disposed of. Surface-water quality will be protected by handling earth materials, ground-water discharges, and runoff in a manner that minimizes the formation of any acidic or toxic drainage.

R645-731-200

None of these boreholes will be developed into water monitoring wells. All eight boreholes will be reclaimed after the cores are extracted.

R645-301-742.410 thru 742.420

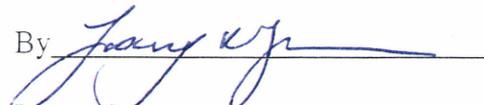
Minimal surface disturbance will be required for the drilling project. Disturbances will be limited to portions of the drill site and possible portions of the access routes to the drill site.

The potential for water pollution will be minimized by keeping pollutants away from the drill hole and in the appropriate containers. Materials used during drilling operations will be selected to be as non-polluting as possible. All spills of polluting materials will be removed from the area and properly disposed of.

No mixing of surface and ground waters will occur. Drill sites will be above perennial and ephemeral stream drainages.

As discussed above, it is anticipated that there will be no drilling fluids utilized in this exploration. Drilling depths will be from about 40 to 200 feet.

This NOI is submitted this 17th day of May, 2012 by Alton Coal Development, LLC.

By   
Its Manager

cc: Office file  
Enclosures

#### REFERENCES

Montgomery Archeological Consultants, P. Stavish and K. Montgomery  
2008 Cultural Resource Management Plan (CRMP)

Appendix 1 - Lease agreements, Project Properties

Appendix F – Alton Coal Tract LBA EIS report of Reconnaissance Surveys,  
Alton Coal Tract Lease by Application, Draft Environmental Impact Statement.

# Proposed Bore Hole Locations

May, 2012

Datum = NAD 27

Hole ID	Zone	Easting	Northing	Latitude	Longitude	Elevation
13-39-06-001	12S	369530	4142436	37d25'17"	112d28'28"	6886
13-39-06-002	12S	369784	4142444	37d25'17"	112d28'18"	6888
13-39-06-003	12S	369932	4142539	37d25'21"	112d28'12"	6882
12-39-06-004	12S	369873	4143077	37d25'38"	112d28'14"	6903
12-39-16-005	12S	369997	4143392	37d25'48"	112d28'10"	6930
7-39-05-008	12S	370477	4143417	37d25'49"	112d27'50"	6943
18-39-05-009	12S	370434	4142772	37d25'28"	112d27'51"	6950
18-39-05-010	12S	370280	4142300	37d25'13"	112d27'57"	6862

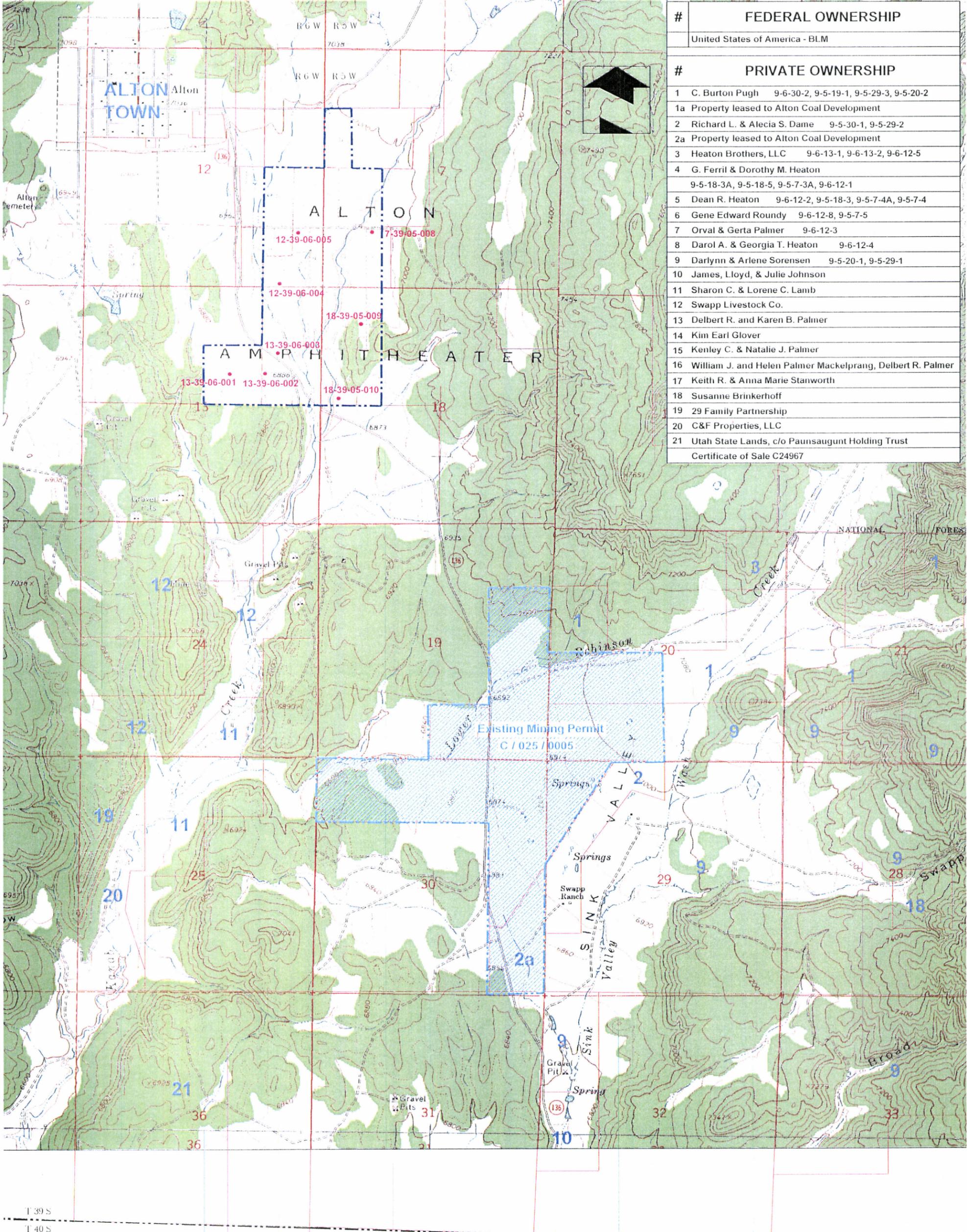
TABLE 1: PROPOSED BOREHOLE COORDINATES IN NAD 27

Exploration Seed Mix			
		Pure Live Seed/Acre	Seeds/Square foot
Bromus carinatus	Mountain Brome	6	13.77
Elymus lanceolatus	Thickspike Wheatgrass	4	14.14
Elymus smithii	Western wheatgrass	5	14.46
Elymus spicatus	Bluebunch wheatgrass	6	19.28
Poa pratensis	Kentucky bluegrass	0.4	19.99
<b>Total</b>		<b>21.4</b>	<b>81.64</b>

NOTE: If drilling occurs on land where crops are planted, ACD will coordinate with the farmer to replant that crop on the drill site.

TABLE 2: SEED MIX





#	FEDERAL OWNERSHIP	
	United States of America - BLM	
#	PRIVATE OWNERSHIP	
1	C. Burton Pugh	9-6-30-2, 9-5-19-1, 9-5-29-3, 9-5-20-2
1a	Property leased to Alton Coal Development	
2	Richard L. & Alecia S. Dame	9-5-30-1, 9-5-29-2
2a	Property leased to Alton Coal Development	
3	Heaton Brothers, LLC	9-6-13-1, 9-6-13-2, 9-6-12-5
4	G. Ferril & Dorothy M. Heaton	9-5-18-3A, 9-5-18-5, 9-5-7-3A, 9-6-12-1
5	Dean R. Heaton	9-6-12-2, 9-5-18-3, 9-5-7-4A, 9-5-7-4
6	Gene Edward Roundy	9-6-12-8, 9-5-7-5
7	Orval & Gerta Palmer	9-6-12-3
8	Darol A. & Georgia T. Heaton	9-6-12-4
9	Darlynn & Arlene Sorensen	9-5-20-1, 9-5-29-1
10	James, Lloyd, & Julie Johnson	
11	Sharon C. & Lorene C. Lamb	
12	Swapp Livestock Co.	
13	Delbert R. and Karen B. Palmer	
14	Kim Earl Glover	
15	Kenley C. & Natalie J. Palmer	
16	William J. and Helen Palmer Mackelprang, Delbert R. Palmer	
17	Keith R. & Anna Marie Stanworth	
18	Susanne Brinkerhoff	
19	29 Family Partnership	
20	C&F Properties, LLC	
21	Utah State Lands, c/o Paunsaugunt Holding Trust	
	Certificate of Sale C24967	

T 39 S  
T 40 S

3

**LEGEND:**

PROPOSED BOREHOLE BOUNDARY

EXISTING PERMIT AREA

PROPOSED BOREHOLE

See Map 4 for Project Area View

DRAWN BY:	CHECKED BY:
LWJ	LWJ
DRAWING:	DATE:
3	5/15/2012
	SCALE:
	1" = 2000'
JOB NUMBER:	SHEET

REVISIONS	
DATE:	BY:

**BoreHole Locations Fee / Fee**

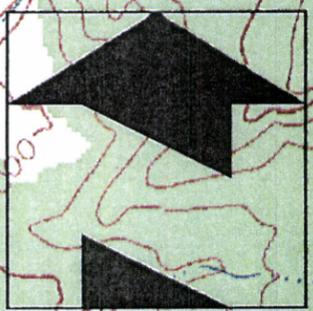
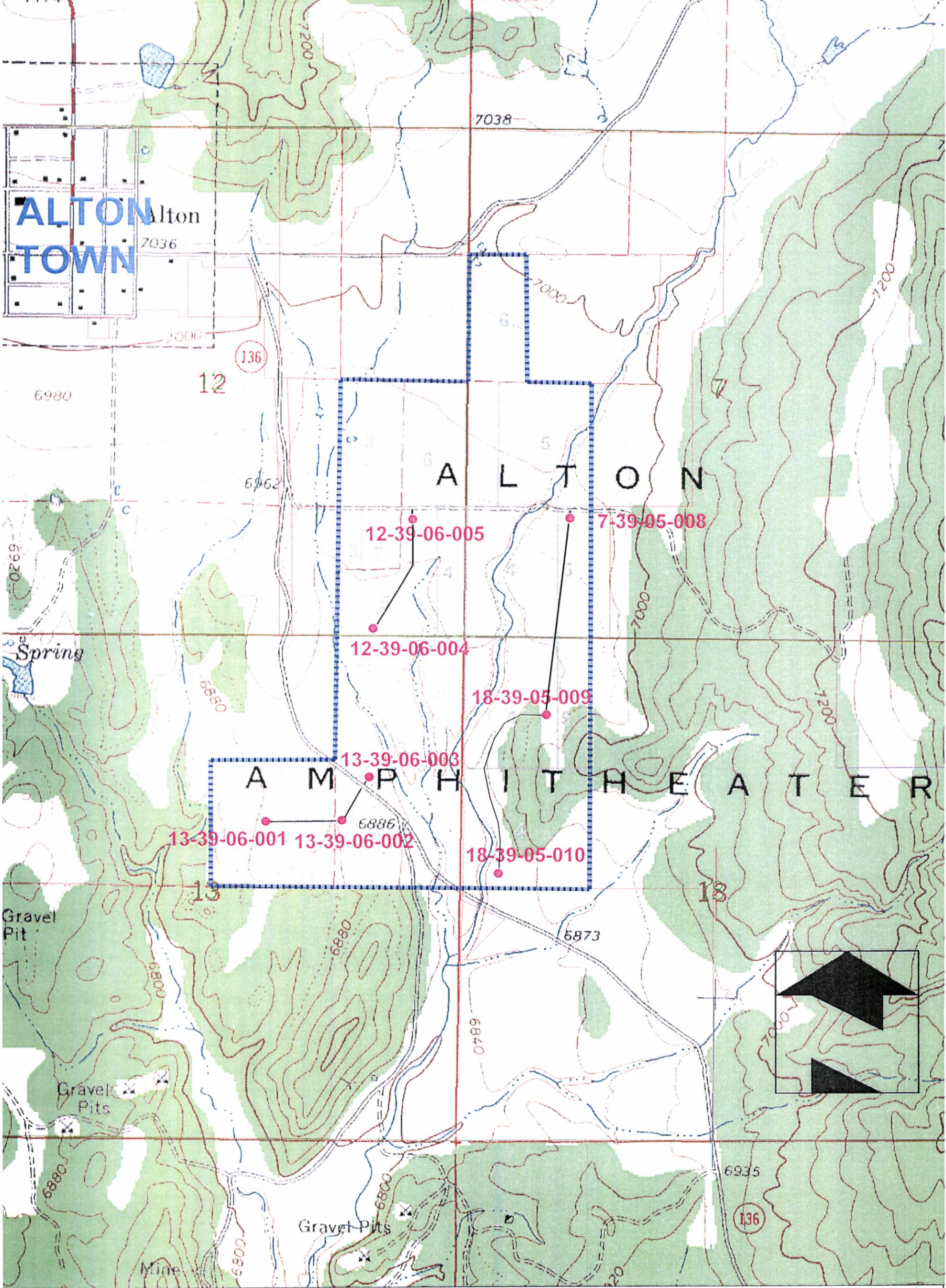
Sec 7 & 18, T39S, R5W  
Sec 12 & 13, T39S, R6W

COAL HOLLOW PROJECT  
ALTON, UTAH

MAP 3

167230  
JAY S. ADAMS  
*Jay S. Adams*  
State of Utah  
5-17-12

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



**LEGEND:**  
 PROPOSED BOREHOLE BOUNDARY  
 PROPOSED BOREHOLE  
 See Map 3 for Overall View

**DRAWN BY:**  
LWJ

**DRAWING:**  
4

**JOB NUMBER:**

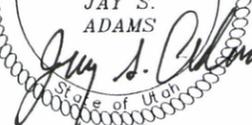
**DATE:**  
5/15/2012

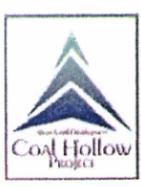
**SCALE:**  
1"=1000'

**SHEET**

REVISIONS	
DATE:	BY:

**BoreHole Locations Fee / Fee**  
 Sec 7 & 18, T39S, R5W  
 Sec 12 & 13, T39S, R6W  
 COAL HOLLOW PROJECT  
 ALTON, UTAH  
 MAP 4

167230  
 JAY S. ADAMS  
  
 State of Utah  
 2-17-12

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