



United States Department of the Interior

BUREAU OF LAND MANAGEMENT
Colorado State Office
2850 Youngfield Street
Lakewood, Colorado 80215-7210
www.co.blm.gov



In Reply Refer To:
3410(CO-921) KB
COC74911

OCT 26 2012

Decision

Oxbow Mining, LLC
Attention: Mr. Steve Weist
PO Box 535
Somerset CO 81434

Coal Exploration License Issued Surety Bond Accepted

Enclosed is your copy of coal exploration license COC74911 with the approved exploration plan. The exploration license is effective November 01, 2012.

Bond Under License to Explore for Coal Deposits, Bond No. 1079326 in the amount of \$263,000; having Oxbow Mining, LLC as principal and Liberty Mutual Insurance Company, at 175 Berkeley St, Boston, MA 02117, as surety, has been examined, found satisfactory and is accepted effective November 01, 2012.

Sincerely,

Lonny Bagley
Deputy State Director
Division of Energy, Lands and Minerals

Enclosures

cc: FOM, UFO w/license
Surety

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

Serial Number COC-74911

Issue Date: November 01, 2012

COAL EXPLORATION LICENSE

Expiration Date: November 01, 2014

This license, entered into on, November 01, 2012 by the United States of America, the licensor, through the Bureau of Land Management (BLM), and

Oxbow Mining, LLC
PO Box 535
Somerset, CO 81434

the licensee, is hereby issued under the Mineral Leasing Act of 1920, as amended (30 U.S.C. section 181 et seq.) and is subject to all applicable Federal, State, and local laws and regulations, including Title 43, Code of Federal Regulations (CFR), Part 3400.

Sec. 1. RIGHTS UNDER LICENSE--This license confers the right to perform exploration operations in accordance with the terms and conditions of this license, the approved exploration plan, and applicable regulations in the following-described lands situated in the State of Colorado:

Sixth Principal Meridian

T. 13 S., R. 92 W.
sec. 7, lots 13-20, inclusive;
sec. 8, S½;
sec. 9, S½;
sec. 15, lots 13, 18, 19, and 22;
sec. 16, all;
sec. 17, all;
sec. 18, all;
sec. 19, all;
sec. 20, all;
sec. 21, all;
sec. 22, lots 4, 5, 12, and 13;
sec. 28, lots 2-7, inclusive;
sec. 29, all;
sec. 30, all;

T. 13 S., R. 93 W., 6th P.M.
sec. 9, lots 9-16, inclusive;
sec. 10, lots 9-16, inclusive;
sec. 11, lots 9-16, inclusive;

sec. 12, lots 9-16, inclusive;
sec. 13, all;
sec. 14, all;

2012 OCT 22 PM 12:09
COC-74911
COSE-74911
COC-74911
COC-74911

sec. 15, lots 1-10, inclusive, and lots 14-15, inclusive;
 sec. 16, lots 1-4, inclusive;
 sec. 23, all;
 sec. 24, all;
 sec. 25, all;
 sec. 26, all;
 sec. 35, all;
 sec. 36, lots 1-8, inclusive, and lots 11-14, inclusive.

These lands contain 13,873 acres, more or less.

This license is issued for a period of two years and shall confer no right to a lease. It shall not be extended; however, the licensee may apply for a new exploration license to be issued simultaneously with the expiration of this license.

The issuance of this license shall not preclude the issuance of a coal lease at such time and to such persons as deemed appropriate by the BLM State Director or by his delegated representative, hereafter called the "authorized officer." If a coal lease is issued for lands included in this exploration license, those lands common to both lease and license shall be canceled from the license effective the date of lease issuance.

Sec. 2. EXPLORATION--The licensee shall diligently explore the lands by drilling, by excavating, by geophysical or geochemical surveying, or by other acceptable methods. The licensee is entitled to use for exploration purposes so much of the surface of the licensed lands as reasonably necessary for such operations in accordance with the approved exploration plan which is attached and made a part of this license.

Sec. 3. OPERATIONS--(a) The licensee shall comply with all applicable rules and regulations of the Secretary of the Interior and, as to any lands in this license which are administered by another Federal agency, with the regulations and orders of that agency.

(b) The licensee shall comply with the provisions of the operations regulations at 43 CFR Part 3480 and all orders issued pursuant thereto. Copies of the operating regulations may be obtained from the **Uncompahgre Field Office Manager**.

(c) The licensee shall allow inspection of the premises and operations by authorized representatives of the Department of the Interior or other Federal agency administering the lands and shall allow the free ingress and egress of Government officers and other persons using the lands under authority of the United States. Upon request of the authorized officer or the **Uncompahgre Field Office Manager**, the licensee shall report all matters pertaining to the character and progress of exploration work.

Sec. 4. MULTIPLE USE--(a) This license shall not adversely affect valid existing rights acquired prior to license issuance on the lands described herein.

(b) The granting of this license shall not preclude the issuance of other licenses, permits, or leases and shall not preclude other developments of the same lands.

(c) Operations under this license shall not unreasonably interfere with or endanger any other operations or use authorized pursuant to the provisions of any other act or regulation.

(d) The United States reserves the right to sell or otherwise to dispose of Federal lands under existing law or under laws hereafter enacted, insofar as such disposal shall not materially interfere with the rights of the licensee.

(e) If any of the licensed lands shall have been or may be entered and patented with a reservation of

mineral deposits to the United States, the licensee shall observe such conditions as provided by law as to the use and occupancy of the surface of those lands.

Sec. 5. PROTECTION OF SURFACE, NATURAL RESOURCES, AND IMPROVEMENTS--The licensee agrees to take reasonable steps to prevent operations under this license from unnecessarily causing or contributing to soil erosion; damaging crops, forage, or timber; polluting air and water; or damaging improvements owned by the United States and other parties. Upon any partial or total relinquishment, upon the cancellation or expiration of this license, or at any other time prior thereto when required, the licensee shall, to the extent deemed necessary by the licensor, (a) fill any pits, ditches, and other excavations, (b) remove or cover all debris, and (c) so far as reasonably possible, restore the surface of the licensed lands and access roads to their former condition, including the removal of structures. The licensor may prescribe the steps to be taken and the restoration to be made with respect to the licensed lands and improvements thereon.

Sec. 6. PROTECTION OF CULTURAL AND PALEONTOLOGICAL RESOURCES--

(a) Cultural Resources. Prior to any surface disturbing activities, the licensee shall conduct a cultural resources survey of all previously unsurveyed areas that will be directly impacted by exploration operations under this license. The survey shall be an intensive field inventory of cultural, historical, and archeological values, including, but not limited to, any and all objects of antiquity, historic or prehistoric ruins and artifacts, or other specimens of scientific interest.

(1) The survey shall be conducted by a qualified professional cultural resources specialist (e.g., archeologist, historian or historical architect, as appropriate), approved in advance by the **Uncompahgre Field Office Manager**. A report on the survey and recommendations for protecting any identified cultural resources shall be submitted to the **Uncompahgre Field Office Manager**. After review and approval of the report, exploration operations may be further conditioned with the imposition of additional stipulations for protection of the identified cultural resources.

(2) The cost of the cultural resources survey, the report, and any measures to protect cultural resources identified thereby shall be borne by the licensee. All identified items shall remain the property of the appropriate surface owner, but the United States reserves its right and obligation under applicable law to take action necessary to protect, preserve, or acquire such items.

Sec. 7. BOND--The licensee shall file with the Colorado State Office a compliance bond in the amount of **\$263,000** to ensure compliance with the terms and conditions of the license and the regulations.

Sec. 8. USE OF DATA--The licensee shall furnish to the **Uncompahgre Field Office Manager** copies of all data (including, but not limited to, geological, geophysical, and core drilling analyses) obtained during exploration. The licensee shall submit such data at such time and in such form as required by the **Uncompahgre Office Manager**, the authorized officer, or the surface management agency; or as specified in this license or in the exploration plan. The confidentiality of all data so obtained shall be maintained until after the areas involved have been leased or until such time as the **Uncompahgre Field Office Manager** determines that making the data available to the public would not damage the competitive position of the licensee, whichever comes first. The authorized officer may require the licensee to collect and to report ground and surface water data available in the conduct of the approved exploration plan.

Sec 9. TRANSFER OF LICENSE--Transfer of this license shall not be effective until it is approved by the authorized officer.

Sec. 10. MODIFICATION OF LICENSE--

- (a) The licensee may request a modification of the exploration plan if geologic or other conditions warrant.
- (b) The authorized officer may adjust the terms and conditions of the license, including the stipulations or the **Uncompahgre Field Office Manager** may direct adjustment in the exploration plan when unforeseen conditions are encountered that could result in substantial surface disturbance or damage to the environment or to improvements, or when geologic or other physical conditions warrant.
- (c) Any modification of the exploration plan is subject to approval by the **Uncompahgre Field Office Manager**.

Sec. 11. RELINQUISHMENT OF LICENSE--The licensee may relinquish this license, in whole or in part, by filing in the Colorado State Office a written relinquishment. The relinquishment shall be effective the date it is filed, subject to the continued obligation of the licensee and his surety: (a) to comply with the terms and conditions of the license, the exploration plan, and the regulations and, (b) to provide for the preservation of any permanent improvements on the licensed lands.

Sec. 12. REVOCATION OF LICENSE--This license may be revoked for noncompliance with the terms and conditions of the license, the approved exploration plan, or the regulations after the licensee has been notified of such violation and the licensee has failed to correct the violation within the time specified in such notice.

Sec. 13. EQUAL OPPORTUNITY CLAUSE--This license is subject to the provisions of Executive Order No. 11246 of September 24, 1965, as amended, which sets forth the nondiscrimination clauses. A copy of this order may be obtained from the issuing office.

Sec. 14. STIPULATIONS--SEE ATTACHMENT A

This license consists of the terms and conditions in Sec. 1 through 14 on four pages, of which this is the fourth page, the attached FONSI, Attachment A and Item A which explains minimum requirements for plugging drill holes, and Item B which outlines the requirements for submission of drilling and abandonment information.

OXBOW MINING, LLC

By: Michael W Ludlow

Name: MICHAEL W Ludlow

Title: Executive Vice President

Date: 10/19/12

UNITED STATES OF AMERICA

By: Lonny Bagley

Name: Lonny Bagley

Title: Deputy State Director
Division of Energy, Lands, and Minerals

Date: October 26, 2012

ATTACHMENT A

**Federal Coal Exploration License Plan
for the
OAK MESA AREA
within
Delta County, Colorado**

Exploration License No. COC-74911

Submitted by
OXBOW Mining LLC
PO Box 535
3737 HWY 133
Somerset, CO 81434

May 6, 2011
Revised August 26, 2011
Revised January 17, 2012
Revised March 12, 2012
Revised April 10, 2012

Barbara Hawrow
9-11-12

Tables

Table 1 Proposed Exploration Drillholes	Page
	8
Table 2 Seed Mix for Oakbrush Zone	
	9

Plates

- Plate 1 General Location Map**
- Plate 2 Drillhole Location Map**
- Plate 3 Surface Ownership Map**
- Plate 4 Mineral Ownership Map**

Township 13 South, Range 93 West, 6th P.M.

Sec 9, Lots 9-16;
Sec 10, Lots 9-16;
Sec 11, Lots 9-16;
Sec 12, Lots 9-16;
Sec 13, All;
Sec 14, All;
Sec 15, Lots 1-10, 14-15;
Sec 16, Lots 1-4;
Sec 23, Lots 1-15;
Sec 24, All;
Sec 25, All;
Sec 26, Lots 1-15;
Sec 35, All;
Sec 36, Lots 1-8, 11-14.

Of the approximately 13,873 acres of surface described above, 67.8% (9,408 acres) of this surface is privately owned, and 32.2% (4,465 acres) are managed by the BLM.

Exploration drilling activities will be short term and will be conducted over a two year period. Exploration mobilization is expected to begin as soon as approval is given and weather and ground conditions allow. It is expected to be completed within two years.

The Exploration Area and Geology:

The proposed exploration license covers upland areas located between the West Roatcap Creek and Leroux Creek drainages and north of the community of Hotchkiss. The area lies generally west of the Orchard Valley coal lease tracts (C-53356 and C37210). The geology and coal character are anticipated to be similar to the Orchard Valley coal lease tract with at least one seam of recoverable coal, outcropping on the southern slopes of the Oak Mesa, and dipping into the mesa at approximately 5 degrees.

Topography:

The surface lands of this proposed exploration area consist of a combination of privately owned and BLM managed sections, however, a majority of the exploration drill pads will occur on private surface, with seven drillholes expected to occur on BLM surface. The elevation in the exploration area ranges from approximately 7,350 ft. above mean sea level (amsl) in the drainages of the exploration license area to 9,100 ft. (amsl) in the north portion of the area. Forty-three (43) drill sites are proposed with elevations ranging from approximately 7,590 to 8,974 feet (amsl). This area is semi-arid with annual precipitation of approximately 17 inches, mostly as snow.

Hydrology:

Both Leroux Creek and West Roatcap Creek are perennial drainages with minor flows occurring all year long. The flow volumes vary in response to spring snowmelt and runoff from major rainfall events. Flow volumes will also vary depending upon the amount of runoff that is diverted into irrigation channels that run through this area and provide water to local orchards and farm land. There are two other drainages, the Dever, and Jay Creek drainages that are in the area of the proposed exploration drilling activities. These drainages have intermittent flows that varying depending upon runoff available and varying amounts captured by local irrigation canals. Proposed exploration activities will be located no closer than 1,000 ft. to Leroux Creek or West Roatcap drainage channels.

Soils:

The environmental resources and values occurring within the proposed area are projected to be consistent

Drilling and Related Activities:

As much as possible drilling will be conducted with minimal site preparation, since the drill rig can be set-up and leveled using self-contained hydraulic jacks. Where site preparation is necessary due to the need to utilize drilling fluids, a pad having maximum dimensions of approximately 180 feet by 120 feet will be established (approx. 0.5 acre disturbance per site). Pad preparation will involve the use of a tracked dozer approximately D6 sized or a utility type backhoe to establish a level drill site and dig a mud pit should the need require it. If topsoil exists, up to 12" will be salvaged and stored in a stockpile along one or more sides of the pad and marked with a "topsoil" sign(s).

Drill holes will be drilled using 8 ¾ inch rotary hole to a depth of up to 200ft. depending upon ground conditions. This hole will be cased with a resulting hole diameter of 6 ½ inches the remainder of the rotary drilling will be with a 6 ¼ inch drill to the desired depth above the coal seam where a 3 inch core drill will recover portions of the material above and below the coal seam, and the coal seam. See Table 1 for the approximate rotary and core depths and total hole depth.

In order to avoid potential sample contamination, drill holes will be completed to the extent possible with air, air-foam, or water as the circulation medium. If we have difficulty keeping drillholes open and sample contamination minimized, it may be necessary to use drilling muds to maintain circulation and drillhole integrity. In that event polymer muds that are free of metallic compounds will be utilized. It is estimated that approximately 5,000 gallons of water will be used for each drillhole under normal drilling conditions.

Drill mud pit(s) for the containment of drilling fluids and cuttings will be excavated with a backhoe within the pad area. The pit will be approximately 20 feet in length, 8 feet in width and 8 feet deep (47.4 cubic yards each). This material may be used to assist in preparing a drillpad.

All drilling and related operations will be conducted by experienced exploration drillers in such a way as to minimize potential environmental impacts, and will be supervised by a qualified geologist. During drilling operations, water levels and flows in the drill holes (if any) will be closely monitored in order to characterize hydrologic conditions in the seams intersected. Samples of immediate roof and floor rock materials and of each coal seam intersected will be logged and may be collected during drilling for subsequent analysis. Drillholes will be logged by the geologist as drilling occurs and will be e-logged to provide appropriate information for the geologist to use in developing a geologic model of the exploration area. Transportation of these crews will be by one or two pickups per shift. One for the crew and one for the geologist.

During drilling, Oxbow will control dust from drilling and related activities, divert and control both natural runoff from disturbed areas and fluid loss from drilling, and will clean-up any trash or debris. If air is utilized as the circulation medium, dust from drilling will be controlled by a flexible shroud at the drill collar. Drill cuttings and portable pits or excavated mud pits will effectively contain drilling fluids as discussed above.

Hole Completion:

Oxbow may complete several of these exploration holes as water monitoring wells, in preparation for base line monitoring required for permit submission. Identification of specific drillholes to be completed as water monitoring wells will occur once initial meetings with the Colorado division of Reclamation, Mining and Safety (CDRMS) has occurred and we have received their direction on locations for monitoring wells. Drill holes selected to be completed as monitoring wells will be completed in accordance with the guidelines agreed to by the BLM and CDRMS for monitoring wells. Once monitoring is no longer required, these wells will be reclaimed as described below under site reclamation. The projected hole depths are provided on Table 1.

Site Reclamation:

Upon completion of drilling and related activities, all drill holes will be backfilled, sealed and abandoned. During drilling, fluid return will be monitored to identify the depth and extent of any water-producing zones. Upon abandonment, in accordance with Drill Hole Plugging Procedures agreed to by BLM and CDRMS, bentonite chips, bentonite plug gel or similar seal will be established in the bottom of the hole, extending to within ten feet of the surface. A cement plug will be set in the hole ten (10) feet below the ground to within three (3) feet of the surface. Accumulations of drill cuttings and mud will be backfilled into and buried in the mud pit (if any) or otherwise buried.

All trash and debris will be removed from drill sites for disposal. Excavations, including mud pits, will be backfilled. Where mud pits are necessary, they may be temporarily fenced and allowed to dry and/or backfilled with drill cuttings and/or previously excavated material. During backfilling, the material will be mixed and compacted as it is replaced, by running the equipment over the backfilled area during placement of successive lifts. Following backfilling, disturbance areas will be graded to their approximate original configuration and surface drainage re-established. Any salvaged topsoil materials will be re-spread onto the regraded surface and reseeded of the areas (pads and roads) will take place using the following seed mixture. A metal post with tag will be placed in the vicinity of the hole as a permanent marker.

Table 2
Seed Mix for Oakbrush Zone

(source: BLM - UFO)			
SPECIES	% of Mix	PLS	#/Acre
Western Wheatgrass var Arriba	12	8.0	0.96
Slender Wheatgrass var San Luis	12	5.5	0.66
Mountain Brome var Bromar	12	12.5	1.5
Big Bluegrass var Sherman	12	1.5	0.18
Bottlebrush Squirreltail	12	8.0	0.96
Canada Wild rye	12	7.0	0.94
American Vetch	6	10.0	0.6
Rocky Mountain Penstemon	6	1.5	0.09
Western Yarrow	6	1.0	0.06
Total application rate for incorporated seed			5.95 #/acre
Seed application rates will be doubled if aerial broadcast methods are used.			

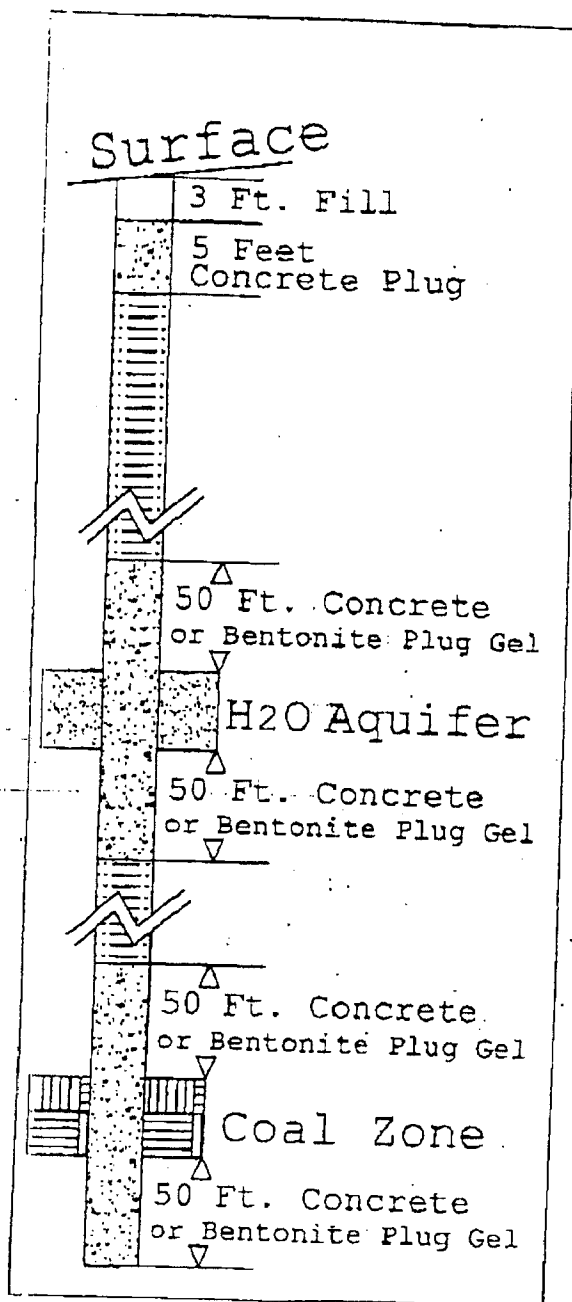
Seed mix shown in Table 2 above is a standard mix. This mix may vary on private surface depending upon seed mixes agreed to with each surface landowner. Seeding will take place in the fall or early spring. Periodic monitoring of re-seeding efforts and weed control will occur for a couple of field seasons to determine stand success, or until vegetation sustainability allows for Bond release of each drilling sites disturbance.

Estimated amounts of coal to be removed during exploration

During the exploration drilling process an estimated 8 tons of coal will be recovered from this area. This coal will occur in the form of coal core that is recovered, so that it can be analyzed to determine its physical, chemical, and energy related properties, this will allow for the determination of whether it is of sufficient quality and quantity to allow Oxbow to apply for a coal lease in this area. Coal tonnages removed were calculated by estimating the volume of coal to be removed from each exploration drillhole, times the typical weight of coal at 80 #/cu. ft. as shown below:

$$\text{Volume of coal removed: } V = \pi r^2 h$$

$r = 3$ inches, $h = 12$ ft. ave. per seam assume 2 seams of coal encountered.



1. Hole must be backfilled with as many cuttings as possible. All remaining cuttings must be dispersed evenly over the surrounding surface.
2. Hole must be blocked to a depth of five (5) ft. below collar with a short hole plug. If water is encountered in the drill hole, a concrete plug must be set below ground three (3) ft. The upper three (3) ft. of the hole is then filled with cuttings and soil.
3. All water bearing zones will be concreted or sealed with a bentonite gel plug if a well is not developed. If coal seams are encountered, they must be sealed in the same manner.
4. All sump holes used during drilling must be drained and backfilled.
5. The site around the hole must be cleaned up and surplus cuttings leveled. Seeding disturbed areas may be required.

Item A

ABANDONMENT OF SHALLOW DRILL HOLES
NORTHERN ROCKY MOUNTAIN REGION

Drilling and Abandonment Information Required to be Submitted to the Field Office Manager

One copy of the following must be submitted within 30 days after each calendar year:

1. Lithologic and geophysical logs and any other required logs of strata penetrated and conditions encountered appropriately identified by the hole number.
2. Analyses of coal and other pertinent tests appropriately identified by drill hole number. Identify types of tests that were run (proximate, ultimate, moisture-mineral-matter free basis, etc), and whether the reported results were analyzed or calculated as composite or incremental samples.
3. Drill hole location map showing lease or license boundary, coal crop lines, drill hole numbers, and township, range and section lines and numbers.
4. List of drill hole numbers and depths drilled.

B. An abandonment report must be submitted after the drill holes have been properly conditioned for abandonment or if approved in advance, converted to monitoring wells. The report should contain the following:

1. For abandoned holes, describe or illustrate the method by which each hole was plugged and conditioned for final abandonment.
2. For holes converted to monitoring wells, describe or illustrate the well completion method (cementing, casing set, perforation interval, etc.), what aquifer(s) is being monitored, duration and frequency of monitoring, and types of tests planned (pH, conductivity, pump, cation, etc.)
3. Status of reclamation of all disturbed areas.
4. List of hole numbers and depths drilled.

C. Abandonment inspections will be conducted upon completion of operations to determine if drill holes are properly plugged and disturbed areas are reclaimed. Once the Field Office Manager determines that the holes are adequately plugged and conditioned for abandonment and reclamation is acceptable, final abandonment approval will be given by the Field Office Manager.

1. For drill holes converted to monitoring wells, inspections will be made to determine if the wells are properly completed, drill sites are reclaimed, and access roads are properly water-barred or otherwise maintained to minimize erosion.

The following shall be submitted within one year after the completion of drilling operations:

1. Any coal reserve base, minable reserve base or recoverable coal reserves estimates generated from the exploration license.