

0055



Ark Land Company  
c/o Canyon Fuel Co., LLC  
Skyline Mines  
HC35Box 380  
Helper, Utah 84526  
435-448-2633

BLM - UT - 950  
2005 JUN 20 AM 10:06

June 17, 2005

Mr. James Kohler  
Bureau of Land Management  
Utah State Office  
PO Box 45155  
Salt Lake City, Utah 84145-0155

*Jim King*  
6/20/05

Re: Combined Coal Exploration License Application, Granger Ridge Tract; and Coal Exploration Plan, Federal Coal Lease UTU-67939, 2005, Revised Pages 3, 6, and 9, Revised Borehole Locations

Dear Jim:

Attached are 5 copies of revised pages 3, 6 and 9 to the Combined Coal Exploration License, Granger Ridge Tract, and Coal Exploration Plan, Lease UTU-67939. During staking of locations in the field it became necessary to alter locations for proposed boreholes F, H, I, and J to allow safe helicopter access. The maps have been revised (pages 3 and 6) as well as the text describing hole locations (page 9). These pages should replace the same pages in the original application.

If you have questions or require further information, please call me at 435-448-2633.

Attached are 5 copies.

Sincerely,

A handwritten signature in black ink that reads "Mark Bunnell".

Mark Bunnell  
Geologist  
Attach.

**RECEIVED**  
**JUN 29 2005**  
DIV. OF OIL, GAS & MINING

**COMBINED APPLICATION**

**APPLICATION FOR FEDERAL MINOR COAL  
EXPLORATION LICENSE  
GRANGER RIDGE TRACT  
Carbon County, Utah  
Manti-La Sal National Forest**

**&**

**COAL EXPLORATION PLAN  
FEDERAL COAL LEASE UTU-67939  
WINTER QUARTERS AND WOODS CANYONS  
Carbon County, Utah  
Manti-La Sal National Forest**

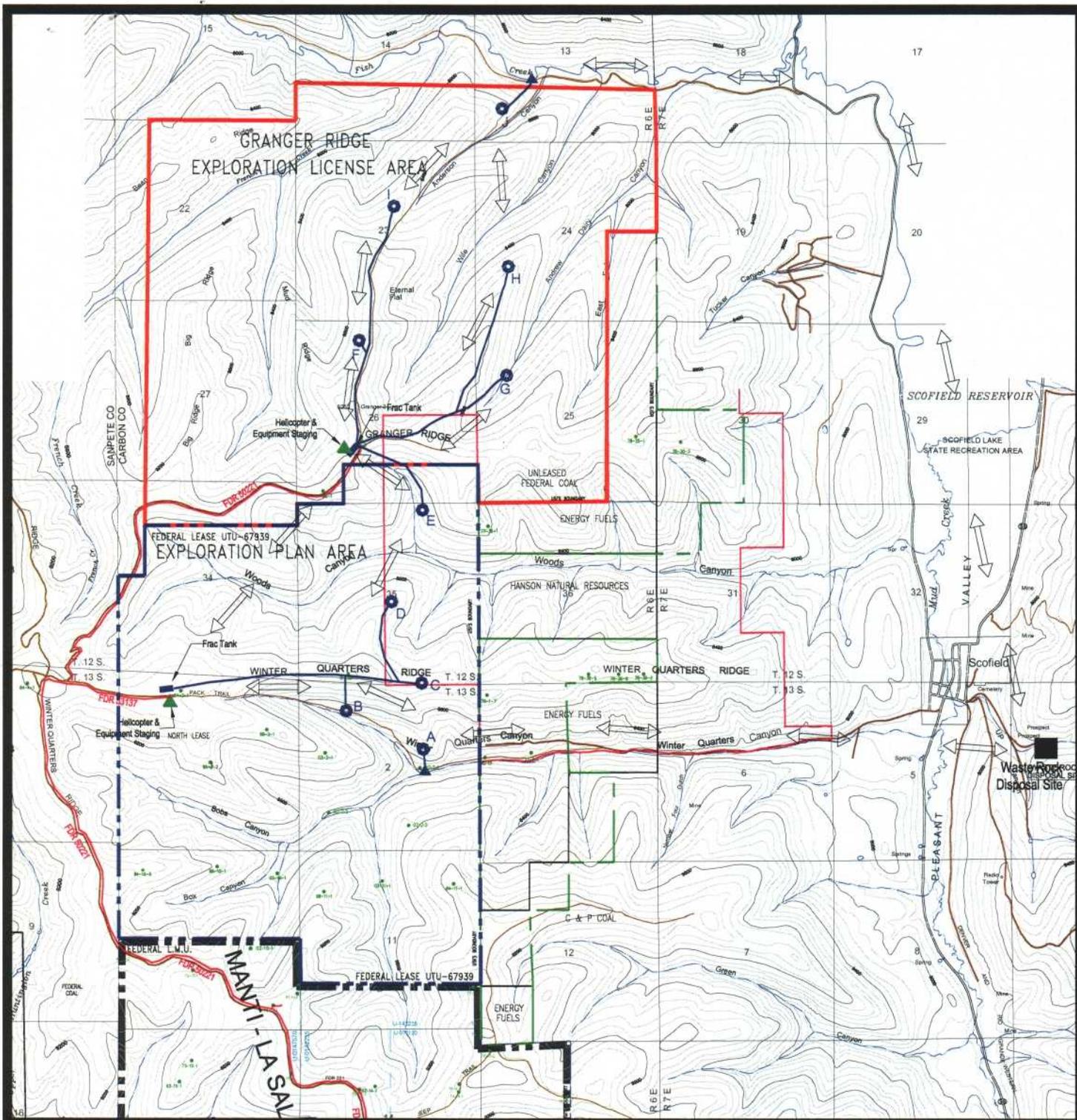
**Exploration Plan  
Feb. 2005**

**ARK LAND COMPANY  
A Subsidiary of Arch Coal Inc.**

## **Introduction**

Ark Land Company (a subsidiary of Arch Coal Inc.) is submitting this combined Application for Federal Minor Coal Exploration License and Exploration Plan on behalf of Canyon Fuel Company, LLC, Skyline Mine to the United States Bureau of Land Management (BLM) as required in 43 CFR 3482 in order to obtain approval to conduct coal exploration and reclamation activities during the summer of 2005. The type of exploration proposed is helicopter-assisted wireline core drilling. Because the NEPA analysis required for approval of the two projects will be considered connected actions, both the exploration license located on unleased federal coal and the exploration plan located on federal coal lease UTU- 67939 are being combined in one application package. A total of ten drill holes are proposed for drilling in coal managed by the BLM with surface management by the U.S. Department of Agriculture Forest Service, including five holes planned for drilling under exploration license on the Granger Ridge tract and five holes under exploration plan in the Winter Quarters/Woods Canyon area to the south on federal coal lease UTU-67939. Map 1 shows the locations of the exploration areas.

This plan is divided into 2 sections with Section 1 addressing the minor coal exploration license for the unleased federal coal exploration, and Section 2 addressing the exploration plan on federal lease UTU-67939. The plan is formatted to address the specific requirements of 30 CFR Chapter VII Subchapters G and K and 43 CFR 3482, and, where applicable, those of the United States Forest Service (USFS), and the Utah Department of Oil, Gas and Mining (UDOGM, Section 2 only). The U. S. Forest Service exploration stipulations are addressed in Appendix B. Requirements of the Utah Department of Oil, Gas and Mining (UDOGM) relative to the on-lease exploration plan are addressed in Appendix C.



- Proposed Helicopter Drill Site
- ▲ Helicopter and Equipment Staging Area
- Proposed Water Tank Location, 10,000-20,000 gal Frac Tank
- ▲ Water Pump Location
- Proposed Forest Road Use
- 2 to 4 in. Waterline (hdpe)
- ↔ Helicopter Flight Route

# MAP 1

DRAWN	
DATE	
BY	
REVISION	
DATE	
BY	
APPROVED	
DATE	
BY	

**ARK LAND COMPANY**  
 SKYLINE MINES, HC35 BOX 360, HELPER, UT, 84528  
**PROPOSED EXPLORATION PLAN**  
**LEASE UTU-67939**  
**AND EXPLORATION LICENSE**  
**GRANGER RIDGE AREA**  
**2005**  
 (Revised 6/17/05)

SCALE: 1" = 4000'  
 FILE NO. \_\_\_\_\_ SHEET NO. \_\_\_\_\_



A site-specific cultural resources survey for this project will be conducted in early Summer 2005, prior to commencement of any field operations. Results will be forwarded to the BLM upon completion.

### Exploration

The drill site locations and projected depths are tabulated as follows:

Site	Location	Projected TD
F	NE, NW, 26, 12S, 6E	1300 ft
G	SW, NW, 25, 12S, 6E	1000 ft
H	NW, SW, 24, 12S, 6E	950 ft
I	SW, NE, 23, 12S, 6E	950 ft
J	SW, SW, 13, 12S, 6E	1000 ft (?? In graben ??)

It should be noted that five additional holes (A thru E) are being planned as part of the overall drilling project (Map 1). These holes are located on federal lease UTU-67939 and will be discussed in Section 2 of this application. All ten holes will be drilled as part of a combined drilling project.

### Drilling

The planned drilling method is helicopter-supported continuous wireline core drilling. The entire borehole will be core drilled from surface through the lowest coal seam horizon. Exploration equipment for the drilling phase will include up to 3 heli-portable skid-mounted core drilling rig(s) together with all necessary heli-portable equipment such as drill rod trays, mud tanks, water tanks, water pump, etc.

Core drilling will involve one to three skid-mounted 2000 ft rated core drills, one or two 1000 gal. poly water tanks for each drill rig, two water trough-type mudtanks for each rig, and 4 to 6 drill rod trays for each rig. Other support equipment will include 4000 gallon water trucks to supply the 18,000 gal. frac tanks, one 1500 gallon water/fire truck, two to four 18,000 gallon frac tanks depending on water usage, two to three supply trailers parked at staging areas, up to 8 pick-up trucks, and a geophysical logging truck. The drilling procedure for the exploration holes will be to continuously core to total depth. Twenty to 100 ft. of surface casing will be set in each hole depending on hole conditions. None of the holes will be completed as a water monitor well due to the relative small size of the heli-portable drilling equipment. Water will be hauled from the Skyline minesite with the exception of drillhole "J" which will utilize water pumped from the adjacent drainage or, if water flow is insufficient, from Fish Creek. Fifth-wheel supply trailers will carry the heli-portable equipment, including drills, drill steels, coring equipment, drilling additives, cutting and welding equipment, and other supplies. One pick-up truck will be used for each drill rig by the drillers to carry personnel, fuel, and supplies and two to three pickup trucks will be used by the dirt contractor. The logging contractor will use a single axle 1 ton rated truck. The company representative and geological consultant will also use pick-up trucks for transportation.