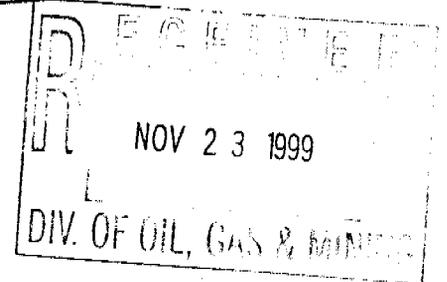
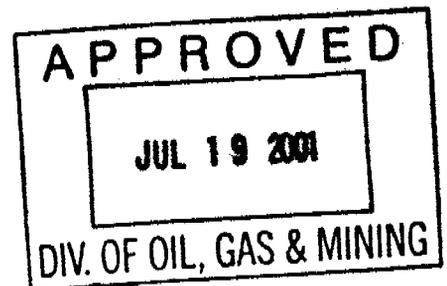


**NOTICE OF INTENT TO CONDUCT
MINOR COAL EXPLORATION**

**SCHOOL AND INSTITUTIONAL TRUST LANDS
ADMINISTRATION MUDDY TRACT**



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

November 1999

Introduction

Ark Land Company (a subsidiary of Arch Coal Inc.) is submitting this Notice of Intent to Conduct Minor Coal Exploration on behalf of Canyon Fuel Company, LLC - SUFCO Mine to the Utah Division of Oil, Gas, and Mining (UDOGM) in order to obtain approval to conduct coal exploration and reclamation activities in the summer of 2001. The type of exploration proposed is drilling. Three drill holes will be drilled all of which will be located on the School and Institutional Trust Lands Administration (SITLA) Muddy Coal Tract. All exploration activities will occur on U. S. Forest Service, Manti - La Sal National Forest surface and will involve unleased coal resources administered by the School and Institutional Trust Lands Administration. This application is formatted to address the specific requirements of R645-201-200. The U. S. Forest Service exploration stipulations are addressed in Appendix A. Other related information is given in Appendix B. Five copies of this notice are submitted for distribution by the UDOGM to other agencies.

R645-201 Coal Exploration: Requirements for Exploration Approval

The proposed exploration plan qualifies as minor exploration as described in State of Utah Coal Mining Rules R645 section R645-201-200.

R645-201-221

The name, address and telephone number of the applicant are:

Ark Land Company
397 South 800 West
Salina, Utah 84654 (work) 435 637-4880

The applicant is the same as the operator of the proposed exploration plan. Correspondence regarding this exploration plan should be addressed to:

Chris Kravits
Ark Land Company
397 South 800 West
Salina, Utah 84654 (work) 435 637-4880

R645-201-222

The name, address and telephone number of the representative of the applicant who will be present during and be responsible for conducting the exploration is:

Chris Kravits
Ark Land Company
397 South 800 West
Salina, Utah 84654
(work) 801 637-4880 (home) 801 529-3621

At times a consulting geologist may act as representative of the applicant. The UDOGM and USFS will be notified of the consulting geologist's name and address if one is used.

R645-201-223

The exploration area is generally located in central Utah 7 miles northwest of Emery (Map 1). The legal description of the SITLA Muddy Coal Tract is as follows -

T. 20 S., R. 5 E., Salt Lake Base and Meridian
Section 32, S $\frac{1}{2}$ S $\frac{1}{2}$
Section 33, S $\frac{1}{2}$ S $\frac{1}{2}$

T. 21 S., R. 5 E., Salt Lake Base and Meridian
Section 4, all
Section 5, all
Section 7, all
Section 8, all
Section 9, all

Containing 2,553.84 acres.

The tract is totally located in Sevier County, Utah. Map 2 shows all the Forest Development Roads that will be used to access the exploration area. Map 3 shows the SITLA Muddy Tract in detail.

Surface topography includes a large ridge with small drainages on both sides. Elevations range from 8,400 to 9,100 ft. The major drainage in the area is Box Canyon Creek.

Rocks exposed in the exploration area belong to the Cretaceous age Blackhawk, Castlegate, and Price River Formations and the Cretaceous-Tertiary age North Horn Formation. The rock types are predominantly sandstones, siltstones, shale and coal. The major geologic feature in the exploration area is the escarpment created by the outcrop of the 200 ft thick Castlegate Sandstone in Box Canyon.

Vegetation in the exploration area is comprised mostly of the mountain brush (oak, serviceberry, mahogany) community. The drill hole locations specifically are in grass and low sagebrush areas. The streams in the exploration area are not considered habitat for the four endangered Colorado River drainage fish species and none are known to occur in the drainages. The streams are not capable of supporting game fish. The exploration area is important habitat for raptors, elk, mule deer, cougar, bobcat, black bear, and small mammals. The area is habitat for a limited number of reptiles and amphibians.

Threatened, endangered, or special interest species in the exploration area include the sage grouse, bald eagle and peregrine falcon. Exploration and reclamation activities will not occur during breeding and nesting periods nor within one half mile of known breeding and nesting areas.

IDAHO

WYOMING

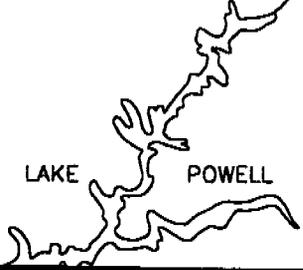
NEVADA

COLORADO

ARIZONA

N.M.

MAP 1 - GENERAL LOCATION MAP



OGDEN

SALT LAKE CITY

VERNAL

PROVO

THISTLE

LEVAN

FAIRVIEW

PRICE

SALINA

EMERY

EXPLORATION AREA

MILFORD

BEAVER

BLANDING

LAKE

POWELL



There are no known districts, sites, buildings, structures, or objects listed on, or eligible for listing on, the National Register of Historic Places in the proposed exploration area. There are no known archeological resources located in the proposed exploration area.

R645-201-224

A time table for all exploration related activities is given below. It is anticipated that exploration activities will start the second week of July 2001.

EVENT	WEEK 1	WEEK 2	WEEK 3	WEEK 4
Prepare Forest Development Roads and Trails				
Prepare Drill Hole Sites				
Drill and Plug Holes				
Reclaim Drill Hole Sites				

R645-201-225

The general method to be followed during drill hole exploration, reclamation and abandonment is - 1) repair the Forest Development Roads and temporary removal of water bars on the National Forest Trail and prepare the drill site, 2) drill, log and plug the exploration drill hole, and 3) reclaim the drill sites. No blasting will be done for road building or repair. Repair of the Forest Development Roads will include hauling gravel to fill rough areas on bedrock ledges and grading rutted areas with a small grader. Water bars on NFT 025 will be removed temporarily during drilling and reclamation but will be replaced upon completion of activities. The National Forest Trail will not be widened. Wheel track and drill site preparation and reclamation will be done with a small D-6 Cat dozer. The equipment operators will use a pick-up truck for transportation.

Because drill rig access is so difficult, drilling may be done by either rotary or continuous core methods. If drilling is done by rotary methods, drilling will involve a skid or track-mounted 2500 ft rated rotary drill, one auxiliary air compressor, supply trailers, three pick-up trucks, a portable geophysical logging unit, and one covered trailer. The drilling procedure will be to rotary drill to the core point using air, foam or mud, core the coal interval, ream the cored interval, and continue rotary drilling to TD. Water for drilling will be pumped across the surface from the North Fork of Quitcupah Creek (location shown on Maps 2 and 3) to the drill sites. A 2 inch plastic water line will be laid on the route shown on the maps. The auxiliary air compressor will provide extra air volume when hole depths increase. The supply trailers will carry drill steels, coring equipment, drilling additives, cutting and welding

equipment, a dog house and other supplies. The supply trailers and auxiliary compressor will be pulled to the drill sites by a dozer. Two of the pick-up trucks will be used by the drillers to carry personnel, fuel and supplies to the start of NFT 025. From there personnel will travel to the drill sites on four wheeler ATV's. The geophysical logging unit will be hauled to the drill sites on a trailer. The company representative or geological consultant will use a pick-up truck for transportation to the start of NFT 025 and from there will go to the drill sites on four wheeler ATV's.

If drilling is done by continuous core methods, drilling will involve a skid or track-mounted 2500 ft rated core drill, possibly an auxiliary air compressor, supply trailers, three pick-up trucks, a geophysical logging unit, and one covered trailer. The drilling procedure will be to continuously core using air, foam, water, or mud to TD. Should water be used as a drilling medium, it will be pumped across the surface from the North Fork of Quitcupah Creek (location shown on Maps 2 and 3) to the drill sites. A 2 inch plastic water line will be laid on the route shown on Maps 2 and 3. Should air be used as a drilling medium, an air compressor may be used. The supply trailers will carry drill steels, coring equipment, drilling additives, cutting and welding equipment, a dog house and other supplies. The air compressor and supply trailers will be pulled to the drill sites with a dozer. Two of the pick-up trucks will be used by the drillers to carry personnel, fuel and supplies to the start of NFT 025. Personnel will travel to the drill sites on four wheeler ATV's. The geophysical logging unit will be hauled to the drill sites on a trailer. The company representative or geological consultant will use a pick-up truck for transportation to the start of NFT 025 and from there will go to the drill sites on four wheeler ATV's.

The only coal removed during exploration activities will be cores. Cores will be two to three inches in diameter depending on the drilling method used. Assuming a 3 inch core and an average thickness of 12 ft for the Upper Hiawatha coal seam and 5 ft for the Lower Hiawatha coal seam, an estimated 215 pounds of coal will be removed.

No roads or other transportation facilities will be constructed. Forest Development Roads (FDR) 007 and 044 will be graded. Water bars on National Forest Trail (NFT) 025 will be temporarily removed to make it passable for a skid or track mounted rig. The regulations cited in R645-202-232 are not applicable to this work because 1) the National Forest Trail will be used only 9 - 12 days, 2) only minor work will be needed to make it travelable, and 3) the trail will be reclaimed as soon as drilling is complete including replacing the travel barriers.

Reclamation is an integral part of the exploration activities and will progress as contemporaneously as practical with the other exploration activities.

Topsoil and subsoil piles will have properly constructed silt fences placed around them to minimize loss of material. During reclamation, grubbed material will be distributed over the areas from which it was removed to enhance seed germination.

There will be no diversion of overland flows. Impoundments will not be constructed.

The drill holes will be plugged with cement which will seal aquifers to preclude cross-connection.

It is not anticipated that acid- or toxic-forming materials will be encountered during exploration because none have been encountered previously.

The method of revegetation described in a previous portion of this exploration plan is intended to encourage prompt revegetation and recovery of a diverse, effective, and permanent vegetative cover. The seed mix to be used is as follows -

Seed Mix		<u>Pounds PLS/acre</u>
Western Wheatgrass	Elymus smithii	2
Basin Wild Rye	Elymus cinereus	1
Intermediate Wheatgrass	Elymus hispidus	2
"Paiute" Orchardgrass	Dactylis glomeratus	2
Yellow Sweet Clover	Melilotus officinalis	1
"Rambler" Alfalfa	Medicago sativa	1
Blue leaf Aster	Aster glaucodes	0.25
Lewis Flax	Linum lewisii	0.50
Mountain Big Sage	Artemisia tridentata vaseyana	0.25
Bitterbrush	Purshia tridentata	1

Pacific aster may be substituted for Blue leaf aster. The pure live seed (PLS) rating will be 95% and only seed meeting the State Seed Act will be used. Certification tags will be retained by the permittee. The vegetative cover resulting from this seed mix is considered capable of stabilizing the soil surface from erosion.

Map 2 shows the location of the drill sites and the Forest Service roads and trails used to access them. Equipment access to the exploration area will be via Forest Development Road FDR 007 which traverses federal coal leases SL-062583, U-47080, and U-63214 on both the Fishlake and Manti-La Sal National Forests then FDR 044 to the junction with National Forest Trail NFT 025. The drill holes will be located along NFT 025.

No new access routes will be made to any of the drill sites because the holes will be drilled along side NFT 025.

Earth excavation will mostly be done for the drill sites using a D-6 Cat dozer. Excavation will include removal and separate storage of the soil A horizon and, if needed, removal and separate storage of material below the soil A horizon to make a level drill site. Two mud pits will be excavated in the material below the soil A horizon if there is sufficient soil depth. The only material disposed of at the drill sites will be cuttings and drilling foam and mud which will be placed in the mud pits.

The drill holes will be plugged with a cement/bentonite slurry to their full depth. The completion method includes - pulling surface casing when possible, but when not possible, cutting it flush with the ground, then pumping the cement/bentonite slurry through the drill pipe starting at the bottom of the hole. Plugging will then be done in stages by tripping-out of the hole 60-80 ft and pumping again. This process will be repeated to the surface. A 6 inch section of rebar and a brass identification tag will be placed in the concrete at the top of the drill hole stating the operator's name, drill hole number and legal description. The plugged hole will be flush with the ground surface.

The drill hole diameters will vary depending in the type of drill rig used and so will be between 2 and 6 1/4 inches in diameter. The estimated depths of the proposed drill holes and other drill hole information is given in the following table. Drill site disturbed area acreage is estimated for a 100 ft X 60 ft pad.

<u>Drill Hole</u>	<u>Location</u>	<u>Total Depth</u> <u>(ft)</u>	<u>Disturbed Area</u> <u>(acres)</u>
01-7-1	T21S, R5E, Sec.7, SE	2,298	0.14
01-8-1	T21S, R5E, Sec.8, NE	2,084	0.14
01-9-1	T21S, R5E, Sec.9, NW	1,996	0.14
	Total	6,378	0.42

None of the drill holes will be completed as water wells nor piezometers.

There are no occupied dwellings nor pipelines located in the exploration area. No trenches will be dug, no structures constructed nor debris disposed of in the exploration area.

The permittee or his representative will have a copy of this Notice of Intention To Conduct Minor Coal Exploration while in the exploration area available for review by an authorized representative of the Division by request.

APPENDIX A

The surface management agency is the U. S. Forest Service, Manti-La Sal and Fishlake National Forests. This Appendix gives responses to applicable Special Coal Lease Stipulations and all the Standardized Stipulations for Coal Drilling Operations from the Manti-La Sal National Forest Land and Resource Management Plan (1986). Other Forest Service requirements are addressed at the end.

SPECIAL COAL LEASE STIPULATIONS

1. Before undertaking activities that may disturb the surface of previously undisturbed leased lands, the Lessee may be required to conduct a cultural resource inventory and a paleontological appraisal of the areas to be disturbed. These studies shall be conducted by qualified professional cultural resource specialists or qualified paleontologists, as appropriate, and a report prepared itemizing the findings. A plan will then be submitted making recommendations for the protection of, or measures to be taken to mitigate impacts, for identified cultural or paleontological resources.

If cultural resources or paleontological remains (fossils) of significant scientific interest are discovered during operations under this lease, the Lessee, prior to disturbance shall immediately bring them to the attention of the appropriate authority. Paleontological remains of significant scientific interest do not include leaves, ferns, or dinosaur tracks commonly encountered during underground mining operations.

The cost of conducting the inventory, preparing reports, and carrying out mitigating measures shall be borne by the Lessor.

Response/Action - Ark Land will have a cultural resource inventory and paleontological appraisal done by a third party contractor in the Fall of 1999. The work will be done by a qualified contractor approved by the USFS. A plan will be submitted with recommendations for the protection of, or measures to be taken to mitigate impacts, should any cultural or paleontological resources be identified.

2. If there is reason to believe that Threatened or Endangered (T&E) species of plants or animals, or migratory bird species of high Federal interest occur in the area, the Lessee shall be required to conduct an intensive field inventory of the area to be disturbed and/or impacted. The inventory shall be conducted by a qualified specialist and a report of findings will be prepared. A plan will be prepared making recommendations for the protection of these species or action necessary to mitigate the disturbance. The cost of conducting the inventory, preparing reports, and carrying out mitigating measures shall be borne by the Lessor.

Response/Action - Ark Land will have field inventories done of threatened or endangered fauna and flora by a third party contractor in the Fall of 1999 and Spring of 2000 if needed.

The work will be done by qualified contractors approved by the USFS. A plan will be submitted with recommendations for the protection of, or measures to be taken to mitigate impacts, should any threatened or endangered fauna or flora be found. Ark Land will bear the cost of conducting the inventories, preparing reports, and carrying out any mitigating measures.

4. If removal of timber is required for clearing of construction sites, etc., such timber shall be removed in accordance with the regulations of the surface management agency.

Response/Action - Ark Land does not plan to remove timber.

5. Existing Forest Service owned or permitted surface improvements will need to be protected, restored, or replaced to provide for the continuance of current land uses.

Response/Action - Ark Land will improve the surface of Forest Development Roads as needed following the recommendations of the USFS. A final grading of any ruts or other damage will be made after all activities are completed. Cattle guard by-passes will be used by equipment when available and where not, heavy planks will be laid on the cattle guard before crossing with equipment. Stock watering ponds will not be used and otherwise will not be affected by the exploration and reclamation activities.

6. In order to protect big-game wintering areas, elk calving and deer-fawning areas, sage grouse strutting areas, and other key wildlife habitat and/or activities, specific surface uses outside the mine development area may be curtailed during specified periods of the year.

Response/Action - Ark Land will not conduct exploration and reclamation activities during periods specified by the USFS to protect wildlife habitat and/or activities.

STANDARDIZED STIPULATIONS FOR COAL DRILLING OPERATIONS

Stipulations To Be Included in the Coal Drilling Permit

1. A pre-work meeting including the responsible company representative(s), contractors, and the Forest Service will be conducted at the project location prior to commencement of operations. Site-specific Forest Service requirements will be discussed at this time.

Response/Action - Ark Land will hold a pre-work meeting with the responsible company representative(s), contractors, and the Forest Service at the project location prior to commencement of operations. Site-specific Forest Service requirements will be discussed at this time.

2. A Road-Use Permit must be obtained from the Forest Service before equipment is transported onto National Forest System lands.

Response/Action - Ark Land will obtain a Road Use Permit from the Forest Service before equipment is transported onto National Forest System lands.

3. The Forest Service will specify times and locations, if any, that exploration activities may not occur.

Response/Action - Ark Land will obey any times and locations specified by the Forest Service in which exploration activities may not occur.

4. All surface disturbing activities including reclamation will be supervised by a responsible representative of the permittee/licensee who is aware of the terms and conditions of the project permits and licenses. A copy of the appropriate permits and licenses must be available for review at the project site.

Response/Action - Ark Land will have an employee or representative who is aware of the terms and conditions of the project permits and licenses present during surface disturbing activities including reclamation.

5. The Forest Service must be notified 48 hours in advance that heavy equipment will be moved onto National Forest System lands and that surface disturbing activities will commence.

Response/Action - Ark Land will notify the Forest Service at least 48 hours in advance of the movement of heavy equipment onto National Forest System lands and of when surface disturbing activities will commence.

6. Establishment of campsites and staging areas on National Forest System lands in support of this project is subject to Forest Service approval.

Response/Action - Ark Land will request Forest service approval before establishing campsites or staging areas for this exploration project.

7. The Forest Service will be notified of any proposed alterations to the plan of operations. Any changes to the existing plan are subject to Forest Service review and concurrence.

Response/Action - Ark Land will notify the Forest Service of any proposed alterations to the plan of operations and will not make alterations to the plan until the Forest Service has reviewed and concurred with the change.

8. Fire suppression equipment will be available to all personnel working at the project site. Equipment will include at least one hand tool per crew member consisting of shovels and pulaskis and one properly rated fire extinguisher per vehicle and/or internal combustion engine.

Response/Action - Ark Land or its contractors will provide fire suppression to all personnel working at the project site, including at least one hand tool per crew member consisting of shovels and pulaskis and one properly rated fire extinguisher per vehicle and/or internal combustion engine.

9. All gasoline, diesel and steam-powered equipment will be equipped with effective spark arresters and mufflers. Spark arresters will meet Forest Service specifications discussed in the USDA Forest Service Spark Arrester Guide, June, 1981. In addition, all electrical equipment will be properly insulated to prevent sparks.

Response/Action - Ark Land will ensure that all gasoline, diesel and steam-powered equipment is equipped with effective spark arresters and mufflers meeting USDA Forest Service Spark Arrester Guide, June, 1981. Also, all electrical equipment will be properly insulated to prevent sparks.

10. The permittee/licensee will be held responsible for damage and suppression costs for fires started as a result of operations. Fires will be reported to the Forest Service as soon as possible.

Response/Action - Ark Land understands that it will be held responsible for damage and suppression costs for fires started as a result of operations. Fires will be reported to the Forest Service as soon as possible.

11. The Forest Service reserves the right to suspend operations during periods of high fire potential.

Response/Action - Ark Land will, at Forest Service request, suspend operations during periods of high fire potential.

12. Water needed in support of operations will be properly and legally obtained according to State Water Laws. The Forest Service will initiate arrangements for obtaining the water. The locations of diversion, if on National Forest System lands, is subject to Forest Service review and approval.

Response/Action - Ark Land will properly and legally obtain the water needed in support of operations according to State Water Laws. Any diversions, if on National Forest System lands, will be reviewed and approved by the Forest Service. Water for exploration and reclamation activities will be taken from the North Fork of Quitcupah Creek where the North Fork flows under Forest Development Road FDR 007. It is estimated that 0.5 acre-feet will be used for drilling and dust suppression.

13. There will be no unauthorized off-road vehicular travel.

Response/Action - Ark Land will ensure that no unauthorized off-road vehicular travel occurs.

14. Section corners or other survey markers, including claim corners, in the project area will be located and flagged for preservation prior to commencement of surface disturbing activities. The removal, displacement, or disturbance of markers will be approved by the proper authority.

Response/Action - Ark Land will locate and flag any section corners, survey markers, and claim corners that are in areas of planned surface disturbance for preservation prior to commencement of surface disturbing activities. Any removal, displacement, or disturbance of markers will be approved by the proper authority.

15. If cultural or paleontological resources are discovered during operations, all operations which may result in disturbance to the resource will cease and the Forest Service will be notified of the discovery.

Response/Action - Ark Land will cease all operations should cultural or paleontological resources be discovered and the Forest Service will be notified of the discovery.

Forest Service Stipulations To Be Discussed at the Pre-Work Meeting

1. Gates will be kept closed unless otherwise notified.

Response/Action - Ark Land will keep all gates closed unless otherwise notified.

2. The permittee/licensee will be held responsible for all damages to fences, cattle guards, resource improvements, roads, and other structures on National Forest system lands which result from operations. The Forest Service will be notified of damages as soon as possible.

Response/Action - Ark Land acknowledges responsibility for all damages to fences, cattle guards, resource improvements, roads, and other structures on National Forest system lands which result from operations. The Forest Service will be notified of damages as soon as possible.

3. All drilling fluids, muds, and cuttings will be contained on the project site in mud pits or portable containers. The pits will not be used for disposal of garbage, trash or other refuse.

Response/Action - Ark Land will contain all drilling fluids, muds, and cuttings in mud pits or portable containers. Where these are not practical, drilling fluids, muds, and cuttings will be hauled to an approved site. An MSDS will be provided the Forest Service for all drilling fluids and muds used. The pits will not be used for disposal of garbage, trash or other refuse. Garbage, trash or other refuse will be disposed of in an approved site.

4. All trees and brush must be cleared as the first step for new access and site construction. Topsoil must be stripped and stockpiled at a location where loss and contamination is minimized.

Response/Action - All trees and brush will be grubbed (cleared) if needed as the first step drill site construction. Topsoil will be stripped and stockpiled at a location where loss and contamination will be minimized, preferably on the uphill side of the disturbed area. Subsoil,

if excavated, will be removed separately from topsoil and stored separately. Mud pits will be excavated within the drill site area. Topsoil and subsoil piles will have properly constructed silt fences placed on their down-hill sides.

5. Disturbed areas must be reclaimed by the end of the field season. Exceptions require Forest Service approval.

Response/Action - The disturbed areas will be the drill sites and will be reclaimed at the end of the field season. The drill sites will be reclaimed after the mud pits have dried by replacing any removed subsoil first, followed by the topsoil and restoring to approximate original contour, seeding with the specified seed mix, mulching with certified noxious weed-free hay, and crimping the seed and mulch into the soil with the dozer growzer tracks. Any grubbed material will be distributed over the area. After reclamation, the drill sites will be surrounded by a barbed wire fence to prevent cattle and wildlife from entering and promote successful reclamation. The estimated acreage disturbed by drilling is given in table in the reply to R645-201-225.

6. Contaminated soil and gravel must be stripped and placed in the mud pit prior to site reclamation.

Response/Action - Contaminated soil and gravel will be stripped and placed in the mud pit prior to reclamation.

7. Mud pits must be allowed to dry before they are backfilled and reclaimed.

Response/Action - Mud pits, if used, will be allowed to dry before they are back filled and reclaimed. Mud pits will be enclosed by a 4-strand barbed wire fence while in use and while left to dry. The applicant plans to use closed circulation systems which do not require mud pits nor large amounts of water.

8. When dry, mud pits must be reclaimed by selectively back filling excavated materials, topsoil last, such that the disturbed area is replaced to approximate original contour. The disturbed area must be seeded with the specified seed mix when topsoil is replaced.

Response/Action - When dry, mud pits will be reclaimed by selectively back filling the excavated material, topsoil last, such that the disturbed area is replaced to approximate original contour. The disturbed area will be seeded with the specified seed mix after topsoil is replaced, mulched with certified noxious weed-free hay and the seed and mulch crimped into the soil with the dozer growzer tracks. No water diversion structures are anticipated.

9. Roads to be obliterated must be reclaimed by ripping the surface, replacing the disturbed area to approximate original contour, replacing stockpiled topsoil, and seeding with the specified seed mix. Seeding must take place when topsoil is replaced. Water diversion structures, if needed, must be constructed as specified by the Forest Service.

Response/Action - Roads to be obliterated will be reclaimed by replacing any removed topsoil to approximate original contour, seeding with the specified seed mix, mulching with certified noxious weed-free hay and crimping the seed and mulch into the soil with the dozer growzer tracks. Any grubbed material will be distributed over the area. No water diversion structures are anticipated. The Forest Service will place road closure signs at the beginning of reclaimed roads which are to be obliterated to discourage entry and promote successful revegetation. The permittee will place a fence with a sign at the beginning of reclaimed roads to discourage vehicular travel.

10. All disturbed drainages must be replaced to their approximate original configuration when the project area is reclaimed.

Response/Action - At this time Ark Land does not plan to disturb any drainages.

11. All significant water encountered during drilling must be reported to the Forest Service, including the depth and formation at which it was encountered, and an estimate of flow.

Response/Action - All significant groundwater encountered during drilling will be reported to the Forest Service, including the depth and formation at which it was encountered, and an estimate of flow.

12. The operator must clean-up and remove all drilling equipment, trash, garbage, flagging, vehicles and other such materials from National Forest System lands.

Response/Action - The permittee will clean-up all drilling equipment, trash, garbage, flagging, vehicles, and other such materials from National Forest System lands upon completion of exploration and reclamation operations.

13. All trash, garbage, and other refuse must be properly contained on the project site prior to disposal.

Response/Action - The permittee will properly contain all trash, garbage, and other refuse on the project site prior to disposal.

14. All drill holes must be plugged in accordance with Federal and State regulations.

Response/Action - Ark Land Company will plug all drill holes in accordance with Federal and State regulations.

15. Operations must be coordinated with grazing permittees to prevent conflicts.

Response/Action - Exploration and reclamation operations will be coordinated with grazing permittees to prevent conflicts.

16. Harassment of wildlife and livestock is prohibited.

Response/Action -Ark Land will ensure that harassment of wildlife and livestock does not occur.

Stipulations To Be Included in Road-Use Permits

1. Roads must not be used when they are wet and susceptible to damage.

Response/Action - Roads will not be used when they are wet and susceptible to damage.

2. The permittee is responsible for repair of damages to roads caused by its operations.

Response/Action - Ark Land will repair damage to roads caused its operations. When possible, equipment will be transported to the exploration area on low-boy flat beds to avoid damage to road surfaces, cattle guards and culverts. Planks will be laid on cattle guards to distribute the weight of heavy equipment.

3. All traffic must maintain speeds commensurate with existing conditions.

Response/Action - Ark Land will ensure that all traffic related to exploration and reclamation operations maintain speeds commensurate with existing conditions.

4. Roads must be watered if dust becomes a problem or if excessive loss of material occurs.

Response/Action - Roads will be watered if dust becomes a problem or if excessive loss of material occurs.

5. Heavy equipment will not be transported along FDR_____ during holiday weekends and the opening weekend of the regular big game hunting seasons.

Response/Action - Ark Land will not transport heavy equipment on Forest Development Roads at times specified by the Forest Service.

Other Forest Service Requirements

1. Outside berms will not be constructed on any roads.
2. Drill pads will be constructed to prevent or diminish overland water flow from entering the site during precipitation events. Drill pads will be constructed to drain all spills and run-off into the mud pits. If necessary, pits will be pumped out to reduce their volume to ensure that overflow does not occur. The pumped fluid will be disposed of off Forest Service lands and in a state approved disposal site.
3. The permittee will notify the USFS District Ranger of any artesian groundwater flows encountered prior to plugging the drill hole to determine whether or not the Forest Service would elect to establish a permanent water development at the site.

4. The permittee will be responsible for control of noxious weed infestations found to be a result of this exploration. All equipment coming into the exploration area from outside Utah will be steam cleaned to remove foreign seeds.
5. No timber will be removed during exploration and reclamation. Small trees will be removed at several locations on Forest Development Roads to make equipment access better.

Stipulation for Lands of the National Forest System Under Jurisdiction
of the Department of Agriculture

1. The licensee/permittee/lessee must comply with all the rules and regulations of the Secretary of Agriculture set forth at Title 36, Chapter II, of the Code of Federal Regulations governing the use and management of the National Forest System (NFS) when not inconsistent with the rights granted by the Secretary of the Interior in the license/permit/lease. The Secretary of Agriculture's rules and regulations must be complied with for (1) all use and occupancy of the NFS prior to approval of a permit/operation by the Secretary of the Interior, (2) uses of all existing improvements, such as Forest Development roads, within and outside the area licensed, permitted or leased by the Secretary of the Interior, and (3) use and occupancy of the NFS not authorized by a permit/operating plan approved by the Secretary of the Interior.

All matters related to this stipulation are to be addressed to:

Forest Supervisor

at: Manti-La Sal National Forest
599 West Price River Drive
Price, Utah 84501

telephone number: (801) 637-2817

who is the authorized representative of the Secretary of Agriculture.

Signature of Licensee/Permittee/Lessee

APPENDIX B

1. All drill holes will be plugged. The UDOGM will be notified of when plugging will start. 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 as non-polluting as possible. All spills of polluting materials will be removed from the area and properly disposed of.
2. No mixing of surface and ground waters is possible because all drill sites will be above perennial and ephemeral stream drainages.
3. Mud pits, when used, will be constructed to hold all drilling mud and foam. The pits will be surrounded by a barbed wire fence until dry and reclaimed. When mud pits cannot be constructed, portable containers will be used or the drilling mud, foam, and/or cuttings will be hauled to an approved disposal site.
4. SUFCO will retain all drill and geophysical logs. Copies of the drill and geophysical logs will be provided to the School and Institutional Trust Lands Administration.