

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

SCHOOL AND INSTITUTIONAL TRUST LANDS
ADMINISTRATION MUDDY TRACT

Incoming
04/0002

ARK LAND COMPANY
A Subsidiary of Arch Coal Inc.

Mar. 2002

File in:

- Confidential
- Shelf
- Expandable

Refer to Record No

Date *03/22/2002*

In C *04/0002 Incoming*
For additional information

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 2002. The type of exploration proposed is drilling. One hole will be drilled on the School and Institutional Trust Lands Administration (SITLA) Muddy Coal Tract. All exploration activities will occur on the U.S. Forest Service, Manti-LaSal 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 typical 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 the 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
C/o Skyline Mines
HC 35 Box 380
Helper, Utah 84526 (work) 435-448-2633

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

Mark Bunnell
Ark Land Company
C/o Skyline Mines
HC 35 Box 380
Helper, Utah 84526 (work) 435-448-2633

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:

Mark Bunnell
Ark Land Company
C/o Skyline Mines
HC 35 Box 380
Helper, Utah 84526
(work) 435-448-2633 (home) 435-637-6690

At times a consulting geologist may act as representative of the applicant. The UGOGM 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
Sec. 32, S1/2, S1/2
Sec. 33, S1/2, S1/2

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

Containing 2,553.84 acres

The tract is totally located in Sevier County, Utah. Map 2 shows proposed borehole location and Forest Development Roads that will be used to access the exploration area.

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 Blackhawk, and Price River Formations and the Cretaceous-Tertiary North Horn Formation. 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 member of the Price River Formation in Box Canyon.

Vegetation in the exploration area is comprised mostly of the mountain brush (oak, serviceberry, mohogany) community. The drill hole location is specifically in a grass and low sagebrush area. 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. Information concerning threatened and endangered species is included in the Pines Tract Project Final Environmental Impact Statement, Jan. 1999.

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. A cultural resource evaluation of previous exploratory drilling locations on the Muddy Tract and nearby Pines Lease was submitted to the Division in November, 1999 (Utah State Project No. UT-99-AF-0684f). The Pines Tract Project Final Environmental Impact Statement (Jan., 1999) also includes cultural resource analysis on the area. A site-specific cultural resource evaluation will be conducted in the spring of 2002 and submitted to the Division.

R645-201-224

A timetable for all exploration related activities is given below. It is anticipated that exploration activities will start the second week of July 2002. This timetable may vary somewhat depending on U.S. Forest Service stipulations and other factors such as weather.

EVENT	WEEK1	WEEK 2	WEEK 3	WEEK 4
Prepare Forest Development Roads				
Construct Access Road and Prepare Drill Hole Site				
Drill Hole and install water monitor well				
Reclaim Drill Hole Site				

R645-201-225

The general method to be followed during drill hole exploration, reclamation, and abandonment is: 1) repair the Forest Development Roads as required by the U.S.F.S., 2) drill and log hole and install water monitor well, 3) reclaim the drill site and access road. No blasting will be done for road building or repair. Repair of Forest Development Roads will include hauling of gravel to fill rough areas on bedrock ledges and grading rutted areas. Road construction and site preparation and reclamation will be done with a D-8 Cat dozer, trackhoe, and/or rubber-tired backhoe. Operators will use pick-up trucks for transportation.

Drilling will be accomplished utilizing continuous core drilling techniques. Drilling will involve a truck- or skid-mounted core rig capable of drilling 2000 ft., one auxiliary air compressor, supply trailers, doghouse truck, two water trucks, six pickup trucks, a portable logging unit, and one covered trailer. If a skid-mounted rig is used, it will be transported by flatbed trailer to the drillsite. The drilling procedure will be to

continuously core to total depth. Water for drilling will be pumped from North and/or South Forks of Quitchupah Creek (location shown on Map 2) into a 5000 gal. water truck and transported to the drill site. Supply trailers will carry drill steels, coring equipment, drilling additives, cutting and welding equipment, and other supplies.

The only coal to be removed during exploration activities will be cores. Cores will be three to four inches in diameter. Given an approximate projected thickness of 12 ft. for the Upper Hiawatha seam and 4 ft. for the Lower Hiawatha seam, approximately 100 to 175 lbs. of coal will be removed.

A short access road will be constructed from FDR 044 to the drill site as shown on Map 2. The road follows an existing wheel track that provides access to a cattle pond. The road would be widened to 14 ft. and smoothed. Road length is approximately 1300 ft. Regulations cited in R645-202-232 are not applicable to this work because: 1) it will be temporary use, 2) only minor work will be needed to make it travelable, and 3) it will be reclaimed as soon as drilling is completed.

The drillpad will be approximately 100 ft. wide by 100 ft. long with a 2 ft. berm constructed around the pad to prevent runoff of water or other fluids from the drillpad. Silt fence will be constructed around the outside of the berm to prevent downslope movement of sediment from the disturbed area. One or two mudpits will be constructed within the drillpad with an approximate maximum length of 80 ft., maximum depth of 10 ft., and maximum width of 20 ft. Drawing 1 shows the drillpad construction layout.

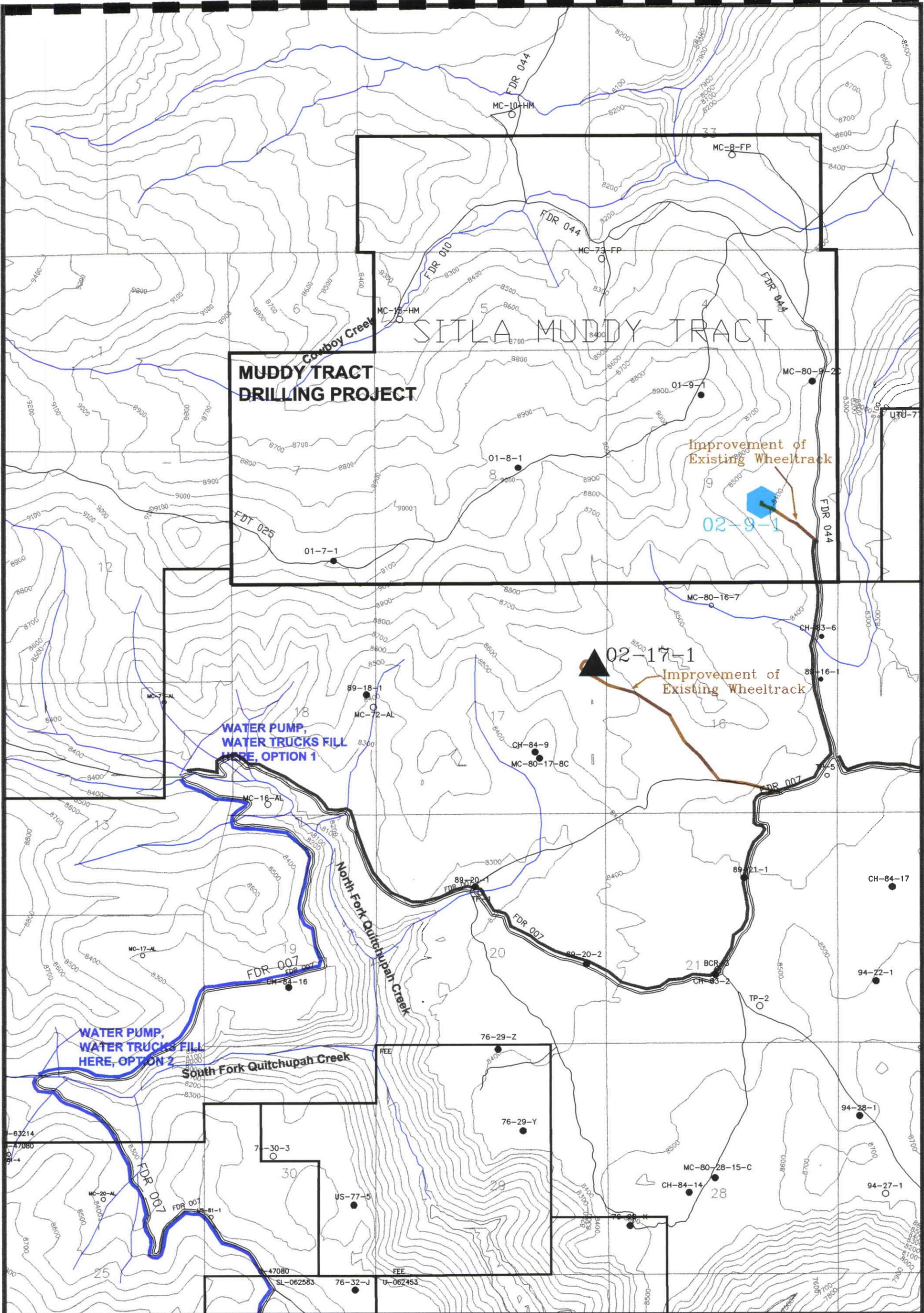
Reclamation is an integral part of the exploration activities and will progress as contemporaneously as practical with the other exploration activities.

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. The site will be restored to approximate original contour. Because the site is already nearly flat, restoration of original contour should be relatively easy.

There will be no diversion of overland flows.

It is not anticipated that acid- or toxic- forming materials will be encountered during exploration because none have been encountered previously. Samples of drill core will be analyzed for acid- and toxic-forming materials. These samples will be taken from the 10 ft. interval above and below the Upper Hiawatha seam.

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 following seed mix was proscribed by the U.S. Forest Service for reclamation of 2001 Muddy Tract drill holes. This seed mix will again be utilized for the current site unless otherwise changed by U.S. Forest Service stipulations:



MUDDY TRACT DRILLING PROJECT

SITLA MUDDY TRACT

Improvement of Existing Wheeltrack

02-9-1

Improvement of Existing Wheeltrack

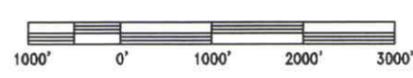
02-17-1

WATER PUMP, WATER TRUCKS FILL HERE, OPTION 1

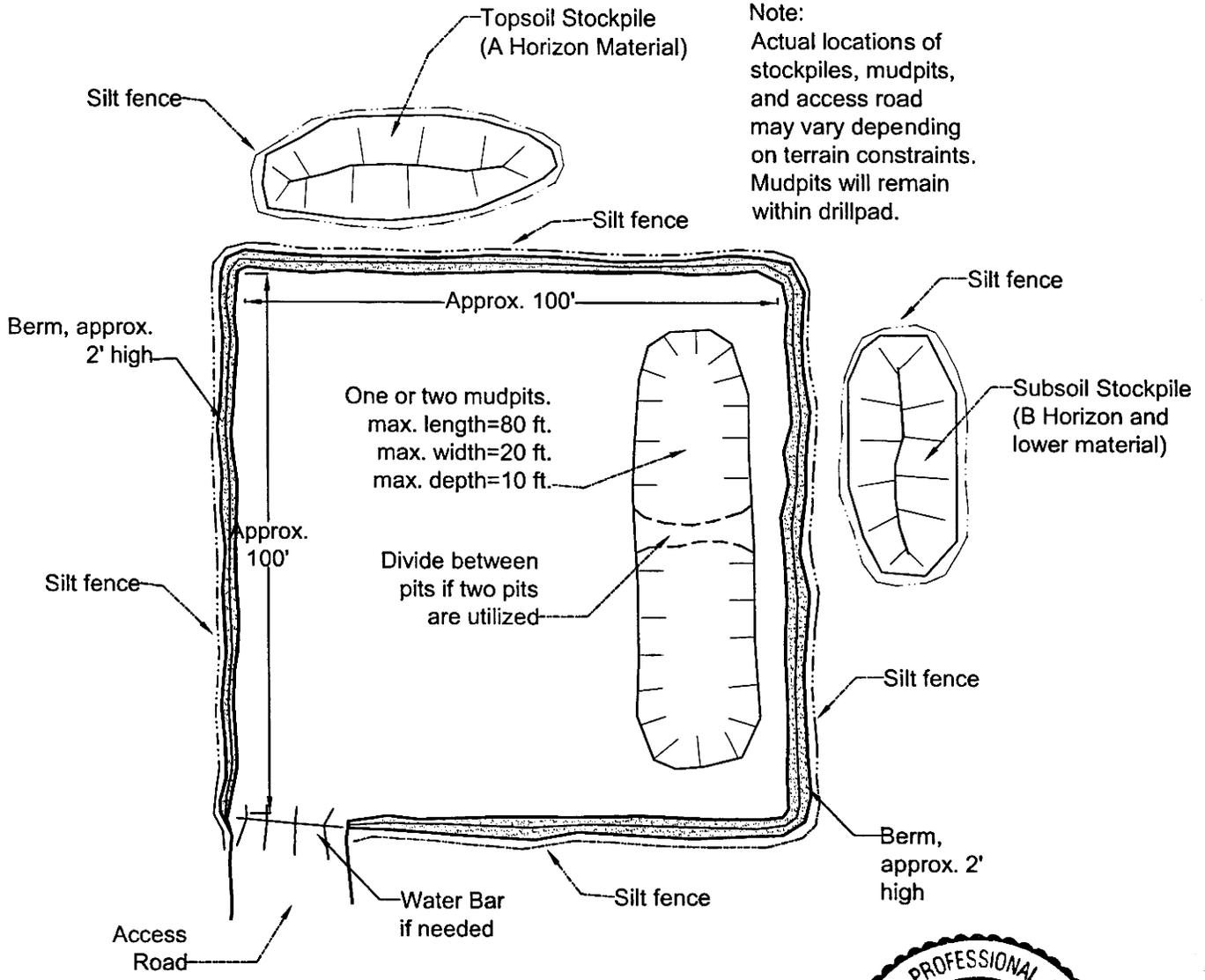
WATER PUMP, WATER TRUCKS FILL HERE, OPTION 2

MAP 2

-  02-9-1 PROPOSED EXPLORATION BOREHOLE, MUDDY TRACT
-  02-17-1 PROPOSED EXPLORATION BOREHOLE, FED. LEASE
-  PROPOSED ROAD IMPROVEMENT OR CONSTRUCTION
-  ROAD ACCESS MANTI-LASAL FOREST
-  ROAD ACCESS FISHLAKE FOREST



ARK LAND COMPANY																			
MUDDY TRACT DRILLING PROJECT, 2002																			
CONSTRUCTION AND ROAD USE LAYOUT																			
<table border="1"> <tr><td>DRAWN</td><td>DATE</td><td>BY</td></tr> <tr><td>REVISION</td><td></td><td></td></tr> <tr><td>REVISOR</td><td></td><td></td></tr> <tr><td>DATE</td><td></td><td></td></tr> </table>	DRAWN	DATE	BY	REVISION			REVISOR			DATE			<table border="1"> <tr><td>APPROVED</td><td>DATE</td><td>BY</td></tr> <tr><td></td><td></td><td></td></tr> </table>	APPROVED	DATE	BY			
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SCALE 1"=2000'	FILE NO. P:\MDC\ARPCO\2002\muddy\ph.dwg																		
	SHEET NO.																		



Note:
Actual locations of
stockpiles, mudpits,
and access road
may vary depending
on terrain constraints.
Mudpits will remain
within drillpad.



DRAWING 1 DRILLPAD CONSTRUCTION LAYOUT

DRAWN	
DATE	BY
REVISION	
DATE	BY
APPROVED	
DATE	BY

ARK LAND COMPANY

DRILLPAD CONSTRUCTION LAYOUT
DRILLHOLE 02-9-1
MUDDY DRILLING PROJECT, 2002

SCALE: **1"=30'** FILE NO. drillpad.dwg SHEET NO.
 PATH: p:\geol\arfco

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	0.25
Small Burnet	Sanguisorbia minor	1
Mountain Big Sage	Artemisia tridentata vaseyana	0.25
Bitterbrush	Purshia tridentata	1

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 proposed drill site, access road, and the Forest Service roads used to access them. Equipment access to the exploration area will be via FDR 007 which traverses federal coal leases SL1-062583, U-47080, and U-63214 on both the Fishlake and Manti-LaSal National Forests then FDR 044 to the junction with the proposed access road construction in section 9.

Earth excavation will mostly be done for the drill site using a D-8 Cat dozer. Additional work will be accomplished with a trackhoe and/or rubber-tired backhoe. Excavation will include removal and separate storage of the soil A horizon and removal and separate storage of material as needed below the soil A horizon to make a level drill site. One or two mudpits will be excavated in the material below the soil A horizon. This material will be stored separately from the soil A horizon stockpile. A geologist will be present at the beginning of site excavation to identify soil horizons and ensure proper segregation of the two stockpiles. 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.

Upon completion of drilling, the hole will be plugged with a cement or cement/bentonite slurry to its full depth. The collar of the monitor well will be identified as to hole number and operator. A brass tag will be placed at the top of the drill hole stating the operator's name, drill hole number, and legal description. This borehole is not planned to be completed as a water monitor well because the hole is located within approximately 1 mile of a water monitor well installed last year in hole 01-8-1 and within approx. 1 mile

of proposed borehole 02-17-1 which under permit review by the Bureau of Land Management.

The main drill hole diameter will be nominally 3 3/16 inch diameter. Approximately 200 to 300 ft. of surface casing will be set. Estimated depth and other drill hole information is given in the following table. Drill site disturbed area acreage is estimated for a 100 X 100 ft. pad (0.23 acres). Road construction will be conducted along an existing wheel track. Total acreage to be disturbed for road work will be 0.48 acres.

Drill Hole	Location	Total Depth (ft)	Disturbed Area (acres)
02-9-1	T21S, R5E, SE	1400	0.71

There are no occupied dwellings nor pipelines located in the exploration area. No trenches will be dug and 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.

R645-203-200

Ark Land Company 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 Ark Land's competitive rights.

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 Spring, 2002. 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 Spring of 2002 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 locations of diversion, if on National Forest System lands, are 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 either the South Fork and/or the North Fork of Quitchupah Creek where they flow 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 properly disposed of off Forest Service lands.

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 field fence/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 will be allowed to dry before they are back filled and reclaimed. Mud pits will be enclosed by field fencing and 2 strands of barbwire fence when left unattended and while left to dry.

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.
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. 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 field fence/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 off Forest Service land and disposed of properly.
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.