

**REVISED 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.

REVISION  
July, 2004

File in:

Confidential

Shelf

Expandable

Refer to Record No. 0080 Date 07282004

In C 0410002 Superior  
For additional information *See Confidential*

## 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 2004. The type of exploration proposed is helicopter-assisted wireline core 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 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 10 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 drainages in the area are Cowboy Creek and Muddy Creek.

Rocks exposed in the exploration area belong to the Cretaceous Blackhawk and Price River Formations, as well as 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.

#### R645-201-225

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 within one half mile of known breeding and nesting areas during breeding or nesting periods. Drilling of the proposed exploration hole will not commence until after Sept. 1, 2004, so as not to interfere with the Mexican Spotted Owl should any be present in the area. Information concerning threatened and endangered species is included in the Pines Tract Project Final Environmental Impact Statement, Jan. 1999. The U.S. Forest Service has also recently completed wildlife and BEBA analyses of the Muddy Tract area which will be included in the U.S.F.S. decision document relative to Ark Land Company's Muddy Drilling License application. That document is scheduled to be submitted to the BLM by mid-August. Tom Lloyd, geologist with the USFS, has information concerning wildlife and BEBA work and can be contacted at 435-636-3596. Raptor surveys were also completed in June, 2004 and submitted to the Division (Appendix D).

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 (Appendix C) has been conducted for the proposed drillsite. The evaluation also includes 5 additional planned drillsites that are on the Federal (BLM-administered) portion of the Muddy Tract. No objects, sites, or structures occur in or near the proposed drillsite area.

#### R645-201-224

A timetable for all exploration related activities is given below. It is anticipated that exploration activities will start the first week of Sept. 2004. This timetable may vary somewhat depending on U.S. Forest Service stipulations and other factors such as weather. It should be noted that this hole is planned to be drilled as part of a 6-hole drilling project. The other five holes are planned for the Federal (BLM-administered) portion of the Muddy Tract (Map 2).

EVENT	WEEK1	WEEK 2	WEEK 3	WEEK 4
Prepare Forest Development Roads				
Set pumps, frac tanks and run water lines to sites				
Drilling and monitor well installation				
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) set temporary water tank, pump, and water line, 3) drill and log hole, and if hole conditions and drilling equipment permit, install water monitor well, 3) reclaim the drill site and remove all waterlines, tank, and pump. 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. Because this project is planned with helicopter assistance, no road construction and only minor site preparation and reclamation with hand tools will be done. Operators will use pick-up trucks for transportation to the staging area/landing zone.

Drilling will be accomplished utilizing continuous core drilling techniques. Drilling will involve a heli-portable skid-mounted core rig capable of drilling 2000 ft.; with necessary support equipment such as a 2000 gal. poly water tank, drill rod trays, fuel tank, portable mud tanks, a heli-portable logging unit, etc. The skid-mounted rig is transported by flatbed trailer to the staging area/landing zone. The drilling procedure will be to continuously core to total depth.

Water for drilling and road watering will be pumped from North or South Forks of Quitcupah Creek or from Muddy Creek (locations shown on Map 2) into a 4000 gal. water truck and transported to an 18,000 gal. frac. tank located along Forest Road 044 as shown on Map 2. A Triplex pump will be located at that site as well for pumping water to the drill site. Water will be pumped via 1, 2, and 3 inch HDPE waterline. All necessary arrangements will be made for water usage, including agreements with water rights owners in each of the drainages and the proper Temporary Water Change approval from the Division of Water Rights. Waterline will be placed and removed via horseback, helicopter, or on foot.

Supply trailers will carry drill steels, coring equipment, drilling additives, cutting and welding equipment, and other supplies to the staging area/landing zone. Also located at the staging area/landing zone will be spare heli-portable fuel tanks for the drill rig, a trailer-mounted jet fuel tank and the helicopter, as well as pickup trucks for the drill crew, geologists, and construction support crew.

The only coal to be removed during exploration activities will be cores. Cores will be 1.4 inches (BQ) in diameter. Given an approximate projected thickness of 7 ft. for the Upper Hiawatha seam and 12 ft. for the Lower Hiawatha seam, approximately 20 to 40 lbs. of coal will be removed.

No road construction is planned for this project. Access to the staging area and storage tank location will be via U.S. Forest Service roads 007 and 044 (Map 2). Regulations cited in R645-202-232 are not applicable to this work because there will be no road construction necessary. Access to the drillsite will be via helicopter, horseback, or on foot.

No actual drillpad will be constructed for the project. The drill is placed on a subframe, wood blocks, and brattice, covering an area about 8 ft. X 10 ft. Drill rod trays, mud tanks, and the water tank are also placed near the drill. Figure 1 shows a typical helicopter-assisted drillsite setup. All drilling fluids are contained within portable tanks. Drill cuttings are transferred from the tanks to heli-portable barrels for helicopter transport away from the drillsite. No drilling fluids, oil and grease, or diesel fuel will be allowed to contact the topsoil.

Prior to setting the drill, minor excavation of the topsoil with hand tools will be conducted for placement of the drill subframe and leveling of the drill equipment. Some removal of grass and shrubs may be necessary for leveling of the drill rig and for safety purposes. No trees will be removed.

Reclamation is an integral part of the exploration activities and will progress as contemporaneously as practical with the other exploration activities. Upon completion of the hole, all hand excavations will be filled in to original contour, all equipment will be removed, and all trash will be hauled away. An approved seed mix will then be applied to the drill area.

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 Lower Hiawatha seam. Any acid- or toxic-forming drill core not boxed for analysis will be removed from the drillsite and disposed of at Sufco Mine's permitted waste rock site.

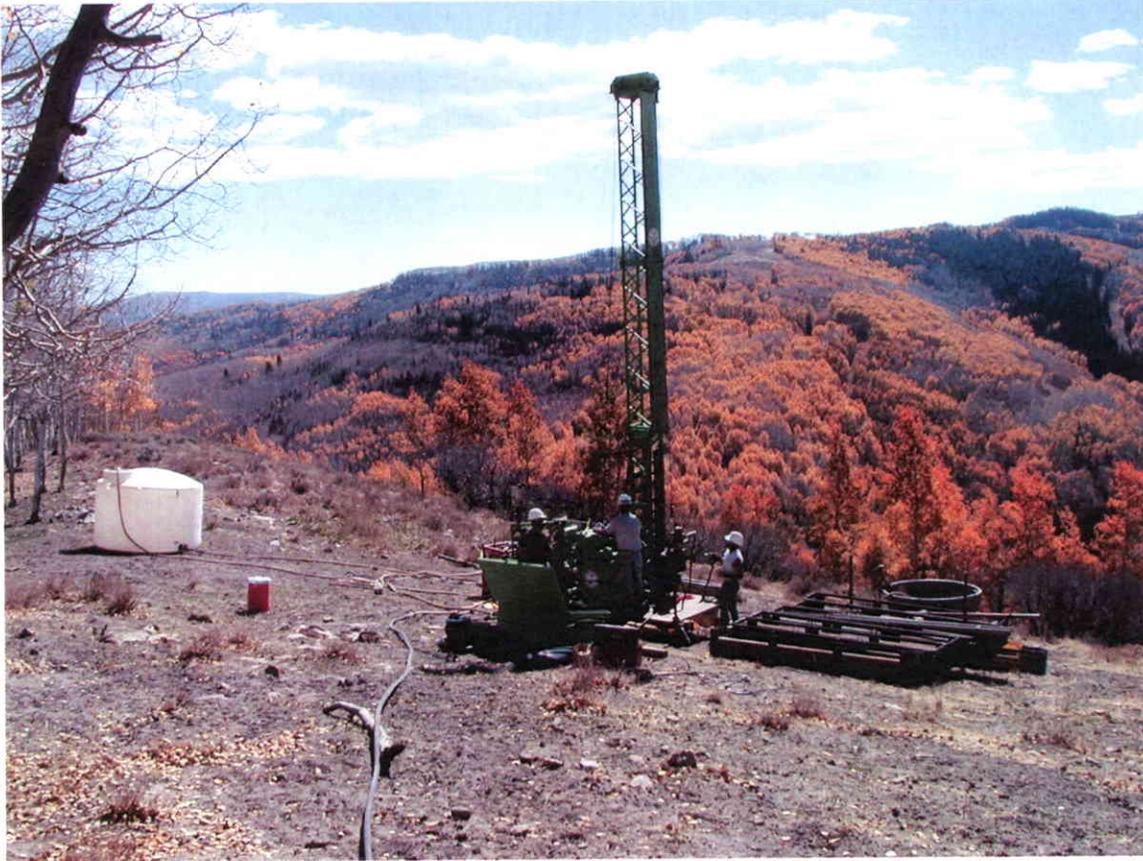


Figure 1. Typical helicopter-assisted drillsite setup. Only minor excavation of surface soil with hand tools is necessary for leveling of drill rig. Surface is otherwise undisturbed.

The method of revegetation is intended to encourage prompt revegetation and recovery of a diverse, effective, and permanent vegetative cover. The following seed mix has been proscribed by the U.S. Forest Service for reclamation of 2003 Pines Lease drill holes:

### Seed Mix

		<u>Pounds PLS/acre</u>
Western Wheatgrass	<i>Elymus smithii</i>	2
Basin Wild Ryegrass	<i>Elymus cinereus</i>	1
Intermediate Wheatgrass	<i>Elymus hispidus</i>	2
Paiute Orchardgrass	<i>Dactylis glomeratus</i>	2
“Rambler” Alfalfa	<i>Medicago sativa</i>	1
Blueleaf Aster	<i>Aster glaucodes</i>	0.25
Lewis Flax	<i>Linum lewisii</i>	0.50
Small Burnet	<i>Sanguisorbia minor</i>	1
Mountain Big Sage	<i>Aremisia tridentate vaseyana</i>	0.25
Bitterbrush	<i>Purshia tridentata</i>	1
TOTAL		11.00

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 and the Forest Service roads used to access it. Equipment access to the exploration area will be via FDR 007 which traverses federal coal leases SLI-062583, U-47080, and U-63214 on both the Fishlake and Manti-LaSal National Forests then FDR 044 to the proposed tank/pump location and staging area/landing zone location.

As mentioned earlier, only minor hand excavation will be necessary at the drill site. No mud pits will be constructed.

Upon completion of drilling, the hole will either be plugged with a cement or cement/bentonite slurry to its full depth, or a water monitor well will be constructed. If a monitor well is constructed, the collar of the monitor well will be identified as to hole number and operator. In either case, a brass tag will be placed at the top of the drill hole stating the operator's name, drill hole number, and legal description. If the hole is plugged, the tag will be placed in the cement at ground level.

If the hole is constructed as a water monitor well, a nominal 1.0 to 1.5 inch well screen and steel casing would be installed to below the deepest mineable coal zone. The screen zone will be sand packed and sealed from overlying strata and the overlying hole annulus will be cemented to the surface. Well casing with a locking lid will be left at the surface extending above the surface approx. 2 ft. As previously mentioned, the wellhead will be properly identified with either a brass marker or a welded-on identification.

The main drill hole diameter will be nominally 2 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 8 X 12 ft. (0.002 acres). No road or significant pad construction will be necessary. Total acreage to be disturbed will be 0.002 acres.

Drill Hole	Location	Total Depth (ft)	Disturbed Area (acres)
A	SW, SE, 32, T20S, R5E	1500	0.002

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.

R645-202.230

No adverse impacts to the stream channel will occur during pumping activities. The USFS will be notified as to points of diversion and generally require that stream flow not be pumped dry during pumping activities. In the past, the USFS has authorized the placement of a water tank at the pump location to allow more gradual pumping and water storage. If, due to drought conditions, stream flow drops too low to pump, water will be hauled from the Sufco minesite. No water will be pumped from Quitcumpah or Muddy Creek without an approved "Temporary Change of Water" from the Division of Water Rights. A copy of the approved Temporary Change is included in Appendix E.

R645-202-231

A site specific cultural resource survey has been conducted and is included as Appendix C. Threatened, endangered, and sensitive plant and animal survey information has been developed by the U.S.F.S. during their work relative to Canyon Fuel's 2004 Muddy Tract drilling license application. The information should be finalized as part of the USFS decision document that will be submitted to the BLM by mid-August, 2004. Information can be obtained from Tom Lloyd at 435-636-3596. A raptor survey was conducted in June, 2004 of the drillsite area. No nests were observed. Appendix D shows the raptor information developed during the 2004 survey.

TES protection measures include the use of Heli-portable drilling equipment which will minimize surface disturbance. Helicopter flight routes will also be selected which will avoid active raptor nests. Drilling will not commence until after Sept. 1, 2004.

R645-202-232

No road construction is planned for this project.

R645-202-235 (R645-301-624.210, R645-301-731.121, R645-301-731.215))

Geologic logs of drilling will be kept. Any appreciable water encountered during drilling will be logged, noting depth, geology, and estimated flow. Any such zones will be evaluated for potential water monitoring.

Figure 2 shows a drawing of the approximate drillsite setup. Figure 3 shows a drawing of the drillsite in relation to Cowboy Creek.

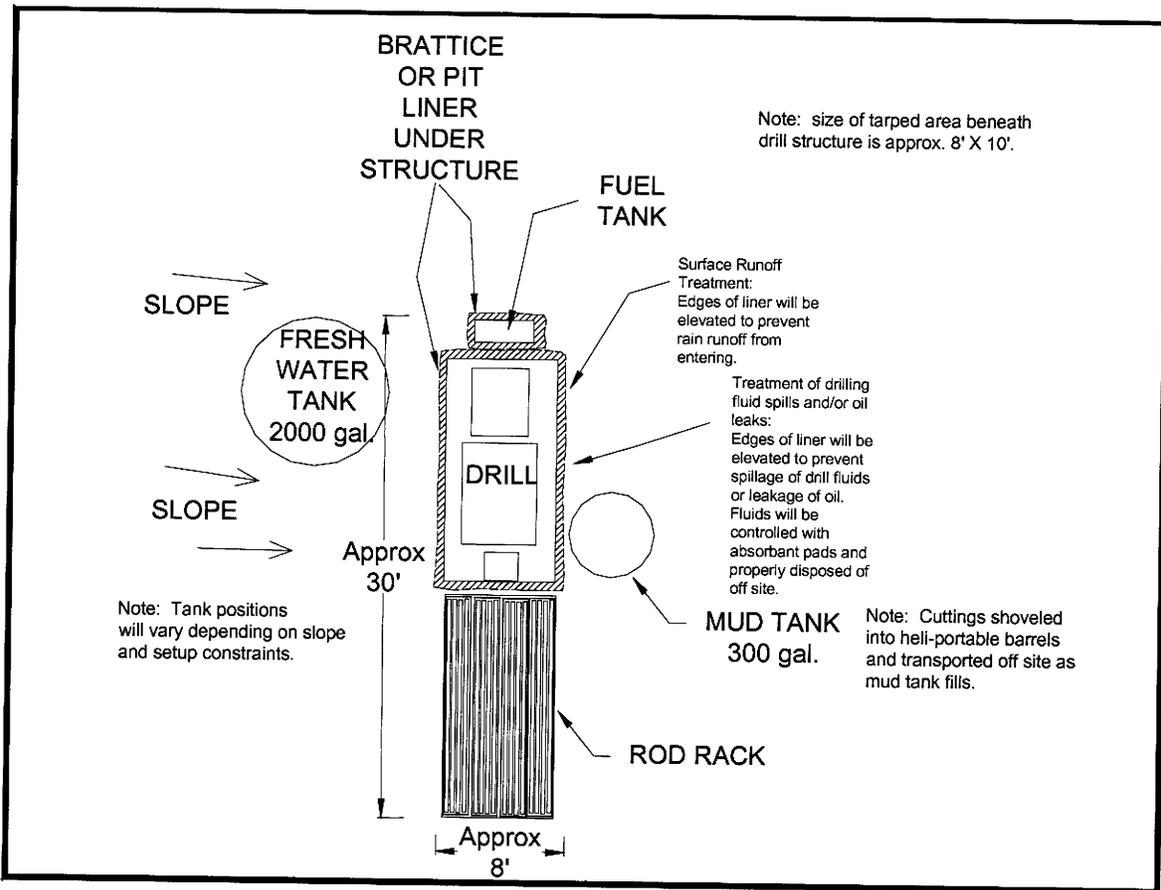


Figure 2: Approximate drill site setup.

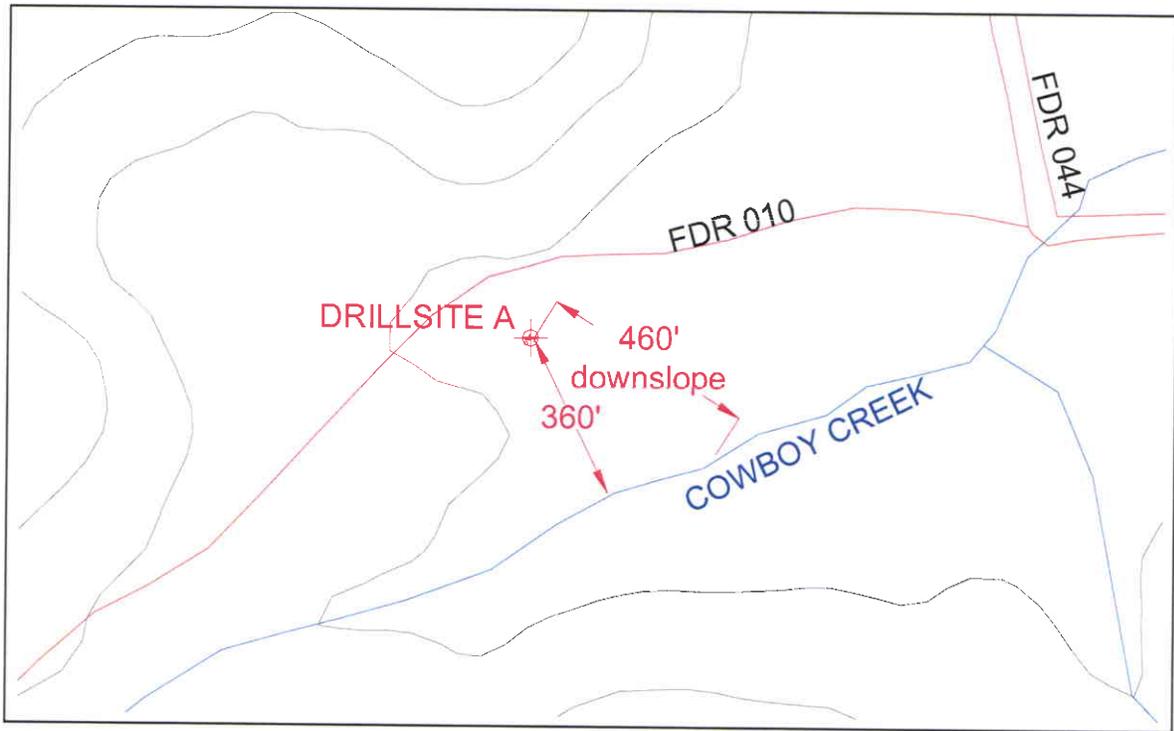


Figure 3: Location of drillsite A in relation to Cowboy Creek.

If it is determined that the drillhole will be completed as a water monitor well, the planned water monitor well design is shown in Figure 4. It should be noted that because the heli-portable drilling equipment has limited lifting and pumping capability due to its small size and low weight, installation of piezometer equipment may not be possible. Hole annulus may also limit the effectiveness of sandpack placement. Hole conditions will be evaluated in the field to determine if piezometer installation is going to be possible. If installed, a groundwater monitor well completion form will be submitted to the Division.

## WATER MONITOR WELL DESIGN

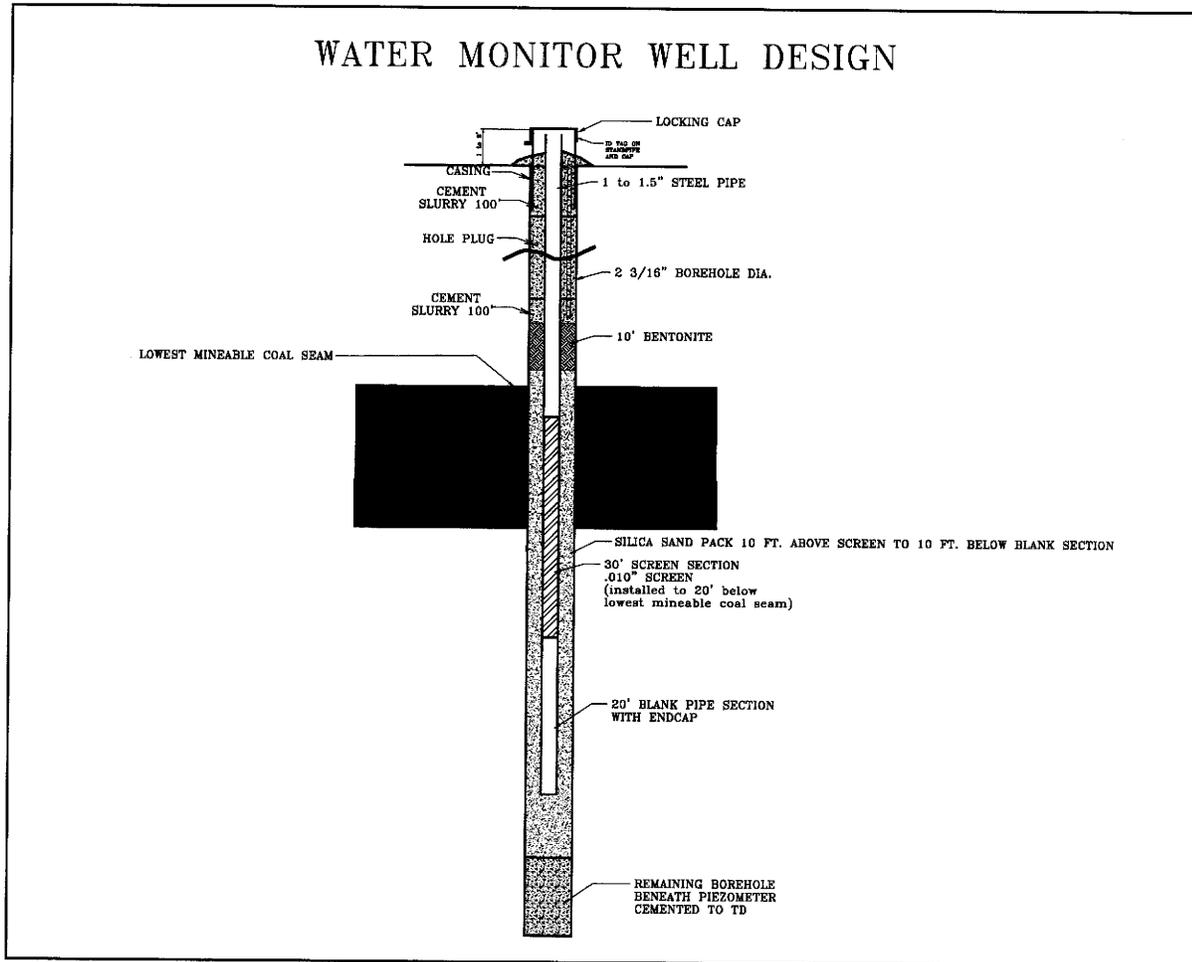


Figure 4. Water monitor well design.

If the drill hole begins to make excess water, such water will be stored in portable poly tanks and pumped to a larger 20,000 gal. frac tank placed adjacent to the main road. At that point the water will be hauled away by water truck to an approved waste water disposal site. At no time will excess drill water generated in the drill hole be allowed to run on topsoil on the surface.

R645-301-525-200

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

R645-301-527.230

U.S. Forest system roads utilized as part of this minor coal exploration plan will be maintained as per U.S.F.S. authorized road use permit, including proper control of fugitive dust to minimize effects to fish, wildlife, and related environmental values.

R645-301-731.100

Approved Temporary Change of Water for water to be used in the drilling process has been obtained from the Utah Division of Water Rights and is included as Appendix E.

R645-301-742.410 thru 742.420

Because heli-portable drill equipment is being utilized for this project requiring minimal surface disturbance, no improvements or changes are necessary to any drainage pattern. Brattice placed beneath the drill and fuel tank will be elevated along the edges to prevent fluids from flowing across adjacent soils. Rain water will be carefully monitored to ensure that it does not overflow the brattice, causing any excess runoff or erosion. Any excess water will be removed and placed in the drill water tank for use in the drilling process.

## 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, 2004. 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 2004 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.

over the area and the area will be seeded. 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 will be removed and transported to an approved disposal site.

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

Response/Action – No mud pits will be constructed for this project.

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 – No mud pits will be constructed for this project.

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 – No roads will be constructed for this project.

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

Response/Action – No drainages will be disturbed.

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.

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 heli-portable containers to be transported to an approved site. An MSDS will be provided the Forest Service for all drilling fluids and muds used. 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 - No trees will be removed. Any brush will be grubbed (cleared) if needed as the first step drill site construction. No topsoil or subsoil will be stripped since this is a helicopter-assisted drilling program.

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

Response/Action - The disturbed area, consisting of minor hand excavation will be reclaimed as soon as possible upon completion of drilling. The drill site will be reclaimed by filling in any hand excavations. Any grubbed material will be distributed.

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 007 and FDR 044 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. No excavation of drill pads will be necessary because this is a helicopter-assisted project. Drilling fluids will be contained in tanks.
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.

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. Portable mud tanks will be used. Drill fluids 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.

# APPENDIX E

Temporary Change of Water, State Division of Water Rights

# APPLICATION FOR TEMPORARY CHANGE OF WATER RECEIVED

STATE OF UTAH

WATER RIGHTS PRICE

Rec. by MK  
Fee Paid \$ 75.00  
Receipt # 04-03131  
Microfilmed \_\_\_\_\_  
Check # 28520

JUL 12 2004

For the purpose of obtaining permission to make a temporary change of water in the State of Utah, application is hereby made to the State Engineer, based upon the following showing of facts, submitted in accordance with the requirements of Section 73-3-3 Utah Code Annotated 1953, as amended.

\*WATER RIGHT NO. 94 - 1307 \*APPLICATION NO. t29223

Changes are proposed in (check those applicable)

point of diversion.  place of use.  nature of use. \_\_\_\_\_ period of use.

1. OWNER INFORMATION

Name: Canyon Fuel Company \*Interest: 100 %  
Address: c/o Ark Land Company, One CityPlace Drive, Suite 300  
City: St. Louis State: MO Zip Code: 63141

2. \*PRIORITY OF CHANGE: July 26, 2004 \*FILING DATE: July 26, 2004

3. RIGHT EVIDENCED BY: 94-1307, supplemented by 94-1308 through 94-1313

Prior Approved Temporary Change Applications for this right: \_\_\_\_\_

\*\*\*\*\*HERETOFORE\*\*\*\*\*

4. QUANTITY OF WATER: \_\_\_\_\_ cfs and/or 3.08 ac-ft.

5. SOURCE: Muddy Creek

6. COUNTY: Emery

7. POINT(S) OF DIVERSION: Point to point NW1/4 SE1/4, Sec 16, T21S, R6E, SLBM  
to NE1/4 NE1/4, Sec 21, T21S, R6E, SLBM

Description of Diverting Works: \_\_\_\_\_

8. POINT(S) OF REDIVERSION

The water has been rediverted from \_\_\_\_\_ at a point: \_\_\_\_\_

Description of Diverting Works: \_\_\_\_\_

9. POINT(S) OF RETURN

The amount of water consumed is \_\_\_\_\_ cfs or \_\_\_\_\_ ac-ft.

The amount of water returned is \_\_\_\_\_ cfs or \_\_\_\_\_ ac-ft.

The water has been returned to the natural stream/source at a point(s): \_\_\_\_\_

\*These items are to be completed by the Division of Water Rights.

Temporary Change

10. NATURE AND PERIOD OF USE

Irrigation: From \_\_\_\_\_ to \_\_\_\_\_
Stockwatering: From Jan 1 to Dec 31
Domestic: From \_\_\_\_\_ to \_\_\_\_\_
Municipal: From \_\_\_\_\_ to \_\_\_\_\_
Mining: From \_\_\_\_\_ to \_\_\_\_\_
Power: From \_\_\_\_\_ to \_\_\_\_\_
Other: From \_\_\_\_\_ to \_\_\_\_\_

11. PURPOSE AND EXTENT OF USE

Irrigation: \_\_\_\_\_ acres. Sole supply of \_\_\_\_\_ acres.
Stockwatering (number and kind): 110 head of cattle
Domestic: \_\_\_\_\_ Families and/or \_\_\_\_\_ Persons.
Municipal (name): \_\_\_\_\_
Mining: \_\_\_\_\_ Mining District in the \_\_\_\_\_ Mine.
Ores mined: \_\_\_\_\_
Power: Plant name: \_\_\_\_\_ Type: \_\_\_\_\_ Capacity: \_\_\_\_\_
Other (describe): \_\_\_\_\_

12. PLACE OF USE

Legal description of place of use by 40 acre tract(s): \_\_\_\_\_

13. STORAGE

Reservoir Name: \_\_\_\_\_ Storage Period: from \_\_\_\_\_ to \_\_\_\_\_
Capacity: \_\_\_\_\_ ac-ft. Inundated Area: \_\_\_\_\_ acres.
Height of dam: \_\_\_\_\_ feet.
Legal description of inundated area by 40 acre tract(s): \_\_\_\_\_

\*\*\*\*\*THE FOLLOWING CHANGES ARE PROPOSED\*\*\*\*\*

14. QUANTITY OF WATER: \_\_\_\_\_ cfs and/or 3.08 ac-ft.

15. SOURCE: Muddy Creek
Balance of the water will be abandoned: \_\_\_\_\_, or will be used as heretofore: \_\_\_\_\_

16. COUNTY: Emery

17. POINT(S) OF DIVERSION: N 901 ft W 594 ft from SE cor, Sec 20, T20S, R5E, SLBM

Description of Diverting Works: Pump on stream
\*COMMON DESCRIPTION: \_\_\_\_\_

18. POINT(S) OF REDIVERSION
The water will be rediverted from \_\_\_\_\_ at a point: \_\_\_\_\_

Description of Diverting Works: \_\_\_\_\_

19. POINT(S) OF RETURN

The amount of water to be consumed is \_\_\_\_\_ cfs or \_\_\_\_\_ ac-ft.
The amount of water to be returned is \_\_\_\_\_ cfs or \_\_\_\_\_ ac-ft.
The water will be returned to the natural stream/source at a point(s): \_\_\_\_\_

20. NATURE AND PERIOD OF USE

Irrigation: From \_\_\_/\_\_\_/\_\_\_ to \_\_\_/\_\_\_/\_\_\_
Stockwatering: From \_\_\_/\_\_\_/\_\_\_ to \_\_\_/\_\_\_/\_\_\_
Domestic: From \_\_\_/\_\_\_/\_\_\_ to \_\_\_/\_\_\_/\_\_\_
Municipal: From \_\_\_/\_\_\_/\_\_\_ to \_\_\_/\_\_\_/\_\_\_
Mining: From 7 / 1 / 04 to 6 / 30 / 05
Power: From \_\_\_/\_\_\_/\_\_\_ to \_\_\_/\_\_\_/\_\_\_
Other: From \_\_\_/\_\_\_/\_\_\_ to \_\_\_/\_\_\_/\_\_\_

21. PURPOSE AND EXTENT OF USE

Irrigation: \_\_\_\_\_ acres. Sole supply of \_\_\_\_\_ acres.
Stockwatering (number and kind): \_\_\_\_\_
Domestic: \_\_\_\_\_ Families and/or \_\_\_\_\_ Persons.
Municipal (name): \_\_\_\_\_
Mining: Sufco Mine Mining District at the \_\_\_\_\_ Mine.
Ores mined: Coal
Power: Plant name: \_\_\_\_\_ Type: \_\_\_\_\_ Capacity: \_\_\_\_\_
Other (describe): Exploratory drilling in connection with coal mining

22. PLACE OF USE

Legal description of place of use by 40 acre tract(s): Sec 20: SE1/4 (160 ac);
Sec 29: All (640 ac); Sec 32: N1/2, SE1/4 (480 ac); Sec 33: NW1/4 (160 ac)
all in T20S, R5E, SLBM (See attached map.)

23. STORAGE

Reservoir Name: \_\_\_\_\_ Storage Period: from \_\_\_\_\_ to \_\_\_\_\_
Capacity: \_\_\_\_\_ ac-ft. Inundated Area: \_\_\_\_\_ acres.
Height of dam: \_\_\_\_\_ feet.
Legal description of inundated area by 40 acre tract(s): \_\_\_\_\_

24. EXPLANATORY

The following is set forth to define more clearly the full purpose of this application. Include any supplemental water rights used for the same purpose. (Use additional pages of same size if necessary):
Water is to be used in an exploratory drilling program during the summer of 2004.
Upon termination of this temporary change, the water will again be used for stockwater.

\*\*\*\*\*

The undersigned hereby acknowledges that even though he/she/they may have been assisted in the preparation of the above-numbered application through the courtesy of the employees of the Division of Water Rights, all responsibility for the accuracy of the information contained herein, at the time of filing, rests with the applicant(s).

[Signature]
Signature of Applicant(s)



OLENE S. WALKER  
Governor  
GAYLE F. McKEACHNIE  
Lieutenant Governor

State of Utah  
DEPARTMENT OF NATURAL RESOURCES  
Division of Water Rights

ROBERT L. MORGAN      JERRY D. OLDS  
Executive Director      State Engineer/Division Director

July 26, 2004

Canyon Fuel Company  
C/o Ark Land Company  
One CityPlace Drive Suite 300  
St. Louis, Missouri 63141

Re: Temporary Change Applications  
94-1307 (t29223); 94-1308 (t29224); 94-1309 (t29225); 94-1310 (t29226);  
94-1311 (t29227); 94-1312 (t29228); 94-1313 (t29229)

Dear Applicant:

The above referenced Temporary Change Application has been approved. This application will expire December 31, 2004. Because a portion of the water represented by the seven water rights has been used for livestock water during 2004, only a portion of the rights remain. These applications collectively are limited to a diversion of 3.08 acre-feet during the remainder of 2004. It is expected that no diversion or use of the water will be done after this date unless another proposal has been made and approved.

Your contact with this office, should you need it, is with the Price Regional Office. The telephone number is 435-637-1303.

Sincerely,

Mark P. Page  
Regional Engineer

MPP/mjk





STATE ENGINEER'S ENDORSEMENT

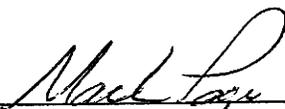
TEMPORARY CHANGE APPLICATION NUMBER: t29223

WATER RIGHT NUMBER: 94 - 1307

1. July 26, 2004            Change Application received by MKILLIAN.
  2. July 26, 2004            Priority of Change Application.
  3.                            Application reviewed and approved for advertising by .  
                                Publication began in .  
                                Publication completed and verified.
  4.                            End of protest period.  
                                Application protested: NO
  5. July 26, 2004            Application designated for APPROVAL by MPAGE and KJONES.
  6. Comments:
- 
- 

Conditions:

This application is hereby APPROVED, dated July 26, 2004, subject to prior rights and this application will expire on December 31, 2004.

  
\_\_\_\_\_  
Mark Page  
Regional Engineer

# APPLICATION FOR TEMPORARY CHANGE OF WATER

RECEIVED

Rec'd by MK

Fee Paid \$ 75.00

JUL 12 2004

Receipt # 04-03131

## STATE OF UTAH

Microfilmed

WATER RIGHTS

PRICE Check #28520

For the purpose of obtaining permission to make a temporary change of water in the State of Utah, application is hereby made to the State Engineer, based upon the following showing of facts, submitted in accordance with the requirements of Section 73-3-3 Utah Code Annotated 1953, as amended.

\*WATER RIGHT NO. 94 - 1308 \*APPLICATION NO. t 29224 -

Changes are proposed in (check those applicable)

point of diversion.  place of use.  nature of use. \_\_\_\_\_ period of use.

### 1. OWNER INFORMATION

Name: Canyon Fuel Company \*Interest: 100 %

Address: c/o Ark Land Company, One CityPlace Drive, Suite 300

City: St. Louis State: MO Zip Code: 63141

2. \*PRIORITY OF CHANGE: July 26, 2004 \*FILING DATE: July 26, 2004

3. RIGHT EVIDENCED BY: 94-1308, supplemented by 94-1307 through 94-1313

Prior Approved Temporary Change Applications for this right: \_\_\_\_\_

\*\*\*\*\*HERETOFORE\*\*\*\*\*

4. QUANTITY OF WATER: \_\_\_\_\_ cfs and/or 3.08 ac-ft.

5. SOURCE: Muddy Creek

6. COUNTY: Emery

7. POINT(S) OF DIVERSION: Point to point NE1/4 NE1/4, Sec 21, T21S, R6E, SLBM  
to SE1/4 NE1/4, Sec 21, T21S, R6E, SLBM

Description of Diverting Works: \_\_\_\_\_

### 8. POINT(S) OF REDIVERSION

The water has been rediverted from \_\_\_\_\_ at a point: \_\_\_\_\_

Description of Diverting Works: \_\_\_\_\_

### 9. POINT(S) OF RETURN

The amount of water consumed is \_\_\_\_\_ cfs or \_\_\_\_\_ ac-ft.

The amount of water returned is \_\_\_\_\_ cfs or \_\_\_\_\_ ac-ft.

The water has been returned to the natural stream/source at a point(s): \_\_\_\_\_

\*These items are to be completed by the Division of Water Rights.

Temporary Change

10. NATURE AND PERIOD OF USE

Irrigation: From \_\_\_\_\_ to \_\_\_\_\_
Stockwatering: From Jan 1 to Dec 31
Domestic: From \_\_\_\_\_ to \_\_\_\_\_
Municipal: From \_\_\_\_\_ to \_\_\_\_\_
Mining: From \_\_\_\_\_ to \_\_\_\_\_
Power: From \_\_\_\_\_ to \_\_\_\_\_
Other: From \_\_\_\_\_ to \_\_\_\_\_

11. PURPOSE AND EXTENT OF USE

Irrigation: \_\_\_\_\_ acres. Sole supply of \_\_\_\_\_ acres.
Stockwatering (number and kind): 110 head of cattle
Domestic: \_\_\_\_\_ Families and/or \_\_\_\_\_ Persons.
Municipal (name): \_\_\_\_\_
Mining: \_\_\_\_\_ Mining District in the \_\_\_\_\_ Mine.
Ores mined: \_\_\_\_\_
Power: Plant name: \_\_\_\_\_ Type: \_\_\_\_\_ Capacity: \_\_\_\_\_
Other (describe): \_\_\_\_\_

12. PLACE OF USE

Legal description of place of use by 40 acre tract(s): \_\_\_\_\_

13. STORAGE

Reservoir Name: \_\_\_\_\_ Storage Period: from \_\_\_\_\_ to \_\_\_\_\_
Capacity: \_\_\_\_\_ ac-ft. Inundated Area: \_\_\_\_\_ acres.
Height of dam: \_\_\_\_\_ feet.
Legal description of inundated area by 40 acre tract(s): \_\_\_\_\_

\*\*\*\*\*THE FOLLOWING CHANGES ARE PROPOSED\*\*\*\*\*

14. QUANTITY OF WATER: \_\_\_\_\_ cfs and/or 3.08 ac-ft.

15. SOURCE: Muddy Creek
Balance of the water will be abandoned: \_\_\_\_\_, or will be used as heretofore: \_\_\_\_\_

16. COUNTY: Emery

17. POINT(S) OF DIVERSION: N 901 ft W 594 ft from SE cor, Sec 20, T20S, R5E, SLBM

Description of Diverting Works: Pump on stream
\*COMMON DESCRIPTION: \_\_\_\_\_

18. POINT(S) OF REDIVERSION
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Description of Diverting Works: \_\_\_\_\_

19. POINT(S) OF RETURN

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The amount of water to be returned is \_\_\_\_\_ cfs or \_\_\_\_\_ ac-ft.
The water will be returned to the natural stream/source at a point(s): \_\_\_\_\_

20. NATURE AND PERIOD OF USE

Irrigation: From \_\_\_/\_\_\_/\_\_\_ to \_\_\_/\_\_\_/\_\_\_
Stockwatering: From \_\_\_/\_\_\_/\_\_\_ to \_\_\_/\_\_\_/\_\_\_
Domestic: From \_\_\_/\_\_\_/\_\_\_ to \_\_\_/\_\_\_/\_\_\_
Municipal: From \_\_\_/\_\_\_/\_\_\_ to \_\_\_/\_\_\_/\_\_\_
Mining: From 7 / 1 / 04 to 6 / 30 / 05
Power: From \_\_\_/\_\_\_/\_\_\_ to \_\_\_/\_\_\_/\_\_\_
Other: From \_\_\_/\_\_\_/\_\_\_ to \_\_\_/\_\_\_/\_\_\_

21. PURPOSE AND EXTENT OF USE

Irrigation: \_\_\_\_\_ acres. Sole supply of \_\_\_\_\_ acres.
Stockwatering (number and kind): \_\_\_\_\_
Domestic: \_\_\_\_\_ Families and/or \_\_\_\_\_ Persons.
Municipal (name): \_\_\_\_\_
Mining: Sufco Mine Mining District at the \_\_\_\_\_ Mine.
Ores mined: Coal
Power: Plant name: \_\_\_\_\_ Type: \_\_\_\_\_ Capacity: \_\_\_\_\_
Other (describe): Exploratory drilling in connection with coal mining

22. PLACE OF USE

Legal description of place of use by 40 acre tract(s): Sec 20: SE1/4 (160 ac);
Sec 29: All (640 ac); Sec 32: N1/2 SE1/4 (480 ac); Sec 33: NW1/4 (160 ac)
all in T20S, R5E, SLBM (See attached map.)

23. STORAGE

Reservoir Name: \_\_\_\_\_ Storage Period: from \_\_\_\_\_ to \_\_\_\_\_
Capacity: \_\_\_\_\_ ac-ft. Inundated Area: \_\_\_\_\_ acres.
Height of dam: \_\_\_\_\_ feet.
Legal description of inundated area by 40 acre tract(s): \_\_\_\_\_

24. EXPLANATORY

The following is set forth to define more clearly the full purpose of this application. Include any supplemental water rights used for the same purpose. (Use additional pages of same size if necessary):
Water is to be used in an exploratory drilling program during the summer of 2004.
Upon termination of this temporary change, the water will again be used for stockwater.

\*\*\*\*\*

The undersigned hereby acknowledges that even though he/she/they may have been assisted in the preparation of the above-numbered application through the courtesy of the employees of the Division of Water Rights, all responsibility for the accuracy of the information contained herein, at the time of filing, rests with the applicant(s).

[Signature]
Signature of Applicant(s)

STATE ENGINEER'S ENDORSEMENT

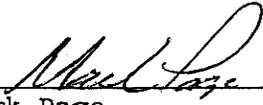
TEMPORARY CHANGE APPLICATION NUMBER: t29224

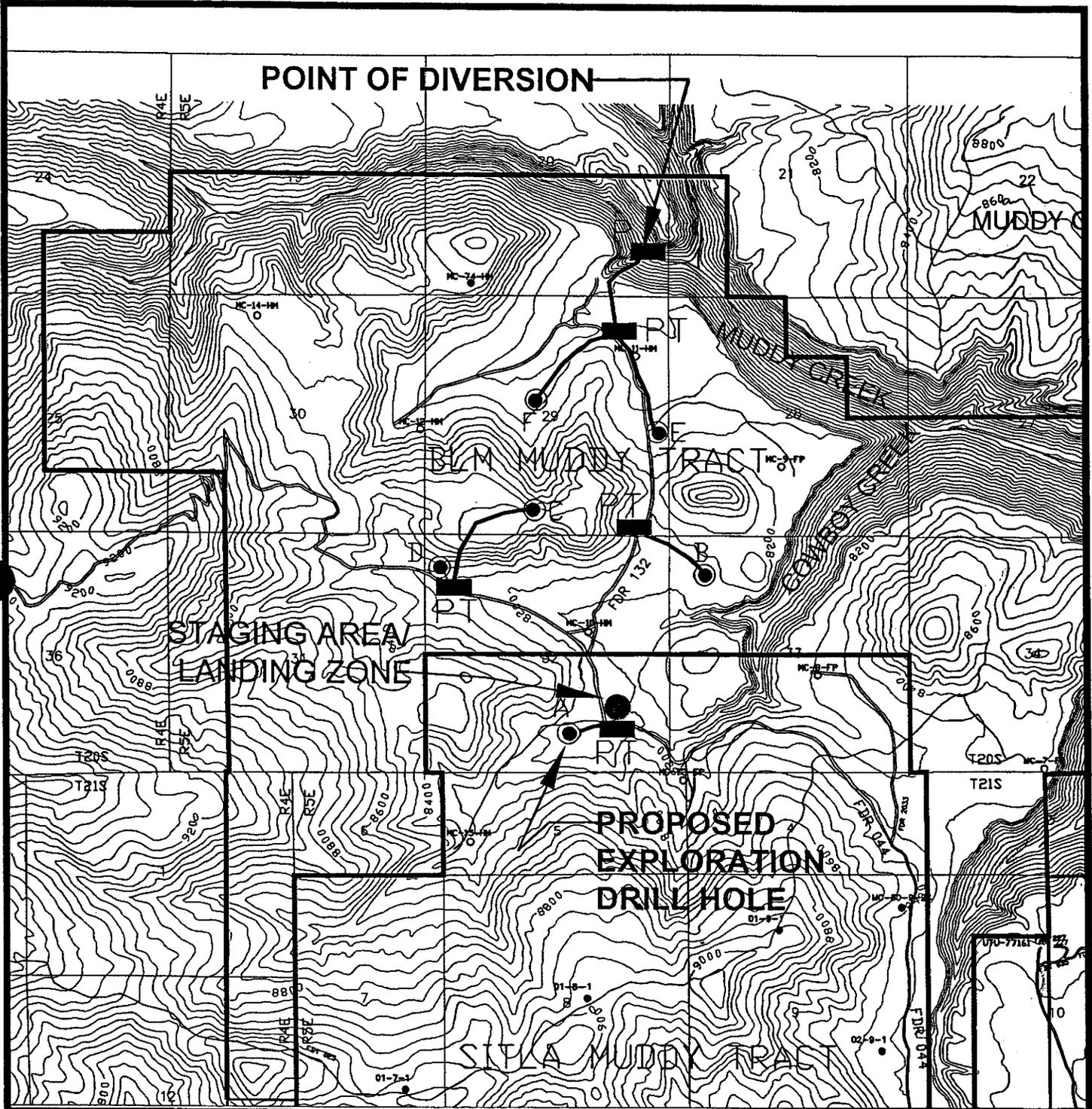
WATER RIGHT NUMBER: 94 - 1308

1. July 26, 2004            Change Application received by MKILLIAN.
  2. July 26, 2004            Priority of Change Application.
  3.                            Application reviewed and approved for advertising by .  
                                Publication began in .  
                                Publication completed and verified.
  4.                            End of protest period.  
                                Application protested: NO
  5. July 26, 2004            Application designated for APPROVAL by MPAGE and KJONES.
  6. Comments:
- 
- 

Conditions:

This application is hereby APPROVED, dated July 26, 2004, subject to prior rights and this application will expire on December 31, 2004.

  
\_\_\_\_\_  
Mark Page  
Regional Engineer



- Proposed 2004 Drillsite
- HDPE Waterline
- PT Pump (P) and/or Storage Tank (T)
- Staging Area/Landing Zones

Canyon Fuel Company  
 Temporary Change Application  
 No. 94-1308 (t29224)

0' 3000' 6000'

SCALE

N

DATE	BY		<b>ARK LAND COMPANY</b> <b>DRILLING PROJECT, 2004</b> <b>MUDDY TRACT</b> <b>DRILL HOLE LOCATIONS</b> <b>AND PROPOSED</b> <b>WATER DIVERSION POINT</b>

SCALE 1" = 3000'

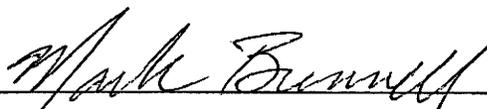
RECEIVED

JUL 26 2004

WATER RIGHTS  
PRICE

**APPLICANT'S MAP VERIFICATION STATEMENT**

I/we, Canyon Fuel Company, hereby acknowledge that this map (or, the map attached to this application), consisting of 1 pages was prepared in support of Application Numbers 94-1307 (t29223); 94-1308 (t29224); 94-1309 (t29225); 94-1310 (t29226); 94-1311 (t29227); 94-1312 (t29228); 94-1313 (t29229). I/we hereby accept and submit this map as a true representation of the facts shown thereon to the best of my\our knowledge and belief.

  
\_\_\_\_\_  
Canyon Fuel Company

# APPLICATION FOR TEMPORARY CHANGE OF WATER

**RECEIVED**  
Rec. by: MK  
Fee Paid \$ 75.00  
JUL 12 2004 Receipt # 04-03131  
Microfilmed \_\_\_\_\_  
WATER RIGHTS PRICE Check #28520

For the purpose of obtaining permission to make a temporary change of water in the State of Utah, application is hereby made to the State Engineer, based upon the following showing of facts, submitted in accordance with the requirements of Section 73-3-3 Utah Code Annotated 1953, as amended.

\*WATER RIGHT NO. 94 - 1309 \*APPLICATION NO. t 29225 -  
Changes are proposed in (check those applicable)  
X point of diversion. X place of use. X nature of use. \_\_\_\_\_ period of use.

1. OWNER INFORMATION  
Name: Canyon Fuel Company \*Interest: 100 %  
Address: c/o Ark Land Company, One CityPlace Drive, Suite 300  
City: St. Louis State: MO Zip Code: 63141

2. \*PRIORITY OF CHANGE: July 26, 2004 \*FILING DATE: July 26, 2004

3. RIGHT EVIDENCED BY: 94-1309, supplemented by 94-1307 through 94-1313

Prior Approved Temporary Change Applications for this right: \_\_\_\_\_

\*\*\*\*\*HERETOFORE\*\*\*\*\*

4. QUANTITY OF WATER: \_\_\_\_\_ cfs and/or 3.08 ac-ft.  
5. SOURCE: Muddy Creek  
6. COUNTY: Emery  
7. POINT(S) OF DIVERSION: Point to point NE1/4 SE1/4, Sec 22, T21S, R6E, SLBM  
to NE1/4 SE1/4, Sec 22, T21S, R6E, SLBM

Description of Diverting Works: \_\_\_\_\_

8. POINT(S) OF REDIVERSION  
The water has been rediverted from \_\_\_\_\_ at a point: \_\_\_\_\_

Description of Diverting Works: \_\_\_\_\_

9. POINT(S) OF RETURN  
The amount of water consumed is \_\_\_\_\_ cfs or \_\_\_\_\_ ac-ft.  
The amount of water returned is \_\_\_\_\_ cfs or \_\_\_\_\_ ac-ft.  
The water has been returned to the natural stream/source at a point(s): \_\_\_\_\_

\*These items are to be completed by the Division of Water Rights.

Temporary Change

10. NATURE AND PERIOD OF USE

Irrigation: From \_\_\_\_\_ to \_\_\_\_\_
Stockwatering: From Jan 1 to Dec 31
Domestic: From \_\_\_\_\_ to \_\_\_\_\_
Municipal: From \_\_\_\_\_ to \_\_\_\_\_
Mining: From \_\_\_\_\_ to \_\_\_\_\_
Power: From \_\_\_\_\_ to \_\_\_\_\_
Other: From \_\_\_\_\_ to \_\_\_\_\_

11. PURPOSE AND EXTENT OF USE

Irrigation: \_\_\_\_\_ acres. Sole supply of \_\_\_\_\_ acres.
Stockwatering (number and kind): 110 head of cattle
Domestic: \_\_\_\_\_ Families and/or \_\_\_\_\_ Persons.
Municipal (name): \_\_\_\_\_
Mining: \_\_\_\_\_ Mining District in the \_\_\_\_\_ Mine.
Ores mined: \_\_\_\_\_
Power: Plant name: \_\_\_\_\_ Type: \_\_\_\_\_ Capacity: \_\_\_\_\_
Other (describe): \_\_\_\_\_

12. PLACE OF USE

Legal description of place of use by 40 acre tract(s): \_\_\_\_\_

13. STORAGE

Reservoir Name: \_\_\_\_\_ Storage Period: from \_\_\_\_\_ to \_\_\_\_\_
Capacity: \_\_\_\_\_ ac-ft. Inundated Area: \_\_\_\_\_ acres.
Height of dam: \_\_\_\_\_ feet.
Legal description of inundated area by 40 acre tract(s): \_\_\_\_\_

\*\*\*\*\*THE FOLLOWING CHANGES ARE PROPOSED\*\*\*\*\*

14. QUANTITY OF WATER: \_\_\_\_\_ cfs and/or 3.08 ac-ft.

15. SOURCE: Muddy Creek
Balance of the water will be abandoned: \_\_\_\_\_, or will be used as heretofore: \_\_\_\_\_

16. COUNTY: Emery

17. POINT(S) OF DIVERSION: N 901 ft W 594 ft from SE cor, Sec 20, T20S, R5E, SLBM

Description of Diverting Works: Pump on stream
\*COMMON DESCRIPTION: \_\_\_\_\_

18. POINT(S) OF REDIVERSION
The water will be rediverted from \_\_\_\_\_ at a point: \_\_\_\_\_

Description of Diverting Works: \_\_\_\_\_

19. POINT(S) OF RETURN
The amount of water to be consumed is \_\_\_\_\_ cfs or \_\_\_\_\_ ac-ft. by \_\_\_\_\_
The amount of water to be returned is \_\_\_\_\_ cfs or \_\_\_\_\_ ac-ft. by \_\_\_\_\_
The water will be returned to the natural stream/source at a point(s): \_\_\_\_\_

20. NATURE AND PERIOD OF USE

Irrigation: From \_\_\_/\_\_\_/\_\_\_ to \_\_\_/\_\_\_/\_\_\_
Stockwatering: From \_\_\_/\_\_\_/\_\_\_ to \_\_\_/\_\_\_/\_\_\_
Domestic: From \_\_\_/\_\_\_/\_\_\_ to \_\_\_/\_\_\_/\_\_\_
Municipal: From \_\_\_/\_\_\_/\_\_\_ to \_\_\_/\_\_\_/\_\_\_
Mining: From 7 / 1 / 04 to 6 / 30 / 05
Power: From \_\_\_/\_\_\_/\_\_\_ to \_\_\_/\_\_\_/\_\_\_
Other: From \_\_\_/\_\_\_/\_\_\_ to \_\_\_/\_\_\_/\_\_\_

21. PURPOSE AND EXTENT OF USE

Irrigation: \_\_\_\_\_ acres. Sole supply of \_\_\_\_\_ acres.
Stockwatering (number and kind): \_\_\_\_\_
Domestic: \_\_\_\_\_ Families and/or \_\_\_\_\_ Persons.
Municipal (name): \_\_\_\_\_
Mining: Sufco Mine Mining District at the \_\_\_\_\_ Mine.
Ores mined: Coal
Power: Plant name: \_\_\_\_\_ Type: \_\_\_\_\_ Capacity: \_\_\_\_\_
Other (describe): Exploratory drilling in connection with coal mining

22. PLACE OF USE

Legal description of place of use by 40 acre tract(s): Sec 20: SE1/4 (160 ac);
Sec 29: All (640 ac); Sec 32: N1/2 SE1/4 (480 ac); Sec 33: NW1/4 (160 ac)
all in T20S, R5E, SLBM (See attached map.)

23. STORAGE

Reservoir Name: \_\_\_\_\_ Storage Period: from \_\_\_\_\_ to \_\_\_\_\_
Capacity: \_\_\_\_\_ ac-ft. Inundated Area: \_\_\_\_\_ acres.
Height of dam: \_\_\_\_\_ feet.
Legal description of inundated area by 40 acre tract(s): \_\_\_\_\_

24. EXPLANATORY

The following is set forth to define more clearly the full purpose of this application. Include any supplemental water rights used for the same purpose. (Use additional pages of same size if necessary):
Water is to be used in an exploratory drilling program during the summer of 2004.
Upon termination of this temporary change, the water will again be used for stockwater.

\*\*\*\*\*

The undersigned hereby acknowledges that even though he/she/they may have been assisted in the preparation of the above-numbered application through the courtesy of the employees of the Division of Water Rights, all responsibility for the accuracy of the information contained herein, at the time of filing, rests with the applicant(s).

[Signature]
Signature of Applicant(s)

STATE ENGINEER'S ENDORSEMENT

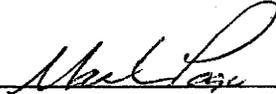
TEMPORARY CHANGE APPLICATION NUMBER: t29225

WATER RIGHT NUMBER: 94 - 1309

1. July 26, 2004            Change Application received by MKILLIAN.
  2. July 26, 2004            Priority of Change Application.
  3.                            Application reviewed and approved for advertising by .  
                                Publication began in .  
                                Publication completed and verified.
  4.                            End of protest period.  
                                Application protested: NO
  5. July 26, 2004            Application designated for APPROVAL by MPAGE and KJONES.
  6. Comments:
- 
- 

Conditions:

This application is hereby APPROVED, dated July 26, 2004, subject to prior rights and this application will expire on December 31, 2004.

  
\_\_\_\_\_  
Mark Page  
Regional Engineer



OLENE S. WALKER  
Governor  
GAYLE F. McKEACHNIE  
Lieutenant Governor

State of Utah  
DEPARTMENT OF NATURAL RESOURCES  
Division of Water Rights

ROBERT L. MORGAN      JERRY D. OLDS  
Executive Director      State Engineer/Division Director

July 26, 2004

Canyon Fuel Company  
C/o Ark Land Company  
One CityPlace Drive Suite 300  
St. Louis, Missouri 63141

Re: Temporary Change Applications  
94-1307 (t29223); 94-1308 (t29224); 94-1309 (t29225); 94-1310 (t29226);  
94-1311 (t29227); 94-1312 (t29228); 94-1313 (t29229)

Dear Applicant:

The above referenced Temporary Change Application has been approved. This application will expire December 31, 2004. Because a portion of the water represented by the seven water rights has been used for livestock water during 2004, only a portion of the rights remain. These applications collectively are limited to a diversion of 3.08 acre-feet during the remainder of 2004. It is expected that no diversion or use of the water will be done after this date unless another proposal has been made and approved.

Your contact with this office, should you need it, is with the Price Regional Office. The telephone number is 435-637-1303.

Sincerely,

Mark P. Page  
Regional Engineer

MPP/mjk



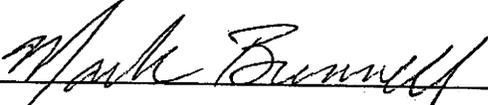
RECEIVED

JUL 26 2004

WATER RIGHTS  
PRICE

## APPLICANT'S MAP VERIFICATION STATEMENT

I/we, Canyon Fuel Company, hereby acknowledge that this map (or, the map attached to this application), consisting of 1 pages was prepared in support of Application Numbers 94-1307 (t29223); 94-1308 (t29224); 94-1309 (t29225); 94-1310 (t29226); 94-1311 (t29227); 94-1312 (t29228); 94-1313 (t29229). I/we hereby accept and submit this map as a true representation of the facts shown thereon to the best of my\our knowledge and belief.

  
\_\_\_\_\_  
Canyon Fuel Company

# APPLICATION FOR TEMPORARY CHANGE OF WATER

Rec. by MK  
JUL 12 2004 Fee Paid \$ 75.00

STATE OF UTAH

WATER RIGHTS PRICE microfilmed  
Receipt # 04-03131

Check #28520

For the purpose of obtaining permission to make a temporary change of water in the State of Utah, application is hereby made to the State Engineer, based upon the following showing of facts, submitted in accordance with the requirements of Section 73-3-3 Utah Code Annotated 1953, as amended.

\*WATER RIGHT NO. 94 - 1310 \*APPLICATION NO. t 29226

Changes are proposed in (check those applicable)

point of diversion.  place of use.  nature of use. \_\_\_\_\_ period of use.

### 1. OWNER INFORMATION

Name: Canyon Fuel Company \*Interest: 100 %  
Address: c/o Ark Land Company, One CityPlace Drive, Suite 300  
City: St. Louis State: MO Zip Code: 63141

2. \*PRIORITY OF CHANGE: July 26, 2004 \*FILING DATE: July 26, 2004

3. RIGHT EVIDENCED BY: 94-1310, supplemented by 94-1307 through 94-1313

Prior Approved Temporary Change Applications for this right: \_\_\_\_\_

\*\*\*\*\*HERETOFORE\*\*\*\*\*

4. QUANTITY OF WATER: \_\_\_\_\_ cfs and/or 3.08 ac-ft.

5. SOURCE: Muddy Creek

6. COUNTY: Emery

7. POINT(S) OF DIVERSION: Point to point NE1/4 SE1/4, Sec 22, T21S, R6E, SLBM  
to SE1/4 SW1/4, Sec 23, T21S, R6E, SLBM

Description of Diverting Works: \_\_\_\_\_

### 8. POINT(S) OF REDIVERSION

The water has been rediverted from \_\_\_\_\_ at a point: \_\_\_\_\_

Description of Diverting Works: \_\_\_\_\_

### 9. POINT(S) OF RETURN

The amount of water consumed is \_\_\_\_\_ cfs or \_\_\_\_\_ ac-ft.

The amount of water returned is \_\_\_\_\_ cfs or \_\_\_\_\_ ac-ft.

The water has been returned to the natural stream/source at a point(s): \_\_\_\_\_

\*These items are to be completed by the Division of Water Rights.

Temporary Change

10. NATURE AND PERIOD OF USE

Irrigation: From \_\_\_\_\_ to \_\_\_\_\_  
Stockwatering: From Jan 1 to Dec 31  
Domestic: From \_\_\_\_\_ to \_\_\_\_\_  
Municipal: From \_\_\_\_\_ to \_\_\_\_\_  
Mining: From \_\_\_\_\_ to \_\_\_\_\_  
Power: From \_\_\_\_\_ to \_\_\_\_\_  
Other: From \_\_\_\_\_ to \_\_\_\_\_

11. PURPOSE AND EXTENT OF USE

Irrigation: \_\_\_\_\_ acres. Sole supply of \_\_\_\_\_ acres.  
Stockwatering (number and kind): 110 head of cattle  
Domestic: \_\_\_\_\_ Families and/or \_\_\_\_\_ Persons.  
Municipal (name): \_\_\_\_\_  
Mining: \_\_\_\_\_ Mining District in the \_\_\_\_\_ Mine.  
Ores mined: \_\_\_\_\_  
Power: Plant name: \_\_\_\_\_ Type: \_\_\_\_\_ Capacity: \_\_\_\_\_  
Other (describe): \_\_\_\_\_

12. PLACE OF USE

Legal description of place of use by 40 acre tract(s): \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

13. STORAGE

Reservoir Name: \_\_\_\_\_ Storage Period: from \_\_\_\_\_ to \_\_\_\_\_  
Capacity: \_\_\_\_\_ ac-ft. Inundated Area: \_\_\_\_\_ acres.  
Height of dam: \_\_\_\_\_ feet.  
Legal description of inundated area by 40 acre tract(s): \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

\*\*\*\*\*THE FOLLOWING CHANGES ARE PROPOSED\*\*\*\*\*

14. QUANTITY OF WATER: \_\_\_\_\_ cfs and/or 3.08 ac-ft.

15. SOURCE: Muddy Creek  
Balance of the water will be abandoned: \_\_\_\_\_, or will be used as heretofore: \_\_\_\_\_

16. COUNTY: Emery

17. POINT(S) OF DIVERSION: N 901 ft W 594 ft from SE cor, Sec 20, T20S, R5E, SLBM

Description of Diverting Works: Pump on stream  
\*COMMON DESCRIPTION: \_\_\_\_\_

18. POINT(S) OF REDIVERSION  
The water will be rediverted from \_\_\_\_\_ at a point: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Description of Diverting Works: \_\_\_\_\_

19. POINT(S) OF RETURN

The amount of water to be consumed is \_\_\_\_\_ cfs or \_\_\_\_\_ ac-ft.  
The amount of water to be returned is \_\_\_\_\_ cfs or \_\_\_\_\_ ac-ft.  
The water will be returned to the natural stream/source at a point(s): \_\_\_\_\_

20. NATURE AND PERIOD OF USE

Irrigation: From \_\_\_/\_\_\_/\_\_\_ to \_\_\_/\_\_\_/\_\_\_
Stockwatering: From \_\_\_/\_\_\_/\_\_\_ to \_\_\_/\_\_\_/\_\_\_
Domestic: From \_\_\_/\_\_\_/\_\_\_ to \_\_\_/\_\_\_/\_\_\_
Municipal: From \_\_\_/\_\_\_/\_\_\_ to \_\_\_/\_\_\_/\_\_\_
Mining: From 7 / 1 / 04 to 6 / 30 / 05
Power: From \_\_\_/\_\_\_/\_\_\_ to \_\_\_/\_\_\_/\_\_\_
Other: From \_\_\_/\_\_\_/\_\_\_ to \_\_\_/\_\_\_/\_\_\_

21. PURPOSE AND EXTENT OF USE

Irrigation: \_\_\_\_\_ acres. Sole supply of \_\_\_\_\_ acres.
Stockwatering (number and kind): \_\_\_\_\_
Domestic: \_\_\_\_\_ Families and/or \_\_\_\_\_ Persons.
Municipal (name): \_\_\_\_\_
Mining: Sufco Mine Mining District at the \_\_\_\_\_ Mine.
Ores mined: Coal
Power: Plant name: \_\_\_\_\_ Type: \_\_\_\_\_ Capacity: \_\_\_\_\_
Other (describe): Exploratory drilling in connection with coal mining

22. PLACE OF USE

Legal description of place of use by 40 acre tract(s): Sec 20: SE1/4 (160 ac);
Sec 29: All (640 ac); Sec 32: N1/2 SE1/4 (480 ac); Sec 33: NW1/4 (160 ac)
all in T20S, R5E, SLBM (See attached map.)

23. STORAGE

Reservoir Name: \_\_\_\_\_ Storage Period: from \_\_\_\_\_ to \_\_\_\_\_
Capacity: \_\_\_\_\_ ac-ft. Inundated Area: \_\_\_\_\_ acres.
Height of dam: \_\_\_\_\_ feet.
Legal description of inundated area by 40 acre tract(s): \_\_\_\_\_

24. EXPLANATORY

The following is set forth to define more clearly the full purpose of this application. Include any supplemental water rights used for the same purpose. (Use additional pages of same size if necessary):
Water is to be used in an exploratory drilling program during the summer of 2004.
Upon termination of this temporary change, the water will again be used for stockwater.

\*\*\*\*\*

The undersigned hereby acknowledges that even though he/she/they may have been assisted in the preparation of the above-numbered application through the courtesy of the employees of the Division of Water Rights, all responsibility for the accuracy of the information contained herein, at the time of filing, rests with the applicant(s).

[Signature]
Signature of Applicant(s)

STATE ENGINEER'S ENDORSEMENT

TEMPORARY CHANGE APPLICATION NUMBER: t29226

WATER RIGHT NUMBER: 94 - 1310

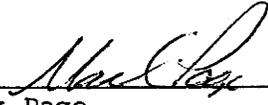
1. July 26, 2004            Change Application received by MKILLIAN.
2. July 26, 2004            Priority of Change Application.
3.                            Application reviewed and approved for advertising by .  
                                Publication began in .  
                                Publication completed and verified.
4.                            End of protest period.  
                                Application protested: NO
5. July 26, 2004            Application designated for APPROVAL by MPAGE and KJONES.
6. Comments:

---

---

Conditions:

This application is hereby APPROVED, dated July 26, 2004, subject to prior rights and this application will expire on December 31, 2004.

  
\_\_\_\_\_  
Mark Page  
Regional Engineer



OLENE S. WALKER  
Governor  
GAYLE F. McKEACHNIE  
Lieutenant Governor

State of Utah  
DEPARTMENT OF NATURAL RESOURCES  
Division of Water Rights

ROBERT L. MORGAN      JERRY D. OLDS  
Executive Director      State Engineer/Division Director

July 26, 2004

Canyon Fuel Company  
C/o Ark Land Company  
One CityPlace Drive Suite 300  
St. Louis, Missouri 63141

Re: Temporary Change Applications  
94-1307 (t29223); 94-1308 (t29224); 94-1309 (t29225); 94-1310 (t29226);  
94-1311 (t29227); 94-1312 (t29228); 94-1313 (t29229)

Dear Applicant:

The above referenced Temporary Change Application has been approved. This application will expire December 31, 2004. Because a portion of the water represented by the seven water rights has been used for livestock water during 2004, only a portion of the rights remain. These applications collectively are limited to a diversion of 3.08 acre-feet during the remainder of 2004. It is expected that no diversion or use of the water will be done after this date unless another proposal has been made and approved.

Your contact with this office, should you need it, is with the Price Regional Office. The telephone number is 435-637-1303.

Sincerely,

Mark P. Page  
Regional Engineer

MPP/mjk



RECEIVED

JUL 26 2004

WATER RIGHTS  
PRICE

## APPLICANT'S MAP VERIFICATION STATEMENT

I/we, Canyon Fuel Company, hereby acknowledge that this map (or, the map attached to this application), consisting of 1 pages was prepared in support of Application Numbers 94-1307 (t29223); 94-1308 (t29224); 94-1309 (t29225); 94-1310 (t29226); 94-1311 (t29227); 94-1312 (t29228); 94-1313 (t29229). I/we hereby accept and submit this map as a true representation of the facts shown thereon to the best of my\our knowledge and belief.

  
\_\_\_\_\_  
Canyon Fuel Company

# APPLICATION FOR TEMPORARY CHANGE OF WATER

STATE OF UTAH

RECEIVED

JUL 12 2004

Rec. by MK

Fee Paid \$ 75.00

Receipt # 04-03131

Microfilmed

WATER RIGHTS PRICE

Check #28520

For the purpose of obtaining permission to make a temporary change of water in the State of Utah, application is hereby made to the State Engineer, based upon the following showing of facts, submitted in accordance with the requirements of Section 73-3-3 Utah Code Annotated 1953, as amended.

\*WATER RIGHT NO. 94 - 1311 \*APPLICATION NO. t t29227 -           

Changes are proposed in (check those applicable)

point of diversion.  place of use.  nature of use.            period of use.

1. OWNER INFORMATION

Name: Canyon Fuel Company \*Interest: 100 %

Address: c/o Ark Land Company, One CityPlace Drive, Suite 300

City: St. Louis State: MO Zip Code: 63141

2. \*PRIORITY OF CHANGE: July 26, 2004 \*FILING DATE: July 26, 2004

3. RIGHT EVIDENCED BY: 94-1311, supplemented by 94-1307 through 94-1313

Prior Approved Temporary Change Applications for this right:           

\*\*\*\*\*HERETOFORE\*\*\*\*\*

4. QUANTITY OF WATER:            cfs and/or 3.08 ac-ft.

5. SOURCE: Muddy Creek

6. COUNTY: Emery

7. POINT(S) OF DIVERSION: Point to point NW1/4 NE1/4, Sec 26, T21S, R6E, SLBM  
to SE1/4 SE1/4, Sec 26, T21S, R6E, SLBM

Description of Diverting Works:           

8. POINT(S) OF REDIVERSION

The water has been rediverted from            at a point:           

Description of Diverting Works:           

9. POINT(S) OF RETURN

The amount of water consumed is            cfs or            ac-ft.

The amount of water returned is            cfs or            ac-ft.

The water has been returned to the natural stream/source at a point(s):           

\*These items are to be completed by the Division of Water Rights.

Temporary Change

10. NATURE AND PERIOD OF USE

Irrigation: From \_\_\_\_\_ to \_\_\_\_\_
Stockwatering: From Jan 1 to Dec 31
Domestic: From \_\_\_\_\_ to \_\_\_\_\_
Municipal: From \_\_\_\_\_ to \_\_\_\_\_
Mining: From \_\_\_\_\_ to \_\_\_\_\_
Power: From \_\_\_\_\_ to \_\_\_\_\_
Other: From \_\_\_\_\_ to \_\_\_\_\_

11. PURPOSE AND EXTENT OF USE

Irrigation: \_\_\_\_\_ acres. Sole supply of \_\_\_\_\_ acres.
Stockwatering (number and kind): 110 head of cattle
Domestic: \_\_\_\_\_ Families and/or \_\_\_\_\_ Persons.
Municipal (name): \_\_\_\_\_
Mining: \_\_\_\_\_ Mining District in the \_\_\_\_\_ Mine.
Ores mined: \_\_\_\_\_
Power: Plant name: \_\_\_\_\_ Type: \_\_\_\_\_ Capacity: \_\_\_\_\_
Other (describe): \_\_\_\_\_

12. PLACE OF USE

Legal description of place of use by 40 acre tract(s): \_\_\_\_\_

13. STORAGE

Reservoir Name: \_\_\_\_\_ Storage Period: from \_\_\_\_\_ to \_\_\_\_\_
Capacity: \_\_\_\_\_ ac-ft. Inundated Area: \_\_\_\_\_ acres.
Height of dam: \_\_\_\_\_ feet.
Legal description of inundated area by 40 acre tract(s): \_\_\_\_\_

\*\*\*\*\*THE FOLLOWING CHANGES ARE PROPOSED\*\*\*\*\*

14. QUANTITY OF WATER: \_\_\_\_\_ cfs and/or 3.08 ac-ft.

15. SOURCE: Muddy Creek
Balance of the water will be abandoned: \_\_\_\_\_, or will be used as heretofore: \_\_\_\_\_

16. COUNTY: Emery

17. POINT(S) OF DIVERSION: N 901 ft W 594 ft from SE cor, Sec 20, T20S, R5E, SLBM

Description of Diverting Works: Pump on stream
\*COMMON DESCRIPTION: \_\_\_\_\_

18. POINT(S) OF REDIVERSION
The water will be rediverted from \_\_\_\_\_ at a point: \_\_\_\_\_

Description of Diverting Works: \_\_\_\_\_

19. POINT(S) OF RETURN

The amount of water to be consumed is \_\_\_\_\_ cfs or \_\_\_\_\_ ac-ft.
The amount of water to be returned is \_\_\_\_\_ cfs or \_\_\_\_\_ ac-ft.
The water will be returned to the natural stream/source at a point(s): \_\_\_\_\_

20. NATURE AND PERIOD OF USE

Irrigation: From \_\_\_/\_\_\_/\_\_\_ to \_\_\_/\_\_\_/\_\_\_
Stockwatering: From \_\_\_/\_\_\_/\_\_\_ to \_\_\_/\_\_\_/\_\_\_
Domestic: From \_\_\_/\_\_\_/\_\_\_ to \_\_\_/\_\_\_/\_\_\_
Municipal: From \_\_\_/\_\_\_/\_\_\_ to \_\_\_/\_\_\_/\_\_\_
Mining: From 7 / 1 / 04 to 6 / 30 / 05
Power: From \_\_\_/\_\_\_/\_\_\_ to \_\_\_/\_\_\_/\_\_\_
Other: From \_\_\_/\_\_\_/\_\_\_ to \_\_\_/\_\_\_/\_\_\_

21. PURPOSE AND EXTENT OF USE

Irrigation: \_\_\_\_\_ acres. Sole supply of \_\_\_\_\_ acres.
Stockwatering (number and kind): \_\_\_\_\_
Domestic: \_\_\_\_\_ Families and/or \_\_\_\_\_ Persons.
Municipal (name): \_\_\_\_\_
Mining: **Sufco Mine** Mining District at the \_\_\_\_\_ Mine.
Ores mined: **Coal**
Power: Plant name: \_\_\_\_\_ Type: \_\_\_\_\_ Capacity: \_\_\_\_\_
Other (describe): **Exploratory drilling in connection with coal mining**

22. PLACE OF USE

Legal description of place of use by 40 acre tract(s): **Sec 20: SE1/4 (160 ac);**
**Sec 29: All (640 ac); Sec 32: N1/2 SE1/4 (480 ac); Sec 33: NW1/4 (160 ac)**
**all in T20S, R5E, SLBM (See attached map.)**

23. STORAGE

Reservoir Name: \_\_\_\_\_ Storage Period: from \_\_\_\_\_ to \_\_\_\_\_
Capacity: \_\_\_\_\_ ac-ft. Inundated Area: \_\_\_\_\_ acres.
Height of dam: \_\_\_\_\_ feet.
Legal description of inundated area by 40 acre tract(s): \_\_\_\_\_

24. EXPLANATORY

The following is set forth to define more clearly the full purpose of this application. Include any supplemental water rights used for the same purpose. (Use additional pages of same size if necessary):
**Water is to be used in an exploratory drilling program during the summer of 2004.**
**Upon termination of this temporary change, the water will again be used for stockwater.**

\*\*\*\*\*

The undersigned hereby acknowledges that even though he/she/they may have been assisted in the preparation of the above-numbered application through the courtesy of the employees of the Division of Water Rights, all responsibility for the accuracy of the information contained herein, at the time of filing, rests with the applicant(s).

[Signature]
Signature of Applicant(s)

STATE ENGINEER'S ENDORSEMENT

TEMPORARY CHANGE APPLICATION NUMBER: t29227

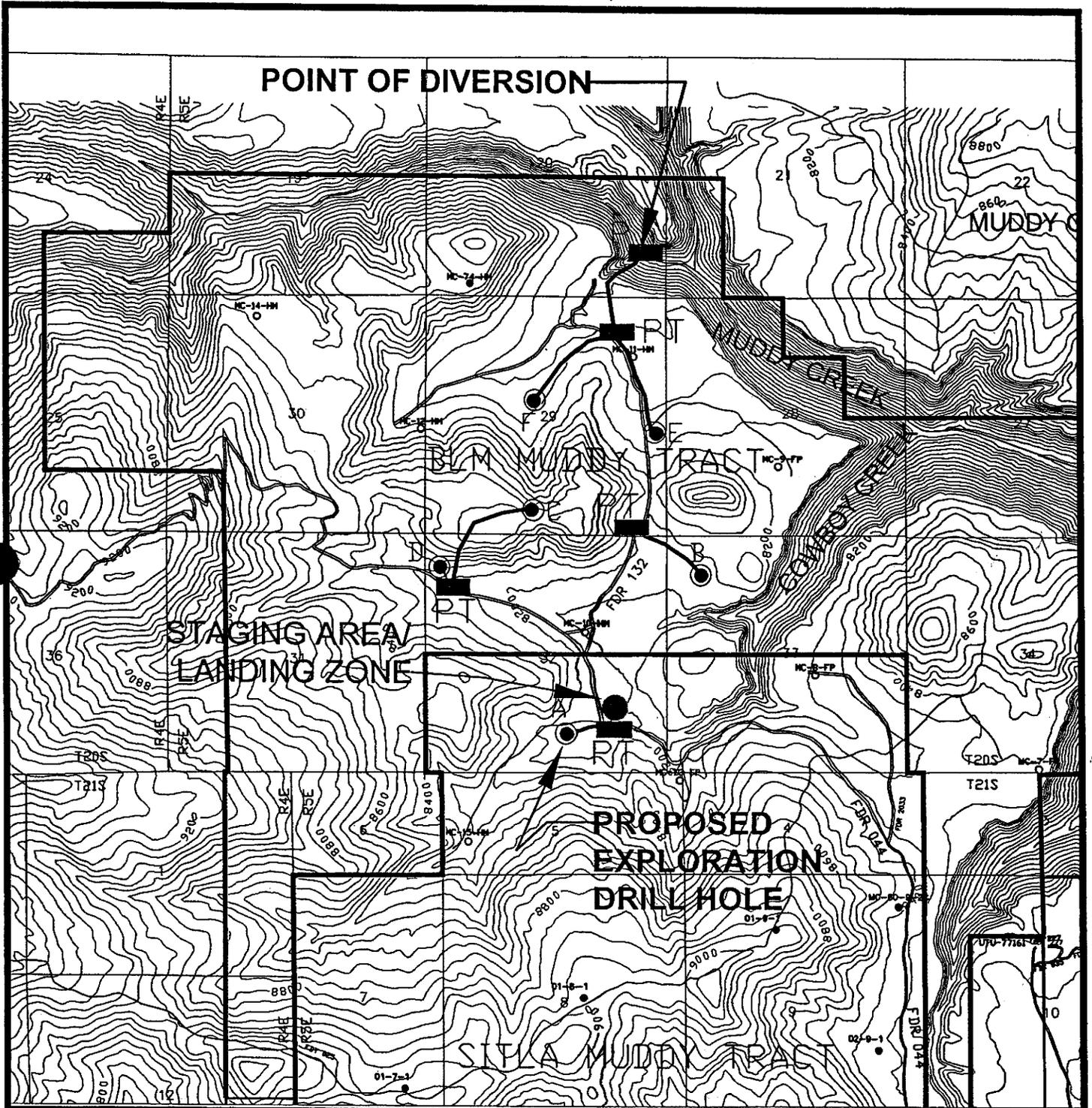
WATER RIGHT NUMBER: 94 - 1311

1. July 26, 2004            Change Application received by MKILLIAN.
  2. July 26, 2004            Priority of Change Application.
  3.                            Application reviewed and approved for advertising by .  
                                Publication began in .  
                                Publication completed and verified.
  4.                            End of protest period.  
                                Application protested: NO
  5. July 26, 2004            Application designated for APPROVAL by MPAGE and KJONES.
  6. Comments:
- 
- 

Conditions:

This application is hereby APPROVED, dated July 26, 2004, subject to prior rights and this application will expire on December 30, 2004.

  
\_\_\_\_\_  
Mark Page  
Regional Engineer



<ul style="list-style-type: none"> <li> Proposed 2004 Drillsite</li> <li> HDPE Waterline</li> <li> Pump (P) and/or Storage Tank (T)</li> <li> Staging Area/Landing Zone</li> </ul>	<p style="text-align: center;">Canyon Fuel Company Temporary Change Application No. 94-1311 (t29227)</p> <p style="text-align: center;">FEET 0'      3000'      6000' (F)</p> <p style="text-align: center;">SCALE</p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 20px;">REV</td> <td style="width: 20px;">BY</td> <td style="width: 20px;">DATE</td> <td rowspan="4" style="text-align: center; vertical-align: middle;">  N         </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> </table> <p style="text-align: center;"><b>ARK LAND COMPANY</b></p> <p style="text-align: center;"><b>DRILLING PROJECT, 2004 MUDDY TRACT</b></p> <p style="text-align: center;"><b>DRILL HOLE LOCATIONS AND PROPOSED WATER DIVERSION POINT</b></p> <table border="1" style="width: 100%; border-collapse: collapse; font-size: small;"> <tr> <td style="width: 20%;">DATE</td> <td style="width: 20%;">SCALE</td> <td style="width: 20%;">FILE NO.</td> <td style="width: 40%;">SHEET NO.</td> </tr> <tr> <td> </td> <td>1"=3000'</td> <td> </td> <td> </td> </tr> </table>	REV	BY	DATE	 N										DATE	SCALE	FILE NO.	SHEET NO.		1"=3000'		
REV	BY	DATE	 N																				
DATE	SCALE	FILE NO.	SHEET NO.																				
	1"=3000'																						

RECEIVED

JUL 25 2004

WATER RIGHTS  
PRICE

## APPLICANT'S MAP VERIFICATION STATEMENT

I/we, Canyon Fuel Company, hereby acknowledge that this map (or, the map attached to this application), consisting of 1 pages was prepared in support of Application Numbers 94-1307 (t29223); 94-1308 (t29224); 94-1309 (t29225); 94-1310 (t29226); 94-1311 (t29227); 94-1312 (t29228); 94-1313 (t29229). I/we hereby accept and submit this map as a true representation of the facts shown thereon to the best of my\our knowledge and belief.

  
\_\_\_\_\_  
Canyon Fuel Company

# APPLICATION FOR TEMPORARY CHANGE OF WATER

RECEIVED

Rec'd by MK

Fee Paid \$ 75.00

JUL 12 2004

Receipt # 04-03131

STATE OF UTAH

Microfilmed  
WATER RIGHTS

PRICE Check #28520

For the purpose of obtaining permission to make a temporary change of water in the State of Utah, application is hereby made to the State Engineer, based upon the following showing of facts, submitted in accordance with the requirements of Section 73-3-3 Utah Code Annotated 1953, as amended.

\*WATER RIGHT NO. 94 - 1312 \*APPLICATION NO. t 29228

Changes are proposed in (check those applicable)

point of diversion.  place of use.  nature of use. \_\_\_\_\_ period of use.

1. OWNER INFORMATION

Name: Canyon Fuel Company \*Interest: 100 %  
Address: c/o Ark Land Company, One CityPlace Drive, Suite 300  
City: St. Louis State: MO Zip Code: 63141

2. \*PRIORITY OF CHANGE: July 26, 2004 \*FILING DATE: July 26, 2004

3. RIGHT EVIDENCED BY: 94-1312, supplemented by 94-1307 through 94-1313

Prior Approved Temporary Change Applications for this right: \_\_\_\_\_

\*\*\*\*\*HERETOFORE\*\*\*\*\*

4. QUANTITY OF WATER: \_\_\_\_\_ cfs and/or 3.08 ac-ft.

5. SOURCE: Muddy Creek

6. COUNTY: Emery

7. POINT(S) OF DIVERSION: Point to point NW1/4 NW1/4, Sec 36, T21S, R6E, SLBM to NW1/4 NW1/4, Sec 36, T21S, R6E, SLBM

Description of Diverting Works: \_\_\_\_\_

8. POINT(S) OF REDIVERSION

The water has been rediverted from \_\_\_\_\_ at a point: \_\_\_\_\_

Description of Diverting Works: \_\_\_\_\_

9. POINT(S) OF RETURN

The amount of water consumed is \_\_\_\_\_ cfs or \_\_\_\_\_ ac-ft.

The amount of water returned is \_\_\_\_\_ cfs or \_\_\_\_\_ ac-ft.

The water has been returned to the natural stream/source at a point(s): \_\_\_\_\_

\*These items are to be completed by the Division of Water Rights.

Temporary Change

10. NATURE AND PERIOD OF USE

Irrigation: From \_\_\_\_\_ to \_\_\_\_\_
Stockwatering: From Jan 1 to Dec 31
Domestic: From \_\_\_\_\_ to \_\_\_\_\_
Municipal: From \_\_\_\_\_ to \_\_\_\_\_
Mining: From \_\_\_\_\_ to \_\_\_\_\_
Power: From \_\_\_\_\_ to \_\_\_\_\_
Other: From \_\_\_\_\_ to \_\_\_\_\_

11. PURPOSE AND EXTENT OF USE

Irrigation: \_\_\_\_\_ acres. Sole supply of \_\_\_\_\_ acres.
Stockwatering (number and kind): 110 head of cattle
Domestic: \_\_\_\_\_ Families and/or \_\_\_\_\_ Persons.
Municipal (name): \_\_\_\_\_
Mining: \_\_\_\_\_ Mining District in the \_\_\_\_\_ Mine.
Ores mined: \_\_\_\_\_
Power: Plant name: \_\_\_\_\_ Type: \_\_\_\_\_ Capacity: \_\_\_\_\_
Other (describe): \_\_\_\_\_

12. PLACE OF USE

Legal description of place of use by 40 acre tract(s): \_\_\_\_\_

13. STORAGE

Reservoir Name: \_\_\_\_\_ Storage Period: from \_\_\_\_\_ to \_\_\_\_\_
Capacity: \_\_\_\_\_ ac-ft. Inundated Area: \_\_\_\_\_ acres.
Height of dam: \_\_\_\_\_ feet.
Legal description of inundated area by 40 acre tract(s): \_\_\_\_\_

\*\*\*\*\*THE FOLLOWING CHANGES ARE PROPOSED\*\*\*\*\*

14. QUANTITY OF WATER: \_\_\_\_\_ cfs and/or 3.08 ac-ft.

15. SOURCE: Muddy Creek
Balance of the water will be abandoned: \_\_\_\_\_, or will be used as heretofore: \_\_\_\_\_

16. COUNTY: Emery

17. POINT(S) OF DIVERSION: N 901 ft W 594 ft from SE cor, Sec 20, T20S, R5E, SLBM

Description of Diverting Works: Pump on stream
\*COMMON DESCRIPTION: \_\_\_\_\_

18. POINT(S) OF REDIVERSION
The water will be rediverted from \_\_\_\_\_ at a point: \_\_\_\_\_

Description of Diverting Works: \_\_\_\_\_

19. POINT(S) OF RETURN

The amount of water to be consumed is \_\_\_\_\_ cfs or \_\_\_\_\_ ac-ft.
The amount of water to be returned is \_\_\_\_\_ cfs or \_\_\_\_\_ ac-ft.
The water will be returned to the natural stream/source at a point(s): \_\_\_\_\_

20. NATURE AND PERIOD OF USE

Irrigation: From \_\_\_/\_\_\_/\_\_\_ to \_\_\_/\_\_\_/\_\_\_
Stockwatering: From \_\_\_/\_\_\_/\_\_\_ to \_\_\_/\_\_\_/\_\_\_
Domestic: From \_\_\_/\_\_\_/\_\_\_ to \_\_\_/\_\_\_/\_\_\_
Municipal: From \_\_\_/\_\_\_/\_\_\_ to \_\_\_/\_\_\_/\_\_\_
Mining: From 7 / 1 / 04 to 6 / 30 / 05
Power: From \_\_\_/\_\_\_/\_\_\_ to \_\_\_/\_\_\_/\_\_\_
Other: From \_\_\_/\_\_\_/\_\_\_ to \_\_\_/\_\_\_/\_\_\_

21. PURPOSE AND EXTENT OF USE

Irrigation: \_\_\_\_\_ acres. Sole supply of \_\_\_\_\_ acres.
Stockwatering (number and kind): \_\_\_\_\_
Domestic: \_\_\_\_\_ Families and/or \_\_\_\_\_ Persons.
Municipal (name): \_\_\_\_\_
Mining: Sufco Mine Mining District at the \_\_\_\_\_ Mine.
Ores mined: Coal
Power: Plant name: \_\_\_\_\_ Type: \_\_\_\_\_ Capacity: \_\_\_\_\_
Other (describe): Exploratory drilling in connection with coal mining

22. PLACE OF USE

Legal description of place of use by 40 acre tract(s): Sec 20: SE1/4 (160 ac);
Sec 29: All (640 ac); Sec 32: N1/2 SE1/4 (480 ac); Sec 33: NW1/4 (160 ac)
all in T20S, R5E, SLBM (See attached map.)

23. STORAGE

Reservoir Name: \_\_\_\_\_ Storage Period: from \_\_\_\_\_ to \_\_\_\_\_
Capacity: \_\_\_\_\_ ac-ft. Inundated Area: \_\_\_\_\_ acres.
Height of dam: \_\_\_\_\_ feet.
Legal description of inundated area by 40 acre tract(s): \_\_\_\_\_

24. EXPLANATORY

The following is set forth to define more clearly the full purpose of this application. Include any supplemental water rights used for the same purpose. (Use additional pages of same size if necessary):
Water is to be used in an exploratory drilling program during the summer of 2004.
Upon termination of this temporary change, the water will again be used for stockwater.

\*\*\*\*\*

The undersigned hereby acknowledges that even though he/she/they may have been assisted in the preparation of the above-numbered application through the courtesy of the employees of the Division of Water Rights, all responsibility for the accuracy of the information contained herein, at the time of filing, rests with the applicant(s).

[Signature]
Signature of Applicant(s)

STATE ENGINEER'S ENDORSEMENT

TEMPORARY CHANGE APPLICATION NUMBER: t29228

WATER RIGHT NUMBER: 94 - 1312

1. July 26, 2004            Change Application received by MKILLIAN.
2. July 26, 2004            Priority of Change Application.
3.                            Application reviewed and approved for advertising by .  
                                Publication began in .  
                                Publication completed and verified.
4.                            End of protest period.  
                                Application protested: NO
5. July 26, 2004            Application designated for APPROVAL by MPAGE and KJONES.
6. Comments:

---

---

Conditions:

This application is hereby APPROVED, dated July 26, 2004, subject to prior rights and this application will expire on December 31, 2004.

  
\_\_\_\_\_  
Mark Page  
Regional Engineer



OLENE S. WALKER  
Governor  
GAYLE F. McKEACHNIE  
Lieutenant Governor

State of Utah  
DEPARTMENT OF NATURAL RESOURCES  
Division of Water Rights

ROBERT L. MORGAN      JERRY D. OLDS  
Executive Director      State Engineer/Division Director

July 26, 2004

Canyon Fuel Company  
C/o Ark Land Company  
One CityPlace Drive Suite 300  
St. Louis, Missouri 63141

Re: Temporary Change Applications  
94-1307 (t29223); 94-1308 (t29224); 94-1309 (t29225); 94-1310 (t29226);  
94-1311 (t29227); 94-1312 (t29228); 94-1313 (t29229)

Dear Applicant:

The above referenced Temporary Change Application has been approved. This application will expire December 31, 2004. Because a portion of the water represented by the seven water rights has been used for livestock water during 2004, only a portion of the rights remain. These applications collectively are limited to a diversion of 3.08 acre-feet during the remainder of 2004. It is expected that no diversion or use of the water will be done after this date unless another proposal has been made and approved.

Your contact with this office, should you need it, is with the Price Regional Office. The telephone number is 435-637-1303.

Sincerely,

Mark P. Page  
Regional Engineer

MPP/mjk



RECEIVED

JUL 26 2004

WATER RIGHTS  
PRICE

## APPLICANT'S MAP VERIFICATION STATEMENT

I/we, Canyon Fuel Company, hereby acknowledge that this map (or, the map attached to this application), consisting of 1 pages was prepared in support of Application Numbers 94-1307 (t29223); 94-1308 (t29224); 94-1309 (t29225); 94-1310 (t29226); 94-1311 (t29227); 94-1312 (t29228); 94-1313 (t29229). I/we hereby accept and submit this map as a true representation of the facts shown thereon to the best of my\our knowledge and belief.

  
\_\_\_\_\_  
Canyon Fuel Company

# APPLICATION FOR TEMPORARY CHANGE OF WATER

RECEIVED by MK

Fee Paid \$ 75.00

JUL 12 2004 Receipt # 04-03131

STATE OF UTAH

Microfilmed

WATER RIGHTS PRICE Check #28520

For the purpose of obtaining permission to make a temporary change of water in the State of Utah, application is hereby made to the State Engineer, based upon the following showing of facts, submitted in accordance with the requirements of Section 73-3-3 Utah Code Annotated 1953, as amended.

\*WATER RIGHT NO. 94 - 1313 \*APPLICATION NO. t 29229 -

Changes are proposed in (check those applicable)

X point of diversion. X place of use. X nature of use. period of use.

1. OWNER INFORMATION

Name: Canyon Fuel Company \*Interest: 100 %
Address: c/o Ark Land Company, One CityPlace Drive, Suite 300
City: St. Louis State: MO Zip Code: 63141

2. \*PRIORITY OF CHANGE: July 26, 2004 \*FILING DATE: July 26, 2004

3. RIGHT EVIDENCED BY: 94-1313, supplemented by 94-1307 through 94-1313

Prior Approved Temporary Change Applications for this right:

\*\*\*\*\*HERETOFORE\*\*\*\*\*

4. QUANTITY OF WATER: 3.08 cfs and/or ac-ft.
5. SOURCE: Muddy Creek
6. COUNTY: Emery
7. POINT(S) OF DIVERSION: Point to point NW1/4 NW1/4, Sec 36, T21S, R6E, SLBM to NW1/4 NW1/4, Sec 36, T21S, R6E, SLBM

Description of Diverting Works:

8. POINT(S) OF REDIVERSION
The water has been rediverted from at a point:

Description of Diverting Works:

9. POINT(S) OF RETURN
The amount of water consumed is cfs or ac-ft.
The amount of water returned is cfs or ac-ft.
The water has been returned to the natural stream/source at a point(s):

\*These items are to be completed by the Division of Water Rights.

10. NATURE AND PERIOD OF USE

Irrigation: From \_\_\_\_\_ to \_\_\_\_\_
Stockwatering: From Jan 1 to Dec 31
Domestic: From \_\_\_\_\_ to \_\_\_\_\_
Municipal: From \_\_\_\_\_ to \_\_\_\_\_
Mining: From \_\_\_\_\_ to \_\_\_\_\_
Power: From \_\_\_\_\_ to \_\_\_\_\_
Other: From \_\_\_\_\_ to \_\_\_\_\_

11. PURPOSE AND EXTENT OF USE

Irrigation: \_\_\_\_\_ acres. Sole supply of \_\_\_\_\_ acres.
Stockwatering (number and kind): 110 head of cattle
Domestic: \_\_\_\_\_ Families and/or \_\_\_\_\_ Persons.
Municipal (name): \_\_\_\_\_
Mining: \_\_\_\_\_ Mining District in the \_\_\_\_\_ Mine.
Ores mined: \_\_\_\_\_
Power: Plant name: \_\_\_\_\_ Type: \_\_\_\_\_ Capacity: \_\_\_\_\_
Other (describe): \_\_\_\_\_

12. PLACE OF USE

Legal description of place of use by 40 acre tract(s): \_\_\_\_\_

13. STORAGE

Reservoir Name: \_\_\_\_\_ Storage Period: from \_\_\_\_\_ to \_\_\_\_\_
Capacity: \_\_\_\_\_ ac-ft. Inundated Area: \_\_\_\_\_ acres.
Height of dam: \_\_\_\_\_ feet.
Legal description of inundated area by 40 acre tract(s): \_\_\_\_\_

\*\*\*\*\*THE FOLLOWING CHANGES ARE PROPOSED\*\*\*\*\*

14. QUANTITY OF WATER: \_\_\_\_\_ cfs and/or 3.08 ac-ft.

15. SOURCE: Muddy Creek
Balance of the water will be abandoned: \_\_\_\_\_, or will be used as heretofore: \_\_\_\_\_

16. COUNTY: Emery

17. POINT(S) OF DIVERSION: N 901 ft W 594 ft from SE cor, Sec 20, T20S, R5E, SLBM

Description of Diverting Works: Pump on stream
\*COMMON DESCRIPTION: \_\_\_\_\_

18. POINT(S) OF REDIVERSION

The water will be rediverted from \_\_\_\_\_ at a point: \_\_\_\_\_
Description of Diverting Works: \_\_\_\_\_

19. POINT(S) OF RETURN

The amount of water to be consumed is \_\_\_\_\_ cfs or \_\_\_\_\_ ac-ft.
The amount of water to be returned is \_\_\_\_\_ cfs or \_\_\_\_\_ ac-ft.
The water will be returned to the natural stream/source at a point(s): \_\_\_\_\_

20. NATURE AND PERIOD OF USE

Irrigation: From \_\_\_/\_\_\_/\_\_\_ to \_\_\_/\_\_\_/\_\_\_
Stockwatering: From \_\_\_/\_\_\_/\_\_\_ to \_\_\_/\_\_\_/\_\_\_
Domestic: From \_\_\_/\_\_\_/\_\_\_ to \_\_\_/\_\_\_/\_\_\_
Municipal: From \_\_\_/\_\_\_/\_\_\_ to \_\_\_/\_\_\_/\_\_\_
Mining: From 7 / 1 / 04 to 6 / 30 / 05
Power: From \_\_\_/\_\_\_/\_\_\_ to \_\_\_/\_\_\_/\_\_\_
Other: From \_\_\_/\_\_\_/\_\_\_ to \_\_\_/\_\_\_/\_\_\_

21. PURPOSE AND EXTENT OF USE

Irrigation: \_\_\_\_\_ acres. Sole supply of \_\_\_\_\_ acres.
Stockwatering (number and kind): \_\_\_\_\_
Domestic: \_\_\_\_\_ Families and/or \_\_\_\_\_ Persons.
Municipal (name): \_\_\_\_\_
Mining: Sufco Mine Mining District at the \_\_\_\_\_ Mine.
Ores mined: Coal
Power: Plant name: \_\_\_\_\_ Type: \_\_\_\_\_ Capacity: \_\_\_\_\_
Other (describe): Exploratory drilling in connection with coal mining

22. PLACE OF USE

Legal description of place of use by 40 acre tract(s): Sec 20: SE1/4 (160 ac);
Sec 29: All (640 ac); Sec 32: N1/2 SE1/4 (480 ac); Sec 33: NW1/4 (160 ac)
all in T20S, R5E, SLBM (See attached map.)

23. STORAGE

Reservoir Name: \_\_\_\_\_ Storage Period: from \_\_\_\_\_ to \_\_\_\_\_
Capacity: \_\_\_\_\_ ac-ft. Inundated Area: \_\_\_\_\_ acres.
Height of dam: \_\_\_\_\_ feet.
Legal description of inundated area by 40 acre tract(s): \_\_\_\_\_

24. EXPLANATORY

The following is set forth to define more clearly the full purpose of this application. Include any supplemental water rights used for the same purpose. (Use additional pages of same size if necessary):

Water is to be used in an exploratory drilling program during the summer of 2004.
Upon termination of this temporary change, the water will again be used for stockwater.

\*\*\*\*\*

The undersigned hereby acknowledges that even though he/she/they may have been assisted in the preparation of the above-numbered application through the courtesy of the employees of the Division of Water Rights, all responsibility for the accuracy of the information contained herein, at the time of filing, rests with the applicant(s).

[Signature]
Signature of Applicant(s)

STATE ENGINEER'S ENDORSEMENT

TEMPORARY CHANGE APPLICATION NUMBER: t29229

WATER RIGHT NUMBER: 94 - 1313

1. July 26, 2004            Change Application received by MKILLIAN.
  2. July 26, 2004            Priority of Change Application.
  3.                            Application reviewed and approved for advertising by .  
                                Publication began in .  
                                Publication completed and verified.
  4.                            End of protest period.  
                                Application protested: NO
  5. July 26, 2004            Application designated for APPROVAL by MPAGE and KJONES.
  6. Comments:
- 
- 

Conditions:

This application is hereby APPROVED, dated July 26, 2004, subject to prior rights and this application will expire on December 31, 2004.

  
\_\_\_\_\_  
Mark Page  
Regional Engineer



OLENE S. WALKER  
Governor  
GAYLE F. McKEACHNIE  
Lieutenant Governor

State of Utah  
DEPARTMENT OF NATURAL RESOURCES  
Division of Water Rights

ROBERT L. MORGAN      JERRY D. OLDS  
Executive Director      State Engineer/Division Director

July 26, 2004

Canyon Fuel Company  
C/o Ark Land Company  
One CityPlace Drive Suite 300  
St. Louis, Missouri 63141

Re:      Temporary Change Applications  
         94-1307 (t29223); 94-1308 (t29224); 94-1309 (t29225); 94-1310 (t29226);  
         94-1311 (t29227); 94-1312 (t29228); 94-1313 (t29229)

Dear Applicant:

The above referenced Temporary Change Application has been approved. This application will expire December 31, 2004. Because a portion of the water represented by the seven water rights has been used for livestock water during 2004, only a portion of the rights remain. These applications collectively are limited to a diversion of 3.08 acre-feet during the remainder of 2004. It is expected that no diversion or use of the water will be done after this date unless another proposal has been made and approved.

Your contact with this office, should you need it, is with the Price Regional Office. The telephone number is 435-637-1303.

Sincerely,

Mark P. Page  
Regional Engineer

MPP/mjk



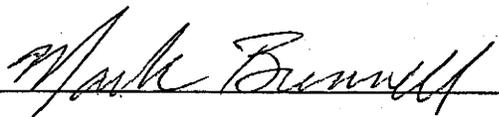
RECEIVED

JUL 26 2004

WATER RIGHTS  
PRICE

## APPLICANT'S MAP VERIFICATION STATEMENT

I/we, Canyon Fuel Company, hereby acknowledge that this map (or, the map attached to this application), consisting of 1 pages was prepared in support of Application Numbers 94-1307 (t29223); 94-1308 (t29224); 94-1309 (t29225); 94-1310 (t29226); 94-1311 (t29227); 94-1312 (t29228); 94-1313 (t29229). I/we hereby accept and submit this map as a true representation of the facts shown thereon to the best of my\our knowledge and belief.

  
\_\_\_\_\_  
Canyon Fuel Company



OLENE S. WALKER  
*Governor*  
GAYLE F. McKEACHNIE  
*Lieutenant Governor*

State of Utah  
DEPARTMENT OF NATURAL RESOURCES  
Division of Water Rights

ROBERT L. MORGAN      JERRY D. OLDS  
*Executive Director*      *State Engineer/Division Director*

June 9, 2004

Canyon Fuel Company LLC  
HC 35 Box 380  
Helper, Utah 84526

Re:    Temporary Change Application  
      Water Right Number 94-1183 (t29069)

Dear Applicant:

The above referenced Temporary Change Application has been APPROVED. This application will expire December 31, 2004. It is expected that no diversion or use of the water will be done after this date unless another proposal has been made and approved.

Your contact with this office, should you need it, is with the Price Regional Office. The telephone number is (435) 637-1303.

Sincerely,

Mark P. Page  
Regional Engineer

MPP/mjk

STATE ENGINEER'S ENDORSEMENT

TEMPORARY CHANGE APPLICATION NUMBER: t29069

WATER RIGHT NUMBER: 94 - 1183

1. June 4, 2004            Change Application received by MKILLIAN.
  2. June 4, 2004            Priority of Change Application.
  3.                            Application reviewed and approved for advertising by .  
                                  Publication began in .  
                                  Publication completed and verified.
  4.                            End of protest period.  
                                  Application protested: NO
  5. June 7, 2004            Application designated for APPROVAL by MPAGE and KJONES.
  6. Comments:
- 
- 

Conditions:

This application is hereby APPROVED, dated June 9, 2004, subject to prior rights and this application will expire on December 31, 2004.

  
\_\_\_\_\_  
Mark Page  
Regional Engineer



State of Utah  
DEPARTMENT OF NATURAL RESOURCES  
Division of Water Rights

OLENE S. WALKER  
Governor

ROBERT L. MORGAN  
Executive Director

JERRY D. OLDS  
State Engineer/Division Director

GAYLE F. MCKEACHNIE  
Lieutenant Governor

>>>>>>>OFFICIAL RECEIPT<<<<<<<<

RECEIPT No. 04-02423	DATE: June 8, 2004
RECEIVED FROM:	
CANYON FUEL COMPANY LLC HC 35 BOX 380 HELPER, UTAH 84526	

NATURE OF SERVICE:		FEE:
Change Application	t29069(94-1183)	75.00
	TOTAL:	\$75.00

METHOD OF PAYMENT: Cash
-------------------------

RECEIVED BY: MKILLIAN
-----------------------

# APPLICATION FOR TEMPORARY CHANGE OF WATER

Rec. by MK Cash

Fee Paid \$ 75.00

Receipt # 04-02423

## STATE OF UTAH

For the purpose of obtaining permission to make a temporary change of water in the State of Utah, application is hereby made to the State Engineer, based upon the following showing of facts, submitted in accordance with the requirements of Section 73-3-3 Utah Code Annotated 1953, as amended.

CHANGE APPLICATION NUMBER: t29069

WATER RIGHT NUMBER: 94-1183

(MKILLIAN)

\*\*\*\*\*

This Change Application proposes to change the POINT(S) OF DIVERSION, PLACE OF USE, and NATURE OF USE.

\*\*\*\*\*

### 1. OWNERSHIP INFORMATION.

A. NAME: Canyon Fuel Company LLC  
ADDRESS: HC 35 Box 380  
Helper, Utah 84526

B. PRIORITY OF CHANGE: June 4, 2004

FILING DATE: June 4, 2004

C. EVIDENCED BY:  
94-1183

\*-----\*  
\* DESCRIPTION OF CURRENT WATER RIGHT: \*  
\*-----\*

### 2. SOURCE INFORMATION.

A. QUANTITY OF WATER: 1.5 acre-feet

B. SOURCE: Quitchumpah Creek

COUNTY: Sevier

#### C. POINT(S) OF DIVERSION.

POINT OF DIVERSION -- SURFACE:

(1) N 550 feet W 1,150 feet from S $\frac{1}{4}$  corner, Section 15, T 22S, R 5E, SLBM

### 3. WATER USE INFORMATION.

The Water Right represented by this change application is SUPPLEMENTAL to other Water Rights.

IRRIGATION: from Apr 1 to Oct 31.

IRRIGATING: 88.2400 acres.

STOCKWATERING: from Jan 1 to Dec 31.

EQUIVALENT LIVESTOCK UNITS: 150.

\*-----\*

## 9. SIGNATURE OF APPLICANT(S).

The undersigned hereby acknowledges that even though he/she/they may have been assisted in the preparation of the above-numbered application, through the courtesy of the employees of the Division of Water Rights, all responsibility for the accuracy of the information contained herein, at the time of filing, rests with the applicant(s).

  
\_\_\_\_\_  
Canyon Fuel Company LLC

RECEIVED

JUN - 3 2004

WATER RIGHTS  
PRICE



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

June 2, 2004

Mark Page  
Division of Water Rights  
P.O. Box 718  
Price, Utah 84501-0718

Re: Request for Temporary Change of Water Associated with Redrill of Hole 03-17-1  
Quitcupah Drilling Project, Quitcupah Creek.

Dear Mark:

Canyon Fuel Company (CFC) was unable to complete one of last year's drill holes associated with its Quitcupah drilling project. CFC would once again like to draw water for drilling and road watering purposes from Quitcupah Creek during redrilling of hole 03-17-1. The temporary change for that project was associated with Temporary Change Application Number t28217 (94-1183). The two possible points of diversion are still the same. They are listed as follows and shown on the attached map :

Point 1: SE1/4, NE1/4, Sec. 13, T21S, R4E (North Fork)  
Point 2: NW1/4, SW1/4, Sec. 24, T21S, R4E (South Fork)

The drill hole is located as follows:

03-17-1: NW1/4, NE1/4, Sec. 17, T21S, R5E

Period of water usage would be from June 14, 2004, through July 31, 2004. Amount of daily usage is estimated at 20,000 gallons/day for approx. 25 days during the period (1.5 acre-ft. total project). CFC has reached an agreement with Castle Valley Ranch for temporary use of their water right (attached). The water right number that was used during last year's project was 94-1183.

Also attached is a check for \$75.00.

I appreciate your consideration of this application. Please call me at 435-448-2633 if you have questions or require further information.

Sincerely

A handwritten signature in cursive script that reads "Mark Bunnell". The signature is written in dark ink and is positioned above the printed name.

Mark Bunnell  
Geologist

Attach.

RECEIVED

JUN - 3 2004

WATER RIGHTS  
PRICE



Ark Land Company  
c/o Canyon Fuel Co., LLC  
Skyline Mines  
HC35 Box 380  
Hedger, Utah 84526  
435-448-2633

May 26, 2004

Jim Fauver  
Castle Valley Ranch  
Emery, Utah 84522

LETTER OF AGREEMENT, QUITCHUPAH CREEK,  
TEMPORARY WATER USAGE FOR EXPLORATION DRILLING  
2004

Dear Mr. Fauver:

It is hereby agreed in consideration of payment of \$40.00 per 4000 gal. load of water that Canyon Fuel Company, LLC be allowed to withdraw water from Quitchupah Creek at a point located along Forest Development Road 007 in the SE1/4, NE1/4, Sec 13; or NW1/4, SW1/4, Sec. 24, T21S, R4E in Sevier County, Utah. This water will be utilized for exploration drilling purposes. It is expected that water usage would range from 4 to 6 loads per day, depending on drilling conditions. The period of water usage is projected from June 14, 2004 through July 31, 2004.

Canyon Fuel Company, LLC will keep a daily log of the number of 4000 gal. loads of water taken from the North Fork of Quitchupah Creek during the drilling project and will make payment to Castle Valley Ranch on a monthly basis for the duration of the project. This agreement will be terminated after July 31, 2004 unless extended and agreed to in writing. Castle Valley Ranch may terminate this agreement at any time.

Questions or concerns related to this agreement should be directed to Mark Bunnell at 435-448-2633.

Sincerely,

Mark Bunnell  
Geologist

ACCEPTED AND AGREED:

CANYON FUEL COMPANY

By: Mark Bunnell Date: 5-26-04

Its: Geologist

CASTLE VALLEY RANCH

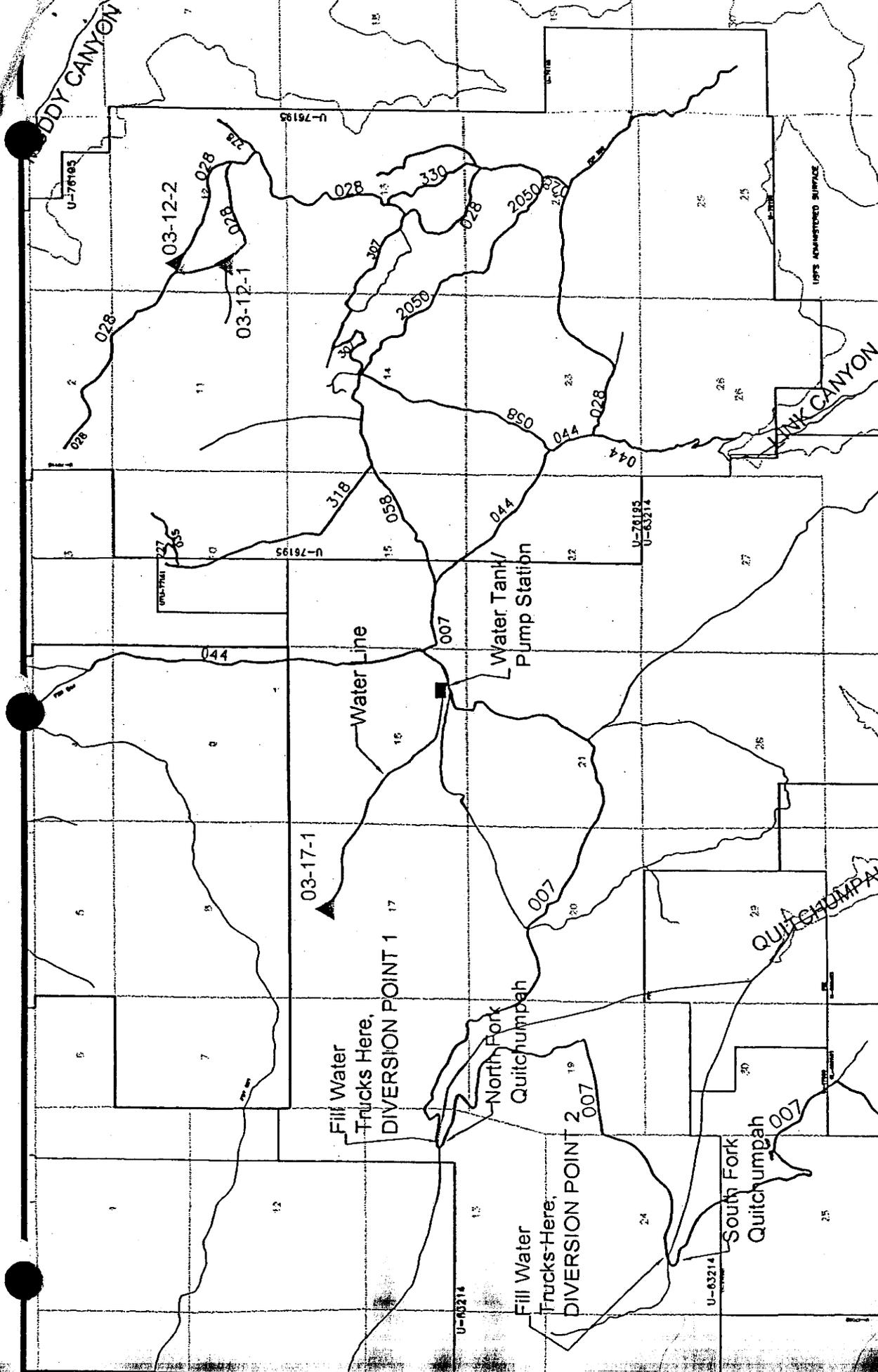
By: [Signature] Date: 6/2/04

Its: RANCH MANAGER

## APPLICANT'S MAP VERIFICATION STATEMENT

I/we, Canyon Fuel Company LLC, hereby acknowledge that this map (or, the map attached to this application), consisting of 1 pages was prepared in support of Application Number 94-1183 (t29069). I/we hereby accept and submit this map as a true representation of the facts shown thereon to the best of my\our knowledge and belief.

  
\_\_\_\_\_



ARK LAND COMPANY  
 DRILLING PROJECT, 2003  
 FED. LEASES U-63214  
 AND U-76195  
 WATER DIVERSION POINTS

SECTION	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27
DATE																											



Canyon Fuel Company LLC  
 Temporary Change Application  
 Number 94-1183 t29069  
 PEET



SCALE

Proposed Waterline  
 Proposed Water Tank/  
 Pump Station

**RECEIVED**

Proposed  
 03-12-2

JUN 23 2004

WATER RIGHTS  
 PRICE

**REVISED 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.

REVISION  
Jan-July, 2004

## 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 – Succo 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 2004. The type of exploration proposed is helicopter-assisted wireline core 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 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 10 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 drainages in the area are Cowboy Creek and Muddy Creek.

Rocks exposed in the exploration area belong to the Cretaceous Blackhawk and Price River Formations, as well as 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.

IDAHO

WYOMING

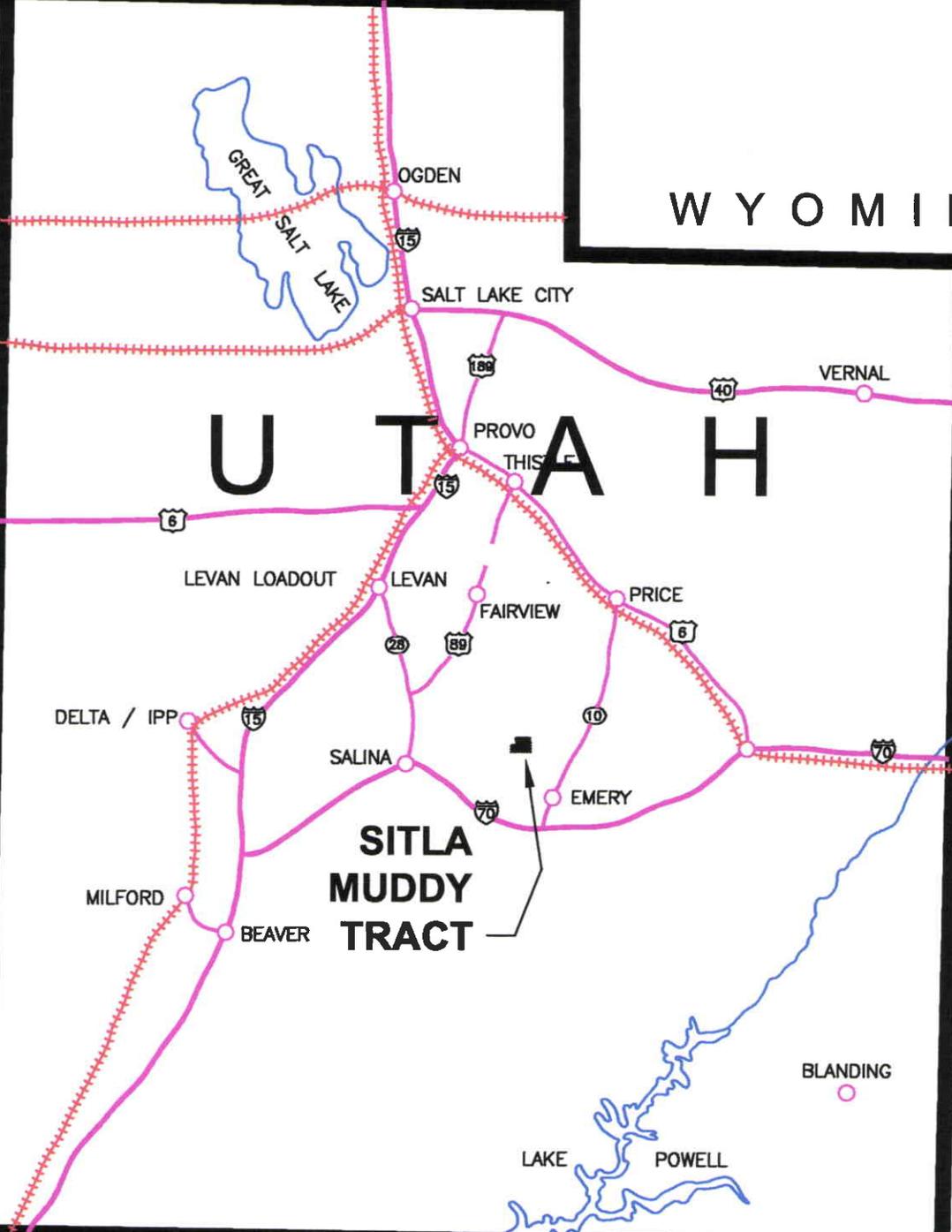
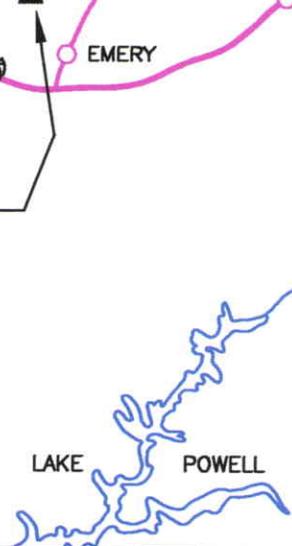
UTAH

NEVADA

COLORADO

ARIZONA

N.M.

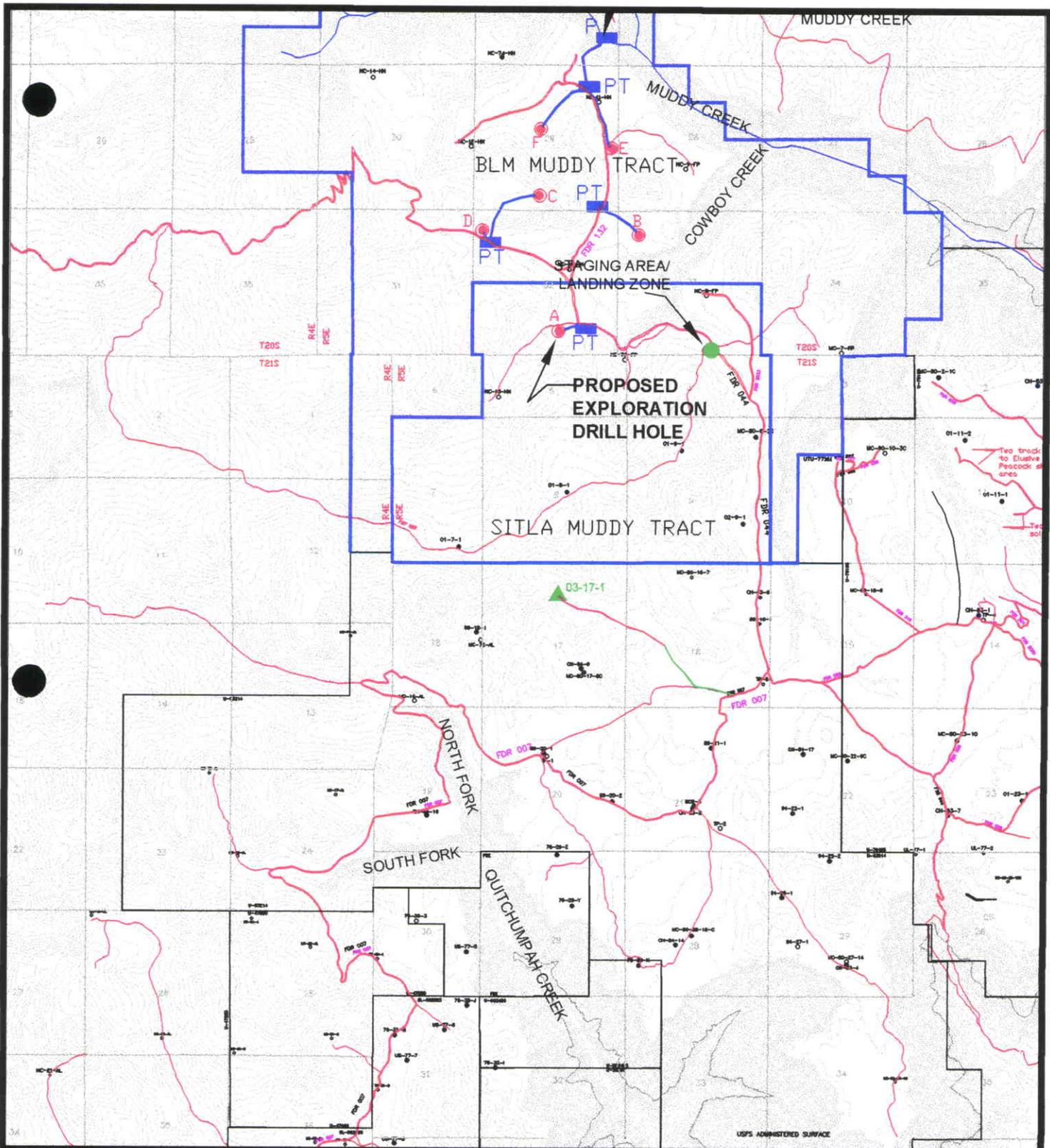


**SITLA MUDDY TRACT**

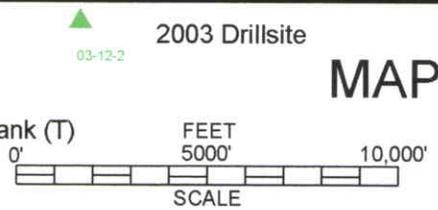


**MAP1**

 Canyon Fuel Company, LLC SUFCO Mine	
<b>SITLA MUDDY TRACT PROPOSED DRILL HOLE LOCATION</b>	
DATE: NOV. 21, 2003	SCALE:
397 SOUTH 800 WEST SALINA, UTAH 84654	DRAWN BY: MB
FILENAME: C:\SUFCO\SURFACEDRILLING\UTAHINDEX\FIG1	



- Proposed 2004 Drillsite
- HDPE Waterline
- PT Pump (P) and/or Storage Tank (T)
- Staging Area/Landing Zone



## MAP 2



<b>DATE</b>	<b>BY</b>		<b>ARK LAND COMPANY</b>
		<b>DRILLING PROJECT, 2004 MINOR COAL EXPLORATION SITLA MUDDY TRACT</b>	
		<b>DRILL HOLE LOCATION AND WATER SYSTEM LAYOUT HELICOPTER-ASSISTED DRILLING</b>	
		SCALE 1" = 5000'	FILE NO. P:\2004\BPCO\BPA\BPA\BPA\BPA\BPA\BPA
			SHEET NO.

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.

#### R645-201-225

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 within one half mile of known breeding and nesting areas during breeding or nesting periods. Drilling of the proposed exploration hole will not commence until after Sept. 1, 2004, so as not to interfere with the Mexican Spotted Owl should any be present in the area. Information concerning threatened and endangered species is included in the Pines Tract Project Final Environmental Impact Statement, Jan. ~~1999~~. 1999. The U.S. Forest Service has also recently completed wildlife and BEBA analyses of the Muddy Tract area which will be included in the U.S.F.S. decision document relative to Ark Land Company's Muddy Drilling License application. That document is scheduled to be submitted to the BLM by mid-August. Tom Lloyd, geologist with the USFS, has information concerning wildlife and BEBA work and can be contacted at 435-636-3596. Raptor surveys were also completed in June, 2004 and submitted to the Division (Appendix D).

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 2004 and submitted to the Division.~~ (Appendix C) has been conducted for the proposed drillsite. The evaluation also includes 5 additional planned drillsites that are on the Federal (BLM-administered) portion of the Muddy Tract. No objects, sites, or structures occur in or near the proposed drillsite area.

#### R645-201-224

A timetable for all exploration related activities is given below. It is anticipated that exploration activities will start the ~~third~~first week of ~~July~~Sept. 2004. This timetable may vary somewhat depending on U.S. Forest Service stipulations and other factors such as weather. It should be noted that this hole is planned to be drilled as part of a 6-hole drilling project. The other five holes are planned for the Federal (BLM-administered) portion of the Muddy Tract (Map 2).

EVENT	WEEK1	WEEK 2	WEEK 3	WEEK 4
Prepare Forest Development Roads				
Set pumps, frac tanks and run water lines to sites				
Drilling and monitor well installation				
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) set temporary water tank, pump, and water line, 3) drill and log hole, and if hole conditions and drilling equipment permit, install water monitor well, 3) reclaim the drill site and remove all waterlines, tank, and pump. 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. Because this project is planned with helicopter assistance, no road construction and only minor site preparation and reclamation with hand tools will be done. Operators will use pick-up trucks for transportation to the staging area/landing zone.

Drilling will be accomplished utilizing continuous core drilling techniques. Drilling will involve a heli-portable skid-mounted core rig capable of drilling 2000 ft.; with necessary support equipment such as a 2000 gal. poly water tank, drill rod trays, fuel tank, portable mud tanks, a heli-portable logging unit, etc. The skid-mounted rig is transported by flatbed trailer to the staging area/landing zone. The drilling procedure will be to continuously core to total depth.

Water for drilling and road watering will be pumped from North or South Forks of Quitchupah Creek or from Muddy Creek (locations shown on Map 2) into a 4000 gal. water truck and transported to an 18,000 gal. frac. tank located along Forest Road 044 as shown on Map 2. A Triplex pump will be located at that site as well for pumping water to the drill site. Water will be pumped via 1, 2, and 3 inch HDPE waterline. All necessary

arrangements will be made for water usage, including agreements with water rights owners in each of the drainages and the proper Temporary Water Change approval from the Division of Water Rights. Waterline will be placed and removed via horseback, helicopter, or on foot.

Supply trailers will carry drill steels, coring equipment, drilling additives, cutting and welding equipment, and other supplies to the staging area/landing zone. Also located at the staging area/landing zone will be spare heli-portable fuel tanks for the drill rig, a trailer-mounted jet fuel tank and the helicopter, as well as pickup trucks for the drill crew, geologists, and construction support crew.

The only coal to be removed during exploration activities will be cores. Cores will be 1.4 inches (BQ) in diameter. Given an approximate projected thickness of 7 ft. for the Upper Hiawatha seam and 12 ft. for the Lower Hiawatha seam, approximately 20 to 40 lbs. of coal will be removed.

No road construction is planned for this project. Access to the staging area and storage tank location will be via U.S. Forest Service roads 007 and 044 (Map 2). Regulations cited in R645-202-232 are not applicable to this work because there will be no road construction necessary. Access to the drillsite will be via helicopter, horseback, or on foot.

No actual drillpad will be constructed for the project. The drill is placed on a subframe, wood blocks, and brattice, covering an area about 8 ft. X 10 ft. Drill rod trays, mud tanks, and the water tank are also placed near the drill. Figure 1 shows a typical helicopter-assisted drillsite setup. All drilling fluids are contained within portable tanks. Drill cuttings are transferred from the tanks to heli-portable barrels for helicopter transport away from the drillsite. No drilling fluids, oil and grease, or diesel fuel will be allowed to contact the topsoil.

Prior to setting the drill, minor excavation of the topsoil with hand tools will be conducted for placement of the drill subframe and leveling of the drill equipment. Some removal of grass and shrubs may be necessary for leveling of the drill rig and for safety purposes. No trees will be removed.

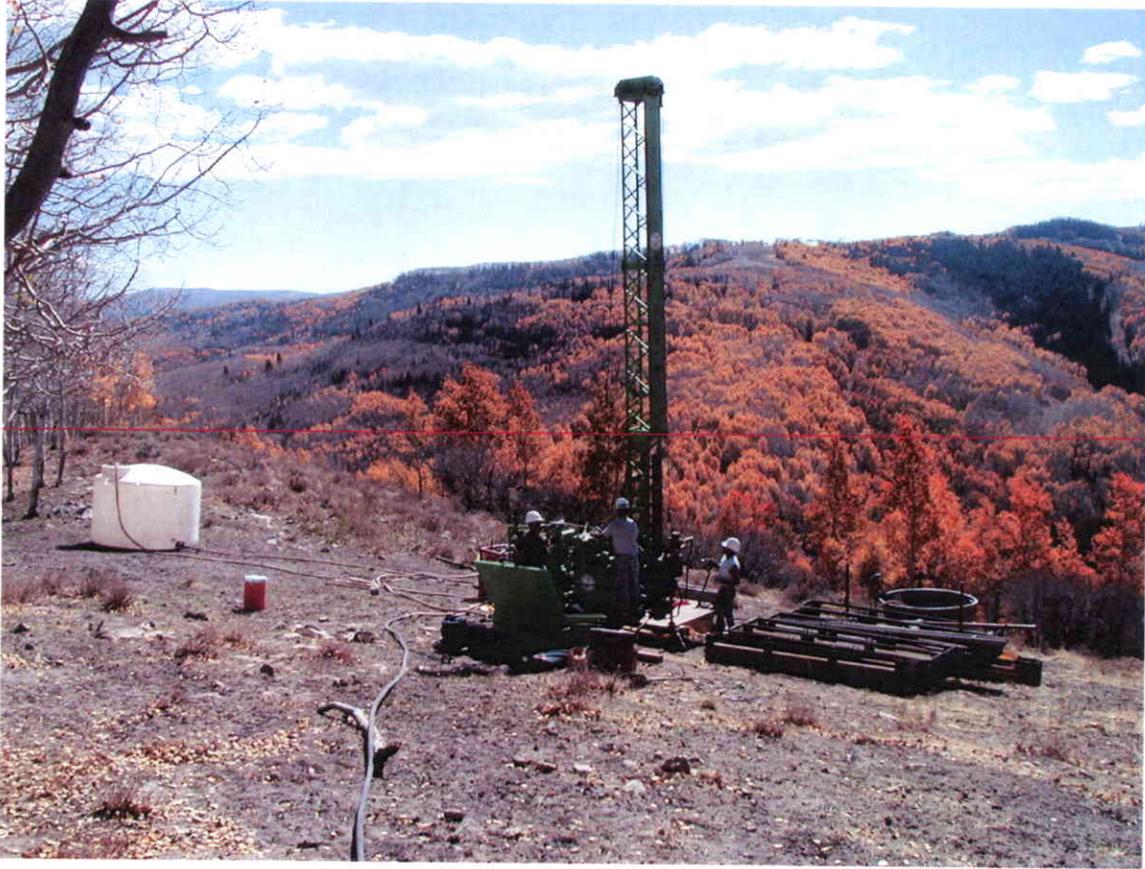


Figure 1. Typical helicopter-assisted drillsite setup. Only minor excavation of surface soil with hand tools is necessary for leveling of drill rig. Surface is otherwise undisturbed.

Reclamation is an integral part of the exploration activities and will progress as contemporaneously as practical with the other exploration activities. Upon completion of the hole, all hand excavations will be filled in to original contour, all equipment will be removed, and all trash will be hauled away. An approved seed mix will then be applied to the drill area.

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 Lower Hiawatha ~~seam.~~ seam. Any acid- or toxic-forming drill core not boxed for analysis will be removed from the drillsite and disposed of at Sufco Mine's permitted waste rock site.

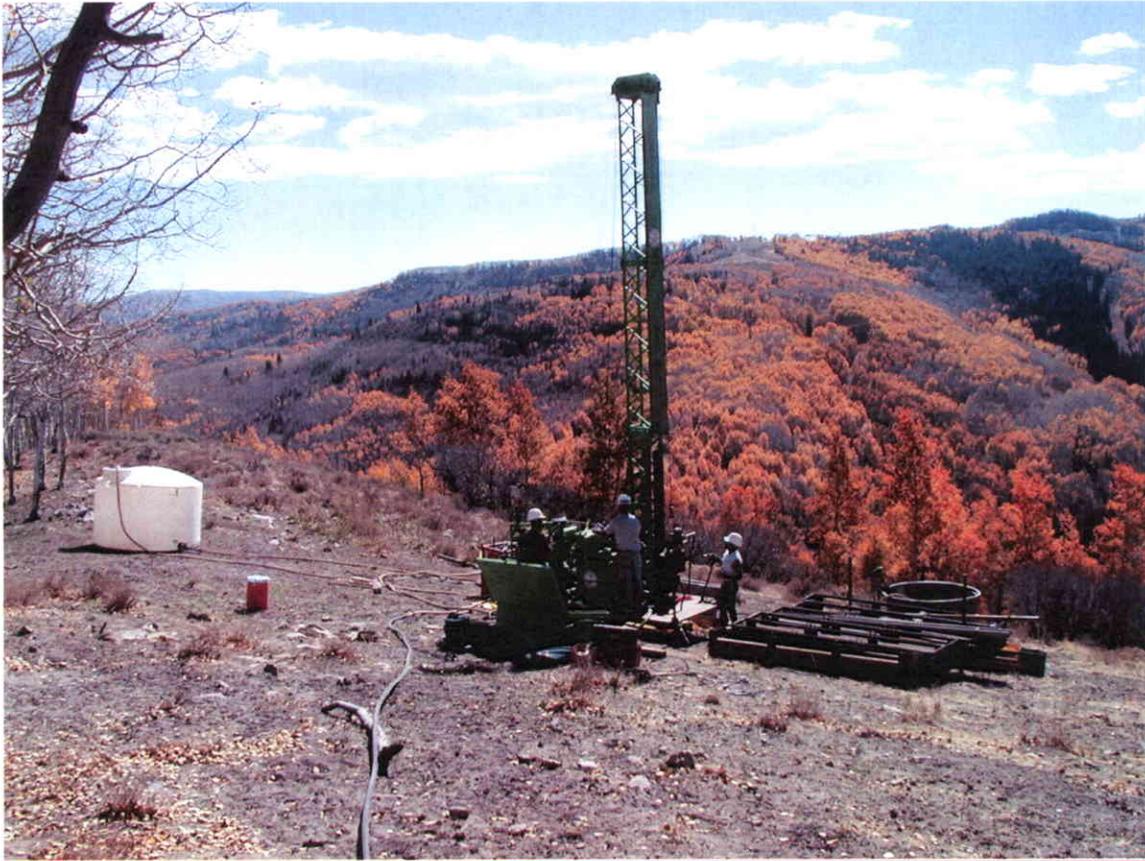


Figure 1. Typical helicopter-assisted drillsite setup. Only minor excavation of surface soil with hand tools is necessary for leveling of drill rig. Surface is otherwise undisturbed.

The method of revegetation is intended to encourage prompt revegetation and recovery of a diverse, effective, and permanent vegetative cover. The following seed mix has been proscribed by the U.S. Forest Service for reclamation of 2003 Pines Lease drill holes:

### Seed Mix

		<u>Pounds PLS/acre</u>
Western Wheatgrass	Elymus smithii	2
Basin Wild Ryegrass	Elymus cinereus	1
Intermediate Wheatgrass	Elymus hispidus	2
Paiute Orchardgrass	Dactylis glomeratus	2
“Rambler” Alfalfa	Medicago sativa	1
Blueleaf Aster	Aster glaucodes	0.25
Lewis Flax	Linum lewisii	0.50
Small Burnet	Sanguisorbia minor	1
Mountain Big Sage	Aremisia tridentate vaseyana	0.25
Bitterbrush	Purshia tridentata	1
TOTAL		11.00

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 and the Forest Service roads used to access it. Equipment access to the exploration area will be via FDR 007 which traverses federal coal leases SLI-062583, U-47080, and U-63214 on both the Fishlake and Manti-LaSal National Forests then FDR 044 to the proposed tank/pump location and staging area/landing zone location.

As mentioned earlier, only minor hand excavation will be necessary at the drill site. No mud pits will be constructed.

Upon completion of drilling, the hole will either be plugged with a cement or cement/bentonite slurry to its full depth, or a water monitor well will be constructed. If a monitor well is constructed, the collar of the monitor well will be identified as to hole number and operator. In either case, a brass tag will be placed at the top of the drill hole stating the operator’s name, drill hole number, and legal description. If the hole is plugged, the tag will be placed in the cement at ground level.

If the hole is constructed as a water monitor well, a nominal 1.0 to 1.5 inch well screen and steel casing would be installed to below the deepest mineable coal zone. The screen zone will be sand packed and sealed from overlying strata and the overlying hole annulus will be cemented to the surface. Well casing with a locking lid will be left at the surface extending above the surface approx. 2 ft. As previously mentioned, the wellhead will be properly identified with either a brass marker or a welded-on identification.

The main drill hole diameter will be nominally 2 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 8 X 12 ft. (0.002 acres). No road or significant pad construction will be necessary. Total acreage to be disturbed will be 0.002 acres.

Drill Hole	Location	Total Depth (ft)	Disturbed Area (acres)
A	SW, SE, 32, T20S, R5E	1500	0.002

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.

R645-202.230

No adverse impacts to the stream channel will occur during pumping activities. The USFS will be notified as to points of diversion and generally require that stream flow not be pumped dry during pumping activities. In the past, the USFS has authorized the placement of a water tank at the pump location to allow more gradual pumping and water storage. If, due to drought conditions, stream flow drops too low to pump, water will be hauled from the Sufco minesite. No water will be pumped from Quitchumpah or Muddy Creek without an approved "Temporary Change of Water" from the Division of Water Rights. A copy of the approved Temporary Change ~~will be forwarded to DOGM and will be in possession of the the on-site geologist. If diversion of water is not approved by the Division of Water Rights, water will be hauled from the Sufco minesite.~~ is included in Appendix E.

R645-202-231

A site specific cultural resource survey ~~will be conducted in the spring of 2004 and forwarded to UDOGM.~~ has been conducted and is included as Appendix C. Threatened, endangered, and sensitive plant and animal survey information has been developed by the U.S.F.S. during their work relative to Canyon Fuel's 2004 Muddy Tract drilling license application. The information should be is included in finalized as part of the USFS decision document that will be submitted to the BLM by mid-August, 2004. Information can be obtained from Tom Lloyd at 435-636-3596. A raptor survey was conducted in June, 2004 of the drillsite area. No nests were observed. Appendix ~~D.~~

D shows the raptor information developed during the 2004 survey.

TES protection measures include the use of Heli-portable drilling equipment which will minimize surface disturbance. Helicopter flight routes will also be selected which will avoid active raptor nests. Drilling will not commence until after Sept. 1, 2004.

R645-202-232

No road construction is planned for this project.

R645-202-235 (R645-301-624.210, R645-301-731.121, R645-301-731.215))

Geologic logs of drilling will be kept. Any appreciable water encountered during drilling will be logged, noting depth, geology, and estimated flow. Any such zones will be evaluated for potential water monitoring.

Figure 2 shows a drawing of the approximate drillsite setup. Figure 3 shows a drawing of the drillsite in relation to Cowboy Creek.

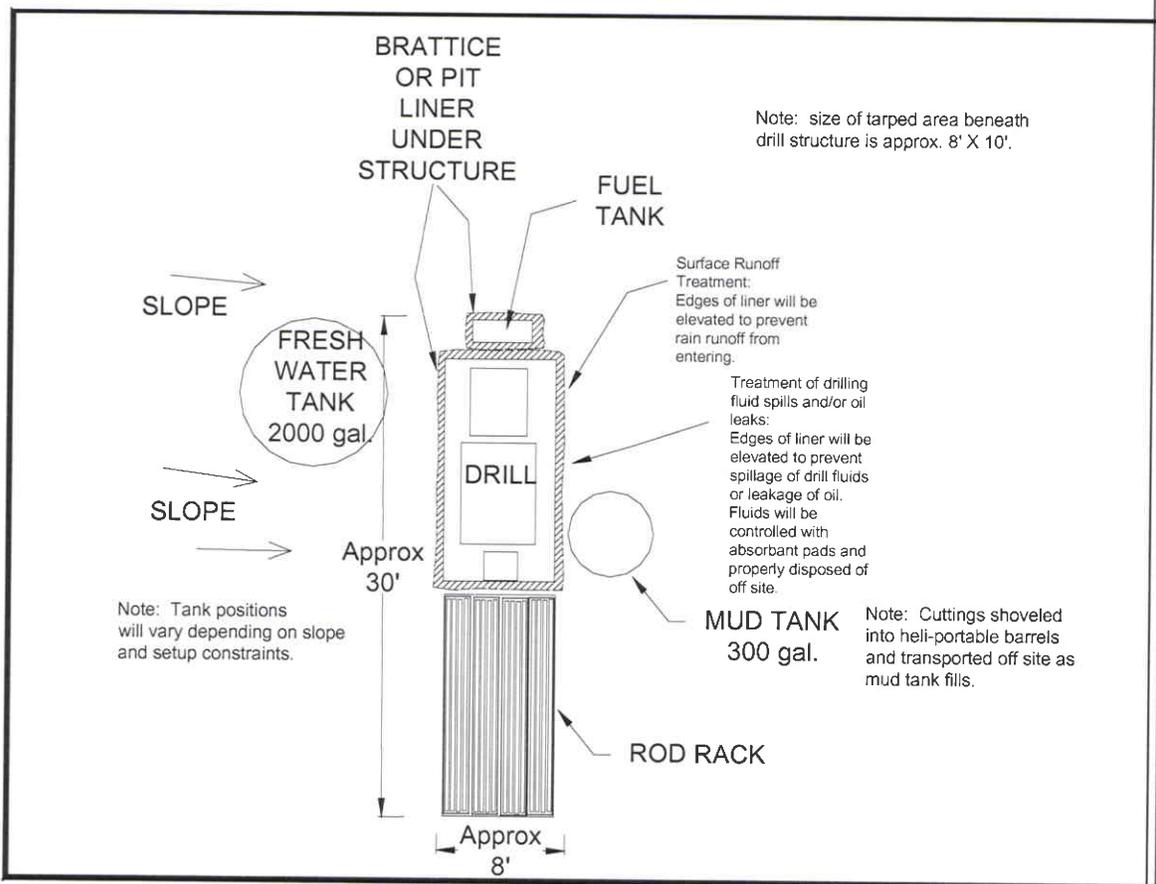


Figure 2: Approximate drill site setup.

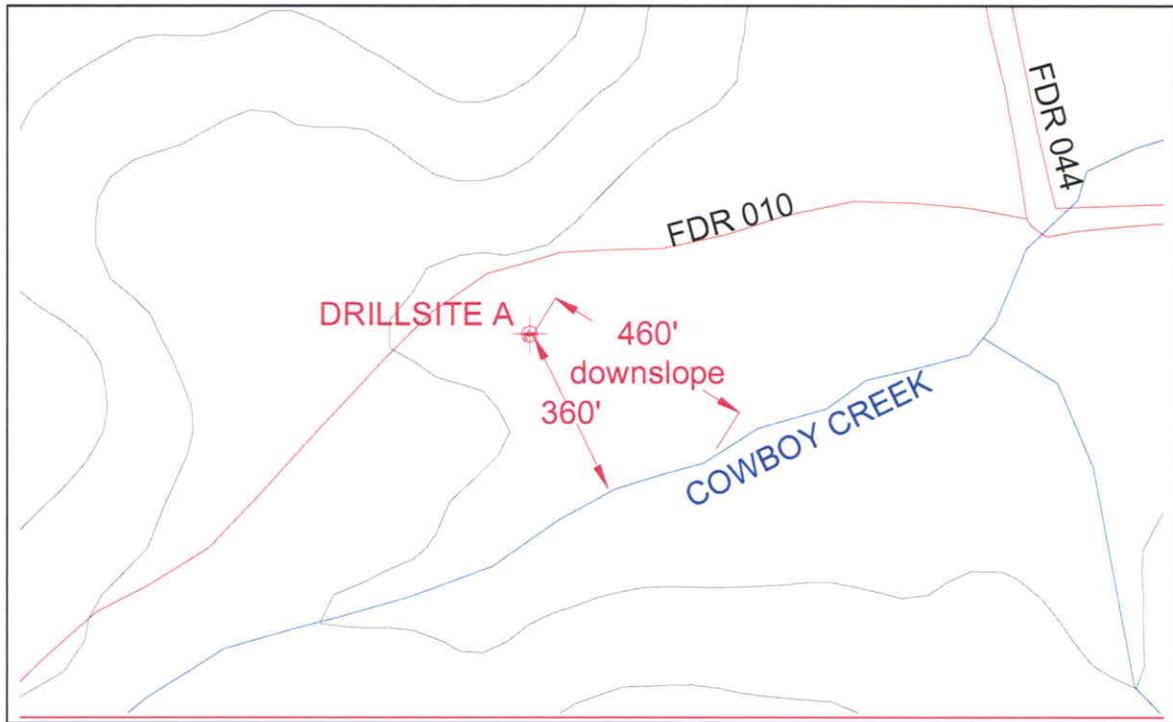


Figure 3: Location of drillsite A in relation to Cowboy Creek.

If it is determined that the drillhole will be completed as a water monitor well, the planned water monitor well design is shown in Figure 4. It should be noted that because the heli-portable drilling equipment has limited lifting and pumping capability due its small size and low weight, installation of piezometer equipment may not be possible. Hole annulus may also limit the effectiveness of sandpack placement. Hole conditions will be evaluated in the field to determine if piezometer installation is going to be possible. If installed, a groundwater monitor well completion form will be submitted to the Division.

## WATER MONITOR WELL DESIGN

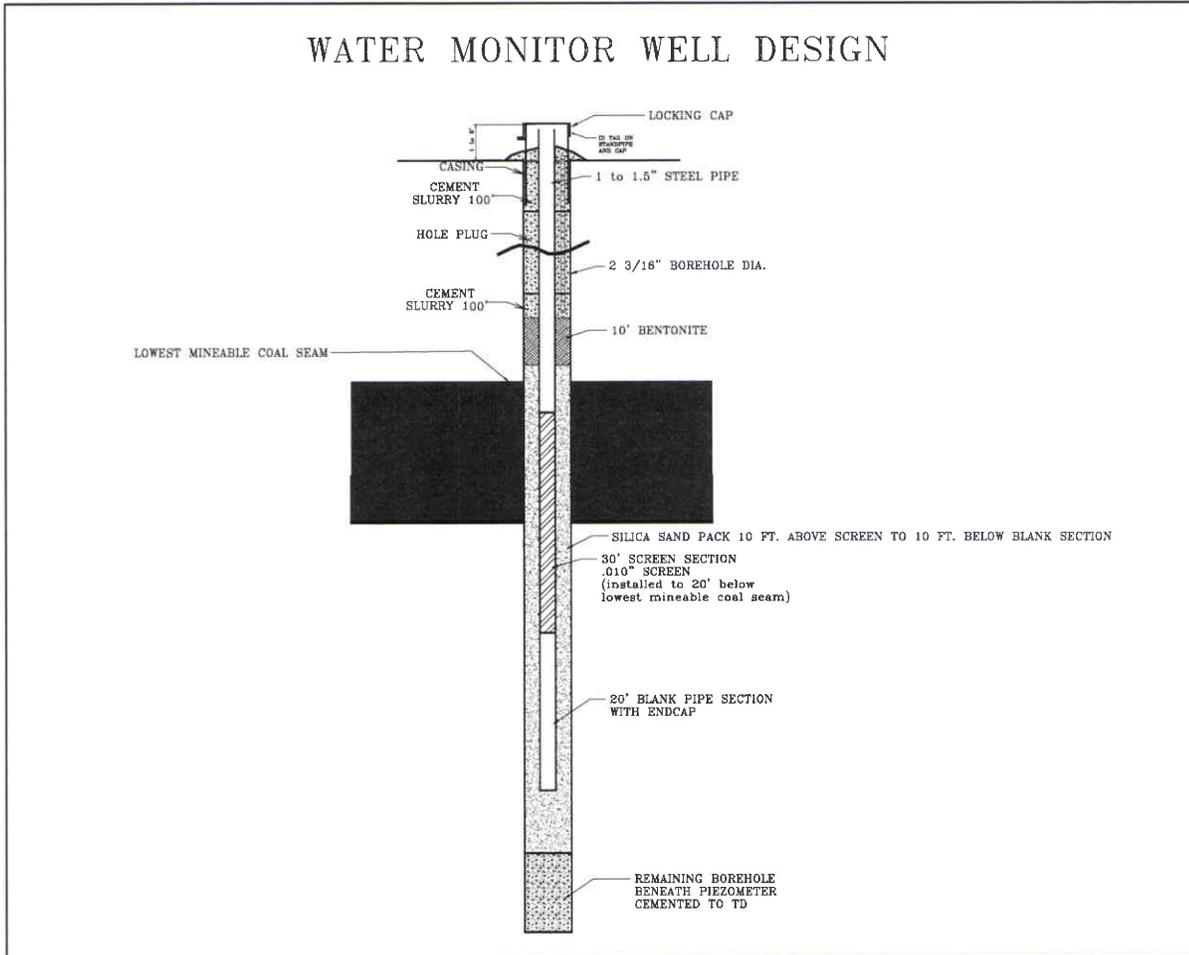


Figure 4. Water monitor well design.

If the drill hole begins to make make excess water, such water will be stored in heli-portable poly tanks and pumped to a larger 20,000 gal. frac tank placed adjacent to the main road. At that point the water will be hauled away by water truck to an approved waste water disposal site. At no time will excess drill water generated in the drill hole be allowed to run on topsoil on the surface.

R645-301-525-200

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

R645-301-527.230

U.S. Forest system roads utilized as part of this minor coal exploration plan will be maintained as per U.S.F.S. authorized road use permit, including proper control of fugitive dust to minimize effects to fish, wildlife, and related environmental values.

R645-301-731.100

Approved Temporary Change of Water for water to be used in the drilling process has been obtained from the Utah Division of Water Rights and is included as Appendix E.

R645-301-742.410 thru 742.420

Because heli-portable drill equipment is being utilized for this project requiring minimal surface disturbance, no improvements or changes are necessary to any drainage pattern. Brattice placed beneath the drill and fuel tank will be elevated along the edges to prevent fluids from flowing across adjacent soils. Rain water will be carefully monitored to ensure that it does not overflow the brattice, causing any excess runoff or erosion. Any excess water will be removed and placed in the drill water tank for use in the drilling process.