



Canyon Fuel Company, LLC
Soldier Canyon Mine
P.O. Box 1029
Wellington, Utah 84542
(435) 637-6360 Fax: (435) 637-0108

July 1, 2004

Ms. Pamela Grubaugh-Littig
Department of Natural Resources
Division of Oil, Gas and Mining
1594 West North Temple
Suite 1210
Salt Lake City, UT 84114-5801

Stevenson
C/007/0039

RE: Clean Copies of Notice of Intent to Conduct Minor Coal Exploration - SITLA Lease
Task ID # 1916, Canyon Fuel Company, LLC, Dugout Mine, C/007/039

Dear Ms. Grubaugh-Littig:

Enclosed please find five clean copies of the Notice of Intent to Conduct Minor Coal Exploration - SITLA Lease - Task ID # 1916

An additional copy of the submittal has been delivered to the Price Field Office.

Please contact Mike Stevenson or Vicky Miller at (435) 636-2869, if there are any questions concerning this submittal.

Sincerely yours,

Vicky S. Miller

Cc: Dave Spillman (enclosures)
Pete Hess (enclosures)

RECEIVED

JUL 02 2004

DIV. OF OIL, GAS & MINING

APPLICATION FOR COAL PERMIT PROCESSING

Permit Change New Permit Renewal Exploration Bond Release Transfer

Permittee: Canyon Fuel Company, LLC

Mine: Dugout Canyon Mine

Permit Number: C/007/039

Title: Clean Copies of Notice of Intent to Conduct Minor Coal Exploration - Task ID #1916

Description, Include reason for application and timing required to implement:

Instructions: If you answer yes to any of the first eight (gray) questions, this application may require Public Notice publication.

- Yes No 1. Change in the size of the Permit Area? Acres: _____ Disturbed Area: _____ increase decrease.
- Yes No 2. Is the application submitted as a result of a Division Order? DO# _____
- Yes No 3. Does the application include operations outside a previously identified Cumulative Hydrologic Impact Area?
- Yes No 4. Does the application include operations in hydrologic basins other than as currently approved?
- Yes No 5. Does the application result from cancellation, reduction or increase of insurance or reclamation bond?
- Yes No 6. Does the application require or include public notice publication?
- Yes No 7. Does the application require or include ownership, control, right-of-entry, or compliance information?
- Yes No 8. Is proposed activity within 100 feet of a public road or cemetery or 300 feet of an occupied dwelling?
- Yes No 9. Is the application submitted as a result of a Violation? NOV # _____
- Yes No 10. Is the application submitted as a result of other laws or regulations or policies?

Explain: _____

- Yes No 11. Does the application affect the surface landowner or change the post mining land use?
- Yes No 12. Does the application require or include underground design or mine sequence and timing? (Modification of R2P2)
- Yes No 13. Does the application require or include collection and reporting of any baseline information?
- Yes No 14. Could the application have any effect on wildlife or vegetation outside the current disturbed area?
- Yes No 15. Does the application require or include soil removal, storage or placement?
- Yes No 16. Does the application require or include vegetation monitoring, removal or revegetation activities?
- Yes No 17. Does the application require or include construction, modification, or removal of surface facilities?
- Yes No 18. Does the application require or include water monitoring, sediment or drainage control measures?
- Yes No 19. Does the application require or include certified designs, maps or calculation?
- Yes No 20. Does the application require or include subsidence control or monitoring?
- Yes No 21. Have reclamation costs for bonding been provided?
- Yes No 22. Does the application involve a perennial stream, a stream buffer zone or discharges to a stream?
- Yes No 23. Does the application affect permits issued by other agencies or permits issued to other entities?

Please attach four (4) review copies of the application. If the mine is on or adjacent to Forest Service land please submit five (5) copies, thank you. (These numbers include a copy for the Price Field Office)

I hereby certify that I am a responsible official of the applicant and that the information contained in this application is true and correct to the best of my information and belief in all respects with the laws of Utah in reference to commitments, undertakings, and obligations, herein.

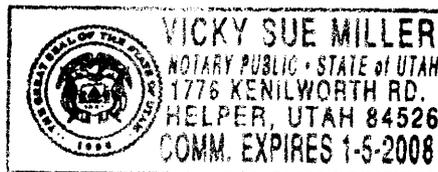
Mike Stevenson
Print Name

Mike Stevenson Sr. Geologist 6/29/04
Sign Name, Position, Date

Subscribed and sworn to before me this 29 day of June, 2004

Vicky Sue Miller
Notary Public

My commission Expires: 1-5, 2008
Attest: State of UTAH } ss:
County of CARBON



For Office Use Only:

Assigned Tracking
Number:

Received by Oil, Gas & Mining

RECEIVED

JUL 02 2004

DIV. OF OIL, GAS & MINING

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

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

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

May 26, 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 – Dugout Canyon 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 rotary-spot core, wireline core drilling, or a combination of both. All exploration activities will occur on private surface held by the Milton and Ardith Thayn Trust in wide spots in existing, previously disturbed roads. This application is formatted to address the specific requirements of R645-201-200. Other related information is given in Appendix A and 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.

R645-201-130 - Notice to Thayn Trustee of proposed drilling activities 2004/2005

Reference Attachment 4-2, Dugout Canyon Mine, Methane Degassification Amendment Wells G-1, G-2 and G-3 for surface use agreement between the Thayn Trust and Canyon Fuel Company, LLC. A copy of the landowner notification letter is located in Appendix B.

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) 435-448-2634

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

Mike Stevenson
Ark Land Company
C/o Skyline Mines
HC 35 Box 380
Helper, Utah 84526
(work) 435-448-2634

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:

Mike Stevenson
Ark Land Company

C/o Skyline Mines
HC 35 Box 380
Helper, Utah 84526
(work) 435-448-2634
(home) 435-636-8546

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

R645-201-223

The exploration area is located in Eastern Utah 15 miles northeast of Wellington, Utah (Map 1). The legal description of the SITLA Dugout Coal Tract is as follows:

State Lease ML 48435-OBA

T. 13 S., R 13 E., SLB&M

Sec. 17: SW/4, SW/4SE/4;
Sec. 19: NE/4SE/4, S/2SE/4;
Sec. 20: All;
Sec. 21: SW/4NW/4, SW/4;
Sec. 28: NW/4, N/2SW/4, SW/4SW/4;
Sec. 29: All;
Sec 30: E/2, E/2W2.

Containing 2,560.00 acres, more or less.

The tract is totally located in Carbon County, Utah, and is located in Eastern Utah approximately 15 miles northeast of Wellington, Map 1. Map 2 gives the location of drill sites and access routes. Heavy Equipment access to the exploration area will be via an improved, gravel road through Clark Valley east of Wellington, herein called the Clark Valley Road, then existing private ranch or logging roads.

Access routes to the drill sites will either use existing ranch or logging roads (Map 2). As necessary, existing roads will be made travelable by grading rutted areas. The drill sites are located in the roadways.

The elevation in the area ranges from 7,200 feet in the south along the base of the Book Cliffs to 8,700 feet in the north atop the high mesas. The terrain is rugged with relatively gently sloping mesas bounded by the steep slopes of the Book Cliffs. Relatively deep and narrow valleys bisect the highlands and drain southward away from the Book Cliffs. The major drainages in the area are the Right Fork of Dugout Creek and Pace Creek.

Rocks exposed in the exploration area belong to the Cretaceous age Blackhawk, Castlegate, and Price River Formations, and the Cretaceous-Tertiary age North Horn Formation. The rock types are predominantly sandstone, siltstone, shale, and coal. The major geologic features in the exploration area are the escarpments created by the various sandstone outcrops including the 150 ft thick Castlegate Sandstone.

R645-201-224

These holes are planned to be drilled as part of a 2-hole drilling project to be drilled in 2004. It should be noted that hole DUG0204 is also being permitted with the Bureau of Land Management (BLM). This hole will be drilled on an angle with the surface disturbance being located on private land with BLM coal ownership directly below the hole collar. Since the hole will be angled, the hole may end in coal owned by the School and Institutional Trust Lands Administration (SITLA). Therefore, the BLM recommended the hole be permitted by both agencies—UDOGM and BLM.

The timetable for all exploration related activities is given below. It is anticipated that exploration activities will start the second week of June 2004.

EVENT	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8
Prepare Access/Sites								
Core Drilling								
Reclamation								

R645-201-225

The general method to be followed during drill hole exploration, reclamation, and abandonment is: 1) grading rutted areas in ranch and logging roads and water roads as needed for dust suppression 2) set temporary water tank, pump, and water line as needed, 3) drill and log holes, 4) reclaim the drill sites and promptly remove all facilities and equipment including but not limited to waterlines, tank, and pump.

No blasting is planned.

Core drilling typically involves one truck-mounted 2000 ft rated core drill, one 3000 gallon water truck, one 1500 gallon water truck, one auxiliary air compressor, one supply trailer, four pick-up trucks, a geophysical logging truck and one covered trailer. The drilling procedure for the exploration holes will be either continuously core to total depth, rotary drilling and spot coring of selected zones, or a combination of both. If the rotary drilling and spot coring method is used, casing will be set in the hole to below the Price River Formation.

Water will be pumped and/or hauled from the Right Fork of Dugout Creek and/or Pace Creek to the drill sites (Map 2). Typically, the following pieces of equipment are used to complete the project. A supply trailer will carry drill steels, coring equipment, drilling additives, cutting and welding equipment, a dog house and other supplies. Two pick-up trucks will be used by the drillers to carry personnel, fuel, and supplies and two pickup trucks will be used by the dirt contractor. The geologic logging contractor will use a single axle 1 ton rated truck. The company representative and geological consultant will also use pick-up trucks for transportation.

The only coal removed during exploration activities will be cores. Cores will be a nominal three inches in diameter. Assuming an average thickness of 7 ft for the Rock Canyon Coal Seam and 8 ft for the Gilson Coal Seam, an estimated 300 pounds of coal will be removed.

Earth moving equipment may include a D-8 Cat, road grader and a track mounted backhoe and/or a rubber-tired backhoe for construction of mud pits. The only material disposed of at the drill sites will

be cuttings and any drilling foam and/or mud which will be placed in the mud pits. Following the drying of the mud pit materials, the dirt excavated to create the mud pit will be mixed with the drill cutting and returned to the pit to prevent a boundary of hard material from forming in the mud pit area and then compacted to minimize settling.

Reclamation is an integral part of the exploration activities and will progress as contemporaneously as practical with the other exploration activities. The exploration drill holes will be plugged with a cement, cement/bentonite slurry, or bentonite chips to their full depth. The completion method includes pulling surface casing when possible; but when not possible, cutting it flush with the ground, then pumping the cement/bentonite slurry through the drill pipe starting at the bottom of the hole. Plugging will then be done in stages by tripping-out of the hole 3-4 joints (60-80 ft) and pumping again. This process will be repeated to the surface. If bentonite chips are used, the chips will be dumped down the annulus of the hole in such a manner to prevent bridging in the hole and drilling water added to the hole as specified by the manufacturer. Spillage of bentonite and/or cement during the drill hole sealing process will be collected and buried in the mud pit or hauled from the sites for disposal at an approved location.

There will be no diversion of overland flows.

Cultural Resources - The permittee agrees to notify the Division and State Historical Preservation Office (SHPO) of previously unidentified cultural resources discovered in the course of operations. The permittee also agrees to have any such cultural resources evaluated in terms of NRHP eligibility criteria. Protection of eligible cultural resources will be in accordance with Division and SHPO requirements. The permittee will also instruct its employees that it is a violation of federal and state law to collect individual artifacts or to otherwise disturb cultural resources.

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. An letter from archeologist John Senulis in provided in Appendix B. A site-specific cultural resource evaluation will be conducted in 2004 prior to drilling and submitted to the Division (Appendix B) and SHPO.

Access to the drill holes will not impact or disturb what remains of the archeological site (42CB292). The road in the bottom of Pace Canyon passes the archeological site, but the closed portal is not visible from the road, therefore there is nothing to draw attention to the site. The loadout referenced in the survey no longer exist at the site. Access to the drill holes is as follows: Turn left (north) off US Highway 6 (eastbound) 7 miles beyond the city of Wellington onto a dirt road, proceed on dirt road 8 miles to an intersection turn left (west) and proceed 1.5 miles to locked gate, proceed onto road in the bottom of Pace Canyon travel an additional 1 mile to intersection turn left (northwest), travel 0.5 miles to DUG0204. To proceed to DUG0104 do not make the left hand turn described above but proceed up Pace Canyon for approximately 0.75 miles, turn left on to a logging road and travel 0.1 of a mile. Both drill sites are located in a wide spot in the road. All mileage is approximate.

Wildlife Protection Measure - The permittee will apply all methods necessary to minimize disturbances or any adverse effects to threatened or endangered species and the species will be protected to the best of the permittee's ability.

May 2004

General control and mitigation measures addressing potential operational related biological impacts will include the following:

- Minimizing the total area of disturbance,
- Design, construction, and operation of drilling to minimize biological impacts including barriers to wildlife movements,
- Control, treatment and monitoring of surface discharges,
- Exclusion of wildlife from potentially hazardous areas, and
- Reclamation of disturbed areas when they are no longer needed.

Vegetation in the exploration area is comprised mostly of juniper, conifer timber, aspen, and sage communities. The streams do not support 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.

Raptors - An aerial raptor nest survey was done of the area by the Utah Division of Wildlife Resource (DWR, Chris Colt, Leroy Mead) and CFC personnel in May of 2003, refer to Attachment 3-3, Dugout Canyon Mine, Methane Degassification Amendment Wells G-1, G-2 and G-3.

A raptor survey will be conducted of the core hole site areas, during 2004 prior to the drilling. However, as stated previously the drill sites are on pre-disturbed road areas. A copy of the raptor survey and map will be incorporated into the mine's annual report. Excerpts from the survey will be included in Appendix B.

Mexican Spotted Owl - A calling point survey will be conducted in the exploration area by EIS Environmental and Engineering Consulting in 2004 and 2005 for Mexican spotted owl. Access to the areas for the survey should be available in April or May, depending on the snow and precipitation for each year. A copy of the survey will be incorporated into Appendix B.

Threatened and Endangered Plant and Wildlife Species - There are no known federally or state listed threatened and endangered plant and wildlife species within the sites planned for core holes. The drill holes are in wide spots in existing, previously disturbed roads. No habitat available in area for Utah State Listed Species as verified with Bill Bates, DWR (personal communication 7/17/03).

Threatened and endangered species in the exploration area include the bald eagle, which may use portions of the area as a winter resident/hunting area. Exploration and reclamation activities will not occur during breeding and nesting periods nor within one half mile of known breeding and nesting areas.

There are no known groundwater or surface water flows to the Colorado or Green Rivers with potential for impact by the drilling of the core holes. Potential adverse affects to the four Colorado River endangered fish species (refer to table below) would not be likely since there is no direct route to the Colorado River or Green River from the proposed drilling locations. Per the Windy Gap Process consumption estimates for the core holes: evaporation from ventilation - zero, holes will not intersect the mine area currently being extracted, therefore no access to mine ventilation; coal preparation - zero, no coal preparation at sites; sediment pond evaporation - zero, no sediment pond at sites; subsidence effects on springs - zero, no anticipated subsidence at sites; alluvial aquifer abstractions into mines - zero, no alluvial aquifer abstractions associated with holes; postmining inflow to workings - zero, no workings for postmining inflow associated with core holes; coal moisture loss - zero, limited coal

extraction therefore very limited moisture loss; direct diversion - zero, no direct diversions associated with core holes. Mitigation will not be required since the estimated loss for the construction and reclamation of the core holes is zero acre feet per year.

**Federally Listed, Threatened, Endangered and Candidate Species
Plants and Wildlife - Carbon County, Utah**

Source: Utah Division of Wildlife Resources data base - created 09/25/03

Common Name	Scientific Name	Status	Habitat Present*
Plants			
Uinta Basin Hookless Cactus	<i>Sclerocactus glaucus</i>	T	No habitat available
Graham Beardtongue	<i>Penstemon grahamii</i>	C	No habitat available
Fish			
Humpback Chub	<i>Gila cypha</i>	E	No habitat available
Bonytail	<i>Gila elegans</i>	E	No habitat available
Colorado Pikeminnow	<i>Ptychocheilus lucius</i>	E	No habitat available
Razorback Sucker	<i>Xyrauchen texanus</i>	E	No habitat available
Birds			
Bald Eagle	<i>Haliaeetus leucocephalus</i>	T	No habitat available, See Attachment 3-3**
Yellow-billed Cuckoo	<i>Coccyzus americanus</i>	C	No habitat available
Mexican Spotted Owl	<i>Strix occidentalis lucida</i>	T	See Appendix B and Attachment 3-3**
Mammals			
Black-footed Ferret	<i>Mustela nigripes</i>	EX	No habitat available

* Habitat availability in Carbon County/Dugout Mine/Degas Well Sites/Core Hole Sites.

** Methane Degassification Amendment, Dugout Canyon Mine, August 2003

E = A taxon that is listed by the U.S. Fish and Wildlife Service as "endangered" with the possibility of worldwide extinction.

T = A taxon that is listed by the U.S. Fish and Wildlife Service as "threatened" with becoming endangered.

C = A taxon for which the U.S. Fish and Wildlife Service has on file sufficient information on biological vulnerability and threats to justify it being a "candidate" for listing as an endangered or threatened.

The method of revegetation is intended to encourage prompt revegetation and recovery of a diverse, effective, and permanent vegetative cover. The following seed mixture will be used on outside slopes

May 2004

of road berms which are adjacent to the drill holes and which existed prior to the drilling. The quantity of seed per acre for broadcast seeding will be doubled should the topsoil need to be replaced at drill site DUG0104, see R645-202-233 Soils for additional detail.

Grasses, Forbs, and Shrubs Seed Mix

<u>SPECIES</u>	<u># pls/acre</u>	<u># pls/sq. ft.**</u>
Kentucky Bluegrass (1,390,000 seeds/lb)*	0.5	16
Mountain Brome (64,000 seeds/lb)*	2.0	3
Sandberg Bluegrass (1,100,000 seeds/lb)*	1.0	25
Bluebunch Wheatgrass (126,000 seeds/lb)*	4.0	12
Bottlebrush Squirreltail (192,000 seeds/lb)*	1.0	4
Rocky Mountain Penstemon (478,000 seeds/lb)*	1.0	11
Mountain Lupine (12,000 seeds/lb)*	3.0	1
Mtn. Snowberry (54,000 seeds/lb)*	4.0	5
Wyoming Big Sage (2,500,000 seeds/lb)*	<u>0.5</u>	<u>29</u>
TOTAL	17.0	106

* Native Plants

** Rounded nearest whole seed

The drill holes may range from a nominal 3 3/16 inches to 10 inches in diameter, depending on the drilling method. The estimated depths of the proposed drill holes and other drill hole information is given in the following table. Drill site acreage is estimated for a 100 ft X 100 ft pad. Access routes are estimated to be 14 ft wide.

			Disturbed Acreage		
Drill Hole	Location	Total Depth(ft)	Drill Site	Access Route	Total
DUG0104	T13S, R13E, Sec.20, SE	1,700	0.25	0	0.25
DUG0204	T13S, R13E, Sec.18, SE	1,900	0.25	0	0.25
Total		3,600	0.50	0	0.50

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. No utilities will exist at the drill hole sites.

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. No water will be pumped from the North Fork of Dugout or Pace Canyon Creeks without an approved "Temporary Change of Water" from the Division of Water Rights. A copy of the approved Temporary Change will be included in Appendix B and will be in possession of the on-site geologist. The "Temporary Change of Water" expires in August 2004, upon renewal a copy of the approval will be sent to the Division for incorporation into Appendix B.

R645-202-231

Approximately 500,000 gallons of water will be used during the drilling project. Refer to R645-201-225 for information pertaining to raptors and cultural resource data.

R645-202-232

No road construction is planned for this project. The existing roads were constructed and are maintained by the land owner. The existing roads are approximately 14 feet wide, with turnout/passing areas of approximately 60 feet in width.

R645-202-233 Soils

Drill site DUG0204 is a wide area in an existing road, topsoil is not available at the site therefore it will not be removed. Drill site DUG0104 may require topsoil to be excavated from a pocket on the adjacent hillside per a study performed by Dan Larson of EIS (Appendix B). The permittee will attempt not to disturb the hillside pocket of topsoil. No other topsoil was observed at the drill site. Should the pocket of topsoil (approximately 10 cubic yards) be removed it will be used to berm the site as shown on Figure 1. Following drilling the topsoil will be returned as close as possible to its original location, pocked and gouged and broadcast seeded.

If a subsurface mud pit is made at either site, the material will be excavated, stored immediately adjacent to the mud pit and returned to the pit and compacted, so the area can be used as road surface.

May 2004

A portable container for drilling fluids will be used if necessary, should there not be sufficient subsoil depth to excavate a mud pit.

Where not pre-existing, berms will be created in conjunction with the leveling of the drill pad area. Berms, straw bales and/or silt fences will be used for sediment control at the drill sites.

R645-202-235

Drawings of drill pads have been provided as Figures 1 and 2.

Protection of Water (Runoff, Sediment Control)

Groundwater Protection - The effect on groundwater at the drill hole sites is expected to be minimal. Groundwater encountered during drilling will be sealed off, unless developed as a monitoring well.

Surface Water Protection - To protect the hydrologic balance, construction, maintenance, and reclamation operations will be conducted to handle earth materials and runoff in a manner that prevents, to the extent possible, additional contributions of suspended solids to stream flow outside the permit area, and otherwise prevent water pollution.

During initial drilling, the sites will be graded to ensure that storm runoff will flow towards the lowest point(s) within the pad area where a silt fence and/or straw bale dike(s) will treat the runoff.

The silt fences and/or straw bale dikes will be periodically inspected, and accumulated sediment will be removed as needed to maintain functionality. The sediment from the silt fence and/or straw bale dikes will be piled on the pad and will be used for fill during final reclamation of the drill hole site.

Water encountered during drilling and runoff water will be treated using silt fence and/or straw bale dikes prior to leaving the site. Should it become necessary, the water encountered during drilling will be pumped into a tank and hauled from the site for disposal at a licensed facility.

Although, there are flowing springs above both drill sites, there are no springs immediately adjacent to or below the drill sites. No adverse impacts or necessary mitigation measures are anticipated.

No drill holes are planned for completion as water monitoring wells. However, should significant amounts of water (10+ gallons per minute of continuous flow) be encountered during drilling, Greg Galecki of the Utah Division of Oil, Gas and Mining will be contacted prior to the sealing of the hole.

May 2004

Determination will be made between Mr. Galecki and the permittee as to the potential for development of the drill hole as a monitoring well.

R645-202-236

It is not anticipated that acid- or toxic- forming materials will be encountered during exploration because none have been encountered previously. Should acid- or -toxic material be encountered it will be collected and hauled to an appropriate disposal facility.

R645-202-241

Approximate Original Contour - The drill hole sites will be returned to their approximate original contour after drill holes have been sealed.

R645-202-244

Permittee commits to promptly remove all facilities and equipment upon completion of exploration activities.

R645-301-358

Refer to Section R645-202-225 for information pertaining to wildlife and roads.

R645-301-527.230

Refer to Section R645-202-225 for information pertaining to roads.

Appendix A

Appendix B

May 2004

CANYON FUEL COMPANY'S
2004 BOREHOLE PROGRAM

Strix occidentalis lucida
MEXICAN SPOTTED OWL SURVEY
DUGOUT AND PACE CANYON
CARBON COUNTY

CONDUCTED
MAY 5 TO MAY 29, 2004

BY
EIS ENVIRONMENTAL & ENGINEERING CONSULTING
31 NORTH MAIN STREET
HELPER, UTAH 84526
(435) 472-3814
FAX (435) 472-8780
www.eisenviro.com

Canyon Fuel Company
Dugout Canyon
Mexican Spotted Owl Survey
(*Strix occidentalis lucida*)

Introduction

Canyon Fuel Company has contracted EIS Environmental & Engineering Consulting (EIS) to conduct a survey for their 2004 Coal Exploration Program. The proposed area is located east of Price, Utah. This area consists of primarily of private land and a small portion managed by the Bureau of Land Management (BLM). Proposed activities include the drilling of up to six gob vent boreholes. These proposed drill holes and associated sites are required to be surveyed for the Mexican spotted owl (*Strix occidentalis lucida*). This species has been identified by the U.S Fish and Wildlife Service (USFWS) through past studies as occurring, or potentially occurring within the Canyon Fuel program area. Using established protocols, certified personnel of EIS conducted a field survey of the area. The survey for this Development Program was conducted from May 5 through May 29, 2004.

Methodology

Mexican spotted owl (*Strix occidentalis lucida*)

The inventory work on the project area was conducted from one half hour past sunset until one half hour before sunrise (period of highest owl activity) on May 5th, 13th, 20th, 29th, 2004. Following USFWS protocol, the area of concern was divided into seven calling points, each point being within 0.5 miles of the next. A calling point survey was conducted and each point was called for 20 minutes or more, unless a predator of MSO was encountered.

Calling procedures were as follows: surveyors called with their voice using the four-note hoot for one to two minutes, then listened for a return for five minutes. After five minutes, they would call using the four-note hoot and the whistle for one to two minutes, while listening for another five minutes. Finally they would call with the aggravated call, four-note hoot and/or whistle and listen for the remainder of the time. While listening for the last five minutes, a 1,000,000 candlepower spotlight was utilized to search treetops and cliff ledges for any sign of owls (i.e., eye-shine, whitewash, etc.).

Results

Although suitable habitat did exist within the project area, a thorough search did not reveal the presence of any Mexican spotted owls. However, during the each night of survey Northern saw whets were noted.

Field inventory sheets are included in Attachment 1.

Field Sheets

S Environmental & Engineering Consulting / Mexican Spotted Owl Inventory Form

Inventory Area: Pace Canyon Date 05/05/04 Page 1 of 1

Management Unit _____ District _____ Quad Map Name(S): _____

Survey Type: Nighttime X; Daytime _____ Survey # 1 Complete Survey? Yes

Outing # 1 Aborted? _____ Results Northern Saw Whet % Area Surveyed 100%

Observers: M. Coonrod N. Coonrod

Call Point	Survey Method	Time			Call Method	Moon Vis?	Raptor Response											
		Start	End	Total			A/V	Sex	Age	Spp	Time	Bearing		Weather			UTM Zone	
												1 st	2 nd	Wind	Cld	PPT	E	N
Nw1	CP	2110	2140	20	V	N	A	U	U	ACE C	2110	ALL OVER THE PLACE		0	0	0	543113	4392381
Nw2	CP	2150	2210	20	V	N	A	U	U	ACE C	2150	ALL OVER THE PLACE		0	0	0	542783	4392886
Nw3	CP	2218	2239	20	V	Y								0	0	0	542860	4393494
Nw4	CP	2300	2320	20	V	Y	A	U	U	ACE C	2300	ALL OVER THE PLACE		0	0	0	543540	4393295
Nw5	CP	2340	2400	20	V	Y	A	U	U	ACE C	2340	ALL OVER THE PLACE		0	0	0	543639	4392525

- Date: should be MM/DD/YY format
- Outing #: For cases where it takes multiple outings to complete the survey.
- Call Point: Label point on map and reference it here. CP-Call point, CC-Continuous Calling, LF-Leap Frog
- Survey Method:
- Time - Should be in Military Time
- Call Method: V-Vocal, R-Recorded
- Raptor Response A/V: A=Audio / V=Visual
- Sex: M, F, U
- Age: J=juvenile, S=subadult, A=adult
- Spp: Species (4 letter abbreviation)
- Wind: 0-smoke rises
1-smoke drifts
2-wind felt on face
3-leaves/small twigs in constant motion
4-raises dust
- 5-small trees in leaf sway
6-Large trees in leaf sway
- Cloud: 0-100%
- PPT: Precipitation
0=none, 1=fog, 2=light rain, 3=heavy rain, 4=light snow, 5=heavy snow
- UTM: E=6digits, N=7 digits
- don't forget to attach a map.

EIS Environmental & Engineering Consulting / Mexican Spotted Owl Inventory Form

Inventory Area: Pace Canyon Date 05/13/04 Page 1 of 1

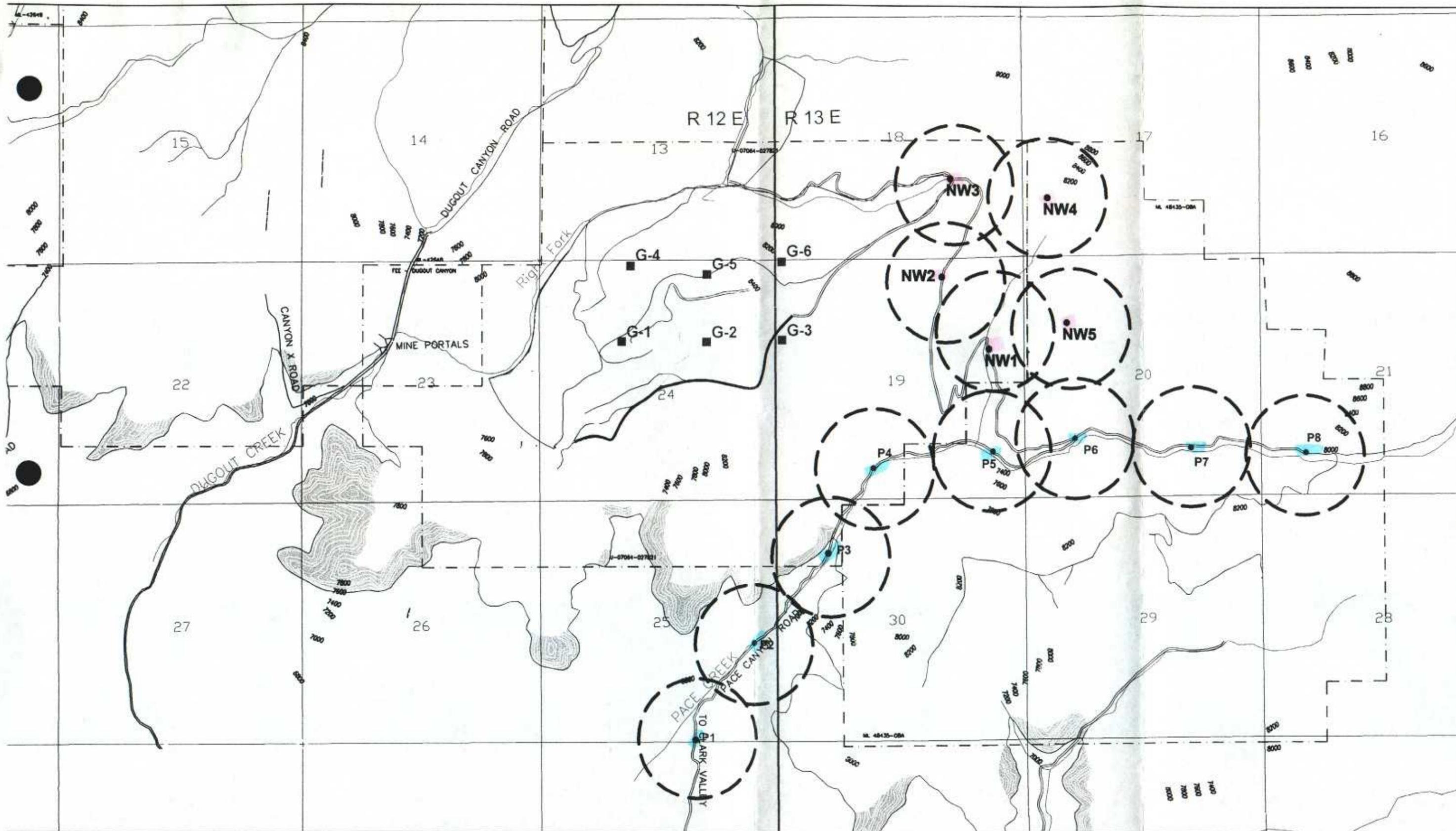
Management Unit _____ District _____ Quad Map Name(S): _____

Survey Type: Nighttime X; Daytime _____ Survey # 2 Complete Survey? Yes

Outing # 1 Aborted? _____ Results Northern Saw Whet % Area Surveyed 100%

Observers: K. NASH D. KENNICK

Call Point	Survey Method	Time			Call Method	Moon Vis?	Raptor Response											
		Start	End	Total			A/V	Sex	Age	Spp	Time	Bearing		Weather			UTM Zone	
												1 st	2 nd	Wind	Cld	PPT	E	N
Nw3	CP	2042	2102	20	V	N	A	U	U	ACE C	2045	ALL OVER THE PLACE		0	0	0	542860	4393494
Nw5	CP	2114	2134	20	V	N								0	0	0	543639	4392525
Nw4	CP	2145	2205	20	V	N								0	0	0	543540	4393295
Nw2	CP	2219	2239	20	V	N								0	0	0	542783	4392886
Nw1	CP	2242	2302	20	V	N	A	U	U	ACE C	2243	ALL OVER THE PLACE		0	0	0	543113	4392381
P8	CP	2317	2337	20	V	N								0	0	0	545562	4391697
P7	CP	2340	2400	20	V	N	A	U	U	ACE C	2342	ALL OVER THE PLACE		0	0	0	544875	4391754
P6	CP	0004	0024	20	V	N								0	0	0	544206	4391732
P5	CP	0030	0050	20	V	N								1	0	0	543612	4391691
P4	CP	0058	0118	20	V	N	A	U	U	ACE C	0059	ALL OVER THE PLACE		1	0	0	542784	4391714
P3	CP	0123	0143	20	V	N								0	0	0	542124	4391062
P2	CP	0148	0208	20	V	N								0	0	0	541714	4390563
P1	CP	0213	0233	20	V	N								0	0	0	541248	4390059



LEGEND

- ▲ Exploration Drill Holes
- Potential Gob Vent Boreholes
- 2004 MSO Call Points
- 2 Years Completed



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Map Name:
MSO Location Map
 DATE: JUNE 2004
 SCALE: SCALE 1" = 2000'

PREPARED FOR:
**Dugout Canyon Mine
 Canyon Fuel Company**
 Map Title:
PLATE 1

DRAWN BY: JOHN BENS
 AUTOCAD REF:
 DUGOUTCANYONFUELCANYONFUEL_MBO.DWG

