

0002

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

FOR FEE COAL

SECTION 30 OF TOWNSHIP 13 S RANGE 7 E

IN THE INTEREST OF



**LODESTAR ENERGY
HC 35 Box 370
HELPER, UT 84526**

JUNE 18, 2001

APPROVED
JUL 27 2001
DIV. OF OIL, GAS & MINING

Prepared By:

**MENCON LLC
23 SOUTH CARBON AVENUE – SUITE 4
PRICE, UT 84501**

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DIVISION OF
OIL, GAS AND MINING

This Notice of Intent to Conduct Minor Coal Exploration has been prepared by MENCON LLC for Lodestar Energy Inc., White Oak Mine and submitted to the State of Utah Division of Oil, Gas, and Mining for approval of a Minor Coal Exploration Permit to explore for coal on Fee status land.

Format of this application follows the regulations as they appear in the State of Utah 645 Mining Rules. The applicable regulations are underlined, followed directly by Lodestar Energy's response.

R645-200. Coal Exploration: Introduction

R645-200-100. Scope.

122. Minor Coal Exploration. Coal exploration during which 250 tons or less of coal will be removed will require Division review of a Notice of Intention to Conduct Minor Coal Exploration under the requirements of R645-201-200. Exploration during which 250 tons or less of coal will be removed on lands designated as unsuitable for surface coal mining operations under R645-103 will be subject to the requirements of R645-201-300.

Coal removed during this episode of exploration will be less than 250 tons; therefore, this application will address regulations necessary for Minor Coal Exploration under the requirements of R645-201-200. The land proposed for this exploration permit is not or has not been designated as unsuitable for surface coal mining operations under R645-103 and will not be subject to the requirements of R645-201-300.

R645-200-200. Responsibilities

210. It is the responsibility of any person seeking to conduct coal exploration under the State Program to comply with the requirements of R645-200 through R645-203.

It is the intent of Lodestar Energy Inc., White Oak Mining to comply with the coal exploration rules of the Utah State Division of Oil Gas and Mining (R645-200 through R645-203).

R645-201. Coal Exploration: Requirements for Exploration Approval.

R645-201-200. Notices of Intention to Conduct Minor Coal Exploration.

211. Notices of Intention to Conduct Minor Coal Exploration when 250 tons or less of coal will be removed will require Division review prior to conducting exploration except where exploration is planned to be conducted on lands designated

unsuitable for surface coal mining operations under R645-103: exploration on these land designated as unsuitable will be subject to the requirements of R645-201-300.

Lodestar Energy Inc., White Oak Mining and its agents will not proceed with the intended coal exploration without receiving written approval of this permit application.

220. Notices of Intention to Conduct Minor Coal Exploration will include:

221. The name, address and telephone number of the applicant seeking to explore:

Lodestar Energy Inc., White Oak Mine
HC 35 Box 370
Helper, UT 84526
(435) 448-9420

222. The name, address and telephone number of the applicant's representative who will be present at, and responsible for conducting the exploration operations:

Dave Miller
White Oak Mine
HC 35 Box 370
Helper, UT 84526
(435) 448-9420

223. A narrative and map describing the exploration area and indication where exploration will occur:

Narrative description of the proposed exploration area.

The proposed sites are located in the Wasatch Plateau Coal field south of Scofield, Utah, south of the White Oak Mine portal and office facilities and west of Clear Creek. Two drill holes are proposed to define reserves in the SW1/4 of section 30. The surface is privately owned and the coal is fee coal. The area of interest has some previous drilling results that suggest that the Upper and Lower

O'Connor seams may have potential minable reserves. The elevation of the area is about 9,600 feet above sea level.

Legal Land Description

Legal description of the area of interest for this Notice of Intent to Conduct Minor Coal Exploration is as follows:

Milton Oman Lease consisting of:
SW1/4 of Section 30, Township 13 S., Range 7 E. Salt Lake Meridian

Surface ownership in this area is in control of Lodestar Energy Inc., White Oak Mine under a lease agreement with the owner.

Legal Description of the Drill Holes

Legal description of the individual drill hole locations is as follows:

Proposed Drill Hole	Legal Description
P01-30-7	SE1/4SE1/4SW1/4 Sec. 30 T 13 S, R 7 E.
P01-30-8	SW1/4SE1/4SW1/4 Sec.30 T 13 S, R 7 E.

A map showing the location of proposed drill holes is enclosed in the Appendix.

Road access to these two drill holes will be to access this road via the White Oak Mine in the head of Whisky Canyon in The Bowl area. Access to these sites will be across surface property currently under lease by Lodestar Energy from the Oman's and Madsens/Hammond. These leases include surface access and rights of way for coal exploration and road construction. Copies of these leases are on file and available at the mine office. Minor road construction will be needed to access these holes, but this construction should not need to move large amounts of earth materials. In fact, if the slope is adequate drill equipment could travel over ground to the well sites. This would be the best method of access as there would be less disturbance and therefore, less reclamation needed. The total distance of new road or trail would be equal to approximately 1,600 feet as shown on the map.

1. A statement of the period of intended exploration; and

It is intended that exploration will commence as soon as written approval of this application is received by Lodestar Energy. This is anticipated to be in December of 2000 but will probably begin in early in 2001. After commencing, work will proceed until the exploration is complete. Reclamation activities may extend beyond the active exploration (drilling) phase. It is planned that all of the proposed drill holes applied for in this exploration plan will be completed within the year of 2001.

1. A description of the method of exploration to be used, the amount of coal to be removed and the practices that will be followed to protect the area from adverse impacts of the exploration activities and to reclaim the area in accordance with the applicable requirements of R645-202.

Method of exploration

The drill holes are shallow with the deepest hole expected to have a total depth (TD) of approximately 600 feet. Exploration will involve either rotary drilling and spot core sampling, or continuous wireline coring. In the case of rotary drilling, overlying strata will be plug drilled (open-hole drilled) to a predetermined core point. Upon reaching the predetermined core point, 20-40 ft of strata containing the targeted coal horizon would be cored. The intent of this option would be to core only the coal seams of interest and each immediate roof and floor strata. If wire line core methods are used, each hole will generally be continuously cored to the total depth. After the hole has been drilled to a predetermined target depth, the hole will be logged using geophysical borehole equipment. Geophysical data of interest would include but not limited to gamma gamma density.

Drilling equipment required for the completion of each drill hole will depend upon the method determined by the operator. In the case of plug drilling (open hole drilling), a truck-mounted rotary or skid-mounted wire line drilling rig (e.g. Gardner-Denver 2000, Longyear 44, or similar), a booster (an air compressor or group of air compressors), a water truck, a pipe trailer, a light plant, and possibly a parts car. Equipment used during construction of the drill pad will include but not be limited to: a D-9 or similar track type dozer, a rubber tired backhoe or a crawler type backhoe. Access by personnel to each drill site will be by four-wheel drive pick up truck or similar vehicle.

Amount of coal to be removed

The amount of coal to be removed will be equal to thickness of the coal times the diameter of the core. The drill hole is not expected to be larger than NX (approximately 2 inches in diameter); therefore, the maximum amount of coal to

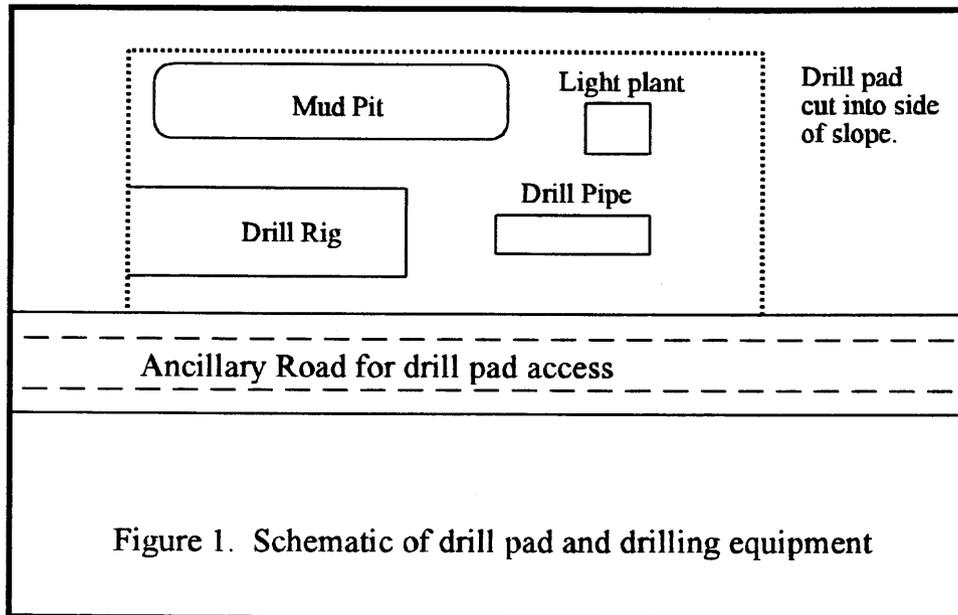


Figure 1. Schematic of drill pad and drilling equipment

upon each hole having an NX core size.

be removed from each hole per 10 ft of coal drilled would be approximately 18.3 lbs. This is based

Practices that will be followed to protect the exploration area from adverse impacts.

The drill pad sites are located adjacent to existing roads where feasible; thus, minimizing the need for new road construction. The drill pad will be constructed by widening the existing roadway, either to the left or to the right, providing enough space for drilling operations. The drill pads will be made as small as practical to accommodate the drill rig and necessary equipment. A mud pit, approximately 20 feet square by 8 ft deep, will contain the drilling medium, sediment produced from drilling, and all effluent drilling materials, preventing them from contaminating the surrounding surface water and ground water (see Figure 1 above). Site drainage will be controlled by berms, straw bales, and /or silt fencing.

R645-201-225.

There are two (2) drill locations in Section 30. The two sites take off from an existing gas well road. The roadway to these two sites will have to be cut. This section will require two (2) site locations approximately 30 feet by 60 feet each. The drill road will be opened a distance of 1200 feet a width of 20 feet of disturbance.

The acreage of disturbance will be approximately 0.64 acres. The drill road will require the replacement of approximately 5500 cubic yards of material to reclaim. This material will be replaced by a trackhoe.

The reclamation cost estimate for this portion of the project is as follows:

Replacement of soil at a rate of 2.5 cubic yards per minute at 75% efficiency. The work would take 48.9 hours or 6 days. The rental rate for the trackhoe from our records is \$125 per day and the mobilization/demobilization cost of \$800 from Price, UT. The equipment charge is \$1,550.

The revegetation cost from the OSM- Handbook for Calculation of Reclamation Bond Amounts. The drill road and site pads will be broadcast seeded using the seed mixture

recommended by DOGM. The seed cost @ \$92.25 per acre, plus the mulch @ \$250 per acre, plus broadcast seeding @ \$200 per acre. Total cost @ \$542.25 per acre. Costs were supplied by Skyline Reclamation.

Total reclamation bond estimate for the Section 30 exploration is as follows:

Total Earthmoving Costs	\$ 1,550
Total Revegetation Costs	\$ 348
Total Direct Costs	\$ 1,898
Inflated Total Direct Costs (x 1.13)	\$ 2,145
Contingencies (5% of ITDC)	\$ 108
Contractor Profit (15% of ITDC)	\$ 322
Project Management Fee (4% of ITDC)	\$ 86
Total Indirect Costs	\$ 516
Subtotal Section 30 Exploration	\$ 2,661
Total Bond Amount	\$ 4,521

$$\text{Inflation Factor} = \frac{\text{ENR CCI for current month/year}}{\text{ENR CCI for mo/yr 5 years prior}} = \frac{6273}{5532} = 1.13 \quad \frac{2/01}{2/96}$$

R645-202. Coal Exploration: Compliance Duties.

R645-202-100. Required Documents.

Each person who conducts coal exploration which substantially disturbs the natural land surface will while in the exploration area, have available a copy of the Notice of Intention to Conduct Minor Coal Exploration or Approved Major Coal Exploration Permit for review by an authorized representative of the Division upon request.

Copies of the approved Notice of Intention to Conduct Minor Coal Exploration will be distributed to the Drillers, Geologists, and any other agents of the company, and they will be available on-site for review by an authorized representative of the Division upon request.

R645-202-200. Performance Standards.

210. All coal exploration and reclamation operations which substantially disturb the natural land surface or which remove more than 250 tons of coal will be conducted in accordance with the coal exploration requirements of the State Program, and any conditions on approval for exploration and reclamation imposed by the Division.

Less than 250 tons of coal will be removed during this exploration program and the exploration activities will not substantially disturb the natural land surface. However, Lodestar Energy Inc., White Oak Mine will reclaim the disturbed area in accordance with the State Program and in accordance with the conditions on approval of the Notice of Intention to Conduct Minor Coal Exploration imposed by the Division.

220. Any person who conducts any coal exploration in violation of the State Program will be subject to the provisions of 40-10-20 of the Act and the applicable inspection and enforcement provisions of the R645 Rules.

Lodestar Energy Inc., White Oak Mine will not conduct coal exploration in violation of the State Program.

223. Operational Standards

231. Habitats of unique or unusually high value for fish, wildlife, and other related environmental values and critical habitats of threatened or endangered species identified pursuant to the Endangered species Act of 1973 (16 U.S.C. 1531 et seq.) will not be disturbed during coal exploration.

There are no known threatened or endangered species within the designated area of exploration. In addition to vegetation community mapping and identification and characterization of plant communities, research was conducted to evaluate the potential or presence of any Threatened, Endangered or Protected (T&E) plant species. T&E evaluations included consultations under the Utah natural Heritage Program and discussions with local botanists of both the BLM and USDA-Forest Service.

Wildlife and Fish

Some of the predominate mammals, which may occur in the general area include elk, deer, black bear, cougar, bobcat, coyote, badger, porcupine, snowshoe hare, golden mantled squirrel, Andy ground squirrel, red fox, gray fox, marmot, flying squirrel, and other species of small rodents.

Data from Utah Division Wildlife Resources (DWR) information indicate the following birds may be found in the ecological zone:

1. Golden Eagle (protected, common)
2. Bald Eagle (endangered, rare)
3. Prairie Falcon(protected, common)
4. American Peregrine (endangered, rare)
5. Goshawk (protected, uncommon)
6. Sharp-shinned Hawk (protected, uncommon)
7. Cooper's Hawk (protected, transient)
8. Red-tailed Hawk (protected, common)
9. Swanson's Hawk (protected, summer resident)
10. Marsh Hawk (protected, common)
11. Various species of owls (essentially all are protected and most show an abundance designation of common, summer resident, or transient)
12. Blue Grouse (protected as a game bird, common)
13. Ruffed grouse (protected as a game bird, common)
14. Sage Grouse (protected as a game bird, common)
15. California Quail (protected as a game bird, common)
16. Gambel's Quail (protected as game bird, common)
17. Chukar (protected as a game bird, common)
18. Great Blue Heron (protected, abundance unknown)
19. Various species of geese, ducks, teal scalps, mergansers, and widgeons (essentially all are protected as game birds and most show an abundance designation of either common, summer resident, or transient).

A site specific raptor survey is not necessary for this exploration. This is due to three factors: the existence of previous surveys in the area, the work will be conducted outside of nesting season, and no planned disturbance to cliff (nesting) areas. Past raptor surveys have shown sparse to rare nesting sites. There are no cliffs near the area of interest that would serve as good nesting locations. A 1995 raptor survey (Appendix A) showed a Golden Eagle roosting in a tree in section 17 and a tended nest in section 16; however, these areas were timbered in both section 16 and 17 by the logging and the nesting sites were removed. These areas are over a mile south of the area or interest and there is not any evidence of nests or nesting raptors near section 30. The mine permit also suggest that there are no

active Golden Eagle nests near the area of the loadout facilities.

Mud Creek to the east and Boarding House Creek to the south are both intermittent, at least during low precipitation years. Slaughter Housed Creek a tributary of Mud Creek is also an intermittent stream. As such they are not considered as important parts of the fishery resources of Pleasant Valley Creek or Scofield Reservoir. All drilling fluids will be contained in the mud pit until the water has evaporated and the pits will be large enough to safely contain the fluids. The drilling fluids will not pose a hazard to the three perennial streams listed above because the amount of drilling fluid use is negligible and it will be contained. Water from the streams or nearby springs may be used to supply water for drilling; this will only occur upon written permission of the owner of the water rights. The volume estimated to be removed from water sources for each drill hole will be 10,000 gallons and methods used to remove the water from these streams will insure that fish and other inhabitants will not be harmed. If water from springs and streams cannot be used, water will be trucked from the mine, or other source.

Cutthroat trout apparently migrate from Scofield Reservoir up to the confluence of Mud Creek to Eccles Creek during the yearly spawning runs. It is not known if these trout spawn in Mud Creed, but the present opinion is that Mud Creek is more important as a migratory route and as a source of food for the reservoir fishes than as spawning habitat (White Oak Mine Permit, 1999). Water needed for and during drilling processes will be pumped from this stream (Mud Creek) using screened suction type pumps from the bank. Lodestar Energy Inc. will acquire water rights, if they do not already have them, to use this water. The volume of water needed to complete each hole will be approximately 10,000 gallons. This amount will depend upon the stability and condition of each drill hole. Methods used to remove water from this stream will insure that fish and other inhabitants will not be harmed.

Reptiles and amphibians species of the area may include; Boreal Toad, Leopard Frog, Northern Sagebrush Lizard, Rocky Mountain Rubber Boa, Great Basin Gopher Snake, Great Basin Rattlesnake, Utah Milk Snake, and the Utah Mountain Kingsnake.

232.

All Roads or other transportation facilities used for coal exploration will comply with the applicable provisions of R645-301-358, R645-301-512.250, R645-301-526.200, R645-301-527.100, R645-301-527.230, R645-301-534.100, through R645-301-534.300, R645-301-742.420, R645-301-752.200, and R645-301-762.

R645-301-358. Protection of Fish, Wildlife, and Related Environmental Values. The operator will, to the extent possible using the best technology currently available, minimize disturbances and adverse impacts on fish, wildlife and related environmental values and will achieve enhancement of such resources where practicable.

Lodestar Energy Inc., White Oak Mine will to the extent possible and using the best technology currently available, minimize disturbances and adverse impacts on fish, wildlife, and related environmental values and will achieve enhancement of such resources where practicable. Any road construction performed during this project will conform to R645-301-358.

R645-301-512.250. Primary Roads. The professional engineer will certify the design and construction or reconstruction of primary roads as meeting the requirements of R645-301534.200 and R645-301-742.420.

Primary roads will not be constructed during this project as defined in R645-301-527.120-123. All roads constructed for this project will be classified as ancillary as defined in R645-301-527.120-123, and will be reclaimed upon completion of each drill hole. Ancillary roads will be limited only to the duration of the drilling project.

R645-301-526.200. Utility Installation and Support Facilities.

Utility Installation and Support Facilities will not need to be installed for this minor coal exploration project, so this is not applicable.

R645-301-527.100. The plan must classify each road.

Access to proposed drill holes P01-30-07 and P01-30-08 will be ancillary roads, as per R645 527.120-130. Ancillary road construction to the drill site may need to be constructed although it may only be minor, just enough to provide access to sites. Any road construction occurring will be reclaimed after the project is completed.

R645-301-527.230. A maintenance plan describing how roads will be maintained throughout their life to meet the design standards throughout there use.

Ancillary roads constructed to access the drilling sites will only be used for a short period of time, which will necessitate little or no maintenance.

Road use is only estimated to be for an average period of three weeks per hole. Regular maintenance of ancillary roads should not be necessary and would only encourage traffic from sight seeing happy wanderers. During times of wet weather, some light maintenance such as grading or gravel fill could be necessary, but maintenance is not anticipated to be needed. Primary roads will be graded prior to and during the exploration activities as needed. The roads will also be watered if needed to control dust caused by travel.

R645-301-527.240 A commitment that if a road is damaged by a catastrophic event, such as a flood or earthquake, the road will be repaired as soon as practical after the damage has occurred.

All roads used to conduct the intended minor coal exploration, if damaged by a catastrophic event, such as a flood or earthquake, will be repaired as soon as practical after the damage has occurred.

R645-301-534.100. Roads will be located, designed, constructed, reconstructed, used, maintained, and reclaimed so as to:

534.110. Prevent or control damage to public or private property.

Maintenance required for roads used to access the drill site, if needed, will enhance the value of the road for private property owners in the area. All roads used to complete the intended minor coal exploration will be located, designed, constructed, reconstructed, used, maintained, and reclaimed in a manner that would prevent or control damage to public or private property. Activities not directly associated with the drilling project, such as off road driving, camping, cooking, will not take place by employees, contractors, or other representatives of Lodestar Energy Inc., White Oak Mine; those who are associated with this project as mentioned above will be required to honor and respect the rights of private property owners (e.g. gates will be closed and trash will be removed).

534.120. Use non-acid-forming or non toxic-forming substances in road surfacing:

Roads used during this minor coal exploration project will not be surfaced; nor, will any chemicals be used to aid in dust suppression such as Mag-chloride (MgCl) etc. Water is the only medium that would be applied to the road surface to suppress dust (see Maintenance) if needed.

534.130. Have, at a minimum, a static safety factor of 1.3 for all embankments.

If embankments are necessary for ancillary road construction, they will have at a minimum, a static safety factor of 1.3. However, at this time it is not foreseen that ancillary roads will need embankments. Primary roads will not be constructed.

534.140. Have a schedule and plan to remove and reclaim each road that would not be retained under an approved postmining land use.

None of the ancillary roads constructed to access drill pads are expected to be retained under an approved postmining land use. The schedule and plan would be to, immediately or as soon as plausible, and after completion of each drill hole, remove and reclaim the ancillary road within 6 months of drill hole completion. The plan would also include methods of removal and reclamation in accordance to standards mentioned later in this application (see R645-202-240. Reclamation Standards).

534.150. Control or prevent erosion, siltation and the air pollution attendant to erosion by vegetating or otherwise stabilizing all exposed surfaces in accordance with current, prudent engineering practices.

Ancillary roads will be used only to access drill pads. Drilling should only last one month maximum at each proposed site and should not pose an erosion, siltation, or air pollution threat. If conditions warrant, control or prevention of erosion, siltation and air pollution attendant to erosion will be implemented according to R645-310-534.150.

534.200. To ensure environmental protection and safety appropriate for their planned duration and use, including consideration of the type and size of equipment used, the design and reconstruction of roads will incorporate appropriate limits for grade, width, surface materials, and any necessary design criteria established by the Division.

The existing roads are unimproved, low quality, back road, type, sufficient for mobilization of drill and minor construction equipment. These roads will remain in the same condition they were found unless improvements are necessary for completion of the project. Ancillary roads constructed to access drill pads will be constructed appropriately for their intended use and duration. Size of equipment will also determine the level of

construction needed. It is not anticipated that these ancillary roads be more than two track roads allowing vehicular and drilling equipment travel to and from the drill pad. Any design criteria established by the Division and deemed necessary will be used by the applicant (Lodestar Energy Inc., White Oak Mine).

534.300

Primary Roads. Primary roads will meet the requirements of R645-301-358, R645-301-527.100, R645-301-527.230, R645-301-534.100, R645-301-534.200, R645-301-542.600, R645-301-542.600, and R645-301-762, any necessary design criteria established by the Division, and the following requirements. Primary roads will:

Not applicable because primary roads will not be constructed during this project.

R645-202-233.

Topsoil will be separately removed, stored, and redistributed on areas disturbed by coal exploration activities as necessary to assure successful revegetation or as required by the Division.

Topsoil, if any, will be separated from poorer quality soils, removed and stored adjacent to the site until the drilling and exploration activities are complete. Upon hole completion and reclamation of the pad and road, all stored topsoil, if any, will be redistributed over areas that were disturbed.

R645-202-234.

Diversions of overland flows and ephemeral, perennial, or intermittent streams will be made in accordance with R645-301-742.300.

It is anticipated that no diversions will be necessary for the duration of this project. If it becomes necessary, diversions of overland flows will be made in accordance with R645-301-742.300. Water bars, ditches, and/or culverts will be used if needed to control overland flow.

R645-202-235.

Coal exploration will be conducted in a manner which minimizes disturbance of the prevailing hydrologic balance in accordance with R645-301-356.300 through R645-301-356.400, R645-301-512.240, R645-301-513.200, R645-301-514.300, R645-301-515.200, R645-301-533.100 through R645-301-533.600, R645-301-731.100 through R645-301-731.522, R645-301-731.800, R645-301-733.220, through R645-301-733.240, R645-301-742.200 through R645-301-742.300, R645-301-743, and R645-301-763. The Division may specify additional measures which will be adopted by the person engaged in coal exploration.

356.300

Siltation structures will be maintained until removal is authorized by the Division and the disturbed area has been stabilized and revegetated. In no case will the structure be removed sooner than two years after the last augmented seeding.

Lodestar Energy Inc., White Oak Mine will maintain siltation structures until removal is authorized by the Division and the disturbed areas have been stabilized and revegetated.

356.400.

When a siltation structure is removed, the land on which the siltation structure was located will be revegetated in accordance with the reclamation plan and R645-301-353 through R645-301-357.

The land where siltation structures were located will be revegetated in accordance with the reclamation plan and R645-301-353 through R645-301-357. Vegetative cover will be diverse, effective, and permanent; comprised of species native to the area, or introduced species where desirable and necessary to achieve the approved post-exploration land use and approved by the Division, and it will be capable of stabilizing the soil surface from erosion. Disturbed areas will be planted during the first normal period for favorable planting conditions after the replacement of the plant-growth medium, which is the planting time generally accepted locally for the type of plant materials selected. A suitable mulch and other soil stabilizing practices will be used on all areas that have been regraded and covered by topsoil or topsoil substitutes.

512.240.

Impoundments. The professional engineer will use current, prudent, engineering practices and will be experienced in the design and construction of impoundments and certify the design of the impoundment according to R645-301-743.

Impoundments as defined by the Division will not be used or constructed during this minor coal exploration project. Therefore, this is not applicable for this minor coal exploration project.

513.200.

Impoundments and sedimentation ponds meeting the size or other qualifying criteria of MSHA, 30 CFR 77.216 (a) will comply with the requirements of MSHA, 30 CFR 77.216 (see R645-301-533.600, R645-301-842.222, and R645-301-742.223).

Impoundments or sedimentation ponds meeting the size or other qualifying criteria of MSHA, 30 CFR 77.216(a) will not be used or constructed during this minor coal exploration project. Therefore, this is not applicable. R645-301-514.300, R645-301-515, and R645-301-533.100-600 are not applicable.

731.100.

Hydrologic-Balance Protection.

The hydrologic-balance will be protected throughout this minor coal exploration project using currently approved and tested techniques, unless other wise directed by the Division.

731.110.

Ground-water Protection. In order to protect the hydrologic balance, coal mining and reclamation operations will be conducted according to the plan approved under R645-301-731 and the following:

731.111.

Groundwater quality will be protected by handling earth materials and runoff in a manner that minimizes acidic, toxic or other harmful infiltration to groundwater systems and by managing excavations and other disturbances to prevent or control the discharge of pollutants into the groundwater:

Berms, straw bails, siltation fences, and other currently approved methods of controlling runoff will be used to minimize acidic, toxic or other harmful infiltration to groundwater systems. Earth materials will be stockpiled in a manner so as to minimize acidic, toxic, or other harmful infiltrations to groundwater systems. Berms will be built to protect stockpiled earth materials, if any, from runoff. Mud pits for drilling operations will be excavated in a manner that would prohibit minimize infiltration of acidic, toxic, or other harmful materials to groundwater systems. Pits will be lined with impermeable material or self contained mobile mud pits will be used if needed. Surface water quality will be protected form acid forming runoff and surface flow rates will be protected by capturing all drilling fluids in a mud pit where evaporation will decease the volume of fluids and the balance will be contained in the pit and the very near surface strata. The mud pit will be built in a manner that will ensure protection against pollution of the surface water.

731.112.

For the purposes of Surface coal mining and reclamation activities groundwater quantity will be protected by handling earth materials and runoff in a manner that will restore approximate premining recharge

capacity of the reclaimed area as a whole, excluding coal mine waste disposal areas and fills so as to allow the movement of water to the groundwater system.

Not applicable because this exploration project will not include surface coal mining.

731.120. Surface water protection. In order to protect the hydrologic balance, coal mining and reclamation operations will be conducted according to the plan approved under R645-301-731 and the following:

731.121. Surface water quality will be protected by handling earth materials, groundwater discharges and runoff in a manner that minimizes the formation of acidic or toxic drainage; prevents, to the extent possible using the best technology currently available, additional contributions of suspended solids to streamflow outside the permit area; and, otherwise prevent water pollution. If drainage control, restabilization and revegetation of disturbed areas, diversion of runoff, mulching or other reclamation and remedial practices are not adequate to meet the requirements of R645-301-731.100 through R6545-301-731.522, R645-301-731.800 and R645-301-751. The operator will use and maintain the necessary water treatment facilities or water quality controls; and

Surface water quality will be protected by handling earth materials, groundwater discharges, and runoff in a manner that minimizes the formation of acidic or toxic drainage, additional contributions of suspended solids to streamflow outside the permit area, and otherwise prevent water pollution. This will accomplished using to the extent possible the best technology currently available.

731.122. Surface water quantity and flow rates will be protected by handling earth materials and runoff approved under R645-301-731.

Surface water quality will be protected form acid forming runoff and surface flow rates will be protected by capturing all drilling fluids in a mud pit where evaporation will decease the volume of fluids and the balance will be contained in the pit and the very near surface strata. The mud pit will be built in a manner that will ensure protection against pollution of the surface water.

731.200. Water Monitoring.

731.210. Groundwater Monitoring. Groundwater monitoring will be conducted according to the plan approved under R645-301-731.200 and the following:

At the present time, these proposed drill holes are concerned with gathering data regarding coal reserves in section 30 of T 13 S., R. 7 E. It is possible that one or more of these holes when completed will be used as a monitoring well. If and when a decision is made and groundwater monitoring is conducted, it will be done according to the plan approved under R645-301-731.200 and the following: R645-301-731.211 through R645-301-731.222.

713.800. Water Rights and Replacement. Any person who conducts surface coal mining and reclamation activities will replace the water supply of an owner of interest in real property who obtains all or part of his or her supply of water of domestic, agricultural, industrial, or other legitimate use from an underground or surface source, where the water supply has been adversely impacted by contamination, diminution, or interruption proximately resulting from the surface mining activities. Baseline hydrologic information required in R645-301-624.100 Through R645-301-624.200, R645-301-625, R645-301-626, R645-301-723 through R645-301-724.300, R645-301-724.500, R645-301-725 through R645-301-731, and R645-301-031.210 through R645-301-731.223 will be used to determine the extent of the impact of mining upon ground water and surface water.

Not applicable to this minor coal exploration permit.

742.200. Siltation Structures.

742.210. General Requirements.

742.211. Additional contributions of suspended solids and sediment to streamflow or runoff outside the permit area will be prevented to the extent possible using the best technology currently available.

Not applicable.

742.212. Siltation structures for an area will be constructed before beginning any coal mining and reclamation operations in that area and, upon construction, will be certified by a qualified registered professional

engineer to be constructed as designed and as approved in the reclamation plan.

742.213. Any siltation structures which impounds water will be designed, constructed and maintained in accordance with R645-301-512.240, R645-301-514.300, R645-301-515.200, R645-301-533.100 through R645-301-533.600, R645-301 through 645-301-733.224, and R645-301-743.

742.214. For the purposes of Underground coal mining and reclamation activities, any point-source discharge of water from underground workings to surface waters which does not meet the effluent limitations of R645-301-751 will be passed through siltation structure before leaving the permit area.

Construction of siltation structures is not foreseen to be necessary for this drilling project. If conditions arise that necessitate the construction of temporary siltation structures, then they will be constructed and designed as needed, using straw bails or silt fences.

742.220. Sedimentation Ponds.

Mud pits used in the drilling process are not sedimentation ponds as defined by the Division. They do allow solids to be removed from the drilling fluid; however, it is done as a process of core and plug drilling, not to meet water quality standards or effluent limitations. Water used in the drilling process does not leave the permit area. Therefore, R645-301-742.221-R645-301-742.240 are not applicable to this minor coal exploration permit.

742.300 Diversions.

Addressed under response to R645-202-234 above.

763. Siltation Structures.

Siltation Structures will not be constructed during this project; thus, this regulation is not applicable.

763.100. Siltation Structures will be maintained until removal is authorized by the Division and the disturbed area has been stabilized and revegetated. In no

case will the structure be removed sooner than two years after the last augmented seeding.

Siltation Structures will not be constructed during this project; thus, this regulation is not applicable.

763.200.

When the siltation structure is removed, the land on which the siltation structure was located will be regarded and revegetated in accordance with the reclamation plan and R645-301-358, R645-301.356, and R645-301-357. Sedimentation ponds approved by the Division for retention as permanent impoundments may be exempted from this requirement.

As stated in the response to R645-301-742.214, siltation structures will not be constructed during this project, however, alternate sediment control measures would consist of using straw bails and silt fences as temporary siltation structures, if needed.

R645-202-236.

Acid- or toxic-forming materials will be handled and disposed or in accordance with R645-301-731.110, R645-301-731.300, and R645-301-553.260. The Division may specify additional measures which will be adopted by the person engaged in coal exploration.

Acid-forming or toxic-forming materials will not be used on this project. Drilling mud will be mixed on site, but is not known to form acid or toxic materials. Drill cuttings will be contained and buried in the mud pit upon evaporation of the drilling fluid. Core samples of coal seams and surrounding roof and floor strata will be taken off the site. Also, see response to 731.110 above. Fuel spill contamination will be contained, collected and disposed of, off property, in an approved manner.

R645-202-240

Reclamation Standards.

R645-202-241

If excavations, artificially flat areas, or embankments are created during exploration, these areas will be returned to the approximate original contour promptly after such features are no longer needed for coal exploration.

There is a possibility that three of the 2 holes will need to have artificially flat areas created for drill pads. These will need to be large enough for the mud pit, pipe storage, drill rig, a light plant, and other equipment necessary to complete the drilling. When drilling is complete, these drill

pads will be returned to the approximate original contour promptly after such features are no longer needed for coal exploration.

R645-202-242

All areas disturbed by coal exploration activities will be revegetated in a manner that encourages prompt revegetation and recovery of a diverse, effective, and permanent vegetative cover. Revegetation will be accomplished in accordance with the following:

All areas disturbed by coal exploration activities will be revegetated in a manner that encourages prompt revegetation as set forth in R645-202-242. A seed mixture designed to give rapid cover and provide good diversity will be used to revegetate disturbed areas.

R645-202-242.100

All areas disturbed by coal exploration activities will be seeded or planted to the same seasonal variety native to the areas disturbed. If the land use of the exploration area is intensive agriculture, planting of the crops normally grown will meet the requirements of R645-202-242.100; and

Areas disturbed during this minor coal exploration project are not of intensive agriculture land use, but a seed mixture of the same seasonal variety native to the areas disturbed will be used.

R645-202-242.200

The vegetative cover will be capable of stabilizing the soil surface from erosion.

The exploration site will have trash and debris removed, mud pit backfilled, and topsoil distributed upon completion of exploration activity. The drill pad will be returned to the approximate original contour, scarified, and re-seeded with the seed mix approved by the Division. Preexisting roads will be returned to a condition equal to or better than their conditions prior to commencement of the exploration activities. Seeding of rehabilitated drill pad and access roads will be performed during the first normal period for favorable planting conditions after replacement of the plant-growth medium. Mulching and other soil stabilizing practices will be used if needed to stabilize slopes from soil surface erosion. This is a copy of a seed mixture faxed to LASR Geo Consulting the last week of October 2000 after we conversed about it on the phone.

Seed mixture for exploration near White Oak Mine	
Common and Scientific Names	Pound pure live seed per acre
Western Wheat grass; <u>Elymus smithii</u>	2
Thickspike Wheatgrass	2
Kentucky Bluegrass	0.5
Lewis Flax; <u>Lintum lewisii</u>	0.5
Basin Wild Rye	1
Bluebunch Wheatgrass	2
Louisiana Sage	0.1
Yarrow	0.1
Rocky Mountain Penstemon	0.5
Total	8.7

R645-202-243 Each exploration hole, borehole, well, or other exposed underground opening created during exploration will be reclaimed in accordance with R645-301-529, R645-301-551, R645-301-631, R645-301-738, and R645-301-765.

Upon completion of the drill holes and when all possible geologic and geophysical information has been gathered, each hole will be cemented from bottom to the collar of the hole (total depth). This will be the last task that the drillers will perform before the drill equipment is moved from the pad.

R645-202-244 All facilities and equipment will be promptly removed from the exploration area when they are no longer needed for exploration, except for those facilities and equipment that the Division determines may remain to:

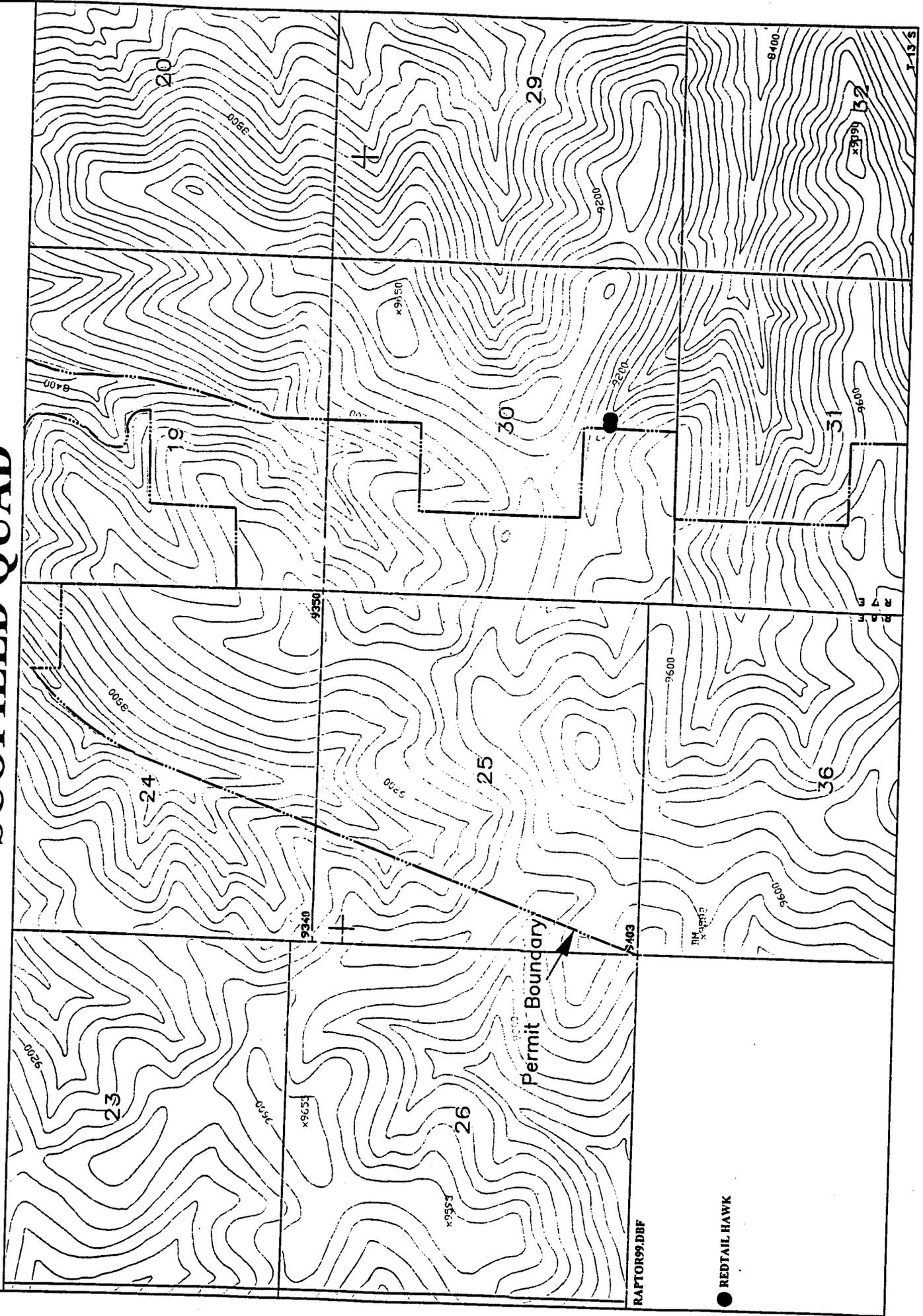
R645-202-244.100 Provide additional environmental data:

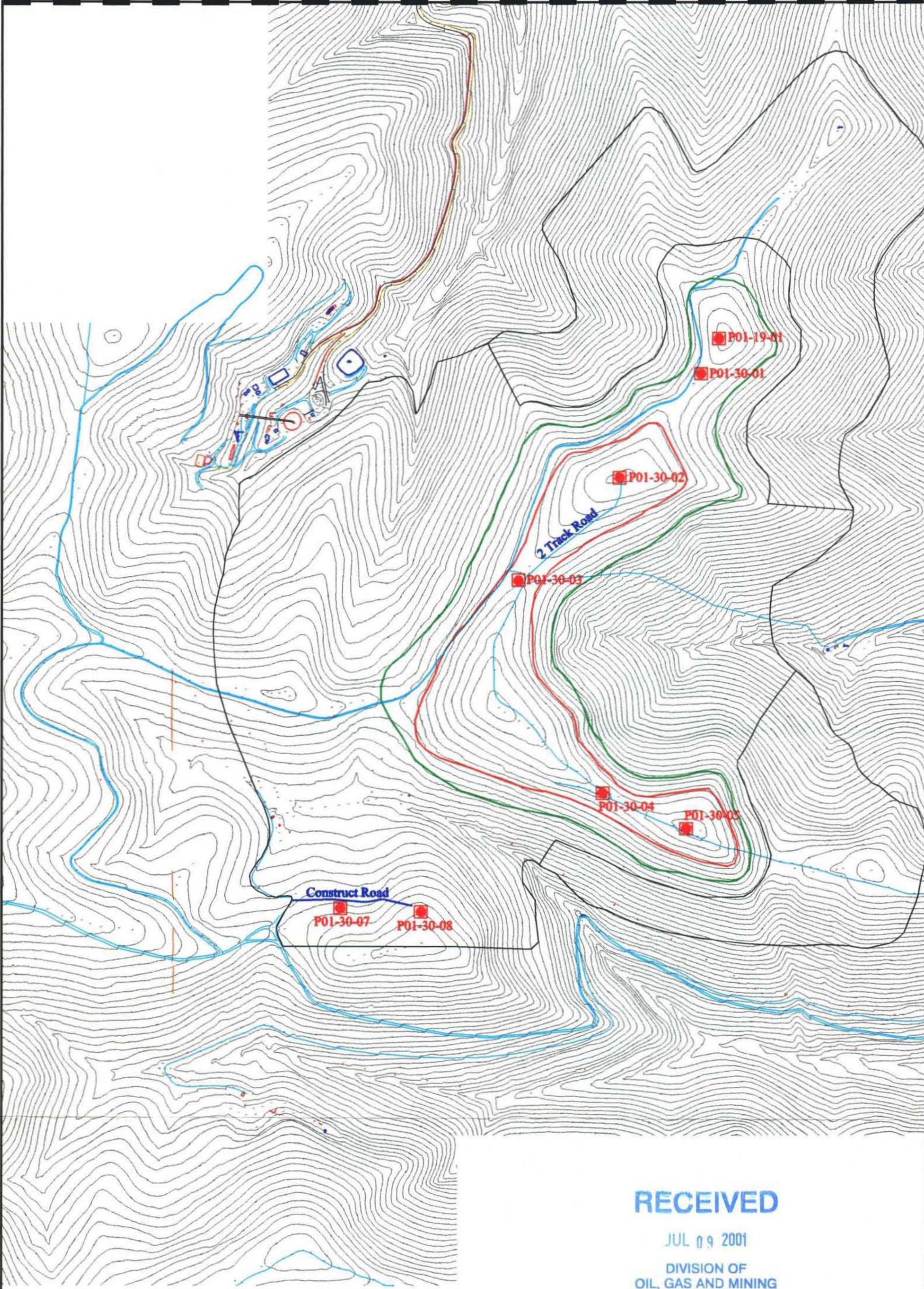
R645-202-244-200 Reduce or control the on-site and off-site effects of the exploration activities; or

R645-202-244-300 Facilitate future coal mining and reclamation operations by the person conducting the exploration.

All equipment will be promptly removed from the exploration area upon completion of the well and reclamation will be conducted as described in response to R645-202-242.200 above.

RAPTOR SURVEY SCOFIELD QUAD





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JUL 09 2001

DIVISION OF
OIL, GAS AND MINING

LEGEND:

MSHA ID# 42-01280

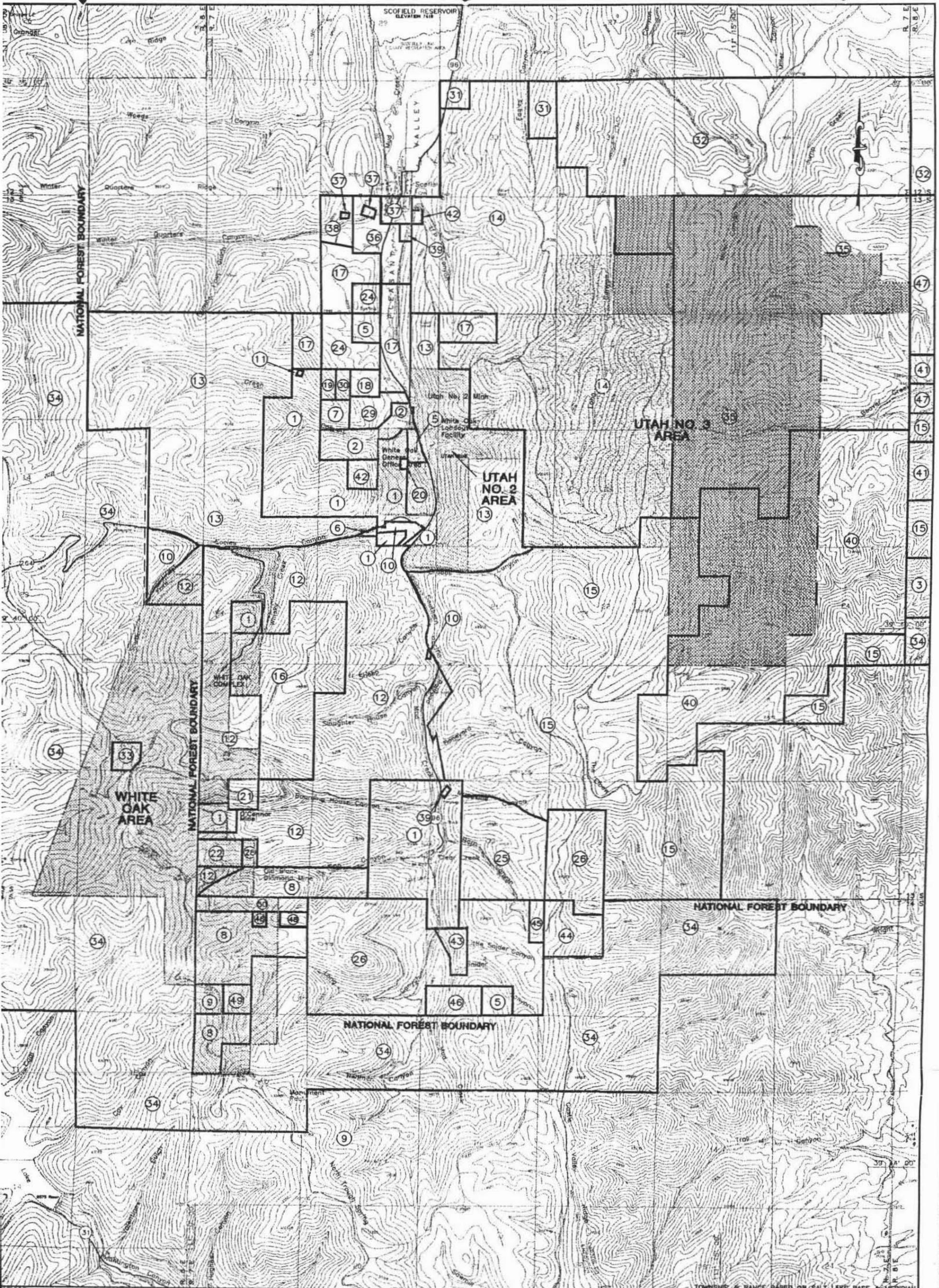
-  **DRILL SITE**
-  **PROPOSED ROAD**
-  **TRAIL**
-  **UNIMPROVED ROAD**



LODESTAR ENERGY, INC.
WHITE OAK MINE #2
HC 35 BOX 370 HELPER, UTAH 84526

TITLE: **PROPOSED DRILL HOLES**

SIZE B	DRAWN BY: LODESTAR ENGINEERING	RR DWG NO.:	C:\Rick\WhiteOak\ strip.dwg	REV.
Scale: 1:800	Date: July 05, 2001	Sheet:		



Legend:

13 MARAKIS & LIODAKIS	27 CALVIN J. JACOB TR, ET AL	41 UTAH POWER & LIGHT
14 WHITE OAK	28 PAUL & MARGIE JACOB	42 NIELSON LTD.
15 ALPINE SCHOOL DISTRICT	29 CLEGG	43 ROBERT & LINDA JEWES
16 PIERCE & KENNICK	30 CARBON CO. SCH. DIST.	44 STILSON & MILLER
17 UTAH NATURAL GAS CO.	31 JACK L. JENSEN, ET AL	45 OTANI & TANNER
18 D.S. CHURCH	32 BILL B. JONES	46 PAUL E. JACOB TR.
19 HELLENIC CHURCH	33 ARTHUR J. ANDERSON	47 KENETH & JENVA OLSEN
20 LUTHERAN HIGH SCHOOL	34 QUESTAR PIPE LINE CO.	48 PAUL BARTON & MARGIE & CALVIN JACOB
21 DAVE CUNNINGHAM	35 FOREST SERVICE	49 STAMATAKIS & KELLY
22 ALBERT BAILEY	36 K.T. HIGGINSON & CO., INC.	50 C. TEERLINK
23 COASTAL STATES	37 ANTHONY THEIS	51 STERLING BOWEN
24 WTN. STATES TELEPHONE	38 MARY L. SEAMONS	52 RESCUE MED
25 MILTON OMAN	39 MARGIE JACOB	
	40 WILLIAM A. & MATTIE CORNARY	

WHITE OAK MINING & CONSTRUCTION CO., INC.
SCOFIELD ROUTE, HELPER, UTAH 84526

PREPARED BY: **HANSEN & LUCE**

TITLE: **SURFACE OWNERSHIP MAP**

SCALE: **1" = 2000'**

DRAWN BY: **J. HANSEN** DATE: **FEB. 1995**

APPROVAL: **WO** DATE: **FEB. 1995**

DRAWING NO. **1.1-2**

SHEET: