

007/005 #2



**Coastal States
Energy Company**

A SUBSIDIARY OF THE COASTAL CORPORATION

The Energy People

0034

June 12, 1991

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DIVISION OF
OIL GAS & MINING

Mr. Lowell P. Braxton
Associate Director, Mining
Division of Oil, Gas and Mining
355 West North Temple
3 Triad Center, Suite 350
Salt Lake City, Utah 84180-1203

Dear Lowell:

Pursuant to R614-201-200, Coastal States Energy Company is hereby applying for a "Minor Coal Exploration Permit" in the Woods Canyon area north of the current Skyline permit area. Application for Federal Coal Exploration License was filed with the State Office of the Bureau of Land Management in March of this year under application number UT-U68087.

Coastal States Energy Company is herewith submitting three (3) copies of an Application for Minor Coal Exploration Permit.

If during review of the Application additional information or clarification is necessary, please notify us.

Sincerely yours,

Kenneth E. May
Director of Environmental & Administrative Affairs

KEM/ak/1442

enclosures

APPLICATION FOR MINOR EXPLORATION PERMIT

**Woods Canyon Area
Carbon County, Utah
Manti-LaSal National Forest**

**Exploration Plan
March 4, 1991**

R614-201-221 Applicant

Coastal States Energy Company
Vernal J. Mortensen, Vice President
175 East 400 South, Suite 800
Salt Lake City, Utah 84111
801-596-7111

R614-201-222 Person Present During Exploration

Mark Bunnell
Skyline Coal Company
P.O. Box 719
Helper, Utah 84526
801-637-7925

R614-201-223 Narrative

The Woods Canyon exploration program involves Federal surface and coal rights in the Woods Canyon area of Carbon County about 3 miles northwest of Scofield, Utah. The requested permit area encompasses 1280 acres, more or less, located approximately 1.5 miles north of the existing Skyline permit area. The coal is managed by the U.S. Department of the Interior, Bureau of Land Management and the surface is managed by the U.S. Department of Agriculture Forest Service. Map 1 shows the boundaries of the proposed exploration area. The area included within the Woods Canyon license is tabulated as follows:

T.12.S., R.6E., Salt Lake Meridian, Carbon County, Utah
Section 26: S1/2, SW1/4
Section 34: All
Section 35: Lots 1 - 8

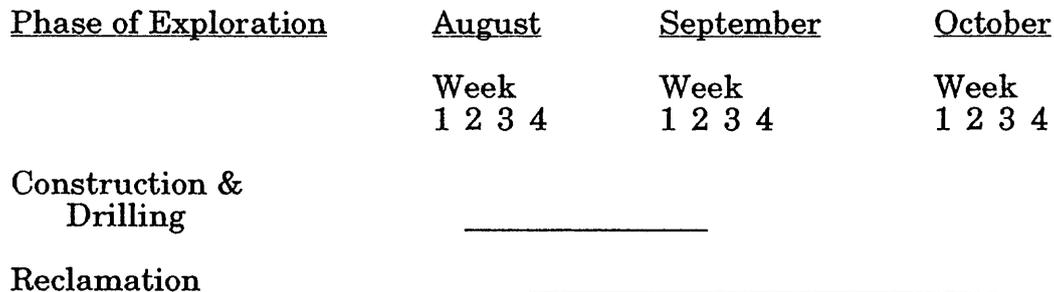
T.13.S., R.6E., Salt Lake Meridian, Carbon County, Utah
Section 3: Lots 1 - 4
Containing 1232.78 acres

Drill site locations and projected depths are tabulated as follows:

<u>Site</u>	<u>Location</u>	<u>Projected TD (feet)</u>
91-26-1	T12S, R6E NW, NE, 34	2300
91-35-1	T12S, R6E SW, SW, 35	1900
91-35-2	T12S, R6E, NE, SW, 35	1700

R614-201-224 Timetable

The proposed drilling program is scheduled to begin in August, 1991. Current plans allow for both phases (drilling and reclamation) of the program to run simultaneously. The following bar graph demonstrates the time schedule for each phase of the program.



The total plan, including re-seeding, can be completed in 6 to 9 weeks, providing there are no unforeseen delays.

R216-201-225 Description

Drilling Method

The drilling method of data collection will involve rotary drilling and core sampling. Only the coal seams and immediate roof and floor will be core drilled. The overlying material will be plug-drilled to predetermined core points. Exploration equipment for the drilling phase will include one truck-mounted rotary drilling machine. Backup and auxiliary equipment may include but not be limited to a water truck, a D-8 Caterpillar or similar track-type dozer, a track-mounted backhoe, an electric generator, personnel trailer, and electric and mechanical geophysical logging equipment. Access by personnel to drilling sites will be by four-wheel drive pick-up truck.

Application for Minor Coal Exploration Permit
 Exploration Plan
 Page 3

The size of the drill holes will range from 4 3/4 inches in diameter to 9 5/8 inches in diameter. Six (6) or seven (7) inch surface casing will be inserted through the surface alluvium and certain other intervals depending on hole conditions. Approximately 100 - 200 feet of core will be recovered per hole. The average depth of the drill holes will be approximately 2000 feet. The following suite of logs is planned to be run on each drill hole: natural gamma, gamma-gamma density, resistivity, and caliper. When desired, this suite may be expanded to include any or all of the following: sonic, spontaneous potential, dipmeter, neutron-neutron, verticality, and/or temperature.

Where possible, all drill hole sites will be located on existing roads and trails. When it is not possible to locate sites on or along these existing facilities, a temporary access trail and level bench will be constructed. Where it is practical and/or stipulated, topsoil and vegetation will be removed and stored for use in reclamation activities.

Existing roads and trails will be utilized wherever possible, and movement by equipment across undisturbed terrain will be kept to a minimum. If existing roads or trails are disturbed by the proposed exploration activities, they will be bladed and returned to a condition equal to or better than their condition prior to commencement of the proposed exploration activities. New or additional roads will be constructed only immediately prior to the drilling operations; at the conclusion of the exploration activity, they will be reclaimed.

Estimated construction and drilling related to disturbed area is tabulated as follows:

<u>Site</u>	<u>Required Construction</u>	<u>Road Length (Feet)</u>	<u>Est. Disturbed Area</u>
91-26-1	Drill Pad	N/A	0.3 Acre
91-35-1	Drill Pad & New Road	5200	1.7 Acre
91-35-2	Drill Pad & New Road	2100	0.9 Acre
Total			2.9 Acres

The disturbed area was calculated using a 12' average road width and an average 100 ft. X 120 ft. drill site.

The following is a description of additional individual locations and site-specific information:

91-26-1 - This hole is located adjacent to an existing road which was improved during drilling of an oil and gas well a number of years ago. Little, if any road upgrading will be necessary.

91-35-1 - Approximately 5200 feet of new access road will have to be constructed along the ridge top from an existing jeep trail. The pad will be located in an open area.

91-35-2 - Another 2100 feet of new access road will be extended from 91-35-1 along the side ridge extending to the northeast. The drill pad will be located near the center of the ridge.

Each exploration site will have trash and debris removed, mud pits (at drill locations) backfilled, and topsoil (when removed) distributed upon completion of exploration activity. All roads and trails constructed or used during the exploration program will be rehabilitated. Existing roads will be returned to a condition equal to or better than their condition prior to commencement of the exploration activities. New roads which have been constructed will be leveled, scarified, water barred where needed, and re-seeded once their existence is no longer needed for exploration activities. The seeding of rehabilitated locations and access roads will be accomplished in the first favorable seeding season following completion of the exploration program. The re-establishment of vegetation on reclaimed sites and abandoned roads, after exploration activities are concluded, is the planned method to prevent possible soil erosion.

After the topsoil is re-spread, the surface will be scarified, if necessary. Upon recommendations of the surface management agency, fertilizer and seed will be applied at the proper mix and rate specified.

Drilling Equipment

Equipment expected to be utilized during various phases of the exploration program is tabulated as follows:

LIST OF EQUIPMENT

<u>Exploration Phase</u>	<u>Types of Equipment</u>	<u>Size or Capacity</u>	<u>Qty.</u>	<u>Comments</u>
Drilling	Rotary Drill Rig	GD2000 or similar	1	All this equipment will be used only for drilling activities.
	Water Truck	4000 Gal.	2	
	Pipe Truck	Dual-axle flat bed	2	
	Core Trailer	8' X 28'	1	
	Elect. Generator	50 KW	1	
	Travel Trailer	8' X 25'	1	
	Air Compressors	750 CFM	2	
Support & Reclamation	Bulldozer	D8 Caterpillar or similar	1	All equipment will be rubber tired except the Bulldozer and backhoe which are track mounted.
	Road Grater	D14 Caterpillar or similar	1	
	Backhoe	Rubber tire Tractor-type	1	
	Fuel Truck	2000 Gal.	1	

Amount of Load to be Removed

Ideally, 3 inch diameter coal core will be removed from each of the seams in each of the 3 holes. While exact seam thickness is unclear at the proposed locations, it can be assumed that less than a total of 300 pounds of coal will be removed throughout the entire proposed program.

The removed coal will be used for quality and geotechnical testing.

Reclamation and Protection from Adverse Impacts

All earth excavated in any phase of the proposed exploration activities will be treated the same. Where stipulated, the topsoil will be removed and stockpiled for re-distribution during road and site reclamation. Drainage will be controlled to prevent concentrated runoff across exposed soils. Each site or disturbed area will be reshaped to approximately the original land contours leaving a roughened

Application for Minor Coal Exploration Permit
Exploration Plan
Page 6

surface. The areas will be scarified where excessive compaction has occurred. The reclaimed sites will be prepared to be fertilized and seeded at the earliest suitable times.

All debris and trash will be disposed of properly, accumulation over an extended period of time before removal will not be allowed. Location of disposal will be off in an approved sanitary landfill.

Vegetation and topsoil will be removed from an approximate 0.3-acre area. Topsoil will be stored adjacent to the site. It will be located so as not to be washed away or driven over.

The drill hole locations will require mud pits to be dug to contain the drilling medium. These pits will be constructed to a sufficient size to contain all effluent drilling materials. Pits of this size are estimated to be 12 ft. by 30 ft. with an average depth of about 6 ft. To prevent overflow, the waste pits will be pumped out and the waste fluids will be disposed of properly.

Map 1 shows roads to be constructed. These are tabulated as follows:

<u>From</u>	<u>To</u>	<u>Length (mi.)</u>
Jeep Trail	91-35-1	1.0
91-35-1	91-35-2	<u>0.4</u>
		1.4

Finalized road routes will be selected in consultation with the U.S. Forest Service. The routes will be cleared by a BLM and Forest Service approved archaeologist. Roads will be constructed with a 12 foot average width. Construction will allow appropriate drainage on steep grades through use of sloping and water bars. Culverts will be placed across streams or seeps where necessary.

Reclamation work will begin within 2 to 3 days of hole plugging and the site will be returned to approximate original contour, topsoil will be spread and seeded with a USFS approved seed mixture. Constructed access roads will be scarified and any culverts will be removed. The road bed will then be seeded with the approved seed mix.

The planned seed mixture is tabulated as follows:

<u>Species</u>	<u>Lbs./Acre, P.L.S.</u>
Slender Wheatgrass (<i>Agropyron trachycaulum</i>)	3
Smooth Brome Grass (<i>Bromis inermis</i>)	3
Mountain Brome	2
Perennial Rye Grass (<i>Lolium perenne</i>)	2
Orchard Grass (<i>Dactylis Glomerata</i>)	2
Timothy (<i>Phleum pratensis</i>)	2
Yellow Sweet Clover (<i>Melilotus officinalis</i>)	0.5
Ladake Alfalfa (<i>Medicago sativa-Lakak</i>)	0.5
Mountain Aster (<i>Aster adsendens</i>)	0.25
Hard Fescue	1.0
Rocky Mountain Penstemon	0.5
Yarrow	<u>0.1</u>
	17.35

Prior to any seeding, the USFS will be consulted to ensure proper seeding mixture.

All applicable requirements of R614-202 will be followed in relation to road and site construction and maintenance, as well as road and site reclamation.

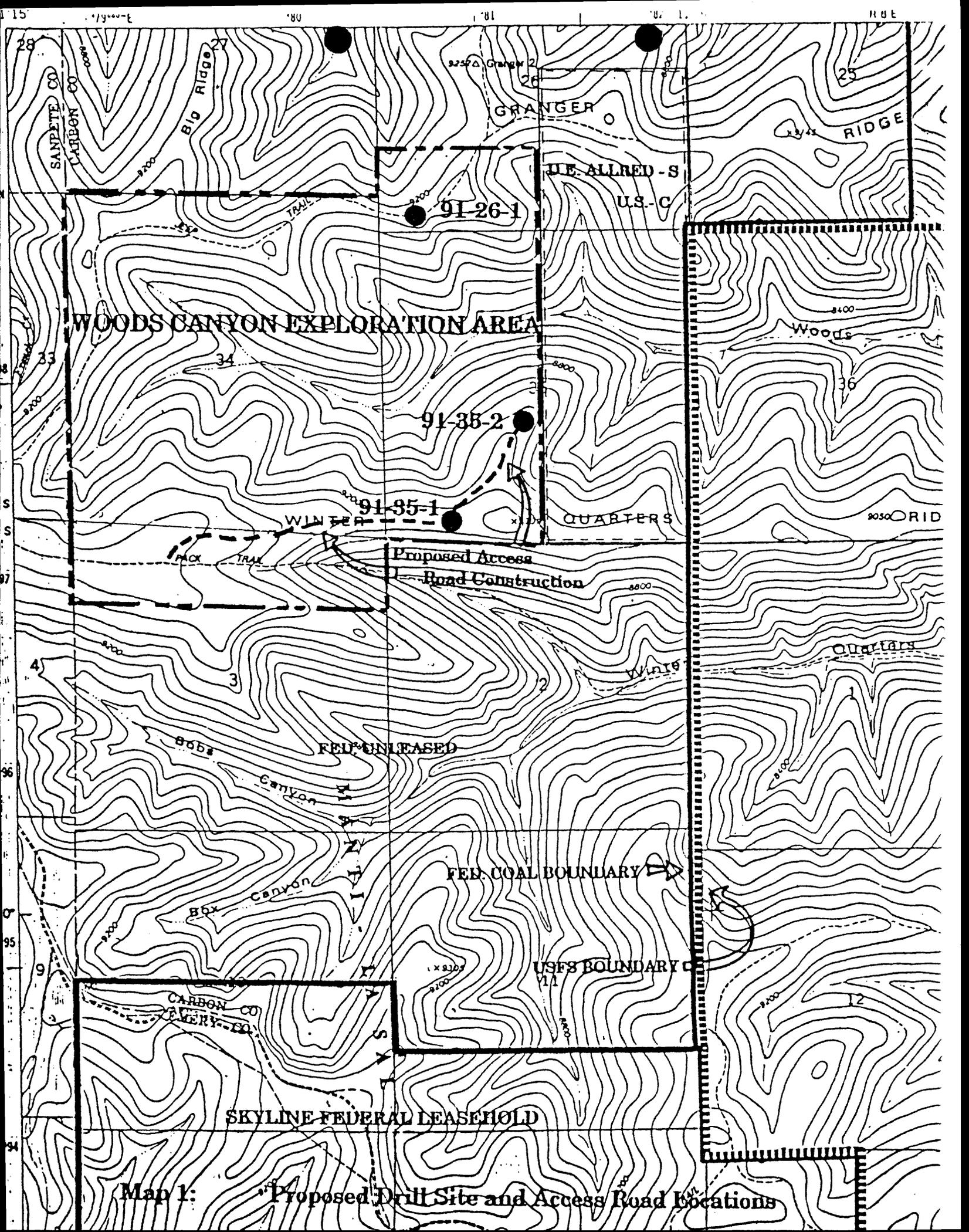
Drill Hole Plugging

Upon completion, each drill hole will be cemented to at least 50 feet above the highest mineable coal seam (4 feet thick or greater) or aquifer. The remainder of the hole to within 5' of the surface will be filled with a plugging gel with a ten-minute gel strength of 20 lbs./100 square ft. The five-foot void at the surface will be cemented to the surface and an approved marker will be placed in the five foot plug.

Drill Hole to Monitoring Well Conversion

At least one of the drill holes may be converted to a ground water monitoring well. Site selection as well as detailed plans of well construction and monitoring will be worked out through consultation with DOGM, the Forest Service and the BLM. The selected monitoring well(s) will have a locked cap to prevent unauthorized access.

Figure 1 shows the proposed design. The well would be utilized for monitoring water level only.



Map 1: Proposed Drill Site and Access Road Locations

PEREZOMETER DESIGN

6-5-91
MB

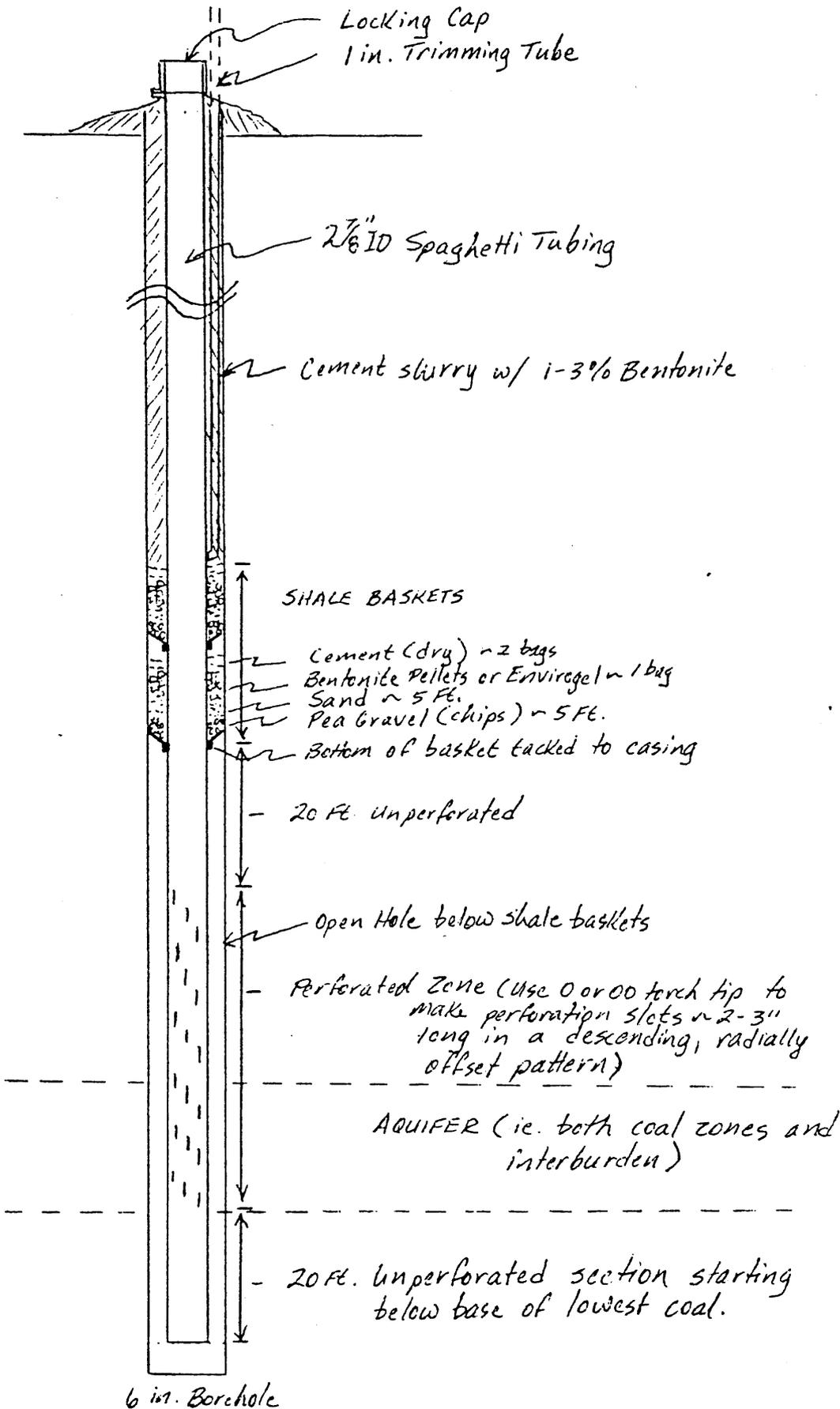


FIGURE 1