

Plugged & Abandoned - 7/13/79

FILE NOTATIONS

Entered in MID File	Checked by Chief
Location Map Pinned	Approval Letter
Card Indexed	Disapproval Letter

COMPLETION DATA:

Date Well Completed 7/18/79	Location Inspected
TA.....	Bond released
GW..... OS..... PA.....	State or Fee Land ...

LOGS FILED

Driller's Log.....
Electric Logs (No.).....
E..... I..... Dual I Lat..... GR-N..... Micro.....
BHC Sonic GR..... Lat..... MI-L..... Sonic.....
CCLog..... Others.....

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

TYPE OF WORK
DRILL DEEPEN PLUG BACK

TYPE OF WELL
OIL WELL GAS WELL OTHER SINGLE ZONE MULTIPLE ZONE

NAME OF OPERATOR
Energy Reserves Group, Inc.

ADDRESS OF OPERATOR
P.O. Box 3280 Casper, Wyoming 82602

LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)
at surface 1,098' FEL, 1,594' FSL (NE SE)
at proposed prod. zone

DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*

DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any)
16. NO. OF ACRES IN LEASE 2,506.14

DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT. N.A.
19. PROPOSED DEPTH 5,200'

ELEVATIONS (Show whether DF, RT, GR, etc.)
GRD 7,813' (ungraded)

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
3 1/2"	13 3/8"	48#	500' ±	500 SX
3 1/2"	9 5/8"	36# & 40#	4,138' ±	360 SX
2"	5 1/2"	15# & 17#	5,200' ±	200 SX

Energy Reserves Group, Inc. proposes to drill the above referenced well with rotary tools from surface to a T.D. The anticipated zone of completion is the Ferron Sand. No coring is planned. Two DST's may be run depending on shows. Copies of all logs will be submitted upon completion of the well.

ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout prevention program, if any.

SIGNED William J. Grant TITLE Field Services Administrator DATE 9-21-78
(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

APPROVED BY _____ TITLE _____

CONDITIONS OF APPROVAL, IF ANY:

CASE DESIGNATION AND SERIAL NO. U-10344
6. IF INDIAN, ALLOTTEE OR TRIBE NAME _____
7. UNIT AGREEMENT NAME _____
8. FARM OR LEASE NAME South Clear Creek
9. WELL NO. _____
10. FIELD AND POOL, OR WILDCAT USA Lynda #1
11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA Wildcat
12. COUNTY OR PARISH 13. STATE Sec 17, T15S, R7E
Emery Utah



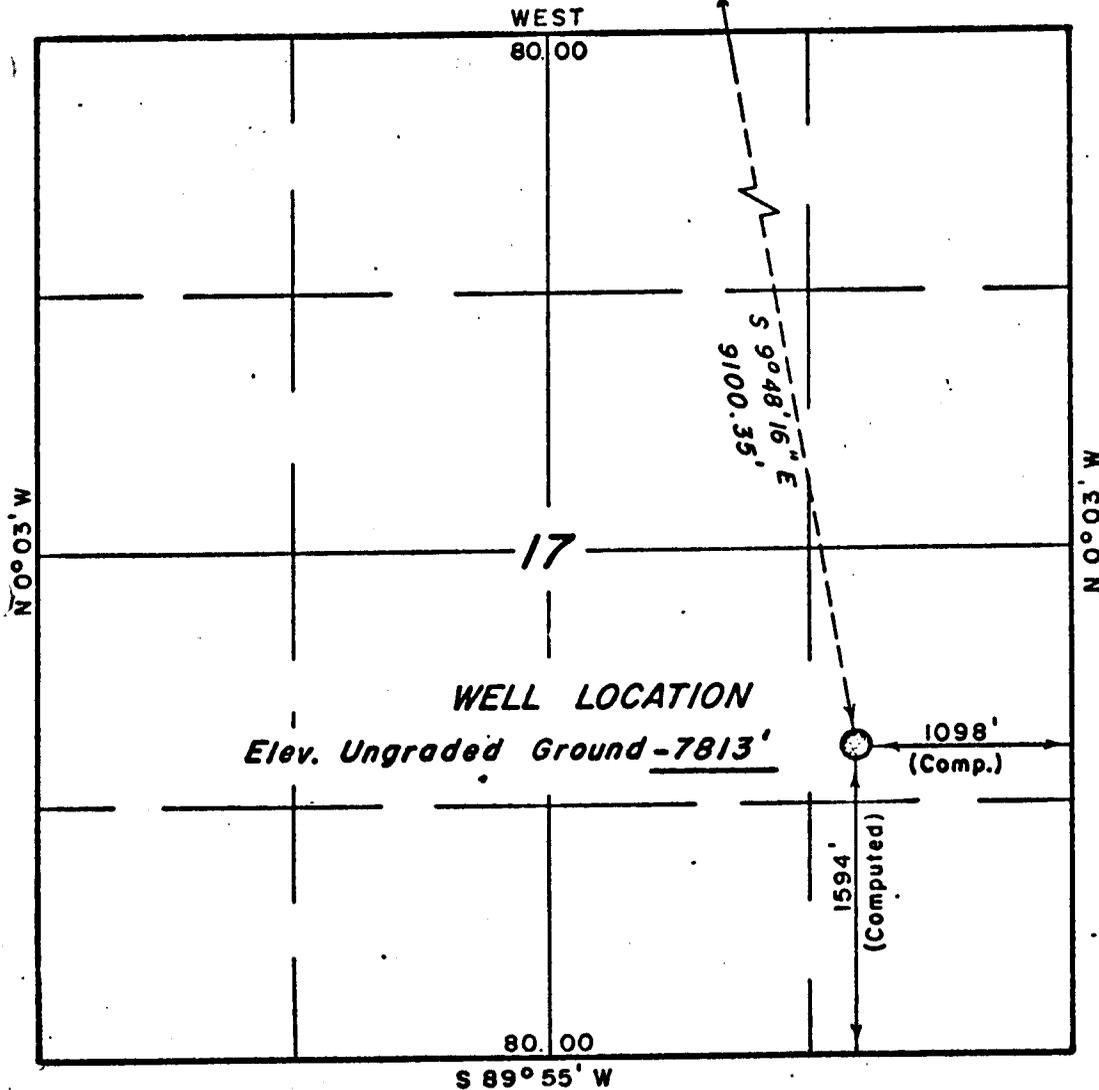
PROJECT

ENERGY RESERVES GROUP

T 15 S, R 7 E, S.L.B. & M.

Well location located as shown
in the NE 1/4 SE 1/4 Section 17,
T 15 S, R 7 E, S.L.B. & M. Emery
County, Utah.

To The North 1/4 Cor. Sec. 8,
T15S, R7E, S.L.B. & M.



NOTE:

Basis of Bearings is from a Solar
Observation.



CERTIFICATE

THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM
FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY
SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE
BEST OF MY KNOWLEDGE AND BELIEF.

Sam Stewart

REGISTERED LAND SURVEYOR
REGISTRATION NO 3154
STATE OF UTAH

UINTAH ENGINEERING & LAND SURVEYING
P. O. BOX Q - 110 EAST - FIRST SOUTH
VERNAL, UTAH - 84078

SCALE	1" = 1000'	DATE	9/13/78
PARTY	GS SS DS	DJ	REFERENCES GLO Plat

FROM: : DISTRICT GEOLOGIST, MF SALT LAKE CITY, UTAH

TO : DISTRICT ENGINEER, O&G, SALT LAKE CITY, UTAH

SUBJECT: APD MINERAL EVALUATION REPORT

LEASE NO. U-10344

OPERATOR: Energy Resources Group, Inc.

WELL NO. USA Lynda #1

LOCATION: NE SE sec. 17, T. 15S., R. 7E., SLM

Emery County, Utah

Operator predicted stratigraphy and predicted hydrocarbon zones are adequate? Yes
If not, USGS predictions are:

1. Fresh water aquifers probable below surface casing? Yes. Fairly probable in the Emery Sand, estimated top \approx @ 640'

2. Other probable leasable minerals? Coal possible but unlikely in Emery and likely in Genion Sand (top \approx @ 4,140'). Also may hit coal in Dakota Sand (top \approx @ 5,040').

3. Are hazardous fluids or gases likely? No.

4. Are abnormal conditions of pressure or temperature likely? No.

5. Will any strata penetrated need special mud, casing, or cementing beyond that proposed in the APD? Probably not.

6. Is additional logging or sampling needed? No.

7. References - remarks: USGS Files, Salt Lake City, Utah

Is location within 2 miles of a KGS? Yes. Is less than 1 mile south of Clear Creek "D" KGS

Signature: Donald C. Alvord

Date: 09-05-78

Memorandum

To: District Oil and Gas Engineer, Mr. Edward Gynn

From: Mining, Supervisor, Mr. Jackson W. Moffitt

Subject: Application for Permit to Drill (form 9-331c) Federal oil and gas lease No. U-10344

1. The location appears potentially valuable for:

- strip mining.*
- underground mining.**
- has no known potential.

2. The proposed area is

- under a Federal lease for _____ under the jurisdiction of this office.
- not under a Federal lease under the jurisdiction of this office.
- Please request the operator to furnish resistivity, density, Gamma-Ray, or other appropriate electric logs covering all formations containing potentially valuable minerals subject to the Mineral Leasing Act of 1920.

*If location has strip mining potential:

Surface casing should be set to at least 50 feet below the lowest strip minable zone at _____ and cemented to surface. Upon abandonment, a 300-foot cement plug should be set immediately below the base of the minable zone.

**If location has underground mining potential:

The minable zones should be isolated with cement from a point 100 feet below the formation to 100 feet above the formation. Water-bearing horizons should be cemented in like manner. Except for salines or water-bearing horizons with potential for mixing aquifers, a depth of 4,000 feet has been deemed the lowest limit for cementing.

Signed William J. House

United States Department of the Interior
Geological Survey
8440 Federal Building
Salt Lake City, Utah 84138

Usual Environmental Analysis

Lease No. U-10344

Operator Energy Reserve Group, Inc.

Well No. USA Lynda #1

Location 1,098'FEL, 1,594'FSL(NE SE) Sec. 17 T. 15 S. R. 7 E.

County Emery State Utah Field Wildcat
U.S.

Status: Surface Ownership Forest Service Minerals Oil and Gas

Joint Field Inspection Date 10-5-78

Participants and Organizations:

Roscoe C. Gillespie, Drlg. Supt. Energy Reserves Group, Inc.

Wm. H. Fiant, Filed Service Admr. Energy Reserves Group, Inc.

Wm. H. Boley, U.S. Forest Service Manti Lasal Nat. Forest

Dwain McGarry, U.S. Forest Service Manti Lasal Nat. Forest

Ira W. Hatch, Dist. Forest Ranger Manti Lasal Nat. Forest

John L. Nault, Pet. Tech. Salt Lake City

Related Environmental Analyses and References:

(1)

(2)

Analysis Prepared by: J. L. Nault, Petroleum Engineering Technician

Date 10-5-78 Reviewed by: George Diwachak, Env. Scientist
Salt Lake City

Proposed Action:

On September 25, 1978, Energy Reserve Group filed an Application for Permit to Drill the No. 1 exploratory well, a 5,200-foot test of the Ferron Sand Stone Formation; located at an elevation of 7,813 feet in the NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 17, T. 15 S., R. 7 E., on Federal mineral lands and Public surface; lease No. U-10344. An objection was raised to the wellsite, it was moved to approximately 100 feet north and NW. This did not change the 1/4 1/4 1/4 coordinates. There was no objection raised to the access road (a new plat will be submitted.)

A rotary rig would be used for the drilling. An adequate casing and cementing program is proposed. Fresh-water sands and other mineral-bearing formations would be protected. A Blowout Preventor would be used during the drilling of the well. The proposed pressure rating should be adequate. Details of the operator's NTL-6 10-Point Subsurface and 13-Point Surface Protection Plans are on file in the USGS District Office in Salt Lake City, Utah and the USGS Northern Rocky Mountain Area Office in Casper, Wyoming.

A working agreement has been reached with the U.S. Forest Service, the controlling surface agency. Rehabilitation plans would be decided upon as the well neared completion; the surface management agency would be consulted for technical expertise on those arrangements.

The operator proposes to construct a drill pad 150 feet wide x 200 feet long and a reserve pit 25 feet x 100 feet. A new access road would be constructed 50 feet off of State Highway 31. The operator proposed to construct production facilities on disturbed area of the proposed drill pad. If production is established, plans for a gas flowline would be submitted to the appropriate agencies for approval. The anticipated starting date is when approved and duration of drilling activities would be about 30-45 days.

Location and Natural Setting:

The proposed drillsite is approximately 18 miles NW of Huntington, Utah, the nearest town. A good road runs to within 50 feet of the location. This well is in the Manti Lasal National Forest.

Topography

Fairly level between mountains with Huntington Creek crossing highway just north of the proposed platform. Mountains are steep just west of platform and across road to the east. Well wooded with spruce, aspen, and native trees.

Geology:

The surface geology is MASUK Shale (top of MANCOS). The solid is light brown sandy clay--rocky about 18" deep. No geologic hazards are known near the drill site. Seismic risk for the area is minor. Anticipated geologic tops are filed with the 10-Point Subsurface Protection Plan.

Approval of the proposed action would be conditioned that adequate and sufficient electric/radioactive/density logging surveys would be made to locate and identify a potential mineral resource. Production casing and cementing would be adjusted to assure no influence of the hydrocarbon zones through the well bore on these minerals. In the event the well is abandoned, cement plugs must be placed with drilling fluid in the hole to assure protection of any mineral resources.

The potential for loss of circulation would exist. Loss of circulation may result in the lowering of the mud levels, which might permit exposed upper formations to blow out or to cause formation to slough and stick to the drill pipe. A loss of circulation would result in contamination due to the introduction of drilling muds, mud chemicals, filler materials, and water deep into the permeable zone, fissures, fractures, and caverns within the formation in which fluid loss is occurring. The use of special drilling techniques, drilling muds, and lost circulation materials may be effective in controlling lost circulation.

A geologic review of the proposed action has been furnished by the Area Geologist, U.S. Geological Survey, Salt Lake City, Utah.

The operator's drilling, cementing, casing, and blowout prevention programs have been reviewed by the Geological Survey engineers and determined to be adequate.

Soils:

No detailed soil survey has been made of the project area. The top soils in the area range from a sandy clay to a clay type soil. The soil is subject to runoff from rainfall and has a high runoff potential and sediment production would be high. The soils are mildly to moderately alkaline and support the salt-desert shrub community. The pinon-juniper association is also present but very minimal. Some scattered aspen and mountain brush is above the pinon-juniper level.

Top soil would be removed from the surface and stockpiled. The soil would be spread over the surface of disturbed areas when abandoned to aid in rehabilitation of the surface. Rehabilitation is necessary to prevent erosion and encroachment of undesired species on the disturbed areas. The operator proposed to rehabilitate the location and access roads per the recommendations of the U.S. Forest Service.

Approximately 1½ acres of land would be stripped of vegetation. This would increase the erosional potential. Proper construction practice, construction of water bars, reseeding of slope-cut area would minimize the impact.

Air:

No specific data on air quality is available at the proposed location. There would be a minor increase in air pollution due to emissions from rig and support traffic engines. Particulate matter would increase due to dust from travel over unpaved dirt roads. The potential for increased air pollution due to leaks, spills, and fire would be possible.

Relatively heavy traffic would be anticipated during the drill-operations phase, increasing dust levels and exhaust pollutants in the area. If the well was to be completed for production, traffic would be reduced substantially to a maintenance schedule with a corresponding decrease of dust levels and exhaust pollutants to minor levels. If the project results in a dry hole, all operations and impact from vehicular traffic would cease after abandonment. Due to the limited number of service vehicles and limited time span of their operation, the air quality would not be substantially reduced.

Toxic or noxious gases would not be anticipated. Dust will be a problem. The last 1,000 feet of the hole will be drilled with air. Dust will go to blow down pit (25 x 25 x 8) and will be dampened with water spray mist. The pit is to be arranged so water will flow to reserve pit which will be lined.

Precipitation:

Annual rain fall should range from about 15" to 18" at the proposed location (Huntington Creek flows continuously).

Wind direction is basically controlled by topography. Winds blow predominately from the SW down the Canyon during the day and up the Canyon during the evening. Regionally, winds are medium and gusty occurring from west to east. The climate is semi-arid with abundant sunshine, hot summers and cold winters with temperature variations on a daily and seasonal basis.

Surface Water Hydrology:

15 to 18 inches of rainfall mostly from winter snow and spring rains. Steep mountains and 7,813 foot altitude causes heavy snows. Drainage is into Huntington Creek, thence into Rephael River, thence into the Colorado River. Some additional erosion would be expected in the area

since surface vegetation would be removed. If erosion became serious, drainage systems such as water bars and dikes would be installed to minimize the problem. The proposed project should have minor impact on the surface water systems. The potentials for pollution would be present from leaks or spills. The operator is required to report and clean-up all spills or leaks.

Ground Water Hydrology:

Some minor pollution of ground water systems would occur with the introduction of drilling fluids (filtrate) into the aquifer. This is normal and unavoidable during rotary drilling operations. The potential for communication, contamination and comingling of formations via the well bore would be possible. The drilling program is designed to prevent this. There is need for more data on hydrologic systems in the area and the drilling of this well may provide some basic information as all shows of fresh water would be reported. Water production with the gas would require disposal of produced water per the requirements of NTL-2B. The depths of fresh water formations are listed in the 10-Point Subsurface Protection Plan. There would be no tangible effect on water migration in fresh water aquifers. The pits would be lined. If fresh water should be available from the well, the owner or surface agency may request completion as a water well if given approval.

The drill site is within 250 feet of Huntington Creek, flowing annually. Pit will be mostly built of fill with east side possibly on highway right-of-way. Some diggings, but only 3 or 4 feet to stay out of underground water. (State highway to be contacted relative to temporary use of right-of-way for east side fill of pit.)

Vegetation:

Several species of conifers, spruce, aspen, numerous shrubs and native grass, mountain brush sage, snowberry, poa, wheat grasses, mountain brome, etc. Plants in the area of a mountain shrub sub-alpine types grading to the pinon-juniper association at lower elevations.

Proposed action would remove about 1½ acres of vegetation. Removal of vegetation would increase the erosional potential and there would be a minor decrease in the amount of vegetation available for grazing.

The operator proposes to rehabilitate the surface upon completion of operations, as requested by the U.S. Forest Service.

Wildlife:

Animal and plant inventory has been made by the U.S. Forest Service, Manti LaSal National Forest. No endangered plants or animals are known to habitat on the project area. The fauna of the area consists predominantly of mule deer, coyotes, rabbits, foxes, and varieties of small ground squirrels and other types of rodents and various types of reptiles.

The area is used by man for the primary purpose of grazing domestic livestock and sheep. The birds of the area are raptors, finches, ground sparrows, magpies, crows, and jays.

Social-Economic Effect:

An on the ground surface archaeological reconnaissance would be required prior to approval of the proposed action. Appropriate clearances would then be obtained from the surface managing agency. If a historic artifact, an archeological feature or site is discovered during construction operations; activity would cease until the extent, the scientific importance, and the method of mitigating the adverse effects could be determined by a qualified cultural resource specialist.

There are no occupied dwellings or other facilities of this nature in the general area. Minor distractions from aesthetics would occur over the lifetime of the project and is judged to be minor. All permanent facilities placed on the location would be painted a color to blend in with the natural environment. Present use of the area is grazing, recreation, and oil and gas activities.

Noise from the drilling operation may temporarily disturb wildlife and people in the area. Noise levels would be moderately high during drilling and completion operations. Upon completion, noise levels would be infrequent and significantly less. If the area is abandoned, noise levels should return to pre-drilling levels.

The site is visible from State Highway 31, a major road. After drilling operations, completion equipment would be visible to passersby of the area and would present a major intrusion.

The economic effect of one well would be difficult to determine. The overall effect of oil and gas drilling and production activity are significant in Emery County, Utah.

But should this well discover a significant new hydrocarbon source, local, state, and possibly national economics might be improved. In this instance, other development wells would be anticipated, with substantially greater environmental and economic impacts.

Should the wellsite be abandoned, surface rehabilitation would be done according to the surface agency requirements and to USGS's satisfaction. This would involve leveling, contouring, reseeding, etc., of the location and possibly the access road. If the well should produce hydrocarbons, measures would be undertaken to protect wildlife and domestic stock from the production equipment.

There are national, state, or local parks, wildlife refuges or ranges, grasslands, monuments, trails or other formally designated recreational facilities near the proposed location. A dispersed type undesignated camping area is about 100 yards north of the drillsite across Huntington Creek. The area on both sides are used for hunting, fishing, and back-packing during appropriate seasons.

The proposed location is within the Ferron and Price planning unit of the U.S. Forest Service management planning framework. This Environmental Assessment Record was compiled by the Bureau of Land Management, the surface managing agency of the Federal surface in the area. The study includes additional information on the environmental impact of oil and gas operations in this area and gives land use recommendations. The EAR is on file in the agency's State offices and is incorporated herein by reference.

Waste Disposal:

The mud and reserves pits would contain all fluids used during the drilling operations. A trash pit would be utilized for any solid wastes generated at the site and would be buried at the completion of the operations. Sewage would be handled according to State sanitary codes. For further information, see the 13-Point Surface Plan.

Alternative to the Proposed Action:

1) Not Approving The Proposed Permit--The Oil and Gas Lease Grants The Lessee Exclusive Right To Drill For, Mine, Extract, Remove And Dispose Of All Oil and Gas Deposits.

Under leasing provisions, the Geological Survey has an obligation to allow mineral development if the environmental consequences are not too severe or irreversible. Upon rehabilitation of the site, the environmental effects of this action would be substantially mitigated, if not totally annulled. Permanent damage to the surface and sub-surface would be prevented as much as possible under USGS and other controlling agencies supervision with rehabilitation planning reversing almost all effects. Additionally, the growing scarcity of (oil and gas) should be taken into consideration. Therefore, the alternative of not proceeding with the proposed action at this time is rejected.

2) Minor relocation of the wellsite and access road or any special, restrictive stipulations or modifications to the proposed program would not significantly reduce the environmental impact. There are no severe vegetative, animal or archaeological-historical-cultural conflicts at the site. Since only a minor impact on the environment would be expected, the alternative of moving the location is rejected. At abandonment, normal rehabilitation of the area such as contouring, reseeding, etc., would be undertaken with an eventual return to the present status as outlined in the 13-Point Surface Plan.

3) This whole area is in the review and evaluation process roadless area #2. Lease was let prior to this review. The operator, at the suggestion of the Forest Service, will move location approximately 100 feet northwest. This will be on a lower incline and dirt moved to level the plat--form will be somewhat less. The platform will be turned about 180 degrees with the reserve pit and blow down pit about on same location as platted. This will put elevator door in correct position. Rig is a cardwell pulling only double joints of drill pipe. (Good for only about 6,000' total.) By slightly turning the platform a few feet to the north digging into the side of the mountain (15' cut) can be avoided. Moving platform 100' will raise the level of the whole operation with less dirt moving. The approximately cut yards will be less--approximately 155' cut and 155' fill with top soil saved and piled only. Operator to submit new map showing new location--cut and fill and will advise when they plan for a sight inspection again and with dirt contractor along as well as the surveyor.

Adverse Environmental Effects Which Cannot Be Avoided:

Surface disturbance and removal of vegetation from approximately 1½ acres of land surface for the lifetime of the project which would result in increased and accelerated erosional potential. Grazing would be eliminated in the disturbed areas and there would be a minor and temporary disturbance of wildlife and livestock. Minor induced air pollution due to exhaust emmissions from rig engines of support traffic engines would occur. Minor increase in dust pollution would occur due to vehicular traffic associated with the operation. If the well is a gas producer, additional surface disturbance would be required to install production pipelines. The potential for fires, leaks, spills of gas, oil or water would exist. During the construction and drilling phases of the project, noise levels would increase. Potential for sub-surface damage to fresh water aquifers and other geologic formations exists. Minor distractions from aesthetics during the lifetime of the project would exist. If the well is a producer, an irreplaceable and irretrievable committment of resources would be made. Erosion from the site would eventually be carried as sediment in Huntington Creek. The potential for pollution would exist through leaks and spills.

Determination:

This requested action does not constitute a major Federal action significantly affecting the environment in the sense of NEPA, Sec. 102(2)(C).

Date

District Engineer
U.S. Geological Survey
Conservation Division
Oil and Gas Operations
Salt Lake City District

Conservation Division
8440 Federal Building
Salt Lake City, Utah 84138

December 22, 1978

Reed C. Christensen, Supervisor
Manti-LaSalle National Forest
350 E. Main Street
Price, Utah 84501

Re: Energy Reserves Group Lynda No. 1
Sec. 17, T. 15S., R. 7E.
Lease U-10344
Emery County, Utah

Dear Mr. Christensen:

On October 12 and 13, Jim Kohler of our Mineral Evaluation Group informally contacted Carter Reed of your staff and Barry Johnson of the Price Ranger District concerning information on the surface resources in the vicinity of Energy Reserves Group's proposed well in Huntington Canyon (Sec. 17, T. 15S., R. 7E., SLM). This information is to be used by this office to prepare an environmental analysis on the proposed test.

To date, none of the requested information has been received, so I would like to formally request any information you might have concerning the following resources on or near the proposed wellsite: 1) Soils, 2) Wildlife and Vegetation, 3) Status of any Threatened or Endangered Species (plant or animal), 4) Cultural Resources, 5) Any Scenic and Recreational Values, 6) Grazing, 7) Status of Land-Use Planning for the Area.

I would appreciate it if you could send any of this information that is readily available as soon as possible.

Sincerely yours,

(ORIG. SCD.) E. W. GYNN

E.W. Gynn
District Engineer

bcc: Well File ✓
George Diwachak

JK/mc

1. The geologic name of the surface formation.

Masuk Shale (Top of Mancos)

2. The estimated tops of important geologic markers.

Emery Sand	638'
Blue Gate Shale	2,138'
Ferron Sand	4,138'
Tununk Shale	4,588'
Dakota Sand	5,038'
T.D.	5,200'

3. The estimated depths at which anticipated water, oil, gas, or other mineral-bearing formations are expected to be encountered.

4,138'	Ferron Sand	primary objective	gas
5,038'	Dakota Sand	possible	gas

4. The proposed casing program, including the size, grade, and weight-per-foot of each string and whether new or used.

- 0' - 500' Drill w/mud 17-1/2" hole. Set 13 3/8", 48#, K-55. Cement to surface (new).
- 0' - 4,138' Drill w/mud 12 1/2" hole. Set 9 5/8", 36# & 40#, K-55. Cement w/360 sx (new).
- 0' - 5,200' Drill w/air 8 1/2" hole. Set 5 1/2", 15# & 17#, K-55. Cement w/200 sx (new).

5. The lessee's or operator's minimum specifications for pressure control equipment which is to be used, a schematic diagram thereof showing sizes, pressure ratings (or API series), and the testing procedures and testing frequency.

BOE will consist of a 10" series 900, 3,000# dual ram hydraulic operated BOP and a 10" annular type preventer. See attachment. The BOE will be pressure tested to 1,000# after installation and prior to drilling out from under surface casing.

6. The type and characteristics of the proposed circulating medium or mediums to be employed for rotary drilling and the quantities and types of mud and weighting material to be maintained.

Fresh water base mud will be used for the drilling operations to the top of the Ferron Sand. An intermediate casing string will be run and cemented in place w/360 sx cement. Will drill with air to T.D.

7. The auxiliary equipment to be used, such as (1) kelly cocks, (2) floats at the bit, (3) monitoring equipment on the mud system, (4) a sub on the floor with a full opening valve to be stabbed into drill pipe when the kelly is not in the string.

Auxiliary equipment will consist of: (1) Kelly Cock, (2) float at the bit, (3) monitoring equipment of the mud system, (4) full opening stab in valve on the rig floor.

8. The testing, logging, fracing, and coring programs to be followed with provision made for required flexibility.

No DST's are planned. Logging will consist of Dual Induction Laterolog -CNL-Density.

9. Any anticipated abnormal pressures or temperatures expected to be encountered or potential hazards such as hydrogen sulfide gas, along with plans for mitigating such hazards.

No abnormal temperatures or pressures are anticipated.

10. The anticipated starting date and duration of the operations.

It is our desire to start operations as soon as regulatory approval has been obtained. It is estimated it will take approximately 30 - 45 days to drill, test and log this well.

1. Existing Roads

A, B, C, D & E - See attached map.

F. Utah State Hwy #31 runs adjacent to the proposed well. No improvements of any sort will be required. There is an existing approved approach from the highway.

2. Planned Access Roads

No new roads will be required. The proposed well site will be constructed on an existing trail immediately adjacent to the paved highway.

3. Location of Existing Wells

There are numerous abandoned wells in the Old Clear Creek Field, the nearest being in Section 5, approximately two miles to the North.

4. Location of Existing and/or Proposed Facilities

- A. There are no facilities located within a one mile radius of the proposed well site.
- B. In the event that production is established, it will be necessary to set a small separator and glycol unit. All facilities will be located on the drill site and painted so as to blend in with the surrounding vegetation. A pipeline will also be required. The route will have to be chosen at a later date due to incompassing future development plans, contracts, etc. All surface facilities will be fenced so as to protect wildlife.
- C. After drilling and completion, the reserve pit will be pumped dry and the liner removed. The pit will then be backfilled and recontoured to as near its original contour as possible. The top soil will be spread over the disturbed areas and reseeded to U.S.G.S specifications.

5. Location and Type of Water Supply

A, B, & C. It is planned to pump water from Huntington Creek located approximately 250' from the well. A small gasoline powered pump will be used to pump water to the location.

6. Source of Construction Materials

If production is established it will probably be necessary to gravel the location. Gravel will be obtained from a source off of the Forest.

7. Methods for Handling Waste Disposal

The reserve pit will be lined so as to prevent any leakage of drilling fluids. Because of the small area available to construct a reserve pit it is necessary to restrict the pit size from normal. It is planned to pump the pit on a routine basis while drilling the well and haul the waste material to a dump site near Huntington. A portable chemical toilet will be used during drilling and completion operations. Trash will be contained in a container and hauled to the Huntington dump. After drilling the area will be policed up and the pit pumped dry. The liner will be removed and the pit backfilled.

8. Ancillary Facilities

None are planned.

9. Well Site Layout

See attached cut and fill plat, location plat and rig lay out diagram. It is planned to line the reserve pit with .030" Chlorinated Polyethelene, reinforced with 10 x 10 1,000D Polyester. See attached specification sheets.

10. Plans for Restoration of the Surface

Upon completion of operations the pit will be immediately pumped dry and the liner removed. The pit will then be backfilled and recontoured to as near its original condition as possible. If the well is plugged the entire disturbed area will be recontoured and reseeded to U.S.F.S. specifications.

It is proposed to commence operations as soon as a rig can be obtained. It is estimated that it will take 30 - 45 days to drill and complete the well.

11. Other Information

The location falls in the bottom of Huntington Canyon adjacent to Utah State Highway #31. Huntington Creek runs along the canyon bottom and is approximately 250' from the proposed well. Vegetation consists of several species of conifers, aspen and numerous shrubs and native grasses. The area is used exclusively for recreational purposes. The area supports a large variety of wildlife; elk, mule deer, coyotes, rabbits and other small rodents and birds. The surface is public land administered by the U.S. Forest Service Price Ranger District. There are no dwellings of any kind near by. There is no evidence of any archaeological, historical or cultural sites in the areas to be disturbed.

Multi-Point Surface Use Plan - Attachment

USA Lynda #1
SW $\frac{1}{4}$ Section 17
T15S, R7E
Emery County, Utah
Lease U-10344

Item 12

Leesee's or Operator's Representative

Bill Fiant and/or Roscoe Gillespie will represent Energy Reserves Group, Inc. on the above referenced well. They can be reached at the following locations:

Energy Reserves Group, Inc.
P.O. Box 3280
Casper, Wyoming 82602
Phone (307) 265-7331

-Office-

Bill Fiant
2047 Manor Drive
Casper, Wyoming 82601
Phone (307) 265-2529

- Home -

Roscoe Gillespie
2675 East 7th Street
Casper, Wyoming 82601
Phone (307) 234-0745

- Home -

CERTIFICATION

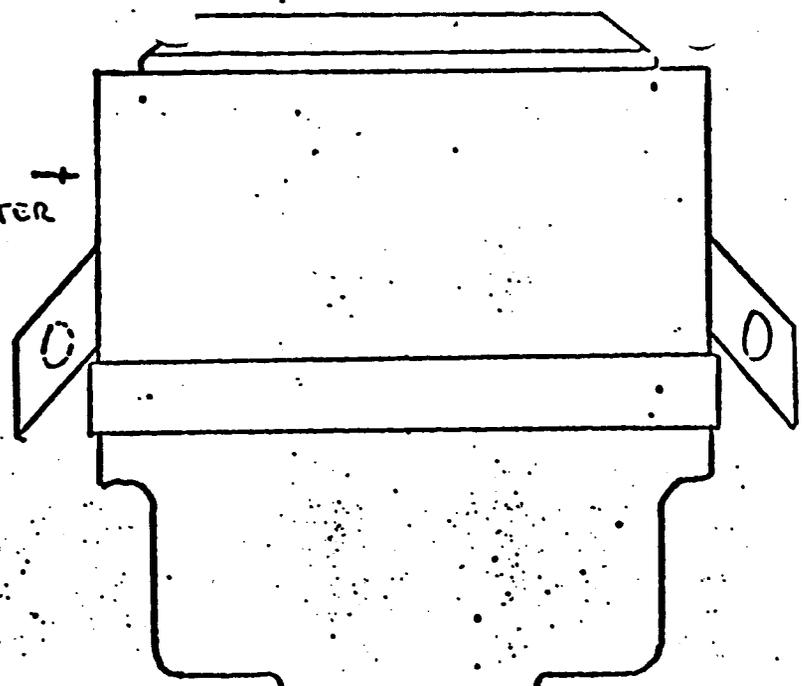
I hereby certify that I, or persons under my direct supervision, have inspected the proposed drillsite and access route; that I am familiar with the conditions which presently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and, that the work associated with the operations proposed herein will be performed by _____

Louisa Milk Const.
and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

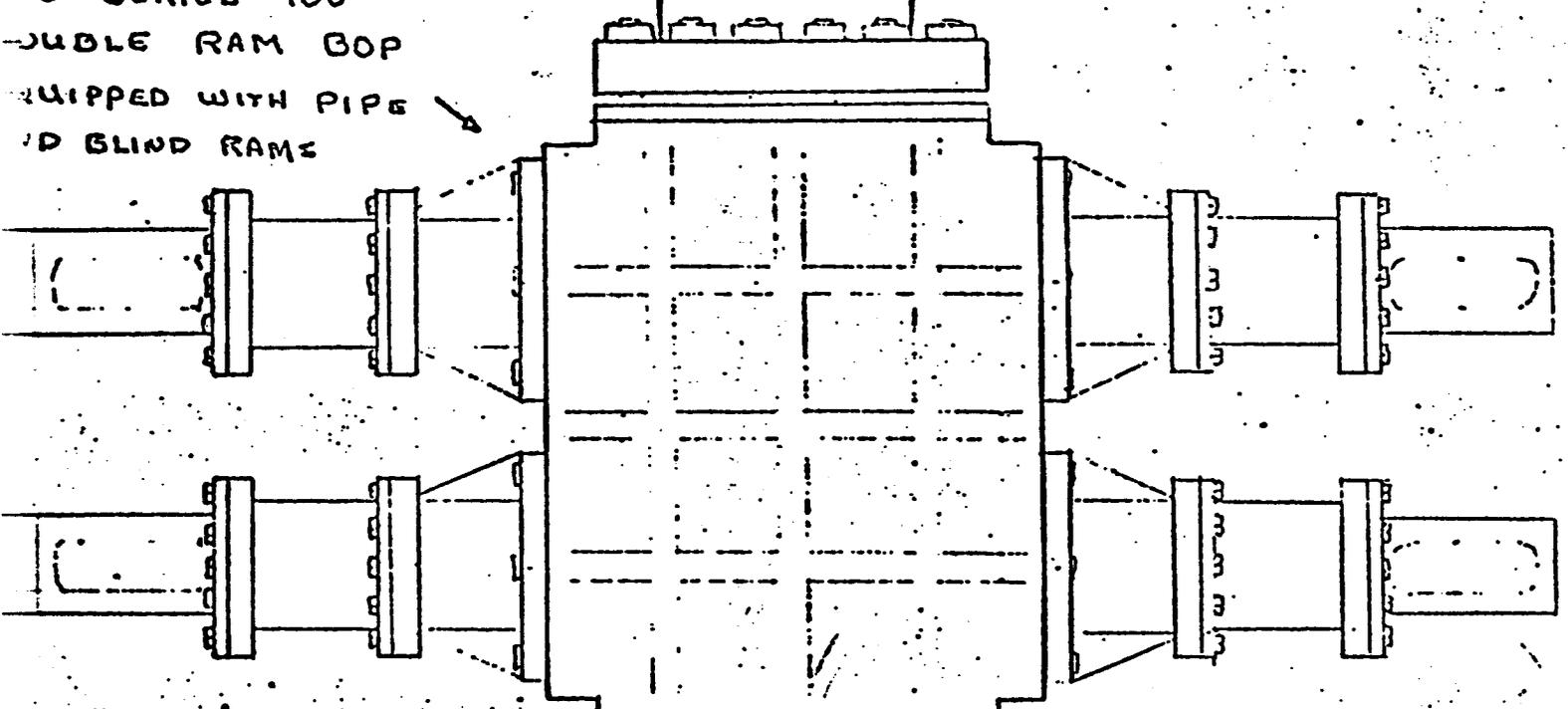
9-18-78
Date

[Signature]
Name and Title
Field Services Administrator

4" SERIES 900
AG TYPE PREVENTER



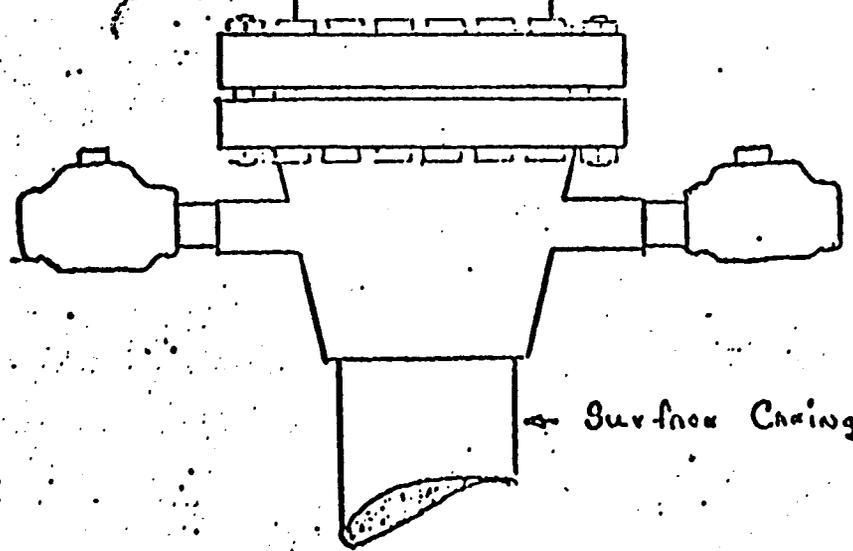
10" SERIES 900
DOUBLE RAM BOP
EQUIPPED WITH PIPE
AND BLIND RAMS



KILL LINE



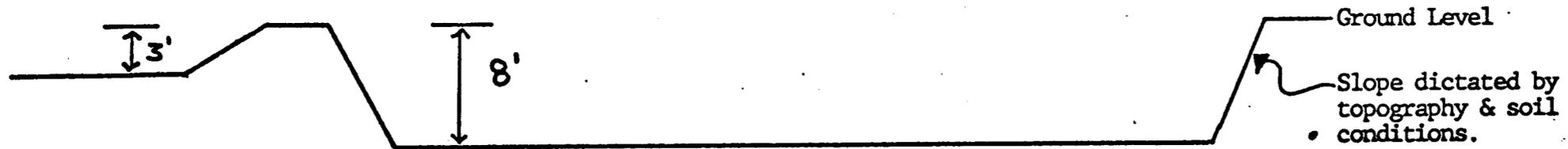
BLEED OFF
LINE



Surface Chasing

CLEAR CREEK PROSPECT
RESERVE PIT LINER SPECIFICATIONS

Pit Dimension 100' x 25' x 8'



Liner Specifications: .030" Chlorinated Polyethelene - Reinforced with 10 x 10 1000D Polyester with 3" sand base.



WATERSAVER COMPANY, INC.

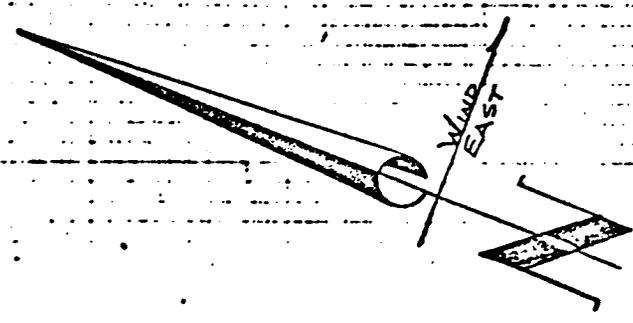
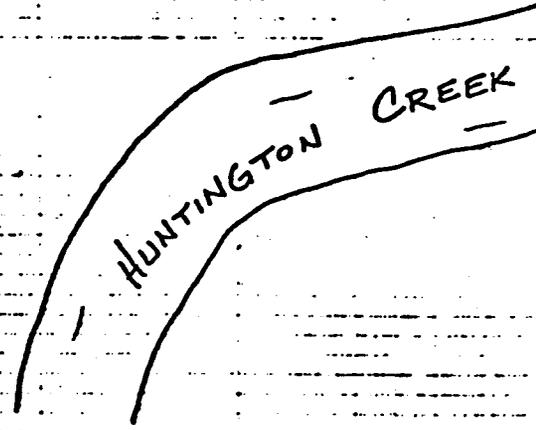
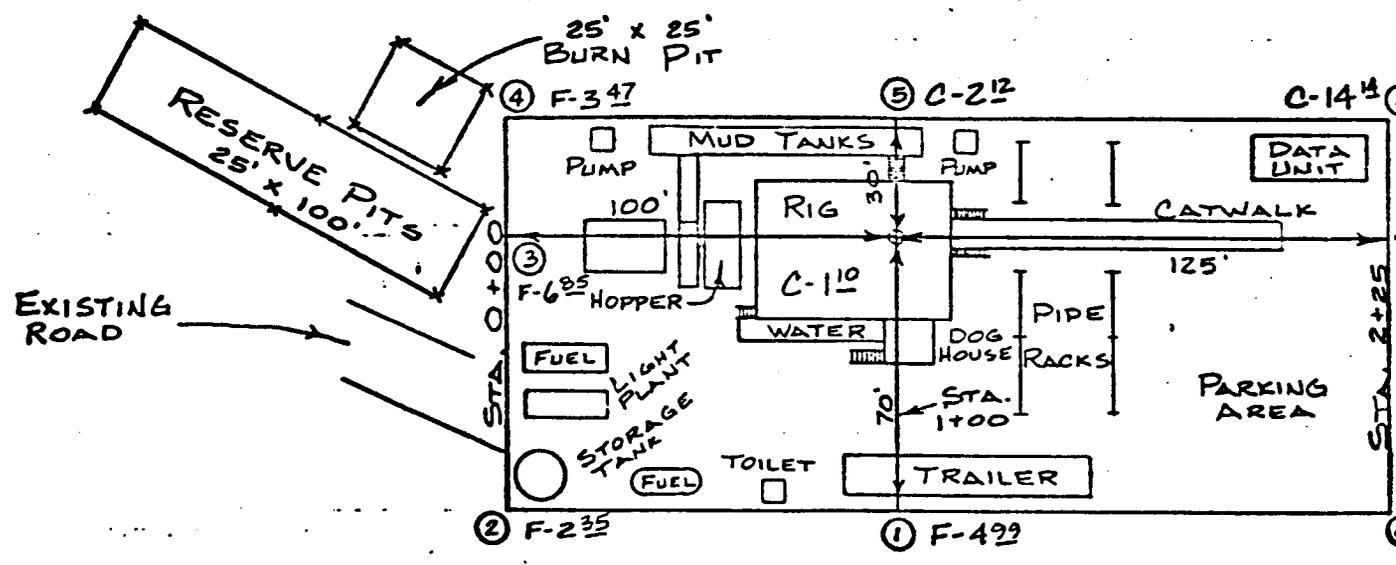
POST OFFICE BOX 16465 • DENVER, COLORADO 80216 • (303) - 623-4111
 Plant and Office - 3560 Wynkoop Street

PHYSICAL PROPERTIES FOR WATERSAVER REINFORCED CHLORINATED POLYETHYLENE (CPE)

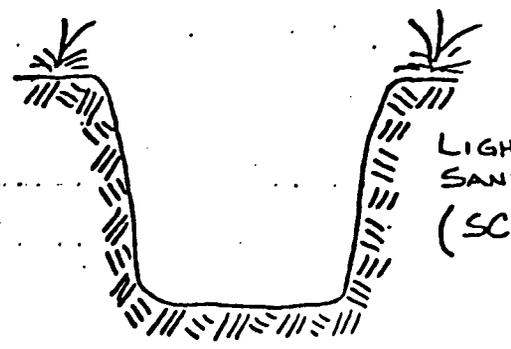
PROPERTY	VALUE		TEST METHOD
	CPE STD.	CPE LOW TEMP.	
Type			
Weight/sq. yard (ounces)	Nominal 30	Nominal 34	CCC 191 (Method 5041)
Adhesion (Peel Method) lbs/2" minimum	30	30	CCC 191 (Method 5970)
Tear Strength (Tongue Method) lbs. minimum	Warp 32 Fill 32	35 35	CCC 191 (Method 5134)
Tensile Strength (Grab Method) lbs/inch, minimum	Warp 230 Fill 210	260 240	CCC 191 (Method 5100)
Hydrostatic Resistance, lbs.	240-270	270-300	CCC 191 (Method 5512)
Water Vapor Trans. (gms/sq.meter/24 hrs.)	0.50 (0.070 perms)	0.48 (0.066 perms)	ASTM E-96 Proced. BW
Low Temperature Strength	Pass -50°F	Pass -60°F	ASTM D-2136
Encapsulation	The M.D. edges of the 10 x 10 - 1000 polyester fabric (scrim) are to be completely encapsulated with CPE film.		

ENERGY RESERVES

SECTION 17, T15S, R7E, SLB
LOCATION LAYOUT & CUT S



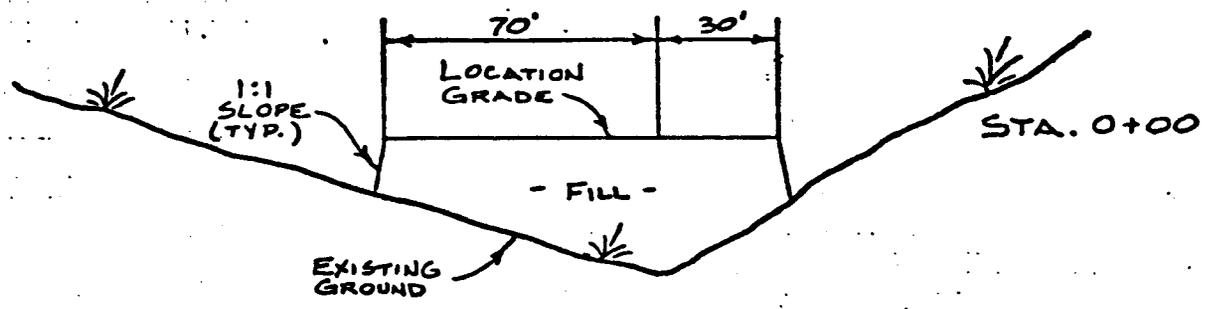
SOILS LITHOLOGY -NO SCALE-



GROUP

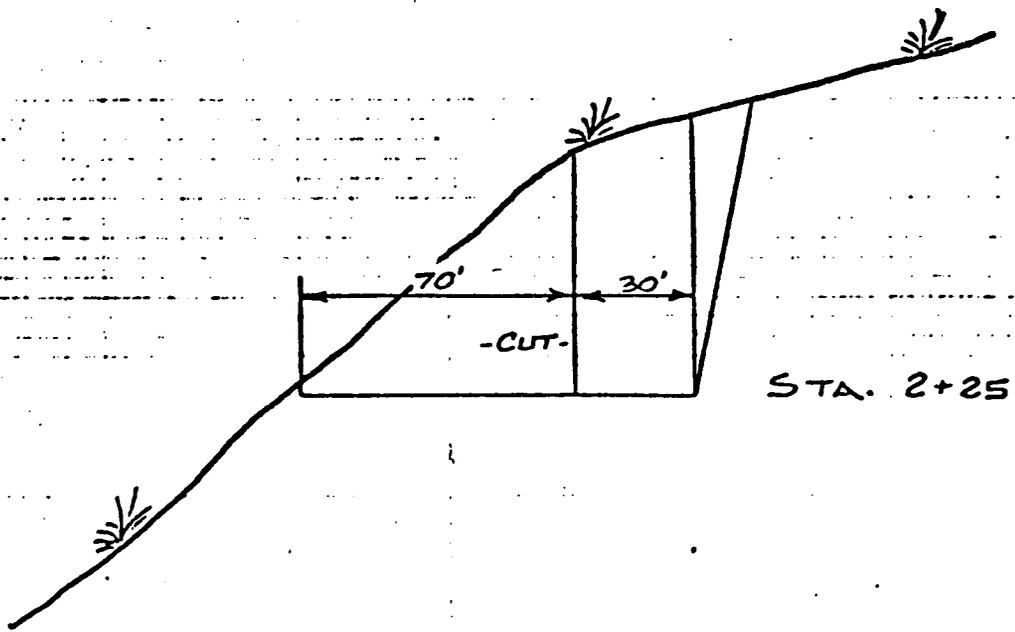
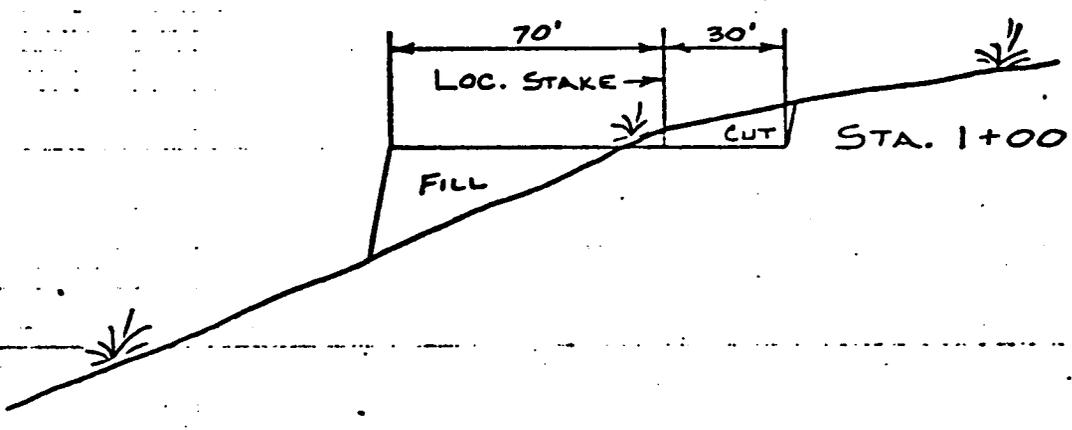
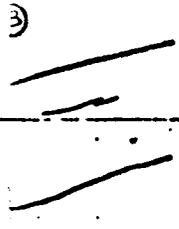
R.M.
SHEET

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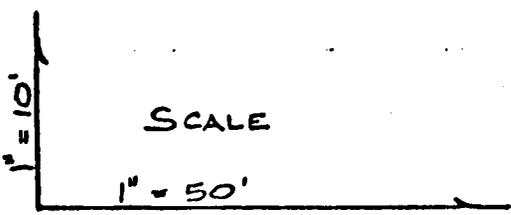


C-1228

A-089



IT BROWN
BY CLAY
(ML)



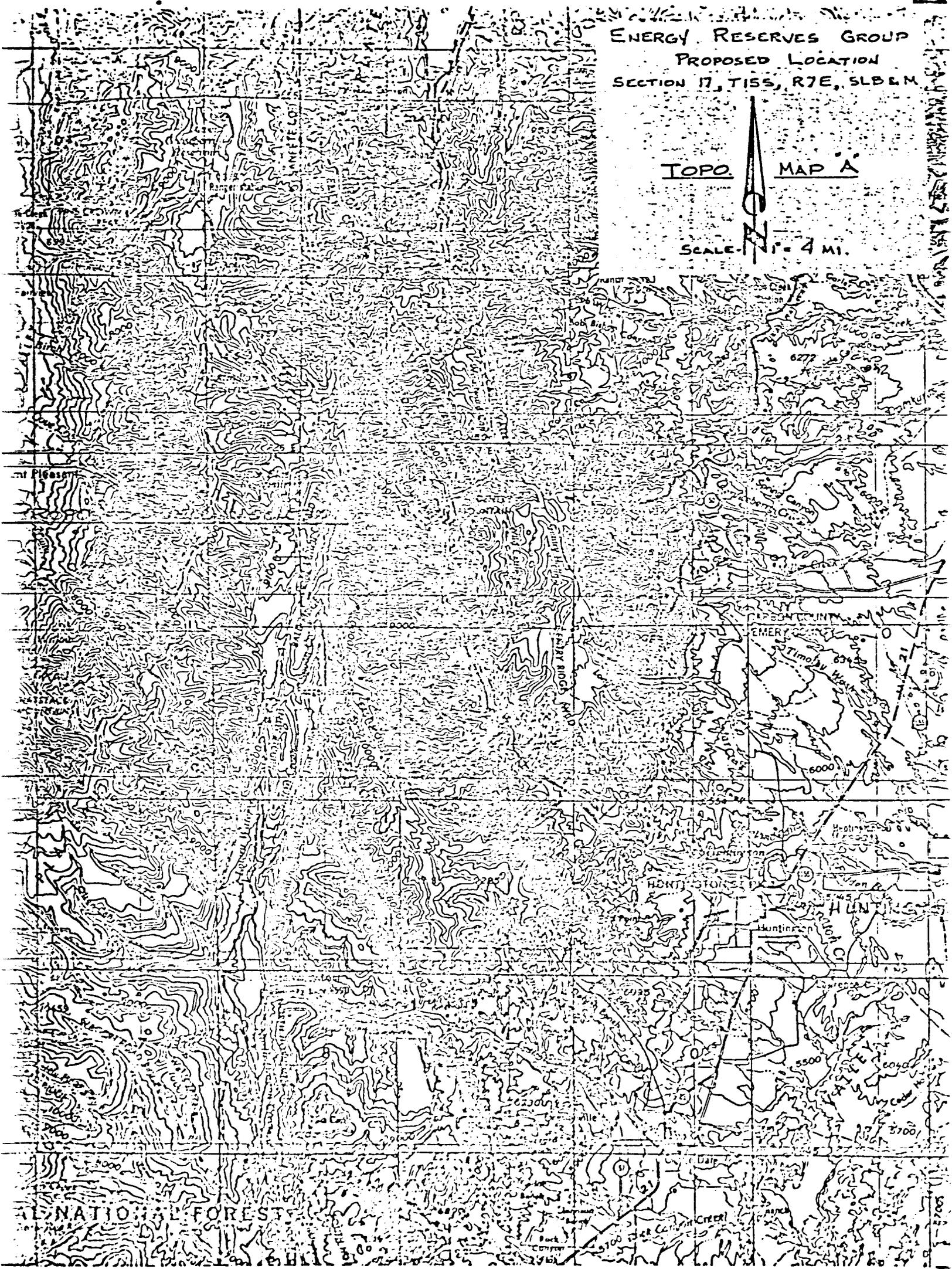
APPROX. YARDAGES

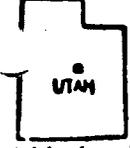
CUT	- 2,471	Cu. Yds.
FILL	- 1,551	Cu. Yds.

ENERGY RESERVES GROUP
PROPOSED LOCATION
SECTION 17, T15S, R7E, S1B&M

TOPO MAP A

SCALE 1" = 4 MI.





UTAH

PROPOSED WELL LOCATION

EXISTING ROAD
(STATE ROUTE 21)

81045

8230

17

16

18

20

21

80115

8785

8986

8360

8400

8500

8600

8700

8850

8950

9050

9150

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1100

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1120

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1200

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3120

3130

3140

PROPOSED LOCATION
SECTION 17, T15S, R7E, SLB&M

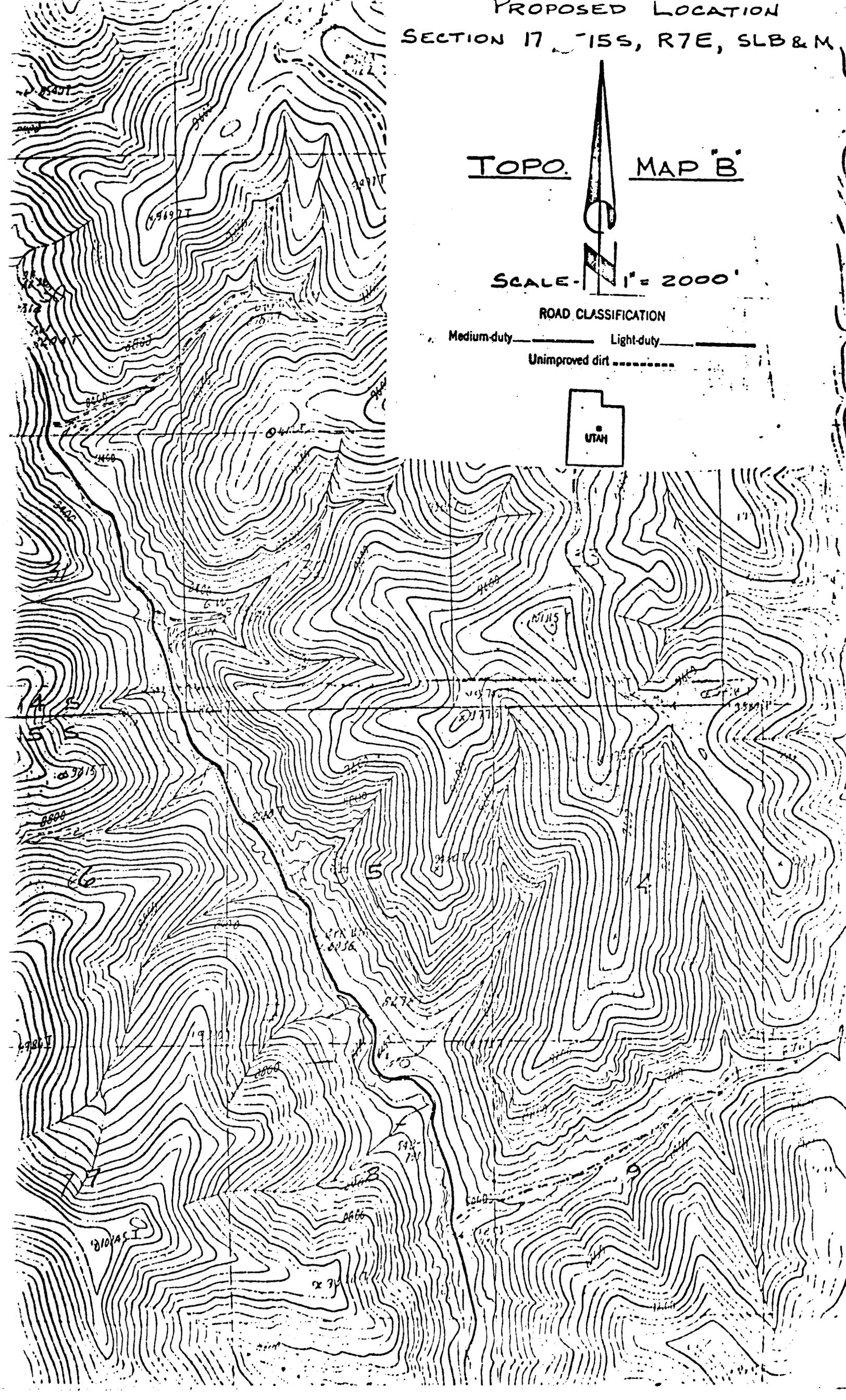
TOPO. MAP B

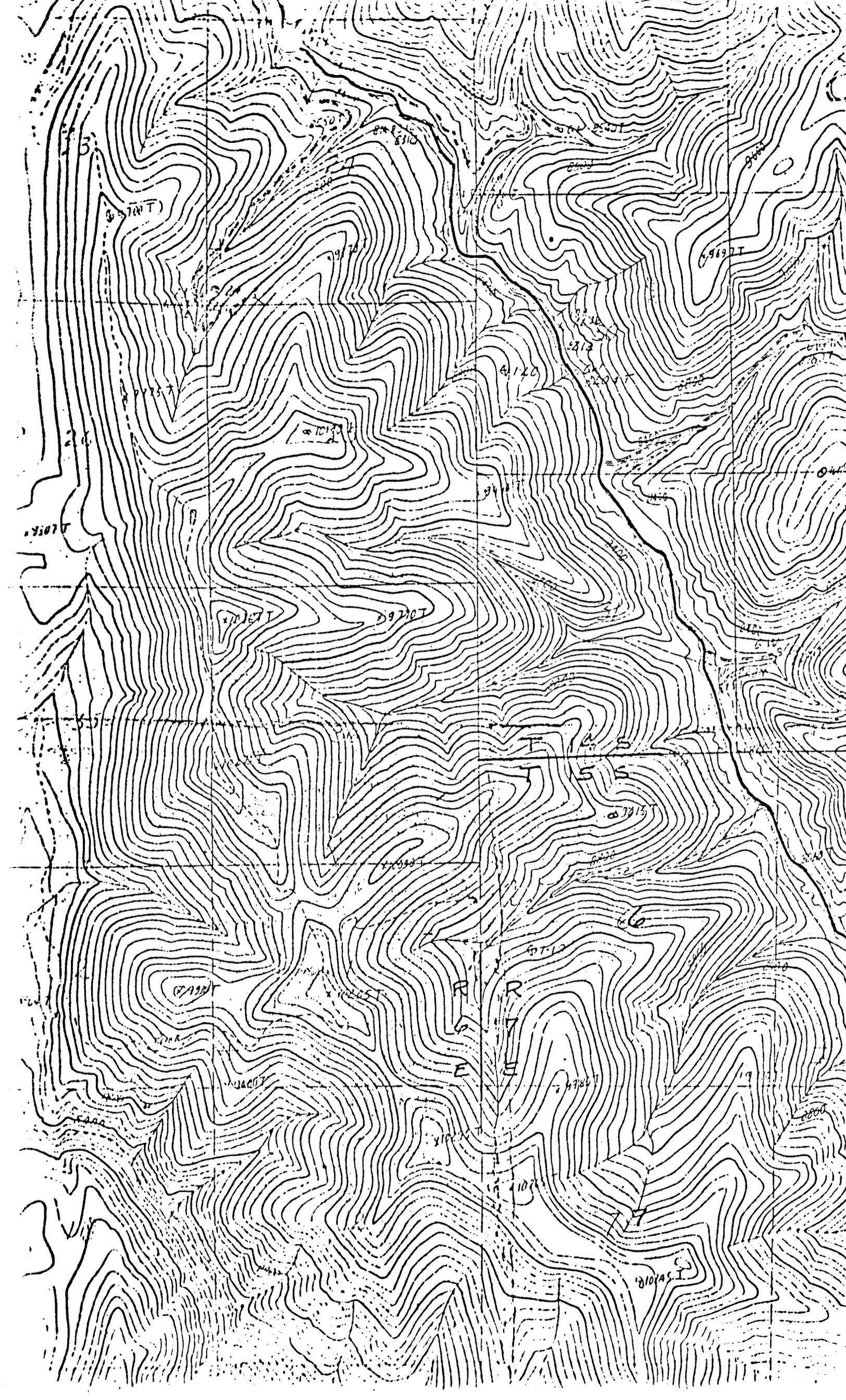
SCALE - 1" = 2000'

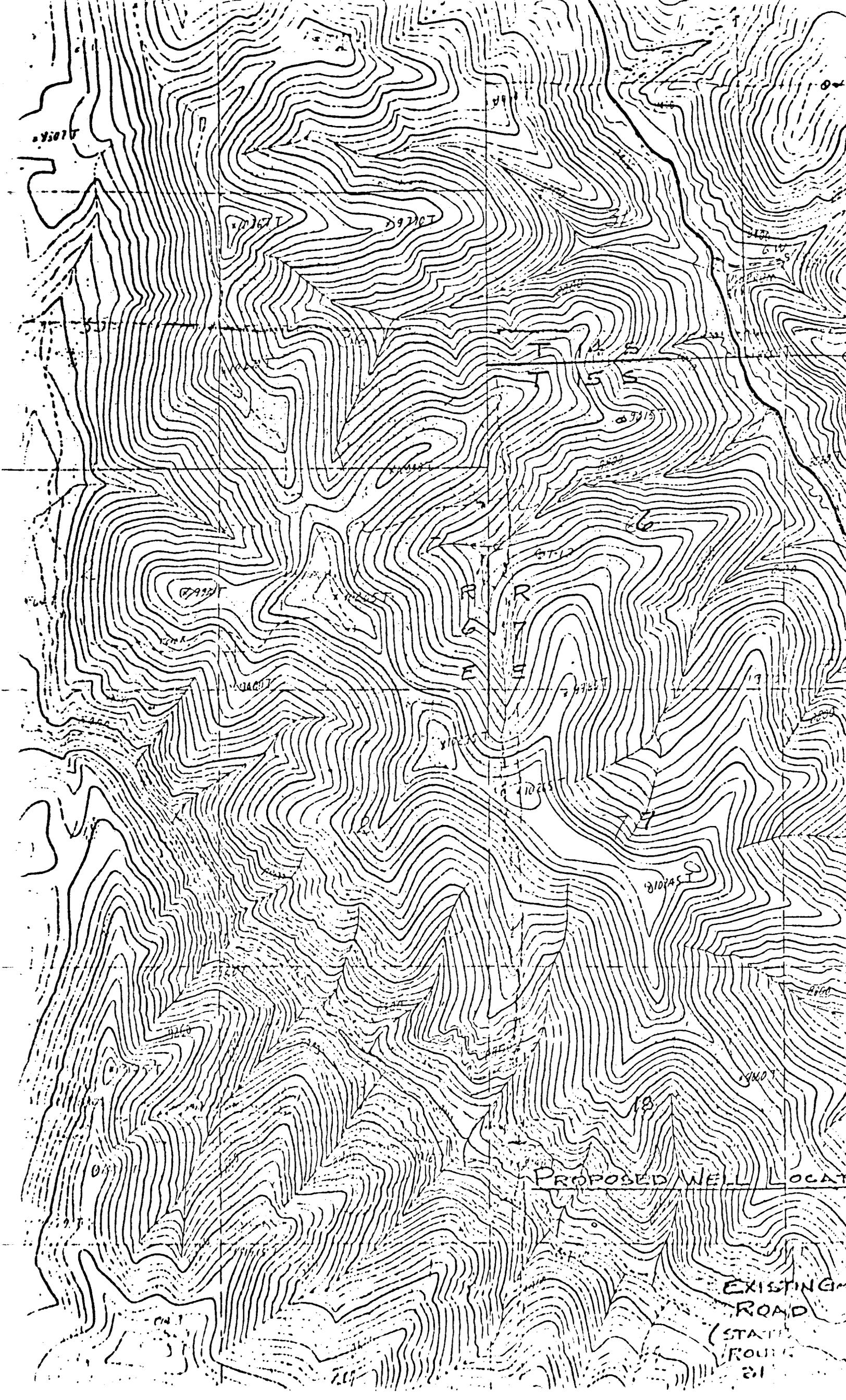
ROAD CLASSIFICATION

Medium-duty _____ Light-duty _____

Unimproved dirt - - - - -







PROPOSED WELL LOCAT

EXISTING ROAD
(STATE ROUTE 21)

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL & GAS

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)*

5. Lease Designation and Serial No.
U-10344

6. If Indian, Allottee or Tribe Name

7. Unit Agreement Name

8. Farm or Lease Name
South Clear Creek

9. Well No.
USA Lynda #1

10. Field and Pool, or Wildcat
Wildcat

11. Sec., T., R., M., or Blk. and Survey or Area

Section 17, T15S-R7E
12. County or Parrish 13. State

Emery, Utah

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. Type of Work

DRILL DEEPEN PLUG BACK

b. Type of Well

Oil Well Gas Well Other Single Zone Multiple Zone

2. Name of Operator

Energy Reserves Group, Inc.

3. Address of Operator

P.O. Box 3280 Casper, Wyoming 82602

4. Location of Well (Report location clearly and in accordance with any State requirements)

At surface **1698' FSL 1119' FEL NE/SE**

At proposed prod. zone

14. Distance in miles and direction from nearest town or post office*

Approximately 16 miles north west of Huntington, Utah Emery, Utah

15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drlg. line, if any)

1698'

16. No. of acres in lease

2506.14

17. No. of acres assigned to this well

18. Distance from proposed location* to nearest well, drilling, completed, or applied for, on this lease, ft.

NA

19. Proposed depth

5200'

20. Rotary or cable tools

Rotary

21. Elevations (Show whether DF, RT, GR, etc.)

7820 Gr (ungraded)

22. Approx. date work will start*

23.

PROPOSED CASING AND CEMENTING PROGRAM

Size of Hole	Size of Casing	Weight per Foot	Setting Depth	Quantity of Cement
15"	10 3/4"	32.75#	500'±	sufficient to circulate
8 3/4"	7"	23#	4138'	300sx
6 1/4"	4 1/2"	9.5#	5200'	200sx

ERG Proposes to drill the above referenced well with rotary tools from surface to T.D. The anticipated zone of completion is the Ferron Sand. No coring is planned. Copies of all logs will be submitted upon completion of the well. It is planned to air drill from 4138' - 5200'. BOE will consist of a 10" series 900, 3000# dual ram hydraulic operated BOP and a 10" annular type preventor. A rotating head will be used from 4138' - 5200' if air drilling can be accomplished.

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24.

Signed *Alan B. Barnes*

Title **District Production Eng.**

Date **May 2, 1979**

(This space for Federal or State office use)

Permit No. Approval Date

Approved by Title Date

Conditions of approval, if any:

Small Energy Group

T 15 S , R 7 E , S. L. B. & M.

To the North 1/4 Cor. Sec. 8,
T15S, R7E, S.L.B. & M.

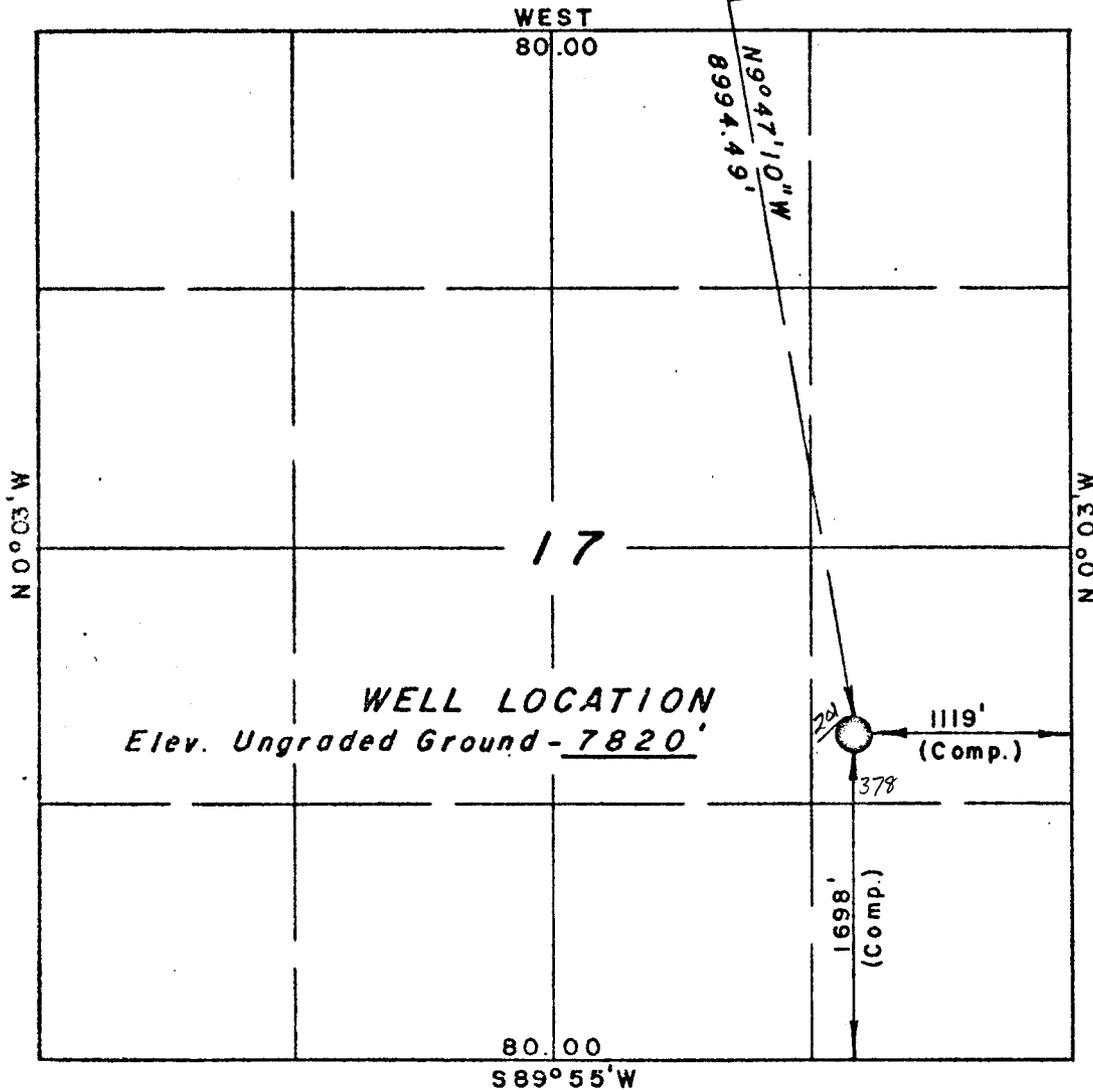
PROJECT

ENERGY RESERVES GROUP

Well location located as shown in
the NE 1/4 SE 1/4 Section 17, T15S,
R7E, S.L.B. & M. Emery County, Utah.

NOTE:

Basis of Bearings is from a Solar Observation.



CERTIFICATE

THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM
FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY
SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE
BEST OF MY KNOWLEDGE AND BELIEF.

Jane Stewart

REGISTERED LAND SURVEYOR
REGISTRATION NO 3154
STATE OF UTAH

UINTAH ENGINEERING & LAND SURVEYING
P. O. BOX Q - 110 EAST - FIRST SOUTH
VERNAL, UTAH - 84078

SCALE	1" = 1000'	DATE	10 / 26 / 78
PARTY	GS SS DS RP	REFERENCES	GLO Plat
WEATHER	Fair & Hot	FILE	ENERGY RESERVES

X = Section Corners Located

STATE OF UTAH
DIVISION OF OIL, GAS, AND MINING

** FILE NOTATIONS **

Date: May 4, 1979

Operator: Energy Reserves Group, Inc.

Well No: USA Lynda #1 (Pole Cym. Un. #1)

Location: Sec. 17 T. 15S R. 7E County: Emery

File Prepared:

Entered on N.I.D.:

Card Indexed:

Completion Sheet:

VAPI Number: 43-015-30064

CHECKED BY:

Administrative Assistant: _____

Remarks:

Petroleum Engineer: M.C.S. Minder 5-11-79

Remarks:

Director:

Remarks:

INCLUDE WITHIN APPROVAL LETTER:

Bond Required:

Survey Plat Required:

Order No. _____

Surface Casing Change
to _____

Rule C-3(c), Topographic exception/company owns or controls acreage
within a 660' radius of proposed site

O.K. Rule C-3

O.K. In _____ Unit

Other:

Letter Written/Approved

Energy Reserves Group, Inc.
P.O. Box 3280
Casper, Wyoming 82601
Phone 307 265 7331



May 8, 1979

State of Utah
Department of Natural Resources
Division of Oil & Gas
1588 West, North Temple
Salt Lake City, Utah 84116

Re: Request for Exception Location - Proposed Well - USA Lynda#1
1698' FSL 1119' FEL (NE/SE) Section 17, T15S-R7E, Emery County, Utah.

Gentlemen:

Energy Reserves Group, Inc. requests approval for the above referenced unorthodox well site due to topographical problems.

The well site is located in the bottom of Huntington Canyon in the Manti La Sal National Forest. The area is extremely rough, with steep ridges, timber and very limited access. We have been working with the U.S. Forest Service and USGS for the past year and one half in selecting a site with minimum environmental damage and still be in a potential hydrocarbon area. The referenced site was chosen as the site with the least amount of environmental impact.

Energy Reserves Group, Inc. has all of Section 16 & 17, T15S-R7E under Federal lease U-10344. The well site is located 1698' from the nearest lease line.

If there are any questions, please call me anytime.

Very truly yours,
ENERGY RESERVES GROUP, INC.

William J. Fiant
Field Services Administrator

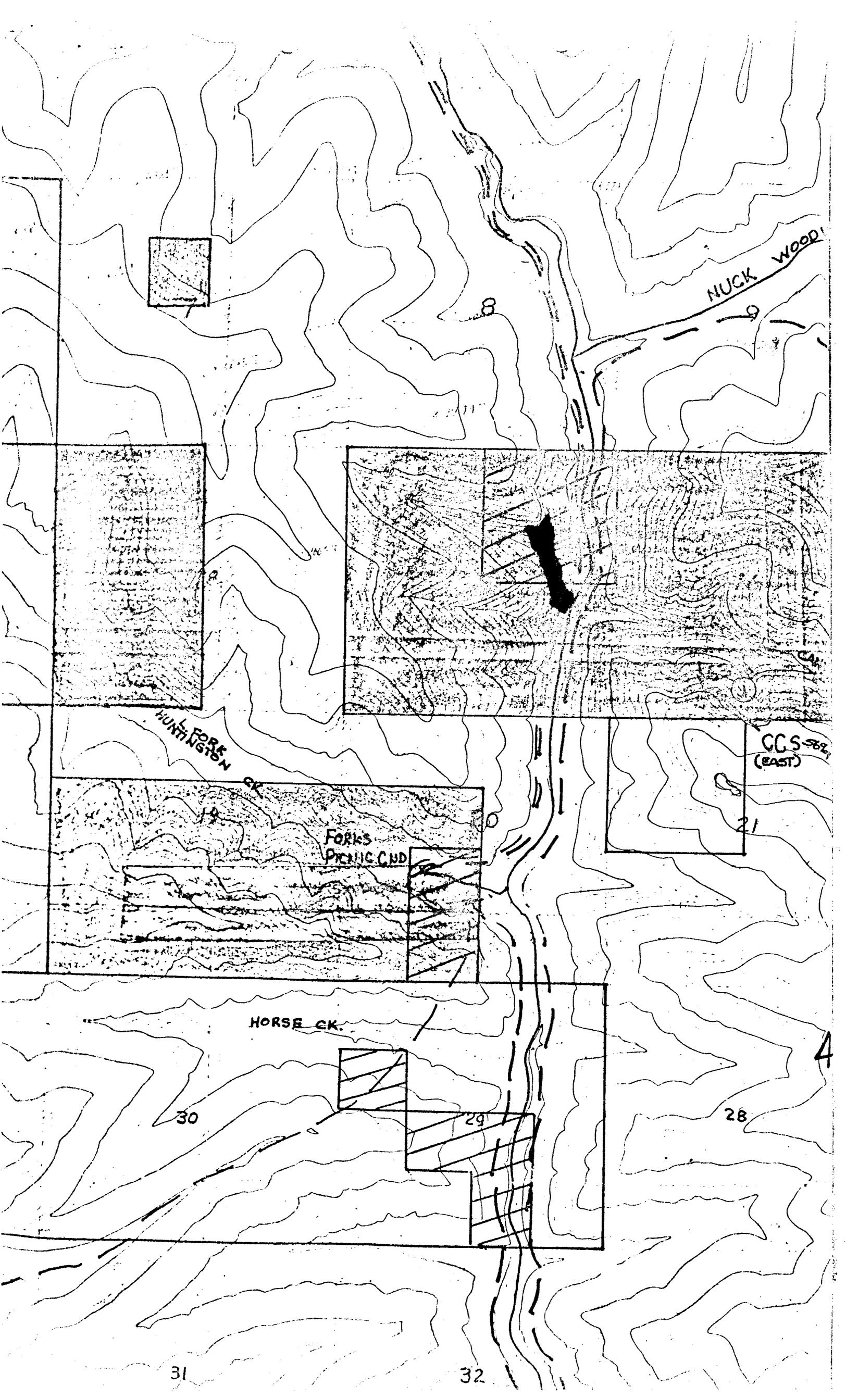
WJF/cc



APPROVED BY THE DIVISION OF
OIL, GAS, AND MINING

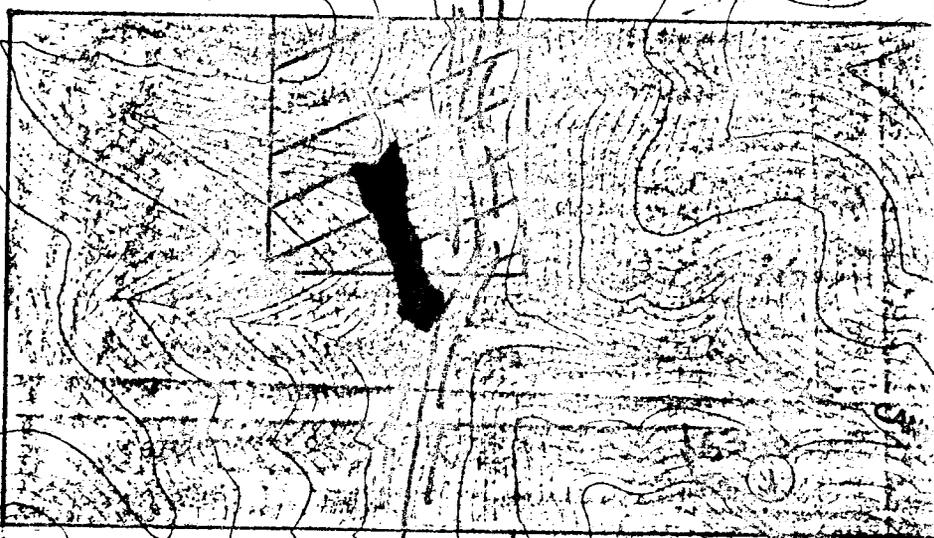
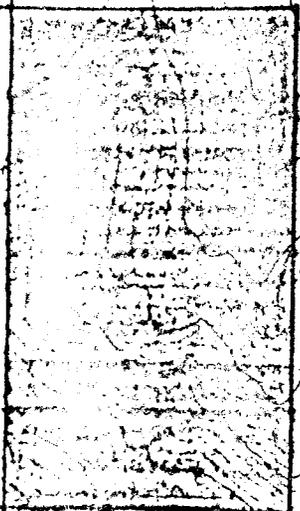
DATE: 5-11-79

BY: M. J. Minder



NUCK WOOD

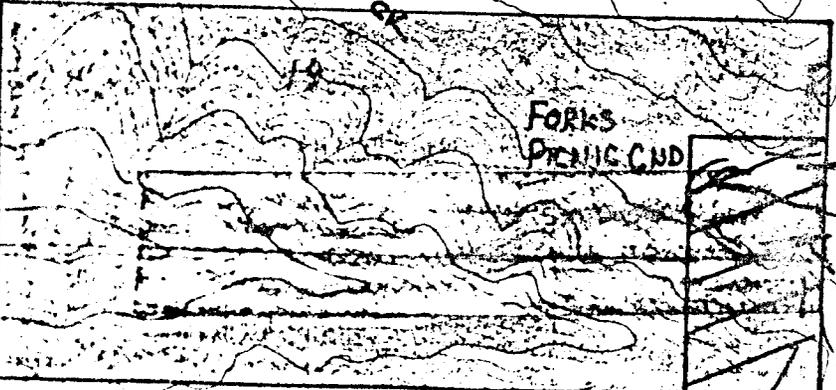
8



FORK CK

CCS 562
(EAST)

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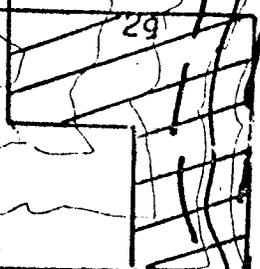
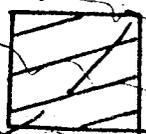
HORSE CK

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SCOTT M. MATHESON
Governor



OIL, GAS, AND MINING BOARD

CHARLES R. HENDERSON
Chairman

GORDON E. HARMSTON
Executive Director,
NATURAL RESOURCES

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING
1588 West North Temple
Salt Lake City, Utah 84116
(801) 533-5771

JOHN L. BELL
C. RAY JUVELIN
THADIS W. BOX
CONSTANCE K. LUNDBERG
EDWARD T. BECK
E. STEELE McINTYRE

CLEON B. FEIGHT
Director

May 15, 1979

ENERGY RESERVES GROUP INC
P O BOX 3280
CASPER WY 82602

Re: Well No. USA Lynda #1, Sec. 17, T. 15S, R. 7E, Emery County, Utah

Gentlemen:

Insofar as this office is concerned, approval to drill the above referred to well on said unorthodox location is hereby granted in accordance with Rule C-3(c), General Rules and Regulations and Rules of Practice and Procedure.

Should you determine that it will be necessary to plug and abandon this well, you are hereby requested to immediately notify the following:

MICHAEL T. MINDER - Geological Engineer
HOME: 876-3001
OFFICE: 533-5771

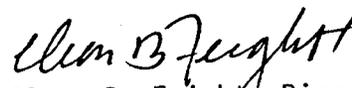
Enclosed please find Form OGC-8-X, which is to be completed whether or not water sands (aquifers) are encountered during drilling. Your cooperation in completing this form will be appreciated.

Further, it is requested that this Division be notified within 24 hours after drilling operations commence, and that the drilling contractor and rig number be identified.

The API number assigned to this well is 43-015-30064.

Yours very truly,

DIVISION OF OIL, GAS, AND MINING


Cleon B. Feight, Director

/lw

cc: U. S. Geological Survey

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK
 DRILL DEEPEN PLUG BACK

b. TYPE OF WELL
 OIL WELL GAS WELL OTHER

2. NAME OF OPERATOR
 Energy Reserves Group, Inc.

3. ADDRESS OF OPERATOR
 P.O. Box 3280 Casper, Wyoming 82602

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)
 At surface: ~~1,098'~~ FEL, ~~1,594'~~ FSL (NE SE)
 At proposed prod. zone: ~~1,119'~~ 1,698'

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*



5. LEASE DESIGNATION AND SERIAL NO.
 U-10344

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME
 South Clear Creek

9. WELL NO.
 USA Lynda #1

10. FIELD AND POOL, OR WILDCAT
 Wildcat

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
 Sec 17, T15S, R7E

12. COUNTY OR PARISH
 Emery

13. STATE
 Utah

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any)

16. NO. OF ACRES IN LEASE
 2,506.14

17. NO. OF ACRES ASSIGNED TO THIS WELL

18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.
 N.A.

19. PROPOSED DEPTH
 5,200'

20. ROTARY OR CABLE TOOLS
 Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)
 GRD 7,813' (ungraded)

22. APPROX. DATE WORK WILL START*
 as soon as possible

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
17 1/2"	13 3/8"	48#	500' ±	500 sx.
12 1/4"	9 5/8"	36# & 40#	4,138' ±	360 sx.
8 1/2"	5 1/2"	15# & 17#	5,200' ±	200 sx

Energy Reserves Group, Inc. proposes to drill the above referenced well with rotary tools from surface to a T.D. The anticipated zone of completion is the Ferron Sand. No coring is planned. Two DST's may be run depending on shows. Copies of all logs will be submitted upon completion of the well.

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24. SIGNED William J. Trout by WJB TITLE Field Services Administrator DATE 9-21-78
 (This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____
 APPROVED BY WJ Maitner TITLE ACTING DISTRICT ENGINEER DATE MAY 15 1979
 CONDITIONS OF APPROVAL, IF ANY:

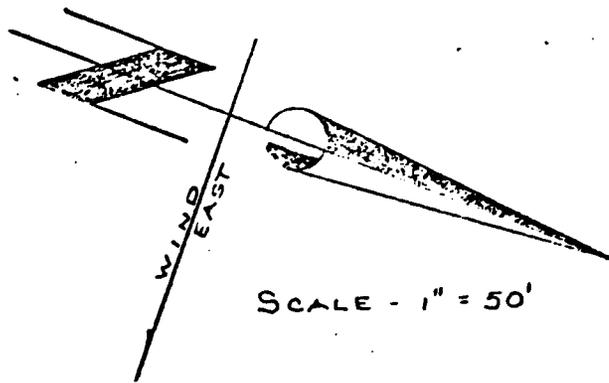
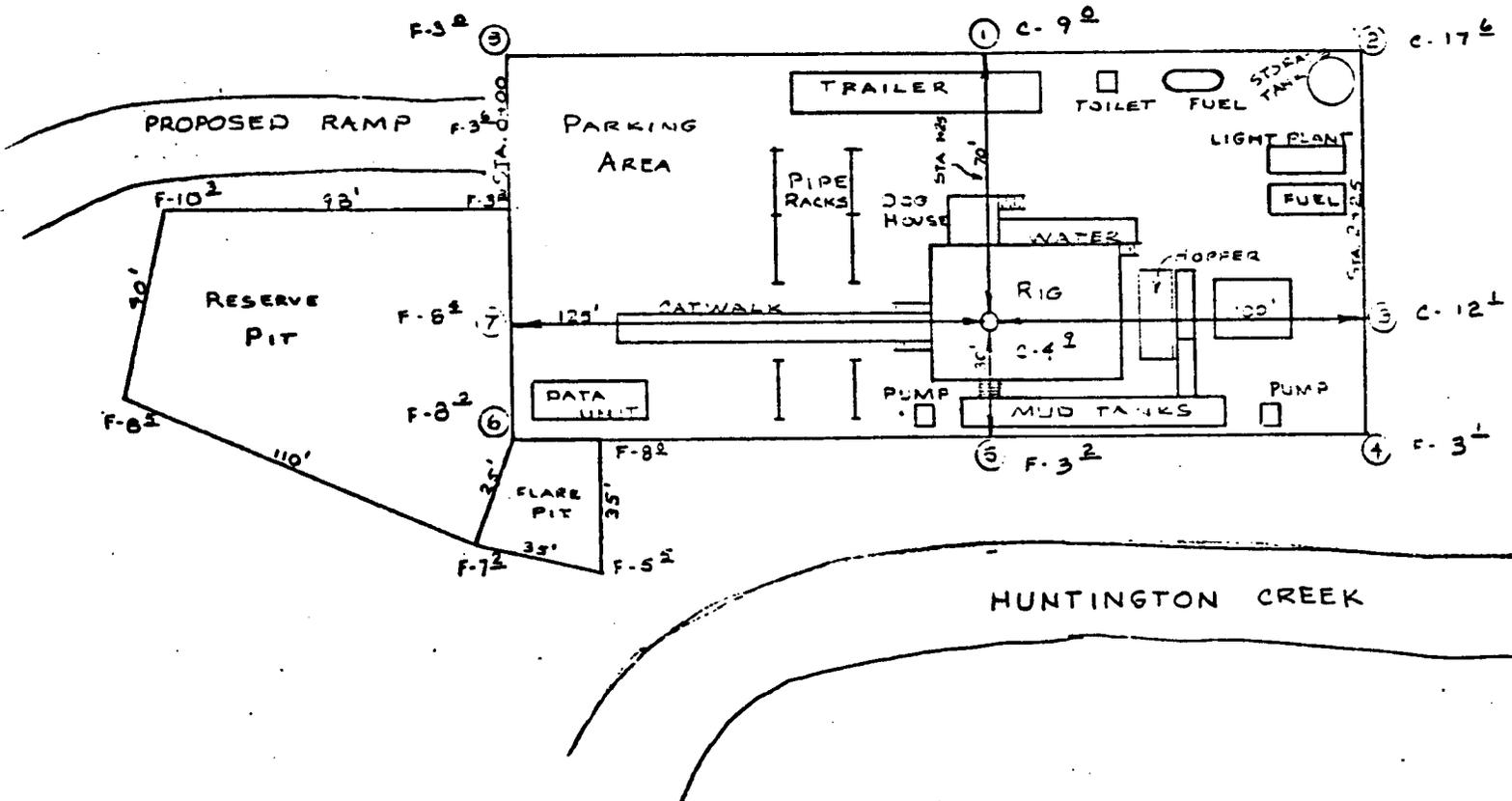
CONDITIONS OF APPROVAL ATTACHED TO OPERATOR'S COPY
 NOTICE OF APPROVAL
 *See Instructions On Reverse Side

NECESSARY FLARING OF GAS DURING DRILLING AND COMPLETION APPROVED SUBJECT TO ROYALTY (NTL-4)

STATE OF G

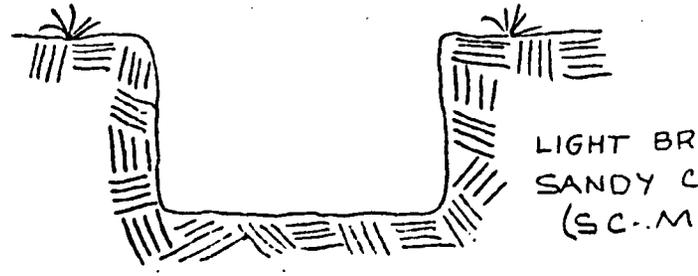
ENERGY RESERVES GROUP

SECTION 17, T15S, R7E, S.L.B.M.
LOCATION LAYOUT & CUT SHEET



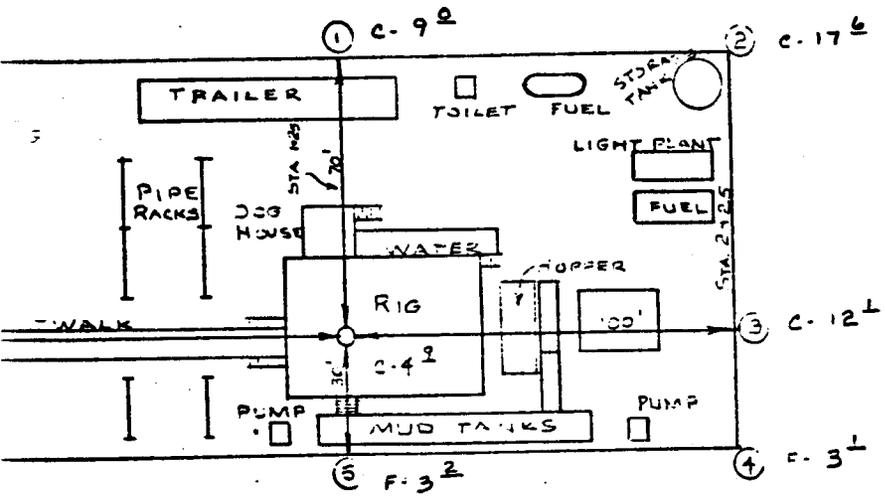
SOILS LITHOLOGY

- NO SCALE -



ENERGY RESERVES GROUP

SECTION 17, T155, R7E, S14B&M.
LOCATION LAYOUT & CUT SHEET

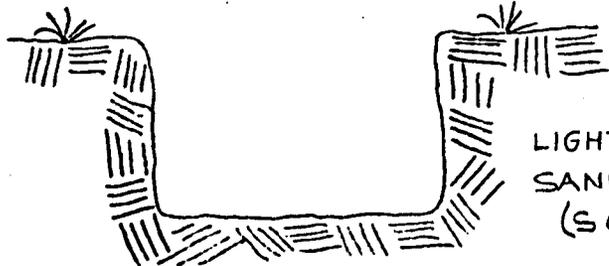


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HUNTINGTON CREEK

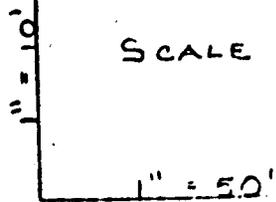
SOILS LITHOLOGY

- NO SCALE -



LIGHT BROWN
SANDY CLAY
(SC-ML)

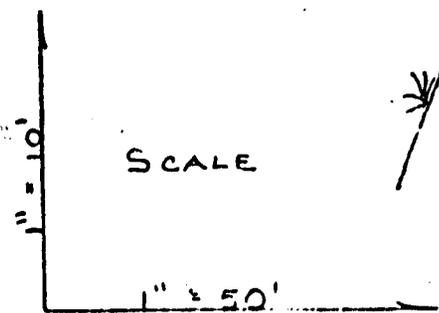
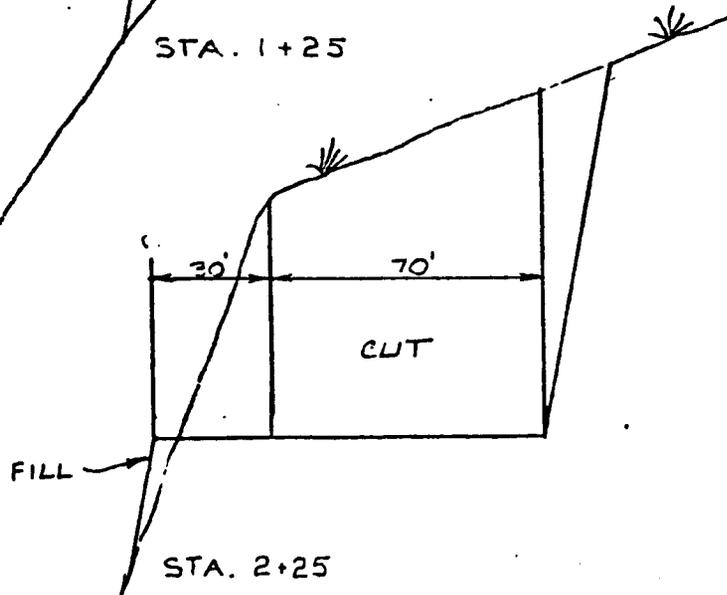
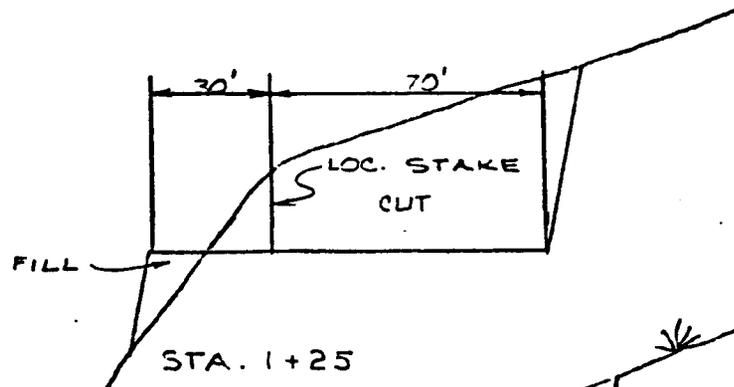
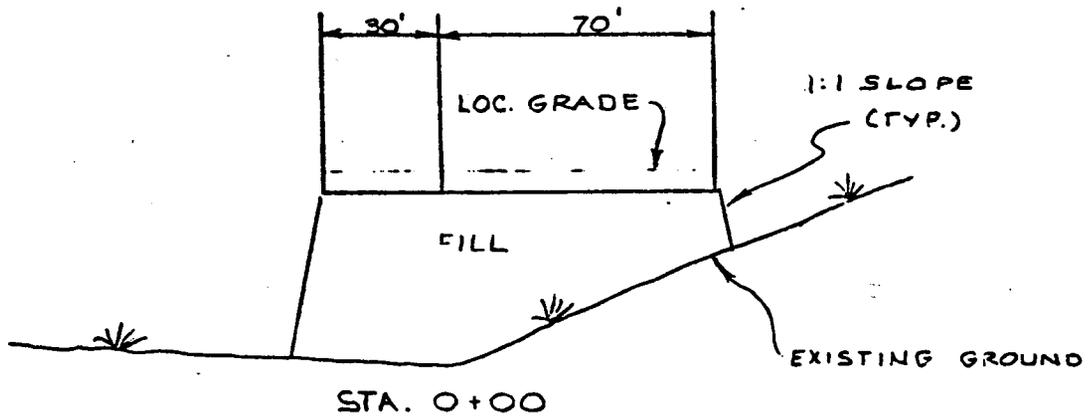
50'



SCALE

FILL

FILL



APPROX. YARDAGES

CUT - 4,909 CU. YDS.

FILL - 1,718 CU. YDS.

T15S, R7E, S.L.B. & M.

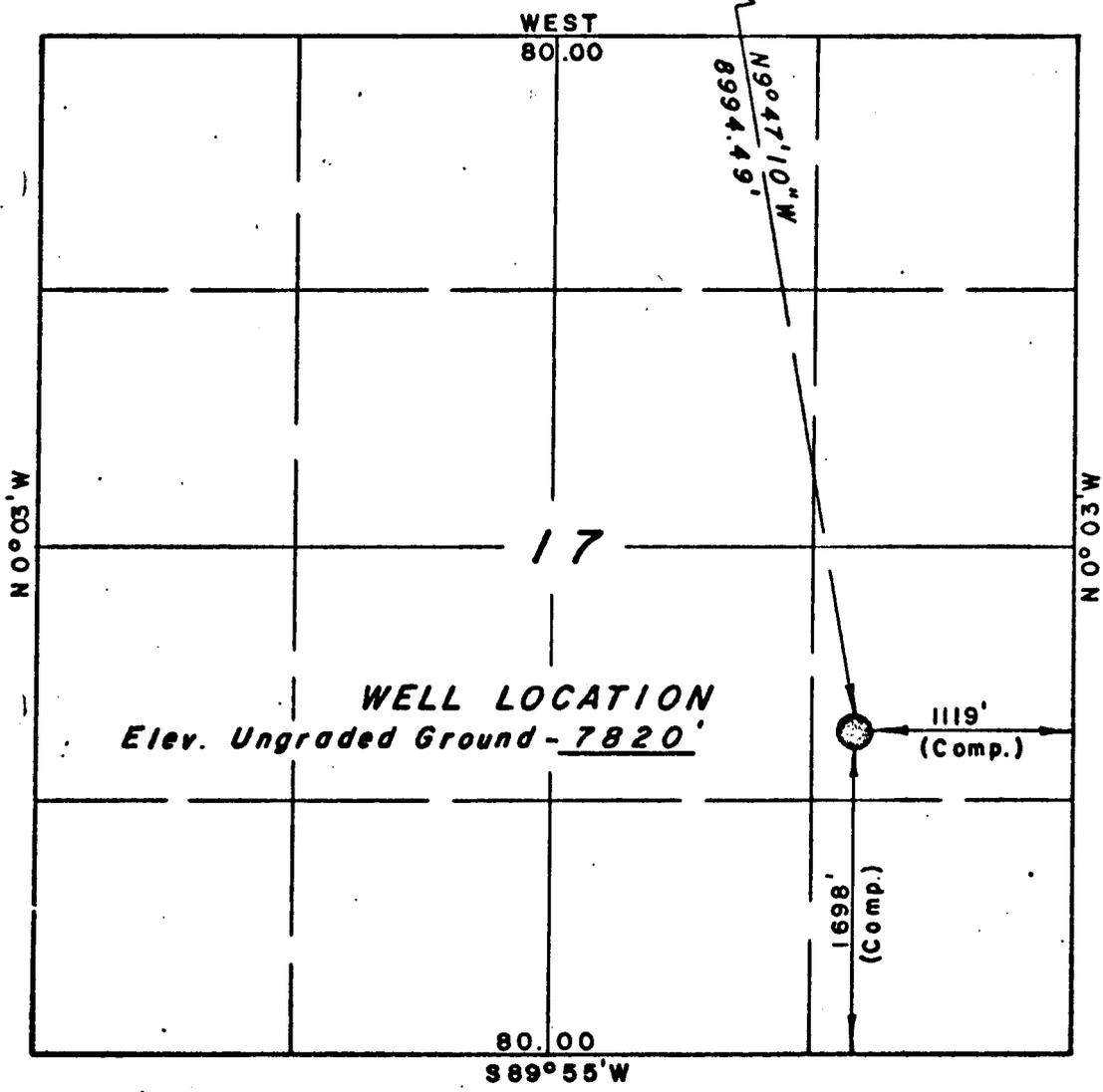
ENERGY RESERVES GROUP

Well location located as shown in the NE 1/4 SE 1/4 Section 17, T15S, R7E, S.L.B. & M. Emery County, Utah.

To the North 1/4 Cor. Sec. 8, T15S, R7E, S.L.B. & M.

NOTE:

Basis of Bearings is from a Solar Observation.



CERTIFICATE

THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

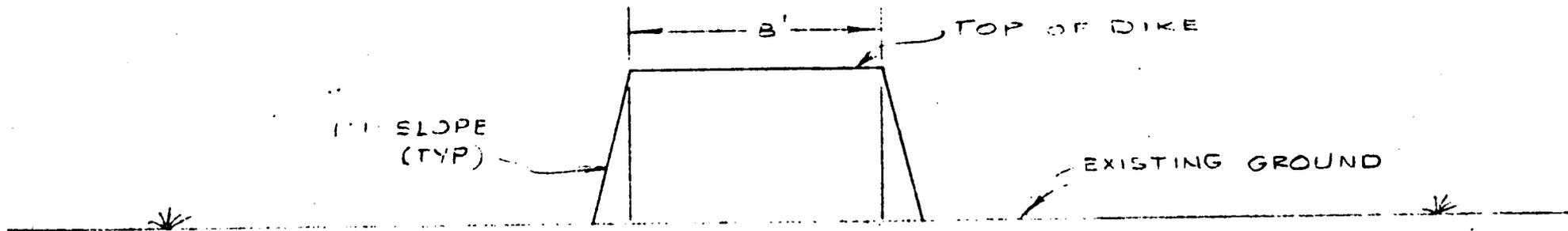
Gene Stewart

REGISTERED LAND SURVEYOR
REGISTRATION NO 3154
STATE OF UTAH

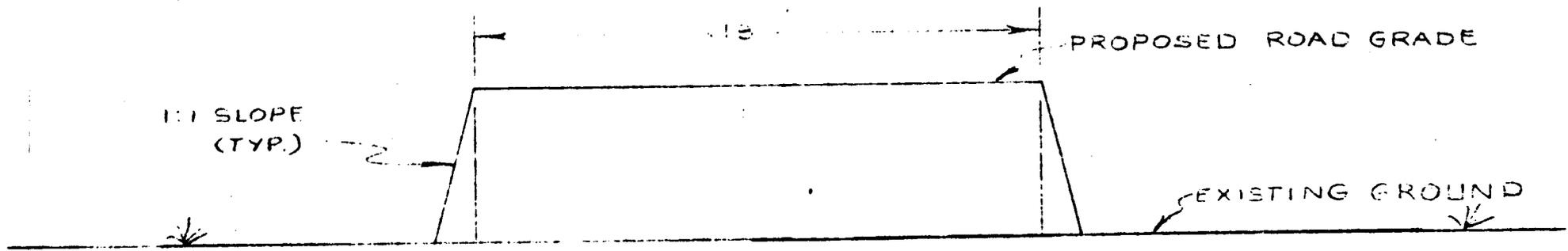
UINTAH ENGINEERING & LAND SURVEYING
P.O. BOX Q - 110 EAST - FIRST SOUTH
VERNAL, UTAH - 84078

SCALE 1" = 1000'	DATE 10 / 26 / 78
PARTY GS SS DS RP	REFERENCES GLO Plat
WEATHER Fair & Hot	FILE ENERGY RESERVES

X = Section Corners Located

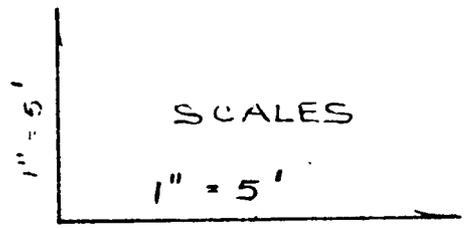


TYPICAL DIKE CROSS-SECTION

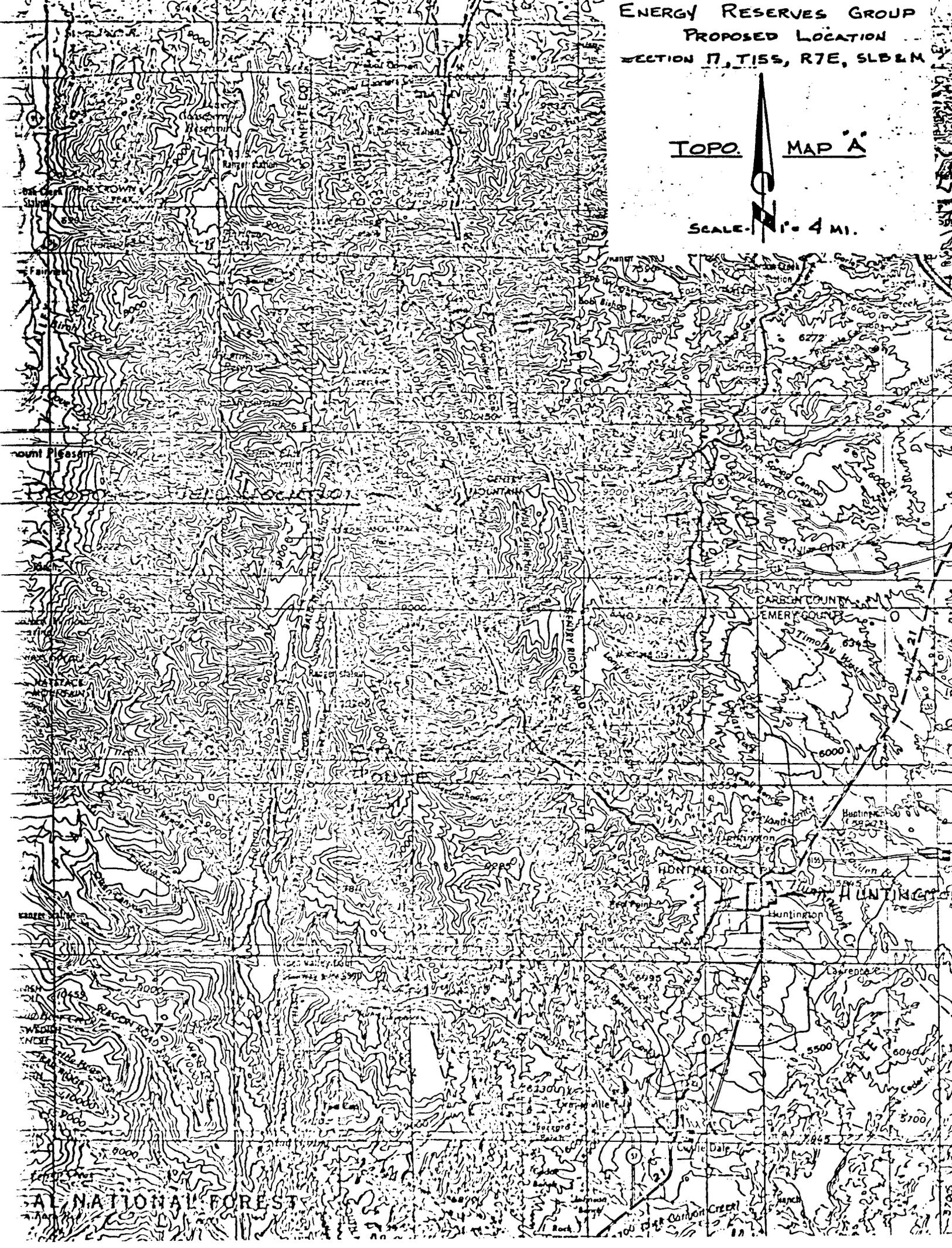
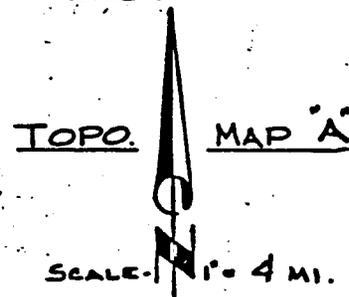


TYPICAL ROAD CROSS-SECTION

ENERGY RESERVES GROUP
 SEC. 17, T15S, R7E, S. 1 & 2 M.
 — CROSS SECTIONS —



ENERGY RESERVES GROUP
PROPOSED LOCATION
SECTION 17, T15S, R7E, SLB&M



I. INTRODUCTION TO PROPOSED ACTION

On June 28, 1978, Energy Reserves Group, Inc., of Casper, Wyoming, made application to the District Engineer of the U.S. Geological Survey, Conservation Division, Salt Lake City, to drill a wildcat well on Federal oil and gas lease U-10344. The proposed well is located on the Price District of the Manti-LaSal National Forest.

The USA Lynda #1 Well, as it will be called, was originally proposed to be drilled in the SE $\frac{1}{4}$ NE $\frac{1}{4}$, Sec. 16, T15S, R7E, SLM, Emery County at the head of Pole Canyon. The site was atop a steep-sided, rocky knob on Gentry Mountain. Access to the proposed site is difficult. The side slopes that would have to be crossed to get to the site are too steep and unstable for road construction without causing substantial irreversible environmental impacts.

Large quantities of earth would have to be moved to construct a road to the site. This would result in high cut banks and fill slopes that would be unreclaimable. The scars would create a visual impact, reduce vegetation production, and, because of the oversteepening of the area, serve as an unstable erosion source.

Five alternative locations to the proposed site were identified, one in Pole Canyon and four in Huntington Canyon (see attached map). Each location was evaluated from the standpoint of the operator's need and from the standpoint of environmental and resource considerations.

Alternate site number 4 was selected both by Energy Reserves and the Forest Service as being the most desirable location and meeting the identified needs for the drilling operation.

On July 27, 1978, Energy Reserves submitted an "Application to Drill" to the U.S. Geological Survey for the alternate site. The site is located in the NE $\frac{1}{4}$ SE $\frac{1}{4}$, Sec. 17, T15S, R7E, SLM. It is in the bottom of Huntington Canyon adjacent to State Highway 31 (Forest Highway 7) and approximately 65 feet from Huntington Creek at elevation 7,820.

The area of the drill site has been designated as a Water Influence Management Zone in the Multiple Use Management Plan of the District. The management direction for this area is to: (1) maintain or improve the aquatic and associated environment to protect or enhance water quality and usefulness, (2) protect or enhance the esthetic qualities and values, (3) develop or maintain recreation sites and facilities for intensive occupancy, use, and enjoyment by the public, and (4) develop or maintain fish and wildlife habitat, timber and range resources, and various activities at levels which will maintain soil and water quality and usefulness, and which will best enhance or maintain the water-oriented outdoor recreation use and aquatic environment.

Appendix No. 2

ENVIRONMENTAL ANALYSIS REPORT

Application to Drill
Energy Reserves Group
USA Lynda #1 Well - Federal Lease U-10344

17-15S-7E

Price Ranger District
Manti-LaSal National Forest
Region 4

Report Prepared By: Bruce J. Adams Date 3/3/79
Forester

Approval of Report
Recommended By: J. W. Hatch Date 2/2/79
District Ranger

W. H. Baley Date 3/14/79
Forest Engineer

Report Approved By: Leed C. Christensen Date 3/14/79
Forest Supervisor

NEGATIVE DECLARATION

File Designation

Date

Name of Activity

Ranger District

National Forest

The proposed activity is not considered to be a major Federal action significantly affecting the quality of the human environment (requiring an environmental statement pursuant to Section 102(2)(C) of the National Environmental Policy Act of 1969 (PL91-190) or to be highly controversial. Those actions that could adversely affect the quality of the physical and biological components in the project area will be sufficiently minimized to prevent long-term environmental impacts. Overall social and economic effects of the proposal are considered to be beneficial. Consultation with others on the proposed project did not reveal significant adverse reaction. These determinations are based upon evaluations made in the attached Environmental Analysis Report.



Signature

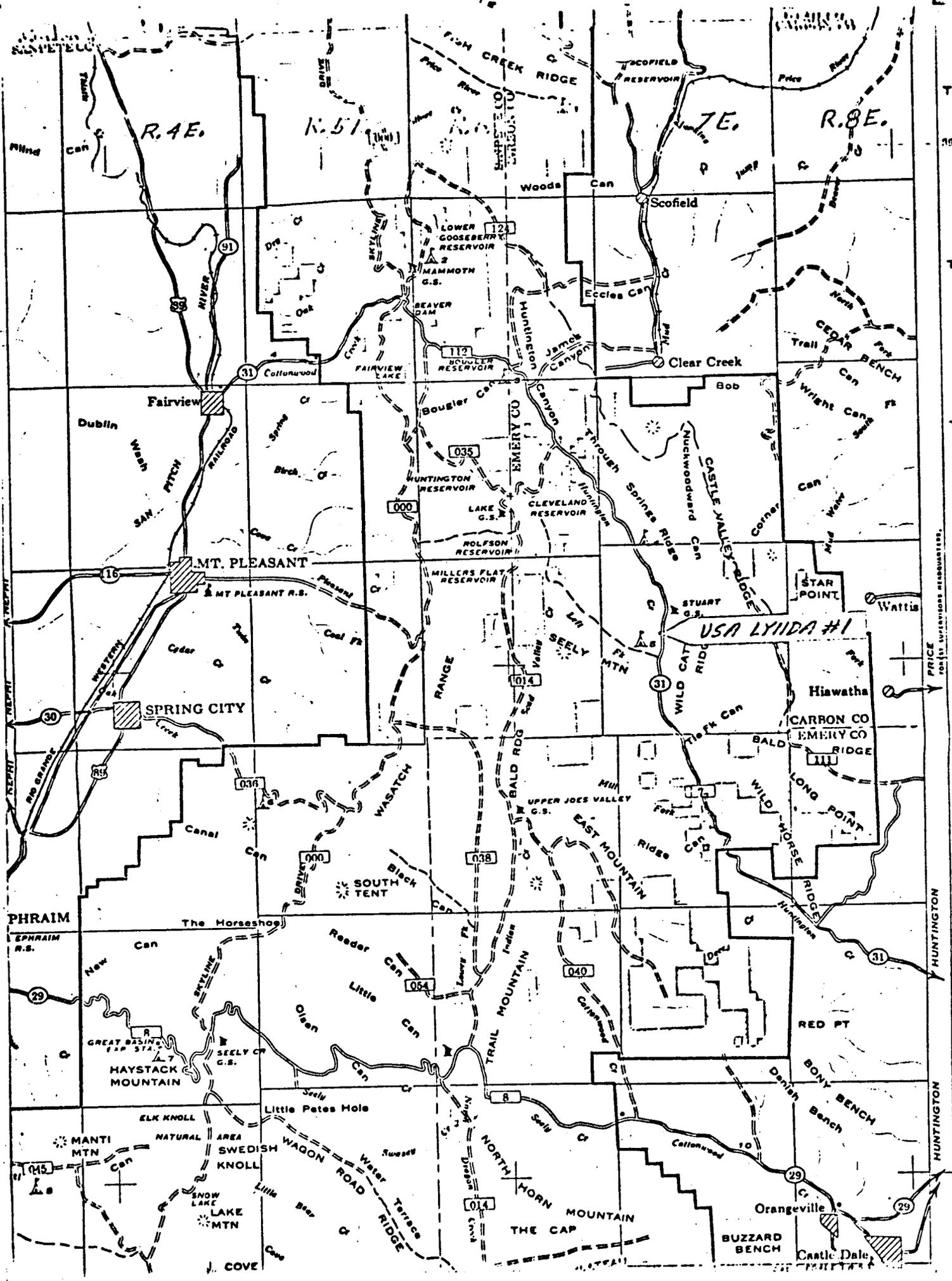


Title

Enclosure

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T. 12
10° 45'
T. 13
T. 1
T. 1
39°
T.
T.
39°
T.

PRICE
per 100 LB. UNWEIGHED RESIDUES

HUNTINGTON

HUNTINGTON

HUNTINGTON

USA LYINDA #1

R. 4 E.

R. 51 (NW)

R. 7 E.

R. 8 E.

Fairview

MT. PLEASANT

SPRING CITY

PHRAIM

HAYSTACK MOUNTAIN

MANTI MTN

NORTH HORN MOUNTAIN

BUZZARD BENCH

Castle Dale

LOWER GOOSEBERRY RESERVOIR

MAMMOTH G.S.

BEAVER DAM

FAIRVIEW LAKE

BOULDER RESERVOIR

HUNTINGTON RESERVOIR

LAKE G.S.

CLEVELAND RESERVOIR

ROLFSON RESERVOIR

MILLERS FLAT RESERVOIR

UPPER JOES VALLEY G.S.

SEELY G.S.

WASATCH

SOUTH BLACK TENT

TRAIL MOUNTAIN

INDIAN

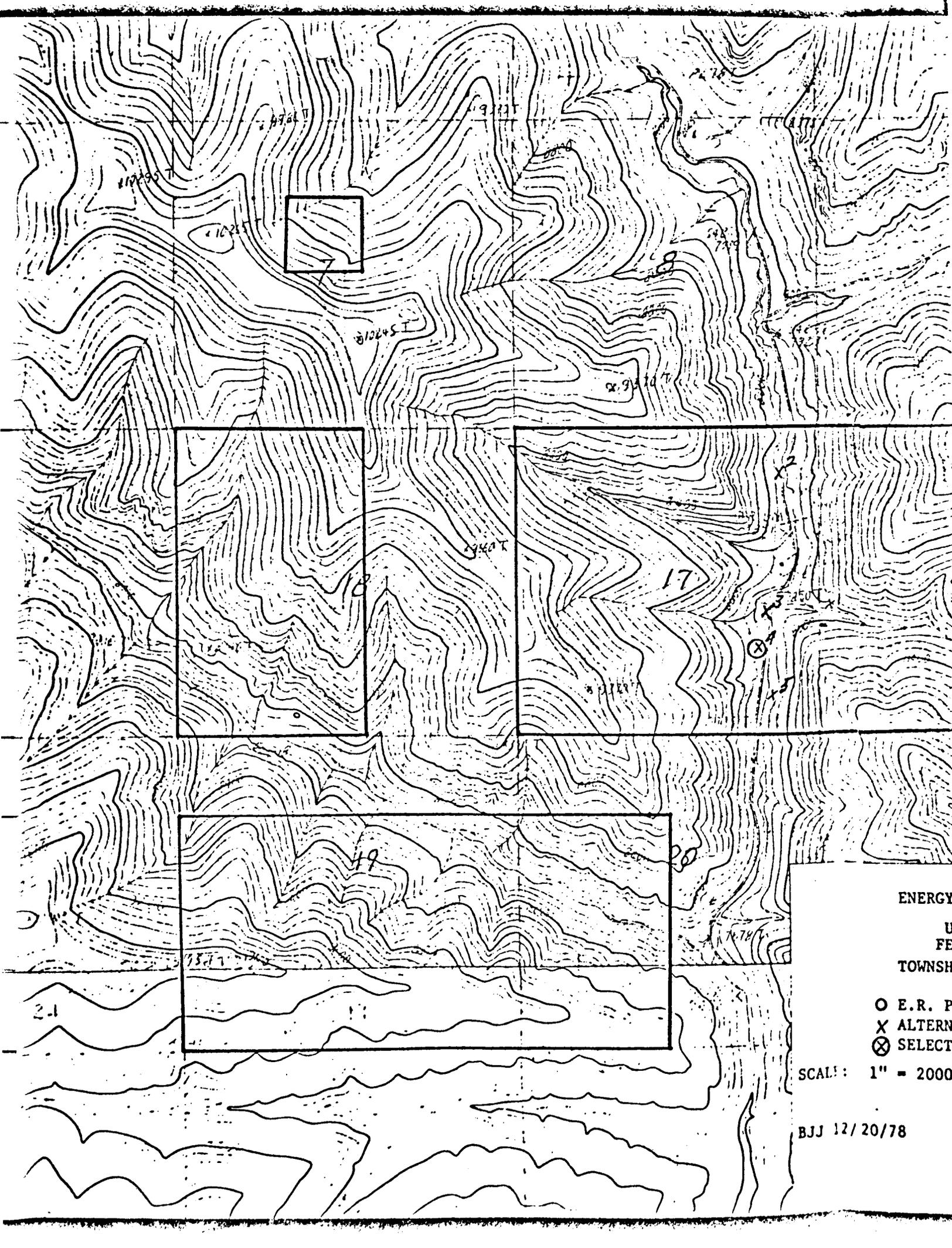
TRAIL MOUNTAIN

THE CAP

WAGON ROAD RIDGE

WATER TERRACE RIDGE

THE CAP

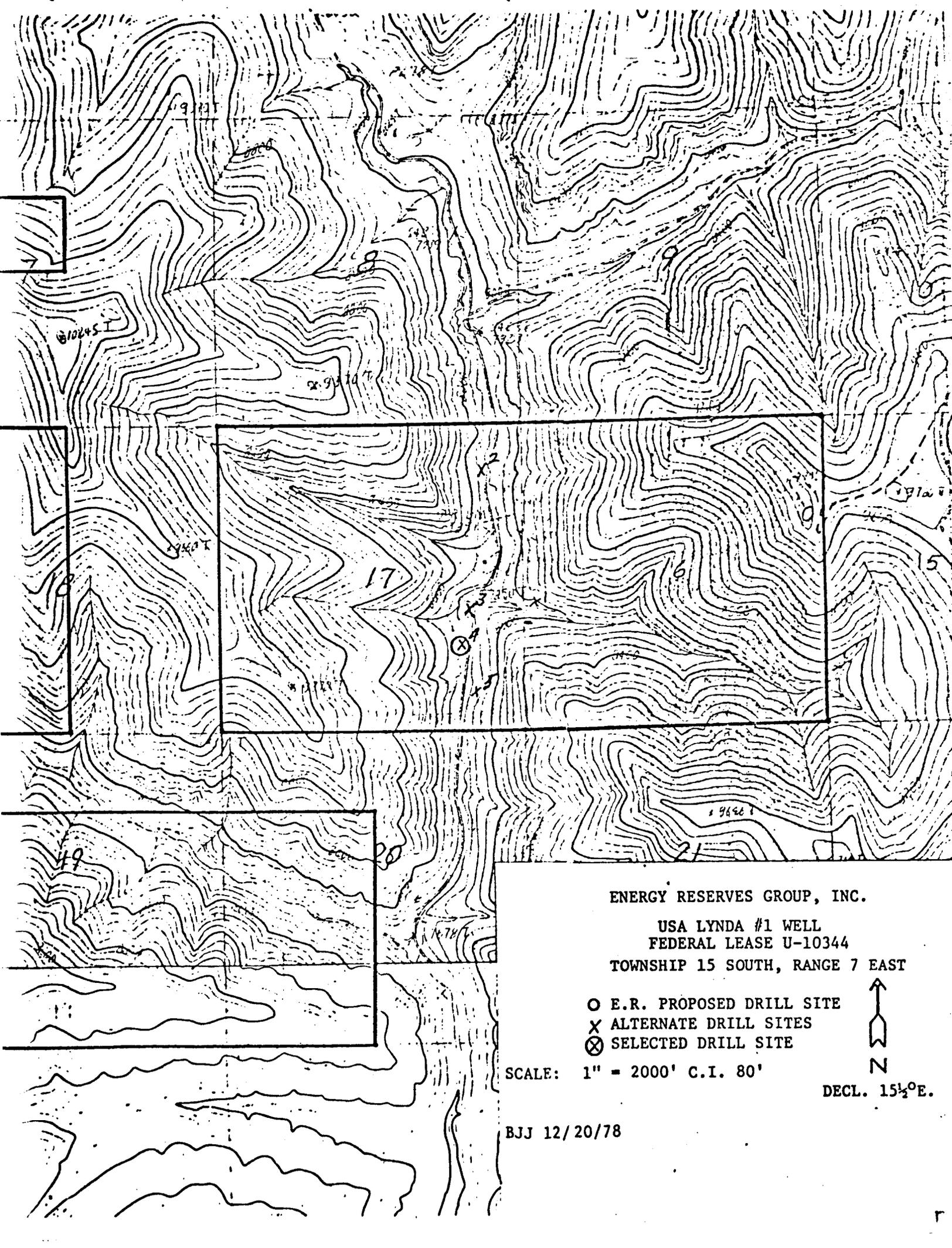


ENERGY
U
FE
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- E.R. P
- X ALTERN
- ⊗ SELECT

SCALE: 1" = 2000

BJJ 12/20/78



ENERGY RESERVES GROUP, INC.

USA LYNDA #1 WELL
FEDERAL LEASE U-10344

TOWNSHIP 15 SOUTH, RANGE 7 EAST

- E.R. PROPOSED DRILL SITE
- × ALTERNATE DRILL SITES
- ⊗ SELECTED DRILL SITE



SCALE: 1" = 2000' C.I. 80'

DECL. 15½°E.

BJJ 12/20/78

There was an on-site inspection of the drill site October 5, 1978. Representatives of the U.S. Geological Survey, Forest Service, Energy Reserves, and Uintah Engineering were in attendance. At that meeting the drill site layout and design were discussed. Features were discussed which would be designed into the drill pad and reserve pit to allow for adequate protection of Huntington Creek, reduce the visual impact of the site, and enhance reclamation efforts. These are discussed in later sections.

The hole will be drilled to a depth of 5,200 feet to explore a known geologic structure in the old Clear Creek Gas Field. Several abandoned gas wells are located in the area, the nearest being in section 5, approximately two miles to the north. There are no buildings located within a one-mile radius of the proposed well site.

Access to the drill site will be via State Highway 31. No additional improvements are anticipated. There is an existing approved approach to the site from the highway.

The drill site will be constructed on a gently sloping area that includes a portion of the old Huntington Canyon road. An area 100' x 225' will be leveled to accommodate the drill rig and ancillary equipment. Drilling fluids and cuttings will be collected in a reserve pit approximately 60' x 100', and a burn pit, 25' x 35' used for flaring gas, will be constructed. The total disturbed area will be a little less than two acres. (see figures 1 and 2).

The reserve pit will be constructed and compacted to the standards of a small dam. The pit will be lined so as to prevent any leakage of drilling fluids. Because of the small area available to construct a reserve pit, it is necessary to restrict the pit size. It is planned to pump the pit on a routine basis while drilling the well and haul the waste material to an approved dump site near Huntington.

A portable chemical toilet will be used during the operations. Trash will be collected in a container and hauled to the Huntington dump.

It is planned to pump water to the location from Huntington Creek using a small gasoline powered pump. Acquisition of the water will be by contacting the water users.

Operations will begin as soon as weather conditions permit. It is estimated that it will take 30 to 45 days to drill the well. Additional time will be required to set the well up for production and construct a pipeline.

In the event that production is established, it will be necessary to set a small separator and glycol unit. All facilities will be located on the drill site and painted so as to blend in with the surrounding vegetation. Additional vegetation will be required to provide screening to the site. A pipeline will also be required. The route will be chosen at a later date when future development plans, contracts, etc., are known.

ENERGY RESERVES GROUP
 SECTION 17, TISS, RTE. S.L.B.M.
 LOCATION LAYOUT & CUT SHEET

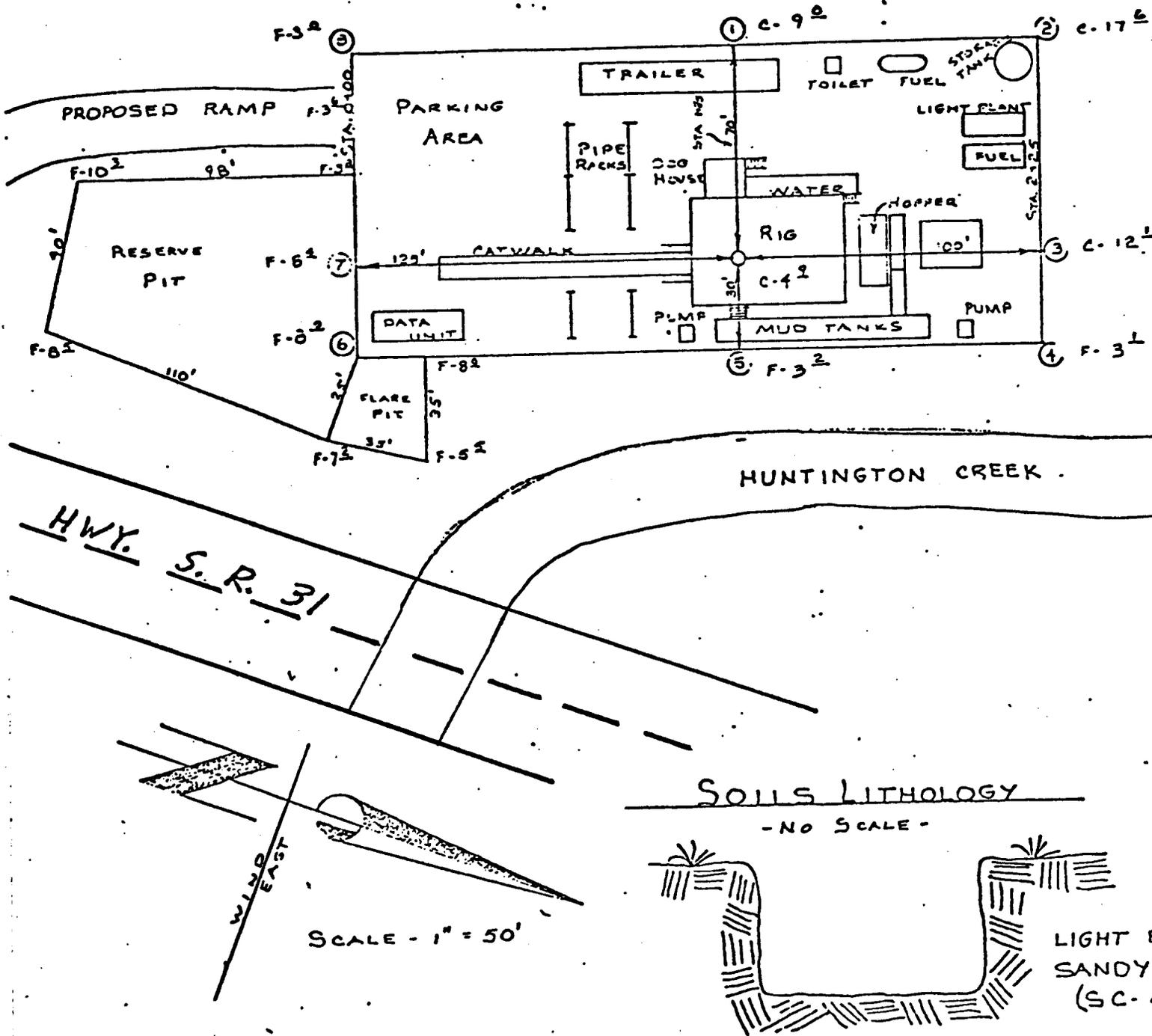
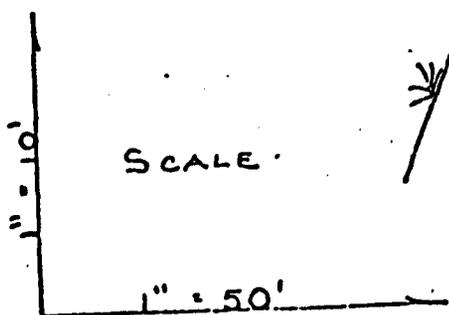
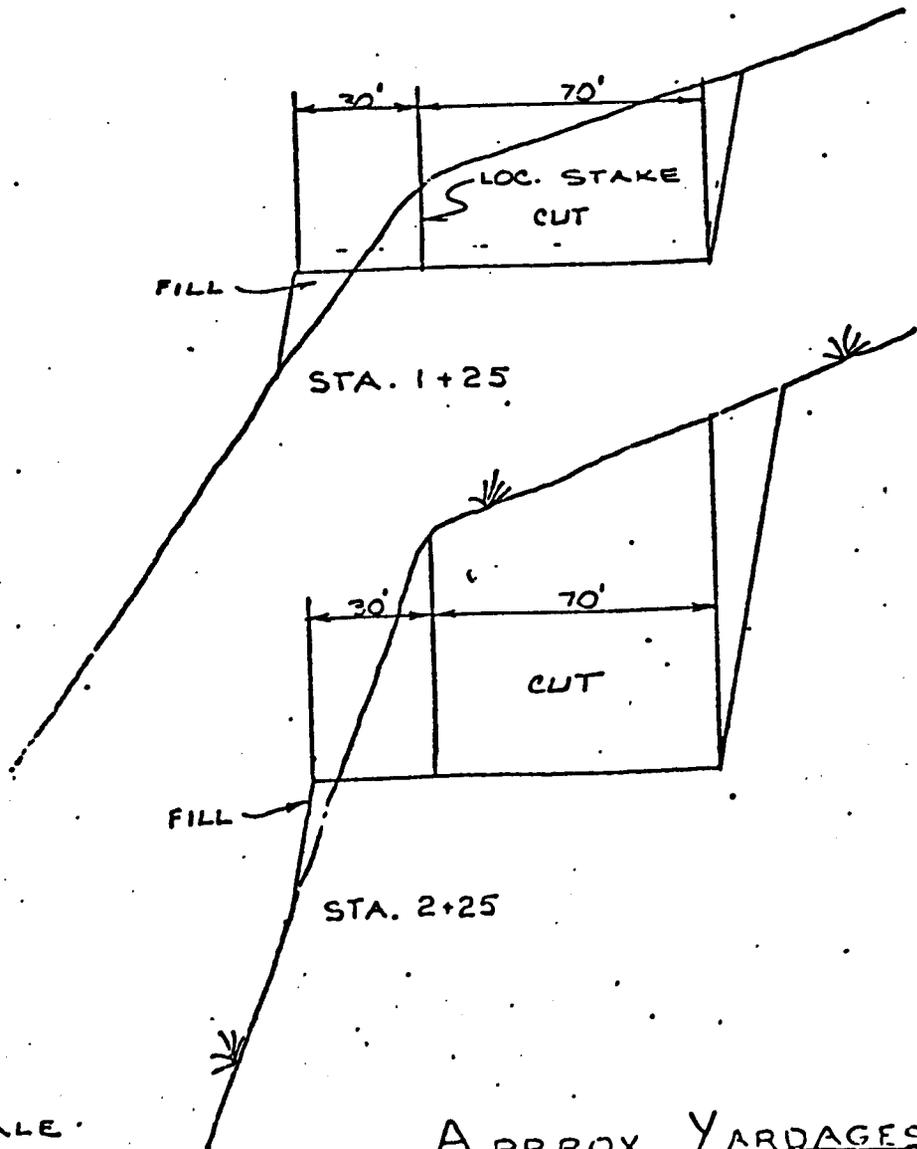
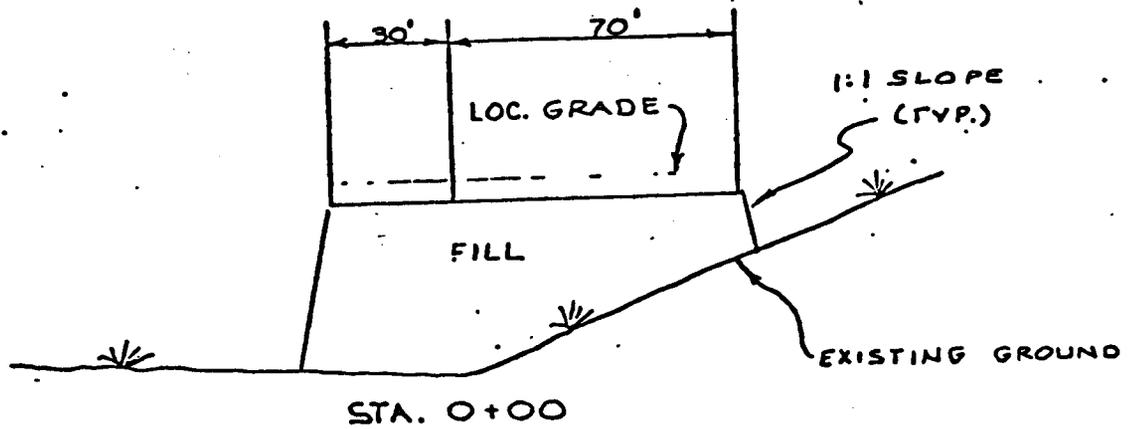


FIG. 1



APPROX. YARDAGES

CUT -	4,907	CU. YDS.
FILL -	1,718	CU. YDS.

FIG.-2

It will be required that the travel and parking surface of the drill pad be gravelled before the drill rig moves onto the location.

After drilling and completion the area will be policed up, the reserve pit pumped dry, and the liner removed. The pit will then be backfilled with soil and recontoured to as near its original condition as possible. If the well is plugged, the entire disturbed area will be recontoured, the top soil spread over the site, and the disturbed areas reseeded to Forest Service specifications. (Refer to later sections).

This report will be the document by which the Forest Service transmits to the Geological Survey its coordination requirements. These requirements are highlighted by underlining in this report.

This report will discuss the proposed action from the standpoint of exploration drilling. It will not attempt to document in detail resource impacts should the well become a producer. Production site plans and transportation routes for this well have not at this time been developed to the point that environmental impacts can be fully addressed. Indications are that resource coordination could be achieved to provide for this use.

Should this well go to production, the Company will be required to submit a production plan which will include location and specifications for the pipeline to the Geological Survey. At that time, the Forest Service will prepare an Environmental Assessment for these features, which are unknown at this time.

II. ENVIRONMENTAL IMPACTS

A. Topography and Geology

The proposed drill site is located approximately thirteen miles up Huntington Canyon at the confluence of Pole Canyon and approximately one mile north of the confluence of the Right Fork of Huntington Creek and the Left Fork of Huntington Creek. Huntington Canyon is one of the major drainages of the Wasatch Plateau. For most of its length it is a deep, steep-walled canyon with 2,000 to 3,000 feet vertical relief from the canyon floor to the surrounding ridge tops.

The drill hole will collar in unconsolidated, sorted, alluvial and colluvial valley fill ranging in size from silt and clay to boulders. Exposed bedrock in the surrounding area indicates that the valley fill overlies the upper part of the Upper Cretaceous Mancos Shale. Prominent cliff-forming outcrops of the Starpoint Sandstone are exposed on the canyon walls several hundred feet above the proposed site.

The soil at this location is a shallow to moderately deep, light brown, sandy soil that contains common angular to subrounded fragments that may reach $\frac{1}{2}$ meter or more in size. Despite the high fragment content, fairly well-developed topsoil is present on much of the site.

The drilling pad and waste pits will be constructed in the valley fill. The pits will be lined with polyethelene to prevent seepage of waste fluids into groundwaters and Huntington Creek which flows adjacent to the site.

No presently unstable features such as slumps, landslides or debris falls were observed in the immediate vicinity of the proposed site; however, a steep slope, apparently consisting of colluvial and alluvial material, exists adjacent to the western perimeter of the site. Excavation into this slope might result in stability problems because of oversteepening.

B. Air Quality and Climate

The ambient air quality in the vicinity of the proposed site is essentially similar to that throughout the Wasatch Plateau; that is, the air is of good quality and is generally free of pollutants. Prevailing winds in the area are from the southwest. However, because the site is located on the floor of Huntington Canyon, diurnal canyon wind fluctuations will probably be of primary importance in actual wind conditions at the site.

Limited, short-term impacts to the ambient air quality can be expected to result from the proposed drilling operations. Increased concentrations of hydrocarbon pollutants will result from the operation of equipment involved in the drilling project. Particulate pollution will be increased due to vehicle operations on the unimproved drill pad and access road surfaces. In addition, particulate pollution may also be increased when air drilling methods are utilized at the site.

The expected influence of canyon winds should create favorable conditions for the dispersion (but not elimination) of both hydrocarbon and particulate pollutants that are generated at the site.

Mitigating measures to limit increased air pollution will be required of the operators. This will include continuous watering of air-ex-pelled drill cuttings and periodic watering of the drill pad and access road if they become sources of particulate pollutants.

There is also the remote possibility of a well head blowout. National statistics indicate that blowouts are held to 1 in 2,600 wells drilled. Strict compliance to State and Federal regulations pertaining to blowout preventers and prompt fire suppression efforts if a blowout occurs, will reduce this hazard although not eliminate it entirely.

It is often the practice to burn garbage and waste material on site. This practice results in obvious impacts to the airshed as well as creates a fire hazard. No trash burning will be allowed on National Forest lands. All solid waste will be properly disposed of off the Forest.

The climate of the area is generally cool and dry. Average annual precipitation is approximately 20 inches. Up to 1/3 of this, 6 to 8 inches, may occur during the summer months, primarily from short, high-intensity thunderstorms, the remainder is almost entirely from winter snowfall. Temperature data are available from Bear Canyon near the Huntington Power Plant, which is approximately 8 miles south of the proposed site and 600 to 700 feet lower in elevation. The mean annual temperature at the proposed site (extrapolated from the Bear Canyon data) should be within the 40° to 50°F. range. Annual temperatures may range from 0°F. or below in winter months to 90° to 100°F., during the summer. A frost-free season of 100 days should not be unusual for this location.

C. Soils

Soils at the site area are a product of several geologic processes, or a combination of these processes. The site is located on the Huntington Creek flood plain. Materials within this flood plain are composed principally of stream deposited sand and gravel to boulder size sandstone fragments containing varying amounts of silt and clay. These materials are intermixed to some degree and also overlain in some locations by small alluvial fan deposits, composed of gravelly to cobbly silts and clays; slopewash deposits, which, in most cases, are very small and generally confined to the parameters of the flood plain, and topsoil materials composed of above mentioned materials and organic materials.

A subsurface soils investigation was not made at the site. The following is presented from surface examinations data only.

The site is located immediately downstream from a small alluvial fan deposit. This deposit is very clayey and overlies the stream fill deposits of sand and gravel. At the site the clayey fan deposits are over 10 feet in thickness and overlie the gravel. The gravels also are fairly thick, estimated to exceed 20 feet. Top soil varies in thickness and composition but averages from 15 to 20 inches. They are dark brown to black in color and primarily are sandy silts and clays in composition.

The site presently is well vegetated indicating the soil to be productive. The top soil (approximately the upper 18-20 inches) will be stripped from the site and stockpiled for use in rehabilitation of the site.

The stream fill sand and gravel deposits are permeable. The alluvial fan and slope wash deposits are clays and generally have low permeabilities, recompacted they will be impervious.

There is presently very little if any sediment produced from the site area. Soil loss from erosion will be increased by the activity. This will be minimized by controlling the construction, proper location of stockpiles, drainage requirements and gravelling the surface of the work areas. Revegetation will be accomplished upon completion of the well to further minimize erosion and sediment production.

The reserve pit location appears to be within the clays of the alluvial fan deposit. It may approach the gravels of the stream fill deposits. Also part of the pit will be constructed as required in section D. The pit will use the clays excavated from the pit for the required embankment. The pit will be lined to prevent seepage of drilling fluids into the creek. (see Hydrology section D).

All flat surface areas except for the mudpit are required to be gravel surfaced. This will minimize dust, soil erosion problems with mud, and will help to control material from entering the creek.

Upon completion of the well, the site is to be reshaped to natural land contour. The stockpiled soil will then be spread over the site and the site revegetated as discussed in section E.

D. Hydrology

The site is adjacent to Huntington Creek and bordered on the north by a small unnamed intermittent drainage.

Huntington Creek supplies both culinary and irrigation water for North Emery County. It is an important State fishery and for the past few years has been used by Utah Power and Light to supply water to their coal-fired power plants at the mouth of Huntington Canyon.

In 1973, Utah Power and Light constructed a dam approximately 7 miles upstream of the proposed drill site. Since that time the amount of water in the creek has been regulated. A minimum of 15 cubic feet per second has been maintained from May 1 to September 30 and 12 cfs from October 1 to April 30. Periodically, Utah Power and Light releases a large volume of water from the dam (165 cfs) for a few days to flush the accumulated silt from the stream bottom gravels to enhance the fisheries habitat.

Huntington Creek is characterized by the V-shaped canyon type with a gradient of 125 feet per mile through the vicinity of the drill-site. Water samples collected by Utah Power and Light in recent years contained less than 300 mg/l of dissolved solids; chemical analysis of those samples indicate the water is chemically suitable for culinary use and most other common uses.

Flood projections at the drill site for the 50 year occurrence, considering a watershed of approximately 30 square miles, would be 645 cfs for Huntington Creek. The drainage to the north of the site would produce approximately 4 cfs.

The water table is about the level of the creek at the drill site.

During the course of drilling a deep well, one or more aquifers could be penetrated. Drilling does post possible impacts to the ground water system. Intermingling of ground waters may result in contamination of aquifers and the raising or lowering of certain aquifers. This has been a long recognized problem. To mitigate this problem, the Geologic Survey's drill hole plugging requirements will be strictly enforced.

To prevent sediment loading of Huntington Creek and potential damage to the fisheries habitat, the following drainage and construction features will be incorporated into the drill site design:

1. The site, because of the sensitive nature of its proximity to Huntington Creek, must have both internal and external drainage systems.

The internal or site drainage should be accomplished by constructing a berm around the site and grading the site in such a manner that all surface water is directed into the reserve pit. This drainage should be transverse to the axis of the site, and be on an approximate one percent grade. Gravel surfacing of the site will be required to maintain the site surface drainage, and prevent ponding of water normally encountered by rutting of the surface during wet weather. Some grader maintenance of the surface may be necessary for snow removal and to maintain the drainage.

2. The external drainage will be achieved by constructing a ditch section on the north and west of the site to intercept surface runoff and prevent surface waters from reaching the work area; water that is accumulated in this ditch section will be routed to the south of the site and led off by the existing roadway culvert under Forest Highway 7. To prevent soil particles from

this ditch from reaching the stream course, a series of temporary dikes will be constructed on the south. These temporary erosion control dikes will utilize straw bales placed across the small drainages and staked to the native ground to prevent movement. The bales will be placed two bales high to form a spillway section. It may be necessary to replace the bales during operation, if large amounts of sediment are encountered.

3. The embankment for the reserve pit will be constructed utilizing small dam construction criteria. A minimum top width of 10 feet and sideslopes of 2:1 will be required. The embankment will be compacted with a sheepsfoot roller, or other acceptable compaction equipment, to a 90 percent Proctor density. This may entail watering of the fill material to achieve optimum moisture conditions, if soil moisture is low during the time of construction. The pit will be lined with a seamless butyl rubber liner, properly bedded on a blanket of sand or other fine-earth material free of protruding obstructions. This is necessary to prevent puncture to the liner. The liner, when properly installed, will provide a complete seal so no percolation into the embankment or pit bottom will be possible. A freeboard of two feet will be strictly maintained on the water level. Provisions for storage of storm water falling on the drill site must be made in the reserve pit. It is understood that daily pumping of the pit will probably be necessary.
4. The access road will be constructed to approach the southwest corner of the drill site. A ditch section will be constructed on the uphill-side of the road to provide for external site drainage, as discussed previously. If the road embankment is planned to serve as the west side of the reserve pit, it must also receive the same compaction effort as outlined for the reserve pit.
5. Runoff diversion structures, such as contour furrows, will be used on the site when it has been reclaimed.

E. Vegetation

The vegetation at the site consists of wheatgrasses, smooth brome, rabbitbrush, sagebrush, pearly everlasting, serviceberry, quaking aspen, subalpine fir and Engelmann spruce.

THE FOREST PLANT SPECIALIST HAS INVESTIGATED THE AREA AND DETERMINED THERE ARE NO THREATENED OR ENDANGERED PLANT SPECIES OCCURRING ON OR ADJACENT TO THE PROPOSED DRILL SITE.

The existing vegetation on the site will be destroyed during the development of the drill site. However, it is required that all disturbed areas will be reseeded with the following seed mix at the rate of 20 pounds to the acre:

3 lbs. Smooth brome

3 lbs. Timothy

2 lbs. Orchard grass

2 lbs. Intermediate wheatgrass

1 lb. Kentucky bluegrass

1 lb. Ranger alfalfa

1 lb. Meadow foxtail

The operator will be responsible for a satisfactory re-establishment of vegetative cover. Satisfactory revegetation for this area will require establishment of vegetation density at least comparable to what presently exists adjacent to the drill site.

The seed will be drilled into the topsoil after the site has been re-contoured and topsoiled. This work should be done on the contour. The surface after topsoiling should be left in a roughened condition.

The site will be fertilized at the application rate of 40 to 60 pounds of available nitrogen per acre and 80 to 100 pounds of phosphorous per acre. This should be applied before the site is drilled to insure that the fertilizer is incorporated into the soil during the drilling process.

Forty Douglas-fir seedlings, 2-0, bare root stock are to be purchased and planted by the operator. The planting is to be at randomly selected spots with the spacing no tighter than 10' x 10'.

Several serviceberry bushes are to be taken from the surrounding areas and transplanted onto the site.

Cattle, camping, and vehicle use must be restricted until vegetation has become established. This will require the construction and maintenance of a four-strand, barbed wire fence around the entire site.

If revegetation is not successful after one growing season, then follow-up measures such as hydromulching will be considered.

If the well goes into production it will be necessary to landscape the area in accordance with a plan developed by the Forest Service Landscape Architect in consultation with the operator. Large trees and shrubs will be required as a part of this scheme to present an immediate screening effect.

F. Wildlife and Fish

Wildlife habitat is an important use of the surface resources in the vicinity of the proposed drill site. Large mammal species that may frequent the area include deer, elk, moose, black bear, and cougar. Other mammals may include beaver, bobcat, coyote, red fox, grey fox, badger, snowshoe hare, and various other species. Birds that may inhabit or frequent the area include the golden eagle, red-tailed hawk, rough-legged hawk, goshawk, screech owl, common raven, red-shafted flicker, yellow-bellied sapsucker, robin, mountain bluebird, phainopepla, grey-headed junco, Stellar's jay, mountain chickadee, vesper sparrow, Audubon's warbler, Clark's nutcracker, mourning dove, nuthatches, sparrows, and various other species.

THE FOREST WILDLIFE BIOLOGIST HAS INVESTIGATED THE AREA AND DETERMINED THERE ARE NO THREATENED OR ENDANGERES ANIMAL SPECIES IN THE AREA.

Because of the relatively low elevation of the floor of Huntington Canyon, deer, elk, and moose may frequent the general area for winter forage. Loss of forage resulting from this project will be temporary and will be restricted to the area cleared for access and for the drill pad. This is a small area. Proper revegetation of the disturbed areas will restore forage and browse vegetation to acceptable levels within a few growing seasons. The most significant impacts to wildlife will probably result from the continuous presence of personnel, equipment, and obnoxious noises, all of which may frighten animals in the vicinity of the drill site and may disrupt grazing migrations. The presence of well-traveled State Highway 31 in Huntington Canyon probably already creates substantial impacts of this nature, and the additional impacts posed by this project should be of minor importance. To avoid undue impacts to wildlife, intentional harassment of any animal species will not be permitted.

Traffic of personnel and equipment along State Highway 31 may cause an increase in road-killed wildlife. To reduce the probability of wildlife road kills, precautionary driving practices, particularly under poor weather and road conditions, will be required of all vehicle operators.

Huntington Creek is a high-quality fishing stream and, in this area, is rated as a class 3 trout fishery by the Utah Division of Wildlife Resources. A letter from Mr. Larry J. Wilson of the Utah Division of Wildlife Resources states that brown trout may spawn in the vicinity of the proposed site during the fall and winter and that cutthroat trout may spawn in the area during the spring. Extreme caution to prevent the escape of sediment or pollutants into the stream will be required during construction of the site and during drilling operations.

Necessary precautions in construction and operations will include:

1. Cuts and fills, and other earth-moving construction, will be designed in a manner that will lessen the possibility of sedimentation of the stream during construction and restoration.
2. The site itself will be internally drained to prevent any contamination of Huntington Creek by drilling related materials.
3. A drainage system will be constructed around the perimeter of the drill pad and other disturbed areas to prevent slope runoff from reaching the drill pad and becoming contaminated prior to reaching Huntington Creek.
4. A filtration system consisting of stake-fastened straw bales will be constructed in the external drainage channel to prevent silt or other suspended materials from reaching the stream.

These mitigating measures are discussed in detail in the Hydrology section in this report.

A Forest Service officer will periodically examine the site to determine whether any undue impacts to the stream or fishery are occurring. If any such impacts are observed, the operation will be shut down until the proper preventive measures are taken.

G. Fire

The occurrence of man-caused or lightning-caused wildfires is low in this area. During the years 1967 through 1977, only three fires, man-caused or lightning-caused, occurred in or near the floor of lower Huntington Canyon. The potential for resource damage by fire, however, is high. On a 1 to 6 scale of resource damage potential the lower Huntington Canyon drainage is rated as class 6; resource values are estimated at \$3,000 per acre in this class.

Due to the presence of personnel and equipment, the proposed project will result in an increased potential for man-caused fires. The following fire precaution will be observed at all times:

1. All flammable materials will be properly stored away from possible sources of ignition.
2. No burning of trash will be permitted.
3. Flaring, to test for natural gas, will be done in a separate burn pit and the flared materials will be contained in this pit until they are properly extinguished.
4. Adequate fire suppression equipment, such as axes, shovels, and water sources, will be available on-site at all times.

H. Recreation/Aesthetics

The dominant visual elements of the area are characterized by form, line, color, and texture. Form in the area is distinctive, with slopes over 60 percent which are lightly dissected and with dominant rockform features. Line is created along the skyline, the highway, and along Huntington Creek. Color is expressed in the soil, rock, water, and in the vegetation. Soil and rock colors range from light brown to dark brown, depending on the light and weather conditions. Water color is blue. Vegetation ranges from grass on ground cover to spruce and aspen trees. The interspersions of light green aspen in dark green spruce adds interest and visual relief. In the fall season, quaking aspen stands display yellow color and become temporarily dominant. Texture ranges from fine to medium.

The proposed drill site is highly visible due to its close proximity to the highway. The site is foreground-viewed by fishermen, campers, picnickers, snowmobilers and others traveling through Huntington Canyon.

Forks of Huntington Campground lies one mile below the site and the old Folks Flat Campground lies two miles above the site.

Recreational activities in the area include fishing, camping, picnicking, pleasure driving, and big game hunting. The duration of use for most recreational activities is from snowmelt to snowfall.

General assumptions can be made to aid in determining management objectives and making recommendations.

1. Recreation use in the vicinity of the drill site will remain high.
2. If gas or oil is discovered, the pumping facility may cause visual degradation of the area.
3. At least one-fourth of the users of the area have a major concern for scenic quality.

The drill site and surrounding area were given a visual quality rating of retention (Visual Management System, Volume 2, Chapter 1, page 43). Retention means that the result of man's activities should not be evident to the casual Forest visitor.

The proposed project as located on the ground does not meet the "retention" quality standard. However, the location of the drill site anywhere else on the lease would have a much greater impact on the visual quality of the area. The negative effects of the project, as proposed, can be minimized through careful planning and site rehabilitation.

The following recommendations are made to minimize visual degradation of the scenic resource.

1. As staked for grading, the west cut section at the upper end of the site is too close to the hill and should be shifted toward the creek.
2. When cutting the west bank, slope rounding should be accomplished at the top of the cut.
3. After removal of the drill rig, the site should be reshaped as close as possible to its original character and trees, rocks and grass should be reestablished.

4. If a pump station is constructed, vegetative screening should be planted on and above the site adjacent to the highway. The pump station should also be painted a color compatible with the landscape.

I. Historical, Archeological and Paleontological

Evidence of prehistoric and historic native American presence has occasionally been found in lower Huntington Canyon. Several sites of Fremont and early Ute cultures are known to exist. The area of the proposed location has previously been disturbed by road construction and frequent use as an unimproved campsite; therefore, the likelihood of discovering artifacts of historical or archeological significance at the site is probably limited.

Energy Reserves Group, Inc., will be required to have the area examined by an approved archeological investigator prior to any site disturbance.

In the event that any archeological artifacts are unearthed during development or operations, all activities will cease until the Forest Officer in charge has been notified and has taken the proper action.

Fossils occur in most of the geologic formations present in the area, and throughout the Wasatch Plateau, but none are known to be of significant paleontologic value in the area of the proposed drill site.

J. Wilderness

The area west of the proposed site is in the East Mountain Roadless Study Area. The site itself, however, is within the Huntington Canyon corridor and will not be affected by any RARE-II stipulations.

K. Socio-Economic

The drilling of one well will not adversely impact the existing socio-economic structure. Some labor will possibly be hired locally and some supplies bought in nearby communities, but those effects will be minimal and temporary. If the well is productive this could lead to a field development which could have some significant impact on the area. This will be evaluated further. Presently, it appears that it would be beneficial.

L. Timber Management

There will be no impacts to the timber management plans for the area. No timber harvesting is planned in the timber on or adjacent to the proposed site.

Because the timber in this area is adjacent to a major travel-way, it offers more in the visual and watershed aspects than its marginal timber harvest quality and quantity. All timber removed from the site will be premarked and designated by the Forest Service.

M. Range Management

The site is in the Gentry Mountain Cattle and Horses Allotment. As much as 640 animals graze through this area for 10 days in June and 10 days in October while trailing on and off the allotment. The area provides 427 (AUM's) Animal Unit Months. The actual drill site has very little grazing use by animals.

There are no range improvements in this area that will be affected by the proposed project.

N. Minerals Other Than Oil and Gas

Other mineral activities in the area include exploration on other oil and gas leases and exploration and development on coal leases. No coal leases exist in the immediate vicinity of the proposed site, but several leased tracts are present within 4 or 5 miles in lower Huntington Canyon. Only minimal impacts to coal leasing and exploration activities will result from the drilling operations. A slight increase in traffic interaction with coal-hauling trucks near the mouth of Huntington Canyon may occur due to traffic to and from the drill site during operations and hauling of drill fluids. State Highway 31 in Huntington Canyon is a two-lane, blacktop surfaced road and should be adequate to accommodate the temporary increase in traffic associated with this drilling project. If the well goes to production, coordination will be needed for transportation facilities.

O. Administrative Improvements, Research and Special Uses

Several administrative improvements, research, and special use areas exist within a one-mile radius of the proposed site. The Stuart Guard Station Administrative Site withdrawal extends to within approximately $\frac{1}{2}$ mile north of the site; and, two pinyon pine study areas are present in Pole Canyon opposite the proposed site.

The proposed drilling operations will cause only restricted surface disturbance and will have no impacts to the other existing surface uses.

P. Transportation

Access to the proposed drill site is via State Highway 31 (Forest Highway 7). The highway is two-laned, black-topped, and of sufficient size and condition to accommodate the drilling equipment and travel needs.

There is an existing black-topped approach ramp to the proposed drill site. The approach road from the drilling site to Forest Highway 7 is good. The sight distance, both upcanyon and downcanyon, is adequate to safely provide for approaching traffic. It can be expected that winter driving conditions may be more hazardous than those in the summer season when the pavement is bare and dry.

The drill site is located in an area that does not allow room for the construction of a conventional sized reserve pit. Because of this, the pit will have to be pumped frequently and the materials hauled south on the highway to the disposal site off Forest. Because of the hazard of transporting high-contaminate materials on a daily basis, especially in winter conditions, it will be required that the tanker truck be equipped with a rotating amber light; further, that warning signs be erected above and below the approach road. These signs will be erected by the State Road at the Operator's expense. The request will originate with the Operator to the State Road, and they will be billed for the work.

It may also be required that a disaster plan for transportation of contaminate materials be formulated.

Hauling operations for waste materials should be planned between the hours of 9:00 a.m. and 3:00 p.m. This avoids the periods of high traffic use in the canyons.

III. SUMMARY OF PROBABLE ADVERSE ENVIRONMENTAL IMPACTS WHICH CANNOT BE AVOIDED

The proposed project will result in:

1. Some temporary hydrocarbon and dust air pollution.
2. Some loss of top soil.
3. Some loss in vegetative productivity.
4. Some loss of wildlife through road kill, habitat loss, and man's continual presence.
5. Higher probability of man-caused fires.
6. Raw cuts and fills will temporarily create a discord to the natural beauty.

IV. RELATIONSHIP BETWEEN SHORT-TERM USES OF MAN'S ENVIRONMENT AND THE MAINTENANCE AND ENHANCEMENT OF LONG-TERM PRODUCTIVITY

Most of the impacts identified in this report will be short-term, lasting during the drill period and possibly a year later. Only a small amount of soil and vegetation is expected to be lost over the long-term.

V. IRREVERSIBLE AND IRRETRIEVABLE COMMITMENT OF RESOURCES

1. Some small amount of soil will be irretrievably lost.
2. The land denuded for this operation is temporarily out of vegetative production; therefore, potential production during this time is irretrievably lost.
3. Some of the water used in drilling this hole will be irretrievably lost to subsurface formations.
4. Any road kill of wildlife will be an irretrievable loss.
5. Gas and oil are non-renewable resources. If they are discovered, extracted and used, they are depleted for the use of all future generations and represent an irretrievable commitment of that resource.

VI. ALTERNATIVES TO THE PROPOSED ACTION

There are three alternatives to the proposed action considered here:

1. Allow no drilling on the lease.
2. Drill at an alternate location, and
3. directional drilling from an alternate location.

Alternative 1

The no action alternative, in this case, is not a legal alternative. This area is under Federal lease and was issued for the purpose of exploring and possibly developing the underlying oil and gas deposits. Prior to lease issuance in February, 1970, the Forest Service had an opportunity to review the application and make comments on the capability of the area to sustain this type of activity. It was determined with proper coordination that drilling could take place.

Alternative 2

The original proposal was to drill at a location on Gentry Mountain. The original location, along with several alternate locations, were evaluated. From the studies it was determined that serious irreversible resource impacts would occur by drill site and road development at several of these locations. After evaluating the topography and access opportunities over

the entire lease area, the Forest Service has determined that the site discussed in this analysis will be the best for mitigating resource impacts and providing the company with a good opportunity to drill their target structure. It would therefore serve in the best public interest.

In order for the Forest Service to allow drilling in this area it has to waver special Forest Service stipulation (2) which is attached to Form 3120-3, Federal Lease U-10344. The content of this stipulation is; a strip of land 300 feet on each side of the centerline of Fairview-Huntington Road where it passes through the E $\frac{1}{2}$ Sec. 17, T15S, R7E, SLMer., Utah, is a roadside zone containing important aesthetic values for public benefit. No occupancy of the surface of this strip is authorized by this lease.

The proposed site is in this area and 170 feet from the centerline of the highway. The rationale for waiving this stipulation was discussed earlier in this section. The trade-offs between the visual impacts in this area and the substantial resource impacts that would occur at alternate sites weigh in favor of drilling at the proposed site. The visual impacts that will occur are believed to be short-lived and reclaimable.

Alternative 3

The proposed site is the most suitable on the lease for a drilling operation; therefore, there would be no advantage in attempting directional drilling from another location. Directional drilling is expensive, difficult, and uncertain. Directional drilling is not needed; therefore, it is not recommended for this proposal.

VII. CONSULTATION WITH OTHERS

Forest Service, Price, Utah

William Boley, Forest Engineer
 Ronald Dickemore, Range Conservationist
 Ira Hatch, Price District Ranger
 Coy Jemmett, Wildlife Biologist
 Jim Jensen, Landscape Architect
 Dennis Kelly, Forest Hydrologist
 Dwain McGarry, Geologist
 David Steinfeld, Soil Scientist
 Robert Thompson, Range Conservationist

U. S. Geological Survey, Salt Lake City, Utah

Edgar Guynn, District Engineer
 Jim Kohler, Engineer Technician

Energy Reserves Group, Inc., Casper, Wyoming

Wallace Averett
Mike Conlon
Bill Fiant

Department of Wildlife Resources, Price, Utah

Larry Dalton
Larry Wilson

Uintah Engineering and Land Surveying, Vernal, Utah

Gene Stewert

Archeological Environmental Research Corp., Salt Lake City, Utah

F. R. Hauck

VIII. MANAGEMENT REQUIREMENTS AND CONSTRAINTS

1. It is recommended that this project be approved.
2. All underlined sentences in this report are considered recommendations and are to be carried over into the approval documents.

Appendix No. 3

FROM: DISTRICT GEOLOGIST, M. SALT LAKE CITY, UTAH

TO: DISTRICT ENGINEER, O&G, SALT LAKE CITY, UTAH

SUBJECT: APD MINERAL EVALUATION REPORT

LEASE NO. U-10344OPERATOR: Energy Reserves Group, Inc.WELL NO. USA Lynda #1LOCATION: ½ NE ½ SE ½ sec. 17, T. 15S., R. 7E., SLMEmery County, Utah

1. Operator predicted stratigraphy and predicted hydrocarbon zones are adequate? Yes.
If not, USGS predictions are:

2. Fresh water aquifers probable below surface casing? Yes. Fairly probable in the Emery Sand, estimated top ~ @ 640'.

3. Other probable leasable minerals? Coal possible but unlikely in Emery and likely in Geron Sand (top ~ @ 4,140'). Also may hit coal in Dakota Sand (top ~ @ 5,040').

4. Are hazardous fluids or gases likely? No.

5. Are abnormal conditions of pressure or temperature likely? No.

6. Will any strata penetrated need special mud, casing, or cementing beyond that proposed in the APD? Probably not.

7. Is additional logging or sampling needed? No.

8. References - remarks: USGS Files, Salt Lake City, Utah

Is location within 2 miles of a KGS? Yes. Is less than 1 mile south of Clear Creek "D" KGS

Signature: Donald C. AlfordDate: 09-05-78

United States Department of the Interior
Geological Survey
8440 Federal Building
Salt Lake City, UT 84138

Unusual Environmental Analysis No. 1411-A
Application for Permit to Drill
Energy Reserves Group, Inc.

Well No. USA Lynda No. 1
NE/4 SE/4 Section 17
T.15S., R.7E.
SLB&M, Emery County, Utah

Lease No. U-10344

Prepared by: James F. Kohler, Geologist
Salt Lake City, Utah

March 30, 1979

Modified by: George J. Diwachak, Environmental Scientist
Salt Lake City, Utah

April 20, 1979

Related Environmental Analysis

- (1) EA N. 1411
- (2) U.S. Forest Service, Environmental Analysis Report, APD, Energy Reserves Group, USA Lynda No. 1 Well

Noted - G. Diwachak

Introduction:

Energy Reserves Group, Inc. of Casper, Wyoming, submitted an Application to Drill a wildcat oil and/or gas well in the NE $\frac{1}{4}$ SE $\frac{1}{4}$ Section 17, T.15S., R.7E., SLM. This application was received in the office of the District Engineer, USGS, in Salt Lake City, Utah on September 25, 1978. On October 5, 1978, a joint field inspection was made of the proposed well location by the following:

<u>Name</u>	<u>Title</u>	<u>Organization</u>
Roscoe G. Gillespie	Drilling Superintendant	Energy Reserves Group, Inc.
Wm. H. Fiant	Field Services Admr.	Energy Reserves Group, Inc.
Wm. H. Boley	Forest Engineer	Manti-LaSal National Forest
Dwain McGarry	Geologist	Manti-LaSal National Forest
Ira Hatch	District Forest Ranger	Manti-LaSal National Forest
John L. Nault	Petroleum Technician	U.S. Geological Survey

As a result of this inspection, the operator (at the suggestion of the Forest Service) moved the location approximately 125 feet northwest of the original location and submitted a sundry notice outlining the new location which was received on November 6, 1978.

James F. Kohler of the District Geologist's office examined the resurveyed location on October 12, 1978. At this time, a thorough examination was made of the proposed pad area and a general reconaissance was made of Huntington Canyon both above and below the proposed area. Mr. Kohler also contacted the offices of the Bureau of Land Management and Manti-LaSal National Forest in Price, Utah, to obtain any existing data on the surface resources in the area and information regarding the status of land-use plans for the area.

Additional information on the surface resources in the vicinity of the proposed test was requested from the Manti-LaSal National Forest during the October visit and a formal request was sent on December 22, 1978. In response to this request, the Forest Service completed an environmental analysis report on the proposed test which was received in the office of the District Engineer on March 19, 1979, and is appended to this report (see Appendix II).

Description of the Proposed Action:

Energy Reserves Group, Inc., proposes to drill a wildcat oil and/or gas well number USA Lynda No. 1 in the NE $\frac{1}{4}$ SE $\frac{1}{4}$, Section 17, T.15S., R.7E., SLM, Emery County, Utah. Drilling operations will start as soon as approval is granted and are expected to be completed in 30-45 days. The proposed well will spud into the Masuk shale member of the cretaceous Mancos shale and will be drilled to a depth of about 5,200 feet to test

the gas potential of the Ferron and Dakota sandstones. The well will be drilled on Federal oil and gas lease U-10344 on Federal lands administered by the U.S. Forest Service.

The well will be drilled with a rotary rig and the operator proposes to construct a drill pad and reserve pit covering about 0.7 acres. Access to the pad will be provided by a short (250') ramp from State Highway 31. The operator will adequately case and cement the well to protect fresh water aquifers and other leasable minerals and to allow the well to be completed as a producer. Also, a blow-out preventer will be used that will adequately provide for control of anticipated pressure zones. The well will be drilled with a water base mud to the top of the Ferron Sandstone member, and with air for the remainder of the hole. Water for drilling operations will be obtained from Huntington Creek adjacent to the pad.

The reserve pit will be lined to prevent leakage of drilling fluids. Because of its small size, the pit will be pumped periodically during drilling operations and disposed of at a dump site near Huntington. Trash will be hauled to the Huntington dump.

If the test is successful, the well will be completed as a producer by installing a separator and a glycol unit. It will also be necessary to install a pipeline to transport the produced gas, but no route for this pipeline has yet been identified. Whether the test is successful or not, when drilling is finished, the reserve pit will be pumped dry, backfilled, and recontoured to as near the original contour as possible. The area will then be revegetated according to specifications prescribed by the U.S. Forest Service. More information concerning the proposed action is contained in the operator's NTL-6 10-Point subsurface and the surface use plans which are appended to this report (see appendix I).

Description of the Existing Environment:

Topography - The proposed well site is located in the bottom of Huntington Canyon adjacent to State Highway 31 about 16 miles northwest of Huntington, Utah (figure 1). The well site is at an elevation of 7820 feet above sea level, and the area in the immediate vicinity of the pad exhibits moderate relief (figure 2). At the wellsite, the canyon bottom is less than 500 feet wide, and the canyon walls are very steep reaching to an elevation in excess of 9600 feet above sea level.

Geology - The proposed well is located in the High Plateaus section of the Colorado Plateau physiographic province. The geologic structure of the area surrounding the well site is shown in figure 3. The surface formation at the well site is the Masuk shale member of the Mancos shale, and the stratigraphic section expected in the well is shown in figure 4.

Hydrocarbons - The operator anticipates possible gas in the Ferron Sandstone member of the Mancos shale and the Dakota sandstone. The nearest production has been from the Joe's Valley and Flat Canyon fields which are located about six miles west and southwest of the proposed test.

Both of these fields contained gas in the Ferron and Dakota sandstones in faulted anticlinal traps. Gas in both fields is generally considered to have originated in the Mancos shale. The wells at Flat Canyon and Joe's Valley are now plugged and abandoned.

Other Mineral Resources - A possibility exists for the occurrence of coal deposits in the Emery and Ferron sandstone members of the Mancos Shale. Some doubt exists as to the presence of coal in the Emery Sandstone Member (Doelling, 1972, p. 437) and any possible coal in the Ferron sandstone is too deep (4,000') to be considered for mining at the present time.

Geologic Hazards - The area in the vicinity of the proposed test has been classified by seismologists as a region of greater seismicity indicating that earthquakes with Richter magnitude 5 or greater are predicted with a frequency of four per decade per square degree (3,700 mi²) of surface area (Rocky Mountain Association of Geologists, 1972, p. 50). The nearest known fault is 1-1/2 miles east of the wellsite, and the seismic risk is considered minimal. No significant potential exists for flash floods, landslides, or other geologic hazards.

No detailed soil surveys have been made in the area of the proposed test. The wellsite is located on the edge of a small alluvial fan which overlies stream deposited sand and gravel. Material within these deposits are rather poorly sorted and range from clay to sandstone boulders. The clay content of the soil gives the area a fairly high runoff potential. Top soil in the area averages from 15-20 inches thick and consists primarily of sandy silts and clays (USFS, 1979). Soil, moisture, and temperature conditions in the area are quite conducive to revegetation. Steep slopes with accompanying erosion hazards offer the greatest potential problems to soil management.

Meteorology - Temperatures in the area are seasonably variable with a January mean minimum temperature of about 8^oF and a July mean maximum temperature of about 72^oF. Because of the high elevation of the site it probably receives in excess of 24" of precipitation annually.

Air Quality - No site specific air quality data are available, but because of limited human and industrial activity, air quality is generally considered to be good to excellent. The wellsite lies within an area that has been designated a Class II area for purposes of significant air

quality degradation. This means that air quality deterioration normally associated with moderate well-controlled growth would not be considered significant (Dept. of Interior, 1978).

Water - The area is drained by Huntington Creek, a perennial stream which is the northernmost tributary of the San Rafael River. Streamflow in Huntington Creek is sustained primarily by snowmelt and ground water flow. Water quality of Huntington Creek is considered to be good.

Ground water could occur in shallow alluvium along Huntington Creek and in relatively flat-lying sedimentary rocks. Of the rock units to be penetrated by the proposed test, fresh to slightly saline water might occur in the Emery sandstone member and moderately saline water could occur in the Ferron sandstone member.

Vegetation - The conifer-aspen vegetative association predominates and wheatgrasses, smooth brome, rabbit brush, sagebrush, pearly everlasting, serviceberry, quaking aspen, subalpine fir, and Englemann spruce have been identified on the site (USFS, 1979). None of the plant species identified as being endangered or threatened in Emery County are expected in the vicinity of the well site.

Wildlife - According to a survey conducted by the Utah State Division of Wildlife Resources (Dalton, et al. 1977) the well site is located within a critical summer range for mule deer and elk. Other big game species found in the general area of the proposed well may include cougar, black bear, and moose. The immediate area of the proposed well provides possible habitat for small mammals including squirrels, chipmunks, rabbits, hares, mice, rats, and gophers. These animals serve as prey for larger predators such as raptors, badgers, bobcats, skunks, and weasels. A few species of songbirds occur in the area and some species of reptiles and amphibians could also be present. Huntington Creek near the well site is a good fishery and provides habitat for cutthroat, brown and rainbow trout. No evidence of wildlife activity was observed near the wellsite during the field examination on October 12, 1978.

No threatened or endangered animal species are thought to occur in the immediate vicinity of the proposed well. Peregrine falcon have been sighted in the region (about six miles from the proposed site), but they are probably migrant birds since no active eyries have been found. Golden and Bald Eagle, may infrequently pass through the area, but there are no known roost sites or eyries in the vicinity of the proposed well. The well site is within the historical range of the endangered black-footed ferret.

Land Use - Huntington Canyon is used primarily for recreation and grazing. The canyon receives heavy recreational use (camping, picnicking, sight-seeing, fishing and hunting) in the summer and fall. There are a

number of developed recreational areas in the canyon above and below the well site. Evidence observed in the field indicates that the area adjacent to the north end of the proposed drill pad has been used by campers and picnickers. In addition, the proposed well site is adjacent to an area that has been inventoried by the Forest Service as a roadless area. Huntington Canyon is one of the main recreation areas for most of Emery County.

The area of the proposed well receives relatively light grazing use and, the actual drill site has very little grazing use (USFS, 1979).

Cultural Resources - There are no known archaeological or historical sites near the proposed well. An archaeological survey conducted of the region in 1977 suggests that the area is expected to contain a low density of archaeological sites. This survey indicates that only 5% or less of the quarter sections in the area is expected to contain at least one site. (Dept. of Interior, 1978).

Aesthetics - The proposed well site will be highly visible from State Highway 31 which is used by fisherman, campers, picnickers, snowmobilers, and others traveling through Huntington Canyon. In their analysis of the visual impacts of the proposed action, the U.S. Forest Service reached the following conclusion, "The negative effects of the project, as proposed, can be minimized through careful planning and site rehabilitation" (USFS, 1979). Photographs showing the proposed well site and its proximity to State Highway 31 and Huntington Creek are shown in figure 5.

Probable Impacts of the Proposed Action:

Construction of the drill pad and access ramp would alter the topography of the area. The cut and fill plan submitted by the operator (see appendix 1) indicates a maximum cut of 18 feet and a maximum fill of 10 feet. In addition, these construction activities would remove the vegetation from an area covering about 1-1/2 acres.

These combined actions could cause erosion and add sediment to Huntington Creek which could damage the fishery potential of the stream. In addition, construction of the pad would result in at least temporary destruction of the habitat of the small mammals, reptiles, insects, etc. which may occur within the pad area forcing them to relocate.

During actual drilling operations air, water, land-use, and aesthetics may be impacted. Increased traffic in the area and operation of the rig would temporarily increase exhaust pollutants in the air. The final 1000 ft. of the well would be drilled with air which would result in increased dust pollution. Subsurface fresh water aquifers could be contaminated either by the introduction of drilling mud into the aquifers during drilling, or commingling of lower quality water from other aquifers

via the bore hole. Seepage, overflow, or failure of the reserve pit would allow Huntington Creek and shallow subsurface water flow to be contaminated by drilling fluids, lubricating oil and rig fuel, low quality formation waters, or other substances that may accumulate in the mud pits. In the event a blowout should occur, pollutants could also be introduced into Huntington Creek. If drilling operations are conducted during June through November when Huntington Canyon receives heavy recreation use, activities such as camping, fishing, and picnicking may have to be curtailed in the vicinity of the well. Also, the proximity of the well site to State Highway 31 would make it highly visible to traffic up and down the canyon. This would either result in a visual intrusion in the normally scenic canyon or an increase in traffic in the area to observe an "oil well." Also, the relatively high noise level associated with drilling operations may detract from the overall recreational experience in the area.

If the well is completed as a producer, it will be necessary to construct production facilities including a wellhead and a pipeline or other means of handling the produced hydrocarbon. This would result in a semi-permanent (for the life of the well) intrusion on the landscape.

Mitigating Measures Proposed by the Operator:

The measures proposed by the operator to mitigate the impacts of the proposed well are discussed in some detail in the drilling application and sundry notice attached to this report.

To minimize the impacts resulting from construction of the pit and pad area, the operator proposes to pump the pit dry, remove the liner, and then fill the pit and recontour the area to as near the original contour as possible. The area would be covered with topsoil and reseeded in accordance with USFS specifications. If the well is a producer, the area around the production facility will be gravelled, otherwise the entire disturbed area will be rehabilitated.

Runoff from the pad area into Huntington Creek would be controlled by a series of drainage ditches around the pad area. Contamination of subsurface waters would be prevented by the casing program proposed by the operator. Drilling fluids would be kept from entering Huntington Creek by lining the reserve pit with reinforced chlorinated polyethylene. The operator would use a blow-out preventer to guard against the well flowing uncontrollably, and further proposes to periodically pump the reserve pit and dispose of the cuttings, etc. at a dump near Huntington.

Air pollution from dust while the well is being drilled with air would be controlled by putting the cuttings and dust into a blowdown pit where it will be dampened with water spray.

After completion of the well, any remaining surface facilities would be painted to blend in as nearly as possible with the surrounding landscape.

Alternatives to the Proposed Action: (1) Not approving the proposed permit--The oil and gas lease grants the Lessee exclusive right to drill for, mine, extract, remove and dispose of all oil and gas deposits.

Under leasing provisions, the Geological Survey has an obligation to allow mineral development if the environmental consequences are not too severe or irreversible. Upon rehabilitation of the site, the environmental effects of this action would be substantially mitigated, if not totally annulled. Permanent damage to the surface and subsurface would be prevented as much as possible under the U.S. Geological Survey and other controlling agencies supervision with rehabilitation planning reversing almost all effects. Additionally, the growing scarcity of oil and gas should be taken into consideration. Therefore, the alternative of not proceeding with the proposed action at this time is rejected.

(2) Minor relocation of the well site and access road or any special, restrictive stipulations or modifications to the proposed program would not significantly reduce the environmental impact. There are no severe vegetative, animal or archaeological-historical-cultural conflicts at the site. At abandonment, rehabilitation of the area such as contouring, reseeding, etc., would be undertaken with an eventual return to the present status as outlined in the 13-Point Surface Plan.

(3) The only other alternative would be to deny the operator his rights under the federal oil and gas lease.

Adverse Environmental Effects Which Cannot Be Avoided:

Surface disturbance and removal of vegetation from a little over one acre of surface would, for the life of the project, result in increased erosion potential. Wildlife would be temporarily disturbed and some smaller species would be forced to relocate until the area is restored. Minor air pollution would result from rig engine exhaust emissions and increased traffic due to support vehicles. The rig and pad would be a temporary visual intrusion on the landscape, and if the well is completed as a producer, the surface facility and transmission pipelines would be a visual intrusion. Erosion from the site would eventually be carried as sediment in Huntington Creek. The potential for pollution to the creek would exist through leaks and spills.

Finding of No Significant Impact

We have examined the impacts of the proposed action, Energy Reserves Group, Application for Permit to Drill, Well USA Lynda No. 1, in the preceding pages of the environmental assessment. The following summary sheet shows the evaluation of these impacts against each of the parameters listed for "significance" in 40 CFR 1508.27, and the background impact reference for our reasons of determining the no impact or not significant impact category.

Finding of No Significant Impact
40 CFR 1508.13 and .27

Key
NI - No Impact
NS - No Significant Impact

<u>CEQ Parameter 40 CFR 1508.27(b)</u>	<u>Severity of Impact Level/Degree of Significance</u>	<u>EA Page and Paragraph Ref.</u>
1. Beneficial and/or adverse effects	NS	par. 5, p. 7
2. Public health and safety	NS	par. 6, p. 5
3. Unique characteristics of the geographical area	NS	par. 3, p. 5 par. 6, p. 5 par. 1, p. 6 par. 5, p. 7
4. Effects highly controversial	NI	
5. Highly uncertain effects or unique or unknown risks	NI	
6. Establishes precedent for future actions, or is a decision in principle about future action	NI	
7. Assessment of cumulative actions and impacts thereof Note 40 CFR 1508.7	NS	par. 5, p. 7
8. Effects on districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places, or may cause loss or destruction of significant scientific, cultural, historic resources.	NI	
9. Effects on endangered or threatened species or their habitat that have been determined to be critical under the Endangered Species Act of 1973.	NI	

**Finding of No Significant Impact
40 CFR 1508.13 and .27**

<u>CEQ Parameter 40 CFR 1508.27(b)</u>	<u>Severity of Impact Level/Degree of Significance</u>	<u>EA Page and Paragraph Ref.</u>
10. Threatens a violation of Federal, State, or local law or requirements imposed for the protection of the environment.	NI	
11. Other related NEPA and environmental documents (U.S. Forest Service Environmental Analysis Report, APD, Energy Reserves Group, USA Lynda No. 1 well)	Appendix #2 of EA	cover sheet and p. 12 references: 6

Determination:

In my opinion, the proposed action does not constitute a major Federal action significantly affecting the quality of the human environment in the sense of NEPA, section 102(2)(c), and the environmental impacts of the proposed action are not likely to be highly controversial.

(Orig. Sgd.) E. W. Guynn _____
District Engineer Date

I concur _____
Area Supervisor Date

I determine that preparation of an Environmental Impact Statement is not required.

Conservation Manager Date

References

- Dalton, L. B., Farnsworth, C. B., Smith, R. B., Wallace, R. C., Wilson, R. B., and Winegardner, S. C., 1977, Species list of vertebrate wildlife that inhabits southeastern Utah: Utah Division of Wildlife Resources, Salt Lake City, Utah (in press).
- Doelling, H. H., 1972, Central Utah Coal Fields: Sevier-Sanpete, Wasatch Plateau, Book Cliffs, and Emery: Utah Geol. and Mineral Survey, Monograph Series No. 3.
- Feltis, R. D., 1966, Water from Bedrock in the Colorado Plateau of Utah: Utah State Engineer Technical Publication 15, 82 p.
- Rocky Mountain Association of Geologists, 1972, Geologic Atlas of the Rocky Mountain Region: Denver, Colorado
- U.S. Department of Interior, 1978, Draft Environmental Statement - Development of Coal Resources in Central Utah.
- U.S. Forest Service, 1979, Environmental Analysis Report, Application to Drill Energy Reserves Group USA Lynda #1 Well - Federal Lease U-10344, 18 p.
- Walton, P. T., 1955, Wasatch Plateau Gas Fields, Utah: Am. Assoc. of Petroleum Geologists Bull., U.39, p385-421.

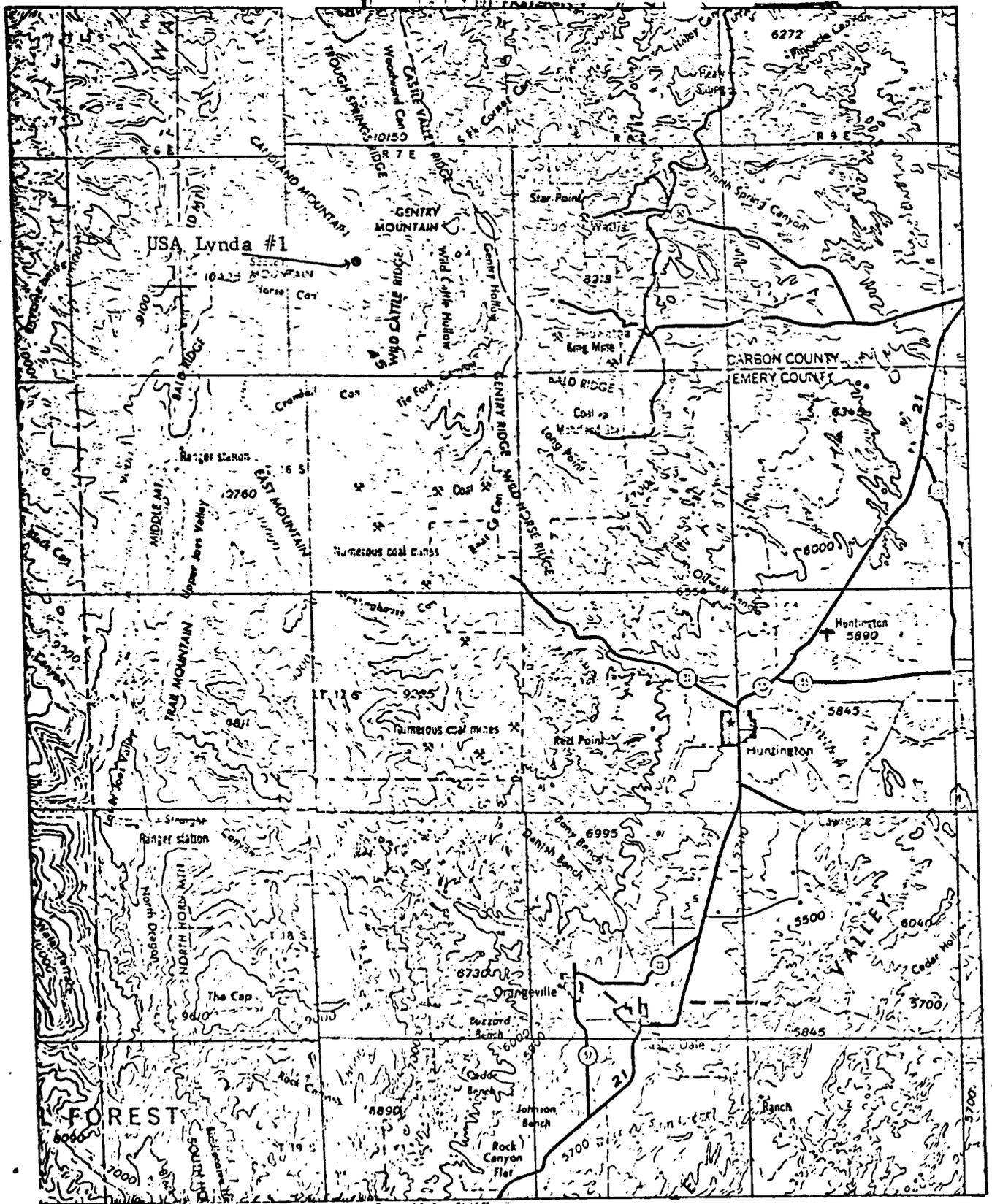


Figure 1: Location of Energy Reserves Group proposed well USA Lynda #1, T. 15 S., R. 7 E., SIM, Carbon Co., Utah

1 mile



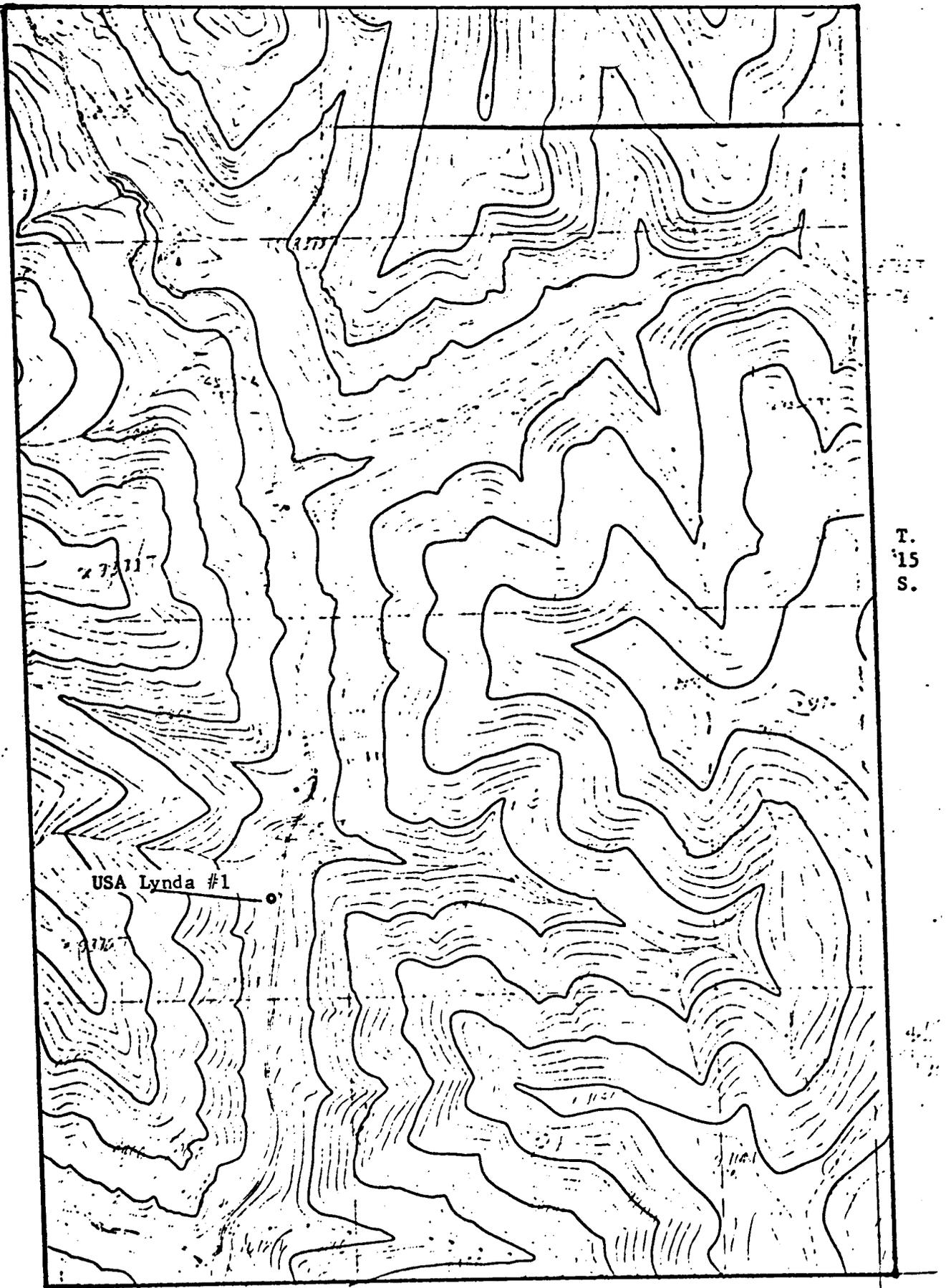


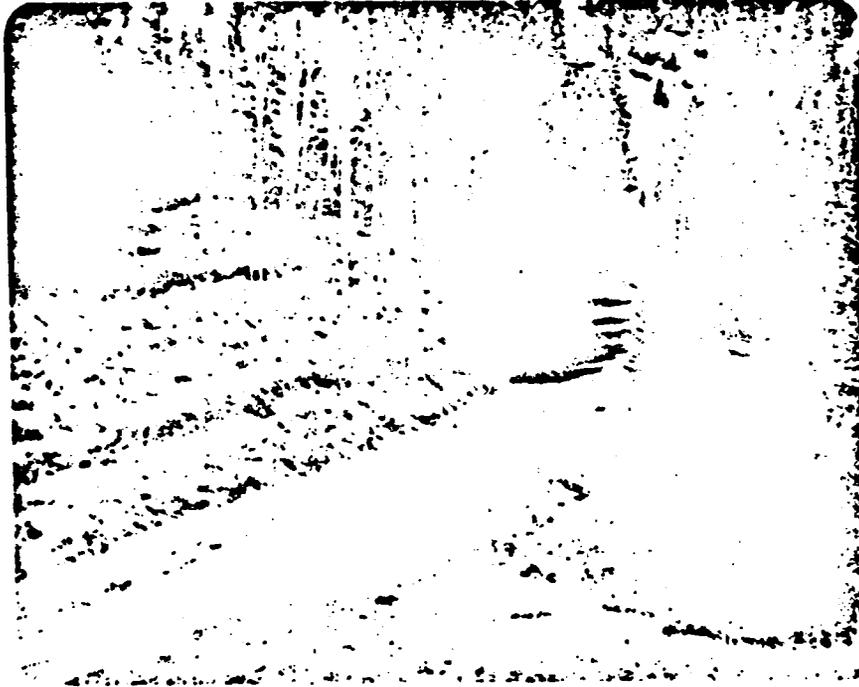
Figure 2: Topography in the vicinity of Energy Reserves Group proposed well USA Lynda #1 (contour interval = 100 ft.) N

1000 ft.

Stratigraphic Unit		Thickness (feet)	Description
Mancos Shale	Masuk Shale	300-1,300	Yellow to blue-gray sandy shale, slope former, thick in north and central plateau area, thins southward.
	Emery Sandstone <i>COAL (?)</i>	50- 800	Yellow-gray friable sandstone tongue or tongues, cliff former, may contain <i>coal</i> (?) in south part of plateau if mapping is correct, thickens to west and south. <i>Coal</i> may be present in subsurface to west.
	Blue Gate Member	1,500-2,400	Pale blue-gray, nodular and irregularly bedded marine mudstone and siltstone with several arenaceous beds, weathers into low rolling hills and badlands, thickens northerly.
	Ferron Sandstone Member <i>MAJOR COAL SEAMS</i>	50- 950	Alternating yellow-gray sandstone, sandy shale and gray shale with important <i>coal</i> beds of Emery coal field, resistant cliff former, thickens to the south.
	Tununk Shale Member	400- 650	Blue-gray to black sandy marine slope forming mudstone.
Dakota Sandstone <i>MINOR COAL</i>	0- 60	Variable assemblages of yellow-gray sandstone, conglomerate shale and <i>coal</i> . Beds lenticular and discontinuous.	

Figure 4: Stratigraphic section expected in Energy Reserves Group proposed well USA Lynda #1, T. 15 S., R. 7 E., SIM, Carbon Co., Utah (from Doelling, 1972)

Figure 5: Photographs of Energy Reserves Group proposed well Lynda #1, T. 15 S., R. 7 E., Carbon Co., Utah



View looking northwest from State Highway 31 towards the proposed pad. Huntington Creek is on the right.



View looking southwest from the proposed location towards State Highway 31.

Appendix No. 1

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Form approved.
Budget Bureau No. 42-R1424.

SUBMIT IN TRIPlicate
(Other instructions on reverse side)

SUNDRY NOTICES AND REPORTS ON WELLS <small>(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use "APPLICATION FOR PERMIT" for such proposals.)</small>		5. LEASE DESIGNATION AND SERIAL NO. U-10344
1. OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER <input type="checkbox"/>		6. IF INDIAN, ALLOTTEE OR TRIBE NAME
2. NAME OF OPERATOR Energy Reserves Group, Inc.		7. UNIT AGREEMENT NAME
3. ADDRESS OF OPERATOR P. O. Box 3280 Casper, WY. 82602		8. FARM OR LEASE NAME South Clear Creek
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface 1698' FSL 1119' FEL NE/SE		9. WELL NO. USA Lynda #1
14. PERMIT NO.		10. FIELD AND POOL, OR WILDCAT Wildcat
15. ELEVATIONS (Show whether DF, RT, GR, etc.) 7820 Gr (ungraded)		11. SEC., T., E., N., OR BLK. AND SURVEY OR AREA Sec. 17, T15S-R7E
		12. COUNTY OR PARISH 13. STATE Emery Utah

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF <input type="checkbox"/>	FULL OR ALTER CASING <input type="checkbox"/>	WATER SHUT-OFF <input type="checkbox"/>	REPAIRING WELL <input type="checkbox"/>
FRACTURE TREAT <input type="checkbox"/>	MULTIPLE COMPLETE <input type="checkbox"/>	FRACTURE TREATMENT <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
SHOOT OR ACIDIZE <input type="checkbox"/>	ABANDON* <input type="checkbox"/>	SHOOTING OR ACIDIZING <input type="checkbox"/>	ABANDONMENT* <input type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	CHANGE PLANS <input checked="" type="checkbox"/>	(Other) <input type="checkbox"/>	
(Other) <input type="checkbox"/>		<small>(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)</small>	

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

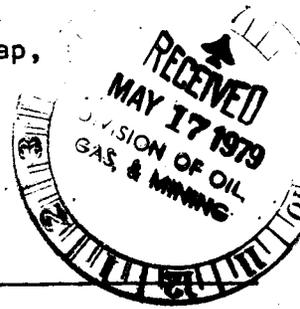
NOTICE TO CHANGE PLANS:

PROPOSED CASING & CEMENTING PROGRAM

<u>Size Hole</u>	<u>Size Csg.</u>	<u>Weight per Ft.</u>	<u>Setting Depth</u>	<u>Quantity Cmt.</u>
15"	10-3/4"	32.75#	500±	Sufficient to Circulate
8-3/4"	7"	23#	4138±	300sx.
6-1/4"	4-1/2"	9.5#	5200±	200sx.

Location was moved approximately 125' northwest to conform with USFS & USGS recommendations at time of the joint onsite inspection.

Attached are copies of: New survey plat, new cut and fill plat, topo map, cross section diagram, and location layout.



18. I hereby certify that the foregoing is true and correct

SIGNED William J. Grant TITLE Field Services Administrator DATE 11-1-78

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN TRIPLICATE*
(Other Instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1424.
5. LEASE DESIGNATION AND SERIAL NO.

U-10344

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use "APPLICATION FOR PERMIT—" for such proposals.)

6. IF INDIAN, ALLOTTEE OR TRIBE NAME _____

7. UNIT AGREEMENT NAME _____

8. FARM OR LEASE NAME
South Clear Creek

9. WELL NO.
USA Lynda No. 1

10. FIELD AND POOL, OR WILDCAT
Wildcat

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
Sec. 17, T15S-R7E

12. COUNTY OR PARISH
Emery

13. STATE
Utah

1. OIL WELL GAS WELL OTHER _____

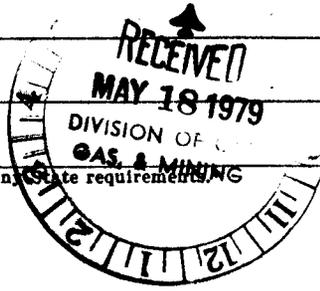
2. NAME OF OPERATOR
Energy Reserves Group, Inc.

3. ADDRESS OF OPERATOR
PO Box 3280 Casper, Wyoming 82602

4. LOCATION OF WELL (Report location clearly and in accordance with applicable State requirements. See also space 17 below.)
At surface
1698' FSL & 1119' FEL (NE SE ¼)

14. PERMIT NO. _____

15. ELEVATIONS (Show whether DF, RT, GR, etc.)
7,820- Ungrade ground



16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF <input type="checkbox"/>	PULL OR ALTER CASING <input type="checkbox"/>
FRACTURE TREAT <input type="checkbox"/>	MULTIPLE COMPLETE <input type="checkbox"/>
SHOOT OR ACIDIZE <input type="checkbox"/>	ABANDON* <input type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	CHANGE PLANS <input checked="" type="checkbox"/>
(Other) _____	

SUBSEQUENT REPORT OF:

WATER SHUT-OFF <input type="checkbox"/>	REPAIRING WELL <input type="checkbox"/>
FRACTURE TREATMENT <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
SHOOTING OR ACIDIZING <input type="checkbox"/>	ABANDONMENT* <input type="checkbox"/>
(Other) _____	

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

Notice To Change Plans :

Proposed Casing and Cementing Program

Size Hole	Size Casing	Weight per ft.	Setting Depth	Quantity Cement
30"	20"	¼" Wall	30'±	To Surface
15"	10 3/4"	32.75#	500'±	To Surface
8 3/4"	7"	23#	4,138'±	300sx.
6 1/4"	4 1/2"	9.5#	5,200'±	200sx.

APPROVED BY THE DIVISION OF
OIL, GAS, AND MINING

DATE: 6-15-79

BY: M. G. Minder

18. I hereby certify that the foregoing is true and correct

SIGNED Kenneth C. Gillespie TITLE Drilling Superintendent DATE 5-16-79

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____
CONDITIONS OF APPROVAL, IF ANY:

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN TRIPPLICATE
(Other instructions on re-
verse side)

Budget Bureau No. 42-R1424

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals.)

1. OIL WELL GAS WELL OTHER

2. NAME OF OPERATOR
Energy Reserves Group, Inc.

3. ADDRESS OF OPERATOR
P. O. Box 3280 Casper, Wyoming 82602

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.
See also space 17 below.)
At surface
1698' FSL & 1119' FEL (NE SE)

5. LEASE DESIGNATION AND SERIAL NO.
U-10344

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME
Pole Canyon Unit

8. FARM OR LEASE NAME

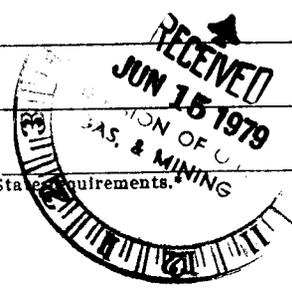
9. WELL NO.
#1 (USA Lyndia)

10. FIELD AND POOL, OR WILDCAT
Wildcat

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
Sec. 17-T15S-R7E

12. COUNTY OR PARISH 13. STATE
Emery Utah

14. PERMIT NO. 15. ELEVATIONS (Show whether DF, RT, GR, etc.)
G.L. 7815'; K.B. 7830'



16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF <input type="checkbox"/>	PULL OR ALTER CASING <input type="checkbox"/>	WATER SHUT-OFF <input checked="" type="checkbox"/>	REPAIRING WELL <input type="checkbox"/>
FRACTURE TREAT <input type="checkbox"/>	MULTIPLE COMPLETE <input type="checkbox"/>	FRACTURE TREATMENT <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
SHOOT OR ACIDIZE <input type="checkbox"/>	ABANDON* <input type="checkbox"/>	SHOOTING OR ACIDIZING <input type="checkbox"/>	ABANDONMENT* <input type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	(Other) _____	

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

Drilled 14 3/4" hole to 523' (K.B.). Ran 13 jts 510' (Net). 10 3/4" O.D., 32.75#, H-40, 8Rth, R-3, SS, ST&C, new casing set @ 511 (K.B.). Cemented w/550sx of Class "G" cement w/2% CaCl₂. Plug down @ 9:00 p.m., 6-9-79. Good cement returns.

Nippled up and tested blind rams, pipe rams, and Hydril to 1,000 PSI, held O.K.

6-13-79: Drilling on cement plug inside 10 3/4" casing.

18. I hereby certify that the foregoing is true and correct

SIGNED Roscoe C. Gillespie TITLE Drilling Superintendent DATE 6-13-79

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

DIVISION OF OIL, GAS AND MINING

PLUGGING PROGRAM

NAME OF COMPANY: Energy Reserves Group Inc. (Roscoe Gillespie)

WELL NAME: Pole Canyon Unit #1 (formerly USA Lynda #1)

SECTION 17 NE SE TOWNSHIP 15S RANGE 7E COUNTY Emery

VERBAL APPROVAL GIVEN TO PLUG THE ABOVE REFERRED TO WELL IN THE FOLLOWING MANNER:

TOTAL DEPTH: 5408'

CASING PROGRAM:

10 3/4" @ 511' (to surface)

7" @ 4450' (150 sx)

6 1/8" openhole TD

FORMATION TOPS:

Mancos - 2672'

Ferron Top - 4490'
Base - 4917'

Dakota - 5370'

Watered out at 4910'

Coal at 1684'

1764'-76'

1834'-51'

1860'-66'

2096'-2103'

PLUGS SET AS FOLLOWS:

5400' - 5240' 160' 30 sx

4550' - 4220' 330' 70 sx

2600' - 2510' 90' 20 sx

(added plug given to Jack Auten
678-9888)

USGS

Top of 7" liner squeeze 35 sx between annules & 7" liner
20" to surface 10 sx weld on cap

State

5240' W.O.C., tag up
Set bridge plug 2600' ±
2250' - 1400' 850' ±

perferate & circulate to cover goal zone

DATE July 16, 1979 11:30 a.m.

SIGNED

M. J. Minder

Jeil



UNITED STATES DEPARTMENT OF THE INTERIOR GEOLOGICAL SURVEY

SUNDAY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use Form 9-331-C for such proposals.)

1. oil well [] gas well [] other Dry Hole
2. NAME OF OPERATOR Energy Reserves Group, Inc.
3. ADDRESS OF OPERATOR
4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See space 17 below.)
AT SURFACE: 1,698' FSL & 1,119' FEL
AT TOP PROD. INTERVAL:
AT TOTAL DEPTH:

5. LEASE U-10344
6. IF INDIAN, ALLOTTEE OR TRIBE NAME
7. UNIT AGREEMENT NAME Pole Canyon Unit
8. FARM OR LEASE NAME
9. WELL NO. 1
10. FIELD OR WILDCAT NAME Wildcat
11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA Sec. 17-T15S-R7E
12. COUNTY OR PARISH Emery 13. STATE Utah
14. API NO. 43-015-30064
15. ELEVATIONS (SHOW DF, KDB, AND WD) G.L. Elev. 7,815

16. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

REQUEST FOR APPROVAL TO: SUBSEQUENT REPORT OF:
TEST WATER SHUT-OFF [] []
FRACTURE TREAT [] []
SHOOT OR ACIDIZE [] []
REPAIR WELL [] []
PULL OR ALTER CASING [] []
MULTIPLE COMPLETE [] []
CHANGE ZONES [] []
ABANDON* [X] []
(other)

(NOTE: Report results of multiple completion or zone change on Form 9-330.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

(See attached)
APPROVED BY THE DIVISION OF OIL, GAS, AND MINING
DATE: Aug. 16, 1979
BY: Frank W. [Signature]

Subsurface Safety Valve: Manu. and Type _____ Set @ _____ Ft.

18. I hereby certify that the foregoing is true and correct
SIGNED [Signature] TITLE Drilling Supt. RMD DATE 7-18-79

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____
CONDITIONS OF APPROVAL, IF ANY:

ATTACHMENT

The above referenced well was drilled to 4,450' w/ 8 3/4" bits. Ran 7" O.D., 23#, casing to 4,450' and cemented w/150 sx of cement. Plug down @ 8:00 p.m., 6-27-79, good returns. Nipped up BOPE and pressure tested same. Drilled out w/6 1/8" bit w/air @ 7:00 p.m., 6-30-79. Quit dusting @ 4,810'; mist drilled to 5,083'; then drilled w/mud to 5,408'. TD. Ran logs.

Permission is requested to plug and abandon per telephone conversation w/Mr. Bill Martens, U.S.G.S., & Mr. Mike Minder, Utah O & G Commission on 7-16-79, as follows:

No attempt will be made to recover any of the 7" casing.

- 5,400' & up w/30 sx of Class "G" cement w/2% CaCl₂.
- 4,550' & up w/70 sx of Class "G" cement w/2% CaCl₂.
- 2,800' & up w/20 sx of Class "G" cement w/2% CaCl₂.

Set bridge plug on wire line at 2,575' +.

Perforate 7" O.D. @ 2,550' + and pump 160 sx of cement in annular space between 7" casing and 8 3/4" hole to cover the potential coal producing zones.

After W.O.C., squeeze 35 sx of cement down annular space between the 7" casing and 10 3/4" casing.

Place 10 sx of cement in top of 7" O.D. casing after cutting off both 7" & 10 3/4" casing approximately 3' or 4' below ground level; then, weld metal plate over the top. Forest Service requested no dry hole marker.

**UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY**

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use Form 9-331-C for such proposals.)

1. oil well gas well other Dry Hole

2. NAME OF OPERATOR
Energy Reserves Group, Inc.

3. ADDRESS OF OPERATOR
P. O. Box 3280 Casper, Wyoming 82602

4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See space 17 below.)
AT SURFACE: 1,698' FSL & 1,119' FEL (NE SE)
AT TOP PROD. INTERVAL:
AT TOTAL DEPTH:

16. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

REQUEST FOR APPROVAL TO:	SUBSEQUENT REPORT OF:
TEST WATER SHUT-OFF <input type="checkbox"/>	<input type="checkbox"/>
FRACTURE TREAT <input type="checkbox"/>	<input type="checkbox"/>
SHOOT OR ACIDIZE <input type="checkbox"/>	<input type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	<input type="checkbox"/>
PULL OR ALTER CASING <input type="checkbox"/>	<input type="checkbox"/>
MULTIPLE COMPLETE <input type="checkbox"/>	<input type="checkbox"/>
CHANGE ZONES <input type="checkbox"/>	<input type="checkbox"/>
ABANDON* <input type="checkbox"/>	<input checked="" type="checkbox"/>
(other) <input type="checkbox"/>	

5. LEASE
U-10344

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME
Pole Canyon Unit

8. FARM OR LEASE NAME

9. WELL NO.
1

10. FIELD OR WILDCAT NAME
Wildcat

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
Sec. 17-T15S-R7E

12. COUNTY OR PARISH Emery 13. STATE Utah

14. API NO.
43-015-30064

15. ELEVATIONS (SHOW DF, KDB, AND WD)
G.L. Elev. 7,815'

(NOTE: Report results of multiple completion or zone change on Form 9-330.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

The above referenced well was P&A on 7-18-79 as follows:
5,400' and up w/30 sx of Class "G" cement w/2%CaCl₂.
4,550' and up w/ 70 sx of Class "G" cement w/2% CaCl₂.
2,800' and up w/20 sx of Class "G" cement w/2% CaCl₂.
Set bridge plug @ 2,575' on wire line. Perforated 2,560' - 2,550' w/10 holes.
Pumped 160 sx of Class "G" cement w/2% CaCl₂ in annulus outside of 7" O.D. csg (to cover coal zones.)
Squeezed 35 sx of Class "G" cement w/2% CaCl₂ in top between 7" & 10 3/4" casing.
Cut off both strings of casing, placed 10 sx of cement inside of 7" and welded plate over top. No marker was set.

Subsurface Safety Valve: Manu. and Type _____ Set @ _____ Ft.

18. I hereby certify that the foregoing is true and correct

SIGNED _____ TITLE Drilling Supt. DATE 7-19-79

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____
CONDITIONS OF APPROVAL, IF ANY:

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN DUPLIC.

(See other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R355.5.

9

WELL COMPLETION OR RECOMPLETION REPORT AND LOG *

1a. TYPE OF WELL: OIL WELL GAS WELL DRY Other _____

b. TYPE OF COMPLETION: NEW WELL WORK OVER DEEP-EN PLUG BACK DIFF. RESVR. Other P & A

2. NAME OF OPERATOR
Energy Reserves Group, Inc.

3. ADDRESS OF OPERATOR
P. O. Box 3280, Casper, Wyoming 82602

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)*
At surface 1698' FSL, 1119' FEL (NESE)
At top prod. interval reported below
At total depth

14. PERMIT NO. _____ DATE ISSUED _____

5. LEASE DESIGNATION AND SERIAL NO.

U-10344

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

Pole Canyon Unit

8. FARM OR LEASE NAME

9. WELL NO.

1

10. FIELD AND POOL, OR WILDCAT

Wildcat

11. SEC. T. R., M., OR BLOCK AND SURVEY OR AREA

Sec. 17-T15S-R7E

12. COUNTY OR PARISH Emery 13. STATE Utah

15. DATE SPUDDED 5-21-79 16. DATE T.D. REACHED 7-14-79 17. DATE COMPL. (Ready to prod.) 7-18-79 P&A 18. ELEVATIONS (DF, REB, RT, GR, ETC.)* G. L. 7815' K.B. 7830' 19. ELEV. CASINGHEAD

20. TOTAL DEPTH, MD & TVD 5408' 21. PLUG, BACK T.D., MD & TVD _____ 22. IF MULTIPLE COMPL., HOW MANY* _____ 23. INTERVALS DRILLED BY → ROTARY TOOLS O-TD CABLE TOOLS _____

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)* _____ 25. WAS DIRECTIONAL SURVEY MADE Yes

26. TYPE ELECTRIC AND OTHER LOGS RUN BHC - Sonic Log; Dual Ind. - Laterlog; Comp. Neutron-Form. Density Log; Continuous Dipmeter 27. WAS WELL CORED No

28. CASING RECORD (Report all strings set in well)

CASINO SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
20"	-----	37' GL	30"	100 sx reg + 2% CaCl ₂	-0-
10 3/4"	32.75#	511' KB	14 3/4"	550 sx "G" + 2% CaCl ₂	-0-
7"	23#	4450' KB	8 3/4"	100 sx "G" w/12# C-12/sx Follow w/50 sx "G" + 2% CaCl ₂	-0-

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)

30. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)

31. PERFORATION RECORD (Interval, size and number)

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED

33.* PRODUCTION

DATE FIRST PRODUCTION _____ PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump) P&A WELL STATUS (Producing or shut-in) _____

DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO
			→				

FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CORR.)
		→				

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.) _____ TEST WITNESSED BY _____

35. LIST OF ATTACHMENTS None

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records

SIGNED Heaven B. Barnes TITLE Dist. Prod. Engr - RMD DATE 7-19-79

*(See Instructions and Spaces for Additional Data on Reverse Side)

INSTRUCTIONS

General: This form is designed for submitting a complete and correct well completion report and log on all types of lands and leases to either a Federal agency or a State agency, or both, pursuant to applicable Federal and/or State laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from, the local Federal and/or State office. See instructions on items 22 and 24, and 33, below regarding separate reports for separate completions.

If not filed prior to the time this summary record is submitted, copies of all currently available logs (drillers, geologists, sample and core analysis, all types electric, etc.), formation and pressure tests, and directional surveys, should be attached hereto, to the extent required by applicable Federal and/or State laws and regulations. All attachments should be listed on this form, see item 35.

Item 4: If there are no applicable State requirements, locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local State or Federal office for specific instructions.

Item 18: Indicate which elevation is used as reference (where not otherwise shown) for depth measurements given in other spaces on this form and in any attachments.

Items 22 and 24: If this well is completed for separate production from more than one interval zone (multiple completion), so state in item 22, and in item 24 show the producing interval, or intervals, top(s), bottom(s) and name(s) (if any) for only the interval reported in item 33. Submit a separate report (page) on this form, adequately identified, for each additional interval to be separately produced, showing the additional data pertinent to such interval.

Item 23: "Sacks Cement": Attached supplemental records for this well should show the details of any multiple stage cementing and the location of the cementing tool.

Item 33: Submit a separate completion report on this form for each interval to be separately produced. (See instruction for items 22 and 24 above.)

37. SUMMARY OF POROUS ZONES:

SHOW ALL IMPORTANT ZONES OF POROSITY AND CONTENTS THEREOF; CORED INTERVALS; AND ALL DRILL-STEM TESTS, INCLUDING DEPTH INTERVAL TESTED, CUSHION USED, TIME TOOL OPEN, FLOWING AND SHUT-IN PRESSURES, AND RECOVERIES

FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.

38. GEOLOGIC MARKERS

NAME	MEAS. DEPTH	TOP	TRUE VERT. DEPTH
Log Tops			
Mancos	2672'		
Ferron Sd	4490'		
Base Ferron	4917'		
Dakota	5370'		
TD Drillers	5408'		
Loggers	5402'		

FILE IN QUADRUPLICATE
FORM OGC-8-X

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING
1588 West North Temple
Salt Lake City, Utah 84116

REPORT OF WATER ENCOUNTERED DURING DRILLING

Well Name & Number: USA LYNDA #1 (POLE CANYON UNIT #1)
Operator: Energy Reserves Group, Inc. Address: Box 3280 Casper, Wyoming 82602
Contractor: Atco Drilling Company Address: Denver, Colorado
Location NE 1/4 SE 1/4; Sec. 17 T. 1 ~~N~~ S, R. 7 ~~E~~ H; Emery County

Water Sands:

<u>Depth:</u>		<u>Volume:</u>	<u>Quality:</u>
From-	To-	Flow Rate or Head	Fresh or Salty
1.	<u>Well was drilled with mud - none of the below listed sands were tested</u>		
2.	<u></u>		
3.	<u></u>		
4.	<u></u>		
5.	<u></u>		

(Continue on Reverse Side if Necessary)

Formation Tops: 1120'-1230'
1470'-1485'
1645'-1670'
1885'-1915'

MESA VERDE - 15-16% POROSITY

Remarks:

- NOTE: (a) Upon diminishing supply of forms, please inform this office.
(b) Report on this form as provided for in Rule C-20, General Rules and Regulations and Rules of Practice and Procedure.
(c) If a water analysis has been made of the above reported zone, please forward a copy along with this form.

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Form 9-329 Rev. Feb 76
OMB 42-RO356

MONTHLY REPORT
OF
OPERATIONS

Lease No. U-1034
Communitization Agreement No. NA
Field Name Wildcat
Unit Name Pole Canyon Unit
Participating Area NA
County Emery State Utah
Operator Energy Reserves Group, Inc.

Amended Report

The following is a correct report of operations and production (including status of all unplugged wells) for the month of July, 1979

(See Reverse of Form for Instructions)

This report is required by law (30 U.S.C. 189, 30 U.S.C. 359, 25 U.S.C. 396 d), regulation (30 CFR 221.60), and the terms of the lease. Failure to report can result in the assessment of liquidated damages (30 CFR 221.54 (j)), shutting down operations, or basis for recommendation to cancel the lease and forfeit the bond (30 CFR 221.53).

Well No.	Sec & H of W	TWP	RNG	Well Status	Days Prod.	*Barrels of Oil	*MCF of Gas	*Barrels of Water	Remarks
1	NE SE17	15S	7E	DRG					Dry Hole (P&A) TD 5,408'

*If none, so state.

Disposition of production (Lease, Participating Area, or Communitized Area basis)

	Oil & Condensate (BBLs)	Gas (MCF)	Water (BBLs)
*On hand, Start of Month	0	XXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXXXX
*Produced	0	0	0
*Sold	0	0	XXXXXXXXXXXXXXXXXXXX
*Spilled or Lost	0	XXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXXXX
*Flared or Vented	XXXXXXXXXXXXXXXXXXXX	0	XXXXXXXXXXXXXXXXXXXX
*Used on Lease	0	0	XXXXXXXXXXXXXXXXXXXX
*Injected	0	0	0
*Surface Pits	XXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXXXX	0
*Other (Identify)	0	0	0
*On hand, End of Month	0	XXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXXXX
*API Gravity/BTU Content	0	0	XXXXXXXXXXXXXXXXXXXX

Authorized Signature: Wale Belden

Address: P. O. BOX 3280, Casper, Wy.
82602

Title: Production Clerk



STATE OF UTAH
NATURAL RESOURCES & ENERGY
Oil, Gas & Mining

Scott M. Matheson, Governor
Temple A. Reynolds, Executive Director
Cleon B. Feight, Division Director

4241 State Office Building • Salt Lake City, UT 84114 • 801-533-5771

October 12, 1982

Energy Reserves, Inc.
P. O. Box 3280
Casper, Wyoming 82602

Re: Well No. Pole Canyon Unit #1
Sec. 17, T. 15S, R. 7E.
Emery County, Utah

Gentlemen:

According to our records, a "Well Completion Report" filed with this office July 19, 1979, from above referred to well, indicates the following electric logs were run: DIL, FDC/CNL, BHC/Sonic Continuous Dipmeter. As of today's date, this office has not received these logs.

Rule C-5, General Rules and Regulations and Rules of Practice and Procedure, requires that a well log shall be filed with the Commission together with a copy of the electric and radioactivity logs.

Your prompt attention to the above will be greatly appreciated.

Sincerely,

DIVISION OF OIL, GAS AND MINING

A handwritten signature in cursive script that reads "Cari Furse".

Cari Furse
Clerk Typist

CF/cf