

UTAH DIVISION OF OIL, GAS AND MINING

REMARKS: WELL LOG _____ ELECTRIC LOGS _____ FILE WATER SANDS _____ LOCATION INSPECTED _____ SUB. REPORT/ABD. _____

Application NOT approved by this office; well never drilled

DATE FILED 4-23-79

LAND: FEE & PATENTED

STATE LEASE NO.

PUBLIC LEASE NO. U-16861

INDIAN

DRILLING APPROVED: APPLICATION NOT APPROVED

SPUDED IN:

COMPLETED:

PUT TO PRODUCING:

INITIAL PRODUCTION:

GRAVITY A.P.I.

GOR:

PRODUCING ZONES:

TOTAL DEPTH:

WELL ELEVATION:

DATE ABANDONED: 4-23-79-LOCATION ABANDONED

FIELD: Wildcat 3/86

UNIT:

COUNTY: Garfield

WELL NO. Turkey Knob #1

API NO: 43-017-30077

LOCATION 802' FT. FROM ~~XX~~ (S) LINE. 1800' FT. FROM ~~XX~~ (W) LINE. SE SW 1/4-1/4 SEC. 23

TWP.	RGE.	SEC.	OPERATOR	TWP.	RGE.	SEC.	OPERATOR
				31S	12E	23	FULTON OIL & GAS INC.

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Other instructions on
reverse side

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
Fulton Oil & Gas, Inc.

3. ADDRESS OF OPERATOR
89505
Arlington-Ridge Building, 290 South Arlington Ave. Reno, Nevada

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)
At surface 802 fsl, 1800' fwl
At proposed prod. zone same
SE SW

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*
22 miles south of Hanksville, Utah

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

16. NO. OF ACRES IN LEASE
2560

17. NO. OF ACRES ASSIGNED TO THIS WELL
80

18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.
3 1/2 miles

19. PROPOSED DEPTH
6420

20. ROTARY OR CABLE TOOLS
Rotary

21. ELEVATIONS (Show whether DP, RT, GR, etc.)
GR 5063

22. APPROX. DATE WORK WILL START*
March 20, 1978

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12-3/4"	9-5/8"	36#	500 - 520	300 sx.
7-7/8"	5-1/2"	14#	T.D.	to determined

1. Drill 12-3/4" hole to 520 feet.
2. Run 500 - 520 feet of 9-5/8" - 36# surface casing.
3. Cement casing to surface. 300 sx construction cement (50% excess), 3% CaCl₂ and .05% friction reducer.

1. Drill 7-7/8" hole to T.D. with mud or air as recommended by the wellsite Engineer. Mud maintained with water or lignite 30 - 32 Secs. VIS to T.D.
2. Run 5-1/2" casing to T.D. (or below production (if encountered)).
3. 1 to 1 Pozmix, 10% salt, .05 Fric. Red. Construction cement with 8% Gel. and .05% Fric. Red.

Install Blowout Preventers (Double Schaeffer) and Hydril. Pressure check. Blind Rams 1000 psi, Pipe Rams 1000 psi, Hydril and Mandrill 1000 psi.

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.

SIGNED [Signature] TITLE [Signature] DATE March 5, 1978

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE
[Signature] ACTING DISTRICT ENGINEER DATE **NOV 08 1978**

CONDITIONS OF APPROVAL, IF ANY:

State O & G

CONDITIONS OF APPROVAL ATTACHED TO OPERATOR'S COPY

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

NOTICE OF APPROVAL

U.S. GEOLOGICAL SURVEY, CONSERVATION DIVISION

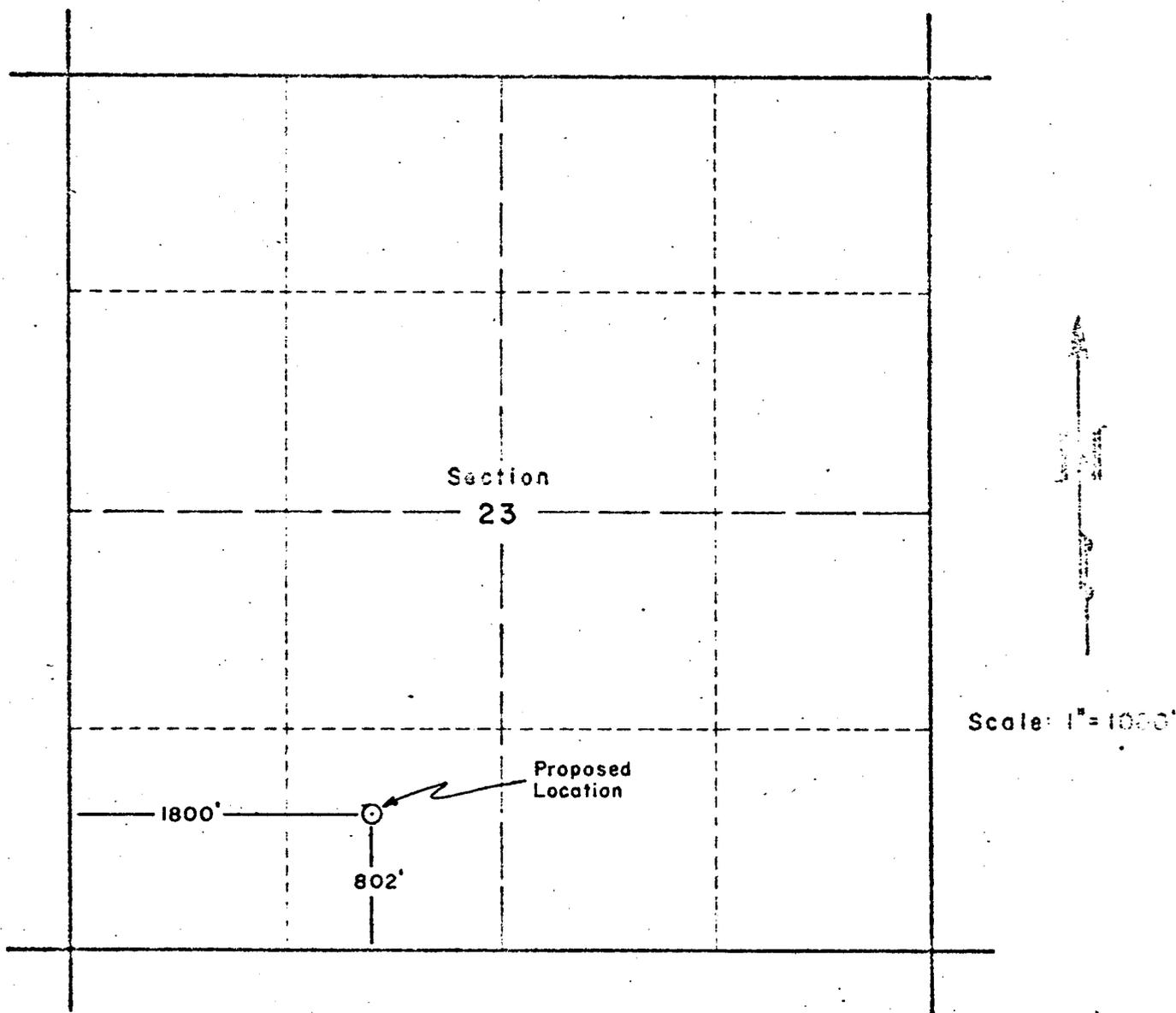
FROM: DISTRICT GEOLOGIST, SALT LAKE CITY, UTAH

TO: DISTRICT ENGINEER, SALT LAKE CITY, UTAH

Well	Location	Lease No.
FULTON OIL & GAS, INC. #1	802 PSL, 120 FWL, S. 23 T 31 S R 12 E SW GARFIELD Co., UTAH BR EL 5063'	U-14861
<p>1. Stratigraphy and Potential Oil and Gas Horizons. <i>Surface rocks are the Quaternary gravels underlain by Entrada Formation.</i></p> <p><i>Navajo - 130' - possible water & gas</i></p> <p><i>Wendover - 930' - " " " "</i></p> <p><i>Shinarump - 1520' - " gas & oil (see driller's report)</i></p> <p>2. Fresh Water Sands.</p> <p><i>See WRD report on page 2.</i></p> <p>3. Other Mineral Bearing Formations. (Coal, Oil Shale, Potash, Etc.)</p> <p><i>none.</i></p> <p>4. Possible Lost Circulation Zones.</p> <p><i>unknown.</i></p> <p>5. Other Horizons Which May Need Special Mud, Casing, or Cementing Programs.</p> <p><i>unknown.</i></p> <p>6. Possible Abnormal Pressure Zones and Temperature Gradients.</p> <p><i>unknown.</i></p> <p>7. Competency of Beds at Proposed Casing Setting Points.</p> <p><i>Probably adequate.</i></p> <p>8. Additional Logs or Samples Needed.</p> <p><i>none.</i></p> <p>9. References and Remarks</p> <p><i>none.</i></p>		

Date: 4-17-78

Signed: [Signature]



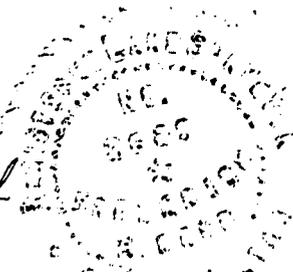
WELL LOCATION: Fulton Oil & Gas, Inc. No. 1 Turkey Knob

Located 802 feet North of the South line and 1800 feet East of the West line of Section 23,
 Township 31 South, Range 12 East Salt Lake Base & Meridian
 Garfield Co., Utah
 Existing ground elevation determined as 5063 feet based on U.S.G.S. datum.

I hereby certify the above plat represents a survey made under my supervision and that it is accurate to the best of my knowledge and belief.

Frederick H. Reed

REGISTERED PROFESSIONAL SURVEYOR



Fulton Oil & Gas, Inc.
 Reno, Nevada

Well Location Plat
 Sec. 23, T 31 S, R 12 E
 Garfield Co., Utah

- (4) Surface Hole:
1. Drill 12 $\frac{1}{2}$ " hole and set 500' 9-5/8" - 36# surface pipe.
 2. Surface Casing - 9-5/8" - 36# with guide shoe and float collar.
 3. Cement - neat cement with 100% excess. Use top and bottom plug. Bleed off pressure after landing plug. If float does not hold shut in head to control flow back. Install preventors after 8 hours if initial set is indicated by cement samples. Drill out after 18 hours using low RPM and low weight to protect surface pipe.

Production Casing: Drill 7-7/8" hole to accommodate 5-1/2" casing or smaller dependent on success of well. Centralizer and scratchers to be placed over production intervals. Use float shoe and float collar. Set full casing weight on Wellhead. 5 $\frac{1}{2}$ " casing use new J-55-14#.

Casing Cement: Cementing of production casing to reach 300 feet above any possible productive zone. If a high cement column is required consideration should be given to cement lighteners, e.g. pozmix, gel, etc.

- (5) Install Blowout Preventers (Double Shaeffer and Hydril):
Pressure Check Blind Rams 1000 p.s.i., Pipe Rams 1000 p.s.i., Hydril and Mandril 1000 p.s.i. Operation of preventers to be checked every 24 hours, and pressure maintained. (See exhibit "C").
- (6) Drilling Fluid: Gel Chemical.
Drill out surface shoe joint with water and dump same. Drill out under surface pipe with mud 30-35Vis. When approaching possible hydrocarbon zones decrease water loss to 6 to 8 cc. and maintain at 9#. Use of desander and/or destiler recommended.
- (7) Auxiliary Equipment to be used:
1. Kelly Cocks.
 2. Floats at the bit on top hole only,
 3. Monitoring equipment on the mud system is considered unnecessary in a shallow hole,
 4. A sub on the floor with a full opening valve to be stabbed into drill pipe when the kelly is out of the string will be provided.
- (8) Tests: Multizone tests. Where indicated during drilling and by the logs.

Samples: 10' intervals surface to T.D.

Cores: Shinarump, Moenkopi (basal), Coconino, Rico, Ismay, Desert Creek and Akah, and deeper cores if interesting section is encountered.

Logs: Induction Electric, Gamma Ray-Neutron-porosity, Sonic Caliper-porosity.

Logging Rate: Induction, Gamma Ray, Caliper
2" = 100'
5" = 100'

- (9) The Blowout preventer and hydril should adequately handle all pressures encountered to the proposed T.D. Fresh air masks will be provided for the crew and a gas sniffer should give adequate warning.
- (10) The anticipated starting date is April 28th, 1978 and the duration of operations in 40 days.

S.A. Mouritsen, P. Eng.

S.A. Mouritsen P. Eng.

Surface Use and Operations Plan

1. Exhibit "A" is a portion of the Bull Mountain Utah Quadrangle that locates the proposed well and other wells in the township. The Lone Cedar road is an existing road and should not need upgrading, (Also see exhibit "B"). Roads will be maintained by a grader or bulldozer contracted at Hanksville, Utah.
2. An existing road from the Lone Cedar road at two miles east of Highway 95 is to be upgraded for 1/2 mile, (See exhibit "B"). This upgraded road will be upgraded for 3/4 miles to the location. The road will be built to a maximum width of sixteen (16) feet and grades will not exceed seven percent (7%). No Turnouts will be constructed except on the well site. No culverts are required unless abnormal weather conditions occur. Drainage is to the east and only a dry wash is present just south of the Lone Cedar road. The surface is sand and sandstone. There are no fences, gates or cattleguards. The access road has been surveyed.
3. Refer to Exhibit "A". (No wells within 3 miles).
4. Initial tank batteries and low lines will be situated on the well pad. If a development program is warranted, a desirable location for a central tank battery will be chosen.
5. Drilling water will be hauled from either Hanksville or Poison Springs Canyon.
6. Refer to Exhibit "A". Use of construction materials is not anticipated.
7. A reserve pit with a capacity of not less than three times the anticipated total mud system shall be constructed to handle waste fluids. A burn pit shall be constructed and provided with a wire cover for the disposal of solid wastes.
8. No camps or air strips are anticipated.
9. Exhibits "A", "B", "C" and "D" are attached. Pits will be unlined.
10. Upon completion of the well, pits shall be filled and properly leveled. Roads shall be water barred as per instructions. Reseeding shall be conducted in compliance with instructions from the B.L.M. The pits will be fenced prior to rig release and any oil removed from the same.

Continued--

(2)

11. The well site occupies a flat that is covered with blow sand. Vegetation is sparse, some grass and sagebrush are present. The location is on federal land. There are no apparent problems resulting from rough topography or abnormal drainages. No occupied dwellings, archeological, historical, or cultural sites are in the area.
12. S. A. Mouritsen,
3219 - 52nd Avenue N.W.
Calgary, Alberta, Canada
T2L 1V6
13. 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 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 FULTON OIL & GAS, INC. and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

Name: S. A. MouritsenDate: Apr 12/78Title: P. Engineer

(D-31-B) 8800

124
C

Depths of fresh-water zones:

Gulf Oil Corp., Garfield Fed. #1, Wildcat
2070' fnl, 1080' fwl, sec. 8, T 31 S, R 13 E, Garfield Co., Utah
Elev. 4,333' GR. Proposed depth 4,250'.

<u>Stratigraphic units</u>	<u>Tops, approx.</u>	<u>Quality of water</u>
Kayenta Fm	surface	dry
Wingate Ss	(not	dry
Chinle Fm	known	dry
Moenkopi Fm	accurately)	usable/saline water(?) near base
White Rim Ss Mem	1,200 ft	usable/saline
Organ Rock Tongue Mem	1,600 ft	same
Cedar Mesa Ss Mem	1,800 ft	same
Hermosa Fm	3,000 ft	saline/brine
Paradox Mem	3,800 ft	brine where present

The Glen Canyon Group is dry at this location , but may contain usable water down dip a few miles to the west. Usable water may be found in the basal limestone of the Moenkopi Fm and in the Cutler Fm. Deeper units contain more saline water or brine.

USGS - WRD
1-15-74

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

Usual Environmental Analysis

Lease No. U-16861

Operator Fulton Oil & Gas, Inc.

Well No. Turkey Knob #1

Location 802' FSL 1800' FNL Sec. 23 T. 31S R. 12E

County Garfield State Utah Field Wildcat

Status: Surface Ownership Public Minerals Public

Joint Field Inspection Date May 16, 1978

Participants and Organizations:

William A. Lucias

Archaeologist

John Petrie

Operator

John Evans

USGS

John Mann

BLM

Mr. Hunt

Dirt Contractor

Related Environmental Analyses and References:

- (1) Richfield District Oil & Gas EAR, BLM, Utah
- (2) Henry Mountain Planning Unit Resource Analysis, BLM, Utah.

Analysis Prepared by:

John T. Evans
Environmental Scientist
Salt Lake City, Utah

Date June 16, 1978

Line reserve pit.

NOTED JOHN T. EVANS
6/24/78

Proposed Action:

On April 13, 1978, Fulton Oil & Gas, Inc. filed an Application for Permit to Drill the No. Turkey Knob #1 exploratory well, a 6420 foot oil and gas test of the formations above the Precambrian; located at an elevation of 5063 ft. in the SE/4SW/4 Sec. 23, T.31S., R.12E. on Federal mineral lands and Public surface; lease No. U-16861. There was no objection raised to the wellsite. As an objection was made to the access road, it was changed. See the attached map for new access road.

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 Preventer 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 U.S.G.S. District Office in Salt Lake City, Utah and the U.S.G.S. Northern Rocky Mountain Area Office in Casper, Wyoming.

A working agreement has been reached with the BLM, 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 200 ft. wide x 300 ft. and a reserve pit 150 ft. 100 ft. A new access road will be constructed 16 ft. wide x 3/4 mile long and upgrade 16 ft. wide x 0.5 miles access road from an existing and improved road. The operator proposes to construct production facilities on disturbed area of the proposed drill pad.

If production is established, plans for a flow line will be submitted to the appropriate agencies for approval. The anticipated starting date is March 20, 1978 and duration of drilling activities would be about 30 days.

Location and Natural Setting:

The proposed drillsite is approximately 22 miles south of Hanksville, Utah, the nearest town. A fair road runs to within 1¼ miles of the location. This well is a wildcat well.

Topography:

The location is on the side of a small north-south trending ridge. The location slopes to the west at 2 to 3% slope. The top soil is very sandy and is typical of blow sand. Some sand dunes are in the general area.

Geology:

The surface geology is Entrada. The soil is very sandy. No geologic hazards are known near the drillsite. Seismic risk for the area is minor. Anticipated geologic tops are filed with the 10-Point Subsurface Protection Plan. Fresh water may be encountered Moenkopi, Cultler, and Glen Canyon group.

Approval of the proposed action would be conditioned that adequate and sufficient electric, radioactive, density logging surveys would be made to locate and identify any potential mineral resources. 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 will be placed with drilling fluid in the hole to assure protection of any mineral resources.

The potential for loss of circulation would exist and is possible. 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 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 sandy 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.

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 proposes to rehabilitate the location and access roads per the recommendations of the Bureau of Land Management.

Approximately 3 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 this 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 drilling-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.

Precipitation:

Annual rainfall should range from about 6 to 8" at the proposed location. The majority of the numerous drainages in the surrounding area are of a non-perennial nature flowing only during early spring runoff and during extremely heavy rain storms. This type of storm is rather uncommon as the normal annual precipitation is around 8".

Winds are medium and gusty, occurring predominately from west to east. Air mass inversions are rare. 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:

There are no live streams in the project area. 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 of 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 commingling 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 basis 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.

Vegetation:

Plants in the area are of the salt-desert-shrub types. Proposed action would remove about three 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.

Wildlife:

Animal and plant inventory has been made by the BLM. No endangered plants or animals are known to habitat on the project area. The fauna

of the area consists predominately of the mule deer, coyotes, rabbits, 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 has been made by Mr. Lucias of the proposed action. Appropriate clearances have been obtained from the surface managing agency. If a historic artifact, an archaeological 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 light sand 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 abandone, noise levels should return to pre-drilling levels.

The site is not visible from any major roads. After drilling operations, completion equipment would be visible to passersby of the area but would not present a major intrusion.

The economic effect of one well would be difficult to determine, but should this well discover a significant new hydrocarbon source, local,

state, and possibly national economies 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's 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.

Land Use:

There are no national, state, or local forests, wildlife refuges or ranges, grasslands, monuments, trails or other formally designated recreational facilities near the proposed location.

The proposed location is within the Henry Mountain Planning Unit 05-01. 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 E.A.R. is on file in the agency's State offices and is incorporated herein by reference.

Waste Disposal:

The mud and reserve 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 burned and 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.

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 U.S.G.S. 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 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.

1. The access road was changed to utilize an existing seismic trail which would ^{AVOID} ~~cross~~ ~~lose~~ sand dunes.

2. The reserve pit must be lined.

3. A Blooey pit will be constructed and at least 120 feet from the well head.

4. The reserve pit will be fenced on three sides prior to start of drilling activities and completed when drill rig moves out. The fence will be maintained till the reserve pit dries and reclamation procedures started. Reserve pit 100' x 150'.
5. The Burn pit will be constructed at least 120' from well head and combustionable materials. This pit will be fenced with small mesh wire.
6. The access road will enter the pad on the NE corner to avoid Blooey pit.
7. Water will be obtained from Hanksville.
8. All permanent facilities be painted a light sand color to blend in with the natural environment.
9. BLM be given 48 hours notice prior to construction.
10. BLM be contacted prior to abandonment for recommendations for rehabilitation.

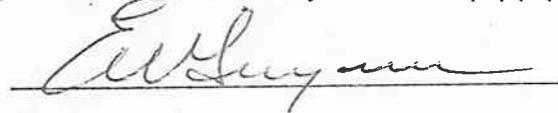
Adverse Environmental Effects Which Cannot Be Avoided:

Surface disturbance and removal of vegetation from approximately 3 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 emissions 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 commitment of resources would be made.

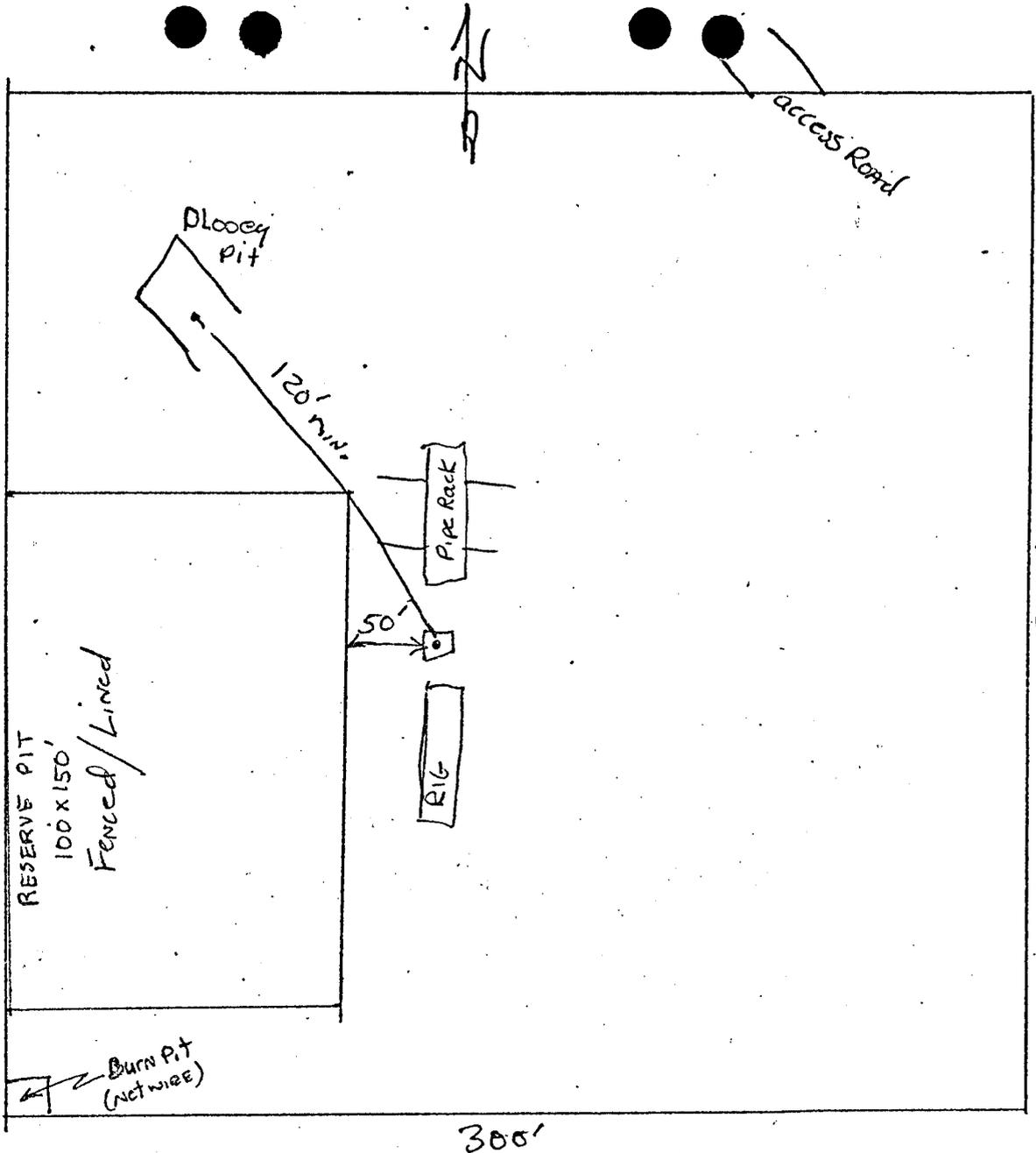
Determination:

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



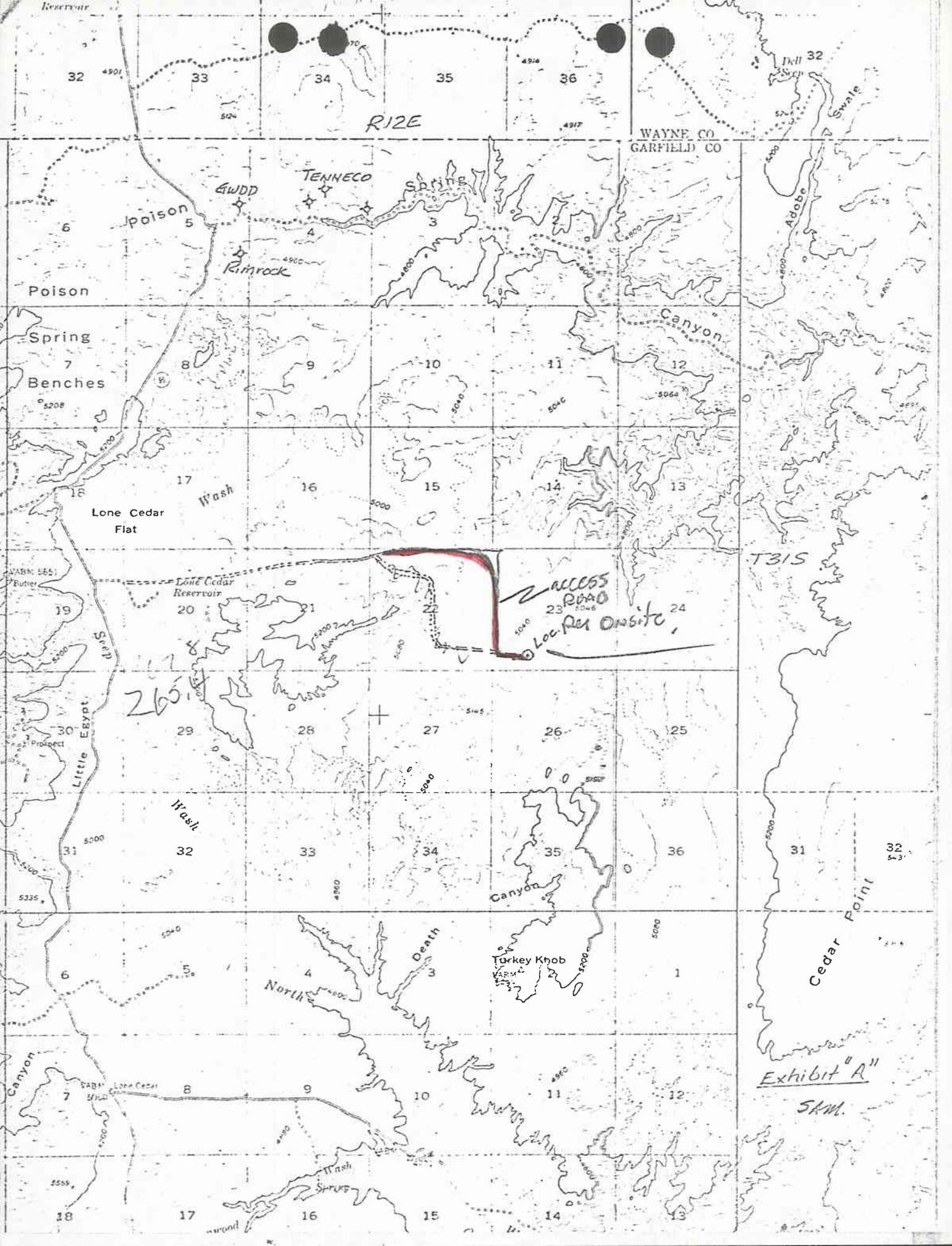
District Engineer
U. S. Geological Survey
Conservation Division
Oil and Gas Operations
Salt Lake City District





FULTON OIL & GAS, INC.
 TURKEY KNOB # 1

Modified Rig layout
 per joint onsite
 May 16, 78



RIZE

WAYNE CO
GARFIELD CO

poison

TENNECO Spring

GWDD

Rimrock

Canyon

Poison

Spring
Benches

Lone Cedar
Flat

Wash

WABN 5551
Butler

Lone Cedar
Reservoir

ACCESS
ROAD
Loc. Per. Onsite

2601

Little Egypt

Wash

Canyon

Turkey Knob

Death

North

Cedar Point

Exhibit "A"

SKM.

PROPOSED DRILLING PROGRAM

TURKEY KNOB

Location: SE $\frac{1}{4}$ SW $\frac{1}{4}$, Sec 23, Twp 31S, Rge 12E
Garfield County, Utah

Elevation: 5063 feet above sea level

Depth: 6000 - 6480 feet.

Formation	Depth of Top	Sea Level Datum (Thickness)	Potential
Entrada	Surface		
Carmel S.S.	30	+5033 (100)	---
Navajo S.S.*	130	+4933 (600)	H ₂ O & Gas?
Kayenta Form.	730	+4333 (200)	?
Wingate S.S.*	930	+4133 (340)	H ₂ O & Gas?
Chinle Sh.	1270	+3793 (250)	---
Shinarump S.S.	1520	+3543 (30)	Gas & Oil?
Moenkopi Sh.	1550	+3513 (230)	Oil
Kaibab-Sinbad fm.	1780	+3283 (180)	Oil
Coconino-White Rim	1960	+3083 (430)	Oil
Cutler fm.	2390	+2673 (210)	?
Cedar Mesa S.S.	2600	+2463 (860)	?
Rico	3460	+1603 (300)	Oil
Hermosa (Honaker)	3760	+1303 (360)**	Oil-Gas
Transition	4120	+ 923 (90)**	Oil-Gas
Ismay	4210	+ 853 (300)**	Oil-Gas
Paradox	4510	+ 553 (20)	?
Desert Creek	4530	+ 533 (40)**	Oil-Gas
Akah	4570	+ 493 (160)**	Oil-Gas
Barker Creek	4710	+ 353 (190)	Oil-Gas
Pinkerton Trail	4900	+ 163 (220)	Oil-Gas
Lim Ridge	5120	- 57 (130)	Oil?
Mississippian	5250	- 187 (650)	Oil
Devonian (ouray)	5900	- 837 (130)	?
Elbert	6030	- 967 (120)	?
McCracken	6150	-1087 (100)	?
Cambrian (Lynch)	6260	-1197 (130)	?
Bowman	6390	-1327 (30)	
Precambrian	6420?	-1357	

*Lost circulation zones

**Reef Zones

(Note: The structural closure will probably increase with depth. Depths prognosed at a maximum and Basement (Precambrian may be reached at less than 6000 feet). This would require an upward adjustment in depth of all horizons).

Deviation: Not over 1° per 300'. Maximum deviation 8°.

Drilling Fluid: Gel Chemical.
Drill out surface shoe joint with water and dump same. Drill out under surface pipe with mud 30-35Vis. When approaching possible hydrocarbon zones decrease water loss to 6 to 8 cc. Use of desander and/or desilter recommended.

Samples: 10' intervals surface to T.D.

Cores: Shinarump, Moenkopi (basal), Coconino, Rico, Ismay, Desert Creek and Akah.

Logs: Induction Electric, Gamma Ray-Neutron-porosity, Sonic Caliper-porosity.

Tests: Multizone tests. Where indicated during drilling and by the logs.

PROPOSED DRILLING PROGRAM

TURKEY KNOB

Telephone Numbers: Rimrock (403) 262-4515
 Sparrow (403) 988-6511
 Public Lands (214) 243-4253
 Taurus (403) 262-2291
 Seagull (403) 263-8386
 Fulton

Companies Receiving
Drilling Information: 1. Rimrock Mining, Inc.
 2. Public Lands Exploration Inc.
 3. Sparrow Industries Ltd.
 4. Taurus Oil Ltd.
 5. Seagull Resources Ltd.
 6. Fulton Oil & Gas, Inc.

Surface Hole: 1. Drill 12½" hole and set 500' 9-5/8" - 36# surface pipe.
 2. Surface Casing - 9-5/8" - 36# with guide shoe and float collar.
 3. Cement - neat cement with 100% excess. Use top and bottom plug.
 Bleed off pressure after landing plug. If float does not hold
 shut in head to control flow back. Install preventors after 8
 hours if initial set is indicated by cement samples. Drill out
 after 18 hours using low RPM and low weight to protect surface
 pipe.

Main Hole: Drill 7-7/8" hole. Bit program to be co-ordinated with bit companies.
 Strong consideration to be given to mill tooth bits to 3000 K.B.
 Deviation survey to be run at minimum of every 300 feet with maximum
 rate of change to be 1° per 300 feet. Maximum deviation to be 8°.

Logging Rate: Induction, Gamma Ray, Caliper
 2" = 100'
 5" = 100'

Production Casing: Drill 7-7/8" hole to accommodate 5-1/2" casing or smaller dependent
 on success of well. Centralizers and scratchers to be placed over
 production intervals. Use float shoe and float collar. Set full
 casing weight on Wellhead.

Casing Cement: Cementing of production casing to reach 300 feet above any possible
 productive zone. If a high cement column is required consideration
 should be given to cement lighteners, e.g. pozmix, gel, etc.

SURFACE USE AND OPERATIONS PLAN

1. Exhibit "A" is a portion of the Bull Mountain Utah Quadrangle that locates the proposed well and other wells in the township. The Lone Cedar road is an existing road and should not need improvement.
2. An existing road from the Lone Cedar road is to be upgraded for one-half mile. Three-quarters of a mile of road must be constructed from this upgraded road to the location. Exhibit "B".
3. Refer to Exhibit "A".
4. Initial tank batteries and flow lines will be situated on the well pad. If a development program is warranted, a desirable location for a central tank battery will be chosen.
5. Drilling water will be hauled from either Hanksville or Poison Springs Canyon.
6. Refer to Exhibit "A". Use of construction materials is not anticipated.
7. A reverse pit with a capacity of not less than three times the anticipated total mud system shall be constructed to handle waste fluids. A burn pit shall be constructed and provided with a wire cover for the disposal of solid wastes.

 Upon completion of the well, all pits shall be allowed to dry and then properly covered and leveled.

 A proper outdoor privie and waste trench will be provided by contractor and installed on location.
8. No camps or air strips are anticipated.
9. Exhibits "A", "B", "C" and "D" are attached.
10. Upon completion of the well, pits shall be filled and properly leveled. Roads shall be water barred as per instructions. Reseeding shall be conducted in compliance with instructions from the B.L.M.
11. The well site occupies a flat that is covered with blow sand. Vegetation is sparse, some grass and sagebrush are present. The location is on federal land. There are no apparent problems resulting from rough topography or abnormal drainages. No occupied dwellings, archeological, historical, or cultural sites are in the area.

Continued.....

12. S.A. Mouritsen,
3219 - 52nd Avenue N.W.
CALGARY, Alberta, Canada
T2L 1V6

13. 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 in this plan are, to the best of my knowledge, true and correct; and, that the work associated with the operations will be performed by FULTON OIL & GAS, INC. and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

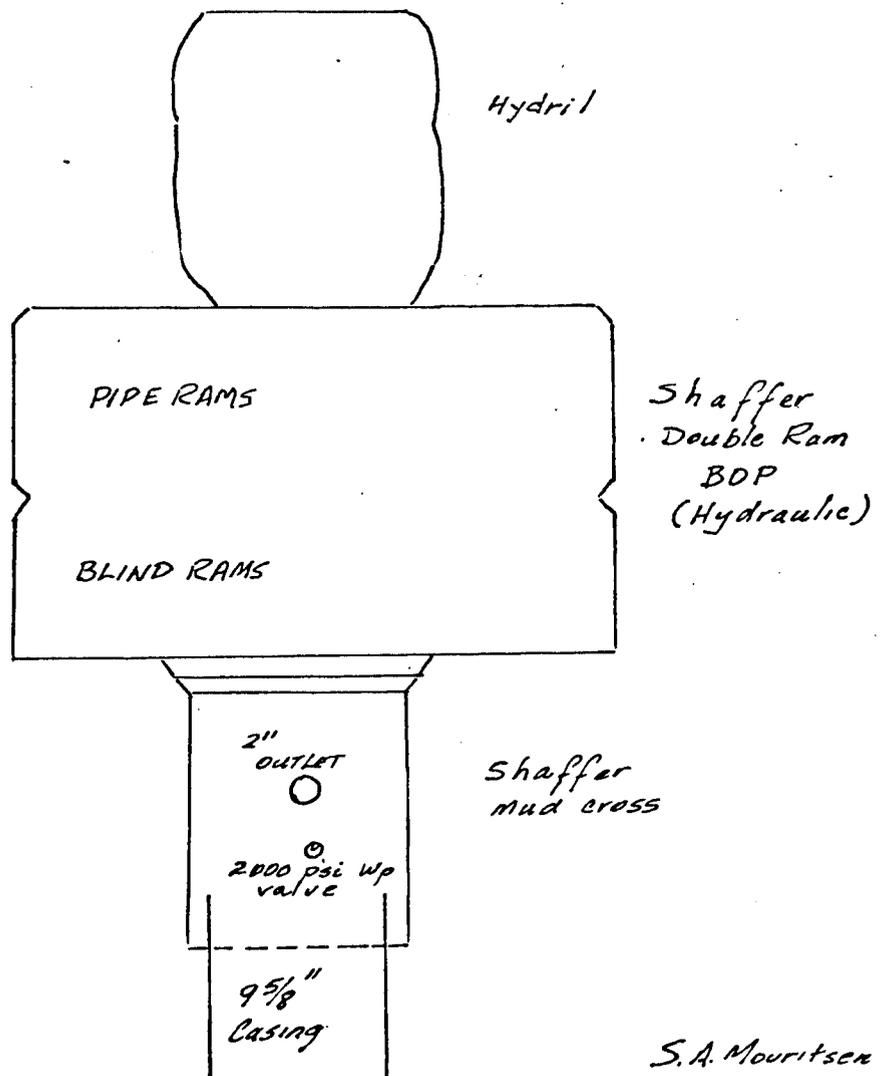
Name: B. F. Litch, P.E.

Date: 3/20/78

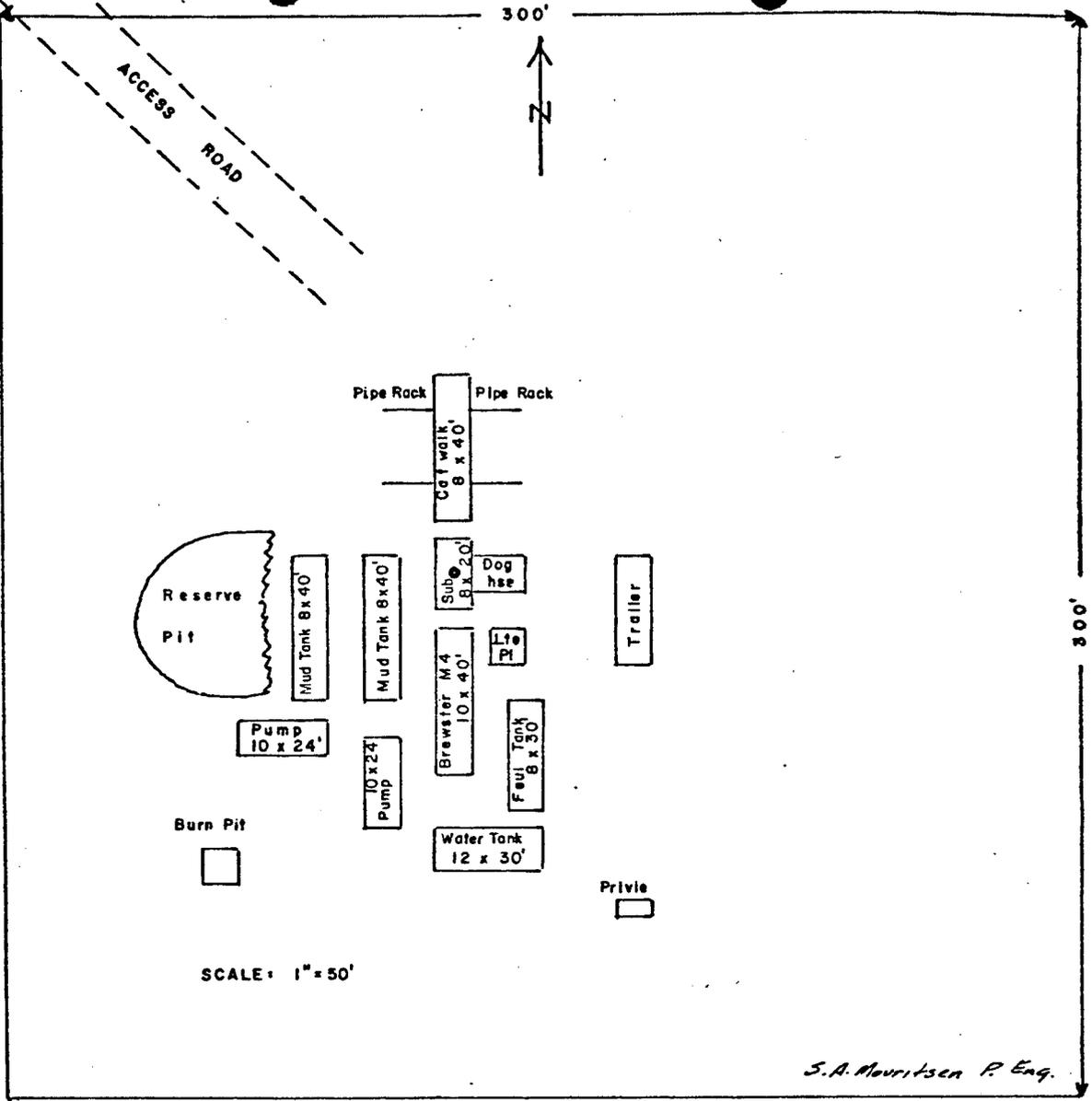
Title: Agent

BOP Stack for Fulton Oil & Gas
5000 psi Wp.

All hydraulically activated
with accumulator & controls
to be located at least 50'
from well bore



S.A. Mouritsen P. Eng.



FULTON OIL & GAS, INC.
 TURKEY KNOB No. 1
 Sec. 23, T31S, R12E SLM.
 Garfield County, UTAH
 PROPOSED RIG LAYOUT

Exhibit "B"

FULTON DRILLING, INC.

RIG NO. 7

RIG: Brewster M-4 Drawworks: American Make-up, double drum, break-out catheads, which double 15" hydramatic brake, air clutches, 1" drilling line, 9/16" sand line.

POWER: Cat D-343 with torque converter.

MAST: 96' Wilson, wire-line raised, 250,000 HLC telescoping mast.

ROTARY TABLE: Ideco 17½" Rotary table, rotary drive bushing.

PUMPS #10 & #2: Wheland 14,000, 6¼" x 14" with cat D343 power. Emsco D175, 7¼" x 12" duplex with GM 6-71 twin diesel power.

PITS: Two 8 x 40 mud tanks with desander and shale shaker.

BOP EQUIPMENT: Shafer 10" 900 series hydraulic (a double).

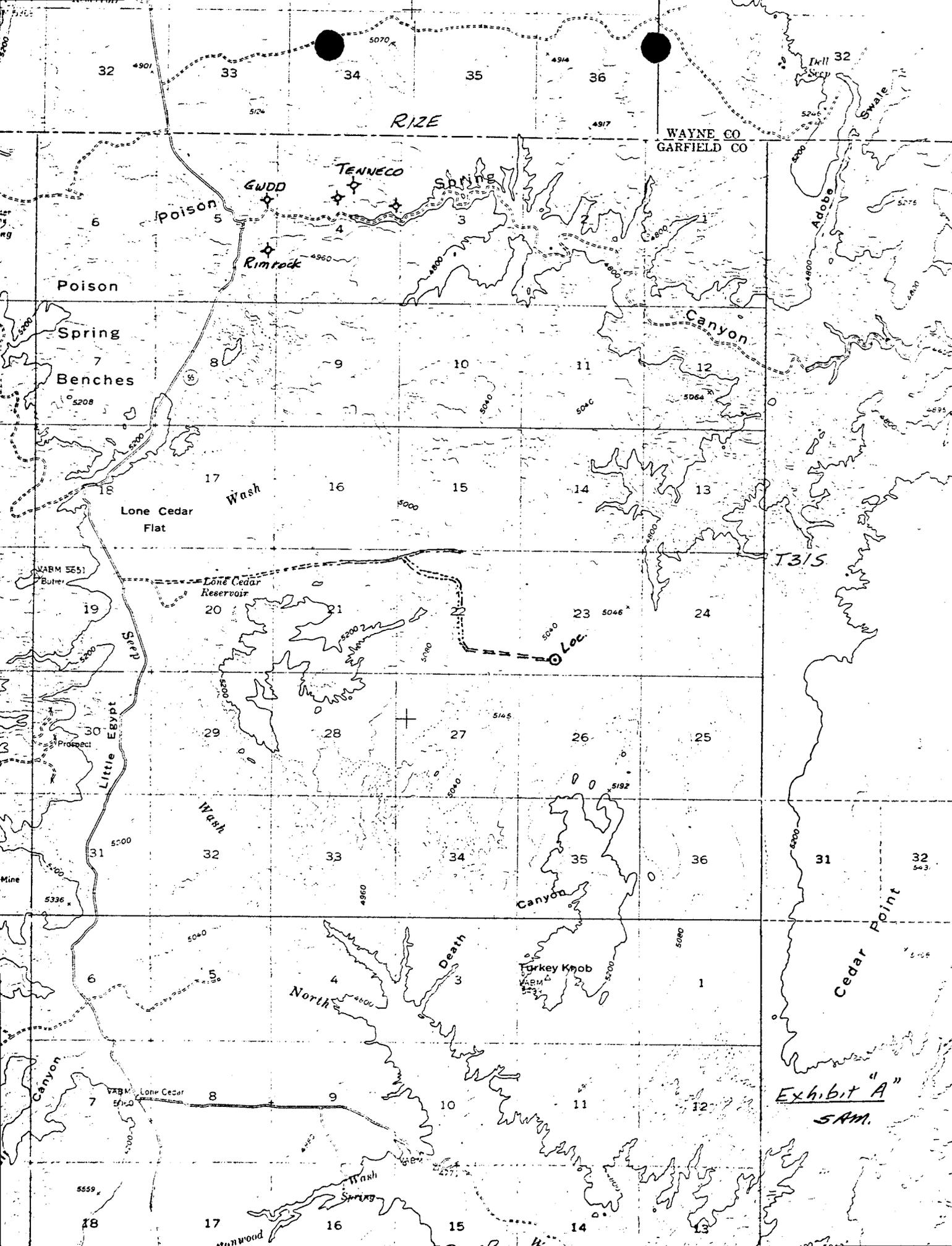
LIGHT PLANTS: Kato 20-KW Generator powered by GM 2-71 diesel.

WATER TANK: 500 gallon.

FUEL TANK: Trailer mounted 3,000 gallons.

DRILL PIPE: 4" O.D.

DRILL COLLARS: 5½".



RIZE

WAYNE CO
GARFIELD CO

TENNECO
Spring

GWDD
Poison
Rimrock

Poison

Spring
Benches

Canyon

Lone Cedar
Flat

Wash

Lone Cedar
Reservoir

Loc.

Little Egypt
Wash

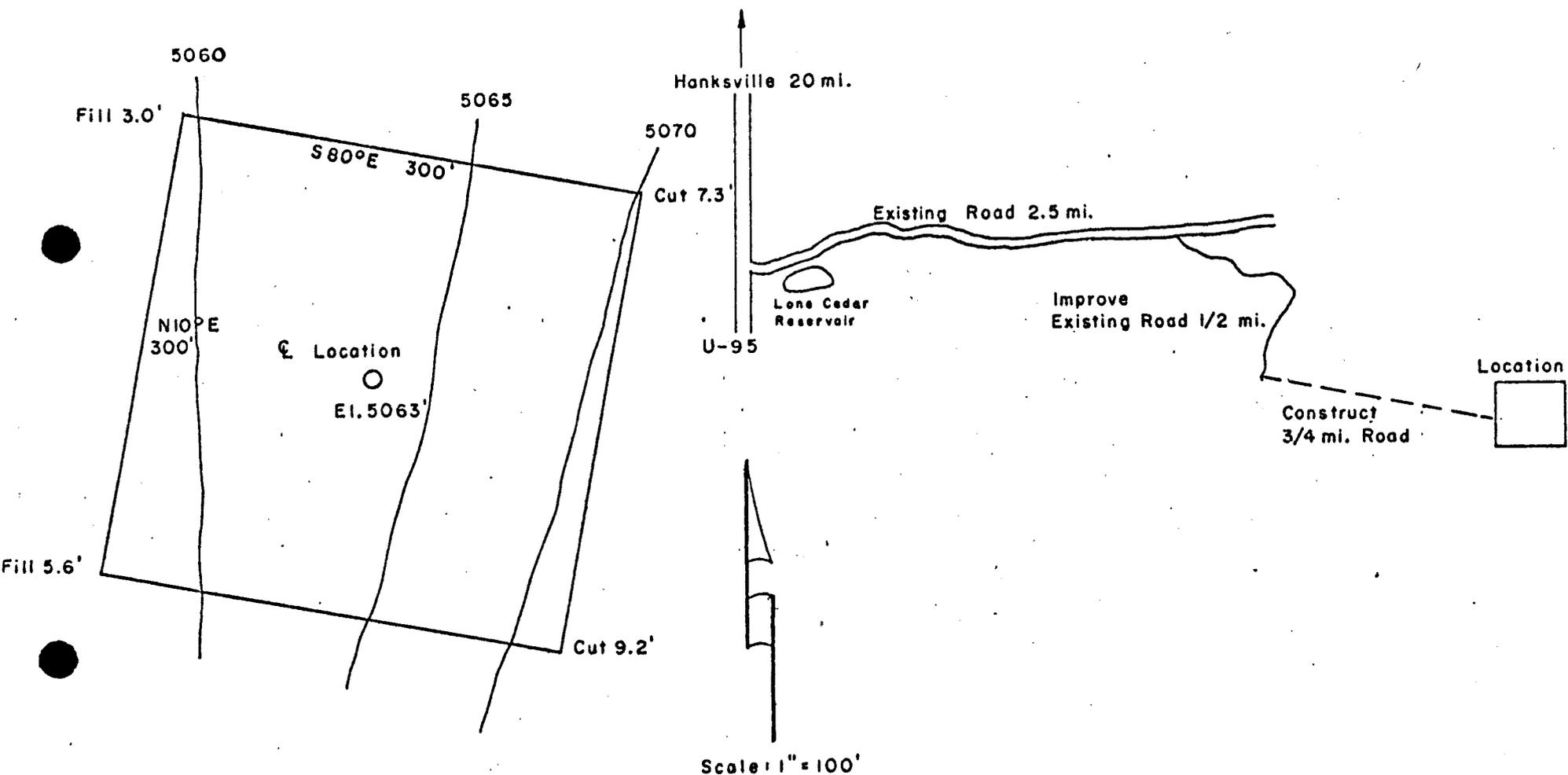
Canyon

North
Death

Turkey Knob

Cedar Point

Exhibit "A"
SAM.



I hereby certify the above plat represents a survey made under my supervision and that it is accurate to the best of my knowledge and belief

Frederick M. Reed
 FREDERICK M. REED
 Registered Land Surveyor



Fulton Oil & Gas, Inc. Reno, Nevada	
Well Site Plan No. 1 Turkey Knob Sec. 23, T31S, R12E Garfield Co., Utah	
CLARK-REED & ASSOC Durango, Colorado	DATE: Feb. 21, 1978 FILE NO 78Q10

Fulton Oil and Gas, Inc.
Well #Turkey Knob
Sec. 23-31S-12E
Garfield County, Utah
U-16861

1. No offsite parking or surface disturbance is allowed.
2. No vehicle traffic except on designated access routes.
3. A wire mesh cage will be placed over the trash pit.
4. Water for the drilling and associated operations will be obtained at Hanksville.
5. At the completion of the drilling program, the disturbed area will be ripped and recontoured to, as near as possible, the original contours.
6. Reseeding will be done in October and November.
7. Rehabilitation will be completed to the satisfaction of the Area Manager.
8. Construction and maintenance for surface use approved under this plan should be in accordance with the surface use standards as set forth in the BLM/GS Oil and Gas Brochure entitled, "Surface Operating Standards for Oil and Gas Exploration and Development". This includes, but is not limited to, such items as road construction and maintenance, handling of top soil and rehabilitation.

STATE OF UTAH
DIVISION OF OIL, GAS, AND MINING

** FILE NOTATIONS **

Date: April 23, 1979

Operator: Fulton Oil & Gas, Inc.

Well No: Turkey-Know #1

Location: Sec. 23 T. 31S R. 12E County: Garfield

File Prepared:

Entered on N.I.D.:

Card Indexed:

Completion Sheet:

API Number: 43-017-30077

CHECKED BY:

Administrative Assistant: _____

Remarks:

Petroleum Engineer: _____

Remarks:

Director: _____

Remarks:

*application NOT approved
by this office; well
never drilled*

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