

UTAH DIVISION OF OIL GAS AND MINING

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

11/15/79 - Location change

DATE FILED 11-1-79

LAND: FEE & PATENTED _____ STATE LEASE NO. _____ PUBLIC LEASE NO. U-40404 _____ INDIAN _____

DRILLING APPROVED: 11-1-79

SPUDED IN:

COMPLETED: _____ PUT TO PRODUCING: _____

INITIAL PRODUCTION:

GRAVITY A.P.I.

GOR:

PRODUCING ZONES:

TOTAL DEPTH:

WELL ELEVATION:

DATE ABANDONED: NOV. 30-1979 LOCATION ABANDONED WELL NEVER DRILLED

FIELD: Undesignated 3/86

UNIT:

COUNTY: San Juan

WELL NO. Federal 24-2

API NO: 43-037-30512

LOCATION 660' FT. FROM (N) ~~XX~~ LINE. 1980' FT. FROM ~~XX~~ (W) LINE. ~~C NE SW~~ 1/4-1/4 SEC. 24

1820' FWL

NE NW 3

TWP.	RGE.	SEC.	OPERATOR	TWP.	RGE.	SEC.	OPERATOR
38S	25E	24	McCULLOCH OIL & GAS CORP.				

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK DRILL <input checked="" type="checkbox"/> DEEPEN <input type="checkbox"/> PLUG BACK <input type="checkbox"/>		5. LEASE DESIGNATION AND SERIAL NO. U 40404	
b. TYPE OF WELL OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/> SINGLE ZONE <input checked="" type="checkbox"/> MULTIPLE ZONE <input type="checkbox"/>		6. IF INDIAN, ALLOTTEE OR TRIBE NAME	
2. NAME OF OPERATOR McCulloch Oil & Gas Corporation		7. UNIT AGREEMENT NAME	
3. ADDRESS OF OPERATOR 3033 N.W. 63rd St.; Suite 250-E, Oklahoma City, Okla. 73116		8. FARM OR LEASE NAME Federal 24	
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)* At surface 660' FNL & 1980' FWL of Section 24, T38S-R25E At proposed prod. zone Same as above C NENW		9. WELL NO. 2	
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*		10. FIELD AND POOL, OR WILDCAT Undesignated	
15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any)		11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA Section 24, T38S-R25E	
16. NO. OF ACRES IN LEASE 160		12. COUNTY OR PARISH San Juan	
17. NO. OF ACRES ASSIGNED TO THIS WELL 40		13. STATE Utah	
18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.		20. ROTARY OR CABLE TOOLS Rotary	
19. PROPOSED DEPTH 5800' <i>PLAN</i>		21. APPROX. DATE WORK WILL START* November 26, 1979	
21. ELEVATIONS (Show whether DF, RT, GR, etc.) 5269' GR			

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12 1/4"	8 5/8"	24#	2650'	1200 sacks
7 7/8"	4 1/2"	10.5#	5900'	300 sacks

Additional Information attached.



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 W.R. Lynn TITLE Dist. Drlg Engr DATE October 19, 1979

(This space for Federal or State office use)

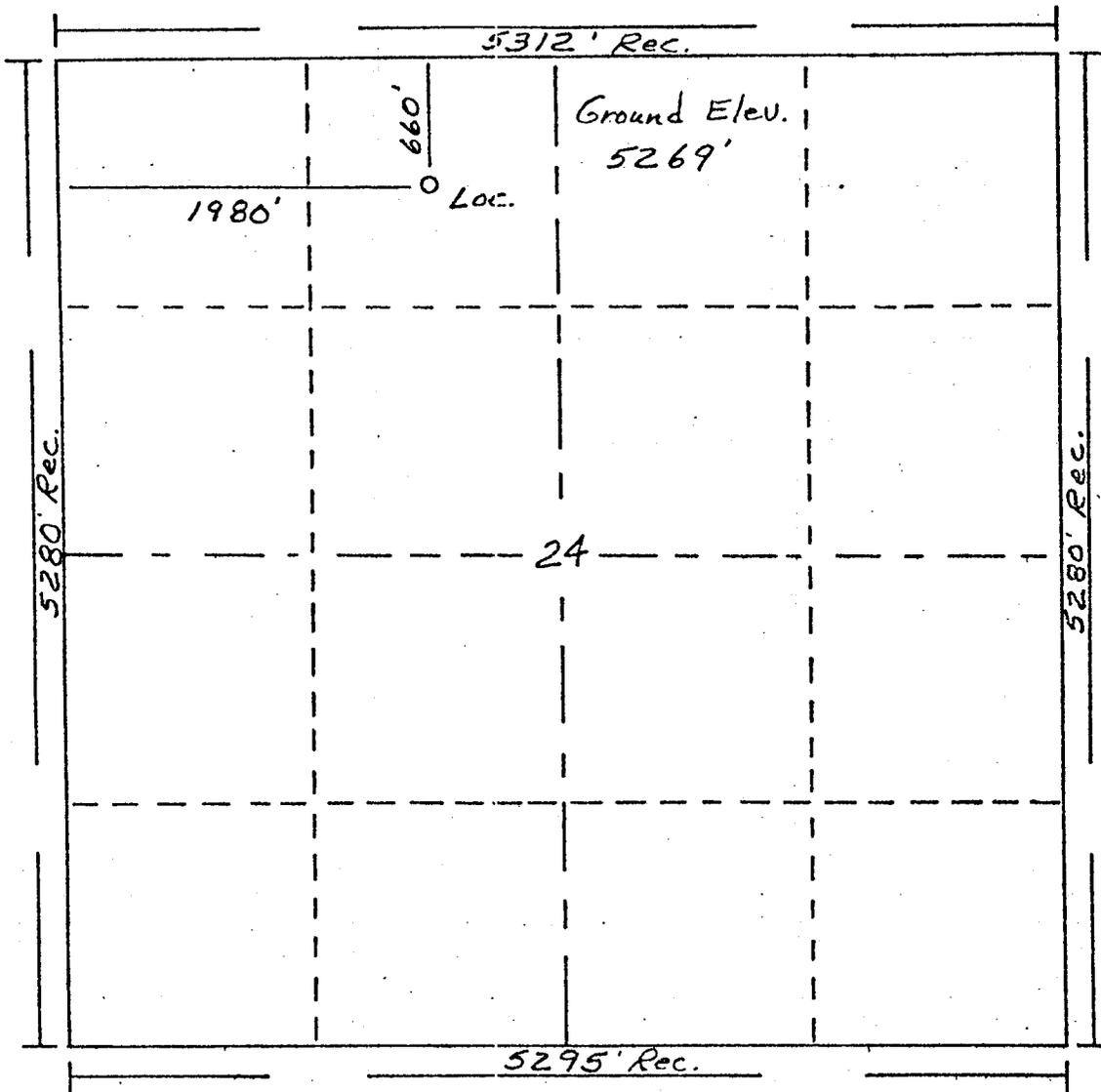
PERMIT NO. _____ APPROVAL DATE _____

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:



R. 25 E.



T. 38 S.

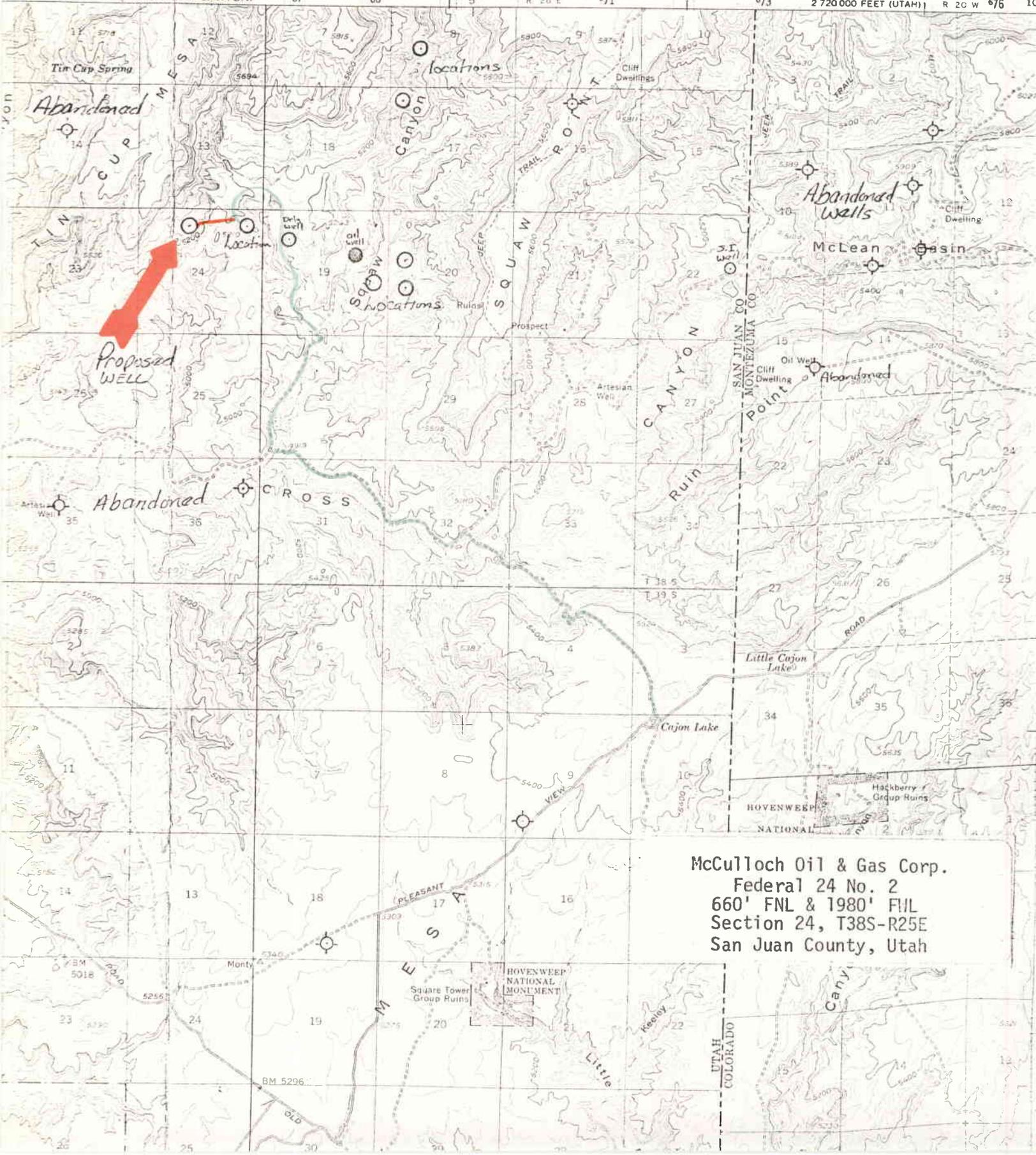
Scale... 1" = 1000'

Powers Elevation of Denver, Colorado
 has in accordance with a request from *Dick Lynn*
 for *McCulloch Oil & Gas*
 determined the location of *#2-24 Federal*
 to be *660 FNL + 1980 FWL* Section 24 Township 38 S.
 Range 25 E. Salt Lake Meridian
 San Juan County, Utah

I hereby certify that this plat is an
 accurate representation of a correct
 survey showing the location of *#2-24 Fed.*

Date: 10-10-79

T. Hildner
 Licensed Land Surveyor No. 2711
 State of Utah



McCulloch Oil & Gas Corp.
Federal 24 No. 2
660' FNL & 1980' FHL
Section 24, T38S-R25E
San Juan County, Utah

McCULLOCH OIL & GAS CORPORATION

Formation Information and Drilling Procedures
(continuation of Item 23 Form 9-331C)

WELL

Federal 24 No. 2

LOCATION

660' FNL & 1980' FWL
Section 24, T38S-R25E
San Juan County, Utah

Federal Lease Number U 40404

1. Geologic Name of Surface Information
Morrison Sandstone

2. Estimated Tops of Important Geologic Markers

Jurassic	Curtis	630'
	Entrada	740'
	Carmel	870'
Triassic	Navajo	900'
	Kayenta	1130'
	Wingate	1240'
	Chinle	1520'
	Shinarump	2450'
	Moenkopi	2500'
Permian	Cutler	2620'
Penn.	U.Hermosa	4460'
	Paradox	5330'
	U.Ismay	5490'
	L.Ismay	5690'
	Desert Creek	5750'
	Akah	5860'
Total Depth		5900'

3. Estimated Depths at which Anticipated Water, Oil, Gas, or Other Mineral Bearing Formations are Expected

700'	Water
2300'	Water
5580'	Oil and Gas
5820'	Oil and Gas

4. Proposed Casing and Cementing Program

Conductor Casing:	13 3/8", 48.00#, H-40 ST&C new casing to be set at 80' and cemented to surface with 100 sacks Class 'B' cement containing 2% CaCl ₂ .
Surface Casing:	8 5/8", 24.00#, K-55 ST&C new casing to be set at 2650' and cemented to surface with 1000 sacks "Light" cement containing 2% CaCl ₂ followed by 200 sacks Class 'B' cement containing 2% CaCl ₂ .
Production Casing:	4 1/2", 10.50#, K-55, ST&C new casing to be set at 5900' and cemented with 300 sacks 50:50 pozmix cement containing 10% salt and 0.75% CFR-2.

5. Specifications for Pressure Control Equipment

The attached schematic drawings show the pressure control equipment to be used while drilling. All equipment is rated at 3000 psi. The blowout preventer will be tested to 1000 psi prior to drilling from under the surface casing by applying pressure through a casing valve with the blind rams closed. This procedure will be repeated with the pipe rams closed on a joint of drill pipe. Operation of the hydraulic system will be checked daily.

6. Drilling Fluids

<u>Depth</u>	<u>Type Fluid</u>	<u>Weight</u>	<u>Viscosity</u>	<u>Water Loss</u>
0 - 100'	Spud Mud	8.6-9.0	35-40	NC
100-2650'	Water	8.4-8.6	28-30	NC
2650-5000'	Gel-Chem	9.0-10.0	35-45	10-20
5000-TD	Gel-Chem	9.0-10.0	40-50	6-8

7. Logging, Coring, and Testing Program

Logging: Dual Induction Laterolog, Gamma Ray Sonic Log, Gamma Ray Compensated Neutron Formation Density Log, and High Resolution Dipmeter.

Coring: The Upper Ismay interval from approximately 5530' to 5650' and the Desert Creek from 5800' to 5840' will be cored.

Drill Stem Tests: DST's will be conducted only as warranted by indications of porosity and shows. Most probable candidates will be the Upper Ismay and Desert Creek Formations.

8. Abnormal Pressures, Temperatures, or Potential Hazards

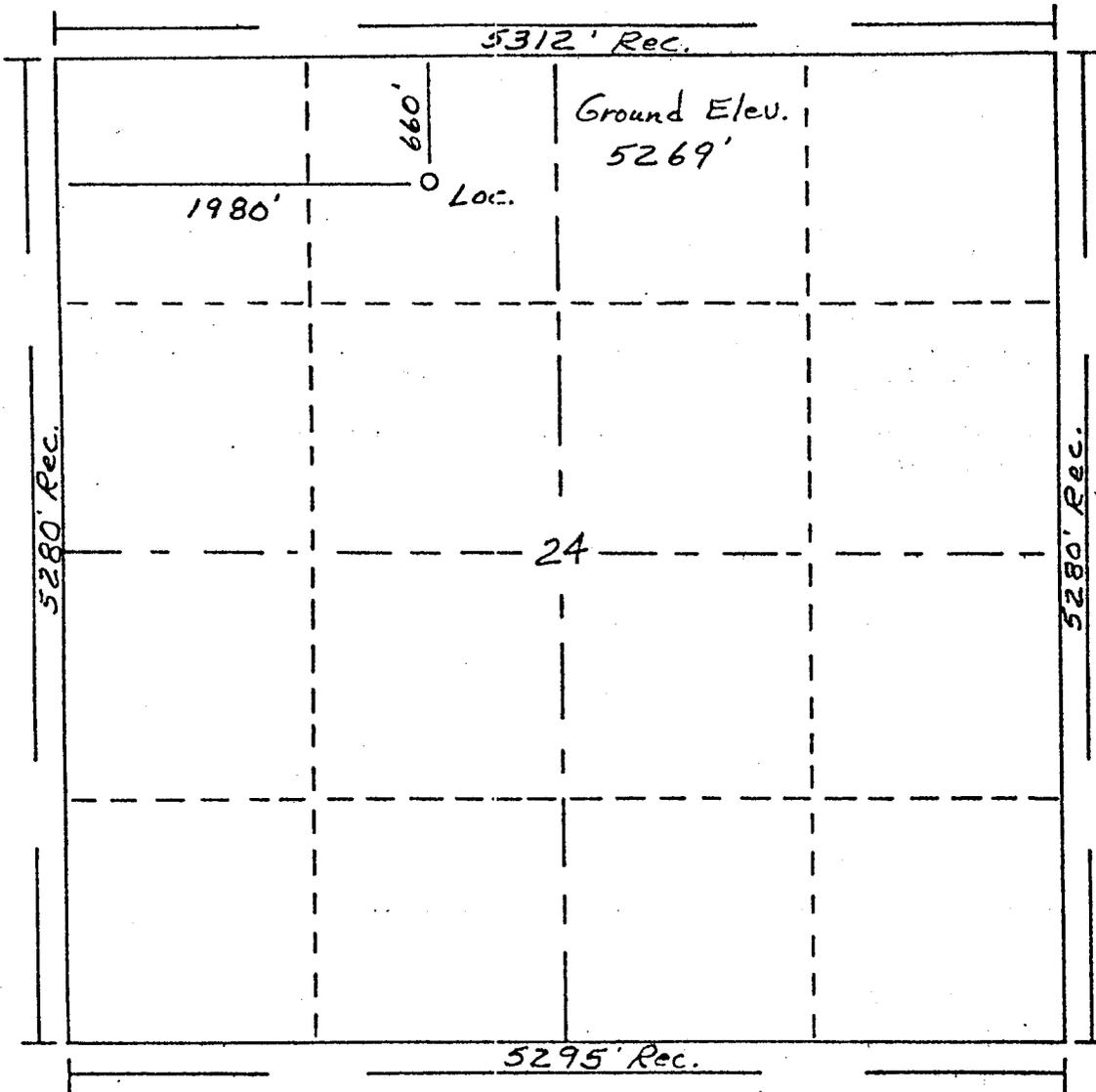
No abnormal pressures or temperatures are expected. None of the formations to be penetrated are expected to contain any hazardous gasses. Water flows are anticipated between 700' and 2400'.

9. Starting Date

The anticipated starting date is November 26, 1979. Approximately 30 days will be required to build roads and location and then drill the well to total depth. If commercial, completion operations will commence immediately and require an additional 15 days.



R. 25 E.



T. 38 S.

Scale... 1" = 1000'

Powers Elevation of Denver, Colorado
 has in accordance with a request from *Dick Lynn*
 for *McCulloch Oil & Gas*
 determined the location of *#2-24 Federal*
 to be *660 FNL + 1980 FWL* Section 24 Township 38 S.
 Range 25 E. Salt Lake Meridian
 San Juan County, Utah

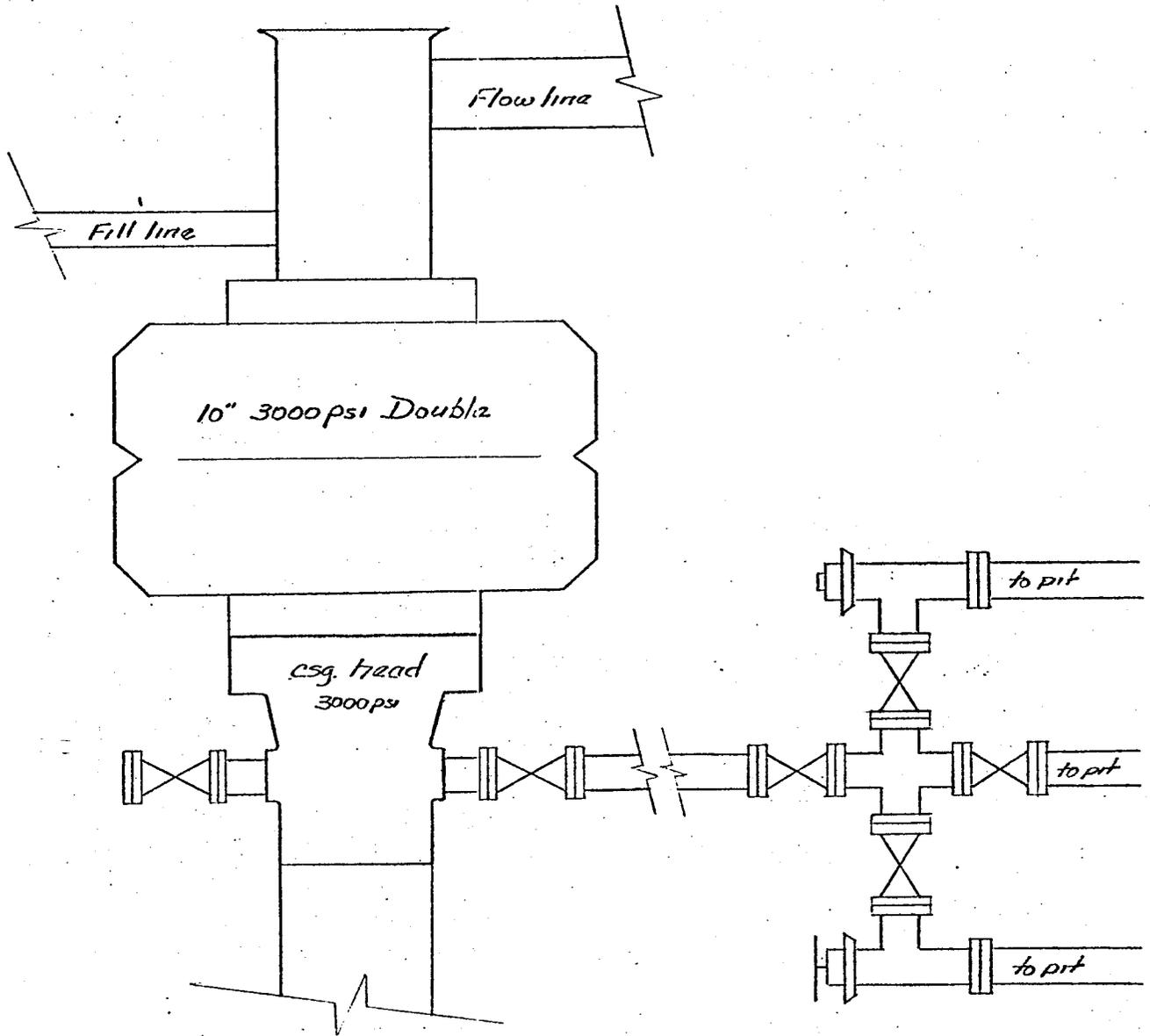
I hereby certify that this plat is an
 accurate representation of a correct
 survey showing the location of *#2-24 Fed.*

Date: 10-10-79

T Nelson
 Licensed Land Surveyor No. 2711
 State of Utah

Schematic of Pressure Control Equipment

McCulloch Oil & Gas Corp.
Federal 24 No. 2
660' FNL & 1980' FWL
Section 24, T38S-R25E
San Juan County, Utah



McCULLOCH OIL & GAS CORPORATION

Multi-Point Surface Use and Operations Plan

WELL

Federal 24 No. 2

LOCATION

660' FNL & 1980' FWL
Section 24, T38S-R25E
San Juan County, Utah

Federal Lease Number U 40404

1. Existing Roads

The attached topographic map shows all existing roads within two miles of the proposed location. To reach the proposed location go north of Cortez, Colorado, on HW. 666 19 miles to the Hovenweep National Monument Road, turn left (west) onto the Hovenweep road and follow it for 23 miles to the Cross Canyon road. Turn right (north) onto the Cross Canyon road and go 2.5 miles just past Cross Canyon wash, then take the road going to the left (west) and go 1.75 miles to the road turning right (north) into Squaw Canyon. Follow this road 1 mile then take the road veering off to the left. Go approximately 1.4 miles to the McCulloch Federal 24 No. 1 location then turn west and go 0.5 miles to the proposed location. All existing roads going to the location are marked in green on the attached map. The last 0.5 of a mile to the location will be new access road and is marked in orange.

The existing roads will have to be upgraded to take care of heavy truck traffic. This will require no more than leveling rough spots in the present roadway.

2. Planned Access Road (Shown in orange)

An access road approximately one half mile long and 20' wide will be necessary to connect the location with the existing road. Drainage will run beside the road, with water bars used where necessary to prevent erosion. All surfacing material will be taken from the roadway. No turnouts will be required. No gates, cattleguards, or fences will be crossed. No major cuts or fills should be required.

3. Location of Existing Wells

All wells (water, abandoned, disposal, and drilling) are shown and so labeled on the topographic map.

4. Location of Tank Batteries, Production Facilities, and Production, Gathering, and Service Lines

Temporary production facilities will be constructed on the location site for initial testing. Plans for a permanent production facility to serve several wells will be submitted as soon as our current development drilling program is completed, and the producing capabilities of the wells are evaluated.

5. Location and Type of Water Supply

Water for drilling will be trucked from the artesian well in Cross Canyon in Section 23, T38S-R26E, approximately 5 road miles south and east of the location. This water source is located on federal land.

6. Source of Construction Materials

Any construction material required for roads or location will be excess material accumulated from building of such sites.

7. Method of Handling Waste Disposal

The location of the reserve and burn pit is shown on the attached drill site layout. All trash and burnable material will be burned in the burn pit when safety permits. All nonburnable material (drilling fluids, cuttings, chemicals) will be stored in the reserve pit and then buried when they have dried. Any oil produced while drilling will be trucked from the location prior to leaving pit to dry out. Pits will be completely fenced during drying time, and then back-filled with dirt prior to preparing the location for production or abandonment.

A portable chemical toilet will be supplied for human waste.

8. Ancillary Facilities

No ancillary facilities are planned.

9. Well Site Layout

The attached layout shows the drilling rig with all associated facilities. Cut and fill required is also indicated.

10. Plans for Restoration of Surface

Restoration of the well site and access road will begin within 90 days of well completion, weather permitting.

Should the well be abandoned, the drilling site will be reshaped to its approximate former contour. The access road will be plowed up and leveled. Both drill site and road will have any top soil replaced and will be reseeded when germination of seeds can take place.

Should the well be commercial, that portion of the location not needed for operation will be reapiired as above. The portion of the location needed for daily production operations and the access road will be kept clean and in good repair.

In either case, cleanup of the site will include burning of any safely burnable material, filling of all pits, carrying away of all nonburnable material and any chemicals that cannot be safely buried, and the hauling off of any oil that may have accumulated on the pits while drilling.

11. Other Information

General topography of the area may be seen on the attached map. This location is on a moderately sloping hillside. The soil is sandy and rocky. Sparse vegetation consists mostly of sage brush and some native grasses.

The surface agency for the drill site and access road is The Bureau of Land Management.

There are no occupied dwellings in the area.

There were no archaeological or cultural sites visible on the location. An archaeologist will be present for the pre-drill inspection and will submit his report afterward.

12. W.R. Lynn
McCulloch Oil & Gas Corporation
3033 N.W. 63rd St.
Suite 250-E
Oklahoma City, Oklahoma 73116
Area Code 405 840-3285

13. I hereby certify that I or persons under my direct supervision, have inspected the proposed drill site and access route; that I am familiar with the conditions which presently exist; that the statements made in the 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 McCulloch Oil & Gas Corporation and its contractors and sub-contractors in conformity with this plan and the terms and conditions under which it is approved.

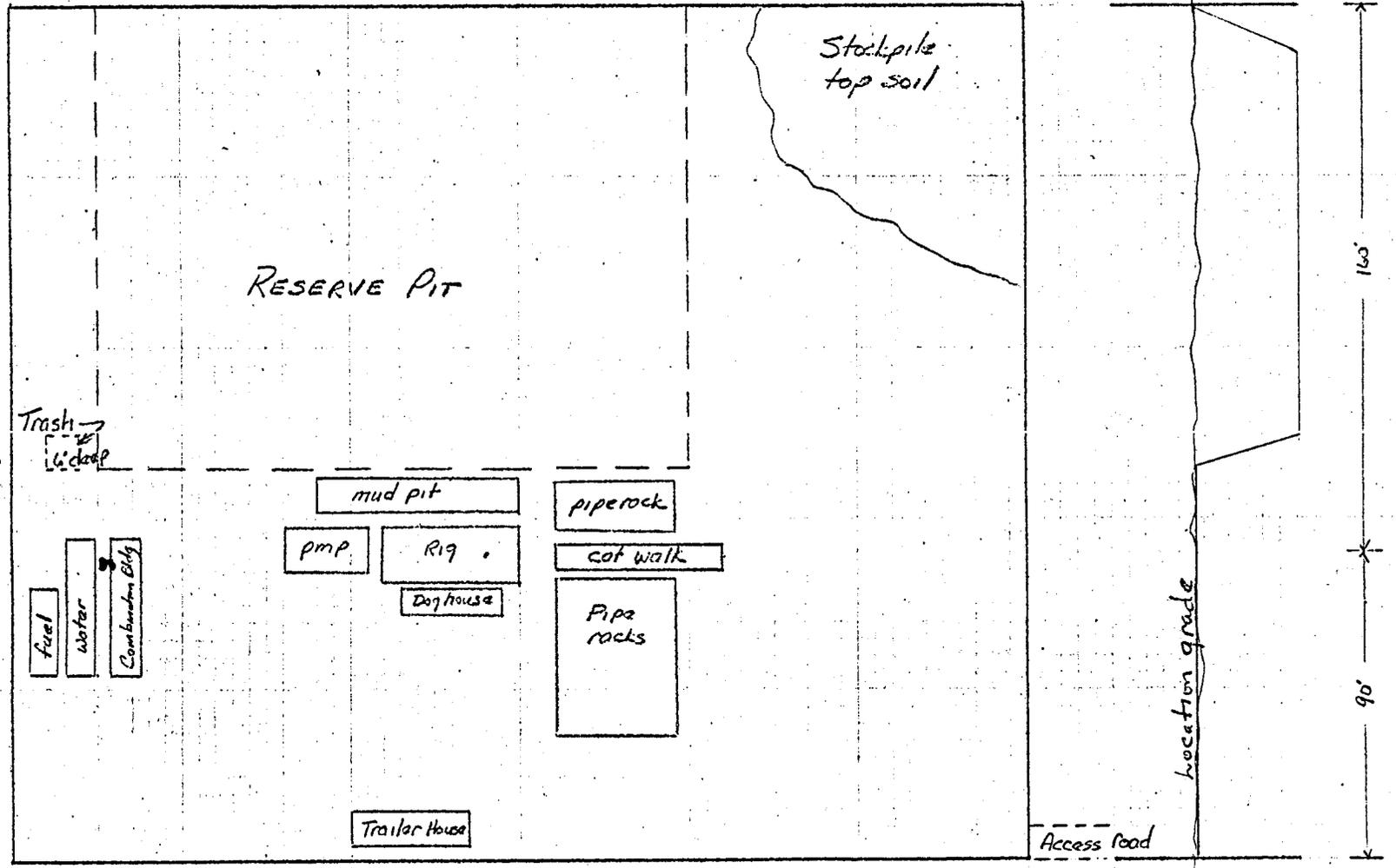
10-19-79


W.R. Lynn

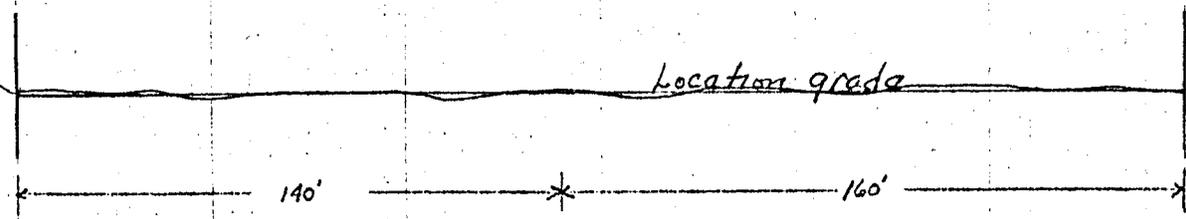
2-2d

McCulloch Oil & Gas Corp.
Federal 24 No. 2
660' FNL & 1980' FWL
Section 24, T38S-R25E
San Juan County, Utah

WELL SITE LAYOUT



Horizontal Scale 1" = 50'
Vertical Scale 1" = 10'



Gene Boyett
M.C.

800 654 8231

**** FILE NOTATIONS ****

DATE: October 25, 1979

Operator: McCulloch Oil & Gas Corporation

Well No: Federal 24-2

Location: Sec. 24 T. 38S R. 25E County: San Juan

File Prepared:

Entered on N.I.D.:

Card Indexed:

Completion Sheet:

API Number 43-037-30512

CHECKED BY:

Geological Engineer: _____

Petroleum Engineer: _____

Director: OK

APPROVAL LETTER:

Bond Required:

Survey Plat Required:

Order No. _____

O.K. Rule C-3

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

#1

Lease Designation Ord

Plotted on Map

Approval Letter Written

Wm

hl
PI

November 1, 1979

McCulloch Oil and Gas Corporation
3033 N.W. 63rd Street, Suite 250E
Oklahoma City, Oklahoma 73116

Re: Well No. Federal 24-2, Sec. 24, T. 38S, R. 25E., San Juan County, Utah
Well No. Federal 19-3, Sec. 19, T. 38S, R. 26E., San Juan County, Utah
Well No. Federal 20-2, Sec. 20, T. 38S, R. 26E., San Juan County, Utah

Insofar as this office is concerned, approval to drill the above referred to oil wells is hereby granted in accordance with Rule C-5, General Rules and Regulations and Rules of Practice and Procedure.

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

MICHAEL T. MINDER
Geological Engineer
Office: 535-5771
Home: 876-3001

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 numbers assigned to these wells are #24-2 - 43-037-30512;
#19-3 - 43-037-30513; #20-2 - 43-037-30514.

Sincerely,

DIVISION OF OIL, GAS AND MINING

Michael T. Minder
Geological Engineer

/b:tm

cc: USGS

**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

2. NAME OF OPERATOR
McCulloch Oil & Gas Corporation

3. ADDRESS OF OPERATOR
3033 NW 63rd St. 250-E, Okla. City, OK 73116

4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See space 17 below.)
AT SURFACE: 660' FNL & 1820' FWL of Section
AT TOP PROD. INTERVAL: Same as above
AT TOTAL DEPTH: Same as above **NENW**

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

5. LEASE
U 1019A

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME
Federal 24

9. WELL NO.
2

10. FIELD OR WILDCAT NAME
Undesignated

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
Section 24, T38S-R25E

12. COUNTY OR PARISH
San Juan

13. STATE
Utah

14. API NO.

15. ELEVATIONS (SHOW DF, KDB, AND WD)
5274GR

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 type="checkbox"/>
(other) Move location <input type="checkbox"/>	<input type="checkbox"/>

(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.)*

In order to facilitate building the location site it was necessary to move the location 160' west of the original location, which was staked at 660' FNL & 1980' FWL of the section. The new location will be 660' FNL & 1820' FWL of Section 24, T38S-R25E.

APPROVED BY THE DIVISION OF
OIL, GAS, AND MINING

DATE: Nov. 20, 1979

BY: Frank M. Hannet

30512

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

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

SIGNED W.R. Lynn TITLE Dist. Drlg. Engr. DATE November 15, 1979

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

Federal Building
701 Camino Del Rio, Room 214
Durango, Colorado 81301

December 10, 1979

McCulloch Oil & Gas Corporation
3033 NW 63rd Street, Suite 250E
Oklahoma City, Oklahoma 73116

*Location
Abandoned*

Gentlemen:

Returned herewith are unapproved Sundry Notice and Application for Permit to Drill Well No. 2 Federal 24, located in the NE/4 NW/4 sec. 24, T. 38 S., R. 25 E., S1M, San Juan County, Utah, on Federal oil and gas lease U-10109-A. This lease expired by operation of the law November 30, 1979.

Application is cancelled effective November 30, 1979. Construction of access road and well pad had not commenced.

If at some later date you decide to drill a well at this location it will be necessary to file a new application.

Sincerely yours,

James F. Sims
James F. Sims
Acting District Engineer

Enclosure

cc: Utah Division of Oil, Gas, and Mining/
BLM, Monticello
Oil & Gas Supervisor, SRMA
Roswell
File
Chrono

CABarrick:mjc

RECEIVED

DEC 14 1979

DIVISION OF
OIL, GAS & MINING

3

Federal Building
701 Camino Del Rio, Room 214
Durango, Colorado 81301

December 10, 1979

*Location
Abandon*

McCulloch Oil & Gas Corporation
3033 NW 63rd Street, Suite 250E
Oklahoma City, Oklahoma 73116

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OIL, GAS & MINING