

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       SINGLE ZONE       MULTIPLE ZONE

2. NAME OF OPERATOR  
 McCulloch Oil & Gas Corporation

3. ADDRESS OF OPERATOR  
 3033 N.W. 63rd St.; Suite 250-E; Okla. City, Okla. 73116

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.\*)  
 At surface 2150' FNL & 660' FEL of section  
 At proposed prod. zone Same *SENE*

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

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  
 445.04

17. NO. OF ACRES ASSIGNED TO THIS WELL  
 40

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

19. PROPOSED DEPTH  
 5700' *actual*

20. ROTARY OR CABLE TOOLS  
 Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)  
 5090' GR

22. APPROX. DATE WORK WILL START\*  
 June 1, 1979

5. LEASE DESIGNATION AND SERIAL NO.  
 U-42232  
 6. IF INDIAN, ALLOTTEE OR TRIBE NAME  
 7. UNIT AGREEMENT NAME  
 8. FARM OR LEASE NAME  
 Federal 22-1  
 9. WELL NO.  
 10. FIELD AND POOL, OR WILDCAT  
 Wildcat  
 11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA  
 Section 22, T38S, R26E  
 12. COUNTY OR PARISH  
 San Juan  
 13. STATE  
 Utah

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12 1/4	9 5/8" new	36	400'	350 sacks
7 7/8	4 1/2" new	10.5	5700'	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 District Drlg. Engineer DATE April 30, 1979

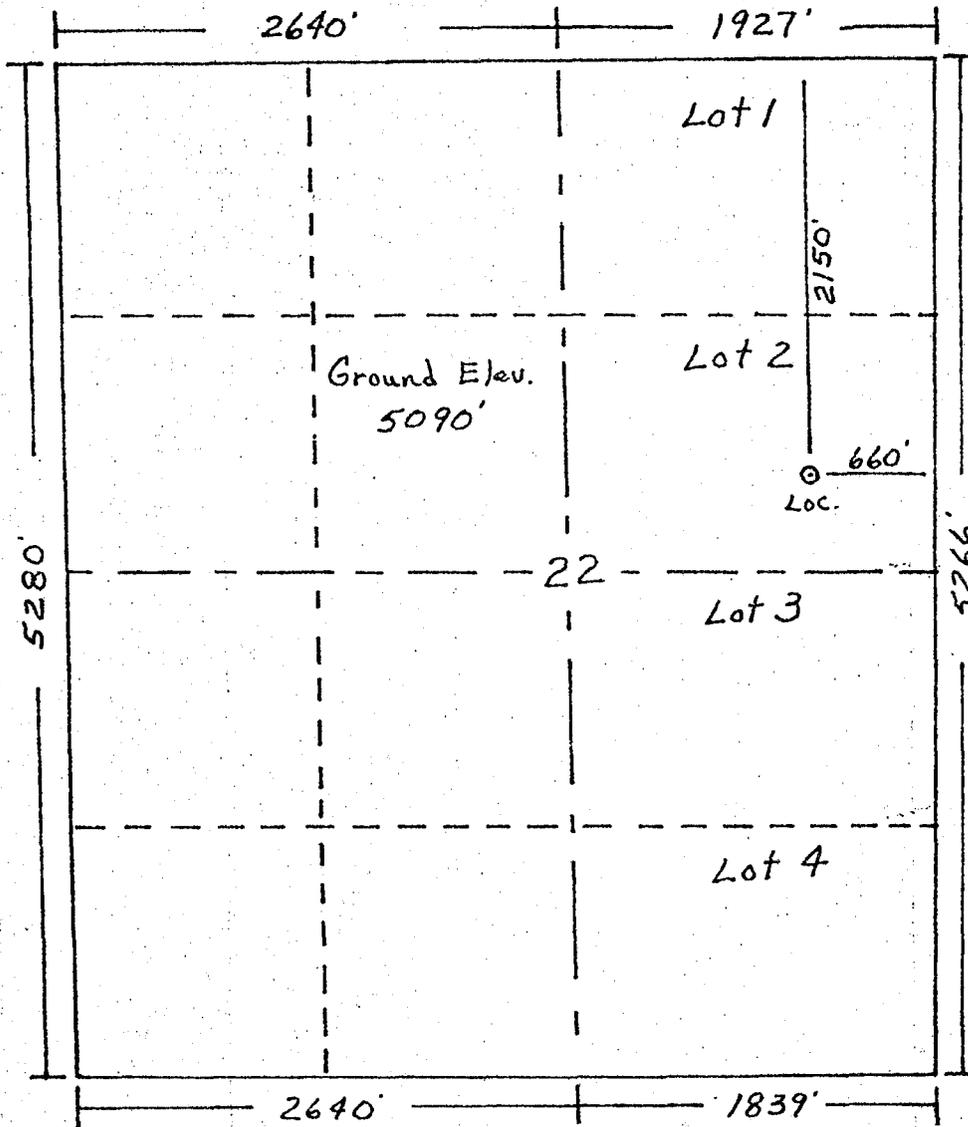
PERMIT NO. 43-037-30484 APPROVAL DATE \_\_\_\_\_

APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_

CONDITIONS OF APPROVAL, IF ANY:



R. 26 E.



T. 38 S.

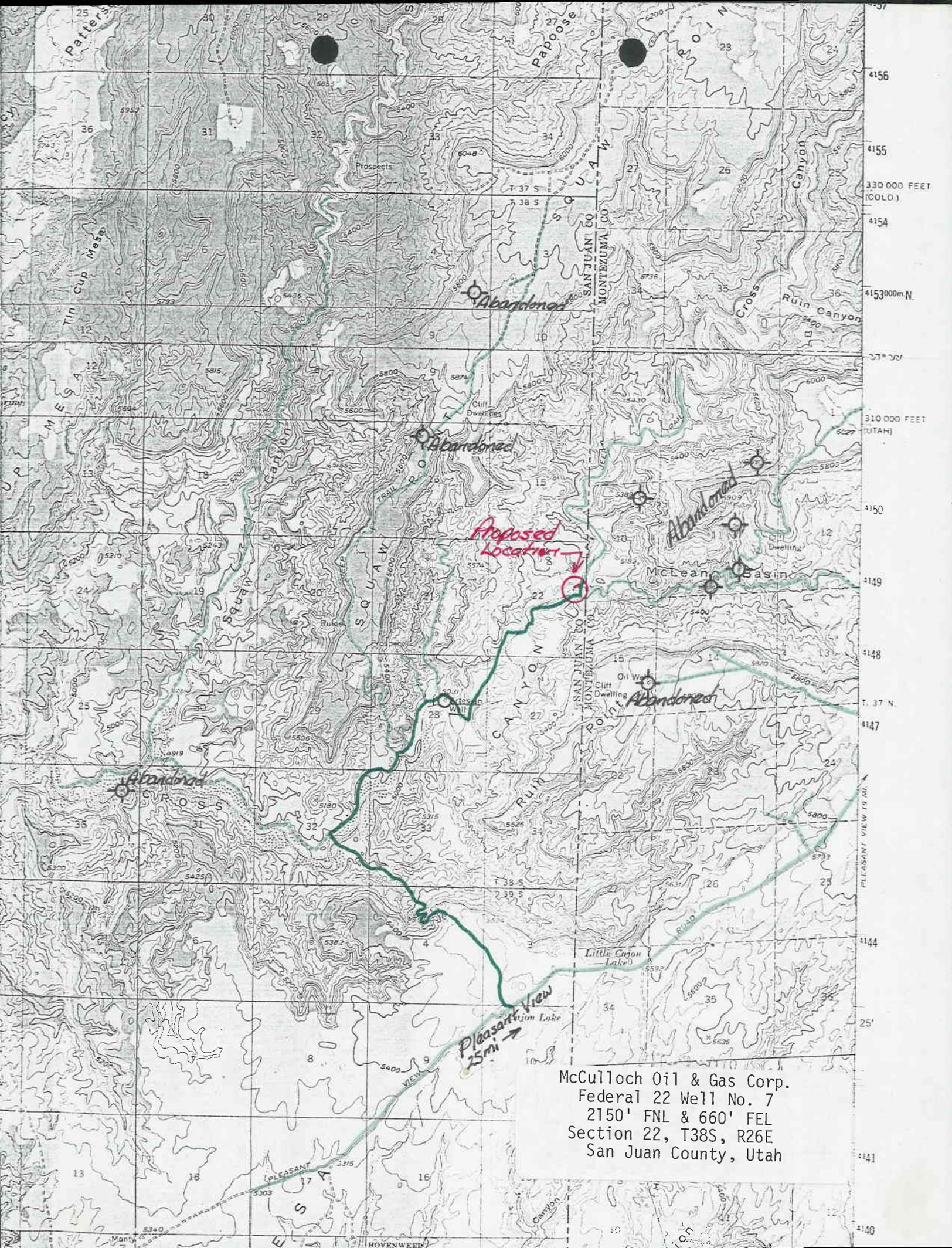
Scale... 1" = 1000'

Powers Elevation Company, Inc. of Denver, Colorado  
 has in accordance with a request from Dick Lynn  
 for McCulloch Oil & Gas Corporation  
 determined the location of #7-22 Federal  
 to be 2150 FNL - 660' FEL Section 22 Township 38 S.  
 Range 26 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 #7-22 Federal

Date: 4-17-79

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



*Proposed Location*

*Pleasant View  
25mi*

McCulloch Oil & Gas Corp.  
Federal 22 Well No. 7  
2150' FNL & 660' FEL  
Section 22, T38S, R26E  
San Juan County, Utah

4156  
4155  
330 000 FEET (COLO)  
4154  
4153000m N  
37° 30'  
310 000 FEET (UTAH)  
4150  
4149  
4148  
T 37 N  
4147  
4144  
25'  
4141  
4140

McCULLOCH OIL & GAS CORPORATION

Multi-Point Surface Use and Operations Plan

WELL

Federal 22 No. 7

LOCATION

2150' FNL & 660' FEL  
Section 22, T38S, R26E  
San Juan County, Utah

Federal Lease Number U-42232

1. Existing Roads (Shown in green)

The attached topographic map shows all existing roads within three miles of the proposed location. To reach the proposed location go west from Pleasant View, Colo., on Rd. CC 5.7 miles, turn south on Rd. 10 and go 19.1 miles to Cross Canyon Rd. Follow the Cross Canyon Rd. 6.7 miles to location (this road is marked in dark green on the attached map and is an existing road).

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)

The new access road will be approximately 500' long and 20' wide. Drainage will run beside the road, with water bars used where necessary to prevent erosion. The maximum grade will be about 5%. Since the road will cross a creek bed, a small culvert will be installed. All surfacing material will be taken from the roadway. No turnouts will be required. No gates, cattle guards, or fences will be crossed. No 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

All production facilities are to be contained within the proposed location site. McCulloch does not own or control any of the above facilities within one mile of the proposed location.

5. Location and Type of Water Supply

Water for drilling will be pumped from the wash running down Cross Canyon, approximately 300' northeast 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 repaired 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 in the bottom of Cross Canyon with a steep bank to the west and the creek to the east. The soil is a sandy loam. Vegetation consists mostly of native grasses and a few cottonwood trees. There was evidence of deer in the area.

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. The archaeologist's report is forthcoming.

12. W.R. Lynn

McCulloch Oil & Gas Corporation

3033 N.W. 63rd St.

Suite 250-E

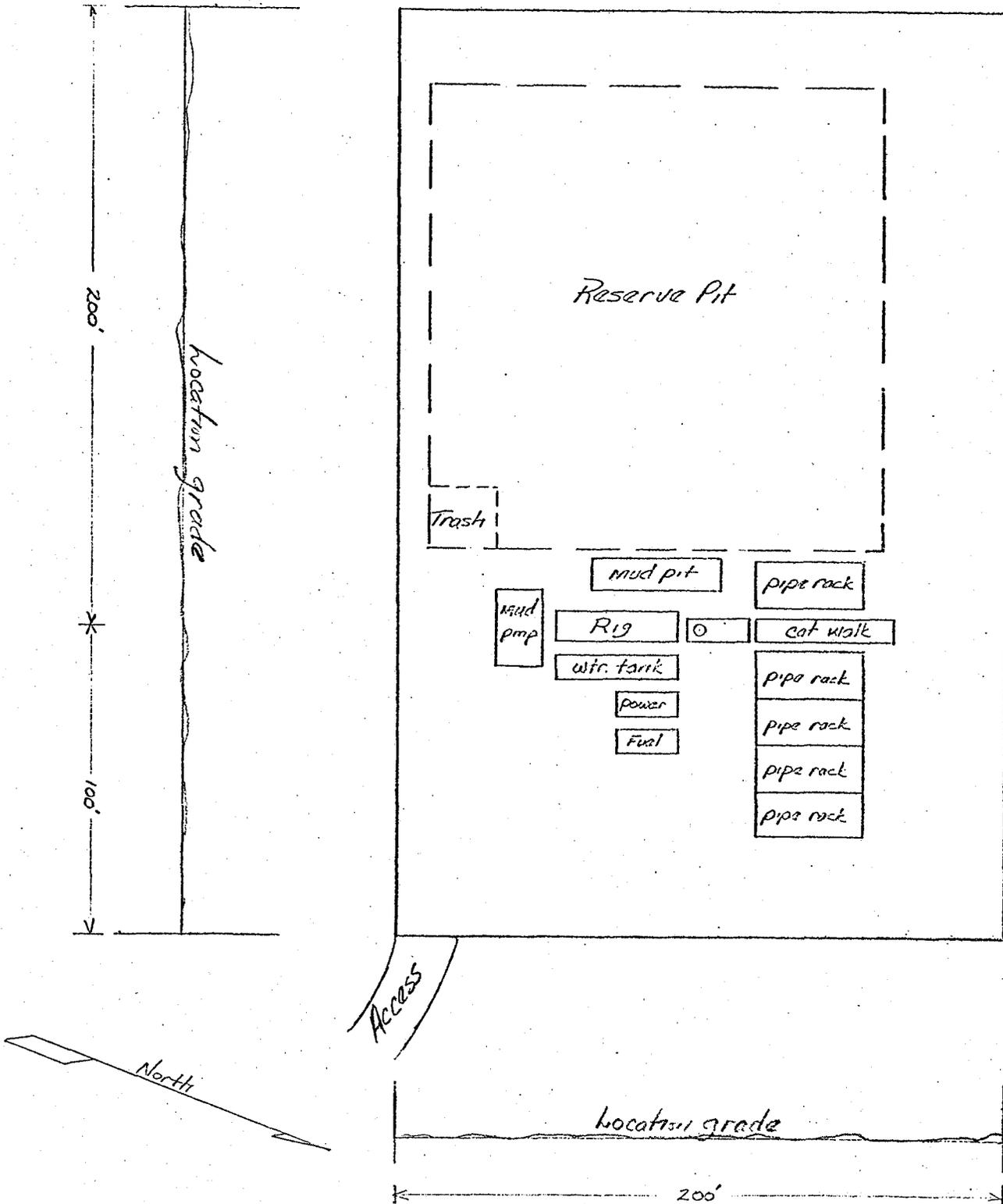
Oklahoma City, Oklahoma 73116

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 Corporation and its contractors and sub-contractors in conformity with this plan and the terms and conditions under which it is approved.

April 30, 1979

  
W.R. Lynn

WELL SITE LAYOUT



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

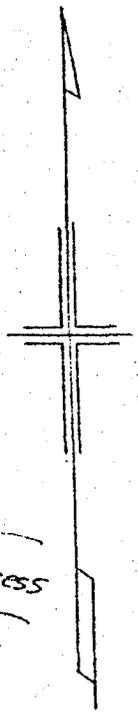
McCulloch Oil & Gas Corp.  
Federal 22 Well No. 7  
2150' ENL & 660' FEL  
Section 22, T38S, R26E  
San Juan County, Utah

TOPOGRAPHIC MAP

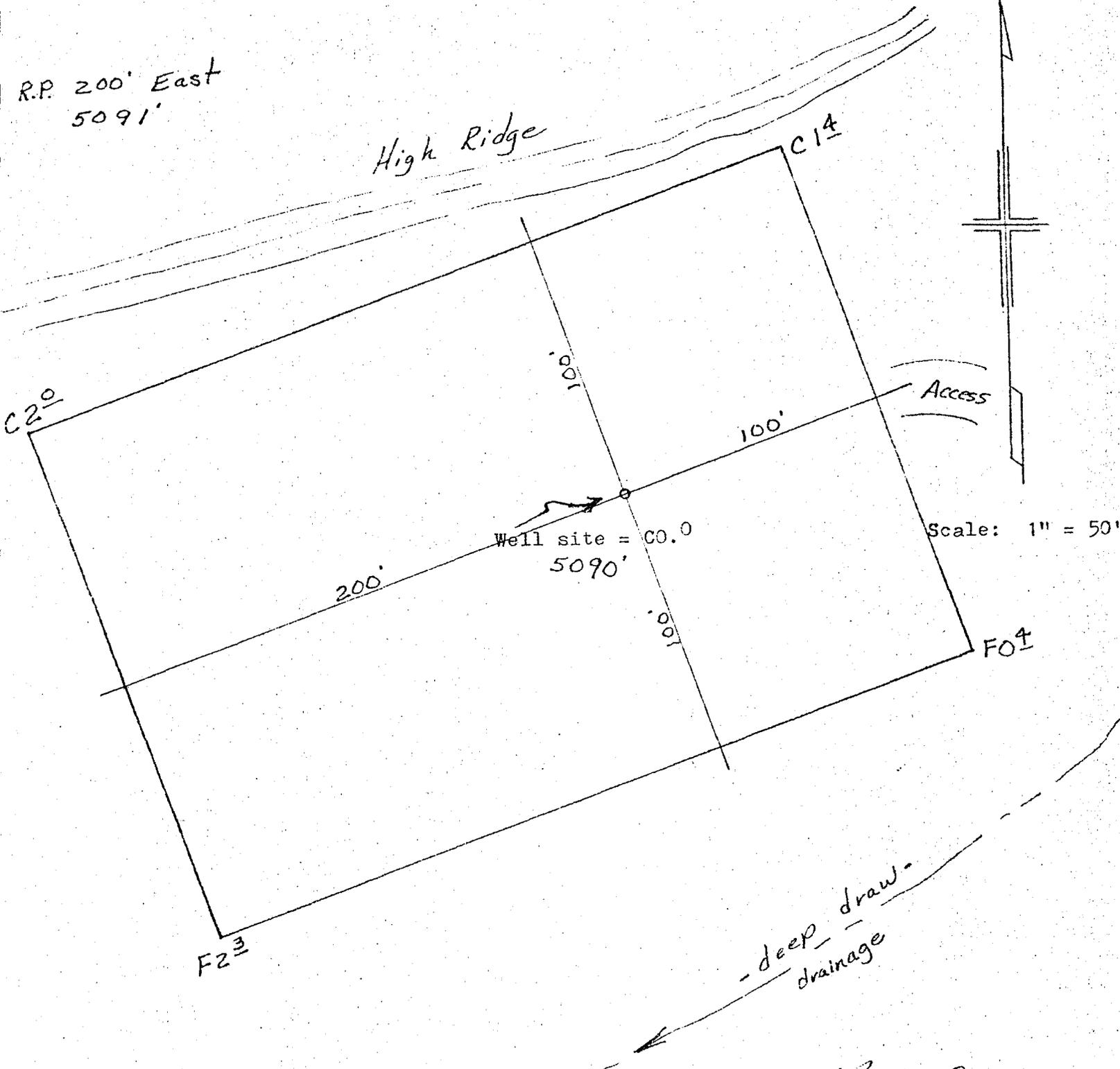
R.P. 150' North  
5106'

R.P. 200' East  
5091'

High Ridge



Scale: 1" = 50'



Mc Culloch Oil + Gas Corp.  
# 7-22 Federal

by: J. C. Edwards  
Powers Elevation Company, Inc.

McCULLOCH OIL & GAS CORPORATION

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

WELL

Federal 22 No. 7

LOCATION

2150' FNL & 660' FEL  
Section 22, T38S, R26E  
San Juan County, Utah

Federal Lease Number U-42232

1. Geologic name of Surface Formation

Morrison Sandstone

2. Estimated Tops of Important Geologic Markers

Jurassic	Curtis	325'
	Entrada	425'
Triassis	Carmel	535'
	Navajo	595'
	Kayenta	835'
	Wingate	925'
	Chinle	1125'
	Shinarump	2125'
Permian	Moenkopi	2155'
	Cutler	2295'
Penn.	U. Hermosa	4095'
	Paradox	5015'
	U. Ismay	5155'
	L. Ismay	5355'
	Desert Creek	5425'
	Akah	5519'
Total Depth		5700'

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

600'	Water
5155'	Oil and Gas
5425'	Oil and Gas

4. Proposed Casing and Cementing Program

Surface Casing: 9 5/8", 36 lb/ft, K-55, ST&C new casing to be set at 400' and cemented to surface with 350 sacks of Class "A" cement containing 2% CaCl<sub>2</sub>.

Production Casing: 4 1/2", 10.5 lb/ft, K-55, ST&C new casing to be set at 5700' 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 pressuring 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

Depth	Type	Weight	Viscosity	Water Loss
0 - 400'	Gel-lime	8.6 - 9.0	35 - 40	NC
400 - 5000'	Low solids	8.6 - 9.0	28 - 30	NC
5000 - 5700'	Gel-Chem.	9.0 - 11.0	35 - 45	10

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 5150' to 5315' will be cored.

Drill Stem Tests: DST 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

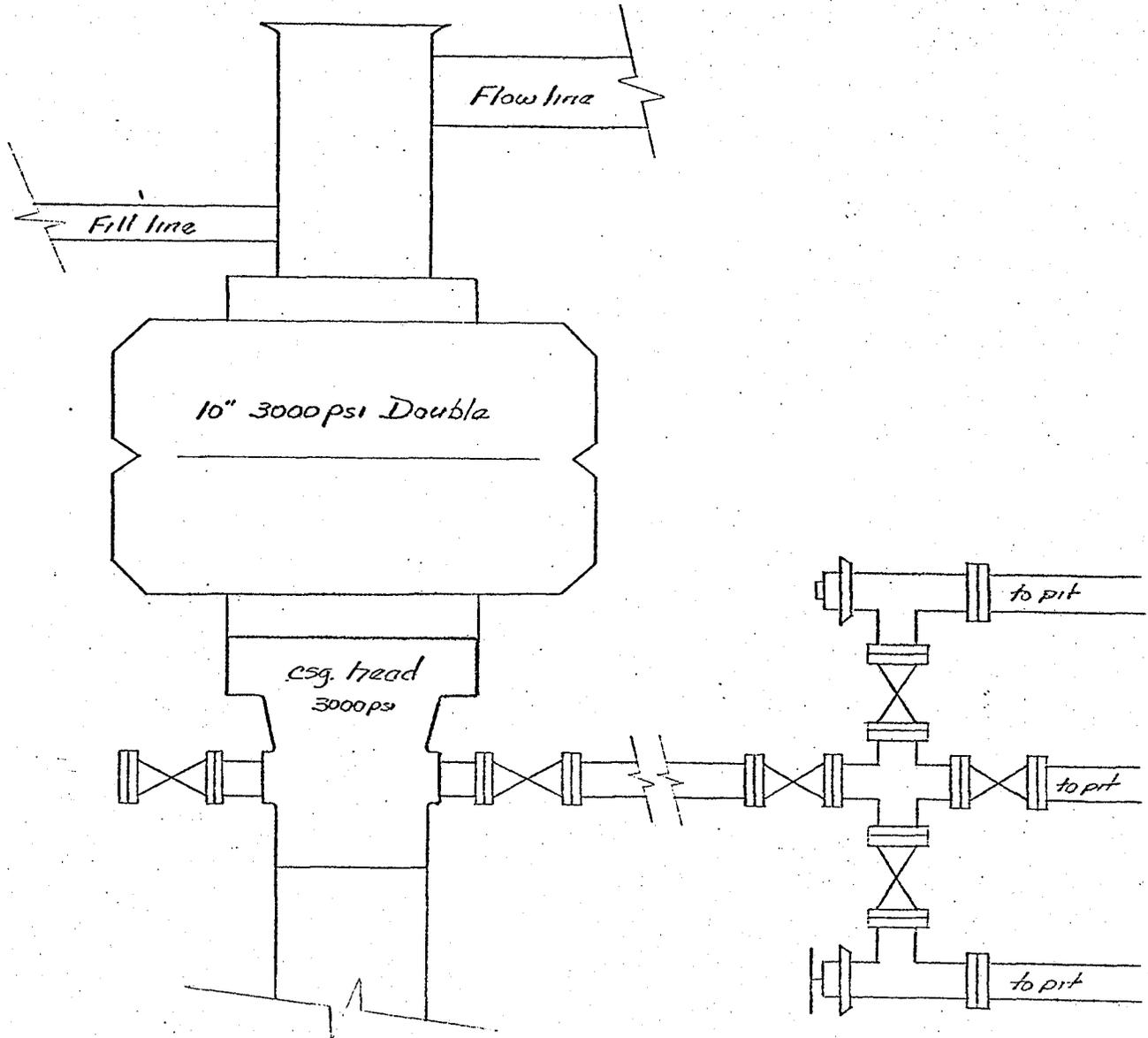
No abnormal pressures or temperatures are expected. No hazardous gasses are anticipated.

9. Starting Date

The anticipated starting date is June 1, 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.

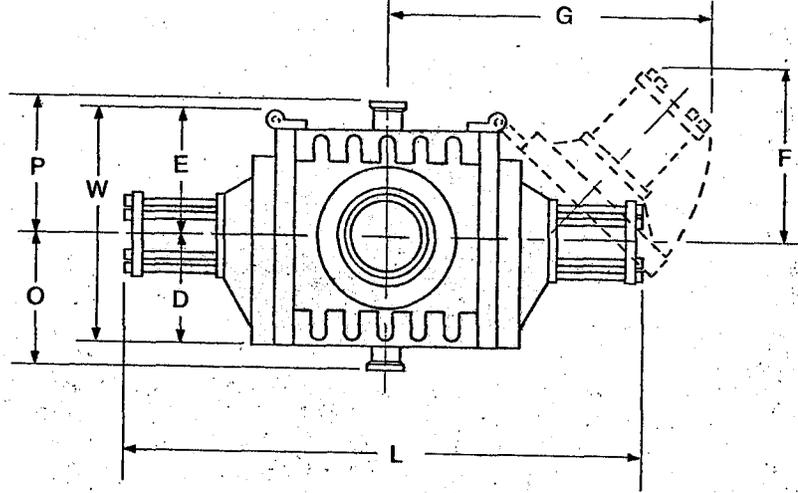
# Schematic of Pressure Control Equipment

McCulloch Oil & Gas Corp.  
Federal 22 Well No. 7  
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San Juan County, Utah

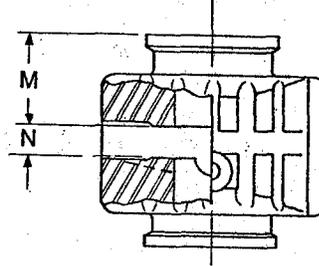
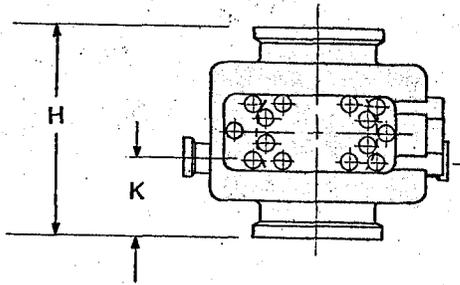




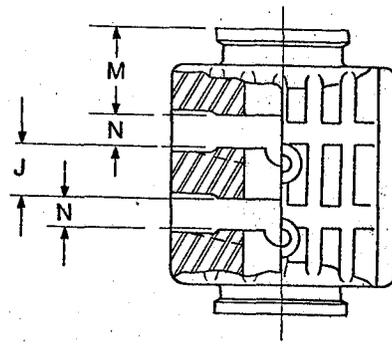
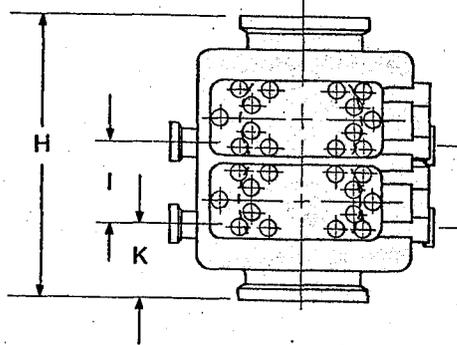
## DIMENSION DRAWINGS



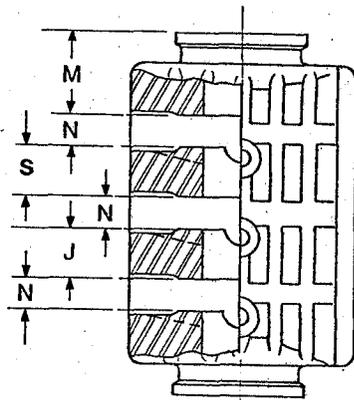
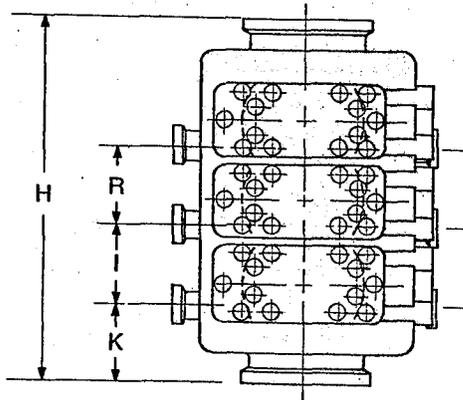
**SINGLE**



**DOUBLE**

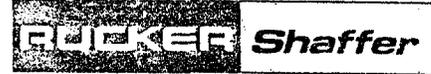


**TRIPLE**



# BLOWOUT PREVENTERS

## MANUAL LOCK



### LWS MANUAL LOCK SPECIFICATIONS

Nominal Size (in.)	4 1/8	6	6	7 1/8	7 1/8	8	8	10	10	11	12	13 1/2	13 1/2	16 1/2	16 1/2	18 1/2	20	20	21 1/2		
Working Pressure (psi.)	10,000	3,000	5,000	10,000	15,000	3,000	5,000	3,000	5,000	10,000	3,000	5,000	10,000	5,000	10,000	10,000	15,000	15,000	2,000	3,000	10,000
Test Pressure (psi.)	15,000	6,000	10,000	15,000	22,500	6,000	10,000	6,000	10,000	15,000	6,000	10,000	15,000	10,000	15,000	15,000	20,000	3,000	4,500	15,000	
Vertical Bore (in.)	4 1/8	7 1/8	7 1/8	7 1/8	7 1/8	9	9	11	11	11	13 1/2	13 1/2	13 1/2	16 1/2	16 1/2	18 1/2	21 1/2	21 1/2	21 1/2		
Cylinder I.D. (in.)	6	6 1/2	6 1/2	14	14	8 1/2	8 1/2	6 1/2	8 1/2	10	8 1/2	8 1/2	14	10	14	14	8 1/2	8 1/2	14		
L (Length, in.)	42 1/2	58	58	74 1/2	74 1/2	132 1/4	79 1/2	22 1/2	89	90 1/2	92 1/2	92 1/2	125 1/2	133 1/2	136 1/2	140 1/2	127 1/2	127 1/2	145		
W (Width, in.)	15 1/4	10 1/8	19 1/8	31 1/2	31 1/2	25 1/4	25 1/4	26 1/8	29 1/8	31 1/4	30 1/2	33 1/2	43	40 1/2	55 1/2	50 1/2	41 1/4	41 1/4	62 1/8		
H (Height, in.)	Single:	Studded	15 1/4	13 1/8	23 1/4	23 1/4	14 1/2	19 1/2	19 1/2	23	23	23	49 1/2	42 1/2	42 1/2	42 1/2	23 1/2	23 1/2	33 1/2	41 1/2	
		Flanged	20 1/4	27 1/8	27 1/8	27 1/8	27 1/8	27 1/8	27 1/8	27 1/8	27 1/8	27 1/8	27 1/8	27 1/8	27 1/8	27 1/8	27 1/8	27 1/8	27 1/8	27 1/8	27 1/8
		Hub	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21
	Double:	Studded	26 1/2	26 1/2	43 1/2	43 1/2	29 1/2	29 1/2	29 1/2	33	44 1/4	34 1/2	36	46	46	52 1/2	49 1/2	49 1/2	49 1/2	67 1/2	67 1/2
		Flanged	36 1/2	36 1/2	36 1/2	36 1/2	41 1/2	45 1/2	42	50 1/2	63 1/2	48	49 1/2	64 1/2	67 1/2	67 1/2	67 1/2	67 1/2	67 1/2	67 1/2	67 1/2
		Hub	31 1/2	31 1/2	31 1/2	31 1/2	37	36 1/2	36 1/2	36 1/2	36 1/2	36 1/2	36 1/2	36 1/2	36 1/2	36 1/2	36 1/2	36 1/2	36 1/2	36 1/2	36 1/2
	Triple:	Flanged	94 1/2	94 1/2	94 1/2	94 1/2	94 1/2	94 1/2	94 1/2	94 1/2	94 1/2	94 1/2	94 1/2	94 1/2	94 1/2	94 1/2	94 1/2	94 1/2	94 1/2	94 1/2	94 1/2
		Hub	87 1/2	87 1/2	87 1/2	87 1/2	87 1/2	87 1/2	87 1/2	87 1/2	87 1/2	87 1/2	87 1/2	87 1/2	87 1/2	87 1/2	87 1/2	87 1/2	87 1/2	87 1/2	87 1/2
		Hub	108 1/2	108 1/2	108 1/2	108 1/2	108 1/2	108 1/2	108 1/2	108 1/2	108 1/2	108 1/2	108 1/2	108 1/2	108 1/2	108 1/2	108 1/2	108 1/2	108 1/2	108 1/2	108 1/2
D (in.)	6 1/8	9 1/8	9 1/8	13 1/8	13 1/8	11 1/8	11 1/8	11 1/8	12 1/4	13 1/4	13 1/4	14 1/4	20 1/4	18 1/4	25 1/4	27 1/4	17 1/4	17 1/4	29 1/4		
E (in.)	9 1/4	12 1/4	12 1/4	18 1/4	18 1/4	14 1/4	14 1/4	14 1/4	16 1/4	18 1/4	17 1/4	18 1/4	22 1/4	22 1/4	30 1/4	23 1/4	24 1/4	24 1/4	33 1/4		
F (in.)	14 1/4	20 1/4	20 1/4	26 1/4	26 1/4	27 1/4	27 1/4	23 1/4	29 1/4	30 1/4	31 1/2	30 1/4	39 1/4	45 1/4	41 1/4	39 1/4	42 1/4	42 1/4	41 1/4		
G (in.)	23 1/4	41 1/4	41 1/4	52 1/4	52 1/4	46 1/4	46 1/4	40 1/4	56 1/4	57 1/4	59 1/4	52 1/4	43 1/4	72 1/4	79 1/4	77 1/4	70 1/4	70 1/4	83 1/4		
I (in.)	11 1/4	11 1/4	21 1/4	21 1/4	15 1/4	15 1/4	14 1/4	15 1/2	19 1/4	16 1/4	16 1/4	18 1/4	25 1/4	19 1/4	19 1/4	26 1/4	26 1/4	19 1/4	19 1/4		
J (in.)	7 1/4	7 1/4	17 1/4	17 1/4	10 1/4	10 1/4	9 1/4	11 1/4	13 1/4	12 1/4	12 1/4	11 1/4	19 1/4	11 1/4	11 1/4	11 1/4	20 1/4	20 1/4	11 1/4		
K (in.)	Single:	Studded	3 1/2	3 1/2	7 1/2	7 1/2	7 1/2	7 1/2	7 1/2	7 1/2	7 1/2	7 1/2	7 1/2	7 1/2	7 1/2	7 1/2	7 1/2	7 1/2	7 1/2	7 1/2	
		Flanged	7 1/2	10 1/2	10 1/2	10 1/2	10 1/2	10 1/2	10 1/2	10 1/2	10 1/2	10 1/2	10 1/2	10 1/2	10 1/2	10 1/2	10 1/2	10 1/2	10 1/2	10 1/2	10 1/2
		Hub	7 1/2	7 1/2	7 1/2	7 1/2	7 1/2	7 1/2	7 1/2	7 1/2	7 1/2	7 1/2	7 1/2	7 1/2	7 1/2	7 1/2	7 1/2	7 1/2	7 1/2	7 1/2	
	Double:	Studded	3 1/2	3 1/2	6 1/2	6 1/2	3 1/2	3 1/2	4 1/2	4 1/2	7 1/2	4 1/2	5 1/2	8 1/2	8 1/2	10 1/2	19 1/2	11 1/2	6 1/2	6 1/2	
		Flanged	10 1/2	10 1/2	10 1/2	10 1/2	9 1/2	11 1/2	10 1/2	13 1/2	17 1/2	11 1/2	11 1/2	17 1/2	17 1/2	17 1/2	17 1/2	17 1/2	17 1/2	17 1/2	
		Hub	6 1/2	6 1/2	6 1/2	6 1/2	7	8 1/2	8 1/2	8 1/2	8 1/2	8 1/2	8 1/2	8 1/2	8 1/2	8 1/2	8 1/2	8 1/2	8 1/2	8 1/2	
	Triple:	Flanged	17 1/2	17 1/2	17 1/2	17 1/2	17 1/2	17 1/2	17 1/2	17 1/2	17 1/2	17 1/2	17 1/2	17 1/2	17 1/2	17 1/2	17 1/2	17 1/2	17 1/2	17 1/2	
		Hub	11 1/2	11 1/2	11 1/2	11 1/2	11 1/2	11 1/2	11 1/2	11 1/2	11 1/2	11 1/2	11 1/2	11 1/2	11 1/2	11 1/2	11 1/2	11 1/2	11 1/2	11 1/2	
		Hub	19 1/2	19 1/2	19 1/2	19 1/2	19 1/2	19 1/2	19 1/2	19 1/2	19 1/2	19 1/2	19 1/2	19 1/2	19 1/2	19 1/2	19 1/2	19 1/2	19 1/2	19 1/2	
M (in.)	Single:	Studded	3 1/2	4	9 1/2	9 1/2	4 1/2	7	4 1/2	7	7	8 1/2	8 1/2	11 1/2	11 1/2	11 1/2	7 1/2	7 1/2	7 1/2		
		Flanged	8 1/2	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	
		Hub	7 1/2	7 1/2	7 1/2	7 1/2	7 1/2	7 1/2	7 1/2	7 1/2	7 1/2	7 1/2	7 1/2	7 1/2	7 1/2	7 1/2	7 1/2	7 1/2	7 1/2		
	Double:	Studded	5	5	8 1/2	8 1/2	5	5	4 1/2	6	8 1/2	6 1/2	6 1/2	10 1/2	10 1/2	12 1/2	7 1/2	7 1/2	7 1/2		
		Flanged	10	11 1/2	11 1/2	11 1/2	11 1/2	12 1/2	11 1/2	14 1/2	17 1/2	13	14 1/2	20 1/2	20 1/2	20 1/2	20 1/2	20 1/2	20 1/2		
		Hub	7 1/2	7 1/2	7 1/2	7 1/2	7 1/2	7 1/2	7 1/2	7 1/2	7 1/2	7 1/2	7 1/2	7 1/2	7 1/2	7 1/2	7 1/2	7 1/2	7 1/2		
	Triple:	Flanged	20 1/2	20 1/2	20 1/2	20 1/2	20 1/2	20 1/2	20 1/2	20 1/2	20 1/2	20 1/2	20 1/2	20 1/2	20 1/2	20 1/2	20 1/2	20 1/2	20 1/2	20 1/2	
		Hub	16 1/2	16 1/2	16 1/2	16 1/2	16 1/2	16 1/2	16 1/2	16 1/2	16 1/2	16 1/2	16 1/2	16 1/2	16 1/2	16 1/2	16 1/2	16 1/2	16 1/2	16 1/2	
		Hub	21 1/2	21 1/2	21 1/2	21 1/2	21 1/2	21 1/2	21 1/2	21 1/2	21 1/2	21 1/2	21 1/2	21 1/2	21 1/2	21 1/2	21 1/2	21 1/2	21 1/2	21 1/2	
N (in.)	3	4 1/2	4 1/2	4 1/2	4 1/2	4 1/2	4 1/2	4 1/2	4 1/2	6	4 1/2	4 1/2	6 1/2	5 1/2	8	8	6	6	8		
O (in.)*	2-inch	10 1/8	13 1/8	13 1/8	17 1/8	15 1/8	16 1/8	15 1/8	16 1/8	17 1/8	17 1/8	18 1/8	20 1/8	25 1/8	23 1/8	28 1/8	29 1/8	20 1/8	21 1/8	32 1/8	
	3-inch	13 1/8	15 1/8	15 1/8	19 1/8	15 1/8	16 1/8	15 1/8	16 1/8	18 1/8	18 1/8	18 1/8	20 1/8	25 1/8	23 1/8	28 1/8	29 1/8	20 1/8	21 1/8	32 1/8	
	4-inch	14 1/8	19 1/8	19 1/8	19 1/8	15 1/8	16 1/8	15 1/8	16 1/8	18 1/8	18 1/8	18 1/8	20 1/8	25 1/8	23 1/8	28 1/8	29 1/8	20 1/8	21 1/8	32 1/8	
P (in.)*	2-inch	11 1/8	15 1/8	15 1/8	19 1/8	17 1/8	18 1/8	16 1/8	19 1/8	18 1/8	16 1/8	19 1/8	21 1/8	25 1/8	25 1/8	28 1/8	29 1/8	20 1/8	21 1/8	31 1/8	
	3-inch	15 1/8	15 1/8	15 1/8	17 1/8	18 1/8	16 1/8	19 1/8	18 1/8	19 1/8	19 1/8	21 1/8	25 1/8	25 1/8	28 1/8	29 1/8	20 1/8	21 1/8	31 1/8		
	4-inch	26 1/8	26 1/8	26 1/8	18 1/8	18 1/8	18 1/8	19 1/8	18 1/8	19 1/8	19 1/8	21 1/8	25 1/8	25 1/8	28 1/8	29 1/8	20 1/8	21 1/8	31 1/8		
R (in.)	29 1/2	25	38 1/2	38 1/2	38 1/2	38 1/2	38 1/2	38 1/2	38 1/2	38 1/2	38 1/2	38 1/2	38 1/2	38 1/2	38 1/2	38 1/2	38 1/2	38 1/2	38 1/2		
Z (in.)	23	19 1/2	30 1/2	30 1/2	30 1/2	30 1/2	30 1/2	30 1/2	30 1/2	30 1/2	30 1/2	30 1/2	30 1/2	30 1/2	30 1/2	30 1/2	30 1/2	30 1/2	30 1/2		
Weight (Total, lbs.)	Without Rams	Single:	825	1,260	5,450	5,450	2,400	5,810	4,000	5,500	9,200	12,900	9,200	12,900	12,900	12,900	8,100	8,400	10,200		
		Double:	2,600	3,000	11,200	11,200	5,300	5,300	7,650	11,175	7,500	9,500	20,990	37,650	37,650	37,650	16,320	16,320	18,350		
		Hub	2,830	3,340	5,750	5,750	5,900	5,900	5,380	8,600	12,950	8,200	11,050	23,350	24,150	24,150	18,350	18,350	18,350		
	Rams With Holders (2 each)	Studded	30	95	95	95	165	165	200	240	295	320	320	500	540	875	1,075	785	785	1,275	
		Flanged	200	175	175	1,500															

STATE OF UTAH  
DIVISION OF OIL, GAS, AND MINING

\*\* FILE NOTATIONS \*\*

Date: May 3, 1979

Operator: McCulloch Oil & Gas Corp.

Well No: Federal 22-7

Location: Sec. 22 T. 38S R. 26E County: San Juan

File Prepared:

Entered on N.I.D.:

Card Indexed:

Completion Sheet:

API Number: 43-037-30484

CHECKED BY:

Administrative Assistant: \_\_\_\_\_

Remarks:

Petroleum Engineer: M. J. Minder 5-9-79

Remarks:

Director: 2

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:

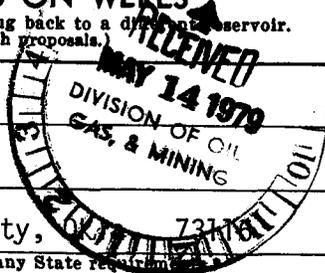
Letter Written/Approved

STATE OF UTAH  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS, AND MINING

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

SUNDRY NOTICES AND REPORTS ON WELLS

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



1. OIL WELL  GAS WELL  OTHER

2. NAME OF OPERATOR  
McCulloch Oil & Gas Corporation

3. ADDRESS OF OPERATOR  
3033 N.W. 63rd; Suite 250-E; Oklahoma City, Oklahoma

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements. See also space 17 below.)  
At surface  
2150' FNL & 660' FEL of Section

5. LEASE DESIGNATION AND SERIAL NO.  
U-42232

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME  
Federal 22 - 1

9. WELL NO.  
0

10. FIELD AND POOL, OR WILDCAT  
Wildcat

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA  
Section 22, T38S-R26E

12. COUNTY OR PARISH  
San Juan

13. STATE  
Utah

14. PERMIT NO.

15. ELEVATIONS (Show whether DF, RT, GR, etc.)  
5090' GR

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 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) <input type="checkbox"/>	
(Other) <input checked="" type="checkbox"/> Change well number			

(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.) \*

Please change the well number of the proposed well from from Well No. 7 to Well No. 1.

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

SIGNED W.R. Lynn TITLE District Drlg Engineer DATE May 11, 1979

(This space for Federal or State office use)

APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_  
CONDITIONS OF APPROVAL, IF ANY:



SCOTT M. MATHESON  
Governor

GORDON E. HARMSTON  
*Executive Director,*  
NATURAL RESOURCES

CLEON B. FEIGHT  
*Director*

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

May 15, 1979

OIL, GAS, AND MINING BOARD

CHARLES R. HENDERSON  
*Chairman*

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

MCCULLOCH OIL AND GAS CORPORATION  
3033 N W 63RD  
SUITE 250-E  
OKLAHOMA CITY OK 73116

Re: Well No. Federal 22-1, Sec. 22, T. 38S, R. 26E, San Juan County, UT

Gentlemen:

Insofar as this office is concerned, approval to drill the above referred to well is hereby granted in accordance with Rule C-3, 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 43-037-30484.

Yours very truly,

DIVISION OF OIL, GAS, AND MINING

*Cleon B. Feight*  
Cleon B. Feight, Director

/lw

cc: U. S. Geological Survey

Confidential

MCCULLOCH OIL & GAS CORPORATION

Federal 22 No. 1

SE NE Section 22, T-38-N, R-26-E

San Juan County, Utah

JAMES K. PRICE  
Geologist

WELL REPORT  
FEDERAL 22 NO. 1

WELL: Federal 22, No. 1  
OPERATOR: McCulloch Oil & Gas Corporation  
CONTRACTOR: Brinkerhoff-Signal, Rig No. 70  
Toolpusher: Danny Phillips  
LOCATION: 2150' FNL, 660' FEL, Section 22, Township 38 South,  
Range 26 East  
COUNTY: San Juan  
STATE: Utah  
ELEVATION: 5090' G.L. 5100' K.B.  
COMMENCED: July 14, 1979  
CASING: Ran 416', 9-5/8", K-55 casing, set at 425' KB with  
400 sacks, Class B cement, 1/4# Floccell/sack and 2% CaCl.  
CORES: CORE NO. 1, 5117'-5177' (Upper Ismay)  
CORE NO. 2, 5177'-5237' (Upper Ismay)  
CORE NO. 3, 5237'-5297' (Upper Ismay)  
CORE NO. 4, 539'-5450' (Lower Desert Creek)  
DRILLSTEM TESTS: DST NO. 1, 5178-5297' (Upper Ismay)  
LOGS: Compensated Neutron-Formation Density Log with GR,  
BHC-Sonic with GR, Dual Induction-SFL (Schlumberger)  
COMPLETED DRILLING: August 8, 1979, 9:30 A.M.  
STATUS: Completing as an Oil and Gas well.

F O R M A T I O N T O P S (LOGS)

<u>FORMATION</u>	<u>DEPTH</u>	<u>ELEVATION</u>
Carmel	560	+4540
Navajo	575	+4525
Kayenta	750	+4350
Wingate	920	+4180
B/Wingate	1142	+3958
Chinle	1277	+3823
Shinarump	2087	+3013

WELL REPORT  
FEDERAL 22 NO. 1

FORMATION TOPS (LOGS) (Continued)

<u>FORMATION</u>	<u>DEPTH</u>	<u>ELEVATION</u>
Cutler	2310	+2790
Upper Hermosa	3947	+1153
Paradox	4950	+150
Upper Ismay	5126	-26
Upper Ismay Porosity	5184	-84
Hovenweep Shale	5240	-140
Lower Ismay	5290	-190
Lower Ismay Anhydrite	5310	-210
Gothic Shale	5342	-242
Upper Desert Creek	5356	-256
Upper Desert Creek Anhydrite	5366	-266
Lower Desert Creek Anhydrite	5412	-312
Lower Desert Creek Porosity	5422	-322
Chimney Rock Shale	5446	-346
Akah	5465	-365

TOTAL DEPTH 5479 (Logger) 5480 (Driller)

CHRONOLOGICAL HISTORY

<u>DATE</u>	<u>DEPTH (7:00 A.M.)</u>	<u>DAY OF OPERATION</u>	<u>COMMENTS</u>
7-14-79	-	1	Moving in Rotary Tools.
7-15-79	-	2	Moving in Rotary Tools
7-16-79	425	3	Ran 9-5/8" surface casing. Set at 425'.
7-17-79	425	4	Drilling out cement.
7-18-79	1745	5	Drilling w/water.
7-19-79	3150	6	Drilling w/water.
7-20-79	3179	7	Circ. - mudding up.
7-21-79	3177	8	Washing to bottom.
7-22-79	3277	9	Washing to bottom.
7-23-79	3310	10	Drilling. Pump down 16½ hours.
7-24-79	3612	11	Drilling.
7-25-79	3783	12	Drilling.
7-26-79	4065	13	Drilling.
7-27-79	4300	14	Drilling.
7-28-79	4475	15	Drilling.
7-29-79	4720	16	Drilling.
7-30-79	4905	17	Drilling.
7-31-79	5080	18	Drilling.

WELL REPORT  
FEDERAL 22 NO. 1

BIT RECORD

<u>NO.</u>	<u>MAKE</u>	<u>SIZE</u>	<u>TYPE</u>	<u>DEPTH OUT</u>	<u>FEET</u>	<u>HOURS</u>	<u>DEVIATION</u>
1	STC	13-3/4	DTJ	150	150	11-1/2	0
2	STC	12-1/4	V2H	308	158	16	1/4°
3	STC	12-1/4	Retip	425	117	3-3/4	1/4°
4	STC	7-7/8	F-2	3179	2753	46-1/4	1/4°
5	STC	7-7/8	F-3	3702	525	40-1/4	1°
6	STC	7-7/8	F-3	4359	657	57	1-1/2°
7	STC	7-7/8	F-3	5115	756	78-1/4	
8	STC	7-7/8	F-3	5117	2	1/2	3/4°
9	Christ	7-7/8	Core	5297	180	14-1/2	
10	STC	7-7/8	F-3	5390	93	15	1-1/2°
11	Christ	7-7/8	Core	5450	60	12-1/4	
12	STC	7-7/8	V2HJ	5480	30	3	

CORE ANALYSES

CORE NO. 1, 5117'-5177'

<u>DEPTH</u>	<u>PERMEABILITY</u>		<u>POROSITY</u>	<u>So(%)</u>	<u>Sw(%)</u>
	<u>MAX.</u>	<u>90° TO MAX.</u>			
5117-5139					
5139-5140	1.3		1.0	0.0	43.0
5140-5141	.06		0.6	0.0	71.7
5141-5142	.05		0.5	0.0	85.3
5142-5143	.06		0.6	0.0	72.2
5143-5144	.05		0.6	0.0	72.2
5144-5145	.07		0.5	0.0	44.4
5145-5146	.23		4.9	0.0	33.4
5146-5147	.09		8.3	0.0	33.5
5147-5148	.07		9.0	0.0	60.6
5148-5149	.07		4.6	0.0	65.0
5149-5150	.53		0.3	0.0	72.1
5150-5151	.04		0.3	0.0	72.1
5151-5152	.05		0.5	0.0	88.0
5152-5153	.11		1.6	0.0	95.2
5153-5154	.18		4.5	0.0	36.4
5154-5155	.08		8.9	0.0	51.7
5155-5156	.11		8.9	0.0	58.4
5156-5157	.25		12.9	0.0	66.1
5157-5158	.04		0.6	0.0	73.3

WELL REPORT  
FEDERAL 22 NO. 1

C O R E   A N A L Y S E S   (Continued)

CORE NO. 1 (Continued)

<u>DEPTH</u>	<u>PERMEABILITY</u>		<u>POROSITY</u>	<u>So(%)</u>	<u>Sw(%)</u>
	<u>MAX.</u>	<u>90° TO MAX.</u>			
5158-5159	.03		1.2	0.0	87.5
5159-5160	.03		0.5	0.0	73.3
5160-5161	.03		0.5	0.0	85.3
5161-5162	.03		0.6	0.0	74.3
5162-5177			N O   A N A L Y S E S		

CORE NO. 2, 5177'-5237'

5177-5178	.03		0.7	0.0	62.2
5178-5179	.04		1.0	0.0	65.0
5179-5180	.04		0.9	0.0	72.1
5180-5181	.04		0.8	0.0	81.4
5181-5182	.04		0.5	0.0	43.5
5182-5183	.05		0.6	0.0	72.1
5183-5184	.09		10.4	4.9	35.3
5184-5185	.03		0.4	0.0	54.3
5185-5186	1.3	0.81	3.5	0.0	51.5
5186-5187	1.2	0.59	4.3	0.0	35.3
5187-5188	3.7	2.7	4.2	0.0	41.9
5188-5189	80.0	57.0	9.5	3.1	21.4
5189-5190	51.0	47.0	10.7	2.8	26.8
5190-5191	16.0	15.0	11.6	0.0	35.0
5191-5192	10.0	10.0	10.4	0.0	45.8
5192-5193	7.5	*	9.1	0.0	42.5
5193-5194	0.34	*	8.2	0.0	48.0
5194-5195	1.4	*	10.1	0.0	44.5
5195-5196	9.1	7.2	10.1	0.0	50.0
5196-5197	85.0	*	10.9	0.0	45.9
5197-5198	7.9	6.3	7.3	0.0	88.3
5198-5199	395.0	8.0	8.6	0.0	47.2
5199-5200	27.0	23.0	10.0	0.0	43.1
5200-5201	19.0	7.4	8.1	0.0	44.8
5201-5202	27.0	0.77	8.2	0.0	44.0
5202-5203	1.2	0.90	12.9	0.0	47.3
5203-5204	29.0	2.1	15.7	0.6	52.9
5204-5205	14.0	*	17.4	0.9	51.8
5205-5206	18.0	6.1	16.5	0.1	51.9
5206-5207	57.0	50.0	16.9	0.1	45.1
5207-5208	25.0	24.0	17.3	0.0	53.8
5208-5209	21.0	*	13.8	0.0	51.0
5209-5210	9.5	9.5	8.5	0.0	55.7

\*Plug Permeability

WELL REPORT  
FEDERAL 22 NO. 1

C O R E   A N A L Y S E S   (Continued)

CORE NO. 2 (Continued)

<u>DEPTH</u>	<u>PERMEABILITY</u>		<u>POROSITY</u>	<u>So(%)</u>	<u>Sw(%)</u>
	<u>MAX.</u>	<u>90° TO MAX.</u>			
5210-5211	6.5	2.2	4.0	0.0	66.3
5211-5212	2.2	1.9	4.8	0.0	50.0
5212-5213	2.9	1.6	4.3	0.0	54.8
5213-5214	0.30	*	4.5	0.0	64.4
5214-5215	0.29	0.11	10.1	0.1	50.9
5215-5216	0.41		0.6	0.0	72.1
5216-5217	0.03		0.7	0.0	61.4
5217-5218	0.04		0.9	0.0	72.1
5218-5219	0.04		0.9	0.0	78.9
5219-5220	0.03		1.4	0.0	77.5
5220-5221	0.03		0.5	0.0	43.5
5221-5222	0.03		1.1	0.0	60.5
5222-5223	0.05		2.0	0.0	31.7
5223-5224	0.38	0.30	4.5	3.5	51.2
5224-5225	3.2	0.30	5.1	2.7	38.5
5225-5226	3.7	*	6.5	1.1	34.6
5226-5227	6.4	3.1	7.7	1.3	38.5
5227-5228	0.67	0.15	6.6	3.6	54.6
5228-5229	7.7	3.9	7.5	3.6	50.4
5229-5230	0.49	0.44	7.3	2.0	61.9
5230-5231	0.37	0.22	4.6	0.0	70.8
5231-5232	0.03		2.0	0.0	74.9
5232-5233	0.03		1.1	0.0	78.8
5233-5234	0.09		0.9	0.0	72.2
5234-5235	0.03		0.7	0.0	92.9
5235-5236	0.04		1.2	0.0	90.2
5236-5237	0.04		0.8	0.0	80.0

CORE NO. 3, 5237'-5297'      NO ANALYSES

CORE NO. 4, 5390'-5450'

5390-5392		N O   A N A L Y S E S			
5392-5393	0.05		1.2	0.0	91.7
5393-5394	0.09		2.8	7.1	75.0
5394-5395	0.10		14.6	3.4	75.3
5395-5396	0.10		3.7	0.0	91.9
5396-5398		N O   A N A L Y S E S			
5398-5399	0.09		2.4	0.0	95.8
5399-5415		N O   A N A L Y S E S			
5415-5416	0.08		2.0	0.0	80.0
5416-5417	0.06		7.7	3.5	82.5
5417-5418	2.7		14.0	1.4	29.8

\* Plug Permeability

WELL REPORT  
FEDERAL 22 NO. 1

C O R E A N A L Y S E S (Continued)

CORE NO. 4 (Continued)

<u>DEPTH</u>	<u>PERMEABILITY</u>		<u>POROSITY</u>	<u>So (%)</u>	<u>Sw (%)</u>
	<u>MAX.</u>	<u>90° TO MAX.</u>			
5418-5419	0.06		9.7	2.1	57.7
5419-5420	2.3		3.8	2.6	21.1
5420-5421	1.8		5.1	2.0	29.4
5421-5422	3.2		4.6	2.2	28.3
5422-5423	0.70		7.9	1.3	26.6
5423-5424	1.6		6.2	1.6	17.7
5424-5425	0.29		3.3	3.0	66.7
5425-5426	4.5		3.1	3.2	87.1
5426-5427	0.10		7.2	1.4	47.2
5427-5428	1.5		11.0	0.9	37.3
5428-5429	0.24		13.0	0.8	60.0
5429-5430	0.24		12.8	0.8	75.0
5430-5431	0.06		6.3	0.0	79.4
5431-5432	0.05		3.4	3.0	79.4
5432-5433	0.07		7.4	1.4	79.7
5433-5434	0.08		7.7	15.6	59.7
5434-5435	0.05		5.6	8.9	80.4
5435-5436	0.05		4.8	2.1	89.6
5436-5437	0.07		9.7	25.8	39.2
5437-5438	0.02		9.5	16.8	56.8
5438-5439	0.04		6.4	1.6	84.4
5439-5440	0.09		3.2	3.1	78.1
5440-5441	0.07		3.4	14.7	73.5
5441-5449					

N O A N A L Y S E S

L O G A N A L Y S E S

<u>DEPTH</u>	<u>POROSITY</u>	<u>Rt</u>	<u>Rw</u>	<u>Sw</u>
5190-5192	9.5	25.0	.025	33.0
5192-5194	10.5	17.0	.025	36.0
5194-5196	10.5	15.0	.025	38.0
5196-5198	10.0	14.5	.025	41.5
5198-5200	8.0	16.0	.025	49.0
5200-5202	8.0	18.0	.025	46.0
5202-5204	9.0	8.0	.025	62.1
5204-5206	16.0	3.0	.025	57.0
5206-5208	18.0	1.5	.025	71.0

WELL REPORT  
FEDERAL 22 NO. 1

LOG ANALYSES (Continued)

<u>DEPTH</u>	<u>POROSITY</u>	<u>Rt</u>	<u>Rw</u>	<u>Sw</u>
5208-5210	13.0	1.5	.025	100.0
5222-5224	2.5	TIGHT		
5224-5226	5.5	25.0	.025	57.5
5226-5228	7.5	17.0	.025	51.1
5228-5230	7.5	12.0	.025	60.8
5230-5232	7.0	8.0	.025	79.8
5232-5234	3.5	8.0	.025	100.0
5422-5424	15.5	3.0	.020	58.8
5424-5426	9.0	3.6	.020	82.8
5426-5428	7.5	5.4	.020	81.1
5428-5430	7.5	6.0	.020	76.9
5430-5432	8.0	6.0	.020	72.2
5432-5434	10.0	3.0	.020	81.6
5434-5436	15.0	1.8	.020	70.2

SAMPLE DESCRIPTION

<u>LOG DEPTH</u>	<u>SAMPLE DEPTH</u>	<u>DESCRIPTION</u>
	4400-4410	SHALE, brown, silty, calcareous; SHALE, orange red; some LIMESTONE, ivory, dense.
	4410-4420	SHALE, brown, as above, increasing; LIMESTONE, as above.
	4420-4430	Sample, as above.
	4430-4440	Sample, as above; SHALE, brown, increasingly silty.
	4440-4450	Sample, as above, with LIMESTONE, mottled grey in part.
	4450-4460	SILTSTONE, shaly, carbonaceous, calcareous, grey-brown; LIMESTONE, some as above.
	4460-4470	SILTSTONE, as above; LIMESTONE, as above, decreasing.
	4470-4480	SHALE, grey, brown, silty, calcareous; some LIMESTONE, as above, decreasing.
	4480-4490	LIMESTONE, light grey, slightly argillaceous, silty, dense.

S A M P L E   D E S C R I P T I O N   (Continued)

<u>LOG DEPTH</u>	<u>DESCRIPTION</u>
<u>SAMPLE DEPTH</u>	
4490-4500	LIMESTONE, as above, becoming darker grey, more shaly; SHALE, medium to dark grey, increasing.
4500-4510	LIMESTONE, mottled, dark grey particles in recrystallized chalky matrix, pyritic in part, some SHALE and SILTSTONE, as above.
4510-4520	LIMESTONE, as above, becoming argillaceous; SILTSTONE, as above, increasing.
4520-4530	SILTSTONE, medium grey, argillaceous, carbonaceous, micaceous, calcareous.
4530-4540	Sample, as above (increased red shale cavings)
4540-4550	Sample, as above (much cavings).
4550-4560	Sample, as above (much cavings).
4560-4570	Sample, as above, increase in brown SHALE.
4570-4580	Sample, as above (much caving).
4580-4590	Sample, as above (much caving).
4590-4600	Sample, as above.
4600-4610	SILTSTONE, grey-brown, as above; LIMESTONE, medium grey, dense.
4610-4620	LIMESTONE, tan-grey, dense.
4620-4630	LIMESTONE, tan-grey, brown, dense, increasingly argillaceous.
4630-4640	SHALE, medium to dark grey, calcareous.
4640-4650	SHALE, as above.
4650-4660	LIMESTONE, mottled grey, some tan, dense to partially chalky; some SHALE, as above, decreasing, trace CHERT, grey.

WELL REPORT  
FEDERAL 22 NO. 1

S A M P L E   D E S C R I P T I O N   (Continued)

<u>LOG DEPTH</u>	<u>SAMPLE DEPTH</u>	<u>DESCRIPTION</u>
	4660-4670	LIMESTONE, mottled, medium grey-tan, crinoidal, argillaceous; CHERT, trace, light grey, translucent.
	4670-4680	Sample, as above, trace SANDSTONE, fine grained, white, siliceous, tight (cave?).
	4680-4690	LIMESTONE, mottled, becoming increasingly grey, argillaceous, silty, in part; SHALE, medium grey, increasing slightly.
	4690-4700	Sample, as above, with SHALE, as above, increasing.
	4700-4710	LIMESTONE, mostly as above, some increase in LIMESTONE, tan-grey, dense; decrease in SHALE, as above.
	4710-4720	LIMESTONE, medium grey-tan, dense.
	4720-4730	No sample.
	4730-4740	LIMESTONE, mixed grey mottled, increasingly shaly, in part; SHALE, medium grey, as above, increasing.
	4740-4750	LIMESTONE, medium grey, shaly; SHALE, medium grey, calcareous, as above.
	4750-4760	LIMESTONE, tan-grey, dense, some light tan-grey, partially finely crystalline to chalky; SHALE, as above, decreasing.
	4760-4770	LIMESTONE, as above; SHALE, medium-dark grey, calcareous, increasing.
	4770-4780	SHALE, dark grey, calcareous; LIMESTONE, medium-dark grey, shaly.
	4780-4790	Sample, as above.
	4790-4800	SHALE, as above; LIMESTONE, tan-dense, some increasing slightly.
	4800-4810	LIMESTONE, tan-grey, some pelletal in light chalky matrix; SHALE, as above, decreasing.

WELL REPORT  
FEDERAL 22 NO. 1

S A M P L E   D E S C R I P T I O N   (Continued)

<u>LOG DEPTH</u>	<u>SAMPLE DEPTH</u>	<u>DESCRIPTION</u>
	4810-4820	LIMESTONE, as above.
	4820-4830	LIMESTONE, light grey to white, some chalky, with relict clastic texture.
	4830-4840	LIMESTONE, dark grey, very shaly, some mottled grey, chalky, some tan-grey, as above.
	4840-4850	Sample, as above.
	4850-4860	Sample, as above.
	4860-4870	Sample, as above.
	4870-4880	SHALE/LIMESTONE, as above.
	4880-4890	LIMESTONE, light tan, dense; SHALE/LIMESTONE, dark grey, as above, decreasing.
	4890-4900	LIMESTONE, tan-grey, dense, some slight chalky.
	4900-4910	LIMESTONE, tan-grey, as above, with rapidly increasing mottled medium grey, shaly; SHALE, medium-dark grey, increasing.
	4910-4920	Sample, as above.
	4920-4930	LIMESTONE, mottled white, grey, shaly; CHERT, milky white.
	4930-4940	LIMESTONE, grey-tan, dense; CHERT, grey, tan, translucent.
	4940-4950	Sample, as above, increasingly shaly; SHALE, medium to dark grey, increasing.
	4950-4960	SHALE, as above; LIMESTONE, as above, decreasing.
PARADOX (4950')		-----
	4960-4970	LIMESTONE, medium grey, increasing, somewhat shaly; SHALE, medium grey.

WELL REPORT  
FEDERAL 22 NO. 1

S A M P L E   D E S C R I P T I O N   (Continued)

<u>LOG DEPTH</u>	<u>SAMPLE DEPTH</u>	<u>DESCRIPTION</u>
	4970-4980	LIMESTONE and SHALE, as above, some increase in red SHALE.
	4980-4990	LIMESTONE, mixed tan, dense to grey, argillaceous; red SHALE increasing (mud weight dropped allowing water flow with increase in cavings and 200 unit gas kick).
	4990-5000	SHALE, medium grey, calcareous; LIMESTONE, as above (sample heavily contaminated with red shale).
	5000-5010	LIMESTONE, grey, mottled, dense, partly argillaceous; some SHALE, as above (red shale, decreasing).
	5010-5020	LIMESTONE, as above, grey-tan, dense in part.
	5020-5030	LIMESTONE, medium grey-tan, dense, some chalky.
	5030-5040	LIMESTONE, as above, trace CHERT, translucent.
	5040-5045	LIMESTONE, as above.
	5045-5050	LIMESTONE, as above, trace CHERT, grey, translucent.
	5050-5055	LIMESTONE, light grey tan, lithographic dense; some LIMESTONE, as above decreasing.
	5055-5060	LIMESTONE, light grey-tan, as above.
	5060-5065	LIMESTONE, as above, becoming slightly darker grey-tan.
	5065-5070	LIMESTONE, medium grey-tan, dense, some light grey and chalky, in part.
	5070-5075	LIMESTONE; as above; CHERT, increasing medium grey-tan.
	5075-5080	LIMESTONE, as above; CHERT, as above.
	5080-5085	Sample, as above.
	5085-5090	Sample, as above with increase in LIMESTONE, grey, chalky.
	5090-5095	LIMESTONE, as above; some CHERT, as above.

S A M P L E   D E S C R I P T I O N   (Continued)

<u>LOG DEPTH</u>	<u>SAMPLE DEPTH</u>	<u>DESCRIPTION</u>
5095-5100		LIMESTONE, as above, becoming somewhat mottled and argillaceous.
5104	CIRC. 15"	LIMESTONE, as above, with some SHALE, dark grey.
	CIRC. 30"	SHALE, dark grey to black, increasing; some LIMESTONE, grey; dense.
5104-5110		SHALE and LIMESTONE, as above.
5110-5115		Sample, as above.
5115	CIRC. 2 hrs. (20 min. spls.)	Sample, as above.
5115-5117		Drilled two feet while fishing for lost bit buttons.
<u>CORE NO. 1, (5117'-5177')</u>		
5117-5125½		SHALE, black, calcareous, occasional small brachiopod shells.
UPPER ISMAY (5126) - - - - -		
5125½-5127		LIMESTONE, fossiliferous, shaly.
5127-5127½		SHALE, black, calcareous.
5127½-5128		LIMESTONE, as above.
5128-5133		ANHYDRITE, nodular, some shaly interbeds with secondary nodules.
5133-5136½		SHALE, as above.
5136½-5138		ANHYDRITE, as above.
5138-5140½		LIMESTONE & SHALE, dark, interlaminated.
5140½-5142½		LIMESTONE, laminated.
5142½-5144½		Same as above, with increasing SHALE.
5144½-5145½		LIMESTONE, dense, grey.

WELL REPORT  
FEDERAL 22 NO. 1

S A M P L E   D E S C R I P T I O N   (Continued)

<u>LOG DEPTH</u>	<u>SAMPLE DEPTH</u>	<u>DESCRIPTION</u>
	5145½-5148½	LIMESTONE with good apparent intergranular porosity, some ANHYDRITE nodules, salty taste, stylolites.
	5148½-5152	LIMESTONE mud with large carbonaceous stylolites.
	5152-5157	DOLOMITE, light tan, grey, silty, with porosity fossiliferous in part, salt and pepper texture, cut and fill structures.
	5157-5162	LIMESTONE, light grey, slightly fossiliferous (mudstone).
	5162-5166	LIMESTONE, shaly, 45° fracture at 5166'.
	5166-5169½	Same as above, with wackestone, <u>fusilinids</u> .
	5169½-5177	LIMESTONE, dark grey-black, shaly.
	<u>CORE NO. 2, (5177-5237')</u>	
	5177-5183	LIMESTONE, medium grey, (packstone) very stylolitic.
	5183-5184½	LIMESTONE, dark grey (mudstone), chalky, bleeding gas.
	5184½-5201½	LIMESTONE, mottled grey (boundstone) with matrix porosity, large scattered vugs. 5185½-5200 - Increasing vuggy porosity.
	5205-5213.2	LIMESTONE, grey, mottled (reef-like) good porosity.
	5213.2-5215.5	LIMESTONE, chalky.
	5215.5-5220	LIMESTONE, dark grey ( <u>fusilinid</u> wackestone).
	5220-5222	LIMESTONE, grey, ripup clasts, base stylolitic.
	5222-5230.5	LIMESTONE, grey, with good to excellent intergranular porosity, good odor on rock, white fluorescence -- will wash but not cut in solvent.
	5230.5-5237	LIMESTONE, medium grey (wackestone) <u>fusilinids</u> , crinoids.

WELL REPORT  
FEDERAL 22 NO. 1

S A M P L E   D E S C R I P T I O N   (Continued)

<u>LOG DEPTH</u>	<u>SAMPLE DEPTH</u>	<u>DESCRIPTION</u>
	<u>CORE NO. 3, (5237-5297')</u>	
	5237-5237.5	LIMESTONE, black, crinoidal (wackestone).
HOVENWEEP SHALE (5240; 5237 spl.)	-----	
	5237.5-5285	SHALE, dark grey to black.
LOWER ISMAY (5280; 5235 spl.)	-----	
	5285-5288	LIMESTONE, shaly, fossiliferous.
	5288-5289	ANHYDRITE, mottled, with shaly LIMESTONE.
	5289-5297	LIMESTONE, grey, dense, thin bedded.
	5297-5305	No sample.
	5305-5310	Mixed LIMESTONE, medium grey, argillaceous, silty; SHALE, medium grey.
LOWER ISMAY ANHYDRITE (5310)	-----	
	5310-5315	ANHYDRITE, white to pale grey, translucent, mottled.
	5315-5320	ANHYDRITE, as above.
	5320-5325	ANHYDRITE, as above.
	5325-5330	ANHYDRITE, as above, becoming somewhat darker, mottled with dark grey LIMESTONE.
	5330-5335	LIMESTONE, grey, very silty and argillaceous, some dolomitic.
	5335-5340	Sample, as above.
	5340-5345	LIMESTONE, as above, decreasingly argillaceous and silty.
GOTHIC SHALE (5342, 5346 spl.)	-----	
	5345-5350	SHALE, very dark grey to black, calcareous.

S A M P L E   D E S C R I P T I O N   (Continued)

<u>LOG DEPTH</u>	<u>SAMPLE DEPTH</u>	<u>DESCRIPTION</u>
	5350-5355	SHALE, as above.
UPPER DESERT CREEK (5354) - - - - -		
	5355-5360	LIMESTONE, very silty and some very fine to fine carbonaceous sand.
	5360-5365	N.S.
	5365-5370	LIMESTONE, as above, increasingly silty.
UPPER DESERT CREEK ANHYDRITE (5366) - - - - -		
	5370-5375	ANHYDRITE, white, soft, to translucent; LIMESTONE, as above, decreasing.
	5375-5380	ANHYDRITE, as above, some mottled grey, mixed shales and limestone background.
	5380-5385	Sample, as above.
	5385-5390	Sample, as above.
	5390 CIRC. 30"	Sample, as above.
	CIRC. 60"	SHALE, grey, silty, very calcareous.
	CIRC. 90"	SHALE, medium grey to dark grey, calcareous.
	CIRC. 120"	LIMESTONE, grey, argillaceous, silty; SHALE, as above, decreasing.
<u>CORE NO.4, (5390-5450')</u>		
	5390-5394	SHALE, silty, calcareous.
	5394-5395.3	LIMESTONE, shaly, silty - odor, dull fluorescence.
	5395.3-5399	LIMESTONE, very silty, with ANHYDRITE nodules.
	5399-5401	SHALE, dark grey, dolomitic(?).

WELL REPORT  
FEDERAL 22 NO. 1

S A M P L E   D E S C R I P T I O N   (Continued)

LOG DEPTH

SAMPLE DEPTH

DESCRIPTION

CORE NO. 4 (Continued)

5401-5409	SILTSTONE, light tan-grey, laminated.
LOWER DESERT CREEK ANHYDRITE (5412, 5409 spl.) - - - - -	
5409-5415.5	ANHYDRITE, liminated.
5415.5-5416	Transition - interbeds ANHYDRITE & DOLOMITE.
5416-5418.5	DOLOMITE, sucrosic, good p&p, strong odor on breaks, oil stain, fluorescence, light yellow, light cut.
5418.5-5423	DOLOMITE, mottled, "Algal" texture, anhydritic, good odor on breaks.
5423-5426.5	DOLOMITE, "Algal", as above, wet.
5426.5-5431	DOLOMITE, earthy, brown, bleeding salt water.
5431-5432	DOLOMITE, shaly, with black shale interlaminations.
5432-5437	DOLOMITE, earthy, brown, with fair odor.
5437-5439	DOLOMITE, becoming grey, earthy, dense.
5439-5441	LIMESTONE, argillaceous, medium grey.
5441-5450	SHALE, black, calcareous.
5450-5460	Trip Sample - red shale.
5460-5470	SHALE, black, soft.
5470-5480	SHALE, as above, ANHYDRITE, grey, white, soft, chalky to crystalline.
5480 CIRC 30"	LIMESTONE, tan grey, dense; ANHYDRITE, as above.
CIRC 60"	Mixed sample, as above.
CIRC 90"	SILTSTONE, anhydritic, light grey.

DRILLING RECORD

WELL NAME Federal #1-22 LOCATION 2150' FNL & 660' FEL, Sec. 22, T38S-R26E  
 DRILL BLOCK & PROSPECT Ruin Point COUNTY San Juan STATE Utah  
 CONTRACTOR: \_\_\_\_\_ FIELD \_\_\_\_\_  
 SPUD DATE: 7-14-79 PROJECTED TD: 5600'  
 ELEVATIONS: \_\_\_\_\_ OBJECTIVE Upper Ismay  
 WORKING INTEREST \_\_\_\_\_ PARTNERS & PERCENTAGE \_\_\_\_\_

*Confidential*

- Federal #1-22 (MOG) TITE HOLE  
DB 78/79 ? Ruin Point Pros
- 7-14: NEW LOCATION: 2150' FNL & 660' FEL, Section 22, T38S-R26E, San Juan County, Utah. 5600' Upper Ismay Test. Spudded 13 3/4" hole @ 1:30 AM 7-14-79. Drlg 77' (77'), sd, MW Spud Mud.
- 7-15: Drlg 281' (204'), sd & sh, MW 9.1#, Vis 35.
- 7-16: Depth 425' (144'), cementing 9 5/8" surface csg, MW 9.0#, Vis 50. Ran 10 jts 416' 9 5/8" 36# K-55 ST&C csg set @ 425'. Cmt'd w/400 sx Class "B" containing 1/4#/sk flocele & 2% CaCl<sub>2</sub>. Cmt circ.
- 
- Federal #1-22 (MOG) TITE HOLE  
DB 78/79 ? Ruin Point Pros
- 7-17: Depth 425', drlg out cmt, MW wtr. Welded on csg head, nipped up BOP's, & tested to 1000ps
- 
- Federal #1-22 (MOG) TITE HOLE  
DB 78/79 ? Ruin Point Pros
- 7-18: Drlg 1745' (1320'), MW wtr.
- 
- Federal #1-22 (MOG) TITE HOLE  
DB 78/79 B-8 Ruin Point Pros
- 7-19: Drlg 3150' (1830'), MW wtr.  
Costs to date:
- |         | D.H.      | Comp:     | Total     |
|---------|-----------|-----------|-----------|
| AFE:    | \$288,000 | \$190,000 | \$478,000 |
| Actual: | 57,085    | - -       | 57,085    |
- 
- Federal #1-22 (MOG) TITE HOLE  
DB 78/79 B-8 Ruin Point Pros
- 7-20: Depth 3177' (27'), Circ & cond mud, MW 10.8#, Vis 37.
- 
- Federal #1-22 (MOG) TITE HOLE  
DB 78/79 B-8 Ruin Point Pros
- 7-21: Depth 3177', Washing to bottom, MW 10.8#, Vis 38. Washed out fill from 2000' to 3177'.
- 7-22: Depth 3277', Washing to bottom, (100'), MW 10.5#, Vis 33. Drilled 8 hrs, shut down for pmp. repair now washing to bottom after repairing pmp.
- 7-23" Drlg. @ 3310, (33'), MW 10.9#, Vis 39, down 16 1/2 hrs. repairing motor on pmp.
- 
- Federal #1-22 (MOG) TITE HOLE  
DB 78/79 B-8 Ruin Point Pros
- 7-24: No report. Radio on rig is out.
- 
- Federal #1-22 (MOG) TITE HOLE  
DB 78/79 B-8 Ruin Point Pros
- 7-24: Drlg @ 3612', (302'), sh & sd, MW 11.1#, Vis 48.
- 7-25: Drlg @ 3783', (171'), sh & sd, MW 11.1#, Vis 49.

Federal #1-22 (MOG) TITE HOLE 7-26: Drlg. 4065' (282'), Sd & Sh, MW 10.3#, Vis 37.

DB 78/79 B-8 Ruin Point Pros

	D. H.	COMP.	TOTAL
AFE:	\$288,000	\$190,000	\$478,000
Actual:	\$126,711	-----	\$126,711

Federal #1-22 DB 78/79 B-8 Ruin Point Pros 7-27: NO REPORT.

Federal #1-22 (MOG) TITE HOLE 7-27: Drlg 4300' (235'), 1m & sh, MW 11.2#, Vis 37.  
 DB 78/79 B-8 Ruin Point Pros 7-28: Drlg 4475' (175'), 1m, dolm, sh, MW 11.4#, Vis 43.  
 7-29: Drlg 4720' (245'), 1m, sd, sh, MW 11.2#, Vis 40.

Federal #1-22 (MOG) TITE HOLE 7-30: Drlg 4905' (185'), 1m & sh, MW 11.2#, Vis 40.  
DB 78/79 B-8 Ruin Point Pros

Federal #1-22 (MOG) TITE HOLE 7-31: Drlg 5080' (185'), sd, 1m, sh, MW 11.2#, Vis 44.  
DB 78/79 B-8 Ruin Point Pros

Federal #1-22 (MOG) TITE HOLE 8-1: Depth 5117' (19'), TOOH w/junk basket, MW 11.3#,  
 DB 78/79 B-8 Ruin Point Pros Vis 50.  
 Costs to date:

	D. H.	Comp.	Total
AFE:	\$288,000	\$190,000	\$478,000
Actual:	177,523	- -	177,523

Federal #1-22 (MOG) TITE HOLE 8-2: Depth 5139' (22'), Cutting Core #1, MW 11.4#,  
DB 78/79 B-8 Ruin Point Pros Vis 45.

Federal #1-22 (MOG) TITE HOLE 8-4; Depth 5258' (55'), Cutting Core #3, 1m, sd, MW 11.3#  
 DB 78/79 B-8 Ruin Point Pros Vis 46.

8-5: Depth 5297' (39'), Trip for DST #1, sh & 1m, MW 11.3#, Vis 46. Fin cutting Core #3 @ 5294'. Rec 57' core.

8-6: Drlg 5310' (13'), MW 11.3#, Vis 46. Rn DST #1, tstd U. Ismay from 5178-5297' (119').

	Bottom (5293')	Top (5160')
IH	3155	3103
30 min IF	237-528	266-479 Strong blow in 15 min
60 min ISI	2436	2378
60 min FF	633-922	585-852 GTS in 26mi
120 min FSI	2436	2351
FH	3155	3076

Temp 124° F. Rec 330' HGCM, 180 G, O, & MC wtr, 870 wtr. Rw: 0.062 @ 88° F Cl 100,000 ppm.  
 Sampler Recovery - 1900ml wtr, 60 ml oil, Rw .058 @ 85° F.

Federal #1-22 (MOG) TITE HOLE 8-7: Depth 5390' (80'), TIH to cut Core #4, MW 11.4#,  
DB 78/79 B-8 Ruin Point Pros Vis 46.

Federal #1-22 (MOG) TITE HOLE 8-8: Depth 5450' (66'), Tripping, MW 11.4#, Vis 41.  
DB 78/79 B-8 Ruin Point Pros Cored 60' from 5390'-5450'. Cut 60', Rec 60'.

DB 78/79 B-8 Ruin Point Pros

Vis 44. RU Schlumb & ran in hole w/DI Laterolog. Loggers TD @ 5481'. Tools sticking, unable to log. Lost rub centralizer. Tried Sonic, could not get below 4985'. TIH w/bit & cond hole. Had 18' fill on bottom.

Costs to date:

	D.H.	Comp.	Total
AFE:	\$288,000	\$190,000	\$478,000
Actual:	228,238	- -	228,238

Federal #1-22 (MOG) TITE HOLE  
DB 78/79 B-8 Ruin Point Pros

8-10: Depth 5480', Logging, MW 11.4#, Vis 48.

Federal #1-22 (MOG) TITE HOLE  
DB 78/79 B-8 Ruin Point Pros

8-11: Depth 5480'. Circ & cond mud.  
8-12: RD & MO Rotary. Ran 133 jts 4½" csg set @ 5480'. Cmt'd w/1175 sks cmt. Set slips, ND, jet pits, released rig @ 6:00AM 8-12-79.

8-13: MO rotary equipment.

Federal #1-22 (MOG) TITE HOLE  
DB 78/79 B-8 Ruin Point Pros

8-14: Clearing well site for comp. unit.

Federal #1-22 (MOG) TITE HOLE  
DB 78/79 B-8 Ruin Point Pros

8-15: SI, WOCU.

Federal #1-22 (MOG) TITE HOLE  
DB 78/79 B-8 Ruin Point Pros

8-16: RU Comp. Unit. Prep to drill out.  
Costs to date:

	D.H.	Comp.	Total
AFE:	\$288,000	\$190,000	\$478,000
Actual:	281,858	45,733	327,591

Federal #1-22 (MOG) TITE HOLE  
DB 78/79 B-8 Ruin Point Pros

8-17: Fin RU unit. Picked up DCs, bit, csg scrapper & tbg. TIH to cmt'g stage tool. SION.

Federal #1-22 (MOG) TITE HOLE  
DB 78/79 B-8 Ruin Point Pros

8-18: Started drilling cmt @ 2222', drilled cmt'g stage tool @ 2259'. Test csg to 1000 psi, OK. SION.

8-19: Fin GIH w/tbg. Drilled out cmt from 5262 to 5416 SION & Sunday.

8-20: SD for Sunday.

Federal #1-22 (MOG) TITE HOLE  
DB 78/79 B-8 Ruin Point Pros

8-21: Fin drlg out cmt to 5440'. Ran GR-CCL from 5440 to 5000'. SION. Prep to perf this AM.

Federal #1-22 (MOG) TITE HOLE  
DB 78/79 B-8 Ruin Point Pros

8-22: Perf'd Desert Creek 5421-5424' w/2 JSPF. TIH w/pkr on 2 3/8" tbg. Set pkr @ 5338'. Swbd dwn to SN. Made 3 runs from SN, on last run rec show of gas & muddy gas cut wtr w/a skim of oil SION.

Federal #1-22 (MOG) TITE HOLE  
DB 78/79 B-8 Ruin Point Pros

8-23: TP. O, FL @ 3000'. Swbd dwn to SN. Started acid job, pkr gave way. Pulled pkr & TIH w/ new pkr. Set pkr @ 5338'. SION. Prep to acidize this AM.

Costs to date:

	D.H.	Comp.	Total
AFE:	\$288,000	\$190,000	\$478,000
Actual:	281,858	60,682	342,540

Federal #1-22 (MOG) TITE HOLE  
DB 78/79 B-9 Ruin Point Pros

8-24: TP 0, CP 0, FL 3300'. Swbd dwn to SN. Rec gas cut wtr. Acidized Desert Creek w/250 gals 28% NEA. HCl acid. ISIP 3800#, 5 min SIP 3550#. Opnd to pit w/3450 psi, blew to 0 immed. Swbd dwn to SN, Rec all flush & acid. Had blow of gas. SION.

Federal #1-22 (MOG) TITE HOLE  
DB 78/79 B-8 Ruin Point Pros

8-25: SICP 150 psi, SITP 100 psi, bled dwn immed. Ran swab. FL @ 900'. Swab to SN. Rec wtr & gas. Acidize dwn 2 3/8" tbg w/3000 gal 28% NEA. Avg press , AIR 1/2 BPM, ISIP 3475, 10 min SIP 2300 (-98 BLW). Opnd well up w/2300 psi. Blew to zero while flowing 2" stream. Gas to surf in 15 min. RU & swab. FL @ 200'. Swab to 2500'. Rec gas, wtr, & acid. Back side on vacuum. SION. Prep to pull tbg.

Federal #1-22 (MOG) TITE HOLE  
DB 78/79 B-8 Ruin Point Pros

8-26: CP 250 psi, TP 635 psi, blew dwn to zero in 4 min. Removed tree & Installed BOP. Unseated pkr. POOH w/tbg & pkr looking for tbg leak. Could not find tbg leak. SION & Sunday. Prep to test tbg in hole.

Federal #1-22 (MOG) TITE HOLE  
DB 78/79 B-8 Ruin Point Pros

8-27: SI, Sunday.  
8-28: SIP 220 psi, blew well dwn. Started in hole tstg tbg. Found 7 leaks in collars. Set pkr @ 5338'. Swbd 1 1/2 hrs. Swbd FL from surf to 1800'. Rec wtr & gas. SION.

Federal #1-22 (MOG) TITE HOLE  
DB 78/79 B-8 Ruin Point Pros

8-29: SITP 400 psi. Tbg blew to zero in 3 min. FL @ 600'. Swbd 10 hrs, rec 2 BO, 100 BW, & gas. FL held between 1200 & 2000' while swbg from 3900'. SION.

Federal #1-22 (MOG) TITE HOLE  
DB 78/79 B-8 Ruin Point Pros

8-30: SITP 300 psi. Blew well dwn. FL @ 450'. Swbd 10 hrs, rec 80 BFW w/trace of oil & blow of gas. FL held between 1200 & 1800' while swbg. SION. Prep to test L. Ismay. Costs to date:

	D.H.	Comp.	Total
AFE:	\$288,000	\$190,000	\$478,000
Actual:	281,455	93,943	375,398

Federal #1-22 (MOG) TITE HOLE  
DB 78/79 B-8 Ruin Point Pros

8-31: TP 50 psi. Installed BOP. Unseat pkr. POOH w/tbg & pkr. Set Wireline, CIBP @ 5410'. Dumpd 10' cmt on top of plug. Perf'd U. Ismay from 5189-5197' w/2 JSPF. SION.

Federal #1-22 (MOG) TITE HOLE  
DB 78/79 B-8 Ruin Point Pros

9-1: CP 0. TIH w/tbg & pkr. Set pkr @ 5121'. ND BOPs & install tree. Swab 60 BW w/good gas blow. FL held constant @ 1700'. SION.  
9-2: CP 0, TP 100 psi. Blew dwn immed. FL @ 250'. Swbd from 4000'. FL held @ 1700 to 1900'. Rec 2 BO on first run. Rec 70 BSW & good blow of gas. SION.  
9-3: SI.  
9-4: SI.

9-5: Opnd well up w/TP 100 psi, CP 0 psi. Bled dwn immed. Swbd from 3500-4000'. FL held @ 1400-1900'. Rec 60-70 BW. Trace gas, no oil. Prep to squeeze.

Federal #1-22 (MOG) TITE HOLE  
DB 78/79 B-8 Ruin Point Pros

9-8: SIFP 100 psi, blew down immed. RO to sqz U. Ismay perfs 5189-5197'. Sqzd perfs w/100 sx Class "B" cmt to a maximum sqz press of 4200 psi, reversed out 2.5 bbls cmt. WOC 3 1/2 hrs while holding 1500 psi. POOH w/tbg & pkr. SION.

Costs to date:

	D.H.	Comp.	Total
AFE:	\$288,000	\$190,000	\$478,000
Actual:	281,455	101,994	383,449

Federal #1-22 (MOG) TITE HOLE  
DB 78/79 B-8 Ruin Point Pros

9-7: PU DC's & bit. TIH. Drilled out cmt from 5098 to 5197'. Circ hole clean & press test to 1100 psi - held OK. POOH 15 stds. SION.

Federal #1-22 (MOG) TITE HOLE  
DB 78/79 B-8 Ruin Point Pros

9-8: Fin POOH. Perf'd U. Ismay from 5183 to 5192' w/2 JSPF. TIH w/tbg & pkr. Set pkr @ 5121'. Swbd dwn to SN, rec KCl wtr no gas or oil. Made 3 runs from SN. Not much entry. SION.

9-9: No report.

9-10: Plan to acidize today.

Federal #1-22 (MOG) TITE HOLE  
DB 78/79 B-8 Ruin Point Pros

9-9: SITP 0. Made two swab runs, no fluid in hole SION & Sunday.

9-10: SI.

9-11: TP 0. FL @ 5000'. Rec gas & 1/2 bbl wtr. Acidized perfs 5183-92' w/500 gals 28% HCl acid. AIR 1/2 BPM. Perfs broke dwn from 4000 psi to 2000 psi at end of job. ISIP 1800, 5 min SIP 925 (-36 BLW). Opnd to pit w/600 psi, blew to zero immed. Swbd 3 hrs, rec load plus salt wtr w/trace of oil & gas. FL held @ 1000 to 1500' while swbg from 3800-4000'. SION.

Federal #1-22 (MOG) TITE HOLE  
DB 78/79 B-8 Ruin Point Pros

9-12: TP 500 psi, blew dwn in 2 min. FL @ 250'. Swbd 10 hrs, rec 1/2 BO, 140 BW with a show of gas. FL held at 1000 to 1500' while swbg from 3000 to 3500'. SION.

Federal #1-22 (MOG) TITE HOLE  
DB 78/79 B-8 Ruin Point Pros

9-13: TP 100 psig. Rel unit @ 8:00AM 9-12-79. Shut well in. Will drop from report until further action is taken.

Costs to date:

	D.H.	Comp.	Total
AFE:	\$288,000	\$190,000	\$478,000
Actual:	282,192	128,519	410,711

DIVISION OF OIL, GAS AND MINING

SPUDDING INFORMATION

NAME OF COMPANY: McCulloch Oil and Gas Corporation

WELL NAME: Federal 22-1

SECTION 22 TOWNSHIP 38S RANGE 26E COUNTY San Juan

DRILLING CONTRACTOR Brinkerhoff

RIG # 70

SPUDDED: DATE July 14, 1979

TIME 11:30 a.m.

How rotary

DRILLING WILL COMMENCE ASAP

REPORTED BY Dick Lynn

TELEPHONE # (405) 840-3285

DATE July 16, 1979

SIGNED M.S.M.

Jack  
USGS  
Jerry Long

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

SUBMIT IN DUPLICATE

(See other instructions on reverse side)

Form approved.  
Budget Bureau No. 42-E355.5

8

**WELL COMPLETION OR RECOMPLETION REPORT AND LOG \***

1a. TYPE OF WELL: OIL WELL  GAS WELL  DRY  Other **Suspended Operation**

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

2. NAME OF OPERATOR  
**McCulloch Oil & Gas Corp.**

3. ADDRESS OF OPERATOR  
**3033 N.W. 63rd; Suite 250-E, Oklahoma City, Okla. 73116**

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)\*  
At surface **2150' FNL & 660' FEL of Section**  
At top prod. interval reported below  
At total depth ~~2150' FNL & 660' FEL of Section~~

14. PERMIT NO. \_\_\_\_\_ DATE ISSUED **6-8-79**

12. COUNTY OR PARISH **San Juan** 13. STATE **Utah**

5. LEASE DESIGNATION AND SERIAL NO.  
**U-42232**

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME  
**Federal 22**

9. WELL NO.

10. FIELD AND POOL, OR WILDCAT  
**Wildcat**

11. SEC. T. R., M., OR BLOCK AND SURVEY OR AREA  
**Section 22, T38S-R26E**

12. COUNTY OR PARISH **San Juan** 13. STATE **Utah**

15. DATE SPUNDED **7-14-79** 16. DATE T.D. REACHED **8-8-79** 17. DATE COMPL. (Ready to prod.)

18. ELEVATIONS (DF, REB, RT, GR, ETC.)\* **GR 5090; KB 5100** 19. ELEV. CASINGHEAD **5090**

20. TOTAL DEPTH, MD & TVD **5480'** 21. PLUG, BACK T.D., MD & TVD **5400'** 22. IF MULTIPLE COMPL., HOW MANY\*

23. INTERVALS DRILLED BY **0 - TD** ROTARY TOOLS **0 - TD** CABLE TOOLS

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)\*

25. WAS DIRECTIONAL SURVEY MADE  
**No**

26. TYPE ELECTRIC AND OTHER LOGS RUN  
**CNL-FDC, DIL, BHC Sonic & Dipmeter**

27. WAS WELL CORED  
**Yes**

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

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
9 5/8"	36	425'	12 1/4"	400 sx Class "B"	none
4 1/2"	10.5	5480'	7 7/8"	1st stage 325 sx Pozmix 2nd stage 700 sx Light + 100 sx "B"	none

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)

30. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)
2 3/8"	5121	5121

31. PERFORATION RECORD (Interval, size and number)

5421 - 5424 (.38" OD)	8 holes
5189 - 5197 (.38" OD)	18 holes
5183 - 5192 (.38" OD)	20 holes

32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
5421 - 5424	3250 gal 28% HCl acid
5189 - 5197	Squeeze w/100 sx Class "B" cmt.
5183 - 5192	500 gals 28% HCl acid

33. PRODUCTION

DATE FIRST PRODUCTION \_\_\_\_\_ PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump) \_\_\_\_\_ WELL STATUS (Producing or shut-in) **Suspended Operations**

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  
**Geological Report; Logs (CNL-FDC, DIL, & BHC Sonic); Cmt. record. Drilling log.**

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

SIGNED W.R. Lynn TITLE **District Drilling Engineer** DATE **10-8-79**

\*(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 16:** 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 29:** "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.
U. Ismay	5178	5297	DST #1, Rec. 330' HG & OCM, 180' G, O, MCW, 300' SG, O, & MCW, 870' water. 30 min IF 266-479; 60 min ISI 2378; 60 min IF 585-852; 120 min FSI 2351. Temp 123 F.
U. Ismay	5117	5177	Core #1.
U. Ismay	5177	5237	Core #2
U. Ismay	5237	5297	Core #3
Desert Creek	5390	5450	Core #4
U. Ismay	5183	5197	Swabbed salt wtr (336 BPD rate)
Desert Creek	5421	5425	Swabbed salt wtr (192 BPD rate)

## GEOLOGIC MARKERS

NAME	MEAS. DEPTH	TOP	TRUE VERT. DEPTH
Carmel	560		
Navajo	575		
Kayenta	750		
Windgate	920		
Chinle	1277		
Shinarump	2087		
Cutler	2310		
U. Hermosa	3947		
Paradox	4950		
U. Ismay	5126		
L. Ismay	5290		
Desert Creek	5356		
Akai	5465		

McCulloch Oil & Gas Corp.  
Federal 22 No. 1  
Section 22, T38S-R26E  
San Juan County, Utah

Continuation of Item 28 Form 9-330:

4½" casing cemented in two stages as follows:

1st stage: 35 sx 50:50 Pozmix containing 10% salt, 0.4% R-11.

2nd stage: Cemented through Stage tool set at 2257' with 700 sx  
Light cmt. followed by 100 sx of Class "B" neat. Cement  
circ to surface.

~~Confidential~~

**McCulloch Oil and Gas Corporation**



October 8, 1979

United States Geological Survey  
P.O. Box 1809  
Durango, Colorado 81301

Attn: Mr. Jerry Long

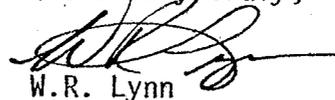
Re: Well Completion Report  
McCulloch Oil & Gas Corp.  
Federal 22 No.1 (U-42232)  
Sec. 22, T38S-R26E  
San Juan County, Utah

**CONFIDENTIAL**

Dear Sir:

Attached is Form 9-330 Well Completion Report and Log for the referenced well. Since this well was drilled as a wildcat and McCulloch plans to drill additional tests in the immediate area, we request that this information be held confidential. -Release date- 3/8/80

Yours very truly,

  
W.R. Lynn

WRL/dj  
Attach:  
CC: State of Utah



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.)

5. LEASE	U-42232
6. IF INDIAN, ALLOTTEE OR TRIBE NAME	
7. UNIT AGREEMENT NAME	
8. FARM OR LEASE NAME	Federal 22
9. WELL NO.	1
10. FIELD OR WILDCAT NAME	Wildcat
11. SEC., T., R., M.; OR BLK. AND SURVEY OR AREA	Section 22, T38S-R26E
12. COUNTY OR PARISH	San Juan
13. STATE	Utah
14. API NO.	43-037-30484
15. ELEVATIONS (SHOW DE, KDB, AND WD)	GR 5090, KB 5100

1. oil well  gas well  other  Suspended Operations

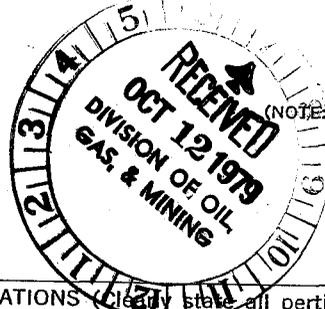
2. NAME OF OPERATOR  
McCulloch Oil & Gas Corp.

3. ADDRESS OF OPERATOR  
3033 N.W. 63rd, Suite 250-E, Okla. City, OK

4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See <sup>73116</sup> ~~space~~ 17 below.)  
AT SURFACE: 2150' FNL & 660' FEL of Section.  
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 type="checkbox"/>
(other) Completion attempt <input checked="" type="checkbox"/>	<input checked="" 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.\*

- 8-12-79 - 4 1/2" csg set & cemented at 5480'. PBD 5440'.
- 8-22 to 29-79 - Perforated Desert Creek 5421-5424' w/2 JSPF. Acidized w/3250 gals 28% HCl acid. Swabbed 80 bbls formation wtr w/trace of oil in 10 hrs
- 8-30-79 - Set CIBP @ 5410' and dumped 10' of cement on top of plug.
- 8-31 to 9-2-79 - Perforated U.Ismay 5189-5197' w/2 JSPF. Swabbed 70 bbls wtr.
- 9-5-79 - Squeezed perms 5189-5197' w/100 sx class 'B' cmt containing 1% CFR-2.
- 9-7- to 11-79 - Perforated U.Ismay 5183-5192' w/2 JSPF. Acidized perms w/500 gal 28% HCl acid. Swabbed 140 bbls salt wtr in 10 hrs.
- 9-12-79 - SI pending further evaluation.

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. Eng. DATE October 8, 1979

(This space for Federal or State office use)

APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_  
CONDITIONS OF APPROVAL, IF ANY:

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: Federal 22 Well No. 1  
Operator: McCulloch Oil & Gas Corp. Address: 3033 N.W. 63rd St.; Okla. City, OK 73116  
Contractor: Brinkerhoff-Signal Address: Farmington, New Mexico  
Location SE 1/4 NE 1/4; Sec. 22 T. 38 S, R. 26 E; San Juan County.

Water Sands:

<u>Depth:</u>		<u>Volume:</u>	<u>Quality:</u>
From-	To-	Flow Rate or Head	Fresh or Salty
1. 1350	- 1400'	est. 10-20 BPH	brackish
2. 2140	- 2200'	est. 50 BPH	salty
3.			
4.			
5.			

(Continue on Reverse Side if Necessary)

Formation Tops: Navajo 575; Kayenta 750; Windgate 920; Chinle 1277; Shinarump 2087; Cutler 2310; U.Hermosa 3947; Paradox 4950; U.Ismay 5126; Desert Creek 5356; Akah 5465.

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.

CHRONOLOGICAL HISTORY (Continued)

<u>DATE</u>	<u>DEPTH (7:00 A.M.)</u>	<u>DAY OF OPERATION</u>	<u>COMMENTS</u>
8-1-79	5117	19	Tripping out for CORE NO. 1.
8-2-79	5139	20	Cutting Core No. 1
8-3-79	5193	21	Cutting Core No. 2
8-4-79	5258	22	Cutting Core No. 3
8-5-79	5297	23	Tripping out for DST No. 1. MW: 11.3; V: 44; WL: 6.6; Ph: 7.6
8-6-79	5310	24	Drilling.
8-7-79	5390	25	Tripping in for Core No. 4.
8-8-79	5450	26	Tripping in hole w/Bit No. 12, TD @ 5480, 9:45 a.m.
8-9-79	5480	27	Running logs.
8-10-79	5480	28	Completed logging. Waiting on production casing.

DRILLSTEM TESTS

DST NO. 1, 5178-5297'

IFP 30 min., ISIP 60 min., FFP 60 min., FSIP 120 min.  
 Opened with moderate blow increasing to good blow off the bottom in three minutes. Final open began with a good blow off the bottom of bucket. GTS in 26 minutes or final open, too small to measure.

Pipe Recovery: 330' HG & OCM  
 180' G, O & MCW  
 300' SG, O & MCW  
 870' Water

Sample Recovery: 1 cu. ft. gas, 600#  
 1900 ml. water,  $R_w = .068 @ 85^{\circ}F$   
 50 ml. Oil

Pressures: IH 3103                      FF 585-852  
                   IF 266-479                FSI 2351  
                   ISI 2378                      FH 3076

BHT: 123<sup>o</sup>F

NOTE: Mudlogger analysis of gas (PPM) C1 2075            1C4 30  
     C2 675                NC4 40  
     C3 100

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

SUBMIT IN TRIPLICATE\*  
(Other instructions on re-  
verse side)

Form approved.  
Budget Bureau No. 42-R1424.

5. LEASE DESIGNATION AND SERIAL NO.

U-42232

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

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

7. UNIT AGREEMENT NAME

2. NAME OF OPERATOR

McCulloch Oil & Gas Corporation

8. FARM OR LEASE NAME

Federal 22

3. ADDRESS OF OPERATOR

3033 N.W. 63rd St.; Ste 250-E, Okla. City, Okla. 73116

9. WELL NO.

1

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.\*  
See also space 17 below.)  
At surface

2150' FNL & 660' FEL of Section

10. FIELD AND POOL, OR WILDCAT

Wildcat

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

Sec. 22, T38S-R26E

14. PERMIT NO.

15. ELEVATIONS (Show whether DF, RT, GR, etc.)

Gd 5090', KB 5100'

12. COUNTY OR PARISH

San Juan

13. STATE

Utah

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

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF

PULL OR ALTER CASING

FRACTURE TREAT

MULTIPLE COMPLETE

SHOOT OR ACIDIZE

ABANDON\*

REPAIR WELL

CHANGE PLANS

(Other)

SUBSEQUENT REPORT OF:

WATER SHUT-OFF

REPAIRING WELL

FRACTURE TREATMENT

ALTERING CASING

SHOOTING OR ACIDIZING

ABANDONMENT\*

(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.)\*

1. Displace hole with 11 ppg mud via tubing. Through tubing --

a. Spot 150' regular neat cement plug from 5250' back to 5100'.

b. Spot 100' regular neat cement plug from 4000' back to 3900'.

c. Spot 100' regular neat cement plug from ~~2350'~~ back to ~~2250'~~. <sup>2400' - 2250'</sup>

d. Spot 100' regular neat cement plug from ~~1300'~~ back to ~~1200'~~. <sup>1325' - 1225'</sup>

e. Spot 100' regular neat cement plug from 475' back to 375'

f. Spot 50' regular neat cement plug from 50' back to surface.

2. Cut off 9 5/8" casing and weld on steel plate. Erect a dry hole marker.

3. Restore location as outlined in "Multi-Point Surface Use and Operations Plan".

*11\* abandonment mud between plugs; erect reg. dryhole marker; clean & restore location.*

APPROVED BY THE DIVISION OF  
OIL, GAS, AND MINING

DATE: 7-8-80

BY: W. J. Minder

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

SIGNED

*J. D. Rawdon*  
J. D. Rawdon

TITLE

District Manager

DATE

6/25/80

(This space for Federal or State office use)

APPROVED BY

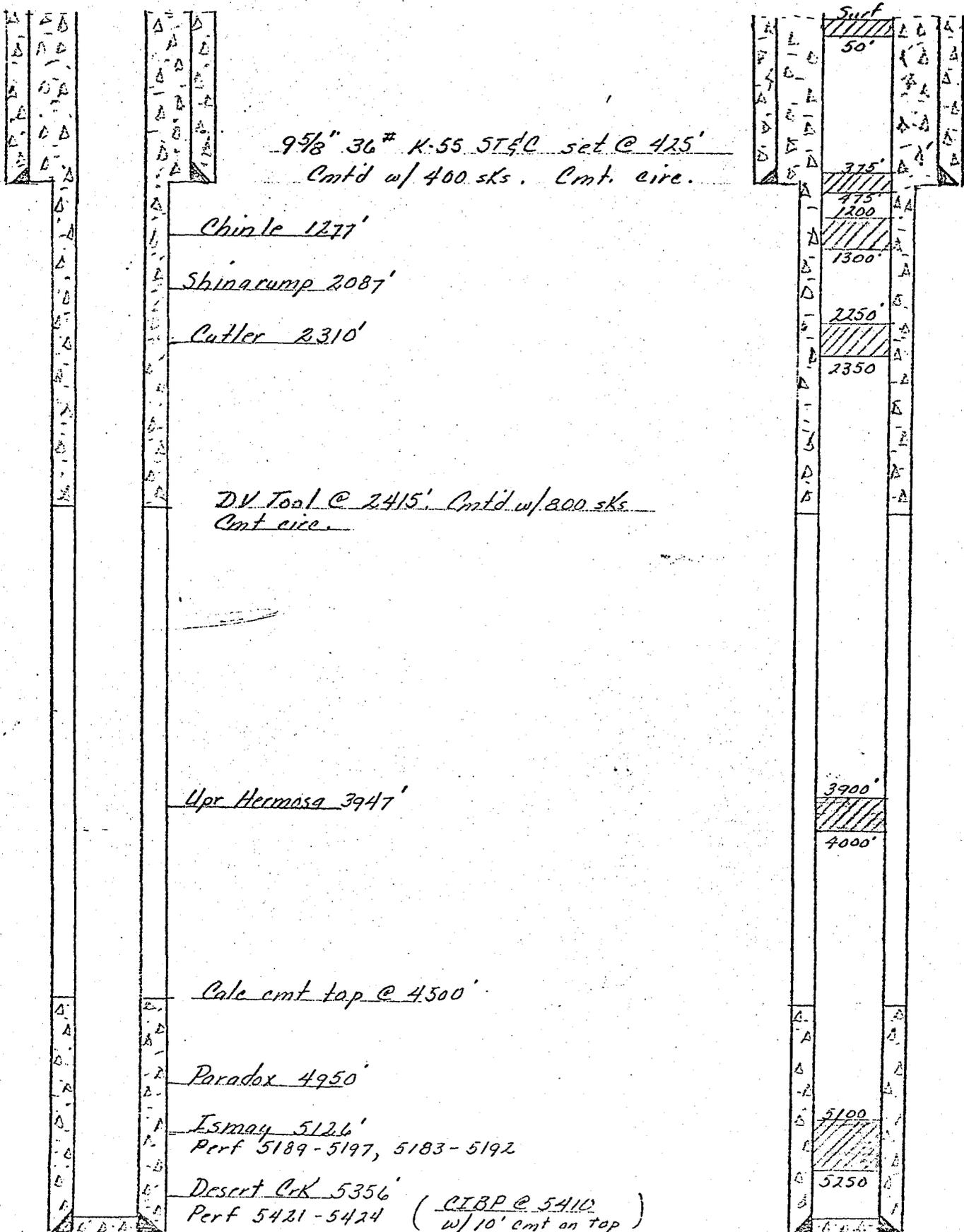
TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

MI-Cullach Oil & Gas Corp  
(405) 840-3285

Federal Well No. 1-  
Sec. 22, T38S - R26E  
San Juan Co., Utah  
El. 5100 KB



Before P&A -- 4 1/2" 10.5# K-55 ST&C set @ 5480  
PBTD @ 5436, Cmt'd w/ 375 sks. -- After P&A

DIVISION OF OIL, GAS AND MINING

PLUGGING PROGRAM

NAME OF COMPANY: McCulloch Oil and Gas Corporation

WELL NAME: Federal #22-1

SECTION 22 SE NE TOWNSHIP 38S RANGE 26E COUNTY San Juan

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

TOTAL DEPTH: 5480'

CASING PROGRAM:

9 5/8" @ 425' circ to surface

4 1/2" @ 5480'

TOC 4500'

FORMATION TOPS:

Carmel	560'	U. Hermosa	3947'
Navajo	575'	Paradox	4950'
Kayenta	750'	U. Ismay	5126 (salt water)
Wingate	920'	L. Ismay	5290'
Chinle	1277'	Desert Creek	5356'
Shinarump	2087'	Akah	5465'
Cutler	2310'		

PLUGS SET AS FOLLOWS:

already in place: CIBP @ 5410 w/10' cement on top

- 1) 5250' - 5100'
- 2) 4000' - 3900'
- 3) 2400' - 2250'
- 4) 1325' - 1225'
- 5) 475' - 375'
- 6) 50' - surface

11# abandonment mud between plugs; cut off 9 5/8" casing below surface, weld on plate; erect regulation dryhole marker, clean and restore site.

DATE July 2, 1980

SIGNED *M. J. Minder*

cc: USGS

P/A

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

SUBMIT TO THE BUREAU  
(Other instructions on re-  
verse side)

Form approved,  
Budget Bureau No. 42-R1424.

5. LEASE DESIGNATION AND SERIAL NO.

U-42232

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

**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.)

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

Federal 22

9. WELL NO.

1

10. FIELD AND POOL, OR WILDCAT

Wildcat

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

Section 22, T38S-R26E

12. COUNTY OR PARISH

San Juan

13. STATE

Utah

1. OIL WELL  GAS WELL  OTHER

2. NAME OF OPERATOR  
MCOR Oil and Gas Corporation

3. ADDRESS OF OPERATOR  
3033 N.W. 63rd St., Suite 250-E, Okla. City, Oklahoma 73116

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.\*  
See also space 17 below.)  
At surface

2150' FNL and 660' FEL of Section 22

14. PERMIT NO.

15. ELEVATIONS (Show whether DF, RT, CR, etc.)

Gd 5090', KB 5100

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

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF

FRACTURE TREAT

SHOOT OR ACIDIZE

REPAIR WELL

(Other)

FULL OR ALTER CASING

MULTIPLE COMPLETE

ABANDON\*

CHANGE PLANS

SUBSEQUENT REPORT OF:

WATER SHUT-OFF

FRACTURE TREATMENT

SHOOTING OR ACIDIZING

(Other)

REPAIRING WELL

ALTERING CASING

ABANDONMENT\*

(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.)\*

1. Displace Hole with 12 ppg mud via tubing. Through tubing --
  - a. Spot 150 sks. regular neat cement from 5250' back to 5100' (squeezed perforations)
  - b. Spot 100 sks. regular neat cement from 4000' back to 3900'
  - c. Spot 150 sks. regular neat cement from 2400' back to 2250'
  - d. Spot 100 sks. regular neat cement from 1325' back to 1225'
  - e. Spot 100 sks. regular neat cement from 475' back to 375'
  - f. Spot 50 sks. regular neat cement from 50' tack to surface.
2. Cut off 8 5/8" casing 3' below surface and welded on steel plate. Erected a dry hole marker.
3. Restored location as outlined in "Multi-Point Surface Use and Operations Plan".

APPROVED BY THE DIVISION  
OF OIL, GAS, AND MINING

DATE: 2-10-81  
BY: M. J. Winder

RECEIVED  
FEB 9 1981

DIVISION OF  
OIL, GAS & MINING

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

SIGNED

J. O. Rawdon

TITLE

District Manager

DATE

2-3-81

(This space for Federal or State office use)

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY: