

UTAH OIL AND GAS CONSERVATION COMMISSION

REMARKS: WELL LOG \_\_\_\_\_ ELECTRIC LOGS  \_\_\_\_\_ X \_\_\_\_\_ WATER SANDS \_\_\_\_\_ LOCATION INSPECTED \_\_\_\_\_ SUB. REPORT/abd \_\_\_\_\_  
 No. 106 1-28-95 971210 Equiterna 40 In Land eff. 9-30-97:  
 970206 Confidential Status Expired 2-26-96 960401 Oper. Nm. Chg.

DATE FILED NOVEMBER 7, 1994

LAND: FEE & PATENTED \_\_\_\_\_ STATE LEASE NO. \_\_\_\_\_ PUBLIC LEASE NO. U-66191 INDIAN \_\_\_\_\_

DRILLING APPROVED: DECEMBER 7, 1994

SPLUDED IN: 12-18-94

COMPLETED: 1-26-95 PWD PUT TO PRODUCING: 1-26-95

INITIAL PRODUCTION: 17 BOPD

GRAVITY A.P.I. 34

GOR: \_\_\_\_\_

PRODUCING ZONES: 16221-16248 (GRRV)

TOTAL DEPTH: 10000'

WELL ELEVATION: 5197 GR

DATE ABANDONED: \_\_\_\_\_

FIELD: UNDESIGNATED FIELD TREATY BOUNDARY 12-6-96

UNIT: NA

COUNTY: DUCHESNE

WELL NO. BALCRON FEDERAL #12-22Y API NO. 43-013-31476

LOCATION 2105' FNL FT. FROM (N) (S) LINE. 660' FWL FT. FROM (E) (W) LINE. SW NW 1/4 - 1/4 SEC. 22

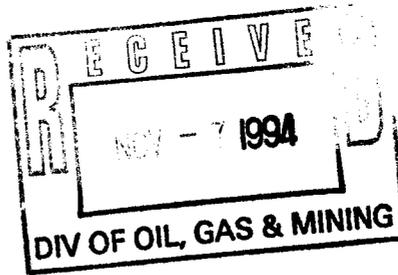
TWP.	RGE.	SEC.	OPERATOR	TWP.	RGE.	SEC.	OPERATOR
				8S	17E	22	Inland Prod. Co. <del>EQUIT RES ENERGY CO</del>



**EQUITABLE RESOURCES**  
**ENERGY COMPANY**

**BALCRON OIL DIVISION**

1601 Lewis Avenue  
P.O. Box 21017  
Billings, MT 59104



Office: (406) 259-7860  
FAX: (406) 245-1365   
FAX: (406) 245-1361

November 4, 1994

-- VIA FEDERAL EXPRESS --

Bureau of Land Management  
170 South 500 East  
Vernal, UT 84078

Gentlemen:

RE: Balcron Federal #12-22Y  
SW NW Section 22, T8S, R17E  
Duchesne County, Utah

Enclosed is our Application for Permit to Drill the referenced well.

The Notice of Staking for this well was submitted October 12, 1994, and an onsite inspection was held October 24, 1994. Federal lease #U-66191 expires January 1, 1995, and we will need to be drilling over that expiration date. In order to do that we will need to have an approved APD to begin building location by December 15, 1994.

As operator, we hereby request that the status of this well be held tight for the maximum period allowed by Federal and State regulations.

Sincerely,

Bobbie Schuman  
Regulatory and Environmental Specialist

/rs

Enclosure

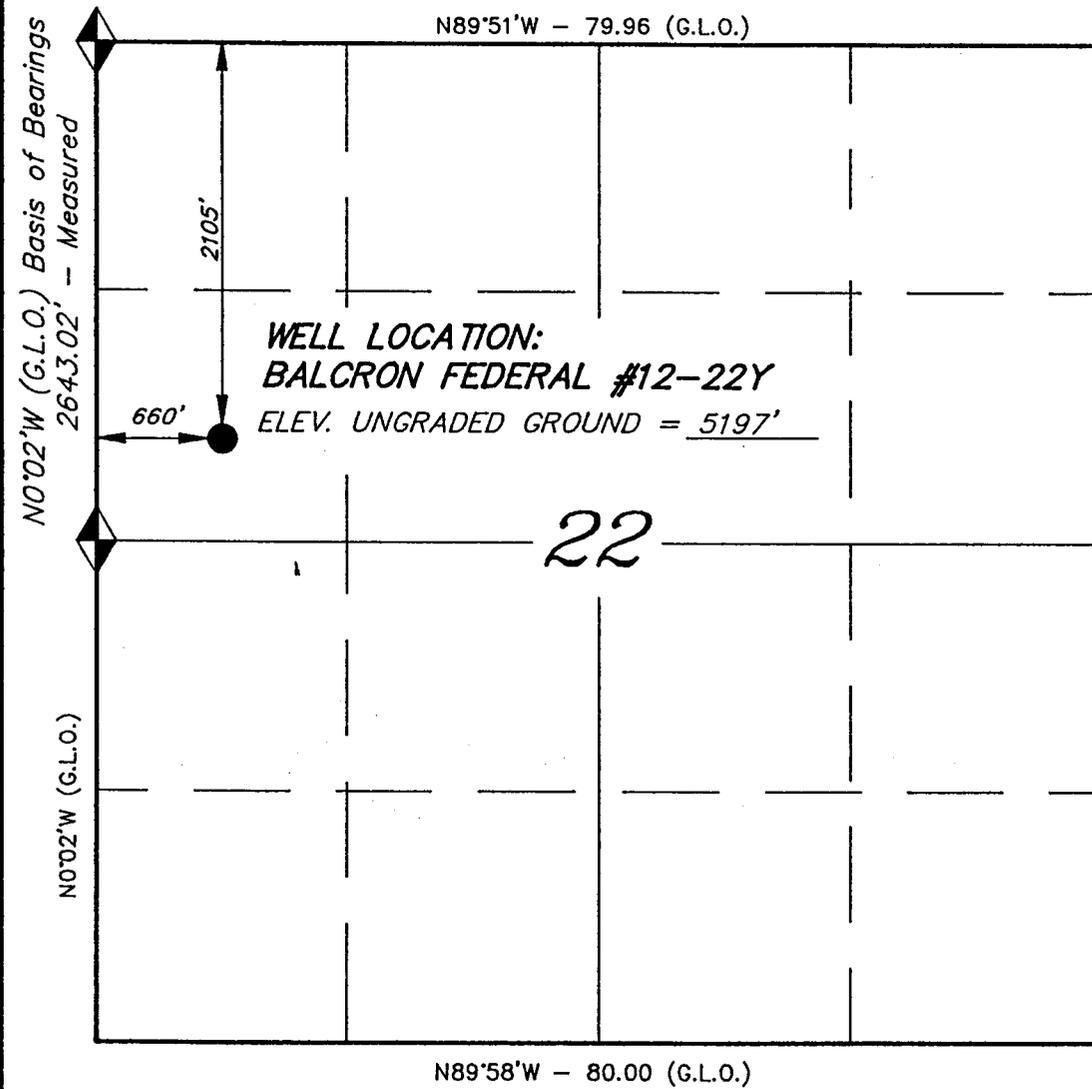
cc: Utah Division of Oil, Gas and Mining



T8S, R17E, S.L.B.&M.

**EQUITABLE RESOURCES ENERGY CO.**

WELL LOCATION, BALCRON FEDERAL #12-22Y,  
 LOCATED AS SHOWN IN THE SW 1/4 NW 1/4 OF  
 SECTION 22, T8S, R17E, S.L.B.&M. DUCHESNE  
 COUNTY, UTAH.

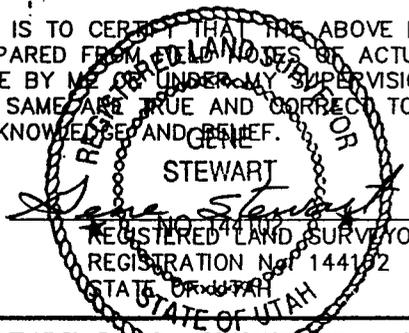


**WELL LOCATION:**  
**BALCRON FEDERAL #12-22Y**  
 ELEV. UNGRADED GROUND = 5197'

22



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

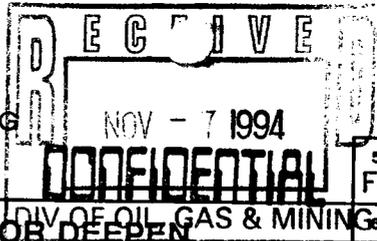


<b>TRI STATE LAND SURVEYING &amp; CONSULTING</b> 38 EAST 100 NORTH, VERNAL, UTAH 84078 (801) 781-2501	
SCALE: 1" = 1000'	SURVEYED BY: G.S.
DATE: 10-11-94	WEATHER: COOL
NOTES:	FILE #12-22Y

◆ = SECTION CORNERS LOCATED  
 BASIS OF BEARINGS; G.L.O. DATED 1910  
 BASIS OF ELEV; U.S.G.S. 7-1/2 min QUAD (MYTON SE)

EXHIBIT "K"

STATE OF UTAH  
DIVISION OF OIL, GAS AND MINING



5. Lease Designation and Serial Number:  
Federal # U-66191

6. If Indian, Allottee or Tribe Name:  
n/a

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

1A. Type of Work: DRILL  DEEPEN

7. Unit Agreement Name:  
n/a

B. Type of Well: OIL  GAS  OTHER: SINGLE ZONE  MULTIPLE ZONE

8. Farm or Lease Name:  
Balcron Federal

2. Name of Operator:  
Equitable Resources Energy Company, Balcron Oil Division

9. Well Number:  
# 12-22Y

3. Address and Telephone Number:  
P.O. Box 21017; Billings, MT 59104 (406) 259-7860

10. Field and Pool, or Wildcat:  
Undesignated Grn. River

4. Location of Well (Footages)  
At Surface: 2105' FNL, 660' FWL  
At Proposed Producing Zone:

11. Ctr/Otr, Section, Township, Range, Meridian:  
SW NW 22, T8S, R17E

14. Distance in miles and direction from nearest town or post office:  
Approximately 10.6 miles SE of Myton, Utah

12. County: Duchesne 13. State: UTAH

15. Distance to nearest property or lease line (feet):

16. Number of acres in lease:

17. Number of acres assigned to this well:

18. Distance to nearest well, drilling, completed, or applied for, on this lease (feet):

19. Proposed Depth: 6,600'

20. Rotary or cable tools:  
Rotary

21. Elevations (show whether DF, RT, GR, etc.):  
GL 5197'

22. Approximate date work will start:  
12/15/94

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
	See EXHIBIT "D"	Drilling Program/Casing Design		

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

Operator intends to drill this well in accordance with the attached Federal Application for Permit to Drill.

24. Name & Signature: Bobbie Schuman  
Bobbie Schuman

Regulatory and Environmental Specialist  
APPROVED BY THE STATE OF UTAH  
DATE: 12/15/94

(space for State use only)

API Number Assigned: 43-013-31476

Approval:

DATE: 12/17/94  
BY: [Signature]  
WELL SPACING: R649-3-2

## EXHIBITS

- A PROPOSED DRILLING PROGRAM
- B PROPOSED SURFACE USE PROGRAM
- C GEOLOGIC PROGNOSIS
- D DRILLING PROGRAM/CASING DESIGN/WELLBORE DIAGRAM
- E HAZMAT DECLARATION
- F EXISTING & PLANNED ACCESS ROADS (MAPS A & B)
- G WELLSITE LAYOUT
- H BOPE SCHEMATIC
- I EXISTING ROADS (MAP C)
- J PROPOSED PRODUCTION FACILITY DIAGRAM
- K SURVEY PLAT
- L LAYOUT/CUT & FILL DIAGRAM

11/2/94

# **CONFIDENTIAL**

**AS OPERATOR, WE HEREBY REQUEST THAT THE STATUS OF THIS WELL BE HELD TIGHT FOR THE MAXIMUM PERIOD ALLOWED BY FEDERAL AND STATE REGULATIONS.**

Equitable Resources Energy Company  
Balcron Oil Division  
P.O. Box 21017  
Billings, MT 59104  
(406) 259-7860

EQUITABLE RESOURCES ENERGY COMPANY  
Balcron Oil Division  
Balcron Federal # 12-22Y  
SW NW Section 22, T8S, R17E  
Duchesne County, Utah

In accordance with requirements outlined in 43 CFR 3162-3.1 (d):

1. ESTIMATED IMPORTANT GEOLOGICAL MARKERS:

See Geologic Prognosis (EXHIBIT "C")

2. ESTIMATED DEPTHS OF ANTICIPATED OIL, GAS OR WATER:

See Geologic Prognosis (EXHIBIT "C")

3. OPERATOR'S MINIMUM SPECIFICATIONS FOR PRESSURE CONTROL:

- a. EXHIBIT "H" is a schematic of the BOP equipment and choke manifold. A 2M system will be used. The BOPE will be installed after setting 8-5/8" casing at 400'. The blind rams and pipe rams will be tested to 1500 psi. Pipe rams will be operationally checked each 24-hour period and blind rams each time pipe is pulled out of the hole.
- b. The BOPE will be tested to 1500 psi when initially installed, whenever any seal subject to test pressure is broken, and following related repairs. The pipe and blind rams will be activated at least weekly and on every trip the pipe and blind rams will be activated.
- c. An accumulator of sufficient capacity to open the hydraulically-controlled choke valve lines (if so equipped), close all rams, and retain a minimum of 200 psi above precharge on the closing manifold without the use of the closing unit pumps will be installed during the drilling of this well.
- d. An upper kelly cock will be used during the drilling of this well.
- e. Visual mud monitoring equipment will be used to detect volume changes indicating loss or gain in circulating fluid volume.
- f. Sufficient quantities of mud materials will be maintained or readily accessible for the purpose of assuring well control.

4. PROPOSED CASING AND CEMENTING PROGRAM:

- a. Surface casing will be set in the Uinta formation to approximately 400' and cemented to surface.
- b. All potentially productive hydrocarbon zones will be isolated.

- c. Casing designs are based on factors of burst: 1.00, collapse: 1.125, and joint strength: 1.8.
- d. All casing strings will be pressure tested to 0.22 psi/ft. of casing string length or 1500 psi whichever is greater (not to exceed 70% of yield).
- E. For details of casing, cement program, drilling fluid program, and proposed mud program, see the following attachment:

Drilling Program/Casing Design (EXHIBIT "D")

5. HAZARDOUS PRESSURES, TEMPERATURES, FLUIDS/GASSES EXPECTED:

- a. Expected bottom hole temperature is 125 degrees F. Expected bottom hole pressure is 1500 psi.
- b. No abnormal pressures or temperatures have been noted or reported in wells drilled to the Grn.River formation in this area.
- c. No dangerous levels of hydrogen sulfide, hazardous fluids, or gasses have been found, reported, or known to exist at the depth to be drilled in this well, in this area.

6. ANTICIPATED STARTING DATE AND DURATION OF OPERATIONS:

- a. The drilling operations for this well will begin with location construction beginning approximately December 15, 1994.
- b. These drilling operations should be completed within 18 days after spudding the well depending on weather and hole conditions.
- c. If the well is productive, a sundry notice and plat showing exact installed facilities will be submitted.
- d. If this well is non-productive, a sundry notice will be filed with the BLM District Office within 30 days following completion of the well for abandonment.

SURFACE USE PROGRAM

EQUITABLE RESOURCES ENERGY COMPANY  
Balcron Oil Division  
Balcron Federal #12-22Y  
SW NW Section 22, T8S, R17E  
Duchesne County, Utah

In accordance with requirements outlined in 43 CFR 3162.3-1 (d):

1. EXISTING ROADS:

- a. From Myton, Utah, take Highway #40 west out of town 1.6 miles to the Sand Wash road. Go south on the Sand Wash road for 6.6 miles. Turn left and follow road 3.0 miles to the location.
- b. Existing roadways need no improvements for these drilling operations.
- c. All existing roads used by these drilling operations will be maintained in the same or better condition as were existing prior to entry.
- d. See EXHIBIT "F" Maps A and B for access route.

2. PLANNED ACCESS ROADS: See EXHIBIT "J" Maps A & B

- a. All access is on private surface.
- b. All travel will be confined to location and access routes.
- c. As all access is on private surface no right-of-way applications are needed for this road.

3. LOCATION OF EXISTING WELLS:

See EXHIBIT "I" Map C.

4. LOCATION OF EXISTING AND/OR PROPOSED PRODUCTION FACILITIES:

See EXHIBIT "J" which is the proposed production facility diagram.

5. LOCATION AND TYPE OF WATER SUPPLY:

- a. The drilling water source will be obtained from a private source owned by Joe Shields. A copy of the State-approved permit is on file in the Vernal District Bureau of Land Management office.
- b. The drilling water will be hauled by truck to the location site.

6. CONSTRUCTION ROAD/LOCATION MATERIALS:

- a. Any construction materials which are required will be native materials from the location and/or access site.
- b. All construction materials for this location site and access road shall be borrowed material accumulated during the construction of the site and road. No additional construction material from other sources is anticipated at this time.
- c. Reasonable precautions will be taken to protect all lands.

7. METHODS FOR HANDLING WASTE MATERIALS AND DISPOSAL:

- a. Garbage will be stored in a dumpster and disposed of according to local and state regulations, at an approved facility. Disposal will not be allowed on location. No trash will be disposed of in the reserve pit.
- b. Fluids produced during the completion operation will be collected in test tanks. Any spills of oil, gas, salt water or other noxious fluids will be cleaned up and hauled to an approved disposal site. Burning will not be allowed.
- c. The reserve pit will be lined.
- d. Saltwater or testing tanks will be located and/or diked so that any spilled fluids will flow into the reserve pit. Saltwater tanks will not be placed on topsoil stockpiles.
- e. Sewage will be disposed of according to county and state requirements. Sealed chemical portable toilets will be on location during these drilling operations. Waste and chemicals will not be disposed of on location.
- f. Cuttings will be deposited in the reserve pit.

8. ANCILLARY FACILITIES:

None anticipated.

9. LOCATION SITE LAYOUT:

- a. The proposed location site and elevation plat (survey plat) is shown on EXHIBIT "K".
- b. The drill pad layout, showing elevations, orientation, and access to the pad is shown on EXHIBIT "L".
- c. The drilling rig facilities layout is shown on EXHIBIT "G". No permanent living facilities are planned. There will be two or three trailers on location during drilling operations.

10. PLANS FOR RECLAMATION OF LOCATION SITE:

Reclamation will be done in accordance with the agreement with the surface owner.

11. SURFACE OWNERSHIP:

Clark Roberts  
Route 3, Box 3675  
Myton, UT 84052

12. OTHER INFORMATION:

- a. The surface owner has waived any archeological surveys.
- b. Operator will have on site a copy of the Surface Use Program and a copy of the supplemental conditions.
- c. Downhole drilling operations will be conducted in accordance with the Bureau of Land Management conditions of approval when received. The surface operations will be conducted in accordance with the agreement reached with the surface owner.
- d. Equitable Resources Energy Company, Balcron Oil Division has reached an agreement with the surface owner, L. Clark Roberts, as to the requirements for the protection of surface resources and reclamation of disturbed areas and/or damages in lieu thereof.

13. OPERATOR'S REPRESENTATIVES:

Equitable Resources Energy Company, Balcron Oil Division  
1601 Lewis Avenue  
P.O. Box 21017  
Billings, Montana 59104  
(8:00 a.m. to 5:00 p.m.)  
(406) 259-7860  
FAX: (406) 245-1361

Dave McCoskery, Drilling Engineer Home: (406) 248-3864

Dale Griffin, Operations Supervisor Home: (801) 781-1018  
Mobile: (801) 828-7291

14. CERTIFICATION:

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drillsite and access route; that I am familiar with the conditions which presently exist; that any statements made in this plan are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed by Balcron Oil, a division of Equitable Resources Energy Company, and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provisions of 18 U.S.C. 1001 for the filing of a false statement.

November 4, 1994  
Date

Bobbie Schuman  
Bobbie Schuman  
Regulatory and Environmental  
Specialist  
Equitable Resources Energy  
Company, Balcron Oil Division

11/3/94  
/rs

# Balcron Oil Well Prognosis

EXHIBIT "C"

<b>Well Name</b> <u>BALCRON FEDERAL #12-22Y</u>	<b>Exploratory</b> _____	<b>Control Well</b> <u>BOUND FED #11-2</u>
<b>Location</b> <u>SWNW SEC 22-T8S-R17E 2105' FNL, 660' FWL</u>	<b>Development</b> <u>X</u>	<b>Operator</b> <u>LOMAX</u>
<b>County</b> <u>DUCHESNE</u>	<b>Field</b> <u>MON BUTTE</u>	<b>KB</b> <u>5252</u>
<b>State</b> <u>UTAH</u>	<b>Section</b> <u>SWNW 22</u>	<b>Section</b> <u>NESW 21</u>
<b>Total Depth</b> <u>6600</u>	<b>Township</b> <u>8S</u>	<b>Township</b> <u>8S</u>
<b>GL (Ung)</b> <u>5197</u> <b>EST. KB</b> <u>5205</u>	<b>Range</b> <u>17E</u>	<b>Range</b> <u>17E</u>

Formation	Prognosis		Sample Top		Control Well	High/Low		Deviation
	Depth	Datum	Depth	Datum	Datum	Prog	Cntl	
UINTA	SURFACE							
GREEN RIVER	1923	3282			3352			
HORSEBENCH SS	2753	2452			2522			
2ND GARDEN GULCH	4442	763			833			
Y-3 SAND (PAY)	4821	384			454			
YELLOW MARKER	5074	131			201			
DOUGLAS CREEK	5246	-41			29			
R-2 SAND (PAY)	5343	-138			-68			
R-5 SAND (PAY)	5439	-234			-164			
2ND DOUGLAS CREEK	5512	-307			-237			
GREEN MARKER	5672	-467			-397			
G-5 SAND (PAY)	5800	-595			-525			
CARBONATE MARKER	6100	-895			NDE			
B-1 SAND (PAY)	6144	-939			NDE			
UTELAND BUTTE LS	6516	-1311						
TD	6600							

**Samples**  
50' FROM 1900' TO 4500'  
30' FROM 4500' TO TD  
5' THROUGH EXPECTED PAYS  
5' THOUGH DRILLING BREAKS

**DST,s**  
DST #1 NONE  
DST #2  
DST #3  
DST #4

**Wellsite Geologist**  
 Name: \_\_\_\_\_  
 From: \_\_\_\_\_ to: \_\_\_\_\_  
 Address: \_\_\_\_\_  
 Phone # \_\_\_\_\_ wk \_\_\_\_\_ hm \_\_\_\_\_  
 Fax # \_\_\_\_\_

**Logs**  
DLL FROM SURF CSG TO TD  
LDT/CNL FROM 4200' TO TD  
 \_\_\_\_\_  
 \_\_\_\_\_

**Cores**  
Core #1 NONE  
Core #2  
Core #3  
Core #4

**Mud Logger/Hot Wire**  
 Company: \_\_\_\_\_  
 Required: (Yes/No) YES  
 Type: IWO MAN  
 Logger: \_\_\_\_\_  
 Phone # \_\_\_\_\_  
 Fax # \_\_\_\_\_

**Comments:** \_\_\_\_\_  
 \_\_\_\_\_

**Report To:** 1st Name: DAVE BICKERSTAFF Phone # (406) 259-7860 wk. 245-2261 hm \_\_\_\_\_  
 2nd Name: KEVEN REINSCHMIDT Phone # " wk. 248-7026 hm \_\_\_\_\_  
**Prepared By:** K.K. REINSCHMIDT 11/2/94 Phone # \_\_\_\_\_ wk. \_\_\_\_\_ hm \_\_\_\_\_

Equitable Resources Energy Company  
Balcron Oil Division

DRILLING PROGRAM

WELL NAME: Balcron Federal #12-22Y      PROSPECT/FIELD: Exploratory  
LOCATION: SW NW Sec.22 Twn.8S Rge.17E  
COUNTY: Duchesne                              STATE: Utah

TOTAL DEPTH: 6600'

HOLE SIZE      INTERVAL

12 1/4"      Surface to 400'  
7 7/8"      400' to 6600' (TD)

CASING	INTERVAL		CASING			
	STRING TYPE	FROM	TO	SIZE	WEIGHT	GRADE
Surface Casing		0	400	8 5/8"	24 lb/ft	J55
Production Casing		0	6600	5 1/2"	15.50	K55

(All casing strings will be new, 8 Rd, ST&C)

CEMENT PROGRAM

Surface      350 sacks Class "G" with 2% CaCl and 1/4 lb/sack Flocele.  
(Cement will be circulated to surface.)

Production      225 sacks Thrify Lite and 400 sacks 50-50 Pozmix.  
(Actual cement volumes will be calculate from caliper log with cement top being 2000')

PRELIMINARY DRILLING FLUID PROGRAM

TYPE	FROM	TO	WEIGHT	PLAS. VIS	YIELD POINT
Air and air mist	Surf	400	N.A.	N.A.	N.A.
Air/Air Mist/KCl Water	400	6600	8.7-8.9	N.A.	N.A.

COMMENTS

1.) No cores or DST's are planned.

Operator: BALCRON OIL	Well Name: Balcron Fed. 12-22Y
Project ID:	Location: Uintah Co., Utah

Design Parameters:

Mud weight ( 9.00 ppg) : 0.468 psi/ft  
 Shut in surface pressure : 2793 psi  
 Internal gradient (burst) : 0.100 psi/ft  
 Annular gradient (burst) : 0.000 psi/ft  
 Tensile load is determined using air weight  
 Service rating is "Sweet"

Design Factors:

Collapse : 1.125  
 Burst : 1.00  
 8 Round : 1.80 (J)  
 Buttress : 1.60 (J)  
 Body Yield : 1.50 (B)  
 Overpull : 0 lbs.

Length (feet)	Size (in.)	Weight (lb/ft)	Grade	Joint	Depth (feet)	Drift (in.)	Cost		
1	6,600	5-1/2"	15.50	K-55	ST&C	6,600	4.825		
	Collapse Load (psi)	Strgth (psi)	S.F.	Burst Load (psi)	Min Int Strgth (psi)	Yield S.F.	Tension Load (kips)	Strgth (kips)	S.F.
1	3553	4040	1.137	3553	4810	1.35	117.80	222	1.88 J

Prepared by : McCoskery, Billings, MT  
 Date : 11-03-1994  
 Remarks :

Minimum segment length for the 6,600 foot well is 1,500 feet.  
 The mud gradient and bottom hole pressures (for burst) are 0.468 psi/ft and  
 3,553 psi, respectively.

**NOTE:** The design factors used in this casing string design are as shown above. As a general guide-  
 line, Lone Star Steel recommends using minimum design factors of 1.125 - Collapse (with  
 evacuated casing), 1.0 - Burst, 1.8 - 8 Round Tension, 1.6 - Buttress Tension, and 1.5 - Body  
 Yield. Collapse strength under axial tension was calculated based on the Westcott, Dunlop and  
 Kemler curve. Engineering responsibility for use of this design will be that of the purchaser.  
 Costs for this design are based on a 1990 pricing model. (Version 1.0G)

EXHIBIT E

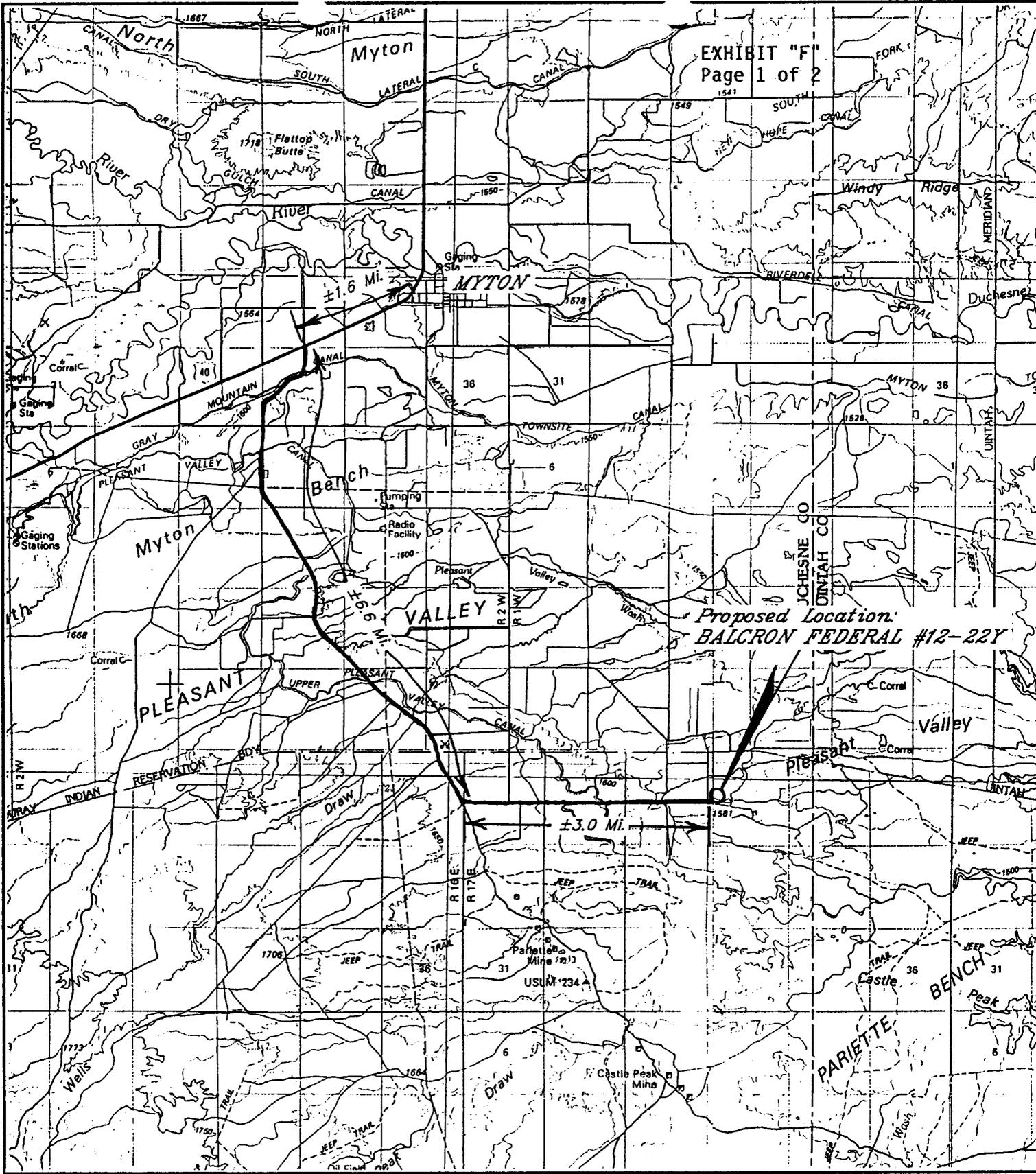
- A. Hazardous chemicals 10,000 pounds of which will most likely be used, produced, stored, transported, or disposed of in association with the proposed action of drilling, completing and producing this well:

We anticipate that none of the hazardous chemicals in quantities of 10,000 pounds or more will be associated with these operations.

- B. Extremely hazardous substances threshold quantities (per Howard Cleavinger 11/30/93) of which will be used, produced, stored, transported, or disposed of in association with the proposed action of drilling, completing and producing this well:

We anticipate that none of the extremely hazardous substances in threshold quantities per 40 CFR 355 will be associated with these operations.

12/1/93  
Revised 12/7/93  
/rs



Proposed Location:  
BALCRON FEDERAL #12-22Y

**EQUITABLE RESOURCES CO.**

BALCRON FEDERAL #12-22Y  
SECTION 22, T8S, R17E, S.L.B.&M.  
TOPO "A"



**Tri State**  
Land Surveying, Inc.  
(801) 781-2501  
38 WEST 100 NORTH VERNAL, UTAH 84078



UNION DRILLING RIG #17

Hex Kelly -

ROTATING HEAD

AIR BOWL

#3000  
BLIND RAM-PIPE RAM

3" GATE VALVE

ADJ. CHOKE

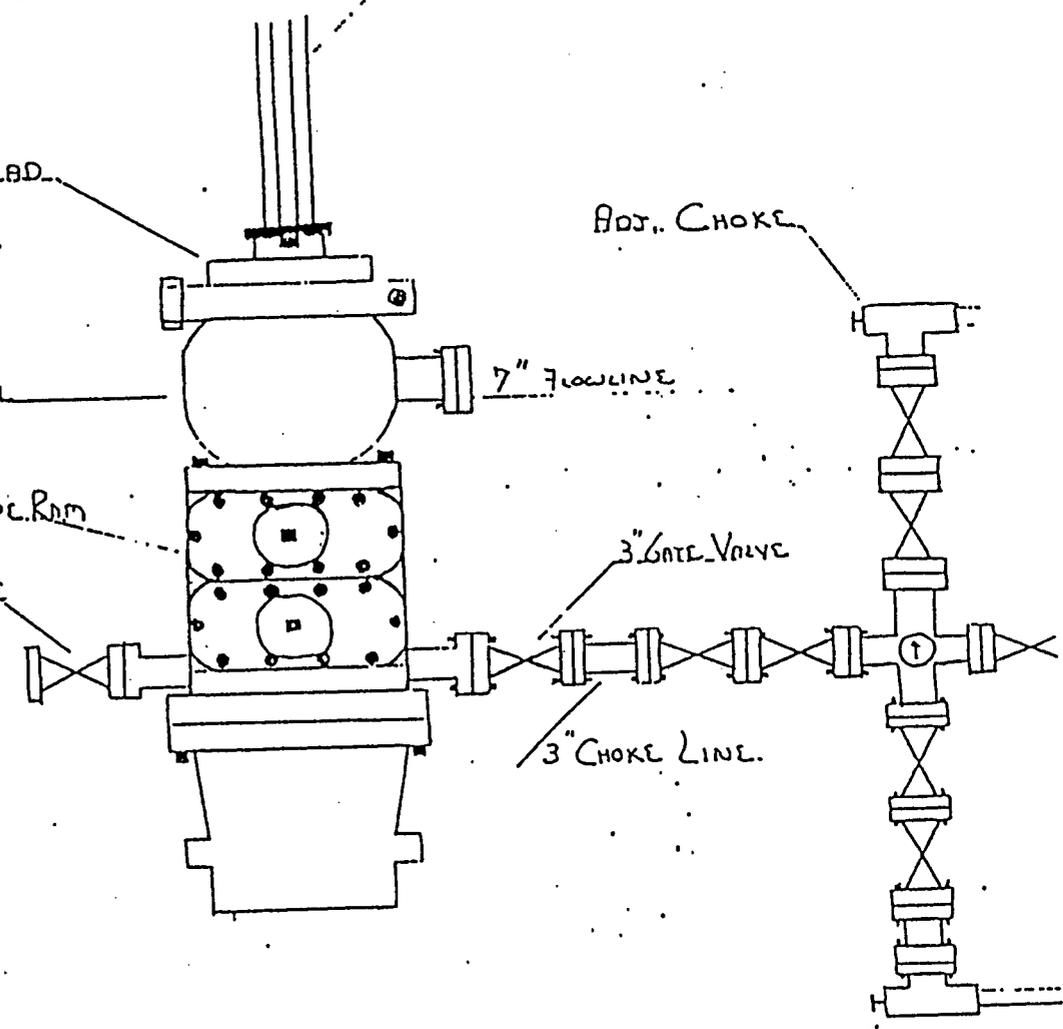
7" FLOWLINE

3" GATE VALVE

3" CHOKE LINE

ADJ. CHOKE

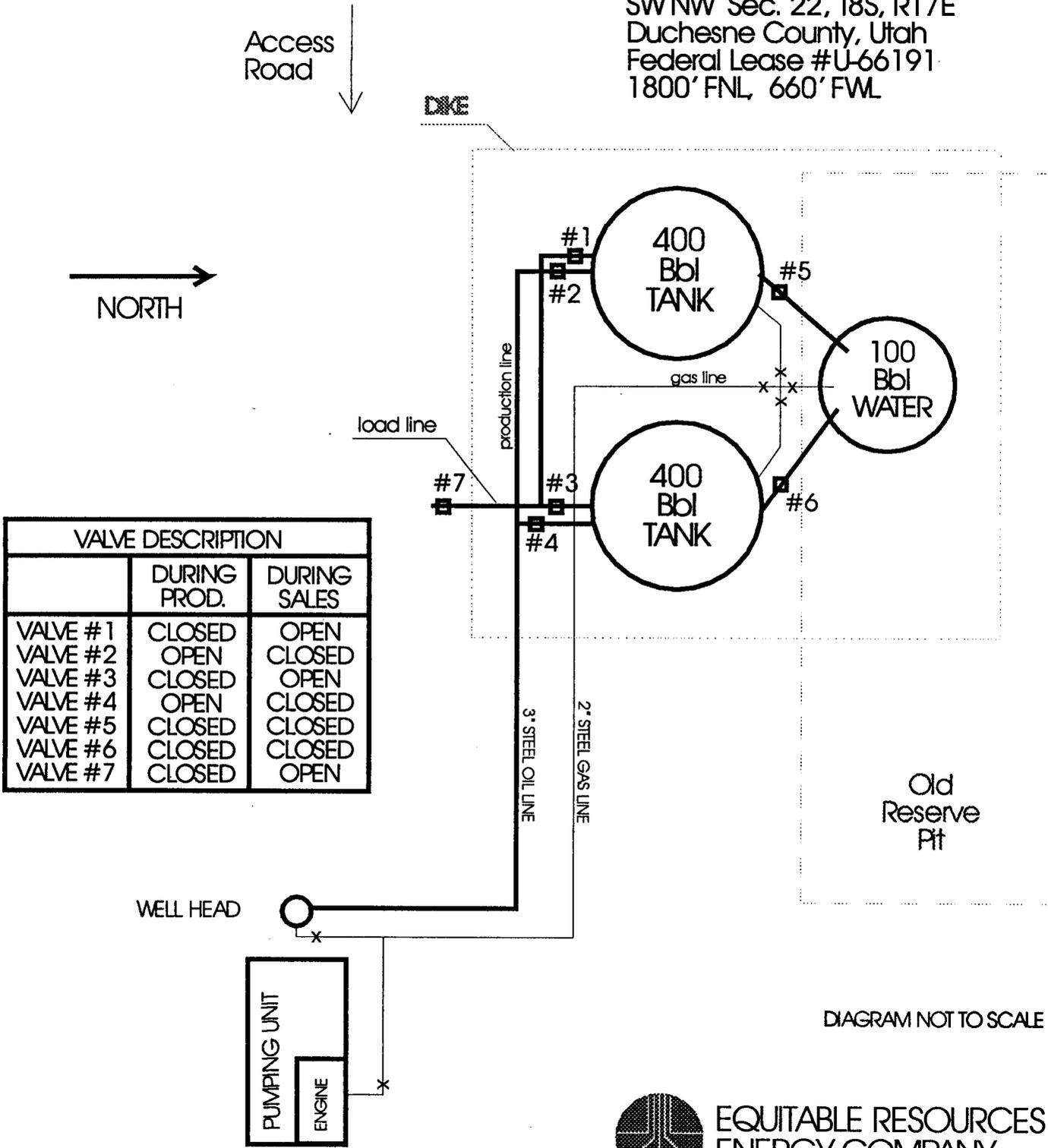
#3000 STACK



Equitable Resources Energy Company  
 Balcron Federal 12-22Y  
 Proposed Production Facility Diagram

EXHIBIT "J"

Balcron Federal 12-22Y  
 SWNW Sec. 22, T8S, R17E  
 Duchesne County, Utah  
 Federal Lease #U-66191  
 1800' FNL, 660' FWL



VALVE DESCRIPTION		
	DURING PROD.	DURING SALES
VALVE #1	CLOSED	OPEN
VALVE #2	OPEN	CLOSED
VALVE #3	CLOSED	OPEN
VALVE #4	OPEN	CLOSED
VALVE #5	CLOSED	CLOSED
VALVE #6	CLOSED	CLOSED
VALVE #7	CLOSED	OPEN

DIAGRAM NOT TO SCALE



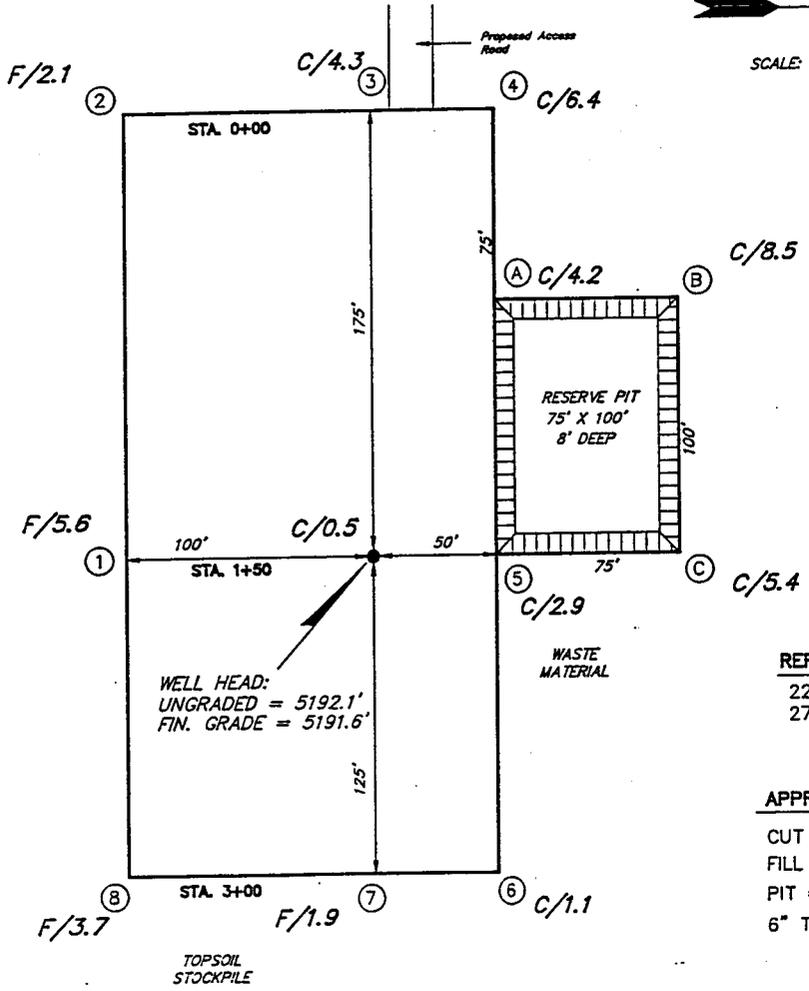
EQUITABLE RESOURCES  
 ENERGY COMPANY

BALCRON OIL DIVISION  
 1601 Lewis Avenue  
 P.O. Box 21017  
 Billings, MT 59104-1017  
 (406) 259-7860

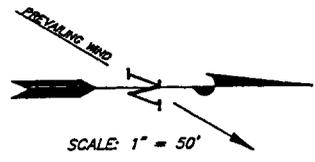
EXHIBIT "L"

**EQUITABLE RESOURCES ENERGY CO.**

**BALCRON FEDERAL #12-22Y  
SECTION 22, T8S, R17E, S.L.B.&M.**

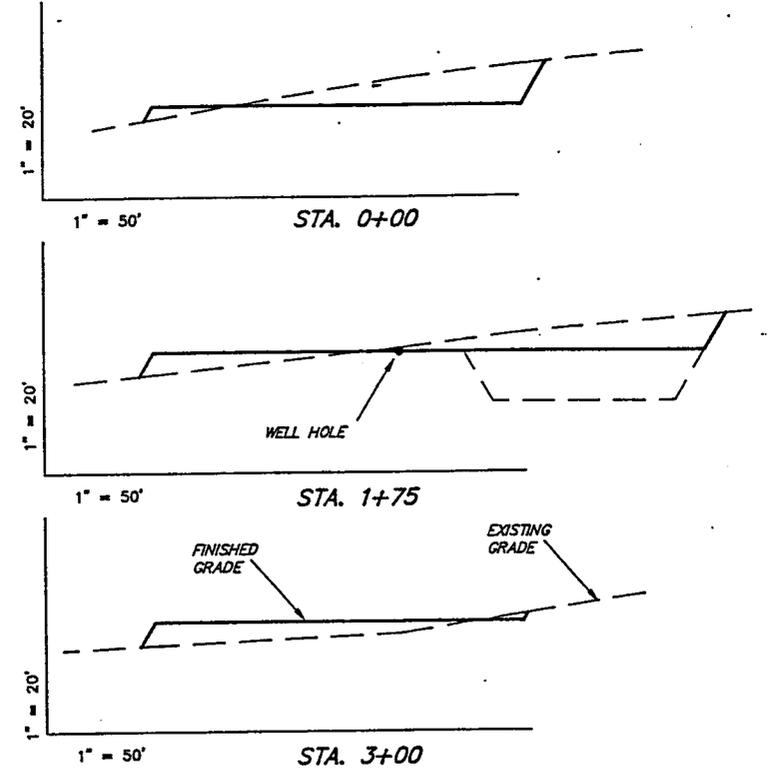


WELL HEAD:  
UNGRADED = 5192.1'  
FIN. GRADE = 5191.6'



**REFERENCE POINTS**  
225.0' WEST 5190.5'  
275.0' WEST 5190.7'

**APPROXIMATE YARDAGES**  
CUT = 3490 Cu. Yds.  
FILL = 2460 Cu. Yds.  
PIT = 2220 Cu. Yds.  
6" TOPSOIL = 970 Cu. Yds.



SURVEYED BY: G.S. G.H.
DRAWN BY: R.H.
DATE: 10-14-94
SCALE: 1" = 50'
FILE: 12-22Y

**Tri State**  
Land Surveying, Inc.  
(801) 781-2501  
38 WEST 100 NORTH VERNAL, UTAH 84078

WORKSHEET  
APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 11/07/94

API NO. ASSIGNED: 43-013-31476

WELL NAME: BALCRON 12-22Y  
OPERATOR: EQUITABLE RESOURCES (N9890)

PROPOSED LOCATION:  
SWNW 22 - T08S - R17E  
SURFACE: 2105-FNL-0660-FWL  
BOTTOM: 2105-FNL-0660-FWL  
DUCHESNE COUNTY  
UNDESIGNATED FIELD (002)

INSPECT LOCATION BY: / /		
TECH REVIEW	Initials	Date
Engineering		
Geology		
Surface		

LEASE TYPE: FED  
LEASE NUMBER: U-66191

PROPOSED PRODUCING FORMATION: GRRV

RECEIVED AND/OR REVIEWED:

Plat  
 Bond: Federal  State  Fee   
 (Number 5547188)

Potash (Y/N)  
 Oil shale (Y/N)  
 Water permit  
 (Number JOE SAHEDS WELL)

RDCC Review (Y/N)  
 (Date: \_\_\_\_\_)

LOCATION AND SITING:

\_\_\_ R649-2-3. Unit: \_\_\_\_\_

R649-3-2. General.

\_\_\_ R649-3-3. Exception.

\_\_\_ Drilling Unit.  
 Board Cause no: \_\_\_\_\_  
 Date: \_\_\_\_\_

COMMENTS: \_\_\_\_\_

CONFIDENTIAL  
PERIOD  
EXPIRED  
ON 2-26-96

STIPULATIONS: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**STATE OF UTAH**

<b>Operator: EQUITABLE RESOURCES</b>	<b>Well Name: BALCRON FED. 12-22Y</b>
<b>Project ID: 43-013-31476</b>	<b>Location: SEC. 22 - T088 - R17E</b>

Design Parameters:

Mud weight ( 8.90 ppg) : 0.462 psi/ft  
 Shut in surface pressure : 2624 psi  
 Internal gradient (burst) : 0.065 psi/ft  
 Annular gradient (burst) : 0.000 psi/ft  
 Tensile load is determined using buoyed weight  
 Service rating is "Sweet"

Design Factors:

Collapse : 1.125  
 Burst : 1.00  
 8 Round : 1.80 (J)  
 Buttress : 1.60 (J)  
 Other : 1.50 (J)  
 Body Yield : 1.50 (B)

Length (feet)	Size (in.)	Weight (lb/ft)	Grade	Joint	Depth (feet)	Drift (in.)	Cost		
1	6,600	5.500	15.50	K-55	ST&C	6,600	4.825		
	<b>Load (psi)</b>	<b>Collapse Strgth (psi)</b>	<b>S.F.</b>	<b>Burst Load (psi)</b>	<b>Min Int Strgth (psi)</b>	<b>Yield S.F.</b>	<b>Tension Load (kips)</b>	<b>Strgth (kips)</b>	<b>S.F.</b>
1	3051	4040	1.324	3051	4810	1.58	88.38	222	2.51 J

Prepared by : FRM, Salt Lake City, UT  
 Date : 12-08-1994  
 Remarks :

Minimum segment length for the 6,600 foot well is 1,000 feet.  
 SICP is based on the ideal gas law, a gas gravity of 0.69, and a mean gas temperature of 107°F (Surface 74°F , BHT 140°F & temp. gradient 1.000°/100 ft.)  
 The mud gradient and bottom hole pressures (for burst) are 0.462 psi/ft and 3,051 psi, respectively.

**NOTE:** The design factors used in this casing string design are as shown above. As a general guideline, Lone Star Steel recommends using minimum design factors of 1.125 - Collapse (with evacuated casing), 1.0 - Burst, 1.8 - 8 Round Tension, 1.6 - Buttress Tension, and 1.5 - Body Yield. Collapse strength under axial tension was calculated based on the Westcott, Dunlop and Kemler curve. Engineering responsibility for use of this design will be that of the purchaser. Costs for this design are based on a 1987 pricing model. (Version 1.06)

**EQUIPMENT INVENTORY**  
**UTAH DIVISION OF OIL, GAS AND MINING**  
**STATE OF UTAH**

Operator: EQUITABLE RESOURCES Lease: State:      Federal: Y Indian:      Fee:     

Well Name: BALCRON FEDERAL #12-22Y API Number: 43-013-31476

Section: 22 Township: 8S Range: 17E County: DUCHESNE Field: TREATY BOUNDARY

Well Status: POW Well Type: Oil:      Gas:     

**PRODUCTION LEASE EQUIPMENT: (NUMBER)**

Boiler(s):      Compressor(s):      Separator(s):      Dehydrator(s):     

Shed(s):      Line Heater(s):      Heated Separator(s):      VRU:     

Heater Treater(s): (1)

**PUMPS:**

Triplex:      Chemical:      Centrifugal: (1)

**LIFT METHOD:**

Pumpjack: Y Hydraulic:      Submersible:      Flowing:     

**GAS EQUIPMENT: (NUMBER)**

Purchase Meter: N Sales Meter: N

**TANKS:**

	NUMBER	SIZE	
Oil Storage Tank(s):	<u>YES</u>	<u>2-400 OIL TANKS</u>	BBLs
Water Tank(s):	<u>YES</u>	<u>1-150 WATER</u>	BBLs
Power Water Tank:	<u>N</u>	<u>    </u>	BBLs
Condensate Tank(s):	<u>N</u>	<u>    </u>	BBLs
Propane Tank:	<u>(1)</u>	<u>    </u>	

**Central Battery Location: (IF APPLICABLE)**

Qtr/Qtr:      Section:      Township:      Range:     

REMARKS: NO METERS. RUNNING ON CASING GAS WITH PROPANE FOR BACKUP.

CENTRIFUGAL IS FOR HEAT TRACE. GAS WAS NOT VENTING WHILE ON LEASE.

Inspector: DENNIS L. INGRAM Date: 2/7/95

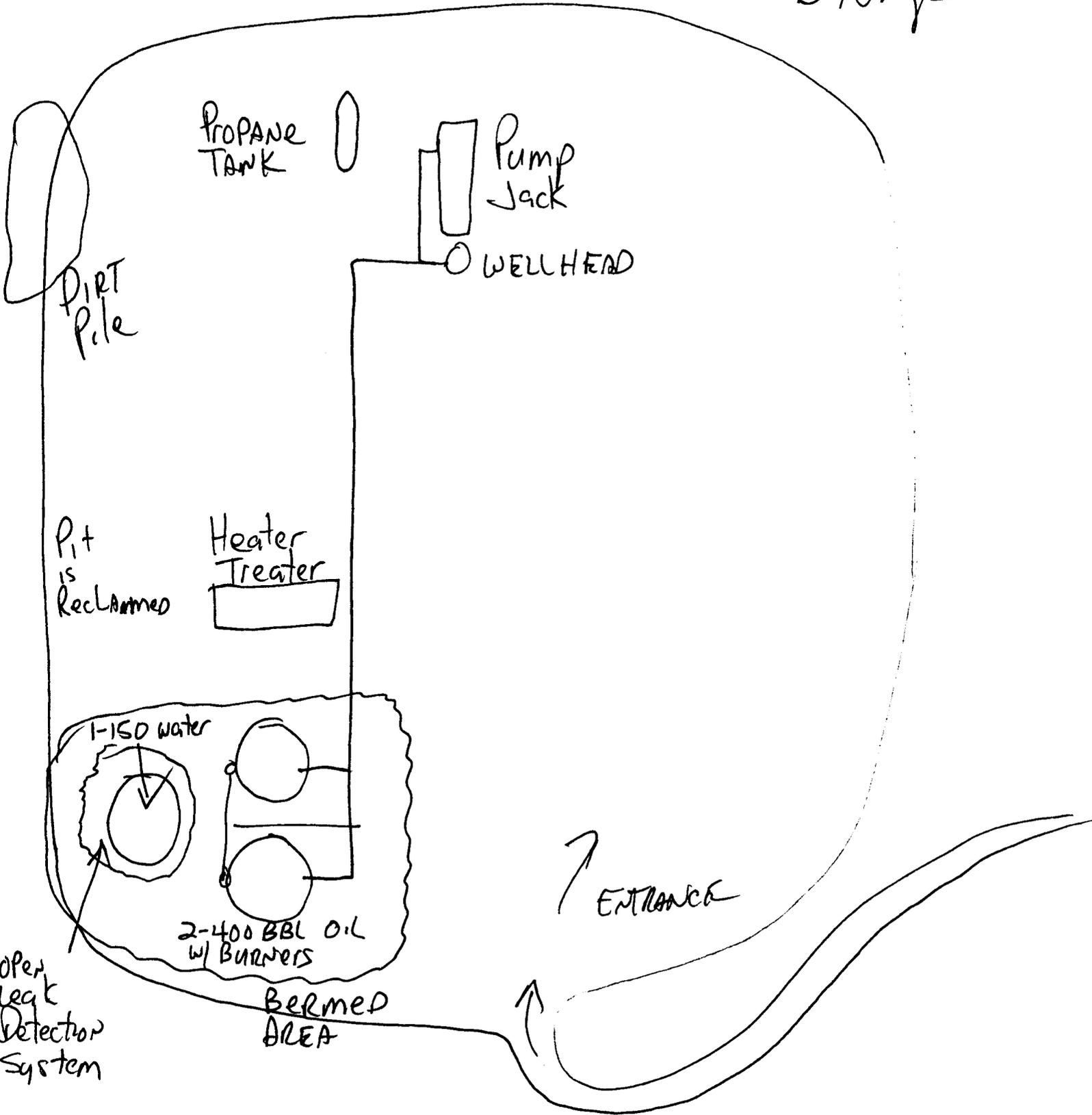
2/7/95

≡ QUITABLE RESOURCES ENERGY  
BALCROW FEDERAL 12-224  
Sec 22 ; T8S ; R17E  
POW

43-013-31476

← NORTH

*D. Hays*





**EQUITABLE RESOURCES  
ENERGY COMPANY**

**BALCRON OIL DIVISION**

1601 Lewis Avenue  
P.O. Box 21017  
Billings, MT 59104

Office: (406) 259-7860  
FAX: (406) 245-1365   
FAX: (406) 245-1361

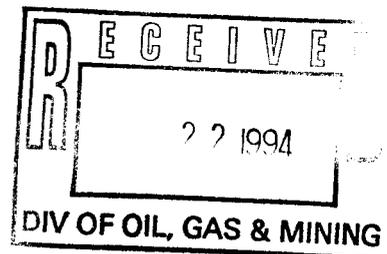
November 21, 1994

-- VIA FEDERAL EXPRESS --

Sally Gardiner  
Legal Instruments Examiner  
Bureau of Land Management  
170 South 500 East  
Vernal, UT 84078

Dear Sally:

RE: Balcron Federal #12-22Y *43-013-31476*  
SW NW Section 22, T8S, R17E  
Duchesne County, Utah



As requested, attached is a copy of the combined Private Surface Owner Waiver and Surface Agreement for the referenced well.

We would like to begin building location the week of December 5, 1994, so would appreciate a prompt turnaround on approval of this APD. I'd appreciate it if you would call me when it is ready, Sally, as we would like a copy kept at your office so that our representative can pick it up.

Thanks for your help in this matter. If you have any questions, please give me a call at (406) 259-7860.

Sincerely,

*Bobbie Schuman*

Bobbie Schuman  
Regulatory and Environmental Specialist

/hs

Attachment

cc: Utah Division of Oil, Gas and Mining  
Stan Olmstead, Vernal BLM

RECEIVED NOV 14 1994



EQUITABLE RESOURCES ENERGY COMPANY

BALCRON OIL DIVISION

1601 Lewis Avenue
P.O. Box 21017
Billings, MT 59104

Office: (406) 259-7860
FAX: (406) 245-1365
FAX: (406) 245-1361

LESSOR: UTU-66191

SURFACE OWNER: L. Clark Roberts & Barbara J. Roberts, husband & wife

WELL: Balcron Federal #12-22Y

WELLSITE: TOWNSHIP 8 SOUTH, RANGE 17 EAST
COUNTY Duchesne
STATE Utah

I CERTIFY THAT L. Clark Roberts & Barbara J. Roberts HAVE REACHED AN AGREEMENT WITH EQUITABLE RESOURCES ENERGY COMPANY, BALCRON OIL DIVISION AS TO THE REQUIREMENTS FOR THE PROTECTION OF SURFACE RESOURCES AND RECLAMATION OF DISTURBED AREAS AND/OR DAMAGES IN LIEU THEREOF. THE UNDERSIGNED ALSO WAIVE ANY ARCHEOLOGICAL ASSESSMENTS THAT MAY BE REQUIRED BY THE UTAH BUREAU OF LAND MANAGEMENT.

OCTOBER 24, 1994
DATE

[Signature of L. Clark Roberts]
SURFACE OWNER

OCTOBER 24, 1994
DATE

[Signature of Barbara J. Roberts]
SURFACE OWNER

OCTOBER 24, 1994
DATE

[Signature of D. Gary Keeney]
REPRESENTATIVE OF OPERATOR



**State of Utah**  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

Michael O. Leavitt  
Governor

Ted Stewart  
Executive Director

James W. Carter  
Division Director

355 West North Temple  
3 Triad Center, Suite 350  
Salt Lake City, Utah 84180-1203  
801-538-5340  
801-359-3940 (Fax)  
801-538-5319 (TDD)

December 7, 1994

**Equitable Resources Energy Company**  
P.O. Box 21017  
Billings, Montana 59104

Re: Balcron Federal #12-22Y Well, 2105' FNL, 660' FWL, SW NW, Sec. 22, T. 8 S., R. 17 E., Duchesne County, Utah

Gentlemen:

Pursuant to Utah Admin. R. 649-3-2, Location and Siting of Wells and Utah Admin. R. 649-3-4, Permitting of Wells to be Drilled, Deepened or Plugged-Back, approval to drill the referenced well is hereby granted.

In addition, the following specific actions are necessary to fully comply with this approval:

1. Compliance with the requirements of Utah Admin. R. 649-1 et seq., the Oil and Gas Conservation General Rules.
2. Notification to the Division within 24 hours after drilling operations commence.
3. Submittal of Entity Action Form, Form 6, within five working days following commencement of drilling operations and whenever a change in operations or interests necessitates an entity status change.
4. Submittal of the Report of Water Encountered During Drilling, Form 7.
5. Compliance with the requirements of Utah Admin. R. 649-3-20, Gas Flaring or Venting, if the well is completed for production.
6. Prompt notification prior to commencing operations, if necessary, to plug and abandon the well. Notify Frank R. Matthews, Petroleum Engineer, (Office) (801)538-5340, (Home) (801)476-8613, or K. Michael Hebertson, Reclamation Specialist, (Home) (801)269-9212.



Page 2  
Equitable Resources Energy Company  
Balcron Federal #12-22Y Well  
December 7, 1994

This approval shall expire one year after date of issuance unless substantial and continuous operation is underway or a request for an extension is made prior to the approval expiration date. The API number assigned to this well is 43-013-31476.

Sincerely,



R.J. Firth  
Associate Director

ldc  
Enclosures  
cc: Duchesne County Assessor  
Bureau of Land Management, Vernal District Office  
WO11

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

**CONFIDENTIAL**

5. LEASE DESIGNATION AND SERIAL NO.

6. IS INDIAN, ALLOTTEE OR TRIBE NAME

**APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK**

1a. TYPE OF WORK  
 DRILL  DEEPEN  PLUG BACK

n/a

7. UNIT AGREEMENT NAME

n/a

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

8. FARM OR LEASE NAME

Balcron Federal

2. NAME OF OPERATOR

Equitable Resources Energy Company, Balcron Oil Division

9. WELL NO.

# 12-22Y

3. ADDRESS OF OPERATOR

P.O. Box 21017; Billings, MT 59104

10. FIELD AND POOL, OR WILDCAT

Undesignated/Green River

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)  
 At surface

SW NW Section 22, T8S, R17E 2105' FNL, 660' FWL  
 At proposed prod. zone

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

Sec. 22, T8S, R17E

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

Approximately 10.6 miles SE of Myton, Utah

12. COUNTY OR PARISH

Duchesne

13. STATE

UTAH

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

16. NO. OF ACRES IN LEASE

17. NO. OF ACRES ASSIGNED TO THIS WELL

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

19. PROPOSED DEPTH  
 6,600'

20. ROTARY OR CABLE TOOLS  
 Rotary

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

GL 5197'

22. APPROX. DATE WORK WILL START\*

12/15/94

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
See EXHIBIT "D" Drilling	Program/Casing	Design		

Operator intends to drill this well in accordance with the attached EXHIBITS. A listing of EXHIBITS is also attached.

NOV 07 1994

**SELF CERTIFICATION:** I hereby certify that I am authorized, by proper lease interest owner, to conduct these operations associated with the application. Bond coverage pursuant to 43 CFR 3104 for lease activities is being provided by Equitable Resources Energy Company as principal and Safeco Insurance Company of America as surety under BLM Bond No. MT 0576 (Nationwide Oil & Gas Bond #5547188) who will be responsible for compliance with all of the terms and conditions of that portion of the lease associated with this application.

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 Bobbie Schuman TITLE Regulatory and Environmental Specialist DATE November 4, 1994  
 Bobbie Schuman

(This space for Federal or State office use)

**NOTICE OF APPROVAL**

PERMIT NO. \_\_\_\_\_ APPROVAL DATE \_\_\_\_\_  
 ASSISTANT DISTRICT  
 APPROVED BY [Signature] TITLE MANAGER MINERALS DATE DEC 7 1994  
 CONDITIONS OF APPROVAL, IF ANY:

CONDITIONS OF APPROVAL ATTACHED TO OPERATOR'S COPY

\*See Instructions On Reverse Side

**CONDITIONS OF APPROVAL**  
**APPLICATION FOR PERMIT TO DRILL**

Company/Operator: Equitable Resources Energy Company

Well Name & Number: Balcron Federal 12-22Y

API Number: 43-013-31476

Lease Number: U-66191

Location: SWNW Sec. 22 T. 8S R. 17E

**NOTIFICATION REQUIREMENTS**

- Location Construction - at least forty-eight (48) hours prior to construction of location and access roads.
- Location Completion - prior to moving on the drilling rig.
- Spud Notice - at least twenty-four (24) hours prior to spudding the well.
- Casing String and Cementing - at least twenty-four (24) hours prior to running casing and cementing all casing strings.
- BOP and Related Equipment Tests - at least twenty-four (24) hours prior to initiating pressure tests.
- First Production Notice - within five (5) business days after new well begins, or production resumes after well has been off production for more than ninety (90) days.

For more specific details on notification requirements, please check the Conditions of Approval for Notice to Drill and Surface Use Program.

## CONDITIONS OF APPROVAL FOR NOTICE TO DRILL

Approval of this application does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

All lease and/or unit operations will be conducted in such a manner that full compliance is made with applicable laws, regulations (43 CFR 3100), Onshore Oil and Gas Orders, and the approved plan of operations. The operator is fully responsible for the actions of his subcontractors. A copy of these conditions will be furnished the field representative to insure compliance.

Be aware fire restrictions may be in effect when location is being constructed and/or when well is being drilled. Contact the appropriate Surface Management Agency for information.

### A. DRILLING PROGRAM

#### 1. Estimated Depth at Which Oil, Gas, Water, or Other Mineral Bearing Zones are Expected to be Encountered

Report ALL water shows and water-bearing sands to Tim Ingwell of this office. Copies of State of Utah form OGC-8-X are acceptable. If noticeable water flows are detected, submit samples to this office along with any water analyses conducted.

All usable water and prospectively valuable minerals (as described by BLM at onsite) encountered during drilling, will be recorded by depth and adequately protected. All oil and gas shows will be tested to determine commercial potential.

#### 2. Pressure Control Equipment

The BOP and related equipment shall meet the minimum requirements of Onshore Oil and Gas Order No. 2 for equipment and testing requirements, procedures, etc., for a 2M system and individual components shall be operable as designed. Chart recorders shall be used for all pressure tests.

Test charts, with individual test results identified, shall be maintained on location while drilling and shall be made available to a BLM representative upon request.

If an air compressor is on location and is being utilized to provide air for the drilling medium while drilling, the special drilling requirements in Onshore Oil and Gas Order No. 2, regarding air or gas drilling shall be adhered to. If a mist system is being utilized then the requirement for a deduster shall be waived.

The Vernal District Office shall be notified, at least 24 hours prior to initiating the pressure tests, in order to have a BLM representative on location during pressure testing.

3. Casing Program and Auxiliary Equipment

Surface casing shall have centralizers on the bottom three joints, with a minimum of one centralizer per joint.

As a minimum, the usable water and oil shale resources shall be isolated and/or protected by having a cement top for the production casing at least 200 ft. above the top of the Mahogany Oil Shale zone identified at  $\pm 3,315$  ft. If gilsonite is encountered while drilling, it shall be isolated and/or protected via the cementing program.

The Vernal District Office shall be notified at least 24 hours prior to the running and cementing of all casing strings, in order to have a BLM representative on location while running and cementing all casing strings.

4. Mud Program and Circulating Medium

Hazardous substances specifically listed by the EPA as a hazardous waste or demonstrating a characteristic of a hazardous waste will not be used in drilling, testing, or completion operations.

No chromate additives will be used in the mud system on Federal and Indian lands without prior BLM approval to ensure adequate protection of fresh water aquifers.

5. Coring, Logging and Testing Program

Daily drilling and completion progress reports shall be submitted to this office on a weekly basis.

All Drill Stem tests (DST) shall be accomplished during daylight hours, unless specific approval to start during other hours is obtained from the AO. However, DSTs may be allowed to continue at night if the test was initiated during daylight hours and the rate of flow is stabilized and if adequate lighting is available (i.e., lighting which is adequate for visibility and vaporproof for safe operations). Packers can be released, but tripping should not begin before daylight unless prior approval is obtained from the AO.

A cement bond log (CBL) will be run from the production casing shoe to  $\pm 3,215$  ft. and shall be utilized to determine the bond quality for the production casing. Submit a field copy of the CBL to this office.

Whether the well is completed as a dry hole or as a producer, "Well Completion and Recompletion Report and Log" (Form 3160-4) will be submitted not later than 30 days after completion of the well or after completion of operations being performed, in accordance with 43 CFR 3164. Two copies of all logs, core descriptions, core analyses, well-test data, geologic summaries, sample description, and all other surveys or data obtained and compiled during the drilling, workover, and/or completion operations, will be filed with Form 3160-4. Samples (cuttings, fluids, and/or gases) will be submitted when requested by the AO.

6. Notifications of Operations

No location will be constructed or moved, no well will be plugged, and no drilling or workover equipment will be removed from a well to be placed in a suspended status without prior approval of the AO. If operations are to be suspended, prior approval of the AO will be obtained and notification given before resumption of operations.

The Vernal District Office shall be notified, during regular work hours (7:45 a.m.-4:30 p.m., Monday through Friday except holidays), at least 24 hours prior to spudding the well.

Operator shall report production data to MMS pursuant to 30 CFR 216.5 using form MMS/3160.

Immediate Report: Spills, blowouts, fires, leaks, accidents, or any other unusual occurrences shall be promptly reported in accordance with the requirements of NTL-3A or its revision.

If a replacement rig is contemplated for completion operations, a "Sundry Notice" (Form 3160-5) to that effect will be filed, for prior approval of the AO, and all conditions of this approved plan are applicable during all operations conducted with the replacement rig.

The date on which production is commenced or resumed will be construed for oil wells as the date on which liquid hydrocarbons are first sold or shipped from a temporary storage facility, such as a test tank, and for which a run ticket is required to be generated or, the date on which liquid hydrocarbons are first produced into a permanent storage facility, whichever first occurs; and, for gas wells as the date on which associated liquid hydrocarbons are first sold or shipped from a temporary storage facility, such as a test tank, and for which a run ticket is required to be generated or, the date on which gas is first measured through permanent metering facilities, whichever first occurs.

Should the well be successfully completed for production, the AO will be notified when the well is placed in a producing status. Such notification will be sent by telegram or other written communication, not later than five (5) days following the date on which the well is placed on production.

Gas produced from this well may not be vented or flared beyond an initial authorized test period of 30 days or 50 MMCF following its completion, whichever occurs first, without the prior written approval of the Authorized Officer. Should gas be vented or flared without approval beyond the authorized test period, the operator may be directed to shut-in the well until the gas can be captured or approval to continue venting or flaring as uneconomic is granted and the operator shall be required to compensate the lessor for that portion of the gas vented or flared without approval which is determined to have been avoidably lost.

A schematic facilities diagram as required by 43 CFR 3162.7-5 (b.9. d.), and shall be submitted to the appropriate District Office within sixty (60) days of installation or first production, whichever occurs first. All site security regulations as specified in Onshore Oil & Gas Order No. 3 shall be adhered to. All product lines entering and leaving hydrocarbon storage tanks will be effectively sealed in accordance with 43 CFR 3162.7-5 (b. 4).

No well abandonment operations will be commenced without the prior approval of the AO. In the case of newly drilled dry holes or failures, and in emergency situations, oral approval will be obtained from the AO. A "Subsequent Report of Abandonment" Form 3160-5, will be filed with the AO within thirty (30) days following completion of the well for abandonment. This report will indicate where plugs were placed and the current status of surface restoration. Final abandonment will not be approved until the surface reclamation work required by the approved APD or approved abandonment notice has been completed to the satisfaction of the AO or his representative, or the appropriate Surface Managing Agency.

7. Other Information

All loading lines will be placed inside the berm surrounding the tank battery.

All off-lease storage, off-lease measurement, or commingling on-lease or off-lease will have prior written approval from the AO.

Gas meter runs for each well will be located within 500 feet of the wellhead. The gas flowline will be buried or anchored down from the wellhead to the meter and within 500 feet downstream of the meter run or any production facilities. Meter runs will be housed and/or fenced.

The oil and gas measurement facilities will be installed on the well location. The oil and gas meters will be calibrated in place prior to any deliveries. Tests for meter accuracy will be conducted monthly for the first three months on new meter installations and at least quarterly thereafter. The AO will be provided with a date and time for the initial meter calibration and all future meter proving schedules. A copy of the meter calibration reports will be submitted to the Vernal District Office. All meter measurement facilities will conform with Onshore Oil & Gas Order No. 4 for liquid hydrocarbons and Onshore Oil & Gas Order No. 5 for natural gas measurement.

The use of materials under BLM jurisdiction will conform to 43 CFR 3610.2-3.

There will be no deviation from the proposed drilling and/or workover program without prior approval from the AO. Safe drilling and operating practices must be observed. All wells, whether drilling, producing, suspended, or abandoned will be identified in accordance with 43 CFR 3162.

"Sundry Notice and Report on Wells" (Form 3160-5) will be filed for approval for all changes of plans and other operations in accordance with 43 CFR 3162.3-2.

Section 102(b)(3) of the Federal Oil and Gas Royalty Management Act of 1982, as implemented by the applicable provisions of the operating regulations at Title 43 CFR 3162.4-1(c), requires that "not later than the 5th business day after any well begins production on which royalty is due anywhere on a lease site or allocated to a lease site, or resumes production in the case of a well which has been off production for more than 90 days, the operator shall notify the authorized officer by letter or sundry notice, Form 3160-5, or orally to be followed by a letter or sundry notice, of the date on which such production has begun or resumed."

If you fail to comply with this requirement in the manner and time allowed, you shall be liable for a civil penalty of up to \$10,000 per violation for each day such violation continues, not to exceed a maximum of 20 days. See Section 109(c)(3) of the Federal Oil and Gas Royalty Management Act of 1982 and the implementing regulations at Title 43 CFR 3162.4-1(b)(5)(ii).

APD approval is valid for a period of one (1) year from the signature date. An extension period may be granted, if requested, prior to the expiration of the original approval period.

In the event after-hours approvals are necessary, please contact one of the following individuals:

Wayne P. Bankert (801) 789-4170  
Petroleum Engineer

Ed Forsman (801) 789-7077  
Petroleum Engineer

BLM FAX Machine (801) 781-4410

**EPA'S LIST OF NONEXEMPT EXPLORATION AND PRODUCTION WASTES**

While the following wastes are nonexempt, they are not necessarily hazardous.

- Unused fracturing fluids or acids
- Gas plant cooling tower cleaning wastes
- Painting wastes
- Oil and gas service company wastes, such as empty drums, drum rinsate, vacuum truck rinsate, sandblast media, painting wastes, spent solvents, spilled chemicals, and waste acids
- Vacuum truck and drum rinsate from trucks and drums, transporting or containing nonexempt waste
- Refinery wastes
- Liquid and solid wastes generated by crude oil and tank bottom reclaimers
- Used equipment lubrication oils
- Waste compressor oil, filters, and blowdown
- Used hydraulic fluids
- Waste solvents
- Waste in transportation pipeline-related pits
- Caustic or acid cleaners
- Boiler cleaning wastes
- Boiler refractory bricks
- Incinerator ash
- Laboratory wastes
- Sanitary wastes
- Pesticide wastes
- Radioactive tracer wastes
- Drums, insulation and miscellaneous solids.

**SURFACE USE PLAN OF OPERATION**  
Conditions of Approval (COAs)

Additional Surface Conditions of Approval

A complete copy of the approved APD and ROW grant, if applicable, shall be on location during construction of the location and drilling activities.

The operator or his/her contractor shall contact the BLM Office at (801) 789-1362 forty-eight (48) hours prior to construction activities.

The BLM Office shall be notified upon site completion prior to moving on the drilling rig.

**CONFIDENTIAL**

DIVISION OF OIL, GAS AND MINING

SPUDDING INFORMATION

Name of Company: EQUITABLE RESOURCES

Well Name: BALCRON MONUMENT FEDERAL 12-22Y

API NO. 43-013-31476

Section 22 Township 8S Range 17E County DUCHESNE

Drilling Contractor UNION

Rig # 17

SPUDDED: Date 12/18/94

Time \_\_\_\_\_

How ROTARY

Drilling will commence \_\_\_\_\_

Reported by ODELL WILLIAMS

Telephone # \_\_\_\_\_

Date: 12/16/94 Signed: DLI

OPERATOR Equitable Resources Energy Company  
Balcron Oil Division  
ADDRESS P.O. Box 21017  
Billings, MT 59104  
(406) 259-7860

OPERATOR ACCT. NO. N 9890

ACTION CODE	CURRENT ENTITY NO.	NEW ENTITY NO.	API NUMBER	WELL NAME	WELL LOCATION					SPUD DATE	EFFECTIVE DATE
					QQ	SC	TP	RG	COUNTY		
A	99999	11717	43-013-31476	Balcron Federal #12-22Y	SW NW	22	8S	17E	Duchesne	12-18-94	12-18-94
WELL 1 COMMENTS: Entity added 12-21-94. See Spud of a new well.											
WELL 2 COMMENTS:											
WELL 3 COMMENTS:											
WELL 4 COMMENTS:											
WELL 5 COMMENTS:											

RECEIVED

1994

Bobbie Schuman  
Signature

Regulatory & Environmental Specialist  
Title

Phone No. 406 , 259-7860

- ACTION CODES (See instructions on back of form)
- A - Establish new entity for new well (single well only)
  - B - Add new well to existing entity (group or unit well)
  - C - Re-assign well from one existing entity to another existing entity
  - D - Re-assign well from one existing entity to a new entity
  - E - Other (explain in comments section)

NOTE: Use COMMENT section to explain why each Action Code was selected.

DATE: 12-19-94

12-21-94

CONFIDENTIAL

Form 3160-5 UNITED STATES  
(June 1990) DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
Budget Bureau No. 1004-0135  
Expires: March 31, 1993

5. Lease Designation and Serial No.  
**U-66191**

6. If Indian, Allottee or Tribe Name  
**n/a**

7. If Unit or CA, Agreement Designation  
**n/a**

8. Well Name and No.  
**Balcron Federal #12-22Y**

9. API Well No.  
**43-013-31476**

10. Field and Pool, or Exploratory Area  
**Undesignated / Green River**

11. County or Parish, State  
**Duchesne County, Utah**

**SUNDRY NOTICES AND REPORTS ON WELLS**

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.  
Use "APPLICATION FOR PERMIT --" for such proposals

**SUBMIT IN TRIPLICATE**

1. Type of Well  
 Oil Well  Gas Well  Other

2. Name of Operator  
**EQUITABLE RESOURCES ENERGY COMPANY, BALCRON OIL DIVISION**

3. Address and Telephone No.  
**P.O. Box 21017; Billings, MT 59104 (406) 259-7860**

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)  
**SURFACE: SW NW Section 22, T8S, R17E  
TD: 2105' FNL & 660' FWL**

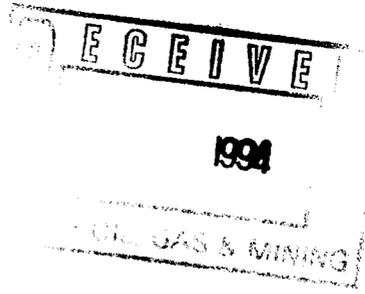
**12. CHECK APPROPRIATE BOX(S) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA**

TYPE OF SUBMISSION	TYPE OF ACTION
<input type="checkbox"/> Notice of Intent	<input type="checkbox"/> Abandonment
<input checked="" type="checkbox"/> Subsequent Report	<input type="checkbox"/> Recompletion
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Plugging Back
	<input type="checkbox"/> Casing Repair
	<input type="checkbox"/> Altering Casing
	<input checked="" type="checkbox"/> Other <b>Report of spud.</b>
	<input type="checkbox"/> Change of Plans
	<input type="checkbox"/> New Construction
	<input type="checkbox"/> Non-Routine Fracturing
	<input type="checkbox"/> Water Shut-Off
	<input type="checkbox"/> Conversion to Injection
	<input type="checkbox"/> Dispose Water

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

13. 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.)\*

This well was spud on 12-18-94 at 4 p.m.



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

Signed *Bobbie Schuman* Title Regulatory and Environmental Specialist Date 12-19-94

(This space for Federal or State office use)

Approved by \_\_\_\_\_ Title \_\_\_\_\_ Date \_\_\_\_\_  
Conditions of approval, if any: \_\_\_\_\_

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

\*See Instruction on Reverse Side

RECEIVED  
**JAN 30 1995**  
 DIV OF OIL, GAS & MIN.

FORM APPROVED  
 Budget Bureau No. 1004-0135  
 Expires: March 31, 1993

**SUNDRY NOTICES AND REPORTS ON WELLS**

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.  
 Use "APPLICATION FOR PERMIT --" for such proposals

**SUBMIT IN TRIPLICATE**

1. Type of Well  
 Oil Well     Gas Well     Other

2. Name of Operator  
EQUITABLE RESOURCES ENERGY COMPANY, BALCRON OIL DIVISION

3. Address and Telephone No.  
P.O. Box 21017; Billings, MT 59104 (406) 259-7860

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)  
 SURFACE: SW NW Section 22, T8S, R17E  
 TD: 2105' FNL & 660' FWL

CONFIDENTIAL

5. Lease Designation and Serial No.  
U-66191

6. If Indian, Allottee or Tribe Name  
n/a

7. If Unit or CA, Agreement Designation  
n/a

8. Well Name and No.  
Balcron Federal #12-22Y

9. API Well No.  
43-013-31476

10. Field and Pool, or Exploratory Area  
Undesignated / Green River

11. County or Parish, State  
Duchesne County, Utah

12. **CHECK APPROPRIATE BOX(S) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA**

TYPE OF SUBMISSION	TYPE OF ACTION	
<input type="checkbox"/> Notice of Intent  <input checked="" type="checkbox"/> Subsequent Report  <input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Abandonment <input type="checkbox"/> Recompletion <input type="checkbox"/> Plugging Back <input type="checkbox"/> Casing Repair <input type="checkbox"/> Altering Casing <input checked="" type="checkbox"/> Other <u>Report of First Production</u>	<input type="checkbox"/> Change of Plans <input type="checkbox"/> New Construction <input type="checkbox"/> Non-Routine Fracturing <input type="checkbox"/> Water Shut-Off <input type="checkbox"/> Conversion to Injection <input type="checkbox"/> Dispose Water

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

13. 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.)\*

First production was on 1-26-95 @ 4:30 p.m.

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

Signed *Bobbie Schuman* Title Regulatory and Environmental Specialist Date 1-27-95

(This space for Federal or State office use)

Approved by \_\_\_\_\_ Title \_\_\_\_\_ Date \_\_\_\_\_  
 Conditions of approval, if any: \_\_\_\_\_

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

# WELL REPORT

43-013-31476  
MONUMENT BUTTE FIELD  
Balcron Oil 12-22Y Federal  
2105' FNL, 660' FWL, Sec. 22, T8S-R17E  
Duchesne County, Utah

# CONFIDENTIAL

By

***DENNIS REHRIG & ASSOCIATES, INC.***

Oil & Gas Consulting

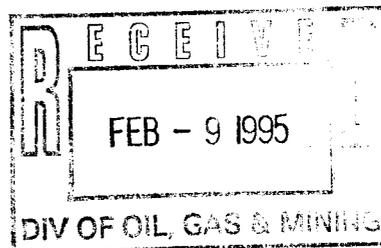
4924 Rimrock Road  
Billings, Montana 59106

(406) 656-4785

MICROFILM

# **WELLSITE GEOLOGIST'S REPORT**

**MONUMENT BUTTE FIELD  
Balcron Oil 12-22Y Federal  
2105' FNL, 660' FWL, Sec. 22, T8S-R17E  
Duchesne County, Utah**



***DENNIS REHRIG & ASSOCIATES, INC.***

Oil & Gas Consulting

4924 Rimrock Road  
Billings, Montana 59106

(406) 656-4785

**DENNIS C. REHRIG & ASSOCIATES, INC.**

Oil & Gas Exploration

4924 RIMROCK ROAD • BILLINGS, MONTANA 59106 • (406) 656-4785

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**MONUMENT BUTTE FIELD  
Balcron Oil 12-22Y Federal  
2105' FNL, 660' FWL, Sec. 22, T8S-R17E  
Duchesne County, Utah**

**TABLE OF CONTENTS**

<u>Page</u>	<u>Item</u>
1	General Well Review
2	Well Data
5	Daily Drilling History
8	Surveys
9	Bit Record
10	Time/Depth Penetration Chart
11	Drilled Well Formation Tops
12	Reference Well Formation Tops
13	Potentially Significant Mudlog and Sample Shows
14-33	Sample Descriptions
Insert	Geologic Well Log

By:

DENNIS C. REHRIG

Consulting Geologist

For:

**DENNIS C. REHRIG & ASSOCIATES, INC.**

**Balcron Oil 12-22Y Federal  
2105' FNL, 660' FWL, Sec. 22, T8S-R17E  
Duchesne County, Utah**

**GENERAL REVIEW**

The Balcron Oil 12-22Y Federal SW $\frac{1}{4}$ NW $\frac{1}{4}$  S-22, T8S-R17E, Duchesne County, Utah was drilled as a development-field extension well in the Monument Butte Field.

This well was supported by subsurface offset well control and drilled for identification of anticipated Douglas Creek and Wasatch Tongue oil sands and possible future water flood.

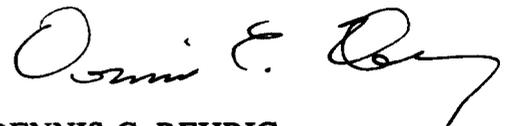
The surface hole was air drilled and surface casing was set by Rotary Rig No. 17 owned by Union Drilling Co. This well was spudded on December 31, 1994. A two-man mud logging unit was operable at 2700'. The Green River and Douglas Creek formations were penetrated at 1912' and 5243' making them respectively 62' low and 70' low structurally to the 1/2 mile offset Lomax Exploration Co. 11-21 (NE $\frac{1}{4}$ SW $\frac{1}{4}$ , S-21, T8S-R17E) control well.

This well was drilled to 6600' (Driller) and 6594' (Logger).

Subsequent to log review the operator elected to run production casing for an attempted oil well completion.

The rotary was released 1/12/95.

Respectfully submitted,



DENNIS C. REHRIG

**Balcron Oil 12-22Y Federal  
2105' FNL, 660' FWL, Sec. 22, T8S-R17E  
Duchesne County, Utah**

**WELL DATA**

<b><u>OPERATOR:</u></b>	Balcron Oil
<b><u>LEASE &amp; WELL NO.:</u></b>	Federal 12-22Y
<b><u>LOCATION:</u></b>	2105' FNL, 660' FWL, Sec. 22, T8S-R17E
<b><u>PROSPECT/FIELD:</u></b>	Monument Butte Field
<b><u>COUNTY:</u></b>	Duchesne
<b><u>STATE:</u></b>	Utah
<b><u>BASIN:</u></b>	Uintah
<b><u>WELL TYPE:</u></b>	Development - Field Extension
<b><u>BASIS FOR PROSPECT:</u></b>	Subsurface well control
<b><u>ELEVATIONS:</u></b>	G.L. 5192', K.B. 5202'
<b><u>SPUD DATE:</u></b>	10:15 AM (MST) 12/31/94 (Rotary)
<b><u>OUT FROM UNDER SURFACE CASING:</u></b>	2:15 PM (MST) 1/1/95
<b><u>DRILLING COMPLETED:</u></b>	7:30 PM (MST) 1/10/95
<b><u>LOGGING COMPLETED:</u></b>	8:30 AM (MST) 1/11/95
<b><u>RIG RELEASE:</u></b>	1:30 AM (MST) 1/12/95
<b><u>TOTAL DAYS SPUD THROUGH LOGGING:</u></b>	12 days
<b><u>TOTAL DEPTH:</u></b>	6,600' (Driller) 6,594' (Logger)
<b><u>TOTAL DRILLING DAYS:</u></b>	11 days

HOLE SIZE & CASING:

Hole Size

12¼" Surface to 420'  
7⅞" 420' to T.D.

Casing Size

8⅝" surface to 404' K.B.  
5½" surface to 6584' K.B.

WELL STATUS:

Ran production casing for attempted oil well completion.

PENETRATION:

77' below top of Uteland Butte LS

COMPANY DRILLING CONSULTANT:

Al Plunkett

DRILLING CONTRACTOR:

Union Drilling Co.

RIG NO.:

17

TOOLPUSHER:

Dave Gray

RIG SPECIFICATIONS:

Draw Works – Cabot–Franks, powered by one  
D–343 Diesel Cat  
Derrick – Cabot–Franks 97' mast.

BLOW OUT PREVENTER:

Make: Cameron. Type: 10" x 5000 lbs.  
Drill Pipe: Size: 4½" OD, 2¼" ID, Thread: XH.  
BHA: Length 600' approximately, 20 sts  
Tool joints: 6¼" OD, Type – XH.

MUD PUMP:

No. 1 – Gardiner–Denver FXN, 14" Stroke, 5½" liner.

MUD COMPANY:

Anchor Drilling Fluids, Inc.  
Operator bought products and drilling contractor  
mixed as needed.

MUD PROGRAM:

Air/Foam – Surface to 4417'  
KCl/Water 4417' – Total Depth

ELECTRIC OPEN–HOLE  
LOGGING PROGRAM:

Schlumberger Well Services  
Engineers: Mike Jardon and Paul Beamer  
Witnessed by: Dennis Rehrig and Al Plunkett  
– Dual Laterolog w/Caliper, Gamma Ray, SP, and  
Tension Curve (404'–6579')  
– Compensated Neutron/Litho–Density with Caliper,  
Gamma Ray & Tension Curve (4200'–6579')

LOST CIRCULATION ZONE  
OR DRILLING PROBLEMS:

Some tight spots tripping out of hole to run E–logs.

WELLSITE GEOLOGIST:

Dennis C. Rehrig

SAMPLING PROGRAM: 50' Samples from 2,700'-4,500'.  
30' Samples from 4,500'-Total Depth,  
except caught extra samples through  
drilling breaks and/or mudlog shows, as necessary.

SAMPLE QUALITY: Generally fair unless noted otherwise, but had poor  
samples with much cavings after tripping.

SAMPLE DISPOSITION: Utah Geological Survey - Salt Lake City, Utah

MUD LOGGING EQUIPMENT: Northwest Mudlogging Service - two man unit  
Larry Vodall and Roy Schmoltd.

CORE PROGRAM: None.

DRILLSTEM TEST: None.

SURFACE CASING: 8<sup>5</sup>/<sub>8</sub>" Maverick, 24 wt, J-55, 9 Jts, from  
surface - 404' K.B. Surface hole drilled and casing  
set by rotary rig. Details of cement job unknown.

PRODUCTION CASING: Ran 156 jts of new 15.5 wt, J-55, 5<sup>1</sup>/<sub>2</sub>" production  
casing to 6584' K.B., cemented with 130 sxs Lite and  
tailed with 480 sxs of 50-50 POZ. Plug down @  
9:30 PM 1/11/95.

**Balcron Oil 12-22Y Federal**  
**2105' FNL, 660' FWL, Sec. 22, T8S-R17E**  
**Duchesne County, Utah**

**DAILY DRILLING HISTORY**

Daily drilling reports taken primarily from Rig Tower Sheets and supplemented by Drilling Supervisor.  
 Day commenced at 6:00 AM (MST) day of prior day of report and ends at 6:00 AM (MST) day of report.

Days Since Spud	1995 Date	Depth	Ftg in Last 24 Hrs	Activity (hrs)			Bit No.	W O B (M)	RPM	PP	Activity
				Drlg	Maint. and Repairs	Other					
1	1/1	420'	420'	8.50	0	15.50	1&2	8-10	40	150	Start up rig, clean hole, RU hammer and PU collar, drilling 12¼" hole, plug bit, TOH & TIH, drilling, clean hole, TOH, run 8⅝" casing, RU cementers and cement casing, WOC, slack off, cut casing, weld flange.
2	1/2	1243'	823'	13.25	0	10.75	3	40	60	250	Weld on head, NU BOP, air bowl and choke, pressure test, TIH and blow H <sub>2</sub> O, drilling plug shoe and cement, drilling 7⅞" hole, survey, drilling, changed to DP, changed airhead rubber, drilling, survey, drilling.
3	1/3	2395'	1153'	22.00	1.25	0.75	3	38	65	280	Service rig and air, drilling, survey, drilling, survey, drilling, survey, service rig and air, drilling.
4	1/4	3480'	1085'	20.00	1.00	3.00	3	35	65	260	Service rig and air, drilling, clean hole, survey, blow hole, drilling, survey, service rig and air, drilling, work pipe - hole tight, drilling.

Days Since Spud	1995 Date	Depth	Ftg in Last 24 Hrs	Activity (hrs)			Bit No.	W O B (M)	RPM	PP	Activity
				Drlg	Maint. and Repairs	Other					
5	1/5	4430'	950'	20.50	1.50	2.00	3	40	70	850	Service rig and air, drilling, survey, drilling, service rig and air, drilling, clean hole w/soap pump, switch to fluid, load hole, drilling, work on mud pump.
6	1/6	4578'	148'	8.25	14.75	1.00	3	40	70	1050	Drilling, WO mud pump, drilling, survey, WO mud pump, drilling, pull 5 stds, work on mud pump, TIH 5 stds, break circ, wash 30' to bottom, no fill, drilling.
7	1/7	4978'	400'	17.75	0.50	5.75	4	40	70	1000	Drilling, service rig and pumps, drilling, TOH, change bit, TIH, fill pipe and wash 40', ream 15' out of gauge hole, drilling.
8	1/8	5241'	263'	10.5	12.75	0.75	4	40	70	1000	Drilling, service rig and pumps, survey, drilling, change brake blocks and repair kelly latch, drilling.
9	1/9	5819'	578'	22.75	1.00	0.25	4	40	70	1000	Drilling, service rig and pumps, check rams, drilling, survey, service rig and pumps, drilling, service rig and pumps, drilling.
10	1/10	6217'	398'	15.75'	2.00	6.25	4	40	70	1250	Drilling, service rig and pumps, drop carbide for washout, TOH 73 stands thru 79 stands - find 3 bad jts and LD same, put pump on hole, TIH, fill pipe and wash 30' to bottom - no fill, drilling, service rig and pumps, drilling, survey, service rig and pumps, drilling.

Days Since Spud	1995 Date	Depth	Ftg in Last 24 Hrs	Activity (hrs)			Bit No.	W O B (M)	RPM	PP	Activity
				Drlg	Maint. and Repairs	Other					
11	1/11	6600'	383'	13.25	0.25	10.50	4	40	70	1150	Drilling, service rig and pumps, check rams, drilling, circ for E-logs, drop survey, TOH for E-logs, ream tight hole, sweep hole, TOH to log, RU logger and log.
12	1/12	6600'	0	0	0	24.00	-	-	-	-	Logging, RD logger, TIH w/DC and DP (42 stds), LD DP, TIH w/DC and DP, LD DP and DC, RU to run production casing, run 5½" casing.
13	1/13	6600'	0	0	0	7.30	-	-	-	-	Run production casing, RU to cement and cement production casing, pump plug, WOC, release rig at 1:30 AM 1/12/95.

Balcron Oil 12-22Y Federal  
2105' FNL, 660' FWL, Sec. 22, T8S-R17E  
Duchesne County, Utah

SURVEYS VERTICAL HOLE

<u>Drilling Depth</u>	<u>Degrees</u>
600'	2°
800'	1¾°
1100'	2¼°
1500'	2½°
1650'	2½°
2150'	2½°
2650'	2¼°
3080'	1¼°
3600'	1¼°
4420'	2°
5008'	1½°
5530'	1¼°
6050'	3°
6600'	3°

**Balcron Oil 12-22Y Federal  
2105' FNL, 660' FWL, Sec. 22, T8S-R17E  
Duchesne County, Utah**

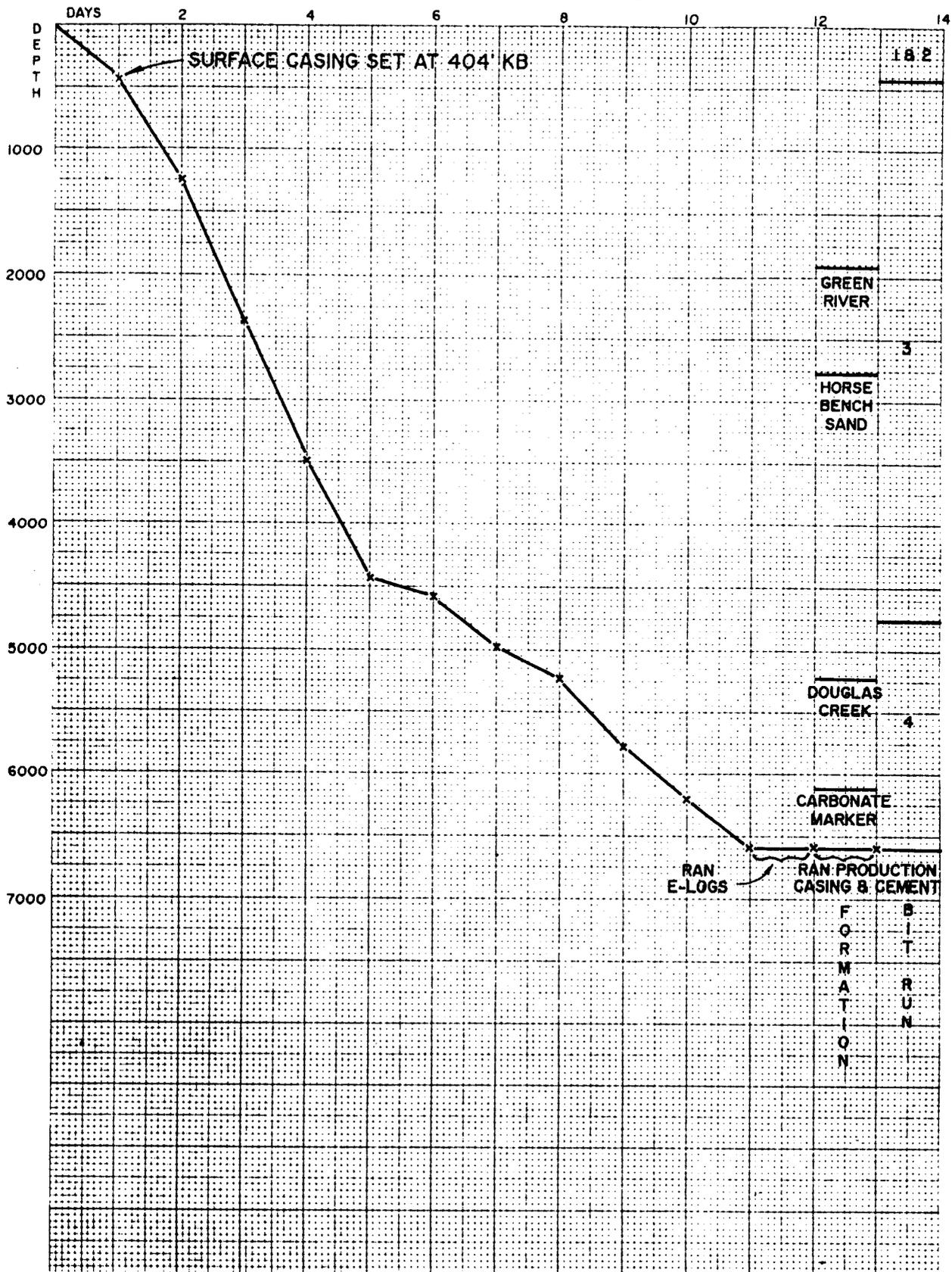
**BIT RECORD**

<b>Contractor:</b> Union Drilling Co.  <b>Operator:</b> Balcron Oil  <b>Lease:</b> Federal  <b>State:</b> Utah <b>County:</b> Duchesne <b>Sec/T-ship/Range:</b> SWNW Sec. 22, T8S-R17E	<b>Rig No.</b> 17  <b>Field:</b> Monument Butte  <b>Well No.</b> 12-22Y	<b>Rig Make:</b> Cabot-Franks  <b>Derrick:</b> Cabot-Franks 97' mast  <hr/> <b>Pump #1:</b> Gardiner- Denver FXN Liner 5½" x 14" Stroke  <hr/>	<b>Collars:</b> ODxIDxLength BHA  6" x 2½" x 20 jts (600')  <b>Drill Pipe-Size</b> 4½"  <b>Tool Joint:</b> 6¼"	<b>SPUD</b> 12/31/94  <b>Under Surface</b> 1/1/95  <b>Total Depth</b> 1/10/95  <b>Total Days Drilling</b> 11	<b>Toolpusher:</b> Dave Gray <b>Day Driller:</b> Wm. Satterfield <b>Evening Driller:</b> Rod Rasmussen <b>Morning Driller:</b> Jim Atcheson <b>Relief Driller:</b> Chris Chapman <b>Operators Representative:</b> Al Plunkett  <b>Mud Type:</b> Air/Foam 0' to 4417' KCl/Water 4417' to TD
--	--	--	---	--	--

Bit No	Bit Size	Bit Type	Bit Mfg	Serial No of Bit	Jet Size	Depth Out	Ftge	Hours Run	Acc Hours	Ft/Hr	Weight 1000 #	Rotary RPM	Vert. Dev.	Air or Pump Press	% of bit life used	Remarks
1	17"	Smith	FB	NA	-Open-	24	14	1	19	14	4/6	15/20		150	60%	WRR
2	12¼"	Smith	FB	N/A	-Open-	420	396	6.5	108.5	61	8/12	15/25	2°	150/200	60%	WRR
3	7¾"	Smith	F47H	LB5881	16 16 16	4758	4338	70	70	62	40	70/75	2°	900/1050	100%	Junk
4	7¾"	HTC	ATJ-44	U54WW	13 13 13	6600'	2262	62.5	62.5	36	40	70/75	3°	1000/1150	100%	Junk

BALCRON OIL 12-22Y FEDERAL  
 2105' FNL 660' FWL, SECTION 22, T 8 S-R 17 E  
 DUCHESNE COUNTY, UTAH

TIME / DEPTH PENETRATION CURVE



**Balcron Oil 12-22Y Federal  
2105' FNL, 660' FWL, Sec. 22, T8S-R17E  
Duchesne County, Utah**

**FORMATION TOPS**

ELEVATIONS: G.L. 5192', K.B. 5202'

FORMATION

	<u>E-Log Top</u>	<u>Subsea Datum</u>	<u>Structural Relationship To Reference Well *</u>
Green River	1912'	(+3290')	62' Low
Horsebench Sand	2758'	(+2444')	78' Low
2nd Garden Gulch	4438'	(+ 764')	72' Low
Yellow Marker	5077'	(+ 125')	76' Low
Douglas Creek	5243'	(- 41')	70' Low
2nd Douglas Creek Mkr	5517'	(- 315')	78' Low
Green Marker	5664'	(- 462')	65' Low
Carbonate Marker	6112'	(- 910')	NDE
Uteland Butte LS	6517'	(-1315')	NDE
TOTAL DEPTH:	6594' Logger		

\* Reference Well:

Lomax Exploration Co. 11-21 Boundry Federal  
NE¼SW¼ Sec. 21, T8S-R17E  
Duchesne County, Utah

Note: Correlations and nomenclature that provided and used by operator.

**Balcron Oil 12-22Y Federal  
2105' FNL, 660' FWL, Sec. 22, T8S-R17E  
Duchesne County, Utah**

**REFERENCE WELL E-LOG FORMATION BOREHOLE AND SUBSEA DATUMS**

Lomax Exploration Co.  
11-21 Boundry Federal  
NE $\frac{1}{4}$ SW $\frac{1}{4}$  Sec. 21, T8S-R17E  
Duchesne County, Utah

K.B. 5252'

Formation

Green River	1900'	(+3352')
Horsebench	2730'	(+2522')
2nd Garden Gulch	4416'	(+ 836')
Yellow Marker	5051'	(+ 201')
Douglas Creek	5223'	(+ 29')
2nd Douglas Creek Mkr	5489'	(- 237')
Green Marker	5649'	(- 397')
Carbonate Marker	NDE	
Uteland Butte LS	NDE	
TOTAL DEPTH	6002' (Logger)	

NOTE: Correlations and nomenclature that provided and used by operator.

**Balcron Oil 12-22Y Federal**  
**2105' FNL, 660' FWL, Sec. 22, T8S-R17E**  
**Duchesne County, Utah**

**SIGNIFICANT GAS KICKS**  
Information from Mudlogger

<u>Formation</u>	<u>Sample (from Depth (Mudlog)</u>	<u>T i m e</u>			<u>Total Gas</u>		
		<u>Before</u>	<u>During</u>	<u>After</u>	<u>Before</u>	<u>During</u>	<u>After</u>
		<u>Min/Ft</u>			<u>Hotwire</u>		
2nd Garden Gulch	4440' - 4445'	3.2	- 2.0	- 2.6	2	- 14	- 4
2nd Garden Gulch	4499' - 4504'	4.0	- 1.5	- 4.5	20	- 300	- 20
2nd Garden Gulch	4544' - 4556'	3.0	- 1.0	- 2.5	20	- 220	- 24
2nd Garden Gulch	4577' - 4579'	3.0	- 1.8	- 3.5	20	- 230	- 40
2nd Garden Gulch	4674' - 4676'	2.0	- 1.8	- 2.8	30	- 104	- 60
2nd Garden Gulch	4684' - 4688'	3.0	- 2.0	- 2.5	40	- 160	- 40
2nd Garden Gulch	4716' - 4718'	3.2	- 2.5	- 2.8	30	- 160	- 60
2nd Garden Gulch	4770' - 4782'	3.0	- 2.0	- 3.0	50	- 200	- 80
2nd Garden Gulch	4790' - 4812'	3.0	- 2.2	- 2.5	80	- 200	- 160
2nd Garden Gulch	4812' - 4826'	2.5	- 1.2	- 4.0	120	- 700	- 120
Douglas Creek	5288' - 5292'	2.0	- 0.8	- 2.2	160	- 1040	- 200
Douglas Creek	5354' - 5360'	1.8	- 0.5	- 2.0	400	- 1040	- 240
Douglas Creek	5476' - 5490'	3.2	- 1.5	- 2.5	180	- 760	- 300
Carbonate Marker	6158' - 6178'	3.6	- 1.4	- 2.6	300	- 1480	- 400
Carbonate Marker	6234' - 6270'	3.2	- 1.0	- 2.7	200	- 1600	- 680

NOTE: There is no inference that all these zones are productive, but rather the point is that gas shows were observed and usually in conjunction with sandstone present in samples. It is suggested that the operator note these zones in conjunction with other data from this well.

**POTENTIAL SANDSTONE ZONES**

Provided by Wellsite Geologist

E-Log Depth (Compensated Neutron - Litho Density Log)

4442'-4446'	PEF indicates this is LS but saw SS in samples w/show, fairly low resistivity.
4498'-4502'	Cross-over, relatively high gamma ray
4536'-4554'	Some Shale stringers
4712'-4720'	No Sandstone or shows in samples
4766'-4773'	No good drilling break
4804'-4817**	Good porosity and high resistivity
5279'-5285'	Slight cross-over
5348'-5354**	Good porosity and high resistivity
5472'-5483**	Acceptable porosity and high resistivity
6150'-6170**	Acceptable porosity and resistivity
6220'-6250**	Acceptable porosity and resistivity
6276'-6282'	Acceptable porosity and borderline resistivity

\* Likely most prospective zones

NOTE: Sandstone generally seen in samples, but not always due to sample quality or thinness of sandstone in some cases.

**Balcron Oil 12-22Y Federal  
2105' FNL, 660' FWL, Sec. 22, T8S-R17E  
Duchesne County, Utah**

**SAMPLE DESCRIPTIONS**

By: Dennis C. Rehrig

All samples caught by Mud Loggers and lagged from 2700' to Total Depth. Samples were examined wet, under reflected light and 3x magnification from 2700' to total depth, for porosity identification samples were dried. Sample descriptions generally tie well to drill time log. Sample quality was fair unless stated otherwise in descriptions. All sample descriptions are interpretive and not tied to E-logs.

- 2700-50 Dolomite-Limy Dolomite - tan-medium to dark brown, commonly mahogany, microcrystalline, moderately firm, commonly pyritic, generally slightly-moderately carbonaceous, occasionally highly carbonaceous, slightly argillaceous in part.
- 2750-2800 Dolomite-Limy Dolomite - generally grayish tan-medium to dark brown, microcrystalline, moderately firm, commonly pyritic, slightly-moderately carbonaceous, slightly argillaceous in part.
- 2800-50 Shale - light tan, slightly silty in part, slightly calcareous, some specks of carbonaceous material in part, occasionally pyritic.
- Sandstone - very fine-fine grained, milky-clear, generally well-moderately well consolidated, moderately-poorly sorted, generally sub-angular to angular, generally appears tight, commonly dark brown-black carbonaceous material, frequently ranges to Siltstone, frequently spotty medium-dark brown oil stain, dull gold fluorescence, fair-good dull yellow streaming-ring cut, some black-dark gray lithic fragments and microcrystalline disseminated Pyrite.
- 2850-2900 Shale - cream to light tan to light gray, slightly-moderately calcareous, moderately soft-moderately firm, silty in part, frequently pyritic.
- Some Siltstone - clear-milky, slightly argillaceous, slightly calcareous.
- 2900-50 Shale - tan, occasionally light brown, moderately firm-frequently moderately soft, slightly calcareous, silty in part, occasionally slight specks of carbonaceous material.

Sandstone - generally very fine grained, frequently ranging to Siltstone, commonly loose very fine-fine Quartz grains, some sub-round to sub-angular and frosted. Generally clear-milky, moderately unconsolidated, moderately well sorted, generally sub-angular to sub-round, probably some fair-good porosity, NSFOC.

2950-3000 Shale - dark brown-dark grayish brown, slightly black in part, moderately soft-moderately firm, moderately-highly carbonaceous, slightly calcareous, frequently in contact with clear spar Calcite, frequently light tan-light brown Shale as above.

3000-50 Shale - as above.

Dolomite-Limy Dolomite - medium-dark brown to mahogany, microcrystalline, moderately firm, slightly-moderately carbonaceous, slightly argillaceous in part, trace Pyrite.

3050-3100 Shale - dark brown-brownish black, moderately firm, slightly-moderately calcareous, moderately-highly calcareous, some cream-light tan Shale.

Dolomite-Limy Dolomite - tan-medium brown, microcrystalline, moderately firm, slightly argillaceous in part, some clear-amber spar Calcite, dense.

3100-50 Limy Dolomite - medium brown-gray brown to tan, microcrystalline, moderately firm, slightly-moderately argillaceous in part, slightly-moderately carbonaceous in part, frequently clear-amber spar Calcite, some Pyrite, dense.

Some Shale - dark gray-gray black, silty-sandy in part, slightly calcareous, moderately-highly carbonaceous, trace dark brown specks oil stain with dull gold fluorescence and fair dull yellow milky cut.

NOTE: Many source rock shales in section yield stain, fluorescence and cut and from here on only shows in Siltstone-Sandstone rock will be reported. Unless other observed shows are out of the ordinary in shales or carbonates.

3150-3200 Dolomite-Limy Dolomite - medium-dark brown, frequently grayish brown-tan, microcrystalline, moderately soft-moderately firm, slightly argillaceous in part, occasionally clear-amber spar Calcite, slightly-medium carbonaceous in part, frequently pyritic.

3200-50 Dolomite-Limy Dolomite - medium-dark brown-grayish brown, occasionally tan, moderately-highly pyritic, slightly-moderately argillaceous, moderately soft-moderately firm, slightly-moderately carbonaceous in part, trace algal laminae, some spar Calcite.

Some Shale - dark gray-grayish black, moderately soft, slightly calcareous, moderately-highly carbonaceous, petroliferous in part.

3250-3300 Shale - dark brown-grayish black, orangish tan in part, moderately firm, commonly algal laminae, slightly calcareous, moderately-highly carbonaceous.

Dolomite-Limy Dolomite - medium-dark brown occasionally tan, microcrystalline-occasionally cryptocrystalline, moderately firm-firm, slightly argillaceous in part, slightly carbonaceous in part, some clear-amber siliceous rock, hard, brittle, moderately-highly pyritic.

3300-50 Dolomite-Limy Dolomite - medium-dark brown to grayish brown, frequently tan, moderately firm, slightly argillaceous in part, slightly-moderately carbonaceous in part, trace siliceous rock as above.

Shale - dark gray-grayish black, orangish tan, moderately firm-moderately soft, slightly calcareous, moderately carbonaceous, some algal laminae.

3350-3450 Dolomite-Argillaceous Dolomite - tan-medium to dark brown-mahogany, moderately firm-firm, slightly-moderately argillaceous in part, slightly-moderately carbonaceous siliceous in part with Pyrite.

Some Shale - dark brown to gray black to mahogany, moderately firm-moderately soft, moderately-highly carbonaceous, frequently algal laminae, slightly calcareous, some light gray-grayish tan Shale, blocky, hard, slightly-moderately calcareous, commonly silty-siltstone, moderately-highly pyritic.

3450-3500 Dolomite-Limy Dolomite - tan-light brown, microcrystalline-cryptocrystalline, moderately firm, slightly argillaceous-slightly silty in part, slightly carbonaceous in part.

Siltstone ranging to very fine grained Sandstone - milky-clear, moderately well consolidated, frequently loose very fine-fine sub-angular Quartz grains, slightly calcareous, some carbonaceous and lithic fragments, trace Glauconite, frequently pyritic, no apparent porosity, NSFOC.

- 3500-50 Shale - light gray-tan, moderately firm-moderately soft, slightly calcareous, slightly carbonaceous, silty in part, abundant microcrystalline disseminated Pyrite.
- Some very fine grained Sandstone ranging to Siltstone - milky to clear, moderately well consolidated, some loose very fine grained Quartz grains, slightly calcareous in part, sub-angular to sub-round, moderately well sorted, some Pyrite, NSFOC.
- 3550-3600 Shale - light gray-tan, generally as above with more specks of carbonaceous material, silt and some Glauconite.
- Sandstone ranging to Siltstone generally as above, slightly more dirty, slightly argillaceous in part, some specks carbonaceous material, lithic fragments and Glauconite, frequently pyritic.
- 3600-50 Dolomite-Argillaceous Dolomite - tan occasionally medium-dark brown to mahogany, cryptocrystalline-microcrystalline, moderately firm-moderately soft, slightly-moderately carbonaceous, slightly-moderately argillaceous, occasionally algal laminae, trace Pyrite.
- Some Shale - dark brown to brownish black to dark mahogany, moderately soft, slightly calcareous in part, highly carbonaceous, some Pyrite.
- 3650-3700 Dolomite-Argillaceous Dolomite as above.
- Shale - medium-dark brown to brownish black to black, slightly-moderately calcareous, sub-fissile in part, moderately firm-moderately soft, slightly-highly carbonaceous, some Pyrite.
- 3700-50 Shale - light gray to buff, moderately soft, slightly calcareous, slightly carbonaceous in part, silty in part, frequently pyritic.
- Some Siltstone ranging to very fine grained Sandstone - milky-clear, moderately well consolidated, some loose very fine-fine Quartz grains, slightly calcareous, slightly argillaceous in part, sub-angular to sub-round, moderately well sorted, slightly pyritic, NSFOC.
- 3750-3800 Shale and Siltstone-Sandstone as above.

- Dolomite-Limy Dolomite - tan to light-medium brown, microcrystalline-occasionally cryptocrystalline, moderately firm, slightly silty-argillaceous in part, slightly carbonaceous in part, some Pyrite.
- 3800-50 Dolomite-Argillaceous Dolomite - tan to light-medium brown, moderately firm-moderately soft, slightly argillaceous in part, slightly-moderately carbonaceous in part, occasionally Pyrite.
- 3850-3900 Dolomite-Limy Dolomite - tan-light brown, cryptocrystalline-frequently microcrystalline, moderately firm-moderately soft, slightly carbonaceous in part.
- Some Shale - light gray-moderately soft, slightly calcareous, silty in part, slightly carbonaceous in part.
- Some Siltstone ranging to very fine grained Sandstone - milky-clear, generally moderately well consolidated, slightly carbonaceous, some loose very fine Quartz grains, commonly pyritic, NSFOC.
- 3900-50 Dolomite-Limy Dolomite - tan to light-medium brown as above.
- 3950-4000 Limy Dolomite-Dolomite - buff-tan, moderately firm-moderately soft, generally cryptocrystalline, slightly carbonaceous in part, frequently pyritic.
- 4000-50 Limestone-Dolomitic Limestone - buff-light tan, slightly argillaceous in part, microcrystalline, moderately soft.
- Shale - medium gray-grayish tan, moderately firm, slightly calcareous in part, frequently pyritic, slightly-moderately carbonaceous.
- 4050-4100 Siltstone ranging to very fine grained Sandstone - milky-clear, generally well consolidated, slightly calcareous, tight, NSFOC, some Pyrite.
- Shale - light gray, slightly calcareous, silty in part, moderately firm-moderately soft, slightly carbonaceous in part, some Pyrite.
- Limestone-Dolomitic Limestone - as above.
- 4100-50 Shale - light-medium gray, frequently grayish tan, moderately soft, slightly-moderately calcareous, silty in part, slightly carbonaceous, frequently pyritic.

Some Siltstone, milky-clear, slightly calcareous, slightly argillaceous in part, slightly carbonaceous in part, frequently pyritic.

4150-4200 Shale as above, also Shale - medium-dark brown to orangish tan, occasionally brownish black, moderately firm-moderately soft, very slightly calcareous in part, generally highly carbonaceous.

4200-50 Shale as above.

Some Limy Dolomite-Dolomite - buff-tan, cryptocrystalline-microcrystalline, moderately firm, slightly carbonaceous in part.

4250-4300 Shale - medium-dark gray to brownish gray, moderately firm-moderately soft, slightly-moderately calcareous, sub-blocky in part, moderately-highly carbonaceous, frequently pyritic.

Limestone-Dolomitic Limestone - buff to light tan, cryptocrystalline-frequently microcrystalline, moderately soft, slightly argillaceous in part, slightly carbonaceous in part.

4300-50 Shale - medium-dark gray, brownish gray, orangish tan, moderately firm-moderately soft, slightly calcareous in part, sub-blocky in part, moderately-highly carbonaceous, some Pyrite.

Some Limestone-Dolomitic Limestone as above.

4350-4400 Shale - light gray-very faint emerald tinge, moderately firm, silty in part, slightly pyritic in part, slightly calcareous, very slightly carbonaceous in part.

Limestone-Dolomitic Limestone as above.

Some Siltstone, milky-clear, slightly calcareous in part, slightly argillaceous in part, occasionally very fine grained Sandstone, moderately well consolidated, trace Mica, occasionally specks of carbonaceous material.

4400-17 Shale as above - plus medium gray to brownish gray.

Siltstone as above.

Some Limestone-Dolomitic Limestone as above.

Switch from air/foam drilling to KCl/water at 4417'.

4417-50 Much cavings, sample questionable.

Trace Sandstone very fine grained dark brown oil stain, no fluorescence, good immediate bright yellow streaming cut, moderately well-sorted, slightly friable, sub-round, fair-good porosity. Commonly dark brown globules of oil on cuttings. This is first significant oil show in well.

4450-4500 Much cavings, sample questionable. Mixture of Shale, Siltstone, Limestone and Dolomitic Limestone, frequently dark brown oil globules on cuttings.

4500-4504 Sandstone - very fine grained ranging to Siltstone - milky-very light brown, moderately well consolidated, moderately sorted, sub-angular to sub-round, slightly calcareous, slightly argillaceous in part, trace Glauconite and lithic fragments, some fair intergranular porosity, spotty-very light brown oil stain, dull gold-yellow fluorescence, fair bright yellow burst-ring cut.

4504-30 Dolomitic Limestone-Limestone - orangish brown-tan occasionally yellowish tan, microcrystalline-cryptocrystalline, generally moderately firm, slightly-carbonaceous in part.

Shale - cream-light gray, moderately soft, slightly-moderately calcareous, silty in part, commonly microcrystalline disseminated Pyrite, slightly carbonaceous.

Siltstone ranging to very fine grained Sandstone - milky-light gray, generally peppered with carbonaceous material and lithic fragments, some Glauconite and Mica, abundant Pyrite, poorly sorted, slightly-moderately calcareous, slightly-moderately argillaceous, tight, generally NSFOC.

4530-60 Sandstone very fine grained ranging to Siltstone - milky-light brown, moderately well consolidated, moderately well sorted, sub-angular to sub-round, slightly calcareous, slightly argillaceous in part, trace Glauconite, some carbonaceous material and lithic fragments, some fair intergranular porosity, generally spotty medium-dark brown oil stain on grain contacts ranging to even very light brown oil stain, very faint dull gold fluorescence in part, fair bluish yellow streaming-ring cut.

Shale and Dolomitic Limestone-Limestone as above.

4560-90 Limestone-occasionally Dolomitic Limestone generally buff-tan, microcrystalline, moderately firm, slightly argillaceous, slightly carbonaceous in part, trace of ostracods and other very fine assumed fossil fragments.

4590-4620 Limestone occasionally Dolomitic Limestone as above, occasionally Pyrite.

Shale - light-medium gray, occasionally mottled with white, moderately soft-moderately firm, slightly-moderately calcareous, slightly carbonaceous, frequently silty.

4620-50 Limy Dolomite-Dolomite - orangish brown, tan-medium brown, microcrystalline, moderately firm, moderately carbonaceous.

Shale as above.

Some Limestone - buff-tan-medium brown, microcrystalline-cryptocrystalline, moderately firm-moderately soft, slightly carbonaceous, slightly argillaceous in part.

4650-80 Limestone-Dolomitic Limestone - buff-tan-light to medium brown, microcrystalline-cryptocrystalline, moderately firm, slightly-moderately argillaceous in part, some clear spar Calcite.

Some Limy Dolomite-Dolomite as above.

Some Shale - dark brown, moderately firm, sub-blocky, moderately calcareous, moderately-highly carbonaceous.

4680-4710 Limy Dolomite-Dolomite - orangish brown to medium brown, microcrystalline, moderately firm, slightly-moderately carbonaceous.

Shale - cream-pale emerald, moderately firm, slightly calcareous, sub-blocky.

Some Limestone - buff-tan, microcrystalline-cryptocrystalline, generally moderately firm, some clear spar Calcite. Some pellets and/or oolites, trace ostracods.

4710-40 Shale - light-medium gray, frequently very faint emerald, occasionally cream, generally moderately soft, slightly-moderately calcareous, slightly carbonaceous in part, slightly silty in part.

Limestone–Dolomitic Limestone – buff–tan, microcrystalline, moderately soft–moderately firm, slightly argillaceous in part, trace ostracods.

Dolomite–Limy Dolomite – orangish brown to medium brown, microcrystalline–cryptocrystalline, slightly–moderately carbonaceous, moderately firm–occasionally moderately soft.

TOH @ 4758' for bit.

4740–70 Shale – light–medium gray occasionally cream, sub–blocky to sub–platy in part, moderately calcareous, moderately soft, frequently specked with carbonaceous material, silty in part, frequently pyritic.

Some Siltstone occasionally ranging to very fine grained Sandstone – milky–light gray occasionally white, well consolidated, slightly calcareous, generally slightly–moderately calcareous, some carbonaceous material, commonly pyritic, tight, NSFOC.

4770–4800 Shale – cream–light gray mottled–streaked with carbonaceous material and Pyrite, moderately soft, slightly calcareous, also light–medium gray, slightly emerald as above.

Limestone and Dolomite–Limy Dolomite as above.

Some Sandstone very fine grained commonly ranging to Siltstone, generally well consolidated, moderately well sorted, sub–angular to sub–round, slightly calcareous, slightly argillaceous, commonly pyritic, generally light–medium brown oil stain, dull yellow fluorescence in part, weak bluish–yellow diffuse milky cut, poor intergranular porosity. Doesn't appear to be prospective reservoir.

4800–30 Sandstone very fine grained ranging to Siltstone, commonly light–medium brown, moderately well consolidated, moderately sorted, sub–angular to sub–round, slightly calcareous, slightly argillaceous, some fair–good intergranular porosity, slightly carbonaceous material in part, generally light brown even oil stain, dull yellow fluorescence and weak diffuse milky cut–weak slow bleeding cut. Extremely fine grained, if E–logs confirm acceptable porosity, then this Sandstone may be commercial.

Some Shale – cream to light gray commonly mottled as above, also light–medium gray with specks of carbonaceous material as above.

4830-60 Shale - medium-dark brown to dark grayish brown, generally moderately soft-occasionally moderately firm, sub-blocky, occasionally sub-platy, slightly-moderately calcareous, moderately-highly carbonaceous.

4860-90 Shale - light gray, occasionally medium gray, moderately soft, slightly calcareous, slightly carbonaceous, occasionally pyritic, silty in part, some Shale as above.

Some Sandstone very fine grained ranging to Siltstone, clear-milky, consolidated, firm-hard, slightly calcareous-slightly argillaceous, commonly pyritic, some carbonaceous material, NSFOC.

4890-4950 Shale - dark brownish gray, frequently orangish brown, moderately soft, slightly-moderately calcareous, sub-blocky, occasionally microcrystalline disseminated Pyrite, highly carbonaceous.

4950-80 Shale - grayish black, generally orangish-bronze cast, sub-platy, slightly-moderately calcareous, moderately soft, slightly-moderately calcareous, moderately-highly carbonaceous, frequently pyritic.

4980-5040 Shale - light-medium gray, occasionally brownish gray-cream, occasionally mottled, moderately soft-frequently moderately firm, slightly-moderately carbonaceous, slightly carbonaceous in part, frequently pyritic, silty in part.

Siltstone ranging to very fine grained Sandstone - clear-milky-white, moderately well consolidated, slightly-moderately calcareous, some specks of carbonaceous material and lithic fragments, trace Glauconite - dense, slightly argillaceous in part, NSFOC, some Pyrite.

Some Dolomite-Limy Dolomite - orangish brown, microcrystalline, moderately firm, slightly-moderately carbonaceous.

Trace Limestone - buff-tan-light brown, cryptocrystalline-microcrystalline, moderately firm, slightly argillaceous in part, trace ostracods.

5040-70 Shale - brownish black-dark brown, commonly bronze cast, soft and pliable, fissile-platy, slightly calcareous, frequently pyritic, moderately-highly carbonaceous.

Limestone and Dolomite-Limy Dolomite as above.

5070-5100 Shale - light-medium gray, frequently cream and mottled to brownish gray, moderately soft, slightly-moderately calcareous, slightly-moderately carbonaceous, commonly silty, some Pyrite.

Some Siltstone, Limestone and Dolomite-Limy Dolomite as 4980-5040 above.

NOTE: Shut down over 12 hours @ 5087' working on drawworks brakes.

5100-30 Shale - generally medium gray, frequently brownish gray, light gray to cream, slightly calcareous, slightly-moderately carbonaceous, frequently black specks of carbonaceous material, moderately soft-moderately firm, sub-blocky, occasionally pyritic.

Some Siltstone, Limestone and Dolomite-Limy Dolomite as 4980-5040 above.

5130-60 Shale - generally light-medium gray, moderately soft, slightly calcareous, slightly carbonaceous in part, sub-blocky in part, frequently pyritic.

Limestone - buff-clear-tan-light gray, frequently mottled, generally many ostracods, microcrystalline, moderately firm-firm, some spar Calcite, slightly carbonaceous in part, dense.

Some Dolomite-Limy Dolomite - orangish brown, microcrystalline, moderately firm, dense, slightly carbonaceous, slightly argillaceous in part.

5160-90 Shale - generally medium gray, occasionally light gray to cream, frequently mottled-peppered with carbonaceous material, slightly-moderately calcareous, moderately soft, sub-blocky in part.

5190-5220 Shale - light gray to cream to occasionally medium gray, moderately soft, slightly-moderately calcareous, commonly specked-streaked with carbonaceous material, silty in part, sub-blocky in part, some Pyrite.

Siltstone frequently ranging to very fine grained Sandstone - milky-white, well consolidated, slightly calcareous, frequently peppered with carbonaceous material and some Pyrite, dense, slightly argillaceous in part, NSFOC.

Some Dolomite-Limy Dolomite as above.

5220-50 Shale - light-medium gray to brownish gray, occasionally cream frequently specked with carbonaceous material, moderately soft, slightly-moderately calcareous, silty in part.

Some Siltstone ranging to very fine grained Sandstone as above.

5250-80 Shale - dark brown-dark grayish brown, frequently slightly bronze cast, moderately soft, slightly-moderately calcareous, moderately-highly carbonaceous.

Some Limestone and Dolomite-Limy Dolomite as above.

5280-5294 Shale - light-medium gray, frequently brownish gray-cream, moderately firm-moderately soft, slightly-moderately calcareous, slightly carbonaceous in part, frequently pyritic.

Limestone - buff-tan, microcrystalline, moderately soft-moderately firm, slightly silty in part, slightly pyritic in part, some specks of carbonaceous material.

Some Sandstone very fine grained ranging to Siltstone - clear-milky to light brown in part, moderately well consolidated, moderately-poorly sorted, sub-angular to sub-round, slightly calcareous, slightly argillaceous in part, some poor-fair intergranular porosity, spotty-light even brown oil stain, bright yellow cut, weak diffuse bluish yellow cut. Weak cut and questionable reservoir quality, but if E-logs confirm sufficient porosity, then could be commercial.

5294-5310 Shale as above.

Limestone - buff-tan, microcrystalline-cryptocrystalline, moderately firm, some clear spar Calcite, dense, slightly argillaceous in part.

Some Dolomite-Limy Dolomite - generally orangish brown-yellowish tan, slightly argillaceous in part, slightly-moderately carbonaceous, microcrystalline, moderately firm-moderately soft, dense.

5310-40 Shale, Dolomite-Limy Dolomite as above.

Some Sandstone very fine-fine grained ranging to Siltstone, milky-light gray, well consolidated, generally poorly sorted, slightly-moderately calcareous,

slightly-moderately carbonaceous, frequently carbonaceous material-lithic fragments, frequently pyritic, sub-round to sub-angular, dense, NSFOC.

5340-60 Sandstone very fine grained ranging to Siltstone - generally light brown, moderately well consolidated, slightly friable in part, moderately well sorted, slightly calcareous in part, sub-angular to sub-round, some fair intergranular porosity, generally even light-medium brown oil stain, dull gold fluorescence, weak diffuse bluish-yellow oozing cut. Probably commercial if porosity good enough on logs.

Shale - light-medium gray to cream, frequently specked-streaked with carbonaceous material and Pyrite, moderately soft, slightly calcareous.

Limestone and Dolomite-Limy Dolomite as above.

5360-70 Shale, Limestone and Dolomite-Limy Dolomite as above, but less Sandstone than above.

5370-5400 Dolomite-Limy Dolomite - orangish brown-yellowish tan, microcrystalline-cryptocrystalline, moderately firm-moderately soft, slightly argillaceous in part, slightly carbonaceous in part, dense.

Shale - light-medium gray-slightly emerald, occasionally cream, frequently mottled-streaked with carbonaceous material and Pyrite, moderately soft, slightly-moderately calcareous.

Some Siltstone ranging to very fine grained Sandstone - milky-light gray, frequently mottled-specked with carbonaceous material, slightly calcareous, slightly argillaceous, generally well consolidated, poorly-moderately sorted, frequently Pyrite, tight, NSFOC.

5400-30 Shale and Dolomite-Limy Dolomite as above.

5430-60 Shale - light-medium gray frequently cream, commonly specked-streaked with carbonaceous, slightly-moderately calcareous, moderately soft, silty in part, some Pyrite.

Dolomite-Limy Dolomite - orangish brown, microcrystalline, moderately firm-moderately soft, slightly argillaceous in part, slightly-moderately carbonaceous.

Some Siltstone ranging to very fine grained Sandstone - milky-light gray, generally well consolidated, dense, slightly calcareous, slightly argillaceous in part, moderately sorted, frequently carbonaceous material and lithic fragments, commonly pyritic, NSFOC.

5460-90

Sandstone very fine-fine grained occasionally ranging to Siltstone - very faint tan-milky, moderately well consolidated-slightly friable, moderately-well sorted, sub-angular to sub-round, slightly calcareous, generally clean, fair-good intergranular porosity, generally very light tan oil stain, bright yellow fluorescence and fair bright yellow slow bleeding cut.

Although stain is not strong, this is best looking reservoir in well to this point with fair cut, should be commercial.

Some Shale and Dolomite-Limy Dolomite as above.

5490-5520

Shale - medium gray-tannish gray, moderately firm, slightly-moderately calcareous, slightly carbonaceous, sub-blocky in part, some Pyrite.

5520-50

Shale - dark gray-dark brownish gray, occasionally grayish black-black, some bronze cast, moderately firm-moderately soft, sub-blocky in part, slightly calcareous, moderately-highly carbonaceous.

5550-80

Shale - medium-dark gray to brownish gray, moderately soft-moderately firm in part, slightly-moderately calcareous, slightly carbonaceous, some Pyrite.

5580-5610

Shale - generally dark gray-dark brownish gray, moderately soft, sub-blocky, slightly-moderately carbonaceous.

Some Limestone - buff-light tan, microcrystalline, moderately soft-moderately firm, frequently clear-milky spar Calcite, dense, slightly argillaceous in part.

5610-40

Shale - generally medium gray, frequently dark gray-dark brownish gray-light gray, moderately soft, sub-blocky in part, slightly carbonaceous, occasionally pyritic.

Some Dolomite-Limy Dolomite - orangish brown-yellowish tan in part, slightly-moderately carbonaceous, moderately firm-moderately soft, slightly argillaceous in part, dense, microcrystalline-cryptocrystalline.

- 5640-70 Shale - generally light-medium gray, moderately soft, slightly-moderately calcareous, sub-blocky in part, slightly-moderately carbonaceous, frequently pyritic, some black-grayish black Shale, moderately firm-firm, brittle in part, sub-blocky, slightly calcareous, much microcrystalline Pyrite.
- 5670-5700 Shale - black-dark gray with bronze cast, generally soft, frequently firm and brittle, slightly-moderately calcareous, moderately-highly carbonaceous, likely best source rock in well to this point, sub-blocky to sub-platy, some Pyrite.
- 5700-60 Shale ranges from cream-light gray to medium-dark gray-dark brownish gray, generally moderately soft, slightly-moderately calcareous, frequently pyritic, slightly-moderately carbonaceous, sub-blocky in part.
- 5760-90 Shale - cream-light gray occasionally medium gray, frequently specked-streaked with carbonaceous material, soft-moderately soft, slightly-moderately calcareous, frequently silty, sub-blocky.
- Sandstone very fine grained ranging to Siltstone - milky-light brown in part, generally moderately-poorly sorted, slightly calcareous, slightly-moderately argillaceous, generally well consolidated, sub-angular to sub-round, some poor intergranular porosity, some spotty light brown oil stain, dull yellow fluorescence, and very weak bluish yellow diffuse milky cut. Rocks appear too tight to be prospective.
- 5790-5810 Shale - generally medium gray frequently light-dark gray, moderately soft-moderately firm in part, slightly-moderately calcareous, slightly-moderately carbonaceous, frequently pyritic, sub-blocky in part.
- 5810-20 Shale - cream-light gray commonly specked-streaked with carbonaceous material and Pyrite, generally soft, slightly-moderately calcareous, some light-medium gray as 5790-5810 above.
- Dolomite-Limy Dolomite - orangish brown-yellowish tan, cryptocrystalline-microcrystalline, moderately firm occasionally moderately soft, slightly carbonaceous, slightly argillaceous in part, dense.
- 5820-50 Shale - dark grayish black to black, frequently with bronze cast, moderately soft-moderately firm, very slightly calcareous, moderately-highly carbonaceous, sub-blocky to sub-platy, frequently pyritic.

5850-80 Dolomite-Limy Dolomite - tan-yellowish tan to orangish brown to occasionally medium brown, microcrystalline-cryptocrystalline, moderately firm-moderately soft, slightly argillaceous in part, slightly-moderately carbonaceous, dense.

Sample highly mixed and quality is questionable.

TOH @ 5881' for wash out in drill pipe.

5880-5910 Sample highly mixed, quality questionable.

5910-40 Dolomite-Limy Dolomite as 5850-80 above.

Shale - cream-light gray frequently specked with carbonaceous material, moderately soft, slightly-moderately carbonaceous, frequently pyritic.

Appear to still be getting significant amount of cavings.

5940-70 Shale - generally medium-dark gray, occasionally brownish gray, moderately soft, slightly-moderately calcareous, generally moderately carbonaceous, slightly silty in part, frequently pyritic.

5970-6000 Shale - black with slightly bronze cast from abundant microcrystalline Pyrite, frequently dark gray-dark brownish gray, generally soft, slightly-moderately calcareous, generally highly carbonaceous-petroliferous, sub-platy in part, likely very good source rock.

6000-30 Shale - black-grayish black with slightly bronze cast from microcrystalline disseminated Pyrite, moderately firm-soft, slightly calcareous in part, highly carbonaceous, generally sub-platy.

6030-60 Shale - cream-light gray frequently mottled-specked with carbonaceous material, moderately soft, slightly-moderately calcareous, frequently silty.

Dolomite-Limy Dolomite - orangish brown-yellowish tan-dark reddish brown, microcrystalline-cryptocrystalline, moderately firm, slightly-moderately argillaceous in part, slightly-moderately carbonaceous, dense.

6060-90 Shale as 6000-30 above.

6090-6120 Shale - dark steely gray-grayish black-brownish gray with bronze cast from Pyrite, moderately firm and slightly brittle to soft, slightly calcareous, moderately-highly carbonaceous, sub-blocky to sub-platy.

6120-6150 Shale - medium gray-brownish gray, frequently slightly gray-cream, moderately soft-occasionally moderately firm, moderately-slightly calcareous, slightly carbonaceous in part with specks of dark brown-black carbonaceous material, frequently silty. Some Shale as above.

Dolomitic Limestone-Limestone - buff-tan, some clear-milky spar Calcite, cryptocrystalline-occasionally microcrystalline, moderately firm, dense, trace medium gray pellets.

6150-80 Sandstone fine grained ranging from very fine-medium grained, clear-milky, moderately consolidated-slightly friable, moderately well sorted, slightly calcareous, slightly argillaceous in part, some lithic fragments in part, sub-angular to sub-round, some fair-good intergranular porosity, spotty medium-dark brown oil stain on grain contacts, dull yellow fluorescence, very weak diffuse bluish milky cut-weak bluish yellow ring cut-slow bleeding cut after soaking.

Stain and cut not particularly good, but reservoir appears acceptable, based on history in area, this is most likely a commercial zone, frequently globules of dark brown oil on sample.

Shale - cream generally mottled with medium brown-medium gray carbonaceous material and some Pyrite, slightly calcareous, moderately soft.

6180-6226 Shale as above, also some light-medium gray Shale.

Sandstone very fine grained ranging to Siltstone - white-milky, generally slightly-moderately calcareous, slightly-moderately argillaceous, well consolidated, dense, NSFOC, frequently peppered with carbonaceous material and Pyrite.

Dolomite-Limy Dolomite - tan-orangish brown, cryptocrystalline-microcrystalline occasionally spar Calcite, slightly argillaceous in part, slightly carbonaceous in part, dense, moderately firm-firm.

6226-40 Shale as above.

Dolomite-Limy Dolomite as above.

Some Sandstone - fine-very fine grained, generally clear-milky, moderately unconsolidated-slightly friable in part, slightly calcareous in part, moderately well sorted, sub-angular to sub-round, some lithic fragments, trace Glauconite, some fair-good intergranular porosity, generally no visual stain, but some very faint pinpoint light brown oil stain, some bluish-yellow fluorescence in part, no immediate cut, but after soaking, very weak bluish yellow halo cut.

Very weak visual show.

6240-60

Sandstone - medium-fine grained, clear-milky, generally unconsolidated to friable, slightly calcareous in part, generally well-moderately well sorted, generally sub-angular, occasionally sub-round, some lithic fragments, generally good intergranular porosity, generally visual stain is only spotty, faint brown on some grain contacts, bright bluish-yellow fluorescence, weak-fair diffuse bluish-yellow milky-halo cut.

Although stain is very weak, this zone is likely commercial in light of good porosity and quality of cut.

6260-70

Limy Dolomite-Dolomite - orangish brown-yellowish tan-tan, micro-crystalline-cryptocrystalline, moderately firm-moderately soft, slightly argillaceous in part, slightly-moderately carbonaceous.

Shale as 6180-6226 above.

Some Limestone - buff-light tan, cryptocrystalline-microcrystalline, moderately firm, slightly argillaceous in part, dense.

6270-88

Shale - Limy Dolomite to Dolomite and Limestone as above.

Also some Sandstone - very fine-fine grained, frequently fine-medium loose Quartz grains, generally clear-milky, moderately unconsolidated-friable in part, moderately well sorted, sub-angular to sub-round, slightly calcareous, some fair-good porosity, some Pyrite and lithic fragments, some very faint light brown spotty-even oil stain in part, bright yellow cut, weak bluish-yellow milky cut. Some Siltstone which appears tight has medium-dark brown even oil stain.

NOTE: Abundant quantity of oil globules and droplets in this sample.

Although this zone is thin, in view of porosity, shows, and presence of oil, this zone could be a sleeper and deserves close E-log scrutiny.

- 6288-6300 Shale, Limy Dolomite-Dolomite and Limestone 6260-70 above.
- 6300-30 Shale - cream-light to medium gray, generally soft, slightly-moderately calcareous, frequently mottled-streaked with carbonaceous material, generally silty.
- Some Limy Dolomite-Dolomite and Limestone as above.
- 6330-90 Shale as above plus dark brownish gray, abundant microcrystalline Pyrite, moderately firm-moderately soft, moderately carbonaceous, sub-blocky.
- Limy Dolomite-Dolomite - orangish tan to tan to orangish brown, microcrystalline-cryptocrystalline, moderately firm-moderately soft, slightly argillaceous in part, slightly carbonaceous in part, dense, some Pyrite in part.
- 6390-6450 Shale - cream-light to medium gray, frequently mottled-specked with carbonaceous material, moderately soft, slightly-moderately calcareous, frequently pyritic, silty in part, also brownish gray-grayish black to black, highly carbonaceous-petroliferous.
- Limestone-Argillaceous Limestone - buff-tan, microcrystalline, moderately soft, dense.
- Limy Dolomite-Dolomite - orangish brown-yellowish tan, microcrystalline, moderately firm-occasionally moderately soft, slightly carbonaceous in part, dense.
- 6450-80 Shale - dark brownish gray-gray black to occasionally black, generally with slightly bronze cast from Pyrite, moderately firm-soft, slightly calcareous, moderately-highly carbonaceous, sub-blocky.
- 6480-97 Shale as above, also cream-light gray, commonly specked-mottled with carbonaceous material and Pyrite, moderately soft, slightly calcareous.
- Dolomite-Limy Dolomite as above.
- Some Sandstone very fine-fine grained ranging to Siltstone - milky to light gray to light brown, moderately well consolidated, moderately well

sorted, sub-angular to sub-round, slightly calcareous, slightly argillaceous in part, some fair intergranular porosity, some spotty-even medium brown oil stain, bright yellow fluorescence and very weak bright bluish-yellow milky-slow streaming cut.

May be prospective if E-logs confirm reservoir.

6497-6510

Shale as 6450-80 above.

Some Dolomite-Limy Dolomite as above.

6510-40

Shale - dark brownish gray-grayish black to black, generally with bronze cast from abundant Pyrite, moderately firm-soft, slightly-moderately calcareous, highly carbonaceous, sub-blocky to sub-platy.

Some Limestone-Dolomitic Limestone, dark brown, cryptocrystalline-microcrystalline, firm, slightly brittle in part, slightly-moderately carbonaceous, dense.

6540-6600

Shale - dark brownish gray-grayish black, typically with bronze cast, moderately firm-moderately soft, moderately calcareous, moderately-highly carbonaceous.

Limestone-Dolomitic Limestone - dark brown, cryptocrystalline-microcrystalline, moderately firm-firm, slightly brittle in part, slightly-moderately carbonaceous, dense.

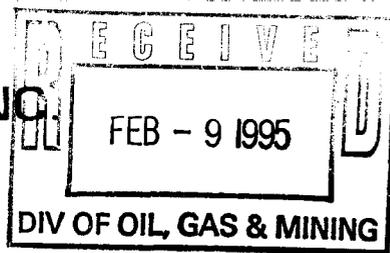
TOTAL DEPTH 6600' - DRILLER.

4924 RIMROCK ROAD  
BILLINGS, MONTANA 59103  
(406) 656-4785

# DENNIS REHRIG & ASSOCIATES, INC.

OIL & GAS CONSULTING

## GEOLOGIC WELL LOG



BALCRON OIL 12-22Y FEDERAL  
2105' FNL 660' FWL, SECTION 22, T 8 S-R 17 E  
DUCHESNE COUNTY, UTAH

22

ELEVATIONS: 5192' G.L. 5202' K.B.

SPUD: 10:15 AM (MST) 12/31/94

OUT FROM UNDER SURF CSG 2:15 PM (MST) 1/1/95

DATE DRLG. COMP. 7:30 PM (MST) 1/10/95

DATE WELL COMPLETED 1:30 AM (MST) 1/12/95

STATUS: RAN PRODUCTION CASING

SURF. CSG.: 404' OF 8 5/8"

PRODUCTION CSG 5 1/2" TO 6584' K.B.

CORES NONE

DRILL STEM TESTS: NONE

CONTRACTOR UNION DRILLING CO.

RIG 17

DE BRICK CABOT FRANKS, 97' MAST

DRAWWORKS DETROIT 3304, POWERED BY  
ONE 343 DIESEL CAT

PUMPS 1 - GARDINER DENVER FXN, 14" STROKE,  
5 1/2" LINER

DRILL BIT 4 1/2" OD, 2 1/4" ID, X-H THREAD

COLLARS 6" OD, 2 1/2" ID, 20 JTS

MUD SYSTEM AIR/FOAM TO 4417', KCL/WTR 4417'-TD

TOTAL BITS 4

TOTAL DAYS TO LOG POINT 11 TO COMPL: 13

T.D. DRILLER 6600' LOGGER 6594'

PLANE TABLE 77' BELOW TOP OF UTEL AND BUTTE L.S.

### ROCK TYPE

(Consistent with American Stratigraphic Company)

	CONGLOMERATE		DOLOMITE
	SANDSTONE		ANHYDRITE
	SILTSTONE		SALT
	SHALE		COAL
	BENTONITE		IGNEOUS
	CHERT		VOLCANIC
	LIMESTONE		METAMORPHIC

### ACCESSORIES

	SANDY		CHERT
	SILTY		ARGILLACEOUS
	SAND GRAINS		CALCAREOUS
	SILICEOUS		DOLOMITIC
	GLAUCONITE		ANHYDRITIC
	PYRITE		SALT CAST or INFILL
	PLANT REMAINS		PHOSPHATE PELLETS
	MINERAL CRYSTALS		NODULES

### ORGANIC or NON ORGANIC ALLOCHEMS

	FORAMINIFERA		CEPHALOPOD
	CRINOID		GASTROPOD
	PELECYPOD		ECHINOID
	BIOLASTIC or FRAGMENTAL		FOSSILS UNIDENTIFIABLE
	CORAL		OOBITES
	STROMATOPOROID		PISOILITE 2mm. or over
	BRYOZOA		PSEUDO OOLITES or PELLETS
	BRACHIOPOD		INTRACLASTS
	OSTRACOD		

### FRAMEWORK ALGAE

	SKELETAL
	OOLOID or ONCOLYTIC

### NON-FRAMEWORK ALGAE

	NON-DESCRIPT
	LAMINATED

### MISCELLANEOUS

	NO SAMPLES		QUESTIONABLE INTERPRETATION
	CANNOT INTERPRET cavings etc		STYLOLITES

### POROSITY TYPES

X	INTERCRYSTALLINE, INTERGRANULAR, INTERFRAGMENTAL	O	ORGANIC - bridged, Intrafossil
∅	INTEROOOLITIC, INTERPELLETOID	F	FRACTURE
V	VUGGY - voids greater than 1/16mm	e	EARTHY - low permeability, crystals less than 1/16mm
P	PINPOINT - voids less than 1/16mm	□	FENESTRAL - voids from gas bubbles, shrinkage cracks & birdseye texture
∞	MOLDIC		

### OIL STAINS - stain present

●	EVEN STAINING, FLOURESCES IN SOLVENT
●	SPOTTED STAINING, FLOURESCES IN SOLVENT
D	DEAD, ASPHALTIC, BITUMEN, ETC
○	QUESTIONABLE, NO FLOURESCENCE IN SOLVENT

### EVALUATION LEGEND

	WHOLE CORE
	DRILL-STEM TEST
	PERFORATIONS

### DRILLING AND PRODUCTION DATA

▲	CASING SET	RPM	ROTATION (REV/MIN)
NB	NEW BIT	PP	PUMP PRESSURE
RRB	RERUN BIT	LC	LOST CIRCULATION
CB	CORE BIT	NR	NO RETURNS
DS	DEVIATION SURVEY	TG	TRIP GAS
W/B	WEIGHT ON BIT	CG	CONNECTION GAS

### MUD DATA

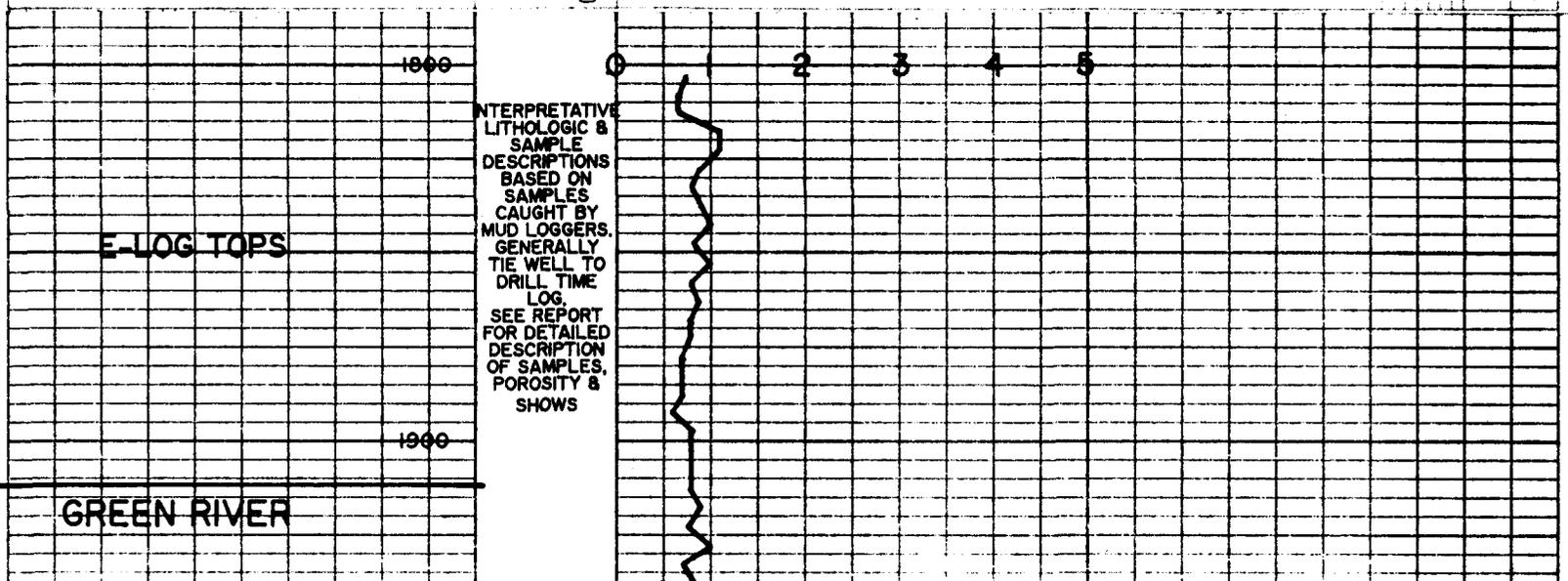
∇	VISCOSITY
W	WEIGHT IN lbs/gal
WL	FILTRATE IN cc
FC	FILTER CAKE
CL	CHLORIDE CONTENT (ppm)
Rm	MUD RESISTIVITY (Ω)
Rmf	MUD FILTRATE RESISTIVITY (Ω)

### ELECTRIC LOG GAMMA RAY / CALIPER

INTERPRETED LITHOLOGY AND DEPTH

### DRILLING PENETRATION RATE (MIN / FT)

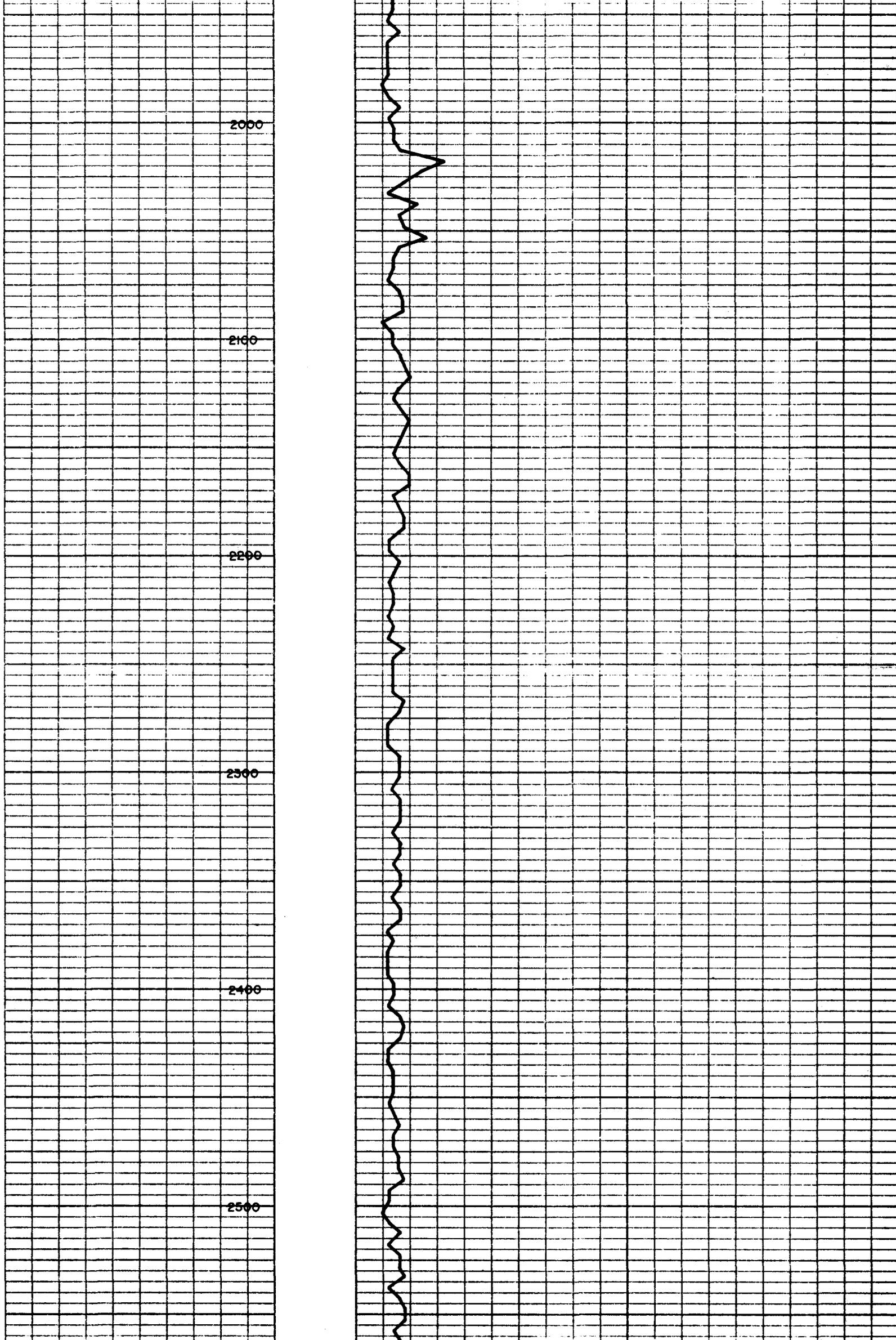
CASING & PERFORATIONS  
CORE & DST  
OIL SHOWS  
POROSITY (%)



E-LOG TOPS

GREEN RIVER

INTERPRETATIVE LITHOLOGIC & SAMPLE DESCRIPTIONS BASED ON SAMPLES CAUGHT BY MUD LOGGERS. GENERALLY TIE WELL TO DRILL TIME LOG. SEE REPORT FOR DETAILED DESCRIPTION OF SAMPLES, POROSITY & SHOWS



SAMPLES EXAMINED FROM 2700'-TOTAL DEPTH. SEE SAMPLE DESCRIPTIONS IN REPORT FOR DETAILS.

HORSE BENCH SAND

2600

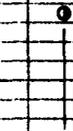
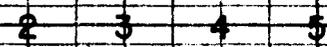
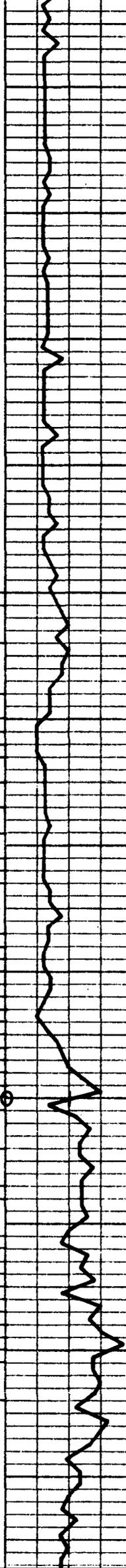
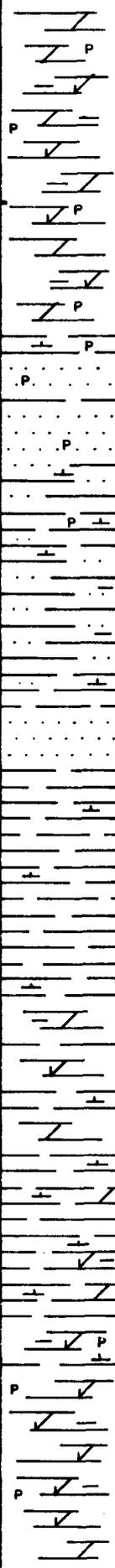
2700

2800

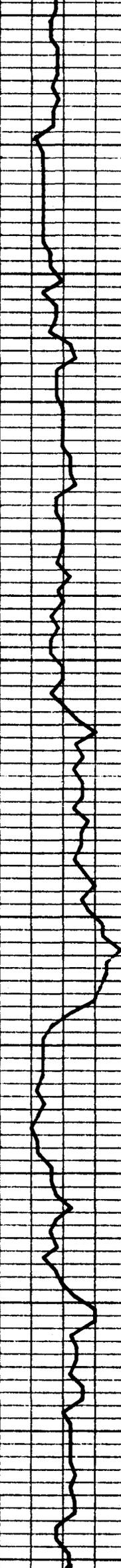
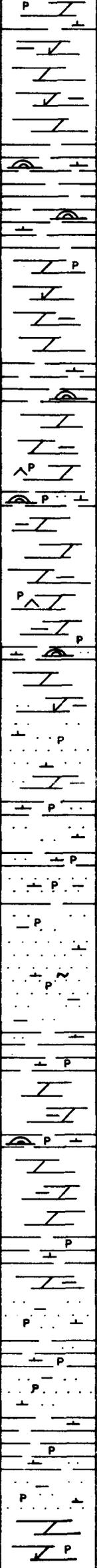
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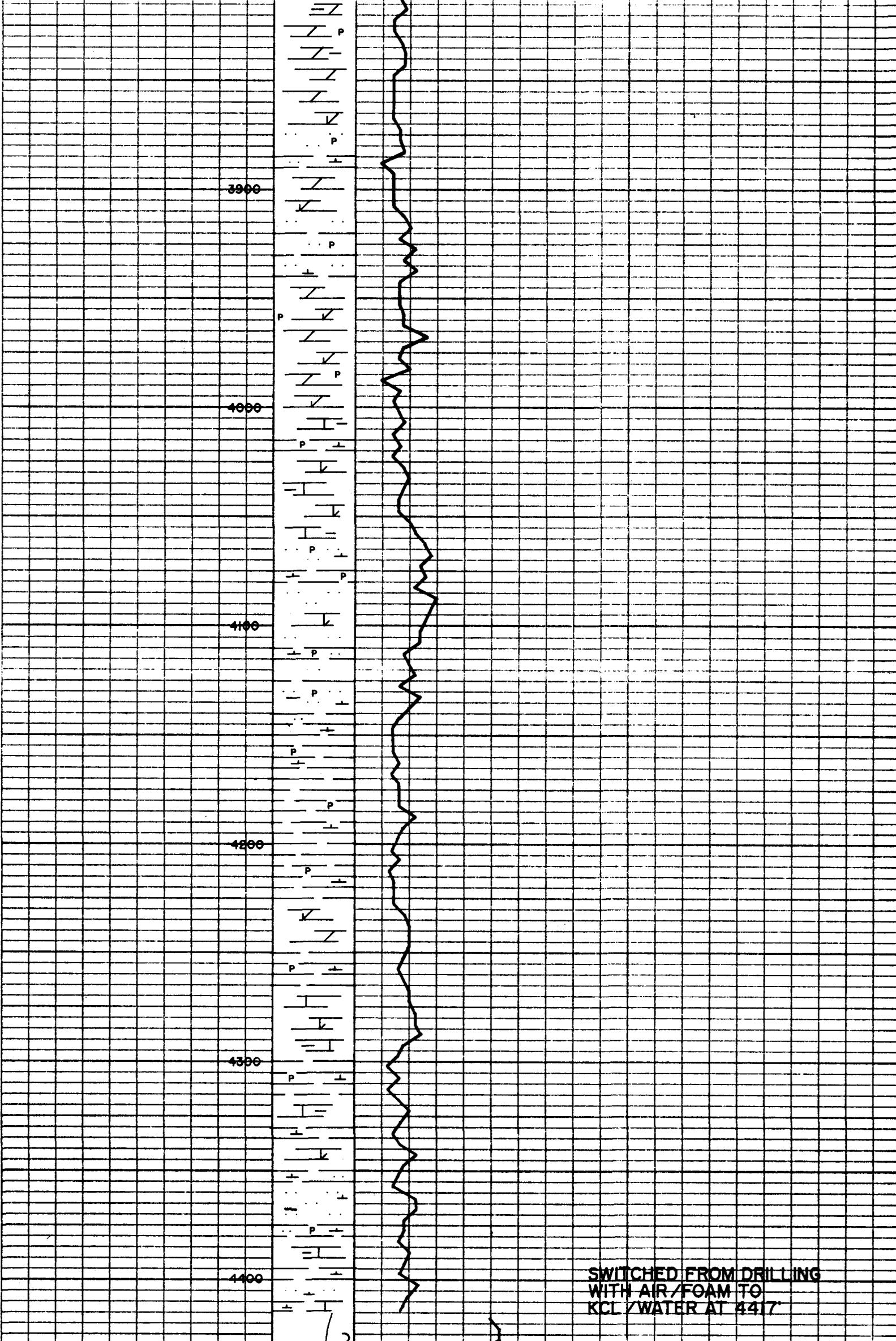
3000

3100



3200  
3300  
3400  
3500  
3600  
3700  
3800





SWITCHED FROM DRILLING  
WITH AIR/FOAM TO  
KCL/WATER AT 4417'

2ND GARDEN GULCH

TOH 5 STANDS AT 4488' WO PUMP

4500

4600

VERTICAL SCALE CHANGE

0 GAMMA RAY 150

6 CALIPER 16

4300

INTERPRETATIVE LITHOLOGIC & SAMPLE DESCRIPTIONS BASED ON SAMPLES CAUGHT BY MUD LOGGERS. GENERALLY TIE WELL TO DRILL TIME LOG. SEE REPORT FOR DETAILED DESCRIPTION OF SAMPLES, POROSITY & SHOWS

50

E-LOG TOPS

4400

GENERALLY NEED TO ADJUST SAMPLE DESCRIPTIONS AND DRILL TIME FROM 4400' TO TOTAL DEPTH UP 4'-8' TO TIE WITH E-LOGS.

SWITCHED FROM AIR/FOAM TO KCL/WATER AT 4417'

2ND GARDEN  
GULCH

50

4500

50

4600

50

TOH 5 STANDS AT  
4488' TO CHANGE  
MUD PUMP MOTOR

RECORDING CHART

GRAPHIC CONTROLS CORPORATION

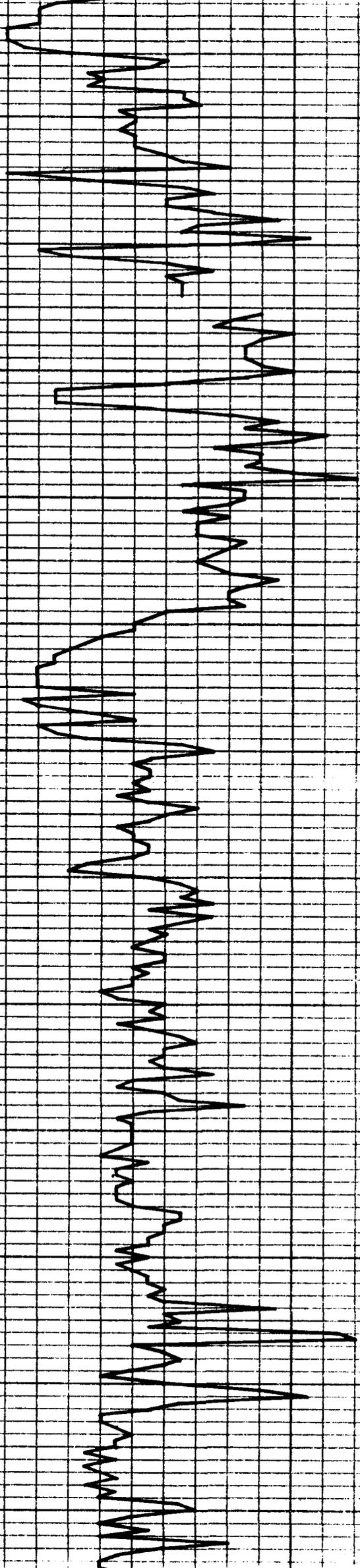
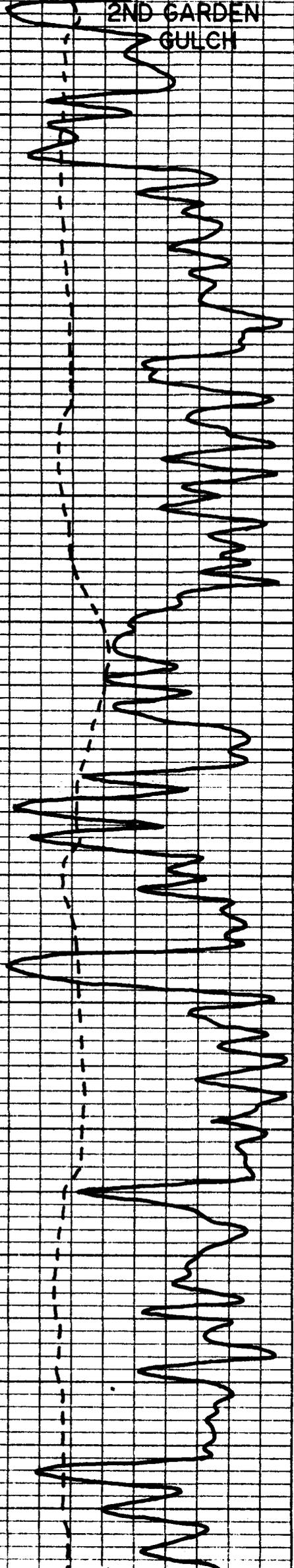
BUFFALO, NEW YORK

NO. TC 1 3355

PRINTED IN U.S.A.

RECORDING CHART

GRAPHIC CONTROLS CORPORATION



X

X

X

X

X

4700

50

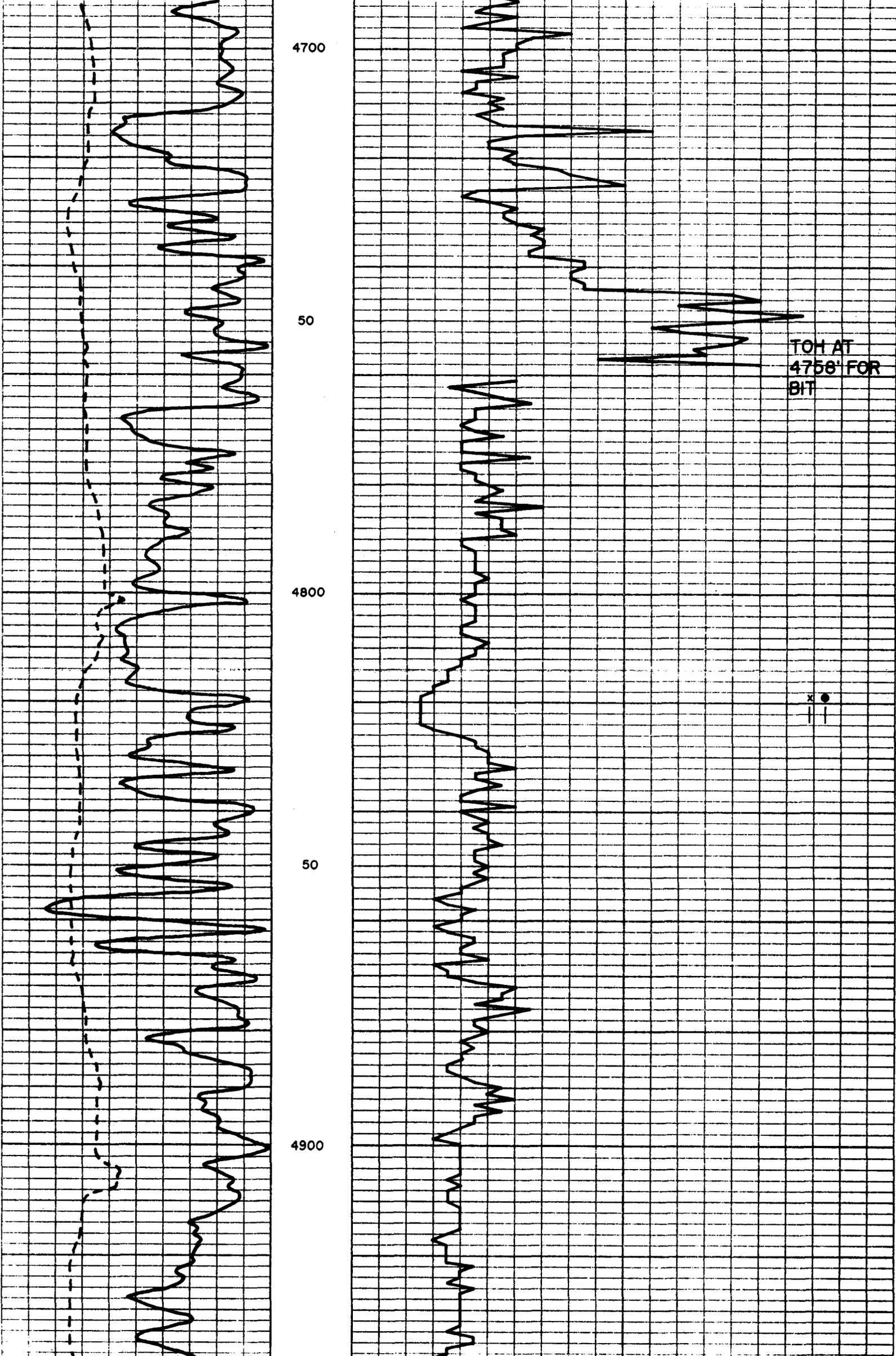
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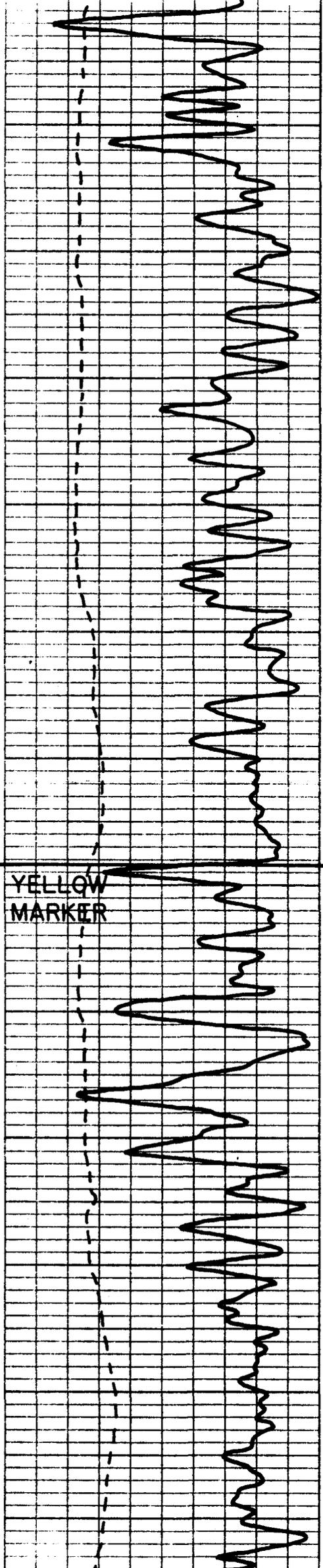
50

4900

TOH AT  
4756' FOR  
BIT

X ●





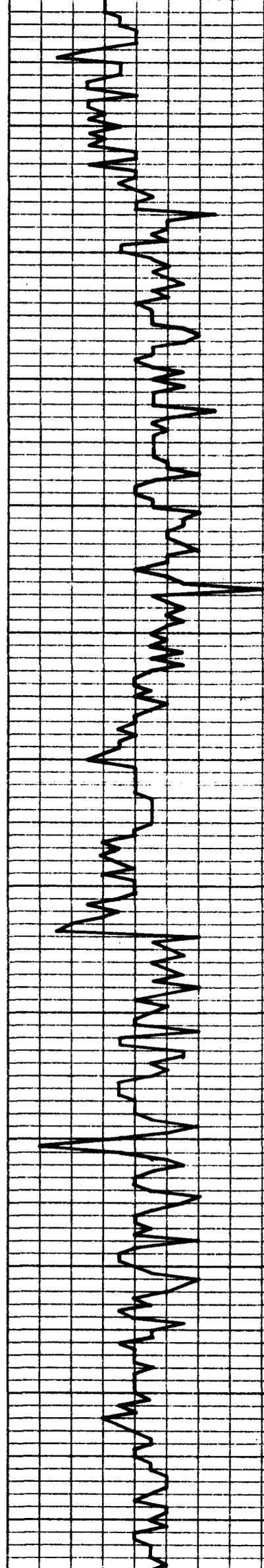
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5000

50

5100

50



SHUT DOWN TO  
WO BRAKES  
AT 5087'

5200

50

5300

50

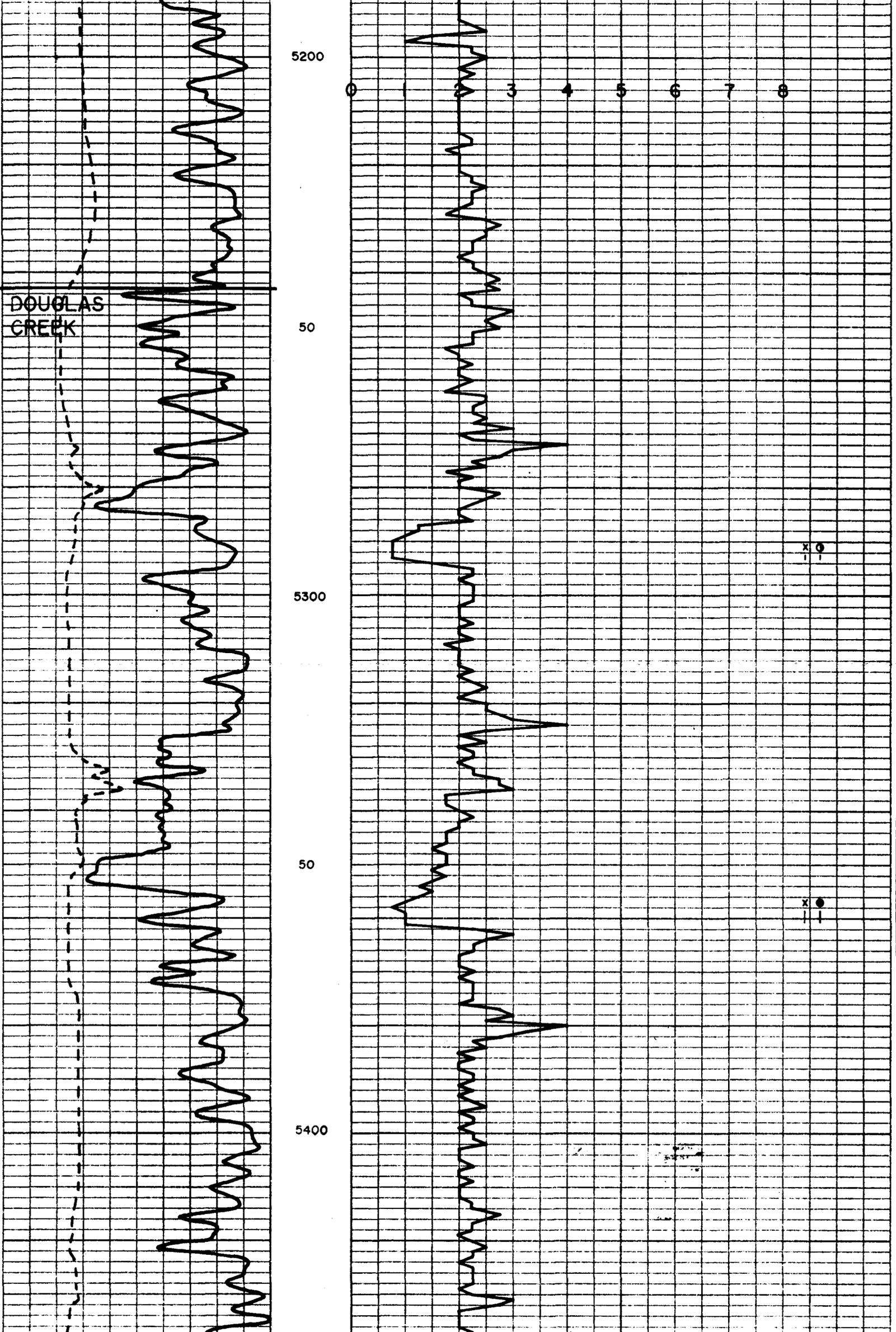
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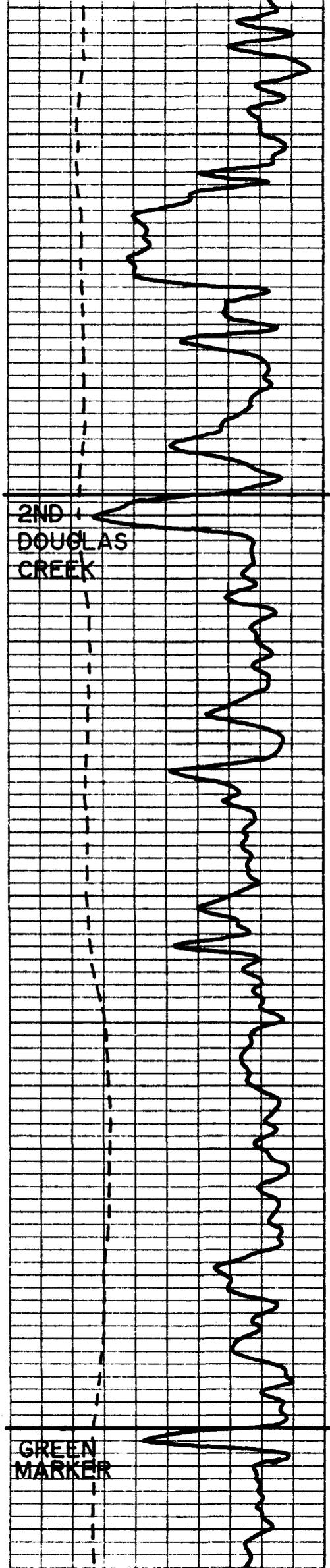
DOUGLAS  
CREEK

0 1 2 3 4 5 6 7 8

X O  
- -

X ●  
- -





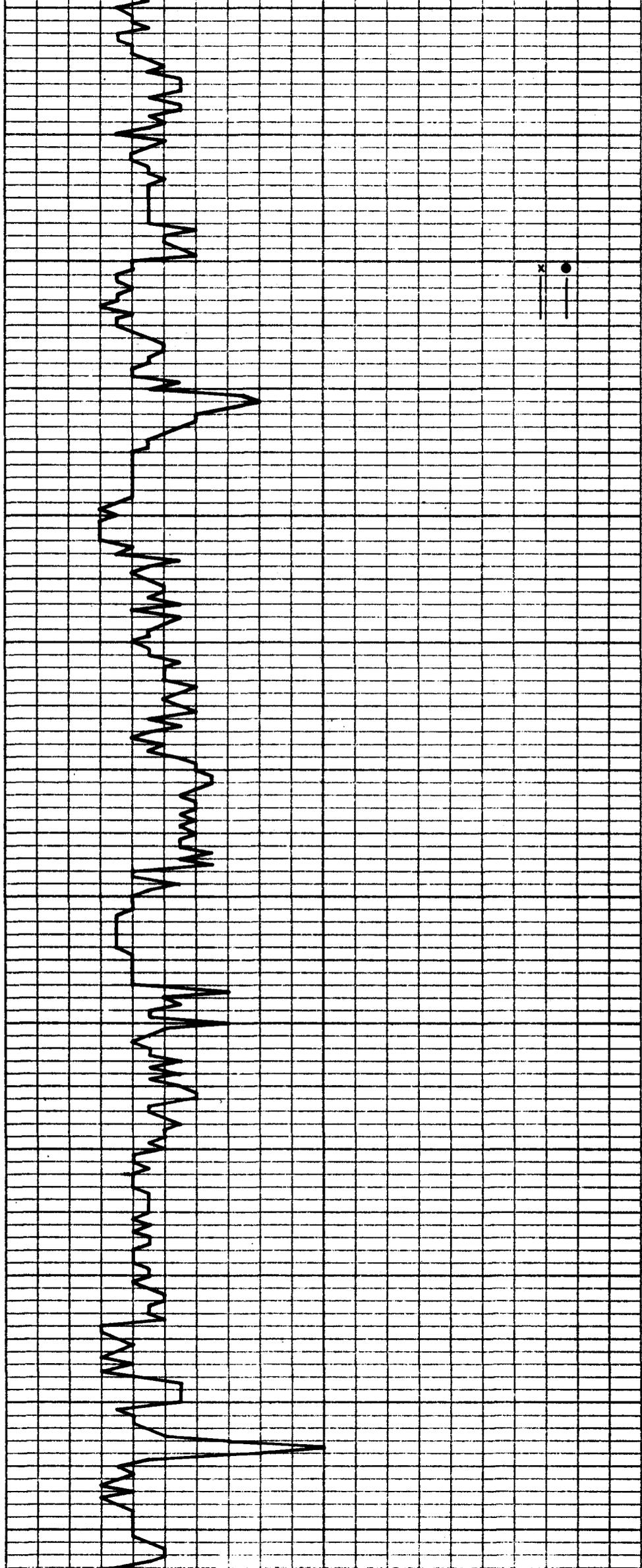
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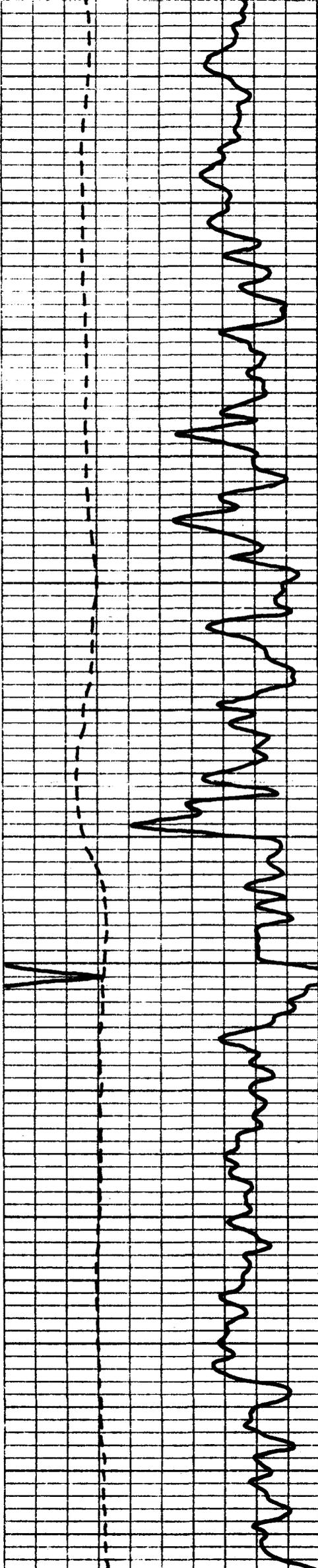
5500

50

5600

50





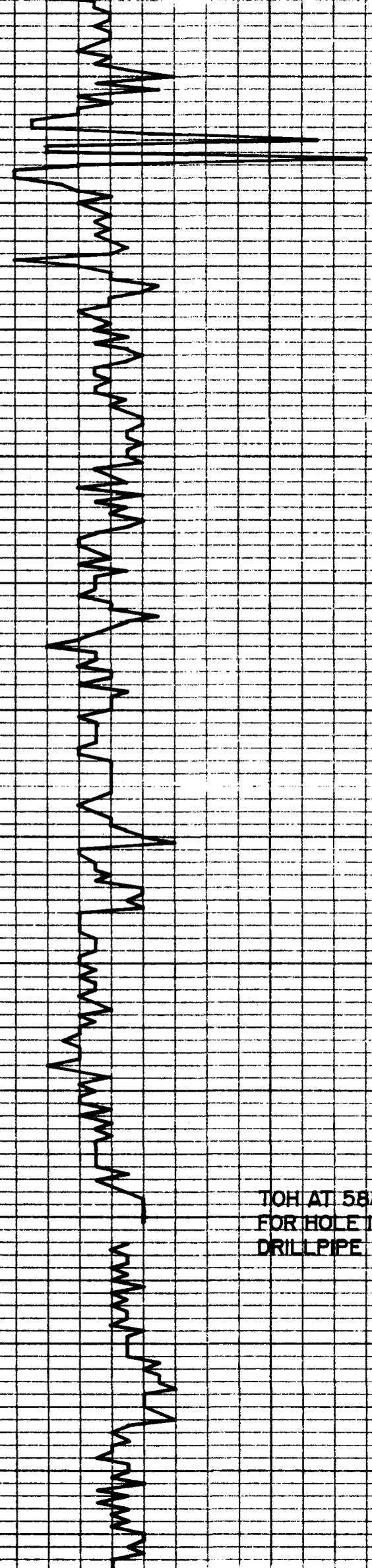
5700

50

5800

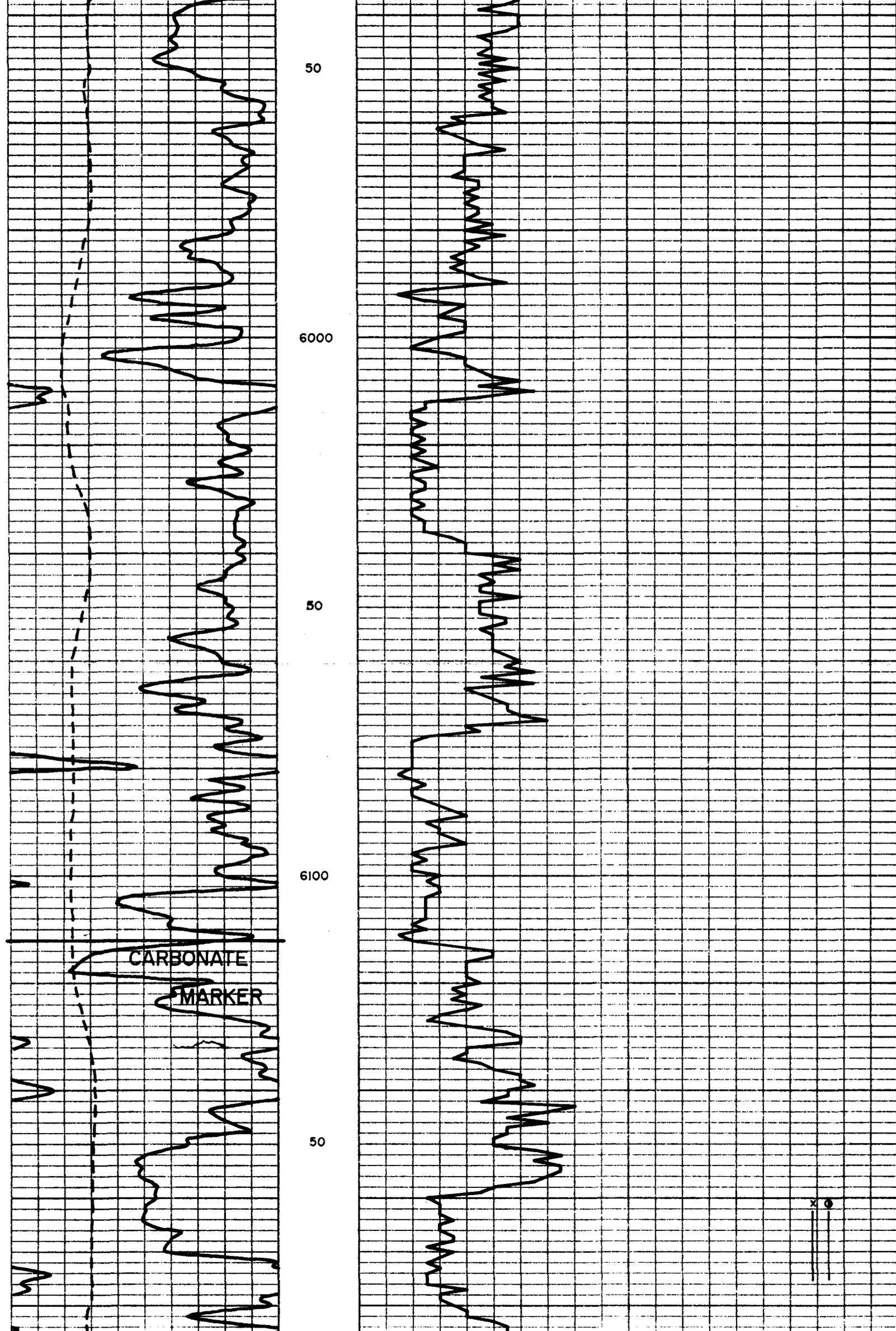
50

5900



GEOLOGRAPH  
NOT WORKING  
PROPERLY

TOH AT 5881'  
FOR HOLE IN  
DRILLPIPE





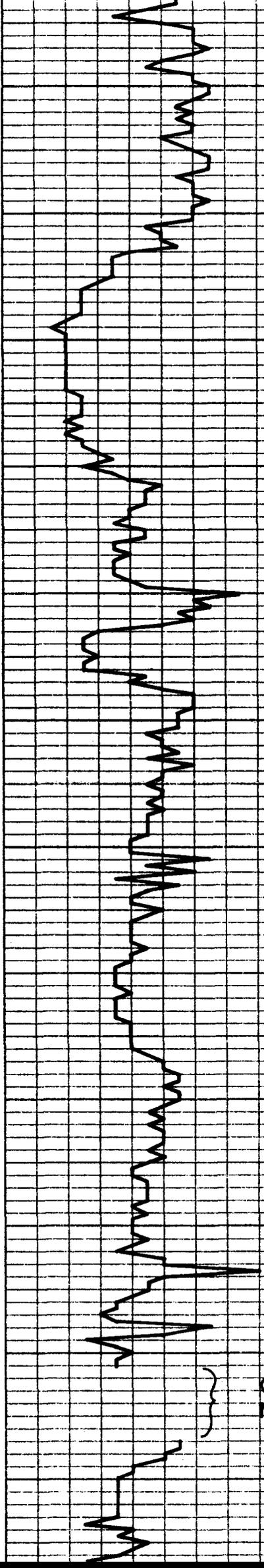
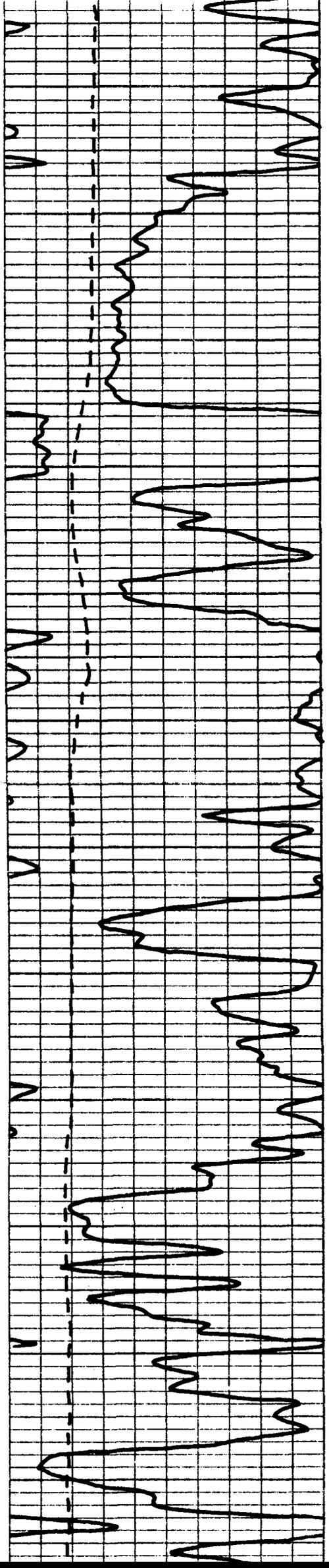
6200

50

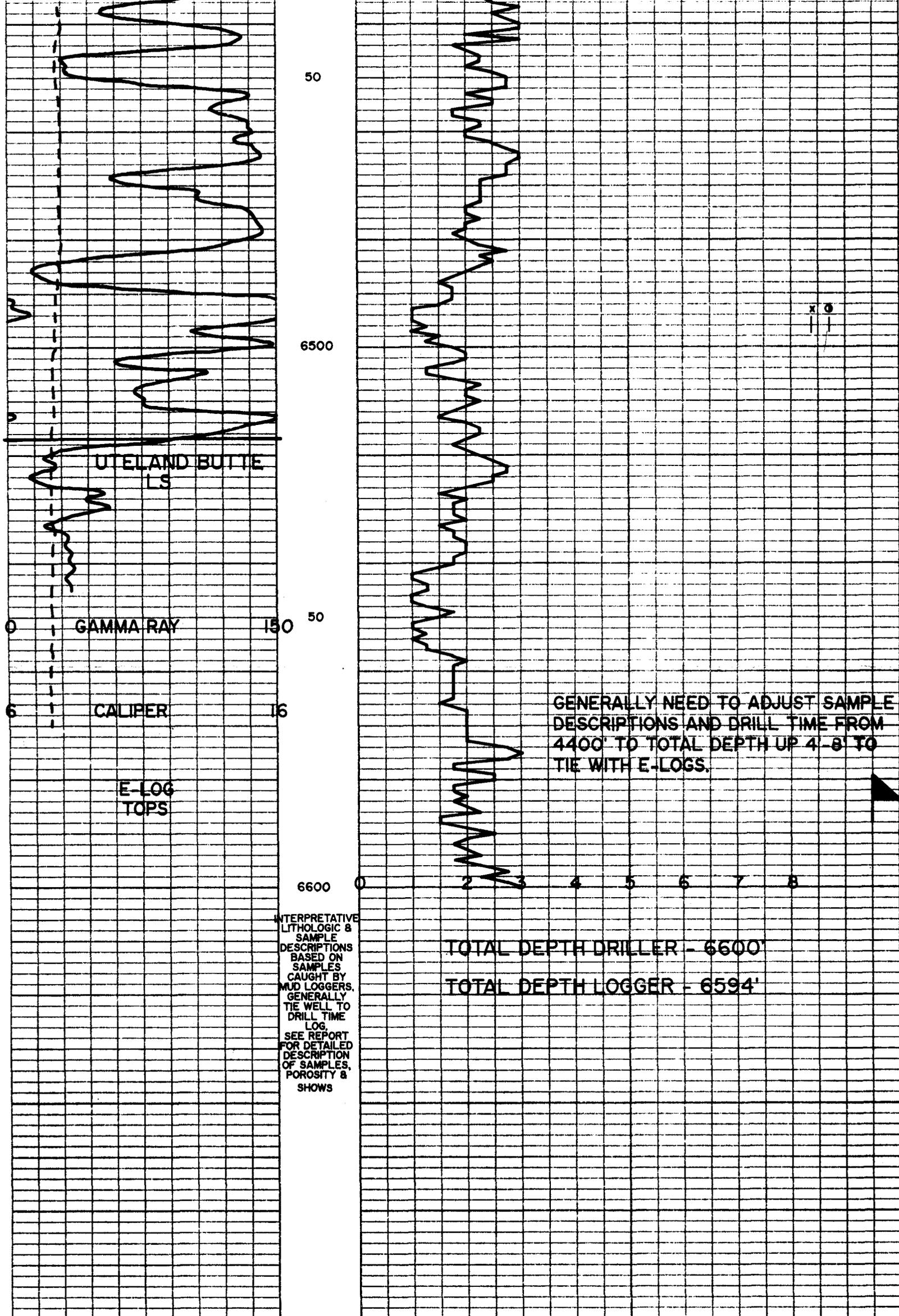
6300

50

6400



GEOLOGRAPH  
NOT WORKING



INTERPRETATIVE LITHOLOGIC & SAMPLE DESCRIPTIONS BASED ON SAMPLES CAUGHT BY MUD LOGGERS. GENERALLY TIE WELL TO DRILL TIME LOG. SEE REPORT FOR DETAILED DESCRIPTION OF SAMPLES. POROSITY & SHOWS

FEB 27 1995  
 DIV OF OIL, GAS & MINING

FORM APPROVED  
 Budget Bureau No. 1004-0135  
 Expires: March 31, 1993  
 Lease Designation and Serial No.

U-66191

**SUNDRY NOTICES AND REPORTS ON WELLS**

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.  
 Use "APPLICATION FOR PERMIT --" for such proposals

**SUBMIT IN TRIPLICATE**

1. Type of Well

Oil Well  Gas Well  Other

2. Name of Operator

EQUITABLE RESOURCES ENERGY COMPANY, BALCRON OIL DIVISION

3. Address and Telephone No.

P.O. Box 21017; Billings, MT 59104 (406) 259-7860

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

SURFACE: SW NW Section 22, T8S, R17E  
 TD: 2105' FNL & 660' FWL

6. If Indian, Allottee or Tribe Name

n/a

7. If Unit or CA, Agreement Designation

n/a

8. Well Name and No.

Balcron Federal #12-22Y

9. API Well No.

43-013-31476

10. Field and Pool, or Exploratory Area

Undesignated/Green River

11. County or Parish, State

Duchesne County, Utah

12. CHECK APPROPRIATE BOX(S) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Abandonment
<input checked="" type="checkbox"/> Subsequent Report	<input type="checkbox"/> Recompletion
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Plugging Back
	<input type="checkbox"/> Casing Repair
	<input type="checkbox"/> Altering Casing
	<input checked="" type="checkbox"/> Other
	<input type="checkbox"/> Change of Plans
	<input type="checkbox"/> New Construction
	<input type="checkbox"/> Non-Routine Fracturing
	<input type="checkbox"/> Water Shut-Off
	<input type="checkbox"/> Conversion to Injection
	<input type="checkbox"/> Dispose Water

Onshore Order #7

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

13. 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.)

Any water produced by this well will be held in a produced water tank and trucked to a commercial disposal facility. The primary facility to be used in the R.N. Industries produced water disposal facility located in Section 9, T2S, R2W in Duchesne County, Utah. A copy of the State-issued permit for that facility is on file at the Vernal Bureau of Land Management. If for some reason the operator is unable to use this primary facility, the produced water will be trucked to another State-approved disposal facility. If applicable, Operator has received approved Right-of-Way access to this well location from the Bureau of Land Management.

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

Signed Bobbie Schuman Title Regulatory and Environmental Specialist

Date 2-23-95

(This space for Federal or State office use)

Approved by \_\_\_\_\_ Title \_\_\_\_\_  
 Conditions of approval, if any:

Date \_\_\_\_\_

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

\*See instruction on Reverse Side

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

SUBMIT IN DUPLICATE

Form approved.  
Budget Bureau No. 1004-0137  
Expires August 31, 1985

(See other instructions on reverse side)

27 1990

5. LEASE DESIGNATION AND SERIAL NO.  
U-66191

6. IF INDIAN, ALLOTTEE OR TRIBE NAME  
n/a

7. AGREEMENT NAME  
n/a

8. FARM OR LEASE NAME  
Balcron Federal

9. WELL NO.  
#12-22Y

10. FIELD AND POOL, OR WILDCAT  
Undesignated/Green River

11. SEC. T., R., M., OR BLOCK AND SURVEY OR AREA  
SW NW  
Section 22, T8S, R17E

12. COUNTY OR PARISH  
Duchesne

13. STATE  
Utah

WELL COMPLETION OR RECOMPLETION REPORT AND LOG \*

1a. TYPE OF WELL: OIL WELL  GAS WELL  DRY  Other  DIV OF OIL, GAS & MINING

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

2. NAME OF OPERATOR  
Equitable Resources Energy Company, Balcron Oil Division

3. ADDRESS OF OPERATOR  
1601 Lewis Avenue, Billings, MT 59102 (406) 259-7860

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)\*  
At surface 2105' FNL & 660' FWL  
At top prod. interval reported below

At total depth

14. PERMIT NO. 43-013-31476 DATE ISSUED 12-7-94

15. DATE SPUDDED 12-18-94 16. DATE T.D. REACHED 1-11-95 17. DATE COMPL. (Ready to prod.) 1-26-95 18. ELEVATIONS (DF, RKB, RT, OR, ETC.)\* 5197' GL 19. ELEV. CASINGHEAD n/a

20. TOTAL DEPTH, MD & TVD 6600' 21. PLUG, BACK T.D., MD & TVD 6538.67' 22. IF MULTIPLE COMPL., HOW MANY\* n/a 23. INTERVALS DRILLED BY n/a 24. ROTARY TOOLS SFC - TD 25. CABLE TOOLS n/a

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)\* 6221' - 6248' Green River 25. WAS DIRECTIONAL SURVEY MADE No

26. TYPE ELECTRIC AND OTHER LOGS RUN MWD, CNL/LDC/GR, DLL, CB/GR/CEL, 1-24-95 27. WAS WELL CORED No

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

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
8-5/8"	24#	404.88' KB	12-1/4"	250 sxs "G" w/additives	None
5-1/2"	15.5#	6584.52' KB	7-7/8"	130 sxs Super "G" w/additives 480 sxs 50-50 FOZ w/additives	None

29. LINER RECORD 30. TUBING RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)
n/a					2-7/8"	6311.21' KB	n/a

31. PERFORATION RECORD (Interval, size and number) 6221' - 6248' (2 SPF)

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

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
6221' - 6248'	Break down w/2856 gallons 2% KCL wtr. Frac w/80,040# 20/40 mesh sand and 87,580# 16/30 mesh sand w/52,584 gallons 2% KCL gelled wtr.

33.\* PRODUCTION

DATE FIRST PRODUCTION 1-26-95 PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump) 1-1/2" Isert Pump WELL STATUS (Producing or shut-in) Producing

DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO
2-19-95	24	n/a	→	17.22	N.M.	0	N.M.

FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CORR.)
n/a	n/a	→	17.22	N.M.	0	34

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

35. LIST OF ATTACHMENTS

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

SIGNED Bobbie Schuman TITLE Regulatory and Environmental Specialist DATE 2-23-95

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

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):

38. GEOLOGIC MARKERS

FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.	NAME	TOP	
					MEAS. DEPTH	TRUE VERT. DEPTH
			No DST's run.			
				See Geological Report submitted separately.		

27 1995

**SUNDRY NOTICES AND REPORTS ON WELLS**

**BUREAU OF OIL, GAS & MINING**

5. Lease Designation and Serial No. U-66191  
 Indian, Allottee or Tribe Name

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.  
 Use "APPLICATION FOR PERMIT--" for such proposals

**SUBMIT IN TRIPLICATE**

1. Type of Well

Oil Well  Gas Well  Other

2. Name of Operator

EQUITABLE RESOURCES ENERGY COMPANY, BALCRON OIL DIVISION

3. Address and Telephone No.

P.O. Box 21017; Billings, MT 59104 (406) 259-7860

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

SURFACE: SW NW Section 22, T8S, R17E  
 TD: 2105' FNL & 660' FWL

7. If Unit or CA, Agreement Designation  
n/a

n/a

8. Well Name and No.  
Balcron Federal #12-22Y

9. API Well No.  
43-013-31476

10. Field and Pool, or Exploratory Area  
Undesignated / Green River

11. County or Parish, State  
Duchesne County, Utah

**12. CHECK APPROPRIATE BOX(S) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA**

TYPE OF SUBMISSION	TYPE OF ACTION
<input type="checkbox"/> Notice of Intent	<input type="checkbox"/> Abandonment
<input checked="" type="checkbox"/> Subsequent Report	<input type="checkbox"/> Recompletion
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Plugging Back
	<input type="checkbox"/> Casing Repair
	<input type="checkbox"/> Altering Casing
	<input checked="" type="checkbox"/> Other <u>Site Security Diagram</u>
	<input type="checkbox"/> Change of Plans
	<input type="checkbox"/> New Construction
	<input type="checkbox"/> Non-Routine Fracturing
	<input type="checkbox"/> Water Shut-Off
	<input type="checkbox"/> Conversion to Injection
	<input type="checkbox"/> Dispose Water

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

13. 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.)\*

Attached is the Site Security Diagram for this well.

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

Signed Lobbie Schuman Title Regulatory and Environmental Specialist

Date 2-23-95

(This space for Federal or State office use)

Approved by \_\_\_\_\_  
 Conditions of approval, if any:

Title \_\_\_\_\_

Date \_\_\_\_\_

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\*See instruction on Reverse Side

# Equitable Resources Energy Company Balcron Federal 12-22Y Production Facility Diagram

Balcron Federal 12-22Y  
SW NW Sec. 22, T8S, R17E  
Duchesne County, Utah  
Federal Lease #U-66191  
1800' FNL, 660' FWL

Access Road  
↓

DIKE

→  
NORTH

VALVE DESCRIPTION		
	DURING PROD.	DURING SALES
VALVE #1	CLOSED	OPEN
VALVE #2	OPEN	CLOSED
VALVE #3	CLOSED	OPEN
VALVE #4	OPEN	CLOSED
VALVE #5	CLOSED	CLOSED
VALVE #6	CLOSED	CLOSED
VALVE #7	CLOSED	OPEN

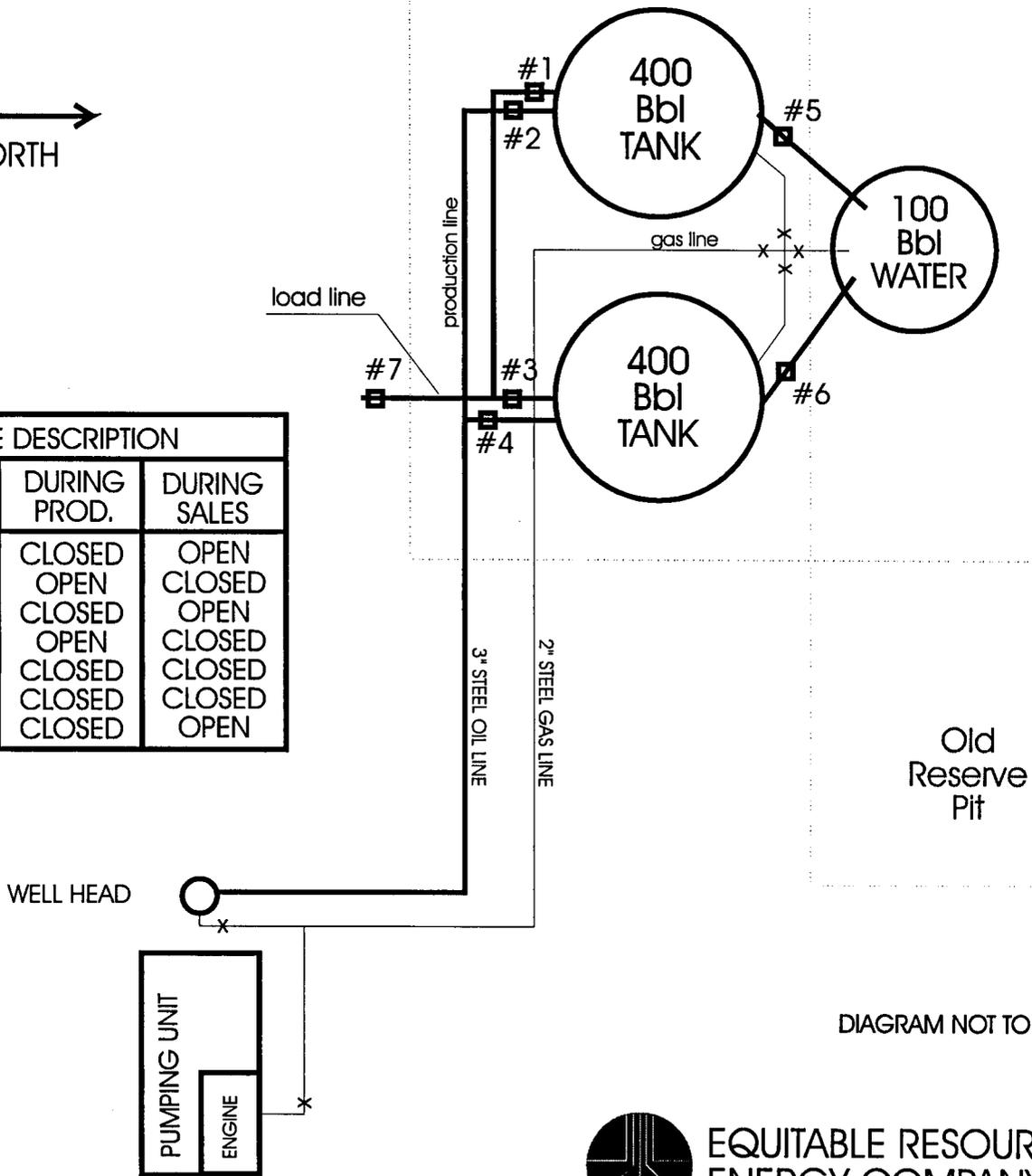


DIAGRAM NOT TO SCALE

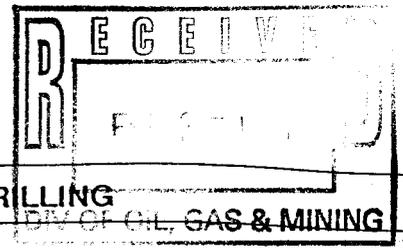


**EQUITABLE RESOURCES  
ENERGY COMPANY**

BALCRON OIL DIVISION

1601 Lewis Avenue  
P.O. Box 21017  
Billings, MT 59104-1017  
(406) 259-7860

STATE OF UTAH  
DIVISION OF OIL, GAS AND MINING



REPORT OF WATER ENCOUNTERED DURING DRILLING

1. Well name and number: Balcon Federal #12-22Y

API number: 43-013-31476

2. Well Location: QQ SW NW Section 22 Township 8S Range 17E County Duchesne

3. Well operator: Equitable Resources Energy Company, Balcron Oil Division

Address: 1601 Lewis Avenue

Billings, MT 59102

Phone: (406) 259-7860

4. Drilling contractor: Union Drilling

Address: Drawer 40

Buckhannon, WV 26201

Phone: (304) 472-4610

5. Water encountered (attach additional pages as needed):

DEPTH		VOLUME (FLOW RATE OR HEAD)	QUALITY (FRESH OR SALTY)
FROM	TO		
		No measurable water encountered	
		during drilling operations.	

6. Formation tops: See Geological Report submitted separately.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

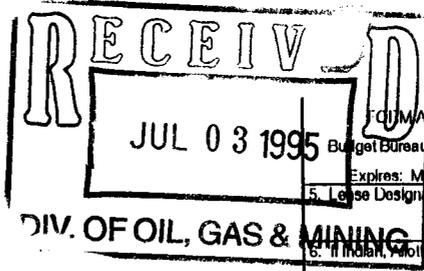
If an analysis has been made of the water encountered, please attach a copy of the report to this form.

I hereby certify that this report is true and complete to the best of my knowledge.

Date: 2-23-95

Name & Signature: Robbie Schuman, Robbie Schuman

Title: Regulatory and Environmental Specialist



FQIM APPROVED  
 Budget Bureau No. 1004-0135  
 Expires: March 31, 1993  
 5. Lease Designation and Serial No. J-66191  
 6. If Indian, Pledge or Tribe Name

**SUNDRY NOTICES AND REPORTS ON WELLS**

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.  
 Use "APPLICATION FOR PERMIT --" for such proposals

**SUBMIT IN TRIPLICATE**

**CONFIDENTIAL**

1. Type of Well

Oil Well  Gas Well  Other

2. Name of Operator

EQUITABLE RESOURCES ENERGY COMPANY, BALCRON OIL DIVISION

3. Address and Telephone No.

P.O. Box 21017; Billings, MT 59104 (406) 259-7860

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

SURFACE: SW NW Section 22, T8S, R17E  
 TD: 2105' FNL & 660' FWL

7. If Unit or CA, Agreement Designation  
 n/a

8. Well Name and No.  
 Balcron Federal #12-22Y

9. API Well No.  
 43-013-31476

10. Field and Pool, or Exploratory Area  
 Undesignated / Green River

11. County or Parish, State  
 Duchesne County, Utah

12. CHECK APPROPRIATE BOX(S) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION
<input type="checkbox"/> Notice of Intent	<input type="checkbox"/> Abandonment
<input checked="" type="checkbox"/> Subsequent Report	<input type="checkbox"/> Recompletion
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Plugging Back
	<input type="checkbox"/> Casing Repair
	<input type="checkbox"/> Altering Casing
	<input checked="" type="checkbox"/> Other Add perfs to Green River Formation
	<input type="checkbox"/> Change of Plans
	<input type="checkbox"/> New Construction
	<input type="checkbox"/> Non-Routine Fracturing
	<input type="checkbox"/> Water Shut-Off
	<input type="checkbox"/> Conversion to Injection
	<input type="checkbox"/> Dispose Water

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

13. 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.)\*

MIRU Basin Well Service on April 25, 1995.  
 Perforate 5348'-5353' (7 holes), 5472'-5475' (4 holes) & 5479'-5481' (3 holes).  
 Break down 5348'-5353' with 3,696 gallons 2% KCL water.  
 Break down 5472'-5481' with 2,940 gallons 2% KCL water.  
 Frac 5348'-5481' with 26,920 lbs 20/40 mesh sand and 38,000 lbs 16/30 mesh sand with 19,950 gallons 2% KCL gelled water.  
 Swab and test well.  
 Perforate 4804'-4817' (4 SPF) and break down perfs with 2,898 gallons 2% KCL water.  
 Frac same perfs with 80,400 lbs 16/30 mesh sand with 23,142 gallons 2% KCL gelled water.  
 Well was put back on production on May 4, 1995.

Original + 2 copies: BLM Vernal, Ut. Copy to: State of Utah

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

Signed Bobbie Schuman Title Regulatory and Environmental Specialist Date 6-29-95

(This space for Federal or State office use)

Approved by \_\_\_\_\_ Title \_\_\_\_\_ Date \_\_\_\_\_  
 Conditions of approval, if any:

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\*See instruction on Reverse Side

DAILY OPERATING REPORTBALCRON FEDERAL #12-22Y

Location: SW NW Section 22, T8S, R17E

Duchesne County, Utah

---TIGHT HOLE---

2105' FNL &amp; 660' FWL

PTD: 6,600' Formation: Green River

Undesignated Field

Elevations: 5197' GL

Contractor: Union Drilling Rig #17

Operator: Balcron/EREC

Spud: 12-18-94 @ 4 p.m.

Casing: 8-5/8", 24#, J-55 @ 404.88' KB

5-1/2", 15.5#, J-55 @ 6584.52' KB

Tubing: 2-7/8", 6.5#, J-55 @ 6311.21' KB

12-19-94 MIRU Union Drilling Rig #17. Drill rate hole & set conductor, spud well @ 4 p.m. 12-18-94. NU air bowl & flowline. SD for Christmas. Will resume drilling operations 12-31-94 a.m.  
DC: \$13,110 CC: \$13,110

12-31-94 Run surface pipe &amp; cmt as follows:

Guide Shoe	.60'
1 jt 8-5/8", 24# shoe jt	44.00'
Insert Float	-----
8 jts 8-5/8", 24#, J-55	<u>350.28'</u>
Total	394.88'
Landing Jt	<u>10.00'</u>
Csg @	404.88' KB

Cmt by Western w/250 sxs Class "G" w/2% CCL & 1/4#/sx Cello-Seal.  
15 bbls cmt back to pit. Plug down @ 12:00 midnight.

1-1-95 TD: 420' (420') Day 2

Formation: Uintah

MW air &amp; mist

Present Operation: NU BOP.

Start operations @ 8 a.m. 12-31-94. Drill surface hole. Blow hole, trip out, RU & run 9 jts as stated above. WOC, install surface head. Could not pull conductor pipe, had to cut it off.

DC: \$16,207

CC: \$29,317

1-2-95 TD: 1,280' (860') Day 3

Formation: Uintah

MW 8.5

Present Operation: drilling

NU BOP, test BOP & manifold to 2000# - OK. Test csg to 1500# - OK.  
TIH w/bit & collars. Drill cmt, survey & drill ahead.

DC: \$11,941

CC: \$41,258

DAILY OPERATING REPORTBALCRON FEDERAL #12-22Y

Location: SW NW Section 22, T8S, R17E  
 Duchesne County, Utah

---TIGHT HOLE---

1-3-95 TD: 2,458' (1,178') Day 4  
 Formation: Green River  
 MW 8.5  
 Present Operation: Drilling  
 Drill, survey, & clean on rig. Mud logger needs electrician to get  
 equipment working.  
 DC: \$15,995 CC: \$57,253

1-4-95 TD: 3,504' (1,046') Day 5  
 Formation: Green River  
 MW 8.5 VIS 26  
 Present Operation: Drilling  
 Drill, survey, & clean on rig.  
 DC: \$14,195 CC: \$71,448

1-5-95 TD: 4,433' (929') Day 6  
 Formation: Yellow Zone  
 MW 8.5 VIS 26  
 Present Operation: Drilling  
 Drill, survey, clean on rig, load hole w/fluid, work on mud pump &  
 drill ahead.  
 DC: \$13,045 CC: \$84,493

1-6-95 TD: 4,580' (147') Day 7  
 Formation: Yellow Zone  
 MW 8.5 VIS 26  
 Present Operation: Drilling  
 Drill, survey, work on mud pump. Pull 5 stds pipe & change out  
 engine on mud pump. Trip 5 stds in & drill.  
 DC: \$3,542 CC: \$88,035

1-7-95 TD: 4,995' (415') Day 8  
 Formation: Yellow Zone  
 MW 8.5 VIS 27  
 Present Operation: Drilling  
 Drill, clean on rig, trip for bit. Drill ahead.  
 DC: \$6,618 CC: \$94,653

1-8-95 TD: 5,255' (260') Day 9  
 Formation: Red Zone  
 MW 8.5 VIS 26  
 Present Operation: Drilling  
 Drill, survey, work on brakes, & drill ahead.  
 DC: \$4,781 CC: \$99,434

DAILY OPERATING REPORTBALCRON FEDERAL #12-22Y

Location: SW NW Section 22, T8S, R17E  
 Duchesne County, Utah

---TIGHT HOLE---

1-9-95 TD: 5,835' (580') Day 10  
 Formation: Green Zone  
 MW 8.5 VIS 26  
 Present Operation: Drilling  
 Drill, survey, & clean on rig.  
 DC: \$9,223 CC: \$108,657

1-10-95 TD: 6,235' (400') Day 11  
 Formation: Blue Zone  
 MW 8.5 VIS 26  
 Present Operation: Drilling  
 Drill, trip for hole in drill pipe. Find washed connection @ 74  
 stds down & cracked jt @ 79-1/2 stds. Replace 3 jts & TIH. Drill,  
 survey, & clean on rig. G-3 zone, good oil show, 1100 units gas.  
 DC: \$6,580 CC: \$115,237

1-11-95 TD: 6,600' (365') Day 12  
 Formation: Blue Zone  
 MW 8.5 VIS 26  
 Present Operation: Logging  
 Drill, unload 5-1/2" csg, circ, survey, TOOH for logs & log well.  
 Pull lite around 5100', ream tight spot. Problems w/break out cat  
 head. Logs went to btm OK 6594' TD.  
 DC: \$8,821 CC: \$124,058

1-12-95 TD: 6,600' (0') Day 13  
 Formation: Green River  
 Present Operation: RDMO.  
 Finish logging, TIH, LD drill pipe & collars. RU casers & run csg  
 as follows:

Guide Shoe	.60'
1 jt 5-1/2", 15.5# shoe jt	44.25'
Float Collar	
155 jts 5-1/2", 15.5#, j-55	<u>6529.67'</u>
	6575.52'
Landing jt	<u>9.00'</u>
Csg landed @ KB	6584.52'
PBTD:	6538.67'

Cmt by Western w/130 sxs Super "G", 47#/sx "G", 20#/sx POZ, 17#/sx  
 CSE, 3% salt, 2% gel, 2#/sx Hi-Seal2 & 1/4#/sx Cello-seal. Tail  
 w/480 sxs 50/50 POZ w/2% gel, 1/4#/sx Cello-Seal & 2#/sx Hi-Seal2.  
 Plug down @ 9:30 p.m. Set slips, ND & clean mud tanks. Test 5-  
 1/2" rams to 2000#. Release rig @ 1:30 a.m. 1-12-95.  
 DC: \$70,101 CC: \$194,159

DAILY OPERATING REPORTBALCRON FEDERAL #12-22Y

Location: SW NW Section 22, T8S, R17E  
 Duchesne County, Utah

---TIGHT HOLE---

- 1-16-95 Completion  
 Dress up location, set rig anchors & tanks. MIRU Cannon Well Service rig #2. NU 5M well head & NU BOP. TIH w/212 jts 2-7/8" J-55 6.5# condition A. Tag PBSD @ 6538' KB. Circ hole clean w/140 bbls 2% KCL wtr. SWIFN.  
 DC: \$20,986 CC: \$215,145
- 1-17-95 Completion  
 TOO H w/tbg, scraper, & bit. RU Schlumberger & run CBL from PBSD to 200' above cmt top @ 2982' KB. Perf 6221'-48' (2 SPF). RD Schlumberger. TIH w/RBP, retrieving head, 2-3/8" x 4' sub, HD packer, SN & 203 jts 2-7/8" tbg. Set BP @ 6290' KB, set packer @ 6185' KB, EOT @ 6193' KB. RU Western & break down 6221-48' KB w/2,856 gals 2% KCL wtr. ATP 2400 spi, max 5000 psi. ATR 6 bpm, max 6 bpm. ISIP 1650 psi. Pump 4 balls/bbl. TOO H w/tbg & packer. RU Western to frac w/80,040# 20/40 mesh sand & 87,580# 16/30 mesh sand w/52,584 gals 2% KCL gelled wtr. ATP 1900 psi, ATR 32.8 bpm. ISIP 2000 psi, 5 min 1920 psi, 10 min 1800 psi, 15 min 1750 psi, & 30 min 1650 psi. SWIFN.  
 DC: \$54,542 CC: \$269,687
- 1-18-95 Completion  
 CP 975 psi. FL @ surface, BP @ 6290'. TIH w/retrieving tool, 2-3/8" x 4' sub, HD packer, 2-7/8" SN & 201 jts 2-7/8" tbg. Tag sand @ 6200' KB. Circ down to BP @ 6290' KB. Set packer @ 6185' KB. Well flowed. Flowed back 320 BW, 1000# of sand, no gas. SI pressure 45 psi in 15 min. Release packer, circ tbg clean w/2% KCL wtr. Reset packer @ 6185' KB. SWI for day. Load to recover 1125 BW.  
 DC: \$2,357 CC: \$272,044
- 1-19-95 Completion  
 TP 75 psi, flowing. Open tbg flow to pit. Flow back 25 BW. Made 41 swab runs, recovered 213 bbls fluid, 1st run trace of oil. Heavy sand on all runs. FL stable @ 1950' last 3 runs. Good gas. SWIFN.  
 DC: \$2,034 CC: \$274,078
- 1-20-95 Completion  
 TP 45 psi, FL @ 500'. Made 38 swab runs, recovered 196 bbls fluid, trace oil, 196 BW, good gas, 1st run 5% oil. No sand last 10 runs. FL stable @ 2150' last 4 runs. Last run trace oil. Release packer, tag sand @ 6235' KB. Circ down to BP @ 6290' KB. Release BP, pull 10 jts 2-7/8" tbg. SWIFN. 691 BLTR.  
 DC: \$2,566 CC: \$276,644

DAILY OPERATING REPORTBALCRON FEDERAL #12-22Y

Location: SW NW Section 22, T8S, R17E  
 Duchesne County, Utah

---TIGHT HOLE---

1-21-95 Completion  
 TOOH w/tbg, packer, & BP. TIH w/tbg production string as follows:

	<u>LENGTH</u>	<u>DEPTH KB</u>
1 jt 2-7/8" J-55, 6.5#	30.11'	6311.21'
1 perf sub 2-7/8" x 4'	4.20'	6281.10'
1 2-7/8" SN	1.10'	6276.90'
3 jts 2-7/8", J-55, 6.5#	91.24'	6275.80'
1 tbg anchor 2-7/8" x 5-1/2"	2.35'	6184.56'
200 jts 2-7/8", J-55, 6.5#	6172.21'	6182.21'

ND BOP, ND 5M well head, NU 3M well head. Set TA w/24" tension.  
 TIH w/rod production string as follows:  
 1 - BHP 2-1/2"x1-1/2"x16' RWAC w/pa plunger  
 250 - 3/4" x 25' D-61 Plain Rods  
 1 - 1-1/4" x 22' Polish Rod  
 Clamp rods off. Pressure test tbg & BHP to 1000 psi - OK. RDMO.  
 DC: \$8,508 CC: \$285,152

1-26-95 Well started pumping @ 4:30 p.m. 4.2 SPM, 89" stroke.  
 Pumper is Steve Farnsworth.

UTAH - ALL

Balcron Coyote Fed. #42-6X	Coyote Basin	SE NE	6	8S	25E	Uintah	UT	OSI	Green River	U-017439-B	43-047-32346	1987' FNL, 682' FEL	Vernal	Coyote Basin
Balcron Coyote Fed. #44-6	Coyote Basin	SE SE	6	8S	25E	Uintah	UT	PND	Green River	U-017439B	43-047-32421	560' FSL, 760' FEL	Vernal	Coyote Basin
Balcron Federal #12-20Y	8 Mile Flat N.	SW NW	20	9S	18E	Uintah	UT	Oil	Green River	U-64917	43-047-32617	1980' FNL, 660' FWL	Vernal	
Balcron Federal #12-22Y	8 Mile Flat N.	SW NW	22	8S	17E	Duchesne	UT	Oil	Green River	U-66191	43-013-31476	2105' FNL, 660' FWL	Vernal/Priv.sfc.	
Balcron Federal #21-13Y	Monument Butte	NE NW	13	9S	16E	Duchesne	UT	Oil	Green River	U-64805	43-013-31400	703' FNL, 1831' FWL	Vernal	
Balcron Federal #21-25Y	Monument Butte	NE NW	25	9S	16E	Duchesne	UT	Oil	Green River	U-64380	43-013-31994	500' FNL, 1980' FWL	Vernal	
Balcron Federal #21-9Y	Monument Butte	NE NW	9	9S	16E	Duchesne	UT	Oil	Green River	U-65207	43-013-31396	476' FNL, 2051' FWL	Vernal	
Balcron Federal #22-10Y	Monument Butte	SE NW	10	9S	17E	Duchesne	UT	Oil	Green River	U-65210	43-013-31395	1980' FNL, 1980' FWL	Vernal	
Balcron Federal #24-3Y	Monument Butte	SE SW	3	9S	17E	Duchesne	UT	Oil	Green River	U-64381	43-013-31397	562' FSL, 1887' FWL	Vernal	
Balcron Federal #31-14Y	Undesignated	NW NE	14	9S	19E	Uintah	UT	PND	WASATCH	U-66193		500' FNL, 2740' FWL	Vernal/Priv.sfc.	
Balcron Federal #31-19Y	8 Mile Flat N.	NW NE	19	9S	18E	Duchesne	UT	Oil	Green River	U-65635	43-047-32614	660' FNL, 1880' FEL	Vernal	
Balcron Federal #31-5Y	8 Mile Flat N.	NW NE	5	9S	18E	Uintah	UT	Oil	Green River	U-65970	43-047-32503	660' FNL, 1980' FEL	Vernal	
Balcron Federal #32-19Y	8 Mile Flat N.	SW NE	19	9S	18E	Uintah	UT	Oil	Green River	U-65635	43-047-32615	1980' FNL, 1980' FEL	Vernal	
Balcron Federal #41-19Y	Monument Butte	NE NE	19	9S	17E	Duchesne	UT	Oil	Green River	U-65967	43-047-32504	660' FSL, 660' FEL	Vernal	
Balcron Federal #41-21Y	Monument Butte	NE NE	21	9S	16E	Duchesne	UT	Oil	Green River	U-64379	43-013-31392	970' FNL, 894' FEL	Vernal	
Balcron Federal #42-19Y	8 Mile Flat N.	SE NE	19	9S	18E	Uintah	UT	Oil	Green River	U-65635	43-047-32616	2100' FNL, 500' FEL	Vernal	
Balcron Federal #44-14Y	Monument Butte	SE SE	14	9S	17E	Uintah	UT	Oil	Green River	U-64806	43-047-32438	1008' FSL, 832' FEL	Vernal	
Balcron Federal #44-4Y	8 Mile Flat N.	SE SE	4	9S	17E	Duchesne	UT	Oil	Green River	U-65635	43-013-31452	660' FNL, 660' FEL	Vernal	
Balcron Monument Fed. #11-10-9-17Y		NW NW	10	9S	17E	Duchesne	UT	PND	Green River				Vernal	
Balcron Monument Fed. #11-20-9-18Y	Monument Butte	NW NW	20	9S	18E	Uintah	UT	OIL	Green River	U-64917	43-047-32712	500' FNL, 500' FWL	Vernal	
Balcron Monument Fed. #11-22-8-17Y	Monument Butte	NW NW	22	8S	17E	Duchesne	UT	OIL	Green River	U-66191	43-013-31539	635' FNL, 658' FWL	Vernal	
Balcron Monument Fed. #11-25	Monument Butte	NW NW	25	8S	17E	Uintah	UT	Oil	Green River	U-67845	43-047-32455	739' FNL, 648' FWL	Vernal	
Balcron Monument Fed. #11-6	Monument Butte	NW NW	6	9S	17E	Duchesne	UT	WW	Green River	U-020252-A	43-013-31362	804' FNL, 696' FWL	Vernal	Jonah
Balcron Monument Fed. #11-7J	Monument Butte	NW NW	7	9S	17E	Duchesne	UT	COMPL-WW	Green River	U-44426	43-013-31492	681' FNL, 447' FWL	Vernal	Jonah
Balcron Monument Fed. #12-10-9-17Y	Monument Butte	SW NW	10	9S	17E	Duchesne	UT	COMPL	Green River	U-65210	43-013-31536	1994' FNL, 618' FWL	Vernal	
Balcron Monument Fed. #12-11J	Monument Butte	SW NW	11	9S	16E	Duchesne	UT	WW	Green River	U-096550	43-013-31417	2128' FNL, 689' FWL	Vernal	Jonah
Balcron Monument Fed. #12-12J	Monument Butte	SW NW	12	9S	16E	Duchesne	UT	WW	Green River	U-096550	43-013-31410	739' FNL, 648' FWL	Vernal	Jonah
Balcron Monument Fed. #12-14J	Monument Butte	SW NW	14	9S	16E	Duchesne	UT	PND	Green River	U-096547	43-013-31488	2004' FNL, 658' FWL	Vernal	Jonah
Balcron Monument Fed. #12-17	Monument Butte	SW NW	17	9S	17E	Duchesne	UT	Oil	Green River	UTU-72106	43-013-31431	1980' FNL, 660' FWL	Vernal	Beluga
Balcron Monument Fed. #12-25	Undesignated	SW NW	25	8S	17E	Uintah	UT	Oil	Green River	U-67845	43-047-32526	1486' FNL, 875.7' FWL	Vernal	
Balcron Monument Fed. #12-7J	Monument Butte	SW NW	7	9S	17E	Duchesne	UT	Oil	Green River	U-44426	43-013-31493	1965' FNL, 620' FWL	Vernal	Jonah
Balcron Monument Fed. #13-11J	Monument Butte	NW SW	11	9S	16E	Duchesne	UT	Oil	Green River	U-096547	43-013-15790	1819' FSL, 658' FWL	Vernal	Jonah
Balcron Monument Fed. #13-5	Monument Butte	NW SW	5	9S	17E	Duchesne	UT	WW	Green River	U-020252	43-013-31370	1980' FSL, 660' FWL	Vernal	Jonah
Balcron Monument Fed. #13-8	Monument Butte	NW SW	8	9S	17E	Duchesne	UT	Oil	Green River	UTU-74108	43-013-31382	2060' FSL, 694' FWL	Vernal	Beluga
Balcron Monument Fed. #14-11	Monument Butte	SW SW	11	9S	16E	Duchesne	UT	WW	Green River	U-096547	43-013-31374	1048' FSL, 446' FWL	Vernal	Jonah

**STATE OF UTAH**  
**DIVISION OF OIL, GAS AND MINING**  
 355 West North Temple, 3 Triad, Suite 350, Salt Lake City, UT 84180-1203

## MONTHLY OIL AND GAS PRODUCTION REPORT

OPERATOR NAME AND ADDRESS:

BALCRON OIL DIVISION  
 EQUITABLE RESOURCES ENERGY  
 1601 LEWIS AVE  
 BILLINGS MT 59102-4126

UTAH ACCOUNT NUMBER: N9890

REPORT PERIOD (MONTH/YEAR): 3 / 96

AMENDED REPORT  (Highlight Changes)

Well Name API Number    Entry    Location	Producing Zone	Well Status	Days Oper	Production Volumes		
				OIL(BBL)	GAS(MCF)	WATER(BBL)
✓ BALCRON FEDERAL 31-5Y 4304732503 11680 09S 18E 5	GRRV					
✓ BALCRON MONUMENT FEDERAL 21-25 4304732528 11683 08S 17E 25	GRRV					
✓ MONUMENT FEDERAL 12-25 4304732526 11694 08S 17E 25	GRRV					
✓ MONUMENT FEDERAL 32-25 4304732524 11707 08S 17E 25	GRRV					
✓ MONUMENT FEDERAL 31-25 4304732530 11710 08S 17E 25	GRRV					
✓ BALCRON FEDERAL 12-22Y 91331476 11717 08S 17E 22	GRRV					
✓ BALCRON MONUMENT FEDERAL 33-25 4304732525 11729 08S 17E 25	GRRV					
✓ MONUMENT FEDERAL 23-25 4304732529 11730 08S 17E 25	GRRV					
✓ BALCRON MONUMENT STATE 24-2 4304732612 11736 09S 17E 2	GRRV					
✓ BALCRON MONUMENT STATE 13-2 4301331482 11738 09S 17E 2	GRRV					
✓ BALCRON MONUMENT STATE 22-2 4304732610 11742 09S 17E 2	GRRV					
✓ BALCRON MONUMENT STATE 12-2 4301331481 11745 09S 17E 2	GRRV					
✓ BALCRON FEDERAL 31-19Y 4304732614 11751 09S 18E 19	GRRV					
<b>TOTALS</b>						

COMMENTS: \_\_\_\_\_

I hereby certify that this report is true and complete to the best of my knowledge. Date: \_\_\_\_\_

Name and Signature: \_\_\_\_\_ Telephone Number: \_\_\_\_\_



**EQUITABLE RESOURCES**  
**ENERGY COMPANY**

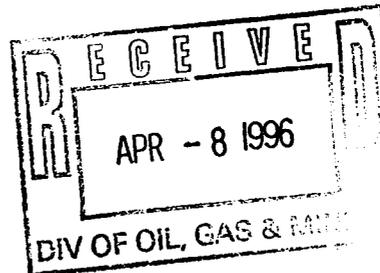
**BALCRON OIL DIVISION**

1601 Lewis Avenue  
Billings, MT 59102

Office: (406) 259-7860  
FAX: (406) 245-1365   
FAX: (406) 245-1361

March 22, 1996

Utah Division of Oil, Gas and Mining  
355 West North Temple  
Salt Lake City, UT 84180



Gentlemen:

Effective April 1, 1996, our name will change from Equitable Resources Energy Company, Balcron Oil Division to Equitable Resources Energy Company. Attached is a sundry notice reflecting that change. To simplify paperwork, I have done one sundry notice with copies for each of the wells. To this letter I have attached a list of our wells for your ease in filing the sundry notices in the well files. This should be sufficient for your purposes.

I have the listings on a spreadsheet so if it would be easier for you to have them sorted differently (for example, the Montana Board of Oil and Gas prefers them sorted by API number), please give me a call at (406) 259-7860, extension 240 and I would be glad to provide a list to your specifications.

This change affects only our company name. The physical locations of our offices and the personnel remain the same. We will be changing our well signs and ask for your patience and cooperation as this will be done as soon as possible but may take some time since we do have so many properties at which to make the change.

If you have any questions, please do not hesitate to give me a call.

Sincerely,

*Bobbie Schuman*  
Bobbie Schuman  
Regulatory and  
Environmental Specialist

/hs

Enclosures

STATE OF UTAH  
DIVISION OF OIL, GAS AND MINING

**SUNDRY NOTICES AND REPORTS ON WELLS**

Do not use this form for proposals to drill new wells, deepen existing wells, or to reenter plugged and abandoned wells. Use APPLICATION FOR PERMIT TO DRILL OR DEEPEN form for such proposals.

5. Lease Designation and Serial Number:  
See attached listing

6. If Indian, Allottee or Tribe Name:  
n/a

7. Unit Agreement Name:  
See attached listing

1. Type of Well: OIL  GAS  OTHER: See attached listing

8. Well Name and Number:  
See attached listing

2. Name of Operator:  
Equitable Resources Energy Company, Balcron Oil Division

9. API Well Number:  
See attached listing

3. Address and Telephone Number:  
1601 Lewis Avenue Avenue; Billings, MT 59102 (406) 259-7860

10. Field and Pool, or Wildcat:  
See attached listing

4. Location of Well  
Footages: See attached listing

County: See attached list

QQ, Sec., T., R., M.:

State: UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

**NOTICE OF INTENT**  
(Submit in Duplicate)

- Abandon
- Repair Casing
- Change of Plans
- Convert to Injection
- Fracture Treat or Acidize
- Multiple Completion
- Other \_\_\_\_\_
- New Construction
- Pull or Alter Casing
- Recomplete
- Reperforate
- Vent or Flare
- Water Shut-Off

Approximate date work will start \_\_\_\_\_

**SUBSEQUENT REPORT**  
(Submit Original Form Only)

- Abandon
- Repair Casing
- Change of Plans
- Convert to Injection
- Fracture Treat or Acidize
- Other Operator name change
- New Construction
- Pull or Alter Casing
- Reperforate
- Vent or Flare
- Water Shut-Off

Date of work completion \_\_\_\_\_

Report results of Multiple Completions and Recompletions to different reservoirs on WELL COMPLETION OR RECOMPLETION REPORT AND LOG form.

\* Must be accompanied by a cement verification report.

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

Effective April 1, 1996, operator will change its name from Equitable Resources Energy Company, Balcron Oil Division TO: Equitable Resources Energy Company. Physical location of the operator remains as: 1601 Lewis Avenue; Billings, MT 59102 (406) 259-7860, FAX: (406) 145-1361. This is to report the operator name change only. It affects the wells on the attached listing.

1996

13. Name & Signature: Bobbie Schuman  
Bobbie Schuman

Title: Regulatory and Environmental Specialist Date: March 27, 1996

(This space for State use only)

Division of Oil, Gas and Mining  
**OPERATOR CHANGE WORKSHEET**

Route:	
1-LEP 7-SJ	✓
2-DTS 58-FILE	
3-VLD (GIL)	✓
4-RJH	✓
5-IEC	✓
6-FILM	✓

Attach all documentation received by the division regarding this change.  
 Initial each listed item when completed. Write N/A if item is not applicable.

- Change of Operator (well sold)                       Designation of Agent  
 Designation of Operator                              **XXX Operator Name Change Only**

The operator of the well(s) listed below has changed (EFFECTIVE DATE: 4-1-96 )

TO (new operator)	<u>EQUITABLE RESOURCES ENERGY COEROM</u> (former operator)	<u>EQUITABLE RESOURCES ENERGY CO</u>
(address)	<u>1601 LEWIS AVE</u>	<u>BALCRON OIL DIVISION</u>
	<u>BILLINGS MT 59102-4126</u>	<u>1601 LEWIS AVE</u>
	phone (406) <u>259-7860</u>	phone (406) <u>259-7860</u>
	account no. <u>N9890</u>	account no. <u>N9890</u>

Well(s) (attach additional page if needed):

Name: <b>**SEE ATTACHED**</b>	API: <u>013-31476</u>	Entity: _____	Sec. _____	Twp. _____	Rng. _____	Lease Type: _____
Name: _____	API: _____	Entity: _____	Sec. _____	Twp. _____	Rng. _____	Lease Type: _____
Name: _____	API: _____	Entity: _____	Sec. _____	Twp. _____	Rng. _____	Lease Type: _____
Name: _____	API: _____	Entity: _____	Sec. _____	Twp. _____	Rng. _____	Lease Type: _____
Name: _____	API: _____	Entity: _____	Sec. _____	Twp. _____	Rng. _____	Lease Type: _____
Name: _____	API: _____	Entity: _____	Sec. _____	Twp. _____	Rng. _____	Lease Type: _____
Name: _____	API: _____	Entity: _____	Sec. _____	Twp. _____	Rng. _____	Lease Type: _____

**OPERATOR CHANGE DOCUMENTATION**

- Yec 1. (Rule R615-8-10) Sundry or other legal documentation has been received from former operator (Attach to this form). *Rec'd 4-4-96 & 4-8-96*
- N/A 2. (Rule R615-8-10) Sundry or other legal documentation has been received from new operator (Attach to this form).
- N/A 3. The Department of Commerce has been contacted if the new operator above is not currently operating any wells in Utah. Is company registered with the state? (yes/no) \_\_\_\_ If yes, show company file number: \_\_\_\_\_.
- \* 4. (For Indian and Federal Wells ONLY) The BLM has been contacted regarding this change (attach Telephone Documentation Form to this report). Make note of BLM status in comments section of this form. Management review of Federal and Indian well operator changes should take place prior to completion of steps 5 through 9 below.
- Yec 5. Changes have been entered in the Oil and Gas Information System (Wang/IBM) ~~for each well listed above.~~ *(4-10-96)*
- Yec 6. Cardex file has been updated for each well listed above. *(4-11-96)*
- Yec 7. Well file labels have been updated for each well listed above. *(4-11-96)*
- Yec 8. Changes have been included on the monthly "Operator, Address, and Account Changes" memo for distribution to State Lands and the Tax Commission. *(4-10-96)*
- Yec 9. A folder has been set up for the Operator Change file, and a copy of this page has been placed there for reference during routing and processing of the original documents.

**ENTITY REVIEW**

- Yes* 1. (Rule R615-8-7) Entity assignments have been reviewed for all wells listed above. Were entity changes made? (yes/no) no (If entity assignments were changed, attach copies of Form 6, Entity Action Form).
- N/A* 2. State Lands and the Tax Commission have been notified through normal procedures of entity changes.

**BOND VERIFICATION (Fee wells only)** # 5578314 (\$80,000) Schae Ins. Co. (Bond Rider In Progress)

- Yes* 1. (Rule R615-3-1) The new operator of any fee lease well listed above has furnished a proper bond.
2. A copy of this form has been placed in the new and former operators' bond files.
- N/A* 3. The former operator has requested a release of liability from their bond (yes/no)     . Today's date                      19    . If yes, division response was made by letter dated                      19    .

**LEASE INTEREST OWNER NOTIFICATION RESPONSIBILITY**

- N/A* 1. (Rule R615-2-10) The former operator/lessee of any fee lease well listed above has been notified by letter dated                      19    , of their responsibility to notify any person with an interest in such lease of the change of operator. Documentation of such notification has been requested.
- 4/26/96*
- DTS* 2. Copies of documents have been sent to State Lands for changes involving State leases.  
*Sent to Ed Bonner - Trust Lands*

**FILMING**

- WJR* 1. All attachments to this form have been microfilmed. Date: May 20 1996.

**FILING**

1. Copies of all attachments to this form have been filed in each well file.
2. The original of this form and the original attachments have been filed in the Operator Change file.

**COMMENTS**

*9/6/96 Blm/BIA "Formal approval not necessary"*

STATE OF UTAH  
DIVISION OF OIL, GAS AND MINING

**SUNDRY NOTICES AND REPORTS ON WELLS**

Do not use this form for proposals to drill new wells, deepen existing wells, or to reenter plugged and abandoned wells.  
Use APPLICATION FOR PERMIT TO DRILL OR DEEPEN form for such proposals.

5. Lease Designation and Serial Number:	See Attached
6. If Indian, Allottee or Tribe Name:	n/a
7. Unit Agreement Name:	See Attached
8. Well Name and Number:	See Attached
9. API Well Number:	See Attached
10. Field and Pool, or Wildcat:	See Attached
County:	
State:	

1. Type of Well: OIL  GAS  OTHER:

2. Name of Operator: Inland Production Company

3. Address and Telephone Number: 475 - 17th Street, Suite 1500, Denver, CO 80202

4. Location of Well  
Footages: See Attached Exhibit  
OO, Sec., T., R., M.:

RECEIVED  
OCT 13 1997

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

**NOTICE OF INTENT**  
(Submit in Duplicate)

Abandon  New Construction  
 Repair Casing  Pull or Alter Casing  
 Change of Plans  Recomplete  
 Convert to Injection  Reperforate  
 Fracture Treat or Acidize  Vent or Flare  
 Multiple Completion  Water Shut-Off  
 Other Change of Operator

Approximate date work will start \_\_\_\_\_

**SUBSEQUENT REPORT**  
(Submit Original Form Only)

Abandon  New Construction  
 Repair Casing  Pull or Alter Casing  
 Change of Plans  Reperforate  
 Convert to Injection  Vent or Flare  
 Fracture Treat or Acidize  Water Shut-Off  
 Other Change of Operator

Date of work completion 9-30-97

Report results of Multiple Completions and Recompletions to different reservoirs on WELL COMPLETION OR RECOMPLETION REPORT AND LOG form.  
 \* Must be accompanied by a cement verification report.

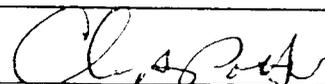
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

Effective September 30, 1997, Inland Production Company will take over operations of the wells on the attached list. The previous operator was :

Equitable Resources Energy Company  
1601 Lewis Avenue  
Billings, MT 59102

Effective September 30, 1997, Inland Production Company is responsible under the terms and conditions of the leases for operations conducted on the leased lands or a portion thereof under State of Utah Statewide Bond No. 4471291.

OCT 13 1997

13. Name & Signature:  **CHRIS A. POTTER, ATTORNEY-IN-FACT** Date: 9/30/97

(This space for State use only)

INLAND

Inland Resources Change of Operator							
WELL NAME	LOCATION	COUNTY	ST	FIELD NAME	API NUMBER	LEASE NO.	AGEEMENT
AMERADA GUINAND #1	SWNW 7 8S 25E	UINTAH	UT	COYOTE BASIN	43-047-20245-00	UTU016271V	UTU72085A
✓ COYOTE BASIN #1-12	NESE 128S 24E	UINTAH	UT	COYOTE BASIN	43-047-20221-00	UTU58226	UTU72085A
COYOTE BASIN #32-6	6 8S 25E	UINTA	UT	COYOTE BASIN	43-047-31835-00	UTU020309D	UTU72085A
COYOTE BASIN #42-6X	SENE 6 8S 25E	UINTA	UT	COYOTE BASIN	43-047-32346-00	UTU017439B	UTU72085A
✓ COYOTE BASIN FED. #13-7	NWSW 7 8S 25E	UINTAH	UT	COYOTE BASIN	43-047-32255-00	UTU41377	UTU72085A
✓ COYOTE BASIN FEDERAL #12-13	SWNW 138S 24E	UINTA	UT	COYOTE BASIN	43-047-31266-00		UTU72085A
✓ COYOTE BASIN FEDERAL #13-5	NWSW 5 8S 25E	UINTAH	UT	COYOTE BASIN	43-047-32261-00	UTU063597A	UTU72085A
✓ COYOTE BASIN FEDERAL #13-13	NWSW 138S 24E	UINTAH	UT	COYOTE BASIN	43-047-32196-00	UTU67208	UTU72085A
✓ COYOTE BASIN FEDERAL #21-7	NENW 7 8S 25E	UINTAH	UT	COYOTE BASIN	43-047-31673-00	UTU41377	UTU72085A
✓ COYOTE BASIN FEDERAL #22-7	SENW 7 9S 25E	UINTAH	UT	COYOTE BASIN	43-047-32256-00	UTU41377	UTU72085A
✓ COYOTE BASIN FEDERAL #33-5	NWSE 5 8S 25E	UINTAH	UT	COYOTE BASIN	43-047-32257-00	UTU063597A	UTU72085A
✓ COYOTE BASIN FEDERAL #43-12	NESE 128S 24E	UINTA	UT	COYOTE BASIN	43-047-30943-00	UTU038797	UTU72085A
✓ COYOTE FEDERAL #12-5	SWNW 5 8S 25E	UNITAH	UT	COYOTE BASIN	43-047-32253-00	UTU063597A	UTU72085A
✓ COYOTE FEDERAL #21-5	NENW 5 8S 25E	UINTAH	UT	COYOTE BASIN	43-047-32260-00	UTU063597A	UTU72085A
✓ COYOTE FEDERAL #31-7	NWNE 7 8S 25E	UINTAH	UT	COYOTE BASIN	43-047-32254-00	UTU020309D	UTU72085A
EAST RED WASH #2-5	NWNW 5 8S 25E	UINTA	UT	COYOTE BASIN	43-047-20252-00	UTU063597A	UTU72085A
✓ EAST RED WASH FED. #1-12	SWNE 128S 24E	UINTA	UT	COYOTE BASIN	43-047-20207-00	UTU038797	UTU72085A
✓ EAST RED WASH FED. #4-6	SWSE 6 8S 25E	UINTAH	UT	COYOTE BASIN	43-047-20261-00	UTU020309D	UTU72085A
✓ EAST RED WASH FEDERA #1-13	NENW 138S 24E	UINTA	UT	COYOTE BASIN	43-047-20222-00	UTU018073	UTU72085A
✓ EAST RED WASH FEDERA #1-5	SENW 5 8S 25E	UINTA	UT	COYOTE BASIN	43-047-20174-00	UTU063597A	UTU72085A
✓ EAST RED WASH FEDERA #1-6	NESE 6 8S 25E	UINTA	UT	COYOTE BASIN	43-047-20208-00	UTU017439B	UTU72085A
✓ FEDERAL #14-4	SWSW 4 8S 25E	UINTAH	UT	COYOTE BASIN	43-047-15678-00	UTU41376	UTU72085A
✓ TXO FEDERAL #2	SENE 5 8S 25E	UINTAH	UT	COYOTE BASIN	43-047-31567-00	UTU41376	UTU72085A
✓ TXO FEDERAL #1	SWNE 5 8S 25E	UINTAH	UT	COYOTE BASIN	43-047-31406-00	UTU41376	UTU72085A
✓ BALCRON FEDERAL #12-20Y	SWNW 209S 18E	UINTAH	UT	EIGHT MILE FLAT (8)	43-047-32617-00	UTU64917	
✓ BALCRON FEDERAL #31-19Y	NWNE 199S 18E	UINTAH	UT	EIGHT MILE FLAT (8)	43-047-32614-00	UTU65635	
✓ BALCRON FEDERAL #32-19Y	SW NE 199S 18E	UINTAH	UT	EIGHT MILE FLAT (8)	43-047-32615-00	UTU65635	
✓ BALCRON FEDERAL #42-19Y	SENE 199S 18E	UINTAH	UT	EIGHT MILE FLAT (8)	43-047-32616-00	UTU65635	
✓ BALCRON FEDERAL #31-5Y	NWNE 5 9S 18E	UINTAH	UT	EIGHT MILE FLAT (U)	43-047-32503-00	UTU65970	
✓ BALCRON FEDERAL #11-22Y	NW NW 228S 17E	DUCHESNE	UT	MONUMENT BUTTE (22)	43-013-31539-00	UTU66191	
✓ BALCRON FEDERAL #12-22Y	SWNW 228S 17E	DUCHESNE	UT	MONUMENT BUTTE (22)	43-013-31476-00	UTU66191	
✓ BALCRON FEDERAL #22-22Y	SE NW 228S 17E	DUCHESNE	UT	MONUMENT BUTTE (22)	43-013-31538-00	UTU76240	
✓ FEDERAL #1-26	NENW 268S 17E	UINTAH	UT	MONUMENT BUTTE (22)	43-047-31953-00	UTU76240	
✓ MONUMENT FEDERAL #13-22Y	NW SW 228S 17E	DUCHESNE	UT	MONUMENT BUTTE (22)	43-013-31583-00	UTU76240	
✓ MONUMENT FEDERAL #23-22-8-17	NESW 228S 17E	DUCHESNE	UT	MONUMENT BUTTE (22)	43-013-31702-00	UTU76240	
✓ MONUMENT FEDERAL ##31-22	NW NE 228S 17E	DUCHESNE	UT	MONUMENT BUTTE (22)	43-013-31587-00	UTU76240	
✓ MONUMENT FEDERAL #32-22-8-17	SW NE 228S 17E	DUCHESNE	UT	MONUMENT BUTTE (22)	43-013-31586-00	UTU76240	
✓ MONUMENT FEDERAL #33-22-8-17	NWSE 228S 17E	DUCHESNE	UT	MONUMENT BUTTE (22)	43-013-31588-00	UTU76240	
✓ BALCRON FEDERAL #11-20Y	NW NW 209S 18E	UINTAH	UT	MONUMENT BUTTE (8)	43-047-32712-00	UTU64917	

RECEIVED

OCT 16 1997



October 7, 1997

Bureau of Land Management  
Vernal District Office  
170 South 500 East  
Vernal, UT 84078

RE: Change of Operator  
Duchesne & Vernal Counties, Utah

Dear Mr. Forsman:

Please find attached Sundry Notices and Reports on Wells for Change of Operator, previously operated by Equitable Resources Energy Company for approval.

If you should have questions regarding this matter, please do not hesitate to contact me at the number listed below.

Sincerely,

INLAND PRODUCTION COMPANY

  
Patsy Barreau

/pb  
encls.





# United States Department of the Interior

## BUREAU OF LAND MANAGEMENT

Vernal District Office  
170 South 500 East  
Vernal, Utah 84078-2799

Phone: (801) 781-4400  
Fax: (801) 781-4410

IN REPLY REFER TO  
3162.3  
UT08438

December 5, 1997

Inland Production Company  
475 17th Street, Suite 1500  
Denver, CO 80202

Re: <sup>43-013-31476</sup> Well No. Monument Fed. 12-22Y  
SWNW, Sec. 22, T8S, R17E  
Lease U-66191  
Duchesne County, Utah

Dear Sir:

This correspondence is in regard to the self-certification statement submitted requesting a change in operator for the referenced well. After a review by this office, the change in operator request is approved. Effective immediately, Inland Production Company is responsible for all operations performed on the referenced well. All liability will now fall under your bond, BLM Bond No. UT0056, for all operations conducted on the referenced well on the leased land.

If you have any other questions concerning this matter, please contact Margie Herrmann or Pat Sutton of this office at (435) 781-4400.

Sincerely,

Howard B. Cleavinger II  
Assistant Field Manager,  
Minerals Resources

cc: Division of Oil, Gas & Mining  
Equitable Resources Energy Company  
ABO Petroleum Corp.  
Myco Industries Inc.  
Yates Drilling Company  
Yates Petroleum Corp.



**EQUITABLE RESOURCES  
ENERGY COMPANY**

**WESTERN REGION**

**(406) 259-7860 Telephone**

**(406) 245-1361 Fax**

December 10, 1997

Lisha  
State of Utah  
Division of Oil, Gas and Mining  
1594 West North Temple, Suite 1210  
Box 145801  
Salt Lake City, UT 84114-5801

Dear Lisha:

RE: Equitable Sale of Utah Properties

Effective September 30, 1997, Equitable Resources Energy Company sold all of its Utah properties to Inland Production Company.

Please feel free to contact me if you require additional information.

Sincerely,

Molly Conrad  
Agent for Equitable Resources  
Energy Company

/mc



Crazy Mountain Oil & Gas Services  
P.O. Box 577  
Laurel, MT 59044  
(406) 628-4164  
(406) 628-4165

TO: Lisha  
St of Utah.

FROM. Molly Conrad  
Crazy Mountain Oil & Gas Services  
(406) 628-4164

Pages Attached - Including Cover Sheet 2.

NOTE: Here is the letter you requested.  
Call if you need anything  
further.

# OPERATOR CHANGE WORKSHEET

Routing	
1-LEC ✓	6-LEC ✓
2-GLH ✓	7-KAS L ✓
3-DTS ✓	8-SI ✓
4-VLD ✓	9-FILE ✓
5-IRB ✓	

Attach all documentation received by the division regarding this change.  
Initial each listed item when completed. Write N/A if item is not applicable.

- Change of Operator (well sold)       Designation of Agent
- Designation of Operator               Operator Name Change Only

The operator of the well(s) listed below has changed, effective: 9-30-97

TO: (new operator)	<u>INLAND PRODUCTION COMPANY</u>	FROM: (old operator)	<u>EQUITABLE RESOURCES ENERGY</u>
(address)	<u>PO BOX 1446</u>	(address)	<u>PO BOX 577</u>
	<u>ROOSEVELT UT 84066</u>		<u>LAUREL MT 59044</u>
			<u>C/O CRAZY MTN O&amp;G SERVICES</u>
Phone:	<u>(801) 722-5103</u>	Phone:	<u>(406) 628-4164</u>
Account no.	<u>N5160</u>	Account no.	<u>N9890</u>

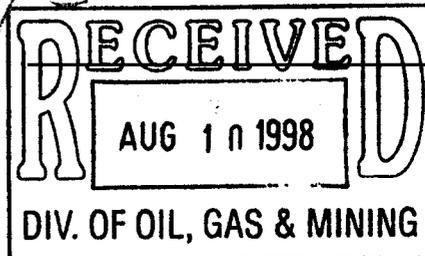
WELL(S) attach additional page if needed:

Name: <b>**SEE ATTACHED**</b>	API: <u>12-11-3776</u>	Entity: _____	S _____	T _____	R _____	Lease: _____
Name: _____	API: _____	Entity: _____	S _____	T _____	R _____	Lease: _____
Name: _____	API: _____	Entity: _____	S _____	T _____	R _____	Lease: _____
Name: _____	API: _____	Entity: _____	S _____	T _____	R _____	Lease: _____
Name: _____	API: _____	Entity: _____	S _____	T _____	R _____	Lease: _____
Name: _____	API: _____	Entity: _____	S _____	T _____	R _____	Lease: _____

## OPERATOR CHANGE DOCUMENTATION

1. (r649-8-10) Sundry or other legal documentation has been received from the **FORMER** operator (attach to this form). *(Rec'd 12-10-97)*
2. (r649-8-10) Sundry or other legal documentation has been received from the **NEW** operator (Attach to this form). *(Rec'd 10-20-97)*
3. The **Department of Commerce** has been contacted if the new operator above is not currently operating any wells in Utah. Is the company registered with the state? (yes/no) \_\_\_\_\_ If yes, show company file number: \_\_\_\_\_
4. **FOR INDIAN AND FEDERAL WELLS ONLY.** The BLM has been contacted regarding this change. Make note of BLM status in comments section of this form. BLM approval of **Federal** and **Indian** well operator changes should ordinarily take place prior to the division's approval, and before the completion of steps 5 through 9 below.
5. Changes have been entered in the **Oil and Gas Information System (3270)** for each well listed above. *(12-9-97)*
6. **Cardex** file has been updated for each well listed above. *(12-10-97)*
7. Well file labels have been updated for each well listed above. *(12-10-97)*
8. Changes have been included on the monthly "Operator, Address, and Account Changes" memo for distribution to Trust Lands, Sovereign Lands, UGS, Tax Commission, etc. *(12-9-97)*
9. A folder has been set up for the **Operator Change file**, and a copy of this page has been placed there for reference during routing and processing of the original documents.





July 31, 1998

Mr. Dan Jarvis  
State of Utah  
Division of Oil, Gas and Mining  
P. O. Box 145801  
Salt Lake City, Utah 84114-5801

RE: Permit Application for Water Injection Well  
Monument Federal #12-22Y, Proposed Canvasback Unit  
Monument Butte Field, Lease #U-66191  
Section 22-Township 8S-Range 17E  
Duchesne County, Utah

Dear Mr. Jarvis:

Inland Production Company herein requests approval to convert the Monument Federal #12-22Y from a producing oil well to a water injection well in the Monument Butte (Green River) Field, Proposed Canvasback Unit.

Please note that the water analysis submitted with this application is that of a nearby well, the Boundary Federal #9-21.

Should you have any questions or require additional information, please contact me at (303) 382-4434.

Sincerely,

Debbie E. Knight  
Manager, Regulatory Compliance

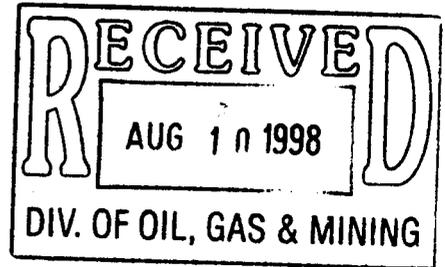
**INLAND PRODUCTION COMPANY**  
**APPLICATION FOR APPROVAL OF CLASS II INJECTION WELL**  
**MONUMENT FEDERAL #12-22Y**  
**MONUMENT BUTTE FIELD (GREEN RIVER) FIELD**  
**CANVASBACK UNIT**  
**LEASE #U-66191**  
**JULY 31, 1998**

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STATE OF UTAH  
DIVISION OF OIL, GAS AND MINING

APPLICATION FOR INJECTION WELL - UIC FORM 1



OPERATOR Inland Production Company  
ADDRESS 410 17th Street, Suite 700  
Denver, Colorado 80202

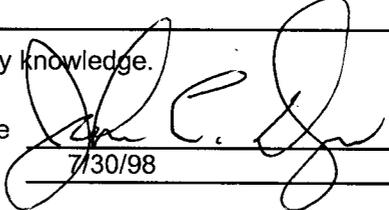
Well Name and number: Monument Federal #12-22Y  
Field or Unit name: Canvasback Unit (Green River) Lease No. U-66191  
Well Location: QQ SWNW section 22 township 8S range 17E county Duchesne

Is this application for expansion of an existing project? . . . . . Yes [ X ] No [ ]  
Will the proposed well be used for: Enhanced Recovery? . . . . . Yes [ X ] No [ ]  
Disposal? . . . . . Yes [ ] No [ X ]  
Storage? . . . . . Yes [ ] No [ X ]  
Is this application for a new well to be drilled? . . . . . Yes [ ] No [ X ]  
If this application is for an existing well,  
has a casing test been performed on the well? . . . . . Yes [ X ] No [ ]  
Date of test: 1/16/95  
API number: 43-013-31476

Proposed injection interval: from 4804' to 6248'  
Proposed maximum injection rate: 500 bpd pressure 1630 psig  
Proposed injection zone contains [ X ] oil, [ ] gas, and/or [ ] fresh water within 1/2 mile of the well.

IMPORTANT: Additional information as required by R615-5-2 should accompany this form.

List of Attachments: Exhibits "A" through "G"

I certify that this report is true and complete to the best of my knowledge.  
Name: John E. Dyer Signature   
Title: Chief Operating Officer Date: 7/30/98  
Phone No.: (303) 292-0900

(State use only)  
Application approved by \_\_\_\_\_ Title \_\_\_\_\_  
Approval Date \_\_\_\_\_

Comments:



**BALCRON FEDERAL #12-22Y**  
**SW NW Sec. 22, T8S, R17E**  
**2105' FNL, 660' FWL**  
**LEASE #U-66191**  
**Undesignated Field**  
**Duchesne County, Utah**

Elev.GR - 5192' GL  
 Elev.KB - 5202' KB (10' KB)

**PROPOSED INJECTION  
 WELLBORE DIAGRAM**

DATE : 2/28/96 vk

**SURFACE CASING**

CSG SIZE: 8-5/8"  
 GRADE: J-55  
 WEIGHT: 24#  
 LENGTH: 9 jts (394.88 ft)  
 DEPTH LANDED: 404.88' KB  
 HOLE SIZE: 12-1/4"  
 CEMENT DATA: Western - 250 sxs class "G" w/  
 2% CCI & 1/4 #/sx celloseal

405' KB

**PRODUCTION CASING**

CSG SIZE: 5-1/2"  
 GRADE: J-55  
 WEIGHT: 15.5#  
 LENGTH: 156 jts (6575.52 ft)  
 DEPTH LANDED: 6584.52' KB  
 HOLE SIZE: 7-7/8"  
 CEMENT DATA: Western - 130 sxs super "G" w/  
 (47# "G" + 20# Poz + 17#  
 CSE)/sk + 3% salt + 2% gel +  
 (2# Hi-Seal + 1/4 #Cello-seal)/sk,  
 tailed w/ 480 sxs 50/50 Poz + 2%  
 gel + (1/4# Cello-seal + 2#  
 Hi-Seal 2)/sk.

CEMENT TOP AT: 2983' KB CBL

**TUBING**

SIZE/GRADE/WT.: 2-7/8" / J-55 / 6.5#  
 NO. OF JOINTS: 154 jts (4745.93 ft)  
 PACKER: 4770'  
 NO. OF JOINTS:  
 SEATING NIPPLE:  
 PERFORATED SUB:  
 MUD ANCHOR:  
 TOTAL STRING LENGTH: 6296.49 ft (EOT @ 6306.49' KB)  
 SN LANDED AT:

POLISHED ROD:  
 SUCKER RODS:

TOTAL ROD STRING LENGTH:

PUMP NUMBER:  
 PUMP SIZE:

STROKE LENGTH:  
 PUMP SPEED, SPM:  
 PUMPING UNIT SIZE:  
 PRIME MOVER:

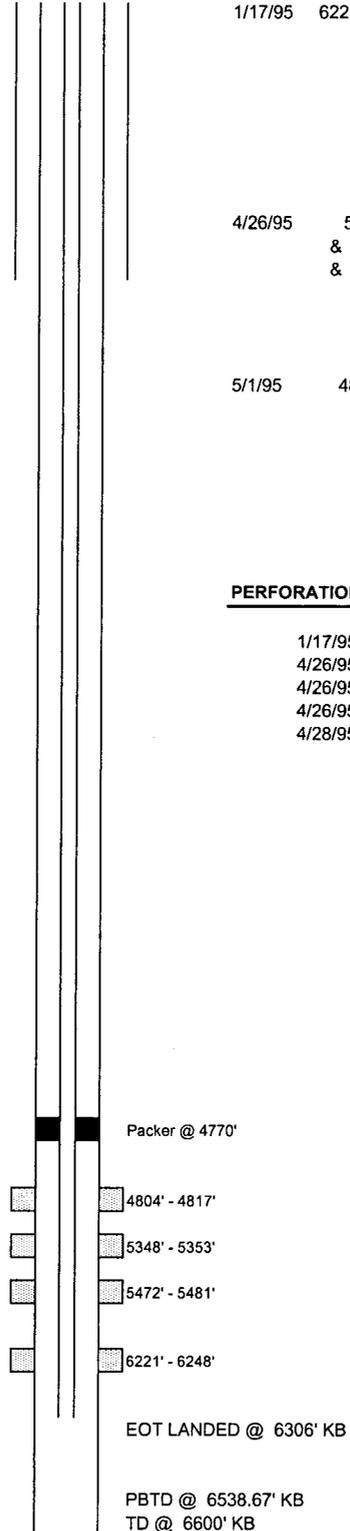
LOGS: CBL-GR, Compensated Neutron  
 Litho-Density Gamma Ray, Dual  
 Laterolog w/ linear correlation log  
 Gamma Ray

**FRAC JOB**

1/17/95	6221' - 6248'	Western - 12,600 gal 2% KCl water pad, followed by 33,390 gal 2% KCl w/ 80,040 # 20/40 + 87,580# 16/30. Flushed w/ 6218 gal 2% KCl water. ATP-1900, Max-2400#, ATR-32.8 bpm, Max-33.4 bpm. ISIP - 2000 psi, 5min-1920, 10min-1800, 15min-1750, 30min-1650psi. Force closure flow back 0.5bpm, 30min=1.5 bbl.FracGrad-0.761
4/26/95	5348' - 5353' & 5472' - 5475' & 5479' - 5481'	Western - 3000gal 2% KCl water pad followed by 11,500 gal 2% KCl gel w/ 26,920 # 20/40 + 38,000 # 16/30 sand, Flushed w/ 5345 gal 2% KCl water. ATP-2200#, Max-2830 #, ATR-33 bpm, Max-34.5 bpm, ISIP-1680 psi. 5min-1440, 10min-1300, 15min-1230 psi.
5/1/95	4804' - 4817'	BJ - 2982 gal 2% KCl water pad, followed by 19,026 gal 2% KCl gel w/ 80,400 # 16/30 sand. ATP-1850#, Max-2300#, ATR-30 bpm, Max-30.6 bpm. ISIP-1900 psi, 5 min-1570#, 10min-1480, 15min-1400, 30min-1250.

**PERFORATION RECORD**

1/17/95	6221' - 6248'	2 SPF	27 ft	54 holes
4/26/95	5348' - 5353'	5 ft	7 holes	
4/26/95	5472' - 5475'	3 ft	4 holes	
4/26/95	5479' - 5481'	2 ft	3 holes	
4/28/95	4804' - 4817'	4 SPF	13 ft	52 holes



## **WORK PROCEDURE FOR INJECTION CONVERSION**

- 1. Rig up hot oil truck to casing. Pump water. Unseat pump. Flush rods. Trip out of hole with rods and pump.**
- 2. Trip out of hole with tubing, breaking and doping every connection. Trip in hole with packer and tubing. Rig up water truck to casing. Pump packer fluid. Set packer.**
- 3. Test casing and packer.**
- 4. Rig down, move out.**

**REQUIREMENTS FOR INJECTION OF FLUIDS INTO RESERVOIRS**  
**RULE R615-5-1**

1. **Operations to increase ultimate recovery, such as cycling of gas, the maintenance of pressure, the introduction of gas, water or other substances into a reservoir for the purpose of secondary or other enhanced recovery or for storage and the injection of water into any formation for the purpose of water disposal shall be permitted only by order of the Board after notice and hearing.**
2. **A request for agency action for authority for the injection of gas, liquified petroleum gas, air, water or any other medium into any formation for any reason, including but not necessarily limited to the establishment of or the expansion of waterflood projects, enhanced recovery projects, and pressure maintenance projects shall contain:**

- 2.1 **The name and address of the operator of the project.**

Inland Production Company  
410 17<sup>th</sup> Street, Suite 700  
Denver, Colorado 80202

- 2.2 **A plat showing the area involved and identifying all wells, including all proposed injection wells, in the project area and within one-half mile of the project area.**

See Attachment A

- 2.3 **A full description of the particular operation for approval is requested.**

Approval is requested to convert the Monument Federal #12-22Y from a producing oil well to a water injection well in the Monument Butte (Green River) Field, Canvasback Unit.

**A description of the pools from which the identified wells are producing or have produced.**

The proposed injection well will inject into the Green River Formation.

- 2.4 **The names, description and depth of the pool or pools to be affected.**

The injection zone is in the Douglas Creek Member of the Green River Formation. At the Monument Federal #12-22Y well, the proposed injection zone is from 4804' -6248'. The confining stratum directly above and below the injection zone is the Douglas Creek Member of the Green River Formation, with the Douglas Creek Marker top at 6221'.

- 2.5 **A copy of a log of a representative well completed in the pool.**

The referenced log for the Monument Federal #12-22Y is on file with the Utah Division of Oil, Gas and Mining.

- 2.6 A statement as to the type of fluid to be used for injection, its source and the estimated amounts to be injected daily.**

The type and source of fluid to be used for injection will be culinary water from the Johnson Water District supply line. The average estimated injection of fluids will be at a rate of 300 BPD, and the estimated maximum injection will be at a rate of 500 BPD.

- 2.7 A list of all operators and surface owners within one-half mile radius of the proposed project.**

See Attachment B.

- 2.8 An affidavit certifying that said operators or owners and surface owners within a one-half mile radius have been provided a copy of the petition for injection.**

See Attachment C.

- 2.9 Any additional information the Board may determine is necessary to adequately review the petition.**

Inland Production Company will supply any additional information requested by the Utah Division of Oil, Gas and Mining.

- 4.0 Establish recovery projects may be expanded and additional wells placed on injection only upon authority from the Board after notice and hearing or by administrative approval.**

This proposed injection well is on a Federal lease (Lease #U-66191), in the Monument Butte (Green River) Field, Canvasback Unit, and this request is for administrative approval.

**REQUIREMENTS FOR CLASS II INJECTION WELLS INCLUDING WATER DISPOSAL,  
STORAGE AND ENHANCED RECOVERY WELLS  
SECTION V – RULE R615-5-2**

- 1. Injection well shall be completed, equipped, operated, and maintained in a manner that will prevent pollution and damage to any USDW, or other resources and will confine injected fluids to the interval approved.**
  
- 2. The application for an injection well shall include a properly completed Form DOGM-UIC-1 and the following:**
  - 2.1 A plat showing the location of the injection well, all abandoned or active wells within a one-half mile radius of the proposed wells, and the surface owner and the operator of any lands or producing leases, respectively, within a one-half mile radius of the proposed injection well.**

See Attachment A and B.
  
  - 2.2 Copies of electrical or radioactive logs, including gamma ray logs, for the proposed well run prior to the installation of casing and indicating resistivity, spontaneous potential, caliper and porosity.**

All logs are on file with the Utah Division of Oil, Gas and Mining.
  
  - 2.3 A copy of a cement bond or comparable log run for the proposed injection well after casing was set and cemented.**

A copy of the cement bond log is on file with the Utah Division of Oil, Gas and Mining.
  
  - 2.4 Copies of logs already on file with the Division should be referenced, but need not be refiled.**

All copies of logs are on file with the Utah Division of Oil, Gas and Mining.
  
  - 2.5 A description of the casing or proposed casing program of the injection well and of the proposed method for testing the casing before use of the well.**

The casing program is 8-5/8", 24#, J-55 surface casing run to 404.88' GL, and the 5-1/2" casing run from surface to 6584.52' KB. A casing integrity test will be conducted at the time of conversion. See Attachment E.
  
  - 2.6 A statement as to the type of fluid to be used for injection, its source and estimated amounts to be injected daily.**

The type and source of fluid to be injected is culinary water from the Johnson Water District supply line. The estimated average rate of injection will be 300 BPD, and the estimated maximum rate of injection will be 500 BPD.
  
  - 2.7 Standard laboratory analysis of the fluid to be injected, the fluid in the formation into which the fluid is being injected, and the compatibility of the fluids.**

See Attachment F, F-1, and F-2.

**2.8 The proposed average and maximum injection pressures.**

The proposed average injection pressure will be approximately 1100 psig and the maximum injection pressure will not exceed 1630 psig.

**2.9 Evidence and data to support a finding that the proposed injection well will not initiate fractures through the overlying strata or a confining interval that could enable the injected fluid or formation fluid to enter the fresh water strata.**

The fracture gradient for the Monument Federal #12-22Y, for proposed zones (4804' – 6248') calculates at .74 psig/ft. The maximum injection pressures will be limited so as not to exceed this gradient. A step rate test will be performed periodically to ensure we are below parting pressure. The proposed maximum injection pressure is 1630 psig. See Attachment G through G-3.

**2.10 Appropriate geological data on the injection interval and confining beds, including the geologic name, lithologic description, thickness, depth, and lateral extent.**

In the Monument Federal #12-22Y, the injection zone (4804'-6248') is in the Douglas Creek member of the Green River Formation. The reservoir is a very fine-grained sandstone with minor imbedded shale streaks. The estimated porosity is 13%. The Douglas Creek member is composed of porous and permeable lenticular calcareous sandstone and low porosity carbonates and calcareous shale. The porous and lenticular sandstone varies in thickness from 0-31', and is confined to the Monument Butte Field. Outside the Monument Butte Field, the sandstone is composed of tight, very fine, silty, calcareous sandstone, less than 3' thick. The stratum confining the injection zone is composed of tight, moderately calcareous, sandy lacustrine shale. All of the confining strata are impermeable, and will effectively seal off the oil, gas, and water of the injection zone from any strata directly above or below it.

**2.11 A review of the mechanical condition of each well within a one-half mile radius of the proposed injection well to assure that no conduit exists that could enable fluids to migrate up or down the wellbore and enter the improper intervals.**

See Attachments E through E-9.

Additionally, the injection system will be equipped with high and low pressure shut down devices that will automatically shut in injection waters if a system blockage or leakage occurs. One way check valves will also ensure proper flow management. Relief valves will also be utilized for high-pressure relief.

**2.12 An affidavit certifying that a copy of the application has been provided to all operators or owners, and surface owners within a one-half mile radius of the proposed injection well.**

See Attachment C.

**2.13 Any other information that the Board or Division may determine is necessary to adequately review the application.**

Inland Production Company will supply any requested information to the Board or Division.

Attachment A

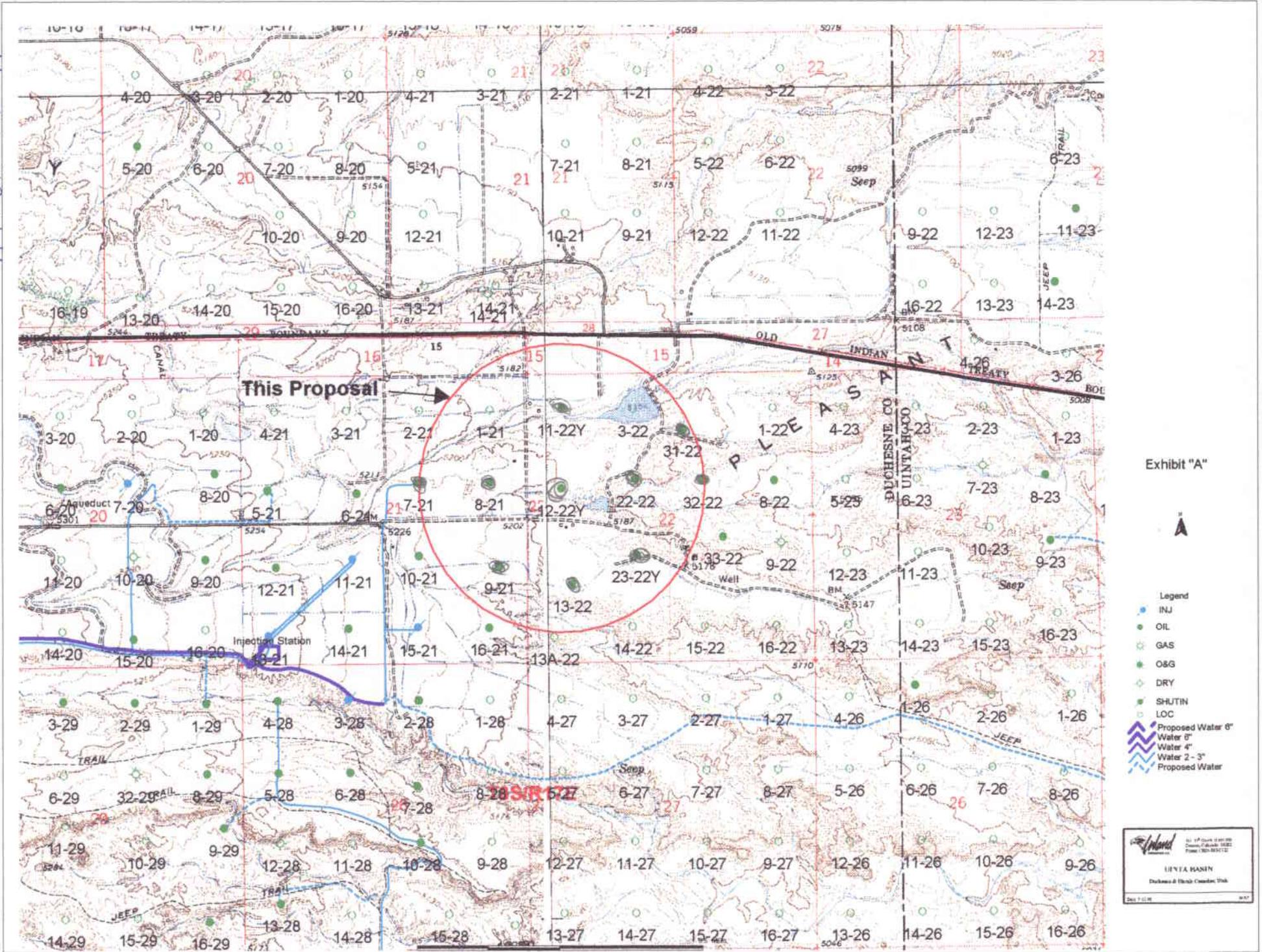


Exhibit "A"



- Legend
- INJ
- OIL
- GAS
- O&G
- DRY
- SHUTIN
- LOC
- Proposed Water 6"
- Water 6"
- Water 4"
- Water 2 - 3"
- Proposed Water

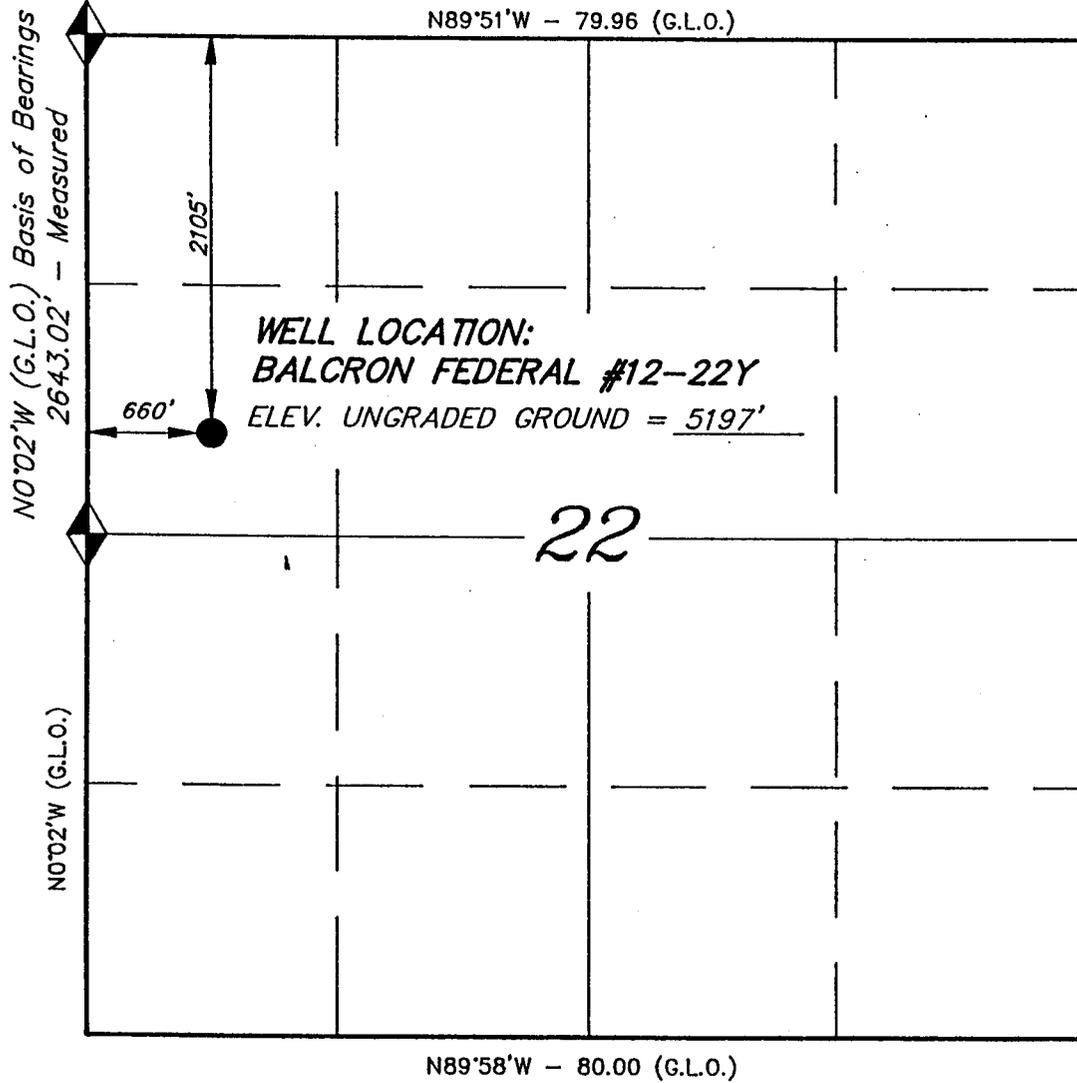
**LINTA HANSH**  
Duckworth & Hirsch Consulting, Inc.  
Dec 7, 2018

Attachment A-1

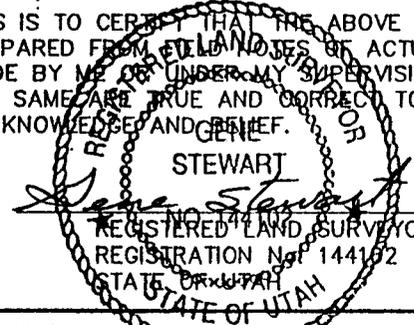
T8S, R17E, S.L.B.&M.

**EQUITABLE RESOURCES ENERGY CO.**

WELL LOCATION, BALCRON FEDERAL #12-22Y,  
LOCATED AS SHOWN IN THE SW 1/4 NW 1/4 OF  
SECTION 22, T8S, R17E, S.L.B.&M. DUCHESNE  
COUNTY, UTAH.



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



◆ = SECTION CORNERS LOCATED  
BASIS OF BEARINGS; G.L.O. DATED 1910  
BASIS OF ELEV; U.S.G.S. 7-1/2 min QUAD (MYTON SE)

<b>TRI STATE LAND SURVEYING &amp; CONSULTING</b>	
38 EAST 100 NORTH, VERNAL, UTAH 84078 (801) 781-2501	
SCALE: 1" = 1000'	SURVEYED BY: G.S.
DATE: 10-11-94	WEATHER: COOL
NOTES:	FILE #12-22Y

EXHIBIT "X"

EXHIBIT B

Page 1

#	Land Description	Minerals Ownership & Expires	Minerals Leased By	Surface Rights
1	Township 8 South, Range 17 East Section 14: All Section 15: All Section 22: W/2NW/4	U-66191 HBP	Inland Production Company Yates Petroleum Corporation ABO Petroleum Corporation Yates Drilling Company Myco Industries	(Surface Rights) USA
2	Township 8 South, Range 17 East Section 22: NE/4, E/2NW/4, S/2	U-77233 HBP	Inland Production Company	(Surface Rights) USA
3	Township 8 South, Range 17 East Section 21: N/2NE/4, SW/4NE/4	L. Clark Roberts HBP	Inland Production Company	(Surface Rights) L. Clark Roberts
4	Township 8 South Range 17 East Section 16: All	ML-45554 4/30/2002	Inland Production Company	(Surface Rights) St. of Utah
5	Township 8 South Range 17 East Section 17: All Section 18: Lots 1,2 Section 19: E/2 Section 20: All Section 21: W/2, SE/4	UTU-76954 HBP	Inland Production Company	(Surface Rights) USA

Attachment B

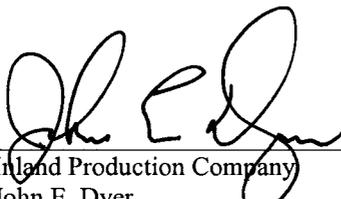
ATTACHMENT C

CERTIFICATION FOR SURFACE OWNER NOTIFICATION

RE: Application for Approval of Class II Injection Well  
Monument Federal #12-22Y

I hereby certify that a copy of the injection application has been provided to all surface owners within a one-half mile radius of the proposed injection well.

Signed: \_\_\_\_\_

  
Inland Production Company  
John E. Dyer  
Chief Operating Officer

Sworn to and subscribed before me this 31<sup>st</sup> day of July, 1998.

Notary Public in and for the State of Colorado: Patsy A. Barreau



My Commission Expires 11/14/2000



BALCRON FEDERAL #12-22Y  
 SW NW Sec. 22, T8S, R17E  
 2105' FNL, 660' FWL  
 LEASE #U-66191  
 Undesignated Field  
 Duchesne County, Utah

Elev.GR - 5192' GL  
 Elev.KB - 5202' KB (10' KB)

WELLBORE DIAGRAM

DATE: 2/28/96 vk

SURFACE CASING

CSG SIZE: 8-5/8"  
 GRADE: J-55  
 WEIGHT: 24#  
 LENGTH: 9 jts (394.88 ft)  
 DEPTH LANDED: 404.88' KB  
 HOLE SIZE: 12-1/4"  
 CEMENT DATA: Western - 250 sxs class "G" w/  
 2% CCI & 1/4 #/sx celloseal

405' KB

PRODUCTION CASING

CSG SIZE: 5-1/2"  
 GRADE: J-55  
 WEIGHT: 15.5#  
 LENGTH: 156 jts (6575.52 ft)  
 DEPTH LANDED: 6584.52' KB  
 HOLE SIZE: 7-7/8"  
 CEMENT DATA: Western - 130 sxs super "G" w/  
 (47# "G" + 20# Poz + 17#  
 CSE)/sk + 3% salt + 2% gel +  
 (2# Hi-Seal + 1/4 #Cello-seal)/sk,  
 tailed w/ 480 sxs 50/50 Poz + 2%  
 gel + (1/4# Cello-seal + 2#  
 Hi-Seal 2)/sk.

CEMENT TOP AT: 2983' KB CBL

TUBING

SIZE/GRADE/WT.: 2-7/8" / J-55 / 6.5#  
 NO. OF JOINTS: 154 jts (4745.93 ft)  
 TUBING ANCHOR: Trico (2.8 ft) set w/ 13" tension  
 NO. OF JOINTS: 49 jts (1512.20 ft)  
 SEATING NIPPLE: 2-7/8" x 1.1"  
 PERFORATED SUB: 2-7/8" x 4' (3.9 ft)  
 MUD ANCHOR: 1 jt (30.56 ft)  
 TOTAL STRING LENGTH: 6296.49 ft (EOT @ 6306.49' KB)  
 SN LANDED AT: 6272.03' KB

SUCKER RODS

POLISHED ROD: 1-1/2" x 22' SM  
 SUCKER RODS: 1 - 3/4" x 4' Pony  
 250 - 3/4" x 25' D-61 Plain

TOTAL ROD STRING LENGTH: 6270.5 ft

PUMP NUMBER: Trico # 1096  
 PUMP SIZE: 2-1/2" x 1-1/2" x 16' RWAC  
 w/ PA plunger

STROKE LENGTH: 89 in  
 PUMP SPEED, SPM: 4.2 SPM  
 PUMPING UNIT SIZE: American 320G (320-256-120)  
 PRIME MOVER: Ajax E-42

LOGS: CBL-GR, Compensated Neutron  
 Litho-Density Gamma Ray, Dual  
 Laterolog w/ linear correlation log  
 Gamma Ray

ACID JOB /BREAKDOWN

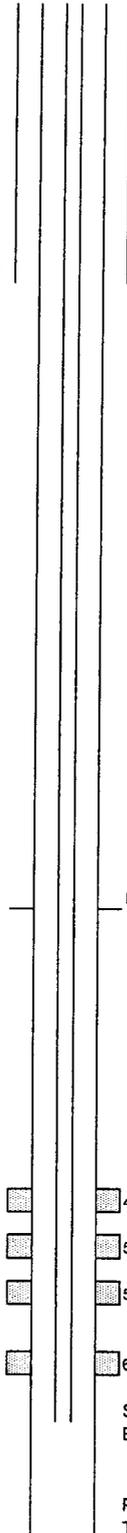
1/17/95	6221' - 6248'	Western - 2856 gal 2% KCl water w/ 125 ball sealers. ATP- 2400 psi, Max-5000psi, ATR-6 bpm, Max - 6 bpm. ISIP-1650 psi. Surged balls off. Frac Gradient - 0.704
4/26/95	5348' - 5353'	Western - 3696 gal 2% KCl water w/ 14 ball sealers. No Ball off. ATP - 2400#, Max-5000#, ATR-4.2 bpm. ISIP-1000 #
4/26/95	5472' - 5475' & 5479' - 5481'	Western - 2940 gal 2% KCl water w/ 14 ball sealers, Balled Off. ATP-2000#, Max-5000#, ATR-3.9 bpm. ISIP-1400 psi.
5/1/95	4804' - 4817'	BJ - 2898 gal 2% KCl water w/ 100 ball sealers. Ball action. ATP-2500#, Max-3800#, ATR-6 bpm, Max-6.1. ISIP-980#

FRAC JOB

1/17/95	6221' - 6248'	Western - 12,600 gal 2% KCl water pad, followed by 33,390 gal 2% KCl w/ 80,040 # 20/40 + 87,580# 16/30. Flushed w/ 6218 gal 2% KCl water. ATP-1900, Max-2400#, ATR-32.8 bpm, Max-33.4 bpm. ISIP - 2000 psi, 5min-1920, 10min-1800, 15min-1750, 30min-1650psi. Force closure flow back 0.5bpm, 30min=1.5 bbl.FracGrad-0.761
4/26/95	5348' - 5353' & 5472' - 5475' & 5479' - 5481'	Western - 3000gal 2% KCl water pad followed by 11,500 gal 2% KCl gel w/ 26,920 # 20/40 + 38,000 # 16/30 sand, Flushed w/ 5345 gal 2% KCl water. ATP-2200#, Max-2830 #, ATR-33 bpm, Max-34.5 bpm, ISIP-1680 psi. 5min-1440, 10min-1300, 15min-1230 psi.
5/1/95	4804' - 4817'	BJ - 2982 gal 2% KCl water pad, followed by 19,026 gal 2% KCl gel w/ 80,400 # 16/30 sand. ATP-1850#, Max-2300#, ATR-30 bpm, Max-30.6 bpm. ISIP-1900 psi, 5 min-1570#, 10min-1480, 15min-1400, 30min-1250.

PERFORATION RECORD

1/17/95	6221' - 6248'	2 SPF	27 ft	54 holes
4/26/95	5348' - 5353'	5 ft	7 holes	
4/26/95	5472' - 5475'	3 ft	4 holes	
4/26/95	5479' - 5481'	2 ft	3 holes	
4/28/95	4804' - 4817'	4 SPF	13 ft	52 holes



SN LANDED @ 6272' KB  
 EOT LANDED @ 6306' KB

PBTD @ 6538.67' KB  
 TD @ 6600' KB



# Attachment E-1

Balcron Monument Federal #11-22-8-17Y  
 Monument Butte Field (Pariette Draw Area)  
 Lease #U-66191  
 NW NW Section 22, T8S, R17E  
 635' FNL, 658' FWL  
 Duchesne County, Utah

Elev. GR - 5175' GL  
 Elev. KB - 5185' KB (10' KB)

## WELLBORE DIAGRAM

DATE : 10/30/96 vk

### SURFACE CASING

CSG SIZE: 8-5/8"  
 GRADE: J-55  
 WEIGHT: 24#  
 LENGTH: 252.29'  
 DEPTH LANDED: 262.29' KB  
 HOLE SIZE: 12-1/4"  
 CEMENT DATA: BJ Services: 160 sks  
 class "G" w/ 2% CaCl<sub>2</sub>,  
 1/4#/sk cello-seal.

### PRODUCTION CASING

CSG SIZE: 5-1/2"  
 GRADE: J-55  
 WEIGHT: 15.5#  
 LENGTH: 6414.20'  
 DEPTH LANDED: 6424.20' KB  
 HOLE SIZE: 7-7/8"  
 CEMENT DATA: BJ Services: 645 sks  
 Super "G", 47#/sk G,  
 3% gel, 3#/sk POZ, 34#/sk  
 BA-91, 2%gel, 3% salt,  
 3#/sk KOL seal, 1/4#/sk  
 cello-seal. Tail w/ 425 sks  
 50/50 POZ, 2%gel, 1/4#/sk  
 cello-seal, 2#/sk KOL seal.

CEMENT TOP AT: 100' KB

### TUBING

SIZE/GRADE/WT.: 2-7/8" 8rd EUE/ J-55/ 6.5#  
 NO. OF JOINTS: ?? Jts (4534.94')  
 TUBING ANCHOR: 2-7/8"x5-1/2"x2.75' Trico  
 NO. OF JOINTS: 56 Jts (1751.59')  
 SEATING NIPPLE: 2-7/8"x1.10'  
 PERFORATED SUB: 2-7/8"x4.10'  
 MUD ANCHOR: 2-7/8"x33.10'  
 STRING LENGTH: 6327.98'  
 SN LANDED AT: 6299' KB

### SUCKER RODS

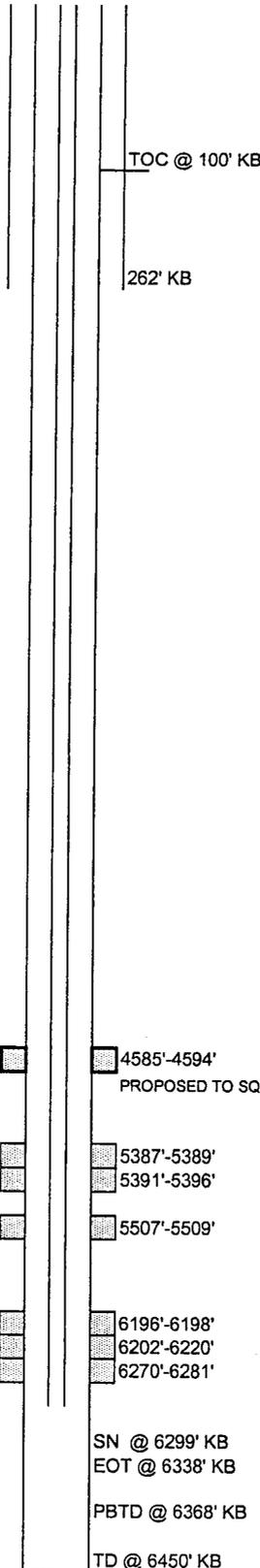
POLISHED ROD: 1-1/4"x22' SM  
 SUCKER RODS: 251-3/4"x25' D-61 Plain

TOTAL STRING LENGTH: 6297'

PUMP NUMBER: Trico #??  
 PUMP SIZE: 2-1/2"x1-1/2"x16' RWAC

STROKE LENGTH: 64 inches  
 PUMP SPEED, SPM: 3.5 SPM  
 PUMPING UNIT: American 228-212-86  
 PRIME MOVER: Ajax E-42

LOGS: CBL/GR  
 SpectralDensity Dual  
 Spaced Neutron Log.  
 Dual Laterolog



### ACID JOB /BREAKDOWN

Date	Interval	Details
11/9/95	6196'-6198' 6202'-6220'	BJ Services: 3015 gal 2% KCL wtr w/ 80 ball sealers. Ball ation but no ball out. ATP=2100 psi, ATR=5.0 bpm, ISIP=1350 psi.
11/9/95	6270'-6281'	BJ Services: 2469 gal 2% KCL wtr w/ 44 ball sealers. Balled out. ATP=2400 psi, ATR=4.9 bpm, ISIP=1500 psi.
11/13/95	5387'-5389' 5391'-5396'	BJ Services: 2058 gal 2% KCL wtr w/ 20 ball sealers. Balled out. ATP=2000 psi, ATR= 5.0 bpm, ISIP=1300 psi.
11/13/95	5507'-5509'	BJ Services: 2142 gal 2% KCL wtr w/ 8 ball sealers. Balled out. ATP=2600 psi, ATR=4.4 bpm, ISIP=1500 psi.
11/16/95	4585'-4594'	BJ Services: No treatment report in file.

### FRAC JOB

Date	Interval	Details
11/9/95	6196'-6198' 6202'-6220' 6270'-6281'	BJ Services: 25,830 gal 2% KCL wtr, 38,460 # 20/40 sand, 58,500# 16/30 sand. ATP=1950 psi, ATR=30.0 bpm, ISIP=2100 psi, 5 min=1900 psi, 10 min=1770 psi, 15 min=1690 psi, 30 min=1690 psi.
11/13/95	5387'-5389' 5391'-5396' 5507'-5509'	BJ Services: 18,900 gal 2% KCL wtr, 23,580# 20/40 sand, 35,020# 16/30 sand. ATP=2850 psi, ATR=30.5 bpm, ISIP=1800 psi, 5 min=1725 psi, 10 min=1588 psi, 15 min=1512 psi, 30 min=1389 psi.
11/16/95	4585'-4594'	BJ Services: 15,960 gal 2% KCL wtr, 53,000# 16/30 sand. ATP=2500 psi, ATR=31.0 bpm, ISIP=4990 psi, 5 min=4780 psi, 10 min=3530psi, 15 min=2530 psi.

### PERFORATION RECORD

Date	Tool	Interval	Details
11/9/95	Cutter	6196'-6198' 6202'-6220' 6270'-6281'	2 SPF 2 SPF 2 SPF
11/13/95	Cutter	5507'-5509' 5391'-5396' 5387'-5389'	4 holes 8 holes 2 holes
11/15/96	Cutter	4585'-4594'	??
10/30/1996		4585' - 4594'	PROPOSED TO SQUEEZE



Monument Federal #13-22-8-17Y  
 Monument Butte  
 U-67845  
 NW SW Section 22, T8s, R17E  
 1446' FSL, 863' FWL  
 Duchesne County, Utah

Elev.GR -5190" GL  
 Elev.KB - 5200" KB

WELLBORE DIAGRAM

DATE : 7/23/96 DZ

SURFACE CASING

CSG SIZE: 8-5/8"  
 GRADE: J-55  
 WEIGHT: 24#  
 LENGTH: 248' (6 Jts)  
 DEPTH LANDED: 258' KB  
 HOLE SIZE: 12-1/4"  
 CEMENT DATA: BJ Services: 160 sks "G"  
 w/2% CaCl<sub>2</sub>, 1/4#/sk  
 Cello-Flake.

PRODUCTION CASING

CSG SIZE: 5-1/2"  
 GRADE: J-55  
 WEIGHT: 15.5#  
 LENGTH: 6337.08' (150 Jts)  
 DEPTH LANDED: 6347.08'  
 HOLE SIZE: 7-7/8"  
 CEMENT DATA: BJ Services: 325 sks  
 Super "G", 3% salt, 2%  
 gel, 2#/sk KOI Seal,  
 1/4#/sk Cello-Flake'  
 Tail w/ 390 sks 50/50 POZ  
 25 gel, 1/4#/sk Cello Flake,  
 2#/sk KOL seal.

CEMENT TOP AT: 1440' KB

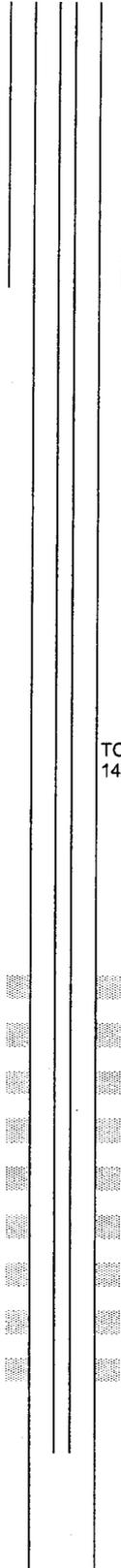
TUBING

SIZE/GRADE/WT.: 2-7/8" 8rd EUE/J-55/6.5#  
 NO. OF JOINTS: 152 Jts (4674.82')  
 TUBING ANCHOR: 2-7/8"x5-1/2"x2.75' Trico  
 NO. OF JOINTS: 38 Jts (1174.91')  
 SEATING NIPPLE: 2-7/8"x1.10'  
 PERFORATED SUB: 2-7/8"x4.20'  
 MUD ANCHOR: 2-7/8"x28.77'  
 STRING LENGTH: 5886.95'  
 SN LANDED AT: 5863.58' KB

SUCKER RODS

POLISHED ROD: 1-1/4"x22' SM  
 SUCKER RODS: 232-3/4"x25' D-61 Plain  
 1-7/8"x2' Pony  
 1-1-1/2"x25' K-Bar  
 1-7/8"x2' Pony w/ guide  
 TOTAL STRING LENGTH: 5851'  
 PUMP NUMBER: Trico #1170  
 PUMP SIZE: 2-1/2"x1-1/2"x16' RWAC  
 STROKE LENGTH: 84 inches  
 PUMP SPEED, SPM: 6-1/2 SPM  
 PUMPING UNIT: Lufkin C3200-305-100  
 PRIME MOVER: Ajax E-42

LOGS: CBL/GR  
 Dual Laterolog w/ linear  
 Correlation GR  
 Compensated Neutron  
 Litho Density GR Log



ACID JOB /BREAKDOWN

6/3/96 5808'-5810' BJ Services: 2142 gal  
 5820'-5823' 2% KCL wtr w/ 72 ball  
 5827'-5831' sealers. Balled out.  
 ATP=2500 psi, ATR=  
 4.3 bpm, ISIP=1650 psi.  
 6/4/96 5668'-5671' BJ Services: 2% KCL wtr  
 5674'-5676' w/ 104 ball sealers. Balled  
 5680'-5688' out. ATP=2100 psi, ATR=  
 4.4 bpm, ISIP=1600 psi.  
 6/7/96 4746'-4723' BJ Services: 2478 gal 2%  
 4772'-4776' KCL wtr w/ 104 ball sealers,  
 4778'-4780' Balled out. ATP=2100 psi,  
 ATR=4.7 bpm, ISIP=1500  
 psi.

FRAC JOB

6/3/96 5808'-5810' BJ Services: 12,180 gals  
 5820'-5823' 2% KCL wtr w/ 14,800 #  
 5827'-5831' 16/30 sand. ATP=2600 psi,  
 ATR=32.8 bpm, ISIP=2180  
 psi, 5 min=1930, 10 min=  
 1860 psi, 15 min=1820 psi.  
 6/4/96 5668'-5671' BJ Services: 11,130 gal  
 5674'-5676' 2% KCL wtr w/ 12,500#  
 5680'-5688' 16/30 sand. ATP=2050 psi,  
 ATR=32.5 bpm, ISIP=  
 1700 psi, 5 min=1560 psi,  
 10 min=1470 psi, 15 min=  
 1400 psi, 30 min=1280 psi.  
 6/7/96 4746'-4723' BJ Services: 9954 gal 2%  
 4772'-4776' KCL wtr w/ 13,420 # 16/30  
 4778'-4780' sand. ATP=2200 psi, ATR=  
 33.8 bpm, 5 min=1550 psi,  
 10 min=1470 psi, 15 min=  
 1410 psi, 30 min=1280 psi.

PERFORATION RECORD

Depth	Company	Depth Range	SPF
6/3/96	Schlumberger	5808'-5810'	4 SPF
		5820'-5823'	4 SPF
		5827'-5831'	4 SPF
6/4/96	Schlumberger	5668'-5671'	4 SPF
		5674'-5676'	4 SPF
		5680'-5688'	4 SPF
6/6/96	Schlumberger	4746'-4753'	4 SPF
		4772'-4776'	4 SPF
		4778'-4780'	4 SPF
		5808'-5810'	4 SPF
		5820'-5823'	4 SPF
		5827'-5831'	4 SPF

SN LANDED @ 5863.58' KB  
 EOT LANDED @ 5896.95' KB

PBTD @ 6299' KB  
 TD @ 6400' KB



Elev.GR - 5159' GL  
Elev.KB - 5169'KB (10' KB)

**WELLBORE DIAGRAM**

Attachment E-3

BALCRON FEDERAL #22-22-8-17Y  
SE NW Sec. 22 T9S, R17E  
1945' FNL, 2030' FWL  
U-67845  
Monument Butte Field  
Duchesne County, Utah

DATE : 2/28/96 vk

**SURFACE CASING**

CSG SIZE: 8-5/8"  
GRADE: J-55  
WEIGHT: 24#  
LENGTH: 8 jts (321.90 ft)  
DEPTH LANDED: 332' KB  
HOLE SIZE: 12-1/4"  
CEMENT DATA: BJ - 215 sxs class "G" + 2%  
CaCl2 + 1/4 #/sk Cello-Seal

**PRODUCTION CASING**

CSG SIZE: 5-1/2"  
GRADE: J-55  
WEIGHT: 15.5#  
LENGTH: 148 jts (6372.92 ft)  
DEPTH LANDED: 6386' KB  
HOLE SIZE: 7-7/8"  
CEMENT DATA: BJ - 140 sxs Super "G" w/ (47# "G" +  
3# Poz + 34# BA-91)/sk + 2% gel +  
(2# Hi-Seal 2 + 1/4 # Cello-Seal)/sk  
tailed by 484 sxs 50/50 Poz + 2% gel +  
(1/4# Cello-Seal + 2# Hi-Seal 2)/sk

CEMENT TOP AT: 2690' KB per CBL

**TUBING**

SIZE/GRADE/WT.: 2-7/8" / J-55 / 6.5#  
NO. OF JOINTS: 154 jts (4697.61 ft)  
TUBING ANCHOR: Trico (2.35 ft)  
NO. OF JOINTS: 42 jts (1274.05 ft)  
SEATING NIPPLE: 2-7/8" (1.1 ft)  
PERFORATED SUB: 2-7/8" (4.2 ft)  
MUD ANCHOR: 1 jt w/ pinned NC (26.10 ft)  
TOTAL STRING LENGTH: 6005.41 ft (EOT @ 6015.41' KB)  
SN LANDED AT: 5985.11' KB

**SUCKER RODS**

POLISHED ROD: 1-1/4" x 22' SM  
SUCKER RODS: 5 - 3/4" x 4' Pony  
239 - 3/4" x 25' D-61 Plain

TOTAL ROD STRING LENGTH: 6011.50 ft

PUMP NUMBER: Trico #1126  
PUMP SIZE: 2-1/2" x 1-1/2" x 16' RWAC  
w/ PA plunger

STROKE LENGTH: 88 in  
PUMP SPEED, SPM: 4.5 SPM  
PUMPING UNIT SIZE: National F 228-246C-86  
PRIME MOVER: Ajax EA-30

two - 400 bbl vert. tanks  
one - 100 bbl open top tank  
one - treater National 12'x5' Horiz

LOGS: Dual Laterolog w/ caliper, GR, SP, & Tension  
curve. Spectral Density/Dual Spaced Neutron  
w/ caliper, GR, & tension curve. CBL/GR

**ACID JOB /BREAKDOWN**

10/27/95 5861' - 5950' (150 holes) BJ - 1420 gal 2% KCl gel, break  
down in 2' segments. No Break: 5924' - 5914',  
Break : 5950', 5936' - 5921', circulated rest.

1/31/96 4748' - 4793' (72 holes) BJ - 3570 bbls 2% KCl water w/  
150 balls. Ball Action, no ball off. ATP-2800,  
Max-4100#, ATR-5.4 bpm, ISIP- 1400 psi.

**FRAC JOB**

1/31/96 4748' - 4793' BJ - 5000 gal 2% KCl wtr pad, followed by  
21,000 gal 2% KCl gel w/ 111,640# 16/30 sand,  
flush w/ 4704 gal 2% KCl water. ATP-1800psi,  
Max-2410 psi, ATR-33.4 bpm, Max-33.7 bpm,  
ISIP-2000psi, 5min-1580, 10min-1490, 15min-  
1380, 30min-1180psi. Frac Gradient - 0.859

**PERFORATION RECORD**

Date	Interval	SPF	Length	Holes
EOT - 2690' KB	10/26/95	5932' - 5950'	2 SPF (18 ft)	36 holes
	10/26/95	5925' - 5929'	2 SPF (4 ft)	8 holes
	10/26/95	5891' - 5920'	2 SPF (29 ft)	58 holes
	10/26/95	5876' - 5888'	2 SPF (12 ft)	24 holes
	10/26/95	5861' - 5873'	2 SPF (12 ft)	24 holes
	1/29/96	5772' - 5780'	4 SPF (8 ft)	32 holes
	1/29/96	5792' - 5796'	4 SPF (4 ft)	16 holes
	1/30/96	4748' - 4752'	4 SPF (4 ft)	16 holes
	1/30/96	4770' - 4778'	4 SPF (8 ft)	32 holes
	1/30/96	4780' - 4784'	4 SPF (4 ft)	16 holes
1/30/96	4791' - 4793'	4 SPF (2 ft)	8 holes	

4748'-4752'  
4770'-4778'  
4780'-4784'  
4791'-4793'

5772'-5780'  
5792'-5796'

5861'-5873'  
5876'-5888'  
5891'-5920'  
5925'-5929'  
5932'-5950'

SN LANDED @ 5985.11' KB  
EOT LANDED @ 6015.41' KB

PBTD @ 6337.88' KB  
TD @ 6400' KB

332' KB



Monument Federal #23-22-8-17Y  
 Monument Butte  
 U-67845  
 Section 22, T8S, R17E

Elev.GR -5190" GL  
 Elev.KB - 5200" KB

Duchesne County, Utah

WELLBORE DIAGRAM

DATE : 2/13/97 DZ

SURFACE CASING

CSG SIZE: 8-5/8"  
 GRADE: J-55  
 WEIGHT: 24#  
 LENGTH: 269'  
 DEPTH LANDED: 279' KB  
 HOLE SIZE: 12-1/4"  
 CEMENT DATA: No data given in report

PRODUCTION CASING

CSG SIZE: 5-1/2"  
 GRADE: J-55  
 WEIGHT: 15.5#  
 LENGTH: 6261'  
 DEPTH LANDED: 6271' KB  
 HOLE SIZE: 7-7/8"  
 CEMENT DATA: 370 sks super"G", 3% salt,  
 2% gel, 2#/sk KOL-seal,  
 1/4#/sk Cello-flake, Tail w/  
 435 sks 50/50 POZ, 2% gel,  
 1/4#/sk Cello-flake, 2#/sk  
 Kol-seal.

CEMENT TOP AT: 925' KB

TUBING

SIZE/GRADE/WT.: 2-7/8" 8rd EUE/ J-55/ 6.5#  
 NO. OF JOINTS: 150 Jts (4666.49')  
 TUBING ANCHOR: 2-7/8"x5-1/2"x2.75'  
 NO. OF JOINTS: 39 Jts (1231.14')  
 SEATING NIPPLE: 2-7/8"x1.10'  
 PERFORATED SUB: 2-7/8"x4.20'  
 MUD ANCHOR: 2-7/8"x27.61' w/notched-pinned collar  
 STRING LENGTH: 5933.29'  
 SN LANDED AT: 5910.38' KB

SUCKER RODS

POLISHED ROD: 1-1/4"x22' SM  
 SUCKER RODS: 1-3/4"x2' Pony  
 1-3/4"x6' Pony  
 1-3/4"x8' Pony

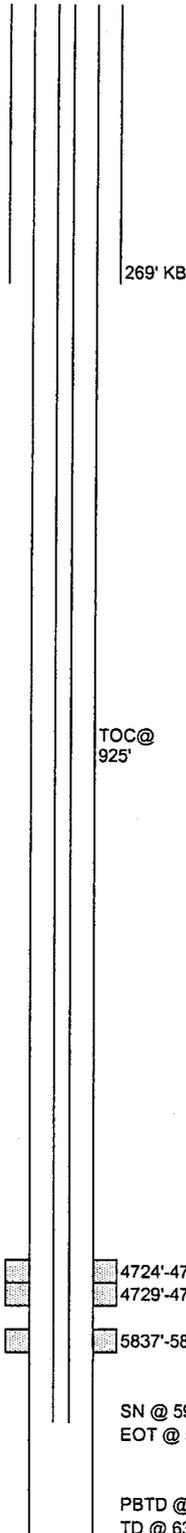
NOTE: Rod count is 50' long compared to tubing tally.  
 TOTAL STRING LENGTH: 5963'

PUMP NUMBER: Trico #1202  
 PUMP SIZE: 2-1/2"x1-1/2"x16' RWAC

STROKE LENGTH: 72 inches  
 PUMP SPEED, SPM: 6  
 PUMPING UNIT SIZE: Lufkin 160-200-74  
 SN: 507-53725

PRIME MOVER: Ajax EA-30  
 SN: 66240

TANKS: 2-400 BBL, Natco 12'x20'  
 Tank #1 SN: 9D-881-07  
 Tank #2 SN: ??



ACID JOB /BREAKDOWN

11/22/96	5837'-5868'	BJ Services: 3234 Gal 2% KCL wtr w/ 124 ball sealers. Ball action but no ball off. ATP= 2800 psi, ATR= 5.5 bpm, ISIP= 1700 psi.
11/25/96	4724'-4728' 4729'-4731'	BJ Services: 2100 gal 2% KCL wtr w/ 48 ball sealers. Ball action but no ball off. ATP= 2200 psi, ATR= 3.8 bpm, ISIP 1350 psi.

FRAC JOB

11/25/96	5837'-5868'	BJ Services: 23,392 gal 2% KCL wtr w/ 29,440# 20/40 sand & 50,660# 16/30 sand. ATP= 2740 psi, ATR= 33.8 bpm, ISIP= 3250 psi, 5 min= 2570 psi, 10 min= 2030 psi.
11/25/96	4724'-4728' 4729'-4731'	BJ Services: 10,878 gal 2% KCI wtr w/ 24,000# 16/30 sand. ATP= 1700 psi, ATR= 25.1 bpm, ISIP= 1660 psi, 5 min= 1330 psi, 10 min= 1240 psi, 15 min= 1200 psi, 30 min= 1100 psi.

PERFORATION RECORD

11/22/96	Cutter WL	5837'-5868'	2 SPF
11/25/96	Cutter WL	4724'-4728' 4729'-4731'	? ?

LOGS: Compensated Neutron  
 Litho-Density Gamma Ray;  
 Dual Laterolog w linear correlation  
 gamma ray; CBLGR.



Elev.GR - 5160' GL  
Elev.KB - 5170' (10' KB)

WELLBORE DIAGRAM

DATE : 7/24/96 DZ

SURFACE CASING

CSG SIZE: 8-5/8"  
GRADE: J-55  
WEIGHT: 24#  
LENGTH: 249.90' (6 Jts)  
DEPTH LANDED: 259.90' KB  
HOLE SIZE: 12-1/4"  
CEMENT DATA: 160 sks "G", w/ 2% CaCl<sub>2</sub>,  
1/4#/sk celloseal.

PRODUCTION CASING

CSG SIZE: 5-1/2"  
GRADE: J-55  
WEIGHT: 15.5#  
LENGTH: 6313.57'  
DEPTH LANDED: 6323.57' KB  
HOLE SIZE: 7-7/8"  
CEMENT DATA: 160 sks Super "G" w/ 47#/sk  
G, 34#/sk BA91, 3% salt,  
2% gel, 2#/sk Kolseal,  
1/3#/sk cello-flake.  
tail w/ 425 sks 50/50 POZ, 25 gel,  
1/4#/sk cello flake, 2#/sk Kolseal.

CEMENT TOP AT: 2066' KB

TUBING

SIZE/GRADE/WT.: 2-7/8" 8rd EUE/ J-55/ 6.5#  
NO. OF JOINTS: 170 Jts (5217.52')  
TUBING ANCHOR: 2-7/8"x5-1/2"x2.75' (Trico)  
NO. OF JOINTS: 26 Jts (803.48')  
SEATING NIPPLE: 2-7/8"x1.10'  
PERFORATED SUB: 2-7/8"x4.20'  
MUD ANCHOR: 2-7/8"x29.72'  
STRING LENGTH: 6059.17'  
SN LANDED AT: 6033.75'

SUCKER RODS

POLISHED ROD: 1-1/4"x22' SM  
SUCKER RODS: 240-3/4"x25' D-54 Plain  
1-7/8"x2' Pony w/2-1/2" guide  
1-1/2"x25' K-Bar  
1-7/8"x2' Pony w/2-1/2" guide

TOTAL STRING LENGTH: 6051'

PUMP NUMBER: Trico #1168  
PUMP SIZE: 2-1/2"x1-1/2"x16' RWAC  
w/ SM plunger.  
STROKE LENGTH: 85"  
PUMP SPEED, SPM: 9.3 SPM  
PUMPING UNIT:  
PRIME MOVER:

LOGS: Dual Laterolog w/ linear  
Correlation GR  
Compensated Neutron  
Litho Density GR  
CBL/GR

ACID JOB /BREAKDOWN

5/20/96 5936'-5950' BJ Services: 2000 gal 15%  
5960'-5965' HCL + 3460 gal % KCL wtr,  
5971'-6010' w/250 ball sealers. ATP=  
2100 psi, ATR=4.1 bpm,  
ISIP=1900 psi.  
  
5/28/96 5509'-5515' BJ Services: 2184 gals 2%  
5534'-5538' KCL wtr w/ 80 ball sealers.  
Balled out. ATP=2250 psi,  
ATR=4.5 bpm, ISIP=950 psi.

259.90' KB

FRAC JOB

5/22/96 5936'-6010' BJ Services: 5880 gals 2%  
KCL wtr w/ 21,260# 20/40  
sand & 39,040# 16/30  
sand. ATP=2600 pis, ATR=  
42.0 bpm, ISIP=2650 psi,  
5 min=2000 psi, 10 min=  
1700 psi, 15 min=1520 psi,  
30 min=1300 psi.  
  
5/29/96 5509'-5515' BJ Services: 10,290 gal  
5534'-5538' 2% KCL wtr & 13,220#  
16/30 sand. ATP=2000 psi,  
ATR=30.8 bpm, ISIP=  
1750 psi, 5 min=1370 psi,  
10 min=1280 psi, 15 min=  
1190 psi, 30 min=1100 psi.

TOC@  
2066' KB

PERFORATION RECORD

5/17/96	Schlumberger	5936'-5950'	4 SPF
		5960'-5965'	4 SPF
		5971'-6010'	4 SPF
5/28/96	Schlumberger	5509'-5515'	4 SPF
		5534'-5538'	4 SPF

5509'-5515'

5534'-5538'

5936'-5950'

5960'-5965'

5971'-6010'

SN LANDED @ 6033.75' KB  
EOT LANDED @ 6069.17' KB

PBTD @ 6282' KB  
TD @ 6350' KB



MONUMENT FEDERAL # 8-17  
 SW NE Sec. 22, T8S R17E  
 1980' FNL, 1980' FEL  
 Lease #U67845  
 Monument Butte Field (Pariette Draw Area)  
 Duchesne County, Utah

Attachment E-6

Elev.GR - 5120' GL  
 Elev.KB - 5130' (10' KB)

**WELLBORE DIAGRAM**

DATE : 7/24/96 DZ

**SURFACE CASING**

CSG SIZE: 8-5/8"  
 GRADE: J-55  
 WEIGHT: 24#  
 LENGTH: 250 ft  
 DEPTH LANDED:  
 HOLE SIZE: 12-1/4"  
 CEMENT DATA:

**PRODUCTION CASING**

CSG SIZE: 5-1/2"  
 GRADE: J-55  
 WEIGHT: 15.5#  
 LENGTH: 6348.61'  
 DEPTH LANDED: 6358.61' KB  
 HOLE SIZE: 7-7/8"  
 CEMENT DATA: BJ Services: 220 sks  
 Super "G", 2#/sk KOL-Seal  
 3% salt, 2% gel, 1/4#/sk  
 Cello-Flake. Tail w/  
 445 sks 50/50 POZ, 2% gel  
 1/4#/sk Cello-Flake  
 2#/sk Kol-Seal.

CEMENT TOP AT: 1702' KB

**TUBING**

SIZE/GRADE/WT.: 2-7/8" 8rd EUE/J-55/6.5#  
 NO. OF JOINTS: 146 Jts (4465.04')  
 TUBING ANCHOR: 2-7/8"x5-1/2"x2.75'  
 NO. OF JOINTS: 33 Jts (1023.80')  
 SEATING NIPPLE: 2-7/8"x1.10'  
 PERFORATED SUB: 2-7/8"x4.20'  
 MUD ANCHOR: 2-7/8"x28.41'  
 STRING LENGTH: 5525.70'  
 SN LANDED AT: 5501.59' KB

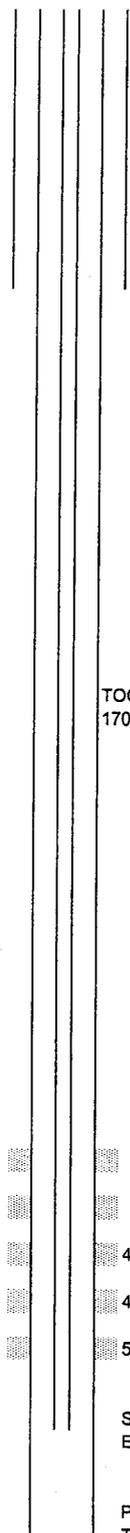
**SUCKER RODS**

POLISHED ROD: 1-1/4"x22' SM  
 SUCKER RODS: 1-3/4"x4' Pony  
 1-3/4"x8' Pony  
 218-3/4"x25' D-54 Plain  
 1-7/8"x2' Pony w/2.5" guide  
 1-1/1/2"x25' K-Bar  
 1-7/8"x2' Pony w/2.5" guide

TOTAL STRING LENGTH: 5513'

PUMP NUMBER: Trico #1173  
 PUMP SIZE: 2-1/2"x1-1/2"x16' RWAC  
 w/ SM Plunger.  
 STROKE LENGTH: 89 inches  
 PUMP SPEED, SPM: 3-1/2 SPM  
 PUMPING UNIT: American 320-213-120  
 PRIME MOVER: Ajax E-42

LOGS: CBL/GR



**ACID JOB /BREAKDOWN**

6/11/96 5447'-5460' BJ Services: 2646 gals  
 2% KCL wtr & 104 ball  
 sealers. Balled out. ATP=  
 2550 psi, ATR=5.8 bpm,  
 ISIP=1000 psi.  
 6/12/96 4501'-4509' BJ Services: 2352 gal 2%  
 4511'-4513' KCL wtr w/ 80 ball sealers.  
 Ball action but no ball out.  
 ATP=2000 psi, ATR=5.0  
 bpm, ISIP=1200 psi.

**FRAC JOB**

6/12/96 5447'-5460' BJ Services: 9324 gal 2%  
 KCL wtr & 13,000# 16/30  
 sand. ATP=1700 psi, ATR=  
 31.3 bpm, ISIP=1400 psi,  
 5 min=1150 psi, 10 min=  
 1100 psi, 15 min=1080 psi.  
 6/12/96 4501'-4509' BJ Services: 9576 gal 2%  
 4511'-4513' KCL wtr w/ 12,800# 16/30  
 sand. ATP=2140 psi,  
 ATR=31.5 bpm, ISIP=  
 1650 psi, 5 min=1200 psi,  
 10 min=1190 psi, 15 min=  
 1160 psi, 30 min=1100 psi.

**PERFORATION RECORD**

6/11/96 Cutter 5447'-5460' 4 SPF  
 6/12/96 Cutter 4501'-4509' 4 SPF  
 4511'-4513' 4 SPF

TOC @  
 1702'

4501'-4509'  
 4511'-4513'  
 5447'-5460'

SN LANDED @ 5502' KB  
 EOT LANDED @ 5535.70' KB

PBTD @ 6312' KB  
 TD @ 6400' KB

# Boundary #7-21

Spud Date: 10/16/96  
 Put on Production: 11/18/96  
 GL: 5208' KB: 5221'

Initial Production: ? BOPD, ?  
 MCFPD, ? BWPD

Wellbore Diagram

**SURFACE CASING**

CSG SIZE: 8-5/8"  
 GRADE: J-55  
 WEIGHT: 24#  
 LENGTH: 7 jts (285.12')  
 DEPTH LANDED: 284.52' GL  
 HOLE SIZE: 12-1/4"  
 CEMENT DATA: 120 sxs Premium cmt, est 9 bbbs to surface.

**PRODUCTION CASING**

CSG SIZE: 5-1/2"  
 GRADE: J-55  
 WEIGHT: 15.5#  
 LENGTH: 150 jts (6355.30')  
 DEPTH LANDED: 6350' KB  
 HOLE SIZE: 7-7/8"  
 CEMENT DATA: 410 sk HiBond mixed & 450 sxs thixotropic  
 CEMENT TOP AT: 808' per CBL

**TUBING**

SIZE/GRADE/WT.: 2-7/8"/M-50/6.5#  
 NO. OF JOINTS: 202 jts.  
 TUBING ANCHOR: 6103'  
 SEATING NIPPLE: 2-7/8" (1.10')  
 TOTAL STRING LENGTH: EOT @ 6208'  
 SN LANDED AT: 6137'

**SUCKER RODS**

POLISHED ROD: 1-1/2" x 22' polished rod.  
 SUCKER RODS: 8-1" scraped, 137-3/4" plain rods, 99-3/4" scraped  
 TOTAL ROD STRING LENGTH: ?  
 PUMP NUMBER: ?  
 PUMP SIZE: 2-1/2 x 1-1/2 x 12 x 15 RHAC pump  
 STROKE LENGTH: 74"  
 PUMP SPEED, SPM: 9 SPM  
 LOGS: Dual Laterlog, GR, SP, Spectral Density-Dual Spaced Neutron, CBL-GR

**FRAC JOB**

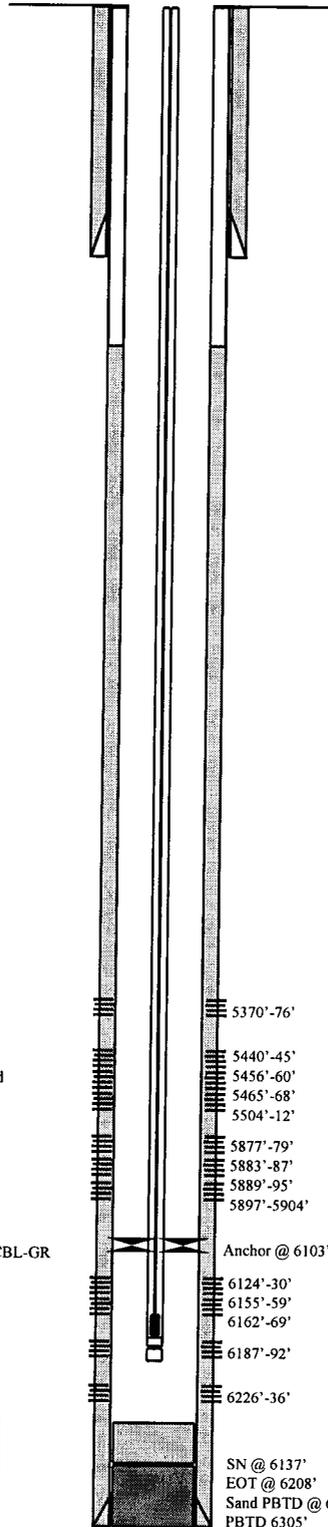
11/8/96 6124'-6236' **Frac CP-1, CP-2 & CP-3 sands as follows:**  
 81,700# of 20/40 sand in 512 bbbs of Boragel. Breakdown @ 1928 psi. Treated @ avg rate of 32 bpm w/avg press of 1400 psi. ISIP-1912 psi. 5-min 1739 psi. Flowback on 12/64" ck for 4-1/2 hours and died.

11/11/96 5877'-5904' **Frac A-3 sand as follows:**  
 121,000# 20/40 sand in 654 bbbs of Boragel. Breakdown @ 3284 psi. Treated @ avg rate of 24.8 bpm w/avg press of 3284 psi. ISIP-2100 psi. 5-min 1937 psi. Flowback on 12/64" ck for 5 hours and died.

11/13/96 5370'-5512' **Frac C and D-2 sands as follows:**  
 96,800# of 20/40 sand in 582 bbbs of Boragel. Breakdown @ 2075 psi. Treated @ avg rate of 24.5 bpm w/avg press of 1400 psi. ISIP-2385 psi. 5-min 2350 psi. Flowback on 12/64" ck for 2-1/2 hours and died.

**PERFORATION RECORD**

Date	Interval	Tool	Holes
11/6/96	6124'-6130'	4 JSPF	24 holes
11/6/96	6155'-6159'	4 JSPF	16 holes
11/6/96	6162'-6169'	4 JSPF	28 holes
11/6/96	6187'-6192'	4 JSPF	20 holes
11/6/96	6226'-6236'	4 JSPF	40 holes
11/9/96	5877'-5879'	4 JSPF	8 holes
11/9/96	5883'-5887'	4 JSPF	16 holes
11/9/96	5889'-5895'	4 JSPF	24 holes
11/9/96	5897'-5904'	4 JSPF	28 holes
11/12/96	5440'-5445'	4 JSPF	20 holes
11/12/96	5456'-5460'	4 JSPF	16 holes
11/12/96	5465'-5468'	4 JSPF	12 holes
11/12/96	5504'-5512'	4 JSPF	32 holes
11/12/96	5370'-5376'	4 JSPF	24 holes



**Inland Resources Inc.**

**Boundary #7-21**

1974 FNL 2111 FEL

SENE Section 21-T8S-R17E

Duchesne Co, Utah

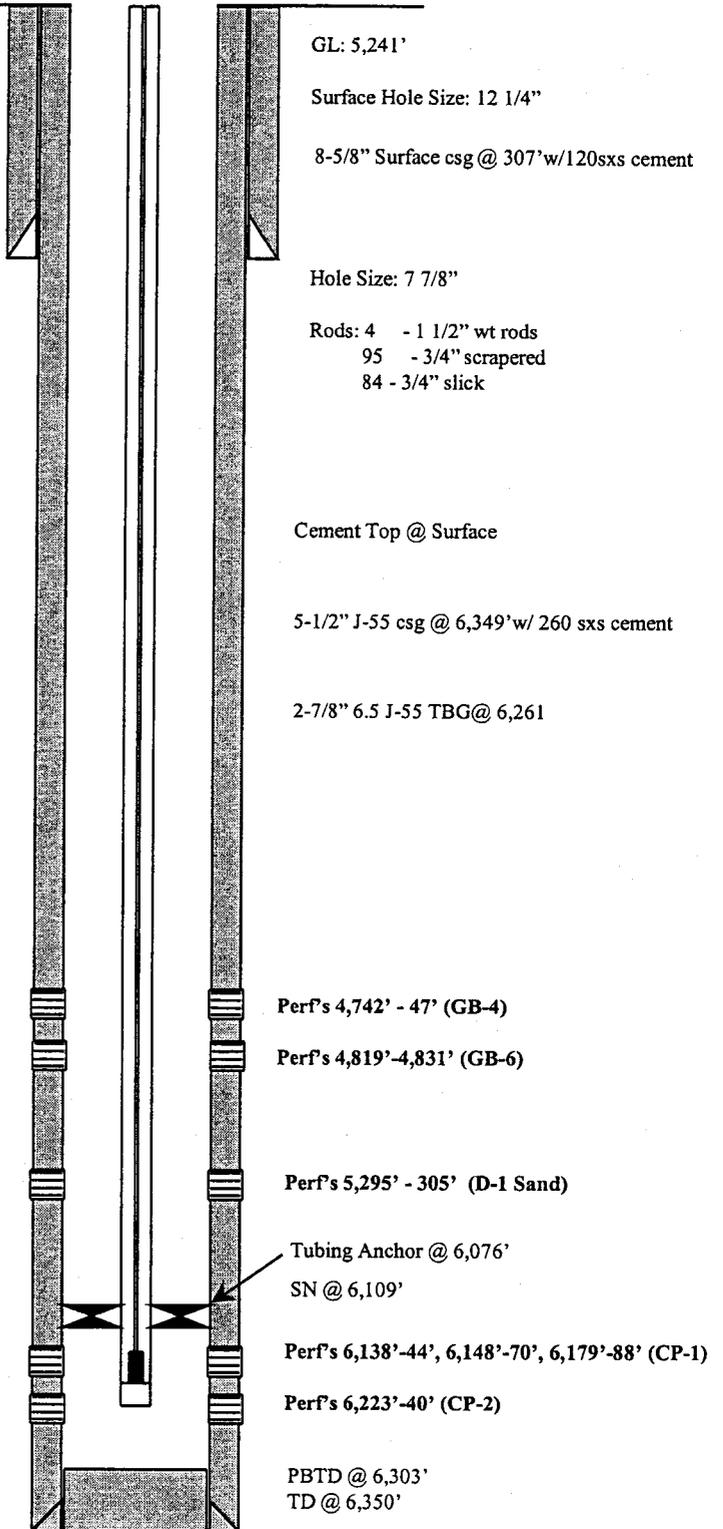
API #43-013-31640; Lease FEE:Roberts

# Boundary Federal #8-21

Wellbore Diagram

**Well History:**

11-5-95	Spud Well
12-23-95	Perf: 6,138' - 44' 6,148' - 70' 6,179' - 88' 6,223 - 40' 2spf Castlet Peak Sands
12-24-95	Frac Castle Peak Zones as follows: Totals 834 bbls Boragel, 109,400# 20/40 sd. Avg rate 43 BPM @ 1800 psi. ISIP: 1759 psi, 5 min.; 1588 psi, 10 min: 1457 psi.
12-27-95	Perf: 5,295-305' D Sand
12-28-95	Frac D Sand as follows: Totals 382 bbls Boragel 39,300# 20/40 sd. Avg rate 20 BPM @ 1900 psi. ISIP 2083 psi, 5 min: 1972 psi, 10 min: 1935 psi.
12-29-95	Perf: 4,742'-47' GB-4 4,819'-31' GB-6 4 SPF
12-30-95	Frac GB-4 & GB-6 Sands as follows: Totals 592 bbls Boragel, 69,000# 16/30 sd. Avg rate 31 BPM @ 2000 psi. ISIP 2100 psi, 5 min: 2081 psi, 10 min: 2080 psi.
1-7-96	1st Day of Production





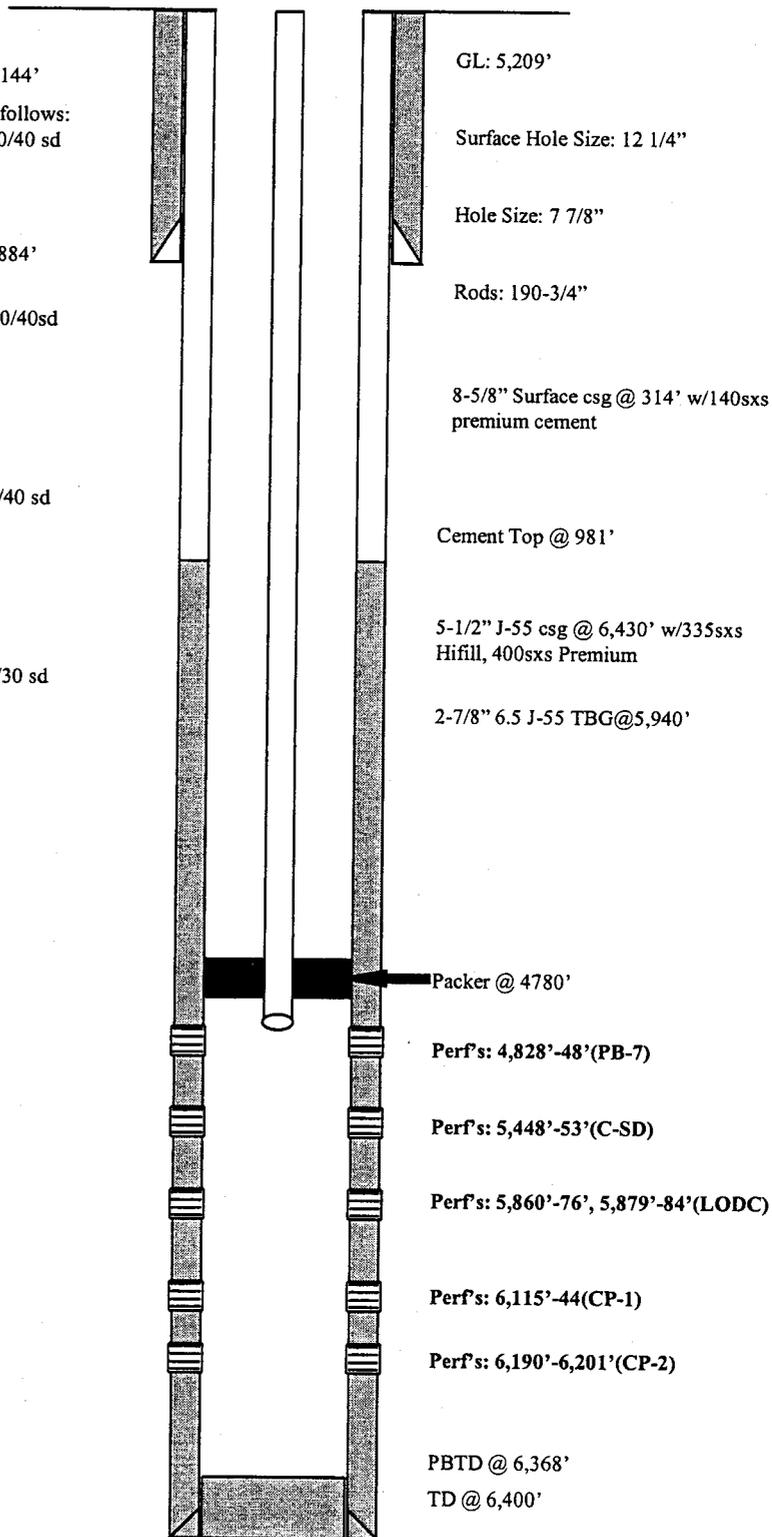
**Inland Resources Inc.**  
**Boundary Federal #8-21**  
 1960 FNL 465 FEL  
 SENE Section 21-T8S-R17E  
 Duchesne Co, Utah  
 API #43-013-31557; Lease #U-50376

# Boundary Federal #9-21

Injection Diagram

**Well History:**

8-23-95	Spud Well
9-16-95	Perf: 6,190'-6,201', 6,115'-6,144'
9-20-95	Frac CP-1 and CP-2 zones as follows: Totals 33,050 gal, 163,350#20/40 sd Max TP 1,895 @ 36.4 BPM Avg TP 1,450 @ 35 BPM ISIP 1,895, after 5 min 1,822
9-21-95	Perf: 5,860'-5,876', 5,879'-5,884'
9-22-95	Frac LODC zone as follows: Totals 31,000 gal, 152,000# 20/40sd Max TP 2,520 @ 41.3 BPM Avg TP 2,200 @ 38 BPM ISIP 2,300, after 5 min 2,243
9-23-95	Perf: 5,448'-5,453'
9-24-95	Frac C-Sd zone as follows: Totals 12,960 gal, 60,000# 20/40 sd Max TP 3,980 @ 27.8 BPM Avg TP 1,550 @ 25 BPM ISIP 1,462, after 5 min. 1,365
9-26-95	Perf: 4,828'-4,848'
9-27-95	Frac GB-7 zone as follows: Totals 27,457 gal, 79,700# 16/30 sd Max TP 2,450 @ 26.6 BPM Avg TP 1,900 @ 24.5 BPM ISIP 2,237, after 5 min. 2,131



	<b>Inland Resources Inc.</b>
	<b>Boundary Federal #9-21</b>
	1980 FSL 660 FEL
	NESE Section 21-T8S-R17E
	Duchesne Co, Utah
API #43-013-31542; Lease #U-50376	

# UNICHEM

A Division of BJ Services

P.O. Box 217  
Roosevelt, Utah 84066

Office (801) 722-5068  
Fax (801) 722-5727

Attachment F

## WATER ANALYSIS REPORT

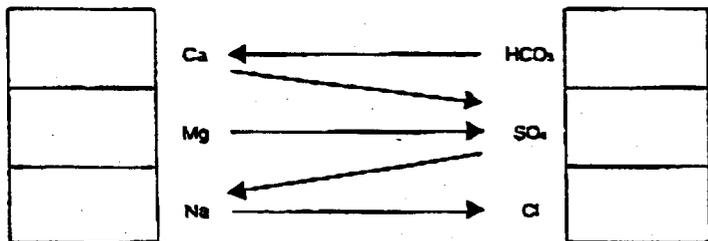
Company INLAND Address \_\_\_\_\_ Date 01-14-98

Source Johnson Water FRESH WATER Date Sampled \_\_\_\_\_ Analysis No. \_\_\_\_\_

	Analysis	mg/l(ppm)	*Mg/l
1. PH	<u>7.0</u>		
2. H <sub>2</sub> S (Qualitative)	<u>0.5</u>		
3. Specific Gravity	<u>1.001</u>		
4. Dissolved Solids		<u>593</u>	
5. Alkalinity (CaCO <sub>3</sub> )		<u>0</u>	<u>0</u> CO <sub>3</sub>
6. Bicarbonate (HCO <sub>3</sub> )		<u>300</u>	<u>5</u> HCO <sub>3</sub>
7. Hydroxyl (OH)		<u>0</u>	<u>0</u> OH
8. Chlorides (Cl)		<u>35</u>	<u>1</u> Cl
9. Sulfates (SO <sub>4</sub> )		<u>110</u>	<u>2</u> SO <sub>4</sub>
10. Calcium (Ca)		<u>44</u>	<u>2</u> Ca
11. Magnesium (Mg)		<u>22</u>	<u>2</u> Mg
12. Total Hardness (CaCO <sub>3</sub> )		<u>200</u>	
13. Total Iron (Fe)		<u>2.2</u>	
14. Manganese			
15. Phosphate Residuals			

\*Mill equivalents per liter

### PROBABLE MINERAL COMPOSITION



Compound	Equlv. Wt.	X	Mg/l	=	Mg/l
Ca(HCO <sub>3</sub> ) <sub>2</sub>	81.04	<u>2</u>			<u>162</u>
CaSO <sub>4</sub>	68.07				
CaCl <sub>2</sub>	55.50				
Mg(HCO <sub>3</sub> ) <sub>2</sub>	73.17	<u>2</u>			<u>146</u>
MgSO <sub>4</sub>	60.19				
MgCl <sub>2</sub>	47.62				
NaHCO <sub>3</sub>	84.00	<u>1</u>			<u>84</u>
Na <sub>2</sub> SO <sub>4</sub>	71.03	<u>2</u>			<u>142</u>
NaCl	58.46	<u>1</u>			<u>59</u>

Saturation Values	Distilled Water 20°C
CaCO <sub>3</sub>	13 Mg/l
CaSO <sub>4</sub> · 2H <sub>2</sub> O	2,090 Mg/l
MgCO <sub>3</sub>	103 Mg/l

REMARKS \_\_\_\_\_

## WATER ANALYSIS REPORT

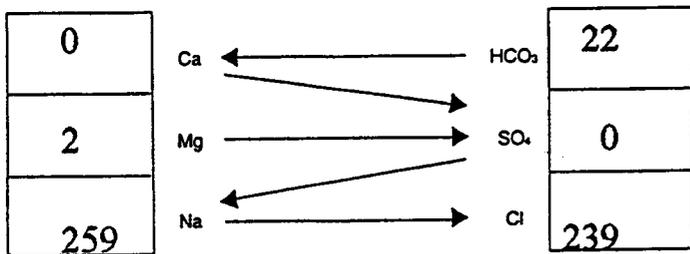
Company INLAND Address \_\_\_\_\_ Date 01-27-98

Source BOUNDARY FED. 9-21 Date Sampled \_\_\_\_\_ Analysis No. \_\_\_\_\_

	Analysis	mg/l(ppm)	*Meg/l
1. PH	<u>9.2</u>		
2. H <sub>2</sub> S (Qualitative)	<u>5</u>		
3. Specific Gravity	<u>1.014</u>		
4. Dissolved Solids		<u>15,798</u>	
5. Alkalinity (CaCO <sub>3</sub> )		<u>120</u>	÷ 30 <u>4</u> CO <sub>3</sub>
6. Bicarbonate (HCO <sub>3</sub> )		<u>1,100</u>	÷ 61 <u>18</u> HCO <sub>3</sub>
7. Hydroxyl (OH)		<u>0</u>	÷ 17 <u>0</u> OH
8. Chlorides (Cl)		<u>8,500</u>	÷ 35.5 <u>239</u> Cl
9. Sulfates (SO <sub>4</sub> )		<u>0</u>	÷ 48 <u>0</u> SO <sub>4</sub>
10. Calcium (Ca)		<u>8</u>	÷ 20 <u>0</u> Ca
11. Magnesium (Mg)		<u>22</u>	÷ 12.2 <u>2</u> Mg
12. Total Hardness (CaCO <sub>3</sub> )		<u>110</u>	
13. Total Iron (Fe)		<u>0.8</u>	
14. Manganese			
15. Phosphate Residuals			

\*Milli equivalents per liter

### PROBABLE MINERAL COMPOSITION



Compound	Equiv. Wt.	X	Meg/l	=	Mg/l
Ca(HCO <sub>3</sub> ) <sub>2</sub>	81.04				
CaSO <sub>4</sub>	68.07				
CaCl <sub>2</sub>	55.50				
Mg(HCO <sub>3</sub> ) <sub>2</sub>	73.17		<u>2</u>		<u>146</u>
MgSO <sub>4</sub>	60.19				
MgCl <sub>2</sub>	47.62				
NaHCO <sub>3</sub>	84.00		<u>20</u>		<u>1,680</u>
Na <sub>2</sub> SO <sub>4</sub>	71.03				
NaCl	58.46		<u>239</u>		<u>13,972</u>

Saturation Values	Distilled Water 20°C
CaCO <sub>3</sub>	13 Mg/l
CaSO <sub>4</sub> · 2H <sub>2</sub> O	2,090 Mg/l
MgCO <sub>3</sub>	103 Mg/l

REMARKS \_\_\_\_\_

## AQUAMIX SCALING PREDICTIONS

COMPANY: INLAND  
 LOCATION:  
 SYSTEM:

03-04-98

WATER DESCRIPTION:	JOHNSON WATER	BF 9-21
P-ALK AS PPM CaCO <sub>3</sub>	0	200
M-ALK AS PPM CaCO <sub>3</sub>	492	1804
SULFATE AS PPM SO <sub>4</sub>	110	0
CHLORIDE AS PPM Cl	35	8500
HARDNESS AS PPM CaCO <sub>3</sub>	0	0
CALCIUM AS PPM CaCO <sub>3</sub>	110	20
MAGNESIUM AS PPM CaCO <sub>3</sub>	90	90
SODIUM AS PPM Na	92	5957
BARIUM AS PPM Ba	0	0
STRONTIUM AS PPM Sr	0	0
CONDUCTIVITY	0	0
TOTAL DISSOLVED SOLIDS	593	15798
TEMP (DEG-F)	150	150
SYSTEM pH	7	9.2

## WATER COMPATIBILITY CALCULATIONS

JOHNSON WATER AND BF 9-21

CONDITIONS: TEMP.=150 AND pH=8.1

WATER ONE IS JOHNSON WATER

% OF WATER # 1	STIFF DAVIS CaCO <sub>3</sub> INDEX	lbs/1000 BBL EXCESS CaCO <sub>3</sub>	mg/l BaSO <sub>4</sub> IN EXCESS OF SATURATION	mg/l SrO <sub>4</sub> IN EXCESS OF SATURATION	mg/l Gypsum IN EXCESS OF SATURATION
100	1.43	36	0	0	0
90	1.44	33	0	0	0
80	1.43	30	0	0	0
70	1.40	27	0	0	0
60	1.36	24	0	0	0
50	1.31	21	0	0	0
40	1.24	18	0	0	0
30	1.15	15	0	0	0
20	1.05	12	0	0	0
10	.94	8	0	0	0
0	.78	5	0	0	0

**Attachment G**

**Monument Federal #12-22Y  
Proposed Maximum Injection Pressure**

Frac Interval (feet)		Avg. Depth (feet)	ISIP (psi)	Frac Gradient (psi/ft)	Pmax
Top	Bottom				
6221	6248	6235	2000	0.75	1959
5348	5481	5415	1680	0.74	1630 ←
4804	4817	4811	1900	0.83	1897
<b>Minimum</b>					<u>1630</u>

Calculation of Maximum Surface Injection Pressure  

$$P_{max} = (\text{Frac Grad} - (0.433 \times 1.005)) \times \text{Depth of Top Perf}$$
 where pressure gradient for the fresh water is .433 psi/ft and  
 specific gravity of the injected water is 1.005.

Frac Gradient is obtained from the service company's frac summary report.



**EQUITABLE RESOURCES  
ENERGY COMPANY**  
BALCRON OIL DIVISION  
1901 Lower Mainway  
P.O. Box 2100  
Troy, MO 64684-1912

Attachment G-1

TREATMENT REPORT

Date of Treatment: 1-17-95

Well Name BALCRON FED. 12-22Y SEC. 22 TWN. 8 S RNG. 17 E  
FIELD MONUMENT BUTTE County UINTAH State UTAH

Location ~~XXXXXXXXXX~~ GREEN RIVER  
PERMITS 6221-48

Treatment type: SAND FRAC.

Total Number of Holes: 54

Treatment Company: WESTERN

Sand Characteristics

Well no	Fluid	Conc.	Size			SAND		Volume
			PER. GAL	BPM	PSI.	CALC.	ACTUAL	
<del>300</del> 300	12600 Gal. 2% KCL WATER PAD	0		31.7	2180			
<del>41</del> 41	1650 Gal. "	1		31.7	2270	1		#
73	2000 Gal. "	2		31.8	2260	20/40	1650	#
116	4300 Gal. "	3		32.3	2130	20/40	5600	#
163	5000 Gal. "	4		32.5	1980	20/40	12900	#
<del>210</del> 210	7200 Gal. "	5		33.2	1860	20/40	23200	#
259	6550 Gal. "	6		33.0	1790	20/40	36000	#
143	4550 Gal. "	7		32.9	1770			#
148	1218 Gal. " FLUSH	0		32.9	1790	16/30	51300	#
	Gal. "			32.8	1780			#
	Gal. "			32.8	1650	16/30	31850	#
	Gal. "			33.0	1670			#
	Gal. "			33.9	2400			#

TOTAL FLUID PUMPED: 52584 gal. 2% Acid fluid  
2% KCL WATER

TOTAL SAND VOL.: 80,040 lbs. 20/40 sand  
87,580 lbs. 16/30 sand  
lbs. 1 sand  
lbs. 1 bauxite

Flushed well with 6218 gal. of 2% KCL WATER

Ball sealers were pumped. Was ball action seen? BLTR.

Pressure to Recover 1252  
Treating Pressure = 1900 psi, max = 2400 psi, min = 1730 psi.  
Treating Rate = 32.8 bpm, max = 33.4 bpm, min = 31.7 bpm.  
ISII = 2000 psi, 5 min. = 1920 psi, 10 min. = 1800 psi, 15 min. = 1750 psi.  
Well will be shut in for 11 hrs. before bringing back fluid, 30 MIN = 1650 PSI

REMARKS: 4 BBL. TO LOAD HOLE  
FORCED CLOSURE FLOW BACK .5 BPM, 30 MIN. = 15 BBL.

FRAC GRADIENT .761

Well site Supervisor: [Signature]





## ATTACHMENT H

### WORK PROCEDURE FOR PLUGGING AND ABANDONMENT

1. **Plug #1** Set 177' plug from 6121'-6298' with 30 sx Class "G" cement.
2. **Plug #2** Set 283' plug from 5248'-5531' with 60 sx Class "G" cement.
3. **Plug #3** Set 163' plug from 4704'-4867' with 30 sx Class "G" cement.
4. **Plug #4** Set 200' plug from 2000'-2200' with 30 sx Class "G" cement.
5. **Plug #5** Set 100' plug from 355'-455' (50' on either side of casing shoe) with 15 sx Class "G" cement.
6. **Plug #6** Set 50' plug from surface with 10 sx Class "G" cement.
7. Pump 10 sx Class "G" cement down the 8-5/8" x 5-1/2" annulus to cement 405' to surface.

The approximate cost to plug and abandon this well is \$18,000.



Elev.GR - 5192' GL  
 Elev.KB - 5202' KB (10' KB)

**PROPOSED P&A  
 WELLBORE DIAGRAM**

**SURFACE CASING**

CSG SIZE: 8-5/8"  
 GRADE: J-55  
 WEIGHT: 24#  
 LENGTH: 9 jts (394.88 ft)  
 DEPTH LANDED: 404.88' KB  
 HOLE SIZE: 12-1/4"  
 CEMENT DATA: Western - 250 sxs class "G" w/  
 2% CCI & 1/4 #/sx celloseal

10 sx Class "G" cmt, 50' to surface  
 10 sx Class "G" cement down the 8-5/8" x 5-1/2"  
 annulus to cement 405' to surface

405' KB

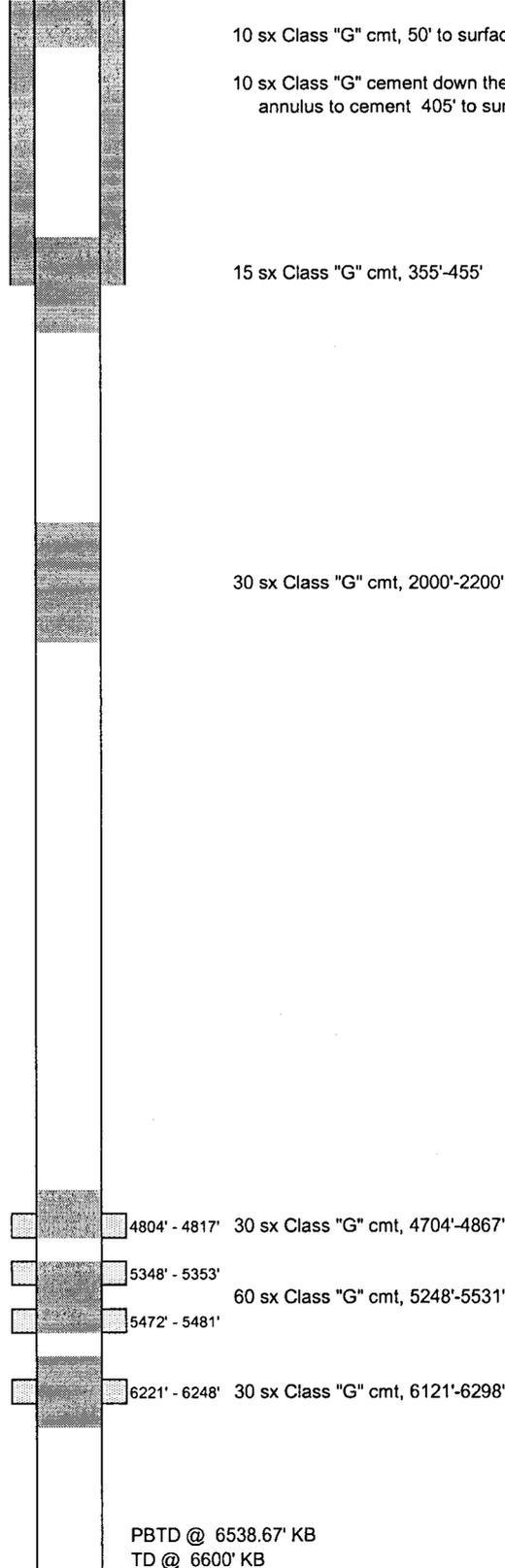
15 sx Class "G" cmt, 355'-455'

**PRODUCTION CASING**

CSG SIZE: 5-1/2"  
 GRADE: J-55  
 WEIGHT: 15.5#  
 LENGTH: 156 jts (6575.52 ft)  
 DEPTH LANDED: 6584.52' KB  
 HOLE SIZE: 7-7/8"  
 CEMENT DATA: Western - 130 sxs super "G" w/  
 (47# "G" + 20# Poz + 17#  
 CSE)/sk +3% salt + 2% gel +  
 (2# Hi-Seal + 1/4 #Cello-seal)/sk,  
 tailed w/ 480 sxs 50/50 Poz + 2%  
 gel + (1/4# Cello-seal + 2#  
 Hi-Seal 2)/sk.

30 sx Class "G" cmt, 2000'-2200'

CEMENT TOP: 2983' KB CBL



PBTD @ 6538.67' KB  
 TD @ 6600' KB

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
Budget Bureau No. 1004-0135  
Expires: March 31, 1993

**SUNDRY NOTICES AND REPORTS ON WELLS**

Do not use this form for proposals to drill or to deepen or reentry a different reservoir.  
Use "APPLICATION FOR PERMIT -" for such proposals

5. Lease Designation and Serial No.

**U-66191**

6. If Indian, Allottee or Tribe Name

NA

7. If Unit or CA, Agreement Designation

NA

**SUBMIT IN TRIPLICATE**

1. Type of Well

Oil Well     Gas Well     Other

8. Well Name and No.

**BALCRON FEDERAL 12-22Y**

9. API Well No.

**43-013-31476**

2. Name of Operator

**INLAND PRODUCTION COMPANY**

10. Field and Pool, or Exploratory Area

**TREATY BOUNDARY**

3. Address and Telephone No.

**475 17TH STREET, SUITE 1500, DENVER, COLORADO 80202 (303) 292-0900**

11. County or Parish, State

**DUCHESNE COUNTY, UTAH**

4. Location of Well (Footage, Sec., T., R., m., or Survey Description)

**2105 FNL 0660 FWL                      SW/NW Section 22, T08S R17E**

12. CHECK APPROPRIATE BOX(S) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

**TYPE OF SUBMISSION**

Notice of Intent  
 Subsequent Report  
 Final Abandonment Notice

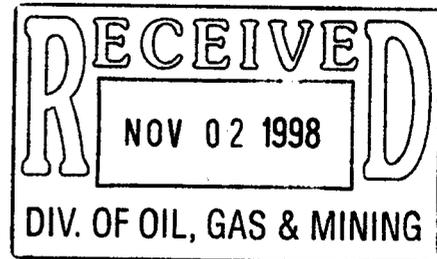
**TYPE OF ACTION**

Abandonment  
 Recompletion  
 Plugging Back  
 Casing Repair  
 Altering Casing  
 Other Site Security  
 Change of Plans  
 New Construction  
 Non-Routine Fracturing  
 Water Shut-Off  
 Conversion to Injection  
 Dispose Water

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

13. 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.)\*

Attached please find the site security diagram for the above referenced well.



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

Signed

*Debbie C. Knight*

Title

Manager, Regulatory Compliance

Date

10/30/98

(This space for Federal or State office use)

Approved by \_\_\_\_\_

Title \_\_\_\_\_

Date \_\_\_\_\_

Conditions of approval, if any:

**CC: UTAH DOGM**

# Inland Production Company Site Facility Diagram

Federal 12-22Y

SW/NW Sec. 22, T8S, 17E

Duchesne County

May 12, 1998

Site Security Plan is held at the Roosevelt Office, Roosevelt Utah

**Production Phase:**

- 1) Valves 1 and 3 sealed closed
- 2) Valves 2 and 4 sealed open

**Sales Phase:**

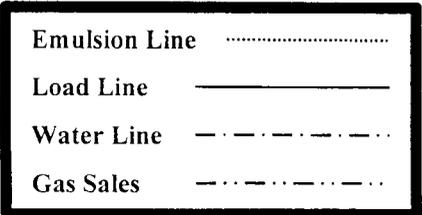
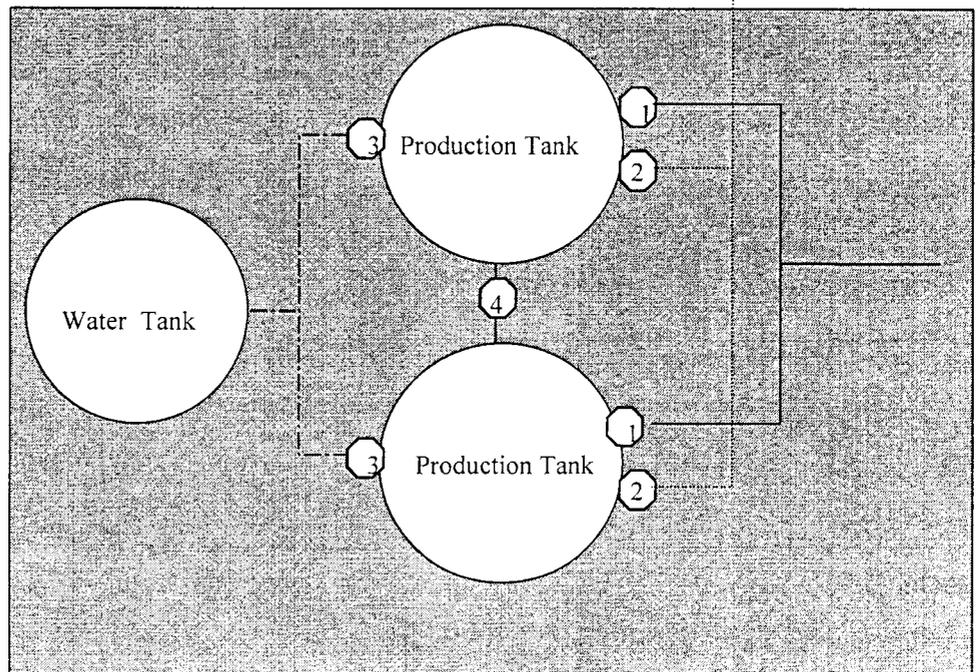
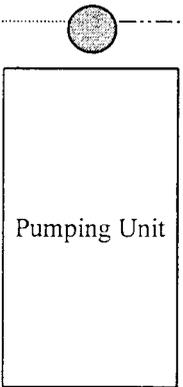
- 1) Valves 1, 2, 4, 5 sealed closed
- 2) Valves 1 open

**Draining Phase:**

- 1) Valve 3 open

Diked Section

Gas Sales Meter



OPERATOR INLAND PRODUCTION COMPANY

OPERATOR ACCT. NO. N 5160

ADDRESS \_\_\_\_\_

ACTION CODE	CURRENT ENTITY NO.	NEW ENTITY NO.	API NUMBER	WELL NAME	WELL LOCATION					SPUD DATE	EFFECTIVE DATE
					QQ	SC	TP	RG	COUNTY		
D	11917	12299	43-013031587	MONUMENT FED 31-22-8-17	NWNE	22	8S	17E	DUCHESNE		12-1-98
WELL 1 COMMENTS: 990216 CANVASBACK UNIT/GRRV EFFECTIVE 12-1-98; ENTITY CHANGED.											
D	11845	12299	43-013-31539	MONUMENT FED 11-22Y-8-17	NWNW	22	8S	17E	DUCHESNE		12-1-98
WELL 2 COMMENTS: 990216 CANVASBACK UNIT/GRRV EFFECTIVE 12-1-98; ENTITY CHANGED.											
D	11717	12299	43-013-31476	MONUMENT FED 12-22Y-8-17	SWNW	22	8S	17E	DUCHESNE		12-1-98
WELL 3 COMMENTS: 990216 CANVASBACK UNIT/GRRV EFFECTIVE 12-1-98; ENTITY CHANGED.											
D	11842	12299	43-013-31538	MONUMENT FED 22-22Y-8-17	SENW	22	8S	17E	DUCHESNE		12-1-98
WELL 4 COMMENTS: 990216 CANVASBACK UNIT/GRRV EFFECTIVE 12-1-98; ENTITY CHANGED.											
D	11959	12299	43-013-31586	MONUMENT FED 32-22-8-17	SWNE	22	8S	17E	DUCHESNE		12-1-98
WELL 5 COMMENTS: 990216 CANVASBACK UNIT/GRRV EFFECTIVE 12-1-98; ENTITY CHANGED.											

ACTION CODES (See instructions on back of form)

- A - Establish new entity for new well (single well only)
- B - Add new well to existing entity (group or unit well)
- C - Re-assign well from one existing entity to another existing entity
- D - Re-assign well from one existing entity to a new entity
- E - Other (explain in comments section)

NOTE: Use COMMENT section to explain why each Action Code was selected.

\_\_\_\_\_  
Signature **DOGM (KDR)**

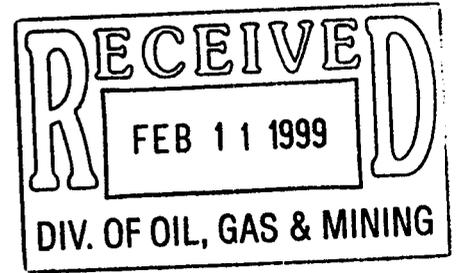
\_\_\_\_\_  
Title

\_\_\_\_\_  
Date **2-16-99**

\_\_\_\_\_  
Phone No. ( )



PRODUCTION COMPANY  
A Subsidiary of Inland Resources Inc.



February 10, 1999

State of Utah  
Division of Oil, Gas & Mining  
Attn: Kristen Risbeck  
1594 West North Temple - Suite 1210  
P.O. Box 145801  
Salt Lake City, Utah 84114-5801

Dear Kristen:

Thank you so much for your assistance yesterday with the Canvasback Unit. As we unitize areas and get the final approval, we have always in the past selected one well within the unit and assigned that entity number to the unit.

The entity number that you and I selected yesterday was 12299. This had been the entity number for the Pariette Draw #8-22 and now it will be the entity number for the whole Canvasback Unit. This entity number change will be effective December 1, 1998.

I am enclosing a listing of all the wells currently in the Canvasback Unit. I have listed the name of the well with the old entity number and the A.P.I. number. In the future any wells drilled within this unit will be assigned the entity number of 12299.

If you have any questions or need further information, please don't hesitate to call me.

Sincerely,

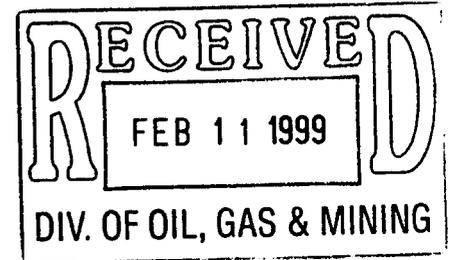
Kebbie S. Jones  
District Administrator

Enclosures

/kj

## CANVASBACK UNIT - ENTITY #12299

FIELD	WELL NAME	OLD ENTITY #	API NUMBER	
CANVASBACK UNIT	MONUMENT FEDERAL #31-22-8-17	11917	43-013-31587	NWNE S22TBS R17
CANVASBACK UNIT	MONUMENT FEDERAL #11-22Y-8-17	11845	43-013-31539	NWNN S22TBS R17
CANVASBACK UNIT	MONUMENT FEDERAL #12-22Y-8-17	11717	43-013-31476	SWNW S22TBS R17
CANVASBACK UNIT	MONUMENT FEDERAL #22-22Y-8-17	11842	43-013-31538	SENW S22TBS R17
CANVASBACK UNIT	MONUMENT FEDERAL #32-22-8-17	11959	43-013-31586	SWNE S22TBS R17
CANVASBACK UNIT	PARIETTE DRAW FEDERAL #8-22-8-17	12299	43-013-31826	SENE S22TBS R17
CANVASBACK UNIT	MONUMENT FEDERAL #33-22-8-17	12024	43-013-31588	NWSE S22TBS R17
CANVASBACK UNIT	MONUMENT FEDERAL #23-22-8-17	12031	43-013-31702	NESW S22TBS R17
CANVASBACK UNIT	MONUMENT FEDERAL #13-22Y-8-17	11942	43-013-31583	NWSW S22TBS R17



STATE OF UTAH

DIVISION OF OIL, GAS, AND MINING

1. **SUNDRY NOTICES AND REPORTS ON WELLS**

Do not use this form for proposals to drill new wells, deepen existing wells, or to reenter plugged and abandoned wells.  
Use "APPLICATION FOR PERMIT TO DRILL OR DEEPEN" form for such proposals.

OIL WELL  GAS WELL  OTHER

2. NAME OF OPERATOR  
**INLAND PRODUCTION COMPANY**

3. ADDRESS AND TELEPHONE NUMBER  
**Rt. 3 Box 3630, Myton Utah 84052  
435-646-3721**

4. LOCATION OF WELL **Sec 22-T8S-R 17E**  
Footages **2105 FNL 0660 FWL**  
QQ, SEC, T, R, M: **SW/NW**

5. LEASE DESIGNATION AND SERIAL NO.  
**U-66191**

6. IF INDIAN, ALLOTTEE OR TRIBAL NAME  
**N/A**

7. UNIT AGREEMENT NAME  
**CANVASBACK UNIT**

8. WELL NAME and NUMBER  
**BALCRON FEDERAL 12-22Y**

9. API NUMBER  
**43-013-31476**

10. FIELD AND POOL, OR WILDCAT  
**MONUMENT BUTTE**

COUNTY **DUCHESNE**  
STATE **UTAH**

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT OR OTHER DATA

**NOTICE OF INTENT:**  
(Submit in Duplicate)

ABANDON  NEW CONSTRUCTION  
 REPAIR CASING  PULL OR ALTER CASING  
 CHANGE OF PLANS  RECOMPLETE  
 CONVERT TO INJECTION  REPERFORATE  
 FRACTURE TREAT OR ACIDIZE  VENT OR FLARE  
 MULTIPLE COMPLETION  WATER SHUT OFF  
 OTHER \_\_\_\_\_

**SUBSEQUENT REPORT OF:**  
(Submit Original Form Only)

ABANDON\*  NEW CONSTRUCTION  
 REPAIR CASING  PULL OR ALTER CASIN  
 CHANGE OF PLANS  RECOMPLETE  
 CONVERT TO INJECTION  REPERFORATE  
 FRACTURE TREAT OR ACIDIZE  VENT OR FLARE  
 OTHER \_\_\_\_\_

DATE WORK COMPLETED \_\_\_\_\_  
Report results of Multiple Completion and Re Completions to different reservoirs on WELL COMPLETION OR RECOMPLETION REPORT AND LOG form.  
\*Must be accompanied by a cement verification report.

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. (Clearly state all pertinent details, and give pertinent dates. If well is directionally drilled, give subsurface locations and measured and true vertical depth for all markers and zones pertinent to this work.

Inland intends to perforate additional Green River intervals and convert the subject well to an injector. The GB4 intervals from 4768 -72', D-1 intervals from 5278-85', CP1 intervals from 6150-54' and 6160-70', and CP3 intervals from 6276-80' will be perforated with 3 3/8" casing guns at 4jspf. The perforated intervals will be broken down with water and an injection test will be performed to determined if hydraulic fracturing is required.

13. NAME & SIGNATURE: Michael Guinn TITLE District Engineer DATE 10/23/00

(This space for State use only) **Approved by the Utah Division of Oil, Gas and Mining** \* See Instructions On Reverse Side

Date: 11/6/00  
By: [Signature]

COPY SENT TO OPERATOR  
DATE: 11-7-00  
BY: CHD

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
Budget Bureau No. 1004-0135  
Expires: March 31, 1993

**SUNDRY NOTICES AND REPORTS ON WELLS**

Do not use this form for proposals to drill or to deepen or reentry a different reservoir.  
Use "APPLICATION FOR PERMIT -" for such proposals

*SUBMIT IN TRIPLICATE*

1. Type of Well  
 Oil Well     Gas Well     Other Injection Well

2. Name of Operator  
**INLAND PRODUCTION COMPANY**

3. Address and Telephone No.  
**RT 3 Box 3630 Myton Ut 84052, (435) 646-3721**

4. Location of Well (Footage, Sec., T., R., m., or Survey Description)  
**2105 FNL 0660 FWL      SW/NW Section 22, T08S R17E**

5. Lease Designation and Serial No.  
**U-66191**

6. If Indian, Allottee or Tribe Name  
**NA**

7. If Unit or CA, Agreement Designation  
**CANVASBACK UNIT**

8. Well Name and No.  
**BALCRON FEDERAL 12-22Y**

9. API Well No.  
**43-013-31476**

10. Field and Pool, or Exploratory Area  
**MONUMENT BUTTE**

11. County or Parish, State  
**DUCHESNE COUNTY, UTAH**

12. CHECK APPROPRIATE BOX(S) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION
<input type="checkbox"/> Notice of Intent <input checked="" type="checkbox"/> Subsequent Report <input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Abandonment <input type="checkbox"/> Recompletion <input type="checkbox"/> Plugging Back <input type="checkbox"/> Casing Repair <input type="checkbox"/> Altering Casing <input type="checkbox"/> Other _____ <input type="checkbox"/> Change of Plans <input type="checkbox"/> New Construction <input type="checkbox"/> Non-Routine Fracturing <input type="checkbox"/> Water Shut-Off <input checked="" type="checkbox"/> Conversion to Injection <input type="checkbox"/> Dispose Water <small>(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)</small>

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)\*

The subject well was converted from a producing to an injection well on 11/11/00. The rods and tubing anchor were removed and a packer was inserted in the bottom hole assembly at 4673'. On 11/13/00 Nathan Wisner with the EPA and Dennis Ingram with the State DOGM were contacted and gave verbal approval to conduct a MIT on the casing - tubing annulus. On 11/13/00 the casing was pressured to 1045 psi with no loss of pressure charted in a 1/2 hour test. No governmental agencies were able to witness the test. The well is shut in and waiting on permission to inject.

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

Signed *Krishna Russell* Title Production Clerk Date 11/15/00  
 Krishna Russell

(This space for Federal or State office use)

Approved by \_\_\_\_\_ Title \_\_\_\_\_ Date \_\_\_\_\_

Conditions of approval, if any:

**CC: UTAH DOGM**

DIVISION OF OIL, GAS AND MINING  
UNDERGROUND INJECTION CONTROL PROGRAM

**PERMIT  
STATEMENT OF BASIS**

**Applicant:** Inland Production Company      **Well:** Monument Federal 12-22y

**Location:** 22/8S/17E      **API:** 43-013-31476

**Ownership Issues:** The proposed well is located on Federal land. The well is located in the proposed Canvasback Unit. Lands in the one-half mile radius of the well are administered by the BLM, the State of Utah (SITLA) and L. Clark Roberts. The Federal Government, the State of Utah (SITLA) and L. Clark Roberts are the mineral owners within the area of review. Inland and various other individuals hold the leases in the unit. Inland has provided a list of all surface, mineral and lease holders in the half-mile radius. Inland will be the operator of the proposed Canvasback Unit. Inland has submitted an affidavit stating that all owners and interest owners have been notified of their intent.

**Well Integrity:** The proposed well has surface casing set at 405 feet and has a cement top at the surface. A 5 ½ inch production casing is set at 6585 feet and has a cement top at 2983'. A cement bond log verifies adequate bond well above the injection zone. A 2 7/8 inch tubing with a packer will be set at 4770 feet. A mechanical integrity test will be run on the well prior to injection. There are 9 producing wells in the area of review. All of the wells have adequate casing and cement. No corrective action will be required.

**Ground Water Protection:** According to Technical Publication No. 92 the base of moderately saline water is at a depth of approximately 200 feet. Injection shall be limited to the interval between 4804 feet and 6248 feet in the Green River Formation. Information submitted by Inland indicates that the fracture gradient for the 12-22Y well is .74 psi/ft., which was the lowest reported fracture gradient for the injection zone. The resulting minimum fracture pressure for the proposed injection interval is 1630 psig. The requested maximum pressure is 1630 psig. The anticipated average injection pressure is 1100 psig. Injection at this pressure should not initiate any new fractures or propagate existing fractures in the adjacent confining intervals. Any ground water present should be adequately protected.

**Monument Federal 12-22y**  
**page 2**

**Oil/Gas& Other Mineral Resources Protection:** The Board of Oil, Gas & Mining will hear Cause #225-3 requesting approval of the Canvasback Unit on September 23,1998. Correlative rights issues will be addressed at this time. Previous reviews in this area indicate that other mineral resources in the area have been protected or are not at issue.

**Bonding:** Bonded with the BLM

**Actions Taken and Further Approvals Needed:** A notice of agency action has been sent to the Salt Lake Tribune and the Uinta Basin Standard. A casing/tubing pressure test will be required prior to injection. It is recommended that Administrative approval of this application be granted.

Note: Applicable technical publications concerning water resources in the general vicinity of this project have been reviewed and taken into consideration during the permit review process.

Reviewer(s): Brad Hill Date: 9/3/98

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
Budget Bureau No. 1004-0135  
Expires: March 31, 1993

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Use "APPLICATION FOR PERMIT -" for such proposals

5. Lease Designation and Serial No.

6. Mineral, Allottee or Tribe Name  
NA

7. If Unit or CA, Agreement Designation  
CANVASBACK UNIT

8. Well Name and No.  
BALCRON FEDERAL 12-22Y

9. API Well No.  
43-013-31476

10. Field and Pool, or Exploratory Area  
MONUMENT BUTTE

11. County or Parish, State  
DUCHESNE COUNTY, UTAH

SUBMIT IN TRIPLICATE

1. Type of Well

Oil Well  Gas Well  Other Injector

2. Name of Operator

INLAND PRODUCTION COMPANY

3. Address and Telephone No.

Rt. 3 Box 3630, Myton Utah, 84052 435-646-3721

4. Location of Well (Footage, Sec., T., R., m., or Survey Description)

2105 FNL 0660 FWL SW/NW Section 22, T08S R17E

12. CHECK APPROPRIATE BOX(S) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION

Notice of Intent  
 Subsequent Report  
 Final Abandonment Notice

TYPE OF ACTION

Abandonment  
 Recompletion  
 Plugging Back  
 Casing Repair  
 Altering Casing  
 Other Report of first injection

Change of Plans  
 New Construction  
 Non-Routine Fracturing  
 Water Shut-Off  
 Conversion to Injection  
 Dispose Water

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

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)\*

The above referenced well was put on injection at 3:00 p.m. on 12/7/00.

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

Signed

Martha Hall  
Martha Hall

Title

Office Manager

Date

12/7/00

CC: UTAH DOGM

(This space for Federal or State office use)

Approved by

Title

Date

Conditions of approval, if any:



State of Utah  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

Michael O. Leavitt  
Governor

Kathleen Clarke  
Executive Director

Lowell P. Braxton  
Division Director

1594 West North Temple, Suite 1210

PO Box 145801

Salt Lake City, Utah 84114-5801

801-538-5340

801-359-3940 (Fax)

801-538-7223 (TDD)

**UNDERGROUND INJECTION CONTROL PERMIT**

Cause No. 225-3

**Operator:** Inland Production Company  
**Well:** Balcron Monument Federal 12-22Y  
**Location:** Section 22, Township 8 South, Range 17 East  
**County:** Duchesne  
**API No.:** 43-013-31476  
**Well Type:** Enhanced Recovery (waterflood)

Stipulations of Permit Approval

1. Approval for conversion to Injection Well issued on September 23, 1998.
2. Maximum Allowable Injection Pressure: 1630 psig
3. Maximum Allowable Injection Rate: (restricted by pressure limitation)
4. Injection Interval: Green River Formation (4804 feet - 6248 feet)

Approved by:

  
for John R. Baza  
Associate Director, Oil And Gas

11-22-00

Date

cc: Dan Jackson Environmental Protection Agency  
Bureau of Land Management, Vernal  
Inland Production Company, Myton  
SITLA, Salt Lake City

STATE OF UTAH  
 DIVISION OF OIL, GAS, AND MINING

<p><b>1 SUNDRY NOTICES AND REPORTS ON WELLS</b></p> <p>Do not use this form for proposals to drill new wells, deepen existing wells, or to reenter plugged and abandoned wells.                  Use "APPLICATION FOR PERMIT TO DRILL OR DEEPEN form for such proposals.</p> <p>OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input checked="" type="checkbox"/> <b>Injection Well</b></p> <p><b>2 NAME OF OPERATOR</b>                  INLAND PRODUCTION COMPANY</p> <p><b>3 ADDRESS AND TELEPHONE NUMBER</b>                  Rt. 3 Box 3630, Myton Utah 84052                  435-646-3721</p> <p><b>4 LOCATION OF WELL</b></p> <p>Footages <b>2105 FNL 660 FWL</b></p> <p>QQ, SEC, T, R, M: <b>SW/NW Section 22, T08S R17</b></p>	<p><b>5. LEASE DESIGNATION AND SERIAL NO.</b>                  U-66191</p> <p><b>6. IF INDIAN, ALLOTTEE OR TRIBAL NAME</b>                  N/A</p> <p><b>7. UNIT AGREEMENT NAME</b>                  CANVASBACK</p> <p><b>8. WELL NAME and NUMBER</b>                  BALCRON FEDERAL 12-22Y-8-17</p> <p><b>9. API NUMBER</b>                  43-013-31476</p> <p><b>10. FIELD AND POOL, OR WILDCAT</b>                  MONUMENT BUTTE</p> <p>COUNT <b>DUCHESNE</b>                  STATE <b>UTAH</b></p>
--	--

**11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT OR OTHER DATA**

<p><b>NOTICE OF INTENT:</b>                  (Submit in Duplicate)</p> <p><input type="checkbox"/> ABANDON                      <input type="checkbox"/> NEW CONSTRUCTION</p> <p><input type="checkbox"/> REPAIR CASING                <input type="checkbox"/> PULL OR ALTER CASING</p> <p><input type="checkbox"/> CHANGE OF PLANS              <input type="checkbox"/> RECOMPLETE</p> <p><input type="checkbox"/> CONVERT TO INJECTION        <input type="checkbox"/> REPERFORATE</p> <p><input type="checkbox"/> FRACTURE TREAT OR ACIDIZE   <input type="checkbox"/> VENT OR FLARE</p> <p><input type="checkbox"/> MULTIPLE COMPLETION        <input type="checkbox"/> WATER SHUT OFF</p> <p><input type="checkbox"/> OTHER _____</p>	<p><b>SUBSEQUENT REPORT OF:</b>                  (Submit Original Form Only)</p> <p><input type="checkbox"/> ABANDON*                      <input type="checkbox"/> NEW CONSTRUCTION</p> <p><input type="checkbox"/> REPAIR CASING                <input type="checkbox"/> PULL OR ALTER CASING</p> <p><input type="checkbox"/> CHANGE OF PLANS              <input type="checkbox"/> RECOMPLETE</p> <p><input type="checkbox"/> CONVERT TO INJECTION        <input type="checkbox"/> REPERFORATE</p> <p><input type="checkbox"/> FRACTURE TREAT OR ACIDIZE   <input type="checkbox"/> VENT OR FLARE</p> <p><input checked="" type="checkbox"/> OTHER                      <u>Step Rate Test</u></p> <p>DATE WORK COMPLETED _____</p> <p>Report results of Multiple Completion and Re Completions to different reservoirs on WELL COMPLETION OR RECOMPLETION REPORT AND LOG form.</p> <p>*Must be accompanied by a cement verification report.</p>
--	--

**12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS.** (Clearly state all pertinent details, and give pertinent dates. If well is directionally drilled, give subsurface locations and measured and true vertical depth for all markers and zones pertinent to this work.)

A step rate test was conducted on the subject well on 5/24/01. Results from the test indicate that the fracture gradient is .506 psi/ft. Therefore, Inland is requesting that the MAIP be changed to 340 psi.

**13. NAME & SIGNATURE:** Michael Guinn      **TITLE:** District Engineer      **DAT:** 6/26/01

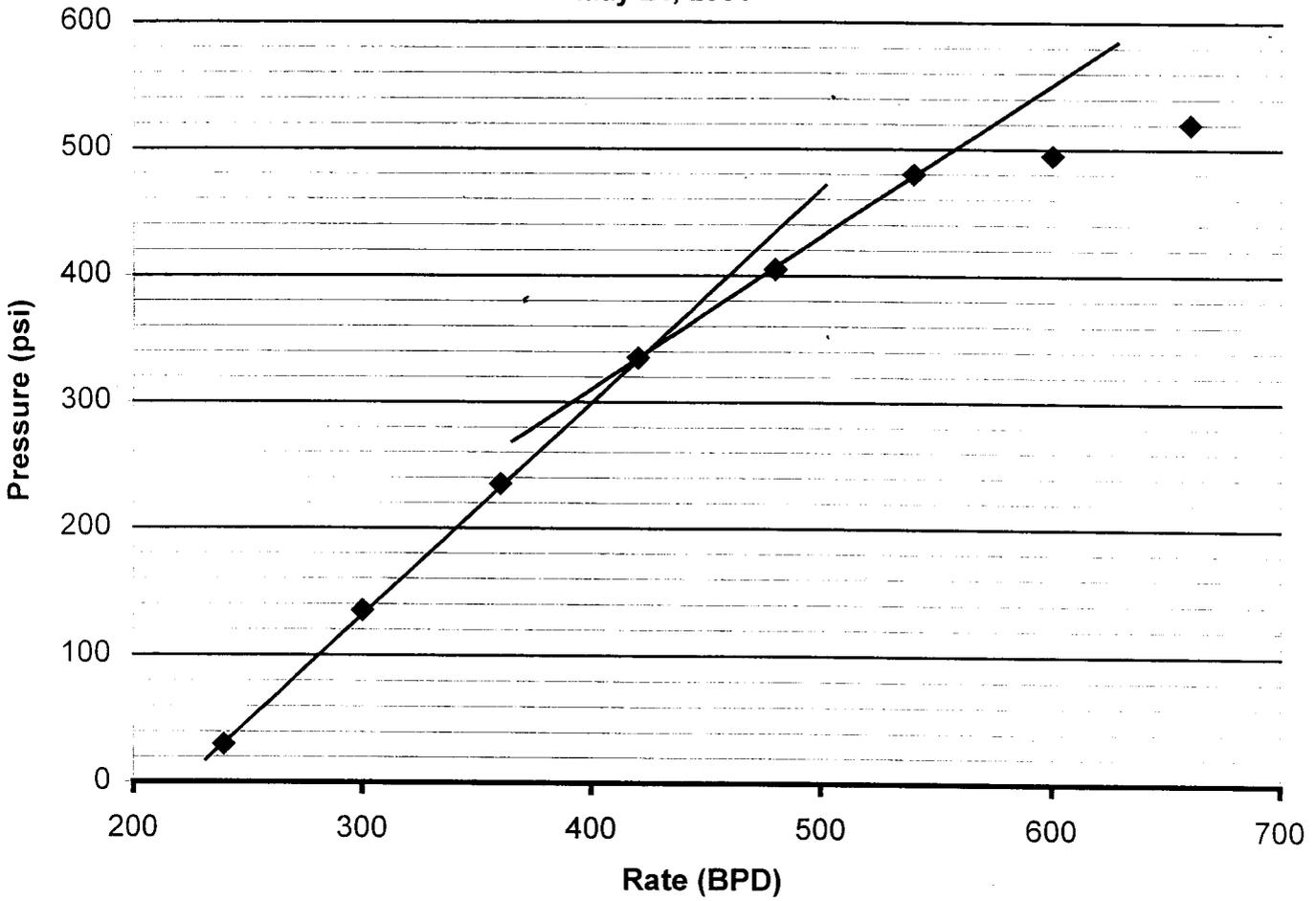
(This space for State use only)

**Approved by the** Instructions On Reverse Side  
**Utah Division of**  
**Oil, Gas and Mining**

**Date:** 06-28-01  
**By:** [Signature]

6-27-01  
 (H)

**Monument Federal 12-22-8-17**  
**Canvasback Unit**  
**Step Rate Test**  
**May 24, 2001**



Start Pressure:

0 psi

Instantaneous Shut In Pressure (ISIP):

550 psi

Top Perforation:

4804 feet

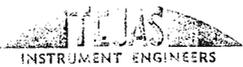
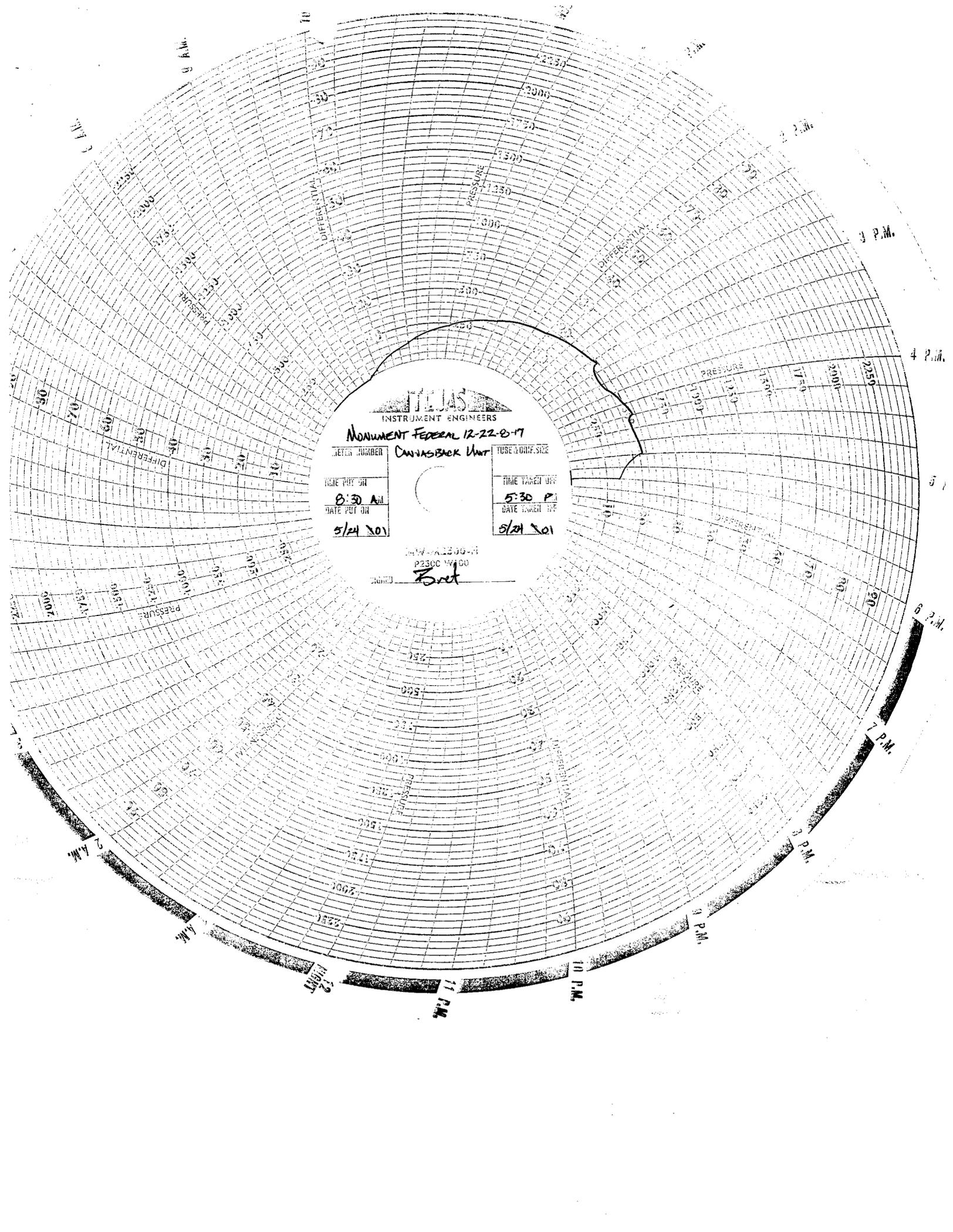
Fracture pressure (P<sub>fp</sub>):

340 psi

FG:

0.506 psi/ft

Step	Rate(bpd)	Pressure(psi)
1	240	30
2	300	135
3	360	235
4	420	335
5	480	405
6	540	480
7	600	495
8	660	520



MONUMENT FEDERAL 12-22-0-17

METER NUMBER

CANNASACK UNIT

TUBE & GAGE SIZE

TIME PUT ON

8:30 A.M.

TIME TAKEN OFF

5:30 P.M.

DATE PUT ON

5/24 201

DATE TAKEN OFF

5/24 201

NEW-A1200-41

P2300 W/100

SIGNED

*Boet*

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

5. LEASE DESIGNATION AND SERIAL NUMBER:  
U66191

**SUNDRY NOTICES AND REPORTS ON WELLS**

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7. UNIT or CA AGREEMENT NAME:  
CANVASBACK UNIT

8. WELL NAME and NUMBER:  
BALCRON FED 12-22Y

9. API NUMBER:  
4301331476

10. FIELD AND POOL, OR WILDCAT:  
Monument Butte

1. TYPE OF WELL: OIL WELL  GAS WELL  OTHER Injection well

2. NAME OF OPERATOR:  
Inland Production Company

3. ADDRESS OF OPERATOR: Route 3 Box 3630 CITY Myton STATE UT ZIP 84052

PHONE NUMBER  
435.646.3721

4. LOCATION OF WELL:  
FOOTAGES AT SURFACE: 2105 FNL 0660 FWL

COUNTY: Duchesne

STATE: Utah

QTR/OTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: SW/NW, 22, T8S, R17E

**11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA**

TYPE OF SUBMISSION	TYPE OF ACTION		
	TYPE OF ACTION		
<input type="checkbox"/> NOTICE OF INTENT (Submit in Duplicate)  Approximate date work will  <hr/>	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> REPERFORATE CURRENT FORMATION
	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> SIDETRACK TO REPAIR WELL
<input checked="" type="checkbox"/> SUBSEQUENT REPORT (Submit Original Form Only)  Date of Work Completion:  <u>07/16/2004</u>	<input type="checkbox"/> CASING REPAIR	<input type="checkbox"/> NEW CONSTRUCTION	<input type="checkbox"/> TEMPORARITLY ABANDON
	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> TUBING REPAIR
	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> VENT OR FLAIR
	<input type="checkbox"/> CHANGE WELL NAME	<input type="checkbox"/> PLUG BACK	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> PRODUCTION (START/STOP)	<input type="checkbox"/> WATER SHUT-OFF
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input checked="" type="checkbox"/> OTHER: - Step Rate Test
	<input type="checkbox"/> CONVERT WELL TYPE	<input type="checkbox"/> RECOMPLETE - DIFFERENT FORMATION	

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

A step rate test was conducted on the subject well on July 12, 2004. The fracture gradient was not reached during the test. Therefore, Inland is requesting that the maximum allowable injection pressure (MAIP) be changed to the highest pressure achieved during the test or 720 psi.

**Accepted by the  
Utah Division of  
Oil, Gas and Mining  
FOR RECORD ONLY**

**RECEIVED  
JUL 19 2004**

DIV. OF OIL, GAS & MINING

NAME (PLEASE) Mike Guinn

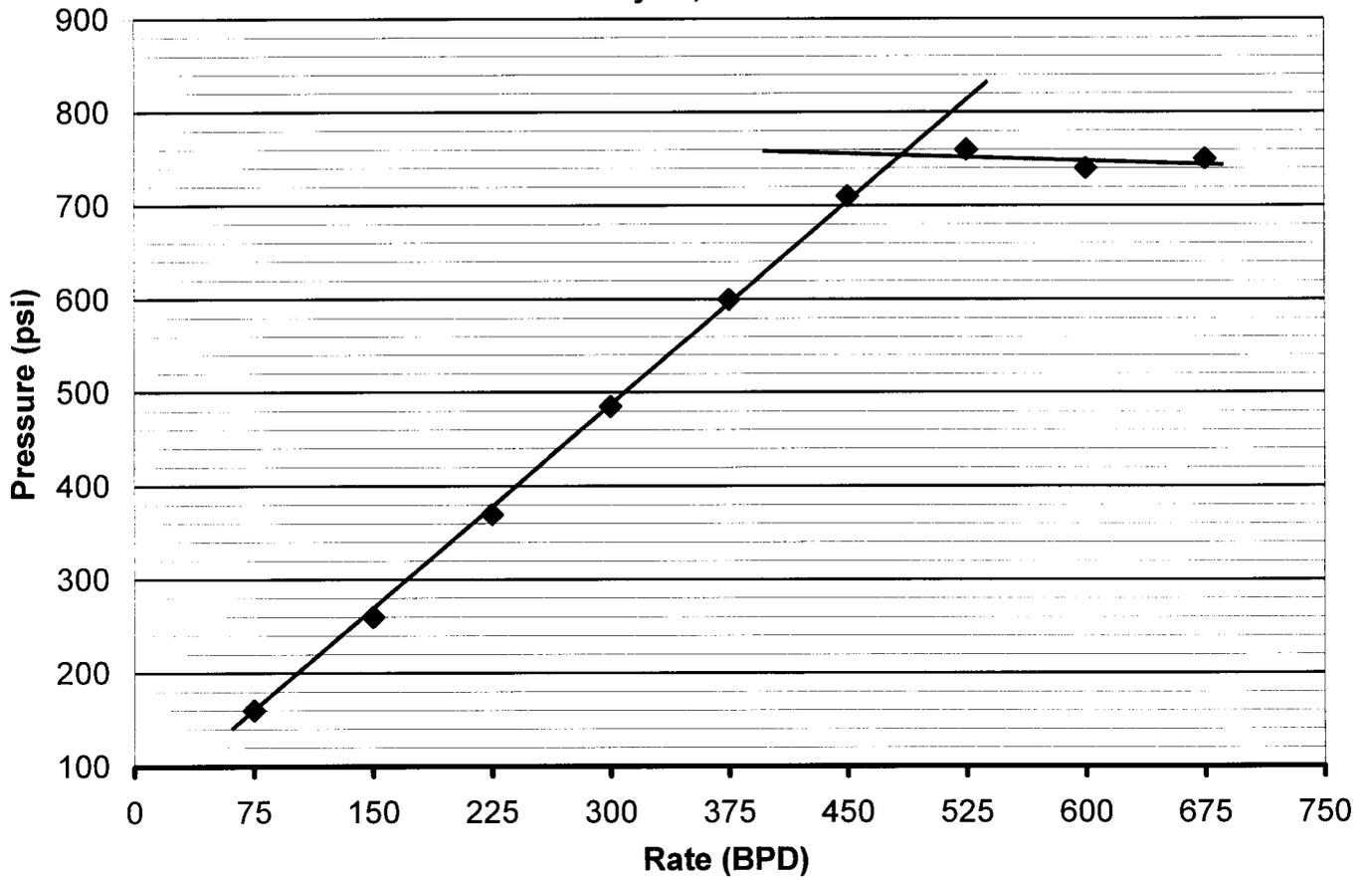
TITLE Engineer

SIGNATURE



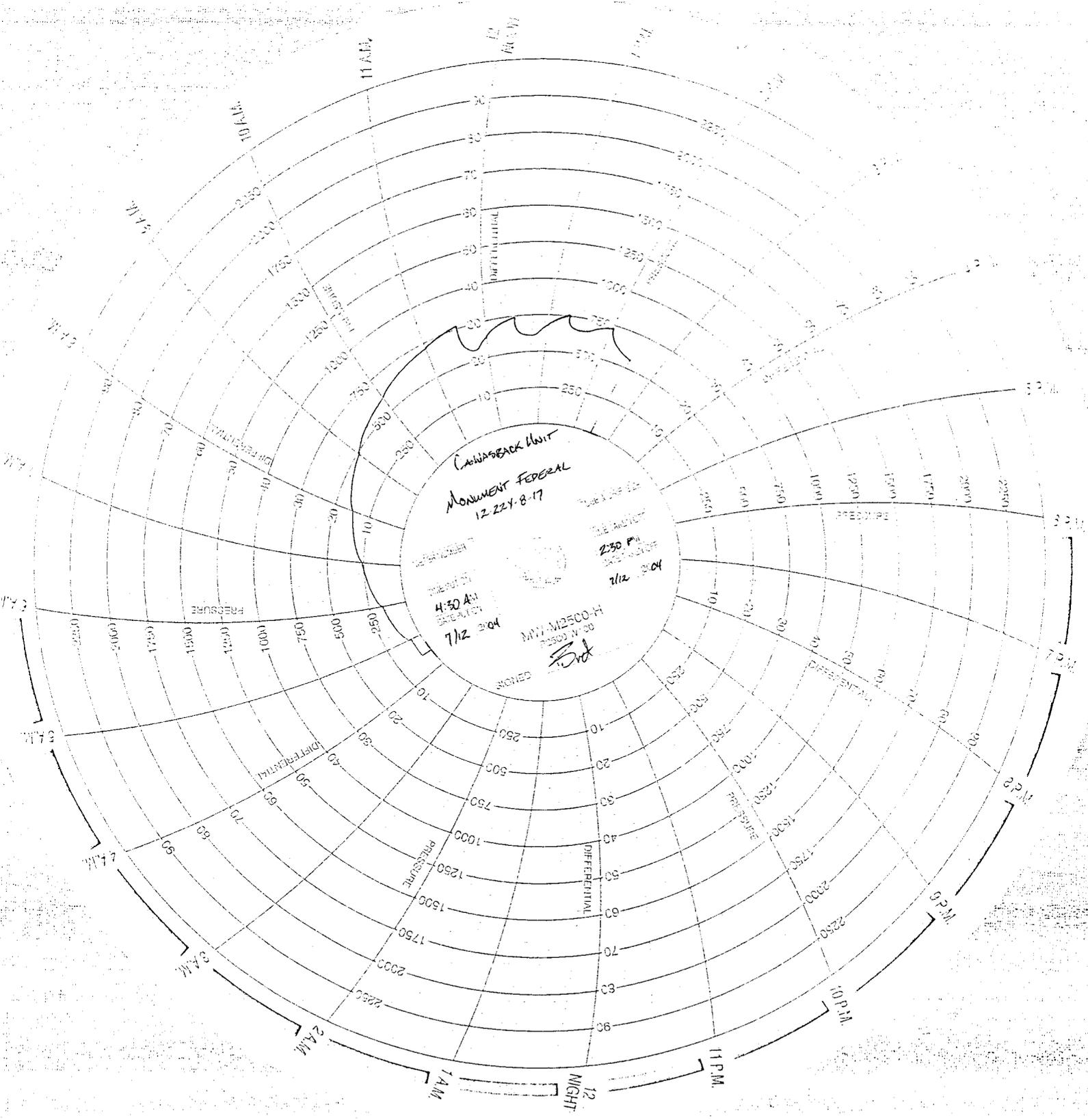
DATE July 16, 2004

**Canvasback 12-22-8-17**  
**Canvasback Unit**  
**Step Rate Test**  
**July 12, 2004**



**Start Pressure:** 70 psi  
**Instantaneous Shut In Pressure (ISIP):** 720 psi  
**Top Perforation:** 4768 feet  
**Fracture pressure (Pfp):** 750 psi  
**FG:** 0.592 psi/ft

<u>Step</u>	<u>Rate(bpd)</u>	<u>Pressure(psi)</u>
1	75	160
2	150	260
3	225	370
4	300	485
5	375	600
6	450	710
7	525	760
8	600	740





# United States Department of the Interior

## BUREAU OF LAND MANAGEMENT

Utah State Office  
P.O. Box 45155  
Salt Lake City, UT 84145-0155  
<http://www.blm.gov>



IN REPLY REFER TO:  
3106  
(UT-924)

September 16, 2004

### Memorandum

To: Vernal Field Office

From: Acting Chief, Branch of Fluid Minerals

Subject: Merger Approval

Attached is an approved copy of the name change recognized by the Utah State Office. We have updated our records to reflect the merger from Inland Production Company into Newfield Production Company on September 2, 2004.

Michael Coulthard  
Acting Chief, Branch of  
Fluid Minerals

### Enclosure

1. State of Texas Certificate of Registration

cc: MMS, Reference Data Branch, James Sykes, PO Box 25165, Denver CO 80225  
State of Utah, DOGM, Attn: Earlene Russell, PO Box 145801, SLC UT 84114  
Teresa Thompson  
Joe Incardine  
Connie Seare

UTSL-	15855	61052	73088	76561	
071572A	16535	62848	73089	76787	
065914	16539	63073B	73520A	76808	
	16544	63073D	74108	76813	
	17036	63073E	74805	76954	63073X
	17424	63073O	74806	76956	63098A
	18048	64917	74807	77233	68528A
UTU-	18399	64379	74808	77234	72086A
	19267	64380	74389	77235	72613A
02458	26026A	64381	74390	77337	73520X
03563	30096	64805	74391	77338	74477X
03563A	30103	64806	74392	77339	75023X
04493	31260	64917	74393	77357	76189X
05843	33992	65207	74398	77359	76331X
07978	34173	65210	74399	77365	76788X
09803	34346	65635	74400	77369	77098X
017439B	36442	65967	74404	77370	77107X
017985	36846	65969	74405	77546	77236X
017991	38411	65970	74406	77553	77376X
017992	38428	66184	74411	77554	78560X
018073	38429	66185	74805	78022	79485X
019222	38431	66191	74806	79013	79641X
020252	39713	67168	74826	79014	80207X
020252A	39714	67170	74827	79015	81307X
020254	40026	67208	74835	79016	
020255	40652	67549	74868	79017	
020309D	40894	67586	74869	79831	
022684A	41377	67845	74870	79832	
027345	44210	68105	74872	79833	
034217A	44426	68548	74970	79831	
035521	44430	68618	75036	79834	
035521A	45431	69060	75037	80450	
038797	47171	69061	75038	80915	
058149	49092	69744	75039	81000	
063597A	49430	70821	75075		
075174	49950	72103	75078		
096547	50376	72104	75089		
096550	50385	72105	75090		
	50376	72106	75234		
	50750	72107	75238		
10760	51081	72108	76239		
11385	52013	73086	76240		
13905	52018	73087	76241		
15392	58546	73807	76560		



## Office of the Secretary of State

The undersigned, as Secretary of State of Texas, does hereby certify that the attached is a true and correct copy of each document on file in this office as described below:

Newfield Production Company  
Filing Number: 41530400

Articles of Amendment

September 02, 2004

In testimony whereof, I have hereunto signed my name officially and caused to be impressed hereon the Seal of State at my office in Austin, Texas on September 10, 2004.



A handwritten signature in black ink, appearing to read "G. Connor".

Secretary of State

ARTICLES OF AMENDMENT  
TO THE  
ARTICLES OF INCORPORATION  
OF  
INLAND PRODUCTION COMPANY

FILED  
In the Office of the  
Secretary of State of Texas  
SEP 02 2004  
Corporations Section

Pursuant to the provisions of Article 4.04 of the Texas Business Corporation Act (the "TBCA"), the undersigned corporation adopts the following articles of amendment to the articles of incorporation:

ARTICLE 1 – Name

The name of the corporation is Inland Production Company.

ARTICLE 2 – Amended Name

The following amendment to the Articles of Incorporation was approved by the Board of Directors and adopted by the shareholders of the corporation on August 27, 2004.

The amendment alters or changes Article One of the Articles of Incorporation to change the name of the corporation so that, as amended, Article One shall read in its entirety as follows:

"ARTICLE ONE – The name of the corporation is Newfield Production Company."

ARTICLE 3 – Effective Date of Filing

This document will become effective upon filing.

The holder of all of the shares outstanding and entitled to vote on said amendment has signed a consent in writing pursuant to Article 9.10 of the TBCA, adopting said amendment, and any written notice required has been given.

IN WITNESS WHEREOF, the undersigned corporation has executed these Articles of Amendment as of the 1<sup>st</sup> day of September, 2004.

INLAND RESOURCES INC.

By: Susan G. Riggs  
Susan G. Riggs, Treasurer

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

UIC FORM 5

**TRANSFER OF AUTHORITY TO INJECT**

Well Name and Number See Attached List		API Number
Location of Well		Field or Unit Name See Attached List
Footage :	County :	Lease Designation and Number
QQ, Section, Township, Range:	State : UTAH	

EFFECTIVE DATE OF TRANSFER: 9/1/2004

**CURRENT OPERATOR**

Company: <u>Inland Production Company</u>	Name: <u>Brian Harris</u>
Address: <u>1401 17th Street Suite 1000</u>	Signature: <u><i>Brian Harris</i></u>
city <u>Denver</u> state <u>Co</u> zip <u>80202</u>	Title: <u>Engineering Tech.</u>
Phone: <u>(303) 893-0102</u>	Date: <u>9/15/2004</u>
Comments:	

**NEW OPERATOR**

Company: <u>Newfield Production Company</u>	Name: <u>Brian Harris</u>
Address: <u>1401 17th Street Suite 1000</u>	Signature: <u><i>Brian Harris</i></u>
city <u>Denver</u> state <u>Co</u> zip <u>80202</u>	Title: <u>Engineering Tech.</u>
Phone:	Date: <u>9/15/2004</u>
Comments:	

(This space for State use only)

Transfer approved by: *A. Hunt*  
Title: *Field Services Manager*

Approval Date: *9-20-04*

Comments: *Note: Indian Country wells will require EPA approval.*

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SEP 20 2004  
DIV. OF OIL, GAS & MINING



- 6a. (R649-9-2)Waste Management Plan has been received on: IN PLACE  
6b. Inspections of LA PA state/fee well sites complete on: waived

7. **Federal and Indian Lease Wells:** The BLM and or the BIA has approved the merger, name change, or operator change for all wells listed on Federal or Indian leases on: BLM BIA

8. **Federal and Indian Units:**  
The BLM or BIA has approved the successor of unit operator for wells listed on: n/a

9. **Federal and Indian Communization Agreements ("CA"):**  
The BLM or BIA has approved the operator for all wells listed within a CA on: na/

10. **Underground Injection Control ("UIC")** The Division has approved UIC Form 5, **Transfer of Authority to Inject**, for the enhanced/secondary recovery unit/project for the water disposal well(s) listed on: 2/23/2005

**DATA ENTRY:**

1. Changes entered in the Oil and Gas Database on: 2/28/2005  
2. Changes have been entered on the Monthly Operator Change Spread Sheet on: 2/28/2005  
3. Bond information entered in RBDMS on: 2/28/2005  
4. Fee/State wells attached to bond in RBDMS on: 2/28/2005  
5. Injection Projects to new operator in RBDMS on: 2/28/2005  
6. Receipt of Acceptance of Drilling Procedures for APD/New on: waived

**FEDERAL WELL(S) BOND VERIFICATION:**

1. Federal well(s) covered by Bond Number: UT 0056

**INDIAN WELL(S) BOND VERIFICATION:**

1. Indian well(s) covered by Bond Number: 61BSBDH2912

**FEE & STATE WELL(S) BOND VERIFICATION:**

1. (R649-3-1) The NEW operator of any fee well(s) listed covered by Bond Number 61BSBDH2919  
2. The FORMER operator has requested a release of liability from their bond on: n/a\*  
The Division sent response by letter on: n/a

**LEASE INTEREST OWNER NOTIFICATION:**

3. (R649-2-10) The FORMER operator of the fee wells has been contacted and informed by a letter from the Division of their responsibility to notify all interest owners of this change on: n/a

**COMMENTS:**

\*Bond rider changed operator name from Inland Production Company to Newfield Production Company - received 2/23/05

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

5. LEASE DESIGNATION AND SERIAL NUMBER:  
UTU67845

**SUNDRY NOTICES AND REPORTS ON WELLS**

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7. UNIT or CA AGREEMENT NAME:  
CANVASBACK UNIT

1. TYPE OF WELL: OIL WELL  GAS WELL  OTHER Injection well

8. WELL NAME and NUMBER:  
MON FED 23-22Y-8-17

2. NAME OF OPERATOR:  
Newfield Production Company

9. API NUMBER:  
4301331702

3. ADDRESS OF OPERATOR:  
Route 3 Box 3630 CITY Myton STATE UT ZIP 84052

PHONE NUMBER  
435.646.3721

10. FIELD AND POOL, OR WILDCAT:  
Monument Butte

4. LOCATION OF WELL:  
FOOTAGES AT SURFACE: 2019 FSL 1356 FWL

COUNTY: Duchesne

OTR/OTR. SECTION, TOWNSHIP, RANGE, MERIDIAN: NE/SW, 22, T8S, R17E

STATE: Utah

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF ACTION      SubDate

TYPE OF SUBMISSION	TYPE OF ACTION		
<input type="checkbox"/> NOTICE OF INTENT (Submit in Duplicate)  Approximate date work will _____	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> REPERFORATE CURRENT FORMATION
	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> SIDETRACK TO REPAIR WELL
	<input type="checkbox"/> CASING REPAIR	<input type="checkbox"/> NEW CONSTRUCTION	<input type="checkbox"/> TEMPORARITLY ABANDON
	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> TUBING REPAIR
	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> VENT OR FLAIR
	<input type="checkbox"/> CHANGE WELL NAME	<input type="checkbox"/> PLUG BACK	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> PRODUCTION (START/STOP)	<input type="checkbox"/> WATER SHUT-OFF
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input checked="" type="checkbox"/> OTHER: - 5 Year MIT
	<input type="checkbox"/> CONVERT WELL TYPE	<input type="checkbox"/> RECOMPLETE - DIFFERENT FORMATION	
	<input checked="" type="checkbox"/> SUBSEQUENT REPORT (Submit Original Form Only)  Date of Work Completion: 09/13/2005		

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

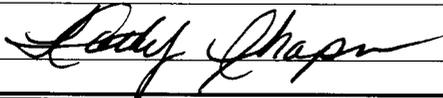
On 9/13/05 Nathan Wiser with the EPA was contacted concerning the 5-year MIT on the above listed well. Permission was given at that time to perform the test on 9/29/05. On 9/29/05 the csg was pressured up to 1240 psig and charted for 30 minutes with 0 psi pressure loss. The well was injecting during the test. The tbg pressure was 1840 psig during the test. There was not an EPA representative available to witness the test. API# 43-013-31702.

**Accepted by the  
Utah Division of  
Oil, Gas and Mining  
FOR RECORD ONLY**

NAME (PLEASE PRINT) Kathy Chapman

TITLE Office Manager

SIGNATURE



DATE 10/03/2005

(This space for State use only)

**RECEIVED**

**OCT 0 / 2005**

DIV. OF OIL, GAS & MINING

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
OMB No. 1004-0135  
Expires January 31, 2004

**SUNDRY NOTICES AND REPORTS ON WELLS**  
Do not use this form for proposals to drill or to re-enter an  
abandoned well. Use Form 3160-3 (APD) for such proposals.



1. Type of Well  
 Oil Well  Gas Well  Other Injection well

2. Name of Operator  
 Newfield Production Company

3a. Address Route 3 Box 3630  
 Myton, UT 84052

3b. Phone No. (include are code)  
 435.646.3721

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)  
 2019 FSL 1356 FWL  
 NE/SW Section 22 T8S R17E

5. Lease Serial No.  
 UTU67845

6. If Indian, Allottee or Tribe Name.

7. If Unit or CA/Agreement, Name and/or No.  
 CANVASBACK UNIT

8. Well Name and No.  
 MON FED 23-22Y-8-17

9. API Well No.  
 4301331702

10. Field and Pool, or Exploratory Area  
 Monument Butte

11. County or Parish, State  
 Duchesne, UT

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production(Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input checked="" type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other _____
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug & Abandon	<input type="checkbox"/> Temporarily Abandon	5 Year MIT
	<input type="checkbox"/> Convert to Injector	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplate horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

On 9/13/05 Nathan Wiser with the EPA was contacted concerning the 5-year MIT on the above listed well. Permission was given at that time to perform the test on 9/29/05. On 9/29/05 the csg was pressured up to 1240 psig and charted for 30 minutes with 0 psi pressure loss. The well was injecting during the test. The tbg pressure was 1840 psig during the test. There was not an EPA representative available to witness the test. API# 43-013-31702.

I hereby certify that the foregoing is true and correct Name (Printed/ Typed) Kathy Chapman	Title Office Manager
Signature 	Date 10/03/2005

Approved by	Title	Date
Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.	Office	

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious and fraudulent statements or representations as to any matter within its jurisdiction

(Instructions on reverse)

RECEIVED

OCT 0 / 2005

DIV. OF OIL, GAS & MINING

# Mechanical Integrity Test

## Casing or Annulus Pressure Mechanical Integrity Test

U.S. Environmental Protection Agency  
Underground Injection Control Program  
999 18<sup>th</sup> Street, Suite 500 Denver, CO 80202-2466

EPA Witness: \_\_\_\_\_ Date: 09/29/05  
 Test conducted by: Date Giles  
 Others present: \_\_\_\_\_

Well Name: <u>Monument Fed. 23-22-8-17</u>	Type: ER SWD	Status: AC TA UC
Field: <u>Canvasback Unit.</u>		
Location: _____	Sec: <u>22 T 8 N 17 E</u>	County: <u>Duchesne</u> State: <u>WV</u>
Operator: <u>Newfield Production Co.</u>		
Last MIT: <u>  /  /  </u>	Maximum Allowable Pressure: <u>1860</u>	PSIG

Is this a regularly scheduled test?     Yes     No  
 Initial test for permit?                 Yes     No  
 Test after well rework?                 Yes     No  
 Well injecting during test?             Yes     No      If Yes, rate: 38 bpd

Pre-test casing/tubing annulus pressure: 0 psig

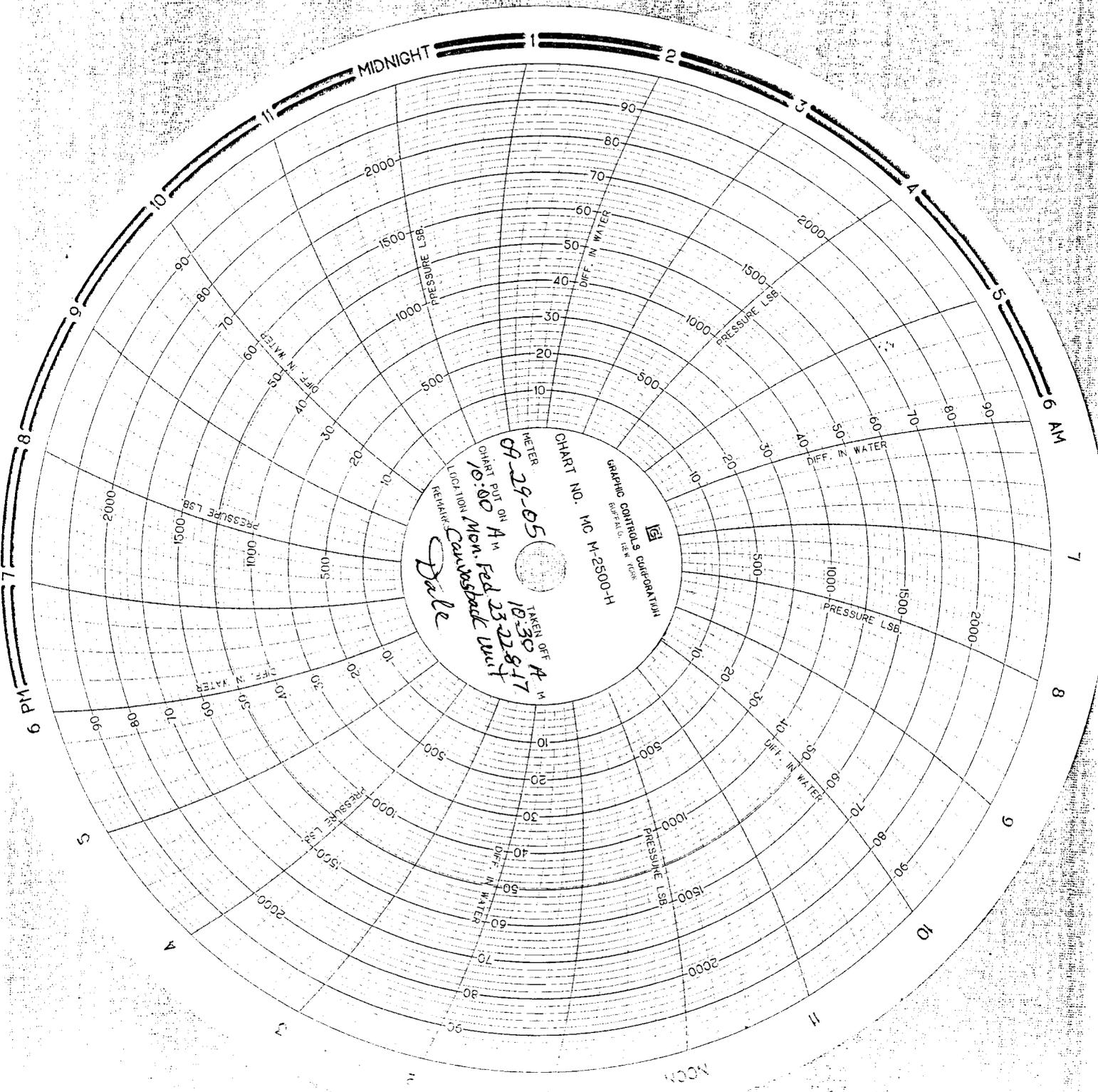
MIT DATA TABLE	Test #1	Test #2	Test #3
<b>TUBING PRESSURE</b>			
Initial Pressure	<u>1840</u> psig	psig	psig
End of test pressure	<u>1840</u> psig	psig	psig
<b>CASING / TUBING ANNULUS PRESSURE</b>			
0 minutes	<u>1240</u> psig	psig	psig
5 minutes	<u>1240</u> psig	psig	psig
10 minutes	<u>1240</u> psig	psig	psig
15 minutes	<u>1240</u> psig	psig	psig
20 minutes	<u>1240</u> psig	psig	psig
25 minutes	<u>1240</u> psig	psig	psig
30 minutes	<u>1240</u> psig	psig	psig
_____ minutes	psig	psig	psig
_____ minutes	psig	psig	psig
<b>RESULT</b>	<input type="checkbox"/> Pass <input type="checkbox"/> Fail	<input type="checkbox"/> Pass <input type="checkbox"/> Fail	<input type="checkbox"/> Pass <input type="checkbox"/> Fail

Does the annulus pressure build back up after the test ?     Yes     No

### MECHANICAL INTEGRITY PRESSURE TEST

Additional comments for mechanical integrity pressure test, such as volume of fluid added to annulus and bled back at end of test, reason for failing test (casing head leak, tubing leak, other), etc.:

Signature of Witness: \_\_\_\_\_



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CHART NO. 10 MC M-25000-H

METER

CHART PUT ON 10:00 Mon. Feb 23 1947

LOCATION Cambridge Unit

REMARKS Dale

TAKEN OFF 18:30 AM

GRAPHIC CONTROLS CORPORATION  
 125 WEST 47TH STREET  
 NEW YORK 18, N.Y.

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PRESSURE LBS.

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

5. LEASE DESIGNATION AND SERIAL NUMBER:  
UTU66191

**SUNDRY NOTICES AND REPORTS ON WELLS**

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7. UNIT or CA AGREEMENT NAME:  
CANVASBACK UNIT

1. TYPE OF WELL: OIL WELL  GAS WELL  OTHER Injection well

8. WELL NAME and NUMBER:  
BALCRON FED 12-22Y

2. NAME OF OPERATOR:  
Newfield Production Company

9. API NUMBER:  
4301331476

3. ADDRESS OF OPERATOR:  
Route 3 Box 3630 CITY Myton STATE UT ZIP 84052

PHONE NUMBER  
435.646.3721

10. FIELD AND POOL, OR WILDCAT:  
Monument Butte

4. LOCATION OF WELL:  
FOOTAGES AT SURFACE: 2105 FNL 0660 FWL

COUNTY: Duchesne

OTR/OTR. SECTION. TOWNSHIP. RANGE. MERIDIAN: SW/NW, 22, T8S, R17E

STATE: Utah

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF ACTION SubDate

TYPE OF SUBMISSION	TYPE OF ACTION	TYPE OF ACTION	TYPE OF ACTION
<input type="checkbox"/> NOTICE OF INTENT (Submit in Duplicate)  Approximate date work will  _____	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> REPERFORATE CURRENT FORMATION
	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> SIDETRACK TO REPAIR WELL
<input checked="" type="checkbox"/> SUBSEQUENT REPORT (Submit Original Form Only)  Date of Work Completion:  10/27/2005	<input type="checkbox"/> CASING REPAIR	<input type="checkbox"/> NEW CONSTRUCTION	<input type="checkbox"/> TEMPORARITLY ABANDON
	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> TUBING REPAIR
	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> VENT OR FLAIR
	<input type="checkbox"/> CHANGE WELL NAME	<input type="checkbox"/> PLUG BACK	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> PRODUCTION (START/STOP)	<input type="checkbox"/> WATER SHUT-OFF
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input checked="" type="checkbox"/> OTHER: - 5 Year MIT
	<input type="checkbox"/> CONVERT WELL TYPE	<input type="checkbox"/> RECOMPLETE - DIFFERENT FORMATION	

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

On 10/4/05 Nathan Wiser with the EPA was contacted concerning the 5-year MIT on the above listed well. Permission was given at that time to perform the test on 10/24/05. On 10/24/05 the csg was pressured up to 1050 psig and charted for 30 minutes with 0 psi pressure loss. The well was injecting during the test. The tbg pressure was 700 psig during the test. There was not an EPA representative available to witness the test. EPA# 20855-04477 API# 43-013-31476.

Accepted by the  
Utah Division of  
Oil, Gas and Mining  
FOR RECORD ONLY

NAME (PLEASE PRINT) Callie Duncan

TITLE Production Clerk

SIGNATURE

*Callie Duncan*

DATE 10/27/2005

(This space for State use only)

RECEIVED  
OCT 28 2005  
DIV. OF OIL, GAS & MINING

# Mechanical Integrity Test

## Casing or Annulus Pressure Mechanical Integrity Test

U.S. Environmental Protection Agency  
Underground Injection Control Program  
999 18<sup>th</sup> Street, Suite 500 Denver, CO 80202-2466

EPA Witness: \_\_\_\_\_ Date: 10/24/05  
 Test conducted by: Dale Giles  
 Others present: \_\_\_\_\_

Well Name: <u>Monument Fed. 12-224-8-17</u>	Type: ER SWD	Status: AC TA UC
Field: <u>Canvasback Unit</u>		
Location: _____	Sec: <u>22 T 8 N 10 R 17 E 1 W</u>	County: <u>Duchesne</u> State: <u>Ut.</u>
Operator: <u>Newfield Production Co.</u>		
Last MIT: <u>1 / 1</u>	Maximum Allowable Pressure: <u>720</u>	PSIG

Is this a regularly scheduled test?  Yes  No  
 Initial test for permit?  Yes  No  
 Test after well rework?  Yes  No  
 Well injecting during test?  Yes  No If Yes, rate: 23 bpd

Pre-test casing/tubing annulus pressure: 0 psig

MIT DATA TABLE	Test #1	Test #2	Test #3
<b>TUBING PRESSURE</b>			
Initial Pressure	<u>700</u> psig	psig	psig
End of test pressure	<u>700</u> psig	psig	psig
<b>CASING / TUBING ANNULUS PRESSURE</b>			
0 minutes	<u>1050</u> psig	psig	psig
5 minutes	<u>1050</u> psig	psig	psig
10 minutes	<u>1050</u> psig	psig	psig
15 minutes	<u>1050</u> psig	psig	psig
20 minutes	<u>1050</u> psig	psig	psig
25 minutes	<u>1050</u> psig	psig	psig
30 minutes	<u>1050</u> psig	psig	psig
_____ minutes	psig	psig	psig
_____ minutes	psig	psig	psig
<b>RESULT</b>	<input checked="" type="checkbox"/> Pass <input type="checkbox"/> Fail	<input type="checkbox"/> Pass <input type="checkbox"/> Fail	<input type="checkbox"/> Pass <input type="checkbox"/> Fail

Does the annulus pressure build back up after the test?  Yes  No

### MECHANICAL INTEGRITY PRESSURE TEST

**RECEIVED**  
OCT 26 2005

Additional comments for mechanical integrity pressure test, such as volume of fluid added to annulus and bled back at end of test, reason for failing test (casing head leak, tubing leak, other), etc.:

DIV. OF OIL, GAS & MINING

Signature of Witness: \_\_\_\_\_



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

5. LEASE DESIGNATION AND SERIAL NUMBER:  
USA UTU-77233

**SUNDRY NOTICES AND REPORTS ON WELLS**

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

7. UNIT or CA AGREEMENT NAME:  
GMBU

1. TYPE OF WELL: OIL WELL  GAS WELL  OTHER

8. WELL NAME and NUMBER:  
BALCRON FED 12-22Y

2. NAME OF OPERATOR:  
NEWFIELD PRODUCTION COMPANY

9. API NUMBER:  
4301331476

3. ADDRESS OF OPERATOR:  
Route 3 Box 3630 CITY Myton STATE UT ZIP 84052

PHONE NUMBER  
435.646.3721

10. FIELD AND POOL, OR WILDCAT:  
GREATER MB UNIT

4. LOCATION OF WELL:  
FOOTAGES AT SURFACE: 2105 FNL 660 FWL

COUNTY: DUCHESNE

OTR/OTR. SECTION. TOWNSHIP. RANGE. MERIDIAN: SWNW, 22, T8S, R17E

STATE: UT

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
<input type="checkbox"/> NOTICE OF INTENT (Submit in Duplicate)  Approximate date work will  _____	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> REPERFORATE CURRENT FORMATION
	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> SIDETRACK TO REPAIR WELL
	<input type="checkbox"/> CASING REPAIR	<input type="checkbox"/> NEW CONSTRUCTION	<input type="checkbox"/> TEMPORARILY ABANDON
	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> TUBING REPAIR
	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> VENT OR FLAIR
<input checked="" type="checkbox"/> SUBSEQUENT REPORT (Submit Original Form Only)  Date of Work Completion:  08/16/2010	<input type="checkbox"/> CHANGE WELL NAME	<input type="checkbox"/> PLUG BACK	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> PRODUCTION (START/STOP)	<input type="checkbox"/> WATER SHUT-OFF
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input checked="" type="checkbox"/> OTHER: - Step Rate Test
	<input type="checkbox"/> CONVERT WELL TYPE	<input type="checkbox"/> RECOMPLETE - DIFFERENT FORMATION	

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

A step rate test was conducted on the subject well on August 16, 2010. Results from the test indicate that the fracture gradient is 0.677 psi/ft. Therefore, Newfield is requesting that the maximum allowable injection pressure (MAIP) be changed from 720 psi to 1130 psi.

EPA: UT20855-04477 API: 43-013-31476

Accepted by the  
Utah Division of  
Oil, Gas and Mining  
**FOR RECORD ONLY**

NAME (PLEASE PRINT) Lucy Chavez-Naupoto TITLE Administrative Assistant

SIGNATURE  DATE 09/22/2010

(This space for State use only)

**RECEIVED**  
**SEP 27 2010**  
DIV. OF OIL, GAS & MINING

# Step Rate Test (SRT) Analysis

Date: 08/24/2010

Operator:

Newfield Production Company

Well:

Monument Federal 12-22Y-8-17

Permit #:

UT20855-04477

**Enter the following data :**

Specific Gravity (sg) of injectate =	<u>1.015</u>	g/cc	
Depth to top perforation (D) =	<u>4768</u>	feet	4768
Top of permitted injection zone depth (blank=use top perforation to calculate fg) =		feet	
Estimated Formation Parting Pressure (Pfp) from SRT chart =	<u>1130</u>	psi	
Instantaneous Shut In Pressure (ISIP) from SRT =	<u>1242</u>	psi	1130
Bottom Hole Parting Pressure (Pbhp) from downhole pressure recorder =		psi	no downhole

## Part One - Calculation of Fracture Gradient (fg)

**Calculated Fracture Gradient = 0.677 psi/ft.**

where: fg = Pbhp / D (Note: this formula uses the downhole recorded bottom hole parting pressure if available) = 1242

D = depth used = 4768

Pbhp used = 3226

**Calculated Bottom Hole Parting Pressure (Pbhp) = 3226 psi**

3225.512

to calculate Bottom Hole Parting Pressure (Pbhp) = Formation Fracture Pressure (ISIP or Pfp) + (0.433 \* SG \* D)

(Uses lesser of ISIP or Pfp) Value used = 1130

## Part Two - Calculation of Maximum Allowable Injection Pressure (MAIP)

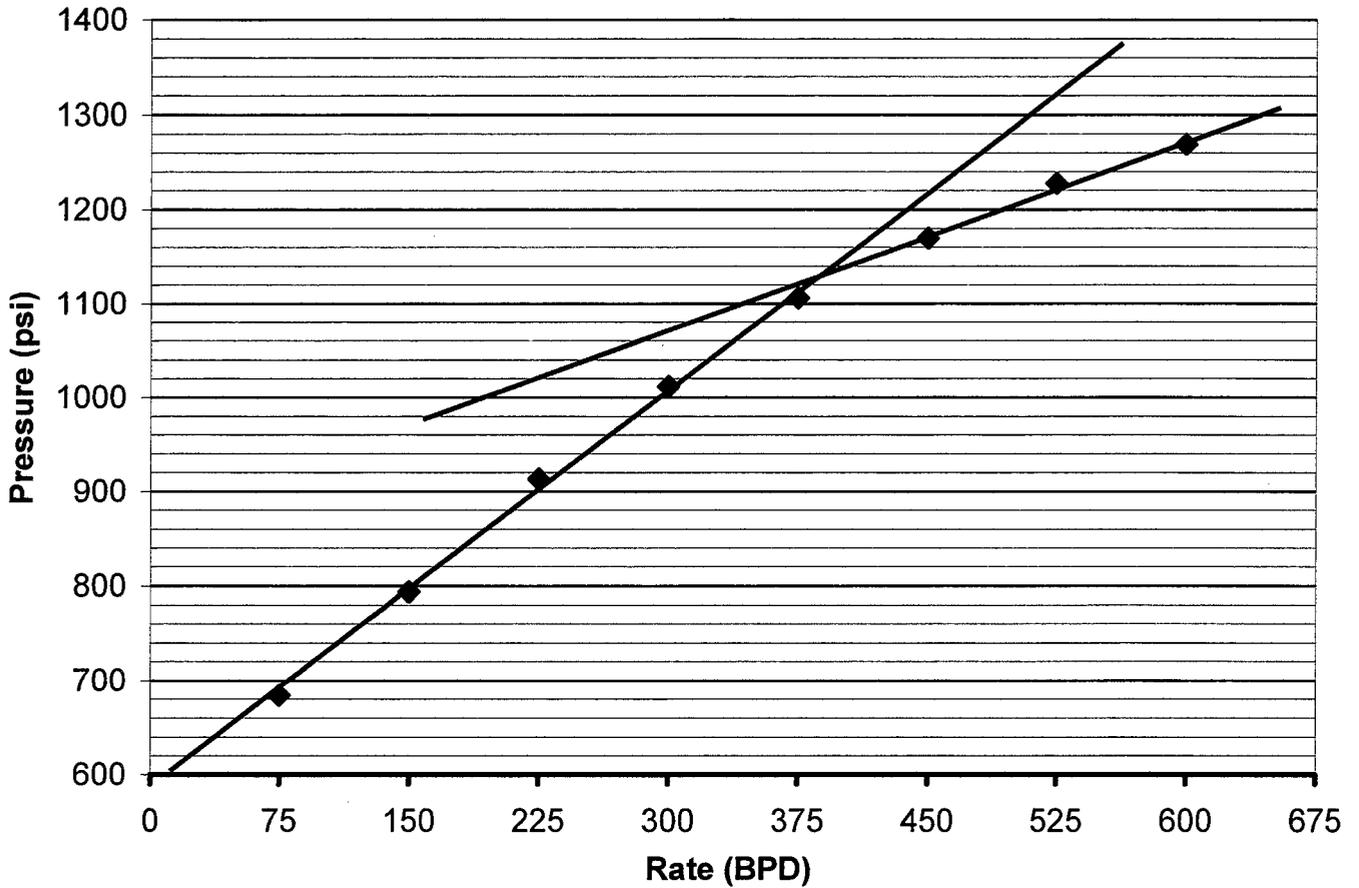
**Maximum Allowable Injection Pressure (MAIP) = 1130 psig**

D = depth used = 4768

MAIP = [fg - (0.433 \* SG)] \* D = 1132.424

(rounded down to nearest 5 psig)

**MonumentFederal 12-22Y-8-17  
Greater Monument Butte Unit  
Step Rate Test  
August 12, 2010**



**Start Pressure:** 612 psi  
**Instantaneous Shut In Pressure (ISIP):** 1242 psi  
**Top Perforation:** 4768 feet  
**Fracture pressure (Pfp):** 1130 psi  
**FG:** 0.676 psi/ft

<b>Step</b>	<b>Rate(bpd)</b>	<b>Pressure(psi)</b>
1	75	684
2	150	794
3	225	913
4	300	1012
5	375	1106
6	450	1170
7	525	1228
8	600	1269

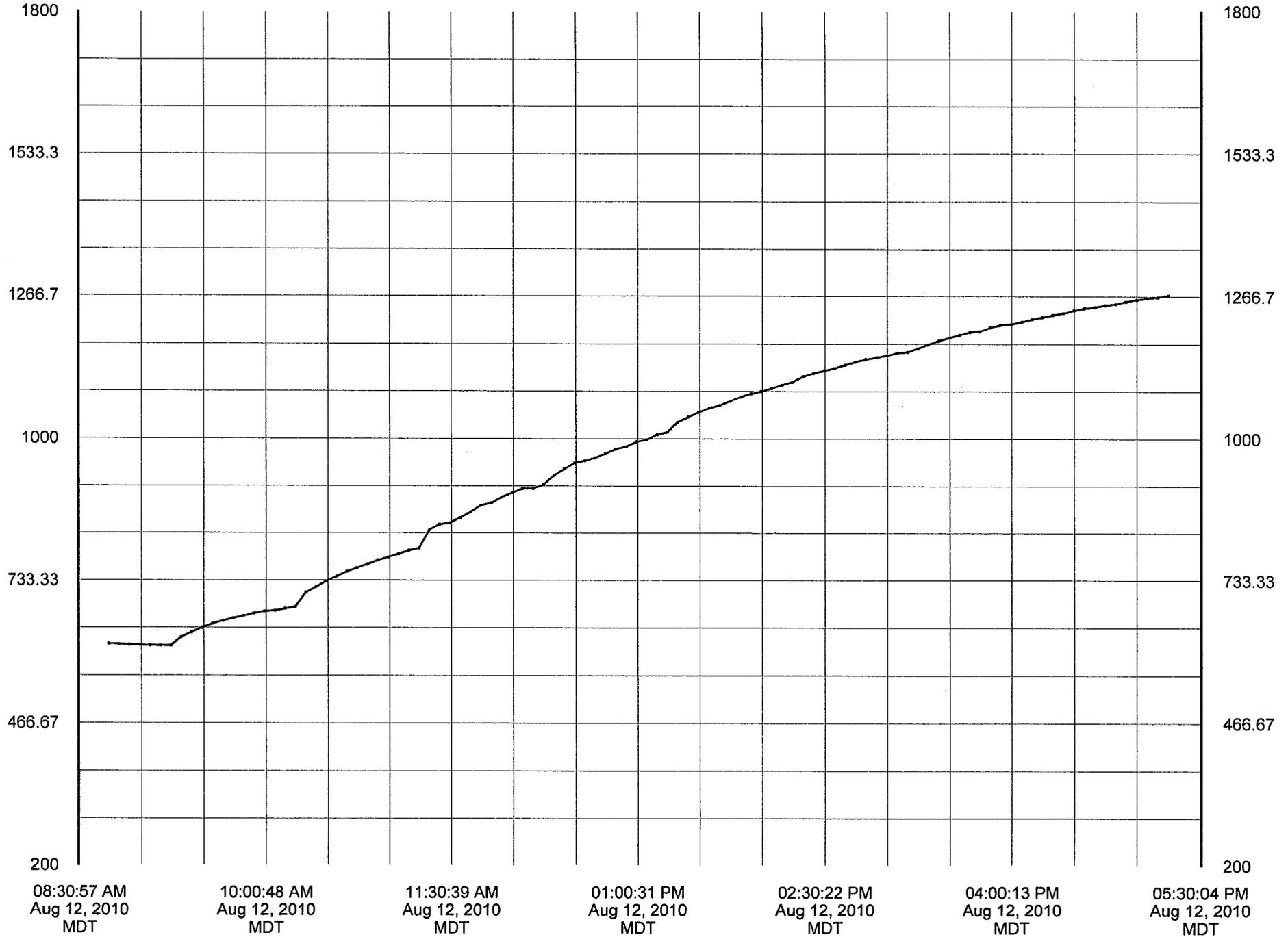
PSIA

Absolute Pressure —

Monument Federal 12-22Y-8-17 SRT  
(8-12-10)

Device	- PrTemp1000
Serial Number	- M75866
Device ID	- PrTemp

PSIA



Report Name: PrTemp1000 Data Table  
 Report Date: Aug 13, 2010 03:34:19 PM MDT  
 File Name: C:\Program Files\PTC@ Instruments 2.00\Monument Federal 12-22y-8-17 SRT (8-12-10).csv  
 Title: Monument Federal 12-22Y-8-17 SRT (8-12-10)  
 Device: PrTemp1000 - Temperature and Pressure Recorder  
 Hardware Revision: REV2C (64K)  
 Serial Number: M75866  
 Device ID: PrTemp  
 Data Start Date: Aug 12, 2010 08:45:00 AM MDT  
 Data End Date: Aug 12, 2010 05:15:00 PM MDT  
 Reading Rate: 2 Seconds  
 Readings: 1 to 103 of 103  
 Last Calibration Date: May 22, 2009  
 Next Calibration Date: May 22, 2010

<u>Reading</u>	<u>Date and Time (MDT)</u>	<u>Absolute Pressure</u>	<u>Annotation</u>
1	Aug 12, 2010 08:45:00 AM	615.200	PSIA
2	Aug 12, 2010 08:50:00 AM	614.400	PSIA
3	Aug 12, 2010 08:55:00 AM	613.400	PSIA
4	Aug 12, 2010 09:00:00 AM	612.800	PSIA
5	Aug 12, 2010 09:05:00 AM	612.200	PSIA
6	Aug 12, 2010 09:09:59 AM	612.000	PSIA
7	Aug 12, 2010 09:14:59 AM	611.600	PSIA
8	Aug 12, 2010 09:19:59 AM	627.000	PSIA
9	Aug 12, 2010 09:25:01 AM	636.200	PSIA
10	Aug 12, 2010 09:30:00 AM	644.400	PSIA
11	Aug 12, 2010 09:34:59 AM	652.000	PSIA
12	Aug 12, 2010 09:39:59 AM	657.200	PSIA
13	Aug 12, 2010 09:45:00 AM	662.200	PSIA
14	Aug 12, 2010 09:49:59 AM	666.400	PSIA
15	Aug 12, 2010 09:54:59 AM	671.200	PSIA
16	Aug 12, 2010 10:00:00 AM	675.200	PSIA
17	Aug 12, 2010 10:04:59 AM	676.400	PSIA
18	Aug 12, 2010 10:09:59 AM	680.400	PSIA
19	Aug 12, 2010 10:15:00 AM	683.800	PSIA
20	Aug 12, 2010 10:19:59 AM	710.400	PSIA
21	Aug 12, 2010 10:25:00 AM	721.200	PSIA
22	Aug 12, 2010 10:29:59 AM	731.600	PSIA
23	Aug 12, 2010 10:35:00 AM	740.800	PSIA
24	Aug 12, 2010 10:39:59 AM	749.400	PSIA
25	Aug 12, 2010 10:44:59 AM	756.600	PSIA
26	Aug 12, 2010 10:49:59 AM	763.800	PSIA
27	Aug 12, 2010 10:54:59 AM	770.800	PSIA
28	Aug 12, 2010 10:59:59 AM	776.800	PSIA
29	Aug 12, 2010 11:04:59 AM	783.000	PSIA
30	Aug 12, 2010 11:10:01 AM	789.400	PSIA
31	Aug 12, 2010 11:15:00 AM	793.800	PSIA
32	Aug 12, 2010 11:20:00 AM	827.200	PSIA
33	Aug 12, 2010 11:25:00 AM	838.400	PSIA
34	Aug 12, 2010 11:30:00 AM	841.000	PSIA
35	Aug 12, 2010 11:35:00 AM	851.200	PSIA
36	Aug 12, 2010 11:40:00 AM	861.800	PSIA
37	Aug 12, 2010 11:44:59 AM	874.400	PSIA
38	Aug 12, 2010 11:49:59 AM	879.000	PSIA
39	Aug 12, 2010 11:54:59 AM	889.600	PSIA
40	Aug 12, 2010 11:59:59 AM	897.800	PSIA
41	Aug 12, 2010 12:04:59 PM	906.000	PSIA
42	Aug 12, 2010 12:09:59 PM	906.200	PSIA
43	Aug 12, 2010 12:15:00 PM	913.200	PSIA
44	Aug 12, 2010 12:20:00 PM	930.800	PSIA
45	Aug 12, 2010 12:25:00 PM	943.200	PSIA
46	Aug 12, 2010 12:30:00 PM	954.600	PSIA
47	Aug 12, 2010 12:35:00 PM	958.600	PSIA
48	Aug 12, 2010 12:39:59 PM	964.400	PSIA
49	Aug 12, 2010 12:44:59 PM	972.200	PSIA
50	Aug 12, 2010 12:49:59 PM	980.800	PSIA
51	Aug 12, 2010 12:54:59 PM	985.600	PSIA
52	Aug 12, 2010 01:00:00 PM	994.200	PSIA
53	Aug 12, 2010 01:04:59 PM	998.200	PSIA
54	Aug 12, 2010 01:10:00 PM	1007.400	PSIA
55	Aug 12, 2010 01:14:59 PM	1012.200	PSIA
56	Aug 12, 2010 01:19:59 PM	1030.800	PSIA
57	Aug 12, 2010 01:25:00 PM	1041.000	PSIA
58	Aug 12, 2010 01:29:59 PM	1050.200	PSIA
59	Aug 12, 2010 01:35:00 PM	1057.800	PSIA

60	Aug 12, 2010 01:40:00 PM	1062.600	PSIA
61	Aug 12, 2010 01:45:02 PM	1070.800	PSIA
62	Aug 12, 2010 01:50:00 PM	1078.200	PSIA
63	Aug 12, 2010 01:54:59 PM	1084.600	PSIA
64	Aug 12, 2010 01:59:59 PM	1089.000	PSIA
65	Aug 12, 2010 02:05:00 PM	1094.400	PSIA
66	Aug 12, 2010 02:09:59 PM	1100.600	PSIA
67	Aug 12, 2010 02:14:59 PM	1106.400	PSIA
68	Aug 12, 2010 02:20:00 PM	1117.200	PSIA
69	Aug 12, 2010 02:25:00 PM	1123.400	PSIA
70	Aug 12, 2010 02:30:00 PM	1127.800	PSIA
71	Aug 12, 2010 02:35:00 PM	1132.400	PSIA
72	Aug 12, 2010 02:40:02 PM	1138.800	PSIA
73	Aug 12, 2010 02:44:59 PM	1144.600	PSIA
74	Aug 12, 2010 02:49:59 PM	1149.400	PSIA
75	Aug 12, 2010 02:55:00 PM	1152.800	PSIA
76	Aug 12, 2010 03:00:00 PM	1156.600	PSIA
77	Aug 12, 2010 03:05:00 PM	1161.400	PSIA
78	Aug 12, 2010 03:09:59 PM	1163.200	PSIA
79	Aug 12, 2010 03:15:00 PM	1170.000	PSIA
80	Aug 12, 2010 03:20:00 PM	1177.400	PSIA
81	Aug 12, 2010 03:24:59 PM	1184.200	PSIA
82	Aug 12, 2010 03:30:00 PM	1189.600	PSIA
83	Aug 12, 2010 03:34:59 PM	1195.000	PSIA
84	Aug 12, 2010 03:40:00 PM	1200.200	PSIA
85	Aug 12, 2010 03:44:59 PM	1201.800	PSIA
86	Aug 12, 2010 03:49:59 PM	1209.000	PSIA
87	Aug 12, 2010 03:55:00 PM	1213.800	PSIA
88	Aug 12, 2010 04:00:00 PM	1215.400	PSIA
89	Aug 12, 2010 04:04:59 PM	1219.400	PSIA
90	Aug 12, 2010 04:09:59 PM	1224.600	PSIA
91	Aug 12, 2010 04:14:59 PM	1228.200	PSIA
92	Aug 12, 2010 04:19:59 PM	1232.200	PSIA
93	Aug 12, 2010 04:24:59 PM	1235.600	PSIA
94	Aug 12, 2010 04:30:07 PM	1240.800	PSIA
95	Aug 12, 2010 04:34:59 PM	1245.000	PSIA
96	Aug 12, 2010 04:39:59 PM	1247.000	PSIA
97	Aug 12, 2010 04:45:00 PM	1250.800	PSIA
98	Aug 12, 2010 04:49:59 PM	1252.800	PSIA
99	Aug 12, 2010 04:54:59 PM	1257.400	PSIA
100	Aug 12, 2010 04:59:59 PM	1260.600	PSIA
101	Aug 12, 2010 05:05:00 PM	1263.800	PSIA
102	Aug 12, 2010 05:09:59 PM	1265.600	PSIA
103	Aug 12, 2010 05:15:00 PM	1269.200	PSIA

PSIA

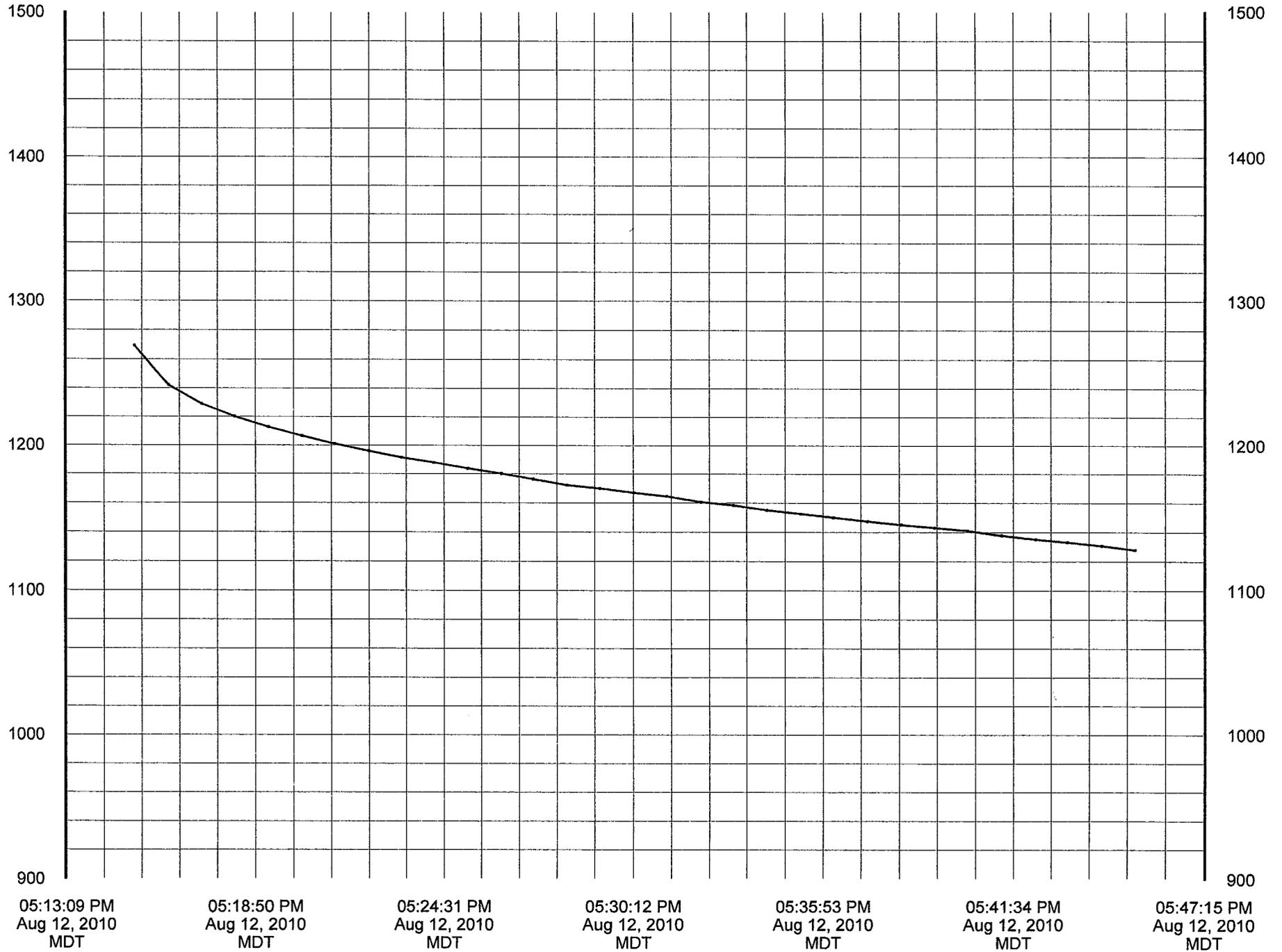
Absolute Pressure



Monument Federal 12-22Y-8-17 ISIP  
(8-12-10)

Device - PrTemp1000  
Serial Number - M75866  
Device ID - PrTemp

PSIA



Report Name: PrTemp1000 Data Table  
 Report Date: Aug 13, 2010 03:34:11 PM MDT  
 File Name: C:\Program Files\PTC® Instruments 2.00\Monument Federal 12-22y-8-17 ISIP (8-12-10).csv  
 Title: Monument Federal 12-22Y-8-17 ISIP (8-12-10)  
 Device: PrTemp1000 - Temperature and Pressure Recorder  
 Hardware Revision: REV2C (64K)  
 Serial Number: M75866  
 Device ID: PrTemp  
 Data Start Date: Aug 12, 2010 05:15:12 PM MDT  
 Data End Date: Aug 12, 2010 05:45:13 PM MDT  
 Reading Rate: 2 Seconds  
 Readings: 1 to 31 of 31  
 Last Calibration Date: May 22, 2009  
 Next Calibration Date: May 22, 2010

<u>Reading</u>	<u>Date and Time (MDT)</u>	<u>Absolute Pressure</u>	<u>Annotation</u>
1	Aug 12, 2010 05:15:12 PM	1269.200	PSIA
2	Aug 12, 2010 05:16:14 PM	1242.200	PSIA
3	Aug 12, 2010 05:17:13 PM	1229.000	PSIA
4	Aug 12, 2010 05:18:12 PM	1220.200	PSIA
5	Aug 12, 2010 05:19:13 PM	1212.800	PSIA
6	Aug 12, 2010 05:20:13 PM	1206.600	PSIA
7	Aug 12, 2010 05:21:12 PM	1201.000	PSIA
8	Aug 12, 2010 05:22:14 PM	1196.000	PSIA
9	Aug 12, 2010 05:23:14 PM	1191.600	PSIA
10	Aug 12, 2010 05:24:12 PM	1188.000	PSIA
11	Aug 12, 2010 05:25:14 PM	1183.800	PSIA
12	Aug 12, 2010 05:26:15 PM	1180.200	PSIA
13	Aug 12, 2010 05:27:13 PM	1176.400	PSIA
14	Aug 12, 2010 05:28:13 PM	1172.400	PSIA
15	Aug 12, 2010 05:29:13 PM	1170.000	PSIA
16	Aug 12, 2010 05:30:13 PM	1167.000	PSIA
17	Aug 12, 2010 05:31:12 PM	1164.600	PSIA
18	Aug 12, 2010 05:32:13 PM	1160.600	PSIA
19	Aug 12, 2010 05:33:12 PM	1158.400	PSIA
20	Aug 12, 2010 05:34:12 PM	1155.000	PSIA
21	Aug 12, 2010 05:35:13 PM	1152.600	PSIA
22	Aug 12, 2010 05:36:12 PM	1150.000	PSIA
23	Aug 12, 2010 05:37:13 PM	1147.400	PSIA
24	Aug 12, 2010 05:38:13 PM	1145.000	PSIA
25	Aug 12, 2010 05:39:13 PM	1143.000	PSIA
26	Aug 12, 2010 05:40:12 PM	1141.000	PSIA
27	Aug 12, 2010 05:41:13 PM	1137.800	PSIA
28	Aug 12, 2010 05:42:14 PM	1135.200	PSIA
29	Aug 12, 2010 05:43:12 PM	1133.200	PSIA
30	Aug 12, 2010 05:44:13 PM	1130.800	PSIA
31	Aug 12, 2010 05:45:13 PM	1128.000	PSIA

## Monument Federal 12-22Y-8-17 Rate Sheet (8-12-10)

<i>Step # 1</i>	Time:	9:20	9:25	9:30	9:35	9:40	9:45
	Rate:	75.6	75.6	75.6	75.5	75.5	75.5
	Time:	9:50	9:55	10:00	10:05	10:10	10:15
	Rate:	75.5	75.5	75.5	75.5	75.4	75.4
<i>Step # 2</i>	Time:	10:20	10:25	10:30	10:35	10:40	10:45
	Rate:	150.5	150.5	150.4	150.4	150.4	150.4
	Time:	10:50	10:55	11:00	11:05	11:10	11:15
	Rate:	150.3	150.3	150.3	150.3	150.2	150.2
<i>Step # 3</i>	Time:	11:20	11:25	11:30	11:35	11:40	11:45
	Rate:	225.5	225.5	225.5	225.5	225.5	225.4
	Time:	11:50	11:55	12:00	12:05	12:10	12:15
	Rate:	225.4	225.4	225.4	225.3	225.3	225.3
<i>Step # 4</i>	Time:	12:20	12:25	12:30	12:35	12:40	12:45
	Rate:	300.7	300.7	300.7	300.7	300.6	300.5
	Time:	12:50	12:55	1:00	1:05	1:10	1:15
	Rate:	300.5	300.5	300.5	300.5	300.5	300.4
<i>Step # 5</i>	Time:	1:20	1:25	1:30	1:35	1:40	1:45
	Rate:	375.5	375.5	375.5	375.4	375.4	375.4
	Time:	1:50	1:55	2:00	2:05	2:10	2:15
	Rate:	375.4	375.4	375.3	375.3	375.3	375.3
<i>Step # 6</i>	Time:	2:20	2:25	2:30	2:35	2:40	2:45
	Rate:	450.4	450.4	450.3	450.3	450.3	450.3
	Time:	2:50	2:55	3:00	3:05	3:10	3:15
	Rate:	450.2	450.2	450.2	450.1	450.1	450.1
<i>Step # 7</i>	Time:	3:20	3:25	3:30	3:35	3:40	3:45
	Rate:	525.6	525.6	525.6	525.6	525.6	525.4
	Time:	3:50	3:55	4:00	4:05	4:10	4:15
	Rate:	525.4	525.4	525.3	525.3	525.3	525.3
<i>Step # 8</i>	Time:	4:20	4:25	4:30	4:35	4:40	4:45
	Rate:	600.5	600.5	600.5	600.4	600.4	600.4
	Time:	4:50	4:55	5:00	5:05	5:10	5:15
	Rate:	600.4	600.4	600.3	600.2	600.2	600.1

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

5. LEASE DESIGNATION AND SERIAL NUMBER:  
USA UTU-77233

**SUNDRY NOTICES AND REPORTS ON WELLS**

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

7. UNIT or CA AGREEMENT NAME:  
GMBU

1. TYPE OF WELL:      OIL WELL       GAS WELL       OTHER

8. WELL NAME and NUMBER:  
BALCRON FED 12-22Y

2. NAME OF OPERATOR:  
NEWFIELD PRODUCTION COMPANY

9. API NUMBER:  
4301331476

3. ADDRESS OF OPERATOR:      PHONE NUMBER  
Route 3 Box 3630      CITY Myton      STATE UT      ZIP 84052      435.646.3721

10. FIELD AND POOL, OR WILDCAT:  
GREATER MB UNIT

4. LOCATION OF WELL:  
FOOTAGES AT SURFACE: 2105 FNL 660 FWL

COUNTY: DUCHESNE

OTR/OTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: SWNW, 22, T8S, R17E

STATE: UT

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
<input type="checkbox"/> NOTICE OF INTENT (Submit in Duplicate)  Approximate date work will _____	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> REPERFORATE CURRENT FORMATION
	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> SIDETRACK TO REPAIR WELL
<input checked="" type="checkbox"/> SUBSEQUENT REPORT (Submit Original Form Only)  Date of Work Completion: 09/28/2010	<input type="checkbox"/> CASING REPAIR	<input type="checkbox"/> NEW CONSTRUCTION	<input type="checkbox"/> TEMPORARITLY ABANDON
	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> TUBING REPAIR
	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> VENT OR FLAIR
	<input type="checkbox"/> CHANGE WELL NAME	<input type="checkbox"/> PLUG BACK	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> PRODUCTION (START/STOP)	<input type="checkbox"/> WATER SHUT-OFF
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input checked="" type="checkbox"/> OTHER: - Five Year MIT
	<input type="checkbox"/> CONVERT WELL TYPE	<input type="checkbox"/> RECOMPLETE - DIFFERENT FORMATION	

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

On 09/13/2010 Nathan Wiser with the EPA was contacted concerning the 5 year MIT on the above listed well. On 09/28/2010 the casing was pressured up to 12400 psig and charted for 30 minutes with no pressure loss. The well was not injecting during the test. The tubing pressure was 605 psig during the test. There was not an EPA representative available to witness the test.

EPA# UT20855-04477 API# 43-013-31476

Accepted by the  
Utah Division of  
Oil, Gas and Mining  
**FOR RECORD ONLY**

NAME (PLEASE PRINT) Lucy Chavez-Naupoto      TITLE Administrative Assistant

SIGNATURE       DATE 09/29/2010

(This space for State use only)

**RECEIVED**  
**OCT 04 2010**  
**DIV. OF OIL, GAS & MINING**

# Mechanical Integrity Test

## Casing or Annulus Pressure Mechanical Integrity Test

U.S. Environmental Protection Agency  
Underground Injection Control Program  
999 18<sup>th</sup> Street, Suite 500 Denver, CO 80202-2466

EPA Witness: \_\_\_\_\_ Date: 9/28/10  
 Test conducted by: Rusty Bird  
 Others present: \_\_\_\_\_

Well Name: <u>Monument Federal 12-22V-8-17</u>		Type: ER SWD	Status: AC TA UC
Field: <u>Monument Butte</u>			
Location: <u>SW/NW</u> Sec: <u>22</u> T <u>8</u> N <u>10</u> R <u>17</u> E <u>W</u>		County: <u>Duchesne</u>	State: <u>Ut</u>
Operator: <u>Newfield</u>			
Last MIT: <u>1</u> / <u>1</u>	Maximum Allowable Pressure: <u>720</u>		PSIG

Is this a regularly scheduled test?     Yes     No  
 Initial test for permit?                 Yes     No  
 Test after well rework?                 Yes     No  
 Well injecting during test?             Yes     No    If Yes, rate: 0 bpd

Pre-test casing/tubing annulus pressure: 0 psig

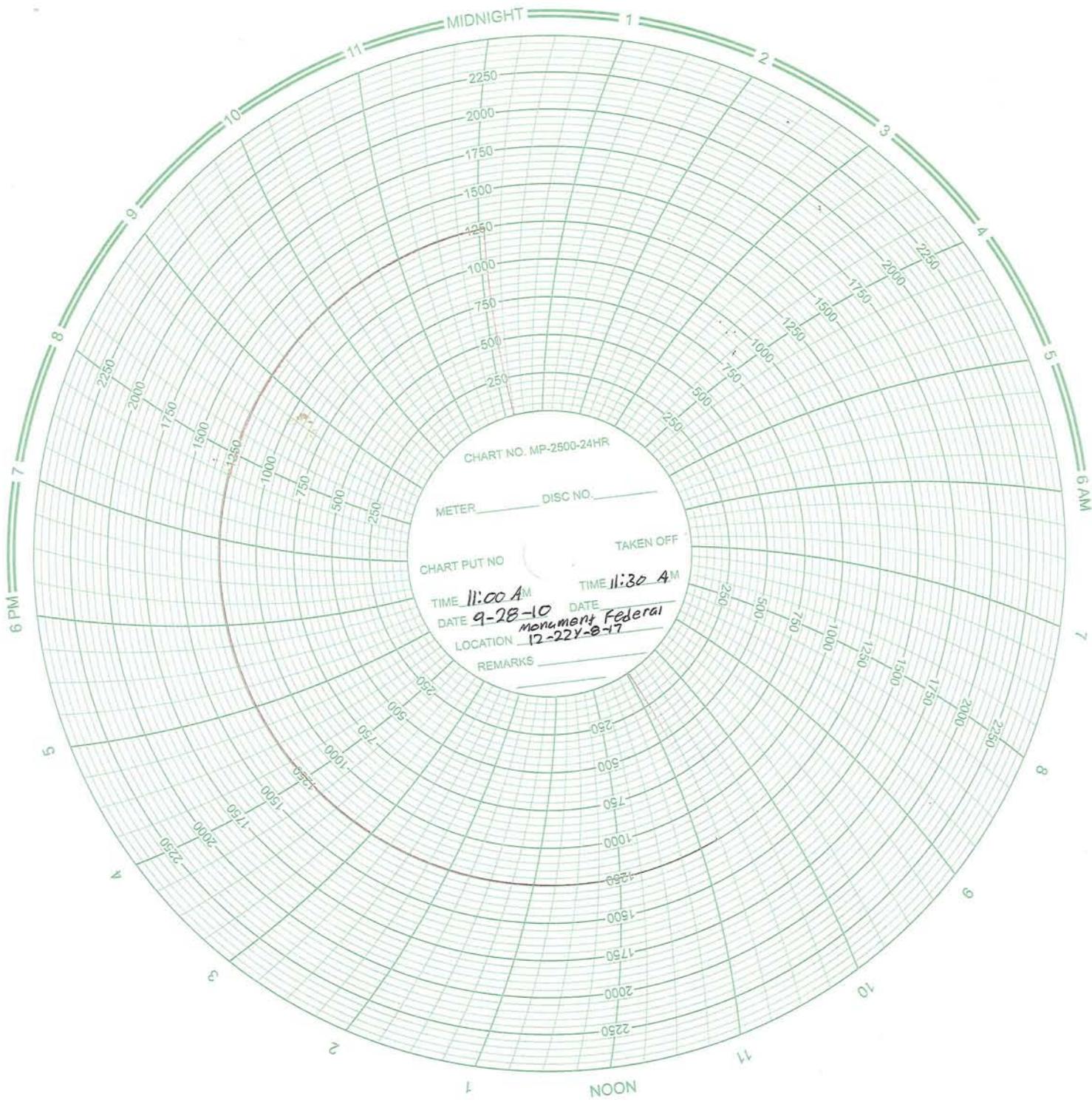
MIT DATA TABLE	Test #1	Test #2	Test #3
<b>TUBING PRESSURE</b>			
Initial Pressure	<u>605</u> psig	psig	psig
End of test pressure	<u>605</u> psig	psig	psig
<b>CASING/TUBING ANNULUS PRESSURE</b>			
0 minutes	<u>1240</u> psig	psig	psig
5 minutes	<u>1240</u> psig	psig	psig
10 minutes	<u>1240</u> psig	psig	psig
15 minutes	<u>1240</u> psig	psig	psig
20 minutes	<u>1240</u> psig	psig	psig
25 minutes	<u>1240</u> psig	psig	psig
30 minutes	<u>1240</u> psig	psig	psig
_____ minutes	psig	psig	psig
_____ minutes	psig	psig	psig
<b>RESULT</b>	<input checked="" type="checkbox"/> Pass <input type="checkbox"/> Fail	<input type="checkbox"/> Pass <input type="checkbox"/> Fail	<input type="checkbox"/> Pass <input type="checkbox"/> Fail

Does the annulus pressure build back up after the test?     Yes     No

## MECHANICAL INTEGRITY PRESSURE TEST

Additional comments for mechanical integrity pressure test, such as volume of fluid added to annulus and bled back at end of test, reason for failing test (casing head leak, tubing leak, other), etc.:

Signature of Witness: Rusty Bird





UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 8

1595 Wynkoop Street  
Denver, CO 80202-1129  
Phone 800-227-8917  
<http://www.epa.gov/region08>

OCT 18 2010

Ref: 8P-W-GW

**CERTIFIED MAIL**  
**RETURN RECEIPT REQUESTED**

Mr. Michael Guinn  
District Manager  
Newfield Production Company  
Route 3-Box 3630  
Myton, UT 84502

Accepted by the  
Utah Division of  
Oil, Gas and Mining  
**FOR RECORD ONLY**

RE: Underground Injection Control (UIC)  
Minor Permit Modification  
Authorization to Continue Injection  
EPA UIC Permit UT20855-04477  
Well: Monument Federal 12-22Y-8-17  
SWNW Sec. 22-T8S-R17E  
Duchesne County, Utah  
API No.: 43-013-31476

Dear Mr. Guinn:

The U.S. Environmental Protection Agency (EPA), Region 8, has received Newfield Production Company's (Newfield) February 10, 2010, letter with enclosures requesting an increase in the Maximum Allowable Injection Pressure (MAIP) for the Monument Federal 12-22Y-8-17 well. Newfield's interpretation of the enclosed Step Rate Test (SRT) data concluded the fracture gradient to be 0.677 psi/ft. However, EPA's analysis of the data determined the fracture gradient to be 0.669 psi/ft., resulting in a calculated MAIP of 1,090 psig. Therefore, the MAIP for UIC Permit UT20855-04477 is hereby increased to 1,090 psig from the 720 psig previously authorized.

As of the date of this letter, EPA authorizes continued injection into the Monument Federal 12-22Y-8-17 well under the terms and conditions of UIC Permit UT20855-04477 at the MAIP of 1,090 psig.

**RECEIVED**

**OCT 27 2010**

**DIV. OF OIL, GAS & MINING**

You may apply for a higher MAIP at a later date. Your application should be accompanied by the interpreted results of a SRT that measures the fracture parting pressure and determines the fracture gradient at the injection depth and location. A current copy of EPA guidelines for running and interpreting a SRT will be sent upon request. Should the SRT result in a request for a higher MAIP, a RTS conducted at the new MAIP is required.

As of this approval, responsibility for permit compliance and enforcement is transferred to the EPA Region 8 UIC Technical Enforcement Program Office. Therefore, please direct all future notification, reporting, monitoring and compliance correspondence to the following address, referencing the well name and UIC Permit number on all correspondence regarding this well:

Y 900 US EPA, Region 8  
Attn: Nathan Wiser  
MC: ENF-UFO  
1595 Wynkoop Street  
Denver, CO 80202

For questions regarding notification, testing, monitoring, reporting or other permit requirements, Nathan Wiser of the UIC Technical Enforcement Program may be reached by calling 800-227-8917 (ext. 312-6211). Please be reminded that it is your responsibility to be aware of and to comply with all conditions of your Permit.

If you have any questions regarding this approval, please call Emmett Schmitz at 303-312-6174 or 800-227-8917 (ext. 312-6174).

Sincerely,



 Stephen S. Tuber  
Assistant Regional Administrator  
Office of Partnerships and Regulatory Assistance

cc: Uintah & Ouray Business Committee:  
Frances Poowegup, Vice-Chairwoman  
Curtis Cesspooch, Councilman  
Phillip Chimburas, Councilman  
Stewart Pike, Councilman  
Irene Cuch, Councilwoman  
Richard Jenks, Jr., Councilman

Daniel Picard  
BIA - Uintah & Ouray Indian Agency

Mike Natchees  
Environmental Coordinator  
Ute Indian Tribe

Manual Myore  
Director of Energy & Minerals Dept.  
Ute Indian Tribe

Brad Hill  
Acting Associate Director  
Utah Division of Oil, Gas, and Mining

Fluid Minerals Engineering Office  
BLM - Vernal Office

Eric Sundberg, Regulatory Analyst  
Newfield Production Company  
Denver, CO

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

5. LEASE DESIGNATION AND SERIAL NUMBER:  
USA UTU-66191

**SUNDRY NOTICES AND REPORTS ON WELLS**

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

7. UNIT or CA AGREEMENT NAME:  
GMBU

1. TYPE OF WELL: OIL WELL  GAS WELL  OTHER

8. WELL NAME and NUMBER:  
BALCRON FED 12-22Y

2. NAME OF OPERATOR:  
NEWFIELD PRODUCTION COMPANY

9. API NUMBER:  
4301331476

3. ADDRESS OF OPERATOR: Route 3 Box 3630 CITY Myton STATE UT ZIP 84052 PHONE NUMBER 435.646.3721

10. FIELD AND POOL, OR WILDCAT:  
GREATER MB UNIT

4. LOCATION OF WELL:  
FOOTAGES AT SURFACE: 2105 FNL 660 FWL

COUNTY: DUCHESNE

OTR/OTR. SECTION, TOWNSHIP, RANGE, MERIDIAN: SWNW, 22, T8S, R17E

STATE: UT

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
<input type="checkbox"/> NOTICE OF INTENT (Submit in Duplicate) Approximate date work will _____	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> REPERFORATE CURRENT FORMATION
	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> SIDETRACK TO REPAIR WELL
	<input type="checkbox"/> CASING REPAIR	<input type="checkbox"/> NEW CONSTRUCTION	<input type="checkbox"/> TEMPORARILY ABANDON
	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> TUBING REPAIR
	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> VENT OR FLAIR
<input checked="" type="checkbox"/> SUBSEQUENT REPORT (Submit Original Form Only) Date of Work Completion: 09/28/2010	<input type="checkbox"/> CHANGE WELL NAME	<input type="checkbox"/> PLUG BACK	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> PRODUCTION (START/STOP)	<input type="checkbox"/> WATER SHUT-OFF
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input checked="" type="checkbox"/> OTHER: - Five Year MIT
	<input type="checkbox"/> CONVERT WELL TYPE	<input type="checkbox"/> RECOMPLETE - DIFFERENT FORMATION	

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

On 09/13/2010 Nathan Wiser with the EPA was contacted concerning the 5 year MIT on the above listed well. On 09/28/2010 the casing was pressured up to 1240 psig and charted for 30 minutes with no pressure loss. The well was not injecting during the test. The tubing pressure was 605 psig during the test. There was not an EPA representative available to witness the test.

EPA# UT20855-04477 API# 43-013-31476

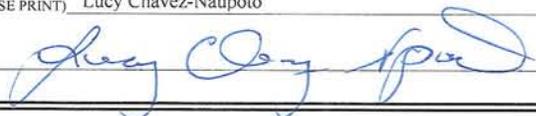
**RECEIVED**  
NOV 08 2010  
DIV. OF OIL, GAS & MINING

**Accepted by the  
Utah Division of  
Oil, Gas and Mining  
FOR RECORD ONLY**

NAME (PLEASE PRINT) Lucy Chavez-Naupoto

TITLE Administrative Assistant

SIGNATURE



DATE 11/03/2010

(This space for State use only)

<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		<b>FORM 9</b>
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		<b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> UTU-66191
		<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b>
<b>1. TYPE OF WELL</b> Water Injection Well		<b>7. UNIT or CA AGREEMENT NAME:</b> GMBU (GRRV)
<b>2. NAME OF OPERATOR:</b> NEWFIELD PRODUCTION COMPANY		<b>8. WELL NAME and NUMBER:</b> BALCRON FED 12-22Y
<b>3. ADDRESS OF OPERATOR:</b> Rt 3 Box 3630 , Myton, UT, 84052		<b>9. API NUMBER:</b> 43013314760000
<b>PHONE NUMBER:</b> 435 646-4825 Ext		<b>9. FIELD and POOL or WILDCAT:</b> MONUMENT BUTTE
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 2105 FNL 0660 FWL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: SWNW Section: 22 Township: 08.0S Range: 17.0E Meridian: S		<b>COUNTY:</b> DUCHESNE
		<b>STATE:</b> UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start:	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> CASING REPAIR
<input checked="" type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion: 8/25/2015	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> CHANGE WELL NAME
<input type="checkbox"/> SPUD REPORT Date of Spud:	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> CONVERT WELL TYPE
<input type="checkbox"/> DRILLING REPORT Report Date:	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> NEW CONSTRUCTION
	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> PLUG BACK
	<input type="checkbox"/> PRODUCTION START OR RESUME	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION
	<input type="checkbox"/> REPERFORATE CURRENT FORMATION	<input type="checkbox"/> SIDETRACK TO REPAIR WELL	<input type="checkbox"/> TEMPORARY ABANDON
	<input type="checkbox"/> TUBING REPAIR	<input type="checkbox"/> VENT OR FLARE	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> WATER SHUTOFF	<input type="checkbox"/> SI TA STATUS EXTENSION	<input type="checkbox"/> APD EXTENSION
	<input type="checkbox"/> WILDCAT WELL DETERMINATION	<input checked="" type="checkbox"/> OTHER	OTHER: <input type="text" value="5 YR MIT"/>

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

5 YR MIT performed on the above listed well. On 08/25/2015 the casing was pressured up to 1126 psig and charted for 30 minutes with no pressure loss. The well was not injecting during the test. The tbq pressure was 314 psig during the test. There was not an EPA representative available to witness the test. EPA #UT22197-04477

**Accepted by the  
Utah Division of  
Oil, Gas and Mining  
FOR RECORD ONLY  
August 27, 2015**

<b>NAME (PLEASE PRINT)</b> Lucy Chavez-Naupoto	<b>PHONE NUMBER</b> 435 646-4874	<b>TITLE</b> Water Services Technician
<b>SIGNATURE</b> N/A	<b>DATE</b> 8/26/2015	

## Mechanical Integrity Test Casing or Annulus Pressure Mechanical Integrity Test

U.S. Environmental Protection Agency  
Underground Injection Control Program  
999 18<sup>th</sup> Street, Suite 500 Denver, CO 80202-2466

EPA Witness: \_\_\_\_\_ Date: 8/25/15  
 Test conducted by: Dale Giles  
 Others present: \_\_\_\_\_

Well Name: <u>Balcon Fed. 12-2248-1</u>	Type: ER SWD	Status: AC TA UC
Field: <u>Monument Butte</u>		
Location: <u>S1/4NW Sec: 22 T 8 N (S) R 17 (E) W</u> County: <u>Duchesne</u> State: <u>UT</u>		
Operator: <u>Newfield production co.</u>		
Last MIT: <u>1/1</u>	Maximum Allowable Pressure: <u>1504</u>	PSIG

Is this a regularly scheduled test?  Yes  No  
 Initial test for permit?  Yes  No  
 Test after well rework?  Yes  No  
 Well injecting during test?  Yes  No If Yes, rate: \_\_\_\_\_ bpd

Pre-test casing/tubing annulus pressure: 0 psig

MIT DATA TABLE	Test #1	Test #2	Test #3
<b>TUBING</b>	<b>PRESSURE</b>		
Initial Pressure	<u>314</u> psig	psig	psig
End of test pressure	<u>314</u> psig	psig	psig
<b>CASING / TUBING</b>	<b>ANNULUS PRESSURE</b>		
0 minutes	<u>1125</u> psig	psig	psig
5 minutes	<u>1127</u> psig	psig	psig
10 minutes	<u>1127</u> psig	psig	psig
15 minutes	<u>1126</u> psig	psig	psig
20 minutes	<u>1126</u> psig	psig	psig
25 minutes	<u>1126</u> psig	psig	psig
30 minutes	<u>1126</u> psig	psig	psig
_____ minutes	psig	psig	psig
_____ minutes	psig	psig	psig
<b>RESULT</b>	<input checked="" type="checkbox"/> Pass <input type="checkbox"/> Fail	<input type="checkbox"/> Pass <input type="checkbox"/> Fail	<input type="checkbox"/> Pass <input type="checkbox"/> Fail

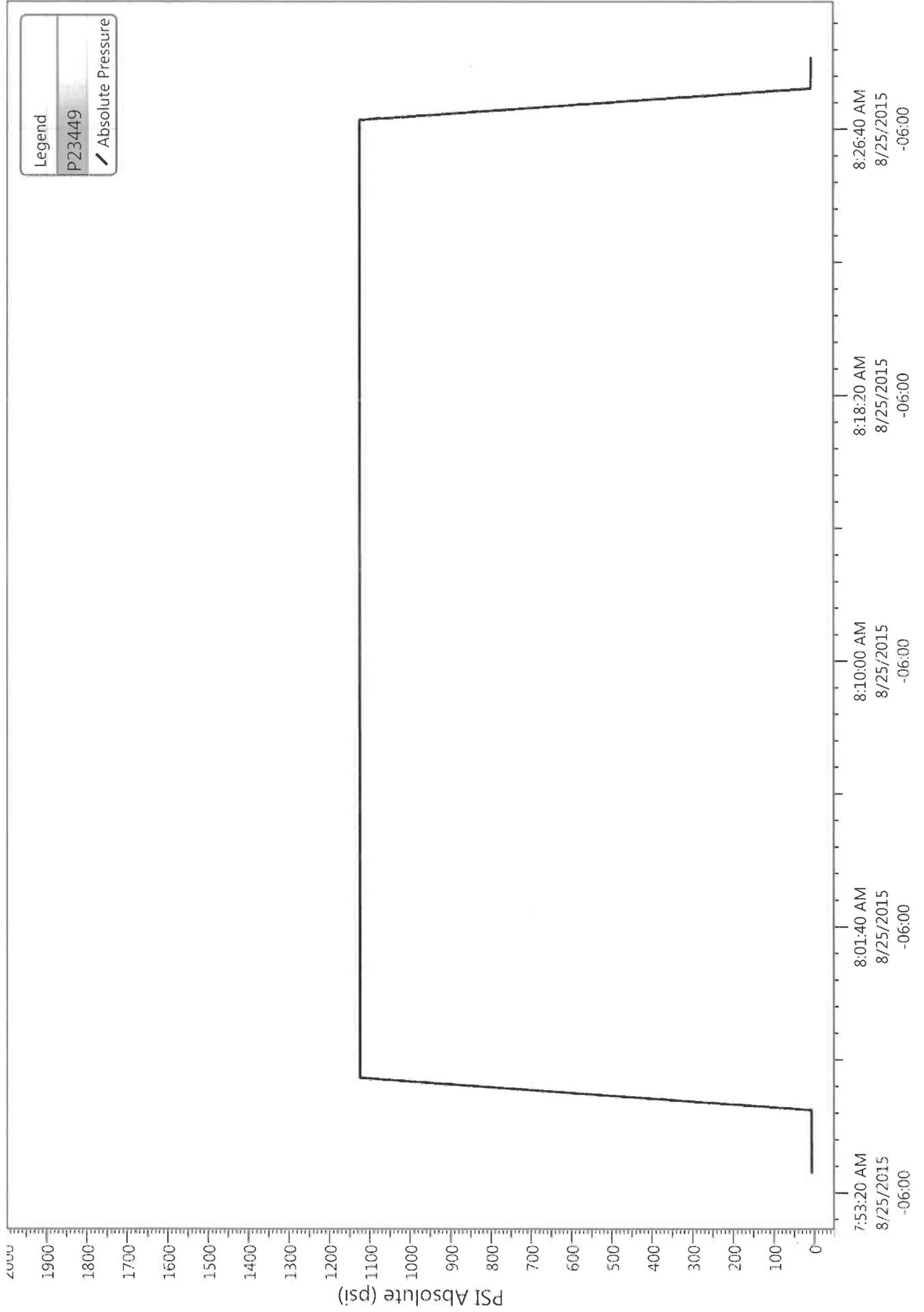
Does the annulus pressure build back up after the test?  Yes  No

### MECHANICAL INTEGRITY PRESSURE TEST

Additional comments for mechanical integrity pressure test, such as volume of fluid added to annulus and bled back at end of test, reason for failing test (casing head leak, tubing leak, other), etc.:

Signature of Witness: \_\_\_\_\_

Balcron Fed. 12 22y 8 17 (5 year mit)  
8/25/2015 7:52:48 AM



Spud Date: 12/18/94  
 Put on Production: 1/26/95  
 Put on Injection: 12/07/2000  
 GL: 5197' KB: 5207'

# Balcron Fed. #12-22Y-8-17

Initial Production: 17 BOPD,  
 NM MCFD, 0 BWPD

## Injection Wellbore Diagram

### SURFACE CASING

CSG SIZE: 8-5/8"  
 GRADE: J-55  
 WEIGHT: 24#  
 LENGTH: 8 jts (394.85')  
 DEPTH LANDED: 404.88' KB  
 HOLE SIZE: 12-1/4"  
 CEMENT DATA: 250 sxs Class "G" cement, est. 15 bbls cement to surface.

### PRODUCTION CASING

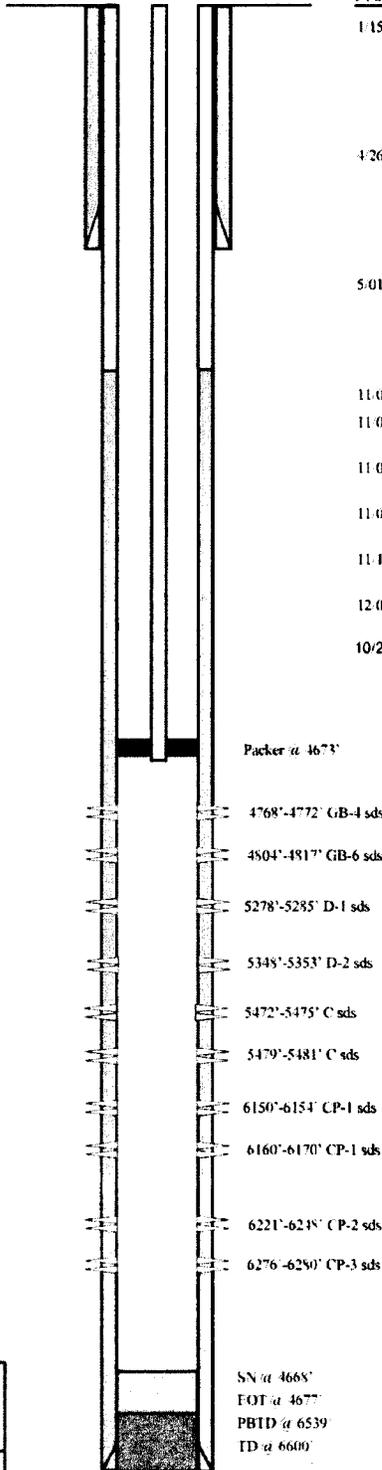
CSG SIZE: 5-1/2"  
 GRADE: J-55  
 WEIGHT: 15.5#  
 LENGTH: 156 jts (6575.52')  
 DEPTH LANDED: 6584.52' KB  
 HOLE SIZE: 7-7/8"  
 CEMENT DATA: 130 sxs Super "G" & 480 sxs 50.50 POZ  
 CEMENT TOP AT: 2983' per CBL

### TUBING

SIZE GRADE-WT.: 2-7/8" / J-55 - 6.5#  
 NO. OF JOINTS: 151 jts (4638.94')  
 SEATING NIPPLE: 2-7/8" (1.10')  
 SN LANDED AT: 4668.94' KB  
 PACKER: 4673.24' KB  
 TOTAL STRING LENGTH: FOI @ 4677.36' KB

### FRAC JOB

1/15/95	6221'-6248'	<b>Frac CP sand as follows:</b> 80,040# 20/40 sand + 87,580# 16/30 sand in 1252 bbls Viking I-35 fluid. Treated @ avg press of 1900 psi w/avg rate of 32 BPM. ISIP 2000 psi. Calc. flush: 6221 gal. Actual flush: 6216 gal.
4/26/95	5348'-5481'	<b>Frac zone sand as follows:</b> 26,920# 20/40 sand + 38,000# 16/30 sand in 473 bbls Viking I-35 fluid. Treated @ avg press of 2200 psi w/avg rate of 33 BPM. ISIP 1650 psi. Calc. flush: 5348 gal. Actual flush: 5334 gal.
5/01/95	4804'-4817'	<b>Frac zone sand as follows:</b> 80,400# 16/30 sand in 559 bbls Viking I-35 fluid. Treated @ avg press of 1800 psi w/avg rate of 30 BPM. ISIP 1900 psi. Calc. flush: 4804 gal. Actual flush: 4704 gal.
11/09/00		Break CP3 w/ 35 bbl water.
11/09/00		Break CP1 w/ 2 bbl water. Rate: 2 BPM @ 1300 psi.
11/09/00		Try to break D1 w/ 4 bbl water. Rate: 1/8 BPM @ 4500 psi. Would'n't break.
11/09/00		Break GB4 w/ 2 bbl water. Rate: 2 BPM @ 1500 psi.
11/10/00		Pump 10 hrs + 6 bbl acid @ 22 lvs into GB4 & D1 zones. Rate: 1/5 - 1/4 BPM.
12/07/00		Put on injection.
10/27/05		5 Year MIT Completed.



### PERFORATION RECORD

Date	Depth Range	Tool	Holes
1/17/95	6221'-6248'	2 JSPF	54 holes
4/26/95	5479'-5481'	1 JSPF	03 holes
4/26/95	5472'-5475'	1 JSPF	04 holes
4/26/95	5348'-5353'	1 JSPF	07 holes
4/25/95	4804'-4817'	4 JSPF	52 holes
11/09/00	6276'-6280'	4 JSPF	16 holes
11/09/00	6160'-6170'	4 JSPF	40 holes
11/09/00	6150'-6154'	4 JSPF	16 holes
11/09/00	5278'-5285'	4 JSPF	28 holes
11/09/00	4768'-4772'	4 JSPF	16 holes

**NEWFIELD**

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**Balcron Fed. #12-22y-8-17**  
 2105' FNL & 660' FWL  
 SWNW Section 22-T8S-R17E  
 Duchesne Co, Utah  
 API #43-013-31476; Lease #U-66191