Form 3160-3
(November 1983)
(formerly 9-331C)

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 1004-0136
Expires August 31, 1985

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

5. LEASE DESIGNATION AND SERIAL NO.: U-64379

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

7. UNIT AGREEMENT NAME: n/a

8. FARM OR LEASE NAME: Balcron Federal

9. WELL NO.: #41-21Y

10. FIELD AND POOL, OR WILDCAT: ~~Monument Butte~~ Castle Peak/Green River

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: Sec. 21, T9S, R16E

12. COUNTY OR PARISH: Duchesne

13. STATE: UTAH

1a. TYPE OF WORK: DRILL ☒ DEEPEN ☐ PLUG BACK ☐

b. TYPE OF WELL: OIL WELL ☒ GAS WELL ☐ OTHER SINGLE ZONE ☐ MULTIPLE ZONE ☐

CONFIDENTIAL

2. NAME OF OPERATOR: EQUITABLE RESOURCES ENERGY COMPANY

3. ADDRESS OF OPERATOR: P.O. Box 21017; Billings, MT 59104 (Balcron Oil Division)

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
At surface: NE NE Section 21, T9S, R16E 970.2' FNL, 893.8' FEL
At proposed prod. zone:

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*: Approximately 14 miles SW of Myton, Utah

16. 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: 6,000'

20. ROTARY OR CABLE TOOLS: Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.): GL 5953.5'

22. APPROX. DATE WORK WILL START*: June 1, 1993

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
See attached for details.				

RECEIVED
MAY 20 1993
DIVISION OF OIL, GAS & MINING

EXHIBITS ATTACHED

"A" PROPOSED DRILLING PROGRAM
"B" PROPOSED SURFACE USE PROGRAM
"C" GEOLOGIC PROGNOSIS
"D" DRILLING PROGRAM/CASING DESIGN
"E" EVIDENCE OF BOND COVERAGE
"F" ARCHEOLOGY REPORT
"G" SURVEY PLAT
"H" BOPE SCHEMATIC
"I" RIG LAYOUT
"J" EXISTING ROADS (Map A)
"K" PLANNED ACCESS (Map B)
"L" EXISTING WELLS (Map C)
"M" CUT & FILL DIAGRAM

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
Bobbie Schuman
TITLE Coordinator of Environmental and Regulatory Affairs
DATE May 17, 1993

(This space for Federal or State office use)

PERMIT NO. 43-013-31390
APPROVAL DATE

APPROVED BY
TITLE
CONDITIONS OF APPROVAL, IF ANY:

~~APPROVED BY THE STATE OF UTAH DIVISION OF OIL, GAS, AND MINING~~
DATE: 6/16/93
BY:
WELL SPACING: ~~R649-3-3~~ Exception

*See Instructions On Reverse Side

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.

FORM 3

CONFIDENTIAL

STATE OF UTAH
DIVISION OF OIL, GAS AND MINING

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

5. Lease Designation and Serial No.: Federal # U-64379

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

7. Unit Agreement Name: n/a

8. Farm or Lease Name: Balcron Federal

9. Well No.: #41-21Y

10. Field and Pool, or Wildcat: Monument Butte/Green River

11. QQ, Sec., T., R., M., or Blk. and Survey or Area: NE NE Sec. 21, T9S, R16E

12. County or Parrish: Duchesne

13. State: UTAH

1a. Type of Work: DRILL [X] DEEPEN [ ] PLUG BACK [ ]

b. Type of Well: Oil Well [X] Gas Well [ ] Other Single Zone [ ] Multiple Zone [ ]

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

3. Address of Operator: P.O. Box 21017; Billings, MT 59104

4. Location of Well (Report location clearly and in accordance with any State requirements.*)
At surface: NE NE Sec. 21, T9S, R16E 970.2' FNL, 893.8' FEL
At proposed prod. zone

RECEIVED APR 26 1993 DIVISION OF OIL, GAS & MINING

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

15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drlg. 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: 6,000'

20. Rotary or cable tools: Rotary

21. Elevations (Show whether DF, RT, GR, etc.): GL 5953.5'

22. Approx. date work will start*: June 1, 1993

23. PROPOSED CASING AND CEMENTING PROGRAM

Size of Hole	Size of Casing	Weight per Foot	Setting Depth	Quantity of Cement
See attached				

Operator plans to drill well in accordance with attached Federal Application for Permit to Drill.

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

Signed: Bobbie Schuman (Bobbie Schuman) Title: Coordinator of Environmental and Regulatory Affairs Date: May 17, 1993

(This space for Federal or State office use)

API NO. ..... Approval Date .....

Approved by ..... Title ..... Date .....

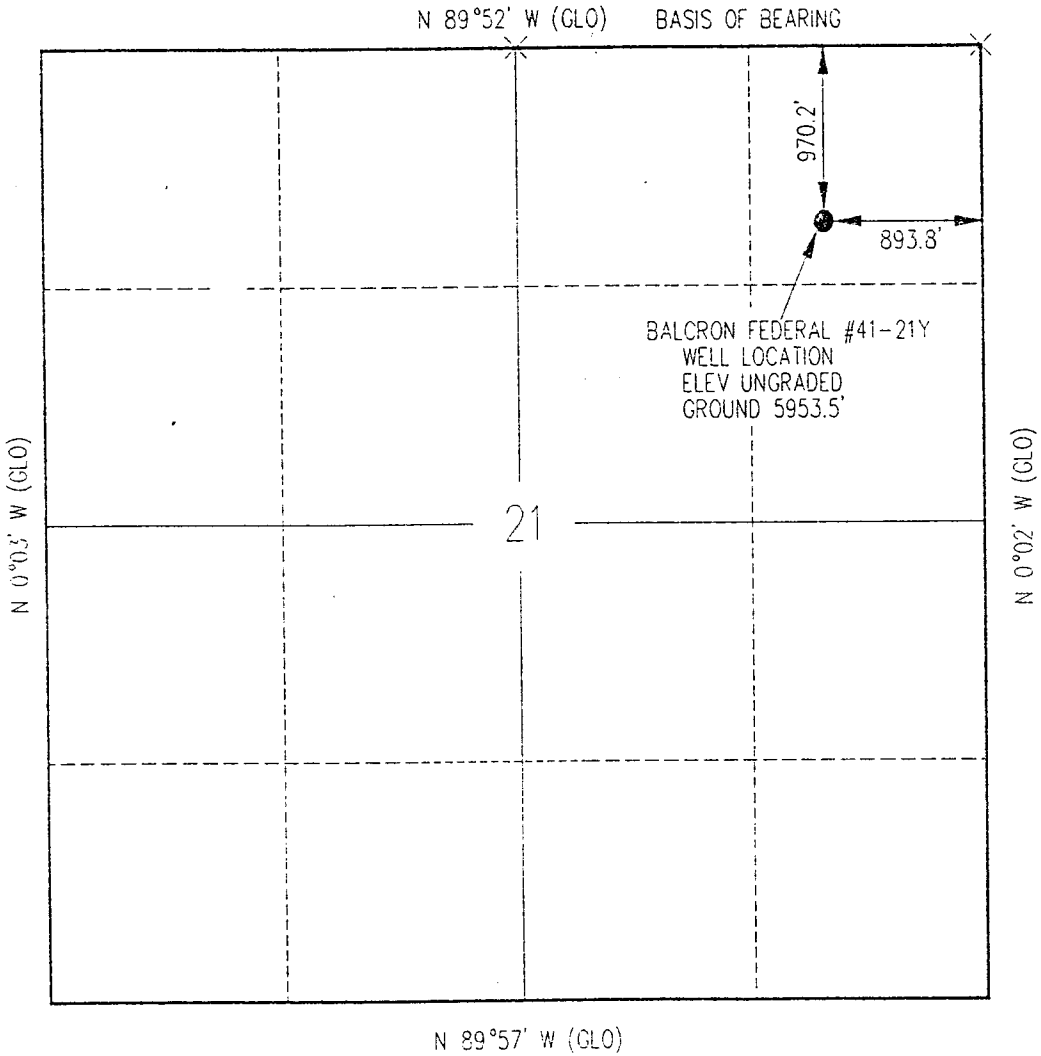
Conditions of approval, if any:

*See Instructions On Reverse Side

(3/89)

EXHIBIT "G"

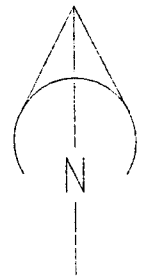
T9S, R16E, S.L.B. & M.



X = SECTION CORNERS LOCATED
BASIS OF BEARINGS; G.L.O. PLAT 1911
BASIS OF ELEV; U.S.G.S. 7-1/2 min QUAD (MYTON SE)

EQUITABLE RESOURCES ENERGY CO.

WELL LOCATION, BALCRON FEDERAL #41-21Y, LOCATED AS SHOWN IN THE NE 1/4 NE 1/4 OF SECTION 21, T9S, R16E, 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.

REGISTERED LAND SURVEYOR
NO. 3154
STEWART
STATE OF UTAH

REGISTERED LAND SURVEYOR
REGISTRATION No. 3154
STATE OF UTAH

TRI STATE LAND SURVEYING & CONSULTING 38 EAST 100 NORTH, VERNAL, UTAH 84078 (801) 781-2501	
SCALE: 1" = 1000'	SURVEYED BY: SS JC
DATE: 4/28/93	WEATHER: CLEAR & WARM
NOTES:	FILE # #41-21Y

EQUITABLE RESOURCES ENERGY COMPANY
Balcron Oil Division
Balcron Federal #41-21Y
NE NE Section 21-T9S-R16E
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 260'. 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 260′ and cemented to surface.

b. All potentially productive hydrocarbon zones will be isolated.

c. Casing designs are based on factors of burst: 1.25, 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 two attachments:

Drilling Program/Casing Design (EXHIBIT "D")
Geologic Prognosis (EXHIBIT "C")

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 Green 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 as soon as the BLM approves this APD.

b. These drilling operations should be completed within 12 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.

Multi-Point Surface Use and Operations Plan

EQUITABLE RESOURCES ENERGY COMPANY
BALCRON OIL DIVISION
BALCRON FEDERAL #41-21Y
NE NE SECTION 21, T9S, R16E
DUCHESNE COUNTY, UTAH

1. Existing Roads: Refer to Maps "A" & "B" (shown in RED)

A. The proposed well site is staked and two reference stakes are present. 240'& 340'South. .

B. The Federal #41-21Y is located 14 miles Southwest of Myton Utah in the NE1/4 NE1/4 Section 21, T9S, R16E, SLB&M, Duchesne County, Utah. To reach the 41-21Y, proceed West from Myton, Utah along U.S. Highway 40 for 1.6 miles to the junction of this highway and Sand Wash road; Proceed South along the Sand Wash road approximately 10.0 miles to an intersection with the Momnument Butte gas plant road, turn right and continue 7.8 miles to sign at intersection with jeep trail; turn left and proceed 1.0 miles to proposed access road sign. Follow flags 0.6 mile to location.

C. Access roads - refer to Maps "A" and "B".

D. Access roads within a one-mile radius - refer to map "B".

E. The existing roads will be maintained in the same or better condition as existed prior to the commencement of operations and said maintenance will continue until final abandonment and reclamation of the well location.

2. Planned Access Roads: Refer to Map "B" (shown in GREEN)

Approximately 0.6 mile of new road construction and 1.0 mile road upgrade will be required for access to the proposed well location.

A. Width - maximum 30-foot overall right-of-way with an 18-foot road running surface, crowned & ditched and/or sloped and dipped.

B. Construction standard - the access road will be constructed so as to conform to the standards outlined in the Bureau of Land Management and Forest Service publication: Surface Operating Standards for Oil and Gas Exploration and Development. (1989)

The road will be constructed to meet the standards of the anticipated traffic flow and all-weather requirements. Construction will include ditching, draining, crowning, and capping or sloping and dipping the roadbed as necessary to provide a well constructed and safe road. Prior to construction/upgrading, the roadway shall be cleared of any snow cover and allowed to dry completely. Traveling off of the thirty (30) foot right-of-way will not be allowed.

Road drainage crossings shall be of the typical dry creek drainage crossing type. Crossing shall be designed so they will not cause siltation or the accumulation of debris in the drainage crossing nor shall the drainages be blocked by the roadbed. Erosion of drainage ditches by runoff water shall be prevented by diverting water off at frequent intervals by means of cutouts.

Upgrading shall not be allowed during muddy conditions.

Should mud holes develop, they shall be filled in and detours around them avoided.

C. Maximum grade - 4%

D. Turnouts - no turnouts will be required on this access road.

E. Drainage design - the access road will be crowned and ditched or sloped and dipped, and water turnouts installed as necessary to provide for proper drainage along the access road route.

F. Culverts, cuts and fills - no culverts will be required. There are no major cuts and/or fills on/along the proposed access road route.

G. Surface materials - all construction materials will be native material taken from onsite.

H. Gates, cattleguards or fence cuts - none required.

I. Road maintenance - during both the drilling and production phase of operations, the road surface and shoulders will be kept in a safe and useable condition and

will be maintained in accordance with the original construction standards. All drainage ditches and culverts will be kept clear and free-flowing, and will also be maintained in accordance with the original construction standards. The access road right-of-way will be kept free of trash during operations.

J. The proposed access road has been centerline flagged.

K. If a right-of-way is required please consider this APD the application for said right-of-way.

3. Location of Existing Wells Within a One-Mile Radius:

Please Refer to Map "C"

A. Water wells - none known.
B. Abandoned wells - see Map "C"
C. Temporarily abandoned wells - none known.
D. Disposal wells - none known.
E. Drilling wells - none known.
F. Producing wells - see Map "C".
G. Shut-in wells - none known.
H. Injection wells - none known.
I. Monitoring wells - none known.

4. Location of Existing and/or Proposed Facilities Owned by Equitable Resources Energy Company Within a One-Mile Radius:

A. Existing

1. Tank batteries - see Map "C".
2. Production facilities - see Map "C".
3. Oil gathering lines - none.
4. Gas gathering lines - see Map "C".

B. New Facilities Contemplated

1. All production facilities will be located on the disturbed portion of the well pad and at a minimum of twenty-five (25) feet from the toe of the backslope or toe of the fill slope.

2. The production facilities will consist primarily of a pumping unit, Two tanks and an emergency pit. A diagram showing the proposed production facility layout will be submitted to the Authorized Officer via "Sundry Notice" (Form 3160-5) for approval of subsequent installation operations.

3. Production facilities will be accommodated on the

existing well pad. Construction materials required for installation of the production facilities will be obtained from the site; any additional materials required will be purchased from a local supplier having a permitted (private) source of materials within the area.

A dike will be constructed completely around those production facilities which contain fluids (i.e. production tanks, produced water tanks and/or heater treater). These dikes will be constructed of compacted subsoil, be impervious, hold 100% of the capacity of the largest tank, and be independent of the back cut.

4. All permanent (onsite for six months or longer) above the ground structures constructed or installed including pumping units) will be painted Desert Brown. All production facilities will be painted within six (6) months of installation. Facilities required to comply with Occupational Health and Safety Act Rules and Regulations will be excluded from this painting requirement.

C. The production (emergency) pit will be 12'x12' and will be fenced. Said fence will be maintained in good condition.

D. During drilling and subsequent operations, all equipment and vehicles will be confined to the access road right-of-way and any additional areas as specified in the approved Application for Permit to Drill.

E. Reclamation of disturbed areas no longer needed for operation will accomplished by grading, leveling and seeding as recommended by the Bureau of Land Management.

For Pipeline:

F. Any proposed pipelines will be submitted to the authorized officer Via Sundry Notice for approval of subsequent operations.

G. Equitable Resources Energy Company shall be responsible for road maintenance from the beginning to completion of operations.

5. Location and Type of Water Supply

A. Water to be used for the drilling of these wells will be

hauled by truck over the roads described in item #1 and item #2, from a well owned by Owen Dale Anderson of Vernal Utah.

B. No water well will be drilled on this location.

6. Source of Construction Materials

A. No construction materials are needed for drilling operations. In the event of production, the small amount of gravel needed for facilities will be hauled in by truck from a local gravel pit over existing access roads to the area. No special access other than for drilling operations and pipeline construction is needed.

B. All access roads crossing Federal land are described under item #2, and shown on Map #A.

All construction material for these location sites and access roads shall be borrowed material accumulated during the construction of the location sites and access roads. No additional construction material from other sources is anticipated at this time, if in the future it is required the appropriate actions will be taken to acquire it from private sources.

C. All surface disturbance area is on B.L.M. lands.

D. There are no trees on this location.

7. Methods of Handling Waste Materials:

A. Cuttings - the cuttings will be deposited in the reserve pit.

B. Drilling fluids - including salts and chemicals will be contained in the reserve pit. Upon termination of drilling and completion operations, the liquid contents of the reserve pit will be removed and disposed of at an approved waste disposal facility within ninety (90) days after termination of drilling and completion activities.

In the event adverse weather conditions prevent removal of the fluids from the reserve pit within this time period, an extension may be granted by the Authorized Officer upon receipt of a written request from Equitable Resources Energy Company.

The reserve pit will be constructed so as not to leak, break, or allow discharge. The reserve pit will be lined with a 12 mil plastic reinforced liner.

C. Produced fluids - liquid hydrocarbons produced during completion operations will be placed in test tanks on the location. Produced waste water will be confined to a lined pit (reserve pit) or storage tank for a period not to exceed ninety (90) days after initial production. During the ninety (90) day period, in accordance with NTL-2B, an application for approval of a permanent disposal method and location, along with the required water analysis, shall be submitted for the Authorized Officer's approval. Failure to file an application within the time frame allowed will be considered an incidence of noncompliance.

Any spills of oil, gas, salt water or other noxious fluids will be immediately cleaned up and removed to an approved disposal site.

D. Sewage - self-contained, chemical toilets will be provided for human waste disposal. Upon completion of operations, or as needed, the toilet holding tanks will be pumped and the contents thereof disposed of in the nearest, approved, sewage disposal facility.

E. Garbage and other waste material - garbage, trash and other waste materials will be collected in a portable, self-contained and fully-enclosed trash cage during drilling and completion operations. Upon completion of operations (or as needed) the accumulated trash will be disposed of at an authorized sanitary landfill. No trash will be burned on location or placed in the reserve pit.

F. Immediately after removal of the drilling rig, all debris and other waste materials not contained in the trash cage will be cleaned up and removed from the well location. No adverse materials will be left on the location. Any open pits will be fenced during the drilling operation and the fencing will be maintained until such time as the pits are backfilled.

G. The reserve and/or production pit will be constructed on the existing location and will not be located in natural drainages where a flood hazard exists or surface runoff will destroy or damage the pit walls. All pits will be constructed so as not to leak, break, or allow the discharge of liquids therefrom.

8. Ancillary Facilities:

None anticipated.

9. Wellsite Layout:

A. Plat #1 shows the drill site layout as staked. Cross sections have been drafted to visualize the planned cuts and fills across the location. An average minimum of six (6) inches of topsoil will be stripped from the location (including areas of cut, fill, and/or subsoil storage) and stockpiled for future reclamation of the well site. Refer to Figure #1 for the location of the topsoil and subsoil stockpiles. Corners #2, #6 and #8 will be rounded to avoid excess fill.

B. Plat #2 is a diagram showing the rig layout. No permanent living facilities are planned. There will be three (3) trailers on location during drilling operation.

C. A diagram showing the proposed production facility layout will be submitted to the Authorized Officer via Sundry Notice (Form 3160-5) for approval of subsequent operations.

D. The reserve pit will be constructed so as to be capable of holding 12,000 bbls. of fluid. The flare pit will be located downwind of the prevailing wind between corner #5 and corner #6. Access will be from the SW near corner #3.

The reserve pit will be lined with a 12 mil plastic liner, it will be torn and perforated after the pit dries and before backfilling of the reserve pit.

E. Prior to the commencement of drilling operations, the reserve pit will be fenced on three (3) sides using 39-inch net wire with one strand of barbed wire on top of the net wire. The net wire will be no more than two inches above the ground. the barbed wire will be three inches above the net wire. total height of the fence will be at least 42-inches.

1. Corner posts shall be cemented and/or braced in such a manner to keep the fence tight at all times.

2. Standard steel, wood, or pipe posts shall be used between the corner braces. The maximum distance between any two (2) posts shall be no greater than sixteen (16) feet.

3. All wire shall be stretched, by using a stretching device, before it is attached to the corner posts.

The fourth side of the reserve pit will be fenced immediately upon removal of the drilling rig and the

fencing will be maintained until the pit is backfilled.

F. Any hydrocarbons on the pit will be removed from the pit as soon as possible after drilling operations are completed.

10. Plans for Reclamation of the Surface:

The B.L.M. will be contacted prior to commencement of any reclamation operations.

A. Production

1. Immediately upon well completion, the well location and surrounding area(s) will be cleared of all debris, materials, trash and junk not required for production.

2. Immediately upon well completion, any hydrocarbons on the pit shall be removed in accordance with 43 CFR 3162.7-1.

3. If a plastic or nylon reinforced pit liner is used, it shall be torn and perforated before backfilling of the reserve pit.

4. Before any dirt work to restore the location takes place, the reserve pit will be completely dry and all cans, barrels, pipe, etc. will be removed.

   Other waste and spoil materials will be disposed of immediately upon completion of drilling and workover activities.

5. The reserve pit and that portion of the location and access road not needed for production facilities/operations will be reclaimed within one hundred twenty (120) days from the date of well completion, weather permitting.

6. If the well is a producer, Equitable Resources Energy Company will, upgrade and maintain access roads as necessary to prevent soil erosion, and accommodate year round traffic. Reshape areas unnecessary to operations, distribute topsoil, disk and seed all disturbed areas outside the work area according to the recommended seed mixture. Perennial vegetation must be established. Additional work shall be required in case of seeding failures, etc.

   If the well is abandoned/dry hole, Equitable Resources Energy Company will, restore the access road and

location to approximately the original contours. During reclamation of the site, push the fill material into cuts and up over the backslope. Leave no depressions that will trap water or form ponds. Distribute topsoil evenly over the location, and seed according to the above seed mixture. The access road and location shall be ripped or dished prior to seeding. Perennial vegetation must be established. Additional work shall be required in case of seeding failures, etc.

Seedbed will be prepared by disking, then roller packing following the natural contours. Seed will be drilled on contours at a depth no greater than one-half inch (1/2"). In areas that cannot be drilled, seed will be broadcast at double the seeding rate and harrowed into soil. Certified seed will be used whenever available.

Fall seeding will be completed after September 1 and prior to prolonged ground frost. Spring seeding, to be effective, will be completed after the frost has left the ground and prior to May 15th.

7. Upon completion of backfilling, leveling and recontouring, the stockpiled topsoil will be evenly spread over the reclaimed area(s). Prior to reseeding, all disturbed surfaces will be scarified and left with a rough surface. No depressions will be left that would trap water and form ponds. All disturbed surfaces will be reseeded with the following seed mixture:

Pure Live Seed (PLS) lbs./acre	Seed Mix
1	Forage Kochia (Kochia prostrata)
3	Ephriam Crested Wheatgrass (Agropyron cristatum Ephriam)
2	Russian Wildrye (Elymus junceus)
2	Fourwing Saltbush (Atriplex canescens)
3	Needle-and-Thread Grass (Stipa comata)
1	Yellow Sweetclover (Melilotus officinalis)

Seed will be drilled on the contour to a approximate depth of one-half (1/2) inch. All seeding will be conducted after September 1 and prior to ground frost. Spring seeding will be done after the frost leaves the

ground and no later than May 15. If the seeding is unsuccessful, Equitable Resources may be required to make subsequent seedings.

B. Dry Hole/Abandoned Location

1. On lands administered by the Bureau of Land Management, abandoned well sites, roads, or other disturbed areas will be restored to near their original condition. This procedure will include:

   (c) ensuring revegetation of the disturbed areas to the specifications of the Bureau of Land Management at the time of abandonment.

2. All disturbed surfaces will be recontoured to the approximate natural contours and reseeded according to BLM specifications. Reclamation of the well pad and access road will be performed as soon as practical after final abandonment and reseeding operations will be performed in the fall or spring following completion of reclamation operations.

11. Surface Ownership:

The well site and proposed access road are situated on surface lands administered by

Bureau of Land Management
Vernal District Office
Vernal, Utah

12. Other Information:

A. Topographic and geologic features of the area (reference Topographic Map #A) are:

The proposed drill site is located in the Monument Butte oil field, which lies in a large basin formed by the Uinta Mountains to the North and the Bookcliff Mountains to the South. The site is located approximately 15 miles Northwest of the Green River,which is the major drainage for this area, and approximately 12 miles South of Myton Utah.

This basin floor is interlaced with numerous canyons and ridges formed by the non-perennial streams of the area. The sides of these canyons are steep and ledges formed in sandstone, conglomerate deposits and shale are common in this area.

The geologic structures that are visible in the area are of the Uinta formation (Eocene Epoch) tertiary period and the cobblestone and younger alluvial deposits from the Quaternary period.

The soils in the semi-arid area of the Williams Fork Formation (Upper Cretaceous) and Wasatch Formation (Eocene) consist of light brownish gray clay (OL) to sand soil (SM-ML) type with poorly graded gravels.

Outcrops of sandstone ledges, conglomerate deposits and shale are common in this area.

The topsoils in the area range from a sandy clay (SM-ML) type soil to a clayey (OL) soil.

The majority of the numerous washes and draws in the area are of a non-perennial nature flowing during the early spring run-off and heavy rain storms of long duration which are rare as the normal annual rainfall in the area is only 8".

The flora of the area includes sagebrush, mountain mahogany, serviceberry, rabbit brush, greasewood, four-wing saltbush, Gambel scrub oak, willow, tamarack, shadscale, Spanish bayonet, indian rice grass, cheatgrass, wheatgrass, curly grass, crested wheatgrass, sweet clover, gum weed, foxtail, mustard, Canadian thistle, Russian thistle, Kochia, sunflowers and cacti.

The fauna of the area includes cattle, horses, elk, deer, coyotes, rabbits, rodents, lizards, bull snakes, rattle snakes, water snakes and horned toads. Birds of the area are ground sparrows, bluejays, bluebirds, magpies, ravens, rapters, morning doves, swallows, nighthawks, hummingbirds, and chukar.

B. The surface ownership is Federal. The surface use is grazing and petroleum production.

C. 1. The closest live water is the Green River which is approximately 15 miles Southwest of the proposed site.

2. There are no occupied dwellings in the immediate area

3. An archaeological report will be forwarded upon completion.

4. There are no reported restrictions or reservations noted on the oil and gas lease.

13. Lessee's or Operator's Representative:

Balcron Oil
a division of Equitable Resources Energy Company
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, Home (303)824-3323

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.

May 17, 1993
Date

Bobbie Schuman

Bobbie Schuman
Coordinator of Enviromental and Regulatory Affairs
BALCRON OIL division of Equitable Resources Energy Company

EXHIBIT "C"

BALCRON OIL COMPANY

Geologic Prognosis

EXPLORATORY ____
DEVELOPMENT X

WELL NAME: Balcron Federal #41-21Y
PROSPECT/FIELD: Monument Butte
LOCATION: NENE 970' FNL, 894' FEL
SECTION 21 TOWNSHIP 9S RANGE 16E
COUNTY: Duchesne STATE: UT GL(Ung): 5953.5' EST KB: 5966 TOTAL DEPTH 6000

FORM. TOPS:

Formation	Prognosis Depth	Prognosis Datum	Sample Top Depth	Sample Top Datum	Cntl Wl. Datum	Formation	Prognosis Depth	Prognosis Datum	Sample Top Depth	Sample Top Datum	Cntl Datum
KB		5966			5941						
Uinta	Surf.										
Green River	1573	4593			4345						
2nd GG	3809	2157			2109						
Douglas Crk.	4581	1385			1337						
R-1	4605	1361			1313						
R-2	4699	1267			1219						
G-4	5036	930			882						
Carb. Mkr.	5461	505			457						
B-1	5513	453			405						
TD	6000										

CONTROL WELL: Alta Energy State #16-1 Qtr/Qtr SWSE Section 16 Township 9S Range 16E

SAMPLES:

50'	samples,	1500	to	3800	
10'	samples,	3800	to	TD	
'	samples,		to		
'	samples,		to		
'	samples,		to		
'	samples,		to		

Send Samples To:
Utah Geological Sample Library
1 Dry Cut

LOGS:

DLL/MSFL	from	Surf.Csg.	to	TD
LDT/CNL	from	3500	to	TD
	from		to	
	from		to	
	from		to	
	from		to	
	from		to	
	from		to	

CORES:
None

DRILL STEM TESTS:
None

MUD LOGGER/HOT WIRE:
Required: (Yes/No) Yes
Type: Two Man

WELLSITE GEOLOGIST:
From 1500' to TD
Name: Tele. #: (____) ____
Address:

COMMENTS:

PREPARED BY: K. K. Reinschmidt, S. W. VanDelinder DATE:

Equitable Resources Energy Company
Balcron Oil Division

DRILLING PROGRAM

WELL NAME: Balcron Federal 41-21Y PROSPECT/FIELD: Monument Butte
LOCATION: NE NE Sec.21 Twn.9S Rge.16E
COUNTY: Duchesne STATE: Utah

TOTAL DEPTH: 6000

HOLE SIZE	INTERVAL
12 1/4"	0 to 260'
7 7/8"	260 to 6000'

CASING

STRING TYPE	INTERVAL FROM	INTERVAL TO	CASING SIZE	CASING WEIGHT	CASING GRADE
Surface Casing	0	260	8 5/8"	24 #/Ft	J-55
Production Casing	0	6000	5 1/2"	15.50#/Ft	J-55

(All Casing will be new, ST&C)

CEMENT PROGRAM

Surface	150 sacks 75% Class "G" 25% Poz with 2% CaCl and 1/4 #/Sk Flocele. (Cement will be circulated to surface.)
Production	250 sacks Thifty Lite and 400 sacks 50-50 Poz mix. (Top of cement will be 2000')

PRELIMINARY DRILLING FLUID PROGRAM

TYPE	FROM	TO	WEIGHT	PLAS. VIS	YIELD POINT
Air and air mist	0	260	N.A.	N.A.	N.A.
Air/Air Mist/KCl Water	260	T.D.	8.7-8.9	N.A.	N.A.

Drilling will be with air from surface to as deep as hole conditions allow. 2% KCl fluid will be used for the remainder of the hole.

COMMENTS

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

DMM/5/17/93

BALCRON OIL CO.

Operator: BALCRON OIL	**Well Name: Balcron Fed. 41-21Y**
Project ID:	**Location: Monument Butte, Utah**

Design Parameters:

Mud weight (8.90 ppg) : 0.462 psi/ft
Shut in surface pressure : 2174 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	6,000	5-1/2"	15.50	J-55	ST&C	6,000	4.825	

	Collapse Load (psi)	Collapse Strgth (psi)	Collapse S.F.	Burst Load (psi)	Min Int Yield Strgth (psi)	Burst S.F.	Tension Load (kips)	Tension Strgth (kips)	Tension S.F.
1	2774	4040	1.456	2774	4810	1.73	93.00	202	2.17 J

Prepared by : McCoskery, Billings, MT
Date : 05-17-1993
Remarks :

Minimum segment length for the 6,000 foot well is 1,500 feet.
The mud gradient and bottom hole pressures (for burst) are 0.462 psi/ft and 2,774 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 1990 pricing model. (Version 1.0G)

United States Department of the Interior

TAKE PRIDE IN AMERICA

BUREAU OF LAND MANAGEMENT
MONTANA STATE OFFICE
222 NORTH 32ND STREET
P.O. BOX 36800
BILLINGS, MONTANA 59107-6800

IN REPLY TO:

MTM 12619-A et al
BLM BOND NO. MT0576
(922.31)

April 25, 1989

N O T I C E

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

OIL AND GAS

CORPORATE MERGER RECOGNIZED
RIDER TO NATIONWIDE BOND ACCEPTED

Acceptable evidence has been filed in this office concerning the merger of Balcron Oil Company into Equitable Resources Energy Company, the surviving corporation. Information provided shows that Balcron Oil Company merged into Equitable Resources Energy Company, changing the former entity's name to Balcron Oil, a Division of Equitable Resources Energy Company. Please note that Divisions cannot hold leases, therefore, after consultation with Balcron Oil, this office is recognizing only the merger action.

A rider was filed on April 20, 1989, to be made a part of $150,000 Nationwide Oil and Gas Bond No. 5547188 (BLM Bond No. MT0576) with Balcron Oil Company as principal and Safeco Insurance Company of America as surety. By means of this rider, the surety consents to changing the name on the bond from Balcron Oil Company to Equitable Resources Energy Company. The rider is accepted effective April 20, 1989.

For our purposes, the merger is recognized effective April 20, 1989.

The oil and gas lease files and communitization agreement files identified on the enclosed Exhibit A have been noted as to the merger. Other lease interests will be transferred by assignments from Ballard & Cronoble to Equitable Resources Energy Company.

Cynthia L. Embretson, Chief
Fluids Adjudication Section

1 Enclosure
1-Exhibit A

cc: (w/encl.)
AFS, Denver (1)
All DMs (1 ea.)
RMO Section (1)
Regional Forester, Lakewood (2)
Regional Forester, Missoula (2)
Bureau of Reclamation (1)

BOND NO. 5547188

Form 3104-8
(July 1984)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

STATE, NATIONWIDE, OR NATIONAL PETROLEUM RESERVE IN ALASKA OIL AND GAS BOND

Act of February 25, 1920 (30 U.S.C. Sec. 181)
Act of August 7, 1947 (30 U.S.C. Sec. 351)
Department of the Interior Appropriations Act, Fiscal Year 1981 (P.L. 96-514)
Other Oil and Gas Leasing Authorities as Applicable

KNOW ALL MEN BY THESE PRESENTS, That we
BALCRON OIL COMPANY
of 1601 Lewis Avenue, Billings, MT 59104

as principal, and
SAFECO INSURANCE COMPANY OF AMERICA
of 111 Presidential Blvd., Suite 231, Bala Cynwyd, PA 19004

as surety, are held and firmly bound unto the United States of America in the sum of ONE HUNDRED FIFTY THOUSAND AND 00/100---------- dollars ($ 150,000.00), in lawful money of the United States, which sum may be increased or decreased by a rider hereto executed in the same manner as this bond, for the use and benefit of (1) the United States; (2) the owner of any of the land subject to the coverage of this bond, who has a statutory right to compensation in connection with a reservation of the oil and gas deposits to the United States; and (3) any lessee or permittee under a lease or permit issued by the United States prior to the issuance of an oil and gas lease for the same land subject to this bond, covering the use of the surface or the prospecting for, or development of, other mineral deposits in any portion of such land, to be paid to the United States. For such payment, well and truly to be made, we bind ourselves, and each of our heirs, executors, administrators, and successors, jointly and severally.

☐ The coverage of this bond shall extend to all of the principal's holdings of federal oil and gas leases in the United States, including Alaska, issued or acquired under the Acts cited in Schedule A.

☐ The coverage of this bond extends only to the principal's holdings of federal oil and gas leases issued or acquired under the Acts cited and in the States named in Schedule A and to any other State or States that may be named in a rider attached hereto by the lessor with the consent of the surety.

☐ The coverage of this bond extends only to the principal's holdings of federal oil and gas leases within the National Petroleum Reserve in Alaska.

SCHEDULE A

Mineral Leasing Act of February 25, 1920 (30 U.S.C. Sec. 181), Acquired Lands Leasing Act of August 7, 1947 (30 U.S.C. Sec. 351), and other oil and gas leasing authorities as applicable.

NAMES OF STATES

ALL STATES

The conditions of the foregoing obligations are such that, whereas the said principal has an interest in oil and gas leases issued under the Acts cited in this bond: (1) as lessee; (2) as the approved holder of operating rights in all or part of the lands covered by such leases under operating agreements with the lessees; or (3) as designated operator or agent under such leases pending approval of an assignment or operating agreement; and

WHEREAS the principal is authorized to drill for, mine, extract, remove, and dispose of oil and gas deposits in or under the lands covered by the leases, operating agreements or designations and is obligated to comply with certain covenants and agreements set forth in such instruments; and

WHEREAS the principal and surety agree that without notice to the surety the coverage of this bond, in addition to the present holdings of the principal, shall extend to and include:

SAFECO

SURETY RIDER

SAFECO INSURANCE COMPANY OF AMERICA
GENERAL INSURANCE COMPANY OF AMERICA
FIRST NATIONAL INSURANCE COMPANY OF AMERICA
HOME OFFICE: SAFECO PLAZA
SEATTLE, WASHINGTON 98185

To be attached to and form a part of

Type of Bond: Nationwide Oil and Gas Lease Bond

Bond No. 5547188 (BLM Bond No. MT0576)

dated effective 9/8/88 (MONTH, DAY, YEAR)

executed by BALCRON OIL COMPANY (PRINCIPAL), as Principal,

and by SAFECO INSURANCE COMPANY OF AMERICA (SURETY), as Surety,

in favor of UNITED STATES DEPARTMENT OF THE INTERIOR, BUREAU OF LAND MANAGEMENT (OBLIGEE).

In consideration of the mutual agreements herein contained the Principal and the Surety hereby consent to changing

The name of the Principal

From: BALCRON OIL COMPANY

To: EQUITABLE RESOURCES ENERGY COMPANY

Nothing herein contained shall vary, alter or extend any provision or condition of this bond except as herein expressly stated.

This rider is effective 1/1/89 (MONTH, DAY, YEAR)

Signed and Sealed 4/10/89 (MONTH, DAY, YEAR)

EQUITABLE RESOURCES ENERGY COMPANY
PRINCIPAL

By: _____
TITLE

SAFECO INSURANCE COMPANY OF AMERICA
SURETY

By: R. George Voinchet
ATTORNEY-IN-FACT

SAFECO

POWER OF ATTORNEY

SAFECO INSURANCE COMPANY OF AMERICA
GENERAL INSURANCE COMPANY OF AMERICA
HOME OFFICE: SAFECO PLAZA
SEATTLE, WASHINGTON 98185

EXHIBIT "E" Page 4 of 4

No. 3798

KNOW ALL BY THESE PRESENTS:

That SAFECO INSURANCE COMPANY OF AMERICA and GENERAL INSURANCE COMPANY OF AMERICA, each a Washington corporation, does each hereby appoint

----------THOMAS L. VEHAR; R. GEORGE VOINCHET, Pittsburgh, Pennsylvania----------

its true and lawful attorney(s)-in-fact, with full authority to execute on its behalf fidelity and surety bonds or undertakings and other documents of a similar character issued in the course of its business, and to bind the respective company thereby.

IN WITNESS WHEREOF, SAFECO INSURANCE COMPANY OF AMERICA and GENERAL INSURANCE COMPANY OF AMERICA have each executed and attested these presents

this 4th day of September, 19 87.

CERTIFICATE

Extract from the By-Laws of SAFECO INSURANCE COMPANY OF AMERICA and of GENERAL INSURANCE COMPANY OF AMERICA:

"Article V, Section 13. — FIDELITY AND SURETY BONDS . . . the President, any Vice President, the Secretary, and any Assistant Vice President appointed for that purpose by the officer in charge of surety operations, shall each have authority to appoint individuals as attorneys-in-fact or under other appropriate titles with authority to execute on behalf of the company fidelity and surety bonds and other documents of similar character issued by the company in the course of its business . . . On any instrument making or evidencing such appointment, the signatures may be affixed by facsimile. On any instrument conferring such authority or on any bond or undertaking of the company, the seal, or a facsimile thereof, may be impressed or affixed or in any other manner reproduced; provided, however, that the seal shall not be necessary to the validity of any such instrument or undertaking."

Extract from a Resolution of the Board of Directors of SAFECO INSURANCE COMPANY OF AMERICA and of GENERAL INSURANCE COMPANY OF AMERICA adopted July 28, 1970.

"On any certificate executed by the Secretary or an assistant secretary of the Company setting out,

(i) The provisions of Article V, Section 13 of the By-Laws, and

(ii) A copy of the power-of-attorney appointment, executed pursuant thereto, and

(iii) Certifying that said power-of-attorney appointment is in full force and effect,

the signature of the certifying officer may be by facsimile, and the seal of the Company may be a facsimile thereof."

I, Boh A. Dickey, Secretary of SAFECO INSURANCE COMPANY OF AMERICA and of GENERAL INSURANCE COMPANY OF AMERICA, do hereby certify that the foregoing extracts of the By-Laws and of a Resolution of the Board of Directors of these corporations, and of a Power of Attorney issued pursuant thereto, are true and correct, and that both the By-Laws, the Resolution and the Power of Attorney are still in full force and effect.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the facsimile seal of said corporation

this 10th day of April, 19 89.

EXHIBIT "F"

ARCHEOLOGICAL - ENVIRONMENTAL RESEARCH CORPORATION

P. O. Box 853 Bountiful, Utah 84011-0853
Tel: (801) 292-7061, 292-9668

May 6, 1993

Subject: CULTURAL RESOURCE EVALUATION OF NINE PROPOSED WELL LOCATIONS IN THE CASTLE PEAK DRAW LOCALITY OF DUCHESNE AND UINTAH COUNTIES, UTAH

Project: Balcron Oil Company -- 1993 Development Program for the Monument Butte Lease Area Units: 41-18, 14-8, 21-13Y, 21-25Y, 41-21Y, 21-9, 44-14Y, 24-3Y, and 22-10Y

Project No.: BLCR-93-1

Permit No.: Dept. of Interior -- UT-92-54937

Utah State No.: UT-93-AF-158b

To: Ms. Ms. Bobbie Schuman, Balcron Oil Company, P.O. Box 21017, Billings, Montana 59104

Mr. David Little, District Manager, Bureau of Land Management, 170 South 500 East, Vernal, Utah 84078

Info: Antiquities Section, Division of State History, 300 Rio Grande, Salt Lake City, Utah 84101

RECEIVED
MAY 11 1993

5-13-93 NOTE: The access route on our 41-214 was changed at the onsite. The new access will be re-evaluated and a supplemental report submitted/ps

CULTURAL RESOURCE EVALUATION OF NINE PROPOSED WELL LOCATIONS IN THE CASTLE PEAK DRAW LOCALITY OF DUCHESNE AND UINTAH COUNTIES, UTAH

Report Prepared for BALCRON OIL COMPANY

Dept. of Interior Permit No.: UT-92-54937
AERC Project 1373 (BLCR-93-1)

Utah State Project No.: UT-93-AF-158b

Principal Investigator: F. Richard Hauck, Ph.D.
Author of Report: Glade Hadden

ARCHEOLOGICAL-ENVIRONMENTAL RESEARCH
CORPORATION (AERC)

181 North 200 West, Suite 5
P.O. Box 853
Bountiful, Utah 84011-0853

May 6, 1993

ABSTRACT

Intensive cultural resource evaluations have been conducted for Balcron Oil Company of seven proposed well locations on federal lands in the Castle Peak Draw locality of Duchesne and Uintah Counties, Utah. The examinations of these nine locations involved a total of 119.1 acres of which 29.1 acres (4 miles) includes eight separate access routes associated with Units 41-18, 14-8, 21-13Y, 21-25Y, 41-21Y, 21-9, 44-14Y and 24-3Y. The remaining 90 acres involves ten acre parcels at all nine of the proposed Units (41-18, 14-8, 21-13Y, 21-25Y, 41,21Y, 21-9, 44-14Y, 24-3Y and 22-10Y). These evaluations were conducted on May 3 and 4, 1993 by archaeologist Glade Hadden under the supervision of F. Richard Hauck.

No previously recorded significant or National Register eligible cultural resources will be adversely affected by the proposed developments.

One newly identified cultural resource activity locus was evaluated and recorded during the examinations. This site (42UN 2062) consists of a non-significant lithic scatter associated with proposed Unit 44-14Y.

AERC recommends project clearance based on adherence to the stipulations noted in the final section of this report.

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LIST OF MAPS OF THE PROJECT AREA

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MAP 1: Cultural Resource Survey of Proposed Well Locations in the Castle Peak Draw Locality of Duchesne County 2

MAP 2: Cultural Resource Survey of Proposed Well Locations in the Castle Peak Draw Locality of Duchesne County 3

MAP 3: Cultural Resource Survey of Proposed Well Locations in the Castle Peak Draw Locality of Duchesne County 4

MAP 4: Cultural Resource Survey of Proposed Well Locations in the Castle Peak Draw Locality of Duchesne and Uintah Counties 5

GENERAL INFORMATION

On May 3 and 4. 1993, archaeologist Glade Hadden acting under the supervision of F.R. Hauck, conducted intensive cultural resource evaluations for Balcron Oil Company of Billings, Montana. These examinations involved nine separate well locations (41-18, 14-8, 21-13Y, 21-25Y, 41-21Y, 21-9, 44-14Y, 24-3Y and 22-10Y) and eight linear access route evaluations totaling 4 miles associated with Units 41-18, 14-8, 21-13Y, 21-25Y, 41-21Y, 21-9, 44-14Y and 24-3Y. This project area is situated in the Castle Peak Draw locality of Duchesne and Uintah Counties, Utah.

This project is situated on federal lands administered by the Diamond Mountain Resource Area of the Vernal District of the Bureau of Land Management.

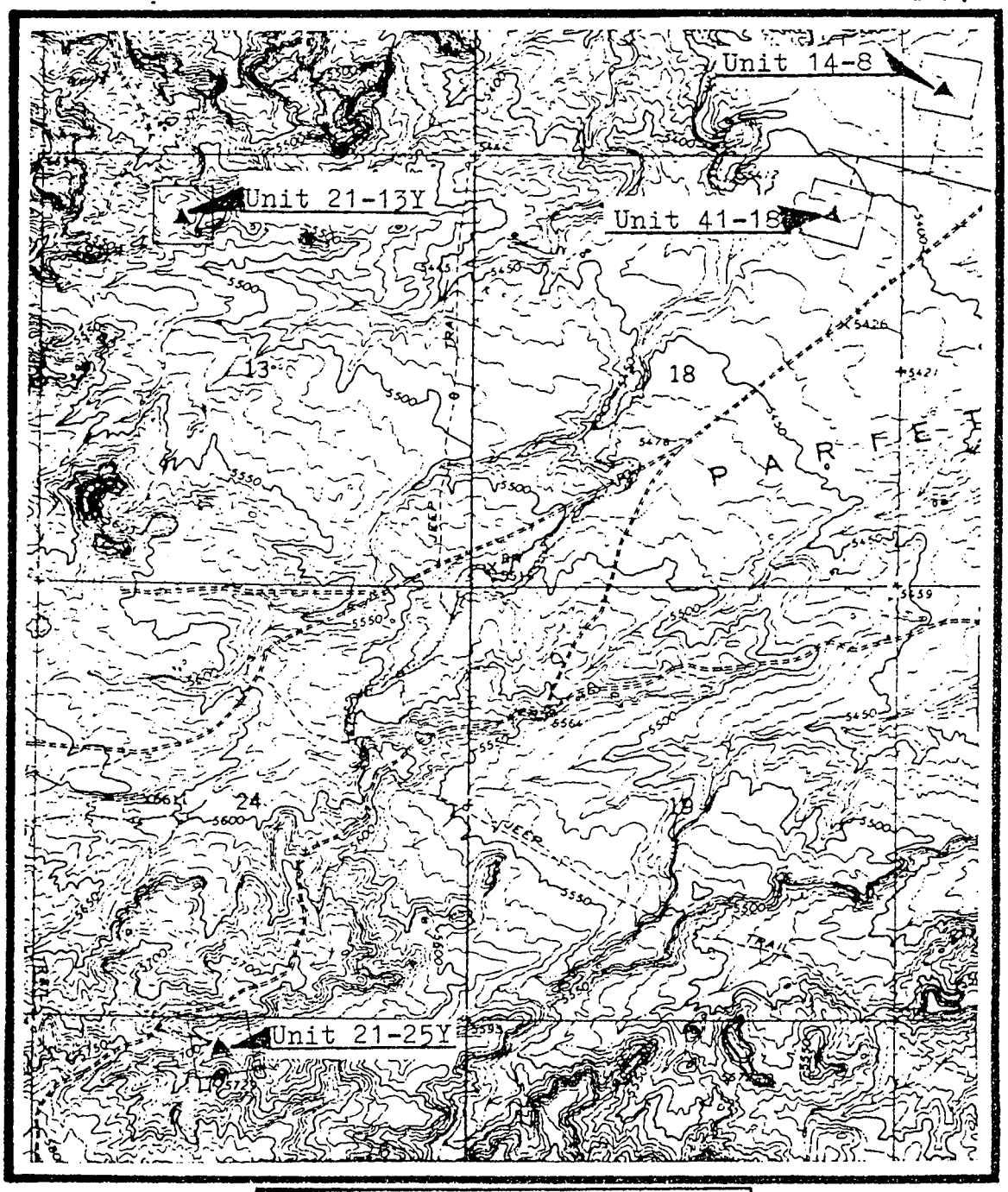
The purpose of the field study and this report is to identify and document cultural site presence and assess National Register potential significance relative to established criteria (cf., Title 36 CFR 60.6). The proposed development of these well locations requires an archaeological evaluation in compliance with the Antiquities Act of 1906, the Reservoir Salvage Act of 1960-as amended by P.L. 93-291, Section 106 of the National Historic Preservation Act of 1966-as amended, the National Environmental Policy Act of 1969, the Federal Land Policy and Management Act of 1979, the Archaeological Resources Protection Act of 1979, the Native American Religious Freedom Act of 1978. the Historic Preservation Act of 1980, and Executive Order 11593.

In addition to documenting cultural identity and significance, mitigation recommendations relative to the preservation of cultural data and materials can be directed to the Vernal District Office of the Bureau of Land Management relative to the locations on public lands, and to the Antiquities Section of the Utah State Division of History. This work was done under U.S. Department of Interior Permit for Utah UT-92-54937 which expires on January 31, 1994.

The nine evaluated well locations included nine 10 acre parcel evaluations for a total of 90 acres. A series of 15 to 20 meter-wide survey transects were walked within the 60 foot-wide corridors associated with the eight access routes covering a total distance of 4 miles or some 29.1 acres. A total of 119.1 acres were examined during this inventory.

Project Location

The project location is in the Vernal District of the Bureau of Land Management. It is situated on the Myton SE, Myton SW and Pariette Draw SW 7.5 minute topographic quads as shown on the attached maps.



T. 9 South

R. 16 and 17 E

Meridian: S.L.B.M

Quad: Myton SE, Utah

MAP 1
Cultural Resource Survey of Balcron Units 41-18, 14-8, 21-13Y and 21-25Y, Castle Peak Draw Area

Legend:

Well Location ▲

Access Route - - - -

N

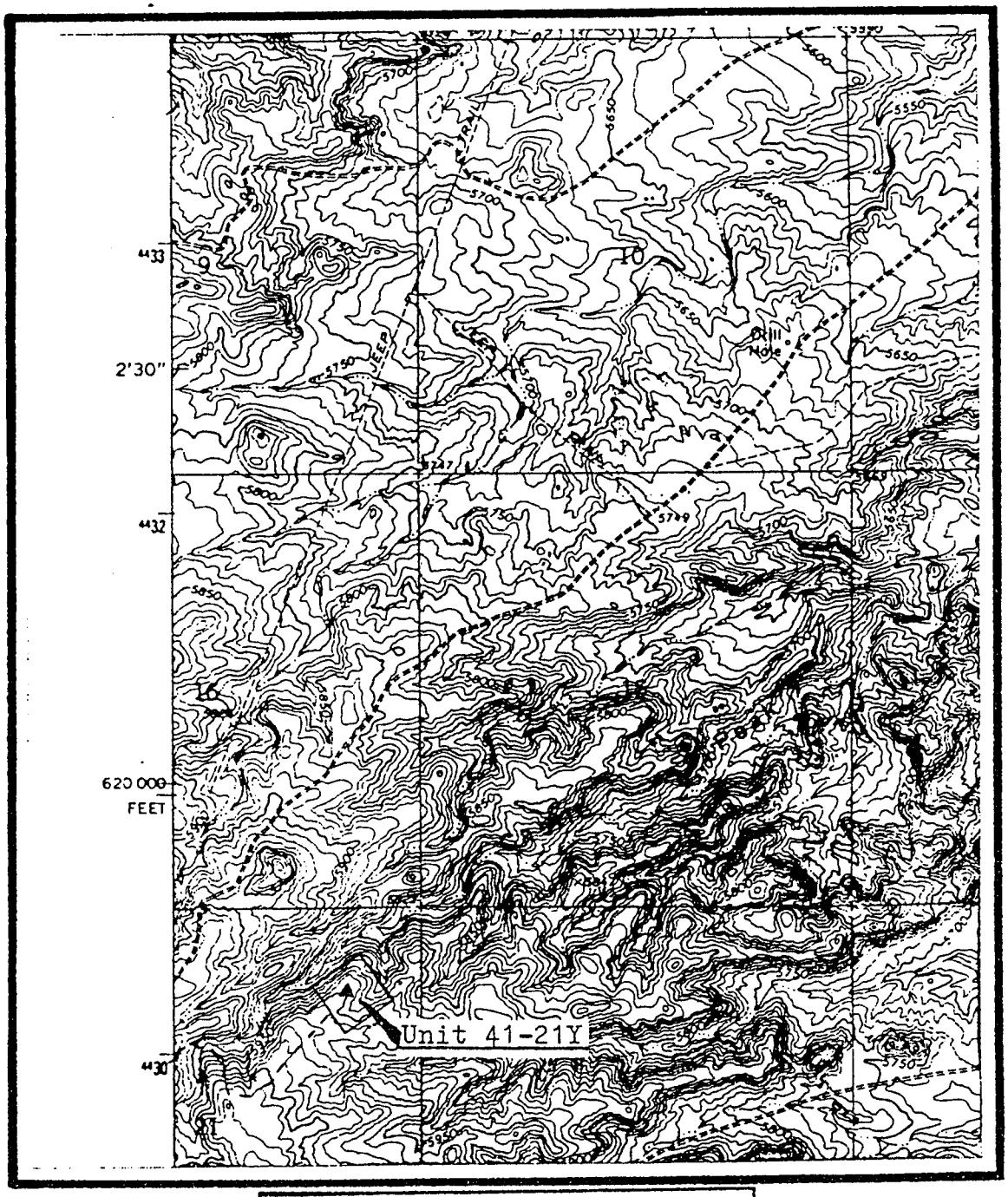
Project: BLCR-93-1

Series: Uinta Basin

Date: 5-6-93

Scale: 1:24,000

AERC



T. 9 South

R. 16 East

Meridian: S.L.B.M.

Quad: Myton SE
Utah

MAP 2
Cultural Resource Survey of Balcron Unit 41-21Y in the Castle Peak Draw area of Duchesne County

Legend:
Well Location ▲
Access Route - - - - -

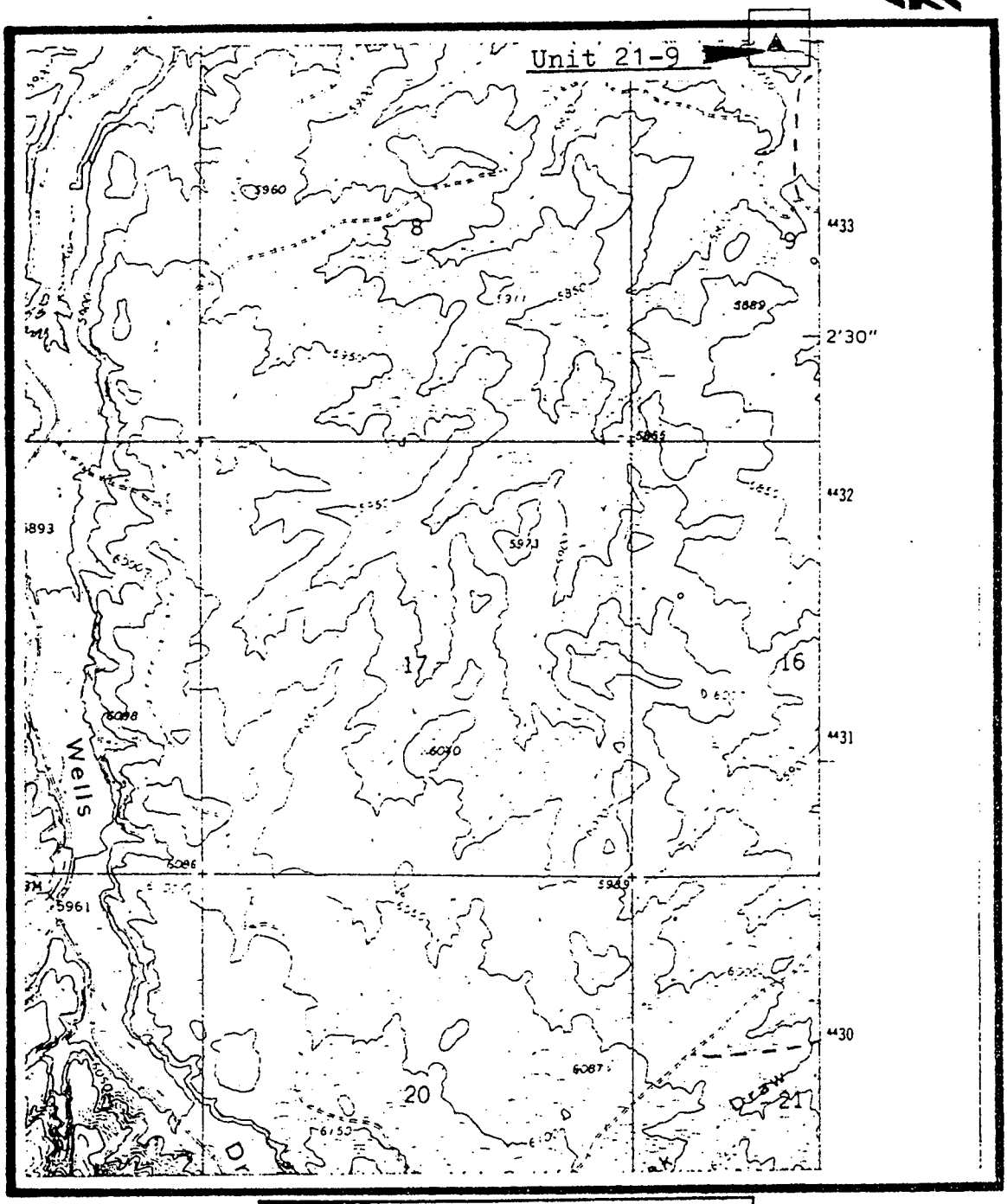
N

Project: BLCR-93-1

Series: Uinta Basin

Date: 5-6-93

Scale: 1:24,000



T. 9 South

R. 16 East

Meridian: S.L.B.M

Quad: Myton SW, Utah

MAP 3
Cultural Resource Survey of Balcron Unit 21-9 in the Castle Peak Draw Area of Duchesne County

Legend:
Well Location ▲
Access Route

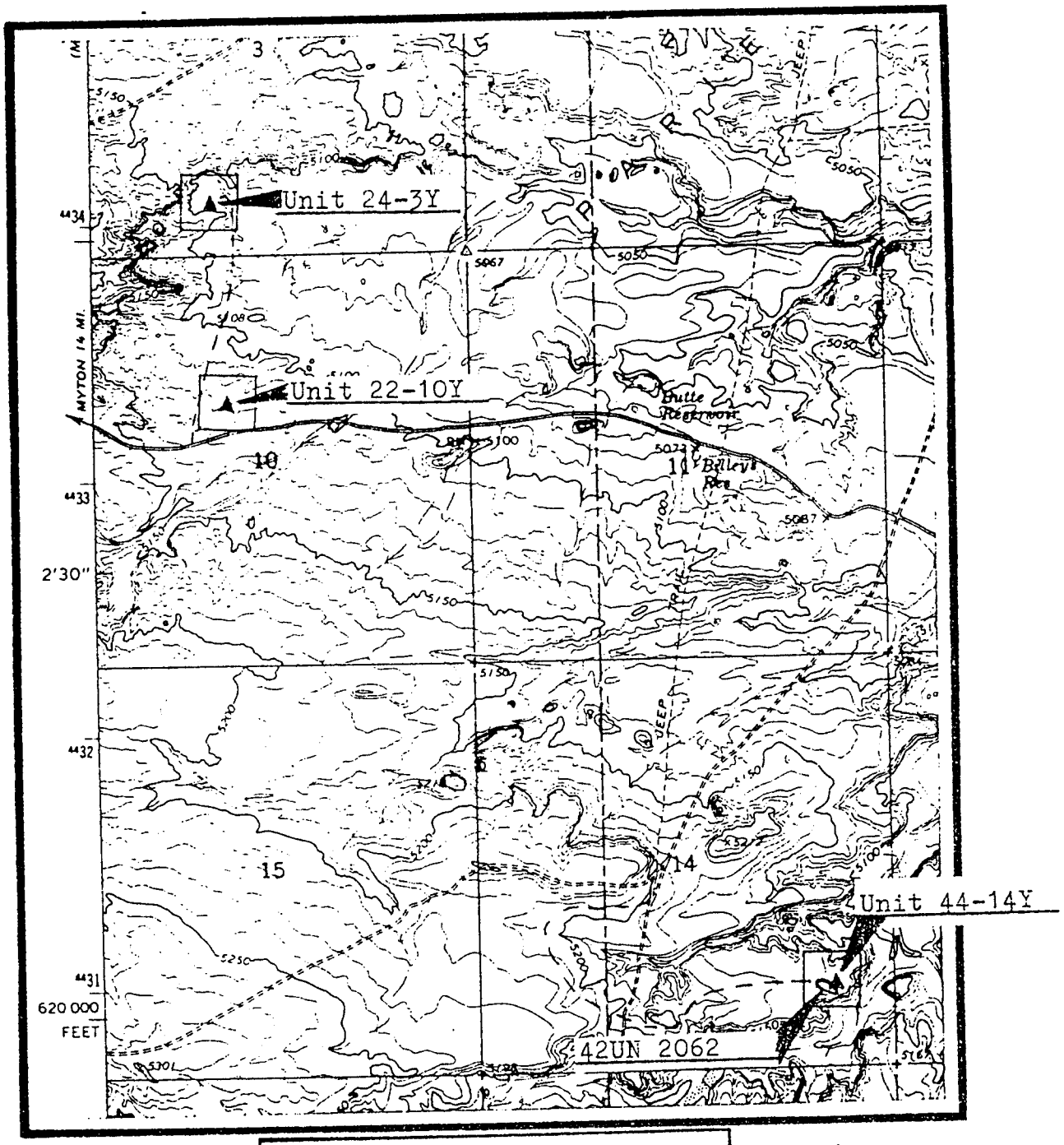
N

Project: BLCR-93-1

Series: Uinta Basin

Date: 5-6-93

Scale: 1:24,000



T. 9 South

R. 17 East

Meridian: S.L.B.M

Quad: Pariette Draw SW, Utah

N

Project: BLCR-93-1

Series: Uinta Basin

Date: 5-6-93

MAP 4
Cultural Resource Survey of Balcron Units 44-14Y, 24-3Y and 22-10Y in the Castle Peak Draw Area

Scale: 1:24,000

Legend:
- Well Location ▲
- Access Route
- Cultural Site

Unit 41-18 is situated in the NE - NE quarter of Section 18, Township 9 South, Range 17 East. Its access route extends for ca. .2 mile to the southwest from an existing road traversing the northeastern corner of that section (see Map 1).

Unit 14-8 is in the SW - SW quarter of Section 8 of that same township and range. An access route extends ca. .2 mile northeast from the same existing road to the location (see Map 1).

Unit 21-13Y is situated in Section 13, Township 9 South, Range 16 East. This unit is situated in the NE - NW quarter of that section (see Map 1). Its access route extends ca. .5 mile east along an existing jeep trail, then southeast onto the location.

Unit 21-25Y is in the NE - NW of section 25 of Township 9 South, Range 16 East. The unit is accessible via a ca. .2 mile-long access that begins at an existing road which crosses the NW corner of that section, and extends to the southeast to the well location.

Unit 41-21Y is located in the NE - NE quarter of Section 21, Township 9 South, Range 16 East (see Map 2). Its 1 mile-long access begins at an existing roadway to the southwest of the location (see Map 3).

Unit 21-9 is also located in Township 9 South, Range 16 East. It is situated in the NE - NW quarter of Section 9 (see Map 3). This unit has a ca. .4 mile access route which will connect the location with the existing road to the south of the location (see maps 2 and 3).

Unit 44-14Y is located in the SE - SE quarter of section 14, Township 9 South, Range 17 East. A ca. 1 mile access route links the unit with an existing one lane jeep trail to the west, near the center of section 14. This jeep trail, in turn, connects with a road/pipeline corridor ca. .5 mile to the north (see map 4).

Unit 24-3Y is situated in the SE - SW quarter of section 3, Township 9 South, Range 17 East. A ca. .5 mile access route connects the unit to the main Castle Peak / Pariette Bench road to the south (see map 4).

Unit 22-10Y is in the SE - NW quarter of section 10 in that same township and range. The unit is located immediately adjacent to the access route leading to unit 24-3Y (see map 4).

Environmental Description:

The project areas range within the 5100 to 5900 foot elevation zone above sea level. Open rangeland terrain surfaces are associated with all locations.

The vegetation in the project area includes *Chrysothamnus spp.*, *Sarcobatus vermiculatus*, *Ephedra viridis*, *Artemesia tridentata*, *Atriplex canescens*, and *Bromus tectorum*.

The geological associations within the project area consist of fluvial and lake deposits which correlate with the Uinta Formation which is of Tertiary age.

PREVIOUS RESEARCH IN THE LOCALITY

File Search

Records searches of the site files and maps at the Antiquities Section of the State Historic Preservation Office in Salt Lake City were conducted on May 5, 1993. A similar search was conducted in the Vernal District Office of the BLM on May 3, 1993. The National Register of Historic Places has been consulted and no registered historic or prehistoric properties will be affected by the proposed developments.

A variety of known cultural sites are situated in the Castle Peak Draw locality. Most of these prehistoric resources, including 42DC 349, 350, 351, 352, 353, 732, 761, 763 and 765 have been identified and recorded by AERC during previous evaluations (Hauck 1981, 1992a, 1992b, 1992c, 1992d). Additional sites previously recorded in this locality include Sites 42DC 423, 424, and 425 which were documented by Sagebrush (Polk 1982), 42DC 382 identified by Grand River (Babcock 1981), and 42DC 539, 540, 541, 542, 543 and 556 recorded by BLM Archaeologist Blaine Phillips in 1983.

One site identified in the project area during the search may be affected. Site 42DC 765 is a lithic scatter/rockshelter complex located by AERC during a previous evaluation for Balcron in the area (Hauck 1992e). This site is located in section 8, adjacent to the proposed development area for unit 14-8, ca. 100 meters from the impacted area (see map 1). Site 42DC 765, while not directly affected by the proposed development may be adversly affected by the increased availability of access to the site.

Prehistory and History of the Cultural Region

Currently available information indicates that the Northern Colorado Plateau Cultural Region has been occupied by a variety of cultures beginning perhaps as early as 10,000 B.C. These cultures, as identified by their material remains, demonstrate a cultural developmental process that begins with the earliest identified Paleoindian peoples (10,000 -- 7,000 B.C.) and extends through the Archaic (ca. 7,000 B.C. -- A.D. 300), and Formative (ca. A.D. 400 -- 1100) Stages, and the Late Prehistoric-Protohistoric periods (ca. A.D. 1200 -- 1850) to conclude in the Historic-Modern period which was initiated with the incursion of the Euro-American

trappers, explorers, and settlers. Basically, each cultural stage -- with the exception of the Late Prehistoric hunting and gathering Shoshonean bands -- features a more complex life-way and social order than occurred during the earlier stage of development (Hauck 1991:53). For a more comprehensive treatment of the prehistory and history of this region see Archaeological Evaluations in the Northern Colorado Plateau Cultural Area (Hauck 1991).

Site Potential in the Project Development Zone

Previous archaeological evaluations in the region have resulted in the identification and recording of a variety of cultural resource sites having eligibility for potential nomination to the National Register of Historic Places (NRHP). The majority of these sites are lithic scatters containing cobble reduction materials. Open occupations are also known in this locality. Sites associated with the open rangeland generally appear to have been occupied during the Middle Archaic Stage with occasional indications of Paleoindian activity based on the recovery of isolated Plano style projectile points. The north-south drainage canyons appear to contain the majority of Late Prehistoric (Numa) sites probably because those canyon floors were transportation corridors and convenient pastures for the Ute horse herds. Evidence of Formative Stage occupation, i.e., the Fremont Culture, is rarely observed in the rangeland environment but is common within the Green River and White River canyons and principal tributaries.

The majority of known sites in this project area are lithic scatters (42DC 349, 350, 353 and 763). Open occupations such as 42DC 352 are also present. Sites 42DC 351 and 761 are rock shelters. Based on the recovery of a Folsom point and a Desert Side-notch arrow point, a possible Paleoindian component and a more recent Numic component exist on Site 42DC 353. Sites in the project locality generally appear to have been occupied during the Archaic Stage and the Late Prehistoric Period.

Site density in Castle Peak Draw appears to range from six to over ten sites per section. This moderate to high density decreases substantially on the benches.

FIELD EVALUATIONS

Methodology

Intensive evaluations were accomplished within each survey area by the archaeologist walking 10 to 20 meter-wide transects within each ten acre parcel associated with a well location. In addition, double 15 to 20 meter-wide transects were walked flanking the flagged centerline. Thus, ca. 4 miles or 29.1 acres of public lands associated with the eight access routes and another 90 acres associated with the nine well locations were examined by Glade Hadden acting under the direction of F. Richard Hauck, the Principal Investigator.

Observation of cultural materials results in intensive examinations to determine the nature of the resource (isolate or activity locus). The analysis of each specific cultural site results in its subsequently being sketched, photographed, and appropriately recorded on standard IMACS forms. Cultural sites are then evaluated for significance utilizing the standards described below and mitigation recommendations are considered as a means of preserving significant resources which may be situated within the development zone.

Site Significance Criteria

Prehistoric and historic cultural sites which can be considered as eligible for nomination to the National Register of Historic Places have been outlined as follows in the National Register's Criteria for Evaluation as established in Title 36 CFR 60.6:

> The quality of significance in American ... archaeology ... and culture is present in ... sites ... that possess integrity of location, design, setting, materials, workmanship, feeling, and association and:
>
> a. That are associated with events that have made a significant contribution to the broad patterns of our history; or
>
> b. that are associated with the lives of persons significant in our past; or
>
> c. that embody the distinctive characteristics of a type, period, or method of construction ... ; or
>
> d. that have yielded, or may be likely to yield, information important in prehistory or history.

In addition to satisfying one or more of these general conditions, a significant cultural resource site in Utah will generally be considered as being eligible for inclusion in the National Register if it should advance our current state of knowledge relating to chronology, cultural relationships, origins, and cultural life ways of prehistoric or historic groups in the area.

In a final review of any site's cultural significance, the site must possess integrity and at least one of the above criteria to be considered eligible for nomination to the National Record of Historic Places.

Results of the Inventory:

One non-significant prehistoric cultural resource activity locus was observed, evaluated and recorded during the archaeological evaluations. This site has been subsequently listed in the State and BLM files as 42UN 2062.

> Site 42UN 2062 (see map 4) consists of a 20 x 100 meter lithic scatter that is predominantly composed of locally procured Parachute Creek chert nodules, primary and secondary flakes and a single non-diagnostic bifacially prepared

artifact. Detritus spread extends ca. 100 meters along the top of a bench associated with well location 44-14Y. Most of the site lies within the proposed development zone or access route for the unit. A small (ca. 2 x 10 meter) concentration of 6 primary and secondary flakes is associated with the single artifact. This small concentration lies entirely outside the proposed development area for the well location but is within the proposed access route. A more widely dispersed distribution of primary flakes and core fragments extending along the bench indicates limited prehistoric lithic testing and procurement activity at this site. Little potential exists for buried deposits, and no other features were noted. Site integrity is good to excellent, with the only noted impact agent being erosion, however potential for extensive occupational strata and material deposits is low. Temporal and cultural associations for this site are presently unknown; no diagnostic artifacts or exposed features were observed during the survey.

This site is a non-significant resource. There exists little potential for providing any pertinent or valuable information on the prehistory of the region relative to criterion d of Title 36 CFR 60.6.

None of the previously recorded cultural sites in this project locality will be adversely affected by the proposed developments, with the possible exception of site 42DC 765. This site, while not directly affected, may be adversely impacted by the increased availability of access provided by the development of unit 14-8.

No isolated diagnostic artifacts were observed or collected during the survey. A single non-diagnostic artifact associated with site 42UN 2062 was collected.

CONCLUSION AND RECOMMENDATIONS

The development and maintenance of these nine locations will not have any direct adverse effect on any NRHP eligible cultural resources in this locality.

AERC recommends that a cultural resource clearance be granted to Balcron Oil Company relative to the development of the nine well locations noted above based upon adherence to the following stipulations:

1. All vehicular traffic, personnel movement, construction and restoration operations should be confined to the flagged areas and corridors examined as referenced in this report, and to the existing roadways and/or evaluated access routes.

2. All personnel should refrain from collecting artifacts and from disturbing any significant cultural resources in the area.

3. The authorized official should be consulted should cultural remains from subsurface deposits be exposed during construction work or if the need arises to relocate or otherwise alter the location of the development areas.

Glade Hadden
Field Archaeologist

F. Richard Hauck, Ph.D.
President and Principal
Investigator

REFERENCES

Babcock, T.

1981 Report on Cultural Resources Identified During an Inventory of Proposed Lomax 1-26 Well Location in the Monument Buttes Area of Duchesne County, 11/12/81. Report Prepared for Grand River Consultants, Grand Junction.

Hauck, F. Richard

1981 Cultural Resource Inventory of Nine Proposed Well Locations and Access Roads in the Coyote Basin Locality of Uintah County, Utah, and in the Castle Peak Draw Locality of Duchesne County, Utah. Report prepared for Diamond Shamrock, DS-81-2, Archeological-Environmental Research Corporation (AERC), Bountiful.

1991 Archaeological Evaluations on the Northern Colorado Plateau Cultural Area, AERC Paper No. 45, Archeological-Environmental Research Corporation, Bountiful.

1992a Cultural Resource Evaluations of Four Proposed Well Locations in the Castle Peak Draw Locality of Duchesne County, Utah. Report prepared for Balcron Oil Company, BLCR-92-2, Archeological-Environmental Research Corporation (AERC), Bountiful.

1992b Addendum to Cultural Resource Evaluations of Four Proposed Well Locations in the Castle Peak Draw Locality of Duchesne County, Utah. Report prepared for Balcron Oil Company, BLCR-92-4, Archeological-Environmental Research Corporation (AERC), Bountiful.

1992c Cultural Resource Evaluations of Seven Proposed Well Locations in the Castle Peak Draw Locality of Duchesne County, Utah. Report prepared for Balcron Oil Company, BLCR-92-5, Archeological-Environmental Research Corporation (AERC), Bountiful.

1992d Cultural Resource Evaluation of a Proposed Water Pipeline Corridor in the Castle Peak Draw Locality of Duchesne County, Utah. Report prepared for Balcron Oil Company, BLCR-92-6, Archeological-Environmental Research Corporation (AERC), Bountiful.

1992e Cultural Resource Evaluation of 7 Proposed Well locations in the Castle Peak Draw Locality of Duchesne County, Utah. Report prepared for Balcron Oil Company, BLCR-92-8, Archeological-Environmental Research Corporation (AERC), Bountiful.

Polk, Michael
1982 Cultural resource inventory of NGC Well No. 12-8h. Report prepared by Sagebrush Archaeological Consultants, Ogden.

U.S. Department of the Interior
Bureau of Land Management
Utah State Office
(AERC FORMAT)

Summary Report of
Inspection for Cultural Resources

Project Authorization No. .U.9.3.A.F.1.5.8.b. .

Report Acceptable Yes __ No __

Mitigation Acceptable Yes __ No __
Comments: _____

---

1. Report Title: MONUMENT BUTTES 9 WELL UNITS

2. Development Company: BALCRON OIL CO. (14-8, 41-18, 24-3Y, 22-10Y, 44-14Y, 41-21Y, 21-9, 21-13Y, 21-25Y)

3. Report Date: 05 06 1993

4. Antiquities Permit No.: UT-92-54937

5. Responsible Institution: AERC BLCR-93-1 County: Uintah and Duchesne

6. Fieldwork Location: TWN 09S RNG 17E Section 03 08 10 14 18

7. Resource Area .D.M.: TWN 09S RNG 16E Section 09 13 21 25

---

8. Description of Examination Procedures: The archeologist, Glade Hadden, acting under the direction of F.R. Hauck intensively examined nine 10 acre well parcels and associated access routes by walking a series of 10 to 20 meter-wide transects within the locations and along the flagged access centerlines.

---

9. Linear Miles Surveyed and/or Definable Acres Surveyed and/or Legally Undefinable Acres Surveyed: 4 / 119.1

10. Inventory Type: I

R = Reconnaissance
I = Intensive
S = Statistical Sample

---

11. Description of Findings: One cultural resource site was identified during the survey. Site 42UN 2062 is a lithic scatter. One biface was collected. This site is non-significant.

12. Number Sites Found: 1 (No sites = 0)

13. Collection: Y (Y = Yes, N = No)

---

14. Actual/Potential National Register Properties Affected: The National Register of Historic Places (NRHP) has been consulted and no registered properties will be affected by the proposed development.

---

15. Literature Search, Location/ Date: Utah SHPO 5-5-93 Vernal District Office Records 5-3-93

16. Conclusion/ Recommendations:

AERC recommends that a cultural resource clearance be granted to Balcron Oil Company for these proposed developments based on the following stipulations:

1. All vehicular traffic, personnel movement, construction and restoration operations should be confined to the corridor examined as referenced in this report, and to the existing roadways and/or evaluated access routes.

2. All personnel should refrain from collecting artifacts and from disturbing any significant cultural resources in the area.

3. The authorized official should be consulted should cultural remains from subsurface deposits be exposed during construction work or if the need arises to relocate or otherwise alter the location of the exploration area.

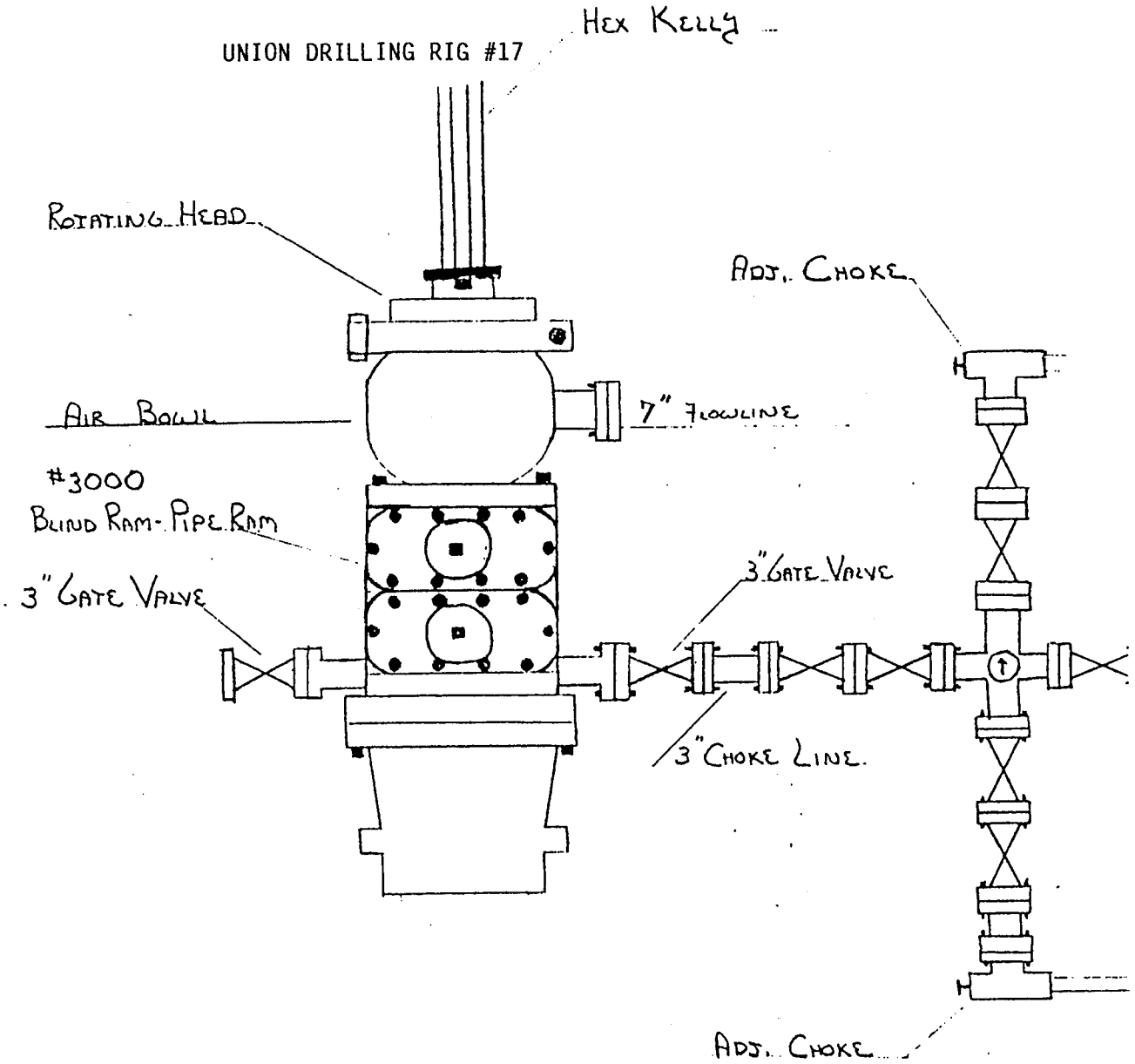
17. Signature of Administrator & Field Supervisor

Administrator

Field Supervisor

UT 8100-3 (2/85)

EXHIBIT "H"



#3000 STACK

EXHIBIT "I"

UNION DRILLING RIG #17

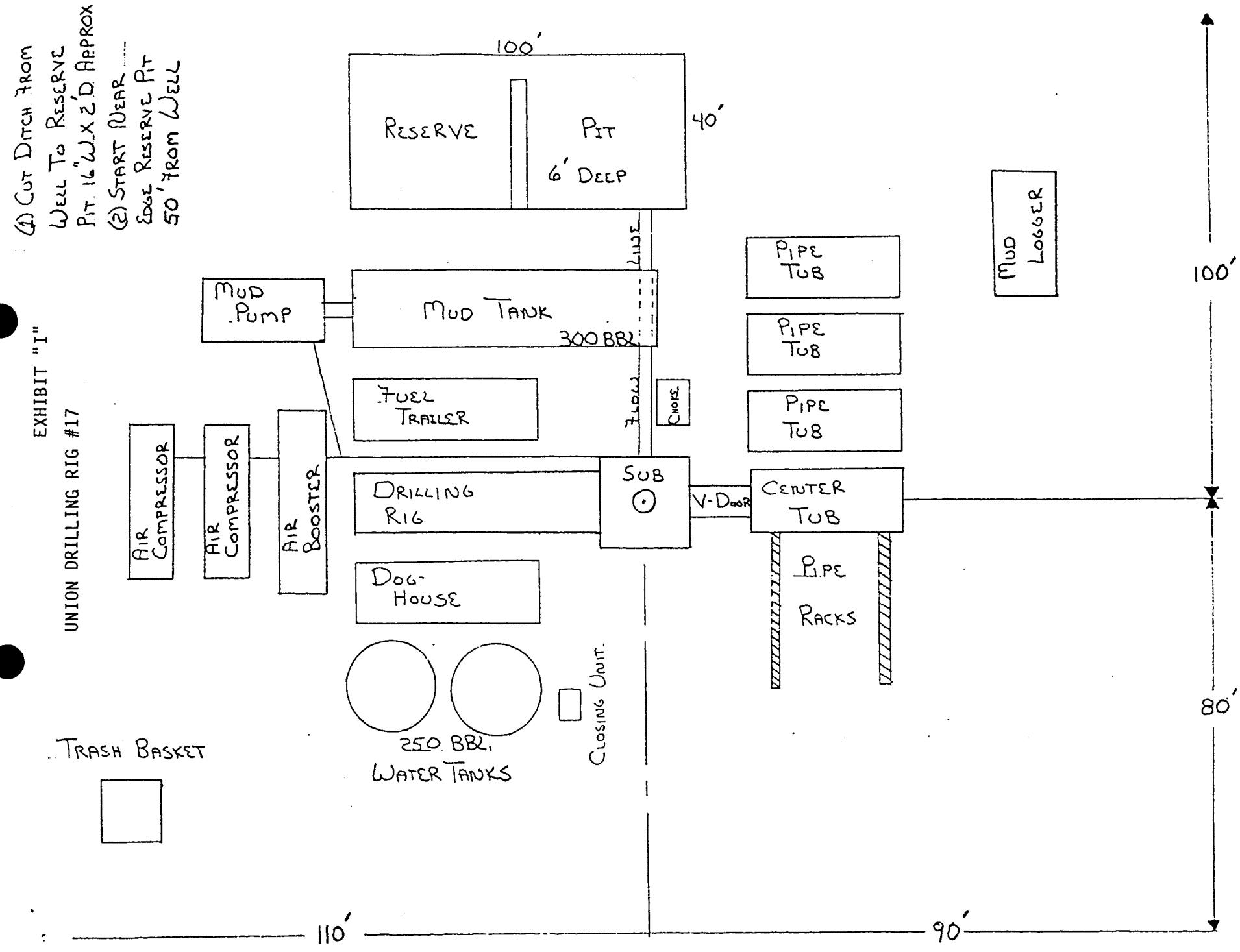


EXHIBIT "J"

BALCRON FEDERAL MAP A

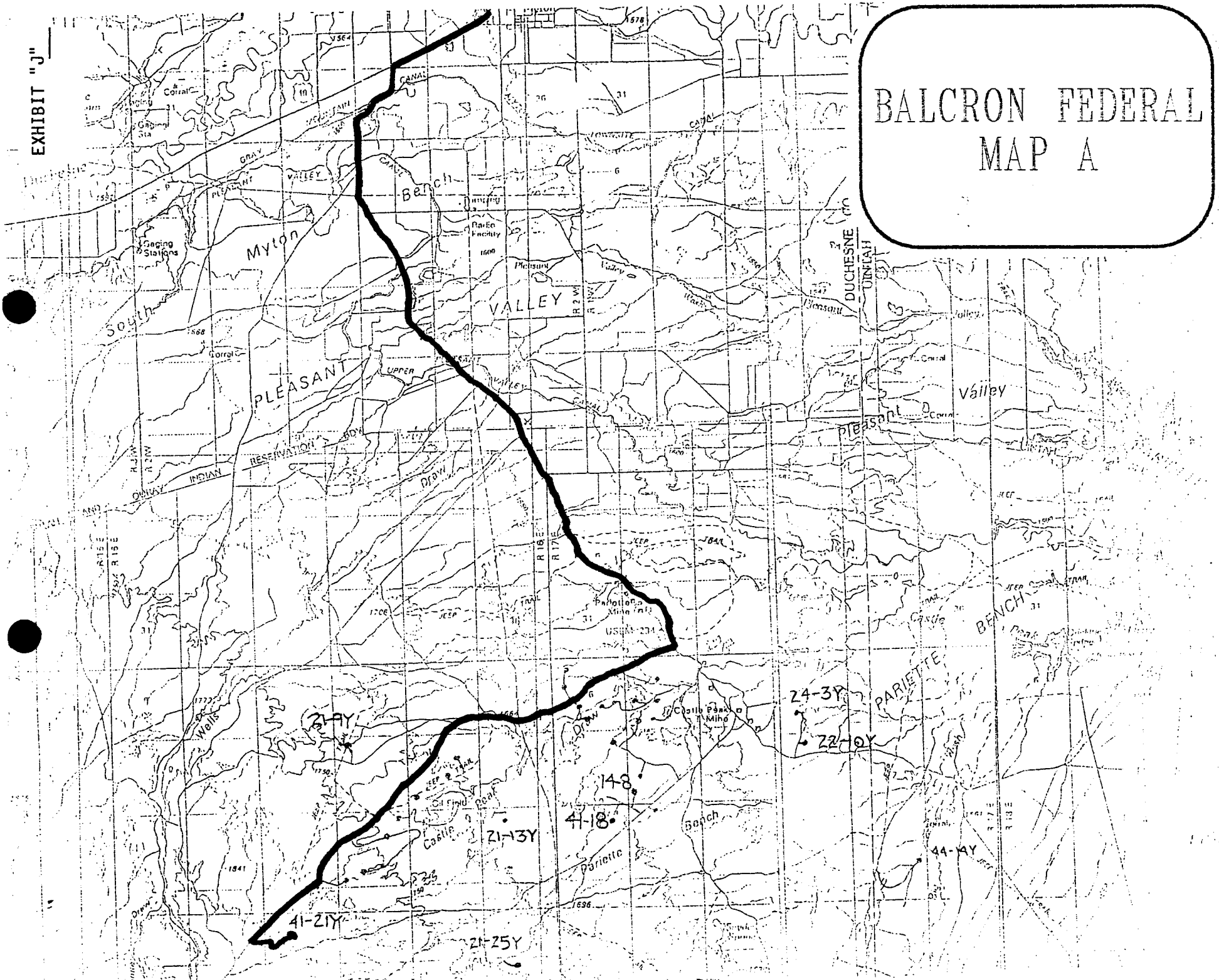


EXHIBIT "K"

BALCRON FEDERAL
MAP B

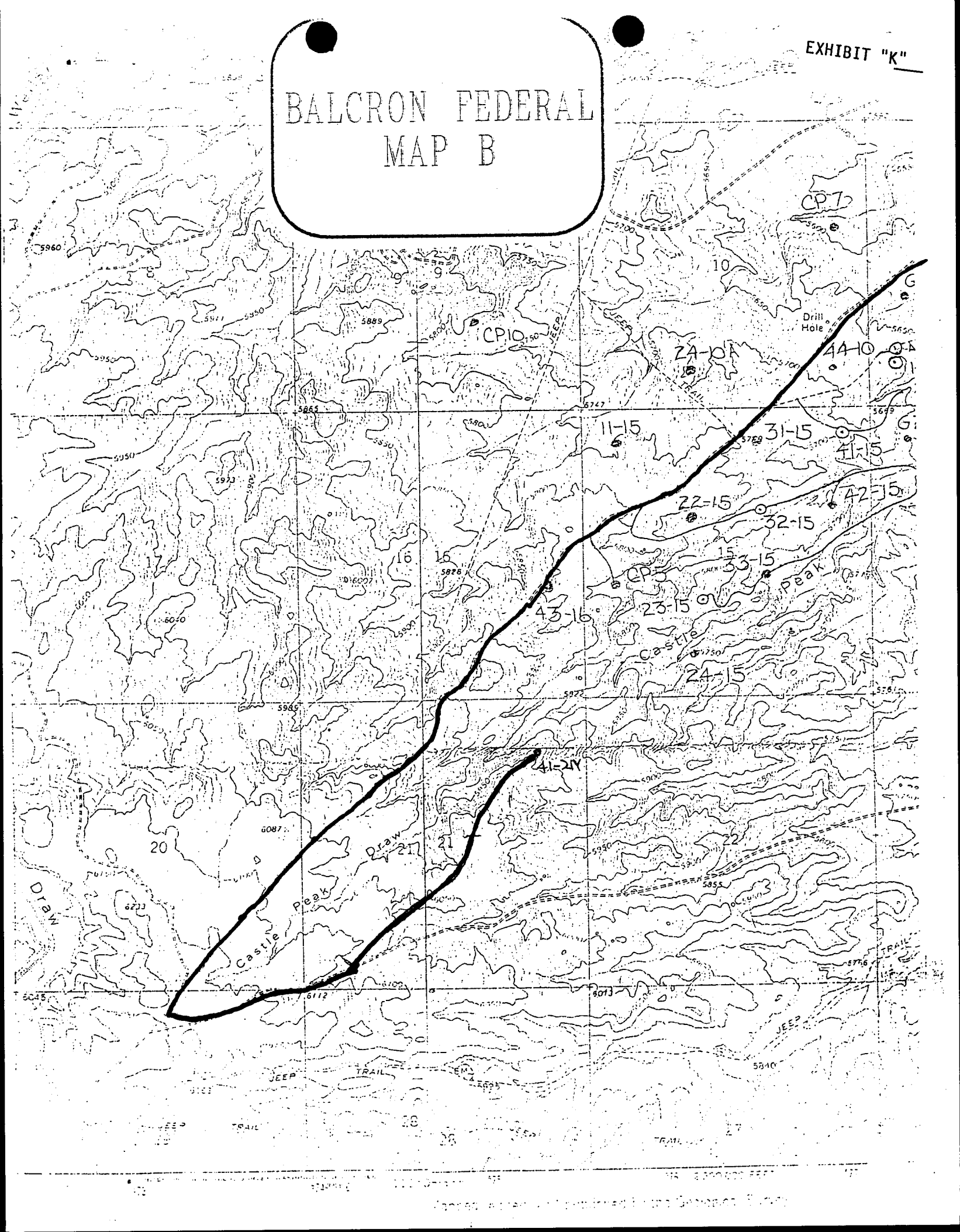


EXHIBIT "L"

BALCRON FEDERAL MAP C

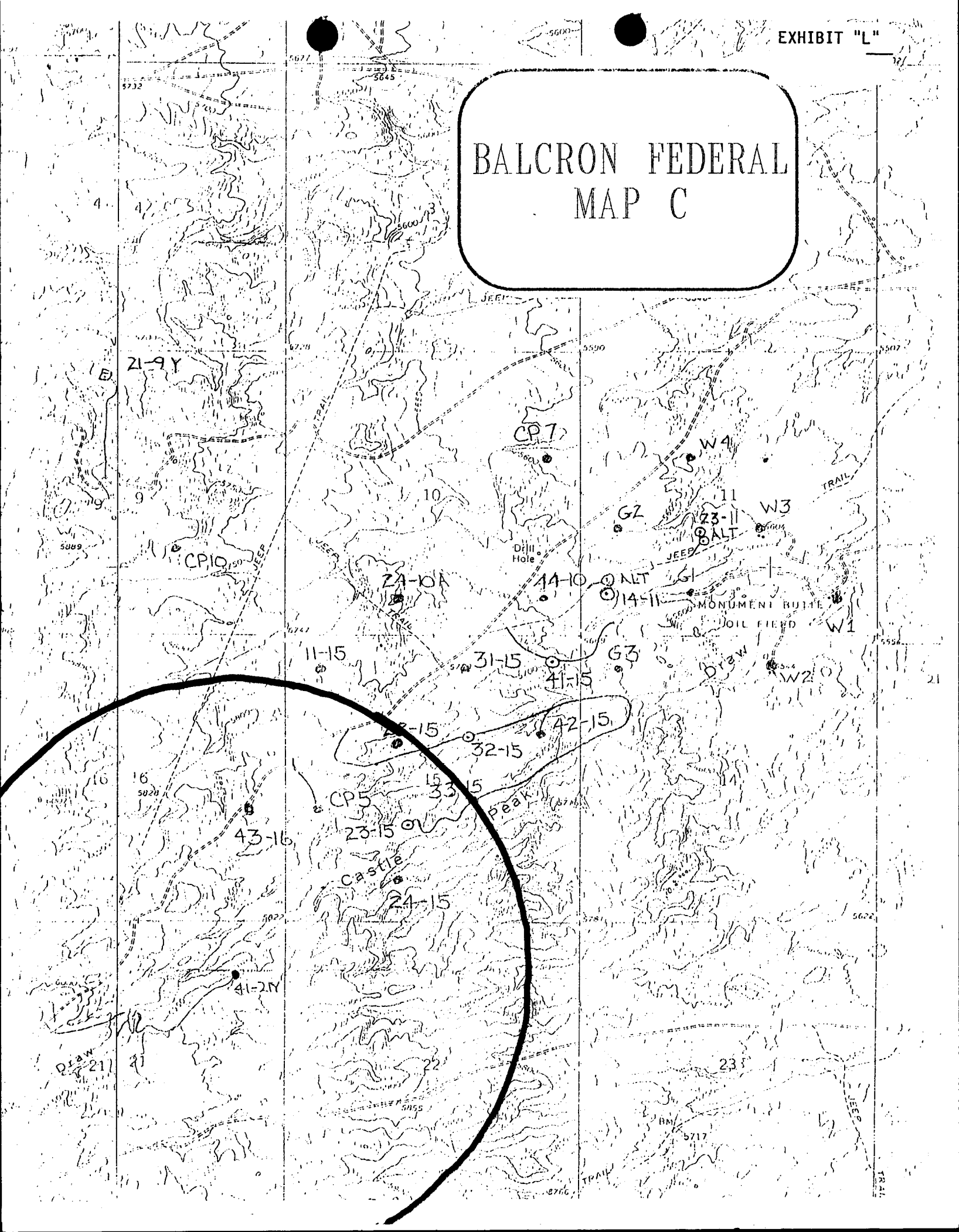
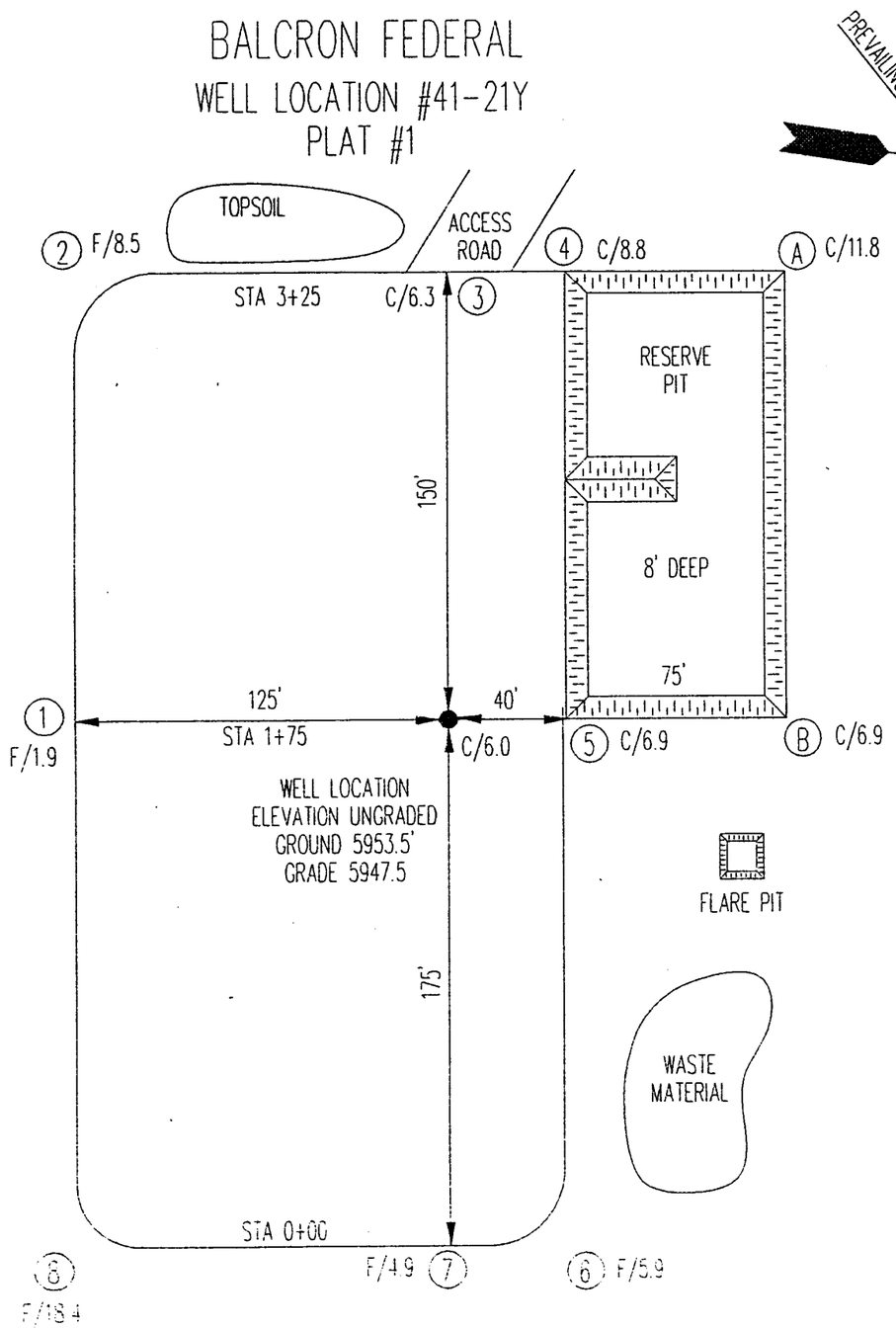
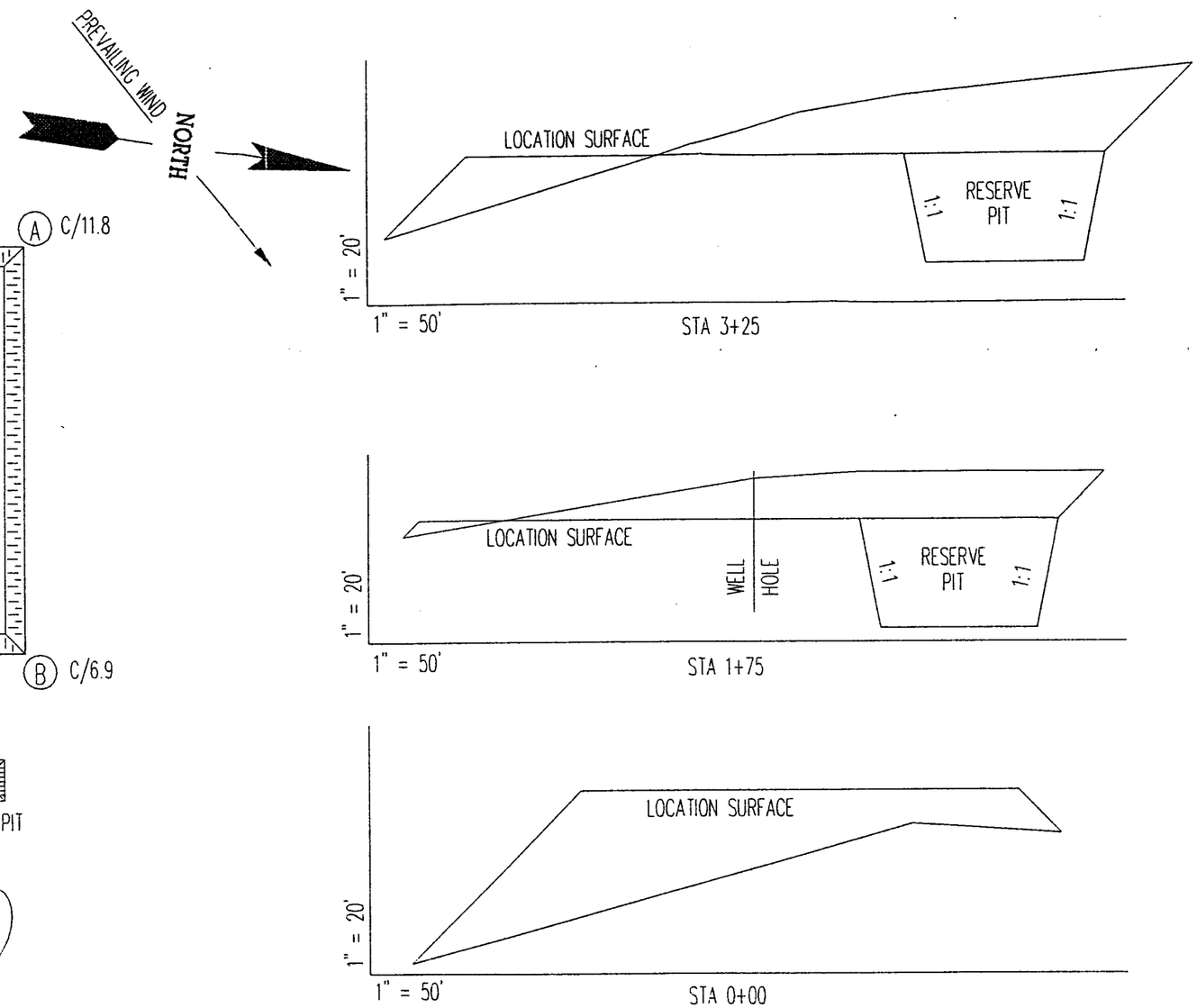


EXHIBIT "M"

BALCRON FEDERAL
WELL LOCATION #41-21Y
PLAT #1





REFERENCE POINTS

240' SOUTH - 5953.7
340' SOUTH - 5955.2

APPROXIMATE YARDAGE

CUT = 5,457 Cu Yds
FILL = 4668 Cu Yds
PIT = 2,603.3 Cu Yds

TRI-STATE
LAND SURVEYING, INC.
38 WEST 100 NORTH, VERNAL, UTAH 84078
801-781-2501

APPLICATION FOR PERMANENT CHANGE OF WATER

RECEIVED APR 17 1987 WATER RIGHTS SALT LAKE

Rec. by DL
Fee Paid $ 15.00
Receipt # 22150
Microfilmed
Roll #

STATE OF UTAH

For the purpose of obtaining permission to make a permanent change of water in the State of Utah, application is hereby made to the State Engineer, based upon the following showing of facts, submitted in accordance with the requirements of the Laws of Utah.

*WATER USER CLAIM NO. 43-9974 *APPLICATION NO. a-14289

Changes are proposed in (check those applicable)

____ point of diversion. ____ point of return.
✓ place of use. ✓ nature of use.

1. OWNER INFORMATION
Name: Owen Dale Anderson *Interest: ____%
Address: PO Box 1162 Vernal UT 84078

2. *PRIORITY OF CHANGE: ____ *FILING DATE: ____
*Is this change amendatory? (Yes/No): ____

3. RIGHT EVIDENCED BY: 43-3525

Prior Approved Change Applications for this right: 83-43-21 84-43-73 & 14099

********** HERETOFORE **********

4. QUANTITY OF WATER: 0.5 cfs and/or ____ ac-ft.
5. SOURCE: U.G.W. (well)
6. COUNTY: Duchesne
7. POINT(S) OF DIVERSION: South 1167 ft East 340 ft from N¼ Corner Section 27 T1S, R2W, USB+M

Description of Diverting Works: ____

8. POINT(S) OF REDIVERSION
The water will be rediverted from ____ at a point: ____

Description of Diverting Works: ____

9. POINT(S) OF RETURN
The amount of water consumed is ____ cfs or ____ ac-ft.
The amount of water returned is ____ cfs or ____ ac-ft.
The water will be returned to the natural stream/source at a point(s): ____

*These items are to be completed by Division of Water Rights.

10. NATURE AND PERIOD OF USE

Stockwatering: From Jan 1 to Dec 31
Domestic: From ____ to ____
Municipal: From ____ to ____
Mining: From ____ to ____
Power: From ____ to ____
Other: From Jan 1 to Dec 31
Irrigation: From April 1 to Oct 31

11. PURPOSE AND EXTENT OF USE

Stockwatering (number and kind): 250 Livestock Units
Domestic: ____ Families and/or ____ Persons.
Municipal (name): ____
Mining: ____ Mining District in the ____ Mine.
Ores mined: ____
Power: Plant name: ____ Type: ____ Capacity: ____
Other (describe): ~~drilling & completion of oil field locations~~ Fish Culture
Irrigation: 55.7 acres. Sole supply of ____ acres

12. PLACE OF USE

Legal description of areas of use ~~other than irrigation~~ by 40 acre tract: n/a

13. STORAGE

Reservoir Name: Unnamed Storage Period: from 11-1 to 3-31
Capacity: 4.0 ac-ft. Inundated Area: ____ acres
Height of dam: ____ feet
Legal description of inundated area by 40 tract: NW NE Sec 27, T15 R2W USB&M

********** THE FOLLOWING CHANGES ARE PROPOSED **********

14. QUANTITY OF WATER: ____ cfs and/or 20.0 ac-ft
15. SOURCE: UGW Remaining Water: same
16. COUNTY: Duchesne
17. POINT(S) OF DIVERSION: same

Description of Diverting Works: ____

18. POINT(S) OF REDIVERSION

The water will be rediverted from ____ at a point: ____

Description of Diverting Works: ____

19. POINT(S) OF RETURN
The amount of water consumed is _____ cfs or _____ ac-ft
The amount of water returned is _____ cfs or _____ ac-ft
The water will be returned to the natural stream/source at a point(s): _____

20. NATURE AND PERIOD OF USE
Stockwatering: From _____ to _____
Domestic: From _____ to _____
Municipal: From _____ to _____
Mining: From _____ to _____
Power: From _____ to _____
Other: From Jan 1 to Dec 31
Irrigation: From _____ to _____

21. PURPOSE AND EXTENT OF USE
Stockwatering (number and kind): _____
Domestic: _____ Families and/or _____ Persons
Municipal (name): _____
Mining: _____ Mining District in the _____ Mine
Ores mined: _____
Power Plant name: _____ Type: _____ Capacity: _____
Other (describe): drilling and completion of oil wells
Irrigation: _____ _____ acres. Sole supply of _____

22. PLACE OF USE
Legal description of areas of use by 40 acre tract: _____

Other: hauled to locations by water trucks as needed

23. STORAGE
Reservoir Name: _____ Storage Period: from _____ to _____
Capacity: _____ ac-ft. Inundated Area: _____ acres
Height of dam: _____ feet
Legal description of inundated area by 40 tract: _____

24. EXPLANATORY
The following is set forth to define more clearly the full purpose of this application. Include any supplemental water rights used for the same purpose. (Use additional pages of same size if necessary): _____

Change is for oilfield drilling and exploration.
Approximately 4 acre ft/year will be taken from
irrigation purposes and used for oilfield purposes
Acres to be irrigated will change from ~~55.7~~ 50.7 to ~~50~~ 45.7 acres

****

he undersigned hereby acknowledges that even though he/she/they may have been assisted in the preparation f the above-numbered application through the courtesy of the employees of the Division of Water Rights, all esponsibility for the accuracy of the information contained herein, at the time of filing, rests with the pplicant(s).

Signature of Applicant(s)

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

May 18, 1993

RECEIVED
MAY 20 1993
DIVISION OF
OIL GAS & MINING

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

Gentlemen:

Enclosed are Applications for Permit to Drill the wells on the enclosed list.

As operator, we hereby request that the status of these wells be held tight for the maximum period allowed by State regulations.

Sincerely,

Bobbie Schuman

Bobbie Schuman
Coordinator of Operations,
Environmental and Regulatory Affairs

/rs

Enclosures

EQUITABLE RESOURCES ENERGY COMPANY,
BALCRON OIL DIVISION

MONUMENT BUTTE DRILLING PROGRAM

==========

Balcron Federal #21-25Y
NE NW Section 25, T9S, R16E
Duchesne County, Utah
198.4′ FNL, 2302.2′ FWL
FLS #U-64380
PTD 5,650′
GL 5684.9′

Balcron Federal #41-21Y
NE NE Section 21, T9S, R16E
Duchesne County, Utah
970.2′ FNL, 893.8′ FEL
FLS #U-64379
PTD 6,000′
GL 5953.5′

Balcron Federal #24-3Y
SE SW Section 3, T9S, R17E
Duchesne County, Utah
561.8′ FSL, 1887.2′ FWL
FLS #U-64381
PTD 5,950′
GL 5099.1′

Balcron Federal #21-9Y
NE NW Section 9, T9S, R16E
Duchesne County, Utah
476.2′ FNL, 2051′ FWL
FLS #U-65207
PTD 6,190′
GL 5747.3′

Balcron Federal #21-13Y
NE NW Section 13, T9S, R16E
Duchesne County, Utah
702.7′ FNL, 1830.5′ FWL
FLS #U-64805
PTD 5,900′
GL 5535.5′

Balcron Federal #22-10Y
SE NW Section 10, T9S, R17E
Duschene County, Utah
1980′ FNL, 1980′ FWL
FLS #U-65210
PTD 5,850′
GL 5121.9′

EQUITABLE RESOURCES ENERGY COMPANY,
BALCRON OIL DIVISION

MONUMENT BUTTE DRILLING PROGRAM

==========

Balcron Federal #44-14Y
SE SE Section 14, T9S, R17E
Duchesne County, Utah
1008.2' FSL, 832.3' FEL
FLS #U-64806
PTD 5,700'
GL 5164.3'

Balcron Monument Federal #14-8
SW SW Section 8, T9S, R17E
Duchesne County, Utah
660' FSL, 660' FWL
FLS #U-007978
PTD 5,950'
GL 5370.6'

Balcron Monument Federal #41-18
NE NE Section 18, T9S, R17E
Uintah County, Utah
660' FNL, 660' FEL
FLS #U-3563-A
PTD 5,900'
GL 5406.3'

5/17/93
/rs

WORKSHEET
APPLICATION FOR PERMIT TO DRILL

DATE RECEIVED: 05/20/93

OPERATOR: EQUITABLE RESOURCES OPERATOR ACCT NO: N- 9890
WELL NAME: BALCRON FEDERAL 41-21Y

API NO. ASSIGNED: 43-013-31390

LEASE TYPE: FED LEASE NO: U-16379
LOCATION: NENE 21 - T09S - R16E DUCHESNE COUNTY
FIELD: CASTLE PEAK (075) FIELD CODE: 075

RECEIVED AND/OR REVIEWED:

✓ Plat
✓ Bond
(Number federal)
✓ Potash (Y/N)
✓ Oil shale (Y/N)
✓ Water permit
(Number 43-9971 a-14589)
✓ 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: Request for exception location requested 6-14-93.

STIPULATIONS: cc: Duchesne county assessor.

CONFIDENTIAL
PERIOD
EXPIRED
ON 10-14-94

ARCHEOLOGICAL - ENVIRONMENTAL RESEARCH CORPORATION

P. O. Box 853 Bountiful, Utah 84011-0853
Tel: (801) 292-7061, 292-9668

RECEIVED MAY 28 1993

May 20, 1993

Subject: *Addendum to* CULTURAL RESOURCE EVALUATION OF NINE PROPOSED WELL LOCATIONS IN THE CASTLE PEAK DRAW LOCALITY OF DUCHESNE AND UINTAH COUNTIES, UTAH

Project: Balcron Oil Company -- 1993 Development Program for the Monument Butte Lease Area Unit 41-21Y.

Project No.: BLCR-93-2

Permit No.: Dept. of Interior -- UT-92-54937

Utah State No.: UT-93-AF-158b

To: Ms. Bobbie Schuman, Balcron Oil Company, P.O. Box 21017, Billings, Montana 59104

Mr. David Little, District Manager, Bureau of Land Management, 170 South 500 East, Vernal, Utah 84078

Info: Antiquities Section, Division of State History, 300 Rio Grande, Salt Lake City, Utah 84101

ADDENDUM TO BLCR-93-1, DATED 5/6/93 (Ut-93-AF-158b)

On May 19, 1993, AERC archaeologist Glade Hadden returned to the Balcron Oil Company's proposed Access Road for Unit No. 41-21Y in the Castle Peak Draw locality of Duchesne County, Utah.

The reason for the reevaluation involves the restaking of the access route in Section 21, Township 09 South, Range 16 East. As the attached map shows, the new 1.6 mile-long access route extends from the southwest along the southern edge of Castle Peak Draw to the well location in the NE 1/4 of Section 21.

The new access route lies mostly along an existing jeep trail. In order to conduct the evaluation of the new access route, a 30 meter-wide corridor was examined by walking double transects flanking the existing road and the staked centerline.

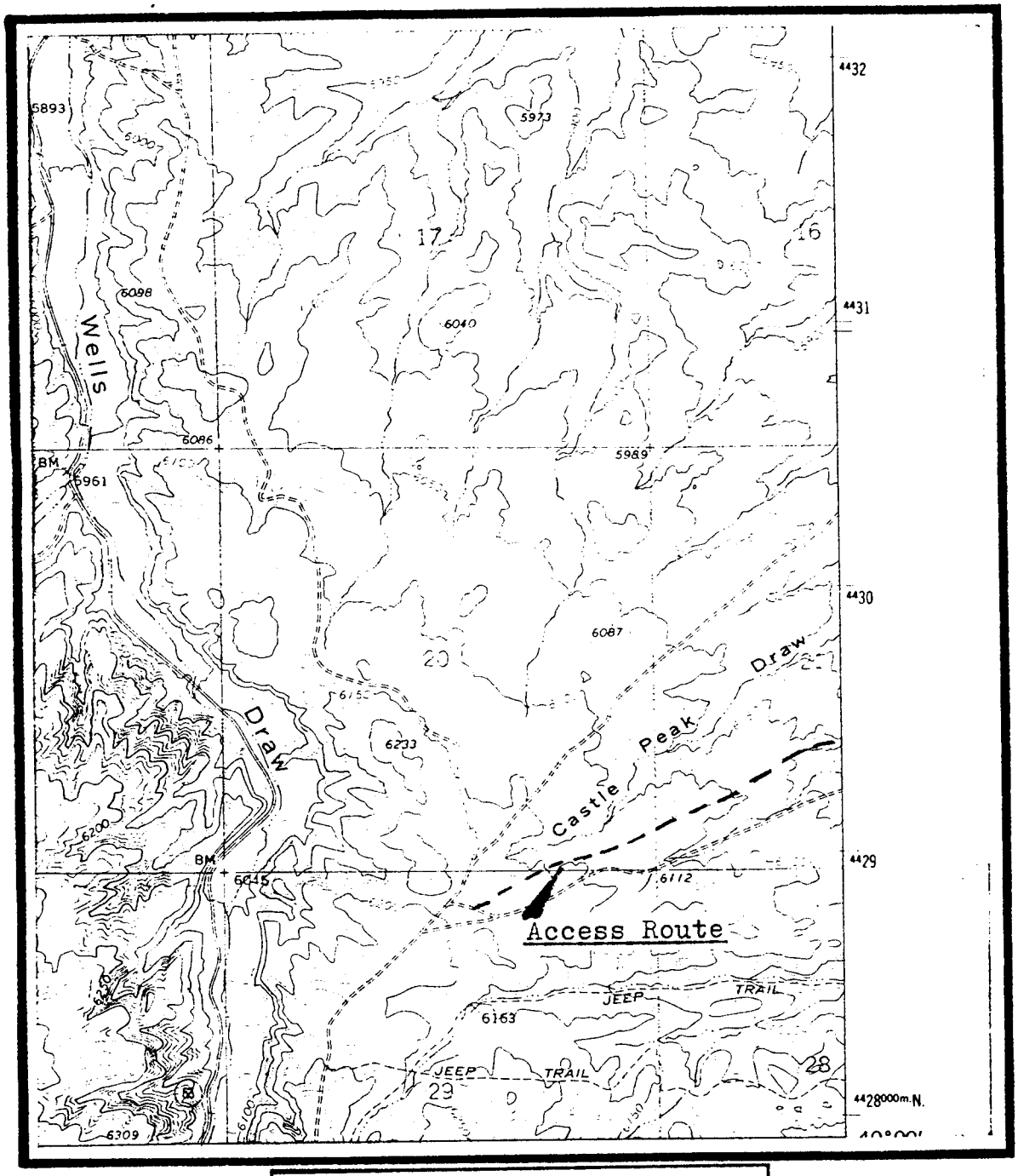
No previously recorded significant or National Register eligible cultural resources will be adversely affected by the proposed development.

No diagnostic isolated artifacts were observed or collected.

No newly identified cultural resource activity loci were identified, evaluated, or recorded during the examination.

AERC recommends that a cultural resource clearance be granted to Balcron Oil Company relative to the development of this new access route associated with Unit 41-21Y based on adherence to the recommendations provided on page 11 in the primary report.

F. Richard Hauck, Ph.D.
Principal Investigator



T. 9 South

R. 16 East

Meridian: S.L.B.M.

Quad: Myton, SW, Utah

MAP 1
Cultural Resource Survey of Access Road for Balcron Unit 41-21 Y in the Castle Peak Draw Locality

Legend:
Access Route

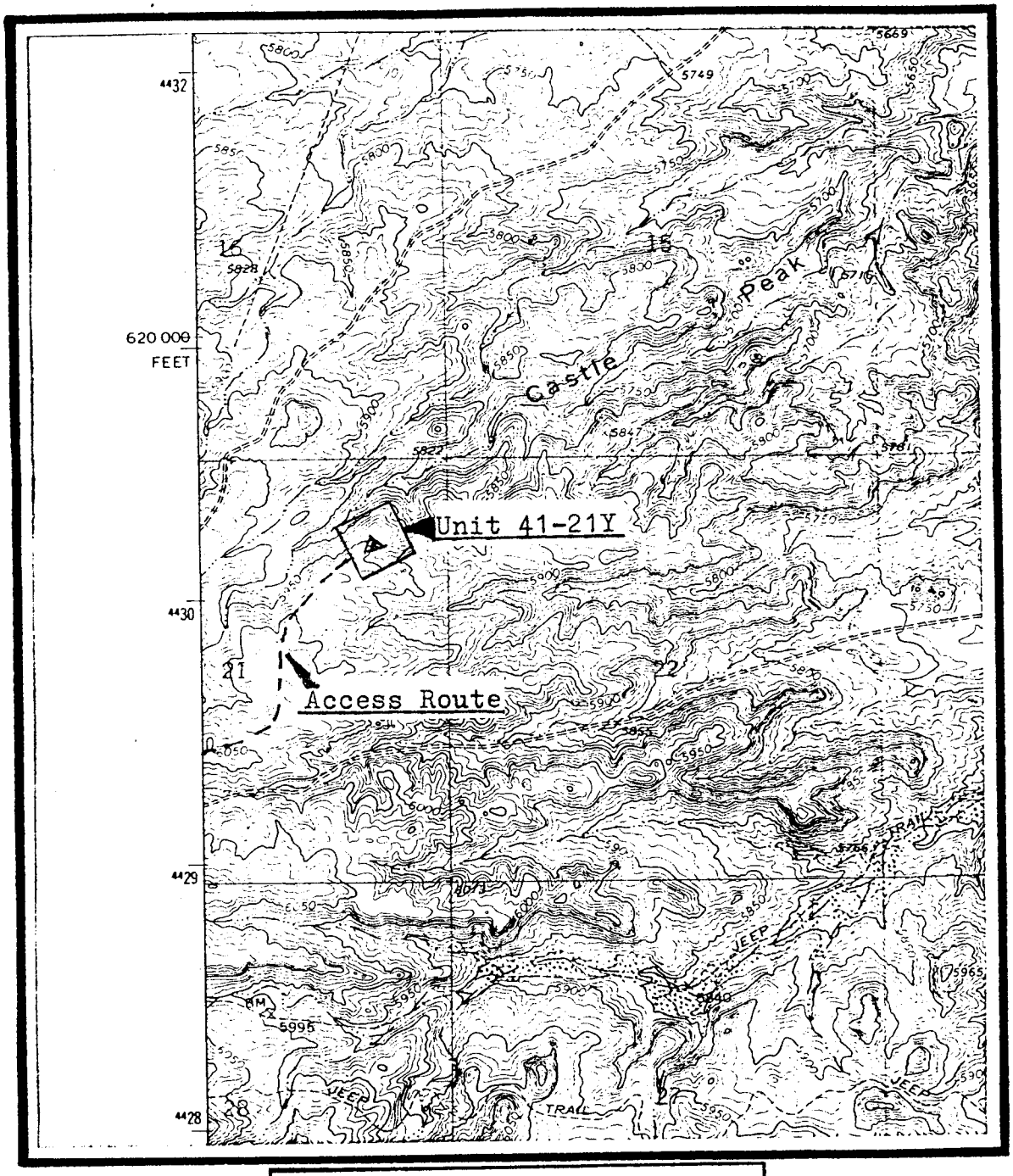
N

Project: BLCR-93-2

Series: Uinta Basin

Date: 5-20-93

Scale: 1:24,000



T. 9 South

R. 16 East

Meridian: S.L.B.M.

Quad: Myton SE, Utah

MAP 2
Cultural Resource Survey of Access Road for Balcron Unit 41-21Y in the Castle Peak Draw Locality

Legend:
Access Route

N

Project: BLCR-93-2

Series: Uinta Basin

Date: 5-20-93

Scale: 1:24,000

16. Conclusion/ Recommendations:

AERC recommends that a cultural resource clearance be granted to Balcron Oil Company for these proposed developments based on the following stipulations:

1. All vehicular traffic, personnel movement, construction and restoration operations should be confined to the corridor examined as referenced in this report, and to the existing roadways and/or evaluated access routes.

2. All personnel should refrain from collecting artifacts and from disturbing any significant cultural resources in the area.

3. The authorized official should be consulted should cultural remains from subsurface deposits be exposed during construction work or if the need arises to relocate or otherwise alter the location of the exploration area.

17. Signature of Administrator & Field Supervisor

Administrator

Field Supervisor

UT 8100-3 (2/85)

6-2-93

TO: Bobbie

FROM: Dave Mc

RE: Cement Information

Thrifty Lite Cement Composition:

Class "G" cement with;

4.0% Thrifty Lite *
3.0 Lbs/Sk CSE *
3.0% salt
0.25 Lbs/Sk Cello Flakes
200% Water

* See Attached product Description

Thrifty Lite Cement Properties:

Slurry Weight:	11.02 Lbs/Gal
Slurry Yield:	3.58 Cu. Ft./Sk
Mix Water:	22.56 Gal/Sk
Est. Pump Time:	4.0 Hrs
Free Water:	0.0 CC

DV040145

PRODUCT DESCRIPTIONS

CELLO-SEAL

Graded (3/8 to 3/4 inch) cellophane flakes used as a lost circulation material.

CSE

Compressive Strength Enhancer - Fumed Silica. An additive which contributes to low density, high compressive strength development of cement slurries at all temperature ranges. This material also controls free water without the need for standard extenders.

CLASS G CEMENT (API) [Premium Cement]

Intended for use as a basic cement from surface to 8000 Ft. as manufactured, or can be used with accelerators and retarders to cover a wide range of well depths and temperatures.

SODIUM CHLORIDE (NaCl)

Commonly called salt, is used to reduce damage caused by cement filtrate and to promote better bonding. At low concentration, less than 10% by weight of mixing water, it acts as an accelerator, while at concentrations greater than 15-18%, it will retard thickening time and strength development.

THRIFTY LITE

Anhydrous sodium metasilicate compound used as an extender for cement slurries. Thrifty Lite yields a very economical filler slurry on a cost per cu. ft. of slurry basis and is a mild accelerator that will cause the slurry to set at low temperatures.

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

RECEIVED
JUN 0 4 1993
DIVISION OF
OIL GAS & MINING

June 2, 1993

-- VIA FEDERAL EXPRESS --

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

Gentlemen:

As requested, enclosed is a copy of the State Water Use Authorization (Water User Claim No. 43-9974) which is the water source we propose to use for drilling the wells on the enclosed list. Also enclosed as requested is an explanation of the composition of the thrifty lite cement including water, all additives, and stating its yield.

Am I correct in assuming that the 30-day posting period began as of the date the Notice of Staking was received by your office (May 3 according to the date agreed upon at the onsite inspections held May 5-6) as required and stated by 43 CFR 3162.3-1(g) rather than the May 20 date the APD was received by your office? If my interpretation of 43 CFR 3162.3-1(g) is incorrect, I would appreciate a call to discuss this.

If you need further information or have any questions, please call.

Sincerely,

Bobbie Schuman

Bobbie Schuman
Coordinator of Operations,
Environmental and Regulatory Affairs

/rs

Enclosures

cc: Utah Division of Oil, Gas and Mining

MONUMENT BUTTE DRILLING PROGRAM

Balcron Federal #21-25Y
NE NW Section 25, T9S, R16E
Duchesne County, Utah
198.4' FNL, 2302.2' FWL
FLS #U-64380
PTD 5,650'
GL 5684.9'

Balcron Federal #41-21Y
NE NE Section 21, T9S, R16E
Duchesne County, Utah
970.2' FNL, 893.8' FEL
FLS #U-64379
PTD 6,000'
GL 5953.5'

Balcron Federal #24-3Y
SE SW Section 3, T9S, R17E
Duchesne County, Utah
561.8' FSL, 1887.2' FWL
FLS #U-64381
PTD 5,950'
GL 5099.1'

Balcron Federal #21-9Y
NE NW Section 9, T9S, R16E
Duchesne County, Utah
476.2' FNL, 2051' FWL
FLS #U-65207
PTD 6,190'
GL 5747.3'

Balcron Federal #21-13Y
NE NW Section 13, T9S, R16E
Duchesne County, Utah
702.7' FNL, 1830.5' FWL
FLS #U-64805
PTD 5,900'
GL 5535.5'

Balcron Federal #22-10Y
SE NW Section 10, T9S, R17E
Duschene County, Utah
1980' FNL, 1980' FWL
FLS #U-65210
PTD 5,850'
GL 5121.9'

MONUMENT BUTTE DRILLING PROGRAM

==========

Balcron Federal #44-14Y
SE SE Section 14, T9S, R17E
Duchesne County, Utah
1008.2' FSL, 832.3' FEL
FLS #U-64806
PTD 5,700'
GL 5164.3'

Balcron Monument Federal #14-8
SW SW Section 8, T9S, R17E
Duchesne County, Utah
660' FSL, 660' FWL
FLS #U-007978
PTD 5,950'
GL 5370.6'

Balcron Monument Federal #41-18
NE NE Section 18, T9S, R17E
Uintah County, Utah
660' FNL, 660' FEL
FLS #U-3563-A
PTD 5,900'
GL 5406.3'

6/2/93
/rs

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

RECEIVED
JUN 0 3 1993
DIVISION OF
OIL GAS & MINING

June 1, 1993

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

Gentlemen:

RE: Balcron Federal #41-21Y
NE NE Section 21, T9S, R16E
Duchesne County, Utah

At the onsite inspection for the referenced well it was determined that the access route needed to be changed. Attached is the Archeological Survey which was conducted for the new access route. Please consider this a part of the Application for Permit to Drill which has already been submitted.

Sincerely,

Bobbie Schuman

Bobbie Schuman
Coordinator of Operations,
Environmental and Regulatory Affairs

/rs

Attachment

cc: Utah Division of Oil, Gas and Mining

EQUITABLE RESOURCES
ENERGY COMPANY
BALCRON OIL DIVISION
1601 Lewis Avenue
P.O. Box 21017
Billings, MT 59104

RECEIVED
JUN 16 1993
DIVISION OF
OIL, GAS & MINING

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

June 14, 1993

-- VIA FAX --

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

Gentlemen:

RE: Balcron Federal #41-21Y
NE NE Section 21, T9S, R16E
Duchesne County, Utah

We hereby request an Exception to Location for the referenced well. The location was moved in response to a request from the Bureau of Land Management.

If you have any questions or need further information, please give me a call.

Sincerely,

Bobbie Schuman

Bobbie Schuman
Coordinator of Operations,
Environmental and Regulatory Affairs

/rs

Michael O. Leavitt
Governor
Ted Stewart
Executive Director
James W. Carter
Division Director

State of Utah

DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

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)

June 16, 1993

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

Gentlemen:

Re: Balcron Federal #41-21Y Well, 970 feet from the north line, 894 feet from the east line, NE 1/4 NE 1/4, Section 21, Township 9 South, Range 16 East, Duchesne County, Utah

Pursuant to Utah Admin. R. 649-3-3, Exception to 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., Oil and Gas Conservation General Rules.

2. Notification 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. 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 R.J. Firth, Associate Director, (Home) (801)571-6068.

6. Compliance with the requirements of Utah Admin. R. 649-3-20, Gas Flaring or Venting, if the well is completed for production.

Trash and sanitary waste should be properly contained and transported to approved disposal locations, not retained in or disposed of in pits on location or downhole. Prior to the commencement of drilling operations, the operator should consult the local/county sanitarian and/or the Department of Environmental Quality, Division of Drinking Water/Sanitation, regarding appropriate disposal of sanitary waste.

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 43-013-31392.

Sincerely,

R.J. Firth
Associate Director, Oil and Gas

ldc
Enclosures
cc: Bureau of Land Management
Duchesne County Assessor
J.L. Thompson
WOI1

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

June 14, 1993

-- VIA FAX --

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

Gentlemen:

RE: Balcron Federal #41-21Y
NE NE Section 21, T9S, R16E
Duchesne County, Utah

We hereby request an Exception to Location for the referenced well. The location was moved in response to a request from the Bureau of Land Management.

If you have any questions or need further information, please give me a call.

Sincerely,

Bobbie Schuman

Bobbie Schuman
Coordinator of Operations,
Environmental and Regulatory Affairs

/rs

DUG MA

Form 3160-3
(November 1983)
(formerly 9-331C)

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 1004-0136
Expires August 31, 1985

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

5. LEASE DESIGNATION AND SERIAL NO.: U-64379

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

7. UNIT AGREEMENT NAME: n/a

8. FARM OR LEASE NAME: Balcron Federal

9. WELL NO.: #41-21Y

10. FIELD AND POOL, OR WILDCAT: Monument Butte/Green River

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: Sec. 21, T9S, R16E

12. COUNTY OR PARISH: Duchesne

13. STATE: UTAH

1a. TYPE OF WORK: DRILL [X] DEEPEN [ ] PLUG BACK [ ]

b. TYPE OF WELL: OIL WELL [X] GAS WELL [ ] OTHER SINGLE ZONE [ ] MULTIPLE ZONE [ ]

CONFIDENTIAL

2. NAME OF OPERATOR: EQUITABLE RESOURCES ENERGY COMPANY

3. ADDRESS OF OPERATOR: P.O. Box 21017; Billings, MT 59104 (Balcron Oil Division)

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
At surface: NE NE Section 21, T9S, R16E 970.2' FNL, 893.8' FEL
At proposed prod. zone

43-013-31392

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*: Approximately 14 miles SW of Myton, 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: 6,000'

20. ROTARY OR CABLE TOOLS: Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.): GL 5953.5'

22. APPROX. DATE WORK WILL START*: June 1, 1993

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
See attached for details.				

RECEIVED
MAY 20 1993

EXHIBITS ATTACHED

"A" PROPOSED DRILLING PROGRAM
"B" PROPOSED SURFACE USE PROGRAM
"C" GEOLOGIC PROGNOSIS
"D" DRILLING PROGRAM/CASING DESIGN
"E" EVIDENCE OF BOND COVERAGE
"F" ARCHEOLOGY REPORT
"G" SURVEY PLAT
"H" BOPE SCHEMATIC
"I" RIG LAYOUT
"J" EXISTING ROADS (Map A)
"K" PLANNED ACCESS (Map B)
"L" EXISTING WELLS (Map C)
"M" CUT & FILL DIAGRAM

RECEIVED
JUN 28 1993
DIVISION OF OIL, GAS & MINING

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 (Bobbie Schuman) TITLE Coordinator of Environmental and Regulatory Affairs DATE May 17, 1993

(This space for Federal or State office use)

PERMIT NO. APPROVAL DATE

APPROVED BY Terry Kenczka TITLE Acting ASSISTANT DISTRICT MANAGER MINERALS DATE JUN 25 1993

CONDITIONS OF APPROVAL, IF ANY:

CONDITIONS OF APPROVAL ATTACHED TO OPERATOR'S COPY

NOTICE OF APPROVAL

UT080-3M-053

*See Instructions On Reverse Side

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 LOCATION INFORMATION

Company/Operator: EQUITABLE RESOURCES ENERGY COMPANY

API Number 43-013-31392

Well Name & Number: BALCRON FEDERAL #41-21Y

Lease Number: U-64379

Location: NENE Sec. 21 T. 9S R. 16E

Surface Ownership: BLM

Date NOS Received May 3, 1993

Date APD Received May 20, 1993

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.

RECEIVED
JUN 2 6 1993
DIVISION OF
OIL GAS & MINING

CONDITIONS OF APPROVAL

"If a plastic nylon reinforced liner is used, it will be a minimum of 12 mil thickness with sufficient bedding (either straw or dirt) to cover any rocks. The liner will overlap the pit walls and be covered with dirt and/or rocks to hold it in place. No trash, scrap pipe, etc., that could puncture the liner will be disposed of in the pit. More stringent protective requirements may be deemed necessary by the AO."

Fall seeding is preferred and will be done after September 15 and before ground freezes. Spring seeding will be done prior to April 15.

The requested emergency pit is hereby approved under NTL-2B, Section VI, subject to the following Conditions of Approval:

1. If emergency use occurs, the emergency pit shall be emptied and the liquids disposed of in accordance with applicable State and/or Federal regulations within 48 hours following its use, unless such time is extended by the authorized officer.

2. As much as practicable, the emergency pit shall be located on level ground, and away from drainage patterns and unstable ground.

3. The emergency pit shall be fenced and the fence maintained for safety, and to prevent livestock and wildlife entry. The pit shall be fenced according to the same minimum standards listed for the drilling reserve pit under Point 9E of the Multi-Point Surface Use and Operation Plan. The fence shall be maintained in a taut condition. Fences shall not be built on berms.

4. Produced water drain lines shall not go to the emergency pit.

5. The pit shall be bermed or otherwise constructed and maintained to prevent entrance of surface water.

6. Turn downs shall be put on the ends of pipes to direct fluids downward instead of against the wall of the pit.

7. The pit shall be kept free of trash.

Balcron shall contact a Utah BLM artified Paleontologist to survey the location and access road prior to surface disturbance to determine the presence of paleontological resources. If historic archaeological, or paleontological resources are uncovered during ground disturbing activities, Balcron will suspend all operations that would further disturb such materials and immediately contact the BLM Authorized Officer.

For the protection of Mountain Plover nesting and the rearing of their young, drilling activities will not be allowed between March 15 and July 15.

CONDITIONS OF APPROVAL FOR NOTICE TO DRILL

Company Equitable Resources Energy Company Well No. Balcron Federal 41-21Y

Location NENE Section 21, T9S, R16E Lease No. U - 64379

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.

   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 base of the usable water zone, identified at ± 3,018 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 ± 2,818 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 3162.7-2, 3162.7-3, and 3162.7-4 shall be submitted to the appropriate District Office within thirty (30) 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 3162.7-4.

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 onlease 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:

Gerald E. Kenczka Petroleum Engineer	(801) 781-1190
Ed Forsman Petroleum Engineer	(801) 789-7077
BLM FAX Machine	(801) 789-3634

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, spend 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.

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

July 19, 1993

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

Gentlemen:

As required, enclosed are the Paleontology Report for the wellpads and locations of the following wells:

Balcron Federal #41-21Y 43-013-31392
NE NE Section 21, T9S, R16E
Duchesne County, Utah

Balcron Federal #21-9Y
NE NW Section 9, T9S, R16E
Duchesne County, Utah

Balcron Federal #44-14Y
SE SE Section 14, T9S, R17E
Duchesne County, Utah

RECEIVED
JUL 20 1993
DIVISION OF
OIL, GAS & MINING

Sincerely,

Bobbie Schuman

Bobbie Schuman
Coordinator of Operations,
Environmental and Regulatory Affairs

/rs

Enclosures

cc: Utah Division of Oil, Gas and Mining

BALCRON OIL

Balcron Monument Federal #41-21Y

NE NE Section 21, T9S, R16E, SLB&M

Duchesne County, Utah

PALEONTOLOGY REPORT

WELLPAD LOCATION AND ACCESS ROAD

BY

ALDEN H. HAMBLIN
PALEONTOLOGIST
235 EAST MAIN
VERNAL, UTAH 84078

JULY 13, 1993

RESULTS OF PALEONTOLOGY SURVEY AT BALCRON MONUMENT BUTTE FEDERAL #41-21Y

Description of Geology and Topography-

This well location is 12 miles south and 3 miles west of Myton, Utah. It is on a point at the end of the bench top immediately south of Castle Peak Draw in the NE1/4 of the NE1/4 of section 21, T9S, R16E, The wellpad is located on a surface that slopes to the east and northeast into Castle Peak Draw. The access road follows an existing jeep trail northeast from the NW1/4 of the NE1/4 of section 29, T9S, R16E for about 1 mile then covers about 0.6 miles of new area.

All rock outcrops in the area are of the Upper Eocene Uinta Formation, known for its fossil vertebrate fauna of mammals, turtles, crocodilians, and occasional fish remains.

Rocks along the proposed access road and in the immediate area of the proposed wellpad are composed of interbedded limy sandstone, sandstone, clay, and mudstone. The surface is covered with residual eroded rock fragments of limy sandstone with some layers of clay or mudstone as one drops down through the strata. Probably represents shallow lacustrine (lake) and fluvial (stream) deposits.

Paleontological material found -

Both the 1.6 miles of proposed access road and the wellpad were surveyed for paleontology. No fossils were found on the wellpad location or access road.

Recommendations-

No other recommendations are made for this location.

Alden H. Hamblin Date July 15, 1993

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

July 19, 1993

-- VIA FEDERAL EXPRESS --

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

Gentlemen:

RE: Balcron Federal #41-21Y
NE NE Section 21, T9S, R16E
Duchesne County, Utah

Enclosed is a sundry notice reporting a change in the drilling contractor for the referenced well. Because of the change, a new drilling program, rig layout, and BOPE diagram are also enclosed.

Sincerely,

Bobbie Schuman

Bobbie Schuman
Coordinator of Operations,
Environmental and Regulatory Affairs

/rs

Enclosures

cc: Utah Division of Oil, Gas and Mining

RECEIVED
JUL 20 1993
DIVISION OF
OIL GAS & MINING

Form 3160-5
(June 1990)

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 to a different reservoir. Use "APPLICATION FOR PERMIT—" for such proposals

SUBMIT IN TRIPLICATE

CONFIDENTIAL

5. Lease Designation and Serial No.: U-64379

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

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

1. Type of Well: [X] Oil Well [ ] Gas Well [ ] Other

8. Well Name and No.: Balcron Federal #41-21Y

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

9. API Well No.: 43-013-31392

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

10. Field and Pool, or Exploratory Area: Monument Butte/Grn Rvr

4. Location of Well (Footage, Sec., T., R., M., or Survey Description): NE NE Section 21, T9S, R16E
970.2' FNL, 893.8' FEL

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	
[ ] Notice of Intent	[ ] Abandonment	[ ] Change of Plans
[X] ~~Subsequent~~ Report	[ ] Recompletion	[ ] New Construction
[ ] Final Abandonment Notice	[ ] Plugging Back	[ ] Non-Routine Fracturing
	[ ] Casing Repair	[ ] Water Shut-Off
	[ ] Altering Casing	[ ] Conversion to Injection
	[X] Other change of drilling cont	[ ] 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.)*

We have changed drilling contractors on this well to Molen Drilling. Attached is a new drilling program, rig layout, and BOPE diagram for the well.

RECEIVED
JUL 20 1993
DIVISION OF
OIL GAS & MINING

7/21/93
TM Matthews

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

Signed Bobbie Schuman — Title Coordinator of Environmental and Regulatory Affairs — Date July 19, 1993

Bobbie Schuman

(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

Equitable Resources Energy Company
Balcron Oil Division

DRILLING PROGRAM

WELL NAME: Balcron Federal 41-21Y PROSPECT/FIELD: Monument Butte
LOCATION: NE NE Sec.21 Twn.9S Rge.16E
COUNTY: Duchesne STATE: Utah

TOTAL DEPTH: 6000

HOLE SIZE	INTERVAL
12 1/4"	0 to 260'
7 7/8"	260 to 6000'

CASING

STRING TYPE	INTERVAL FROM	INTERVAL TO	CASING SIZE	CASING WEIGHT	CASING GRADE
Surface Casing	0	260	8 5/8"	24 #/Ft	J-55
Production Casing	0	6000	5 1/2"	15.50#/Ft	J-55

(All Casing will be new, ST&C)

CEMENT PROGRAM

Surface	150 sacks 75% Class "G" 25% Poz with 2% CaCl and 1/4 #/Sk Flocele. (Cement will be circulated to surface.)
Production	250 sacks Thifty Lite and 400 sacks 50-50 Poz mix. (Top of cement will be 2000')

PRELIMINARY DRILLING FLUID PROGRAM

TYPE	FROM	TO	WEIGHT	PLAS. VIS	YIELD POINT
Air and air mist	0	260	N.A.	N.A.	N.A.
2% KCl /Gel	260	T.D.	8.7-8.9	10-12	12-14.

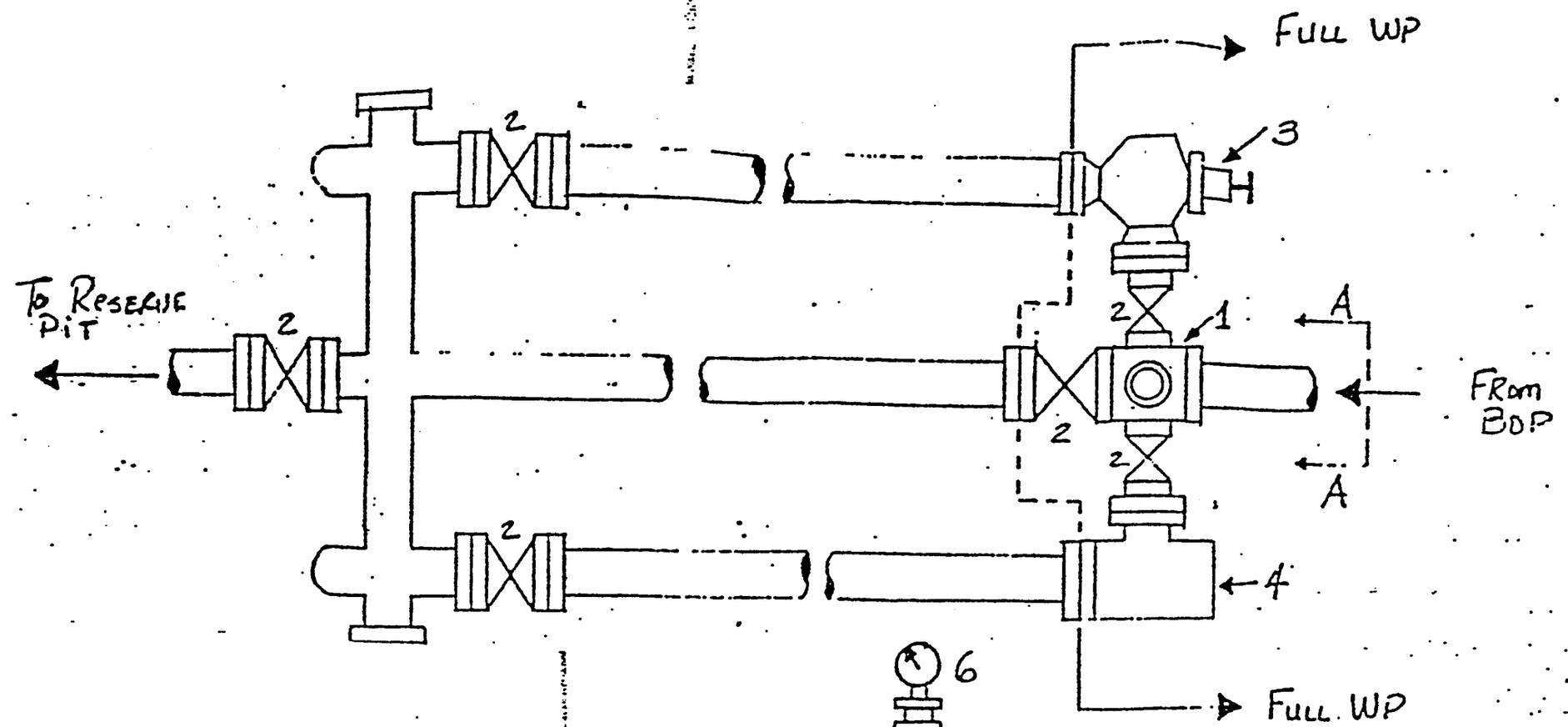
COMMENTS

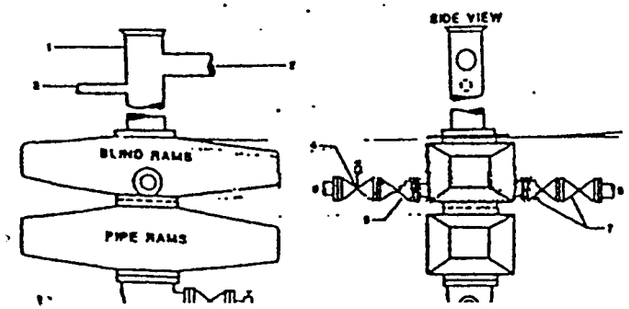
1.) No cores or DST's are planned.

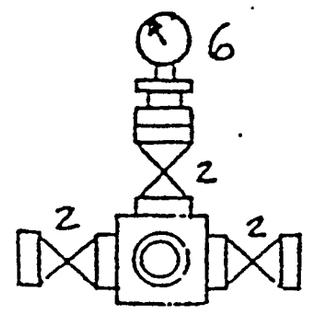
RECEIVED
JUL 20 1993
DIVISION OF
OIL GAS & MINING

DMM/7/16/93

EXHIBIT "H"







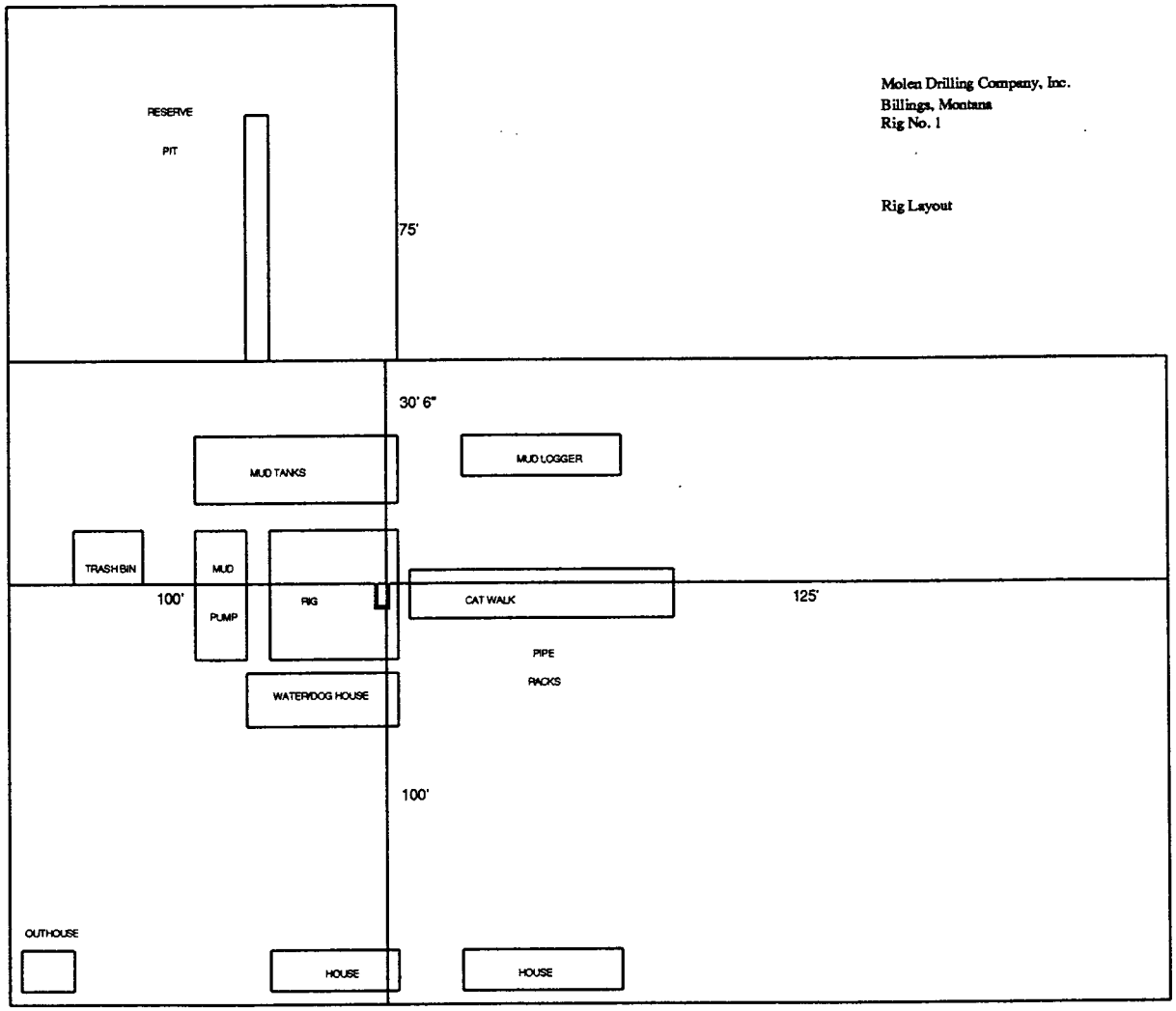
VIEW A-A

1. Cross
2. Gate Valve
3. Adjustable Choke
4. Positive Choke
5. Welded Bull Plug, Lead Filled
6. 2" - 3000 psi mud pressure gauge

Note: All lines must be securely anchored

Molen Drilling Company, Inc.
Billings, Montana
Rig No. 1

Rig Layout



DIVISION OF OIL, GAS AND MINING

SPUDDING INFORMATION

NAME OF COMPANY: BALCRON 43-013-31392

WELL NAME: BALCRON FEDERAL 41-21Y

Section 21 Township 9S Range 16E County DUCHESNE

Drilling Contractor MOLEN DRILLING

Rig # 1

SPUDDED: Date 8/1/93

Time 11:00 AM

How DRY HOLE

Drilling will commence

Reported by BOBBIE SCHUMAN

Telephone #

Date 8/2/93 SIGNED FRM

BALCRON OIL
DAILY OPERATING REPORT

BALCRON FEDERAL #41-21Y
Location: NE NE Section 21, T9S, R16E
Duchesne County, Utah **---TIGHT HOLE---**
970.2' FNL, 893.8' GEL
PTD: 5900' Formation: Green River
Green River Prospect/Monument Butte Field
Elevations: 5953.5' GL
Contractor: Molen Drilling Rig #1
Operator: Balcron/EREC
Spud:
Casing:

7-21-93	Present Operation:	Start building location.
7-22-93	Present Operation:	Work on location.
7-23-9	Present Operation:	Work on location, hard rock, prep to drill & shoot.
7-24-93	Present Operation:	Start to drill rock for dynamite.
7-25-93	Present Operation:	Finish drilling holes. Total of 194.
7-26-93	Present Operation:	Shoot pit & location.
7-27-93	Present Operation:	Work on location.
7-28-93	Present Operation:	Work on location.
7-29-93	Present Operation:	Work on location & pit.
7-30-93	Present Operation:	Can't dig pit.
7-31-93	Present Operation:	Shoot pit again.
8-1-93	Present Operation:	Finish location, rig up rat hole digger & drill 100' of surface hole.

DC: Not given CC: $4,483

BALCRON OIL
DAILY OPERATING REPORT

BALCRON FEDERAL #41-21Y
Location: NE NE Section 21, T9S, R16E
Duchesne County, Utah **---TIGHT HOLE---**
970.2' FNL, 893.8' GEL
PTD: 5900' Formation: Green River
Green River Prospect/Monument Butte Field
Elevations: 5953.5' GL
Contractor: Molen Drilling Rig #1
Operator: Balcron/EREC
Spud:
Casing:

7-21-93 Present Operation: Start building location.

7-22-93 Present Operation: Work on location.

7-23-9 Present Operation: Work on location, hard rock, prep to drill & shoot.

7-24-93 Present Operation: Start to drill rock for dynamite.

7-25-93 Present Operation: Finish drilling holes. Total of 194.

7-26-93 Present Operation: Shoot pit & location.

7-27-93 Present Operation: Work on location.

7-28-93 Present Operation: Work on location.

7-29-93 Present Operation: Work on location & pit.

7-30-93 Present Operation: Can't dig pit.

7-31-93 Present Operation: Shoot pit again.

8-1-93 Present Operation: Finish location, rig up rat hole digger & drill 100' of surface hole.
DC: Not given CC: $4,483

8-2-93 Present Operation: Put liner in reserve pit. Start hauling water. Rat hole digger will run 8-5/8" casing Wednesday morning.
DC: Not given

BALCRON OIL
DAILY OPERATING REPORT

BALCRON FEDERAL #41-21Y
Location: NE NE Section 21, T9S, R16E
Duchesne County, Utah **---TIGHT HOLE---**

8-3-93 TD: 225' (0') Day 3
Present Operation: Drilling surface hole.
Spud well @ 11:00 AM 8/1/93. Haul more water to reserve, rat hole digger still reaming hole to 12-1/4". Blow hydraulic hose, lacks 30'.
DC: 826' CC: $5,309

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

August 2, 1993

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

Gentlemen:

RE: Balcron Federal #41-21Y
NE NE Section 21, T9S, R16E
Duchesne County, Utah

Enclosed is our Entity Action form reporting spud of the reference well along with a copy of the Federal sundry notice reporting spud of the referenced well.

Sincerely,

Bobbie Schuman

Bobbie Schuman
Coordinator of Operations,
Environmental and Regulatory Affairs

/rs

Enclosure

RECEIVED
AUG 04 1993
DIVISION OF
OIL GAS & MINING

Form 3160-5
(June 1990)

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 to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals

SUBMIT IN TRIPLICATE

CONFIDENTIAL

5. Lease Designation and Serial No.
U-64379

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

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

1. Type of Well
[X] Oil Well [ ] Gas Well [ ] Other

8. Well Name and No.
Balcron Federal #41-21Y

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

9. API Well No.
43-013-31392

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

10. Field and Pool, or Exploratory Area
Monument Butte/Grn Rvr

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
NE NE Section 21, T9S, R16E
970.2' FNL, 893.8' FEL

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	
[ ] Notice of Intent	[ ] Abandonment	[ ] Change of Plans
[X] Subsequent Report	[ ] Recompletion	[ ] New Construction
[ ] Final Abandonment Notice	[ ] Plugging Back	[ ] Non-Routine Fracturing
	[ ] Casing Repair	[ ] Water Shut-Off
	[ ] Altering Casing	[ ] Conversion to Injection
	[XX] Other spud of well	[ ] 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.)*

Well was spud at 11 a.m. 8/1/93 at 11 a.m. by Parker Air Drilling. Molen Rig #1 will be the drilling contractor on this well.

RECEIVED
AUG 0 4 1993
DIVISION OF
OIL GAS & MINING

14. I hereby certify that the foregoing is true and correct
Signed Bobbie Schuman Title Coordinator of Environmental and Regulatory Affairs Date August 2, 1993
Bobbie Schuman

(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

ATE OF UTAH
VISION OF OIL, GAS AND MINING
NTITY ACTION FORM - FORM 6

RECEIVED
AUG 0 4 1993
DIVISION OF
OIL GAS & MINING

OPERATOR Equitable Resources Energy Company, Balcron Oil Division
ADDRESS ~~P.O. Box 21017~~
Billings, MT 59104

OPERATOR ACCT. NO. N9890

ACTION CODE	CURRENT ENTITY NO.	NEW ENTITY NO.	API NUMBER	WELL NAME	WELL LOCATION QQ	SC	TP	RG	COUNTY	SPUD DATE	EFFECTIVE DATE
A	99999	11505	43-013-31392	Balcron Federal #41-21Y	NE NE	21	9S	16E	Duchesne	8/1/93	8/1/93

ELL 1 COMMENTS:
Spud of new well.
Entity added 8-5-93 JLC

ELL 2 COMMENTS:

ELL 3 COMMENTS:

ELL 4 COMMENTS:

ELL 5 COMMENTS:

TION 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)

DATE: August 2, 1993

Bobbie Schuman
Signature
Coordinator of Environmental and Regulatory Affairs
Title Date

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

Phone No. (406) 259-7860

/89)

BALCRON OIL
DAILY OPERATING REPORT

BALCRON FEDERAL #41-21Y
Location: NE NE Section 21, T9S, R16E
Duchesne County, Utah **---TIGHT HOLE---**

8-3-93 TD: 225' (0') Day 3
Present Operation: Drilling surface hole.
Spud well @ 11:00 AM 8/1/93. Haul more water to reserve, rat hole digger still reaming hole to 12-1/4". Blew hydraulic hose, lacks 30'.
DC: 826' CC: $5,309

8-4-93 TD: 225' (0') Day 4
Present Operation: WOC.
Finish reaming hole. Run 6 jts. 8-5/8" 24# casing. Cement with Dowell. Good returns, approx 5 BBLS cement back. Cement with 150 sx Class G with 2% CCL & 1/4# per sx Celloflake. Plug down @ 4:40 PM.
DC: $5,040 CC: $10,345

BALCRON OIL
DAILY OPERATING REPORT

BALCRON FEDERAL #41-21Y
Location: NE NE Section 21, T9S, R16E
Duchesne County, Utah

---TIGHT HOLE---

8-3-93 TD: 225' (0') Day 3
Present Operation: Drilling surface hole.
Spud well @ 11:00 AM 8/1/93. Haul more water to reserve, rat hole digger still reaming hole to 12-1/4". Blow hydraulic hose, lacks 30'.
DC: 826' CC: $5,309

8-4-93 TD: 225' (0') Day 4
Present Operation: WOC.
Finish reaming hole. Run 6 jts. 8-5/8" 24# casing. Cement with Dowell. Good returns, approx 5 BBLS cement back. Cement with 150 sx Class G with 2% CCL & 1/4# per sx Celloflake. Plug down @ 4:40 PM.
DC: $5,040 CC: $10,345

8-5-93 TD: 225' (0') Day 5
Present Operation: Drilling mouse & rat holes.
Parker Air Drilling drilling mouse & rat holes. Molen will move today.
DC: $27,300 CC: $37,645

BALCRON OIL
DAILY OPERATING REPORT

BALCRON FEDERAL #41-21X
Location: NE NE Section 21, T9S, R16E
Duchesne County, Utah **---TIGHT HOLE---**

8-3-93 TD: 225' (0') Day 3
Present Operation: Drilling surface hole.
Spud well @ 11:00 AM 8/1/93. Haul more water to reserve, rat hole digger still reaming hole to 12-1/4". Blow hydraulic hose, lacks 30'.
DC: 826' CC: $5,309

8-4-93 TD: 225' (0') Day 4
Present Operation: WOC.
Finish reaming hole. Run 6 jts. 8-5/8" 24# casing. Cement with Dowell. Good returns, approx 5 BBLS cement back. Cement with 150 sx Class G with 2% CCL & 1/4# per sx Celloflake. Plug down @ 4:40 PM.
DC: $5,040 CC: $10,345

8-5-93 TD: 225' (0') Day 5
Present Operation: Drilling mouse & rat holes.
Parker Air Drilling drilling mouse & rat holes. Molen will move today.
DC: $27,300 CC: $37,645

8-7-93 TD: 258' (0') Day 7
Present Operation: Rig up.
Get trucks @ 7:00 AM & move to location. Trucks leave @ 4:00 PM. Did not break tower. Raise derrick @ 3:00 PM.
DC: $3,736 CC: $41,381

8-8-93 TD: 525' (267') Day 8
MW 8.4 Vis 29 pH 10.5
Formation: Uintah
Present Operation: Drilling.
Rig up, weld on casing head & nipple up. Test BOP & mainifold to 2000 psi - OK. Test casing to 1500 psi - OK. Pick up collars & drill cement. Drill, survey.
DC: $4,703 CC: $46,084

8-9-93 TD: 1,600' (1,075') Day 9
MW 8.4 Vis 29 pH 10.5
Formation: Uintah
Present Operation: Drilling
Drill, survey, clean on rig. Get mud loggers rigged up.
DC: $14,232 CC: $60,316

BALCRON OIL
DAILY OPERATING REPORT

BALCRON FEDERAL #41-21X
Location: NE NE Section 21, T9S, R16E
Duchesne County, Utah **---TIGHT HOLE---**

8-10-93 TD: 2,670' (1,070') Day 7
MW 8.5 Vis 29 pH 10.5
Formation: Green River
Present Operation: Drilling.
Drill, survey, clean on rig.
DC: $18,971 CC: $79,287

BALCRON OIL
DAILY OPERATING REPORT

BALCRON FEDERAL #41-21Y
Location: NE NE Section 21, T9S, R16E
Duchesne County, Utah **---TIGHT HOLE---**

8-10-93 TD: 2,670' (1,070') Day 7
MW 8.5 Vis 29 pH 10.5
Formation: Green River
Present Operation: Drilling.
Drill, survey, clean on rig.
DC: $18,971 CC: $79,287

8-11-93 TD: 3,289' (619') Day 8
MW 8.4 Vis 29 pH 10.3
Present Operation: Green River
Present Operation: Drilling.
Drill, survey, clean on rig, work on mud pump. Good rain.
DC: $9,541 CC: $ 88,830

BALCRON OIL
DAILY OPERATING REPORT

BALCRON FEDERAL #41-21Y
Location: NE NE Section 21, T9S, R16E
Duchesne County, Utah **---TIGHT HOLE---**

8-10-93 TD: 2,670' (1,070') Day 7
MW 8.5 Vis 29 pH 10.5
Formation: Green River
Present Operation: Drilling.
Drill, survey, clean on rig.
DC: $18,971 CC: $79,287

8-11-93 TD: 3,289' (619') Day 8
MW 8.4 Vis 29 pH 10.3
Present Operation: Green River
Present Operation: Drilling.
Drill, survey, clean on rig, work on mud pump. Good rain.
DC: $9,541 CC: $ 88,830

8-12-93 TD: 3,750' (461') Day 9
MW 8.5 Vis 29 pH 10.3
Formation: Green River
Present Operation: Drilling.
Drill, work on draworks engine, survey, drill, clean on rig.
DC: $6,895 CC: $95,725

BALCRON OIL
DAILY OPERATING REPORT

BALCRON FEDERAL #41-21Y
Location: NE NE Section 21, T9S, R16E
Duchesne County, Utah **---TIGHT HOLE---**

8-10-93 TD: 2,670' (1,070') Day 7
MW 8.5 Vis 29 pH 10.5
Formation: Green River
Present Operation: Drilling.
Drill, survey, clean on rig.
DC: $18,971 CC: $79,287

8-11-93 TD: 3,289' (619') Day 8
MW 8.4 Vis 29 pH 10.3
Present Operation: Green River
Present Operation: Drilling.
Drill, survey, clean on rig, work on mud pump. Good rain.
DC: $9,541 CC: $ 88,830

8-12-93 TD: 3,750' (461') Day 9
MW 8.5 Vis 29 pH 10.3
Formation: Green River
Present Operation: Drilling.
Drill, work on draworks engine, survey, drill, clean on rig.
DC: $6,895 CC: $95,725

8-13-93 TD: 4,185' (435') Day 6
MW 8.5 Vis 29 pH 10.5
Formation: Green River
Present Operation: Drilling.
Drill, survey, work on light plant, drill.
DC: $6,542 CC: $102,267

BALCRON OIL
DAILY OPERATING REPORT

BALCRON FEDERAL #41-21Y
Location: NE NE Section 21, T9S, R16E
Duchesne County, Utah **---TIGHT HOLE---**

8-14-93 TD: 4,538' (353') Day 7
MW 8.5 Vis 29 pH 10.5
Formation: Green River
Present Operation: Drilling.
Drill, survey, trip for bit, clean & paint. About 400-500 BBLS water loss per day. LCM sweeps.
DC: $6,651 CC: $108,918

8-15-93 TD: 5,043' (505') Day 8
MW 8.4 Vis 29 pH 10.0
Formation: Green River
Present Operation: Drilling.
Drill, survey, clean on rig & paint. Approximately 250 BBLS water loss per day.
DC: $7,759 CC: $116,677

8-16-93 TD: 5,510' (467') Day 9
MW 8.5 Vis 29 pH 10.0
Formation: Green River
Present Operation: Drilling.
Drill, survey, work on pump, clean & paint.
DC: $8,473 CC: $125,150

BALCRON OIL
DAILY OPERATING REPORT

BALCRON FEDERAL #41-21Y
Location: NE NE Section 21, T9S, R16E
Duchesne County, Utah **---TIGHT HOLE---**

8-14-93 TD: 4,538' (353') Day 7
MW 8.5 Vis 29 pH 10.5
Formation: Green River
Present Operation: Drilling.
Drill, survey, trip for bit, clean & paint. About 400-500 BBLS water loss per day. LCM sweeps.
DC: $6,651 CC: $108,918

8-15-93 TD: 5,043' (505') Day 8
MW 8.4 Vis 29 pH 10.0
Formation: Green River
Present Operation: Drilling.
Drill, survey, clean on rig & paint. Approximately 250 BBLS water loss per day.
DC: $7,759 CC: $116,677

8-16-93 TD: 5,510' (467') Day 9
MW 8.5 Vis 29 pH 10.0
Formation: Green River
Present Operation: Drilling.
Drill, survey, work on pump, clean & paint.
DC: $8,473 CC: $125,150

8-17-93 TD: 5,852' (342') Day 10
MW 8.4 Vis 29 pH 9.5
Formation: Green River
Present Operation: Drilling.
Drill, survey, clean & paint. Still losing about 250 BBLS water down hole per day. LCM sweeps.
DC: $8,571 CC: $133,721

BALCRON OIL
DAILY OPERATING REPORT

BALCRON FEDERAL #41-21Y
Location: NE NE Section 21, T9S, R16E
Duchesne County, Utah **---TIGHT HOLE---**

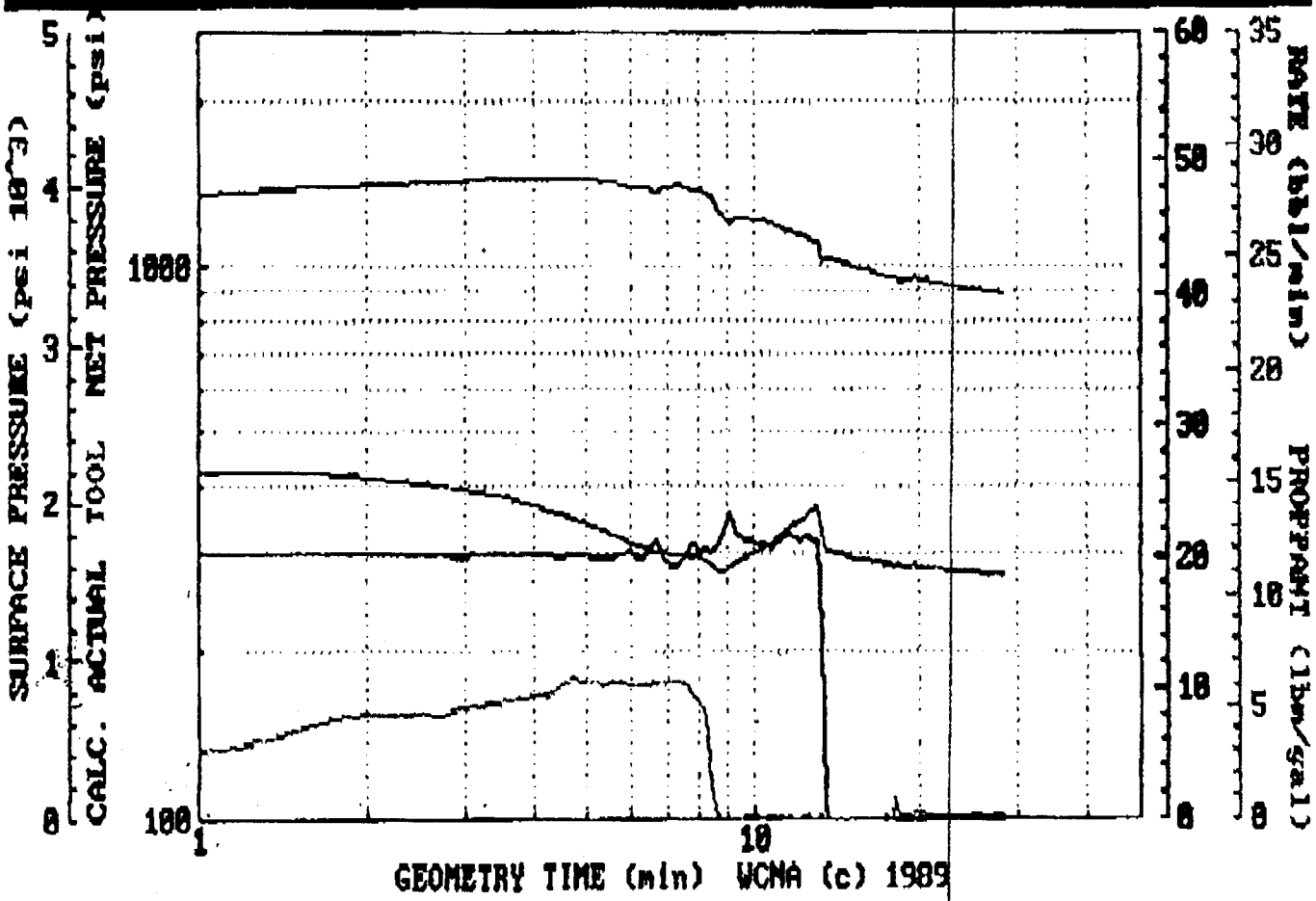
8-14-93 TD: 4,538' (353') Day 7
MW 8.5 Vis 29 pH 10.5
Formation: Green River
Present Operation: Drilling.
Drill, survey, trip for bit, clean & paint. About 400-500 BBLS water loss per day. LCM sweeps.
DC: $6,651 CC: $108,918

8-15-93 TD: 5,043' (505') Day 8
MW 8.4 Vis 29 pH 10.0
Formation: Green River
Present Operation: Drilling.
Drill, survey, clean on rig & paint. Approximately 250 BBLS water loss per day.
DC: $7,759 CC: $116,677

8-16-93 TD: 5,510' (467') Day 9
MW 8.5 Vis 29 pH 10.0
Formation: Green River
Present Operation: Drilling.
Drill, survey, work on pump, clean & paint.
DC: $8,473 CC: $125,150

8-17-93 TD: 5,852' (342') Day 10
MW 8.4 Vis 29 pH 9.5
Formation: Green River
Present Operation: Drilling.
Drill, survey, clean & paint. Still losing about 250 BBLS water down hole per day. LCM sweeps.
DC: $8,571 CC: $133,721

8-18-93 TD: 6,000' (148') Day 11
MW 9.0 Vis 31 pH 9.5
Formation: Green River
Present Operation: Logging.
Drill, TD at 6,000'. Circulate 2 hours and drop survey. Strap out of hole. Rig up Halliburton and log well.
DC: $6,902 $140,623


SURFACE PRESSURE (psi 10^3)
CALC. ACTUAL TOOL NET PRESSURE (psi)
RATE (bbl/min)
PROPPANT (lbm/gal)
GEOMETRY TIME (min) WCNA (c) 1989
0
1
2
3
4
5
100
1000
1
10
0
10
20
30
40
50
60
0
5
10
15
20
25
30
35

The Western Company—Treatment Report

Date 8-18-93 District Vernal F. Receipt 220741 Operator Balcron Oil Co.
Lease Federal Well No. 44-14y Field Monument Buttes Location S14-T9S-R17E
County Duchesne State UT Stage Number 1 This Zone ☒ This Well ☒

WELL DATA OG☐ NG☐ NO☐ OO☐ WD☐ IW☐ Misc.☐ Depth TD/PB 5591 Formation Green River
Tubing Size — WT. — Set at: — Type Packer — Set At —
Casing Size 5½ WT. 15.5 Set From Surface To TD Liner Size — Wt. —
Liner Set From — To — Open Hole: Size — From — To — Casing Perforations: Size .45
Holes Per Foot 2 Intervals 4745-4758
Previous Treatment N/A Prior Production N/A

TREATMENT DATA Pad Used: Yes☒ No☐ Pad Type Viking I - 35#
Treating Fluid Type: Foam☐ Water☒ Acid☐ Oil☐ Treat. Fluid Vol. 9954 Gal.
Base Fluid Type Viking I 35# Base Fluid Vol. 9954 Gal.
Foam Qual.: — % Mitchell☐ Slurry☐ Surface☐ Downhole☐ Total Prop Qty. 39,120 Lbs.
Prop Type: Sand☒ WP-1☐ WP-3☐ Baux.☐ Other
Prop Mesh Sizes, Types and Quantities 20/40 - 22,780 16/30 - 16,340
Hole Loaded With Treat Via: Tubing☐ Casing☒ Anul.☐ Tubing & Anul.☐
Ball Sealers: — In — Stages of —
Types and Number of Pumps Used TM 1300-3
Auxiliary Materials

LIQUID/GAS PUMPED AND CAPACITIES IN BBLS.
Tubing Cap. —
Casing Cap. 112.9
Annular Cap. —
Open Hole Cap. —
Fluid to Load 17
Pad Volume 95
Treating Fluid 237
Flush 111
Overflush —
Fluid to Recover 348
Total N² —
Total CO_2 —

PROCEDURE SUMMARY

Time AM/PM	Treating Pressure-Psi STP	Annulus	Surface Slurry BBLS. Pumped Stage	Total	Slurry Rate BPM	Surface CO_2 BBLS. Pumped Stage	Total	CO_2 Rate BPM	Surface N² MSCF Pumped Stage	Total	N² Rate SCFM	Comments
8:45	—	—	—	—	—							Test Lines @ 4500 psi
9:02	2010	—	—	—	20.2							Start Pad
9:04	2050	—	—	95	20.1							Start 2.0# 20/40
9:09	2070	—	—	105	20.1							Start 3.0# 20/40
9:09	2200	—	—	127	20.1							Start 4.0# 20/40
9:11	2140	—	—	152	20.1							Start 5.0# 20/40
9:12	2000	—	—	114	20.1							Start 6.0# 20/40
9:15	1750	—	—	228	20.2							Start 6.0# 16/30
9:17	1690	—	—	272	21.3							Start ~~2.0#~~ 1[illegible]
9:22	1750	—	—	382	—							Shutdown All Flush Flushed
												5 min 1600 psi
												10 min 1570 psi
												15 min 1550 psi

Treating Pressure: Min. 1560 Max. 2100 Avg. 1800 Customer Representative Mr. Dave Greenwood
Inj. Rate on Treating Fluid 20.1 Rate on Flush 21.4 Western Representative J. Strange
Avg. Inj. Rate 20.5 I.S.D.P. 1750 Flush Dens. lb./gal. 8.4 Distribution Balcron
Final Shut-in Pressure 1550 in 15 Minutes
Operator's Maximum Pressure 3000 psi

Job Number Recommendation ID #

BALCRON OIL
DAILY OPERATING REPORT

BALCRON FEDERAL #41-21Y
Location: NE NE Section 21, T9S, R16E
Duchesne County, Utah **---TIGHT HOLE---**

8-19-93 TD: 6,000' (-0-) Day 12
Formation: Green River
Present Operation: Running Casing.
Log well, rig down loggers. Wait on orders. Trip in hole & circulate. Unload 5-1/2" casing. Lay down drillpipe & collars; rig up casers & run casing.
DC: $20,275 CC: $160,898

BALCRON OIL
DAILY OPERATING REPORT

BALCRON FEDERAL #41-21Y
Location: NE NE Section 21, T9S, R16E
Duchesne County, Utah **---TIGHT HOLE---**

8-19-93 TD: 6,000' (-0-) Day 12
Formation: Green River
Present Operation: Running Casing.
Log well, rig down loggers. Wait on orders. Trip in hole & circulate. Unload 5-1/2" casing. Lay down drillpipe & collars; rig up casers & run casing.
DC: $20,275 CC: $160,898

8-20-93 TD: 6,000' (-0-) Day 13
Formation: Green River
Present Operation: Moving rig.
Finish running casing, cement with Western. Nipple down & clean mud tank.

One 5-1/2" guide shoe	.70'
One jt 5-1/2" 15.5#/ft K-55	43.14'
One 5-1/2" float collar	2.65'
138 jts 5-1/2" 15.5#/ft K-55	5,957.53'
Total String	6,004.02'

Set @5,999'. PBTD 5,950'.

Ran 20 centralizers. Cemented with 165 sxs Thrifty lite. Tailed in with 275 sxs 50-50 Pozmix. Job looked good. Plug down 8:30 AM 8/19/93. **Release rig 12:30 PM 8/19/93.**

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

August 18, 1993

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

Gentlemen:

RE: Balcron Federal #41-21Y
NE NE Section 21, T9S, R16E
Duchesne County, Utah

Enclosed is our sundry notice reporting that we will change to a completion rig on the referenced well.

Sincerely,

Bobbie Schuman

Bobbie Schuman
Coordinator of Operations,
Environmental and Regulatory Affairs

/rs

Enclosure

cc: Utah Division of Oil, Gas and Mining

RECEIVED
AUG 20 1993
DIVISION OF
OIL, GAS & MINING

Form 3160-5
(June 1990)

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 to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals

SUBMIT IN TRIPLICATE

CONFIDENTIAL

5. Lease Designation and Serial No.: U-64379

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

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

1. Type of Well: [X] Oil Well [ ] Gas Well [ ] Other

8. Well Name and No.: Balcron Federal #41-21Y

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

9. API Well No.: 43-013-31392

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

10. Field and Pool, or Exploratory Area: Monument Butte/Grn Rvr

4. Location of Well (Footage, Sec., T., R., M., or Survey Description): NE NE Section 21, T9S, R16E
970.2' FNL, 893.8' FEL

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	
[X] Notice of Intent	[ ] Abandonment	[ ] Change of Plans
[X] Subsequent Report	[ ] Recompletion	[ ] New Construction
[ ] Final Abandonment Notice	[ ] Plugging Back	[ ] Non-Routine Fracturing
	[ ] Casing Repair	[ ] Water Shut-Off
	[ ] Altering Casing	[ ] Conversion to Injection
	[X] Other replacement rig	[ ] 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.)*

Operator will change to a completion rig on this wellsite as soon as possible after the drilling rig moves off.

RECEIVED
AUG 20 1993
DIVISION OF
OIL, GAS & MINING

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

Signed: Bobbie Schuman — Title: Coordinator of Environmental and Regulatory Affairs — Date: August 18, 1993

Bobbie Schuman

(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

BALCRON OIL
DAILY OPERATING REPORT

BALCRON FEDERAL #41-21Y
Location: NE NE Section 21, T9S, R16E
Duchesne County, Utah **---TIGHT HOLE---**

8-19-93 TD: 6,000' (-0-) Day 12
Formation: Green River
Present Operation: Running Casing.
Log well, rig down loggers. Wait on orders. Trip in hole & circulate. Unload 5-1/2" casing. Lay down drillpipe & collars; rig up casers & run casing.
DC: $20,275 CC: $160,898

8-20-93 TD: 6,000' (-0-) Day 13
Formation: Green River
Present Operation: Moving rig.
Finish running casing, cement with Western. Nipple down & clean mud tank.

One 5-1/2" guide shoe	.70'
One jt 5-1/2" 15.5#/ft K-55	43.14'
One 5-1/2" float collar	2.65'
138 jts 5-1/2" 15.5#/ft K-55	5,957.53'
Total String	6,004.02'

Set @5,999'. PBTD 5,950'.

Ran 20 centralizers. Cemented with 165 sxs Thrifty lite. Tailed in with 275 sxs 50-50 Pozmix. Job looked good. Plug down 8:30 AM 8/19/93. **Release rig 12:30 PM 8/19/93.**
DC: $48,259 CC: $209,157

8-23-93 NU BOP & tbg head. TIH w/4-3/4" drag bit & scraper & 195 jts 2-7/8" tbg EUE tag. PBTD @ 5,950'KB. TOOH w/2-7/8", 5-1/2" scraper & bit. RU Cutter Wire Line to Bond Log & perforate top of cement @ 2,980'KB. Perforate 5,023'-5,036'KB, 2 SPF. RD Cutter Wire Line. SWIFN.
DC: $4,950 CC: $4,950

8-24-93 Cas PSIG 1. TIH w/162 jts, 2-7/8" tbg, 1-SN, one 5-1/2" HD PKR, 1 jt 2-7/8" tbg. Set pkr @ 4,967'KB. Bottom of tbg 4,999'KB. RU Halliburton to break down formation. Pressure test surface equipment to 4000 PSIG - OK. Break back @ 2500 PSIG, pump 6 bbls water. Start balls, 1 ball per bbl - 4 BPM. 25 bbls total, no ball off.

BALCRON OIL
DAILY OPERATING REPORT

BALCRON FEDERAL #41-21Y
Location: NE NE Section 21, T9S, R16E
Duchesne County, Utah

---TIGHT HOLE---

Surge balls back. Shut down 15 minutes. Pump 14 bbls water for rate. 2-1/2 BPM @ 2500 PSIG. ISIP 1950 PSIG, flow back 20 bbls water. Made 8 swab runs, well swabbed down. Last three runs, trace of oil. Load recovered 59 bbls water. TOOH w/tbg & packer. SWIFN. Total load to recover 97 bbls water.

DC: $3,017 CC: $7,967

BALCRON OIL
DAILY OPERATING REPORT

BALCRON FEDERAL #41-21Y
Location: NE NE Section 21, T9S, R16E
Duchesne County, Utah **---TIGHT HOLE---**

Surge balls back. Shut down 15 minutes. Pump 14 bbls water for rate. 2-1/2 BPM @ 2500 PSIG. ISIP 1950 PSIG, flow back 20 bbls water. Made 8 swab runs, well swabbed down. Last three runs, trace of oil. Load recovered 59 bbls water. TOOH w/tbg & packer. SWIFN. Total load to recover 97 bbls water.
DC: $3,017 CC: $7,967

8-25-93 Casing pressure slight blow. RU Halliburton to frac 5,023'-5,036'. Pressure test surface equipment to 4000 PSIG - OK. Start frac 1 to 7 pd. ramp. Max pressure 3200 PSIG. Max rate 36 BPM. 2470 average pressure, average rate 34 BPM. Frac complete. ISIP 2084, 5 minutes 1770, 10 minutes 1723, 15 minutes 1672. SWIFD.
DC: $20,409 CC: $28,376

BALCRON OIL
DAILY OPERATING REPORT

BALCRON FEDERAL #41-21Y
Location: NE NE Section 21, T9S, R16E
Duchesne County, Utah

---TIGHT HOLE---

Surge balls back. Shut down 15 minutes. Pump 14 bbls water for rate. 2-1/2 BPM @ 2500 PSIG. ISIP 1950 PSIG, flow back 20 bbls water. Made 8 swab runs, well swabbed down. Last three runs, trace of oil. Load recovered 59 bbls water. TOOH w/tbg & packer. SWIFN. Total load to recover 97 bbls water.
DC: $3,017 CC: $217,124

8-25-93 Casing pressure slight blow. RU Halliburton to frac 5,023'-5,036'. Pressure test surface equipment to 4000 PSIG - OK. Start frac 1 to 7 pd. ramp. Max pressure 3200 PSIG. Max rate 36 BPM. 2470 average pressure, average rate 34 BPM. Frac complete. ISIP 2084, 5 minutes 1770, 10 minutes 1723, 15 minutes 1672. SWIFD.
DC: $20,409 CC: $237,533

8-26-93 Cas 790 PSIG. TIh w/1 jt 2-7/8" tbg, 5-1/2" R-3 packer, SN & 190 jts tbg. Land bottom of tbg @4,999'KB. Set packer @4,967'KB. Made 48 swab runs. Flowed back 60 bbls water, swabbed back 253 bbls water. Last three runs tag fluid @ 4,500'. Last 2 runs 2% oil. SWIFN.
DC: $3,344 CC: $240,877
---PLEASE SEE ATTACHED REPORTS, 2 PAGES---

DONALD CANNON, President

PHONE 801/789-0572
789-1218
1-828-7591
1-828-7485

CANNON WELL SERVICE, INC.

P.O. Box 906
VERNAL, UTAH 84078

Page #1

Page 3 of 6

SWAB REPORT

DATE 8-26-93 LEASE Balcron WELL NO. Fed 41-21-4

TANK NO. TANK SIZE BBLS. PER INCH CO. REP. Dale Griffin

	TIME	FLUID LEVEL	PULLED FROM	FLUID LEVEL IN TANK FT.	FLUID LEVEL IN TANK IN.	BBLS. IN TANK	BBLS. PER RUN	TOT. BBLS SWABBED	FLUID ANALYSIS OIL	WATER	MUD	H2S	GAS
1	9:30	surface	1000'				6	6		100%			
2		400'	1400'				6	12		100%			
3		900'	1900'				6	18		100%			
4		1200'	2200'				6	24		100%		"	
5		1500'	2500'				6	30		100%		"	
6		1700'	2700'				6	36		100%		"	
7		2100'	3100'				6	42		100%		"	
8		2500'	3500'				6	48		100%		"	
9		2800'	3800'				6	54		100%		"	
10		2900'	3900'				6	60		100%		"	
11		3100'	4100'				6	66		100%		"	
12		3200'	4200'				6	72		100%		"	gassy
13		3200'	4200'				6	78		100%		"	"
14		3300'	4300'				6	84	trace	100%		"	"
15		3300'	4300'				6	90	"	100%		"	"
16		3300'	4300'				6	96	"	100%		"	"
17		3300'	4300'				6	102	"	100%		"	"
18		3400'	4400'				6	108	"	100%		"	"
19		3400'	4400'				6	114	"	100%		"	"
20		3400'	4400'				6	120	"	100%		"	"
21		3400'	4400'				6	126	"	100%	cl	trace	"
22		3400'	4400'				6	132	"	100%			"
23		3500'	4500'				6	138	"	100%			"
24		3500'	4500'				6	144	"	100%			"
25		3500'	4500'				6	150	"	100%			"
26		3600'	4600'				6	156	"	100%			"
27		3600'	4600'				6	162	"	100%			"
28		3600'	4600'				6	168	"	100%			"
		3600'	4600'				6	174	"	100%			"
		3600'	4600'				6	180	"	100%			"

DONALD CANNON, President

PHONE 801/789-0572
789-1218
1-828-7591
1-828-7495

Page #2

CANNON WELL SERVICE, INC.

P.O. Box 906
VERNAL, UTAH 84078

Page 4 of 6

SWAB REPORT

DATE 8-26-93 LEASE Balcron WELL NO. Fed 41-21-4

TANK NO. TANK SIZE BBLS. PER INCH CO. REP. Dale Griffin

	TIME	FLUID LEVEL	PULLED FROM	FLUID LEVEL IN TANK FT.	FLUID LEVEL IN TANK IN.	BBLS. IN TANK	BBLS. PER RUN	TOT. BBLS. SWABBED	FLUID ANALYSIS OIL	WATER	MUD	HS	GAS
1		3700'	4965'				6	186	trace	100%			gas
2		3800'	4965'				6	192	"	100%			"
3		3900'	4965'				6	198	"	100%			"
4		4000'	4965'				6	204	"	100%			"
5		4100'	4965'				5½	209½	"	100%			"
6		4100'	4965'				5½	215	"	100%			"
7		4200'	4965'				4	219	"	100%			"
8		4200'	4965'				4	223	"	100%			"
9		4300'	4965'				4	227	"	100%			"
10		4300'	4965'				3½	230½	1%	99%			"
11		4400'	4965'				3	233½	1%	99%			"
12		4400'	4965'				3	236½	1%	99%			"
13		4400'	4965'				3	239½	1%	99%			"
14		4400'	4965'				3	242½	1%	99%			"
15		4400'	4965'				3	245½	1%	99%			"
16		4500'	4965'				2½	248	1%	99%			"
17		4500'	4965'				2½	250½	2%	98%			"
18	5:30	4500'	4965'				2½	253	2%	98%			"
19						Flowed back 60 bbls		60					
20								313					
21													
22													
23													
24													
25													
26													
27													

BALCRON OIL
DAILY OPERATING REPORT

BALCRON FEDERAL #41-21Y
Location: NE NE Section 21, T9S, R16E
Duchesne County, Utah

---TIGHT HOLE---

Surge balls back. Shut down 15 minutes. Pump 14 bbls water for rate. 2-1/2 BPM @ 2500 PSIG. ISIP 1950 PSIG, flow back 20 bbls water. Made 8 swab runs, well swabbed down. Last three runs, trace of oil. Load recovered 59 bbls water. TOOH w/tbg & packer. SWIFN. Total load to recover 97 bbls water.
DC: $3,017 CC: $217,124

8-25-93 Casing pressure slight blow. RU Halliburton to frac 5,023'-5,036'. Pressure test surface equipment to 4000 PSIG - OK. Start frac 1 to 7 pd. ramp. Max pressure 3200 PSIG. Max rate 36 BPM. 2470 average pressure, average rate 34 BPM. Frac complete. ISIP 2084, 5 minutes 1770, 10 minutes 1723, 15 minutes 1672. SWIFD.
DC: $20,409 CC: $237,533

8-26-93 Cas 790 PSIG. TIh w/1 jt 2-7/8" tbg, 5-1/2" R-3 packer, SN & 190 jts tbg. Land bottom of tbg @4,999'KB. Set packer @4,967'KB. Made 48 swab runs. Flowed back 60 bbls water, swabbed back 253 bbls water. Last three runs tag fluid @ 4,500'. Last 2 runs 2% oil. SWIFN.
DC: $3,344 CC: $240,877
---PLEASE SEE ATTACHED REPORTS, 2 PAGES---

8-27-93 Cas "0" PSIG, tbg 35 psi. Tag fluid 1500' from surface. Made 30 swab runs. Swab back 122 bbls water. Unseat packer, circulate sand out of well. TOOH w/tbg & packer. RU Schlumberger to preforate 4,645'-4,650' - 1SPF; 4,614' - 4,624' - 1SPF. SWIFN. DC: $2,971
CC: $243,848

8-28-93 TIH w/5-1/2" retrievable bridge plub, one jt 2-7/8" tbg, one 5-1/2" R-3 packer & 2-7/8" tbg. Set bridge plug at 4700', set packer at 4551'. Bottom of tubing at 4,583'. RU Halliburton to break down. Test surface equipment - OK. Start break down - 1 ball per bbl, 3 bbls per minute. Ball off. Surge balls back. Pump for rate 6.5 BPM at 2650 PSIG, ISIP 1400 psi. Pressure test surface equpment to 4000 PSIG - OK. Start pad. Start sand 1# to 7# ramp. Maximum rate 35 BPM. Start fresh 2750 maximum pressure. ISIP 1972 psi, 5 minutes 1971 psi, 10 minutes 1679 psi, 16 minutes 1607 psi. SWIFN.
DC: $22,846 CC: $266,694

BALCRON OIL
DAILY OPERATING REPORT

BALCRON FEDERAL #41-21Y
Location: NE NE Section 21, T9S, R16E
Duchesne County, Utah **---TIGHT HOLE---**

8-30-93 Casing psi 40. TIH w/5-1/2" packer & 2-7/8" tbg, tag fill @ 4,633' KB. Circulate to 4,670', set packer @ 4,550'. Made swab 30 runs, swab back 180 bbls fluid - 7% oil. No sand in fluid after 30 hrs. Last three runs 15% oil. Release packer, tag fill @ 4,650'KB. Circulate sand out to bridge plug (4,700'). Release bridge plug & TOOH w/36 jts 2-7/8" tbg. SDFN.
DC: $2,600 CC: $269,294

BALCRON OIL
DAILY OPERATING REPORT

BALCRON FEDERAL #41-21Y
Location: NE NE Section 21, T9S, R16E
Duchesne County, Utah

---TIGHT HOLE---

8-30-93 Casing psi 40. TIH w/5-1/2" packer & 2-7/8" tbg, tag fill @ 4,633' KB. Circulate to 4,670', set packer @ 4,550'. Made swab 30 runs, swab back 180 bbls fluid - 7% oil. No sand in fluid after 30 hrs. Last three runs 15% oil. Release packer, tag fill @ 4,650'KB. Circulate sand out to bridge plug (4,700'). Release bridge plug & TOOH w/36 jts 2-7/8" tbg. SDFN.
DC: $2,600 CC: $269,294

8-31-93 Cas. - Vacuum, tubing slight blow. TOOH w/tbg, packer & bridge plug. TIH w/1 jt 2-7/8" EUE, J-55, 8 rods, 6.5# tbg - length 31.82', landed at 5,096.63'KB; 1 perf nipple 2-7/8" x 3' - length 3.20'; 1 seating nipple - length 1.10'; 165 jts 2-7/8" tbg EUE, J-55, 8 rods, 6.5# tbg - length 5,047.51'. ND BOP. NU wellhead. TIH w/1 BHP 2-1/2" x 1-1/2" x 16' RHAC pressure actuated plunger, 6 rods 1" x 25" EL w/2-1/2" Ricton guides, 195 rods 3/4" x 25' D slick, one 3/4" x 8' pony, one 3/4" x 4' pony, one 1-1/4" x 16' polish rod SM. RDMO.
DC: $7,565 CC: $276,859

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

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SEP 01 1993
DIVISION OF
OIL, GAS & MINING

August 30, 1993

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

Gentlemen:

Enclosed are sundry notices laying out the proposed site facility diagrams for the following wells:

Balcron Federal #21-13Y

Balcron Federal #41-21Y

Balcron Federal #44-14Y

Sincerely,

Bobbie Schuman

Bobbie Schuman
Coordinator of Operations,
Environmental and Regulatory Affairs

/rs

Enclosures

cc: Utah Division of Oil, Gas and Mining

Form 3160-5
(June 1990)

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 to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals

SUBMIT IN TRIPLICATE

CONFIDENTIAL

5. Lease Designation and Serial No.
U-64379

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

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

1. Type of Well
[X] Oil Well [ ] Gas Well [ ] Other

8. Well Name and No.
Balcron Federal #41-21Y

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

9. API Well No.
43-013-31392

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

10. Field and Pool, or Exploratory Area
Monument Butte/Grn Rvr

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
NE NE Section 21, T9S, R16E
970.2' FNL, 893.8' FEL

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	
[XX] Notice of Intent	[ ] Abandonment	[ ] Change of Plans
[ ] Subsequent Report	[ ] Recompletion	[ ] New Construction
[ ] Final Abandonment Notice	[ ] Plugging Back	[ ] Non-Routine Fracturing
	[ ] Casing Repair	[ ] Water Shut-Off
	[ ] Altering Casing	[ ] Conversion to Injection
	[X] Other proposed production facility	[ ] 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 our proposed production facility diagram for this well.

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SEP 01 1993
DIVISION OF
OIL, GAS & MINING

14. I hereby certify that the foregoing is true and correct
Signed Bobbie Schuman Title Coordinator of Environmental and Regulatory Affairs Date August 30, 1993
Bobbie Schuman

(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.

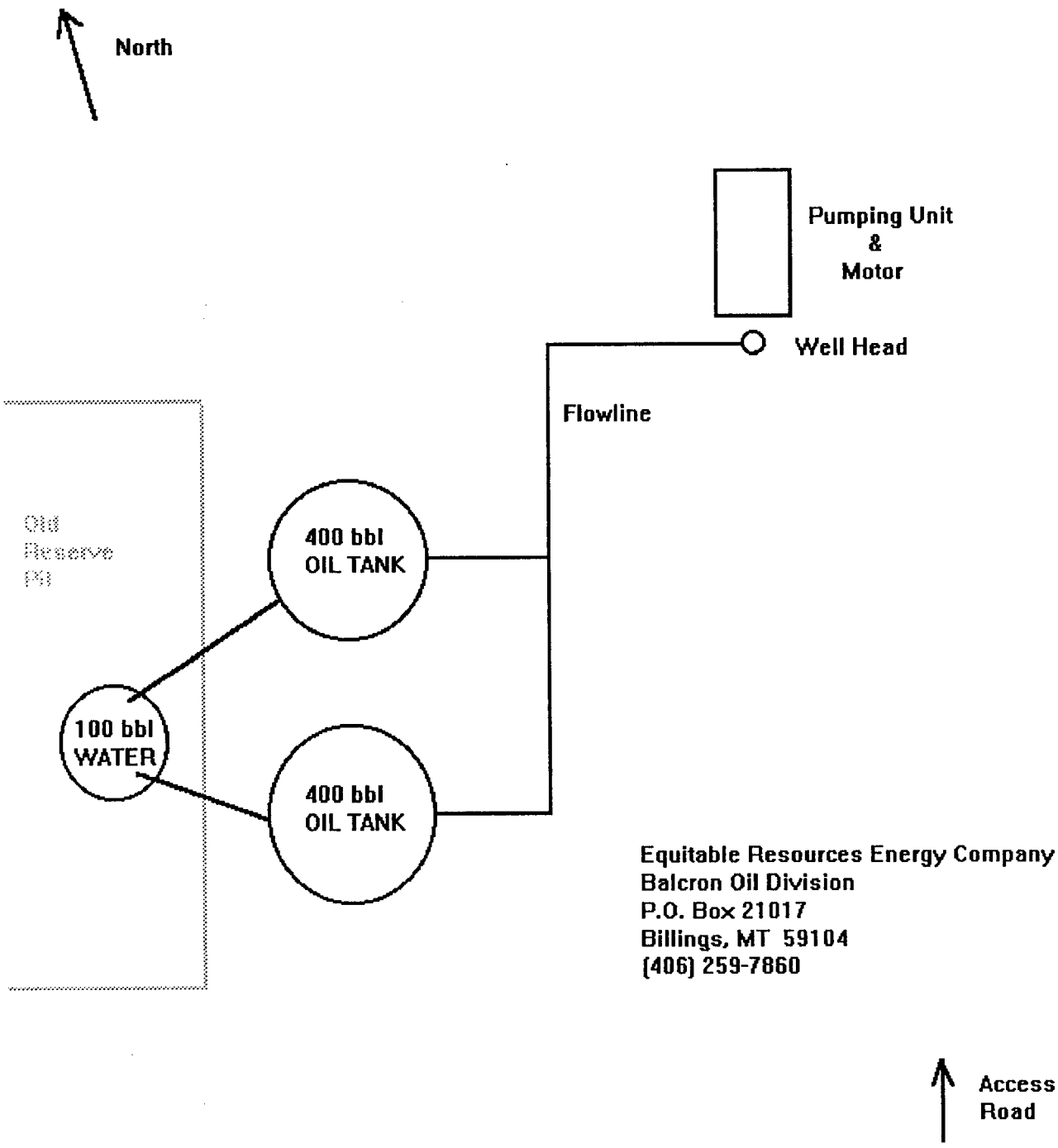
*See Instruction on Reverse Side

Equitable Resources Energy Company

Balcron Federal 41-21Y

Proposed Production Facility Diagram

Balcron Federal 41-21Y
NE NE Section 21, T9S, R16E
Duchesne County, Utah
Federal Lease #U-64379
970.2' FNL, 893.8' FEL



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

BALCRON OIL
DAILY OPERATING REPORT

BALCRON FEDERAL #41-21Y
Location: NE NE Section 21, T9S, R16E
Duchesne County, Utah **---TIGHT HOLE---**

8-30-93 Casing psi 40. TIH w/5-1/2" packer & 2-7/8" tbg, tag fill @ 4,633' KB. Circulate to 4,670', set packer @ 4,550'. Made swab 30 runs, swab back 180 bbls fluid - 7% oil. No sand in fluid after 30 hrs. Last three runs 15% oil. Release packer, tag fill @ 4,650'KB. Circulate sand out to bridge plug (4,700'). Release bridge plug & TOOH w/36 jts 2-7/8" tbg. SDFN.
DC: $2,600 CC: $269,294

8-31-93 Cas. = Vacuum, tubing slight blow. TOOH w/tbg, packer & bridge plug. TIH w/1 jt 2-7/8" EUE, J-55, 8 rods, 6.5# tbg - length 31.82', landed at 5,096.63'KB; 1 perf nipple 2-7/8" x 3' - length 3.20'; 1 seating nipple - length 1.10'; 165 jts 2-7/8" tbg EUE, J-55, 8 rods, 6.5# tbg - length 5,047.51'. ND BOP. NU wellhead. TIH w/1 BHP 2-1/2" x 1-1/2" x 16' RHAC pressure actuated plunger, 6 rods 1" x 25" EL w/2-1/2" Rieton guides, 195 rods 3/4" x 25' D slick, one 3/4" x 8' pony, one 3/4" x 4' pony, one 1-1/4" x 16' polish rod SM. RDMO.
DC: $7,565 CC: $276,859

9-1-93 Start reclamation; clean & move tanks; pump water from pit & haul to drilling rig.
DC: $2,450 CC: $279,309

SEP 7 1993

WELL REPORT

MONUMENT BUTTE FIELD
Balcron Oil Co. 41-21Y Monument Butte-Federal
970' FNL, 894' FEL, Sec. 21, T9S-R16E
Duchesne County, Utah

43-013-31392

CONFIDENTIAL

BY

DENNIS REHRIG & ASSOC.,INC.

OIL & GAS CONSULTING

4924 Rimrock Road
Billings, Montana 59106

(406) 656-4785

WELLSITE GEOLOGIST'S REPORT

MONUMENT BUTTE FIELD
Balcron Oil Co. 41-21Y Monument Butte-Federal
970' FNL, 894' FEL, Sec. 21, T9S-R16E
Duchesne County, Utah

DENNIS REHRIG & ASSOC.,INC.

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MONUMENT BUTTE FIELD
Balcron Oil Co. 41-21Y Monument Butte-Federal
970' FNL, 894' FEL, Sec. 21, T9S-R16E
Duchesne County, Utah

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11	Drilled Well Formation Tops
12	Reference Well Formation Tops
13	Significant Gas and Sample Shows
14	Sample Descriptions
Insert	Geologic Well Log

By:

DENNIS C. REHRIG

Consulting Geologist

For:

DENNIS C. REHRIG & ASSOCIATES, INC.

DENNIS C. REHRIG & ASSOCIATES, INC.
Oil & Gas Exploration
4924 RIMROCK ROAD • BILLINGS, MONTANA 59106 • (406) 656-4785

Balcron Oil Co. 41-21Y Monument Butte-Federal
970' FNL, 894' FEL, Sec. 21, T9S-R16E
Duchesne County, Utah

GENERAL REVIEW

The Balcron Oil Co. 41-21Y Monument Butte-Federal (NE¼NE¼ S-21, T9S-R16E, Duchesne County, Utah) was drilled as a field extension well in the Monument Butte Field.

This well was supported by subsurface offset well control and drilled for extension of existing productive sands and identification of anticipated additional Douglas Creek and Carbonate Marker oil sands.

The surface hole was air drilled and surface casing was set prior to moving Molen Drilling Co. Rig No. 1 on location and spudding through surface casing August 7, 1993. A two-man mud logging unit and wellsite geologist were on site from 1500' to total depth. The Green River and Douglas Creek formations were penetrated at 1572' and 4564' making them respectively 43' and 59' structurally high to the offset Alta Energy Co. 16-1 State (SW¼SE¼ S-16, T9S-R16E) control well.

Numerous sandstone zones below the 2nd Garden Gulch appear prospective based on mud-log, sample shows, and E-logs. The most prospective based on visual shows is in the Douglas Creek formation at 4614'-4624'. All sandstones which had significant gas and/or visual shows are noted elsewhere in this report.

This well was drilled to 6002' (Driller & Logger).

Subsequent to log review the operator elected to run 5½" production casing to total depth.

The rotary was released 8/19/93.

Respectfully submitted,

DENNIS C. REHRIG

Balcron Oil Co. 41-21Y Monument Butte-Federal
970' FNL, 894' FEL, Sec. 21, T9S-R16E
Duchesne County, Utah

WELL DATA

OPERATOR:	Balcron Oil Company
LEASE & WELL NO.:	Monument Butte-Federal 41-21Y
LOCATION:	970' FNL, 894' FEL, Sec. 21, T9S-R16E
PROSPECT/FIELD:	Monument Butte Field
COUNTY:	Duchesne
STATE:	Utah
BASIN:	Uintah
WELL TYPE:	Field Extension
BASIS FOR PROSPECT:	Subsurface well control
ELEVATIONS:	G.L. 5947' (Graded), K.B. 5960'
SPUD DATE:	12:30 p.m. (MDT) 8/1/93 (Small air rig for surface casing)
OUT FROM UNDER SURFACE CASING:	8:30 p.m. (MDT) 8/7/93 (Rotary)
DRILLING COMPLETED:	2:00 p.m. (MDT) 8/17/93
LOGGING COMPLETED:	8:00 a.m. (MDT) 8/18/93
RIG RELEASE:	12:30 p.m. (MDT) 8/19/93
TOTAL DAYS SPUD THROUGH LOGGING:	12 days
TOTAL DEPTH:	6,002' (Driller) 6,002' (Logger)

TOTAL DRILLING DAYS:	11 days (Surface casing previously set)
HOLE SIZE & CASING:	Hole Size 12¼" Surface to 261' 7⅞" 261' to T.D. Casing Size 8⅝" surface to 261' K.B. 5½" Production Casing to 5997' K.B.
WELL STATUS:	Cased for completion attempt in Douglas Creek.
PENETRATION:	120' into Uteland Butte LS.
COMPANY DRILLING CONSULTANT:	Al Plunkett
DRILLING CONTRACTOR:	Molen Drilling Co.
RIG NO.:	1
TOOLPUSHER:	Chuck Doornek
RIG SPECIFICATIONS:	Draw Works – EMSCO GB–250T, powered by two Detroit 6–71 300 HP Diesels, Derrick – Idela, 104' mast.
BLOW OUT PREVENTER:	Make: Schaffer LWS. Type: 10" X 3000 lbs. Drill Pipe: Size: 4½" OD, 2¼" ID, Thread: XH. BHA: Length 835.20', 16 jts–6" DC– 470.09' & 12 jts heavy weight pipe 360.11'. Tool joints: 6¼" OD, Type – XH.
PUMPS:	No. 1 – EMSCO D–375, 14" Stroke, 6" liner.
MUD COMPANY & ENGINEER:	Milpark Drilling Fluids – Grant Newton
MUD PROGRAM:	KCl/water 261'–Total Depth
ELECTRIC OPEN–HOLE LOGGING PROGRAM:	Halliburton Logging Services, Inc. Engineer: Bob Hale Witnessed by: Dennis Rehrig and Al Plunkett High Resolution Induction w/Gamma Ray (3500'–5994') Dual Laterolog Micro–Spherically Focused w/ Gamma Ray & Caliper (250'–5994') Spectral Density/Dual Spacer Neutron # w/Gamma Ray, Caliper and Tension (3500'–5994')

LOST CIRCULATION ZONE OR DRILLING PROBLEMS:	Had considerable seepage in hole while drilling well.
WELLSITE GEOLOGIST:	Dennis C. Rehrig
SAMPLING PROGRAM:	50' Samples from 1,500'–3,800'. 30' Samples from 3,800'–Total Depth, except caught 10' or extra samples through drilling breaks and significant gas shows.
SAMPLE QUALITY:	Generally fair–good unless noted otherwise.
SAMPLE DISPOSITION:	Utah Geological Survey – Salt Lake City, Utah and Amstrat – Denver, Colorado.
MUD LOGGING EQUIPMENT:	Monaco Logging – two–man unit operated by Chris Jensen and Charlie Crocker.
CORE PROGRAM:	None.
DRILL STEM TEST:	None.
SURFACE CASING:	8–5/8", 25 Wt, 6 Jts. Surface – 261' K.B. Cemented w/150 sxs Class 'G' w/2% $CaCl_2$ and ¼ lb/sx CelloFlake. Plug down on 8/6/93. Surface hole drilled and casing set by small air–impact rig.
PRODUCTION CASING:	Ran 139 jts 5½" 15.5 lb K–55 casing to 5997' K.B. Cemented w/165 sxs Thrifty–Lite and 275 sxs 50–50 Poz–mix, with various additives in all cement.

Balcron Oil Co. 41-21Y Monument Butte-Federal
970' FNL, 894' FEL, Sec. 21, T9S-R16E
Duchesne County, Utah

DAILY DRILLING HISTORY

Daily drilling reports taken primarily from Rig Tower Sheets and supplemented by Drilling Supervisor.
Day commenced at 8:00 AM (MDT) day of prior day of report and ends at 8:00 AM (MDT) day of report.

Days Since Spud	Date	Depth	Ftg in Last 24 Hrs	Activity (hrs) Drlg	Maint. and Repairs	Other	Bit No.	W O B (M)	RPM	PP	Activity
1	8/8	600	339	11.25	0	12.75	1	35	60	600	Surface hole and casing previously set by air drilling rig, RU rotary, cut casing and weld on wellhead, NU, test BOP's, blind-pipe ram, choke valves, kill valve and kelly valve to 2000 psi for 20 min, test casing to 1500 psi, PU DC, TIH to drill cement, tagged cement @ 221', drilling cement, drilling 7⅞" hole from 261', survey, drilling.
2	8/9	1643'	1043'	23.0	0.25	0.75	1	35	70	750	Drilling, survey and level derrick, drilling, survey, drilling.
3	8/10	2686'	1043'	22.5	0	1.50	1	35	70	800	Drilling, survey, drilling.
4	8/11	3315'	629'	21.75	1.25	1.00	1	35	70	800	Drilling, survey, drilling, work on pump, drilling.
5	8/12	3775'	460'	16.75	7.00	0.25	1	40	70	850	Survey, drilling, work on drawworks motor, drilling, work on drawworks motor, drilling, repair drawworks motor, drilling.

Days Since Spud	Date	Depth	Ftg in Last 24 Hrs	Activity (hrs) Drlg	Maint. and Repairs	Other	Bit No.	W O B (M)	RPM	PP	Activity
6	8/13	4207'	432'	21.75	1.75	0.50	1	40	70	850	Drilling, survey, work on light plant, drilling.
7	8/14	4560'	353'	17.75	0.25	6.00	2	40	70	800	Drilling, survey, drilling, drop survey, TOH for bit, dress bit, TIH, drilling.
8	8/15	5060'	500'	23.25	0.50	0.25	2	40	70	800	Drilling, survey, drilling.
9	8/16	5525'	465'	22.50	0.75	0.25	2	40	70	800	Drilling, work on pump, drilling, survey, drilling.
10	8/17	5866'	341'	23.75	0	0.25	2	40	70	800	Drilling.
11	8/18	6000'	134'	5.75	0	18.25	2	40	70	800	Drilling, reached TD, circ for logs, drop survey, TOH for logs, SLM – 2' downhole correction, RU logger, logging.
12	8/19	6002'	–	–	–	–	–	–	–	–	Finished logging, RD loggers, GIH w/DC, WOO, TIH w/DP, circ and cond for casing, TOH laydown DP & DC, RU for running casing, run casing and cement same.
13	8/20	6002'									WOC, clean mud tanks, released rig 12:30 p.m. 8/19/93

Balcron Oil Co. 41-21Y Monument Butte-Federal
970' FNL, 894' FEL, Sec. 21, T9S-R16E
Duchesne County, Utah

BIT RECORD

Contractor: Molen Drilling Co. **Operator:** Balcron Oil Co. **Lease:** Federal **State:** Utah **County:** Duchesne **Sec/T-ship/Range:** NENE Sec. 21, T9S-R16E	**Rig No.** 1 **Field:** Monument Butte **Well No.** 41-21Y	**Rig Make:** Emsco GB-250T **Derrick:** Idela, 104' mast **Pump #1:** Emsco D-375 Liner 6" x 14"	**Collars:** ODxIDxLength BHA 6" x 2¼" x 835.20' **Drill Pipe-Size** **Wt** 4½" 16.6 E **Tool Joint:** 6¼"	**SPUD** (for surface casing) 8/1/93 **Under Surface** (rotary) 8/7/93 **Total Depth** 8/17/93 **Total Days Drilling** 11	**Toolpusher/Drillers** Chuck Doornek A. E. Cook Joe J. Wipf Calvin L. Clyde **Operators Representative** Al Plunkett **Mud Type:** KCl/water

Bit No	Bit Size	Bit Mfgr	Bit Type	Jet Size 32nds	Ser. No.	Depth Out	Feet	Hrs	Ft/Hr	Cum Hrs	Wt 1000#	Rotary RPM	Vert Dev	Pump Press	PUMPS			MUD		DULL COND			Remarks Date, Formation, etc.
															No	Liner ID	SPM	Wt	Vis	T	B	G	
1	7⅞	Sec	M85F	3-14	622621	4448	4190	128¼	32.7	128¼	35-40	60/70		850	1	6	52	8.4					DBL
2	7⅞	Smith	F4H	3-15	KV8804	6000	1552	81¼	19	209½	40	70	3½	850									

DENNIS C. REHRIG & ASSOCIATES, INC.

Balcron Oil Co. 41-21Y Monument Butte-Federal
970' FNL, 894' FEL, Sec. 21, T9S-R16E
Duchesne County, Utah

1993

DAILY MUD REPORT

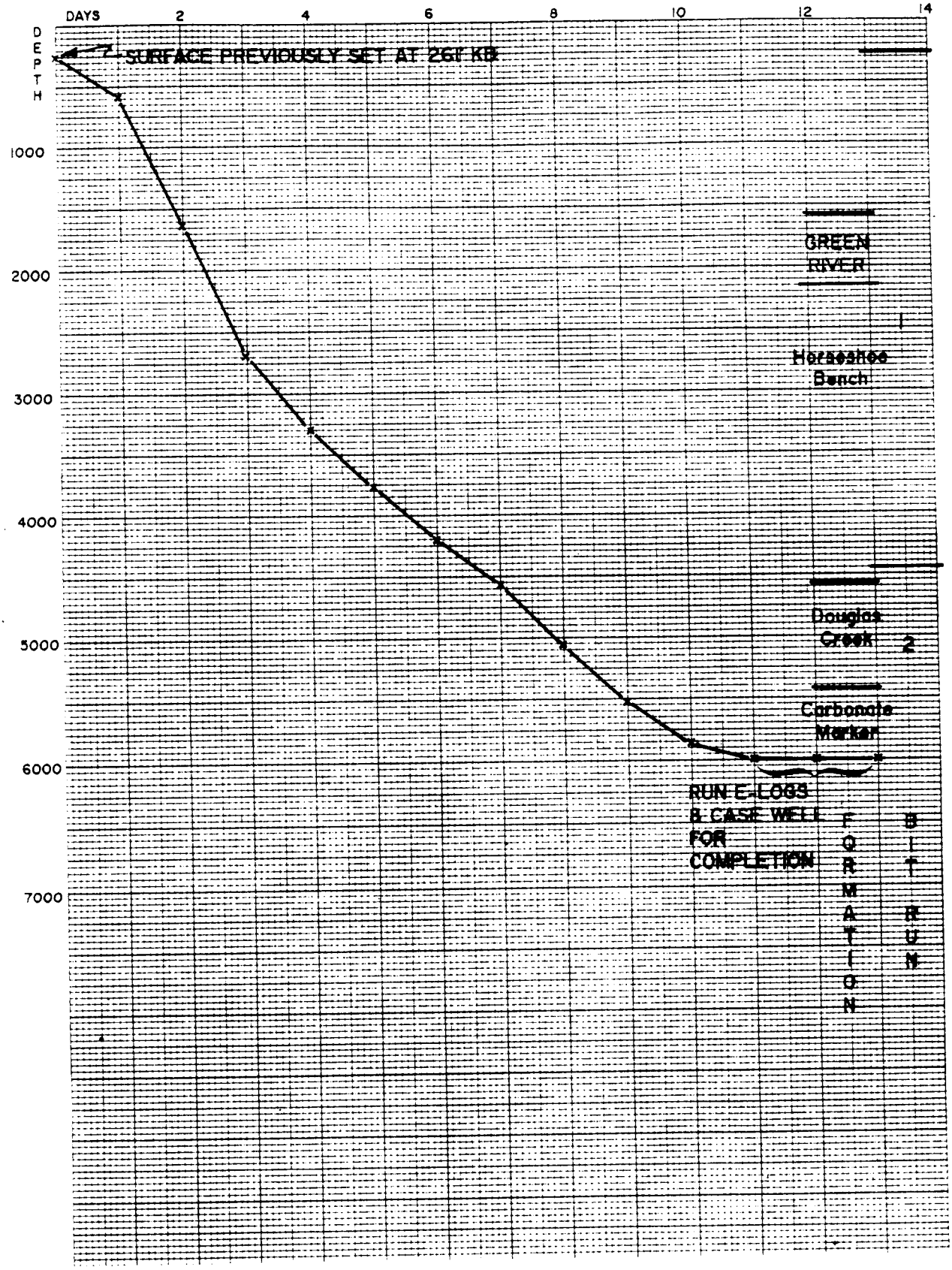
Milpark Drilling Fluids – Representative: Grant Newton

	8/7	8/8	8/9	8/10	8/11	8/12	8/13	8/14	8/15	8/16	8/17
Time Sample Taken	**Noon**	10:30 am	10:00 am	11:30 am	10:30 am	11:15 am	10:30 am	10:30 am	10:30 am	10:30 am	10:15 am
Depth (Feet)	0	745'	1823'	2780'	3425'	3818'	4282'	4660'	5130'	5586'	5927'
Weight (PPG)	8.4	8.4+	8.5	8.4+	8.5	8.5	8.5	8.4+	8.5	8.4+	9.0
Funnel Viscosity (sec/qt API)	29	29	29	29	29	29	29	29	29	29	31
Plastic Viscosity cp @ 120°F	–	–	–	–	–	–	–	–	–	–	3
Yield Point (lb/100 ft^2)	–	–	–	–	–	–	–	–	–	–	2
Gel Strength (lb/100 ft^2) 10 sec/10 min	–	–	–	–	–	–	–	–	–	–	1/3
Cake Thickness (32nd in.)											2/32
Solids Content (% by vol)	0	0	0	–	0	–	0	–	–	–	4
Liquid Content (% by Vol, oil/water)	0/100	0/100	0/100	–	0/100	–	0/100	0/100	–	–	0/96
Sand Content (% by vol)	–	0	0	–	0	–	–	–	–	–	0
pH	10.5	10.5	10.5	10.3	10.3	10.5	10.5	10.0	10.0	9.5	9.5
Alkalinity Mud (PM)	1	1.5	1.5	1.3	1.2	1.4	2.0	1.2	1.0	.6	.4
Alkalinity Filtrate (P_f/M_f)	1/2.8	1.5/2.8	1.5/2.8	1.3/2.8	1.2/2.6	1.4/2.7	2.0/4.2	1.2/2.8	1.0/2.2	.6/1.0	.2/.4
Chloride (mg/L)	9,000	10,000	12,000	12,000	13,000	13,000	13,000	12,000	11,000	10,000	13,000
Total Hardness as Calcium (Mg/L)	40	40	40	40	40	40	40	40	40	20	40
KCl (% by volume)	2	2	2+	2+	2+	2+	2+	2+	2	2	2+
Mud Type	KCl water				KCl water			KCl water			KCl water
Remarks:											

DENNIS C. REHRIG & ASSOCIATES, INC.

BALCRON OIL 41-21Y MONUMENT BUTTE-FEDERAL
970' FNL, 894' FEL, SECTION 21, T 9 S-R 16 E
DUCHESNE COUNTY, UTAH

TIME/DEPTH PENETRATION CURVE



Balcron Oil Co. 41-21Y Monument Butte-Federal
970' FNL, 894' FEL, Sec. 21, T9S-R16E

FORMATION TOPS

ELEVATIONS: G.L. 5947' (Graded) K.B. 5960'

Formation	E-Log Top	Subsea Datum	Structural Relationship To Reference Well *
Green River	1572'	(+4388')	43' Hi
Horseshoe Bench	2154'	(+3806')	43' Hi
2nd Garden Gulch	3794'	(+2166')	57' Hi
Yellow Marker	4414'	(+1546')	61' Hi
Douglas Creek	4564'	(+1396')	59' Hi
2nd Douglas Creek Mkr	4797'	(+1163')	60' Hi
Green Marker	4941'	(+1019')	60' Hi
Carbonate Marker	5441'	(+ 519')	61' Hi
Uteland Butte LS	5882'	(+ 78')	--
TOTAL DEPTH	6002' Logger		

* Reference Well:

Alta Energy Co.
16-1 State
SW¼SE¼ Sec. 16, T9S, R16E
Duchesne County, Utah

Note: Correlations and nomenclature that used by operator.

Balcron Oil Co. 41-21Y Monument Butte-Federal
970' FNL, 894' FEL, Sec. 21, T9S-R16E
Duchesne County, Utah

REFERENCE WELL E-LOG FORMATION BOREHOLE AND SUBSEA DATUMS

Alta Energy Co.
16-1 State
SW¼SE¼ Sec. 16, T9S-R16E
Duchesne County, Utah

K.B. 5941'

Formation		
Green River	1596'	(+4345')
Horseshoe Bench	2178'	(+3763')
2nd Garden Gulch	3832'	(+2109')
Yellow Marker	4456'	(+1485')
Douglas Creek	4604'	(+1337')
2nd Douglas Creek Mkr	4838'	(+1103')
Green Marker	4982'	(+ 959')
Carbonate Marker	5483'	(+ 458')
Uteland Butte LS	NDE	-
TOTAL DEPTH	5660' (Logger)	

Note: Correlations and nomenclature that used by operator.

Balcron Oil Co. 41-21Y Monument Butte-Federal
970' FNL, 894' FEL, Sec. 21, T9S-R16E
Duchesne County, Utah

SIGNIFICANT GAS KICKS AND DRILLING BREAKS

Information from Mud Log

Formation	Sample Depth	Time (Before-During-After) Min/Ft	Total Gas (Before-During-After)	
Horseshoe Bench	3585'-3595'	2.4 - 1.7 - 1.5	40 - 150 - 40	(oil on pits)
2nd Garden Gulch	4114'-4126'	3.5 - 2.5 - 3.0	20 - 60 - 16	
2nd Garden Gulch	4320'-4328'	3.0 - 1.5 - 3.0	16 - 140 - 18	
2nd Garden Gulch	4334'-4340'	3.0 - 2.0 - 3.0	16 - 80 - 10	
Yellow Marker	4410'-4416'	2.5 - 0.5 - 3.0	10 - 70 - 25	
Douglas Creek	4456'-4462'	No significant change (possibly fractured)	14 - 200 - 16	
	4612'-4620'	2.5 - 1.0 - 2.5	20 - 1000+ - 30	
	4642'-4648'	2.5 - 1.0 - 2.5	30 - 60 - 30	
	4746'-4752'	2.5 - 2.0 - 2.5	30 - 90 - 35	
2nd Douglas Creek	4812'-4814'	3.0 - 1.5 - 3.0	50 - 140 - 40	
Green Marker	4988'-4992'	4.0 - 2.0 - 3.0	20 - 200 - 30	
	5020'-5034'	4.0 - 2.0 - 5.5	30 - 400 - 40	
	5154'-5160'	1.5 - 2.0 - 2.5	40 - 160 - 14	
	5172'-5188'	3.0 - 1.5 - 3.0	20 - 200 - 60	
Carbonate Marker	5472'-5482'	3.5 - 3.0 - 4.5	50 - 140 - 60	
	5488'-5502'	4.5 - 2.5 - 4.0	60 - 250 - 40	
	5728'-5742'	5.0 - 2.5 - 4.5	30 - 140 - 60	

POTENTIAL SANDSTONE ZONES

Provided by Wellsite Geologist

E-Log Depth (Spectral Density/Dual Spaced Neutron II Log)

3602'-3606'
4114'-4128'
4318'-4320'
4338'-4347'
4415'-4419'
4614'-4624'
4642'-4650'
4744'-4756'
4816'-4820'
4987'-4994'
5020'-5036'
5158'-5166'
5180'-5190'
5468'-5482'
5490'-5506'
5734'-5749'

Note: Sandstone not always seen in samples due to sample quality or thinness of sandstone in some cases.

Balcron Oil Co. 41-21Y Monument Butte-Federal
970' FNL, 894' FEL, Sec. 21, T9S-R16E
Duchesne County, Utah

SAMPLE DESCRIPTIONS

By: Dennis C. Rehrig

Samples caught and lagged from shale shaker by Mud Loggers. Samples were examined wet, under reflected light and 3X magnification from 1500' to total depth, for porosity identification samples were dried. Sample descriptions generally tie well to drill time log. Sample quality was fair-good unless stated otherwise in descriptions. All sample descriptions are interpretive.

1500-1550	Siltstone - cream-light gray, argillaceous in part, speckled with Glauconite, carbonaceous material and Pyrite, moderately carbonaceous, moderately firm, dense.
1550-1600	Dolomite Limestone - buff to mostly tan, slightly argillaceous, moderately firm, cryptocrystalline-microcrystalline, dense.
	Dolomite - medium-dark brown, slightly argillaceous-slightly carbonaceous, moderately firm, cryptocrystalline-microcrystalline, dense.
1600-1700	Limy Dolomite - tan-medium brown, cryptocrystalline-microcrystalline, moderately firm, dense, occasional speck black carbonaceous material.
	Some Limestone - buff-light tan, cryptocrystalline, soft, argillaceous in part, occasional speck dark brown-black carbonaceous material, dense.
1700-1750	Limy Dolomite-Dolomite - medium brown, cryptocrystalline-microcrystalline, moderately firm, dense, some microcrystalline disseminated Pyrite, occasionally dark brown specks of carbonaceous material, siliceous to cherty in part with much Pyrite.
	Some Limestone - cream-buff as above.
1750-1850	Limy Dolomite-Dolomite - medium brown-occasionally dark brown-tan, cryptocrystalline-microcrystalline, moderately firm, dense, occasional specks of black carbonaceous material, siliceous-cherty in part with microcrystalline Pyrite.
	Frequently Limestone - white-cream-light to medium gray, occasionally clear, cryptocrystalline-microcrystalline, moderately soft-moderately firm,

dense, commonly with microcrystalline disseminated Pyrite, siliceous to cherty in part, argillaceous in part.

1850–1900 Limestone – light to medium gray–brownish gray, occasionally cream. Cryptocrystalline–microcrystalline, generally moderately firm, occasionally moderately soft, commonly speckled to mottled with disseminated microcrystalline Pyrite, some carbonaceous and argillaceous material, dense.

1900–1950 Limestone – as above.

Some Limy Dolomite–Dolomite as 1750'–1850' above.

1950–2000 Limy Dolomite to occasional Dolomite – generally medium brown, occasionally light–dark brown, generally microcrystalline, occasionally cryptocrystalline, trace Pyrite, frequently dark brown–black carbonaceous material, moderately firm, dense.

Some Limestone – cream–light gray–clear, siliceous–cherty in part, cryptocrystalline–microcrystalline, moderately soft–moderately hard, frequently disseminated Pyrite, dense.

2000–2050 Limy Dolomite–occasional Dolomite – generally as above, but mostly medium–occasionally light brown.

Less LS than above.

2050–2100 Limy Dolomite – tan–grayish tan, cryptocrystalline–microcrystalline, firm, dense, frequently microcrystalline disseminated Pyrite, trace dark brown–black carbonaceous material, argillaceous in part. Some Limestone – cream–white, occasionally clear, microcrystalline–cryptocrystalline, soft–moderately firm, dense, pyritic, argillaceous in part, siliceous in part.

2100–2150 Limy Dolomite–Dolomite – buff–cream–light gray–greenish gray, occasionally tan–medium brown, generally microcrystalline, moderately firm, dense, frequently glauconitic, frequently speckled with Pyrite and carbonaceous material, some Mica. Siliceous in part, argillaceous in part.

2150–2200 Limy Dolomite–Dolomite – medium–dark brown, cryptocrystalline–microcrystalline, moderately firm, dense.

2200–2250 Limy Dolomite–Dolomite – as above.

2250–2350 Limy Dolomite – buff–grayish brown, microcrystalline, moderately firm–moderately soft, argillaceous in part, dense.

2350–2400 Dolomitic Limestone–Limestone – buff–tan–grayish light brown, occasionally cream, cryptocrystalline–microcrystalline, frequently

disseminated microcrystalline Pyrite, firm–moderately soft, dense, argillaceous in part.

2400–2450 Limy Dolomite–Dolomite – tan–light to medium brown, microcrystalline, argillaceous in part, moderately firm, dense.

2450–2500 Limy Dolomite–Dolomite – generally as above, but much grayish brown color.

2500–2600 Dolomite–Limy Dolomite – medium to dark brown, occasionally tan to grayish brown, microcrystalline, moderately firm–moderately soft, dense, argillaceous in part, trace black carbonaceous material.

2600–2650 Dolomite–Limy Dolomite – as above.

Sandstone – loose grains, very fine–fine grained, unconsolidated, generally angular to sub–angular, some sub–round, moderately–poorly sorted, NSFOC, some Siltstone – unconsolidated, generally shaly. Poor sample.

2650–2700 Sandstone – loose grains, generally very fine–fine grained, occasionally medium grained, generally unconsolidated, generally angular to sub–angular, occasionally sub–round, appears moderately–poorly sorted, questionable isolated specks of medium dark brown oil stain, no fluorescence, very weak–moderately weak bluish yellow milky cut.

Siltstone – clear–cream, generally argillaceous, very unconsolidated, slightly calcareous in part.

2700–2750 Siltstone – clear–buff, moderately consolidated–well consolidated, moderately firm, moderately calcareous. Frequent specks dark brown carbonaceous material, generally argillaceous, no stain or fluorescence, trace very weak bluish yellow milky cut.

Shale – cream–light gray, moderately soft, frequently medium–dark gray carbonaceous material, moderately–highly calcareous.

2750–2800 Dolomite–occasionally Limy Dolomite – grayish brown–medium brown, frequently tan, cryptocrystalline–occasionally microcrystalline, firm–moderately firm, dense, carbonaceous in part, some disseminated microcrystalline Pyrite.

Some Limestone – cream–buff, cryptocrystalline, soft, frequently pyritic and argillaceous.

2800–2850 Limestone–Dolomitic Limestone – buff–tan–light brown, occasionally cream, generally microcrystalline, moderately firm–soft, dense, frequently specked with carbonaceous material, some Pyrite, argillaceous in part.

2850–2900	Shale – generally medium–dark gray, frequently light gray–cream, generally moderately firm, slightly calcareous, moderately–slightly carbonaceous, some smooth striated surfaces. Some Siltstone – clear–light gray, moderately–well consolidated, slightly–moderately calcareous, argillaceous in part, frequently specked with carbonaceous material, NSFOC. Trace fine–medium quartz grains, unconsolidated, angular to sub–angular, NSFOC.
2900–2950	Sandstone – clear–milky, generally unconsolidated, angular to sub–angular, occasionally sub–round, moderately well sorted, sand grains, generally fine–medium. Assume porosity is good, due to largely unconsolidated nature of sample. No stain or fluorescence, trace of very weak bluish halo glow, didn't last long, trace Pyrite.
2950–3000	Limestone–Dolomite LS – generally buff–light tan, occasionally medium brown–grayish brown, cryptocrystalline–microcrystalline, moderately firm–moderately soft, dense, some mottled appearance, frequent carbonaceous material, trace laminated algae laminae, trace Pyrite. First appearance of some Marlstone like rock.
3000–3050	Limestone – cream–buff, occasionally white, microcrystalline, moderately firm, dense, frequently dark brown–black carbonaceous material. Dolomite – light–medium gray, brownish gray in part, cryptocrystalline, occasionally microcrystalline, firm–moderately firm, much microcrystalline disseminated Pyrite.
3050–3100	Shale – generally light gray, occasionally cream, moderately firm, glauconitic, moderately calcareous, frequently dark gray carbonaceous material. Siltstone – generally light gray, occasionally clear to cream, moderately firm, glauconitic, frequently dark brown–dark gray carbonaceous material, some Pyrite – argillaceous in part, NSFOC.
3100–3150	Limestone – cream–buff, microcrystalline–cryptocrystalline, moderately firm–moderately soft, dense. Some Dolomite LS – dark brown–medium brown, microcrystalline, moderately firm, dense, argillaceous in part. Some Siltstone – cream–white, moderately firm–moderately soft, slightly unconsolidated in part, argillaceous in part, calcareous in part, NSFOC.

3150–3200	LS – as above, with some light gray color. Increase in Dolomite LS as above, more medium brown–grayish brown color.
3200–3250	Limestone – cream–light gray–light brown, microcrystalline, firm–moderately firm, frequent Pyrite – generally argillaceous, some silt size grains. Siltstone – cream–light gray, occasionally slightly brown, generally hard, well consolidated, highly calcareous, highly pyritic, argillaceous in part, NSFOC. Some Sandstone – cream–light gray, white in part, generally hard, well consolidated, but some very fine–fine sized loose quartz grains, angular to sub–angular, highly calcareous and pyritic, tight, NSFOC, argillaceous in part. Consolidated Sandstone, generally very fine grained and moderately well sorted.
3250–3300	Generally as above, with increase in Sandstone, NSFOC.
3300–3350	Limestone – generally buff, occasionally cream, generally microcrystalline, moderately firm, dense, some microcrystalline disseminated Pyrite, trace clear Spar Calcite. Dolomite – generally grayish brown–medium brown, cryptocrystalline, moderately firm, dense, highly carbonaceous, some microcrystalline disseminated Pyrite.
3350–3400	Limestone – cream–buff, cryptocrystalline–microcrystalline, moderately firm–moderately soft, dense, highly pelletoidal, possibly some ostracods and sponge spicules, other unidentifiable fossil fragments, some dark gray–dark brown carbonaceous material.
3400–3450	Shale – light–medium gray, moderately firm–moderately soft, slightly–moderately calcareous, specks of dark brown–black carbonaceous material, some smooth striated surfaces. Some Siltstone and Sandstone – clear–white. Sandstone is very fine–fine grained, some loose fine–medium sized grains, generally moderately well consolidated with calcareous cement, no apparent porosity, NSFOC. Generally sub–angular, moderately well sorted, trace Glauconite and black carbonaceous material.
3450–3500	Shale – pale green–cream with green trace, moderately–highly calcareous, moderately soft, Limestone in part, trace dark brown–black carbonaceous material.

3500–3550	Shale – cream–white–light to medium gray, moderately soft, some smooth striated surfaces, moderately–highly calcareous, frequently microcrystalline disseminated Pyrite, frequent dark brown–dark gray carbonaceous material. Sandstone – clear–light gray, very fine grained, sub–angular to sub–round, moderately well sorted, moderately well consolidated–moderately friable, fair–good intergranular porosity, argillaceous in part, frequently pyritic, no stain or fluorescence, trace bright yellow halo cut, some carbonaceous material.
3550–3600	Shale – as above. Trace Sandstone – as above. Limestone – tan, cryptocrystalline–occasionally microcrystalline, moderately firm, dense. Some Dolomite – medium dark brown, cryptocrystalline, moderately firm, dense, moderately–highly carbonaceous in part.
3600–3650	Limestone – buff–tan–light brown, microcrystalline–cryptocrystalline in part, moderately firm–moderately soft, dense, argillaceous in part, some medium–dark gray carbonaceous material, moderately–highly pelletoidal in part, some unidentifiable fossils. Dolomite – medium–dark gray, brownish gray in part, cryptocrystalline, firm–moderately firm, dense, highly carbonaceous in part.
3650–3700	Shale – light–moderately gray, occasionally cream–brownish gray, moderately firm–moderately soft, some dark–medium gray carbonaceous material, moderately calcareous, some microcrystalline disseminated Pyrite. Limestone and Dolomite – as above. Some Siltstone and Sandstone – clear–white in part, argillaceous in part, some calcareous cement. Sandstone – very fine grained, sub–angular, moderately well–well sorted, no apparent porosity, trace dark brown stain, yellow fluorescence, very weak bluish yellow milky cut, moderately consolidated–slightly friable in part, some fair–good intergranular porosity, trace of Glauconite and frequently pyritic.
3700–3750	Limestone – buff–tan, cryptocrystalline–microcrystalline, moderately firm–moderately soft, dense. Dolomitic Limestone – medium–dark brown to grayish brown, cryptocrystalline, argillaceous in part, moderately carbonaceous in part, frequently pyritic, moderately firm.

3750–3800	Shale – pale green, moderately firm, moderately calcareous, trace of Glauconite, trace black carbonaceous material. Sandstone ranging to Siltstone – very fine–fine grained, clear–white in part, frequently specked with Glauconite, carbonaceous material and/or argillaceous material. Moderately firm–friable, sub–angular, moderately well sorted, moderately–slightly calcareous, some poor–fair intergranular porosity, NSFOC.
3800–3830	Shale – as above. Some Sandstone and Siltstone – as above. Limestone – generally buff, occasionally cream–light gray, cryptocrystalline, moderately firm–moderately soft, dense, argillaceous in part.
3830–3860	Shale – tinge of pale green–light gray, grayish brown, occasionally cream, moderately firm–moderately soft, moderately–highly calcareous, frequently carbonaceous material, trace Pyrite. Some Siltstone and Sandstone – as above.
3860–3890	Sandstone – ranging to Siltstone, generally very fine grained, clear ranging to white, slightly–moderately calcareous, moderately consolidated–friable, frequent specks of carbonaceous material, sub–angular, moderately well sorted, NSFOC, poor–fair intergranular porosity, argillaceous in part, trace of Pyrite. Some Shale – as above.
3890–3920	Limestone – generally buff–medium brown, cryptocrystalline, firm–soft and earthy, argillaceous in part, frequent carbonaceous material, dense. Dolomite and Limy Dolomite – generally dark brown–medium brown, cryptocrystalline, firm–moderately firm, dense, generally carbonaceous rock.
3920–3950	Shale – tinge of green, light gray, brownish gray, occasionally cream, moderately firm–moderately soft, moderately–highly calcareous, frequently medium–dark gray carbonaceous material.
3950–3980	Shale – generally light gray, frequently cream, moderately firm–moderately soft, moderately–highly calcareous, specks carbonaceous material, slightly pyritic in part. Some Siltstone – clear–white in part, generally moderately calcareous cement, argillaceous in part, some Glauconite and Pyrite – moderately firm, generally well consolidated, NSFOC.

	Trace Sandstone – generally very fine grained, moderately well consolidated, sub–angular, occasionally sub–round to round, trace Glauconite and Pyrite, NSFOC, argillaceous in part.
3980–4010	Shale – generally as above, but generally medium gray, frequently cream–light gray–brownish gray.
4010–4040	Shale – medium brown–grayish brown, frequently cream–light to medium gray, moderately calcareous, moderately firm.
	Some Siltstone, generally clear, slightly white, moderately well consolidated, moderately firm, moderately–slightly calcareous, argillaceous in part, NSFOC.
4040–4070	Shale – generally white–cream, moderately–highly calcareous, moderately soft, frequently microcrystalline disseminated Pyrite, some dark gray carbonaceous material.
	Siltstone – white–cream–clear, moderately–highly calcareous, commonly argillaceous, some Pyrite – moderately well consolidated, moderately–poorly sorted, some very fine grained Sandstone, no apparent porosity, NSFOC.
4070–4100	Shale – light–medium gray, moderately calcareous, moderately firm, some carbonaceous material.
	Some Siltstone – as above.
4100–4130	Shale – light–medium gray, frequently cream, moderately calcareous, moderately soft, some Pyrite.
	Sandstone ranging to Siltstone – very fine grained, clear–cream in part, some calcareous cement, moderately well consolidated–slightly friable, moderately well sorted, sub–angular to sub–round, some Glauconite and Pyrite. No stain or fluorescence, very weak bright yellow cut, poor porosity.
4130–4160	Shale – medium gray–brownish gray, moderately calcareous, moderately firm, frequently carbonaceous material.
	Some Sandstone and Siltstone – as above, generally more argillaceous, NSFOC.
4160–4190	Limestone – buff–light tan, cryptocrystalline, moderately soft, dense, argillaceous in part, some smooth striated surfaces.

Dolomite–Limy Dolomite – medium–dark brown, microcrystalline–cryptocrystalline, highly carbonaceous in part, generally moderately firm, occasionally moderately hard.

4190–4220 Shale – generally medium gray, frequently light–dark gray to brownish gray, moderately soft, moderately–highly calcareous, silty in part.

4220–4250 Limestone – generally tan–buff, occasionally light–medium brown, microcrystalline–cryptocrystalline, moderately firm–moderately soft, mottled in part, trace pellets and unidentifiable fossil fragments.

Some Dolomite–Limy Dolomite – medium–dark brown–grayish brown, moderately soft, generally carbonaceous, argillaceous in part.

Some Shale – white–cream–light gray, generally mottled, frequently microcrystalline disseminated Pyrite and dark gray carbonaceous material.

Some Siltstone and Sandstone – generally white–clear, commonly argillaceous, moderately calcareous, sub–angular, poorly–moderately sorted, moderately well consolidated.

Sandstone – very fine, no apparent porosity, NSFOC.

4250–4280 Shale – dark brown, occasionally black in part, moderately hard, brittle, sub–platy in part, highly carbonaceous–petroliferous, trace bitumen, moderately–highly calcareous, some microcrystalline disseminated Pyrite, no fluorescence or cut.

Trace Sandstone ranging to Siltstone – generally very fine grained, some loose fine grained quartz. Sub–angular to sub–round, moderately well sorted, moderately unconsolidated, generally NSFOC. Trace dark brown oil stain, with very weak dull yellow fluorescence and weak bright bluish cut, poor–fair intergranular porosity.

4280–4310 Limestone–Dolomite LS – tan–medium to dark brown, microcrystalline–cryptocrystalline, moderately firm–moderately soft, carbonaceous in part.

Shale – light–medium gray, moderately soft, moderately–highly calcareous, some carbonaceous material, silty in part.

4310–4340 Sandstone – generally clear, slightly calcareous cement in part, generally very fine grained, moderately consolidated to friable in part, fair–poor intergranular porosity, sub–angular to sub–round, fairly well sorted, argillaceous in part, frequent pinpoint uneven dark brown oil stain, dull yellow fluorescence and very weak bluish yellow milky cut.

Note: An extra 10' sample was caught through this Sandstone.

4340–4370	Shale – light–medium gray to brownish gray, sub–platy in part, slightly moderately calcareous, frequently carbonaceous, some smooth striated surface, generally moderately soft.
4370–4400	Shale – as above.
	Limestone–Dolomite LS – tan–medium to dark brown–grayish brown as 4280–4310' above.
4400–4410	Shale – generally dark brown–dark grayish brown, moderately calcareous, moderately firm, sub–platy to sub–splintery, highly carbonaceous–petroliferous.
4410–4430	Sandstone grading to Siltstone – generally clear–white in part. Sandstone very fine grained, moderately consolidated–friable in part, slightly–moderately calcareous cement, sub–angular, moderately well sorted, argillaceous in part, specks carbonaceous material in part, some fair intergranular porosity, <u>with pinpoint uneven dark brown oil stain, dull yellow fluorescence, and weak bluish yellow streaming cut.</u>
	Shale – light gray–cream, moderately calcareous, moderately firm–moderately soft, specks of carbonaceous material in part.
4430–4460	Shale – grayish brown to light–medium brown, moderately calcareous, moderately firm–moderately soft in part.
4460–4490	Siltstone – clear–white–light gray in part, slightly calcareous, argillaceous in part, slightly firm–moderately soft, some Glauconite, NSFOC.
	Shale – light gray, occasionally cream, slightly–moderately calcareous, moderately soft, specks of carbonaceous material.
4490–4550	Siltstone – as above.
	Shale – generally as above, but marked increase in cream to white color, some with smooth striated surfaces.
4550–4580	Shale – dark brown–occasionally grayish black, slightly bronze tinge in part, moderately–highly calcareous, sub–platy, slightly brittle, moderately firm, occasionally Pyrite, highly carbonaceous–petroliferous, no stain, <u>dull yellow fluorescence, weak dull yellow streaming cut in part.</u>
	Limestone–Dolomite Limestone – tan–light to medium brown, crypto–crystalline–occasionally microcrystalline, moderately firm–moderately soft, dense, argillaceous in part, moderately carbonaceous in part.
4580–4610	Shale and Siltstone as 4460–4490' above.

Frequent Sandstone – clear, very fine grained, sub–angular to sub–round, moderately consolidated to slightly friable, fair intergranular porosity, slightly calcareous cement in part, NSFOC.

4610–4620 Sandstone – generally clear, occasionally milky in part, slightly–moderately calcareous cement, generally very fine grained, occasionally fine grained, moderately well consolidated to slightly friable, sub–angular to sub–round, moderately well to occasionally poorly sorted, some fair–good intergranular porosity, pinpoint dark brown oil stain in part, with dull yellow fluorescence, weak–fair bluish yellow streaming cut, argillaceous in part.

4620–4640 Shale – light gray, occasionally cream–moderately gray, very slight green tinge in part, moderately firm–moderately soft, moderately calcareous, trace microcrystalline disseminated Pyrite, frequently moderately–slightly carbonaceous material.

Trace Limestone – medium–dark brown, cryptocrystalline, moderately hard, dense, frequently pelletoidal.

4640–4670 Shale – as above.

4670–4700 Shale – light–medium gray, moderately firm, slightly–moderately calcareous, occasional specks of carbonaceous material.

Siltstone – clear–white, moderately–highly calcareous, moderately firm–firm, siliceous in part, frequent dark gray pellets, one piece had concentric rings, argillaceous in part, occasional grades to very fine grained Sandstone – no apparent porosity, NSFOC, some Glauconite.

4700–4730 Siltstone – as above, with less pellets, some Pyrite, more Glauconite.

Some Shale – as above.

4730–4752 Sandstone – clear–slightly white in part, very fine grained, occasional grading to Siltstone, generally well consolidated, no apparent porosity, some calcareous cement, some Glauconite, sub–angular to sub–round, moderately well–poorly sorted, NSFOC.

4752–4760 Sandstone and Siltstone – as above.

Shale – light gray–medium gray, occasionally cream, moderately firm–moderately soft, slightly–moderately calcareous, frequently carbonaceous.

Some Limestone to Dolomite Limestone – medium–dark brown, occasionally grayish brown, moderately firm–soft, cryptocrystalline, dense, commonly carbonaceous.

4760–4790	Shale – as above.
	Limestone – cream–buff, cryptocrystalline, dense, moderately firm.
	Some Sandstone and Siltstone – as above. NSFOC.
4790–4815	Sandstone ranging to Siltstone – generally clear, occasionally slightly white, slightly–moderately calcareous, moderately well consolidated, generally appears non–porous, some poor intergranular porosity, sub–angular to sub–round, moderately–poorly sorted, some Glauconite. Frequent faint uneven light brown oil stain – pinpoint medium brown stain, dull yellow fluorescence and weak–fair bluish–yellow streaming cut.
4815–4850	Shale – generally medium gray, occasionally cream–light gray, moderately firm–moderately soft, moderately calcareous, sub–platy in part, frequently carbonaceous, trace Pyrite.
	Some Siltstone – clear–white, occasionally light gray, argillaceous in part, slightly–moderately calcareous, moderately firm, NSFOC.
4850–4880	Shale – light–medium gray, occasionally cream, frequently medium dark carbonaceous material, moderately–slightly calcareous, moderately firm–moderately soft, trace Shale – medium–dark brown, petroliferous, dull gold fluorescence, weak bluish yellow milky cut.
	Siltstone, clear, occasionally buff–cream, moderately firm to firm , siliceous in part. Commonly argillaceous material, Pyrite, some carbonaceous material and Glauconite, some dark gray pellets, moderately well–well consolidated.
4880–4910	Shale – generally dark gray to brownish gray, occasionally medium gray–cream, generally carbonaceous rock, moderately calcareous, moderately firm, sub–blocky in part, trace Pyrite.
	Siltstone – as above.
4910–4940	Shale – as above, also much light gray–cream, moderately firm–moderately soft, moderately calcareous.
	Some Siltstone – as above.
4940–4970	Siltstone – clear–white in part, moderately–highly calcareous, firm, generally well consolidated, siliceous in part, specks of carbonaceous material and Glauconite, trace Pyrite.
	Some Shale – cream–light gray, moderately soft, moderately calcareous, some smooth striated surfaces, slightly carbonaceous in part.

4970–5000	Shale – pale green–cream–light gray, occasionally medium gray, moderately firm–moderately soft, frequently microcrystalline disseminated Pyrite, commonly have medium–dark gray carbonaceous material.
	Some Siltstone – as above.
5000–5020	Shale and Siltstone – as above.
	Some Sandstone – clear, occasionally white, slightly–moderately calcareous, moderately consolidated–friable in part, very fine grained, sub–angular to sub–round, moderately well sorted, trace Pyrite and Glauconite, slightly argillaceous in part. Trace pinpoint medium–dark brown oil stain, with dull yellow fluorescence, very weak pale blue streaming cut. Porosity appears very poor to non–existent.
5020–5030	Sandstone – clear–white in part, slightly–moderately calcareous, well consolidated–occasional slightly friable, sub–angular to sub–round, generally no apparent porosity, some poor intergranular porosity with uneven pinpoint medium dark brown oil stain, dull yellow fluorescence, and very weak bluish yellow streaming – milky cut, some speck of Pyrite and Glauconite – generally moderately–poorly sorted, argillaceous in part.
	Some Shale – generally cream, mottled with medium gray carbonaceous material, Pyrite in part, moderately–highly calcareous, moderately soft.
5030–5060	Shale – generally medium gray, moderately calcareous, moderately firm, slightly carbonaceous.
	Limestone–Dolomite Limestone – tan–medium to dark brown, cryptocrystalline, moderately firm–moderately soft, trace of pellets, trace algae laminae, highly carbonaceous in part.
5060–5090	Shale – generally dark gray, dark brownish gray, firm–moderately hard, brittle in part, moderately–highly calcareous, moderately carbonaceous.
	Limestone–Dolomite LS – generally as above, but less carbonaceous, no algae laminae or pellets.
5090–5120	Siltstone – clear–white, moderately–highly calcareous, argillaceous in part, well consolidated, moderately firm, NSFOC, trace Glauconite and Pyrite.
	Shale – cream–white, moderately calcareous, frequently medium–dark gray carbonaceous material, generally moderately soft, some smooth striated surfaces.

5120–5150	Shale – dark gray–dark grayish brown with bronze cast in part, moderately calcareous, highly carbonaceous, very soft, NSFOC, looks like good source rock.
5150–5160	Shale – generally as above, some is black, sub–blocky, slightly brittle with microcrystalline disseminated Pyrite, NSFOC.
5160–5180	Shale – dark brown–black with some bronze cast, firm and brittle to moderately soft, highly carbonaceous, moderately–highly calcareous, frequently pyritic, looks petroliferous in part, NSFOC.
	Argillaceous Limestone – buff–tan, frequently mottled with gray, cryptocrystalline, generally moderately soft, dense, carbonaceous in part.
5180–5210	Shale – as above.
5210–5240	Shale – black to dark brownish gray with bronze cast, moderately calcareous, highly carbonaceous to petroliferous, firm and brittle to moderately soft, sub–platy in part, no stain or fluorescence, weak–fair dull yellow streaming cut in part.
5240–5270	Shale – as 5160–5180' above.
	Argillaceous Limestone – as 5160–5180 above.
5270–5300	Some Shale – as above, also Shale – light gray–cream, moderately calcareous, moderately firm. Some Pyrite.
	Some Siltstone – white–light gray, moderately calcareous, well consolidated, some specks of carbonaceous material, firm–moderately friable, NSFOC, trace pellets.
	Some Limestone – tan–light to medium orangish brown, microcrystalline, firm–moderately firm, dense, carbonaceous in part.
5300–5310	Shale – dark gray–grayish black with bronze cast, heavy concentration of microcrystalline disseminated Pyrite – sub–platy to sub–splintery in part, firm and brittle to moderately soft, moderately calcareous, heavily carbonaceous to petroliferous in part, NSFOC.
5310–5330	Shale – as above, some light–medium gray, NSFOC.
	Limestone – light–medium gray, moderately argillaceous, moderately soft, also some tan–medium–dark brown cryptocrystalline–microcrystalline, generally moderately firm, frequently moderately–highly carbonaceous, some algae laminae, dense, NSFOC.

5330–5360	Shale – as 5210–5240 above, also much light–medium gray Shale – moderately firm–moderately soft, moderately calcareous, some dark brown–black carbonaceous material.
5360–5390	Shale – black–dark brown to dark grayish brown, moderately–highly calcareous, highly carbonaceous–petroliferous in part, moderately hard and brittle–moderately soft, frequently microcrystalline disseminated Pyrite – sub–platy to sub–fissile in part, no stain, trace yellow fluorescence, trace bluish yellow very weak streaming cut. Some very fine laminae.
5390–5420	Shale – generally as above with increase in dark brown–dark grayish brown color, frequently very fine laminae. Trace of cut as above.
5420–5450	Shale – black–dark brownish gray, frequently light–medium gray, moderately highly calcareous, moderately–high carbonaceous, firm–brittle–soft, trace Pyrite – sub–platy in part, NSFOC. Some Siltstone – clear–white–light gray, generally mottled, generally argillaceous, moderately calcareous, generally well consolidated and firm, siliceous in part, NSFOC. Some Limestone – light–medium brown to yellowish–orangish tan–brown, cryptocrystalline–microcrystalline, moderately firm–soft, dense, moderately carbonaceous in part.
5450–5480	Limestone – as above. Sandstone ranging to Siltstone – clear–frequently white, Sandstone very fine grained, moderately well consolidated, moderately firm, generally moderately–highly calcareous, no apparent porosity, sub–angular to sub–round, poorly–moderately sorted, generally no show, trace dark brown oil stain, yellow fluorescence, very weak bluish milky cut after a few minutes, argillaceous in part, some Glauconite. Shale – white–cream, moderately calcareous, moderately soft, some carbonaceous material, silty in part.
5480–5490	Sandstone grading to Siltstone – clear–white in part, Sandstone is very fine grained, some apparent mafic or shale clasts. Trace Glauconite, slightly–moderately calcareous, argillaceous in part, generally moderately well consolidated, sub–angular to sub–round, moderately–poor sorting, some poor intergranular porosity, frequently fair dark brown spotty oil stain, with dull yellow fluorescence, weak slow streaming bluish yellow cut, some Pyrite.

Shale – cream–light gray, frequently mottled with dark brown carbonaceous material, moderately calcareous, moderately soft–soft, some smooth striated surfaces.

5490–5510 Shale – as above.

Some Sandstone and Siltstone – as above.

Limestone – tan–light to medium brown, microcrystalline–cryptocrystalline, moderately firm–moderately soft, dense, argillaceous in part, moderately carbonaceous in part.

5510–5540 Shale – cream–light gray, moderately calcareous, cream color, frequently streaked–mottled with medium–dark gray carbonaceous material, moderately soft–soft.

Siltstone grading to very fine Sandstone – clear–white, firm–moderately firm, generally well consolidated, moderately–highly calcareous, frequently glauconitic, Sandstone – very fine grained, sub–angular to sub–round, moderately–poorly sorted, argillaceous in part, no apparent porosity, NSFOC.

Limestone – medium–dark brown, occasionally grayish brown microcrystalline–cryptocrystalline, moderately firm–moderately soft, argillaceous in part, dense, occasionally dark carbonaceous material.

5540–5570 Shale – as above.
Siltstone grading to very fine grained Sandstone – as above.

Limestone with slight increase in carbonaceous material, trace oolites, some slightly flattened.

5570–5600 Shale, Siltstone, and Limestone – as above.

5600–5630 Sandstone grading to Siltstone – clear–white, moderately–highly calcareous, moderately firm–slightly friable in part, sub–angular to sub–round, moderately–poorly sorted, argillaceous in part, some Pyrite and Glauconite, no apparent porosity, NSFOC.

Shale – cream–light to medium gray, moderately firm–moderately soft, frequent much microcrystalline disseminated Pyrite, some smooth striated surfaces, moderately–highly calcareous, some dark gray–black, highly pyritic, highly carbonaceous.

Limestone – slightly yellow–orange tinge in light–medium brown color, cryptocrystalline–microcrystalline, moderately firm–soft, dense, carbonaceous in part.

5630–5660	Shale – generally light–medium gray, occasionally cream, occasionally black and highly carbonaceous, moderately–highly calcareous, Pyrite frequent, firm–moderately firm. Siltstone and Limestone.
5660–5690	Sandstone ranging to Siltstone, clear–white in part, slightly to moderately calcareous cement, moderately well consolidated to slightly friable, generally very fine grained occasional fine grained, generally sub–angular to sub–round, trace Glauconite, no apparent porosity, generally NSFOC, trace black dead pinpoint oil stain, no fluorescence, very weak bluish milky cut. Limestone – as above, some white–cream–light gray, moderately argillaceous, moderately soft, cryptocrystalline, dense, earthy in part.
5690–5720	Limestone – medium brown–grayish brown, occasionally dark brown, microcrystalline–cryptocrystalline, moderately firm–moderately soft, argillaceous in part. Shale – cream–light gray, moderately calcareous, moderately soft, carbonaceous in part, some Pyrite. Some Siltstone – clear–white, moderately firm, moderately well consolidated, argillaceous in part, slightly–moderately calcareous, NSFOC.
5720–5750	Sandstone grading to Siltstone – clear–white, very fine grained, moderately consolidated–slightly friable in part, sub–angular to sub–round, moderately–poorly sorted, slightly–moderately calcareous cement, trace Glauconite, frequently fine loose quartz grains, some poor–fair intergranular porosity, NSFOC. Some Shale – cream–light gray, as above.
5750–5780	Sandstone grading to Siltstone – generally as above, no apparent porosity, NSFOC. Shale – cream–light gray in part, moderately soft, occasionally smooth striated surface, frequently mottled with medium–dark gray carbonaceous material.
5780–5810	Siltstone grading to very fine Sandstone – clear–light gray, frequently argillaceous, moderately calcareous, no apparent porosity, some dark brown–black dead oil stain, no fluorescence or cut. Shale – cream–light gray as above.

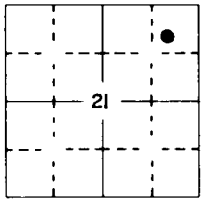
5810–5840	Shale – dark gray–dark brown gray, moderately–highly carbonaceous, moderately–firm–moderately soft, sub–platy in part. Limestone – light–medium brown, frequently mottled with clear–white calcite, microcrystalline–cryptocrystalline, slightly–moderately calcareous, moderately–highly pelletoidal, some oolites.
5840–5860	Sandstone grading to Siltstone as above 5780–5810' NSFOC. Shale as 5780–5810'. Some Limestone – as above.
5860–5880	Limestone–Dolomite Limestone – generally medium brown, occasionally light brown to grayish brown to dark brown, microcrystalline, firm–moderately soft, dense, slightly carbonaceous in part, dense. Shale – light gray–cream, moderately calcareous, moderately soft, carbonaceous in part. Siltstone – as 5840–5860' above.
5880–5920	Shale – black–dark grayish black with bronze cast, brittle–moderately hard, sub–platy in part, moderately–highly calcareous with some dark brown Limestone in part. No stain or fluorescence, <u>trace very weak bluish yellow cut.</u>
5920–5950	Shale – as above. Some Limestone – dark brown, cryptocrystalline, hard–moderately hard, brittle, dense, moderately carbonaceous.
5950–5980	Shale – as above, but no cut. Increase of Limestone – as above.
5980–6000	Shale – medium–dark gray, occasionally black–brownish gray, moderately firm–moderately soft, moderately calcareous, frequently microcrystalline disseminated Pyrite, moderately–highly carbonaceous. Some Sandstone, frequently argillaceous, very fine grained, sub–angular to sub–round, moderately well sorted, commonly has <u>heavy black dead oil stain, with no fluorescence and weak bluish yellow streaming cut</u>, no apparent porosity, commonly has microcrystalline Pyrite, moderately consolidated to friable in part. Drillers Total Depth 6000'. 6002' After SLM.

DENNIS REHRIG & ASSOCIATES, INC.

OIL & GAS CONSULTING

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

GEOLOGIC WELL LOG



MONUMENT BUTTE FIELD
BALCRON OIL 41-21Y MONUMENT BUTTE-FEDERAL
970' FNL, 894' FEL, SECTION 21, T 9 S-R 16 E
DUCHESNE COUNTY, UTAH

ELEVATIONS: GL 5947'(GRADED) KB 5960'

SPUD: 12:30 PM (MDT) 8/1/93 (SMALL AIR RIG FOR SURFACE CASING)

OUT FROM UNDER SURF. CSG.: 8:30 PM (MDT) 8/7/93

DATE DRLG. COMP.: 2:00 PM (MDT) 8/17/93

DATE WELL COMPLETED: 12:30 PM (MDT) 8/19/93

STATUS: CASED FOR OIL COMPLETION ATTEMPT

SURF. CSG.: 261' OF 8 5/8"

PRODUCTION CSG: 5 1/2" TO 5997' KB

CORES: NONE

DRILL STEM TESTS: NONE

CONTRACTOR: MOLEN DRILLING CO.

RIG: 1

DERRICK: IDELA, 104' MAST (DOUBLE)

DRAWWORKS: EMSCO GB-250T, POWERED BY 2 - DETROIT 6-71 300 HP DIESELS

PUMPS: EMSCO D-375 14" STROKE

DRILL PIPE: 4 1/2" OD, 2 1/4" ID, XH-THREAD

COLLARS: BHA 835.20'-470.09' 6" DC & 360.11" HWP

MUD SYSTEM: KCL/WATER

TOTAL BITS: 2 ROTARY, AIR DRILLED FOR SURFACE CASING

TOTAL DAYS TO LOG POINT: 11 TO COMPL: 13

T.D. DRILLER 6002' LOGGER 6002'

PENETRATION: 120' INTO UTELAND BUTTE LS

ROCK TYPE

(Consistent with American Stratigraphic Company)

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

ACCESSORIES

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

ORGANIC or NON ORGANIC ALLOCHEMS

- FORAMINIFERA
- CRINOID
- PELECYPOD
- BIOCLASTIC or FRAGMENTAL
- CORAL
- STROMATOPOROID
- BRYOZOA
- BRACHIOPOD
- OSTRACOD
- CEPHALOPOD
- GASTROPOD
- ECHINOID
- FOSSILS UNIDENTIFIABLE
- OOLITES
- PISOLITE 2mm. or over
- PSEUDO OOLITES or PELLETS
- INTRACLASTS

FRAMEWORK ALGAE

- SKELETAL
- OOTOID or ONCOLYTIC

NON-FRAMEWORK ALGAE

- NON-DESCRIPT
- LAMINATED

MISCELLANEOUS

- NO SAMPLES
- CANNOT INTERPRET, cavings, etc.
- QUESTIONABLE INTERPRETATION
- STYLOLITES

POROSITY TYPES

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

OIL STAINS - stain present

- EVEN STAINING, FLOURESCES IN SOLVENT
- SPOTTED STAINING, FLOURESCES IN SOLVENT
- D DEAD, ASPHALTIC, BITUMEN, ETC.
- O QUESTIONABLE, NO FLOURESCENCE IN SOLVENT

EVALUATION LEGEND

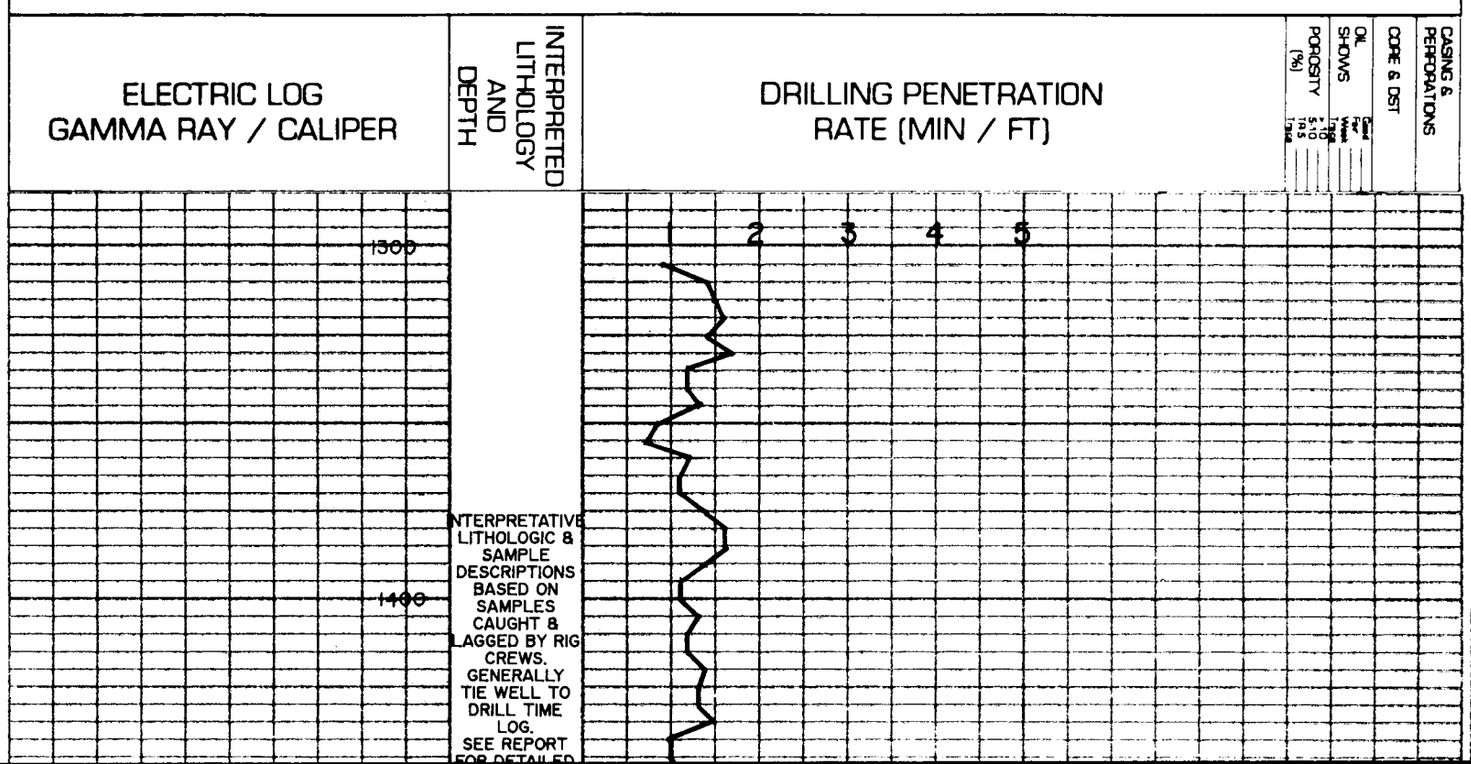
- WHOLE CORE
- DRILL-STEM TEST
- PERFORATIONS

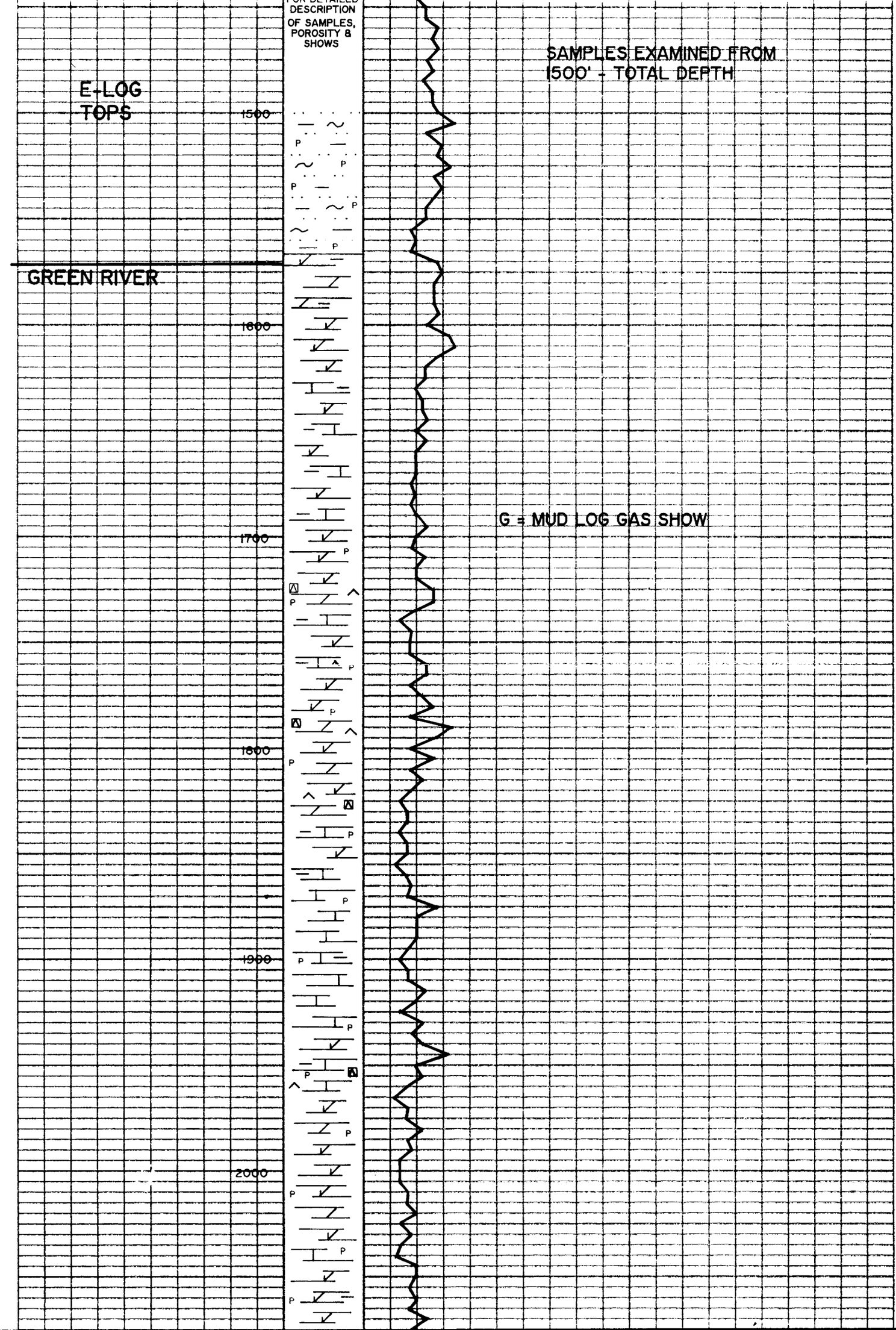
DRILLING AND PRODUCTION DATA

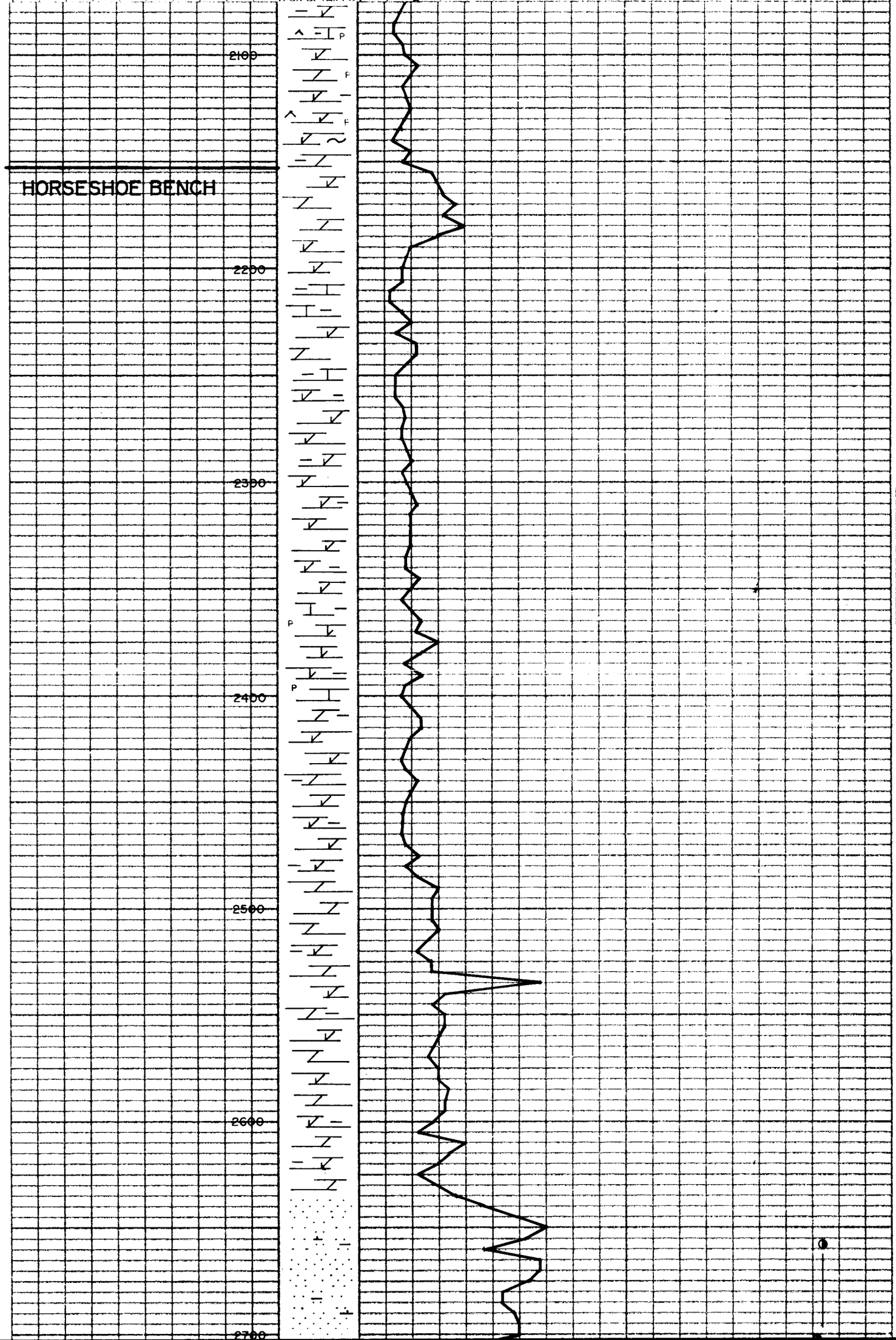
	CASING SET	RPM	ROTATION (REV/MIN)
NB	NEW BIT	PP	PUMP PRESSURE
RRB	RERUN BIT	LC	LOST CIRCULATION
CB	CORE BIT	NR	NO RETURNS
DS	DEVIATION SURVEY	TG	TRIP GAS
W/B	WEIGHT ON BIT	CG	CONNECTION GAS

MUD DATA

V	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)

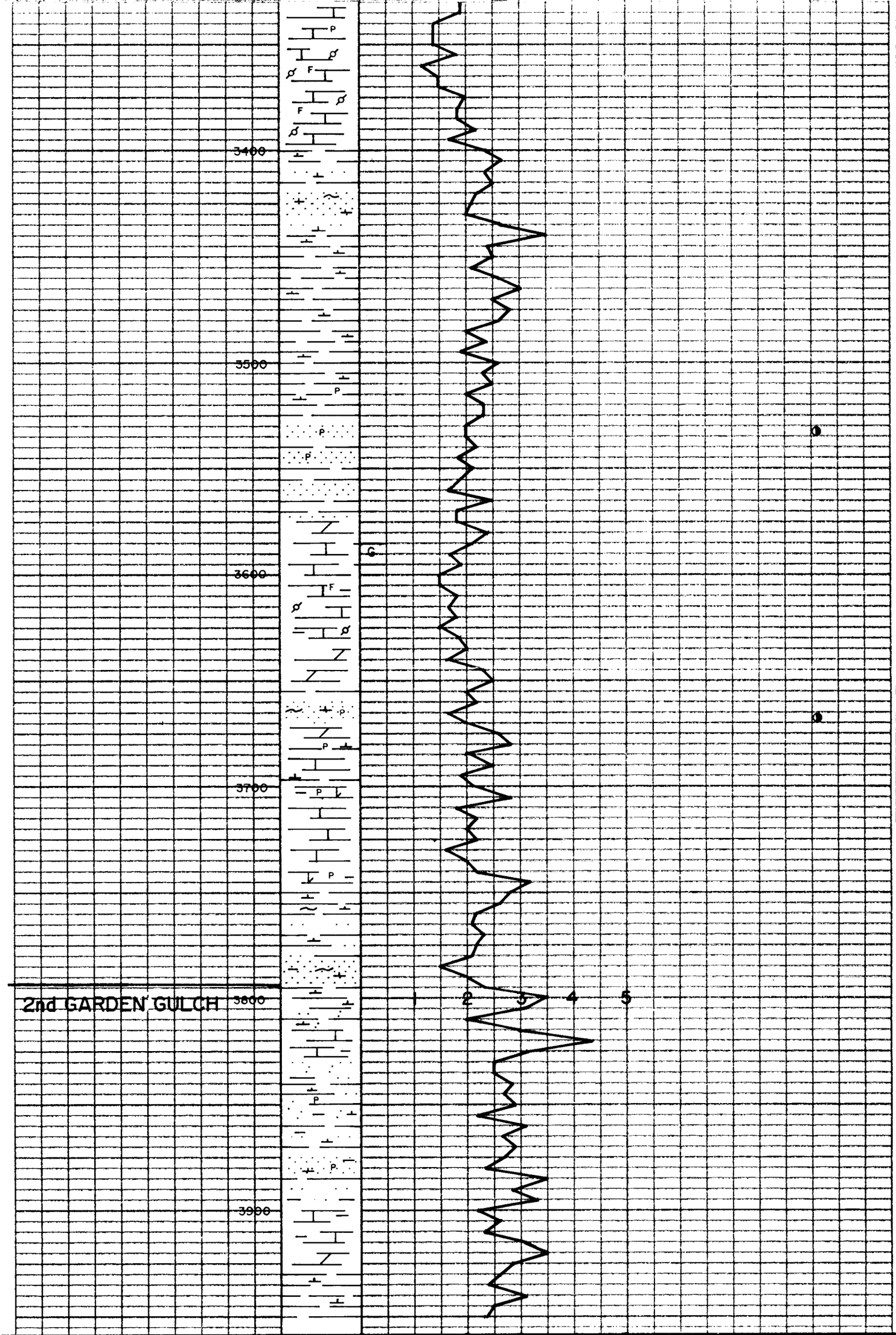


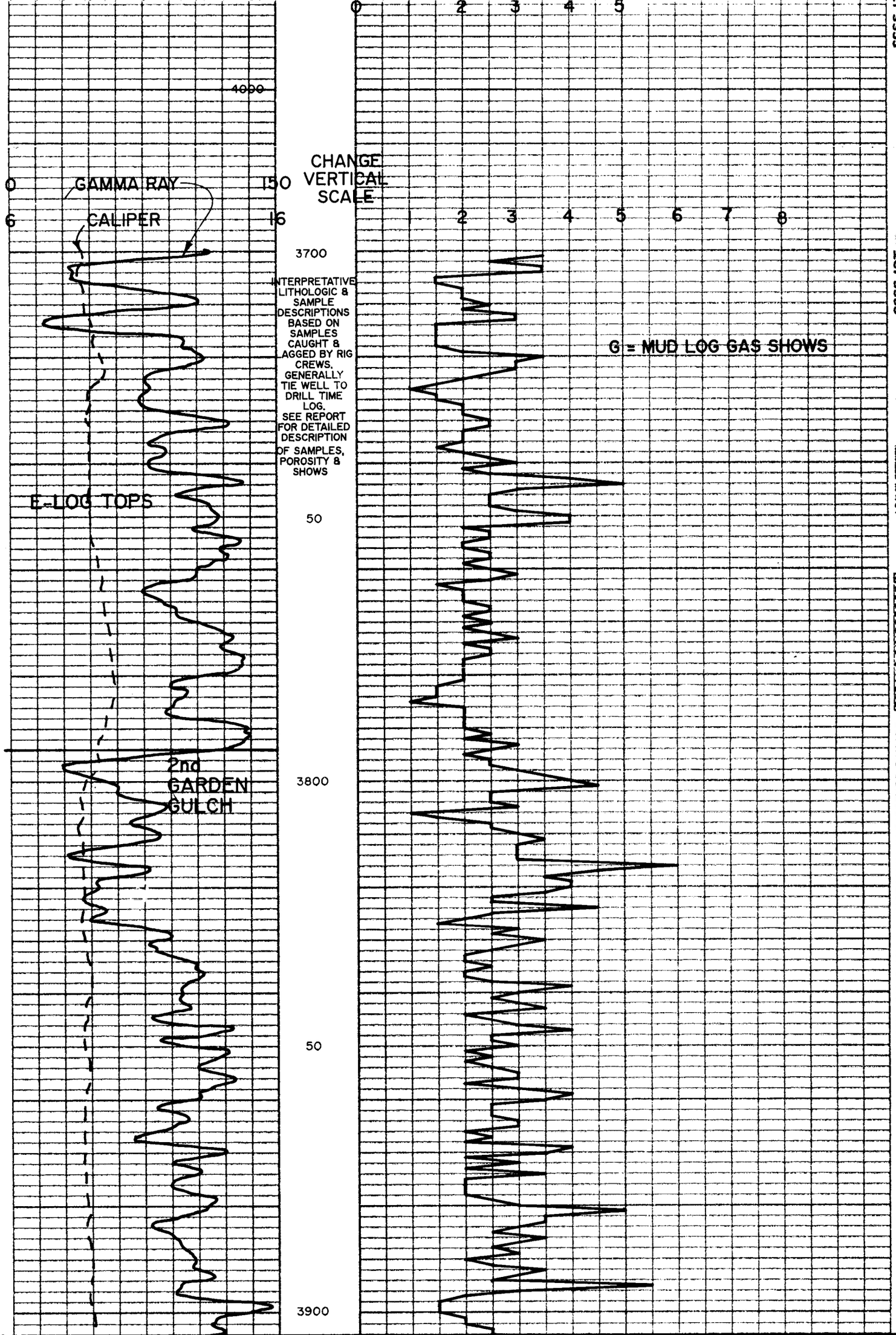

FOR DETAILED DESCRIPTION OF SAMPLES, POROSITY & SHOWS
SAMPLES EXAMINED FROM 1500' - TOTAL DEPTH
E-LOG TOPS
GREEN RIVER
G = MUD LOG GAS SHOW
1500
1600
1700
1800
1900
2000
P

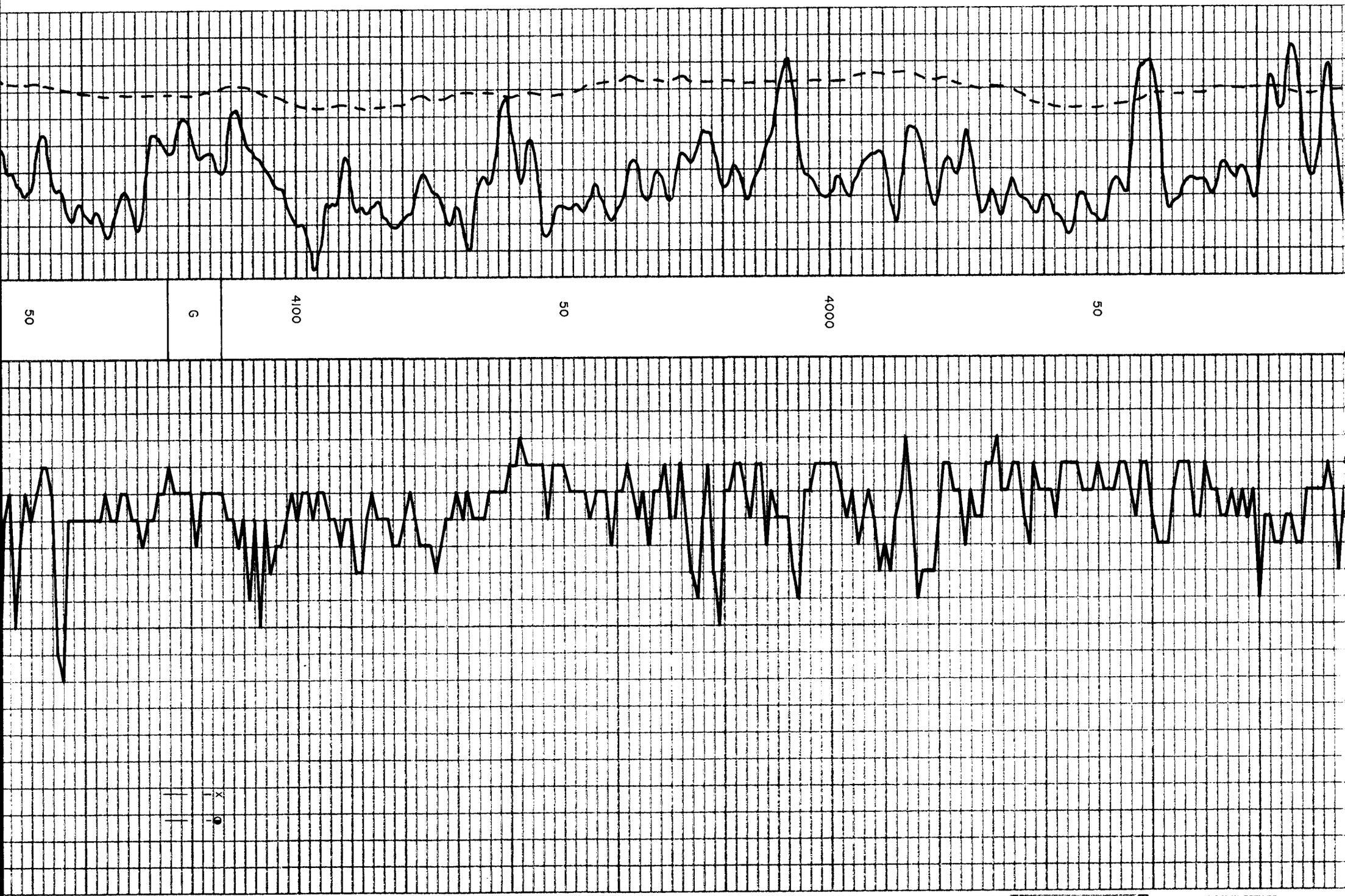


No. TCI 3322
GRAPHIC CONTROLS CORPORATION BUFFALO, NEW YORK
No. TCI 3322

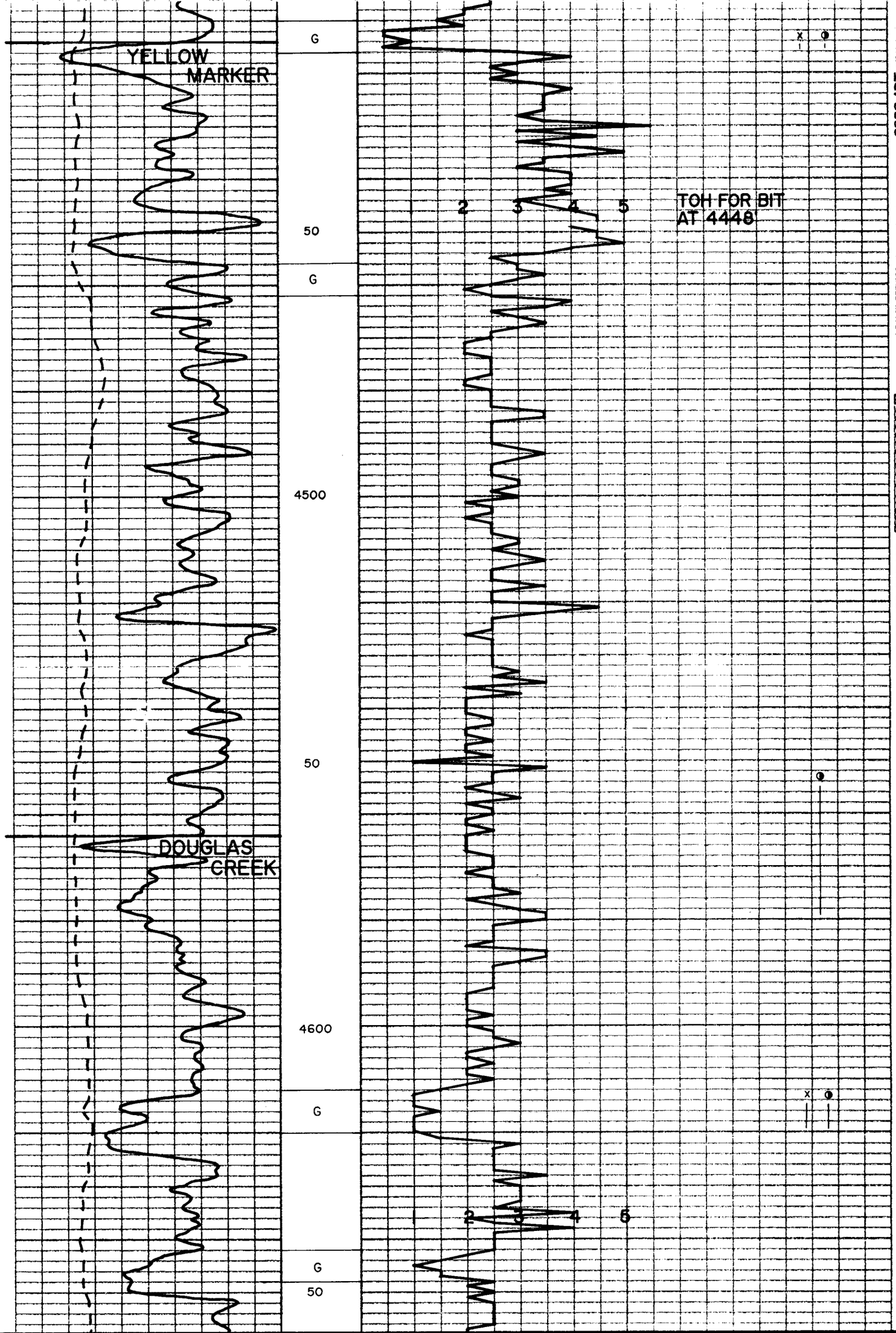
2800
2900
3000
3100
3200
3300
P
GRAPHIC CONTROLS CORPORATION
BUFFALO, NEW YORK
No. TCI 3332
RECORDING CHART

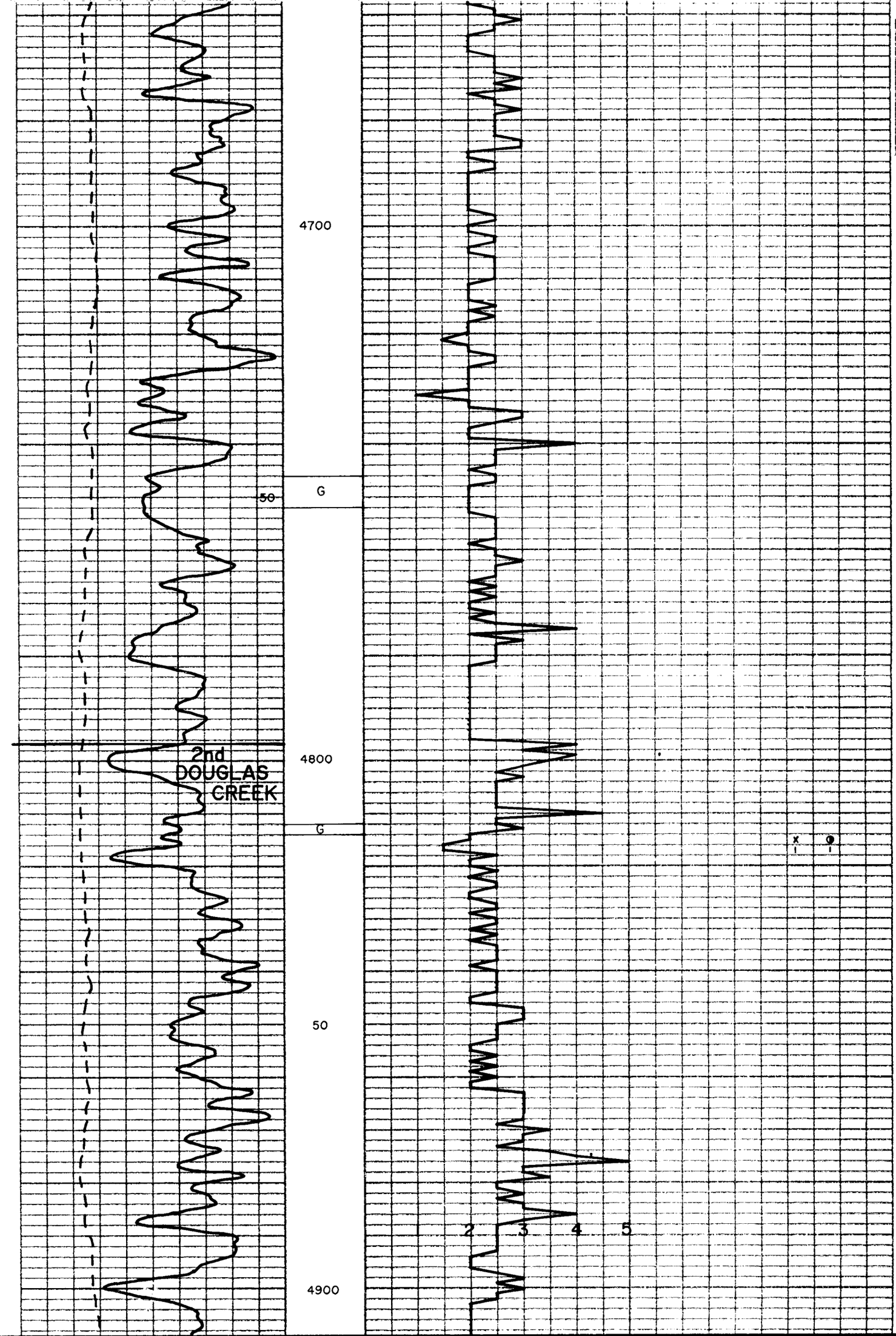

3400
3500
3600
3700
3800
3900
2nd GARDEN GULCH
1
2
3
4
5
P
F
G

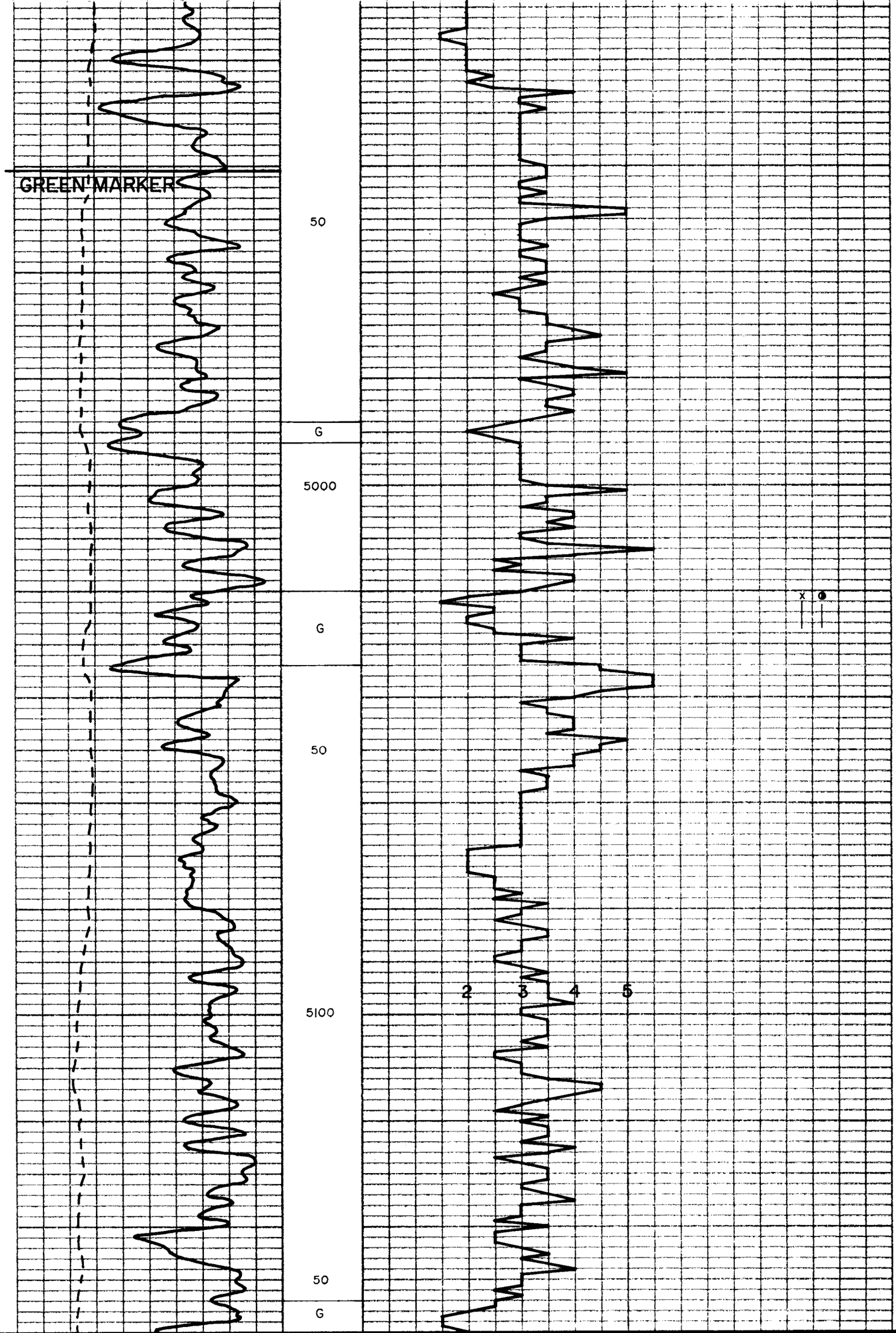

4000
0
GAMMA RAY
150
6
CALIPER
16
CHANGE VERTICAL SCALE
3700
INTERPRETATIVE LITHOLOGIC & SAMPLE DESCRIPTIONS BASED ON SAMPLES CAUGHT & BAGGED BY RIG CREWS. GENERALLY TIE WELL TO DRILL TIME LOG. SEE REPORT FOR DETAILED DESCRIPTION OF SAMPLES, POROSITY & SHOWS
E-LOG TOPS
50
2nd GARDEN GULCH
3800
50
3900
0 1 2 3 4 5
1 2 3 4 5 6 7 8
G = MUD LOG GAS SHOWS

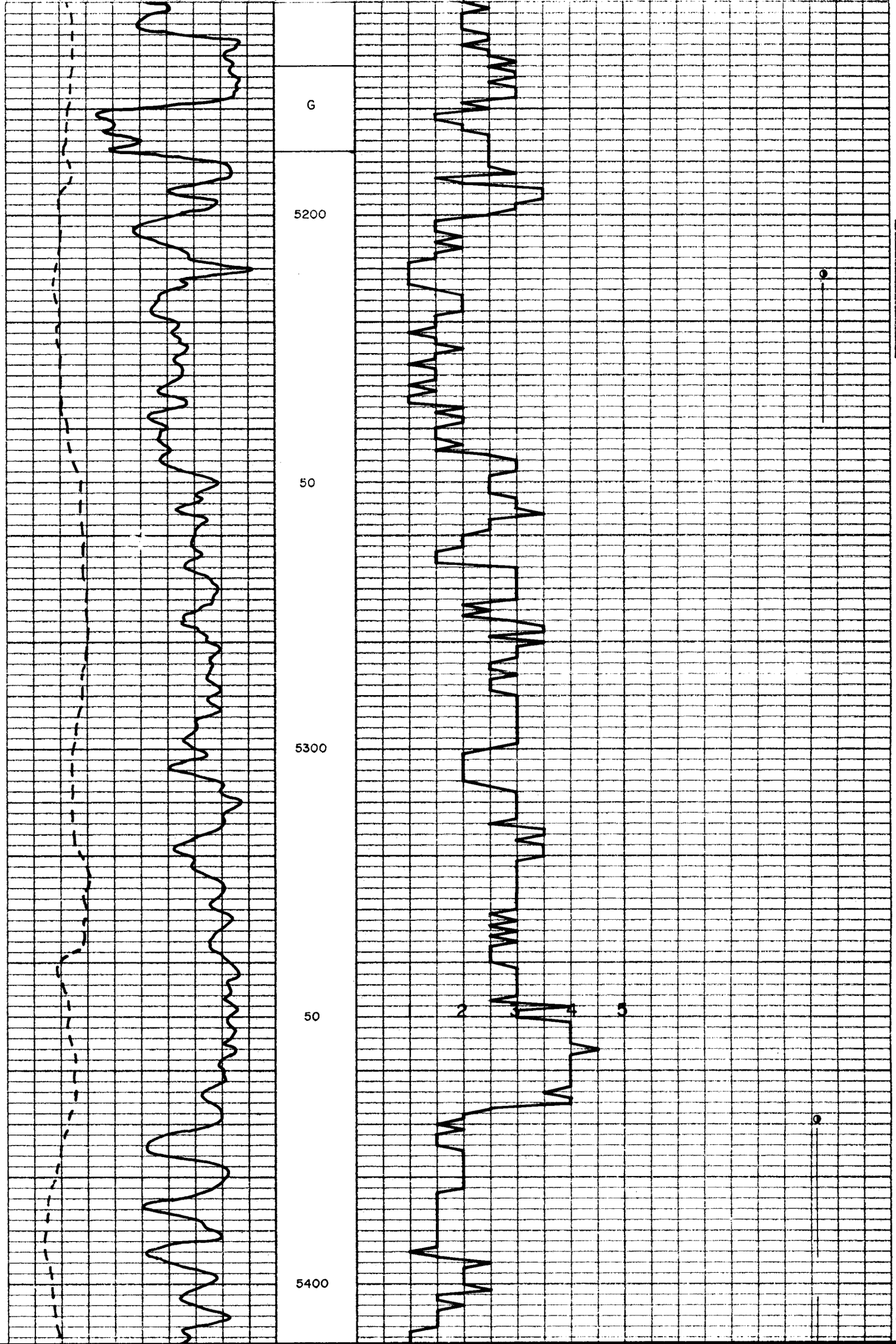

50
G
4100
50
4000
50
X
Y

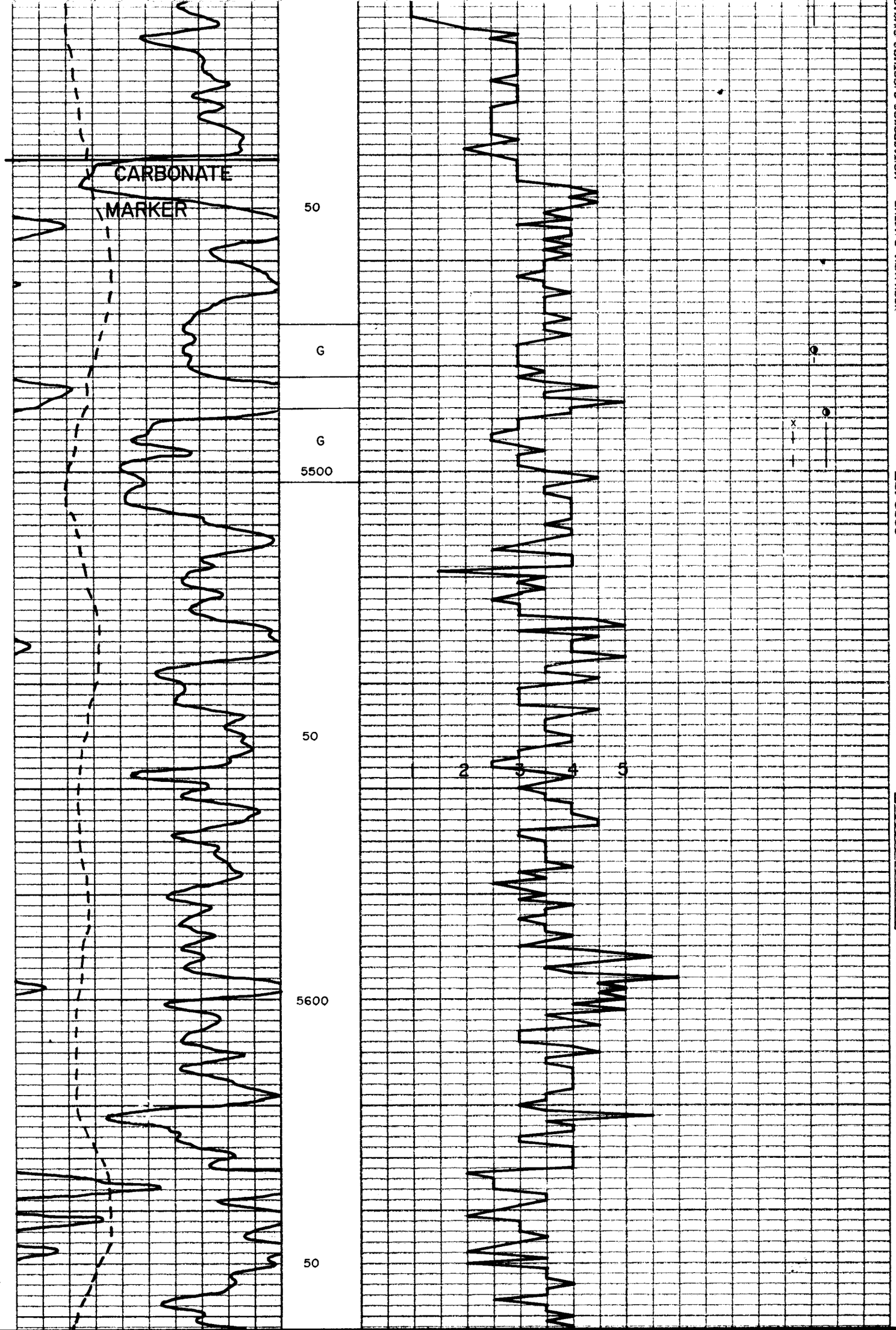
MIDYARDCO CONTROLS CORPORATION BUFFALO, NEW YORK
No. TC1 332
RECORDING CHART
MIDYARDCO CONTROLS CORPORATION BUFFALO, NEW YORK

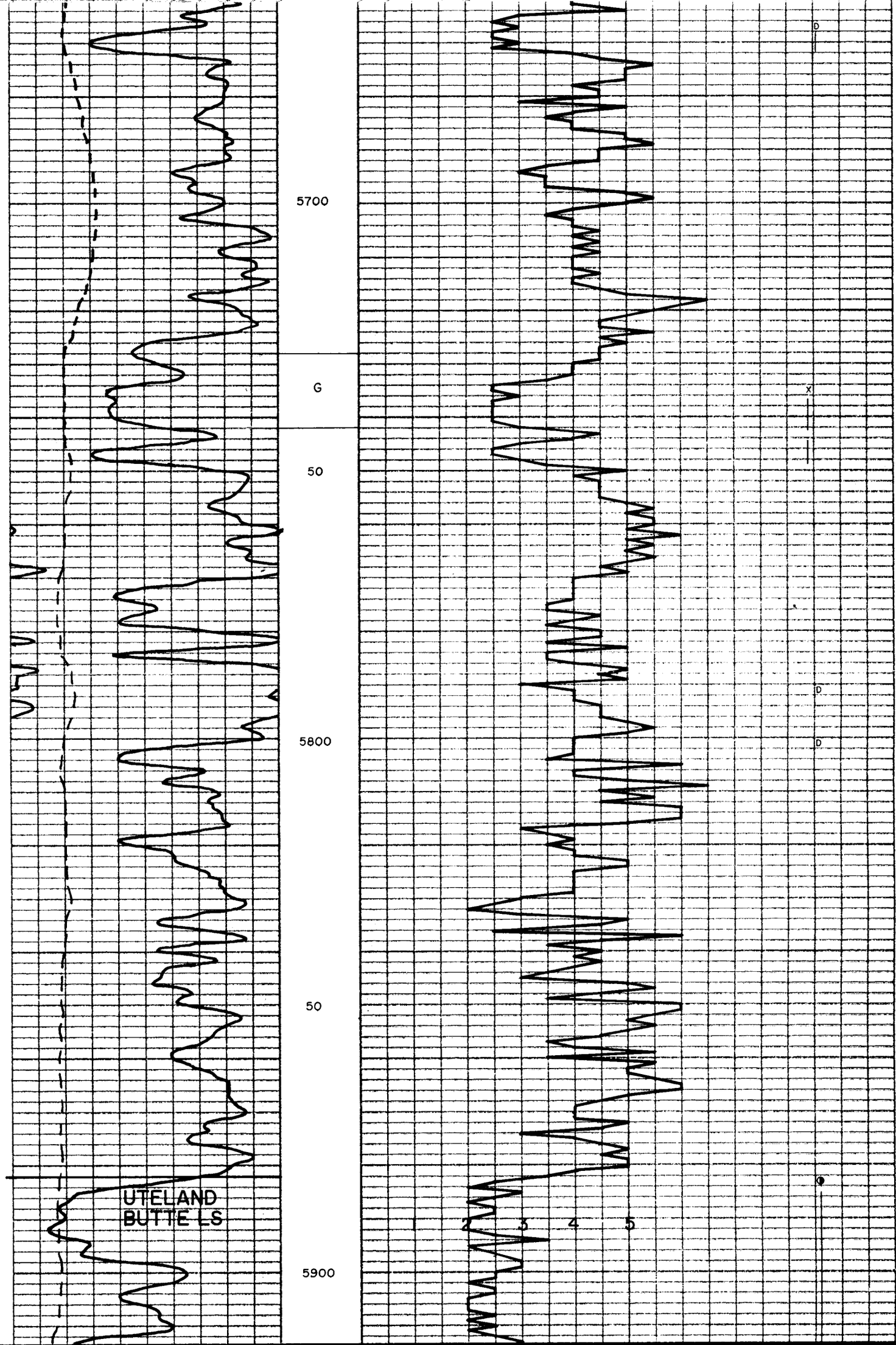

YELLOW
MARKER
G
50
G
4500
50
DOUGLAS
CREEK
4600
G
G
50
1
2
3
4
5
TOH FOR BIT
AT 4448'
1
2
3
4
5

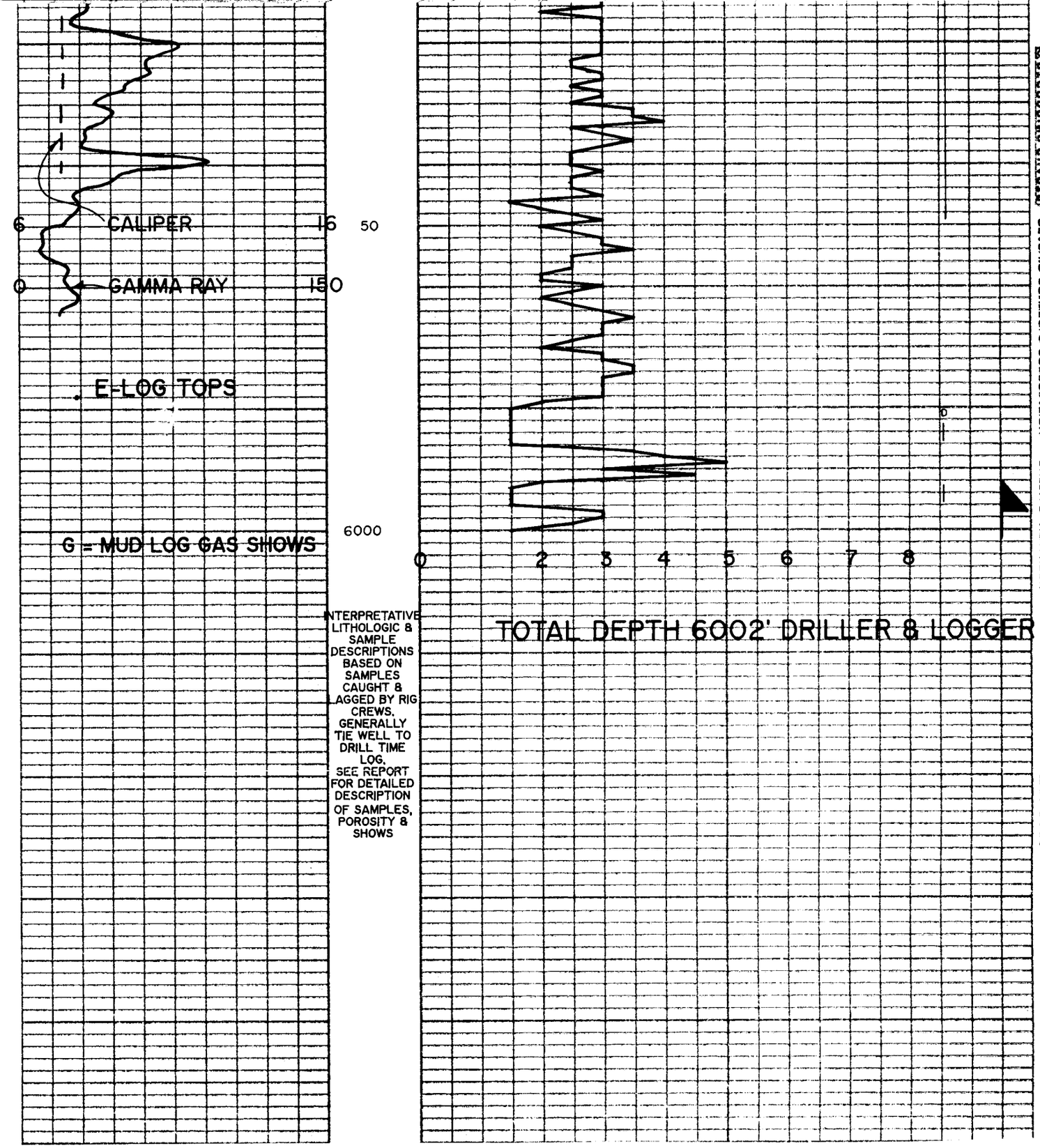

4700
50
G
4800
2nd
DOUGLAS
CREEK
G
50
4900
2
3
4
5
X
RECORDING CHART
GRAPHIC CONTROLS CORPORATION
BUFFALO, NEW YORK
No. TC1 3322


GREEN MARKER
50
G
5000
G
50
5100
50
G
2
3
4
5
X
RECORDING CHART
GRAPHIC CONTROLS CORPORATION
BUFFALO, NEW YORK
No. TC1 3332


G
5200
50
5300
50
5400
2
4
5


CARBONATE
MARKER
50
G
G
5500
50
5600
50
1
2
3
4
5


5700
G
50
5800
50
5900
UTELAND
BUTTE LS
1
2
3
4
5
D
X
D
D
D


6
CALIPER
16
50
0
GAMMA RAY
150
E-LOG TOPS
G = MUD LOG GAS SHOWS
6000
0
2
3
4
5
6
7
8
TOTAL DEPTH 6002' DRILLER & LOGGER
INTERPRETATIVE LITHOLOGIC & SAMPLE DESCRIPTIONS BASED ON SAMPLES CAUGHT & LAGGED BY RIG CREWS. GENERALLY TIE WELL TO DRILL TIME LOG. SEE REPORT FOR DETAILED DESCRIPTION OF SAMPLES, POROSITY & SHOWS

BALCRON OIL
DAILY OPERATING REPORT

BALCRON FEDERAL #41-21Y
Location: NE NE Section 21, T9S, R16E
Duchesne County, Utah **---TIGHT HOLE---**

8-30-93 Casing psi 40. TIH w/5-1/2" packer & 2-7/8" tbg, tag fill @ 4,633' KB. Circulate to 4,670', set packer @ 4,550'. Made swab 30 runs, swab back 180 bbls fluid - 7% oil. No sand in fluid after 30 hrs. Last three runs 15% oil. Release packer, tag fill @ 4,650'KB. Circulate sand out to bridge plug (4,700'). Release bridge plug & TOOH w/36 jts 2-7/8" tbg. SDFN.
DC: $2,600 CC: $269,294

8-31-93 Cas. = Vacuum, tubing slight blow. TOOH w/tbg, packer & bridge plug. TIH w/1 jt 2-7/8" EUE, J-55, 8 rods, 6.5# tbg - length 31.82', landed at 5,096.63'KB; 1 perf nipple 2-7/8" x 3' - length 3.20'; 1 seating nipple - length 1.10'; 165 jts 2-7/8" tbg EUE, J-55, 8 rods, 6.5# tbg - length 5,047.51'. ND BOP. NU wellhead. TIH w/1 BHP 2-1/2" x 1-1/2" x 16' RHAC pressure actuated plunger, 6 rods 1" x 25" EL w/2-1/2" Ricton guides, 195 rods 3/4" x 25' D slick, one 3/4" x 8' pony, one 3/4" x 4' pony, one 1-1/4" x 16' polish rod SM. RDMO.
DC: $7,565 CC: $276,859

9-1-93 Start reclamation; clean & move tanks; pump water from pit & haul to drilling rig.
DC: $2,450 CC: $279,309

9-3-93 Completion
Reserve pit reclaimation.
DC: $1,508 CC: $280,817

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

September 14, 1993

RECEIVED
SEP 16 1993
DIVISION OF
OIL, GAS & MINING

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

Gentlemen:

RE: Balcron Federal #41-21Y
NE NE Section 21, T9S, R16E
Duchesne County, Utah

43-013-31392

Enclosed is a sundry notice reporting first production on the referenced well. A site security diagram is also enclosed.

Sincerely,

Bobbie Schuman

Bobbie Schuman
Coordinator of Operations,
Environmental and Regulatory Affairs

/rs

Enclosures

cc: Utah Division of Oil, Gas and Mining

CONFIDENTIAL

Form 3160-5
(June 1990)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

RECEIVED
SEP 16 1993
DIVISION OF
OIL, GAS & MINING

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

CONFIDENTIAL

5. Lease Designation and Serial No.: U-64379

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

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

1. Type of Well: [X] Oil Well [ ] Gas Well [ ] Other

8. Well Name and No.: Balcron Federal #41-21Y

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

9. API Well No.: 43-013-31392

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

10. Field and Pool, or Exploratory Area: Monument Butte/Grn Rvr

4. Location of Well (Footage, Sec., T., R., M., or Survey Description): NE NE Section 21, T9S, R16E
970.2' FNL, 893.8' FEL

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	
[ ] Notice of Intent	[ ] Abandonment	[ ] Change of Plans
[X] Subsequent Report	[ ] Recompletion	[ ] New Construction
[ ] Final Abandonment Notice	[ ] Plugging Back	[ ] Non-Routine Fracturing
	[ ] Casing Repair	[ ] Water Shut-Off
	[ ] Altering Casing	[ ] Conversion to Injection
	[X] Other 1st production and site security diagram	[ ] 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 on this well was on September 14, 1993.

A site security diagram is attached to this sundry notice.

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

Signed Bobbie Schuman Title Coordinator of Environmental and Regulatory Affairs Date 9/14/93

Bobbie Schuman

(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.

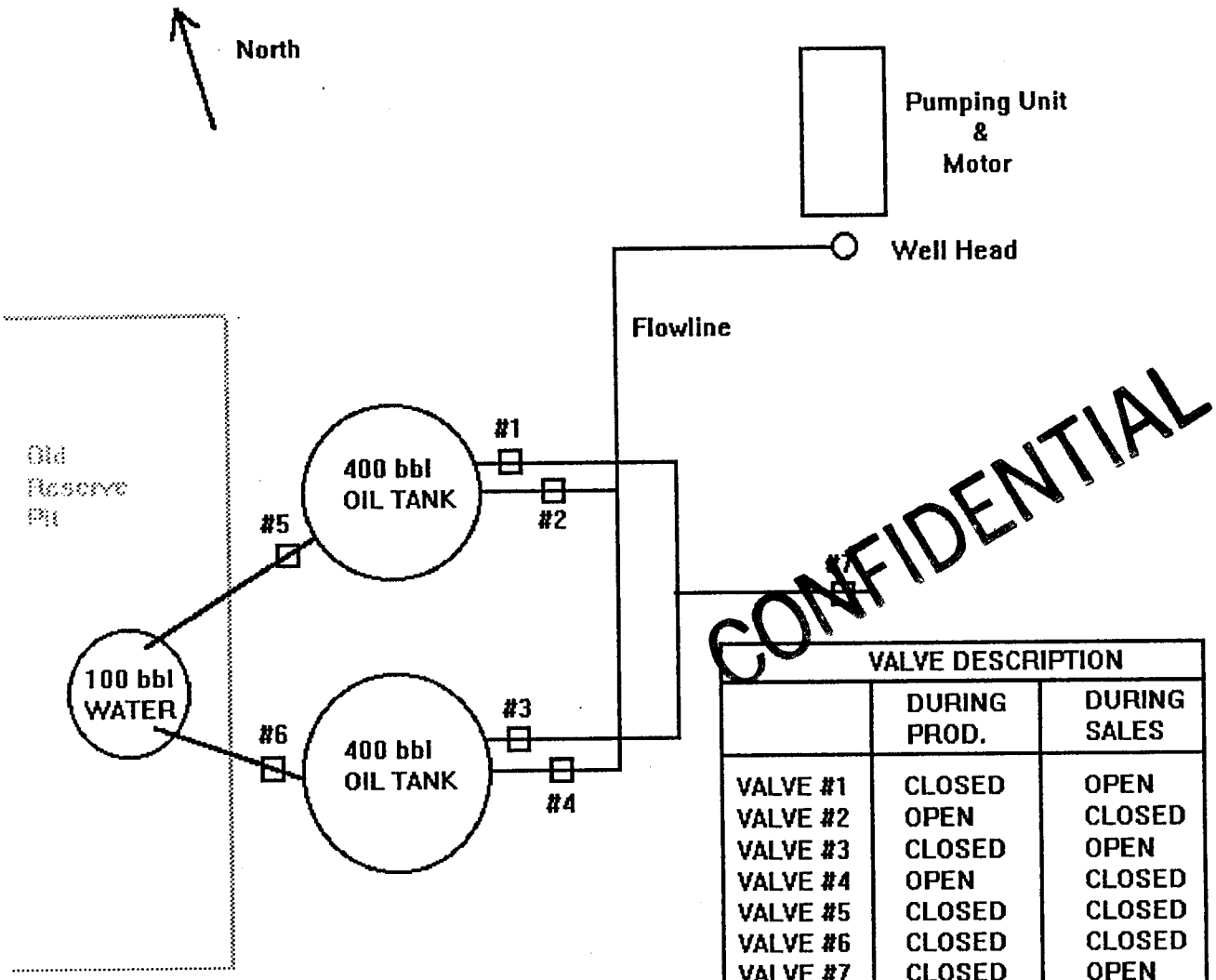
*See Instruction on Reverse Side

Equitable Resources Energy Company

Balcron Federal 41-21Y

Production Facility Diagram

Balcron Federal 41-21Y
NE NE Section 21, T9S, R16E
Duchesne County, Utah
Federal Lease #U-64379
970.2' FNL, 893.8' FEL



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

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

Access
Road

Form 3160-4
(November 1983)
(formerly 9-330)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN DUPLICATE*
(See other instructions on reverse side)

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

WELL COMPLETION OR RECOMPLETION REPORT AND LOG*

5. LEASE DESIGNATION AND SERIAL NO.: U-64379

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

7. UNIT AGREEMENT NAME: n/a

8. FARM OR LEASE NAME: Balcron Federal

9. WELL NO.: 41-21Y

10. FIELD AND POOL, OR WILDCAT: Monument Butte / Green River

11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA: Section 21, T9S, R16E

1a. TYPE OF WELL: OIL WELL [X] GAS WELL [ ] DRY [ ] Other

b. TYPE OF COMPLETION: NEW WELL [X] 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: P.O. Box 21017, Billings, MT 59104 (406) 259-7860

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)*
At surface: NE NE Section 21, T9S, R16E 970.2' FNL, 893.8' FEL
At top prod. interval reported below
At total depth

14. PERMIT NO.	DATE ISSUED	12. COUNTY OR PARISH	13. STATE
43-013-31392	6-16-93	Duchesne	Utah

15. DATE SPUDDED	16. DATE T.D. REACHED	17. DATE COMPL. (Ready to prod.)	18. ELEVATIONS (DF, RKB, RT, GR, ETC.)*	19. ELEV. CASINGHEAD
8-1-93	8-20-93	9-14-93	5953.5' GL	n/a

20. TOTAL DEPTH, MD & TVD	21. PLUG, BACK T.D., MD & TVD	22. IF MULTIPLE COMPL., HOW MANY*	23. INTERVALS DRILLED BY	ROTARY TOOLS	CABLE TOOLS
6,000'	5,950'	n/a	→	Sfc. - TD	

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)*
5023'-5036'
4645'-4650' 4614'-4624' Green River

25. WAS DIRECTIONAL SURVEY MADE: No

26. TYPE ELECTRIC AND OTHER LOGS RUN: DLL-DSN-SDL-GR 9-22-93
MUD LOG, HIGH RESOLUTION INDUCTION

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#	258'	12-1/4"	150 sxs "G" + additives	n/a
5-1/2"	15.5#	5999'	7-7/8"	165 sxs Thirfty Lite	n/a
				275 sxs 50-50 POZ	

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT	SCREEN (MD)
n/a				

30. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)
2-7/8"	5096.63'	n/a

RECEIVED
OCT 28 1993
DIVISION OF
OIL, GAS & MINING

31. PERFORATION RECORD (Interval, size and number)
5023'-5036' (2 SPF)
4645'-4650' (1 SPF)
4614'-4624' (1 SPF)

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

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
5023'-5036'	36,000# 20/40 sand w/13,000 gallons gelled 2% KCL water
4614'-4650'	36,000# 20/40 sand

33.* PRODUCTION

DATE FIRST PRODUCTION	PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump)	WELL STATUS (Producing or shut-in)
9-14-93	Pump - 1-1/2" insert pump	Producing

DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO
9-23-93	24	n/a	→	85	127.5	13	1500

FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CORR.)
n/a	n/a	→	85	127.5	13	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 [signature] TITLE Operations Manager DATE October 25, 1993

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

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.

37. SUMMARY OF POROUS ZONES: (Show all important zones of porosity and contents thereof; cored intervals; and all drill-stem, tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures, and recoveries):

FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.
			No DST's run.

38. GEOLOGIC MARKERS

NAME	TOP	
	MEAS. DEPTH	TRUE VERT. DEPTH
See Geologic REport .		

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

October 25, 1994

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

RECEIVED
OCT 28 1993
DIVISION OF
OIL, GAS & MINING

Gentlemen:

RE: Balcron Federal #21-13Y

Balcron Federal #41-21Y

Balcron Monument Fedeal #13-5

Balcron Monument Federal #22-5

Balcron Monument Federal #32-11J

Enclosed are the following items for the referenced wells:

Well Completion Report

The following items will follow under separate cover in a few days:

Site Security Diagram (Sundry Notice)
NTL2B Disposition of Produced Water (Sundry Notice)

Sincerely,

Molly Conrad

Molly Conrad
Operations Secretary

/mc

Enclosures

cc: Utah Division of Oil, Gas and Mining: Also enclosed is the Report of Water Encountered (Utah Form 7)

REPORT OF WATER ENCOUNTERED DURING DRILLING - FORM 7 (1/89)

1. Well name and number: Balcron Federal #41-21Y
API number: 43-013-31392

2. Well location: QQ NE NE section 21 township 9S range 16E county Duchesne

3. Well operator: Equitable Resources Energy Company, Balcron Oil Division
Address: P.O. Box 21017 phone: (406) 259-7860
Billings, MT 59104

4. Drilling contractor: Molen Drilling Rig #1
Address: P.O. Box 2222 phone: (406) 252-2591
Billings, MT 59104

5. Water encountered (continue on reverse side if necessary)

Depth		Volume (flow rate or head)	Quality (fresh or salty)
from	to		
No water encountered.			

6. Formation tops: See Geologic Report.

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

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

Name Dave McCoskery Signature
Title Operations Manager Date October 25, 1993

RECEIVED OCT 28 1993 DIVISION OF OIL, GAS & MINING

Comments:

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 1, 1993

RECEIVED
NOV 02 1993
DIVISION OF
OIL, GAS & MINING

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

Gentlemen:

RE: Balcron Federal #21-13Y

Balcron Federal #41-21Y

Balcron Monument Federal #13-5

Balcron Monument Federal #22-5

Balcron Monument Federal #32-11

Enclosed are our Site Security Diagrams and Sundries reporting Disposition of Produced Water for the referenced wells.

Please feel free to contact me if you need any additional information.

Sincerely,

Molly Conrad

Molly M. Conrad
Operations Secretary

/mc

cc: State of Utah, Division of Oil, Gas, & Mining

Form 3160-5
(June 1990)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

CONFIDENTIAL

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

5. Lease Designation and Serial No.: U-64379
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 #41-21Y
9. API Well No.: 43-013-31392
10. Field and Pool, or Exploratory Area: Monument Butte/Green River
11. County or Parish, State: Duchesne County, Utah

1. Type of Well: [X] 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): NE NE Section 21, T9S, R16E; 970.2' FNL, 893.8' FEL

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

TYPE OF SUBMISSION	TYPE OF ACTION	
[X] Notice of Intent	[ ] Abandonment	[ ] Change of Plans
[X] Subsequent Report	[ ] Recompletion	[ ] New Construction
[ ] Final Abandonment Notice	[ ] Plugging Back	[ ] Non-Routine Fracturing
	[ ] Casing Repair	[ ] Water Shut-Off
	[ ] Altering Casing	[ ] Conversion to Injection
	[X] Other NTL2B	[ ] 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 sundry notice is to be considered as our NTL2B (Disposition of Produced Water) for this well.

Any water produced by this well will be held in a produced water tank and then hauled to a commercial disposal facility. See Site Security Diagram for location of water tank.

RECEIVED
NOV 02 1993
DIVISION OF
OIL, GAS & MINING

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

Signed [signature] Title Operations Manager Date October 25, 1993

Dave McCorkery

(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

Form 3160-5
(June 1990)

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 to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals

SUBMIT IN TRIPLICATE

CONFIDENTIAL

5. Lease Designation and Serial No.: U-64379
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 #41-21Y
9. API Well No.: 43-013-31392
10. Field and Pool, or Exploratory Area: Monument Butte/Grn Rvr
11. County or Parish, State: Duchesne County, UTAH

1. Type of Well: [X] 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): NE NE Section 21, T9S, R16E
970.2' FNL, 893.8' FEL

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

TYPE OF SUBMISSION	TYPE OF ACTION	
[ ] Notice of Intent	[ ] Abandonment	[ ] Change of Plans
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[ ] Final Abandonment Notice	[ ] Plugging Back	[ ] Non-Routine Fracturing
	[ ] Casing Repair	[ ] Water Shut-Off
	[ ] Altering Casing	[ ] Conversion to Injection
	[X] Other Site Security Diagram	[ ] 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.

CONFIDENTIAL

RECEIVED
NOV 02 1993
DIVISION OF
OIL, GAS & MINING

14. I hereby certify that the foregoing is true and correct
Signed Bobbie Schuman Title Coordinator of Environmental and Regulatory Affairs Date 11-1-93
Bobbie Schuman
(This space for Federal or State office use)

Approved by _____ Title _____ Date _____
Conditions of approval, if any:

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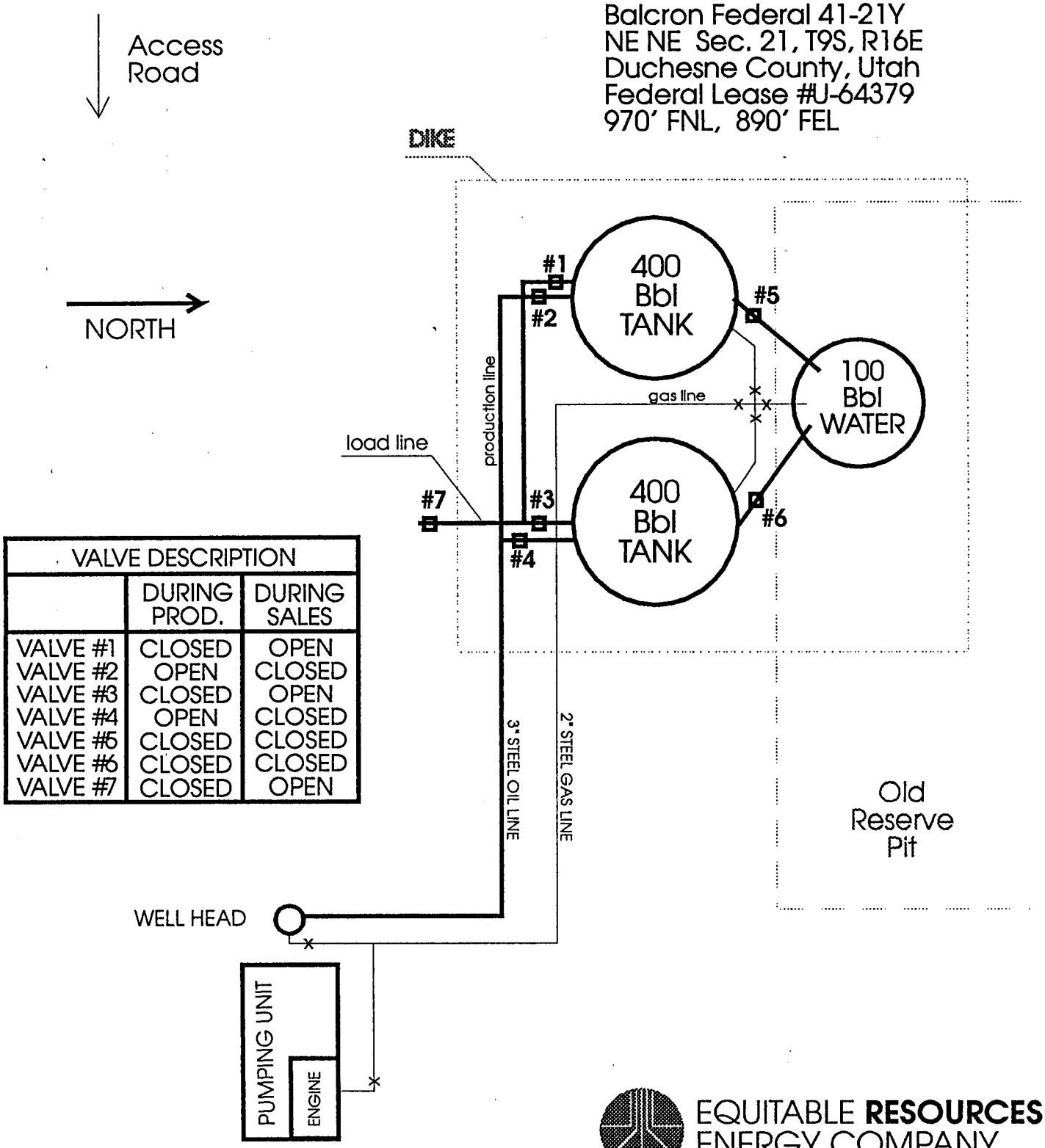
*See Instruction on Reverse Side

Equitable Resources Energy Company
Balcron Federal 41-21Y
Production Facility Diagram

Balcron Federal 41-21Y
NE NE Sec. 21, T9S, R16E
Duchesne County, Utah
Federal Lease #U-64379
970' FNL, 890' FEL



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

BALCRON OIL
DAILY OPERATING REPORT

BALCRON FEDERAL #41-21Y 43-013-31392
Location: NE NE Section 21, T9S, R16E
Duchesne County, Utah **---TIGHT HOLE---**
970.2' FNL, 893.8' GEL
PTD: 5900' Formation: Green River
Green River Prospect/Monument Butte Field
Elevations: 5953.5' GL
Contractor: Molen Drilling Rig #1
Operator: Balcron/EREC
Spud: 8-1-93 @ 11 a.m.
Casing: 8-5/8" @ 258'
5-1/2" @ 5,999' KB
Tubing: 2-7/8" @ 5096.63'

7-21-93 Present Operation: Start building location.

7-22-93 Present Operation: Work on location.

7-23-9 Present Operation: Work on location, hard rock, prep to drill & shoot.

7-24-93 Present Operation: Start to drill rock for dynamite.

7-25-93 Present Operation: Finish drilling holes. Total of 194.

7-26-93 Present Operation: Shoot pit & location.

7-27-93 Present Operation: Work on location.

7-28-93 Present Operation: Work on location.

7-29-93 Present Operation: Work on location & pit.

7-30-93 Present Operation: Can't dig pit.

7-31-93 Present Operation: Shoot pit again.

8-1-93 Present Operation: Finish location, rig up rat hole digger & drill 100' of surface hole.
DC: Not given CC: $4,483

8-2-93 Present Operation: Put liner in reserve pit. Start hauling water. Rat hole digger will run 8-5/8" casing Wednesday morning.
DC: Not given

BALCRON OIL
DAILY OPERATING REPORT

BALCRON FEDERAL #41-21Y
Location: NE NE Section 21, T9S, R16E
Duchesne County, Utah **---TIGHT HOLE---**

8-3-93 TD: 225′ (0′) Day 3
Present Operation: Drilling surface hole.
Spud well @ 11:00 AM 8/1/93. Haul more water to reserve, rat hole digger still reaming hole to 12-1/4". Blow hydraulic hose, lacks 30′.
DC: 826′ CC: $5,309

8-4-93 TD: 225′ (0′) Day 4
Present Operation: WOC.
Finish reaming hole. Run 6 jts. 8-5/8" 24# casing. Cement with Dowell. Good returns, approx 5 BBLS cement back. Cement with 150 sx Class G with 2% CCL & 1/4# per sx Celloflake. Plug down @ 4:40 PM.
DC: $5,040 CC: $10,345

8-5-93 TD: 225′ (0′) Day 5
Present Operation: Drilling mouse & rat holes.
Parker Air Drilling drilling mouse & rat holes. Molen will move today.
DC: $27,300 CC: $37,645

8-7-93 TD: 258′ (0′) Day 7
Present Operation: Rig up.
Get trucks @ 7:00 AM & move to location. Trucks leave @ 4:00 PM. Did not break tower. Raise derrick @ 3:00 PM.
DC: $3,736 CC: $41,381

8-8-93 TD: 525′ (267′) Day 8
MW 8.4 Vis 29 pH 10.5
Formation: Uintah
Present Operation: Drilling.
Rig up, weld on casing head & nipple up. Test BOP & mainifold to 2000 psi - OK. Test casing to 1500 psi - OK. Pick up collars & drill cement. Drill, survey.
DC: $4,703 CC: $46,084

8-9-93 TD: 1,600′ (1,075′) Day 9
MW 8.4 Vis 29 pH 10.5
Formation: Uintah
Present Operation: Drilling
Drill, survey, clean on rig. Get mud loggers rigged up.
DC: $14,232 CC: $60,316

BALCRON OIL
DAILY OPERATING REPORT

BALCRON FEDERAL #41-21Y
Location: NE NE Section 21, T9S, R16E
Duchesne County, Utah **---TIGHT HOLE---**

8-10-93 TD: 2,670′ (1,070′) Day 7
MW 8.5 Vis 29 pH 10.5
Formation: Green River
Present Operation: Drilling.
Drill, survey, clean on rig.
DC: $18,971 CC: $79,287

8-11-93 TD: 3,289′ (619′) Day 8
MW 8.4 Vis 29 pH 10.3
Present Operation: Green River
Present Operation: Drilling.
Drill, survey, clean on rig, work on mud pump. Good rain.
DC: $9,541 CC: $ 88,830

8-12-93 TD: 3,750′ (461′) Day 9
MW 8.5 Vis 29 pH 10.3
Formation: Green River
Present Operation: Drilling.
Drill, work on draworks engine, survey, drill, clean on rig.
DC: $6,895 CC: $95,725

8-13-93 TD: 4,185′ (435′) Day 6
MW 8.5 Vis 29 pH 10.5
Formation: Green River
Present Operation: Drilling.
Drill, survey, work on light plant, drill.
DC: $6,542 CC: $102,267

BALCRON OIL
DAILY OPERATING REPORT

BALCRON FEDERAL #41-21Y
Location: NE NE Section 21, T9S, R16E
Duchesne County, Utah **---TIGHT HOLE---**

8-14-93 TD: 4,538′ (353′) Day 7
MW 8.5 Vis 29 pH 10.5
Formation: Green River
Present Operation: Drilling.
Drill, survey, trip for bit, clean & paint. About 400-500 BBLS water loss per day. LCM sweeps.
DC: $6,651 CC: $108,918

8-15-93 TD: 5,043′ (505′) Day 8
MW 8.4 Vis 29 pH 10.0
Formation: Green River
Present Operation: Drilling.
Drill, survey, clean on rig & paint. Approximately 250 BBLS water loss per day.
DC: $7,759 CC: $116,677

8-16-93 TD: 5,510′ (467′) Day 9
MW 8.5 Vis 29 pH 10.0
Formation: Green River
Present Operation: Drilling.
Drill, survey, work on pump, clean & paint.
DC: $8,473 CC: $125,150

8-17-93 TD: 5,852′ (342′) Day 10
MW 8.4 Vis 29 pH 9.5
Formation: Green River
Present Operation: Drilling.
Drill, survey, clean & paint. Still losing about 250 BBLS water down hole per day. LCM sweeps.
DC: $8,571 CC: $133,721

8-18-93 TD: 6,000′ (148′) Day 11
MW 9.0 Vis 31 pH 9.5
Formation: Green River
Present Operation: Logging.
Drill, TD at 6,000′. Circulate 2 hours and drop survey. Strap out of hole. Rig up Halliburton and log well.
DC: $6,902 $140,623

BALCRON OIL
DAILY OPERATING REPORT

BALCRON FEDERAL #41-21Y
Location: NE NE Section 21, T9S, R16E
Duchesne County, Utah **---TIGHT HOLE---**

8-19-93 TD: 6,000′ (-0-) Day 12
Formation: Green River
Present Operation: Running Casing.
Log well, rig down loggers. Wait on orders. Trip in hole & circulate. Unload 5-1/2" casing. Lay down drillpipe & collars; rig up casers & run casing.
DC: $20,275 CC: $160,898

8-20-93 TD: 6,000′ (-0-) Day 13
Formation: Green River
Present Operation: Moving rig.
Finish running casing, cement with Western. Nipple down & clean mud tank.

One 5-1/2" guide shoe	.70′
One jt 5-1/2" 15.5#/ft K-55	43.14′
One 5-1/2" float collar	2.65′
138 jts 5-1/2" 15.5#/ft K-55	5,957.53′
Total String	6,004.02′

Set @5,999′. PBTD 5,950′.

Ran 20 centralizers. Cemented with 165 sxs Thrifty lite. Tailed in with 275 sxs 50-50 Pozmix. Job looked good. Plug down 8:30 AM 8/19/93. **Release rig 12:30 PM 8/19/93.**
DC: $48,259 CC: $209,157

8-23-93 NU BOP & tbg head. TIH w/4-3/4" drag bit & scraper & 195 jts 2-7/8" tbg EUE tag. PBTD @ 5,950′KB. TOOH w/2-7/8", 5-1/2" scraper & bit. RU Cutter Wire Line to Bond Log & perforate top of cement @ 2,980′KB. Perforate 5,023′-5,036′KB, 2 SPF. RD Cutter Wire Line. SWIFN.
DC: $4,950 CC: $214,107

8-24-93 Cas PSIG 1. TIH w/162 jts, 2-7/8" tbg, 1-SN, one 5-1/2" HD PKR, 1 jt 2-7/8" tbg. Set pkr @ 4,967′KB. Bottom of tbg 4,999′KB. RU Halliburton to break down formation. Pressure test surface equipment to 4000 PSIG - OK. Break back @ 2500 PSIG, pump 6 bbls water. Start balls, 1 ball per bbl - 4 BPM. 25 bbls total, no ball off.

BALCRON OIL
DAILY OPERATING REPORT

BALCRON FEDERAL #41-21Y
Location: NE NE Section 21, T9S, R16E
Duchesne County, Utah **---TIGHT HOLE---**

Surge balls back. Shut down 15 minutes. Pump 14 bbls water for rate. 2-1/2 BPM @ 2500 PSIG. ISIP 1950 PSIG, flow back 20 bbls water. Made 8 swab runs, well swabbed down. Last three runs, trace of oil. Load recovered 59 bbls water. TOOH w/tbg & packer. SWIFN. Total load to recover 97 bbls water.
DC: $3,017 CC: $217,124

8-25-93 Casing pressure slight blow. RU Halliburton to frac 5,023'-5,036'. Pressure test surface equipment to 4000 PSIG - OK. Start frac 1 to 7 pd. ramp. Max pressure 3200 PSIG. Max rate 36 BPM. 2470 average pressure, average rate 34 BPM. Frac complete. ISIP 2084, 5 minutes 1770, 10 minutes 1723, 15 minutes 1672. SWIFD.
DC: $20,409 CC: $237,533

8-26-93 Cas 790 PSIG. TIh w/1 jt 2-7/8" tbg, 5-1/2" R-3 packer, SN & 190 jts tbg. Land bottom of tbg @4,999'KB. Set packer @4,967'KB. Made 48 swab runs. Flowed back 60 bbls water, swabbed back 253 bbls water. Last three runs tag fluid @ 4,500'. Last 2 runs 2% oil. SWIFN.
DC: $3,344 CC: $240,877
---PLEASE SEE ATTACHED REPORTS, 2 PAGES---

8-27-93 Cas "0" PSIG, tbg 35 psi. Tag fluid 1500' from surface. Made 30 swab runs. Swab back 122 bbls water. Unseat packer, circulate sand out of well. TOOH w/tbg & packer. RU Schlumberger to preforate 4,645'-4,650' - 1SPF; 4,614' - 4,624' - 1SPF. SWIFN. DC: $2,971
CC: $243,848

8-28-93 TIH w/5-1/2" retrievable bridge plug, one jt 2-7/8" tbg, one 5-1/2" R-3 packer & 2-7/8" tbg. Set bridge plug at 4700', set packer at 4551'. Bottom of tubing at 4,583'. RU Halliburton to break down. Test surface equipment - OK. Start break down - 1 ball per bbl, 3 bbls per minute. Ball off. Surge balls back. Pump for rate 6.5 BPM at 2650 PSIG, ISIP 1400 psi. Pressure test surface equpment to 4000 PSIG - OK. Start pad. Start sand 1# to 7# ramp. Maximum rate 35 BPM. Start fresh 2750 maximum pressure. ISIP 1972 psi, 5 minutes 1971 psi, 10 minutes 1679 psi, 16 minutes 1607 psi. SWIFN.
DC: $22,846 CC: $266,694

BALCRON OIL
DAILY OPERATING REPORT

BALCRON FEDERAL #41-21Y
Location: NE NE Section 21, T9S, R16E
Duchesne County, Utah **---TIGHT HOLE---**

8-30-93 Casing psi 40. TIH w/5-1/2" packer & 2-7/8" tbg, tag fill @ 4,633' KB. Circulate to 4,670', set packer @ 4,550'. Made swab 30 runs, swab back 180 bbls fluid - 7% oil. No sand in fluid after 30 hrs. Last three runs 15% oil. Release packer, tag fill @ 4,650'KB. Circulate sand out to bridge plug (4,700'). Release bridge plug & TOOH w/36 jts 2-7/8" tbg. SDFN.
DC: $2,600 CC: $269,294

8-31-93 Cas. = Vacuum, tubing slight blow. TOOH w/tbg, packer & bridge plug. TIH w/1 jt 2-7/8" EUE, J-55, 8 rods, 6.5# tbg - length 31.82', landed at 5,096.63'KB; 1 perf nipple 2-7/8" x 3' - length 3.20'; 1 seating nipple - length 1.10'; 165 jts 2-7/8" tbg EUE, J-55, 8 rods, 6.5# tbg - length 5,047.51'. ND BOP. NU wellhead. TIH w/1 BHP 2-1/2" x 1-1/2" x 16' RHAC pressure actuated plunger, 6 rods 1" x 25" EL w/2-1/2" Ricton guides, 195 rods 3/4" x 25' D slick, one 3/4" x 8' pony, one 3/4" x 4' pony, one 1-1/4" x 16' polish rod SM. RDMO.
DC: $7,565 CC: $276,859

9-1-93 Start reclamation; clean & move tanks; pump water from pit & haul to drilling rig.
DC: $2,450 CC: $279,309

9-3-93 Completion
Reserve pit reclaimation.
DC: $1,508 CC: $280,817

9-7-93 Completion
Reserve pit reclamation & make rods for pump & tank.
DC: $17,138

9-14-93 Completion
Continue surface equipment hook up. Complete hookup. Start @ 1630 hrs, 6-1/2 SPM, 58" stroke.
DC: $1,766

DONALD CANNON, President

PHONE 801/789-0572
789-1218
1-828-7591
1-828-7485

CANNON WELL SERVICE, INC.

P.O. Box 906
VERNAL, UTAH 84078

Page #1

SWAB REPORT

DATE 8-26-93 LEASE Balcron WELL NO. Fed 41-21 y

TANK NO. TANK SIZE BBLS. PER INCH CO. REP. Dale Griffin

	TIME	FLUID LEVEL	PULLED FROM	FLUID LEVEL IN TANK FT.	FLUID LEVEL IN TANK IN.	BBLS. IN TANK	BBLS. PER RUN	TOT. BBLS SWABBED	FLUID ANALYSIS OIL	WATER	MUD	BS	GAS
1	9:30	Surface	1000'				6	6		100%			
2		400'	1400'				6	12		100%			
3		900'	1900'				6	18		100%			
4		1200'	2200'				6	24		100%		Sand	
5		1500'	2500'				6	30		100%		"	
6		1700'	2700'				6	36		100%		"	
7		2100'	3100'				6	42		100%		"	
8		2500'	3500'				6	48		100%		"	
9		2800'	3800'				6	54		100%		"	
10		2900'	3900'				6	60		100%		"	
11		3100'	4100'				6	66		100%		"	
12		3200'	4200'				6	72		100%		"	gassed
13		3200'	4200'				6	78		100%		"	"
14		3300'	4300'				6	84	trace	100%		"	"
15		3300'	4300'				6	90	"	100%		"	"
16		3300'	4300'				6	96	"	100%		"	"
17		3300'	4300'				6	102	"	100%		"	"
18		3400'	4400'				6	108	"	100%		"	"
19		3400'	4400'				6	114	"	100%		"	"
20		3400'	4400'				6	120	"	100%		"	"
21		3400'	4400'				6	126	"	100%	clean		"
22		3400'	4400'				6	132	"	100%			"
23		3500'	4500'				6	138	"	100%			"
24		3500'	4500'				6	144	"	100%			"
25		3500'	4500'				6	150	"	100%			"
26		3600'	4600'				6	156	"	100%			"
27		3600'	4600'				6	162	"	100%			"
28		3600'	4600'				6	168	"	100%			"
29		3600'	4600'				6	174	"	100%			"
30		3600'	4600'				6	180	"	100%			"

DONALD CANNON, President

PHONE 801/789-0572
789-1218
1-828-7591
1-828-7485

CANNON WELL SERVICE, INC.

P.O. Box 906
VERNAL, UTAH 84078

Page #2

SWAB REPORT

DATE 8-26-93 LEASE Balcron WELL NO. Fed 41-21y

TANK NO. TANK SIZE BBLS. PER INCH CO. REP. Dale Griffin

	TIME	FLUID LEVEL	PULLED FROM	FLUID LEVEL IN TANK FT.	FLUID LEVEL IN TANK IN.	BBLS. IN TANK	BBLS. PER RUN	TOT. BBLS SWABBED	FLUID ANALYSIS OIL	WATER	MUD	BS	GAS
1		3700'	4965'				6	186	trace	100%			gas cu
2		3800'	4965'				6	192	"	100%			"
3		3860'	4965'				6	198	"	100%			"
4		4000'	4965'				6	204	"	100%			"
5		4100'	4965'				5½	209½	"	100%			"
6		4100'	4965'				5½	215	"	100%			"
7		4200'	4965'				4	219	"	100%			"
8		4200'	4965'				4	223	"	100%			"
9		4200'	4965'				4	227	"	100%			"
10		4300'	4965'				3½	230½	1%	99%			"
11		4400'	4965'				3	233½	1%	99%			"
12		4400'	4965'				3	236½	1%	99%			"
13		4400'	4965'				3	239½	1%	99%			"
14		4400'	4965'				3	242½	1%	99%			"
15		4400'	4965'				3	245½	1%	99%			"
16		4500'	4965'				2½	248	1%	99%			"
17		4500'	4965'				2½	250½	2%	98%			"
18	5:30	4500'	4965'				2½	253	2%	98%			"
19						Flowed back 60 bbls		60					
20								313					
21													
22													
23													
24													
25													
26													
27													
28													
29													
30													

Form 3160-5
(June 1990)

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 to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals

SUBMIT IN TRIPLICATE

CONFIDENTIAL

5. Lease Designation and Serial No.: U-64379
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 #41-21Y
9. API Well No.: 43-013-31392
10. Field and Pool, or Exploratory Area: Monument Butte/Grn Rvr
11. County or Parish, State: Duchesne County, UTAH

1. Type of Well: [X] 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): NE NE Section 21, T9S, R16E
970.2' FNL, 893.8' FEL

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

TYPE OF SUBMISSION	TYPE OF ACTION	
[X] Notice of Intent	[ ] Abandonment	[ ] Change of Plans
[X] Subsequent Report	[ ] Recompletion	[ ] New Construction
[ ] Final Abandonment Notice	[ ] Plugging Back	[ ] Non-Routine Fracturing
	[ ] Casing Repair	[ ] Water Shut-Off
	[ ] Altering Casing	[ ] Conversion to Injection
	[X] Other Onshore Order #7	[ ] 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.)*

DEC 01 1993
DIVISION OF
OIL, GAS & MINING

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 is 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 disposal 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 Vernal Bureau of Land Management.

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

Signed Bobbie Schuman — Title Coordinator of Environmental and Regulatory Affairs — Date November 30, 1993

Bobbie Schuman

(This space for Federal or State office use)

Approved by _____ Title _____ Date _____
Conditions of approval, if any: Federal Approval of this Action is Necessary

Accepted by the State of Utah Division of Oil, Gas and Mining
Date: 12-5-93
By: [illegible]

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 statement or representations as to any matter within its jurisdiction.

*See Instruction on Reverse Side

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 30, 1993

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

Gentlemen:

As requested, enclosed are sundry notices which are being resubmitted to comply with Onshore Order #7 which covers disposition of produced waters. These are being resubmitted for the following wells:

Balcron Monument Federal #32-11
Balcron Monument Federal #22-5
Balcron Monument Federal #13-5
Balcron Federal #41-21Y
Balcron Federal #21-13Y
Balcron Federal #21-9Y
Balcron Monument Federal #23-5
Balcron Monument Federal #23-11
Balcron Federal #22-10Y
Balcron Federal #44-14Y
Balcron Federal #24-3Y

These are to replace the sundry notices which were filed as NTL2B.

Also enclosed for your information is a copy of the State approval of the primary facility at which we dispose of our produced water.

Sincerely,

Bobbie Schuman

Bobbie Schuman
Coordinator of Operations,
Environmental and Regulatory Affairs

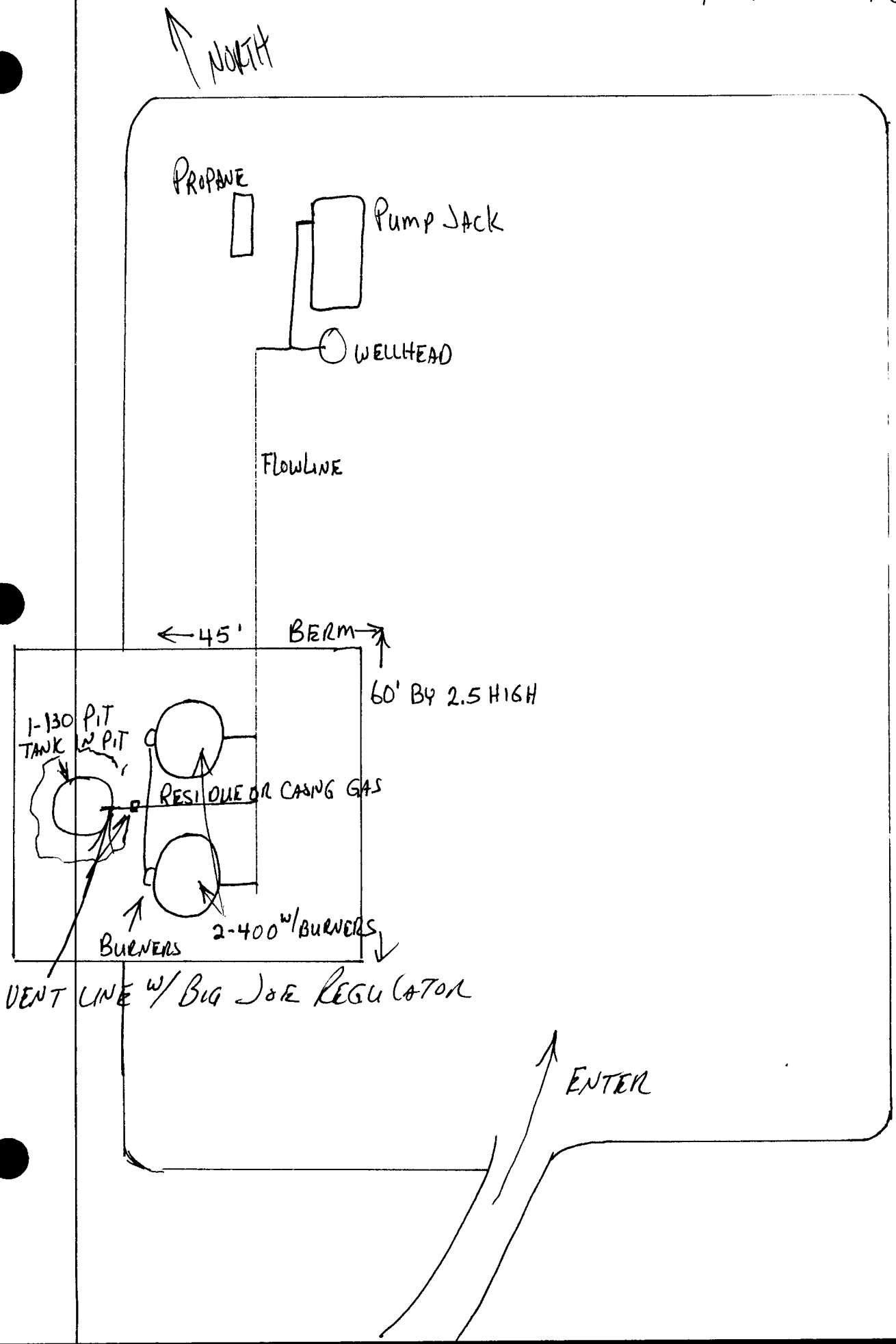
/rs

Enclosures

cc: Utah Division of Oil, Gas and Mining

EQUITABLE RESOURCES
BALCRON FED # 41-21Y
SEC 21 T9S R16E

4[redacted]013-31392
12/21/93



Form 3160-5
(June 1990)

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 to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals

SUBMIT IN TRIPLICATE

5. Lease Designation and Serial No.: U-65379
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 #41-21Y
9. API Well No.: 43-013-~~XXXXX~~ 31392
10. Field and Pool, or Exploratory Area: Monument Butte/Green River
11. County or Parish, State: Duchesne County, UTAH

1. Type of Well: [X] 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): NE NE Section 21, T9S, R16E; 970' FNL, 893' FEL

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

TYPE OF SUBMISSION	TYPE OF ACTION	
[X] Notice of Intent	[ ] Abandonment	[ ] Change of Plans
[X] Subsequent Report	[ ] Recompletion	[ ] New Construction
[ ] Final Abandonment Notice	[ ] Plugging Back	[ ] Non-Routine Fracturing
	[ ] Casing Repair	[ ] Water Shut-Off
	[ ] Altering Casing	[ ] Conversion to Injection
	[X] Other off-lease meter	[ ] 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.)*

Operator requests approval for off-lease measurement of gas on this well. A map showing the location of the meter is attached.

The location of the meter is shown on Federal Right-of-Way #UTU-71256.

Accepted by the Utah Division of Oil, Gas and Mining

FOR RECORD ONLY

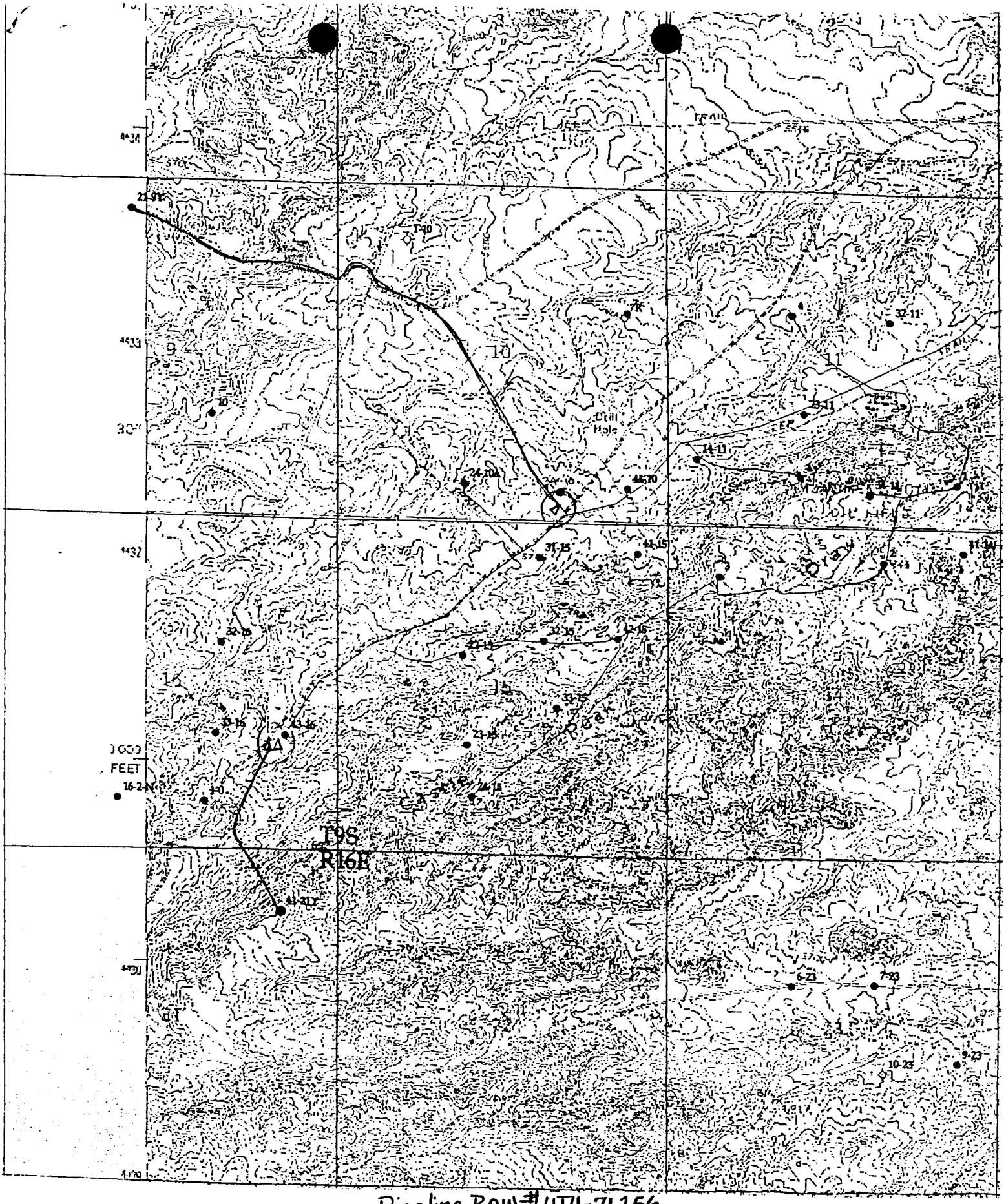
14. I hereby certify that the foregoing is true and correct
Signed Bobbie Schuman (Bobbie Schuman) Title Regulatory and Environmental Specialist Date January 13, 1995

(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



Pipeline Row # UTU-71256

Existing Gas Lines

Proposed 2" Poly Lines (Row)

▲ Proposed Gas Meter

41-21Y
21-9Y

Equitable Resources Energy Company
Balcron Oil Division

Monument Butte Gas Plant
Gas Gathering System

5-1-94

I2

Form 3160-5
(June 1990)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

RECEIVED
JUL 17 1995
DIV. OF OIL, GAS & MINING

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.

5. Lease Designation and Serial No.: U-65379

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

SUBMIT IN TRIPLICATE

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

1. Type of Well: [X] Oil Well [ ] Gas Well [ ] Other

8. Well Name and No.: Balcron Federal #41-21Y

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

9. API Well No.: 43-013-31392

3. Address and Telephone No.: 1601 Lewis Avenue; Billings, MT 59102 (406) 259-7860

10. Field and Pool, or Exploratory Area: Monument Butte/Green River

4. Location of Well (Footage, Sec., T., R., M., or Survey Description): NE NE Section 21, T9S, R16E
970' FNL, 893' FEL

11. County or Parish, State: Duchesne County, UT

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

TYPE OF SUBMISSION	TYPE OF ACTION	
[X] Notice of Intent	[ ] Abandonment	[ ] Change of Plans
[X] Subsequent Report	[ ] Recompletion	[ ] New Construction
[ ] Final Abandonment Notice	[ ] Plugging Back	[ ] Non-Routine Fracturing
	[ ] Casing Repair	[ ] Water Shut-Off
	[ ] Altering Casing	[ ] Conversion to Injection
	[X] Other off-lease meter	[ ] 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.)*

Operator requests approval for off-lease natural gas measurement for this well. It is desired to place the gas meter off-lease to reduce the distance that our gas plant operator must travel each day. The operator must check the meter daily. Due to rocky terrain this necessitates driving several each additional miles each day if the meter were located on lease. Less driving also aids with dust control. See attached map for the meter location.

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

Signed Bobbie Schuman Title Regulatory and Environmental Specialist Date July 13, 1995

(This space for Federal or State office use)

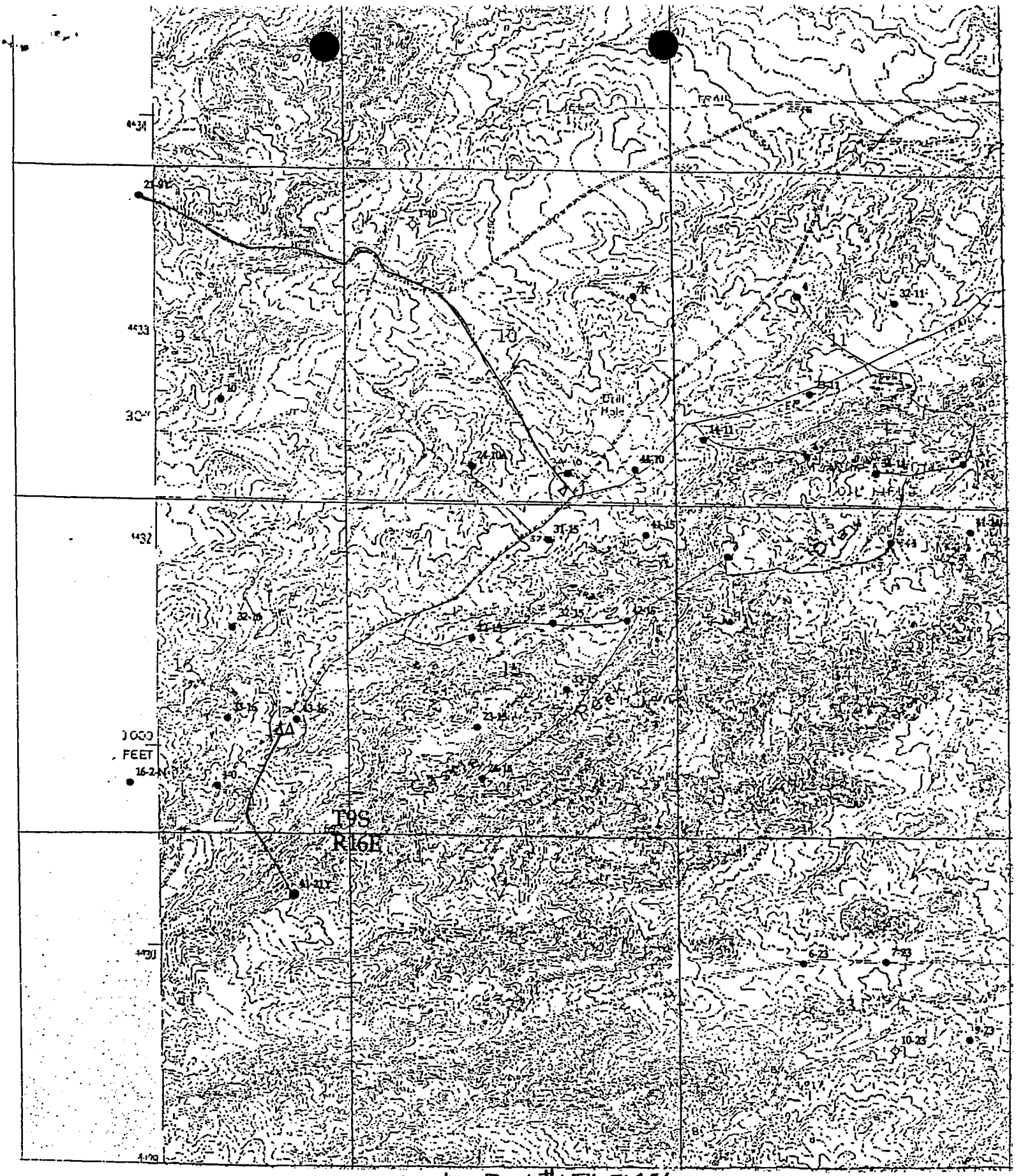
Bobbie Schuman

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



Pipeline ROW # UTU-71256

Existing Gas Lines

Proposed 2" Poly Lines (ROW)

Proposed Gas Meter

41-21Y
21-9Y

Equitable Resources Energy Company
Balcron Oil Division

Monument Butte Gas Plant
Gas Gathering System

5-1-94

I2

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 ☒

RECEIVED
APR - 8 1996
DIV OF OIL, GAS & MINING

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 <u>only</u> 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

FORM 9

STATE OF UTAH
DIVISION OF OIL, GAS AND MINING

5. Lease Designation and Serial Number: See attached listing

SUNDRY NOTICES AND REPORTS ON WELLS

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

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.

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
- ☐ New Construction
- ☐ Pull or Alter Casing
- ☐ Recomplete
- ☐ Reperforate
- ☐ Vent or Flare
- ☐ Water Shut-Off
- ☐ Other

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.

13.
Name & Signature: Bobbie Schuman
Bobbie Schuman
Title: Regulatory and Environmental Specialist
Date: March 27, 1996

(This space for State use only)

(4\94)

(See Instructions on Reverse Side)

Division of Oil, Gas and Mining
OPERATOR CHANGE WORKSHEET

Routing:
1. LEC 7-SJ
2. DTS 8-FILE
3. VLD (GIL)
4. RJF
5. LEC
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 ☒ Operator Name Change Only

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

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

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

Name	API	Entity	Sec	Twp	Rng	Lease Type
SEE ATTACHED	013-31392					

OPERATOR CHANGE DOCUMENTATION

Lec 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.

Lec 5. Changes have been entered in the Oil and Gas Information System (Wang/IBM) ~~for each well listed above~~. (4-10-96)

Lec 6. Cardex file has been updated for each well listed above. (4-11-96)

Lec 7. Well file labels have been updated for each well listed above. (4-11-96)

Lec 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)

Lec 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.

– OVER –

OPERATOR CHANGE WORKSHEET (CONTINUED) Initial each item when completed. Write N/A if item is not applicable.

ENTITY REVIEW

Yes 1. (Rule R615-8-7) Entity assignments have been reviewed for all wells listed above. Were entity changes made? (yes/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) Seneca 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.

4/22/96

DTS 2. Copies of documents have been sent to State Lands for changes involving **State leases**.
Sent to Ed Bonner – Trust Lands

FILMING

VDR 1. All attachments to this form have been microfilmed. Date: May 20 19 96.

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".

WE71/34-35

FORM 10

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	Entity	Location	Producing Zone	Well Status	Days Oper	Production Volumes OIL(BBL)	GAS(MCF)	WATER(BBL)
COYOTE FEDERAL 21-5 4304732260	11500	08S 25E 5	GRRV					
COYOTE FEDERAL 13-5 4304732261	11500	08S 25E 5	GRRV					
FEDERAL 22-10Y 4301331395	11501	09S 17E 10	GRRV					
FEDERAL 41-21Y 4301331392	11505	09S 16E 21	GRRV					
FEDERAL 44-14Y 4304732438	11506	09S 17E 14	GRRV					
FEDERAL 21-13Y 91331400	11510	09S 16E 13	GRRV					
FEDERAL 21-9Y 4301331396	11513	09S 16E 9	GRRV					
FEDERAL 21-25Y 4301331394	11530	09S 16E 25	GRRV					
MONUMENT FEDERAL 11-25 4304732455	11625	08S 17E 25	GRRV					
ALLEN FEDERAL 31-6G 4301331442	11642	09S 17E 6	GRRV					
BALCRON FEDERAL 41-19Y 4304732504	11651	09S 18E 19	GRRV					
BALCRON MONUMENT STATE 14-2 4301331425	11656	09S 17E 2	GRRV					
FEDERAL 44-4Y 4301331452	11679	09S 17E 4	GRRV					
					TOTALS			

COMMENTS:

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

Name and Signature: Telephone Number:

(12/93)

Form 3160-5
(June 1990)

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 to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals

SUBMIT IN TRIPLICATE

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1. Type of Well
[X] Oil Well [ ] Gas Well [ ] Other

2. Name of Operator
Inland Production Company

3. Address and Telephone No.
475 - 17th Street, Suite 1500, Denver, CO 80202 (303) 292-0900

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

5. Lease Designation and Serial No.
See Attached

6. If Indian, Allottee or Tribe Name
See Attached

7. If Unit or CA, Agreement Designation
See Attached

8. Well Name and No.
See Attached

9. API Well No.
See Attached

10. Field and Pool, or Exploratory Area
See Attached

11. County or Parish, State
See Attached

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

TYPE OF SUBMISSION	TYPE OF ACTION	
[ ] Notice of Intent	[ ] Abandonment	[ ] Change of Plans
	[ ] Recompletion	[ ] New Construction
[X] Subsequent Report	[ ] Plugging Back	[ ] Non-Routine Fracturing
	[ ] Casing Repair	[ ] Water Shut-Off
[ ] Final Abandonment Notice	[ ] Altering Casing	[ ] Conversion to Injection
	[X] Other Change of Operator	[ ] 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.)*

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 BLM Bond No. UT0056 issued by The Hartford Insurance Group.

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

Signed [signature] Title CHRIS A. POTTER, ATTORNEY-IN-FACT Date 9/30/97

(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

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	Duchense	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	WIW	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-WIW	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	WIW	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	WIW	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	WIW	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	WIW	Green River	U-096547	43-013-31374	1048' FSL, 446' FWL	Vernal	Jonah

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Inland
RESOURCES INC.

October 7, 1997

OCT

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.

Sincereiy,

INLAND PRODUCTION COMPANY

Patsy Barreau

Patsy Barreau

/pb
encls.

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475 Seventeenth Street, Suite 1500, Denver, CO 80202 • 303-292-0900 • FAX 303-296-4070

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

November 20, 1997

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NOV 28 1997
DIV. OF OIL, GAS & MINING

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

43-013-31392

Re: Well No. Mon. Fed. 41-21Y
NENE, Sec. 21, T9S, R16E
Lease U-64379
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,

for Howard B. Cleavinger II
Assistant Field Manager,
Minerals Resources

cc: Division of Oil, Gas & Mining
Equitable Resources Energy Company
Yates Petro Corp

Inland Resources Change of Operator

WELL NAME	LOCATION	COUNTY	ST	FIELD NAME	API NUMBER	LEASE NO.	AGEEMENT
WALTON FEDERAL #1	SESE 119S 16E	DUCHESNE	UT	MONUMENT BUTTE (J)	43-013-15792-00	UTU096550	UTU72086A
WALTON FEDERAL #2	NWNE 149S 16E	DUCHESNE	UT	MONUMENT BUTTE (J)	43-013-15793-00	UTU096550	UTU72086A
WALTON FEDERAL #34-11	SWSE 119S 16E	DUCHESNE	UT	MONUMENT BUTTE (J)	43-013-31003-00	UTU096550	UTU72086A
WALTON FEDERAL #4	SENW 119S 16E	DUCHESNE	UT	MONUMENT BUTTE (J)	43-013-15795-00	UTU096550	UTU72086A
ALLEN FEDERAL #31-6G	NWNE 6 9S 17E	DUCHESNE	UT	MONUMENT BUTTE (U)	43-013-31442-00	UTU020252A	
BALCRON FEDERAL #21-13Y	NENW 139S 16E	DUCHESNE	UT	MONUMENT BUTTE (U)	43-013-31400-00	UTU64805	
BALCRON FEDERAL #21-25Y	NENW 259S 16E	DUCHESNE	UT	MONUMENT BUTTE (U)	43-013-31394-00	UTU64380	
BALCRON FEDERAL #44-14Y	SESE 149S 17E	UINTAH	UT	MONUMENT BUTTE (U)	43-047-32438-00	UTU64806	
CASTLE PEAK FEDERAL #24-10A	SESW 169S 16E	DUCHESNE	UT	MONUMENT BUTTE (U)	43-013-30555-00	UTU72107	
CASTLE PEAK STATE #43-16	NESE 169S 16E	DUCHESNE	UT	MONUMENT BUTTE (U)	43-013-30594-00		891008243C
K. JORGENSON STATE #16-4	NESE 169S 17E	DUCHESNE	UT	MONUMENT BUTTE (U)	43-013-30572-00	ML-3453-B	
STATE #16-2	NENE 169S 17E	DUCHESNE	UT	MONUMENT BUTTE (U)	43-013-30552-00	ML-3453-B	
BALCRON FEDERAL #21-9Y	NENW 9 9S 16E	DUCHESNE	UT	MONUMENT BUTTE (W)	43-013-31396-00	UTU65207	
BALCRON FEDERAL #41-21Y	NENE 219S 16E	DUCHESNE	UT	MONUMENT BUTTE (W)	43-013-31392-00	UTU64379	
MONUMENT FEDERAL #31-6-9-16	NWNE 6 9S 16E	DUCHESNE	UT	MONUMENT BUTTE (W)	43-013-31717-00	UTU74390	
MONUMENT FEDERAL #32-6-9-16Y	SW NE 6 9S 16E	DUCHESNE	UT	MONUMENT BUTTE (W)	43-013-31300-00	UTU74390	
MONUMENT FEDERAL #42-6-9-16Y	SE NW 6 9S 15E	DUCHESNE	UT	MONUMENT BUTTE (W)	43-013-31645-00	UTU74390	
MONUMENT FEDERAL #41-6-9-16	NENE 6 9S 16E	DUCHESNE	UT	MONUMENT BUTTE (W)	43-013-31718-00	UTU74390	
MONUMENT FEDERAL #31-8-9-16	NW NE 8 9S 16E	DUCHESNE	UT	MONUMENT BUTTE (W)	43-013-31721-00	UTU020255	
MONUMENT FEDERAL #41-8-9-16	NENE 8 9S 16E	DUCHESNE	UT	MONUMENT BUTTE (W)	43-013-31619-00	UTU020255	
MONUMENT FEDERAL #11-9-9-16	NW NW 9 9S 16E	DUCHESNE	UT	MONUMENT BUTTE (W)	43-013-31618-00	UTU020254	
MONUMENT FEDERAL #33-6-9-16Y	NW SE 6 9S 16E	DUCHESNE	UT	MONUMENT BUTTE (W)	43-013-31589-00	UTU74390	
MONUMENT FEDERAL #43-6-9-16Y	NE SE 6 9S 16E	DUCHESNE	UT	MONUMENT BUTTE (W)	43-013-31644-00	UTU74390	
MONUMENT FEDERAL #44-6-9-16Y	SE SE 6 9S 15E	DUCHESNE	UT	MONUMENT BUTTE (W)	43-013-31720-00	UTU74390	
MONUMENT FEDERAL #31-18-9-16	NW NE 189S 16E	DUCHESNE	UT	MONUMENT BUTTE (W)	43-013-31725-00	UTU74390	
MONUMENT FEDERAL #41-18Y	NE NE 189S 16E	DUCHESNE	UT	MONUMENT BUTTE (W)	43-013-31646-00	UTU74390	
MONUMENT FEDERAL #42-18Y	SE NE 189S 16E	DUCHESNE	UT	MONUMENT BUTTE (W)	43-013-31724-00	UTU74390	
MONUMENT FEDERAL #31-21-9-16	NW NE 219S 16E	DUCHESNE	UT	MONUMENT BUTTE (W)	43-013-31726-00	UTU64379	
MONUMENT FEDERAL #11-22Y	NW NW 229S 16E	DUCHESNE	UT	MONUMENT BUTTE (W)	43-013-31647-00	UTU64379	
MONUMENT FEDERAL #13-4-9-16	NW SW 4 9S 16E	DUCHESNE	UT	MONUMENT BUTTE (W)	43-013-31716-00	UTU73086	
MONUMENT FEDERAL #14-4	SWSW 4 9S 16E	DUCHESNE	UT	MONUMENT BUTTE (W)	43-013-31666-00	UTU73086	
MONUMENT FEDERAL #22-20-9-16	SE NW 209S 16E	DUCHESNE	UT	MONUMENT BUTTE (W)	43-013-31681-00	UTU52018	
MONUMENT FEDERAL #23-7-9-16	NESW 7 9S 16E	DUCHESNE	UT	MONUMENT BUTTE (W)	43-013-31694-00	UTU74390	
MONUMENT FEDERAL #24-17-9-16	SESW 179S 16E	DUCHESNE	UT	MONUMENT BUTTE (W)	43-013-31682-00	UTU52018	
MONUMENT BUTTE #34-31-8-16	SW SE 318S 16E	DUCHESNE	UT	MONUMENT BUTTE (W)	43-013-31715-00	UTU74389	
MONUMENT FEDERAL #33-10-9-16	NW SE 109S 16E	DUCHESNE	UT	MONUMENT BUTTE (W)	43-013-31722-00	UTU72107	
MONUMENT BUTTE #43-10-9-16	NE SE 109S 16E	DUCHESNE	UT	MONUMENT BUTTE (W)	43-013-31723-00	UTU72107	
CHORNEY FEDERAL #1-9	SWSE 9 9S 19E	UINTA	UT	PARIETTE BENCH	43-047-30070-00	UTU5843	
HENDEL FEDERAL #1	SWSW 9 9S 19E	UINTA	UT	PARIETTE BENCH	43-047-20011-00	UTU058149	

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

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.

Division of Oil, Gas and Mining

OPERATOR CHANGE WORKSHEET

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

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

XX 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) INLAND PRODUCTION COMPANY
(address) PO BOX 1446
ROOSEVELT UT 84066
Phone: (801)722-5103
Account no. N5160

FROM: (old operator) EQUITABLE RESOURCES COMPANY
(address) PO BOX 577
LAUREL MT 59044
C/O CRAZY MTN O&G
Phone: (406)628-4164
Account no. N9890

WELL(S) attach additional page if needed:

Name:	API:	Entity:	S	T	R	Lease:
SEE ATTACHED	43-013-31392					

OPERATOR CHANGE DOCUMENTATION

LEC 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)

LEC 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)

N/A 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: _____.

LEC 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.

LEC 5. Changes have been entered in the **Oil and Gas Information System** (3270) for each well listed above. (12-2-97)

LEC 6. **Cardex** file has been updated for each well listed above. (12-3-97)

LEC 7. Well **file labels** have been updated for each well listed above. (12-3-97)

LEC 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. (12-3-97)

LEC 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.

OPERATOR CHANGE WORKSHEET (continued) - Initial each item when completed. Write N/A if item is not applicable.

ENTITY REVIEW

fec 1. (r649-8-7) **Entity assignments have been reviewed** for all wells listed above. Were entity changes made? (yes/no) ____ If entity assignments were changed, attach copies of Form 6, Entity Action Form.

N/A 2. Trust Lands, Sovereign Lands, Tax Commission, etc., have been **notified** through normal procedures of entity changes.

BOND VERIFICATION - (FEE WELLS ONLY)

N/A/fec 1. (r649-3-1) 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 operator's bond files.

___ 3. The **FORMER** operator has requested a release of liability from their bond (yes/no) _____, as of today's date _____. If yes, division response was made to this request by letter dated _____.

LEASE INTEREST OWNER NOTIFICATION OF RESPONSIBILITY

N/A 1. Copies of documents have been sent on _____ to _____ at Trust Lands for changes involving State leases, in order to remind that agency of their responsibility to review for proper bonding.
DTS 12/5/97

N/A 2. (r649-2-10) The former operator of any fee lease wells listed above has been contacted and informed by letter dated _____ 19 __, of their responsibility to notify all interest owners of this change.

FILMING

1. All attachments to this form have been **microfilmed**. Today's date: 1.7.98.

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** are now being filed in the Operator Change file.

COMMENTS

971202 Blm/Vernal Aprv. Nov. 10, 13 & 20, 1997.

FORM 10

STATE OF UTAH
DIVISION OF OIL, GAS AND MINING
1594 West North Temple, Suite 1210, PO Box 145801, Salt Lake City, UT 84114-5801

MONTHLY OIL AND GAS PRODUCTION REPORT

OPERATOR NAME AND ADDRESS:

C/O CRAZY MTN O&G SVS'S
EQUITABLE RESOURCES ENERGY
PO BOX 577
LAUREL MT 59044

UTAH ACCOUNT NUMBER: N9890

REPORT PERIOD (MONTH/YEAR): 9 / 97

AMENDED REPORT ☐ **(Highlight Changes)**

Well Name API Number	Entity	Location	Producing Zone	Well Status	Days Oper	Production Volumes OIL(BBL)	GAS(MCF)	WATER(BBL)
FEDERAL 22-10Y 4301331395	11501	09S 17E 10	GRRV			UL5210		
FEDERAL 41-21Y 4301331392	11505	09S 16E 21	GRRV			UL4379		
FEDERAL 44-14Y 4304732438	11506	09S 17E 14	GRRV			UL4806		
FEDERAL 21-13Y 4301331400	11510	09S 16E 13	GRRV			UL4805		
FEDERAL 21-9Y 4301331396	11513	09S 16E 9	GRRV			UL5207		
FEDERAL 21-25Y 4301331394	11530	09S 16E 25	GRRV			UL4380		
BALCRON FEDERAL 31-6G 4301331442	11642	09S 17E 6	GRRV			U020252A		
BALCRON FEDERAL 41-19Y 4304732504	11651	09S 18E 19	GRRV			UL5635		
FEDERAL 44-4Y 4301331452	11679	09S 17E 4	GRRV			UL5967		
BALCRON FEDERAL 31-5Y 4304732503	11680	09S 18E 5	GRRV			UL5970		
BALCRON FEDERAL 12-22Y 4301331476	11717	08S 17E 22	GRRV			UL6191		
BALCRON MONUMENT STATE 24-2 4304732612	11736	09S 17E 2	GRRV			ML45555		
BALCRON MONUMENT STATE 13-2 4301331482	11738	09S 17E 2	GRRV			ML45555		
					TOTALS			

COMMENTS:

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

lame and Signature: Telephone Number:

12/93)

FORM 3160-5
(June 1990)

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

5. Lease Designation and Serial No.
U-64379

6. If Indian, Allottee or Tribe Name
NA

7. If Unit or CA, Agreement Designation
NA

1. Type of Well
[X] Oil Well [ ] Gas Well [ ] Other

8. Well Name and No.
FEDERAL 41-21Y

9. API Well No.
43-013-31392

2. Name of Operator
INLAND PRODUCTION COMPANY

10. Field and Pool, or Exploratory Area
MONUMENT BUTTE

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)
0970 FNL 0894 FEL NE/NE Section 21, T09S R16E

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

TYPE OF SUBMISSION	TYPE OF ACTION	
[ ] Notice of Intent	[ ] Abandonment	[ ] Change of Plans
[X] Subsequent Report	[ ] Recompletion	[ ] New Construction
[ ] Final Abandonment Notice	[ ] Plugging Back	[ ] Non-Routine Fracturing
	[ ] Casing Repair	[ ] Water Shut-Off
	[ ] Altering Casing	[ ] Conversion to Injection
	[X] Other **Site Security**	[ ] 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.

RECEIVED
NOV 02 1998
DIV. OF OIL, GAS & MINING

14. I hereby certify that the foregoing is true and correct
Signed Debbie E. Knight Title Manager, Regulatory Compliance Date 10/28/98

(This space for Federal or State office use)
Approved by _____ Title _____ Date _____
Conditions of approval, if any:
CC: UTAH DOGM

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 fradulent statements or representations as to any matter within its jurisdiction.

Inland Production Company
Site Facility Diagram

Federal 41-21Y

NE/NE Sec. 21, T9S, 16E

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

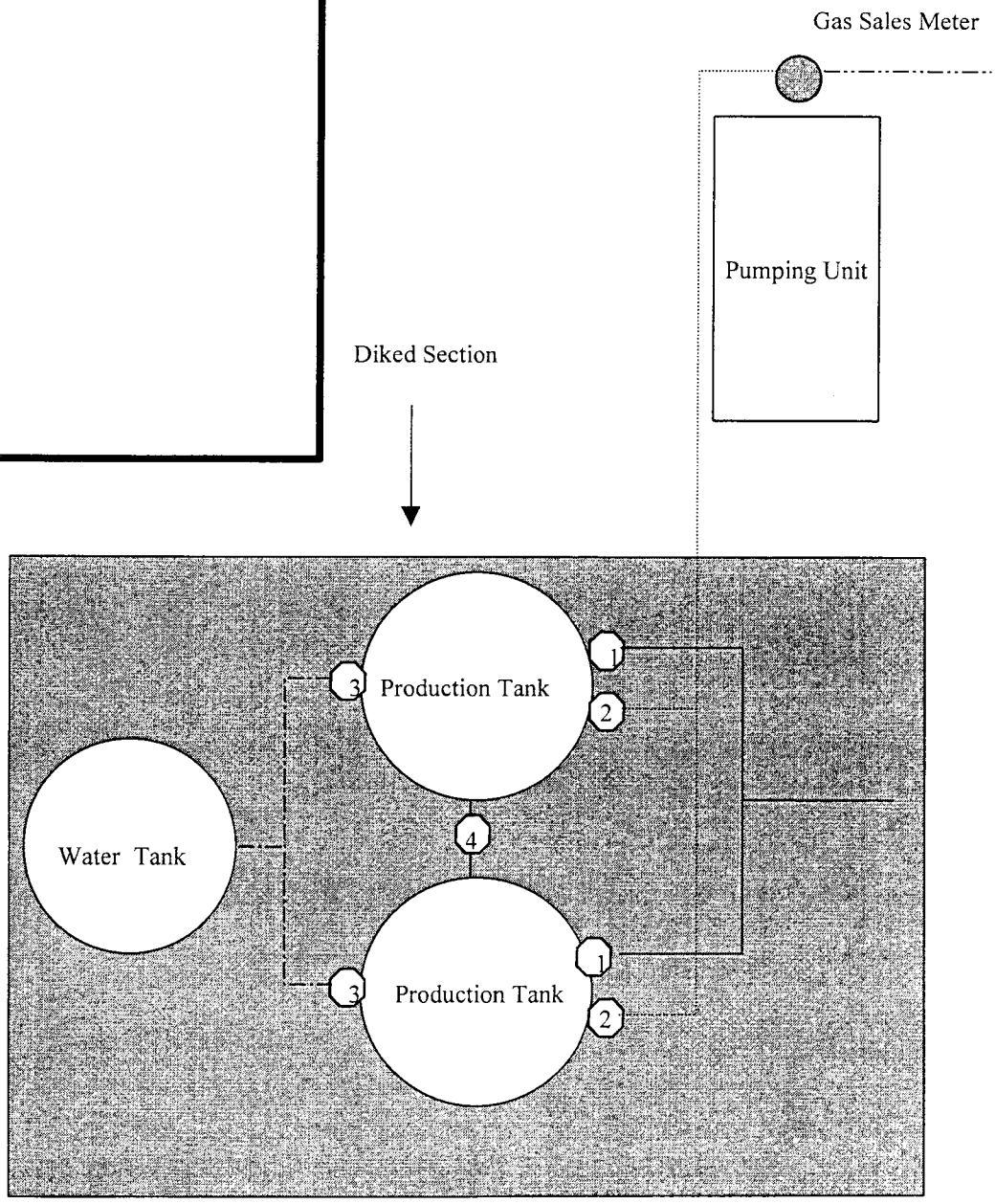
Sales Phase:

1) Valves 1, 2, 4, 5 sealed closed

2) Valves 1 open

Draining Phase:

1) Valve 3 open



Emulsion Line .....

Load Line ————————

Water Line —·—·—·—·—·

Gas Sales —··—··—··—··

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

TAKE PRIDE IN AMERICA

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 L Coulthard

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

Corporations Section
P.O.Box 13697
Austin, Texas 78711-3697

Geoffrey S. Connor
Secretary of State

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.

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 1st day of September, 2004.

INLAND RESOURCES INC.

By: Susan G. Riggs
Susan G. Riggs, Treasurer

UTSL-

071572A
065914

UTU-

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03563
03563A
04493
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09803
017439B
017985
017991
017992
018073
019222
020252
020252A
020254
020255
020309D
022684A
027345
034217A
035521
035521A
038797
058149
063597A
075174
096547
096550

10760
11385
13905
15392
15855
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16539
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68528A
72086A
72613A
73520X
74477X
75023X
76189X
76331X
76788X
77098X
77107X
77236X
77376X
78560X
79485X
79641X
80207X
81307X

Division of Oil, Gas and Mining

OPERATOR CHANGE WORKSHEET

ROUTING
1. GLH
2. CDW
3. FILE

Change of Operator (Well Sold) — Designation of Agent/Operator

X Operator Name Change — **Merger**

The operator of the well(s) listed below has changed, effective: **9/1/2004**

FROM: (Old Operator):	**TO:** (New Operator):
N5160-Inland Production Company	N2695-Newfield Production Company
Route 3 Box 3630	Route 3 Box 3630
Myton, UT 84052	Myton, UT 84052
Phone: 1-(435) 646-3721	Phone: 1-(435) 646-3721

CA No. **Unit:**

WELL(S)

NAME	SEC	TWN	RNG	API NO	ENTITY NO	LEASE TYPE	WELL TYPE	WELL STATUS
WALKER/SAND PASS 14-21R-4-1(REEN	21	040S	010W	4301331069	14300	Fee	NA	P
CODY FEDERAL 2-35 (REENTRY)	35	080S	150E	4301331525	11794	Federal	OW	P
MONUMENT BUTTE FED 14-25	25	080S	160E	4301331531	11805	Federal	OW	P
MONUMENT BUTTE FED 12-25	25	080S	160E	4301331554	11840	Federal	OW	P
MONUMENT BUTTE FED 10-25	25	080S	160E	4301331562	11874	Federal	OW	P
MONUMENT BUTTE FED 16-26	26	080S	160E	4301331517	11814	Federal	OW	P
MONUMENT BUTTE ST 14-36	36	080S	160E	4301331508	11774	State	OW	P
MONUMENT BUTTE ST 10-36	36	080S	160E	4301331551	11822	State	OW	P
MONUMENT BUTTE ST 2-36	36	080S	160E	4301331556	11855	State	OW	P
ASHLEY FEDERAL 10-23	23	090S	150E	4301331519	11775	Federal	OW	P
FEDERAL 41-10Y	10	090S	160E	4301331478	11764	Federal	NA	PA
FEDERAL 21-13Y	13	090S	160E	4301331400	11510	Federal	OW	P
NOVA 31-20 G NGC FEDERAL	20	090S	160E	4301331071	10185	Federal	OW	S
FEDERAL 41-21Y	21	090S	160E	4301331392	11505	Federal	OW	S
FEDERAL 21-25Y	25	090S	160E	4301331394	11530	Federal	OW	S
ALLEN FEDERAL 31-6G	06	090S	170E	4301331442	11642	Federal	GW	S
FEDERAL 41-18	18	090S	170E	4301331399	11536	Federal	NA	PA

K

OPERATOR CHANGES DOCUMENTATION

Enter date after each listed item is completed

1. (R649-8-10) Sundry or legal documentation was received from the **FORMER** operator on: 9/15/2004
2. (R649-8-10) Sundry or legal documentation was received from the **NEW** operator on: 9/15/2004
3. The new company was checked on the **Department of Commerce, Division of Corporations Database on:** 2/23/2005
4. Is the new operator registered in the State of Utah: YES Business Number: 755627-0143
5. If **NO**, the operator was contacted contacted on:

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**

FEDERAL APPROVAL OF THIS ACTION IS NECESSARY

FORM 9

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

5.LEASE DESIGNATION AND SERIAL NUMBER: UTU-64379

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 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: GMBU (GRRV)

1. TYPE OF WELL Oil Well

8. WELL NAME and NUMBER: FEDERAL 41-21Y

2. NAME OF OPERATOR: NEWFIELD PRODUCTION COMPANY

9. API NUMBER: 43013313920000

3. ADDRESS OF OPERATOR: Rt 3 Box 3630 , Myton, UT, 84052

PHONE NUMBER: 435 646-4825 Ext

9. FIELD and POOL or WILDCAT: MONUMENT BUTTE

4. LOCATION OF WELL
FOOTAGES AT SURFACE: 0970 FNL 0894 FEL
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NENE Section: 21 Township: 09.0S Range: 16.0E Meridian: S

COUNTY: DUCHESNE

STATE: UTAH

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

TYPE OF SUBMISSION

- ✓ NOTICE OF INTENT — Approximate date work will start: 10/15/2013
- ☐ SUBSEQUENT REPORT — Date of Work Completion:
- ☐ SPUD REPORT — Date of Spud:
- ☐ DRILLING REPORT — Report Date:

TYPE OF ACTION

☐ ACIDIZE	☐ ALTER CASING	☐ CASING REPAIR
☐ CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	☐ CHANGE WELL NAME
☐ CHANGE WELL STATUS	☐ COMMINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE
☐ DEEPEN	☐ FRACTURE TREAT	☐ NEW CONSTRUCTION
☐ OPERATOR CHANGE	☐ PLUG AND ABANDON	☐ PLUG BACK
☐ PRODUCTION START OR RESUME	☐ RECLAMATION OF WELL SITE	☐ RECOMPLETE DIFFERENT FORMATION
☐ REPERFORATE CURRENT FORMATION	☐ SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON
☐ TUBING REPAIR	☐ VENT OR FLARE	☐ WATER DISPOSAL
☐ WATER SHUTOFF	☐ SI TA STATUS EXTENSION	☐ APD EXTENSION
☐ WILDCAT WELL DETERMINATION	✓ OTHER	OTHER: OAP to Current Formation

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

Newfield proposes to OAP to the current production interval. The basic perforation and frac information is attached.

Accepted by the Utah Division of Oil, Gas and Mining

Date: November 05, 2013

By: Dark K Quist

NAME (PLEASE PRINT)	PHONE NUMBER	TITLE
Mandie Crozier	435 646-4825	Regulatory Tech

SIGNATURE	DATE
N/A	10/15/2013

RECEIVED: Oct. 15, 2013

NEWFIELD

1001 17th Street, Suite 2000
Denver, CO 80202
Phone: 303-893-0102

Well Name: **Federal 41-21Y (9-16)**
TD Location: **Section 21, T9S, R16E** **Date: October 2013**

Engineer: **Ryan Johnson**

Note: All Perf Depths are correllated to the Open Hole Log ran on 07/20/12.

Stage	Zone	Top	Bottom	Gun Size	Comments	Volume	Plug Depth
Stage #1	B-Half	4,815'	4,816'	2'	20 bpm	42,500	4,875'
	C-sand	4,754'	4,754'	1'	6 ppa		
	C-sand	4,732'	4,732'	1'	2 SPF		
					2 SPF		
Stage #2	GB-6	4,126'	4,127'	2'	20 bpm	50,000	
	GB-6	4,121'	4,121'	1'	6 ppa		
	GB-4	4,061'	4,061'	1'	2 SPF		
					2 SPF		
					Total 100m =	0	
Flush all stages to top perf					**Total 30/50 =**	0	
SS3 @ 4ppt					**Total 20/40 =**	92,500	
Pump Trucks	3				**Total Sand =**	**92,500**	

RECEIVED: Oct. 15, 2013

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

FORM 9

5.LEASE DESIGNATION AND SERIAL NUMBER: UTU-64379

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 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: GMBU (GRRV)

1. TYPE OF WELL Oil Well

8. WELL NAME and NUMBER: FEDERAL 41-21Y

2. NAME OF OPERATOR: NEWFIELD PRODUCTION COMPANY

9. API NUMBER: 43013313920000

3. ADDRESS OF OPERATOR: Rt 3 Box 3630 , Myton, UT, 84052

PHONE NUMBER: 435 646-4825 Ext

9. FIELD and POOL or WILDCAT: MONUMENT BUTTE

4. LOCATION OF WELL
FOOTAGES AT SURFACE: 0970 FNL 0894 FEL
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NENE Section: 21 Township: 09.0S Range: 16.0E Meridian: S

COUNTY: DUCHESNE

STATE: UTAH

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

TYPE OF SUBMISSION

- ☐ NOTICE OF INTENT — Approximate date work will start:
- ✓ SUBSEQUENT REPORT — Date of Work Completion: 9/30/2014
- ☐ SPUD REPORT — Date of Spud:
- ☐ DRILLING REPORT — Report Date:

TYPE OF ACTION

☐ ACIDIZE	☐ ALTER CASING	☐ CASING REPAIR
☐ CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	☐ CHANGE WELL NAME
✓ CHANGE WELL STATUS	☐ COMMINGLE PRODUCING FORMATIONS	✓ CONVERT WELL TYPE
☐ DEEPEN	☐ FRACTURE TREAT	☐ NEW CONSTRUCTION
☐ OPERATOR CHANGE	☐ PLUG AND ABANDON	☐ PLUG BACK
☐ PRODUCTION START OR RESUME	☐ RECLAMATION OF WELL SITE	☐ RECOMPLETE DIFFERENT FORMATION
☐ REPERFORATE CURRENT FORMATION	☐ SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON
☐ TUBING REPAIR	☐ VENT OR FLARE	☐ WATER DISPOSAL
☐ WATER SHUTOFF	☐ SI TA STATUS EXTENSION	☐ APD EXTENSION
☐ WILDCAT WELL DETERMINATION	✓ OTHER	OTHER: New Perforations

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

The subject well has been converted from a producing oil well to an injection well on 09/26/2014. New Perforations added - 5732-5742', 5505-5509', 4734-4819', & 4060-4126' - 3 JSPF. On 09/29/2014 Chris Jensen with the State of Utah DOGM was contacted concerning the initial MIT on the above listed well. On 09/30/2014 the casing was pressured up to 1156 psig and charted for 30 minutes with no pressure loss. The well was not injecting during the test. The tubing pressure was 0 psig during the test. There was a State representative available to witness the test - Chris Jensen.

Accepted by the Utah Division of Oil, Gas and Mining
FOR RECORD ONLY
October 09, 2014

NAME (PLEASE PRINT)	PHONE NUMBER	TITLE
Lucy Chavez-Naupoto	435 646-4874	Water Services Technician
SIGNATURE N/A		**DATE** 10/7/2014

RECEIVED: Oct. 07, 2014

Mechanical Integrity Test
Casing or Annulus Pressure Test

Newfield Production Company
Rt. 3 Box 3630
Myton, UT 84052
435-646-3721

Witness: _____ **Date** 9 / 30 / 14 **Time** 11:30 am pm
Test Conducted by: Jonny Daniels
Others Present: _____

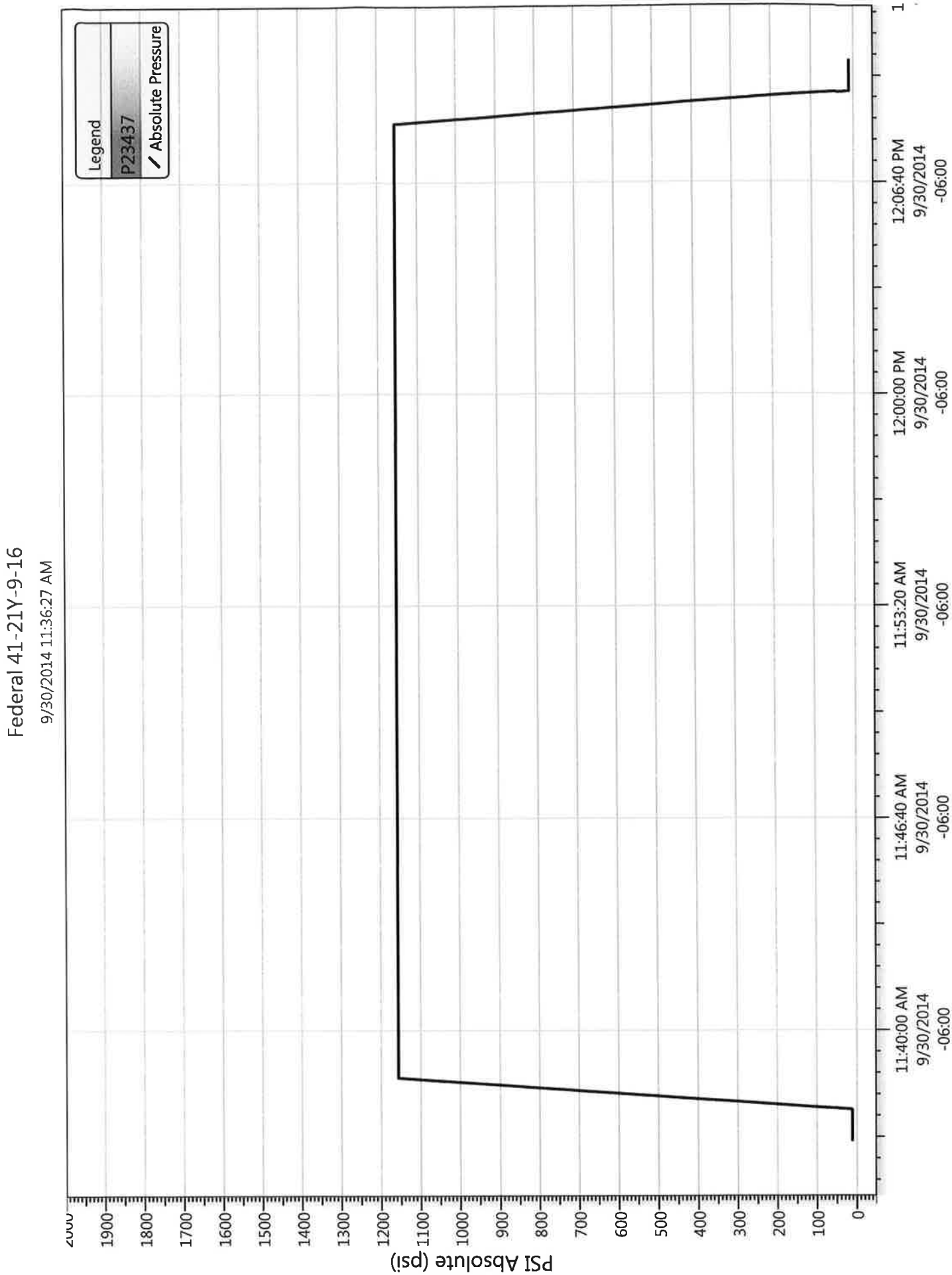
Well: Federal 411-21Y-9-16 **Field:** Monument Butte
Well Location: NE/NE Sec. 21, T9S, R16E **API No:** 4301331392
Duchesne County

Time	Casing Pressure	
0 min	1156	psig
5	1156	psig
10	1156	psig
15	1156	psig
20	1156	psig
25	1156	psig
30 min	1156	psig
35		psig
40		psig
45		psig
50		psig
55		psig
60 min		psig

Tubing pressure: 0 psig

Result: Pass Fail

Signature of Witness: _____
Signature of Person Conducting Test: _____


Federal 41-21Y-9-16
9/30/2014 11:36:27 AM
Legend
P23437
Absolute Pressure
PSI Absolute (psi)
2000
1900
1800
1700
1600
1500
1400
1300
1200
1100
1000
900
800
700
600
500
400
300
200
100
0
11:40:00 AM 9/30/2014 -06:00
11:46:40 AM 9/30/2014 -06:00
11:53:20 AM 9/30/2014 -06:00
12:00:00 PM 9/30/2014 -06:00
12:06:40 PM 9/30/2014 -06:00

NEWFIELD

Job Detail Summary Report

Well Name: Federal 41-21Y-9-16

Jobs

Primary Job Type	Job Start Date	Job End Date
Conversion	9/19/2014	9/30/2014

Daily Operations

Report Start Date	Report End Date	24hr Activity Summary
9/19/2014	9/20/2014	Strip out of the hole with rods & tbg.

Start Time	End Time	Comment
04:00	05:00	Crew travel
05:00	10:00	Load out & move from FED 6-8 to Balcron FED 41-21Y, MIRU Same, Pump 60 BBLS H2O Down CSG @ 1200 PSI, Remove head, Beat on pump for 1 HR, Pump 60 BBLS H2O Down CSG, Beat on pump for 1 HR, Back off rods, LD 3-3/4" Slicks
10:00	11:00	ND Well head, Unset 5 1/2" B-2 TAC, Strip on 5K BOPS, RU FLOOR & TBG Works, TOOH W/ 4 JTS
11:00	13:00	Beat on rods for 2 HRS While pumping 100 BBLS H2O Down CSG-No Good
13:00	15:00	Wait on backhoe to dig pit
15:00	18:30	CONT TOOH Stripping out of hole W/ 55 JTS 2 7/8" TBG & 102-3/4" Slicks, CWI @ 6:30
18:30	19:30	Crew travel

Report Start Date	Report End Date	24hr Activity Summary
9/20/2014	9/21/2014	Strip out of the hole w/ tbg & rods

Start Time	End Time	Comment
00:00	06:00	SDFN
06:00	07:00	Crew travel
07:00	08:45	Pump 30 BBLS H2O Down CSG @ 1200 PSI, Well Started CIRC, Pump another 40 BBLS H2O Hot, CIRC Well clean W/ 75 BBLS H2O W/ Rig pump
08:45	10:45	TOOH W/ 20 JTS, Latch onto rod string, Rods coming free LD 93-3/4" Slicks, 6-1" 4 per, Top of pull rod was backed off
10:45	13:00	CONT TOOH W/ 110 JTS 2 7/8" TBG, LD 5 1/2" B-2 TAC PSN 4' PERF SUB & MU Anchor, Steam off rig EQUIP
13:00	14:00	Crew travel
14:00	00:00	SDFN

Report Start Date	Report End Date	24hr Activity Summary
9/22/2014	9/23/2014	PU & TIH w/ bit & scraper on L-80 frac string. TOOH w/ same. Perforate new zones. TIH w/ RBP & Pkr on frac string.

Start Time	End Time	Comment
00:00	06:00	SDFN
06:00	07:00	Crew travel
07:00	08:15	Spot pipe racks & TBG
08:15	12:00	PU & Talley 5 1/2" bit & scraper, PSN & 186 JTS 2 7/8" TBG Tag fill @ 5927', ld 1 JT & CIRC Well clean W/ 150 BBLS H2O
12:00	13:45	TOOH W/ 185 JTS 2 7/8" TBG, LD 5 1/2" Bit & Scraper

Sundry Number: 56473 API Well Number: 4301331392000

NEWFIELD

Job Detail Summary Report

Well Name: Federal 41-21Y-9-16

Start Time	End Time	Comment
13:45	15:00	RD Floor & TBG Works, ND 5K BOPS, NU 5K Frac valve, Single blind ram & Double 2 7/8" Pipe rams
15:00	17:45	RU Wireline, Test lubricator to 4000 PSI-OK, PERF Zones 4060-5742', RD Wireline
17:45	19:30	U & TIH W/ 5 1/2" RBP, RH, 4' 2 3/8" TBG SUB 5 1/2" PKR, PSN & 126 JTS, Set RBP @ 4029' & PKR @ 3990' Test Tools & CSG To 1500 PSI-OK
19:30	20:30	Crew travel
20:30	00:00	SDFN

Report Start Date	Report End Date	24hr Activity Summary
9/23/2014	9/24/2014	Frac 3 stages down tbg & flowback

Start Time	End Time	Comment
00:00	06:00	
06:00	07:00	
07:00	08:00	
08:00	10:00	
10:00	11:00	
11:00	12:45	
12:45	13:15	

Report Start Date	Report End Date	24hr Activity Summary
9/24/2014	9/25/2014	Frac remaining stage & flowback. LD frac string, RBP & pkr. TIH w/ tbg

Start Time	End Time	Comment
00:00	06:00	SDFN
06:00	07:00	Crew travel
07:00	08:00	FRAC PERFS 4060-4126', Screened out
08:00	10:15	REL PKR, CIRC Well clean, CIRC 40' Of sand off RBP, CIRC Well clean
10:15	14:15	Spot in pipe racks, REL RBP, LD 184 JTS 2 7/8" L-80 TBG, LD RBP & PKR
14:15	16:00	PU & TIH W/ NC & 165 JTS 2 7/8" TBG, Flush TBG W/ 50 BBLS H2O
16:00	18:00	TOOH Breaking & redoping every collar W/ 40 JTS 2 7/8" TBG, EOT @ 3835
18:00	19:00	Crew travel
19:00	00:00	SDFN.

Report Start Date	Report End Date	24hr Activity Summary
9/25/2014	9/26/2014	TOOH w/ tbg breaking collars & applying liquid O-ring to threads. TIH w/ injection string.

Start Time	End Time	Comment
00:00	06:00	SDFN

Sundry Number: 56473 API Well Number: 4301331392000

NEWFIELD

Job Detail Summary Report

Well Name: Federal 41-21Y-9-16

Start Time	End Time	Comment
06:00	07:00	Crew travel
07:00	13:00	Flush TBG W/ 40 BBLS H2O, CONT TOOH Breaking & Redoping every collar W/ 90 JTS 2 7/8" TBG, LD 35 JTS 2 7/8" TBG & NC, Stopped 5 Times & flushed W/ A TOT of 125 BBLS H20, LD 9 JTS Due to gaulding
13:00	14:00	PU & TIH W/ 2 3/8" Reentry guide, XN Nipple, 4' 2 3/8" TBG SUB, X-Over, 5 1/2" Arrowset-1 PKR, On/off tool, PSN & 130 JTS 2 7/8" TBG
14:00	16:00	Pump 15 BBL Pad, Drop SV Pump 30 BBLS H2O Down TBG, Never caught PRESS, RIH W/ Sandline, Tag SV @ 700' Push SV to 2100' Quit making, RIH W/ Overshot, RET SV, CWI @ 4:00 For company BBQ
16:00	17:00	Crew travel
17:00	00:00	SDFN

Report Start Date	Report End Date	24hr Activity Summary
9/26/2014	9/26/2014	Pressure test tbg, pump pkr fluid & pressure test annulus.

Start Time	End Time	Comment
00:00	06:00	SDFN
06:00	07:00	Crew travel
07:00	11:15	Flush TBG W/ 60 BBLS H2O, Drop SV To PSN, Test TBG to 3000 PSI, Took 3 HRS To get test
11:15	12:30	RU & RIH W/ Sandline, RET SV POOH & Rack out sandline, ND Double pipe rams, Single blind ram & 5K Frac valve, Land TBG on well head
12:30	13:30	Pump 60 BBLS H2O Down CSG
13:30	14:45	Set 5 1/2" Arrowset-1 PKR W/ 15000# Tension @ 3993' PSN @ 3987' & EOT @ 4004' Land TBG W/ B-1 Adaptor flange, NU INJ Tree
14:45	16:00	Test CSG & PKR To 1500 PSI
16:00	17:00	Start MIT Test-Good Test
17:00	18:00	Crew travel

Report Start Date	Report End Date	24hr Activity Summary
9/30/2014	9/30/2014	Conduct MIT

Start Time	End Time	Comment
11:40	12:10	On 09/29/2014 Chris Jensen with the State of Utah DOGM was contacted concerning the initial MIT on the above listed well. On 09/30/2014 the casing was pressured up to 1156 psig and charted for 30 minutes with no pressure loss. The well was not injecting during the test. The tubing pressure was 0 psig during the test. There was a State representative available to witness the test - Chris Jensen.

Sundry Number: 56473 API Well Number: 43013313920000

NEWFIELD

Schematic

Well Name: Federal 41-21Y-9-16

Surface Legal Location	API/UWI	Well RC	Lease	State/Province	Field Name	County
21-9S-16E	43013313920000	500151761		Utah	GMBU CTB6	DUCHESNE

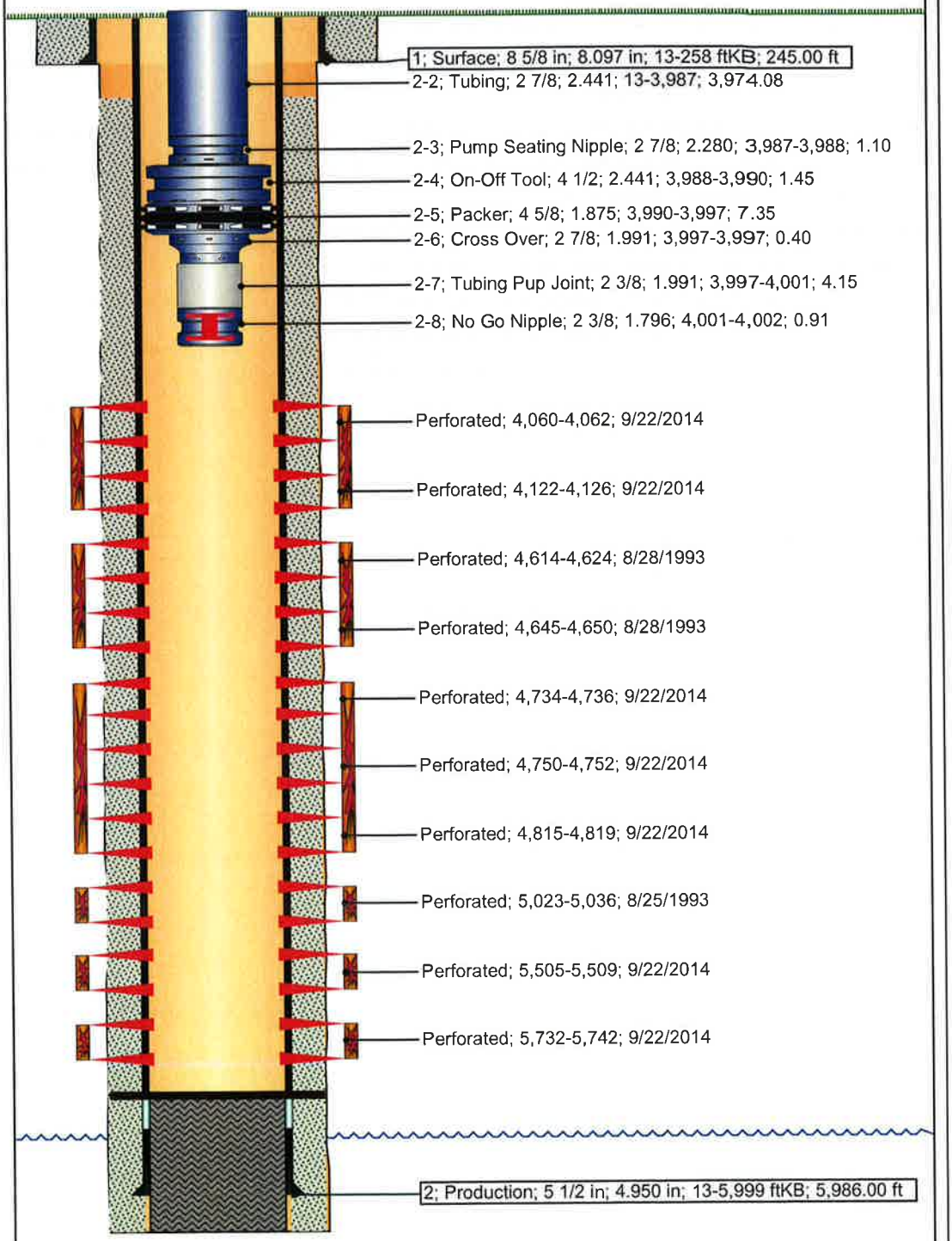
Spud Date	Rig Release Date	On Production Date	Original KB Elevation (ft)	Ground Elevation (ft)	Total Depth All (TVD) (ftKB)	PBTD (All) (ftKB)
8/1/1993	8/19/1993	9/14/1993	5,967	5,954		Original Hole - 5,952.5

Most Recent Job

Job Category	Primary Job Type	Secondary Job Type	Job Start Date	Job End Date
Production / Workover	Conversion	OAP	9/19/2014	9/30/2014

TD: 6,000.0 Vertical - Original Hole, 10/7/2014 7:03:19 AM

MD (ftKB)	TVD (ftKB)	Incl (°)	DLS	Vertical schematic (actual)
			DLS (°...	
12.5				
12.8				
13.1				
257.9				
2,980.0				
3,986.9				
3,988.2				
3,989.5				
3,997.0				
3,997.4				
4,001.3				
4,002.3				
4,002.6				
4,060.0				
4,062.0				
4,122.0				
4,126.0				
4,613.8				
4,624.0				
4,645.0				
4,649.9				
4,733.9				
4,735.9				
4,750.0				
4,752.0				
4,815.0				
4,818.9				
5,023.0				
5,036.1				
5,504.9				
5,508.9				
5,732.0				
5,742.1				
5,952.4				
5,955.1				
5,998.4				
5,999.0				
6,000.0				



NEWFIELD

Newfield Wellbore Diagram Data
Federal 41-21Y-9-16

Surface Legal Location	API/UWI	Lease
21-9S-16E	43013313920000	

County	State/Province	Basin	Field Name
DUCHESNE	Utah	Uintah Basin	GMBU CTB6

Well Start Date	Spud Date	Final Rig Release Date	On Production Date
8/1/1993	8/1/1993	8/19/1993	9/14/1993

Original KB Elevation (ft)	Ground Elevation (ft)	Total Depth (ftKB)	Total Depth All (TVD) (ftKB)	PBTD (All) (ftKB)
5,967	5,954	6,000.0		Original Hole - 5,952.5

Casing Strings

Csg Des	Run Date	OD (in)	ID (in)	Wt/Len (lb/ft)	Grade	Set Depth (ftKB)
Surface	8/4/1993	8 5/8	8.097	24.00	J-55	258
Production	8/20/1993	5 1/2	4.950	15.50	J-55	5,999

Cement

String: Surface, 258ftKB 8/4/1993

Cementing Company	Top Depth (ftKB)	Bottom Depth (ftKB)	Full Return?	Vol Cement Ret (bbl)
Dowell	13.0	258.0		

Fluid Description	Fluid Type	Amount (sacks)	Class	Estimated Top (ftKB)
	Lead	0	Thrifty Lite	13.0

String: Production, 5,999ftKB 8/20/1993

Cementing Company	Top Depth (ftKB)	Bottom Depth (ftKB)	Full Return?	Vol Cement Ret (bbl)
Western	2,980.0	6,000.0		

Fluid Description	Fluid Type	Amount (sacks)	Class	Estimated Top (ftKB)
Cement top is unknown. 2000' was the target depth in the drilling program and was thus used as an estimate of the true depth.	Lead	165	Thrifty Lite	2,000.0
	Tail	275	50/50 Poz	4,000.0

Tubing Strings

Tubing Description	Run Date	Set Depth (ftKB)
Tubing	9/25/2014	4,002.8

Item Des	Jts	OD (in)	ID (in)	Wt (lb/ft)	Grade	Len (ft)	Top (ftKB)	Btm (ftKB)
Stretch Correction	1					0.33	12.6	12.9
Tubing	130	2 7/8	2.441	6.50	J-55	3,974.08	12.9	3,987.0
Pump Seating Nipple	1	2 7/8	2.280			1.10	3,987.0	3,988.1
On-Off Tool	1	4 1/2	2.441			1.45	3,988.1	3,989.6
Packer	1	4 5/8	1.875			7.35	3,989.6	3,996.9
Cross Over	1	2 7/8	1.991			0.40	3,996.9	3,997.3
Tubing Pup Joint	1	2 3/8	1.991			4.15	3,997.3	4,001.5
No Go Nipple	1	2 3/8	1.796			0.91	4,001.5	4,002.4
Notched collar	1	2 3/8	2.625			0.39	4,002.4	4,002.8

Rod Strings

Rod Description	Run Date	Set Depth (ftKB)

Item Des	Jts	OD (in)	Wt (lb/ft)	Grade	Len (ft)	Top (ftKB)	Btm (ftKB)

Perforation Intervals

Stage#	Zone	Top (ftKB)	Btm (ftKB)	Shot Dens (shots/ft)	Phasing (°)	Nom Hole Dia (in)	Date
6	Green River, Original Hole	4,060	4,062	3	120	0.340	9/22/2014
6	Green River, Original Hole	4,122	4,126	3	120	0.340	9/22/2014
2	Green River, Original Hole	4,614	4,624	1			8/28/1993
2	Green River, Original Hole	4,645	4,650	1			8/28/1993
5	Green River, Original Hole	4,734	4,736	3	120	0.340	9/22/2014
5	Green River, Original Hole	4,750	4,752	3	120	0.340	9/22/2014
5	Green River, Original Hole	4,815	4,819	3	120	0.340	9/22/2014
1	Green River, Original Hole	5,023	5,036	2			8/25/1993
4	Green River, Original Hole	5,505	5,509	3	120	0.340	9/22/2014
3	Green River, Original Hole	5,732	5,742	3	120	0.340	9/22/2014

Stimulations & Treatments

Stage#	ISIP (psi)	Frac Gradient (psi/ft)	Max Rate (bbl/min)	Max PSI (psi)	Total Clean Vol (bbl)	Total Slurry Vol (bbl)	Vol Recov (bbl)
1	2,084		36.0	3,200			
2	1,972		35.0	2,750			
3	0	0.0	17.2	7,295	281	0	0
4	1,580	0.72	20.2	5,516	380	0	0
5	2,140	0.881	20.4	6,593	549	0	0
6	0	0.0	20.2	7,551	258	0	0

NEWFIELD

Newfield Wellbore Diagram Data
Federal 41-21Y-9-16

Proppant

Stage#	Total Prop Vol Pumped (lb)	Total Add Amount
1		Proppant Sand 36000 lb
2		Proppant Sand 36000 lb
3	19,675	Main White Sand 19675 lbs
4	29,582	Main White Sand 29582 lbs
5	58,030	Main White Sand 58030 lbs
6	28,369	Main White Sand 28369 lbs

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

FORM 9

5.LEASE DESIGNATION AND SERIAL NUMBER: UTU-64379

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 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: GMBU (GRRV)

1. TYPE OF WELL Water Injection Well

8. WELL NAME and NUMBER: FEDERAL 41-21Y

2. NAME OF OPERATOR: NEWFIELD PRODUCTION COMPANY

9. API NUMBER: 43013313920000

3. ADDRESS OF OPERATOR: Rt 3 Box 3630 , Myton, UT, 84052

PHONE NUMBER: 435 646-4825 Ext

9. FIELD and POOL or WILDCAT: MONUMENT BUTTE

4. LOCATION OF WELL
FOOTAGES AT SURFACE: 0970 FNL 0894 FEL
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NENE Section: 21 Township: 09.0S Range: 16.0E Meridian: S

COUNTY: DUCHESNE

STATE: UTAH

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

TYPE OF SUBMISSION

- ☐ NOTICE OF INTENT — Approximate date work will start:
- ✓ SUBSEQUENT REPORT — Date of Work Completion: 1/13/2015
- ☐ SPUD REPORT — Date of Spud:
- ☐ DRILLING REPORT — Report Date:

TYPE OF ACTION

☐ ACIDIZE	☐ ALTER CASING	☐ CASING REPAIR
☐ CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	☐ CHANGE WELL NAME
✓ CHANGE WELL STATUS	☐ COMMINGLE PRODUCING FORMATIONS	✓ CONVERT WELL TYPE
☐ DEEPEN	☐ FRACTURE TREAT	☐ NEW CONSTRUCTION
☐ OPERATOR CHANGE	☐ PLUG AND ABANDON	☐ PLUG BACK
☐ PRODUCTION START OR RESUME	☐ RECLAMATION OF WELL SITE	☐ RECOMPLETE DIFFERENT FORMATION
☐ REPERFORATE CURRENT FORMATION	☐ SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON
☐ TUBING REPAIR	☐ VENT OR FLARE	☐ WATER DISPOSAL
☐ WATER SHUTOFF	☐ SI TA STATUS EXTENSION	☐ APD EXTENSION
☐ WILDCAT WELL DETERMINATION	☐ OTHER	OTHER:

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

The above reference well was put on injection at 9:45 AM on 01/13/2015

Accepted by the Utah Division of Oil, Gas and Mining
FOR RECORD ONLY
January 20, 2015

NAME (PLEASE PRINT)	PHONE NUMBER	TITLE
Lucy Chavez-Naupoto	435 646-4874	Water Services Technician
SIGNATURE N/A		**DATE** 1/14/2015

RECEIVED: Jan. 14, 2015

GARY R. HERBERT
Governor

SPENCER J. COX
Lieutenant Governor

State of Utah

DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER
Executive Director

Division of Oil, Gas and Mining

JOHN R. BAZA
Division Director

UNDERGROUND INJECTION CONTROL PERMIT

Cause No. UIC-424

Operator: Newfield Production Company

Well: Federal 41-21Y

Location: Section 21, Township 9 South, Range 16 East

County: Duchesne

API No.: 43-013-31392

Well Type: Enhanced Recovery (waterflood)

Stipulations of Permit Approval

1. Approval for conversion to Injection Well issued on July 31, 2014.
2. Maximum Allowable Injection Pressure: 1,917 psig
3. Maximum Allowable Injection Rate: (restricted by pressure limitation)
4. Injection Interval: Green River Formation (3,905' – 5,950')
5. Any subsequent wells drilled within a ½ mile radius of this well shall have production casing cement brought up to or above the top of the unitized interval for the Greater Monument Butte Unit.

Approved by: John Rogers
Associate Director

Date 1/8/15

JR/MLR/js
cc: Bruce Suchomel, Environmental Protection Agency
Bureau of Land Management, Vernal
SITLA
Jill Loyle, Newfield Production Company, Denver
Newfield Production Company, Myton
Duchesne County
Well File
N:\O&G Reviewed Docs\ChronFile\UIC\Newfield

GARY R. HERBERT
Governor

SPENCER J. COX
Lieutenant Governor

State of Utah

DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER
Executive Director

Division of Oil, Gas and Mining

JOHN R. BAZA
Division Director

July 31, 2014

Newfield Production Company
1001 Seventeenth Street, Suite 2000
Denver, CO 80202

Subject: Greater Monument Butte Unit Well: Federal 41-21Y, Section 21, Township 9 South, Range 16 East, SLBM, Duchesne County, Utah, API Well # 43-013-31392

Newfield Production Company:

Pursuant to Utah Admin. Code R649-5-3-3, the Division of Oil, Gas and Mining (the "Division") issues its administrative approval for conversion of the referenced well to a Class II injection well. Accordingly, the following stipulations shall apply for full compliance with this approval:

1. Compliance with all applicable requirements for the operation, maintenance and reporting for Underground Injection Control ("UIC") Class II injection wells pursuant to Utah Admin. Code R649-1 et seq.

2. Conformance with all conditions and requirements of the complete application submitted by Newfield Production Company.

3. A casing\tubing pressure test shall be conducted prior to commencing injection.

4. Pressure shall be monitored between the surface casing and the production casing on a regular basis. Any pressure changes observed shall be reported to the Division immediately.

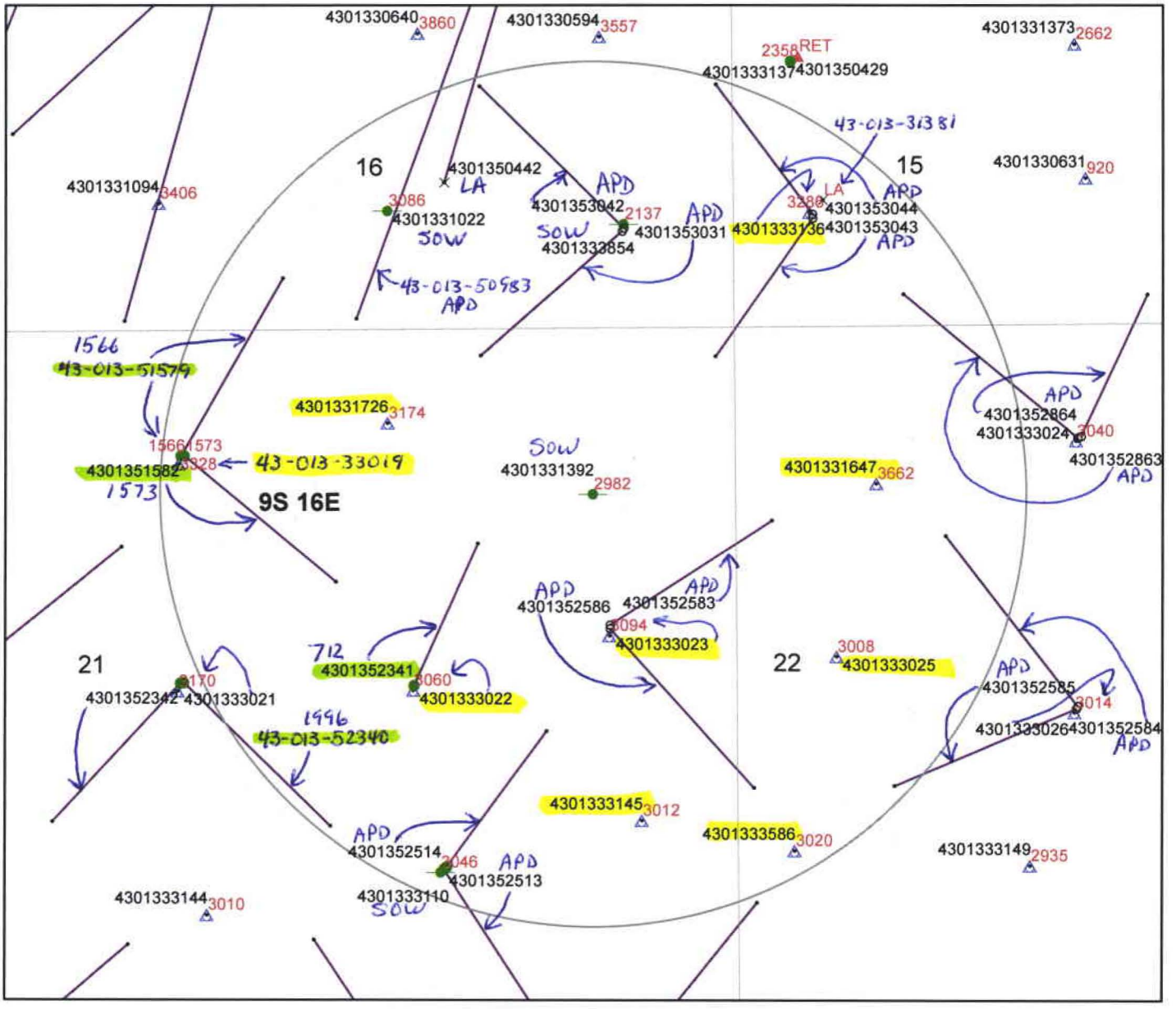
5. The top of the injection interval shall be limited to a depth no higher than 3,905 feet in the Federal 41-21Y-9-16 well.

A final approval to commence injection will be issued upon satisfactory completion of the listed stipulations. If you have any questions regarding this approval or the necessary requirements, please contact Mark Reinbold at 801-538-5333 or Brad Hill at 801-538-5315.

Sincerely,

John Rogers
Associate Director

JR/MLR/js
cc: Bruce Suchomel, Environmental Protection Agency
Bureau of Land Management, Vernal
SITLA
Duchesne County
Newfield Production Company, Myton
Well File
N:\O&G Reviewed Docs\ChronFile\UIC



Cement Bond Tops
Federal 41-21Y-9-16
API #43-013-31392
UIC-424.7

(updated 12/26/2014)

0 0.05 0.1 0.2 0.3 0.4 Miles

N

Legend

Oil & Gas Well Type

- APD-Approved Permit
- DRL-Spudded (Drilling Commenced)
- GIW-Gas Injection Well
- GSW-Gas Storage Well
- LA-Location Abandoned
- LOC-New Location Well
- OPS-Drilling Operations Suspended
- PA-Pugged & Abandoned
- PGW-Producing Gas Well
- POW-Producing Oil Well
- RET-Returned APD
- SGW-Shut-in Gas Well
- SOW-Shut-in Oil Well
- TA-Temp Abandoned
- TW-Test Well
- WDW-Water Disposal Well
- WIW-WaterInjection Well
- WSW-Water Supply Well

4585 Depth to top of suitable cement bond

Well Bottom Hole Location

Oil & Gas Wells Hole Directional Path

Wells-CbltopsMaster 1-31-13

DNR Oil Gas Wells Buffer

County Boundaries

PLSS Sections

PLSS Townships

DIVISION OF OIL, GAS AND MINING
UNDERGROUND INJECTION CONTROL PROGRAM
PERMIT
STATEMENT OF BASIS

Applicant: Newfield Production Company **Well:** Federal 41-21Y-9-16

Location: 21/9S/16E **API:** 43-013-31392

Ownership Issues: The proposed well is located on BLM land. The well is located in the Greater Monument Butte Unit. Lands in the one-half mile radius of the well are administered by the BLM and the State of Utah. The Federal Government and the State of Utah are the mineral owners within the area of review (AOR). Newfield and other various individuals hold the leases in the unit. Newfield has provided a list of all surface, mineral and leaseholders in the half-mile radius. Newfield is the operator of the Greater Monument Butte Unit. Newfield 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 258 feet and has a cement top at the surface. A 5½ inch production casing is set at 5,999 feet. The cement bond log demonstrates adequate bond in this well up to about 2,982 feet. A 2 7/8 inch tubing with a packer will be set at 4,564 feet. Higher perforations may be opened at a later date. A mechanical integrity test will be run on the well prior to injection. At the time of this revision (12/26/2014), on the basis of surface locations, there are 3 producing wells, 9 injection wells, and 4 shut-in wells (including the proposed injection well) in the AOR. In addition, there is 1 directionally drilled producing well with a surface location outside the AOR and a bottom hole location inside the AOR. There is 1 approved surface location outside the AOR for a horizontal well with proposed bottom hole location inside the AOR. Finally, there is 1 approved surface location inside the AOR, from which a directional well will be drilled to a bottom hole location outside the AOR and 3 approved surface locations outside the AOR for bottom hole locations inside the AOR. All existing wells within the AOR have evidence of adequate casing and cement for the proposed injection interval.

Ground Water Protection: As interpreted from the Utah Geological Survey's DOE Project-Uinta Basin Water Draft Map (Paul B. Anderson, December 2, 2011), the base of moderately saline water (3000-10,000 mg/l TDS) is at a depth of approximately 2800 feet. Injection shall be limited to the interval between 3,905 feet and 5,950 feet in the Green River Formation. Information submitted by Newfield indicates that the fracture gradient for the 41-21Y-9-16 well is 0.82 psi/ft., which was the lowest reported fracture gradient for the injection zone. The resulting minimum fracture pressure for the proposed injection interval is 1,917 psig. The requested maximum pressure is 1,917 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 groundwater present should be adequately protected.

Oil/Gas& Other Mineral Resources Protection: The Board of Oil, Gas & Mining approved the Greater Monument Butte Unit on December 1, 2009. Correlative rights issues were 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 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): Mark Reinbold Date: 7/25/2014 (revised 12/26/2014)

4770 S. 5600 W.
P.O. BOX 704005
WEST VALLEY CITY, UTAH 84170
FED.TAX I.D.# 87-0217663
801-204-6910

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PROOF OF PUBLICATION — CUSTOMER'S COPY

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DIV OF OIL-GAS & MINING, Rose Nolton 1594 W NORTH TEMP #1210 P.O. BOX 145801 SALT LAKE CITY, UT 84114	9001402352	6/25/2014

RECEIVED JUN 30 2014 DIV. OF OIL, GAS & MINING

OLD YEAR

42 →

ACCOUNT NAME	
DIV OF OIL-GAS & MINING,	
TELEPHONE	ADORDER# / INVOICE
8015385340	0000966816 /
SCHEDULE	
Start 06/25/2014	End 06/25/2014
CUST. REF. NO.	
CAUSE NO. UIC-424	
CAPTION	
BEFORE THE DIVISION OF OIL, GAS AND MINING DEPARTMENT OF NATU	
SIZE	
76 Lines	2.00 COLUMN
TIMES	RATE
3	
MISC. CHARGES	AD CHARGES
	TOTAL COST
	260.36

BEFORE THE DIVISION OF OIL, GAS AND MINING
DEPARTMENT OF NATURAL RESOURCES
STATE OF UTAH
NOTICE OF AGENCY ACTION
CAUSE NO. UIC-424

IN THE MATTER OF THE APPLICATION OF NEWFIELD PRODUCTION COMPANY FOR ADMINISTRATIVE APPROVAL OF CERTAIN WELLS LOCATED IN SECTION 24, TOWNSHIP 8 SOUTH, RANGE 16 EAST, SECTION 25, TOWNSHIP 9 SOUTH, RANGE 15 EAST, AND SECTIONS 17 AND 21, TOWNSHIP 9 SOUTH, RANGE 16 EAST, DUCHESNE COUNTY, UTAH, AS CLASS II INJECTION WELLS.

THE STATE OF UTAH TO ALL PERSONS INTERESTED IN THE ABOVE ENTITLED MATTER.

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API 43-013-32360
Ashley Federal 6-25-9-15 well located in SE/4NW/4, Section 25, Township 9 South, Range 15 East
API 43-013-32946
Ashley Federal 10-25-9-15 well located in NW/4 SE/4, Section 25, Township 9 South, Range 15 East
API 43-013-32949
Federal 2-17-9-16 well located in NW/4 NE/4, Section 17, Township 9 South, Range 16 East
API 43-013-33029
Federal 8-17-9-16 well located in SE/4 NE/4, Section 17, Township 9 South, Range 16 East
API 43-013-33031
Federal 41-21Y well located in NE/4 NE/4, Section 21, Township 9 South, Range 16 East
API 43-013-31392

The proceeding will be conducted in accordance with Utah Admin. R649-10, Administrative Procedures.

Selected zones in the Green River Formation will be used for water injection. The maximum requested injection pressures and rates will be determined based on fracture gradient information submitted by Newfield Production Company.

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Dated this 23rd day of June, 2014.
STATE OF UTAH
DIVISION OF OIL, GAS & MINING
/s/
Brad Hill
Permitting Manager

966816 UPAXLP

AFFIDAVIT OF PUBLICATION

AS NEWSPAPER AGENCY COMPANY, LLC dba MEDIAONE OF UTAH LEGAL BOOKER, I CERTIFY THAT TH
BEFORE THE DIVISION OF OIL, GAS AND MINING DEPARTMENT OF NATURAL RESOURCES STATE
CAUSE NO. UIC-424 IN THE MATTER OF THE APPLICA FOR **DIV OF OIL-GAS & MINING,** WAS PUBL
COMPANY, LLC dba MEDIAONE OF UTAH, AGENT FOR THE SALT LAKE TRIBUNE AND DESERET NEWS, D
ENGLISH LANGUAGE WITH GENERAL CIRCULATION IN UTAH, AND PUBLISHED IN SALT LAKE CITY, SALT LAKE COUNTY IN THE STATE OF UTAH. NOTICE IS ALSO POSTED ON UTAHLEGALS.COM ON THE SAME DAY AS THE FIRST NEWSPAPER PUBLICATION DATE AND REMAINS ON UTAHLEGALS.COM INDEFINATELY. COMPLIES WITH UTAH DIGITAL SIGNATURE ACT UTAH CODE 46-2-101; 46-3-104.

PUBLISHED ON Start 06/25/2014 End 06/25/2014

SIGNATURE

DATE 6/25/2014

VIRGINIA CRAFT
NOTARY PUBLIC - STATE OF UTAH
My Comm. Exp. 01/12/2018
Commission # 672963

Virginia Craft
NOTARY SIGNATURE

THIS IS NOT A STATEMENT BUT A "PROOF OF PUBLICATION"
PLEASE PAY FROM BILLING STATEMENT

2250/REB/GGUICADMIN/GF14/0131

AFFIDAVIT OF PUBLICATION

County of Duchesne,
STATE OF UTAH

I, Kevin Ashby on oath, say that I am the PUBLISHER of the Uintah Basin Standard, a weekly newspaper of general circulation, published at Roosevelt, State and County aforesaid, and that a certain notice, a true copy of which is hereto attached, was published in the full issue such newspaper for 1 consecutive issues, and that the first publication was on the 1 day of July, 2014, and that the last publication of such notice was in the issue of such newspaper dated the 1 day of July, 2014, and that said notice was published on Utahlegals.com on the same day as the first newspaper publication and the notice remained on Utahlegals.com until the end of the scheduled run.

Publisher

Subscribed and sworn to before me on this

2 day of July, 2014

by Kevin Ashby.

Notary Public

Notary Public
BONNIE PARRISH
Commission #685342
My Commission Expires
February 23, 2018
State of Utah

NOTICE OF AGENCY ACTION CAUSE NO. UIC-424

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

IN THE MATTER OF THE APPLICATION OF NEWFIELD PRODUCTION COMPANY FOR ADMINISTRATIVE APPROVAL OF CERTAIN WELLS LOCATED IN SECTION 24, TOWNSHIP 8 SOUTH, RANGE 16 EAST, SECTION 25, TOWNSHIP 9 SOUTH, RANGE 15 EAST, AND SECTIONS 17 AND 21, TOWNSHIP 9 SOUTH, RANGE 16 EAST, DUCHESNE COUNTY, UTAH, AS CLASS II INJECTION WELLS.

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API 43-013-32364

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Dated this 23rd day of June, 2014.

STATE OF UTAH
DIVISION OF OIL, GAS & MINING

/s/
Brad Hill
Permitting Manager

Published in the Uintah Basin Standard July 1, 2014.

8 South, Range 16 East

API 43-013-32360

Ashley Federal 6-25-9-15 well located in SE/4NW/4, Section 25, Township 9 South, Range 15 East

API 43-013-32946

Ashley Federal 10-25-9-15 well located in NW/4 SE/4, Section 25, Township 9 South, Range 15 East

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DEPARTMENT OF NATURAL RESOURCES
STATE OF UTAH
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Dated this 23rd day of June, 2014.

STATE OF UTAH
DIVISION OF OIL, GAS & MINING

Brad Hill
Permitting Manager

Newfield Production Company

FENCELINE FEDERAL 2-24-8-16, FENCELINE FEDERAL 8-24-8-16, ASHLEY FEDERAL 6-25-9-15, ASHLEY FEDERAL 10-25-9-15, FEDERAL 2-17-9-16, FEDERAL 8-17-9-16, FEDERAL 41-21Y

Cause No. UIC-424

Publication Notices were sent to the following:

Newfield Production Company
1001 17th Street, Suite 2000
Denver, CO 80202

Uintah Basin Standard
268 South 200 East
Roosevelt, UT 84066
via e-mail ubslegals@ubmedia.biz

Salt Lake Tribune
P O Box 45838
Salt Lake City, UT 84145
via e-mail naclegal@mediaoneutah.com

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

SITLA
675 E 500 S Ste 500
Salt Lake City, UT 84102-2818

Duchesne County Planning
P O Box 317
Duchesne, UT 84021-0317

Bruce Suchomel
US EPA Region 8
MS 8P-W-GW
1595 Wynkoop Street
Denver, CO 80202-1129

Newfield Production Company
Rt 3 Box 3630
Myton, UT 84052

Jean Sweet

GARY R. HERBERT
Governor

SPENCER J. COX
Lieutenant Governor

State of Utah

DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER
Executive Director

Division of Oil, Gas and Mining

JOHN R. BAZA
Division Director

June 24, 2014

Via e-mail: ubslegals@ubmedia.biz

Uintah Basin Standard
268 South 200 East
Roosevelt, UT 84066

Subject: Notice of Agency Action – Newfield Production Company Cause No. UIC-424

To Whom It May Concern:

Enclosed is a copy of the referenced Notice of Agency Action. Please publish the Notice, once only, as soon as possible. Please notify me via e-mail of the date it will be published. My e-mail address is: jsweet@utah.gov.

Please send proof of publication and billing to:

Division of Oil, Gas and Mining
PO Box 145801
Salt Lake City, UT 84114-5801

Sincerely,

Jean Sweet

Jean Sweet
Executive Secretary

Enclosure

Jean Sweet <jsweet@utah.gov>

Re: Notice of Agency Action – Newfield Production Company Cause No. UIC-424

1 message

Cindy Kleinfelter <ckleinfelter@ubmedia.biz> Thu, Jun 26, 2014 at 2:54 PM
To: Jean Sweet <jsweet@utah.gov>

On 6/24/2014 9:37 AM, Jean Sweet wrote:

To Whom It May Concern:

Enclosed is a copy of the referenced Notice of Agency Action. Please publish the Notice, once only, as soon as possible. Please notify me via e-mail of the date it will be published. My e-mail address is: jsweet@utah.gov.

Please send proof of publication and billing to:

Division of Oil, Gas and Mining

PO Box 145801

Salt Lake City, UT 84114-5801

Sincerely,

–
Jean Sweet
Executive Secretary
Utah Division of Oil, Gas and Mining
801-538-5329

Received. Thank you. It will publish July 1, 2014.
Cindy

GARY R. HERBERT
Governor

SPENCER J. COX
Lieutenant Governor

State of Utah
DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER
Executive Director

Division of Oil, Gas and Mining
JOHN R. BAZA
Division Director

June 24, 2014

VIA E-MAIL naclegal@mediaoneutah.com

Salt Lake Tribune
P. O. Box 45838
Salt Lake City, UT 84145

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Division of Oil, Gas and Mining
PO Box 145801
Salt Lake City, UT 84114-5801

Sincerely,

Jean Sweet

Jean Sweet
Executive Secretary

Enclosure

The Salt Lake Tribune MEDIAONE Deseret News

Remit to: P.O. Box 704005
West Valley City, UT 84170

Order Confirmation for Ad #0000966816-01

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Client Phone	801-538-5340	**Payor Phone**	801-538-5340
Account#	9001402352	**Payor Account**	9001402352
Address	1594 W NORTH TEMPLE STE 1210, SALT LAKE CITY UT 84116-3154 USA	**Payor Address**	1594 W NORTH TEMPLE STE 1210, SALT LAKE CITY UT 84116-3154
Fax	801-359-3940	**Ordered By**	**Acct. Exec**
EMail	juliecarter@utah.gov	Jean	kstowe

Total Amount	**$260.36**			
Payment Amt	**$0.00**	**Tear Sheets**	**Proofs**	**Affidavits**
Amount Due	**$260.36**	0	0	1

Payment Method **PO Number** CAUSE NO. UIC-424

Confirmation Notes:

Text: Jean

Ad Type	Ad Size	Color
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Product	Placement	Position
Salt Lake Tribune::	Legal Liner Notice - 0998	998-Other Legal Notices
Scheduled Date(s):	6/25/2014	
Product	**Placement**	**Position**
Deseret News::	Legal Liner Notice - 0998	998-Other Legal Notices
Scheduled Date(s):	6/25/2014	
Product	**Placement**	**Position**
utahlegals.com::	utahlegals.com	utahlegals.com
Scheduled Date(s):	6/25/2014	

Ad Content Proof Actual Size

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DEPARTMENT OF NATURAL RESOURCES
STATE OF UTAH
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Dated this 23rd day of June, 2014.
STATE OF UTAH
DIVISION OF OIL, GAS & MINING
/s/
Brad Hill
Permitting Manager

966816 UPAXLP

NEWFIELD

Newfield Exploration Company
1001 17th Street | Suite 2000
Denver, Colorado 80202
PH 303-893-0102 | FAX 303-893-0103

June 4, 2014

Mr. Mark Reinbold
State of Utah
Division of Oil, Gas and Mining
1594 W North Temple
Salt Lake City, Utah 84114-5801

RECEIVED
JUN 06 2014
DIV. OF OIL, GAS & MINING

RE: Permit Application for Water Injection Well
Federal #41-21Y-9-16
Monument Butte Field, Lease #UTU-64379
Section 21-Township 9S-Range 16E
Duchesne County, Utah

Dear Mr. Reinbold:

Newfield Production Company herein requests approval to convert the Federal #41-21Y-9-16 from a producing oil well to a water injection well in the Monument Butte (Green River) Field.

I hope you find this application complete; however, if you have any questions or require additional information, please contact me at (303) 893-0102.

Sincerely,

Jill L Loyle
Regulatory Associate

NEWFIELD PRODUCTION COMPANY

APPLICATION FOR APPROVAL OF CLASS II INJECTION WELL

FEDERAL #41-21Y-9-16

MONUMENT BUTTE FIELD (GREEN RIVER) FIELD

LEASE #UTU-64379

JUNE 4, 2014

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ATTACHMENT G	FRACTURE GRADIENT CALCULATIONS
ATTACHMENT G-1	FRACTURE REPORTS DATED – *8/19/1993 – 8/31/1993*
ATTACHMENT H	WORK PROCEDURE FOR PROPOSED PLUG AND ABANDON
ATTACHMENT H-1	WELLBORE DIAGRAM OF PROPOSED PLUGGED WELL

STATE OF UTAH
DIVISION OF OIL, GAS AND MINING

APPLICATION FOR INJECTION WELL - UIC FORM 1

OPERATOR Newfield Production Company
ADDRESS 1001 17th Street, Suite 2000
Denver, Colorado 80202

Well Name and number: Federal #41-21Y-9-16
Field or Unit name: Monument Butte (Green River) Lease No. UTU-64379
Well Location: QQ NENE section 21 township 9S range 16E 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 [ ] No [X]
Date of test:
API number: 43-013-31392

Proposed injection interval: from 3905 to 5950
Proposed maximum injection: rate 500 bpd pressure 1917 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: Attachments "A" through "H-1"

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

Name: Jill L Loyle Signature Jill L Loyle
Title Regulatory Associate Date 6/4/2014
Phone No. (303) 383-4135

(State use only)
Application approved by Title
Approval Date

Comments:

Balcron Federal #41-21y

Proposed Injection Wellbore Diagram

Elev.GR - 5953.5' GL
Elev.KB - 5966' (13' KB)

SURFACE CASING

CSG SIZE: 8-5/8"
GRADE: J-55
WEIGHT: 24#
LENGTH: 250'
DEPTH LANDED: 258' KB
HOLE SIZE: 12-1/4"
CEMENT DATA: 15 sks class "G"

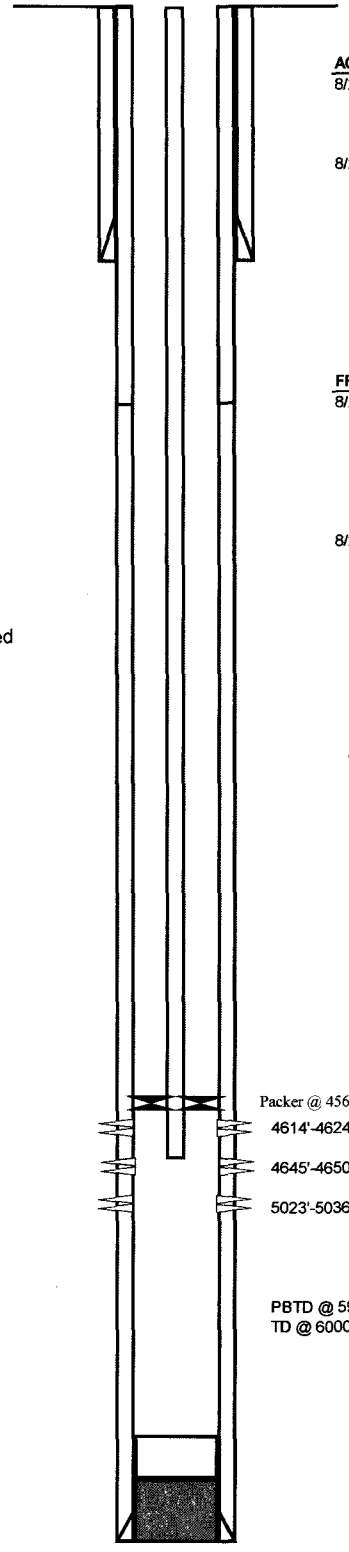
PRODUCTION CASING

CSG SIZE: 5-1/2"
GRADE: J-55
WEIGHT: 15.5#
LENGTH: 6004.02'
DEPTH LANDED: 5999' KB
HOLE SIZE: 7-7/8"
CEMENT DATA: 165 sks thrifty lite. Tailed w/ 275 sks 50-50 POZ.

CEMENT TOP AT: 2980' KB

TUBING

SIZE/GRADE/WT.: 2-7/8' 8rd EUE / J-55 / 6.5#
NO. OF JOINTS: 144 jts
TUBING ANCHOR: 2-7/8"x5-1/2"
NO. OF JOINTS: 21 Jts
SEATING NIPPLE: 2-7/8"x1.10'
PERFORATED SUB: 2-7/8"x3.20'
MUD ANCHOR: 2-7/8"x31.82'
STRING LENGTH:
SN LANDED AT:



ACID JOB /BREAKDOWN

8/24/93	5023'-5036'	Halliburton: ATP=2500 psi, ATR=2.5 bpm, ISIP=1950 psi.
8/28/96	4645'-4650' 4614'-4624'	Halliburton: ATR=6.5 bpm, ATP=2650 psi.

FRAC JOB

8/25/93	5023'-5036'	No vols or quantities in report. Max. Rate=36 bpm, max. Press.=3200 psi, ATP=2470 psi, ISIP=2084 psi, 5 min=1770 psi, 10 min= 1723 psi, 15 min=1672 psi.
8/28/96	4645'-4650' 4614'-4624'	Halliburton: No vols or quantities in report. Max. Rate=35 bpm, ISIP=1972 psi, 5 min= 1791 psi, 10 min=1679 psi, 15 min=1607 psi.

PERFORATION RECORD

8/23/93	Cutter	5023'-5036'	2 SPF
8/27/93	Schlumberger	4645'-4650'	1 SPF
		4614'-4624'	1 SPF

NEWFIELD

Balcron Federal #41-21y
Monument Butte
Lease #U-64379
NE NE Section 21, T9S, R16E
970.2' FNL, 893.8 FEL
Duchesne County, Utah

JL 4/1/2014

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 and 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.**

   Newfield Production Company
   1001 17th Street, Suite 2000
   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 Federal #41-21Y-9-16 from a producing oil well to a water injection well in Monument Butte (Green River) Field.

   2.4 **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.

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

   The injection zone is in the Green River Formation. For the Federal #41-21Y-9-16 well, the proposed injection zone is from Garden Gulch to Basal Carbonate (3905' - 5950'). The confining strata directly above and below the injection zones are the Garden Gulch and the top of the Wasatch Formation or TD, which ever is shallower. The Garden Gulch Marker top is at 3583' and the TD is at 6000'.

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

   The referenced log for the Federal #41-21Y-9-16 is on file with the Utah Division of Oil, Gas and Mining.

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

The primary type and source of fluid to be used for injection will be culinary water commingled with produced water. 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.

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

See Attachment B.

2.9 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.

2.10 Any additional information the Board may determine is necessary to adequately review the petition.

Newfield 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 #UTU-64379) in the Monument Butte Federal (Green River) Field, 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 Attachments 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# surface casing run to 258' KB, and 5-1/2", 15.5# casing run from surface to 5999' 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 primary type and source of fluid to be used for injection will be culinary water commingled with produced water. 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.

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 1917 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 minimum fracture gradient for the Federal #41-21Y-9-16, for existing perforations (4614' - 5036') calculates at 0.82 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 1917 psig. We may add additional perforations between 3583' and 6000'. See Attachments G and G-1.

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 Federal #41-21Y-9-16, the proposed injection zone (3905' - 5950') is in the Garden Gulch to the Basal Carbonate of the Green River Formation. The reservoir is a very fine-grained sandstone with minor imbedded shale streaks. The estimated porosity is 13%. The members are 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 Federal Field. Outside the Monument Butte Federal 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-17.

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.

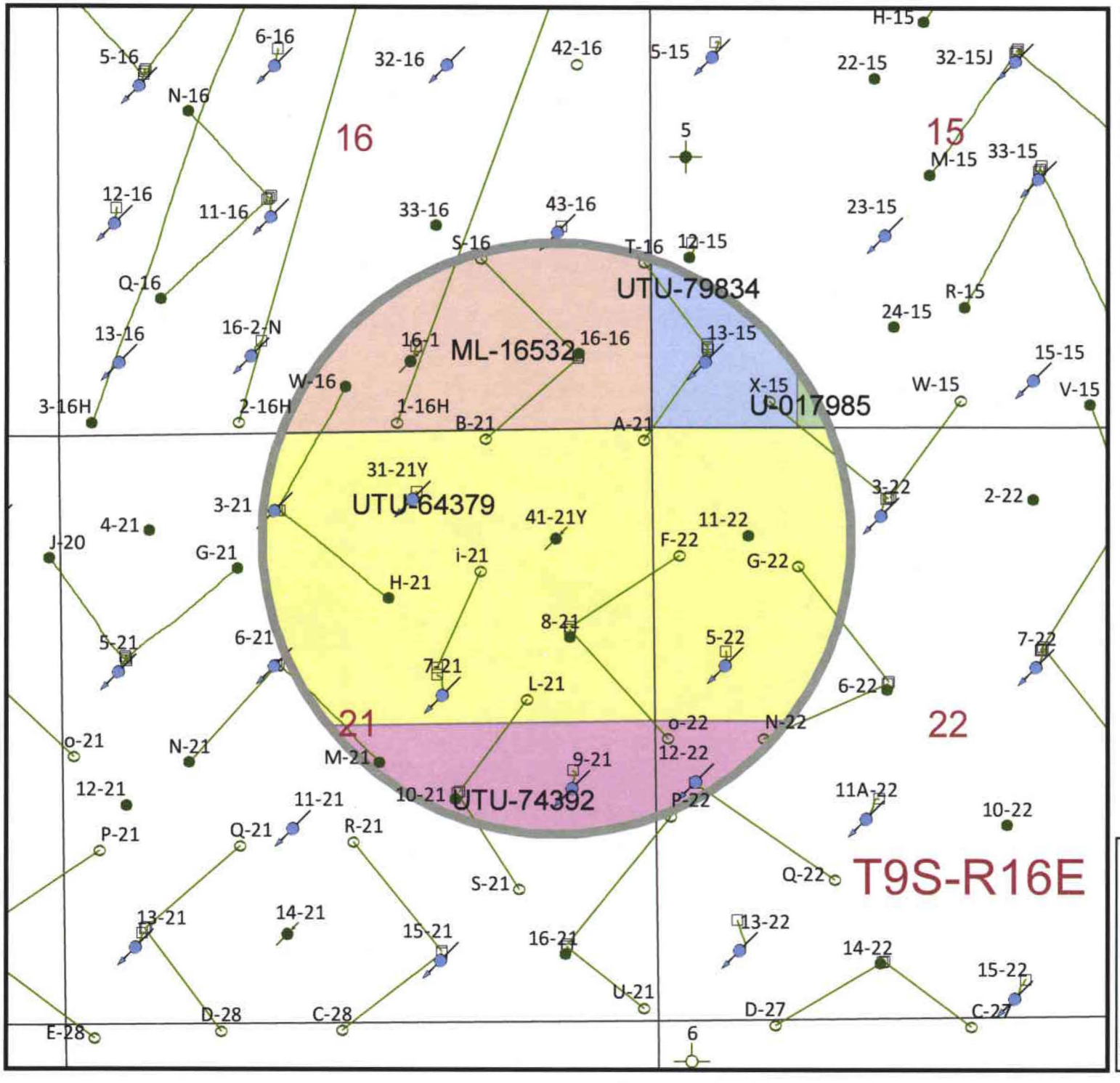
2.12 An affidavit certifying that a copy of the application has been provided to all operators or owners, and surface owners within a one-half mile radius of the proposed injection well.

See Attachment C.

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

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

ATTACHMENT A



Lease Number

- ML-16532
- U-017985
- UTU-64379
- UTU-74392
- UTU-79834
- Half-Mile Buffer

Well Status

- Location
- Surface Spud
- Drilling
- Waiting on Completion
- Producing Oil Well
- Producing Gas Well
- Water Injection Well
- Water Disposal Well
- Dry Hole
- Temporarily Abandoned
- Plugged & Abandoned
- Shut In
- Well Surface Location

Federal 41-21Y-9-16
Section 21, T9S-R16E

NEWFIELD
ROCKY MOUNTAINS

N

1 in = 1,250 feet

1/2 Mile Radius Map

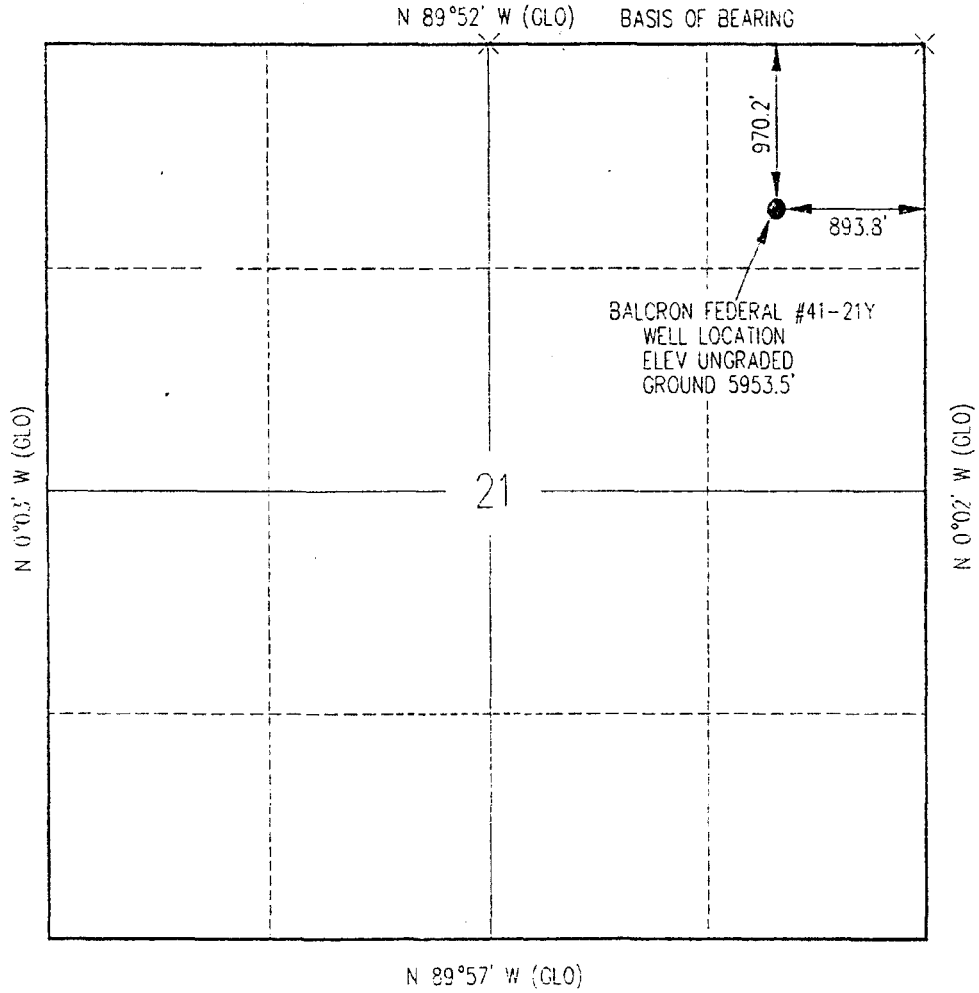
Duchesne County

1001 17th Street Suite 2000
Denver, Colorado 80202
Phone: (303) 893-0102

March 13, 2014

ATTACHMENT A-1

T9S, R16E, S.L.B. & M.



X = SECTION CORNERS LOCATED
BASIS OF BEARINGS; G.L.O. PLAT 1911
BASIS OF ELEV; U.S.G.S. 7-1/2 min QUAD (MYTON SE)

EQUITABLE RESOURCES ENERGY CO.

WELL LOCATION, BALCRON FEDERAL #41-21Y,
LOCATED AS SHOWN IN THE NE 1/4 NE 1/4
OF SECTION 21, T9S, R16E, S.L.B. & M.,
DUCHESNE COUNTY UTAH.

N

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.

REGISTERED LAND SURVEYOR
REGISTRATION NO. 3154
STATE OF UTAH

REGISTERED LAND SURVEYOR NO. 3154 STEVE STEWART STATE OF UTAH

TRI STATE LAND SURVEYING & CONSULTING
38 EAST 100 NORTH, VERNAL, UTAH 84078
(801) 781-2501

SCALE:	1" = 1000'	SURVEYED BY:	SS JC
DATE:	4/28/93	WEATHER:	CLEAR & WARM
NOTES:		FILE #	#41-21Y

EXHIBIT "G"

EXHIBIT B

#	Legal Description	Lessor & Expiration	Lessee & Operating Rights	Surface Owner
1	T9S-R16E SLM	State of Utah	QEP Energy Company	State of Utah
	Section 16: ALL	ML 16532	El Paso E&P Company, LP	
		HBP	Isramco Resources Inc	
			Brave River Production	
			Santa Fe Snyder Corporation	
			Santa Fe Snyder Corporation	
			Oxy USA Inc	
			MYCO Industries Inc	
			ABO Petroleum Corporation	
			Yates Petroleum Corporation	
			Newfield RMI LLC	
			Newfield Production Company	
2	T9S-R16E SLM	USA	Newfield Production Company	USA
	Section 10: S2SE	UTU-017985	Newfield RMI LLC	
	Section 15: E2,E2W2	HBP	ABO Petroleum Corp	
			MYCO Industries Inc	
			OXY Y-1 Company	
			Yates Petroleum Corp	
3	T9S-R16E SLM	USA	Newfield Production Company	USA
	Section 8: SWNE, SE	UTU-64379	Newfield RMI LLC	
	Section 9: SWSW	HBP	Yates Petroleum Corp	
	Section 17: NE			
	Section 18: E2SW, SE, LOTS 3,4			
	Section 19: NE, E2NW, LOTS 1,2			
	Section 21: N2			
	Section 22: W2NE, SENE, NW			

4	T9S-R16E SLM Section 21: S2 Section 22: NENE, S2 Section 23: SWSW Section 24: SESE Section 26: NENE Section 27: All Section 28: All	USA UTU-74392 HBP	Newfield Production Company Newfield RMI LLC ABO Petroleum Corp MYCO Industries Inc OXY Y-1 Company Yates Petroleum Corp	USA
5	T9S-R16E SLM Section 15: W2W2	USA UTU-79834 HBP	Newfield Production Company Newfield RMI LLC	USA

ATTACHMENT C

CERTIFICATION FOR SURFACE OWNER NOTIFICATION

RE: Application for Approval of Class II Injection Well
Federal #41-21Y-9-16

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: _____
Newfield Production Company
Jill L Loyle
Regulatory Associate

Sworn to and subscribed before me this 4th day of June, 2014.

Notary Public in and for the State of Colorado: Lydia Biondo

My Commission Expires: 12/15/31

LYDIA BIONDO
Notary Public
State of Colorado

ATTACHMENT E

Balcron Federal #41-21y

Wellbore Diagram

Elev.GR - 5953.5' GL
Elev.KB - 5966' (13' KB)

SURFACE CASING

CSG SIZE: 8-5/8"
GRADE: J-55
WEIGHT: 24#
LENGTH: 250'
DEPTH LANDED: 258' KB
HOLE SIZE: 12-1/4"
CEMENT DATA: 15 sks class "G"

PRODUCTION CASING

CSG SIZE: 5-1/2"
GRADE: J-55
WEIGHT: 15.5#
LENGTH: 6004.02'
DEPTH LANDED: 5999' KB
HOLE SIZE: 7-7/8"
CEMENT DATA: 165 sks thrifty lite. Tailed w/ 275 sks 50-50 POZ.

CEMENT TOP AT: 2980' KB

TUBING

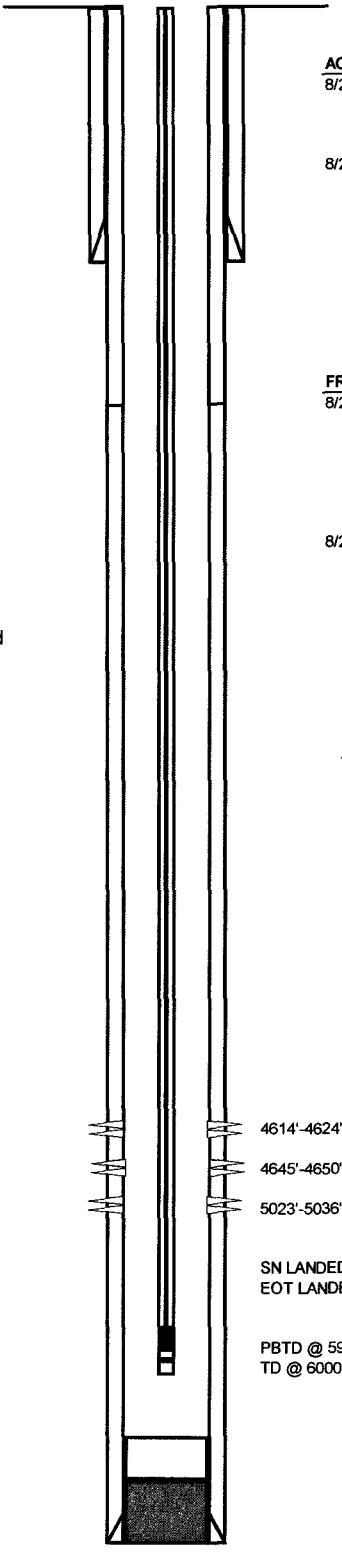
SIZE/GRADE/WT.: 2-7/8' 8rd EUE / J-55 / 6.5#
NO. OF JOINTS: 144 jts
TUBING ANCHOR: 2-7/8"x5-1/2"
NO. OF JOINTS: 21 Jts
SEATING NIPPLE: 2-7/8"x1.10'
PERFORATED SUB: 2-7/8"x3.20'
MUD ANCHOR: 2-7/8"x31.82'
STRING LENGTH:
SN LANDED AT:

SUCKER RODS

POLISHED ROD: 1-1/4"x22' SM
SUCKER RODS:
2-3/4"x4' Pony
1-3/4"x8' Pony
195-3/4"x25' Plain
6-1"x25' EL w/2.5 guides
TOTAL STRING LENGTH: 5061'

PUMP NUMBER: Trico #1193
PUMP SIZE: 2-1/2"x1-1/2"x16' RWAC

STROKE LENGTH: 58 inches
PUMP SPEED, SPM: 6.5 SPM
PUMPING UNIT SIZE:
PUMPING UNIT:
PRIME MOVER:



SN LANDED @5061' KB
EOT LANDED @ 5098' KB

PBTD @ 5950' KB
TD @ 6000' ' KB

ACID JOB /BREAKDOWN

8/24/93	5023'-5036'	Halliburton: ATP=2500 psi, ATR=2.5 bpm, ISIP=1950 psi.
8/28/96	4645'-4650' 4614'-4624'	Halliburton: ATR=6.5 bpm, ATP=2650 psi.

FRAC JOB

8/25/93	5023'-5036'	No vols or quantities in report. Max. Rate=36 bpm, max. Press.=3200 psi, ATP=2470 psi, ISIP=2084 psi, 5 min=1770 psi, 10 min=1723 psi, 15 min=1672 psi.
8/28/96	4645'-4650' 4614'-4624'	Halliburton: No vols or quantities in report. Max. Rate=35 bpm, ISIP=1972 psi, 5 min=1791 psi, 10 min=1679 psi, 15 min=1607 psi.

PERFORATION RECORD

8/23/93	Cutter	5023'-5036'	2 SPF
8/27/93	Schlumberger	4645'-4650'	1 SPF
		4614'-4624'	1 SPF

NEWFIELD

Balcron Federal #41-21y
Monument Butte
Lease #U-64379
NE NE Section 21, T9S, R16E
970.2' FNL, 893.8 FEL
Duchesne County, Utah

ATTACHMENT E-1

Federal 13-15-9-16

Spud Date: 5-21-07

Put on Production: 6-25-07

GL: 5846' KB: 5858'

SURFACE CASING

CSG SIZE: 8-5/8"

GRADE: J-55

WEIGHT: 24#

LENGTH:.7 jnts (312.81')

DEPTH LANDED: 323.71' KB

HOLE SIZE:12-1/4"

CEMENT DATA: 160 sxs Class "G" cmt, est 1bbls cmt to surf.

PRODUCTION CASING

CSG SIZE: 5-1/2"

GRADE: J-55

WEIGHT: 15.5#

LENGTH: 135 jts. (5899.55')

DEPTH LANDED: 5944.14' KB

HOLE SIZE: 7-7/8"

CEMENT DATA: 300 sxs Prem. Lite II mixed & 450 sxs 50/50 POZ.

CEMENT TOP AT: 56'

TUBING

SIZE/GRADE/WT.: 2-7/8" / J-55 / 6.5#

NO. OF JOINTS: 128 jts (3994.3')

SEATING NIPPLE: 2-7/8" (1.10')

SN LANDED AT: 4006.3' KB

ON/OFF TOOL AT: 4007.4'

SEAL NIPPLE AT: 4008.9'

ARROW #1 PACKER CE AT: 4012.5'

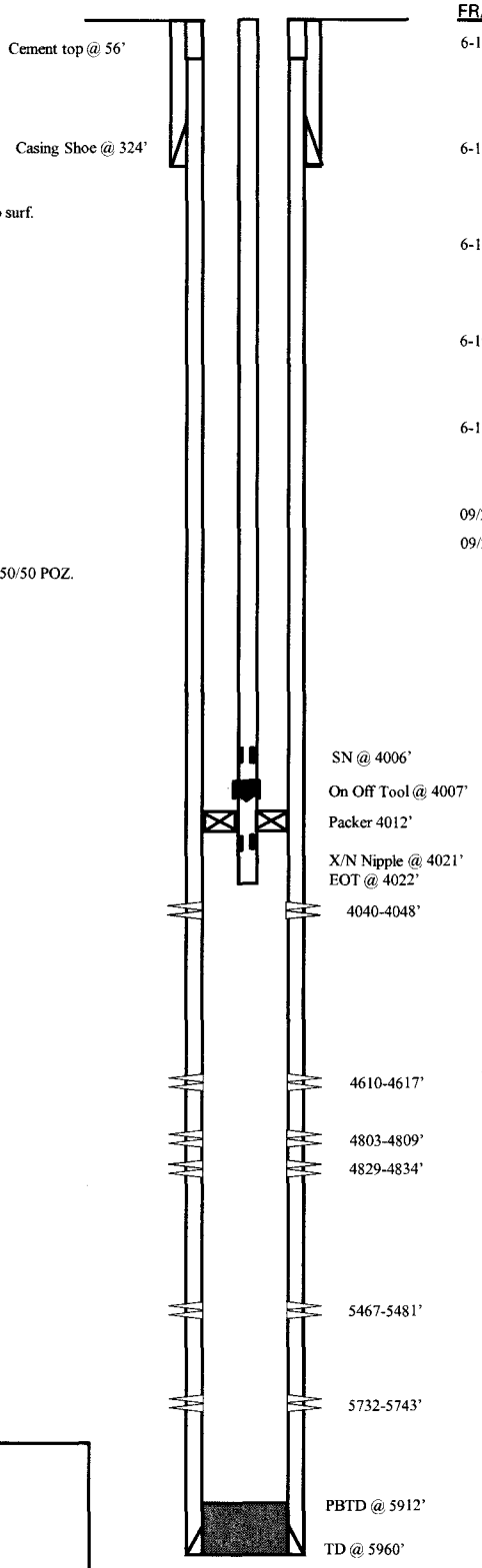
XO 2-3/8 x 2-7/8 J-55 AT: 4016.2'

TBG PUP 2-3/8 J-55 AT: 4016.7'

X/N NIPPLE AT: 4020.7'

TOTAL STRING LENGTH: EOT @ 4022'

Injection Wellbore Diagram



FRAC JOB

6-19-07	5732-5743'	**Frac CP5 sands as follows:** 40000# 20/40 sand in 406 bbls Lightning 17 frac fluid. Treated @ avg press of 1700 psi w/avg rate of 22.2 BPM. ISIP 1980 psi. Calc flush:5730 gal. Actual flush: 5145 gal.
6-19-07	5467-5481'	**Frac CP1 sands as follows:** 50251# 20/40 sand in 432 bbls Lightning 17 frac fluid. Treated @ avg press of 1294 psi w/avg rate of 23.3 BPM. ISIP 1690 psi. Calc flush: 5465 gal. Actual flush: 4872 gal.
6-19-07	4829-4809'	**Frac B1 & B.5 sands as follows:** 14309# 20/40 sand in 248 bbls Lightning 17 frac fluid. Treated @ avg press of 1801 psi w/avg rate of 23.4 BPM. ISIP 1810 psi. Calc flush: 4827 gal. Actual flush: 4221 gal.
6-19-07	4610-4617'	**Frac D1 sands as follows:** 25018# 20/40 sand in 338 bbls Lightning 17 frac fluid. 21.8 BPM. ISIP 1990 psi. Calc flush: 4608 gal. Actual flush: 4011 gal.
6-19-07	4040-4048'	**Frac GB4 sands as follows:** 28952# 20/40 sand in 294 bbls Lightning 17 frac fluid. 24.7 BPM. ISIP 1723 psi. Calc flush: 4038 gal. Actual flush: 3948 gal.
09/22/12		**Convert to Injection Well**
09/25/12		**Conversion MIT Finalized** – update tbg detail

PERFORATION RECORD

6-13-07	5732-5743'	4 JSPF	36 holes
6-19-07	5467-5481'	4 JSPF	56 holes
6-19-07	4829-4834'	4 JSPF	20 holes
6-19-07	4803-4809'	4 JSPF	20 holes
6-19-07	4610-4617'	4 JSPF	28 holes
6-19-07	4040-4048'	4 JSPF	32 holes

NEWFIELD

Federal 13-15-9-16

717' FSL & 469' FWL

SW/SW Section 15-T9S-R16E

Duchesne Co, Utah

API #43-013-33136; Lease #UTU-39713

LCN 10/01/12

ATTACHMENT E-2

Federal 3-21-9-16

Spud Date: 10-24-06

Put on Production: 12-7-06

GL: 5975' KB: 5987'

Injection Wellbore Diagram

SURFACE CASING

CSG SIZE: 8-5/8"

GRADE: J-55

WEIGHT: 24#

LENGTH: 7 jts (310.86')

DEPTH LANDED: 322.71' KB

HOLE SIZE:12-1/4"

CEMENT DATA: 160 sxs Class "G" cmt, est 2 bbls cmt to surf.

Cement top @ 90'

PRODUCTION CASING

CSG SIZE: 5-1/2"

GRADE: J-55

WEIGHT: 15.5#

LENGTH: 134 jts. (5839.32')

DEPTH LANDED: 5852.57' KB

HOLE SIZE: 7-7/8"

CEMENT DATA: 300 sxs Prem. Lite II mixed & 425 sxs 50/50 POZ.

CEMENT TOP AT: 90'

TUBING

SIZE/GRADE/WT.: 2-7/8" / J-55 / 6.5#

NO. OF JOINTS: 149 jts (4793.4')

SEATING NIPPLE: 2-7/8" (1.10')

SN LANDED AT: 4805.4' KB

ON/OFF TOOL AT: 4806.5'

"X" SEAL NIPPLE 1-7/8" @ 4807.9'

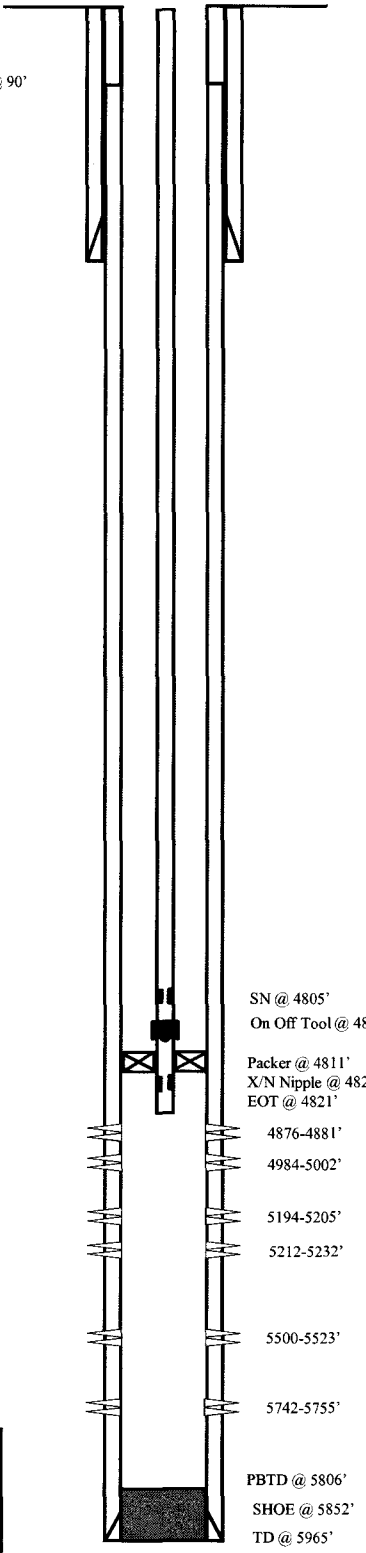
ARROW #1 PACKER CE AT: 4811.54'

XO 2-3/8 x 2-7/8 J-55 AT: 4815.2'

TBG PUP 2-3/8 J-55 AT: 4815.7'

X/N NIPPLE AT: 4819.8'

TOTAL STRING LENGTH: EOT @ 4821.37'



FRAC JOB

11-30-06	5742-5755'	**Frac CP4 sands as follows:** 29540# 20/40 sand in 399 bbls Lightning 17 frac fluid. Treated @ avg press of 2075 psi w/avg rate of 24.9 BPM. ISIP 2100 psi. Calc flush: 5740 gal. Actual flush: 5233 gal.
12-01-06	5500-5523'	**Frac CP1 sands as follows:** 89095# 20/40 sand in 713 bbls Lightning 17 frac fluid. Treated @ avg press of 1762 psi w/avg rate of 24.8 BPM. ISIP 1830 psi. Calc flush: 5498 gal. Actual flush: 4994 gal.
12-01-06	5194-5232'	**Frac LODC sands as follows:** 126238# 20/40 sand in 886 bbls Lightning 17 frac fluid. Treated @ avg press of 2565 psi w/avg rate of 24.7 BPM. ISIP 2450 psi. Calc flush: 5192 gal. Actual flush: 4675 gal.
12-01-06	4984-5002'	**Frac A1 sands as follows:** 18951# 20/40 sand in 288 bbls Lightning 17 frac fluid. Treated @ avg press of 2110 w/ avg rate of 24.9 BPM. ISIP 2130 psi. Calc flush: 4982 gal. Actual flush: 4519 gal.
12-01-06	4876-4881'	**Frac B2 sands as follows:** 12667# 20/40 sand in 262 bbls Lightning 17 frac fluid. Treated @ avg press of 2135 w/ avg rate of 25.0 BPM. ISIP 1710 psi. Calc flush: 4874 gal. Actual flush: 4788 gal.
03/10/07		**Pump Change**. Update rod and tubing details.
12/19/08		**Tubing Leak.** Updated rod & tubing details.
09/08/08		**Parted Rods.** Updated rod & tubing details.
02/06/14		**Convert to Injection Well**
02/07/14		**Conversion MIT Finalized** – update tbg detail

PERFORATION RECORD

11-27-06	5742-5755'	4 JSPF	52 holes
11-30-06	5500-5523'	4 JSPF	92 holes
12-01-06	5212-5232'	4 JSPF	80 holes
12-01-06	5194-5205'	4 JSPF	44 holes
12-01-06	4984-5002'	4 JSPF	72 holes
12-01-06	4876-4881'	4 JSPF	20 holes

NEWFIELD

Federal 3-21-9-16

774' FNL & 1909' FWL

NE/NW Section 21-T9S-R16E

Duchesne Co, Utah

API # 43-013-33019; Lease # UTU-64379

LCN 02/13/14

ATTACHMENT E-3

Spud Date: 10/22/06

Put on Production: 12/07/06

GL: 6019' KB: 6031'

Federal 6-21-9-16

Injection Wellbore Diagram

SURFACE CASING

CSG SIZE: 8-5/8"

GRADE: J-55

WEIGHT: 24#

LENGTH: 7 jts. (310.77')

DEPTH LANDED: 322.62' KB

HOLE SIZE:12-1/4"

CEMENT DATA: 160 sxs Class "G" cmt, est 5 bbls cmt to surf.

PRODUCTION CASING

CSG SIZE: 5-1/2"

GRADE: J-55

WEIGHT: 15.5#

LENGTH: 134 jts. (5916.95')

DEPTH LANDED: 5930.20' KB

HOLE SIZE: 7-7/8"

CEMENT DATA: 325 sxs Prem. Lite II mixed & 450 sxs 50/50 POZ.

CEMENT TOP: 60'

TUBING

SIZE/GRADE/WT.: 2-7/8" / J-55 / 6.5#

NO. OF JOINTS: 144 jts (4500.5')

STRETCH (1.2)

NO. OF JOINTS: 1 jts (1.1')

SEATING NIPPLE: 2-7/8" (1.10')

SN LANDED AT: 4514.9' KB

ON/OFF TOOL AT: 4517.8'

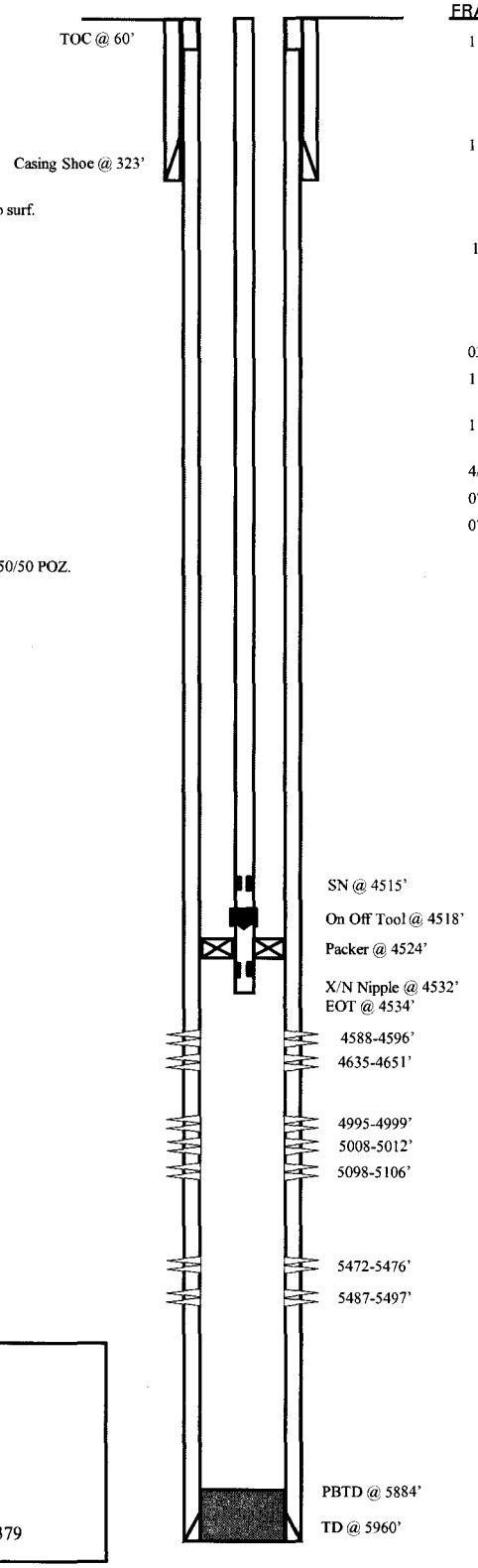
ARROW #1 PACKER CE AT: 4524'

XO 2-3/8 x 2-7/8 J-55 AT: 4527.7'

TBG PUP 2-3/8 J-55 AT: 4528.2'

X/N NIPPLE AT: 4532.3'

TOTAL STRING LENGTH: EOT @ 4533.9'



FRAC JOB

11/28/06	5497-5472'	**Frac CP1 sands as follows:** 60318# 20/40 sand in 517 bbls Lightning 17 frac fluid. Treated @ avg press of 2202 psi w/avg rate of 25.0 BPM. ISIP 3010 psi. Calc flush: 5495 gal. Actual flush: 4964 gal.
11/28/06	5098-5106'	**Frac LODC sands as follows:** 19850# 20/40 sand in 292 bbls Lightning 17 frac fluid. Treated @ avg press of 2154 psi w/avg rate of 14.3 BPM. ISIP 2720 psi. Calc flush: 5096 gal. Actual flush: 4590 gal.
11/28/06	4651-4588'	**Frac D1 & D2 sands as follows:** 126303# 20/40 sand in 857 bbls Lightning 17 frac fluid. Treated @ avg press of 1655 psi w/avg rate of 24.8 BPM. ISIP 1880 psi. Calc flush: 4649 gal. Actual flush: 4494 gal.
03/15/07		**Pump Change.** Update rod and tubing details.
11/11/10	4995-5012'	**Frac A3 sands as follows:** 32618# 20/40 sand in 283 bbls Lighting 17 fluid.
11/17/10		**Re-Completion** finalized – updated tbg and rod details
4/7/2011		**Pump Change.** Rod & tubing detail updated.
07/24/13		**Convert to Injection Well**
07/30/13		**Conversion MIT Finalized** – update tbg detail

PERFORATION RECORD

11/28/06	5487-5497'	4 JSPF	40 holes
11/28/06	5472-5476'	4 JSPF	16 holes
11/28/06	5098-5106'	4 JSPF	32 holes
11/28/06	4635-4651'	4 JSPF	64 holes
11/28/06	4588-4596'	4 JSPF	32 holes
11/11/10	5008-5012'	3 JSPF	12 holes
11/11/10	4995-4999'	3 JSPF	12 holes

NEWFIELD

Federal 6-21-9-16

2159'FNL & 1887' FWL

SE/NW Section 21-T9S-R16E

Duchesne Co, Utah

API #43-013-33021; Lease #UTU-64379

LCN 07/31/13

ATTACHMENT E-4

Federal 7-21-9-16

Spud Date: 4-27-07

Put on Production: 7-19-07

GL: 6006' KB: 6018'

Injection Wellbore Diagram

SURFACE CASING

CSG SIZE: 8-5/8"

GRADE: J-55

WEIGHT: 24#

LENGTH: 7 jts (306.20')

DEPTH LANDED: 318.05' KB

HOLE SIZE:12-1/4"

CEMENT DATA: 160 sxs Class "G" cmt, est 6 bbls cmt to surf.

PRODUCTION CASING

CSG SIZE: 5-1/2"

GRADE: J-55

WEIGHT: 15.5#

LENGTH: 138 jts. (6095.73')

DEPTH LANDED: 6094.98' KB

HOLE SIZE: 7-7/8"

CEMENT DATA: 300 sxs Prem. Lite II mixed & 400 sxs 50/50 POZ.

CEMENT TOP AT: 236'

TUBING

SIZE/GRADE/WT.: 2-7/8" / J-55 / 6.5#

NO. OF JOINTS: 145 jts (4541.8')

SEATING NIPPLE: 2-7/8" (1.10')

SN LANDED AT: 4553.8'

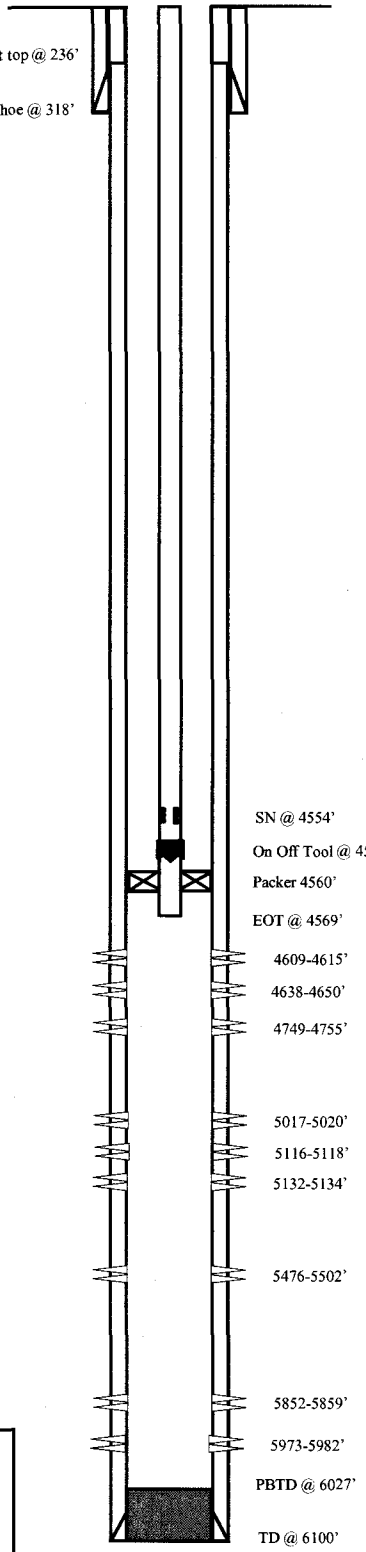
ON/OFF TOOL AT: 4554.9'

ARROW #1 PACKER CE AT: 4559.85'

XO 2-3/8 x 2-7/8 J-55 AT: 4563.6'

TBG PUP 2-3/8 J-55 AT: 4564.1'

TOTAL STRING LENGTH: EOT @ 4569'



FRAC JOB

07-11-07	5973-5982'	**Frac BSC sands as follows:** 40929# 20/40 sand in 364 bbls Lightning 17 frac fluid. Treated @ avg press of 2699 psi w/avg rate of 24.8 BPM. ISIP 3967 psi. Calc flush: 5971 gal. Actual flush: 2129 gal.
07-16-07	5852-5859'	**Frac BSC sands as follows:** 15775# 20/40 sand in 299 bbls Lightning 17 frac fluid. Treated @ avg press of 2760 psi w/avg rate of 22.3 BPM. ISIP 2583 psi. Calc flush: 5850 gal. Actual flush: 5376 gal.
07-16-07	5476-5502'	**Frac CP1 sands as follows:** 116102# 20/40 sand in 859 bbls Lightning 17 frac fluid. Treated @ avg press of 1840 psi w/avg rate of 24.4 BPM. ISIP 2275 psi. Calc flush: 5474 gal. Actual flush: 4956 gal.
07-16-07	4749-4755'	**Frac C sand as follows:** 24885# 20/40 sand in 348 bbls Lightning 17 frac fluid. Treated @ avg press of 2138 w/ avg rate of 2448 BPM. ISIP 1780 psi. Calc flush: 4747 gal. Actual flush: 4284 gal.
07-16-07	4609-4650'	**Frac D1 & D2 sand as follows:** 53260# 20/40 sand in 585 bbls Lightning 17 frac fluid. Treated @ avg press of 2082 w/ avg rate of 24.5 BPM. ISIP 1820 psi. Calc flush: 4691 gal. Actual flush: 4494 gal.
11-26-07		**Pump Change**. Updated rod & tubing details.
10/30/09		**Pump Change**. Updated rod & tubing details.
8/16/11		**Parted Rods.** Updated rod & tubing details.
09/24/12	5116 - 5134'	**Frac LODC sand as follows:** 23425# 20/40 sand in 360bbls Lightning 17 frac fluid
09/24/12	5017 - 5020'	**Frac A3 sand as follows:** 18616# 20/40 sand in 269bbls Lightning 17 frac fluid
09/25/12		**Convert to Injection Well**
09/27/12		**Conversion MIT Finalized** – update tbg detail

PERFORATION RECORD

07-05-07	5973-5982'	4 JSPF	36 holes
07-16-07	5852-5859'	4 JSPF	28 holes
07-16-07	5476-5502'	4 JSPF	104 holes
07-16-07	4749-4755'	4 JSPF	24 holes
07-16-07	4638-4650'	4 JSPF	48 holes
07-16-07	4609-4615'	4 JSPF	24 holes
09/20/12	5132-5134'	3 JSPF	6 holes
09/20/12	5116-5118'	3 JSPF	6 holes
09/20/12	5017-5020'	3 JSPF	9 holes

NEWFIELD

Federal 7-21-9-16

2172' FNL & 1967' FEL

SW/NE Section 21-T9S-R16E

Duchesne Co, Utah

API # 43-013-33022; Lease # UTU-64379

LCN 10/01/12

 Attachment E-5

NEWFIELD

Schematic

43-013-33023

Well Name: Federal 8-21-9-16

Surface Legal Location	API/UWI	Well RC	Lease	State/Province	Field Name	County
21-9S-16E	43013330230000	500154753		Utah	GMBU CTB6	DUCHESNE

Spud Date	Rig Release Date	On Production Date	Original KB Elevation (ft)	Ground Elevation (ft)	Total Depth All (TVD) (ftKB)	PBTD (All) (ftKB)
		7/9/2007	12			

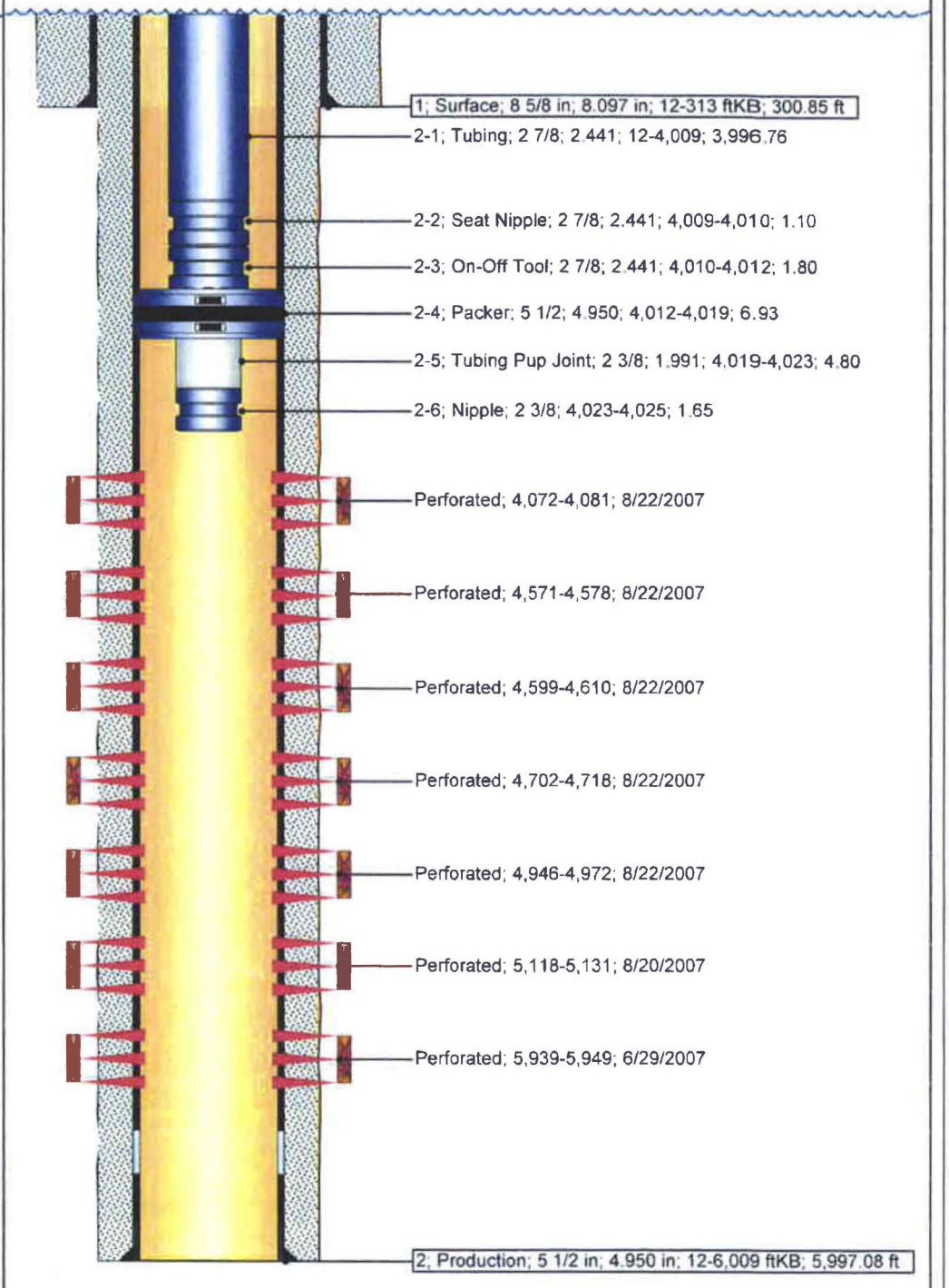
Most Recent Job

Job Category	Primary Job Type	Secondary Job Type	Job Start Date	Job End Date
Production / Workover	Conversion	Basic	3/5/2014	

TD: 6,009.1 Vertical - Original Hole, 3/10/2014 8:06:17 AM

MD (ftKB)	TVD (ftKB)	Incl (°)	DLS
			DLS (°...
12.1			
312.0			
313.0			
3,000.0			
4,008.9			
4,009.8			
4,011.8			
4,018.7			
4,023.3			
4,024.9			
4,071.9			
4,081.0			
4,570.9			
4,578.1			
4,599.1			
4,609.9			
4,702.1			
4,717.8			
4,945.9			
4,972.1			
5,118.1			
5,130.9			
5,939.0			
5,949.1			
5,991.8			
5,992.5			
6,008.5			
6,009.2			

Vertical schematic (actual)



ATTACHMENT E-6

Federal 9-21-9-16

Spud Date: 07/31/09

Put on Production: 09/02/09

GL: 5970' KB: 5982'

Injection Wellbore Diagram

SURFACE CASING

CSG SIZE: 8-5/8"

GRADE: J-55

WEIGHT: 24#

LENGTH: 6 jts. (264')

DEPTH LANDED: 322'

HOLE SIZE: 12-1/4"

CEMENT DATA: 160 sxs Class "G" cmt

PRODUCTION CASING

CSG SIZE: 5-1/2"

GRADE: J-55

WEIGHT: 15.5#

LENGTH: 140 jts. (5836')

HOLE SIZE: 7-7/8"

DEPTH LANDED: 5887.85'

CEMENT DATA: 260 sk Prem. Lite II mixed & 400 sxs 50/50 POZ.

CEMENT TOP AT: 120'

TUBING

SIZE/GRADE/WT.: 2-7/8" / J-55 / 6.5#

NO. OF JOINTS: 141 jts (4492.4')

SEATING NIPPLE: 2-7/8" (1.1')

SN LANDED AT: 4504.4' KB

ON/OFF TOOL AT 4505.5'

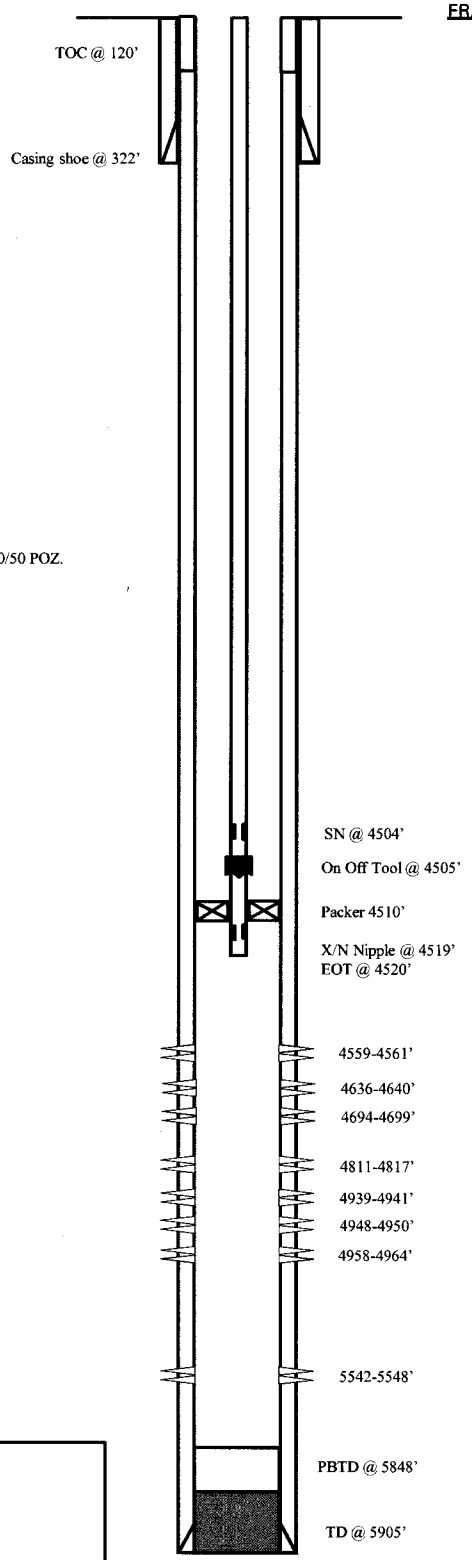
PACKER 5-1/2" AT: 4510'

XO AT: 4513'

TBG PUP 2-3/8" AT: 4514.4'

X/N NIPPLE AT: 4518.6'

TOTAL STRING LENGTH: EOT @ 4520'



FRAC JOB

9-2-09	5542-5548'	**Frac CP3 sands as follows:** Frac with 15136# 20/40 sand in 122 bbls Lightning 17 fluid.
9-2-09	4939-4964'	**Frac A3 sands as follows:** Frac with 115669# 20/40 sand in 698 bbls Lightning 17 fluid.
9-2-09	4811-4817'	**Frac B2 sands as follows:** Frac with 25293# 20/40 sand in 204 bbls Lightning 17 fluid.
9-2-09	4559-4699'	**Frac C, D1, & D3 sands as follows:** Frac with 111451# 20/40 sand in 635 bbls Lightning 17 fluid.
11/25/10		**Pump Change**. Rod & tubing updated.
3/30/11		**Tubing leak**. Rod & tubing detail updated.
09/12/12		**Convert to Injection Well**
09/14/12		**Conversion MIT Finalized** – updte tbg detail

PERFORATION RECORD

5542-5548'	3 JSPF	18 holes
4958-4964'	3 JSPF	18 holes
4948-4950'	3 JSPF	6 holes
4939-4941'	3 JSPF	6 holes
4811-4817'	3 JSPF	18 holes
4694-4699'	3 JSPF	15 holes
4636-4640'	3 JSPF	12 holes
4559-4561'	3 JSPF	6 holes

NEWFIELD

Federal 9-21-9-16
2303' FSL & 582' FEL
NE/SE Section 21-T9S-R16E
Duchesne Co, Utah
API #43-013-33145; Lease #UTU-74392

LCN 09/21/12

ATTACHMENT E-7

FEDERAL 10-21-9-16

Spud Date: 05/12/07
Put on Production: 07/26//07

GL: 6032' KB: 6044'

Wellbore Diagram

SURFACE CASING

CSG SIZE: 8-5/8"
GRADE: J-55
WEIGHT: 24#
LENGTH: 7 jts. (306.20')
DEPTH LANDED: 323.56' KB
HOLE SIZE:12-1/4"
CEMENT DATA: 160 sxs Class "G" cmt, est 6 bbls cmt to surf.

PRODUCTION CASING

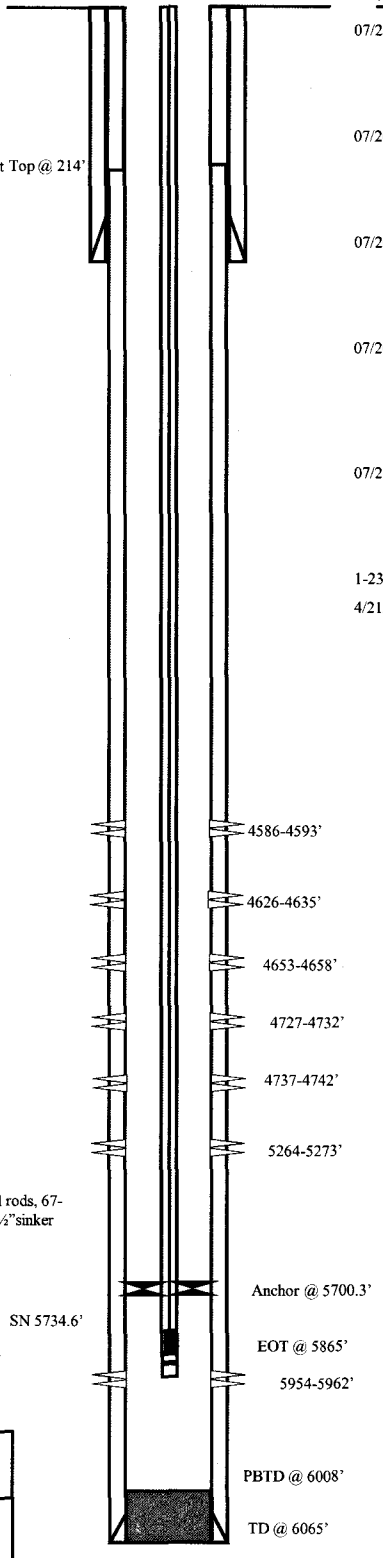
CSG SIZE: 5-1/2"
GRADE: J-55
WEIGHT: 15.5#
LENGTH: 144 jts. (6041.')
DEPTH LANDED: 6054.25' KB
HOLE SIZE: 7-7/8"
CEMENT DATA: 300 sxs Prem. Lite II mixed & 400 sxs 50/50 POZ.
CEMENT TOP: 214'

TUBING

SIZE/GRADE/WT.: 2-7/8" / J-55 / 6.5#
NO. OF JOINTS: 179 jts (5540.9')
TUBING ANCHOR: 5700.3'
NO. OF JOINTS: 1 jts (31.50')
SEATING NIPPLE: 2-7/8" (1.10')
SN LANDED AT: 5734.6'
NO. OF JOINTS: 1 jts (30.9')
GAS ANCHOR : 3-1/2" (5.2')
SEATING NIPPLE: 2-7/8" (0.2')
NO. OF JOINTS: 3 jts (92.5')
BULL PLUG: 2-7/8" (0.5')
TOTAL STRING LENGTH: EOT @ 5865'

SUCKER RODS

POLISHED ROD: 1-1/2" x 26' SM polished rods
SUCKER RODS: 1 – 2', 4', 8' x ¾" pony rods, 134 - 3/4" 4per guided rods, 67-3/4" sucker rods, 20 - 3/4" 4per guided rods, 6 – 1" stabilizer rod, 6-1 ½"sinker bar.
PUMP SIZE: CDI 2-1/2" x 1-1/2" x 12' x 14' x 15' RHAC
STROKE LENGTH: 144"
PUMP SPEED: 5 SPM



FRAC JOB

07/20/07	5954-5962'	**Frac BSLS sands as follows:** 40380# 20/40 sand in 429 bbls Lightning 17 frac fluid. Treated @ avg press of 2388 psi w/avg rate of 24.9 BPM. ISIP 4330 psi. Calc flush: 5952 gal. Actual flush: 5208 gal.
07/20/07	5264-5273'	**Frac LODC sands as follows:** 15583# 20/40 sand in 279 bbls Lightning 17 frac fluid. Treated @ avg press of 2484 psi w/avg rate of 24.8 BPM. ISIP 2438 psi. Calc flush: 5262 gal. Actual flush: 4746 gal.
07/20/07	4727-4742'	**Frac C sands as follows:** 45637# 20/40 sand in 434 bbls Lightning 17 frac fluid. Treated @ avg press of 1823 psi w/avg rate of 24.8 BPM. ISIP 1756 psi. Calc flush: 4725 gal. Actual flush: 4284 gal.
07/20/07	4586-4658'	**Frac D3, D2, & D1 sands as follows:** 0# 20/40 sand in 211 bbls Lightning 17 frac fluid. Treated @ avg press of 1823 psi w/avg rate of 24.8 BPM. ISIP 1597 psi. Calc flush: 4584 gal. Actual flush: 0 gal. (BJ blender broke.)
07/21/07	4586-4658'	**Frac D sands as follows:** 111055# 20/40 sand in 812 bbls Lightning 17 frac fluid. Treated @ avg press of 1670 psi w/avg rate of 24.8 BPM. ISIP 1770 psi. Calc flush: 4584 gal. Actual flush: 4578 gal
1-23-08		Parted rods. Updated rod & tubing details.
4/21/09		Pump Change. Updated r & t details.

PERFORATION RECORD

07/20/07	5954-5962'	4 JSPF	32 holes
07/20/07	5264-5273'	4 JSPF	36 holes
07/20/07	4737-4742'	4 JSPF	20 holes
07/20/07	4727-4732'	4 JSPF	20 holes
07/20/07	4653-5658'	4 JSPF	20 holes
07/20/07	4626-4635'	4 JSPF	36 holes
07/21/07	4586-4593'	4 JSPF	28 holes

NEWFIELD

FEDERAL 10-21-9-16

1992'FSL & 1810' FEL

NW/SE Section 21-T9S-R16E

Duchesne Co, Utah

API #43-013-33110; Lease # UTU-74392

ATTACHMENT E-8

Federal 5-22-9-16

Spud Date: 3-18-08

Put on Production: 5-9-08

GL: 5918' KB: 5930'

Injection Wellbore Diagram

SURFACE CASING

CSG SIZE: 8-5/8"

GRADE: J-55

WEIGHT: 24#

LENGTH: 7 jts (307.89')

DEPTH LANDED: 317.89'

HOLE SIZE: 12-1/4"

CEMENT DATA: 160 sxs Class "G" cmt, circ. 8 bbls to surf.

PRODUCTION CASING

CSG SIZE: 5-1/2"

GRADE: J-55

WEIGHT: 15.5#

LENGTH: 141 jts (5922.15')

DEPTH LANDED: 5920.15'

HOLE SIZE: 7-7/8"

CEMENT DATA: 300 sxs Prem. Lite II & 400 sxs 50/50 POZ.

CEMENT TOP AT: 114' per CBL 4/29/08

TUBING

SIZE/GRADE/WT.: 2-7/8" / J-55 / 6.5#

NO. OF JOINTS: 126 jts (3959.1')

SEATING NIPPLE: 2-7/8" (1.10')

SN LANDED AT: 3971.1' KB

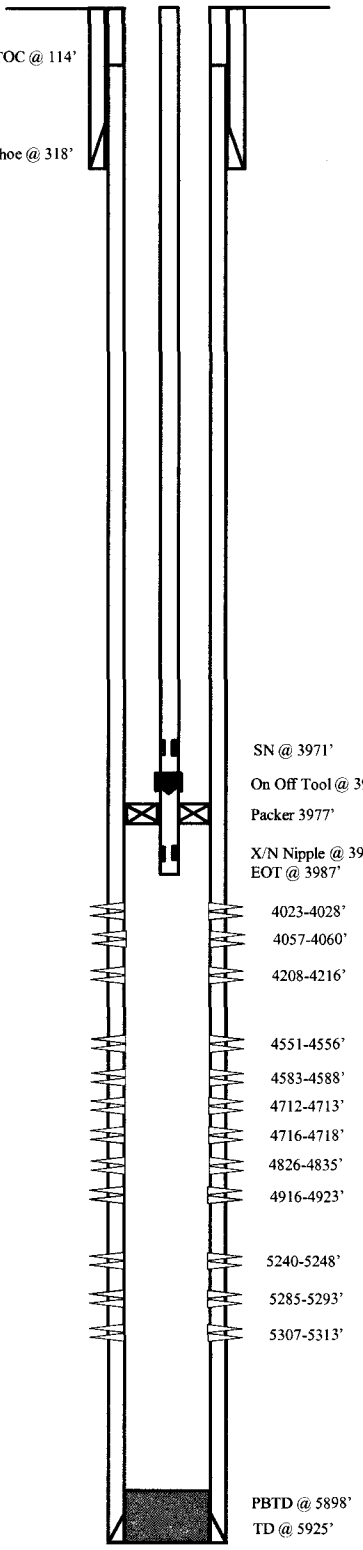
ON/OFF TOOL AT: 3972.2'

PACKER CE AT: 3977.15'

TBG PUP 2-3/8" AT: 3980.9'

X/N NIPPLE AT: 3985.1'

TOTAL STRING LENGTH: EOT @ 3987'



FRAC JOB

05-06-08	5307-5313'	**RU BJ & frac LODC sds as follows:** 99,254# 20/40 sand in 750 bbls of Lightning 17 frac fluid. Treated @ ave pressure of 2444 w/ ave rate of 28.6 bpm w/ 8 ppg of sand. ISIP was 2669.Actual Flush: 4746 gal.
05-06-08	4916-4923'	**RU BJ & frac stage #2 as follows:** 19,006# 20/40 sand in 304 bbls of Lightning 17 frac fluid. Treated @ ave pressure of 2172 w/ ave rate of 23.4 bpm w/ 6.5 ppg of sand. ISIP was 2395. Actual Flush: 4452 gal.
05-06-08	4826-4835'	**RU BJ & frac stage #3 as follows:** 29,485# 20/40 sand in 377 bbls of Lightning 17 frac fluid. Treated @ ave pressure of 1724 w/ ave rate of 23.4 bpm w/ 6.5 ppg of sand. ISIP was 1676. Actual Flush: 4326 gal.
05-06-08	4551-4556'	**RU BJ & frac stage #4 as follows:** 19,618# 20/40 sand in 297 bbls of Lightning 17 frac fluid. Treated @ ave pressure of 1788 w/ ave rate of 23.2 bpm w/ 6.5 ppg of sand. ISIP was 1868. Actual Flush: 4074 gal.
05-06-08	4208-4216'	**RU BJ & frac stage #5 as follows:** 24,768# 20/40 sand in 330 bbls of Lightning 17 frac fluid. Treated @ ave pressure of 2518 w/ ave rate of 23.2 bpm w/ 6.5 ppg of sand. ISIP was 2984. Actual Flush: 4116 gal.
10/7/09		Tubing Leak. Updated rod & tubing details.
09/12/12	4712-4718'	**Frac C sands as follows:** 10839# 20/40 sand in 126 bbls of Lightning 17 frac fluid.
09/13/12	4057-4060'	**Frac GB6 sands as follows:** 18889 # 20/40 sand in 192 bbls of Lightning 17 frac fluid.
09/13/12	4023-4026'	**Frac GB4 sands as follows:** 20651# 20/40 sand in 182 bbls of Lightning 17 frac fluid.
09/14/12		**Convert to Injection Well**
09/18/12		**Conversion MIT Finalized** – update tbg detail

PERFORATION RECORD

04-24-08	5307-5313'	4 JSPF	24 holes
04-30-08	5285-5293'	4 JSPF	32 holes
04-30-08	5240-5248'	4 JSPF	32 holes
04-30-08	4916-4923'	4 JSPF	28 holes
04-30-08	4826-4835'	4 JSPF	36 holes
04-30-08	4583-4588'	4 JSPF	20 holes
04-30-08	4551-4556'	4 JSPF	20 holes
04-30-08	4208-4216'	4 JSPF	32 holes
09-12-12	4716-4718'	3 JSPF	6 holes
09-12-12	4712-4713'	3 JSPF	3 holes
09-12-12	4057-4060'	3 JSPF	9 holes
09-12-12	4023-4026'	3 JSPF	9 holes

NEWFIELD

Federal 5-22-9-16

1989' FNL & 613' FWL

SW/NW Section 22-T9S-R16E

Duchesne Co, Utah

API # 43-013-33025; Lease # UTU-64379

LCN 09/20/12

ATTACHMENT E-9

Federal 12-22-9-16

Spud Date: 4/28/2009

Put on Production: 7/22/2009

GL: 5966' KB: 5978'

Injection Wellbore Diagram

SURFACE CASING

CSG SIZE: 8-5/8"

GRADE: J-55

WEIGHT: 24#

LENGTH: 8 jts (313.85')

HOLE SIZE: 12-1/4"

DEPTH LANDED: 325.7' KB

CEMENT DATA: 160 sxs Class 'G', circ. 4 bbls to surf.

PRODUCTION CASING

CSG SIZE: 5-1/2"

GRADE: J-55

WEIGHT: 15.5#

LENGTH: 149 jts (5868.64')

HOLE SIZE: 7 7/8"

DEPTH LANDED: 5881.89'

CEMENT DATA: 275 sxs Prem. Lite and 401 sxs 50/50 POZ

CEMENT TOP AT: 56' per CBL 7/14/09

TUBING

SIZE/GRADE/WT.: 2-7/8" / J-55 / 6.5#

NO. OF JOINTS: 167 jts (4619.9')

SEATING NIPPLE: 2-7/8" (1.10')

SN LANDED AT: 4631.9' KB

ON/OFF TOOL AT: 4633'

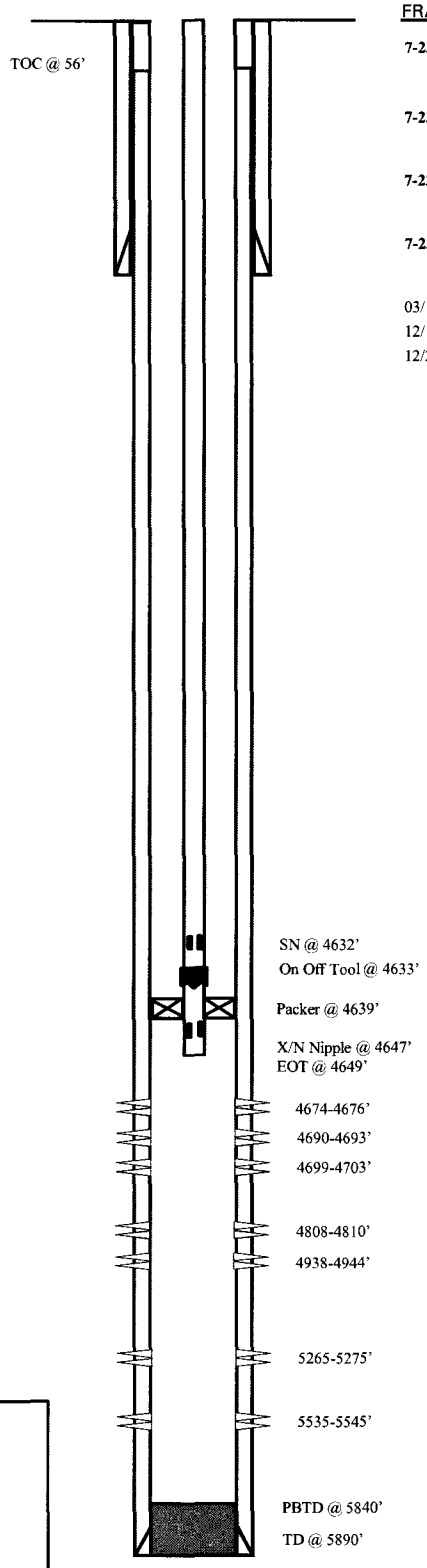
ARROW #1 PACKER CE AT: 4639.1'

XO 2-3/8 x 2-7/8 J-55 AT: 4642.8'

TBG PUP 2-3/8 J-55 AT: 4643.3'

X/N NIPPLE AT: 4647.4'

TOTAL STRING LENGTH: EOT @ 4649.03'



FRAC JOB

7-23-09	5535-5545'	**Frac CP3 sands as follows:** Frac with 34,344# 20/40 sand in 249 bbls of Lightning 17 fluid.
7-23-09	5265-5275'	**Frac LODC sands as follows:** Frac with 65,879# 20/40 sand in 147 bbls of Lightning 17 fluid.
7-23-09	4808-4944'	**Frac A3 & B2 sands as follows:** Frac with 34,625# 20/40 sand in 285 bbls of Lightning 17 fluid.
7-23-09	4674-4703'	**Frac C sands as follows:** Frac with 34344# 20/40 sand in 249 bbls of Lightning 17 fluid.
03/16/2011		**Tubing Leak**. Rod & tubing deatail updated.
12/18/13		**Convert to Injection Well**
12/20/13		**Conversion MIT Finalized** –update tbg detail

PERFORATION RECORD

5535-5545'	3 JSPF	30 holes
5265-5275'	3 JSPF	30 holes
4938-4944'	3 JSPF	18 holes
4808-4810'	3 JSPF	6 holes
4699-4703'	3 JSPF	12 holes
4690-4693'	3 JSPF	9 holes
4674-4676'	3 JSPF	6 holes

NEWFIELD

Federal 12-22-9-16

2113' FSL & 349' FWL NW/SW

Section 22-T9S-R16E

Duchesne Co, Utah

API # 43-013-33586; Lease # UTU-74392

LCN 12/27/13

 Attachment E-10

NEWFIELD

Schematic

43-013-31647

Well Name: Mon 11-22-9-16

Surface Legal Location	API/UWI	Well RC	Lease	State/Province	Field Name	County
22-9S-16E	43013316470000	500151005		Utah	GMBU CTB6	DUCHESNE

Spud Date	Rig Release Date	On Production Date	Original KB Elevation (ft)	Ground Elevation (ft)	Total Depth All (TVD) (ftKB)	PBTD (All) (ftKB)
8/19/1996	8/27/1996	9/26/1996	5,927	5,917		Original Hole - 5,613.5

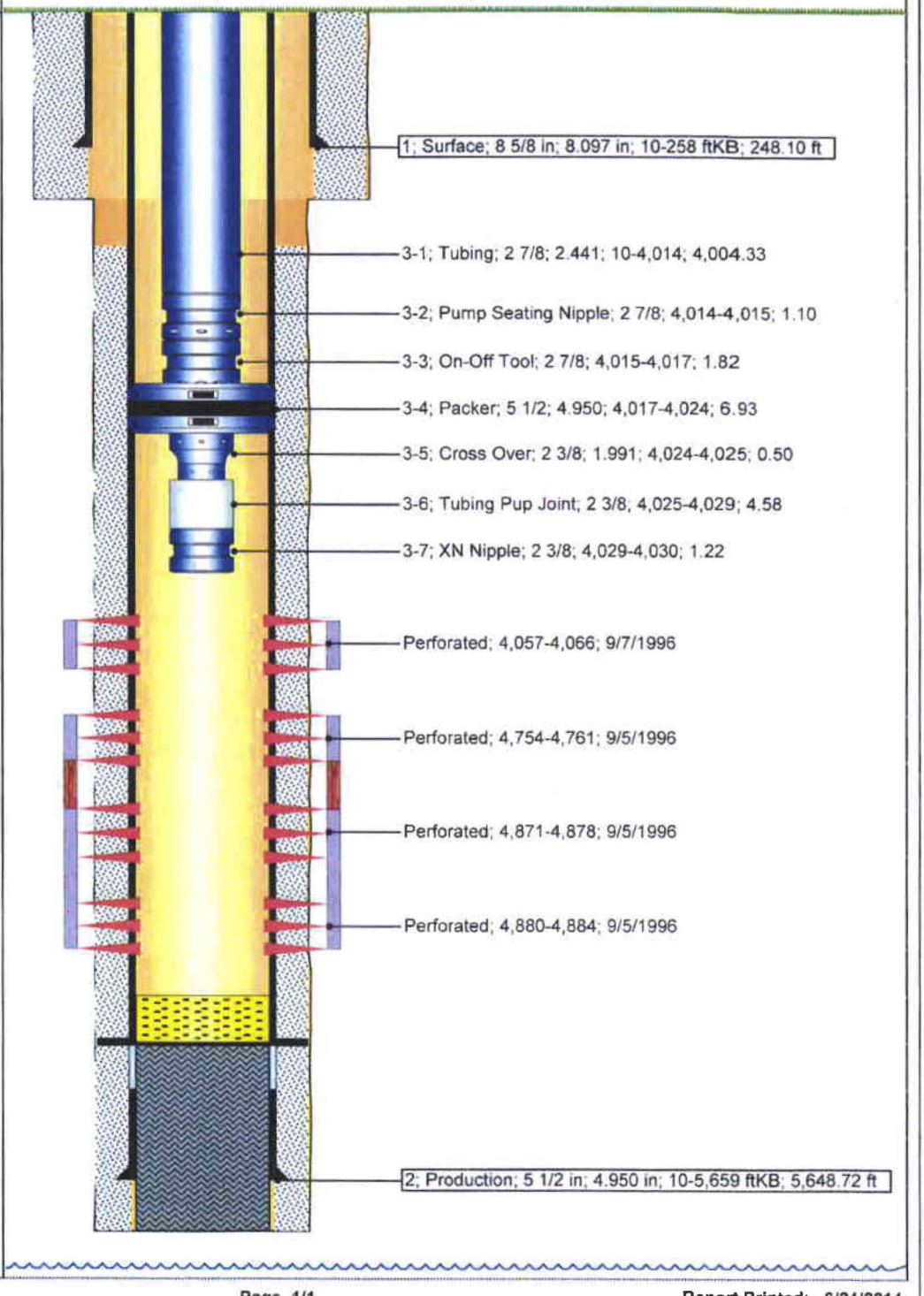
Most Recent Job

Job Category	Primary Job Type	Secondary Job Type	Job Start Date	Job End Date
Production / Workover	Conversion	Basic	6/12/2014	6/17/2014

TD: 5,700.0 Vertical - Original Hole, 6/24/2014 8:22:18 AM

MD (ftKB)	TVD (ftKB)	Incl (°)	DLS DLS (°...
9.8			
228.0			
257.2			
258.2			
279.9			
1,582.0			
4,014.4			
4,015.4			
4,017.4			
4,024.3			
4,024.6			
4,029.2			
4,030.5			
4,057.1			
4,065.9			
4,753.9			
4,761.2			
4,871.1			
4,878.0			
4,879.9			
4,883.9			
5,602.0			
5,613.5			
5,614.5			
5,657.8			
5,658.8			
5,700.1			

Vertical schematic (actual)



ATTACHMENT E-11

Monument Federal 31-21-9-16Y

Put on Production: 3-1-97

GL 5943'

Injection Wellbore Diagram

SURFACE CASING

Surface Casing 0' 260' 8 5/8" 24 J55 Casing Shoe @ 260'

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

PRODUCTION CASING

Production Casing 0' 5650' 5 1/2" 15.50 J55

205 sacks 28:72 Poz. (28% POZ: 72% Class"C") with 10% Gel, 6.0 lbs/sk KOL SEAL & ¼ pps Cello Flake.(Wt.=11.09 ppg,Yd =3.30 Cu.Ft/Sk Comp. Stght @ 72 Hrs=575) Tailed with 400 sacks 50:50 POZ(50% POZ: 50% Class"G") with 2% Gel, 0.3% FL-52, ¼ pps Cello Flakes & 2.0 pps KOL SEAL.(Wt.=14.30 ppg, Yd=1.25 Ft.Cu./Sk, Comp Strght @ 75 Hrs=2700)
(Actual cement volumes to be calculated from caliper log with cement top at 2000')

TOC @ 2090'

TUBING

SIZE/GRADE/WT.: 2-7/8" / J-55 / 6.5#
NO. OF JOINTS: 147 jts (4552.8')
SEATING NIPPLE: 2-7/8" (1.10')
SN LANDED AT: 4562.8' KB
ON/OFF TOOL AT: 4563.9'
SEAL NIPPLE LANDED AT: 4565.4' KB
ARROW #1 PACKER CE AT: 4569.8'
XO 2-3/8 x 2-7/8 J-55 AT: 4572.8'
TBG PUP 2-3/8 J-55 AT: 4573.2'
X/N NIPPLE AT: 4577.3'
TOTAL STRING LENGTH: EOT @ 4579'

SN @ 4563'
On Off Tool @ 4564'
SN @ 4565'
Packer @ 4570'
X/N Nipple @ 4577'
EOT @ 4579'
4614 -4620'
4744-4749'
4751 -4757'
4860-4864'
4866-4868'
5001-5004'
5030-5032'
PBTD @5602
TD @5650'

FRAC JOB

Depth Interval	Amount and Kind of Material Used
5001' - 5032'	Break down with 2,436 gallons 2% KCL water.
4860' - 4868'	Break down with 2,772 gallons 2% KCL water.
4860' - 5032'	Fracture with 17,440# 20/40 mesh sand and 39,550# 16/30 mesh sand with 18,186 gallons 2% KCL gelled water.
4744' - 4757'	Break down with 2,436 gallons 2% KCL water.
4614' - 4620'	Break down with 1,848 gallons 2% KCL water.
4614' - 4757'	Fracture with 30,400# 16/30 mesh sand with 11,130 gallons 2% KCL gelled water.
11/28/12	Convert to Injection Well
11/29/12	Conversion MIT Finalized – update tbg detail

PERFORATION RECORD

5001-5004'	4 JSPF
5030-5032'	4 JSPF
4866-4868'	4 JSPF
4860-4864'	4 JSPF
4751-4757'	4 JSPF
4744-4749'	4 JSPF
4614-4620'	4 JSPF

NEWFIELD

Monument Federal 31-21Y-9-16
537' FNL and 2146' FEL
NW/NE Sec. 21, T9S, 16E
Duchesne Co, Utah
API #43-013-31726 # UTU-64379

LCN 12/05/12

ATTACHMENT E-12

State 16-1-O-9-16

Spud Date: 01/04/85
Put on Production: 03/23/85

GL: 5927' KB: 5941'

Wellbore Diagram

SURFACE CASING

CSG SIZE: 8-5/8"
GRADE: ?
WEIGHT: 24#
LENGTH: 250'
DEPTH LANDED: 250' KB
HOLE SIZE: 12-1/4"
CEMENT DATA: 250 sxs Class "G"

PRODUCTION CASING

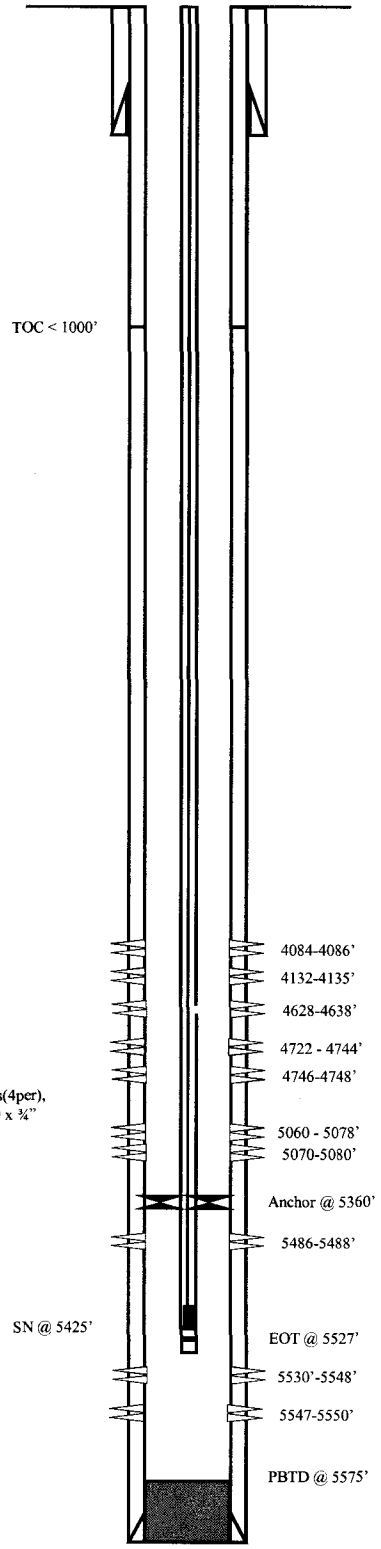
CSG SIZE: 5-1/2"
GRADE: J-55
WEIGHT: 15.5#
LENGTH: 148 jnts
DEPTH LANDED: 5646'
HOLE SIZE: 7-7/8"
CEMENT DATA: 275 sxs High Left & 485 sxs Class "G"
CEMENT TOP AT: <1000' per CBL 3/5/85

TUBING (GI 11/7/11)

SIZE/GRADE/WT.: 2-7/8" / J-55 / 6.5#
NO. OF JOINTS: 170 jts (5343.80')
TUBING ANCHOR: 5359.8'
NO. OF JOINTS: 2 jts (61.22')
SEATING NIPPLE: 2-7/8" (1.10')
SN LANDED AT: 5424.82'
NO. OF JOINTS: 1 (31.57')
GAS ANCHOR: 2-7/8" (5.33')
NO OF JOINTS: 2 (63.89')
PBGA: 0.74'
TOTAL STRING LENGTH: EOT @ 5527.45'

SUCKER RODS (GI 12/15/11)

POLISHED ROD: 1-1/2" x 22' SM
SUCKER RODS: 2', 4', 4', 8 x 7/8" pony rods, 10 x 7/8" guided rods(4per), 123 x 3/4" sucker rods, 15 x ¾" guided rods, 21 x ¾" sucker rods, 39 x ¾" guided rods(4per), 5 x 1" stabilizer bars, 5 x 1-1/2" sinker bars
PUMP SIZE: 2-1/2" x 1-1/2" x 16' x 20' RHAC
STROKE LENGTH: 84"
PUMP SPEED, SPM: 4
PUMPING UNIT: LUFKIN C-320-250-84



FRAC JOB

3/9/85	5530-5548'	Frac'd with: 80000# 20/40 sand in 761 bbls gelled water
3/13/85	5060-5078'	Frac'd with: 50000# 20/40 sand in gelled water
3/16/85	4722-4744'	Frac'd with: 500000# 20/40 sand in 481 bbls gelled water
11/14/11	5486-5550'	Frac'd CP1 sands with: 38960# 20/40 sand in 312 bbls Lightning 17
11/19/11	5070-5080'	Frac'd A1 sands with: 48942# 20/40 sand in 392 bbls Lightning 17
11/19/11	4746-4748'	Frac'd D3 sands with: 34173# 20/40 sand in 283 bbls Lightning 17
11/21/11	4628-4638'	Frac'd D1 sands with: 34603# 20/40 sand in 283 bbls Lightning 17
11/21/11	4084-4135'	Frac'd GB4&GB6 sands with: 30474# 20/40 sand in 247 bbls Lightning 17

PERFORATION RECORD

5530-5548'	4 JSPF	72 Holes
5060-5078'	4 JSPF	72 Holes
4722-4744'	4 JSPF	88 Holes
5547-5550'	3 JSPF	9 Holes
5486-5488'	3 JSPF	6 Holes
5070-5080'	3 JSPF	30 Holes
4746-4748'	3 JSPF	6 Holes
4628-4638'	3 JSPF	30 Holes
4132-4135'	3 JSPF	9 Holes
4084-4086'	3 JSPF	6 Holes

NEWFIELD

State 16-1-0
755' FSL & 2110' FEL
SW/SE Section 16-T9S-R16E
Duchesne County, Utah
API #43-013-31022; Lease #ML-16532

FBS 12-2-13

ATTACHMENT E-13

State 16-16-9-16

Spud Date: 05-03-08
Put on Production: 05-12-08
GL: 5879' KB: 5891'

Wellbore Diagram

SURFACE CASING

CSG SIZE: 8-5/8"
GRADE: J-55
WEIGHT: 24#
LENGTH: 7jts (305.64')
DEPTH LANDED: 316'
HOLE SIZE: 12-1/4"
CEMENT DATA: To Surface with 160 sx Class 'G' cmt

PRODUCTION CASING

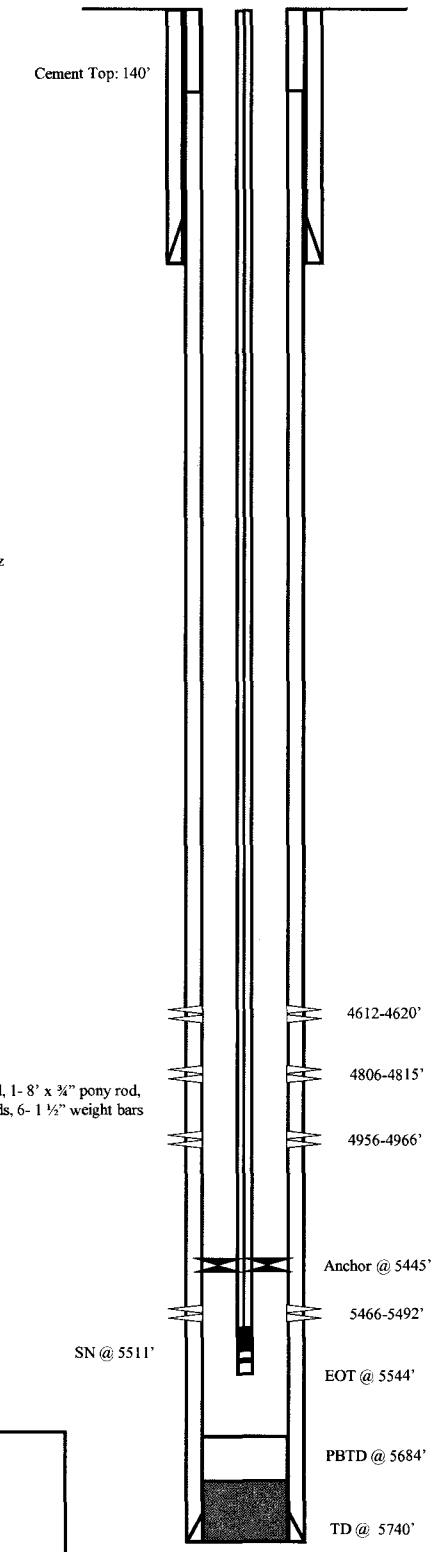
CSG SIZE: 5-1/2"
GRADE: J-55
WEIGHT: 15.5#
LENGTH: 139jts
HOLE SIZE: 7-7/8"
DEPTH LANDED: 5732'
CEMENT DATA: 275 sx Premlite II and 400 sx 50/50 Poz
CEMENT TOP AT: 140'

TUBING

SIZE/GRADE/WT.: 2-7/8" / J-55
NO. OF JOINTS: 173 jts (5432.6')
TUBING ANCHOR: 5444.6'kb
NO. OF JOINTS: 2jts (63.0')
SEATING NIPPLE: 2-7/8" (1.10')
SN LANDED AT: 5510.4'kb
NO. OF JOINTS: 1 jt. (31.3')
TOTAL STRING LENGTH: EOT @ 5544'

SUCKER RODS

POLISHED ROD: 1-1/2" x 26'
SUCKER RODS: 1-2' x ¾" pony rod, 1- 6' x ¾" pony rod, 1- 8' x ¾" pony rod, 98- ¾" guided rods, 43- ¾" sucker rods, 71- ¾" guided rods, 6- 1 ½" weight bars
PUMP SIZE: CDI 2 ½" x 1 ½" x 17' RHAC
STROKE LENGTH: 86"
PUMP SPEED, SPM: 5



FRAC JOB

6-16-08 5466-5492' **RU BJ & frac CP1 sds as follows:** 56,437# 20/40 sand in 509 bbls of Lightning 17 frac fluid. Treated @ ave pressure of 1203 w/ ave rate of 23.5 bpm w/ 8 ppg of sand. ISIP was 1603. Actual Flush: 5006 gals.

6-16-08 4956-4966' **RU BJ & frac stage #2 as follows:** 47,866# 20/40 sand in 458 bbls of Lightning 17 frac fluid. Treated @ ave pressure of 2113 w/ ave rate of 23.3 bpm w/ 8 ppg of sand. ISIP was 2460. Actual Flush: 4523 gals.

6-16-08 4806-4815' **RU BJ & frac stage #3 as follows:** 19,736# 20/40 sand in 307 bbls of Lightning 17 frac fluid. Treated @ ave pressure of 1699 w/ ave rate of 23.2 bpm w/ 6 ppg of sand. ISIP was 1822. Actual Flush: 4347 gals.

6-16-08 4612-4620' **RU BJ & frac stage #4 as follows:** 16,608# 20/40 sand in 290 bbls of Lightning 17 frac fluid. Treated @ ave pressure of 1953 w/ ave rate of 23.4 bpm w/ 6 ppg of sand. 1699 bbls EWTR. ISIP was 1888. Actual Flush: 4615 gals.

7/28/08	Pump Change. Updated rod &tubing details.
3-13-09	Tubing Leak. Updated r & t details.
10/19/09	Pump Change. Updated rod & tubing detail.
6/17/2010	Tubing leak. Updated rod and tubing detail.

PERFORATION RECORD

4612-4620'	4 JSPF	32 holes
4806-4815'	4 JSPF	36 holes
4956-4966'	4 JSPF	40 holes
5466-5492'	4 JSPF	104 holes

NEWFIELD

State 16-16-9-16
658' FSL & 664' FEL
SE/SE Section 16-T9S-R16E
Duchesne Co, Utah
API #43-013-33854; Lease # Utah State ML-16532

ML 7/9/2010

ATTACHMENT E-14

Castle Peak State 43-16-9-16

Spud Date: 10/20/81
Put on Production: 5/06/82

GL: 5882' KB: 5892'

Initial Production: 90 BOPD,
TSTM MCFD, 10 BWPD

Injection Wellbore
Diagram

SURFACE CASING

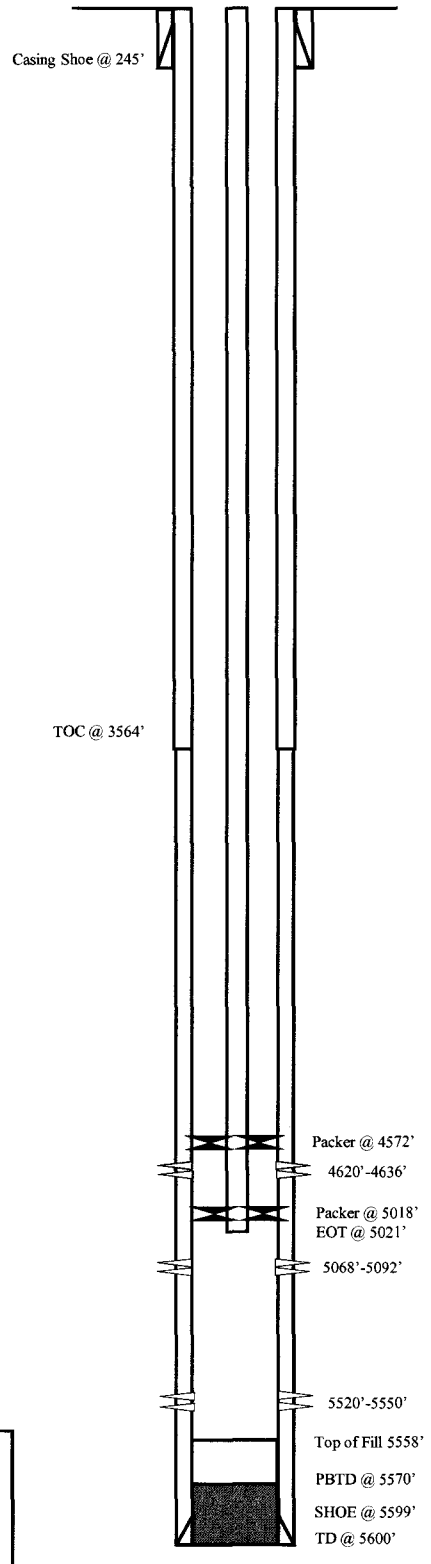
CSG SIZE: 9-5/8"
GRADE: J-55
WEIGHT: 36#
LENGTH: 235'
DEPTH LANDED: 245' KB
HOLE SIZE: 12-1/4"
CEMENT DATA: 200 sxs cement.

PRODUCTION CASING

CSG SIZE: 5-1/2"
GRADE: K-55
WEIGHT: 15.5#
LENGTH: 5590'
DEPTH LANDED: 5598.78' KB
HOLE SIZE: 7-7/8"
CEMENT DATA: 450 sxs cement.
CEMENT TOP AT: 3564'

TUBING

SIZE/GRADE/WT.: 2-3/8" / J-55 / 4.7#
NO. OF JOINTS: 1 jt (31.4')
TUBING PUP: 2-3/8" / N-80 / 4.7# 1 jt (8.0')
ON/OFF TOOL: 1 jt 4-1/2" (1.4')
ARROW PKR: CE @ 4572.43'
TUBING:: 2-3/8" / N-80 / 4.7# 14 jt (438.0')
X/N NIPPLE:2-3/8" / J-55 / 4.7# (1.2)
2-7/8 x 2-3/8 XO: (0.5)
SEAL NIPPLE: 3.875 / J-55 / 6.5# (0.3)
ARROW PKR: @ 5018'
EOT @ 5021.34'



FRAC JOB

5520'-5550'	Frac w/ 60,000# sand.
5068'-5092'	Frac w/ 48,000# sand.
4620'-4636'	Frac w/ 48,000# sand.
6/26/92	**Hole in tubing**. Update rod and tubing details.
5/27/04	**Tubing leak.** Update rod and tubing details.
9/22/04	**Tubing leak.** Update rod and tubing details.
7-26-05	**Pump Change:** Update tubing and rod details
8/24/07	**Parted rods.** Updated rod & tubing details.
03/11/08	**Tbg Leak** Updated rod and tubing detail
10-29-08	**Pump Change**. Updated rod &tubing details.
6/8/09	**Tubing Leak**. Updated r & t details.
05/25/11	**Temporary Abandonment**
06/13/11	**MIT for TA**
05/17/12	**Convert to Injection Well**
05/22/12	**Conversion MIT Finalized** – update tbg detail

PERFORATION RECORD

4620'-4636'	2 SPF	34 holes
5068'-5092'	2 SPF	50 holes
5520'-5550'	2 SPF	60 holes

NEWFIELD

Castle Peak State 43-16-9-16
1820' FSL & 820' FEL
NE/SE Section 16-T9S-R16E
Duchesne County, Utah
API #43-013-30594; Lease #ML-16532

LCN 05/24/12

NEWFIELD

Schematic

ATTACHMENT E-15

Well Name: GMBU H-21-9-16

Surface Legal Location	API/UWI	Well RC	Lease	State/Province	Field Name	County
NENW 726 FNL 1945 FWL Sec 21 T9S R16E Mer SLB	43013515820000	500343077	UTU64379	Utah	GMBU CTB5	Duchesne

Spud Date	Rig Release Date	On Production Date	Original KB Elevation (ft)	Ground Elevation (ft)	Total Depth All (TVD) (ftKB)	PBTD (All) (ftKB)
11/27/2013	12/14/2013		5,990	5,980	Original Hole - 6,033.1	Original Hole - 6,142.1

Most Recent Job

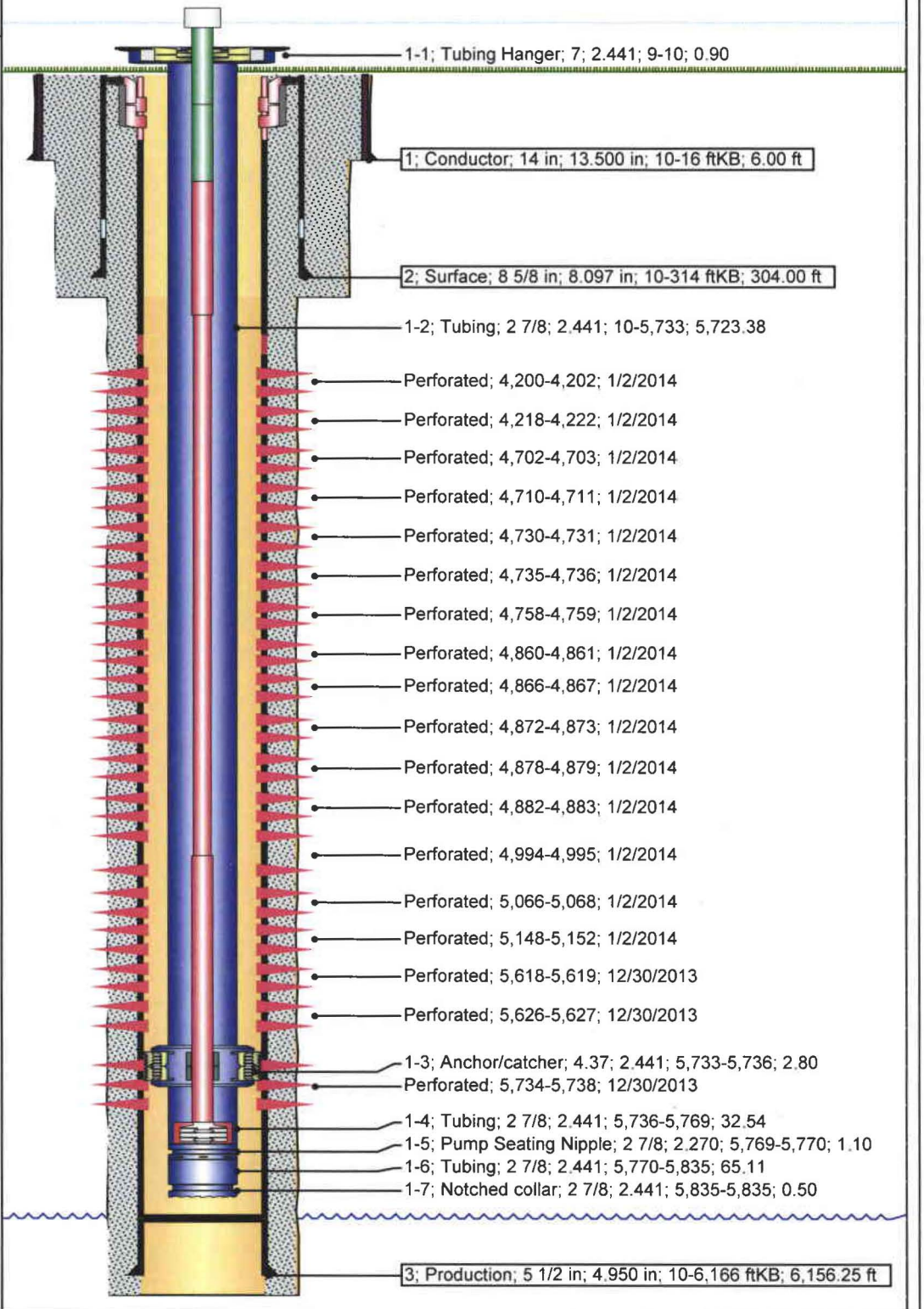
Job Category	Primary Job Type	Secondary Job Type	Job Start Date	Job End Date
Initial Completion	Fracture Treatment	P&P	12/30/2013	1/15/2014

TD: 6,185.0 Slant - Original Hole, 6/3/2014 8:16:01 AM

MD (ftKB)	TVD (ftKB)	Incl (°)
7.5	7.6	1.2
9.8	9.9	1.2
11.5	11.5	1.2
14.1	14.2	1.2
19.4	19.4	1.2
277.9	277.9	1.2
312.3	312.3	1.2
318.9	318.9	1.2
3,384.2	3,314.7	16.3
4,200.1	4,104.2	13.4
4,217.8	4,121.4	13.5
4,702.1	4,592.8	13.2
4,710.0	4,600.5	13.2
4,730.0	4,619.9	13.4
4,734.9	4,624.7	13.4
4,757.9	4,647.0	13.6
4,859.9	4,746.3	13.3
4,866.1	4,752.3	13.4
4,872.0	4,758.1	13.4
4,878.0	4,763.8	13.4
4,881.9	4,767.6	13.4
4,994.1	4,876.8	13.2
4,995.1	4,877.8	13.2
5,067.9	4,948.8	12.8
5,151.9	5,030.5	13.5
5,619.1	5,484.8	15.4
5,627.0	5,492.4	15.5
5,733.9	5,595.3	16.2
5,737.9	5,599.0	16.2
5,768.4	5,628.4	16.1
5,834.6	5,692.1	15.7
6,142.1	5,990.9	10.8
6,165.4	6,013.8	10.8
6,185.0	6,033.1	10.8

DLS (°... 0 — 3

Vertical schematic (actual)



NEWFIELD

Schematic

ATTACHMENT E-16

Well Name: GMBU M-21-9-16

Surface Legal Location	API/UWI	Well RC	Lease	State/Province	Field Name	County
SENW 2107 FNL 1926 FWL Sec 21 T9S R16E Mer SLB	43013523400000	500346524	UTU64379	Utah	GMBU CTB6	Duchesne

Spud Date	Rig Release Date	On Production Date	Original KB Elevation (ft)	Ground Elevation (ft)	Total Depth All (TVD) (ftKB)	PBTD (All) (ftKB)
1/9/2014	1/25/2014		6,032	6,022	Original Hole - 5,832.9	Original Hole - 5,935.6

Most Recent Job

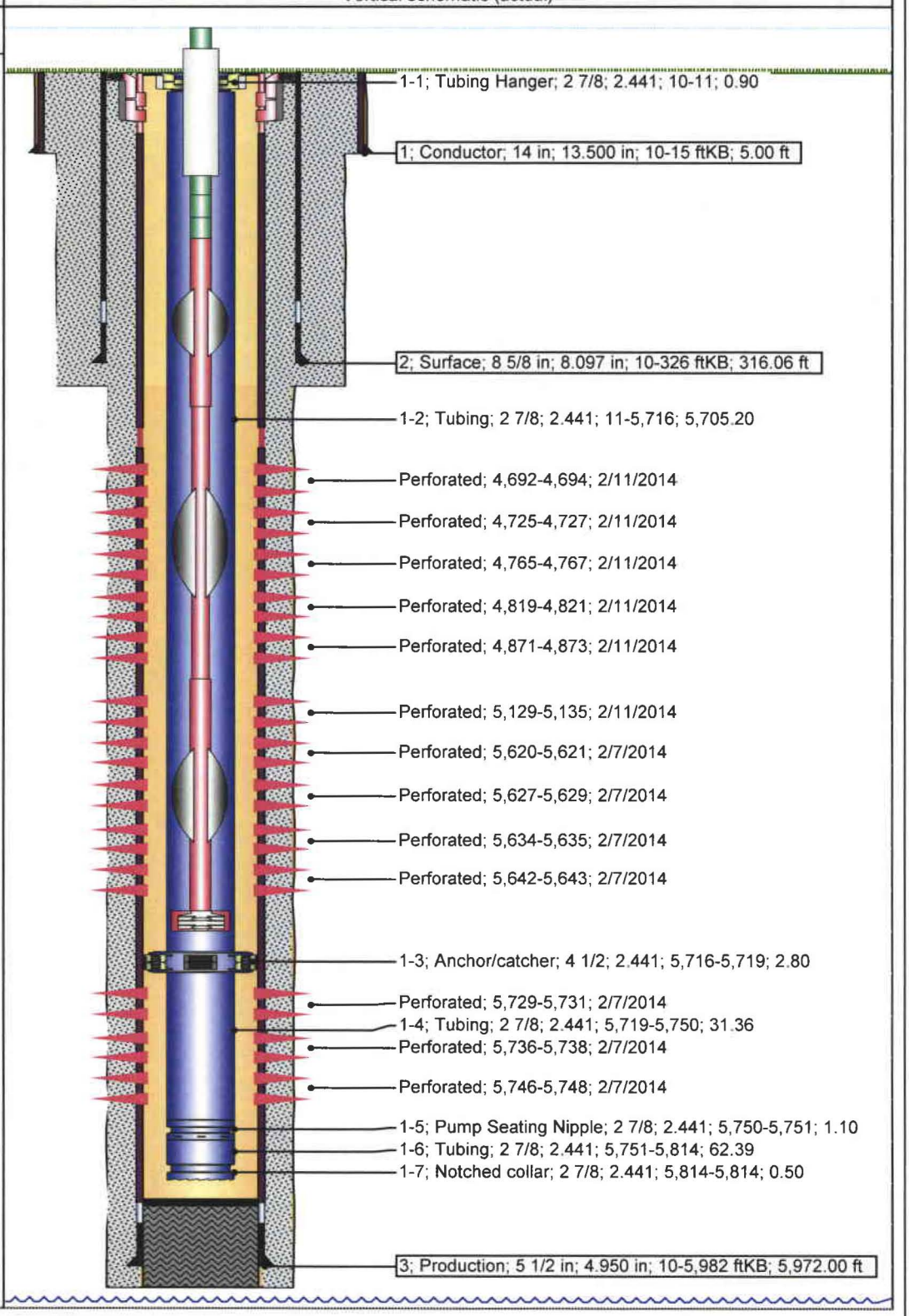
Job Category	Primary Job Type	Secondary Job Type	Job Start Date	Job End Date
Production / Workover	Repairs	Pump Repair	4/4/2014	4/7/2014

TD: 5,996.0 Slant - Original Hole, 6/3/2014 8:17:17 AM

MD (ftKB)	TVD (ftKB)	Incl (°)
2.0	2.0	0.0
10.8	10.8	0.0
14.1	14.1	0.0
32.2	32.2	0.1
38.1	38.1	0.1
54.5	54.5	0.1
278.2	278.2	0.6
324.5	324.5	0.7
331.0	331.0	0.7
3,465.9	3,380.6	18.3
4,691.9	4,562.7	15.7
4,725.1	4,594.7	15.2
4,765.1	4,633.4	14.7
4,818.9	4,685.4	14.6
4,871.1	4,735.9	14.9
4,894.0	4,758.1	14.6
5,134.8	4,991.4	14.6
5,621.1	5,465.8	12.7
5,628.9	5,473.5	12.8
5,634.8	5,479.2	12.9
5,643.0	5,487.2	13.0
5,668.0	5,511.5	13.1
5,718.8	5,561.1	12.6
5,731.0	5,573.0	12.6
5,737.9	5,579.7	12.5
5,748.0	5,589.6	12.5
5,751.3	5,592.8	12.4
5,814.3	5,654.4	11.7
5,937.3	5,775.1	10.5
5,982.0	5,819.1	10.0

DLS (°... 0 — 4

Vertical schematic (actual)



NEWFIELD

Schematic

ATTACHMENT E-17

Well Name: GMBU W-16-9-16

Surface Legal Location	API/UWI	Well RC	Lease	State/Province	Field Name	County
NENW 726 FNL 1924 FWL Sec 21 R16E Mer SLB	43013515790000	500353413	UTU64379	Utah	GMBU CTB5	Duchesne

Spud Date	Rig Release Date	On Production Date	Original KB Elevation (ft)	Ground Elevation (ft)	Total Depth All (TVD) (ftKB)	PBTD (All) (ftKB)
11/26/2013	12/10/2013	1/15/2014	5,990	5,980	Original Hole - 6,099.8	Original Hole - 6,187.5

Most Recent Job

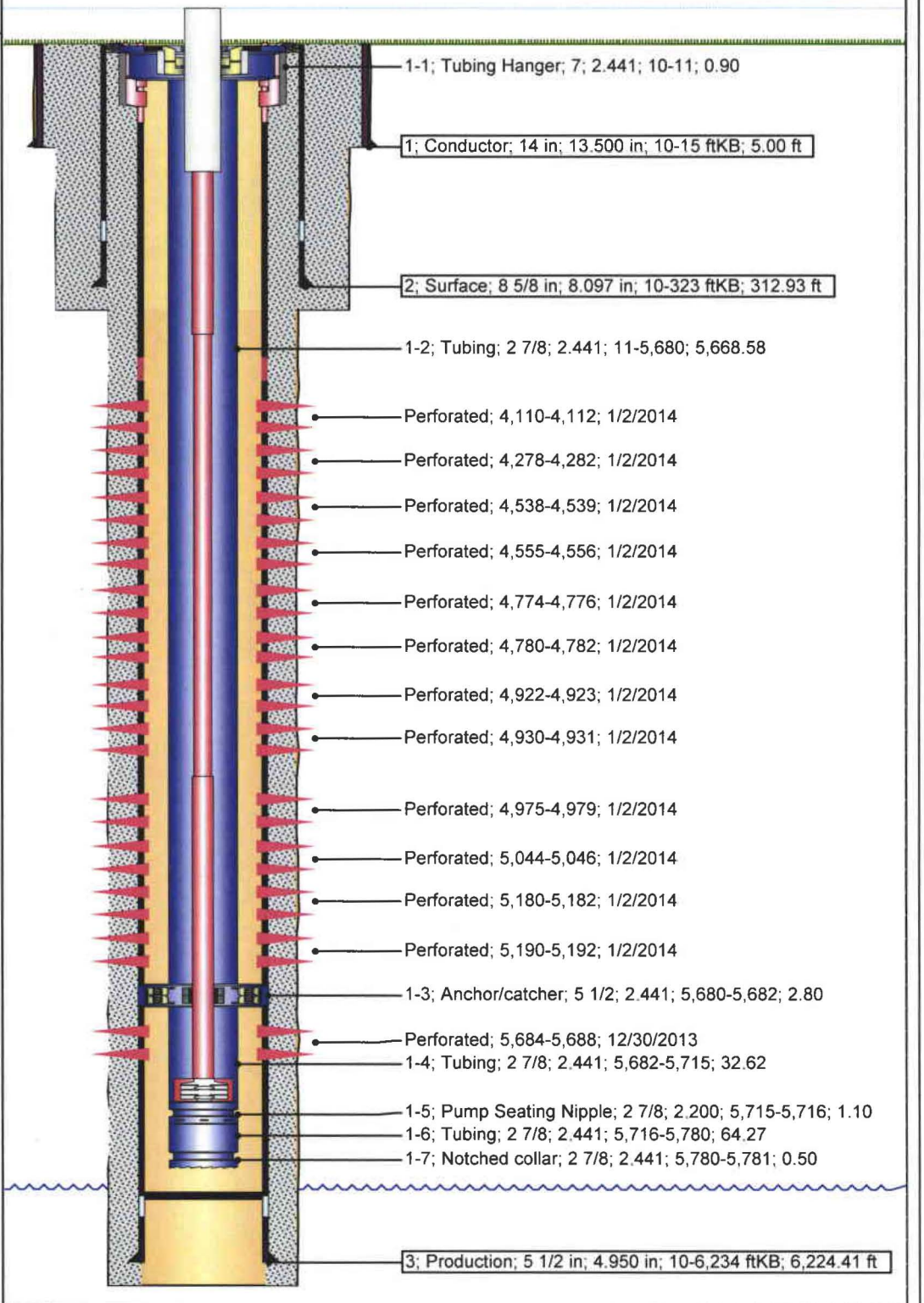
Job Category	Primary Job Type	Secondary Job Type	Job Start Date	Job End Date
Initial Completion	Fracture Treatment	P&P	12/30/2013	1/10/2014

TD: 6,249.0 Slant - Original Hole, 6/3/2014 8:09:56 AM

MD (ftKB)	TVD (ftKB)	Incl (°)
8.5	8.5	0.0
	9.8	
10.2	10.2	0.0
	10.8	
12.1	12.1	0.0
	14.1	
15.1	15.1	0.0
	38.4	
55.1	55.1	0.1
	277.9	
278.9	278.9	0.4
	321.5	
322.8	322.8	0.4
	328.1	
1,613.5	1,596.3	15.6
	3,396.7	
3,483.9	3,408.6	16.4
	4,014.0	
4,111.9	4,015.9	13.7
	4,177.6	
4,282.2	4,181.7	13.1
	4,431.1	
4,539.0	4,432.1	13.1
	4,447.7	
4,556.1	4,448.7	13.3
	4,661.0	
4,775.9	4,662.9	12.8
	4,666.7	
4,782.2	4,669.0	12.9
	4,805.3	
4,922.9	4,806.2	12.7
	4,813.3	
4,931.1	4,814.2	12.7
	4,845.6	
4,975.1	4,857.1	12.8
	4,860.9	
5,044.0	4,924.3	12.8
	4,926.2	
5,180.1	5,057.1	12.7
	5,059.1	
5,190.0	5,066.7	12.8
	5,068.7	
5,679.5	5,544.9	11.6
	5,547.8	
5,684.1	5,549.4	11.6
	5,553.3	
5,713.3	5,578.0	12.1
	5,579.6	
5,715.9	5,580.5	12.2
	5,643.3	
5,780.8	5,644.0	12.9
	6,039.5	
6,189.3	6,041.4	12.3
	6,084.7	
6,234.3	6,085.4	12.4
	6,099.8	

DLS (°... 0 — 4

Vertical schematic (actual)



NEWFIELD

Schematic

43-013-52341

Well Name: GMBU I-21-9-16

Surface Legal Location	API/UWI	Well RC	Lease	State/Province	Field Name	County
SWNE 2144 FNL 1963 FEL Sec 21 T9S R16E	43013523410000	500346532	UTU64379	Utah	GMBU CTB6	Duchesne

Spud Date	Rig Release Date	On Production Date	Original KB Elevation (ft)	Ground Elevation (ft)	Total Depth All (TVD) (ftKB)	PBTD (All) (ftKB)
3/21/2014	3/25/2014	4/11/2014	6,020	6,010	Original Hole - 6,039.4	Original Hole - 6,098.2

Most Recent Job

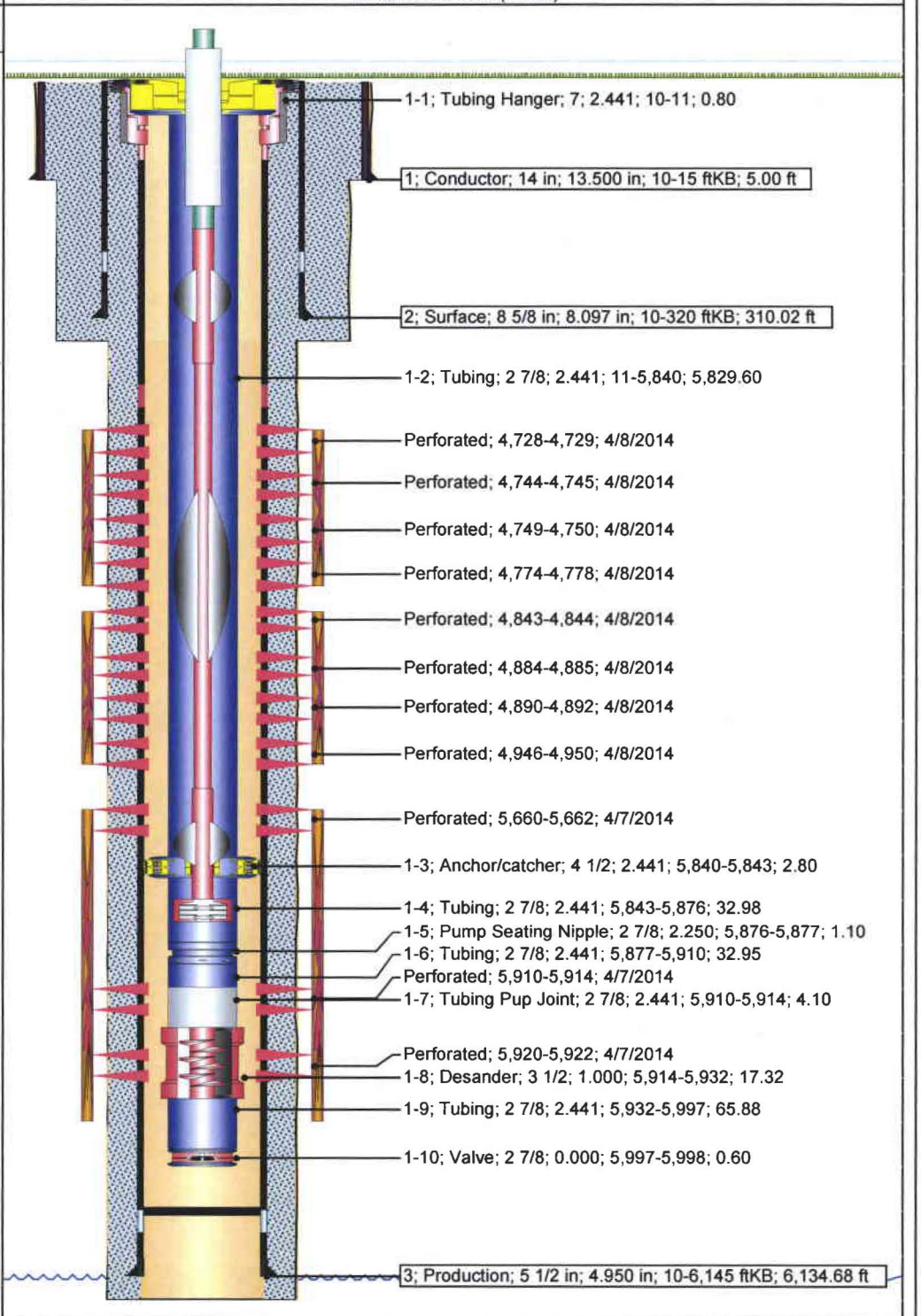
Job Category	Primary Job Type	Secondary Job Type	Job Start Date	Job End Date
Initial Completion	Fracture Treatment	P&P	4/7/2014	4/11/2014

TD: 6,168.0 Slant - Original Hole, 5/5/2014 10:36:17 AM

MD (ftKB)	TVD (ftKB)	Incl (°)
-9.8	-9.8	1.4
10.2	10.2	1.4
12.1	12.2	1.4
15.1	15.2	1.4
24.0	24.0	1.4
275.6	275.6	1.4
319.9	319.9	1.4
1,699.1	1,693.2	4.7
3,433.4	3,379.1	15.2
4,729.0	4,634.7	14.6
4,745.1	4,650.3	14.7
4,750.0	4,655.0	14.8
4,777.9	4,682.0	14.8
4,844.2	4,746.2	13.8
4,884.8	4,785.7	13.4
4,892.1	4,792.8	13.4
4,950.1	4,849.3	13.2
5,660.1	5,542.9	12.6
5,840.2	5,718.5	12.6
5,849.1	5,727.1	12.6
5,876.3	5,753.7	12.6
5,910.1	5,786.6	12.7
5,914.4	5,790.8	12.7
5,921.9	5,798.2	12.7
5,992.1	5,866.7	12.1
5,998.0	5,872.5	11.9
6,098.1	5,970.7	10.7
6,143.7	6,015.5	10.7
6,168.0	6,039.3	10.7

DLS (°... 0 —— 5

Vertical schematic (actual)



NEWFIELD

Schematic

43-013-52340

Well Name: GMBU M-21-9-16

Surface Legal Location	API/UWI	Well RC	Lease	State/Province	Field Name	County
SENW 2107 FNL 1926 FWL Sec 21 T9S R16E Mer SLB	4301352340000	500346524	UTU64379	Utah	GMBU CTB6	Duchesne

Spud Date	Rig Release Date	On Production Date	Original KB Elevation (ft)	Ground Elevation (ft)	Total Depth All (TVD) (ftKB)	PBTD (All) (ftKB)
1/9/2014	1/25/2014		6,032	6,022	Original Hole - 5,832.9	Original Hole - 5,935.6

Most Recent Job

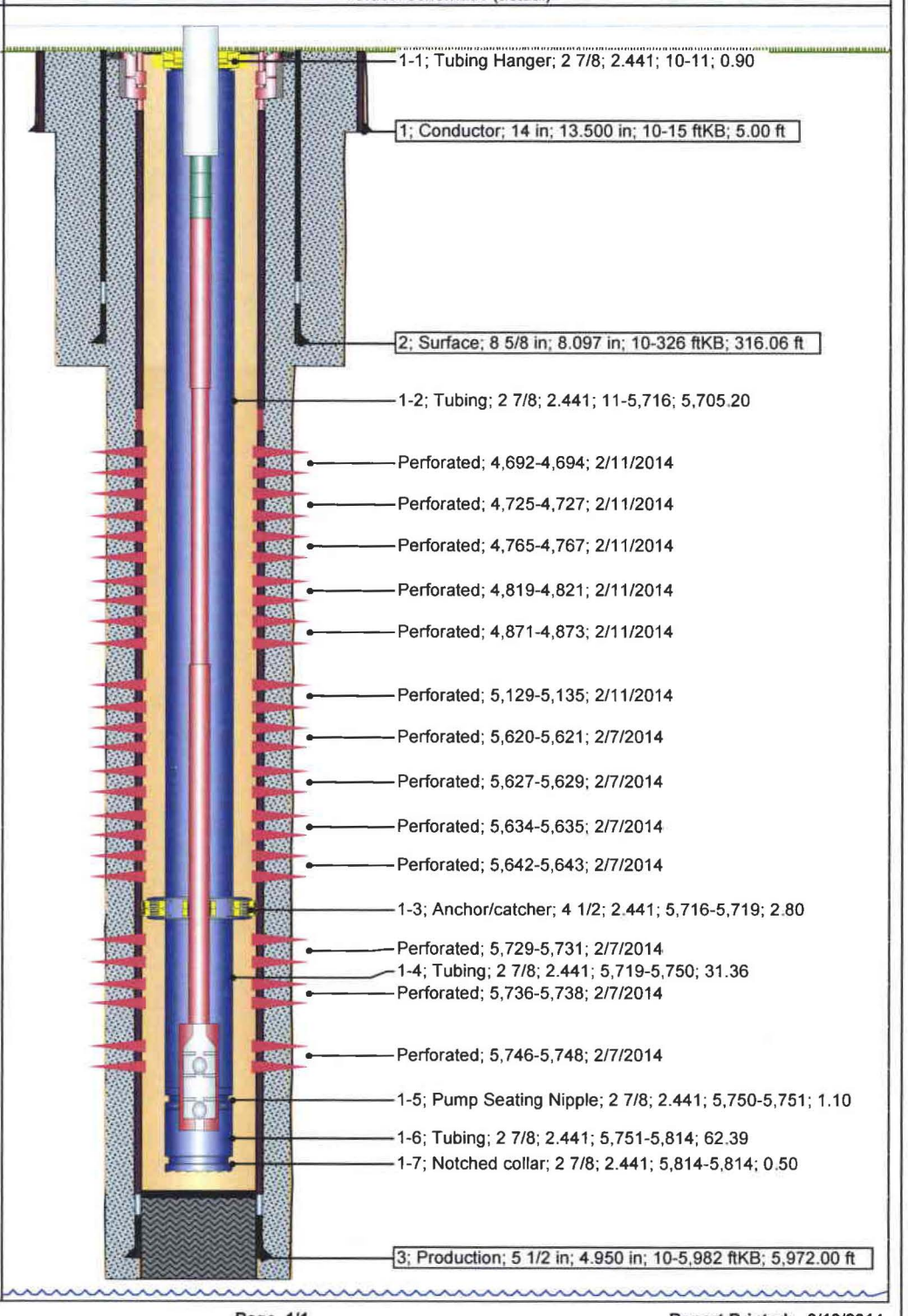
Job Category	Primary Job Type	Secondary Job Type	Job Start Date	Job End Date
Initial Completion	Fracture Treatment	P&P	2/7/2014	2/18/2014

TD: 5,996.0 Slant - Original Hole, 3/19/2014 8:59:35 AM

MD (ftKB)	TVD (ftKB)	Incl (°)
9.8	9.8	0.0
11.5	11.5	0.0
15.1	15.1	0.0
32.2	32.2	0.1
42.0	42.0	0.1
275.6	275.6	0.6
279.5	279.5	0.6
326.1	326.1	0.7
1,892.1	1,873.0	13.3
3,476.7	3,390.9	18.3
4,693.9	4,564.6	15.7
4,727.0	4,596.6	15.1
4,767.1	4,635.3	14.7
4,820.9	4,687.3	14.6
4,873.0	4,737.8	14.8
5,128.9	4,985.7	14.7
5,620.1	5,464.8	12.7
5,627.0	5,471.6	12.8
5,633.9	5,478.3	12.9
5,642.1	5,486.3	13.0
5,716.2	5,558.5	12.6
5,729.0	5,571.0	12.6
5,735.9	5,577.8	12.5
5,742.1	5,583.8	12.5
5,748.0	5,589.6	12.5
5,751.3	5,592.8	12.4
5,813.6	5,653.8	11.7
5,935.7	5,773.5	10.6
5,981.0	5,818.1	10.0
5,996.1	5,832.9	9.8

DLS

Vertical schematic (actual)



Multi-Chem Analytical Laboratory
1553 East Highway 40
Vernal, UT 84078

Units of Measurement: **Standard**

ATTACHMENT F
1 of 5

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Water Analysis Report

Production Company: **NEWFIELD PRODUCTION**
Well Name: **FEDERAL 41-21Y-9-16**
Sample Point:
Sample Date: **1/24/2014**
Sample ID: **WA-264545**

Sales Rep: **Pete Prodromides**
Lab Tech: **Gary Winegar**

Scaling potential predicted using ScaleSoftPitzer from Brine Chemistry Consortium (Rice University)

Sample Specifics	
Test Date:	1/24/2014
System Temperature 1 (°F):	120
System Pressure 1 (psig):	60
System Temperature 2 (°F):	210
System Pressure 2 (psig):	60
Calculated Density (g/ml):	1.013
pH:	8.50
Calculated TDS (mg/L):	23781.46
CO2 in Gas (%):	
Dissolved CO_2 (mg/L)):	0.00
H_2S in Gas (%):	
H2S in Water (mg/L):	10.00

Analysis @ Properties in Sample Specifics			
Cations	*mg/L*	*Anions*	*mg/L*
Sodium (Na):	7730.00	Chloride (Cl):	14000.00
Potassium (K):	43.00	Sulfate (SO_4):	7.00
Magnesium (Mg):	8.50	Bicarbonate (HCO_3):	1952.00
Calcium (Ca):	11.20	Carbonate (CO_3):	
Strontium (Sr):	9.30	Acetic Acid (CH_3COO)	
Barium (Ba):	16.00	Propionic Acid (C_2H_5COO)	
Iron (Fe):	3.70	Butanoic Acid (C_3H_7COO)	
Zinc (Zn):	0.14	Isobutyric Acid ($(CH_3)_2CHCOO$)	
Lead (Pb):	0.00	Fluoride (F):	
Ammonia NH_3:		Bromine (Br):	
Manganese (Mn):	0.62	Silica (SiO_2):	

Notes:
Al=.13 B=9 Li=1.9

(PTB = Pounds per Thousand Barrels)

		Calcium Carbonate		Barium Sulfate		Iron Sulfide		Iron Carbonate		Gypsum CaSO4·2H2O		Celestite SrSO4		Halite NaCl		Zinc Sulfide	
Temp (°F)	PSI	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB
210.00	60.00	1.34	9.30	0.00	0.00	3.37	2.04	2.85	2.69	0.00	0.00	0.00	0.00	0.00	0.00	8.62	0.07
200.00	60.00	1.29	9.24	0.00	0.00	3.37	2.04	2.81	2.68	0.00	0.00	0.00	0.00	0.00	0.00	8.71	0.07
190.00	60.00	1.25	9.17	0.00	0.00	3.36	2.04	2.77	2.68	0.00	0.00	0.00	0.00	0.00	0.00	8.80	0.07
180.00	60.00	1.20	9.11	0.00	0.00	3.36	2.04	2.72	2.68	0.00	0.00	0.00	0.00	0.00	0.00	8.90	0.07
170.00	60.00	1.16	9.04	0.00	0.00	3.37	2.04	2.68	2.68	0.00	0.00	0.00	0.00	0.00	0.00	9.01	0.07
160.00	60.00	1.12	8.97	0.00	0.00	3.38	2.04	2.63	2.68	0.00	0.00	0.00	0.00	0.00	0.00	9.13	0.07
150.00	60.00	1.09	8.89	0.00	0.00	3.40	2.04	2.59	2.68	0.00	0.00	0.00	0.00	0.00	0.00	9.25	0.07
140.00	60.00	1.05	8.82	0.00	0.00	3.43	2.04	2.54	2.68	0.00	0.00	0.00	0.00	0.00	0.00	9.38	0.07
130.00	60.00	1.02	8.74	0.02	0.13	3.46	2.04	2.49	2.68	0.00	0.00	0.00	0.00	0.00	0.00	9.53	0.07
120.00	60.00	0.99	8.66	0.07	0.59	3.50	2.04	2.44	2.68	0.00	0.00	0.00	0.00	0.00	0.00	9.68	0.07

Multi-Chem Analytical Laboratory
1553 East Highway 40
Vernal, UT 84078

ATTACHMENT F
2 of 5

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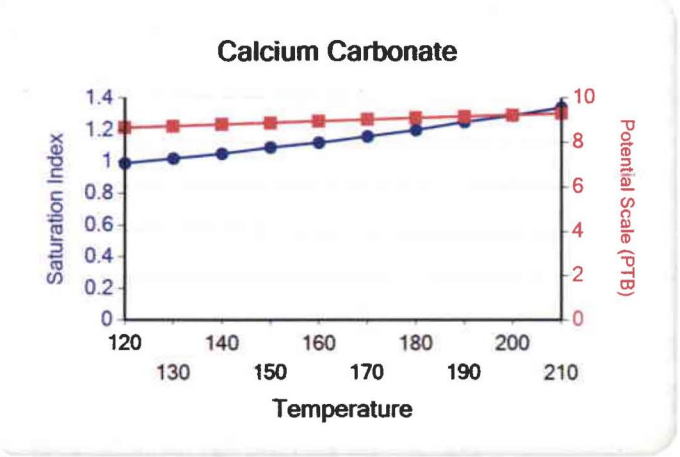
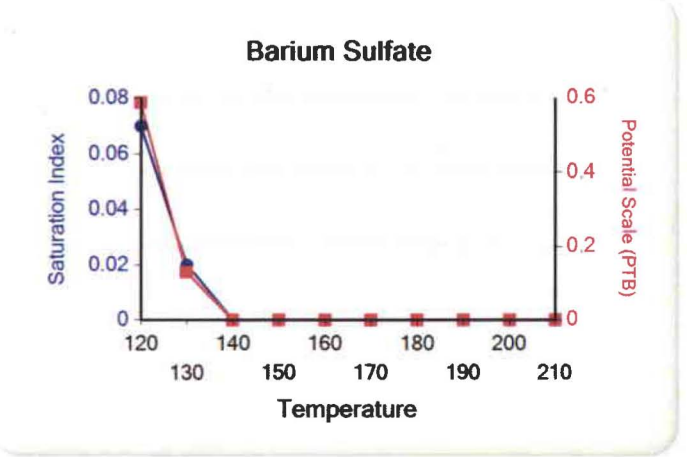
Water Analysis Report

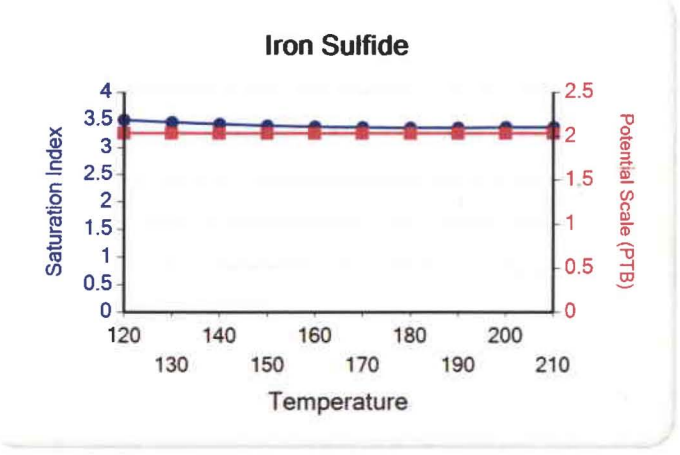
		Hemihydrate CaSO4~0.5H2O		Anhydrate CaSO4		Calcium Fluoride		Zinc Carbonate		Lead Sulfide		Mg Silicate		Ca Mg Silicate		Fe Silicate	
Temp (°F)	PSI	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB
210.00	60.00	0.00	0.00	0.00	0.00	0.00	0.00	1.36	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	60.00	0.00	0.00	0.00	0.00	0.00	0.00	1.29	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
190.00	60.00	0.00	0.00	0.00	0.00	0.00	0.00	1.21	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
180.00	60.00	0.00	0.00	0.00	0.00	0.00	0.00	1.13	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
170.00	60.00	0.00	0.00	0.00	0.00	0.00	0.00	1.05	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
160.00	60.00	0.00	0.00	0.00	0.00	0.00	0.00	0.96	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
150.00	60.00	0.00	0.00	0.00	0.00	0.00	0.00	0.86	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
140.00	60.00	0.00	0.00	0.00	0.00	0.00	0.00	0.76	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
130.00	60.00	0.00	0.00	0.00	0.00	0.00	0.00	0.65	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
120.00	60.00	0.00	0.00	0.00	0.00	0.00	0.00	0.54	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

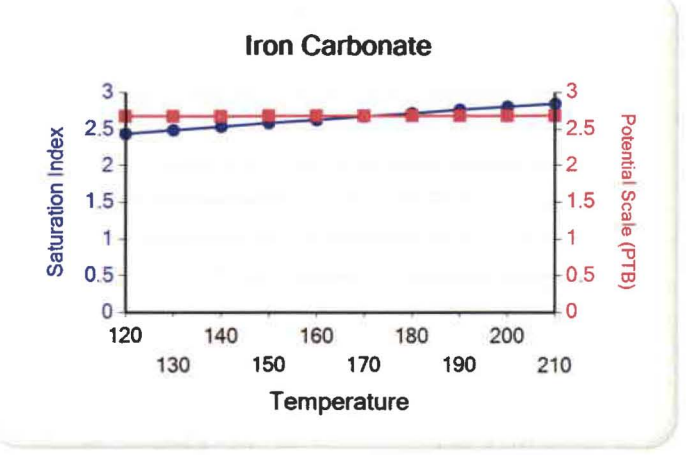
These scales have positive scaling potential under initial temperature and pressure: Calcium Carbonate Iron Sulfide Iron Carbonate Zinc Sulfide Zinc Carbonate

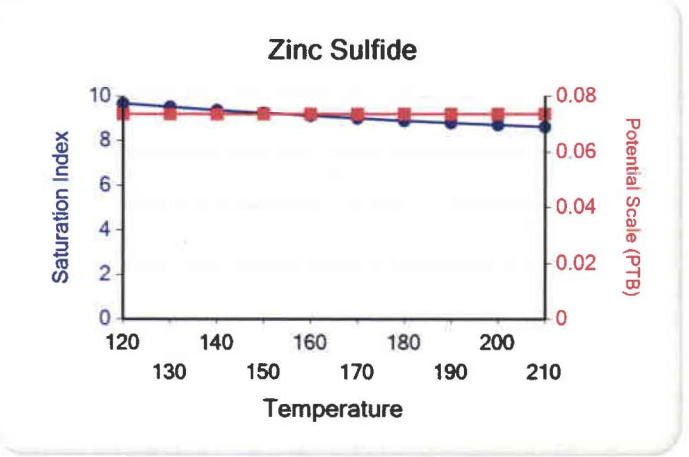
These scales have positive scaling potential under final temperature and pressure: Calcium Carbonate Barium Sulfate Iron Sulfide Iron Carbonate Zinc Sulfide Zinc Carbonate

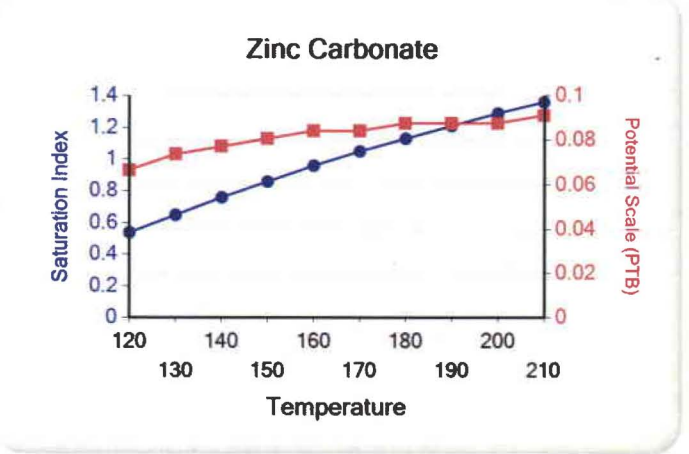









Zinc Sulfide
Saturation Index
Potential Scale (PTB)
Temperature
10
8
6
4
2
0
0.08
0.06
0.04
0.02
0
120
130
140
150
160
170
180
190
200
210


Zinc Carbonate
Saturation Index
Potential Scale (PTB)
Temperature
1.4
1.2
1
0.8
0.6
0.4
0.2
0
0.1
0.08
0.06
0.04
0.02
0
120
130
140
150
160
170
180
190
200
210

Multi-Chem Analytical Laboratory
1553 East Highway 40
Vernal, UT 84078

Units of Measurement: **Standard**

ATTACHMENT F

4 of 5

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Water Analysis Report

Production Company: **NEWFIELD PRODUCTION**
Well Name: **WELLS DRAW INJ FACILITY**
Sample Point: **Commingled After Filter**
Sample Date: **11/18/2013**
Sample ID: **WA-259493**

Sales Rep: **Jacob Bird**
Lab Tech: **Gary Winegar**

Scaling potential predicted using ScaleSoftPitzer from Brine Chemistry Consortium (Rice University)

Sample Specifics	
Test Date:	11/26/2013
System Temperature 1 (°F):	120
System Pressure 1 (psig):	2000
System Temperature 2 (°F):	210
System Pressure 2 (psig):	2000
Calculated Density (g/ml):	0.999
pH:	6.50
Calculated TDS (mg/L):	2413.76
CO2 in Gas (%):	
Dissolved CO_2 (mg/L)):	24.00
H_2S in Gas (%):	
H2S in Water (mg/L):	0.00

Analysis @ Properties in Sample Specifics			
Cations	*mg/L*	*Anions*	*mg/L*
Sodium (Na):	141.00	Chloride (Cl):	1000.00
Potassium (K):	39.00	Sulfate (SO_4):	41.00
Magnesium (Mg):	24.00	Bicarbonate (HCO_3):	1122.00
Calcium (Ca):	41.00	Carbonate (CO_3):	
Strontium (Sr):	0.70	Acetic Acid (CH_3COO)	
Barium (Ba):	0.00	Propionic Acid (C_2H_5COO)	
Iron (Fe):	0.11	Butanoic Acid (C_3H_7COO)	
Zinc (Zn):	0.03	Isobutyric Acid ($(CH_3)_2CHCOO$)	
Lead (Pb):	0.00	Fluoride (F):	
Ammonia NH_3:		Bromine (Br):	
Manganese (Mn):	0.00	Silica (SiO_2):	4.92

Notes:
B=.4 Al=.18 Li=0

(PTB = Pounds per Thousand Barrels)

		Calcium Carbonate		Barium Sulfate		Iron Sulfide		Iron Carbonate		Gypsum CaSO4·2H2O		Celestite SrSO4		Halite NaCl		Zinc Sulfide	
Temp (°F)	PSI	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB
210.00	2000.00	0.31	15.83	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	2000.00	0.22	12.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
190.00	2000.00	0.14	7.94	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
180.00	2000.00	0.06	3.37	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
170.00	2000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
160.00	2000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
150.00	2000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
140.00	2000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
130.00	2000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
120.00	2000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Multi-Chem Analytical Laboratory
1553 East Highway 40
Vernal, UT 84078

ATTACHMENT F
5 of 5

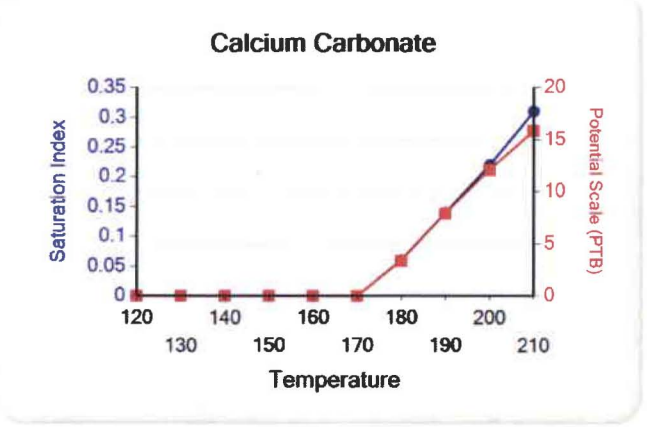
multi-chem®
A HALLIBURTON SERVICE

Water Analysis Report

		Hemihydrate CaSO4~0.5H2O		Anhydrate CaSO4		Calcium Fluoride		Zinc Carbonate		Lead Sulfide		Mg Silicate		Ca Mg Silicate		Fe Silicate	
Temp (°F)	PSI	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB
210.00	2000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	2000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
190.00	2000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
180.00	2000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
170.00	2000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
160.00	2000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
150.00	2000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
140.00	2000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
130.00	2000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
120.00	2000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

These scales have positive scaling potential under initial temperature and pressure: Calcium Carbonate

These scales have positive scaling potential under final temperature and pressure:



Attachment "G"

Federal #41-21Y-9-16
Proposed Maximum Injection Pressure

Frac Interval (feet) Top	Bottom	Avg. Depth (feet)	ISIP (psi)	Calculated Frac Gradient (psi/ft)	Pmax
5023	5036	5030	1950	0.82	1917 ←
5023	5036	5030	2084	0.85	2051
4645	4650	4648	1972	0.86	1942
				Minimum	1917

Calculation of Maximum Surface Injection Pressure
Pmax = (Frac Grad -(0.433*1.015)) x Depth of Top Perf
where pressure gradient for the fresh water is .433 psi/ft and
specific gravity of the injected water is 1.015.

Frac Gradient = (ISIP +(0.433*Top Perf.))/Top Perf.

Please note: These are existing perforations; additional perforations may be added during the actual conversion procedure.

ATTACHMENT G-1
1 of 3

BALCRON OIL
DAILY OPERATING REPORT

BALCRON FEDERAL #41-21Y
Location: NE NE Section 21, T9S, R16E
Duchesne County, Utah **---TIGHT HOLE---**

8-19-93 TD: 6,000' (-0-) Day 12
Formation: Green River
Present Operation: Running Casing.
Log well, rig down loggers. Wait on orders. Trip in hole & circulate. Unload 5-1/2" casing. Lay down drillpipe & collars; rig up casers & run casing.
DC: $20,275 CC: $160,898

8-20-93 TD: 6,000' (-0-) Day 13
Formation: Green River
Present Operation: Moving rig.
Finish running casing, cement with Western. Nipple down & clean mud tank.

One 5-1/2" guide shoe	.70'
One jt 5-1/2" 15.5#/ft K-55	43.14'
One 5-1/2" float collar	2.65'
138 jts 5-1/2" 15.5#/ft K-55	5,957.53'
Total String	6,004.02'

Set @5,999'. PBTD 5,950'.

Ran 20 centralizers. Cemented with 165 sxs Thrifty lite. Tailed in with 275 sxs 50-50 Pozmix. Job looked good. Plug down 8:30 AM 8/19/93. **Release rig 12:30 PM 8/19/93.**
DC: $48,259 CC: $209,157

8-23-93 NU BOP & tbg head. TIH w/4-3/4" drag bit & scraper & 195 jts 2-7/8" tbg EUE tag. PBTD @ 5,950'KB. TOOH w/2-7/8", 5-1/2" scraper & bit. RU Cutter Wire Line to Bond Log & perforate top of cement @ 2,980'KB. Perforate 5,023'-5,036'KB, 2 SPF. RD Cutter Wire Line. SWIFN.
DC: $4,950 CC: $4,950

8-24-93 Cas PSIG 1. TIH w/162 jts, 2-7/8" tbg, 1-SN, one 5-1/2" HD PKR, 1 jt 2-7/8" tbg. Set pkr @ 4,967'KB. Bottom of tbg 4,999'KB. RU Halliburton to break down formation. Pressure test surface equipment to 4000 PSIG - OK. Break back @ 2500 PSIG, pump 6 bbls water. Start balls, 1 ball per bbl - 4 BPM. 25 bbls total, no ball off.

ATTACHMENT G-1
2 of 3

BALCRON OIL
DAILY OPERATING REPORT

BALCRON FEDERAL #41-21Y
Location: NE NE Section 21, T9S, R16E
Duchesne County, Utah **---TIGHT HOLE---**

Surge balls back. Shut down 15 minutes. Pump 14 bbls water for rate. 2-1/2 BPM @ 2500 PSIG. ISIP 1950 PSIG, flow back 20 bbls water. Made 8 swab runs, well swabbed down. Last three runs, trace of oil. Load recovered 59 bbls water. TOOH w/tbg & packer. SWIFN. Total load to recover 97 bbls water.
DC: $3,017 CC: $217,124

8-25-93 Casing pressure slight blow. RU Halliburton to frac 5,023'-5,036'. Pressure test surface equipment to 4000 PSIG - OK. Start frac 1 to 7 pd. ramp. Max pressure 3200 PSIG. Max rate 36 BPM. 2470 average pressure, average rate 34 BPM. Frac complete. ISIP 2084, 5 minutes 1770, 10 minutes 1723, 15 minutes 1672. SWIFD.
DC: $20,409 CC: $237,533

8-26-93 Cas 790 PSIG. TIh w/1 jt 2-7/8" tbg, 5-1/2" R-3 packer, SN & 190 jts tbg. Land bottom of tbg @4,999'KB. Set packer @4,967'KB. Made 48 swab runs. Flowed back 60 bbls water, swabbed back 253 bbls water. Last three runs tag fluid @ 4,500'. Last 2 runs 2% oil. SWIFN.
DC: $3,344 CC: $240,877
---PLEASE SEE ATTACHED REPORTS, 2 PAGES---

8-27-93 Cas "0" PSIG, tbg 35 psi. Tag fluid 1500' from surface. Made 30 swab runs. Swab back 122 bbls water. Unseat packer, circulate sand out of well. TOOH w/tbg & packer. RU Schlumberger to preforate 4,645'-4,650' - 1SPF; 4,614' - 4,624' - 1SPF. SWIFN. DC: $2,971
CC: $243,848

8-28-93 TIH w/5-1/2" retrievable bridge plub, one jt 2-7/8" tbg, one 5-1/2" R-3 packer & 2-7/8" tbg. Set bridge plug at 4700', set packer at 4551'. Bottom of tubing at 4,583'. RU Halliburton to break down. Test surface equipment - OK. Start break down - 1 ball per bbl, 3 bbls per minute. Ball off. Surge balls back. Pump for rate 6.5 BPM at 2650 PSIG, ISIP 1400 psi. Pressure test surface equpment to 4000 PSIG - OK. Start pad. Start sand 1# to 7# ramp. Maximum rate 35 BPM. Start fresh 2750 maximum pressure. ISIP 1972 psi, 5 minutes 1971 psi, 10 minutes 1679 psi, 16 minutes 1607 psi. SWIFN.
DC: $22,846 CC: $266,694

ATTACHMENT G-1
3 of 3

BALCRON OIL
DAILY OPERATING REPORT

BALCRON FEDERAL #41-21Y
Location: NE NE Section 21, T9S, R16E
Duchesne County, Utah

---TIGHT HOLE---

8-30-93 Casing psi 40. TIH w/5-1/2" packer & 2-7/8" tbg, tag fill @ 4,633' KB. Circulate to 4,670', set packer @ 4,550'. Made swab 30 runs, swab back 180 bbls fluid - 7% oil. No sand in fluid after 30 hrs. Last three runs 15% oil. Release packer, tag fill @ 4,650'KB. Circulate sand out to bridge plug (4,700'). Release bridge plug & TOOH w/36 jts 2-7/8" tbg. SDFN.
DC: $2,600 CC: $269,294

8-31-93 Cas. = Vacuum, tubing slight blow. TOOH w/tbg, packer & bridge plug. TIH w/1 jt 2-7/8" EUE, J-55, 8 rods, 6.5# tbg - length 31.82', landed at 5,096.63'KB; 1 perf nipple 2-7/8" x 3' - length 3.20'; 1 seating nipple - length 1.10'; 165 jts 2-7/8" tbg EUE, J-55, 8 rods, 6.5# tbg - length 5,047.51'. ND BOP. NU wellhead. TIH w/1 BHP 2-1/2" x 1-1/2" x 16' RHAC pressure actuated plunger, 6 rods 1" x 25" EL w/2-1/2" Ricton guides, 195 rods 3/4" x 25' D slick, one 3/4" x 8' pony, one 3/4" x 4' pony, one 1-1/4" x 16' polish rod SM. RDMO.
DC: $7,565 CC: $276,859

ATTACHMENT H

WORK PROCEDURE FOR PLUGGING AND ABANDONMENT

1.		Set CIBP @ 4564'
3.	Plug #1	Set 100' plug on top of CIBP using 12 sx Class "G" cement
3.		Perforate 4 JSPF @ 2935'
4.	Plug #2	168' plug covering Trona/Mohagany Bench Formation using 30 sx Class "G" Cement pumped under CICR and out perforations. Follow using 13 sx Class "G" cement pumped on top of CICR
5.		Perforate 4 JSPF @ 1567'
6.	Plug #3	120' plug covering Uinta/Green River formation using 25sx Class "G" cement pumped under CICR and out perforations. Follow using 7 sx Class "G" cement pumped on top of CICR
7.		Perforate 4 JSPF @ 308'
8.	Plug #4	Circulate 80 sx Class "G" cement down 5 ½" casing and up the 5-1/2" x 8-5/8" annulus

The approximate cost to plug and abandon this well is $42,000.

ATTACHMENT H-1

Balcron Federal #41-21y

Proposed Injection Wellbore Diagram

Elev.GR - 5953.5' GL
Elev.KB - 5966' (13' KB)

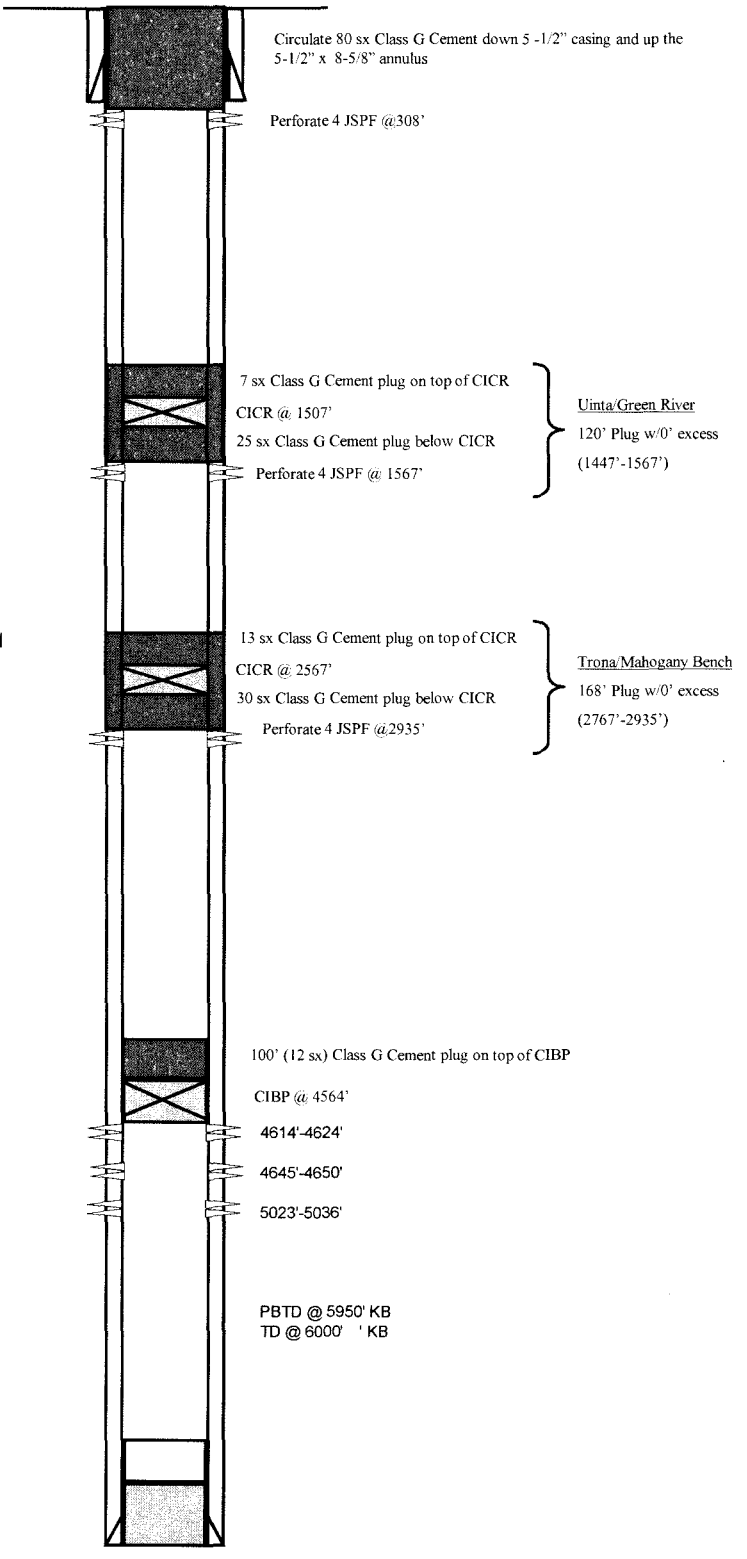
SURFACE CASING

CSG SIZE: 8-5/8"
GRADE: J-55
WEIGHT: 24#
LENGTH: 250'
DEPTH LANDED: 258' KB
HOLE SIZE: 12-1/4"
CEMENT DATA: 15 sks class "G"

PRODUCTION CASING

CSG SIZE: 5-1/2"
GRADE: J-55
WEIGHT: 15.5#
LENGTH: 6004.02'
DEPTH LANDED: 5999' KB
HOLE SIZE: 7-7/8"
CEMENT DATA: 165 sks thrifty lite. Tailed w/ 275 sks 50-50 POZ.

CEMENT TOP AT: 2980' KB



NEWFIELD

Balcron Federal #41-21y
Monument Butte
Lease #U-64379
NE NE Section 21, T9S, R16E
970.2' FNL, 893.8 FEL
Duchesne County, Utah

JL 4/1/2014