

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

RECEIVED  
 (Other instructions on reverse side)  
**JAN 23 1995**  
 DIV OF OIL, GAS & MINING

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

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

1a. TYPE OF WORK  
 DRILL       DEEPEN       PLUG BACK

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

2. NAME OF OPERATOR  
 Rocky Mountain Operating Company, Inc.

3. ADDRESS OF OPERATOR  
 6131 S. Forest Court Littleton, CO 80121 303-850-7921

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)\*  
 At surface 741' FWL, 691' FSL, SW SW Section 4, T9S, R18E SLB&M  
 At proposed prod. zone Same

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\*  
 Approximately 19 miles south of Myton, Utah

10. DISTANCE FROM PROPOSED\* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any) 691'

16. NO. OF ACRES IN LEASE

17. NO. OF ACRES ASSIGNED TO THIS WELL 40

18. DISTANCE FROM PROPOSED LOCATION\* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT. 1000'

19. PROPOSED DEPTH 6000'±

20. ROTARY OR CABLE TOOLS Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.) GR - 4962'

22. APPROX. DATE WORK WILL START\* 2/15/95

7. UNIT AGREEMENT NAME Eight Mile Flat Unit

8. FARM OR LEASE NAME Participating Area "C"

9. WELL NO. Federal #4-3

10. FIELD AND POOL, OR WILDCAT

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA Sec. 4, T9S, R18E SLB&M

12. COUNTY OR PARISH Uintah

13. STATE Utah

**23. PROPOSED CASING AND CEMENTING PROGRAM**

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12 1/2"	9-5/8"	36#	300'	100 sx Class A
7-7/8"	5 1/2"	17.0#	6000'	400 sx Class A

The operator plans to drill a development well to test the lower Green River formation. The drilling operations will follow the attached drilling prognosis. All water flows and hydrocarbon shows will be reported. Adequate BOP equipment will be maintained at all times. If commercial production is established, production casing will be run and cemented adequately to protect the zones of interest. No abnormal pressures or temperatures are anticipated. Anticipated BHP is 2000 psia.

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 *Edward As...* TITLE President DATE January 1, 1995

(This space for Federal or State office use)

PERMIT NO. 43-047-32653 APPROVAL DATE \_\_\_\_\_

APPROVED BY *[Signature]* TITLE \_\_\_\_\_  
 APPROVED BY *[Signature]* DATE 3/18/95  
 OF UTAH DIVISION OF OIL, GAS, AND MINING

DATE: \_\_\_\_\_ BY: \_\_\_\_\_

\*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 the jurisdiction.

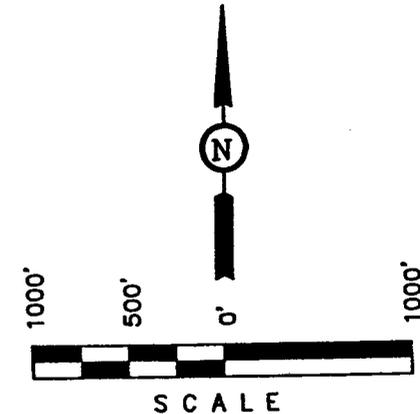
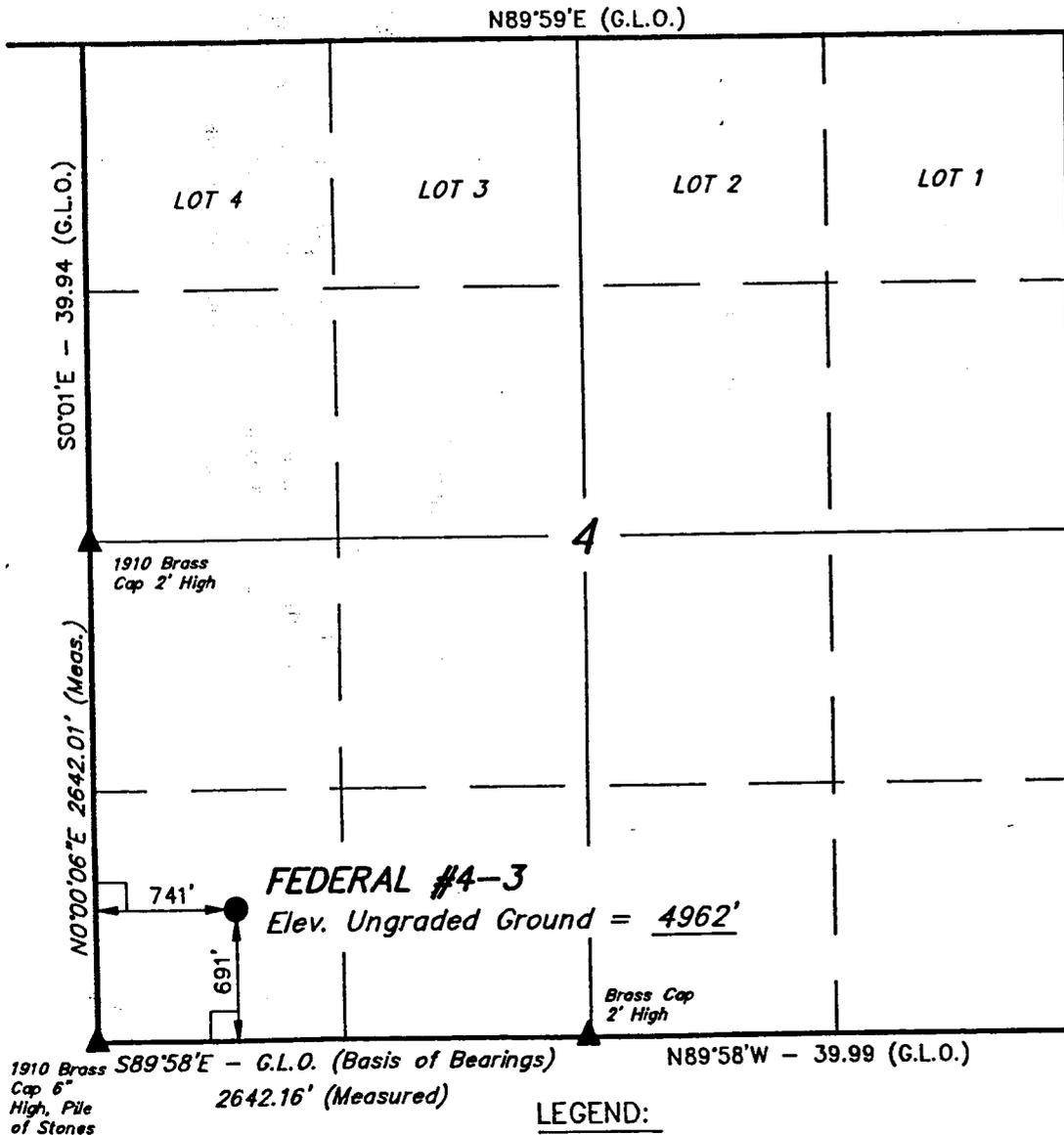
T9S, R18E, S.L.B.&M.

ROCKY MOUNTAIN OPERATING CO., INC.

Well location, FEDERAL #4-3, located as shown in the SW 1/4 SW 1/4 of Section 4, T9S, R18E, S.L.B.&M. Uintah County, Utah

BASIS OF ELEVATION

SPOT ELEVATION AT THE SOUTHWEST CORNER OF SECTION 4, T9S, R18E, 6th P.M. TAKEN FROM THE PARIETTE DRAW SW QUADRANGLE, UTAH, 7.5 MINUTE QUAD. (TOPOGRAPHIC MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. SAID ELEVATION IS MARKED AS BEING 4993 FEET.



CERTIFICATE

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.

*Robert L. Kay*  
 REGISTERED LAND SURVEYOR  
 REGISTRATION NO. 161319  
 STATE OF UTAH

<b>UINTAH ENGINEERING &amp; LAND SURVEYING</b>		
85 SOUTH 200 EAST - VERNAL, UTAH 84078		
(801) 789-1017		
SCALE 1" = 1000'	DATE SURVEYED: 9-9-94	DATE DRAWN: 9-13-94
PARTY G.S. R.A. D.J.S.	REFERENCES G.L.O. PLAT	
WEATHER	FILE	

LEGEND:

- └ = 90° SYMBOL
- = PROPOSED WELL HEAD.
- ▲ = SECTION CORNERS LOCATED

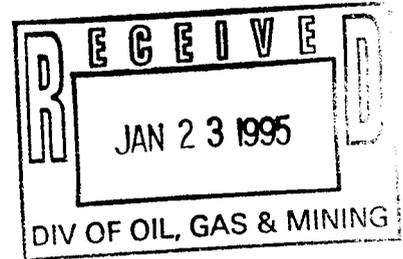
1910 Brass Cap 6" High, Pile of Stones  
 S89°58'E - G.L.O. (Basis of Bearings)  
 2642.16' (Measured)



# Rocky Mountain Operating Company, Inc.

6131 S. Forest Ct. • Heritage Village • Littleton, CO 80121 • (303) 850-7921

January 19, 1995



U.S. Department of Interior  
Bureau of Land Management  
170 South 500 East  
Vernal, Utah 84078

Re: APD for #4-2 & #4-3 Wells located in Section 4, T9S, R18E, Uintah County.

Gentlemen:

Find enclosed the following documents related to the drilling of the above captioned wells:

1. Application for Permit to Drill
2. Surveyor's Plat
3. Well/Drilling Prognosis
4. BOP & Pressure Control Specifications
5. 13-Point Surface Use Plan

Your early response to this application will be appreciated as we would like to commence operations as soon as possible. Should you require any additional information, please contact this office.

Sincerely,

Edward Neibauer  
President

encl.

cc. Utah Division of Oil, Gas & Mining  
3 Triad Center, Suite 350  
Salt Lake City, Utah 84180-1203

## WELL PROGNOSIS

WELL: Federal #4-3

LOCATION: SW/4 SW/4 Section 4, T9S, R18E, Uintah County, Utah

DRILLING CONTRACTOR: To be selected.

ELEVATION: GR - 4962' KB - 4974' (estimated)

FORMATION:	Formation	Depth	Datum
	Uintah	Surface	4962'
	Evacuation Creek	1700'	3274'
	Parachute Creek	2200'	2274'
	Douglas Creek	3900'	1074'
	Black Shale	5300'	-326'
	Green River Tongue	5900'	-926'

**SAMPLE COLLECTION:** Collect cuttings samples at ten (10) foot intervals from under surface casing to total depth. Samples will be collected by drilling crews for the wellsite geologist. Frequency of sample collection may be changed at the wellsite geologist's discretion.

**ELECTRIC LOGGING SURVEYS:** The following logging program will be as follows:

1500' to 6000' 7-7/8" hole below 9-5/8" casing.

1. FDC/CNL/GR
2. DLL/SP/GR

**MUD LOGGING:** A portable mud logging unit will be operated by a wellsite geologist below surface casing to total depth. A geolograph will be in service from surface casing to total depth.

**CORING:** No coring operations are anticipated.

**DRILLSTEM TESTING:** No DST's are anticipated.

## DRILLING PROGNOSIS

### FEDERAL #4-3

1. Move in air rotary drilling rig and drill 12-1/4" hole to 300'. Set and cement 9-5/8", 36# casing to surface with approximately 100 sacks cement.
2. Cut-off 9-5/8" casing and install 3000# casing flange. Install BOP equipment per BOP and Pressure containment program. Pressure test BOP's manifold and all valves to 3000 psig and annular preventer to 2000 psig prior to drilling casing shoe.
3. Drill 7-7/8" hole to total depth. Conduct electric logging and prepare hole for production casing.
4. Run 5-1/2", 17.0 #, K-55 production casing and cement as necessary across potential zones. The length of the cement column will be determined after the logs have been evaluated.
5. Release rotary drilling rig and determine completion procedure.

### SPECIAL INSTRUCTIONS:

1. Run deviation surveys at regular intervals and in conjunction with bit trips.
2. Utilize degasser and necessary solids control equipment.
3. Avoid surging hole on trips and fill hole properly when pulling pipe.
4. All crew members should be familiar with BOP operations. Test pipe rams daily and close blind rams each trip out of the hole.
5. Drilling crews should observe to detect either decrease or increase in fluid level.
6. A regular daily mud check should be made by mud engineer.

ROCKY MOUNTAIN OPERATING COMPANY, INC.  
13 POINT SURFACE USE PLAN  
FOR  
FEDERAL #4-3  
SECTION 4, T9S, R18E, S.L.B.&M.  
UINTAH COUNTY, UTAH

**ROCKY MOUNTAIN OPERATING COMPANY, INC.**  
**13 POINT SURFACE USE PLAN**

**1. EXISTING ROADS**

See attached Topographic Map "A" to reach the Federal #4-3 well location, located in Section 4, T9S, R18E, Uintah County, Utah. Proceed south from Myton along a gravel road approximately 19 miles which is known as the Pleasant Valley road. This road is well traveled and used daily to access the existing oil and gas wells in the Monument Butte and Eight Mile Flat Fields.

**2. PLANNED ACCESS ROAD**

See Topographic Map "B" for the proposed access road. In order to facilitate the anticipated traffic flow necessary to drill and produce this well, the following standards will be met:

- A. The proposed access road will be an 18' crown road (9' either side of the center-line) with drain ditches along either side of the proposed road where it is determined necessary in order to handle run-off from any normal meteorological conditions that are prevalent to this area.
- B. Back slopes along the cut areas of the road will be 1 1/2 to 1 slopes and terraced.
- C. The road will be center-line flagged prior to the commencement of construction.
- D. The grade of this road will vary from flat to 8%, but will not exceed this amount. This road will be constructed from native borrow accumulated during construction.
- E. No major cuts, fills or culverts are anticipated for construction on the road.
- F. Any fences that are encountered along this access road will be cut and replaced with a cattleguard with minimum width of 18' and a loading factor large enough to facilitate the truck traffic required in the drilling and production of this well.
- G. If cattleguards are to be located at existing gates they will be installed with the above requirements and with a new gate installed at one end of the cattleguard.
- H. The access from the road to the gate will be of such a nature that there will be no impedance of traffic flow along the main access road and no difficulties encountered by traffic utilizing the gate either leaving or entering the proposed access road.

### **3. LOCATION OF EXISTING WELLS**

As shown on Topographic Map "B", the other known wells within a one-mile radius are identified as follows:

1. Water Wells - None
2. Abandoned Wells - None
3. Temporarily abandoned wells - None
4. Disposal Wells - None
5. Drilling Wells - None
6. Producing Wells - One
7. Shut-in Wells - Six
8. Injection Wells - None
9. Monitoring or observation wells for other purposes - None

### **4. LOCATION OF TANK BATTERIES, PRODUCTION FACILITIES AND PRODUCTION GATHERING LINES AND SERVICE LINES**

All production facilities are to be contained within the proposed location site. In the event production is established:

- (1) Any plans for a oil and gas flowlines from this location to existing gathering lines or a main production line will be submitted to the appropriate agencies for approval.
- (2) All production facilities will be located on the existing site.
- (3) Construction materials will be native borrow or cut exposed on the site and will be consistent with accepted oil field standards and good engineering practices.
- (4) The reserve pit will be fenced on three sides during drilling and completion operations and will be rehabilitated to conform with the provisions of plans for surface restoration.

### **5. LOCATION OF AND TYPE OF WATER SUPPLY**

Water required for drilling operations will be transported by truck over the existing and proposed access roads from private and/or state sources. No additional roads or pipelines will be required. If a water well is necessary for the drilling of this well, proper permits will be obtained prior to commencement of operations.

### **6. SOURCE OF CONSTRUCTION MATERIALS**

Construction materials will be obtained from Federal lands. The proposed access road will be crossing Federal lands.

## **7. METHOD FOR HANDLING WASTE DISPOSAL**

See Location Layout Sheet. A reserve pit will be constructed as follows:

- (1) The reserve pit will be approximately 8' deep and at least one half of this depth shall be below the surface of the existing ground.
- (2) One half of the reserve pit will be used as a fresh water storage area during the drilling of this well and the other half will be used to store non-flammable materials such as cuttings, salts, drilling fluids, chemicals, produced fluids, etc.
- (3) If deemed necessary by the agencies concerned, the reserve pit will be lined with a liner or gel.
- (4) The pits will have overhead flagging installed if deemed necessary to protect the water fowl, wildlife and domestic animals.
- (5) When the reserve pit dries and the reclamation activities commence, the pits will be covered with a minimum of 4 feet of soil and all requirements will be followed.
- (6) Garbage and other waste materials will be contained in an enclosed wire mesh trash bin on the location and hauled to the nearest sanitary fill as necessary.
- (7) A portable chemical toilet will be supplied for human waste.

## **8. ANCILLARY FACILITIES**

There are no ancillary facilities planned for at the present time and none foreseen in the near future.

## **9. WELL SITE LAYOUT**

See Location Layout Sheet. The Bureau of Land Management District Manager shall be notified before any construction begins on the proposed location site. The pits will be unlined unless it is determined by the representatives of the agencies involved that the materials are too porous and cause contamination to the surrounding areas, then the pits will be lined with gel and any other type material necessary to make it safe and tight. When drilling activities commence, all work shall proceed in a neat and orderly sequence.

## **10. PLANS FOR RESTORATION OF SURFACE**

All topsoil shall be stripped and stockpiled. When all drilling production activities have been completed, the location site and access road will be reshaped to the original contour and stockpiled topsoil spread over the disturbed area. All drainage's re-routed during the construction activities shall be restored to their original line of flow as near as possible.

Fences around pits are to be removed upon completion of drilling activities and all waste being contained in the trash pit shall be buried with a minimum of 5' of cover. Any appreciable amount of oil will be removed from the reserve pit prior to restoration activities. Restoration activities shall begin within 90 days after completion of the well. Once completion activities have begun, they shall be completed within 30 days. When restoration activities have been completed, the location site and access ramp shall be reseeded with a seed mixture recommended by the BLM District Manager when the moisture content of the soil is adequate for germination. The Lessee further covenants and agrees that all of said cleanup and restoration activities shall be done and performed in a diligent and most workmanlike manner.

#### **11. OTHER INFORMATION**

The surface area in the general area is primarily used for oil and gas operations and grazing domestic sheep and cattle. The topsoil in the area range from a light brownish-gray sandy clay (SM-ML) type soil to poorly graded gravels to a clay (OL) type soil. The majority of the numerous washes and streams in the area are of a non-perennial nature flowing during the early spring run-off and extremely heavy rain storms of long duration which are extremely rare.

Due to the low precipitation average, climatic conditions and the marginal types of soils, the vegetation that is found in the area is common of the semi-arid region that exists in the Uinta Basin. It consists of areas of scrub brush, rabbit brush and grasses as the primary flora.

The fauna of the area consists of predominately of rabbits and varieties of small ground squirrels and other types of rodents. The area is used by man for the primary purpose of grazing domestic sheep and cattle and recreation.

The birds of the area are raptors, finches, ground sparrows and magpies.

The topography of the immediate area consists of a high desert plateau with gentle slopes along with rocky outcrops to the north. The vegetation is predominantly scrub brush and grasses. There are no occupied dwellings or other facilities of this nature in the general area. There are no visible archaeological, historical or cultural sites within any reasonable proximity of the proposed location site.

#### **12. LESSEE'S OR OPERATOR'S REPRESENTATIVE**

Edward Neibauer  
6131 South Forest Court  
Littleton, Colorado 80121

Telephone - 303-850-7921  
Fax - 303-850-7950

**13. CERTIFICATION**

I hereby certify that I, or persons under my direct supervision have inspected the proposed drill site and access route; that I am familiar with the conditions which presently exist; that the statements made in this plan are, to the best of my knowledge and belief, true and correct; that the work associated with the operations proposed herein will be performed by Rocky Mountain Operating Company, Inc. and its contractors and sub-contractors in conformity with this plan and terms and conditions under which it is approved.

**ROCKY MOUNTAIN OPERATING COMPANY, INC.**

---

**Edward Neibauer, President**

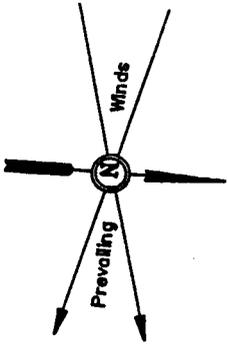
---

**Date**

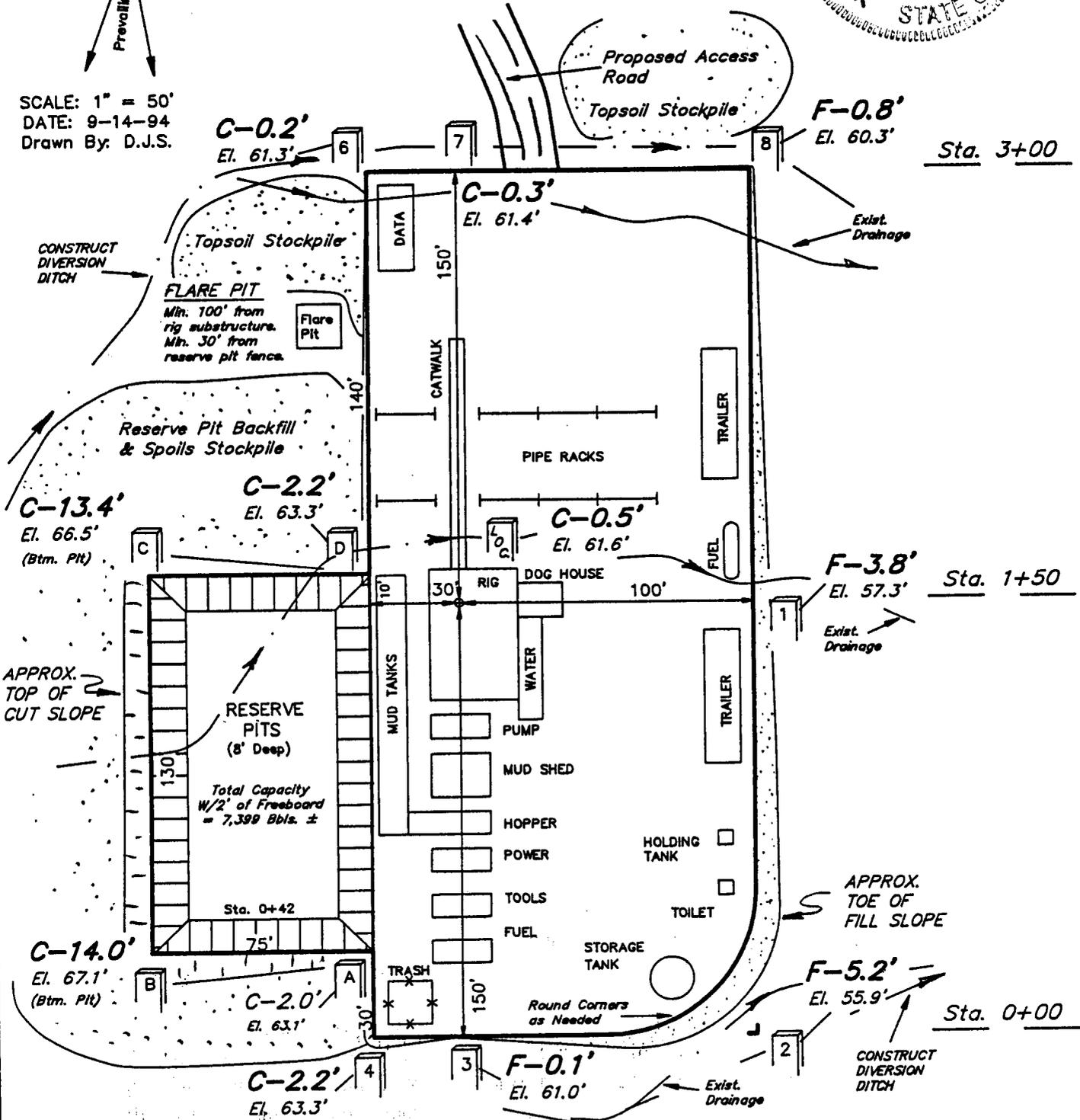
# ROCKY MOUNTAIN OPERATING CO., INC.

## LOCATION LAYOUT FOR

FEDERAL #4-3  
SECTION 4, T9S, R18E, S.L.B.&M.  
691' FSL 741' FWL



SCALE: 1" = 50'  
DATE: 9-14-94  
Drawn By: D.J.S.



Elev. Ungraded Ground at Location Stake = 4961.6

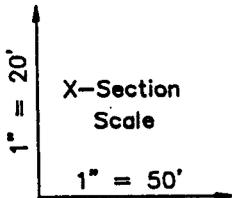
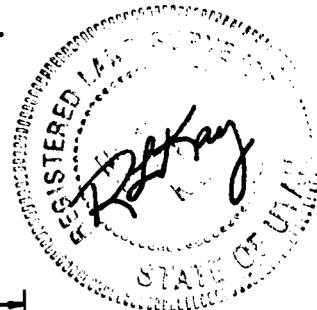
Elev. Graded Ground at Location Stake = 4961.1

UINTAH ENGINEERING & LAND SURVEYING  
86 So. 200 East • Vernal, Utah 84078 • (801) 789-1077

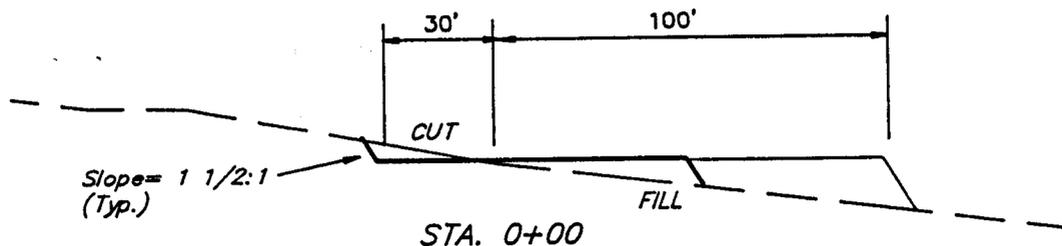
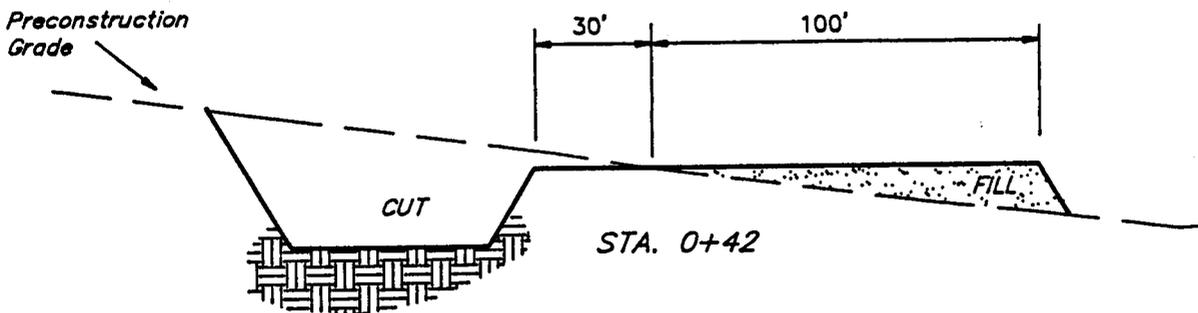
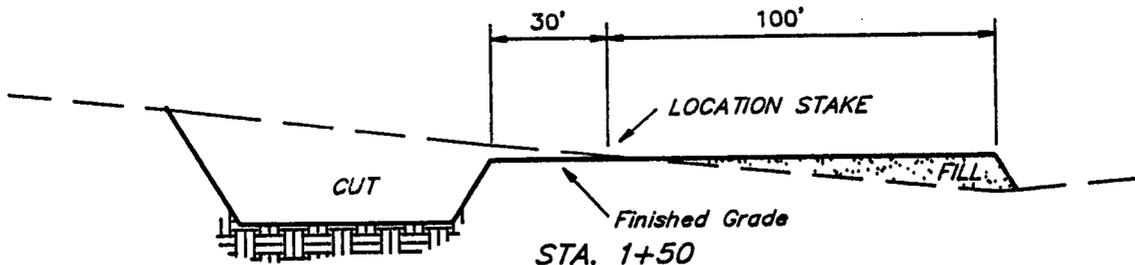
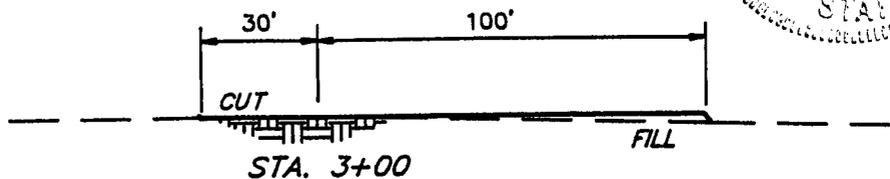
# ROCK MOUNTAIN OPERATING CO. INC.

## LOCATION LAYOUT FOR

FEDERAL #4-3  
SECTION 4, T9S, R18E, S.L.B.&M.  
691' FSL 741' FWL



DATE: 9-14-94  
Drawn By: D.J.S.



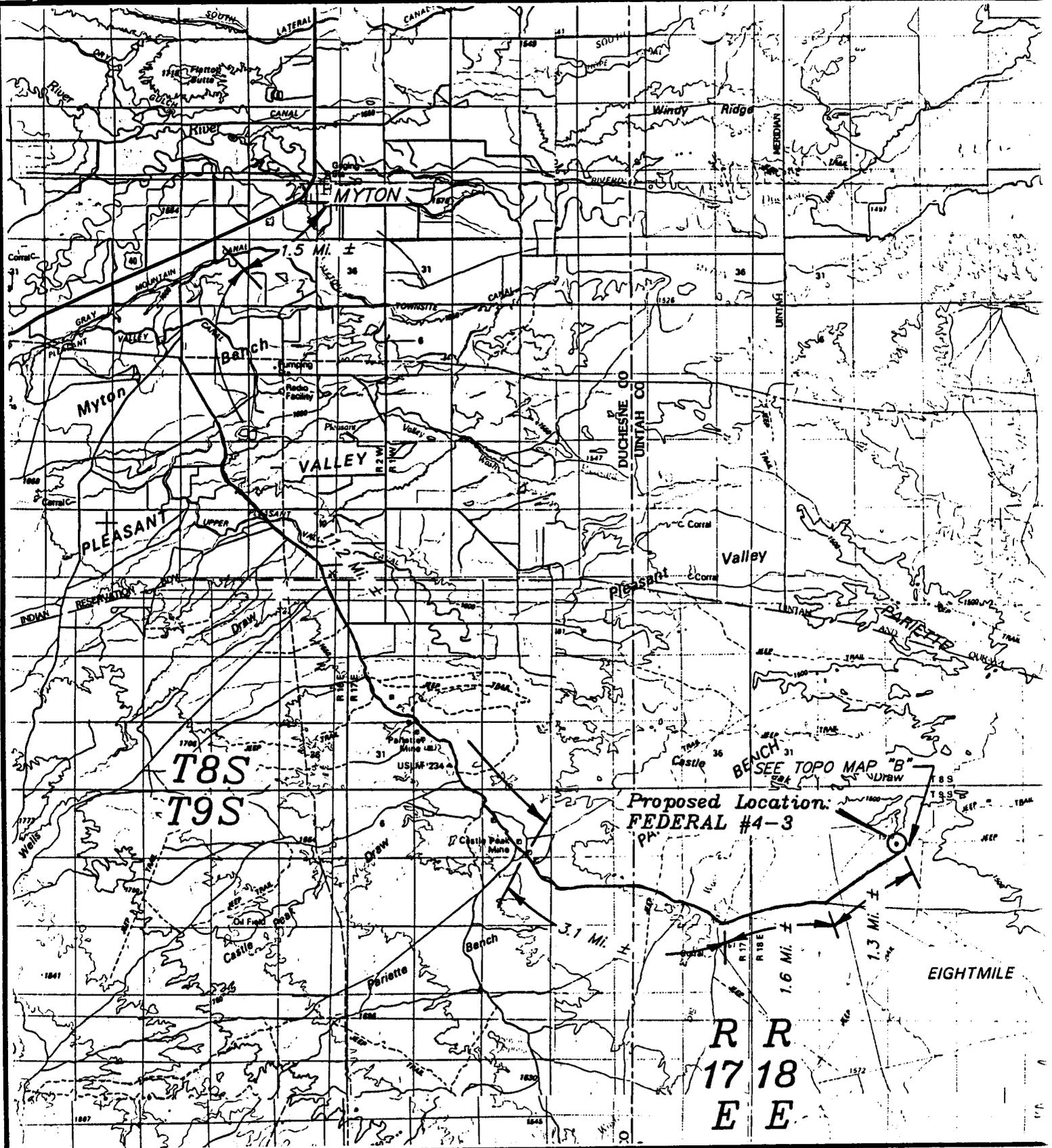
**NOTE:**

Topsoil should not be Stripped Below Finished Grade on Substructure Area.

### APPROXIMATE YARDAGES

CUT  
(6") Topsoil Stripping = 900 Cu. Yds.  
Remaining Location = 3,600 Cu. Yds.  
TOTAL CUT = 4,500 CU.YDS.  
FILL = 2,360 CU.YDS.

EXCESS MATERIAL AFTER 5% COMPACTION = 2,020 Cu. Yds.  
Topsoil & Pit Backfill (1/2 Pit Vol.) = 2,010 Cu. Yds.  
EXCESS UNBALANCE (After Rehabilitation) = 10 Cu. Yds.

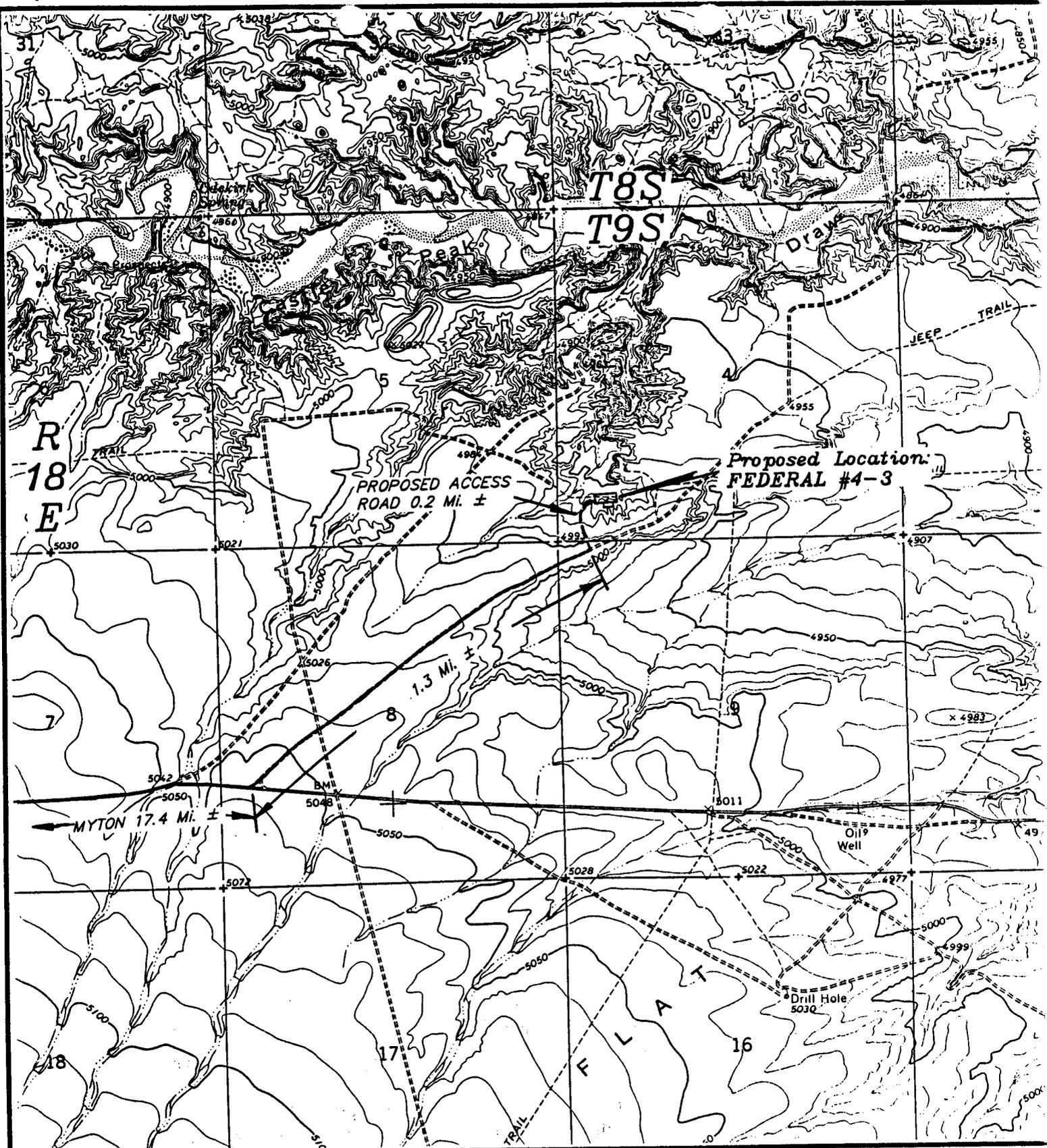


TOPOGRAPHIC  
 MAP "A"  
 DATE: 9-15-94 D.J.S.



ROCKY MOUNTAIN OPERATING CO., INC

FEDERAL #4-3  
 SECTION 4, T9S, R18E, S.L.B.&M.  
 691' FSL 741' FWL



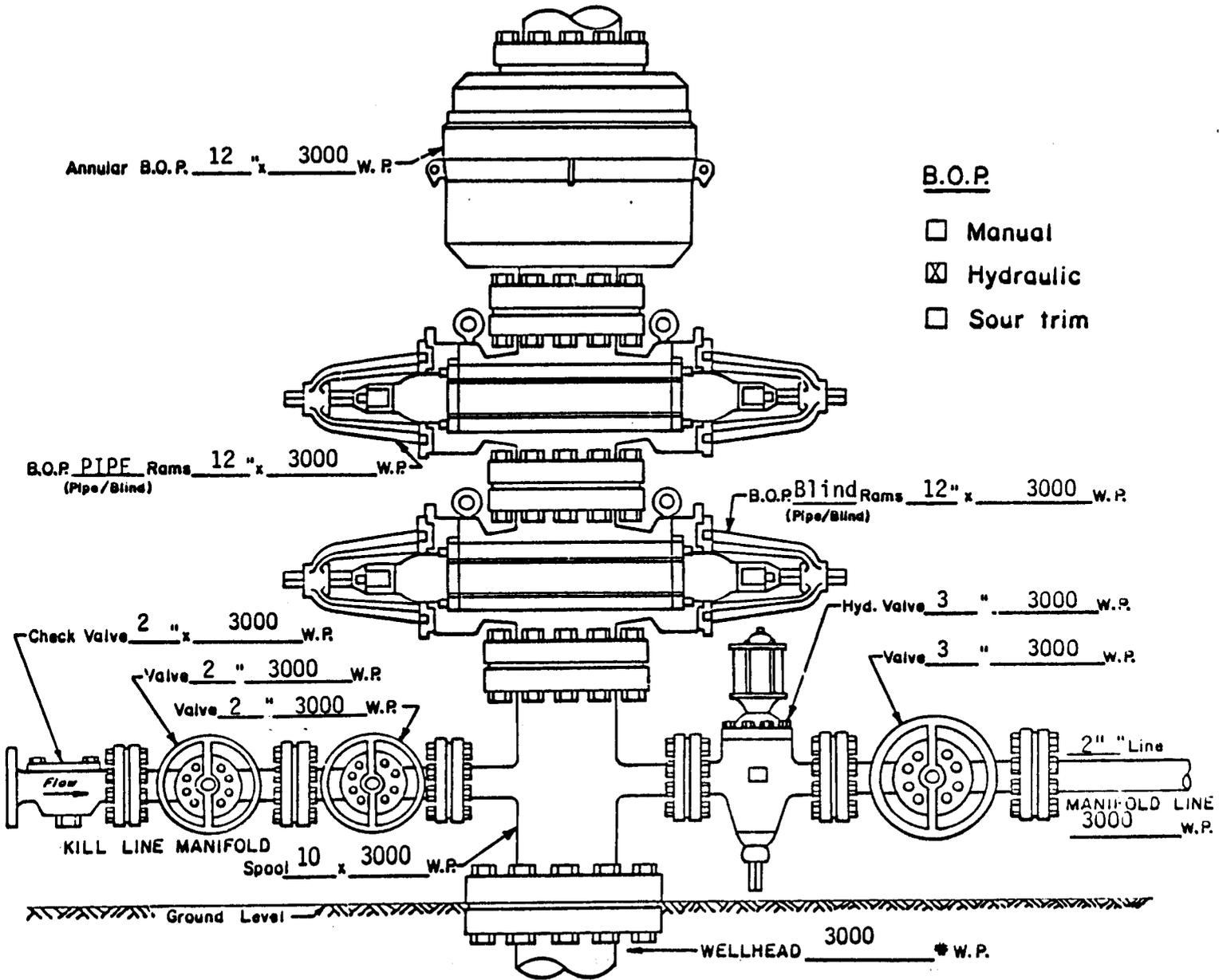
TOPOGRAPHIC  
 MAP "B"  
 SCALE: 1" = 2000'  
 DATE: 9-15-94 D.J.S.



ROCKY MOUNTAIN OPERATING CO., INC  
 FEDERAL #4-3  
 SECTION 4, T9S, R18E, S.L.B.&M.  
 691' FSL 741' FWL

# WELLHEAD BLOWOUT CONTROL SYSTEM

COMPANY	WELL NAME AND NUMBER
Rocky Mountain Operating Co., Inc.	Federal #4-3
LOCATION	SW/4 SW/4 Section 4 T9S R18E Uintah County, Utah



- B.O.P.**
- Manual
  - Hydraulic
  - Sour trim

Fill blanks with applicable information. If not applicable, enter "N.A." or cross-out item shown. Enter other pertinent information below.

---

---

---

---

---

---

---

---

---

---

WORKSHEET  
APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 01/23/95

API NO. ASSIGNED: 43-047-32653

WELL NAME: FEDERAL 4-3  
OPERATOR: ROCKY MOUNTAIN OPERATING (N4890)

PROPOSED LOCATION:  
SWSW 04 - T09S - R18E  
SURFACE: 0741-FWL-0691-FSL  
BOTTOM: 0741-FWL-0691-FSL  
UINTAH COUNTY  
EIGHT MILE FLAT NORTH FIELD (590)

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

LEASE TYPE: FED  
LEASE NUMBER: U-17424

PROPOSED PRODUCING FORMATION: GRRV

<p>RECEIVED AND/OR REVIEWED:</p> <p><u>Y</u> Plat Bond: Federal[] State[] Fee[] (Number _____)</p> <p><u>N</u> Potash (Y/N)</p> <p><u>N</u> Oil shale (Y/N)</p> <p><u>N</u> Water permit (Number _____)</p> <p><u>N</u> RDCC Review (Y/N) (Date: _____)</p>	<p>LOCATION AND SITING:</p> <p><input checked="" type="checkbox"/> R649-2-3. Unit: <u>UTU63073X</u></p> <p><input type="checkbox"/> R649-3-2. General.</p> <p><input type="checkbox"/> R649-3-3. Exception.</p> <p><input type="checkbox"/> Drilling Unit. Board Cause no: _____ Date: _____</p>
---	--

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

\_\_\_\_\_

\_\_\_\_\_

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

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**STATE OF UTAH**

<b>Operator: ROCKY MOUNTAIN</b>	<b>Well Name: EIGHT MILE FLAT FED.</b>
<b>Project ID: 43-047-32653</b>	<b>Location: SW/SW SEC.4, T09S, R1</b>

**Design Parameters:**

Mud weight ( 9.00 ppg) : 0.468 psi/ft  
 Shut in surface pressure : 2444 psi  
 Internal gradient (burst) : 0.060 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)  
 Other : 1.50 (J)  
 Body Yield : 1.50 (B)

Length (feet)	Size (in.)	Weight (lb/ft)	Grade	Joint	Depth (feet)	Drift (in.)	Cost		
1	6,000	5.500	17.00	K-55	LT&C	6,000	4.767		
	<b>Load</b> (psi)	<b>Collapse</b> <b>Strgth</b> (psi)	<b>S.F.</b>	<b>Burst</b> <b>Load</b> (psi)	<b>Min Int</b> <b>Yield</b> <b>Strgth</b> (psi)	<b>S.F.</b>	<b>Tension</b> <b>Load</b> (kips)	<b>Strgth</b> (kips)	<b>S.F.</b>
1	2805	4910	1.750	2805	5320	1.90	102.00	272	2.67 J

Prepared by : KMH, Salt Lake City, UT  
 Date : 03-10-1995  
 Remarks :

Minimum segment length for the 6,000 foot well is 1,000 feet.  
 SICP is based on the ideal gas law, a gas gravity of 0.69, and a mean gas temperature of 104°F (Surface 74°F , BHT 134°F & temp. gradient 1.000°/100 ft.)  
 The mud gradient and bottom hole pressures (for burst) are 0.468 psi/ft and 2,805 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 Kessler curve. Engineering responsibility for use of this design will be that of the purchaser. Costs for this design are based on a 1987 pricing model. (Version 1.06)

T 8 S

T 9 S

EIGHT MILE FLAT NORTH FIELD

• FEDERAL #4-2

• FEDERAL #4-3

R 17 E

R 18 E

R 18 E

ROCKY MOUNTAIN OPERATING  
DEVELOPMENT DRILLING  
SEC. 4, T 9 S, R 18 E,  
UINTAH COUNTY  
PARTICIPATING AREA "C"

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

Operator: ROCKY MOUNTAIN OP. Lease: State:      Federal: X Indian:      Fee:     

Well Name: FEDERAL 4-3 API Number: 43-047-32653

Section: 4 Township: 9S Range: 18E County: UINTAH Field: 8 MILE FLAT

Well Status: POW Well Type: Oil: YES Gas:     

**PRODUCTION LEASE EQUIPMENT: (NUMBER)**

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

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

Heater Treater(s): X

**PUMPS:**

Triplex:      Chemical: 1 Centrifugal: 1

**LIFT METHOD:**

Pumpjack: X Hydraulic:      Submersible:      Flowing:     

**GAS EQUIPMENT: (NUMBER)**

Purchase Meter: 0 Sales Meter:     

**TANKS:**

	NUMBER	SIZE	
Oil Storage Tank(s):	<u>2</u>	<u>400</u>	BBLs
Water Tank(s):	<u>    </u>	<u>    </u>	BBLs
Power Water Tank:	<u>    </u>	<u>    </u>	BBLs
Condensate Tank(s):	<u>    </u>	<u>    </u>	BBLs
Propane Tank:	<u>1</u>		

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

Qtr/Qtr:      Section:      Township:      Range:     

**REMARKS: RESERVE PIT OPEN AND HOLDS 250 BARRELS FLUID. CASINGHEAD GAS USED FOR FUEL GAS WITH PROPANE FOR BACKUP. EXCESS GAS VENTS TO RESERVE PIT.**

Inspector: DAVID HACKFORD Date: 8/25/95

Rocky Mountain Operating -

Fed. 4-3

43-047-32653

↑  
North

Access

Berm

400  
Bbl. Oil  
Tank

400  
Bbl. Oil  
Tank

Propane

Heater  
Trester

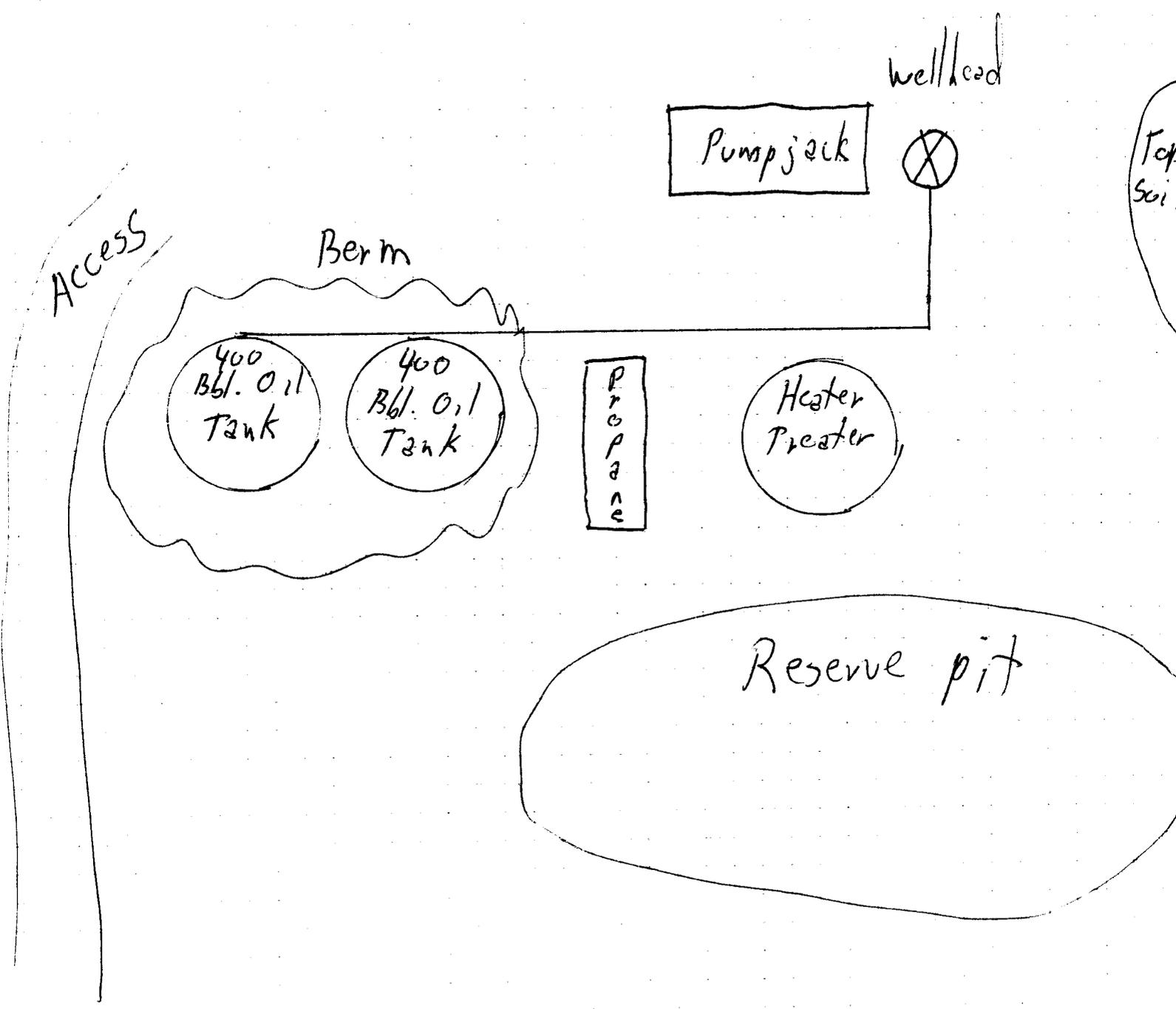
Pumpjack

Wellhead



Top  
Soil

Reserve pit





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

Michael O. Leavitt  
Governor

Ted Stewart  
Executive Director

James W. Carter  
Division Director

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

March 10, 1995

Rocky Mountain Operating Company, Inc.  
6131 South Forest Court  
Littleton, Colorado 80121

Re: Federal #4-3 Well, 691' FSL, 741' FWL, SW SW, Sec. 4, T. 9 S., R. 18 E., Uintah County, Utah

Gentlemen:

Pursuant to the provisions and requirements of Utah Code Ann. 40-6-1 et seq., Utah Admin. R. 649-3-1 et seq., and the attached Conditions of Approval, approval to drill the referenced well is granted.

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date. The API identification number assigned to this well is 43-047-32653.

Sincerely,

A handwritten signature in black ink, appearing to read "R. J. Firth".

R. J. Firth  
Associate Director

ldc

Enclosures

cc: Uintah County Assessor

Bureau of Land Management, Vernal District Office

WAPD



**Operator:** Rocky Mountain Operating Company, Inc.

**Well Name & Number:** Federal #4-3

**API Number:** 43-047-32653

**Lease:** Federal #U-17424

**Location:** SW SW Sec. 4 T. 9 S., R. 18 E.

### **Conditions of Approval**

**1. General**

Compliance with the requirements of Utah Admin. R. 649-1 et seq., the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for Permit to Drill.

**2. Notification Requirements**

Notify the Division within 24 hours following spudding the well or commencing drilling operations. Contact Jimmie Thompson at (801)538-5340.

Notify the Division prior to commencing operations to plug and abandon the well. Contact Frank Matthews or Mike Hebertson at (801)538-5340.

**3. Reporting Requirements**

All required reports, forms and submittals shall be promptly filed with the Division, including but not limited to the Entity Action Form (Form 6), Report of Water Encountered During Drilling (Form 7), Weekly Progress Reports for drilling and completion operations, and Sundry Notices and Reports on Wells requesting approval of change of plans or other operational actions.

**UNITED STATES  
 DEPARTMENT OF THE INTERIOR  
 BUREAU OF LAND MANAGEMENT**

SUBMIT IN 'ELICATE'  
 (Other use, show on  
 reverse side)

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

**MAR 16 1995**

5. LEASE DESIGNATION AND SERIAL NO.  
 U-17424

**APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK**  
 DIV OF OIL, GAS & MINING

1a. TYPE OF WORK  
 DRILL       DEEPEN       PLUG BACK

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

2. NAME OF OPERATOR  
 Rocky Mountain Operating Company, Inc.

3. ADDRESS OF OPERATOR  
 6131 S. Forest Court Littleton, CO 80121 303-850-7921

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)\*  
 At surface 741' FWL, 691' FSL, SW SW Section 4, T9S, R18E SLB&M  
 At proposed prod. zone Same

7. UNIT AGREEMENT NAME  
 Eight Mile Flat Unit

8. FARM OR LEASE NAME  
 Participating Area "C"

9. WELL NO.  
 Federal #4-3

10. FIELD AND POOL, OR WILDCAT  
 Federal #4-3

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA  
 Sec. 4, T9S, R18E SLB&M

12. COUNTY OR PARISH  
 Uintah

13. STATE  
 Utah

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\*  
 Approximately 19 miles south of Myton, Utah

15. DISTANCE FROM PROPOSED\* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any) 691'

16. NO. OF ACRES IN LEASE  
 43.047.32653

17. NO. OF ACRES ASSIGNED TO THIS WELL  
 40

18. DISTANCE FROM PROPOSED LOCATION\* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT. 1000'

19. PROPOSED DEPTH  
 6000'±

20. ROTARY OR CABLE TOOLS  
 Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)  
 GR - 4962'

22. APPROX. DATE WORK WILL START\*  
 2/15/95

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12 1/4"	9-5/8"	36#	300'	100 sx Class A
7-7/8"	5 1/2"	17.0#	6000'	400 sx Class A

The operator plans to drill a development well to test the lower Green River formation. The drilling operations will follow the attached drilling prognosis. All water flows and hydrocarbon shows will be reported. Adequate BOP equipment will be maintained at all times. If commercial production is established, production casing will be run and cemented adequately to protect the zones of interest. No abnormal pressures or temperatures are anticipated. Anticipated BHP is 2000 psia.

RECEIVED  
 JAN 23 1995

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 *Edward A. ...* TITLE President DATE January 1, 1995

(This space for Federal or State office use)

PERMIT NO. \_\_\_\_\_ APPROVAL DATE \_\_\_\_\_  
 APPROVED BY *[Signature]* TITLE ASSISTANT DISTRICT MANAGER MINERALS DATE MAR 10 1995  
 CONDITIONS OF APPROVAL, IF ANY:

CONDITIONS OF APPROVAL REFERENCED TO OPERATOR'S COPY.

DIV 66 NOTICE OF APPROVAL  
 U7080-5A)-113

\*See Instructions On Reverse Side

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

Company/Operator: Rocky Mountain Operating

Well Name & Number: Federal 4-3

API Number: 43-047-32653

Lease Number: U-17424

Location: SWSW Sec. 4 T. 9S R. 18E

**NOTIFICATION REQUIREMENTS**

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

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

CONDITIONS OF APPROVAL FOR NOTICE TO DRILL

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

All lease and/or unit operations will be conducted in such a manner that full compliance is made with applicable laws, regulations (43 CFR 3100), Onshore Oil and Gas Orders, and the approved plan of operations. The operator is fully responsible for the actions of his subcontractors. A copy of these conditions will be furnished to the field representative by the operator 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 3M system and individual components shall be operable as designed. Chart recorders shall be used for all pressure tests.

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

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

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

3. Casing Program and Auxiliary Equipment

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

The minimum grade for the surface casing will be **J-55 STC**.

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  $\pm 277$  ft. or by extending the surface casing to  $\pm 327$  ft. and having a cement top for the production casing at least 200 ft. above the top of the Mahogany Oil Shale zone identified at  $\pm 2880$  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.

4. Mud Program and Circulating Medium

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

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

5. Coring, Logging and Testing Program

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

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

A cement bond log (CBL) will be run from the production casing shoe to  $\pm 2680$  ft. if the surface casing is set at  $\pm 327$  ft. or to surface if the surface casing is set at  $\pm 300$  ft.. The CBL shall be utilized to determine the bond quality for the production casing. Submit a field copy of the CBL to this office.

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

6. Notifications of Operations

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

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

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

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

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

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

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

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

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

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

7. Other Information

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

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

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 following initial installation 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 or notifications are necessary, please contact one of the following individuals:

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

Ed Forsman            (801) 789-7077  
Petroleum Engineer

BLM FAX Machine      (801) 781-4410

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

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

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

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

Location of Tank Batteries, Production facilities, and Production Gathering Lines and Service Lines

If the well is a producing well and production tanks are required, these tanks will be bermed with an impermeable containment dike sufficient to hold the capacity of 100% of the largest tank on location.

All permanent facilities on location will be painted within six (6) months a non-reflective earthtone color to conform to other facilities in the area and the natural terrain. The color required is Desert Brown (10YR 6/3) referenced in the Standard Environmental Colors on the Munsell Soil Color Chart.

All pits on location will be fenced to the following standards to prevent livestock or wildlife from entering:

1. Fence: 39 inch net wire shall be used with at least one strand of barbed wire on top of the net wire (the barbed wire is not necessary if pipe or some other acceptable type of reinforcement rod is attached to the top of the entire fence.)
2. Wire Spacing: The bottom of the net wire shall be no more than 2 inches above the ground. The barbed wire strand shall be 3 inches above the top of the net wire. Total height of the fence shall be at least 42 inches.
3. Corner Braces: Corner posts shall be cemented and/or braced in such a manner to keep the fence tight at all times.
4. Line Posts: Standard steel, wood, or pipe posts shall be used between the corner braces. Maximum distance between any two posts shall be no greater than 16 feet.
5. Fence Construction: All wire shall be stretched tight before the wire is attached to the corner braces. Pulling the wire tight by hand without the use of a stretching device is not acceptable.

The reserve pit will be fenced on three sides during the drilling operation and on the fourth side when the drill rig and workers leave the location, until the reserve pit is reclaimed.

Location of and Type of Water Supply

The water source for drilling the well #4-3 will come from Joe Shields water, located in section 15, T4S, R2W or from Kenneth & Barbara Richens water located in section 34, T3S, R2W. This water will be transported over existing roads by Jim Nebeker Trucking. If any other water source is intended to be used, the operator is required to have prior approval from the authorized officer of the BLM.

### Methods For Handling Waste Disposal

The operator is required to use a plastic reinforced liner to line the reserve pit. The liner will be a minimum of 12 mil thickness with sufficient bedding to cover any rocks. The liner will overlap the pit walls and be covered with dirt and/or rocks to hold in place. No trash, scrap pipe, etc..., that could puncture the liner will be disposed on in the pit.

After first production, produced waste water will be confined to a lined pit or storage tank for a period not to exceed ninety (90) days. During the 90 day period, in accordance with Onshore Order #7, an application for approval of a permanent disposal method and location, along with required water analysis, shall be submitted for the authorized officers approval.

### Plans For Reclamation Of Location

Immediately upon well completion, the location and surrounding area will be cleared of all unused tubing, equipment, debris, materials, and trash not required for production.

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

The plastic liner of the reserve pit shall be torn and perforated before backfilling of the pit when it is reclaimed.

The reserve pit and that portion of the location not needed for production facilities/operations will be recontoured to the approximate natural contours. The reserve pit will be reclaimed within 120 days from the date of well completion. Before any dirt work takes place, the reserve pit must have all fluids and hydrocarbons removed. After these areas are recontoured they will be reseeded with a seed mix as specified by the authorized officer of the BLM.

At time of abandonment the intent of reclamation will be to return the disturbed area to near natural conditions. Recontour the surface of the disturbed area to blend all cuts, fills, road berms, and borrow ditches to be natural in appearance with the surrounding terrain. Stockpiled topsoil will be spread over the surface, and the area reseeded with a seed mix as specified by the authorized officer of the BLM. The location will require revegetation to the satisfaction of the authorized officer of the BLM.

### Additional Surface Conditions of Approval

In order to mitigate the estimated erosion produced from the surface disturbance to develop this location an existing silt retention dam will be cleaned out and the dam reworked to Vernal District standards. Minimum standards for dams construction are attached. This structure is located north of the location about 200 feet.

DIVISION OF OIL, GAS AND MINING

SPUDDING INFORMATION

Name of Company: ROCY MOUNTAIN OPERATING

Well Name: FEDERAL 4-3

Api No. 43-047-32653

Section 4 Township 9S Range 18E County UINTAH

Drilling Contractor EXETER

Rig # 8

SPUDDED: Date 5/26/95

Time \_\_\_\_\_

How DRY HOLE

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

Reported by D. HACKFORD-DOGM

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

Date: 5/30/95 Signed: JLT

RECEIVED  
OCT 2 1995

FORM 8

STATE OF UTAH  
DIVISION OF OIL, GAS AND MINING

3. LEASE DESIGNATION AND SERIAL NO.  
U-17424

WELL COMPLETION OR RECOMPLETION REPORT OF OIL, GAS & MINING

1. TYPE OF WELL: OIL WELL  GAS WELL  DRY  Other \_\_\_\_\_

2. TYPE OF COMPLETION: NEW WELL  WORK OVER  DEEP-EN  PLUG BACK  DIFF. ACQVA.  Other \_\_\_\_\_

2. NAME OF OPERATOR  
Rocky Mountain Operating Co., Inc.

3. ADDRESS OF OPERATOR  
6131 S. Forest Ct., Littleton CO 80121

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)  
At surface 691' FSL, 741' FWL, SWSW Sec. 4, T9S, R18E  
SLB&M  
At top prod. interval reported below  
Same as below  
At total depth  
6000'

7. UNIT AGREEMENT NAME  
Eight Mile Flat Unit

8. FARM OR LEASE NAME  
Participating Area "C"

9. WELL NO.  
Federal #4-3

10. FIELD AND POOL OR WILDCAT  
Green River

11. SEC., T., R., W. OR BLOCK AND SURVEY OR AREA  
Sec. 4, T9S, R18E SLB&M

6000' in Computer  
5-26-95

11. API NO. 43-047-32653 DATE ISSUED 3-10-95 12. COUNTY Uintah 13. STATE Utah

14. DATE STUDDED 6-8-95 16. DATE T.D. REACHED 6-14-95 17. DATE COMPL. (Ready to prod.) 8-21-95 18. ELEVATIONS (DP, SR, RT, CL, ETC.) KB-4972' 19. ELEV. CASINGHEAD 4962'

20. TOTAL DEPTH, MD & TVD 6000' 21. PLUG BACK T.D., MD & TVD 6000' 22. IF MULTIPLE COMPL. HOW MANY 1 23. INTERVALS DRILLED BY TD 6000'

24. PRODUCING INTERVAL(S) OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)  
5383'-5502'  
5720'-5735'

25. WAS DIRECTIONAL SURVEY MADE  
No

26. TYPE ELECTRIC AND OTHER LOGS RUN  
Cement bond log w/Gamma Ray/CCL

27. WAS WELL CORED YES  NO  (Indicate analysis)  
DRILL STEM TEST YES  NO  (Indicate results side)

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

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	MOLE SIZE	CEMENTING RECORD	AMOUNT FILLED
9 5/8"	36.0#	300' new	12 1/4"	100 SX Class A	None
5 1/2"	17.0#	6000' new	7 7/8"	400 SX Class A	None

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	PACKS CEMENT	SCREEN (MD)	SIZE	DEPTH SET (MD)	PACKS SET (MD)
					2 7/8"	5747'	

31. PERFORATION RECORD (Interval, size and number)

5720'-5735' (6 holes)  
5383'-5502' (18 holes)

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

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
5720'-5735'	2,000 Gal 2% HCL
5383'-5502'	2,000 Gal 2% HCL

33. PRODUCTION

DATE FIRST PRODUCTION 8-21-95 PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump) Adesco 640 Pumping Unit WELL STATUS (Producing or shut-in) Producing

DATE OF TEST	HOURS TESTED	CHOKER SIZE	PROOV. FOR TEST PERIOD	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO
7-22-95	24 hrs.	9/64"	→	40 Bbls.	56 MCF	0	

FLOW, TUBING PERM.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CO&L)
350 psi		→	40 Bbls.	56 MCF	0	32.4

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.) Vented/Used on lease for engine, treater, tank heat TEST WITNESSED BY Fred Phillips

35. LIST OF ATTACHMENTS  
Pumping Unit, Treater, 2 ea. 400 BL Oil Tanks, 1-100 BL Water Tank

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

SIGNED David A. Nelson TITLE Operations Supervisor DATE 9-28-95

See Spaces for Additional Data on Reverse Side

**INSTRUCTIONS**

This form should be completed in compliance with the Utah Oil and Gas Conservation General Rules. If not filed prior to this time, all logs, tests, and directional surveys as required by Utah Rules should be attached and submitted with this report.  
 ITEM 18: Indicate which elevation is used as reference for depth measurements given in other spaces on this form and on any attachments.  
 ITEMS 22 and 24: If this well is completed for separate production from more than one interval zone (multiple completion), so state in item 22, and in item 24 show the producing interval, or intervals, top(s), bottom(s) and name(s) for only the interval reported in item 33. Submit a separate report (page) on this form, adequately identified, for each additional interval to be separately produced, showing the additional data pertinent to such interval.  
 ITEM 29: "Sacks Cement": Attached supplemental records for this well should show the details of any multiple stage cementing and the location of the cementing tool.  
 ITEM 33: Submit a separate completion report on this form for each interval to be separately produced (see instruction for items 22 and 24 above).

37. SUMMARY OF POROUS ZONES:		38. GEOLOGIC MARKERS				
formation	Top	Bottom	Description, contents, etc.	Name	Meas. Depth	True Vert. Depth
Green River	N/A	N/A	N/A	N/A	N/A	N/A

SEP-27-95 WED 09:40 AM UTAH DIV OF GAS & MINING FAX NO. 801 359 3940 P. 02/03

ENTITY ACTION FORM - FORM 6

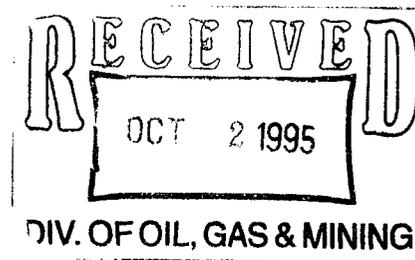
Rocky Mt. Operating Co Inc. N4890  
 6131 S. Forest Ct.  
 ADDRESS \_\_\_\_\_  
 Littleton CO \_\_\_\_\_

ACTION CODE	CURRENT ENTITY NO.	NEW ENTITY NO.	API NUMBER	WELL NAME	WELL LOCATION					SPUD DATE	EFFECTIVE DATE
					QQ	SC	TP	RG	COUNTY		
B	10971	→	43-047-32654	Federal #4-2		4	9S	18E	Uintah	5-13-95	5-13-
WELL 1 COMMENTS: Drilled new well, the Federal #4-2, within the Participating Area "C" boundaries. <i>(Eight mile Flat Unit) Entity added 10-5-95. See</i>											
B	10971	→	43-047-32653	Federal #4-3		4	9S	18E	Uintah	6-8-95	6-8-9
WELL 2 COMMENTS: Drilled new well, the Federal #4-3, within the Participating Area "C" boundaries. <i>(Eight mile Flat Unit) Entity added 10-5-95. See</i>											
WELL 3 COMMENTS:											
WELL 4 COMMENTS:											
WELL 5 COMMENTS:											

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

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

(3/89)



*Betty Newbauer*  
 Signature  
 Secretary 9-28-95  
 Title Date  
 Phone No. 303 850-7921



# Rocky Mountain Operating Company, Inc.

6131 S. Forest Ct. • Heritage Village • Littleton, CO 80121 • (303) 850-7921

December 1, 1995

Vicky Dyson  
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 UT 84180-1203

43047 32653  
9518E4  
3040

Here are the logs you requested on the Federal #4-2 and Federal #4-3 drilled this summer in the Eight Mile Flat Field, Uintah County, Utah. I apologize for not getting them to you sooner.

If you have anymore questions regarding this matter, please contact me at (303)850-7921.

Sincerely,

*Betty Neibauer*

Betty Neibauer

**SUNDRY NOTICES AND REPORTS ON WELLS**

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

1. Type of Well: OIL  GAS  OTHER:

2. Name of Operator:  
Rocky Mountain Operating Company, Inc.

3. Address and Telephone Number:  
6111 S. Forest Ct., Littleton CO 80121 (303)850-7921

4. Location of Well  
Footage:  
OO, Sec., T., R., M.: SWSW Sec. 4, T9S, R18E

5. Lease Designation and Serial Number:

6. If Indian, Altkosee or Tribe Name:

7. Unit Agreement Name:  
#891019365D

8. Well Name and Number:  
Federal #4-3

9. API Well Number:  
43-047-32653

10. Field and Pool, or Wellcat:  
Eight Mile Flat

County: Uintah  
State: Utah

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

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

- |  |   |
|--|---|
| <input type="checkbox"/> Abandon                   | <input type="checkbox"/> New Construction     |
| <input type="checkbox"/> Repair Casing             | <input type="checkbox"/> Pull or Alter Casing |
| <input type="checkbox"/> Change of Plans           | <input type="checkbox"/> Recomplete           |
| <input type="checkbox"/> Convert to Injection      | <input type="checkbox"/> Reperforate          |
| <input type="checkbox"/> Fracture Treat or Acidize | <input type="checkbox"/> Vent or Flare        |
| <input type="checkbox"/> Multiple Completion       | <input type="checkbox"/> Water Shut-Off       |
| <input type="checkbox"/> Other _____               |   |

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

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

- |   |   |
|---|---|
| <input type="checkbox"/> Abandon *                                    | <input type="checkbox"/> New Construction     |
| <input type="checkbox"/> Repair Casing                                | <input type="checkbox"/> Pull or Alter Casing |
| <input type="checkbox"/> Change of Plans                              | <input type="checkbox"/> Reperforate          |
| <input type="checkbox"/> Convert to Injection                         | <input type="checkbox"/> Vent or Flare        |
| <input type="checkbox"/> Fracture Treat or Acidize                    | <input type="checkbox"/> Water Shut-Off       |
| <input checked="" type="checkbox"/> Other <u>Annual Status Report</u> |   |

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.)

ANNUAL STATUS REPORT: The well is temporarily shut-in and a rework and/or plug and abandonment program is currently being prosed for apporval. This work is scheduled to be performed by July 1, 2002.

13.

Name & Signature: Betty Neibauer *Betty Neibauer* Title: Agent Date: 2-8-02

(This space for State use only)

**SUNDRY NOTICES AND REPORTS ON WELLS**

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

5. Lease Designation and Serial Number:	
6. If Indian, Alottee or Tribe Name:	
7. Unit Agreement Name: #891019365D	
1. Type of Well: OIL <input checked="" type="checkbox"/> GAS <input type="checkbox"/> OTHER:	8. Well Name and Number: Federal #4-3
2. Name of Operator: Rocky Mountain Operating Company, Inc.	9. API Well Number: #43-047-32653
3. Address and Telephone Number: 6111 S. Forest Ct., Littleton CO 80121 (303)850-7921	10. Field and Pool, or Wildcat: Eight Mile Flat
4. Location of Well Footages: OO, Sec., T., R., M.: SW SW Sec. 4, T9S, R18E	County: Uintah State: Utah

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

NOTICE OF INTENT (Submit in Duplicate)	SUBSEQUENT REPORT (Submit Original Form Only)
<input type="checkbox"/> Abandon <input type="checkbox"/> Repair Casing <input type="checkbox"/> Change of Plans <input type="checkbox"/> Convert to Injection <input type="checkbox"/> Fracture Treat or Acidize <input type="checkbox"/> Multiple Completion <input type="checkbox"/> Other _____	<input type="checkbox"/> Abandon <input type="checkbox"/> Repair Casing <input type="checkbox"/> Change of Plans <input type="checkbox"/> Convert to Injection <input type="checkbox"/> Fracture Treat or Acidize <input checked="" type="checkbox"/> Other <u>Annual Status Report</u>
<input type="checkbox"/> New Construction <input type="checkbox"/> Pull or Alter Casing <input type="checkbox"/> Recomplete <input type="checkbox"/> Reperforate <input type="checkbox"/> Vent or Flare <input type="checkbox"/> Water Shut-Off	<input type="checkbox"/> New Construction <input type="checkbox"/> Pull or Alter Casing <input type="checkbox"/> Reperforate <input type="checkbox"/> Vent or Flare <input type="checkbox"/> Water Shut-Off
Approximate date work will start _____	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.)

ANNUAL STATUS REPORT: Temporarily shut-in due to waiting on completion of pipeline supplying gas to leases in order to help lower propane costs, which have become very costly.

13. Name & Signature: Betty Neibauer *Betty neibauer* Title: Agent Date: 2-6-01

(This space for State use only)  
**THIS SUNDRY IS BEING RETURNED, INSUFFICIENT DATA WAS SUBMITTED TO APPROVE THE REQUESTED ACTION.**

The well has been nonactive or nonproductive for 4.67 years. In accordance with R649-3-36, a sundry notice shall be filed indicating the reasons and length of time for the well shut-in or temporary abandonment and a demonstration of the well's integrity; evidence that the well is not a risk to public health and safety or the environment. Upon receipt of this required information, the Division will either approve the request or require remedial measures to be taken to establish and maintain the wells integrity.

RECEIVED  
FEB 12 2001

*R. All M. Ken*  
2/20/01

DIVISION OF OIL, GAS AND MINING

*2-20-01*  
*CHD*

STATE OF UTAH  
DIVISION OF OIL, GAS AND MINING

<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>		5. Lease Designation and Serial Number:
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.		6. If Indian, Allottee or Tribe Name:
1. Type of Well: OIL <input checked="" type="checkbox"/> GAS <input type="checkbox"/> OTHER:		7. Unit Agreement Name: #891019365D
2. Name of Operator: Rocky Mountain Operating Co., Inc. 43-047-32653		8. Well Name and Number: Federal #4-3
3. Address and Telephone Number: 6111 S. Forest Ct., Littleton CO 80121 (303)850-7921		9. API Well Number: Eight Mile Flat
4. Location of Well Footages: QQ, Sec., T., R., M.: SW SW Sec. 4, T9S, R18E		10. Field and Pool, or Wildcat: Eight Mile Flat
		County: Uintah State: Utah

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

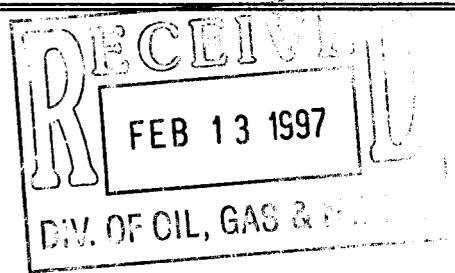
NOTICE OF INTENT (Submit in Duplicate)	SUBSEQUENT REPORT (Submit Original Form Only)
<input type="checkbox"/> Abandonment <input type="checkbox"/> Casing Repair <input type="checkbox"/> Change of Plans <input type="checkbox"/> Conversion to Injection <input type="checkbox"/> Fracture Treat <input type="checkbox"/> Multiple Completion <input type="checkbox"/> Other _____  Approximate date work will start _____	<input type="checkbox"/> Abandonment * <input type="checkbox"/> Casing Repair <input type="checkbox"/> Change of Plans <input type="checkbox"/> Conversion to Injection <input type="checkbox"/> Fracture Treat <input checked="" type="checkbox"/> Other <u>Annual Status Report</u>  Date of work completion _____  <small>Report results of Multiple Completions and Recompletions to different reservoirs on WELL COMPLETION OR RECOMPLETION AND LOG form. * Must be accompanied by a cement verification report.</small>
<input type="checkbox"/> New Construction <input type="checkbox"/> Pull or Alter Casing <input type="checkbox"/> Recompletion <input type="checkbox"/> Shoot or Acidize <input type="checkbox"/> Vent or Flare <input type="checkbox"/> Water Shut-Off	<input type="checkbox"/> New Construction <input type="checkbox"/> Pull or Alter Casing <input type="checkbox"/> Shoot or Acidize <input type="checkbox"/> Vent or Flare <input type="checkbox"/> Water Shut-Off

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.)

ANNUAL STATUS REPORT: Temporarily shut-in due to waiting on the field to be electrified to lower operating costs and on implementation of a water flood program.

13. Name & Signature: Betty Neibauer *Betty Neibauer* Title: Secretary Date: 2-4-97

(This space for State use only)



STATE OF UTAH  
DIVISION OF OIL, GAS AND MINING

**SUNDRY NOTICES AND REPORTS ON WELLS**

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

	5. Lease Designation and Serial Number:
	6. If Indian, Aliottee or Tribe Name:
	7. Unit Agreement Name: #891019635D
1. Type of Well: OIL <input checked="" type="checkbox"/> GAS <input type="checkbox"/> OTHER:	8. Well Name and Number: Federal #4-3
2. Name of Operator: Rocky Mountain Operating Co., Inc.	9. API Well Number: #43-047-32653
3. Address and Telephone Number: 6111 S. Forest Ct., Littleton CO 80121 (303)850-7921	10. Field and Pool, or Wildcat: Eight Mile Flat
4. Location of Well Footages: QQ, Sec.,T.,R.,M.: SW SW Sec. 4, T9S, R18E	County: Uintah State: Utah

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

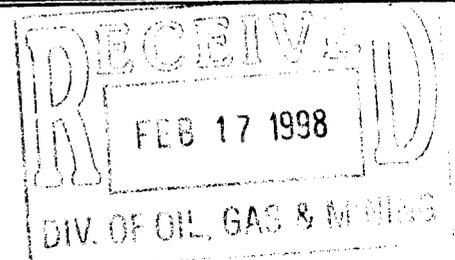
NOTICE OF INTENT (Submit In Duplicate)	SUBSEQUENT REPORT (Submit Original Form Only)
<input type="checkbox"/> Abandonment <input type="checkbox"/> Casing Repair <input type="checkbox"/> Change of Plans <input type="checkbox"/> Conversion to Injection <input type="checkbox"/> Fracture Treat <input type="checkbox"/> Multiple Completion <input type="checkbox"/> Other _____  Approximate date work will start _____	<input type="checkbox"/> Abandonment * <input type="checkbox"/> Casing Repair <input type="checkbox"/> Change of Plans <input type="checkbox"/> Conversion to Injection <input type="checkbox"/> Fracture Treat <input checked="" type="checkbox"/> Other <u>Annual Status Report</u>  Date of work completion _____  <small>Report results of Multiple Completions and Recompletions to different reservoirs on WELL COMPLETION OR RECOMPLETION AND LOG fom. * Must be accompanied by a cement verification report.</small>
<input type="checkbox"/> New Construction <input type="checkbox"/> Pull or Alter Casing <input type="checkbox"/> Recompletion <input type="checkbox"/> Shoot or Acidize <input type="checkbox"/> Vent or Flare <input type="checkbox"/> Water Shut-Off	<input type="checkbox"/> New Construction <input type="checkbox"/> Pull or Alter Casing <input type="checkbox"/> Shoot or Acidize <input type="checkbox"/> Vent or Flare <input type="checkbox"/> Water Shut-Off

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.)

ANNUAL STATUS REPORT: Temporarily shut-in due to low oil prices. Also on the implementation of a water flood program.

13. Name & Signature: Betty Neibauer Betty Neibauer Title: Secretary Date: 2-9-98

(This space for State use only)



## DIVISION OF GAS AND MINING

## SUNDRY NOTICES AND REPORTS ON WELLS

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

1. Type of Well: OIL  GAS  OTHER:2. Name of Operator:  
Rocky Mountain Operating Company, Inc.3. Address and Telephone Number:  
6111 S. Forest Ct., Littleton CO 80121 303-850-79214. Location of Well  
Footages:  
QQ, Sec., T., R., M.: SW SW Sec 4, T9S, R18E

5. Lease Designation and Serial Number:

6. If Indian, Allottee or Tribe Name:

7. Unit Agreement Name:  
#891019635D8. Well Name and Number:  
Federal #4-39. API Well Number:  
#43-047-3265310. Field and Pool, or Wildcat:  
Eight Mile FlatCounty: Uintah  
State: Utah

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

NOTICE OF INTENT  
(Submit in Duplicate)

- |  |   |
|--|---|
| <input type="checkbox"/> Abandonment             | <input type="checkbox"/> New Construction     |
| <input type="checkbox"/> Casing Repair           | <input type="checkbox"/> Pull or Alter Casing |
| <input type="checkbox"/> Change of Plans         | <input type="checkbox"/> Recompletion         |
| <input type="checkbox"/> Conversion to Injection | <input type="checkbox"/> Shoot or Acidize     |
| <input type="checkbox"/> Fracture Treat.         | <input type="checkbox"/> Vent or Flare        |
| <input type="checkbox"/> Multiple Completion     | <input type="checkbox"/> Water Shut-Off       |
| <input type="checkbox"/> Other _____             |   |

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

SUBSEQUENT REPORT  
(Submit Original Form Only)

- |   |   |
|---|---|
| <input type="checkbox"/> Abandonment *                                | <input type="checkbox"/> New Construction     |
| <input type="checkbox"/> Casing Repair                                | <input type="checkbox"/> Pull or Alter Casing |
| <input type="checkbox"/> Change of Plans                              | <input type="checkbox"/> Shoot or Acidize     |
| <input type="checkbox"/> Conversion to Injection                      | <input type="checkbox"/> Vent or Flare        |
| <input type="checkbox"/> Fracture Treat                               | <input type="checkbox"/> Water Shut-Off       |
| <input checked="" type="checkbox"/> Other <u>Annual Status Report</u> |   |

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

Report results of Multiple Completions and Recompletions to different reservoirs on WELL COMPLETION OR RECOMPLETION 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.)

ANNUAL STATUS REPORT: Temporarily shut-in  
due to low oil prices.

13.

Name & Signature: Betty Neibauer *Betty Neibauer* Title: Agent Date: 2-8-99

(This space for State use only)

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

FORM 9

<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>		5. LEASE DESIGNATION AND SERIAL NUMBER: <b>U-17424</b>
		6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
		7. UNIT or CA AGREEMENT NAME: <b>Eight Mile Flat Unit</b>
Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		8. WELL NAME and NUMBER: <b>Federal 4-3</b>
1. TYPE OF WELL OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER _____	2. NAME OF OPERATOR: <b>Inland Production Company</b>	9. API NUMBER: <b>4304732653</b>
3. ADDRESS OF OPERATOR: <b>410 17th St.                      Denver                      Co                      ZIP 80202</b>	PHONE NUMBER: <b>(303) 893-0102</b>	10. FIELD AND POOL, OR WILDCAT: <b>Monument Butte</b>
4. LOCATION OF WELL FOOTAGES AT SURFACE: <b>691' FSL &amp; 741' FWL</b>		COUNTY: <b>Uintah</b>
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: <b>SWSW 4    9s    18e</b>		STATE: <b>UTAH</b>

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA			
TYPE OF SUBMISSION	TYPE OF ACTION		
<input checked="" type="checkbox"/> <b>NOTICE OF INTENT</b> (Submit in Duplicate)  Approximate date work will start: _____	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> REPERFORATE CURRENT FORMATION
	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> SIDETRACK TO REPAIR WELL
<input type="checkbox"/> <b>SUBSEQUENT REPORT</b> (Submit Original Form Only)  Date of work completion: _____	<input type="checkbox"/> CASING REPAIR	<input type="checkbox"/> NEW CONSTRUCTION	<input type="checkbox"/> TEMPORARILY ABANDON
	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> TUBING REPAIR
	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> VENT OR FLARE
	<input checked="" type="checkbox"/> CHANGE WELL NAME	<input type="checkbox"/> PLUG BACK	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> PRODUCTION (START/RESUME)	<input type="checkbox"/> WATER SHUT-OFF
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> OTHER: _____
	<input type="checkbox"/> CONVERT WELL TYPE	<input type="checkbox"/> RECOMPLETE - DIFFERENT FORMATION	

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

Effective March 1, 2003, Inland Production Company is changing the name of the Federal 4-3 to Federal 13-4-9-18.

NAME (PLEASE PRINT) <u>Brian Harris</u>	TITLE <u>Engineering Technician</u>
SIGNATURE <u><i>Brian Harris</i></u>	DATE <u>3/7/2003</u>

(This space for State use only)

RECEIVED  
**APR 25 2003**  
 4/30/03  
 ER  
 DIV. OF OIL, GAS & MINING

STATE OF UTAH  
 DIVISION OF OIL, GAS AND MINING  
 ENTITY ACTION FORM - FORM 6

OPERATOR: NEWFIELD PRODUCTION COMPANY  
 ADDRESS: RT. 3 BOX 3630  
MYTON, UT 84052

OPERATOR ACCT. NO. N2695

ACTION CODE	CURRENT ENTITY NO.	NEW ENTITY NO.	API NUMBER	WELL NAME	WELL LOCATION					SPUD DATE	EFFECTIVE DATE
					QQ	SC	TP	RG	COUNTY		
D	10969	14599	43-047-31126	Federal 6-7-9-18	SE/NE	7	9S	18E	Utah		3/14/05
WELL 1 COMMENTS: Effective 1/1/05 <i>GRRV</i>											
D	10969	14600	43-047-31142	Federal 4-18-9-18	NW/NE	18	9S	18E	Utah		3/14/05
WELL 2 COMMENTS: Effective 1/1/05 <i>GRRV</i>											
D	10971	14601	43-047-31181	Federal 14-4-9-18	SE/SW	4	9S	18E	Utah		3/14/05
WELL 3 COMMENTS: Effective 1/1/05 <i>GRRV</i>											
D	10971	14602	43-047-32653	Federal 13-4-9-18	SW/SW	4	9S	18E	Utah		3/14/05
WELL 4 COMMENTS: Effective 1/1/05 <i>GRRV</i>											
D	10971	14603	43-047-32654	Federal 11-4-9-18	NE/SW	4	9S	18E	Utah		3/14/05
WELL 5 COMMENTS: Effective 1/1/05 <i>GRRV</i>											

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

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

RECEIVED  
 MAR 14 2005

*Kobbie S. Jones*  
 Signature  
 Production Clerk  
 Title  
 March 14, 2005  
 Date

DIVISION OF OIL, GAS & MINING

03/14/2005 16:02 4356453031 INLAND PAGE 02



## Office of the Secretary of State

The undersigned, as Secretary of State of Texas, does hereby certify that the attached is a true and correct copy of each document on file in this office as described below:

Newfield Production Company  
Filing Number: 41530400

Articles of Amendment

September 02, 2004

In testimony whereof, I have hereunto signed my name officially and caused to be impressed hereon the Seal of State at my office in Austin, Texas on September 10, 2004.



A handwritten signature in black ink, appearing to read "G. Connor".

Secretary of State

ARTICLES OF AMENDMENT  
TO THE  
ARTICLES OF INCORPORATION  
OF  
INLAND PRODUCTION COMPANY

FILED  
In the Office of the  
Secretary of State of Texas  
SEP 02 2004  
Corporations Section

Pursuant to the provisions of Article 4.04 of the Texas Business Corporation Act (the "TBCA"), the undersigned corporation adopts the following articles of amendment to the articles of incorporation:

ARTICLE 1 – Name

The name of the corporation is Inland Production Company.

ARTICLE 2 – Amended Name

The following amendment to the Articles of Incorporation was approved by the Board of Directors and adopted by the shareholders of the corporation on August 27, 2004.

The amendment alters or changes Article One of the Articles of Incorporation to change the name of the corporation so that, as amended, Article One shall read in its entirety as follows:

"ARTICLE ONE – The name of the corporation is Newfield Production Company."

ARTICLE 3 – Effective Date of Filing

This document will become effective upon filing.

The holder of all of the shares outstanding and entitled to vote on said amendment has signed a consent in writing pursuant to Article 9.10 of the TBCA, adopting said amendment, and any written notice required has been given.

IN WITNESS WHEREOF, the undersigned corporation has executed these Articles of Amendment as of the 1<sup>st</sup> day of September, 2004.

INLAND RESOURCES INC.

By: Susan G. Riggs  
Susan G. Riggs, Treasurer



# United States Department of the Interior



## BUREAU OF LAND MANAGEMENT

Utah State Office  
P.O. Box 45155  
Salt Lake City, UT 84145-0155  
<http://www.blm.gov>

IN REPLY REFER TO:

3106

(UT-924)

September 16, 2004

### Memorandum

To: Vernal Field Office

From: Acting Chief, Branch of Fluid Minerals

Subject: Merger Approval

Attached is an approved copy of the name change recognized by the Utah State Office. We have updated our records to reflect the merger from Inland Production Company into Newfield Production Company on September 2, 2004.

Michael Coulthard  
Acting Chief, Branch of  
Fluid Minerals

### Enclosure

1. State of Texas Certificate of Registration

cc: MMS, Reference Data Branch, James Sykes, PO Box 25165, Denver CO 80225  
State of Utah, DOGM, Attn: Earlene Russell, PO Box 145801, SLC UT 84114  
Teresa Thompson  
Joe Incardine  
Connie Seare

UTSL-	15855	61052	73088	76561	
071572A	16535	62848	73089	76787	
065914	16539	63073B	73520A	76808	
	16544	63073D	74108	76813	
	17036	63073E	74805	76954	63073X
	17424	63073O	74806	76956	63098A
	18048	64917	74807	77233	68528A
UTU-	18399	64379	74808	77234	72086A
	19267	64380	74389	77235	72613A
02458	26026A	64381	74390	77337	73520X
03563	30096	64805	74391	77338	74477X
03563A	30103	64806	74392	77339	75023X
04493	31260	64917	74393	77357	76189X
05843	33992	65207	74398	77359	76331X
07978	34173	65210	74399	77365	76788X
09803	34346	65635	74400	77369	77098X
017439B	36442	65967	74404	77370	77107X
017985	36846	65969	74405	77546	77236X
017991	38411	65970	74406	77553	77376X
017992	38428	66184	74411	77554	78560X
018073	38429	66185	74805	78022	79485X
019222	38431	66191	74806	79013	79641X
020252	39713	67168	74826	79014	80207X
020252A	39714	67170	74827	79015	81307X
020254	40026	67208	74835	79016	
020255	40652	67549	74868	79017	
020309D	40894	67586	74869	79831	
022684A	41377	67845	74870	79832	
027345	44210	68105	74872	79833	
034217A	44426	68548	74970	79831	
035521	44430	68618	75036	79834	
035521A	45431	69060	75037	80450	
038797	47171	69061	75038	80915	
058149	49092	69744	75039	81000	
063597A	49430	70821	75075		
075174	49950	72103	75078		
096547	50376	72104	75089		
096550	50385	72105	75090		
	50376	72106	75234		
	50750	72107	75238		
10760	51081	72108	76239		
11385	52013	73086	76240		
13905	52018	73087	76241		
15392	58546	73807	76560		



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

Entity Form 6  
 "C" Change from one existing entity to another existing entity

API	Well	Sec	Twsp	Rng	Entity	Entity Eff Date
4304735697	FEDERAL 15-13-9-17	13	090S	170E	14828 to 14844	9/20/2005
4304735698	FEDERAL 13-13-9-17	13	090S	170E	14813 to 14844	9/20/2005
4304735699	FEDERAL 11-13-9-17	13	090S	170E	14837 to 14844	9/20/2005
4304735702	FEDERAL 5-13-9-17	13	090S	170E	14836 to 14844	9/20/2005
4304736012	FEDERAL 14-13-9-17	13	090S	170E	14790 to 14844	9/20/2005
4304732438	FEDERAL 44-14Y	14	090S	170E	11506 to 14844	9/20/2005
4304735708	FEDERAL 9-14-9-17	14	090S	170E	14808 to 14844	9/20/2005
4304735709	FEDERAL 11-14-9-17	14	090S	170E	14734 to 14844	9/20/2005
4304735710	FEDERAL 15-14-9-17	14	090S	170E	14735 to 14844	9/20/2005
4304736068	FEDERAL 14-14-9-17	14	090S	170E	14770 to 14844	9/20/2005
4304736069	FEDERAL 10-14-9-17	14	090S	170E	14787 to 14844	9/20/2005
4304736071	FEDERAL 6-14-9-17	14	090S	170E	14809 to 14844	9/20/2005
4304731181	FEDERAL 14-4-9-18	04	090S	180E	14601 to 14844	9/20/2005
4304732653	FEDERAL 13-4-9-18	04	090S	180E	14602 to 14844	9/20/2005
4304732654	FEDERAL 11-4-9-18	04	090S	180E	14603 to 14844	9/20/2005
4304735473	FEDERAL 1-4-9-18	04	090S	180E	14533 to 14844	9/20/2005
4304735474	FEDERAL 7-4-9-18	04	090S	180E	14499 to 14844	9/20/2005
4304735475	FEDERAL 9-4-9-18	04	090S	180E	14530 to 14844	9/20/2005
4304735589	FEDERAL 2-4-9-18	04	090S	180E	14485 to 14844	9/20/2005
4304735590	FEDERAL 3-4-9-18	04	090S	180E	14697 to 14844	9/20/2005
4304735591	FEDERAL 5-4-9-18	04	090S	180E	14680 to 14844	9/20/2005
4304735592	FEDERAL 6-4-9-18	04	090S	180E	14696 to 14844	9/20/2005
4304735593	FEDERAL 8-4-9-18	04	090S	180E	14528 to 14844	9/20/2005
4304735594	FEDERAL 10-4-9-18	04	090S	180E	14535 to 14844	9/20/2005
4304735595	FEDERAL 12-4-9-18	04	090S	180E	14670 to 14844	9/20/2005
4304732503	21BALCRON FED 31-5Y	05	090S	180E	11680 to 14844	9/20/2005
4304735290	FEDERAL 5-5-9-18	05	090S	180E	14669 to 14844	9/20/2005
4304735292	FEDERAL 9-5-9-18	05	090S	180E	14554 to 14844	9/20/2005
4304735293	FEDERAL 11-5-9-18	05	090S	180E	14769 to 14844	9/20/2005
4304735294	FEDERAL 13-5-9-18	05	090S	180E	14658 to 14844	9/20/2005
4304735505	FEDERAL 14-5-9-18	05	090S	180E	14687 to 14844	9/20/2005
4304735506	FEDERAL 12-5-9-18	05	090S	180E	14651 to 14844	9/20/2005
4304735891	FEDERAL 10-5-9-18	05	090S	180E	14698 to 14844	9/20/2005
4304734933	FEDERAL 6-6-9-18	06	090S	180E	14152 to 14844	9/20/2005
4304734934	FEDERAL 7-6-9-18	06	090S	180E	14126 to 14844	9/20/2005
4304734936	FEDERAL 13-6-9-18	06	090S	180E	14049 to 14844	9/20/2005



# United States Department of the Interior

## BUREAU OF LAND MANAGEMENT

Utah State Office  
P.O. Box 45155  
Salt Lake City, UT 84145-0155



IN REPLY REFER TO  
3180  
UT-922

June 30, 2005

Newfield Production Company  
Attn: Kelly L. Donohoue  
1401 Seventeenth Street, Suite 1000  
Denver, Colorado 80202

Gentlemen:

The Sundance (Green River) Unit Agreement, Uintah County, Utah, was approved June 30, 2005. This agreement has been designated No. UTU82472X, and is effective July 1, 2005. The unit area embraces 11,143.86 acres, more or less.

Pursuant to regulations issued and effective June 17, 1988, all operations within the Sundance (Green River) Unit will be covered by your nationwide (Utah) oil and gas bond No. 0056.

The following leases embrace lands included within the unit area:

UTU0075174	UTU39713	UTU65970*	UTU79013*
UTU16539*	UTU39714	UTU74404	UTU79014*
UTU16540	UTU44429	UTU74835	UTU80915
UTU17424*	UTU64806*	UTU74872*	UTU82205
UTU18043	UTU65969	UTU75234	

\* Indicates lease to be considered for segregation by the Bureau of Land Management pursuant to Section 18 (g) of the unit agreement and Public Law 86-705.

All lands and interests by State of Utah, Cause No. 228-08 are fully committed.

Approval of this agreement does not warrant or certify that the operator thereof and other holders of operating rights hold legal or equitable title to those rights in the subject leases which are committed hereto.

RECEIVED

JUL 0 / 2005

DIV. OF OIL, GAS & MINING

*Docket No  
2005-009*

We are of the opinion that the agreement is necessary and advisable in the public interest and for the purpose of more properly conserving natural resources. Certification-Determination, signed by the School and Institutional Trust Land Administration for the State of Utah, is attached to the enclosed agreement. We request that you furnish the State of Utah and all other interested principals with appropriate evidence of this approval.

Sincerely,

/s/ Terry Catlin

Terry Catlin  
Acting Chief, Branch of Fluid Minerals

Enclosure

bcc: Mary Higgins w/enclosure  
MMS - Data Management Division (Attn: James Sykes)  
Trust Lands Administration  
Division of Oil, Gas and Mining  
Field Manager - Vernal w/enclosure  
File - Sundance (Green River) Unit w/enclosure  
Agr. Sec. Chron  
Fluid Chron  
Central Files

UT922:TAThompson:tt:06/30/2005



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

FORM 9

<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>			5. LEASE DESIGNATION AND SERIAL NUMBER: <b>U-17424</b>
Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.			6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
1. TYPE OF WELL OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER _____			7. UNIT or CA AGREEMENT NAME: <b>Eight Mile Flat Unit</b>
2. NAME OF OPERATOR: <b>Inland Production Company</b>			8. WELL NAME and NUMBER: <b>Federal 4-3</b>
3. ADDRESS OF OPERATOR: <b>410 17th St.</b> CITY <b>Denver</b> STATE <b>Co</b> ZIP <b>80202</b>		PHONE NUMBER: <b>(303) 893-0102</b>	9. API NUMBER: <b>4304732653</b>
4. LOCATION OF WELL FOOTAGES AT SURFACE: <b>691' FSL &amp; 741' FWL</b>			10. FIELD AND POOL, OR WILDCAT: <b>Monument Butte</b>
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: <b>SWSW 4 9s 18e</b>			COUNTY: <b>Uintah</b>
			STATE: <b>UTAH</b>

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

TYPE OF SUBMISSION	TYPE OF ACTION		
<input checked="" type="checkbox"/> NOTICE OF INTENT (Submit in Duplicate) Approximate date work will start: _____	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> REPERFORATE CURRENT FORMATION
	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> SIDETRACK TO REPAIR WELL
	<input type="checkbox"/> CASING REPAIR	<input type="checkbox"/> NEW CONSTRUCTION	<input type="checkbox"/> TEMPORARILY ABANDON
	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input checked="" type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> TUBING REPAIR
	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> VENT OR FLARE
<input type="checkbox"/> SUBSEQUENT REPORT (Submit Original Form Only) Date of work completion: _____	<input type="checkbox"/> CHANGE WELL NAME	<input type="checkbox"/> PLUG BACK	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> PRODUCTION (START/RESUME)	<input type="checkbox"/> WATER SHUT-OFF
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> OTHER: _____
	<input type="checkbox"/> CONVERT WELL TYPE	<input type="checkbox"/> RECOMPLETE - DIFFERENT FORMATION	

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

Effective March 1, 2003, Inland Production Company has taken over operations of the above referenced well. The previous operator was:

**Rocky Mountain Operating Company**  
6131 S. Forest Ct.  
Littleton, Colorado    80121

Effective March 1, 2003, Inland Production Company is responsible under the terms and conditions of the leases for operations of the leased lands or a portion thereof under Federal Bond #UT-0056.

Rocky Mountain Operating Company

Name: \_\_\_\_\_ Title: \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

NAME (PLEASE PRINT) Brian Harris TITLE Engineering Technician

SIGNATURE *Brian Harris* DATE 3/7/2003

SUNDRY NOTICES AND REPORTS ON WELLS

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

1. Type of Well: OIL <input checked="" type="checkbox"/> GAS <input type="checkbox"/> OTHER:		5. Lease Designation and Serial Number:
2. Name of Operator: Rocky Mountain Operating Company, Inc.		6. If Indian, Alutian or Tribe Name:
3. Address and Telephone Number: 6111 S. Forest Ct., Littleton CO 80121 303-850-7921		7. Unit Agreement Name: 891019635D
4. Location of Well: Footages: OO, Sec., T., R., M.: SWSW Sec. 4, T9S, R18E		8. Well Name and Number: Federal #4-3
		9. API Well Number: 43-047-32653
		10. Field and Pool, or Wildcat: Eight Mile Flat
		County: Uintah
		State: Utah

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

NOTICE OF INTENT (Submit in Duplicate)	SUBSEQUENT REPORT (Submit Original Form Only)
<input type="checkbox"/> Abandon <input type="checkbox"/> Repair Casing <input type="checkbox"/> Change of Plans <input type="checkbox"/> Convert to Injection <input type="checkbox"/> Fracture Treat or Acidize <input type="checkbox"/> Multiple Completion <input checked="" type="checkbox"/> Other <u>Change of Operator</u>	<input type="checkbox"/> Abandon <input type="checkbox"/> Repair Casing <input type="checkbox"/> Change of Plans <input type="checkbox"/> Convert to Injection <input type="checkbox"/> Fracture Treat or Acidize <input checked="" type="checkbox"/> Other _____
<input type="checkbox"/> New Construction <input type="checkbox"/> Pull or Alter Casing <input type="checkbox"/> Recomplete <input type="checkbox"/> Reperforate <input type="checkbox"/> Vent or Flare <input type="checkbox"/> Water Shut-Off	<input type="checkbox"/> New Construction <input type="checkbox"/> Pull or Alter Casing <input type="checkbox"/> Reperforate <input type="checkbox"/> Vent or Flare <input type="checkbox"/> Water Shut-Off
Approximate date work will start _____	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 3-1-03 Rocky Mountain Operating Company, Inc. is no longer the operator of this lease. The new operator is:

Inland Production Company  
410 17th Street  
Suite 700  
Denver CO 80202  
303-893-0102

13. Name & Signature: Betty Neibauer *Betty Neibauer* Title: Agent Date: 4-7-03

(This space for State use only)

RECEIVED  
MAY 12 2003  
DIV. OF OIL, GAS & MINING



# United States Department of the Interior

## BUREAU OF LAND MANAGEMENT

Utah State Office  
P.O. Box 45155  
Salt Lake City, UT 84145-0155

IN REPLY REFER TO  
UT-922

April 16, 2003

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

Re: Eight Mile Flat Unit  
Uintah County, Utah

Gentlemen:

On April 11, 2003, we received an indenture dated March 1, 2003, whereby Rocky Mountain Operating Company, Inc. resigned as Unit Operator and Inland Production Company was designated as Successor Unit Operator for the Eight Mile Flat Unit, Uintah County, Utah.

This indenture was executed by all required parties and the signatory parties have complied with Sections 5 and 6 of the unit agreement. The instrument is hereby approved effective April 16, 2003. In approving this designation, the Authorized Officer neither warrants nor certifies that the designated party has obtained all required approval that would entitle it to conduct operations under the Eight Mile Flat Unit Agreement.

Your statewide (Utah) oil and gas bond No. 0056 will be used to cover all operations within the Eight Mile Flat Unit.

It is requested that you notify all interested parties of the change in unit operator. Copies of the approved instruments are being distributed to the appropriate federal offices, with one copy returned herewith.

Sincerely,

/s/ Robert A. Henricks

Robert A. Henricks  
Chief, Branch of Fluid Minerals

Enclosure

bcc: Field Manager - Vernal (w/enclosure)  
SITLA  
Division of Oil, Gas & Mining  
Minerals Adjudication Group  
File - Eight Mile Flat Unit (w/enclosure)  
Agr. Sec. Chron  
Fluid Chron

UT922:TAThompson:tt:4/16/03

RECEIVED

APR 18 2003

DIV. OF OIL, GAS & MINING

## Results of query for MMS Account Number 891019635

Production	API Number	Operator	Well Name	Well Status	Lease or CA Number	Inspection Item	Township	Range	Section	Quarter/Quarter	File Number
Production	4304731181	ROCKY MOUNTAIN OPERATING CO	4-1 HIKO BELL ✓	OSI	UTU17424	8910196350	9S	18E	4	SESW	8 MIL FLAT NOR
Production	4304732653	ROCKY MOUNTAIN OPERATING CO	4-3 FEDERAL ✓	TA	UTU17424	8910196350	9S	18E	4	SWSW	8 MIL FLAT NOR
Production	4304732654	ROCKY MOUNTAIN OPERATING CO	4-2 FEDERAL ✓	OSI	UTU17424	8910196350	9S	18E	4	NESW	8 MIL FLAT NOR
Production	4304731029	ROCKY MOUNTAIN OPERATING CO	11-1 EIGHT MILE FLAT ✓	OSI	UTU15392	891019635A	9S	18E	11	NWSW	8 MIL FLAT NOR
Production	4304731126	ROCKY MOUNTAIN OPERATING CO	7-1 EIGHT MILE FLAT ✓	TA	UTU16540	891019635B	9S	18E	7	SESW	8 MIL FLAT NOR
Production	4304731142	ROCKY MOUNTAIN OPERATING CO	18-1 EIGHT MILE FLAT ✓	OSI	UTU39714	891019635B	9S	18E	18	NWNW	8 MIL FLAT NOR

<u>Production</u>	<u>4304731277</u>	ROCKY MOUNTAIN OPERATING CO	32-13 EIGHT MILE ✓	OSI	UTU18048	891019635D	9S	18E	13	SWNE	8 MI FLA NOR
<u>Production</u>	<u>4304731547</u>	ROCKY MOUNTAIN OPERATING CO	34-8 EIGHT MILE FLAT ✓	OSI	UTU16540	891019635E	9S	18E	8	SWSE	8 MI FLA NOR

*DISCLAIMER for online data: No warranty is made by the BLM for use of the data for purposes not intended by the BLM.*



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 8  
1595 WYNKOOP STREET  
DENVER, CO 80202-1129  
<http://www.epa.gov/region8>

**DEC 10 2008**

Ref: 8P-W-GW

Eric Sundberg  
Newfield Production Company  
1001 Seventeenth Street, Suite 2000  
Denver, CO 80202

Accepted by the  
Utah Division of  
Oil, Gas and Mining  
**FOR RECORD ONLY**

Re: FINAL Permit  
EPA UIC Permit UT21173-08014  
Well: Federal 13-4-9-18  
SWSW Sec. 4-T9S-R18E  
Uintah County, UT  
API No.: 43-047-32653

**RECEIVED**  
**DEC 15 2008**  
DIV. OF OIL, GAS & MINING

Dear Mr. Sundberg:

Enclosed is your copy of the FINAL Underground Injection Control (UIC) Permit for the proposed Federal 13-4-9-18 injection well. A Statement of Basis that discusses the conditions and requirements of this EPA UIC Permit, is also included.

The Public Comment period for this Permit ended on **DEC 01 2008**. No comments on the Draft Permit were received during the Public Notice period; therefore the Effective Date for this EPA UIC Permit is the date of issuance. All conditions set forth herein refer to Title 40 Parts 124, 144, 146, and 147 of the Code of Federal Regulations (CFR) and are regulations that are in effect as of the Effective Date of this Permit.

Please note that under the terms and conditions of this Final Permit you are authorized only to construct the proposed injection well. Prior to commencing injection, you first must fulfill all "Prior to Commencing Injection" requirements of the Final Permit, Part II Section C.1, and obtain written Authorization to Inject from the EPA. It is your responsibility to be familiar with and to comply with all provisions of your Final Permit. The EPA forms referenced in the permit are available at <http://www.epa.gov/safewater/uic/reportingforms.html>. Guidance documents for Cement Bond Logging, Radioactive Tracer testing, Step Rate testing, Mechanical Integrity demonstration, Procedure in the Event of a Mechanical Integrity Loss, and other UIC guidances, are available at [http://www.epa.gov/region8/water/uic/deep\\_injection.html](http://www.epa.gov/region8/water/uic/deep_injection.html). Upon request, hard copies of the EPA forms and guidances can be provided.

This EPA UIC Permit is issued for the operating life of the well unless terminated (Part III, Section B). The EPA may review this Permit at least every five (5) years to determine whether any action is warranted pursuant to 40 CFR § 144.36(a).

If you have any questions on the enclosed Final Permit or Statement of Basis, please call Bruce Suchomel of my staff at (303) 312-6001, or toll-free at (800) 227-8917, ext. 312-6001.

FOR RECORD ONLY

Sincerely,



Stephen S. Tuber  
Assistant Regional Administrator  
Office of Partnerships and Regulatory Assistance

enclosure: Final UIC Permit  
Statement of Basis

cc: Letter Only:

Uintah & Ouray Business Committee  
Ute Indian Tribe:

Curtis Cesspooch, Chairman  
Ronald Groves, Councilman  
Irene Cuch, Vice-Chairwoman  
Steven Cesspooch, Councilman  
Phillip Chimburas, Councilman  
Frances Poowegup, Councilwoman

Daniel Picard, Superintendent  
U.S. Bureau of Indian Affairs  
Uintah & Ouray Indian Agency

All Enclosures:

Michelle Sabori, Acting Director  
GAP 106  
Ute Indian Tribe

Larry Love, Director  
Energy and Minerals Department  
Ute Indian Tribe

Elaine Willie, GAP Coordinator  
Land Use Department  
Ute Indian Tribe

Gilbert Hunt  
Associate Director  
Utah Division of Oil, Gas, and Mining

Fluid Minerals Engineering Office  
U.S. Bureau of Land Management  
Vernal, UT

Michael Guinn, District Manager  
Newfield Production Company  
Myton, UT



**UNDERGROUND INJECTION CONTROL PROGRAM  
PERMIT**

PREPARED: December 2008

**Permit No. UT21173-08014**

Class II Enhanced Oil Recovery Injection Well

**Federal 13-4-9-18  
Uintah County, UT**

Issued To

**Newfield Production Company**  
1001 Seventeenth Street, Suite 2000  
Denver, CO 80202

<b>PART I. AUTHORIZATION TO CONSTRUCT AND OPERATE</b>	<b>2</b>
<b>PART II. SPECIFIC PERMIT CONDITIONS</b>	<b>3</b>
<b>Section A. WELL CONSTRUCTION REQUIREMENTS</b>	<b>3</b>
1. Casing and Cement	3
2. Injection Tubing and Packer	3
3. Sampling and Monitoring Devices	3
4. Well Logging and Testing	4
5. Postponement of Construction or Conversion	4
6. Workovers and Alterations	4
<b>Section B. MECHANICAL INTEGRITY</b>	<b>4</b>
1. Demonstration of Mechanical Integrity (MI)	5
2. Mechanical Integrity Test Methods and Criteria	5
3. Notification Prior to Testing	5
4. Loss of Mechanical Integrity	5
<b>Section C. WELL OPERATION</b>	<b>6</b>
1. Requirements Prior to Commencing Injection	6
2. Injection Interval	6
3. Injection Pressure Limitation	6
4. Injection Volume Limitation	7
5. Injection Fluid Limitation	7
6. Tubing-Casing Annulus (TCA)	7
<b>Section D. MONITORING, RECORDKEEPING, AND REPORTING OF RESULTS</b>	<b>7</b>
1. Monitoring Parameters, Frequency, Records and Reports	7
2. Monitoring Methods	7
3. Records Retention	8
4. Annual Reports	8
<b>Section E. PLUGGING AND ABANDONMENT</b>	<b>8</b>
1. Notification of Well Abandonment, Conversion or Closure	9
2. Well Plugging Requirements	9
3. Approved Plugging and Abandonment Plan	9
4. Forty Five (45) Day Notice of Plugging and Abandonment	9
5. Plugging and Abandonment Report	9
6. Inactive Wells	9

<b>PART III. CONDITIONS APPLICABLE TO ALL PERMITS</b>	<b>11</b>
<b>Section A. EFFECT OF PERMIT</b>	<b>11</b>
<b>Section B. CHANGES TO PERMIT CONDITIONS</b>	<b>11</b>
1. Modification, Reissuance, or Termination	11
2. Conversions	11
3. Transfer of Permit	11
4. Permittee Change of Address	12
5. Construction Changes, Workovers, Logging and Testing Data	12
<b>Section C. SEVERABILITY</b>	<b>12</b>
<b>Section D. CONFIDENTIALITY</b>	<b>12</b>
<b>Section E. GENERAL PERMIT REQUIREMENTS</b>	<b>12</b>
1. Duty to Comply	12
2. Duty to Reapply	13
3. Need to Halt or Reduce Activity Not a Defense	13
4. Duty to Mitigate	13
5. Proper Operation and Maintenance	13
6. Permit Actions	13
7. Property Rights	13
8. Duty to Provide Information	13
9. Inspection and Entry	13
10. Signatory Requirements	14
11. Reporting requirements	14
<b>Section F. FINANCIAL RESPONSIBILITY</b>	<b>15</b>
1. Method of Providing Financial Responsibility	15
2. Insolvency	15
<b>APPENDIX A - WELL CONSTRUCTION REQUIREMENTS</b>	<b>A-1</b>
<b>APPENDIX B - LOGGING AND TESTING REQUIREMENTS</b>	<b>B-1</b>
<b>APPENDIX C - OPERATING REQUIREMENTS</b>	<b>C-1</b>
<b>APPENDIX D - MONITORING AND REPORTING REQUIREMENTS</b>	<b>D-1</b>
<b>APPENDIX E - PLUGGING AND ABANDONMENT REQUIREMENTS</b>	<b>E-1</b>
<b>APPENDIX F - CORRECTIVE ACTION REQUIREMENTS</b>	<b>F-1</b>

## Part I. AUTHORIZATION TO CONSTRUCT AND OPERATE

Under the authority of the Safe Drinking Water Act and Underground Injection Control (UIC) Program regulations of the U. S. Environmental Protection Agency (EPA) codified at Title 40 of the Code of Federal Regulations (40 CFR) Parts 2, 124, 144, 146, and 147, and according to the terms of this Permit,

Newfield Production Company  
1001 Seventeenth Street, Suite 2000  
Denver, CO 80202

is authorized to construct and to operate the following Class II injection well or wells:

Federal 13-4-9-18  
691' FSL & 741' FWL, SWSW S4, T9S, R18E  
Uintah County, UT

EPA regulates the injection of fluids into injection wells so that injection does not endanger underground sources of drinking water (USDWs). EPA UIC Permit conditions are based on authorities set forth at 40 CFR Parts 144 and 146, and address potential impacts to USDWs.

Under 40 CFR Part 144, Subpart D, certain conditions apply to all UIC Permits and may be incorporated either expressly or by reference. General permit conditions for which the content is mandatory and not subject to site-specific differences are not discussed in this document. Issuance of this Permit does not convey any property rights of any sort or any exclusive privilege, nor does it authorize injury to persons or property or invasion of other private rights, or any infringement of other Federal, State or local laws or regulations. (40 CFR §144.35) An EPA UIC Permit may be issued for the operating life of the injection well or project unless terminated for reasonable cause under 40 CFR §§144.39, 144.40 and 144.41, and may be reviewed at least once every five (5) years to determine if action is required under 40 CFR §144.36(a).

This Permit is issued for the life of the well(s) unless modified, revoked and reissued, or terminated under 40 CFR 144.39 or 144.40. This EPA Permit may be adopted, modified, revoked and reissued, or terminated if primary enforcement authority for a UIC Program is delegated to an Indian Tribe or State. Upon the effective date of delegation, reports, notifications, questions and other correspondence should be directed to the Indian Tribe or State Director.

DEC 10 2008

DEC 10 2008

Issue Date: \_\_\_\_\_

Effective Date \_\_\_\_\_



Stephen S. Tuber  
Assistant Regional Administrator\*  
Office of Partnerships and Regulatory Assistance

\*NOTE: The person holding this title is referred to as the "Director" throughout this Permit.

## PART II. SPECIFIC PERMIT CONDITIONS

### Section A. WELL CONSTRUCTION REQUIREMENTS

These requirements represent the approved minimum construction standards for well casing and cement, injection tubing, and packer.

Details of the approved well construction plan are incorporated into this Permit as APPENDIX A. Changes to the approved plan that may occur during construction must be approved by the Director prior to being physically incorporated.

#### **1. Casing and Cement.**

The well or wells shall be cased and cemented to prevent the movement of fluids into or between underground sources of drinking water. The well casing and cement shall be designed for the life expectancy of the well and of the grade and size shown in APPENDIX A. Remedial cementing may be required if shown to be inadequate by cement bond log or other attempted demonstration of Part II (External) mechanical integrity.

A Radioactive Tracer Survey (RTS) will be required if the Cement Bond Log (CBL) does not demonstrate the minimum 18 feet of cement with 80% bond in the confining zone. The permittee shall submit a new CBL that shows the travel time curve. If the new CBL is not able to identify adequate casing cement of at least 18 feet of effective 80% cement bond index across the confining zone, the RTS will be required within a 180-day period following commencement of injection.

#### **2. Injection Tubing and Packer.**

Injection tubing is required, and shall be run and set with a packer at or below the depth indicated in APPENDIX A. The packer setting depth may be changed provided it remains below the depth indicated in APPENDIX A and the Permittee provides notice and obtains the Director's approval for the change.

#### **3. Sampling and Monitoring Devices.**

The Permittee shall install and maintain in good operating condition:

- (a) a "tap" at a conveniently accessible location on the injection flow line between the pump house or storage tanks and the injection well, isolated by shut-off valves, for collection of representative samples of the injected fluid; and
- (b) one-half (1/2) inch female iron pipe fitting, isolated by shut-off valves and located at the wellhead at a conveniently accessible location, for the attachment of a pressure gauge capable of monitoring pressures ranging from normal operating pressures up to the Maximum Allowable Injection Pressure specified in APPENDIX C:
  - (i) on the injection tubing; and
  - (ii) on the tubing-casing annulus (TCA); and

- (c) a pressure actuated shut-off device attached to the injection flow line set to shut-off the injection pump when or before the Maximum Allowable Injection Pressure (MAIP) specified in APPENDIX C is reached at the wellhead; and
- (d) a non-resettable cumulative volume recorder attached to the injection line.

#### **4. Well Logging and Testing**

Well logging and testing requirements are found in APPENDIX B. The Permittee shall ensure the log and test requirements are performed within the time frames specified in APPENDIX B. Well logs and tests shall be performed according to current EPA-approved procedures. Well log and test results shall be submitted to the Director within sixty (60) days of completion of the logging or testing activity, and shall include a report describing the methods used during logging or testing and an interpretation of the test or log results.

#### **5. Postponement of Construction or Conversion**

The Permittee shall complete well construction within one year of the Effective Date of the Permit, or in the case of an Area Permit within one year of Authorization of the additional well. Authorization to construct and operate shall expire if the well has not been constructed within one year of the Effective Date of the Permit or Authorization and the Permit may be terminated under 40 CFR 144.40, unless the Permittee has notified the Director and requested an extension prior to expiration. Notification shall be in writing, and shall state the reasons for the delay and provide an estimated completion date. Once Authorization has expired under this part, the complete permit process including opportunity for public comment may be required before Authorization to construct and operate may be reissued.

#### **6. Workovers and Alterations**

Workovers and alterations shall meet all conditions of the Permit. Prior to beginning any addition or physical alteration to an injection well that may significantly affect the tubing, packer or casing, the Permittee shall give advance notice to the Director and obtain the Director's approval. The Permittee shall record all changes to well construction on a Well Rework Record (EPA Form 7520-12), and shall provide this and any other record of well workover, logging, or test data to EPA within sixty (60) days of completion of the activity.

A successful demonstration of Part I MI is required following the completion of any well workover or alteration which affects the casing, tubing, or packer. Injection operations shall not be resumed until the well has successfully demonstrated mechanical integrity and the Director has provided written approval to resume injection.

### **Section B. MECHANICAL INTEGRITY**

The Permittee is required to ensure each injection well maintains mechanical integrity at all times. The Director, by written notice, may require the Permittee to comply with a schedule describing when mechanical integrity demonstrations shall be made.

An injection well has mechanical integrity if:

- (a) There is no significant leak in the casing, tubing, or packer (Part I); and

- (b) There is no significant fluid movement into an underground source of drinking water through vertical channels adjacent to the injection well bore (Part II).

### **1. Demonstration of Mechanical Integrity (MI).**

The operator shall demonstrate MI prior to commencing injection and periodically thereafter. Well-specific conditions dictate the methods and the frequency for demonstrating MI and are discussed in the Statement of Basis. The logs and tests are designed to demonstrate both internal (Part I) and external (Part II) MI as described above. The conditions present at this well site warrant the methods and frequency required in Appendix B of this Permit.

In addition to these regularly scheduled demonstrations of MI, the operator shall demonstrate internal (Part I) MI after any workover which affects the tubing, packer or casing.

The Director may require additional or alternative tests if the results presented by the operator are not satisfactory to the Director to demonstrate there is no movement of fluid into or between USDWs resulting from injection activity. Results of MI tests shall be submitted to the Director as soon as possible but no later than sixty (60) days after the test is complete.

The permittee shall demonstrate Part II MI by either (1) running and submitting a new CBL that shows the travel time curve, or (2) by conducting a Part II MI test using a Radioactive Tracer Survey (RTS) within a 180-day period following commencement of injection. Part II MI will be considered demonstrated if (1) the CBL results identify adequate casing cement of at least 18 feet, or (2) the RTS is able to demonstrate no fluid movement through vertical channels adjacent to the well bore. If the new CBL is not able to identify adequate casing cement of at least 18 feet of effective 80% cement bond index across the confining zone, the RTS will be required within a 180-day period following commencement of injection. If the RTS is used, a Part II MI demonstration, using a temperature log, noise log, or RTS is required at least once every five years thereafter.

### **2. Mechanical Integrity Test Methods and Criteria**

EPA-approved methods shall be used to demonstrate mechanical integrity. Ground Water Section Guidance No. 34 "Cement Bond Logging Techniques and Interpretation", Ground Water Section Guidance No. 37, "Demonstrating Part II (External) Mechanical Integrity for a Class II injection well permit", and Ground Water Section Guidance No. 39, "Pressure Testing Injection Wells for Part I (Internal) Mechanical Integrity" are available from EPA and will be provided upon request.

The Director may stipulate specific test methods and criteria best suited for a specific well construction and injection operation.

### **3. Notification Prior to Testing.**

The Permittee shall notify the Director at least 30 days prior to any scheduled mechanical integrity test. The Director may allow a shorter notification period if it would be sufficient to enable EPA to witness the mechanical integrity test. Notification may be in the form of a yearly or quarterly schedule of planned mechanical integrity tests, or it may be on an individual basis.

#### **4. Loss of Mechanical Integrity.**

If the well fails to demonstrate mechanical integrity during a test, or a loss of mechanical integrity becomes evident during operation (such as presence of pressure in the TCA, water flowing at the surface, etc.), the Permittee shall notify the Director within 24 hours (see Part III Section E Paragraph 11(e) of this Permit) and the well shall be shut-in within 48 hours unless the Director requires immediate shut-in.

Within five days, the Permittee shall submit a follow-up written report that documents test results, repairs undertaken or a proposed remedial action plan.

Injection operations shall not be resumed until after the well has successfully been repaired and demonstrated mechanical integrity, and the Director has provided approval to resume injection.

### **Section C. WELL OPERATION**

**INJECTION BETWEEN THE OUTERMOST CASING PROTECTING UNDERGROUND SOURCES OF DRINKING WATER AND THE WELL BORE IS PROHIBITED.**

Injection is approved under the following conditions:

#### **1. Requirements Prior to Commencing Injection.**

Well injection, including for new wells authorized by an Area Permit under 40 CFR 144.33 (c), may commence only after all well construction and pre-injection requirements herein have been met and approved. The Permittee may not commence injection until construction is complete, and

- (a) The Permittee has submitted to the Director a notice of completion of construction and a completed EPA Form 7520-10 or 7520-12; all applicable logging and testing requirements of this Permit (see APPENDIX B) have been fulfilled and the records submitted to the Director; mechanical integrity pursuant to 40 CFR 146.8 and Part II Section B of this Permit has been demonstrated; and
  - (i) The Director has inspected or otherwise reviewed the new injection well and finds it is in compliance with the conditions of the Permit; or
  - (ii) The Permittee has not received notice from the Director of his or her intent to inspect or otherwise review the new injection well within 13 days of the date of the notice in Paragraph 1a, in which case prior inspection or review is waived and the Permittee may commence injection.

#### **2. Injection Interval.**

Injection is permitted only within the approved injection interval, listed in APPENDIX C. Additional individual injection perforations may be added provided that they remain within the approved injection interval and the Permittee provides notice to the Director in accordance with Part II, Section A, Paragraph 6.

#### **3. Injection Pressure Limitation**

- (a) The permitted Maximum Allowable Injection Pressure (MAIP), measured at the wellhead, is found in APPENDIX C. Injection pressure shall not exceed the amount the Director determines is appropriate to ensure that injection does not initiate new fractures or propagate existing fractures in the confining zone adjacent to USDWs. In no case shall injection pressure cause the movement of injection or formation fluids into a USDW.
- (b) The Permittee may request a change of the MAIP, or the MAIP may be increased or decreased by the Director in order to ensure that the requirements in Paragraph (a) above are fulfilled. The Permittee may be required to conduct a step rate injection test or other suitable test to provide information for determining the fracture pressure of the injection zone. Change of the permitted MAIP by the Director shall be by modification of this Permit and APPENDIX C.

#### **4. Injection Volume Limitation.**

Injection volume is limited to the total volume specified in APPENDIX C.

#### **5. Injection Fluid Limitation.**

Injected fluids are limited to those identified in 40 CFR 144.6(b)(2) as fluids used for enhanced recovery of oil or natural gas, including those which are brought to the surface in connection with conventional oil or natural gas production that may be commingled with waste waters from gas plants which are an integral part of production operations unless those waters are classified as a hazardous waste at the time of injection, pursuant to 40 CFR 144.6(b). Non-exempt wastes, including unused fracturing fluids or acids, gas plant cooling tower cleaning wastes, service wastes and vacuum truck wastes, are NOT approved for injection. This well is NOT approved for commercial brine injection, industrial waste fluid disposal or injection of hazardous waste as defined by CFR 40 Part 261. The Permittee shall provide a listing of the sources of injected fluids in accordance with the reporting requirements in Part II Section D Paragraph 4 and APPENDIX D of this Permit.

#### **6. Tubing-Casing Annulus (TCA)**

The tubing-casing annulus (TCA) shall be filled with water treated with a corrosion inhibitor, or other fluid approved by the Director. The TCA valve shall remain closed during normal operating conditions and the TCA pressure shall be maintained at zero (0) psi.

If TCA pressure cannot be maintained at zero (0) psi, the Permittee shall follow the procedures in Ground Water Section Guidance No. 35 "Procedures to follow when excessive annular pressure is observed on a well."

### **Section D. MONITORING, RECORDKEEPING, AND REPORTING OF RESULTS**

#### **1. Monitoring Parameters, Frequency, Records and Reports.**

Monitoring parameters are specified in APPENDIX D. Pressure monitoring recordings shall be taken at the wellhead. The listed parameters are to be monitored, recorded and reported at the frequency indicated in APPENDIX D even during periods when the well is not operating.

Monitoring records must include:

- (a) the date, time, exact place and the results of the observation, sampling, measurement, or analysis, and;
- (b) the name of the individual(s) who performed the observation, sampling, measurement, or analysis, and;
- (c) the analytical techniques or methods used for analysis.

## **2. Monitoring Methods.**

- (a) Monitoring observations, measurements, samples, etc. taken for the purpose of complying with these requirements shall be representative of the activity or condition being monitored.
- (b) Methods used to monitor the nature of the injected fluids must comply with analytical methods cited and described in Table 1 of 40 CFR 136.3 or Appendix III of 40 CFR 261, or by other methods that have been approved in writing by the Director.
- (c) Injection pressure, annulus pressure, injection rate, and cumulative injected volumes shall be observed and recorded at the wellhead under normal operating conditions, and all parameters shall be observed simultaneously to provide a clear depiction of well operation.
- (d) Pressures are to be measured in pounds per square inch (psi).
- (e) Fluid volumes are to be measured in standard oil field barrels (bbl).
- (f) Fluid rates are to be measured in barrels per day (bbl/day).

## **3. Records Retention.**

- (a) Records of calibration and maintenance, and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit shall be retained for a period of AT LEAST THREE (3) YEARS from the date of the sample, measurement, report, or application. This period may be extended anytime prior to its expiration by request of the Director.
- (b) Records of the nature and composition of all injected fluids must be retained until three (3) years after the completion of any plugging and abandonment (P&A) procedures specified under 40 CFR 144.52(a)(6) or under Part 146 Subpart G, as appropriate. The Director may require the Permittee to deliver the records to the Director at the conclusion of the retention period. The Permittee shall continue to retain the records after the three (3) year retention period unless the Permittee delivers the records to the Director or obtains written approval from the Director to discard the records.

#### **4. Annual Reports.**

Whether the well is operating or not, the Permittee shall submit an Annual Report to the Director that summarizes the results of the monitoring required by Part II Section D and APPENDIX D.

The first Annual Report shall cover the period from the effective date of the Permit through December 31 of that year. Subsequent Annual Reports shall cover the period from January 1 through December 31 of the reporting year. Annual Reports shall be submitted by February 15 of the year following data collection. EPA Form 7520-11 may be copied and shall be used to submit the Annual Report, however, the monitoring requirements specified in this Permit are mandatory even if EPA Form 7520-11 indicates otherwise.

### **Section E. PLUGGING AND ABANDONMENT**

#### **1. Notification of Well Abandonment, Conversion or Closure.**

The Permittee shall notify the Director in writing at least forty-five (45) days prior to: 1) plugging and abandoning an injection well, 2) converting to a non-injection well, and 3) in the case of an Area Permit, before closure of the project.

#### **2. Well Plugging Requirements**

Prior to abandonment, the injection well shall be plugged with cement in a manner which isolates the injection zone and prevents the movement of fluids into or between underground sources of drinking water, and in accordance with 40 CFR 146.10 and other applicable Federal, State or local law or regulations. Tubing, packer and other downhole apparatus shall be removed. Cement with additives such as accelerators and retarders that control or enhance cement properties may be used for plugs; however, volume-extending additives and gel cements are not approved for plug use. Plug placement shall be verified by tagging. Plugging gel of at least 9.6 lb/gal shall be placed between all plugs. A minimum 50 ft surface plug shall be set inside and outside of the surface casing to seal pathways for fluid migration into the subsurface. The Plugging Record must be certified as accurate and complete by the person responsible for the plugging operation. Prior to placement of the cement plug(s) the well shall be in a state of static equilibrium with the mud weight equalized top to bottom, either by circulating the mud in the well at least once or by a comparable method prescribed by the Director.

#### **3. Approved Plugging and Abandonment Plan.**

The approved plugging and abandonment plan is incorporated into this Permit as APPENDIX E. Changes to the approved plugging and abandonment plan must be approved by the Director prior to beginning plugging operations. The Director also may require revision of the approved plugging and abandonment plan at any time prior to plugging the well.

#### **4. Forty Five (45) Day Notice of Plugging and Abandonment.**

The Permittee shall notify the Director at least forty-five (45) days prior to plugging and abandoning a well and provide notice of any anticipated change to the approved plugging and abandonment plan.

### **5. Plugging and Abandonment Report.**

Within sixty (60) days after plugging a well, the Permittee shall submit a report (EPA Form 7520-13) to the Director. The plugging report shall be certified as accurate by the person who performed the plugging operation. Such report shall consist of either:

- (a) A statement that the well was plugged in accordance with the approved plugging and abandonment plan; or
- (b) Where actual plugging differed from the approved plugging and abandonment plan, an updated version of the plan, on the form supplied by the Director, specifying the differences.

### **6. Inactive Wells.**

After any period of two years during which there is no injection the Permittee shall plug and abandon the well in accordance with Part II Section E Paragraph 2 of this Permit unless the Permittee:

- (a) Provides written notice to the Director;
- (b) Describes the actions or procedures the Permittee will take to ensure that the well will not endanger USDWs during the period of inactivity. These actions and procedures shall include compliance with mechanical integrity demonstration, Financial Responsibility and all other permit requirements designed to protect USDWs; and
- (c) Receives written notice by the Director temporarily waiving plugging and abandonment requirements.

## **PART III. CONDITIONS APPLICABLE TO ALL PERMITS**

### **Section A. EFFECT OF PERMIT**

The Permittee is allowed to engage in underground injection in accordance with the conditions of this Permit. The Permittee shall not construct, operate, maintain, convert, plug, abandon, or conduct any other activity in a manner that allows the movement of fluid containing any contaminant into underground sources of drinking water, if the presence of that contaminant may cause a violation of any primary drinking water regulation under 40 CFR 142 or may otherwise adversely affect the health of persons. Any underground injection activity not authorized by this Permit or by rule is prohibited. Issuance of this Permit does not convey property rights of any sort or any exclusive privilege; nor does it authorize any injury to persons or property, any invasion of other private rights, or any infringement of any other Federal, State or local law or regulations. Compliance with the terms of this Permit does not constitute a defense to any enforcement action brought under the provisions of Section 1431 of the Safe Drinking Water Act (SDWA) or any other law governing protection of public health or the environment, for any imminent and substantial endangerment to human health or the environment, nor does it serve as a shield to the Permittee's independent obligation to comply with all UIC regulations. Nothing in this Permit relieves the Permittee of any duties under applicable regulations.

### **Section B. CHANGES TO PERMIT CONDITIONS**

#### ***1. Modification, Reissuance, or Termination.***

The Director may, for cause or upon a request from the Permittee, modify, revoke and reissue, or terminate this Permit in accordance with 40 CFR 124.5, 144.12, 144.39, and 144.40. Also, this Permit is subject to minor modification for causes as specified in 40 CFR 144.41. The filing of a request for modification, revocation and reissuance, termination, or the notification of planned changes or anticipated noncompliance on the part of the Permittee does not stay the applicability or enforceability of any condition of this Permit.

#### ***2. Conversions.***

The Director may, for cause or upon a written request from the Permittee, allow conversion of the well from a Class II injection well to a non-Class II well. Conversion may not proceed until the Permittee receives written approval from the Director. Conditions of such conversion may include but are not limited to, approval of the proposed well rework, follow up demonstration of mechanical integrity, well-specific monitoring and reporting following the conversion, and demonstration of practical use of the converted configuration.

#### ***3. Transfer of Permit.***

Under 40 CFR 144.38, this Permit is transferable provided the current Permittee notifies the Director at least thirty (30) days in advance of the proposed transfer date (EPA Form 7520-7) and provides a written agreement between the existing and new Permittees containing a specific date for transfer of Permit responsibility, coverage and liability between them. The notice shall adequately demonstrate that the financial responsibility requirements of 40 CFR 144.52(a)(7) will be met by the new Permittee. The Director may require modification or revocation and reissuance of the Permit to change the name of the Permittee and incorporate such other requirements as may be necessary under the Safe Drinking Water Act; in some cases, modification or revocation and reissuance is mandatory.

#### **4. Permittee Change of Address.**

Upon the Permittee's change of address, or whenever the operator changes the address where monitoring records are kept, the Permittee must provide written notice to the Director within 30 days.

#### **5. Construction Changes, Workovers, Logging and Testing Data**

The Permittee shall give advance notice to the Director, and shall obtain the Director's written approval prior to any physical alterations or additions to the permitted facility. Alterations or workovers shall meet all conditions as set forth in this permit. The Permittee shall record any changes to the well construction on a Well Rework Record (EPA Form 7520-12), and shall provide this and any other record of well workovers, logging, or test data to EPA within sixty (60) days of completion of the activity.

Following the completion of any well workovers or alterations which affect the casing, tubing, or packer, a successful demonstration of mechanical integrity (Part III, Section F of this Permit) shall be made, and written authorization from the Director received, prior to resuming injection activities.

### **Section C. SEVERABILITY**

The Provisions of this Permit are severable, and if any provision of this Permit or the application of any provision of this Permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this Permit shall not be affected thereby.

### **Section D. CONFIDENTIALITY**

In accordance with 40 CFR Part 2 and 40 CFR 144.5, information submitted to EPA pursuant to this Permit may be claimed as confidential by the submitter. Any such claim must be asserted at the time of submission by stamping the words "confidential business information" on each page containing such information. If no claim is made at the time of submission, EPA may make the information available to the public without further notice. If a claim is asserted, the validity of the claim will be assessed in accordance with the procedures in 40 CFR Part 2 (Public Information). Claims of confidentiality for the following information will be denied:

- The name and address of the Permittee, and
- information which deals with the existence, absence or level of contaminants in drinking water.

### **Section E. GENERAL PERMIT REQUIREMENTS**

#### **1. Duty to Comply.**

The Permittee must comply with all conditions of this Permit. Any noncompliance constitutes a violation of the Safe Drinking Water Act (SDWA) and is grounds for enforcement action; for Permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application; except that the Permittee need not comply with the provisions of this Permit to the extent and for the duration such noncompliance is authorized in an emergency permit under 40 CFR 144.34. All violations of the SDWA may subject the Permittee to penalties and/or criminal prosecution as specified in Section 1423 of the SDWA.

**2. Duty to Reapply.**

If the Permittee wishes to continue an activity regulated by this Permit after the expiration date of this Permit, under 40 CFR 144.37 the Permittee must apply for a new permit prior to the expiration date.

**3. Need to Halt or Reduce Activity Not a Defense.**

It shall not be a defense for a Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this Permit.

**4. Duty to Mitigate.**

The Permittee shall take all reasonable steps to minimize or correct any adverse impact on the environment resulting from noncompliance with this Permit.

**5. Proper Operation and Maintenance.**

The Permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the Permittee to achieve compliance with the conditions of this Permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of this Permit.

**6. Permit Actions.**

This Permit may be modified, revoked and reissued or terminated for cause. The filing of a request by the Permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.

**7. Property Rights.**

This Permit does not convey any property rights of any sort, or any exclusive privilege.

**8. Duty to Provide Information.**

The Permittee shall furnish to the Director, within a time specified, any information which the Director may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The Permittee shall also furnish to the Director, upon request, copies of records required to be kept by this Permit. The Permittee is required to submit any information required by this Permit or by the Director to the mailing address designated in writing by the Director.

**9. Inspection and Entry.**

The Permittee shall allow the Director, or an authorized representative, upon the presentation of credentials and other documents as may be required by law, to:

- (a) Enter upon the Permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this Permit;

- (b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Permit;
- (c) Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Permit; and,
- (d) Sample or monitor at reasonable times, for the purpose of assuring permit compliance or as otherwise authorized by the SDWA, any substances or parameters at any location.

#### **10. Signatory Requirements.**

All applications, reports or other information submitted to the Director shall be signed and certified according to 40 CFR 144.32. This section explains the requirements for persons duly authorized to sign documents, and provides wording for required certification.

#### **11. Reporting Requirements.**

- (a) **Planned changes.** The Permittee shall give notice to the Director as soon as possible of any planned changes, physical alterations or additions to the permitted facility, and prior to commencing such changes.
- (b) **Anticipated noncompliance.** The Permittee shall give advance notice to the Director of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.
- (c) **Monitoring Reports.** Monitoring results shall be reported at the intervals specified in this Permit.
- (d) **Compliance schedules.** Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this Permit shall be submitted no later than 30 days following each schedule date.
- (e) **Twenty-four hour reporting.** The Permittee shall report to the Director any noncompliance which may endanger human health or the environment, including:
  - (i) Any monitoring or other information which indicates that any contaminant may cause endangerment to a USDW; or
  - (ii) Any noncompliance with a permit condition or malfunction of the injection system which may cause fluid migration into or between USDWs.

Information shall be provided, either directly or by leaving a message, within twenty-four (24) hours from the time the permittee becomes aware of the circumstances by telephoning (800) 227-8917 and requesting EPA Region VIII UIC Program Compliance and Technical Enforcement Director, or by contacting the EPA Region VIII Emergency Operations Center at (303) 293-1788.

In addition, a follow up written report shall be provided to the Director within five (5) days of the time the Permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause, the period of noncompliance including exact dates and times, and if the noncompliance has not been corrected the anticipated time it is expected to continue; and the steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance.

- (f) Oil Spill and Chemical Release Reporting: The Permittee shall comply with all reporting requirements related to the occurrence of oil spills and chemical releases by contacting the National Response Center (NRC) at (800) 424-8802, (202) 267-2675, or through the NRC website <http://www.nrc.uscg.mil/index.htm>.
- (g) Other Noncompliance. The Permittee shall report all instances of noncompliance not reported under paragraphs Part III, Section E Paragraph 11(b) or Section E, Paragraph 11(e) at the time the monitoring reports are submitted. The reports shall contain the information listed in Paragraph 11(e) of this Section.
- (h) Other information. Where the Permittee becomes aware that it failed to submit any relevant facts in the permit application, or submitted incorrect information in a permit application or in any report to the Director, the Permittee shall promptly submit such facts or information to the Director.

## **Section F. FINANCIAL RESPONSIBILITY**

### **1. Method of Providing Financial Responsibility.**

The Permittee shall maintain continuous compliance with the requirement to maintain financial responsibility and resources to close, plug, and abandon the underground injection well(s). No substitution of a demonstration of financial responsibility shall become effective until the Permittee receives written notification from the Director that the alternative demonstration of financial responsibility is acceptable. The Director may, on a periodic basis, require the holder of a permit to revise the estimate of the resources needed to plug and abandon the well to reflect changes in such costs and may require the Permittee to provide a revised demonstration of financial responsibility.

### **2. Insolvency.**

In the event of:

- (a) the bankruptcy of the trustee or issuing institution of the financial mechanism; or
- (b) suspension or revocation of the authority of the trustee institution to act as trustee; or

- (c) the institution issuing the financial mechanism losing its authority to issue such an instrument

the Permittee must notify the Director in writing, within ten (10) business days, and the Permittee must establish other financial assurance or liability coverage acceptable to the Director within sixty (60) days after any event specified in (a), (b), or (c) above.

The Permittee must also notify the Director by certified mail of the commencement of voluntary or involuntary proceedings under Title 11 (Bankruptcy), U.S. Code naming the owner or operator as debtor, within ten (10) business days after the commencement of the proceeding. A guarantor, if named as debtor of a corporate guarantee, must make such a notification as required under the terms of the guarantee.

## APPENDIX A

### WELL CONSTRUCTION REQUIREMENTS

See diagram.

The Federal 13-4-9-18 was drilled to a depth of 6000 feet (KB) in the Basal Carbonate Member of the Green River Formation.

Surface casing (9-5/8 inch) was set at a depth of 300 feet in a 12-1/4 inch hole using 100 sacks of Class "A" cement which was circulated to the surface.

Production casing (5-1/2 inch) was set at a depth of 5941 feet (KB) in a 7-7/8 inch hole with 400 sacks of Class "A" cement. This well construction is considered adequate to protect USDWs.

The EPA calculates the top of cement as 3407 feet from the surface. No Cement Bond Log (CBL) was provided in the application. (Permittee must address Corrective Action measures identified on pages 3 and 5 of this permit as well as within Appendix F in order to identify adequate 80% bond index cement bond within the Confining Zone.)

The schematic diagram shows enhanced recovery injection perforations in the Douglas Creek Member of the Green River Formation. Additional perforations may be added at a later time between the depths of 3744 feet (Garden Gulch top) and 6023 feet (estimated Wasatch top), provided the operator first notifies the Director and later submits an updated well completion report (EPA Form) 7520-12) and schematic diagram.

The packer will be set no higher than 100 feet above the top perforation.

Permit # UT21173-08014

Federal #13-4-9-18

(Formerly Fed 4-3)

Spud Date: 6/8/1995  
Put on Production: 8/21/1995

Initial Production: 40 BOPD,  
56 MCFD, 0 BWPD

GL: 4962' KB: 4972'

Wellbore Diagram

FRAC JOB

7/21/95 5383'-5735'

Frac zones as follows:  
103,300# 20/40 sand in 735 bbls Viking I-35  
fluid. Treated @ avg press of 3400 psi w/avg  
rate of 40 BPM. ISIP 2200 psi.

SURFACE CASING

CSG SIZE: 9-5/8"  
GRADE: J-55  
WEIGHT: 36#  
LENGTH: 300'  
HOLE SIZE: 12-1/4"  
CEMENT DATA: 100 sxs Class "A" cement.

Pub 92 Base USDW

272  
300

PRODUCTION CASING

CSG SIZE: 5-1/2"  
GRADE: J-55  
WEIGHT: 17#  
LENGTH: 6000'  
HOLE SIZE: 7-7/8"  
CEMENT DATA: 400 sxs Class "A" cement.  
CEMENT TOP: With 70% efficiency -- Estimated at 4092'

EPA TOC 3407

80% Bond  
Un Known  
Need CBL

1397 Green River top

2922 Trona top

2952 Mahogany Bench

2979

3550 Top  
CZ Upper Green River Shale  
3744 Garden Gulch top

Injection Zone: Top of  
Garden Gulch down to  
top of Wasatch.

TUBING

SIZE/GRADE/WT.: 2-7/8"/4.7#/J-55  
TUBING LENGTH: 170 jts (5290.35')  
TUBING ANCHOR: 5301.85'  
TUBING LENGTH: 14 jts. (5304.85')  
SEATING NIPPLE: 5738.22'  
MUD ANCHOR: 5739.32'  
TUBING LENGTH: 2 jts. (5747.32')  
TOTAL STRING LENGTH: EOT @ 5810.15'

4092

4690 Douglas Creek top

Anchor @ 5301'

SUCKER RODS

POLISHED ROD: 1-1/2"x22'  
SUCKER RODS: 141-3/4" rods, 88-7/8" rods, 1-4', 2-8' x 7/8" pony rods.  
PUMP SIZE: 2"x1-3/4"x16'  
STROKE LENGTH:  
PUMP SPEED, SPM:  
LOGS: CNLD/DI.J/CBL

5383'-5388'

5416'-5420

5454'-5457'

5460'-5462'

5464'-5466'

5487'-5491'

5496'-5502'

5720'-5727'

5731'-5735'

EOT 5810

5898 Basal Carbonate  
(BC)

SN @ 5738'

EOT @ 5810'

PBTD @ 5941'

TD @ 6000'

PERFORATION RECORD

Date	Interval	SPF	Holes
7/21/95	5383'-5388'	1 SPF	6 holes
7/21/95	5416'-5420	1 SPF	4 holes
7/21/95	5454'-5457'	1 SPF	4 holes
7/21/95	5460'-5462'	1 SPF	2 holes
7/21/95	5464'-5466'	1 SPF	2 holes
7/21/95	5487'-5491'	1 SPF	3 holes
7/21/95	5496'-5502'	1 SPF	3 holes
7/21/95	5720'-5727'	1 SPF	3 holes
7/21/95	5731'-5735'	1 SPF	3 holes

- 6023 Top of Wasatch (est.) 125' below BC

**NEWFIELD**

---

**Federal 13-4-9-18**

691' FSL & 741' FWL

SW/SW Section 4-T9S-R18E

Uintah Co, Utah

API #43-047-32653; Lease #UTU-17424

## APPENDIX B

### LOGGING AND TESTING REQUIREMENTS

#### Logs.

Logs will be conducted according to current UIC guidance. It is the responsibility of the Permittee to obtain and use guidance prior to conducting any well logging required as a condition of this permit.

#### NO LOGGING REQUIREMENTS

#### Tests.

Tests will be conducted according to current UIC guidance. It is the responsibility of the Permittee to obtain and use guidance prior to conducting any well test required as a condition of this permit.

WELL NAME: Federal 13-4-9-18	
TYPE OF TEST	DATE DUE
Standard Annulus Pressure	Prior to receiving authorization to inject and at least once every five years after the last successful demonstration of Part I MI.
Pore Pressure	Prior to receiving authorization to begin injection.
Cement Bond Log (CBL)	Prior to receiving authorization to begin injection.
Radioactive Tracer Survey (2)	An RTS will be required if the cement bond log does not demonstrate the minimum 18 feet of cement with 80% cement bond index in the confining zone.

## APPENDIX C

### OPERATING REQUIREMENTS

#### MAXIMUM ALLOWABLE INJECTION PRESSURE:

Maximum Allowable Injection Pressure (MAIP) as measured at the surface shall not exceed the pressure(s) listed below.

WELL NAME	MAXIMUM ALLOWED INJECTION PRESSURE (psi)
	ZONE 1 (Upper)
Federal 13-4-9-18	1,405

#### INJECTION INTERVAL(S):

Injection is permitted only within the approved injection interval listed below. Injection perforations may be altered provided they remain within the approved injection interval and the Permittee provides notice to the Director in accordance with Part II, Section A, Paragraph 6. Specific injection perforations can be found in Appendix A.

WELL NAME: Federal 13-4-9-18	APPROVED INJECTION INTERVAL (KB, ft)		FRACTURE GRADIENT (psi/ft)
	TOP	BOTTOM	
FORMATION NAME			
Green River	3,744.00	6,023.00	0.701

#### ANNULUS PRESSURE:

The annulus pressure shall be maintained at zero (0) psi as measured at the wellhead. If this pressure cannot be maintained, the Permittee shall follow the procedures listed under Part II, Section C. 6. of this permit.

#### MAXIMUM INJECTION VOLUME:

There is no limitation on the number of barrels per day (bbls/day) of water that shall be injected into this well, provided further that in no case shall injection pressure exceed that limit shown in Appendix C.

## APPENDIX D

### MONITORING AND REPORTING PARAMETERS

This is a listing of the parameters required to be observed, recorded, and reported. Refer to the permit Part II, Section D, for detailed requirements for observing, recording, and reporting these parameters.

OBSERVE MONTHLY AND RECORD AT LEAST ONCE EVERY THIRTY DAYS	
<b>OBSERVE AND RECORD</b>	Injection pressure (psig)
	Annulus pressure(s) (psig)
	Injection rate (bbl/day)
	Fluid volume injected since the well began injecting (bbls)

ANNUALLY	
<b>ANALYZE</b>	Injected fluid total dissolved solids (mg/l)
	Injected fluid specific gravity
	Injected fluid specific conductivity
	Injected fluid pH

ANNUALLY	
<b>REPORT</b>	Each month's maximum and averaged injection pressures (psig)
	Each month's maximum and minimum annulus pressure(s) (psig)
	Each month's injected volume (bbl)
	Fluid volume injected since the well began injecting (bbl)
	Written results of annual injected fluid analysis
	Sources of all fluids injected during the year

In addition to these items, additional Logging and Testing results may be required periodically. For a list of those items and their due dates, please refer to APPENDIX B - LOGGING AND TESTING REQUIREMENTS.

## APPENDIX E

### PLUGGING AND ABANDONMENT REQUIREMENTS

See diagram.

The well shall be plugged in a manner that isolates the injection zone and prevents movement of fluid into or between USDWs and in accordance with other applicable Federal, State, or local law or regulation. Tubing, packers, and any downhole apparatus shall be removed. Class A, C, G, and H cements, with additives such as accelerators and retarders that control or enhance cement properties, may be used for plugs. However, volume extending additives and gel cements are not approved for plug use. Plug placement shall be verified by tagging. Plugging gel of at least 9.2 lb/gal shall be placed between all plugs. Within 60 days after plugging, the owner or operator shall submit Plugging Record (EPA Form 7520-13) to the Director. The Plugging Record must be certified as accurate and complete by the person responsible for the plugging operation. At a minimum, the following plugs are required:

**PLUG No. 1: Seal Injection Zone:** Set a cast iron bridge plug (CIBP) no more than fifty feet above the top injection perforation. Place at least twenty feet of cement on top of the CIBP.

**PLUG No. 2: Seal Mahogany Shale and Trona intervals:** Squeeze a cement plug on the backside of the 5-1/2 inch casing across the Trona Zone and the Mahogany Shale approximately 3550 to 3744 feet (unless pre-existing backside cement precludes cement-squeezing this interval) followed by a minimum 160-foot balanced cement plug inside the 5-1/2 inch casing across the Trona Zone and the Mahogany Shale, approximately 3550 to 3744 feet.

**PLUG No. 3: Seal USDWs:** Squeeze a cement plug (1347 - 1447 feet) on the backside of the 5-1/2 inch casing across the base of the Uinta formation (unless pre-existing backside cement precludes cement-squeezing this interval), followed by a minimum 100-foot balanced cement plug inside the 5-1/2 inch casing across the base of the Uinta Formation, approximately 1347 - 1447 feet.

**PLUG No. 4: Seal Surface:** Set a Class "G" cement plug within the 5-1/2 inch casing to 350 feet and up the 5-1/2 inch by 9-5/8 casings, annulus to surface.

Permit # UT21173-08014  
 Spud Date: 6/8/1995  
 Put on Production: 8/21/1995  
 GL: 4962' KB: 4972'

## Federal #13-4-9-18 (Formerly Fed 4-3)

Initial Production: 40 BOPD,  
 56 MCFD, 0 BWPD

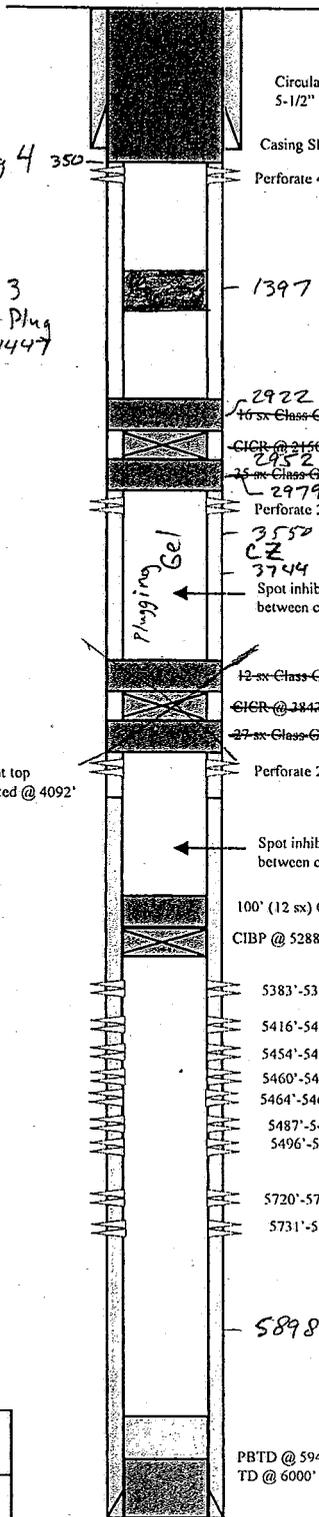
Proposed P & A  
 Wellbore Diagram

### SURFACE CASING

CSG SIZE: 9-5/8"  
 GRADE: J-55  
 WEIGHT: 36#  
 LENGTH: 300'  
 HOLE SIZE: 12-1/4"  
 CEMENT DATA: 100 sx. Class "A" cement.

### PRODUCTION CASING

CSG SIZE: 5-1/2"  
 GRADE: J-55  
 WEIGHT: 17#  
 LENGTH: 6000'  
 HOLE SIZE: 7-7/8"  
 CEMENT DATA: 400 sx. Class "A" cement.  
 CEMENT TOP: With 70% efficiency - Estimated at 4092'



Cement inside longstring casing from surface to depth of at least 50' below surface casing.

Cement annulus of surface casing long-string casing from surface to depth of at least 50' below the surface casing shoe.

Top Green River, 100' balanced cement plug across base of Uinta/top of Green River, mid-contact point at approx. 1397'. (USDW)

Trona/Birds Nest - 200' Plug w/0' excess - 160' cement plug across Trona - Birds Nest and top of Mahogany Bench oil shale at approx. 2872 - 3029'.

66' Plug - 100' Plug w/50' excess - = 50' above top perforation place 5' cast iron plug. Place 20' of cement on top.

- 6023 Top of Wasatch (est.) 125' below BC

(not to scale)



Federal 13-4-9-18

691' FSL & 741' FWL

SW/SW Section 4-T9S-R18E

Uintah Co, Utah

API #43-047-32653; Lease #UTU-17424

## APPENDIX F

### CORRECTIVE ACTION REQUIREMENTS

No corrective action required.

# STATEMENT OF BASIS

## NEWFIELD PRODUCTION COMPANY

FEDERAL 13-4-9-18  
UINTAH COUNTY, UT

EPA PERMIT NO. UT21173-08014

**CONTACT:** Bruce Suchomel  
U. S. Environmental Protection Agency  
Ground Water Program, 8P-W-GW  
1595 Wynkoop Street  
Denver, Colorado 80202-1129  
Telephone: 1-800-227-8917 ext. 312-6001

This STATEMENT OF BASIS gives the derivation of site-specific UIC Permit conditions and reasons for them. Referenced sections and conditions correspond to sections and conditions in the Permit.

EPA UIC permits regulate the injection of fluids into underground injection wells so that the injection does not endanger underground sources of drinking water. EPA UIC permit conditions are based upon the authorities set forth in regulatory provisions at 40 CFR Parts 144 and 146, and address potential impacts to underground sources of drinking water. Under 40 CFR 144.35 Issuance of this permit does not convey any property rights of any sort or any exclusive privilege, nor authorize injury to persons or property of invasion of other private rights, or any infringement of other Federal, State or local laws or regulations. Under 40 CFR 144 Subpart D, certain conditions apply to all UIC Permits and may be incorporated either expressly or by reference. General Permit conditions for which the content is mandatory and not subject to site-specific differences (40 CFR Parts 144, 146 and 147) are not discussed in this document.

Upon the Effective Date when issued, the Permit authorizes the construction and operation of injection wells so that the injection does not endanger underground sources of drinking water, governed by the conditions specified in the Permit. The Permit is issued for the operating life of the injection well or project unless terminated for reasonable cause under 40 CFR 144.39, 144.40 and 144.41. The Permit is subject to EPA review at least once every five (5) years to determine if action is required under 40 CFR 144.36(a).

## PART I. General Information and Description of Facility

Newfield Production Company  
1001 Seventeenth Street, Suite 2000  
Denver, CO 80202

on

October 16, 2007

submitted an application for an Underground Injection Control (UIC) Program Permit or Permit Modification for the following injection well or wells:

Federal 13-4-9-18  
691' FSL & 741' FWL, SWSW S4, T9S, R18E  
Uintah County, UT

Regulations specific to Uintah-Ouray Indian Reservation injection wells are found at 40 CFR 147 Subpart TT.

The application, including the required information and data necessary to issue or modify a UIC Permit in accordance with 40 CFR Parts 144, 146 and 147, was reviewed and determined by EPA to be complete.

The Permit will expire upon delegation of primary enforcement responsibility (primacy) for applicable portions of the UIC Program to the Ute Indian Tribe or the State of Utah unless the delegated agency has the authority and chooses to adopt and enforce this Permit as a Tribal or State Permit.

TABLE 1.1 shows the status of the well or wells as "New", "Existing", or "Conversion" and for Existing shows the original date of injection operation. Well authorization "by rule" under 40 CFR Part 144 Subpart C expires automatically on the Effective Date of an issued UIC Permit.

The Greater Boundary Federal No. 13-4-9-18 is currently an active Garden Gulch and Douglas Creek Members oil well, with total depth in the Basal Carbonate Member. The applicant intends to convert this facility to a Class II enhanced recovery injection well.

TABLE 1.1		
WELL STATUS / DATE OF OPERATION		
NEW WELLS		
Well Name	Well Status	Date of Operation
Federal 13-4-9-18	New	N/A

## PART II. Permit Considerations (40 CFR 146.24)

## Hydrogeologic Setting

Water wells for domestic supply in this area, when present, generally are completed into the shallow alluvium, the Duchesne River Formation, or the underlying Uinta Formation, and the water generally contains approximately 500 to 1,500 mg/l and higher total dissolved solids.

The Uinta-Animas aquifer in the Uinta Basin is present in water-yielding beds of sandstone, conglomerate, and siltstone of the Duchesne River and Uinta Formations, the Renegade Tongue of the Wasatch Formation, and the Douglas Creek Member of the Green River Formation. The Renegade Tongue of the Wasatch Formation and the Douglas Creek Member of the Green River formation contain an aquifer along the southern and eastern margins of the basin where the rocks primarily consist of fluvial, massive, irregularly bedded sandstone and siltstone. Water-yielding units in the Uinta-Animas aquifer in the Uinta Basin commonly are separated from each other and from the underlying Mesaverde aquifer by units of low permeability composed of claystone, shale, marlstone, or limestone. In the Uinta Basin, for example, the part of the aquifer in the Duchesne River and Uinta formations ranges in thickness from 0 feet at the southern margin of the aquifer to as much as 9,000 feet in the north-central part of the aquifer. Ground-water recharge to the Uinta-Animas aquifer generally occurs in the areas of higher altitude along the margins of the basin. Ground water is discharged mainly to streams, springs, and by transpiration from vegetation growing along stream valleys. The rate of ground-water withdrawal is small, and natural discharge is approximately equal to recharge. Recharge occurs near the southern margin of aquifer, and discharge occurs near the White and Green Rivers (from USGS publication H 730-C). Water samples from Mesaverde sands in the nearby Natural Buttes Unit yielded highly saline water.

### Geologic Setting (TABLE 2.1)

The proposed enhanced oil recovery injection well is located in the Greater Monument Butte Field, T9S and R18E, which lies near the center of the broad, gently northward dipping south flank of the Uinta Basin. More than 450 million barrels of oil (63MT) have been produced from sediments of the Uinta Basin. The Uinta Basin is a topographic and structural trough encompassing an area of more than 9,300 square miles (14,900 sq. km) in northeast Utah. The basin is sharply asymmetrical, with a steep north flank bounded by the east-west-trending Uinta Mountains, and a gently dipping south flank. The Uinta Basin was formed in Paleocene to Eocene time, creating a large area of internal drainage which was filled by the ancestral Lake Uinta. The lacustrine, or fresh water lake-formed, sediments deposited in and around Lake Uinta make up the Uintah and Green River Formations. The southern shore of Lake Uinta was very broad and flat, resulting in large cyclic shifts of the location of the shoreline during the many repeated transgressive and regressive cycles caused by the climatic and tectonic-induced rise and fall of water levels of the lake. Distributary-mouth bars, distributary channels, and near-shore bars are the primary oil producing sandstone reservoirs in the area. (Ref: "Reservoir Characterization of the Lower Green River Formation, Southwest Uinta Basin, Utah Biannual Technical Progress Report, 4/1/99-9/30/99", by C.D. Morgan, Program Manager, November 1999, Contract DE-AC26-98BC15103).

The Duchesne River Formation is absent in this area. Shale and siltstone of the Uinta Formation outcrop and compose the surface rock throughout the area. The lower 600 ft. to 800 ft. of the Uinta Formation, consisting generally of shale interbedded with occasionally water-bearing sandstone lenses between 5 ft to 20 ft thick, is underlain by the Green River Formation. The Green River Formation is further subdivided into several Member and local marker units. The cyclic nature of Green River deposition in the southern shore area resulted in numerous stacked, intertonguing deltaic and near-shore sand and silt deposits. Red alluvial shale and siltstone deposits that intertongue with the Green River sediments are of the Colton and Wasatch

Formations. Under the Wasatch Formation is the Mesaverde Formation, which consists primarily of continental-origin deposits of interbedded shale, sandstone, and coal.

The geologic dip is about 200'/mile, and there are no known surface faults in this area. Veins of gilsonite, a natural resinous hydrocarbon occasionally mined as a resource, occurs in the greater Uintah Basin though it is predominantly found on the eastern margin of the basin near the Colorado border. Vertical veins, generally between 2 ft to 6 ft wide but up to 28 ft wide, may extend many miles in length and occasionally extend as deep as 2,000 ft. In this area within the Greater Monument Butte Field there is one known gilsonite vein. This vein is not considered to present a pathway for migration of fluid out of the injection zone because it terminates at depth of about 2,000 ft, far above the protective confining layer and much deeper injection zone. Newfield and the owner of this former gilsonite mine have agreed to conditions for operation near this vein to ensure no potential for impact to this vein or to ground water from enhanced oil recovery operations.

Throughout the Greater Monument Butte Field area undergoing enhanced oil recovery operations, water analyses of the Green River Formation generally exhibit Total Dissolved Solids (TDS) content well in excess of 10,000 mg/l. However, some recent water analyses from the field showed lower TDS values closer to 10,000 mg/l. While rain and surface water recharge into Green River Formation outcrops further south along the Book Cliffs/Roan Cliffs in effect "freshens" the Green River Formation water near those outcrops, in this area of the Monument Butte Field the observed occasional "freshening" is ascribed to the effective dilution of the originally in-place high TDS water from injection of relatively fresh water for enhanced oil recovery operations. Water samples from deeper Mesaverde Formation sands in the nearby Natural Buttes Unit yield highly saline water.

**TABLE 2.1**  
**GEOLOGIC SETTING**  
**Federal 13-4-9-18**

Formation Name	Top (ft)	Base (ft)	TDS (mg/l)	Lithology
Uinta	0	1,397	< 10,000	Predominantly lenticular fluvial sand and shale with minor lacustrine carbonates
Green River	1,397	6,023		
Green River: Trona-Bird's Nest	2,922	2,952		Sodium carbonate
Green River: Mahogany Bench	2,952	2,979		Oil shale
Green River Shale	3,550	3,744		Shale
Green River: Garden Gulch Member	3,744	4,690	36,223	Lacustrine sand, shale, carbonate, interbedded with fluvial sandstone
Green River: Douglas Creek	4,690	5,898	36,223	Interbedded sand, shale, and limestone
Green River: Basal Carbonate	5,898	6,023	36,223	Limestone

**Proposed Injection Zone(s) (TABLE 2.2)**

An injection zone is a geological formation, group of formations, or part of a formation that receives fluids through a well. The proposed injection zones are listed in TABLE 2.2.

Injection will occur into an injection zone that is separated from USDWs by a confining zone which is free of known open faults or fractures within the Area of Review.

The approved interval for enhanced recovery injection is located between the top of the Garden Gulch Member (3744 feet) and the top of the Wasatch (estimated to be 6023 feet).

**TABLE 2.2**  
**INJECTION ZONES**  
Federal 13-4-9-18

Formation Name	Top (ft)	Base (ft)	TDS (mg/l)	Fracture Gradient (psi/ft)	Porosity	Exempted?*
Green River	3,744	6,023	36,223	0.701		N/A

\* C - Currently Exempted  
E - Previously Exempted  
P - Proposed Exemption  
N/A - Not Applicable

**Confining Zone(s) (TABLE 2.3)**

A confining zone is a geological formation, part of a formation, or a group of formations that limits fluid movement above the injection zone. The confining zone or zones are listed in TABLE 2.3.

The 194-foot (3550 - 3744 feet) shale Confining Zone overlies the top of the Garden Gulch Member.

**TABLE 2.3**  
**CONFINING ZONES**  
Federal 13-4-9-18

Formation Name	Formation Lithology	Top (ft)	Base (ft)
Green River	Shale	3,550	3,744

**Underground Sources of Drinking Water (USDWs) (TABLE 2.4)**

Aquifers or the portions thereof which contain less than 10,000 mg/l total dissolved solids (TDS) and are being or could in the future be used as a source of drinking water are considered to be USDWs. The USDWs in the area of this facility are identified in TABLE 2.4.

Throughout the Greater Monument Butte Field area undergoing enhanced oil recovery operations, water analyses of the Green River Formation generally exhibit Total Dissolved Solids (TDS) content well in excess of 10,000 mg/l. However, some recent water analyses from the field showed lower TDS values closer to 10,000 mg/l. While rain and surface water recharge into Green River Formation outcrops further south along the Book Cliffs/Roan Cliffs in effect "freshens" the Green River Formation water near those outcrops, in this area of the Monument Butte Field the

observed occasional "freshening" is ascribed to the effective dilution of the originally in-place high TDS water from injection of relatively fresh water for enhanced oil recovery operations. Water samples from deeper Mesaverde Formation sands in the nearby Natural Buttes Unit yield highly saline water.

The State of Utah "Water Wells and Springs" identifies no public water supply wells within the one-quarter mile Area of Review (AOR) around the Federal 13-4-9-18.

Technical Publication No. 92: State of Utah, Department of Natural Resources, cites the base of Underground Sources of Drinking Water (USDW) in the Uinta Formation approximately 272 feet from the surface. However, absent definitive information relative to the water quality of the Uinta Formation, from the depth of 272 feet to the base of the Uinta Formation (1397 feet), the EPA will require, during plugging and abandonment, a cement plug at the base of the Uinta Formation to protect contamination of possible Uinta USDWs.

**TABLE 2.4**  
**UNDERGROUND SOURCES OF DRINKING WATER (USDW)**  
**Federal 13-4-9-18**

Formation Name	Formation Lithology	Top (ft)	Base (ft)	TDS (mg/l)
Uinta	Predominantly lenticular fluvial sand and shale, with minor lacustrine carbonates	0	1,397	< 10,000

**PART III. Well Construction (40 CFR 146.22)**

**TABLE 3.1**  
**WELL CONSTRUCTION REQUIREMENTS**  
**Federal 13-4-9-18**

Casing Type	Hole Size (in)	Casing Size (in)	Cased Interval (ft)	Cemented Interval (ft)
Surface	12.25	9.63	0 - 300	0 -
Long String	7.88	5.50	0 - 5,941	4,092 - 5,941
Tubing	7.88	2.88	0 - 5,810	-

The approved well completion plan will be incorporated into the Permit as APPENDIX A and will be binding on the Permittee. Modification of the approved plan is allowed under 40 CFR 144.52(a)(1) provided written approval is obtained from the Director prior to actual modification.

The Federal well 13-4-9-18 was drilled to a total depth of 6,000 feet (KB) in the Basal Carbonate Member of the Green River Formation.

Surface casing (9-5/8") was set at a depth of 300 feet in a 12-1/4" hole using 100 sacks of Class "A" cement which was circulated to the surface.

Production casing (5-1/2") was set at a depth of 6,000 feet (KB) in a 7-7/8" hole with 400 sacks of Class "A" cement. There is no CBL with the permit application, but the accompanying schematic shows the top of cement to be 4,092 feet from the surface, while the "EPA-calculated" top of cement is 3,407 feet beneath the surface.

The schematic diagram show the enhanced recovery injection perforations in the Douglas Creek Member of the Green River Formation. Additional perforations may be added at a later time between the depths of 3,744 (top of the Garden Gulch) and 6,023 feet (estimated top of the Wasatch) provided the operator first notifies the Director and later submits an updated well completion report (EPA Form 7520-12) and schematic diagram.

The approved well completion plan will be incorporated into the Permit as Appendix A and will be binding on the Permittee. Modification of the approved plan is allowed under 40 CFR 144.52(a)(1) provided written approval is obtained from the Director prior to actual modification.

### **Casing and Cementing (TABLE 3.1)**

The well construction plan was evaluated and determined to be in conformance with standard practices and guidelines that ensure well injection does not result in the movement of fluids into USDWs. Well construction details for this "new" injection well is shown in TABLE 3.1.

Remedial cementing may be required if the casing cement is shown to be inadequate by cement bond log or other demonstration of Part II (External) mechanical integrity.

### **Tubing and Packer**

Injection tubing is required to be installed from a packer up to the surface inside the well casing. The packer will be set above the uppermost perforation. The tubing and packer are designed to prevent injection fluid from coming into contact with the outermost casing.

The packer will be set no higher than 100 feet above the top perforation.

### **Tubing-Casing Annulus (TCA)**

The TCA allows the casing, tubing and packer to be pressure-tested periodically for mechanical integrity, and will allow for detection of leaks. The TCA will be filled with fresh water treated with a corrosion inhibitor or other fluid approved by the Director.

The tubing/casing annulus must be kept closed at all times so that it can be monitored as required under the conditions of the permit.

### **Monitoring Devices**

The permittee will be required to install and maintain wellhead equipment that allows for monitoring pressures and providing access for sampling the injected fluid. Required equipment may include but is not limited to: 1) shut-off valves located at the wellhead on the injection tubing and on the TCA; 2) a flow meter that measures the cumulative volume of injected fluid; 3) fittings or pressure gauges attached to the injection tubing and the TCA for monitoring the injection and TCA pressure; and 4) a tap on the injection line, isolated by shut-off valves, for sampling the injected fluid.

All sampling and measurement taken for monitoring must be representative of the monitored activity.

## PART IV. Area of Review, Corrective Action Plan (40 CFR 144.55)

**TABLE 4.1  
AOR AND CORRECTIVE ACTION**

Well Name	Type	Status (Abandoned Y/N)	Total Depth (ft)	TOC Depth (ft)	CAP Required (Y/N)
Federal 12-4-9-18	Producer	No	6,000	250	No
Federal 14-4-9-18	Producer	No	6,100	565	No
Federal 16-5-9-18	Producer	No	5,975	520	No
Federal 4-9-9-18	Producer	No	6,075	85	No

TABLE 4.1 lists the wells in the Area of Review ("AOR") and shows the well type, operating status, depth, top of casing cement ("TOC") and whether a Corrective Action Plan ("CAP") is required for the well.

### Area Of Review

Applicants for Class I, II (other than "existing" wells) or III injection well Permits are required to identify the location of all known wells within the injection well's Area of Review (AOR) which penetrate the injection zone, or in the case of Class II wells operating over the fracture pressure of the formation, all known wells within the area of review that penetrate formations which may be affected by increased pressure. Under 40 CFR 146.6 the AOR may be a fixed radius of not less than one quarter (1/4) mile or a calculated zone of endangering influence. For Area Permits, a fixed width of not less than one quarter (1/4) mile for the circumscribing area may be used.

### Corrective Action Plan

For wells in the AOR which are improperly sealed, completed, or abandoned, the applicant shall develop a Corrective Action Plan (CAP) consisting of the steps or modifications that are necessary to prevent movement of fluid into USDWs.

The CAP will be incorporated into the Permit as APPENDIX F and become binding on the permittee.

## PART V. Well Operation Requirements (40 CFR 146.23)

**TABLE 5.1**  
**INJECTION ZONE PRESSURES**  
**Federal 13-4-9-18**

Formation Name	Depth Used to Calculate MAIP (ft)	Fracture Gradient (psi/ft)	Initial MAIP (psi)
Green River	5,383	0.701	1,405

**Approved Injection Fluid**

The approved injection fluid is limited to Class II injection well fluids pursuant to 40 CFR § 144.6(b). For disposal wells injecting water brought to the surface in connection with natural gas storage operations, or conventional oil or natural gas production, the fluid may be commingled and the well used to inject other Class II wastes such as drilling fluids and spent well completion, treatment and stimulation fluid. Injection of non-exempt wastes, including unused fracturing fluids or acids, gas plant cooling tower cleaning wastes, service wastes, and vacuum truck and drum rinsate from trucks and drums transporting or containing non-exempt waste, is prohibited.

The proposed injectate will be a blend of drinking-quality water from the Johnson Water District supply line and/or water from the Green River supply line, as well as Green River Formation water from wells proximate to the Federal No. 13-4-9-18 and mixed at the Beluga Injection Facility.

**Injection Pressure Limitation**

Injection pressure, measured at the wellhead, shall not exceed a maximum calculated to assure that the pressure used during injection does not initiate new fractures or propagate existing fractures in the confining zones adjacent to the USDWs.

The applicant submitted injection fluid density and injection zone data which was used to calculate a formation fracture pressure and to determine the maximum allowable injection pressure (MAIP), as measured at the surface, for this Permit.

TABLE 5.1 lists the fracture gradient for the injection zone and the approved MAIP, determined according to the following formula:

$$FP = [fg - (0.433 * sg)] * d$$

- FP = formation fracture pressure (measured at surface)
- fg = fracture gradient (from submitted data or tests)
- sg = specific gravity (of injected fluid)
- d = depth to top of injection zone (or top perforation)

**Injection Volume Limitation**

Cumulative injected fluid volume limits are set to assure that injected fluids remain within the boundary of the exempted area. Cumulative injected fluid volume is limited when injection occurs into an aquifer that has been exempted from protection as a USDW.

There will be no restrictions on the cumulative volume of the authorized fluid injected into the

Green River interval 3,744 feet to the top of the Wasatch Formation (estimated at 6,023 feet KB).

### **Mechanical Integrity (40 CFR 146.8)**

An injection well has mechanical integrity if:

1. there is no significant leak in the casing, tubing, or packer (Part I); and
2. there is no significant fluid movement into a USDW through vertical channels adjacent to the injection well bore (Part II).

The Permit prohibits injection into a well which lacks mechanical integrity.

The Permit requires that the well demonstrate mechanical integrity prior to injection and periodically thereafter. A demonstration of mechanical integrity includes both internal (Part I) and external (Part II). The methods and frequency for demonstrating Part I and Part II mechanical integrity are dependent upon well-specific conditions as explained below.

**PART I MI:** Internal MI will be demonstrated prior to beginning injection. Since this well is constructed with a standard casing, tubing, and packer configuration, a successful mechanical integrity test (MIT) is required to take place at least once every five (5) years. A demonstration of Part I MI is also required prior to resuming injection following any workover operation that affects the casing, tubing, or packer. Part I MI may be demonstrated by a standard tubing-casing annulus pressure test using the maximum permitted injection pressure or 1000 psi, whichever is less, with a ten (10) percent or less pressure loss over thirty (30) minutes.

**Part II MI:** The CBL indicates that cement does not meet minimum requirements needed to demonstrate zone isolation (at least 18 feet of continuous 80% bond, or better) through the Confining Zone. Therefore, further testing for Part II MI will be required prior to injection and at least once every five years thereafter. The demonstration shall be by Radioactive Tracer Survey or other approved test. Approved tests for demonstrating Part II MI include a Temperature Survey, Noise Log, Oxygen Activation Log, and Radioactive Tracer Survey under certain circumstances.

## **PART VI. Monitoring, Recordkeeping and Reporting Requirements**

### **Injection Well Monitoring Program**

At least once a year the permittee must analyze a sample of the injected fluid for total dissolved solids (TDS), specific conductivity, pH, and specific gravity. This analysis shall be reported to EPA annually as part of the Annual Report to the Director. Any time a new source of injected fluid is added, a fluid analysis shall be made of the new source.

Instantaneous injection pressure, injection flow rate, cumulative fluid volume and TCA pressures must be observed on a weekly basis. A recording, at least once every thirty (30) days, must be made of the injection pressure, annulus pressure, monthly injection flow rate and cumulative fluid volume. This information is required to be reported annually as part of the Annual Report to the Director.

## **PART VII. Plugging and Abandonment Requirements (40 CFR 146.10)**

### **Plugging and Abandonment Plan**

Prior to abandonment, the well shall be plugged in a manner that isolates the injection zone and

prevents movement of fluid into or between USDWs, and in accordance with any applicable Federal, State or local law or regulation. Tubing, packer and other downhole apparatus shall be removed. Cement with additives such as accelerators and retarders that control or enhance cement properties may be used for plugs; however, volume-extending additives and gel cements are not approved for plug use. Plug placement shall be verified by tagging. Plugging gel of at least 9.6 lb/gal shall be placed between all plugs. A minimum 50 ft surface plug shall be set inside and outside of the surface casing to seal pathways for fluid migration into the subsurface. Within sixty (60) days after plugging the owner or operator shall submit Plugging Record (EPA Form 7520 13) to the Director. The Plugging Record must be certified as accurate and complete by the person responsible for the plugging operation. The plugging and abandonment plan is described in Appendix E of the Permit.

## **PART VIII. Financial Responsibility (40 CFR 144.52)**

### **Demonstration of Financial Responsibility**

The permittee is required to maintain financial responsibility and resources to close, plug, and abandon the underground injection operation in a manner prescribed by the Director. The permittee shall show evidence of such financial responsibility to the Director by the submission of a surety bond, or other adequate assurance such as financial statements or other materials acceptable to the Director. The Regional Administrator may, on a periodic basis, require the holder of a lifetime permit to submit a revised estimate of the resources needed to plug and abandon the well to reflect inflation of such costs, and a revised demonstration of financial responsibility if necessary. Initially, the operator has chosen to demonstrate financial responsibility with:

A demonstration of Financial Responsibility in the amount of \$59,344 has been provided.

The Director may revise the amount required, and may require the permittee to obtain and provide updated estimates of costs for plugging the well according to the approved Plugging and Abandonment plan.

Financial Statement, received April 22, 2005

Evidence of continuing financial responsibility is required to be submitted to the Director annually.

<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		FORM 9
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		<b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> UTU-17424
		<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b>
<b>1. TYPE OF WELL</b> Water Injection Well		<b>7. UNIT or CA AGREEMENT NAME:</b> GMBU (GRRV)
<b>2. NAME OF OPERATOR:</b> NEWFIELD PRODUCTION COMPANY		<b>8. WELL NAME and NUMBER:</b> FEDERAL 13-4-9-18
<b>3. ADDRESS OF OPERATOR:</b> Rt 3 Box 3630 , Myton, UT, 84052		<b>9. API NUMBER:</b> 43047326530000
<b>PHONE NUMBER:</b> 435 646-4825 Ext		<b>9. FIELD and POOL or WILDCAT:</b> 8 MILE FLAT NORTH
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 0691 FSL 0741 FWL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: SWSW Section: 04 Township: 09.0S Range: 18.0E Meridian: S		<b>COUNTY:</b> UINTAH
		<b>STATE:</b> UTAH

11.

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

TYPE OF SUBMISSION	TYPE OF ACTION		
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start:	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> CASING REPAIR
<input checked="" type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion: 2/5/2014	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> CHANGE WELL NAME
<input type="checkbox"/> SPUD REPORT Date of Spud:	<input checked="" type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input checked="" type="checkbox"/> CONVERT WELL TYPE
<input type="checkbox"/> DRILLING REPORT Report Date:	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> NEW CONSTRUCTION
	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> PLUG BACK
	<input type="checkbox"/> PRODUCTION START OR RESUME	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION
	<input type="checkbox"/> REPERFORATE CURRENT FORMATION	<input type="checkbox"/> SIDETRACK TO REPAIR WELL	<input type="checkbox"/> TEMPORARY ABANDON
	<input type="checkbox"/> TUBING REPAIR	<input type="checkbox"/> VENT OR FLARE	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> WATER SHUTOFF	<input type="checkbox"/> SI TA STATUS EXTENSION	<input type="checkbox"/> APD EXTENSION
	<input type="checkbox"/> WILDCAT WELL DETERMINATION	<input checked="" type="checkbox"/> OTHER	OTHER: <input type="text" value="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 01/31/2014. New interval added: DS-2 & DS-3 4607-4670' 3JSPF. Initial MIT on the above listed well. On 02/05/2014 the casing was pressured up to 1412 psig and charted for 30 minutes with no pressure loss. The well was not injecting during the test. The tubing pressure was 200 psig during the test. There was not an EPA representative available to witness the test. EPA# UT22197-10195

**Accepted by the  
Utah Division of  
Oil, Gas and Mining  
FOR RECORD ONLY  
February 20, 2014**

<b>NAME (PLEASE PRINT)</b> Lucy Chavez-Naupoto	<b>PHONE NUMBER</b> 435 646-4874	<b>TITLE</b> Water Services Technician
<b>SIGNATURE</b> N/A	<b>DATE</b> 2/19/2014	

# Mechanical Integrity Test

## Casing or Annulus Pressure Mechanical Integrity Test

U.S. Environmental Protection Agency  
Underground Injection Control Program  
999 18<sup>th</sup> Street, Suite 500 Denver, CO 80202-2466

EPA Witness: \_\_\_\_\_ Date: 2/5/14  
 Test conducted by: JOHNNY SLIM  
 Others present: BEN GILLES

Well Name: <u>FEDERAL 13-49-18</u>	Type: ER SWD	Status: AC TA UC	-10195
Field: <u>GREATER MONUMENT BITE UNIT</u>			
Location: <u>13</u>	Sec: <u>4</u>	<u>Q 9 N 18 R 18</u> E/W	County: <u>LINCOLN</u> State: <u>WYOM</u>
Operator: <u>NEWFIELD EXPLORATION CO.</u>			
Last MIT: <u>1</u>	<u>1</u>	Maximum Allowable Pressure:	P SIG

Is this a regularly scheduled test?     Yes     No  
 Initial test for permit?                 Yes     No  
 Test after well rework?                 Yes     No  
 Well injecting during test?             Yes     No      If Yes, rate: \_\_\_\_\_ bpd

Pre-test casing/tubing annulus pressure: 0/200 psig

MIT DATA TABLE	Test #1	Test #2	Test #3
<b>TUBING PRESSURE</b>			
Initial Pressure	<u>200</u> psig	psig	psig
End of test pressure	<u>200</u> psig	psig	psig
<b>CASING / TUBING ANNULUS PRESSURE</b>			
0 minutes	<u>1430</u> psig	psig	psig
5 minutes	<u>1412</u> psig	psig	psig
10 minutes	<u>1411</u> psig	psig	psig
15 minutes	<u>1412</u> psig	psig	psig
20 minutes	<u>1412</u> psig	psig	psig
25 minutes	<u>1412</u> psig	psig	psig
30 minutes	<u>1412</u> psig	psig	psig
_____ minutes	psig	psig	psig
_____ minutes	psig	psig	psig
<b>RESULT</b>	<input checked="" type="checkbox"/> Pass <input type="checkbox"/> Fail	<input type="checkbox"/> Pass <input type="checkbox"/> Fail	<input type="checkbox"/> Pass <input type="checkbox"/> Fail

Does the annulus pressure build back up after the test?     Yes     No

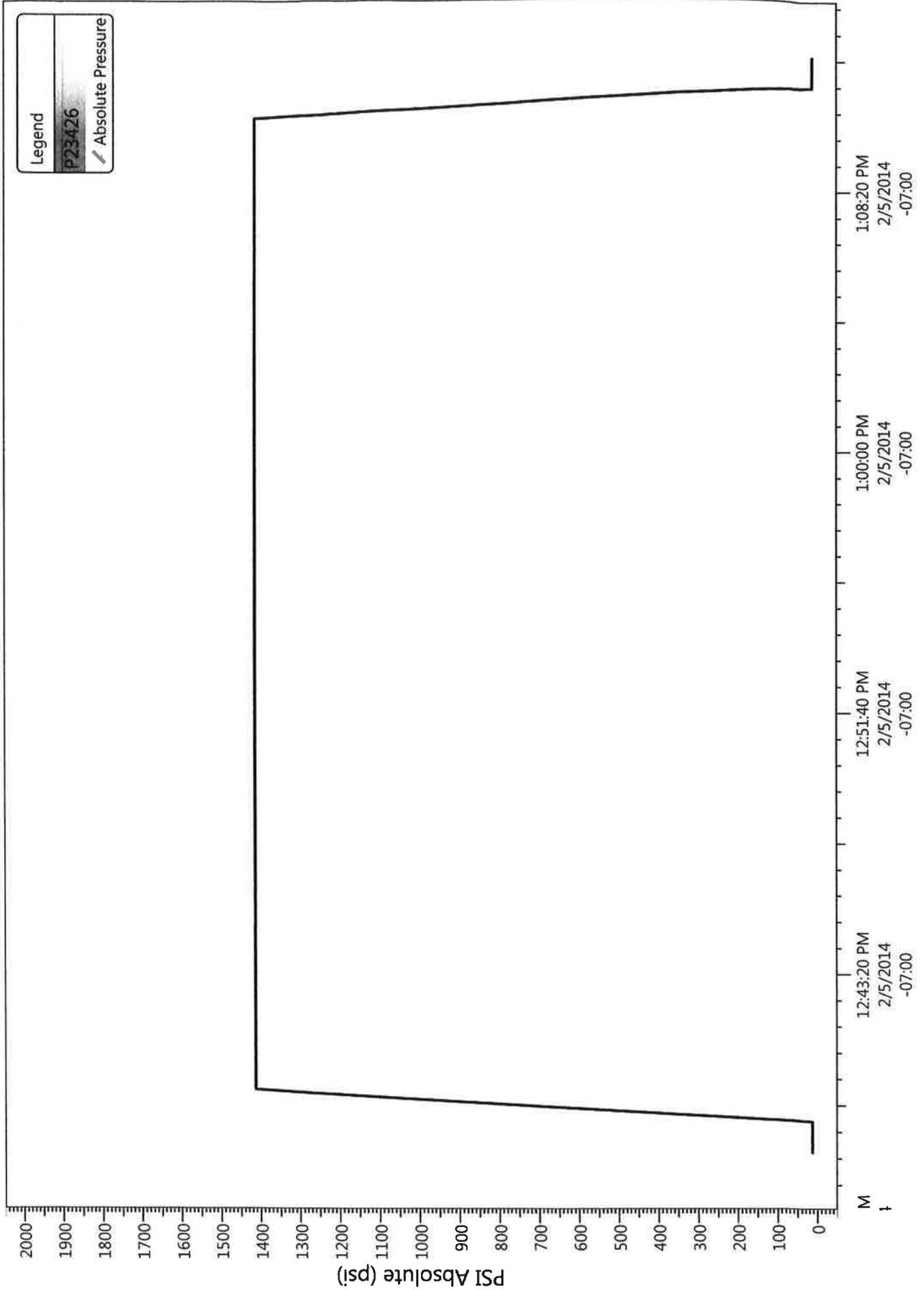
## MECHANICAL INTEGRITY PRESSURE TEST

Additional comments for mechanical integrity pressure test, such as volume of fluid added to annulus and bled back at end of test, reason for failing test (casing head leak, tubing leak, other), etc.:

Signature of Witness: \_\_\_\_\_

Federal 13-4-9-18

2/5/2014 12:37:28 PM



## Daily Activity Report

Format For Sundry

**FEDERAL 13-4-9-18**

**12/1/2013 To 4/28/2014**

**1/28/2014 Day: 1**

**Conversion**

WWS #7 on 1/28/2014 - MIRUSU, back off rods RIH tag fill @ 5912' POOH w/ 40 jts. - Jar on rods no luck pump 60 more down csg psi went up to 1,000 psi - Road rig 8 miles from F-3-9-17 to 14-3-9-18 miru rig pump 60 bw down csg starting @ 1,400 psi down to 200 psi tbg flowing hard pump another 60 down csg - Jar on rods no luck back rods off string wt 4,000# slack off rods psi tbg up to 5,000 psi try to blow hole no luck held solid LD 1-1/2"x22' polish rod, 4',8',8'x7/8" ponys, 86 slk 7/8", 32 - slk 3/4" 2:00 x/o to tbg equip NDWH unland tbg unable to release TAC nu frac valve & bop RU tbg EQUIP RU the perforators, rih w/ WL tag FT @ 2,983' pohh & shoot holes in tbg @2,975' pooh & RD WL flush tbg w/ 60 bw 5:00 release TAC pu & rih w/ 4 jts tag fill @ 5,912' LD 4 jts, tooh w/ 40 jts 2-7/8" J-55 tbg SWI

**Daily Cost:** \$0

**Cumulative Cost:** \$48,985

---

**1/31/2014 Day: 3**

**Conversion**

WWS #7 on 1/31/2014 - RIH w/ RBP Circ. Well w/ H/O - TOO H W/ 56 jts 2-7/8" J-55 tbg x/o to rods back rods off string wt 2,000 # LD 35-SLk 3/4" hot oil 30 bw down csg RU perforators & perf tbg @ 869' pooh & RD WL cont striping rods & tbg out of well had to back rods off 12 more times get every thing out swi steam clean work floor tbg equip ect ready to tih w/ RBP on Monday morning SDFN - TOO H W/ 56 jts 2-7/8" J-55 tbg x/o to rods back rods off string wt 2,000 # LD 35-SLk 3/4" hot oil 30 bw down csg RU perforators & perf tbg @ 869' pooh & RD WL cont striping rods & tbg out of well had to back rods off 12 more times get every thing out swi steam clean work floor tbg equip ect ready to tih w/ RBP on Monday morning SDFN - PU & TIH tallying w/BHA as follows-PLUG CE, Retriven Head, XO, PSN, 153 jts CE @4775 10:00am Set plug @4770 J-off plug preasure test csg to 1000 w/seface csg open good test flush well down csg with 200 bbls wouldnt clean up, switch to pump down tbg pumped 130 bbls and stayed clean TOO H w/tbg LD retrieving head, XO, PSN, Change out csg valves SWI - PU & TIH tallying w/BHA as follows-PLUG CE, Retriven Head, XO, PSN, 153 jts CE @4775 10:00am Set plug @4770 J-off plug preasure test csg to 1000 w/seface csg open good test flush well down csg with 200 bbls wouldnt clean up, switch to pump down tbg pumped 130 bbls and stayed clean TOO H w/tbg LD retrieving head, XO, PSN, Change out csg valves SWI - PU & TIH tallying w/BHA as follows-PLUG CE, Retriven Head, XO, PSN, 153 jts CE @4775 10:00am Set plug @4770 J-off plug preasure test csg to 1000 w/seface csg open good test flush well down csg with 200 bbls wouldnt clean up, switch to pump down tbg pumped 130 bbls and stayed clean TOO H w/tbg LD retrieving head, XO, PSN, Change out csg valves SWI - PU & TIH tallying w/BHA as follows-PLUG CE, Retriven Head, XO, PSN, 153 jts CE @4775 10:00am Set plug @4770 J-off plug preasure test csg to 1000 w/seface csg open good test flush well down csg with 200 bbls wouldnt clean up, switch to pump down tbg pumped 130 bbls and stayed clean TOO H w/tbg LD retrieving head, XO, PSN, Change out csg valves SWI - R/U the perforators WL rih w/ logging tool stacking out @ 500' pump 15 bbls @ 200 degrees work it there for 30 min unable to get past, pooh & RD WL tih w/ 40 jts hot oil 100 bw down tbg tooh w/ 40 jts , RU WL & rih to RBP set @ 4770' psi up to 500 psi doors on bops leaking change out door seals, run bond log to surface rih w/ pkr & set @ surface psi test csg to 4,000 psi -good test LD pkr ru & rih w/ WL perforate csg @ 4,666' - 4,670' puh & perf csg @ 4,607' -

4,609' pooh & RD WL, RU stinger, RD crane, hook up hot oiler pumping 3/4 bpm break down zone @ 2,900 psi dropped down to 2600 - 2,700 psi bleed off well swi wrap well head and install heater ready to RU frac trucks in the AM SFDN - TOO H W/ 56 jts 2-7/8" J-55 tbg x/o to rods back rods off string wt 2,000 # LD 35-SLk 3/4" hot oil 30 bw down csg RU perforators & perf tbg @ 869' pooh & RD WL cont striping rods & tbg out of well had to back rods off 12 more times get every thing out swi steam clean work floor tbg equip ect ready to tih w/ RBP on Monday morning SFDN - TOO H W/ 56 jts 2-7/8" J-55 tbg x/o to rods back rods off string wt 2,000 # LD 35-SLk 3/4" hot oil 30 bw down csg RU perforators & perf tbg @ 869' pooh & RD WL cont striping rods & tbg out of well had to back rods off 12 more times get every thing out swi steam clean work floor tbg equip ect ready to tih w/ RBP on Monday morning SFDN - TOO H W/ 56 jts 2-7/8" J-55 tbg x/o to rods back rods off string wt 2,000 # LD 35-SLk 3/4" hot oil 30 bw down csg RU perforators & perf tbg @ 869' pooh & RD WL cont striping rods & tbg out of well had to back rods off 12 more times get every thing out swi steam clean work floor tbg equip ect ready to tih w/ RBP on Monday morning SFDN - R/U the perforators WL rih w/ logging tool stacking out @ 500' pump 15 bbls @ 200 degrees work it there for 30 min unable to get past, pooh & RD WL tih w/ 40 jts hot oil 100 bw down tbg tooh w/ 40 jts , RU WL & rih to RBP set @ 4770' psi up to 500 psi doors on bops leaking change out door seals, run bond log to surface rih w/ pkr & set @ surface psi test csg to 4,000 psi -good test LD pkr ru & rih w/ WL perforate csg @ 4,666' - 4,670' puh & perf csg @ 4,607' - 4,609' pooh & RD WL, RU stinger, RD crane, hook up hot oiler pumping 3/4 bpm break down zone @ 2,900 psi dropped down to 2600 - 2,700 psi bleed off well swi wrap well head and install heater ready to RU frac trucks in the AM SFDN - sitp 50 sicp 50 bleed off well tih w/ tbg tag sand @ 4740 rev circ well co 30' sand to RBP @ 4770' latch onto rbp circ well clean for 45 min release RBP, tooh w/ 146 jts 2-7/8" J-55 tbg LD 16 jts & BHA, tih w 146 jts tbg, tooh breaking inspecting & green doping EA connection w/ 146 jts flushed 1 time w/ 60 bw swi ready to TIH w/ production pkr in AM - R/U the perforators WL rih w/ logging tool stacking out @ 500' pump 15 bbls @ 200 degrees work it there for 30 min unable to get past, pooh & RD WL tih w/ 40 jts hot oil 100 bw down tbg tooh w/ 40 jts , RU WL & rih to RBP set @ 4770' psi up to 500 psi doors on bops leaking change out door seals, run bond log to surface rih w/ pkr & set @ surface psi test csg to 4,000 psi -good test LD pkr ru & rih w/ WL perforate csg @ 4,666' - 4,670' puh & perf csg @ 4,607' - 4,609' pooh & RD WL, RU stinger, RD crane, hook up hot oiler pumping 3/4 bpm break down zone @ 2,900 psi dropped down to 2600 - 2,700 psi bleed off well swi wrap well head and install heater ready to RU frac trucks in the AM SFDN - R/U the perforators WL rih w/ logging tool stacking out @ 500' pump 15 bbls @ 200 degrees work it there for 30 min unable to get past, pooh & RD WL tih w/ 40 jts hot oil 100 bw down tbg tooh w/ 40 jts , RU WL & rih to RBP set @ 4770' psi up to 500 psi doors on bops leaking change out door seals, run bond log to surface rih w/ pkr & set @ surface psi test csg to 4,000 psi -good test LD pkr ru & rih w/ WL perforate csg @ 4,666' - 4,670' puh & perf csg @ 4,607' - 4,609' pooh & RD WL, RU stinger, RD crane, hook up hot oiler pumping 3/4 bpm break down zone @ 2,900 psi dropped down to 2600 - 2,700 psi bleed off well swi wrap well head and install heater ready to RU frac trucks in the AM SFDN - R/U the perforators WL rih w/ logging tool stacking out @ 500' pump 15 bbls @ 200 degrees work it there for 30 min unable to get past, pooh & RD WL tih w/ 40 jts hot oil 100 bw down tbg tooh w/ 40 jts , RU WL & rih to RBP set @ 4770' psi up to 500 psi doors on bops leaking change out door seals, run bond log to surface rih w/ pkr & set @ surface psi test csg to 4,000 psi -good test LD pkr ru & rih w/ WL perforate csg @ 4,666' - 4,670' puh & perf csg @ 4,607' - 4,609' pooh & RD WL, RU stinger, RD crane, hook up hot oiler pumping 3/4 bpm break down zone @ 2,900 psi dropped down to 2600 - 2,700 psi bleed off well swi wrap well head and install heater ready to RU frac trucks in the AM SFDN - MI Nabors R/U Frac equip. frac equip & ru frac well DS-2 & 3 w/ 25k 20/40 white wait for frac crew to RD frac equip and move out, RD stinger, flow back 200 bbls untill dead tih w/ RH, x/over, sn, 146 jts 2-7/8" J-55 tbg strip washington rubber ru wash stand swi tarp bop install heater ready to C O sand to RBP in the AM SFDN - MI Nabors R/U Frac equip. frac equip & ru frac well DS-2 & 3 w/ 25k 20/40 white wait for frac crew to RD frac equip and move out, RD stinger, flow back 200 bbls untill dead tih w/ RH, x/over, sn, 146 jts 2-7/8" J-55 tbg strip washington rubber ru wash stand swi tarp bop install heater ready to C O sand to RBP in the AM SFDN - MI Nabors R/U Frac equip. frac equip & ru frac well DS-2 & 3 w/ 25k

20/40 white wait for frac crew to RD frac equip and move out, RD stinger, flow back 200 bbls untill dead tih w/ RH, x/over, sn, 146 jts 2-7/8" J-55 tbg strip washington rubber ru wash stand swi tarp bop install heater ready to C O sand to RBP in the AM SDFN - MI Nabors R/U Frac equip. frac equip & ru frac well DS-2 & 3 w/ 25k 20/40 white wait for frac crew to RD frac equip and move out, RD stinger, flow back 200 bbls untill dead tih w/ RH, x/over, sn, 146 jts 2-7/8" J-55 tbg strip washington rubber ru wash stand swi tarp bop install heater ready to C O sand to RBP in the AM SDFN - MI Nabors R/U Frac equip. frac equip & ru frac well DS-2 & 3 w/ 25k 20/40 white wait for frac crew to RD frac equip and move out, RD stinger, flow back 200 bbls untill dead tih w/ RH, x/over, sn, 146 jts 2-7/8" J-55 tbg strip washington rubber ru wash stand swi tarp bop install heater ready to C O sand to RBP in the AM SDFN - sitp 50 sicp 50 bleed off well tih w/ tbg tag sand @ 4740 rev circ well co 30' sand to RBP @ 4770' latch onto rbp circ well clean for 45 min release RBP, tooh w/ 146 jts 2-7/8" J-55 tbg LD 16 jts & BHA, tih w 146 jts tbg, tooh breaking inspecting & green doping EA connection w/ 146 jts flushed 1 time w/ 60 bw swi ready to TIH w/ production pkr in AM - sitp 50 sicp 50 bleed off well tih w/ tbg tag sand @ 4740 rev circ well co 30' sand to RBP @ 4770' latch onto rbp circ well clean for 45 min release RBP, tooh w/ 146 jts 2-7/8" J-55 tbg LD 16 jts & BHA, tih w 146 jts tbg, tooh breaking inspecting & green doping EA connection w/ 146 jts flushed 1 time w/ 60 bw swi ready to TIH w/ production pkr in AM - sitp 50 sicp 50 bleed off well tih w/ tbg tag sand @ 4740 rev circ well co 30' sand to RBP @ 4770' latch onto rbp circ well clean for 45 min release RBP, tooh w/ 146 jts 2-7/8" J-55 tbg LD 16 jts & BHA, tih w 146 jts tbg, tooh breaking inspecting & green doping EA connection w/ 146 jts flushed 1 time w/ 60 bw swi ready to TIH w/ production pkr in AM - sitp 50 sicp 50 bleed off well tih w/ tbg tag sand @ 4740 rev circ well co 30' sand to RBP @ 4770' latch onto rbp circ well clean for 45 min release RBP, tooh w/ 146 jts 2-7/8" J-55 tbg LD 16 jts & BHA, tih w 146 jts tbg, tooh breaking inspecting & green doping EA connection w/ 146 jts flushed 1 time w/ 60 bw swi ready to TIH w/ production pkr in AM

**Daily Cost:** \$0

**Cumulative Cost:** \$64,644

---

**2/3/2014 Day: 7**

**Conversion**

WWS #7 on 2/3/2014 - RIH w/ inj pkr set pkr w/ 15k tension PT to 1500# (good) RDSUMOL - MU & TIH w/ 2-3/8" WL entry guide, X/N nipple w/ 1.875 profile, tbg sub, 2-3/8"x2-7/8" x/over, 5-1/2" AS-1X PKR, on-off tool, 2-7/8" SN, 146 jts 2-7/8" J-55 tbg, 9:00 pump 15 bw drop SV circ to SN & psi test tbg to 3,000 psi w/ 20 BW, get goot psi test for 30 min RU & RIH w/ sand line ret sv pooh & RD sand line, mix 15 gal pkr fluid w/ 70 bbls fresh water cic 60 bbls down csg, ND bop & frac valve set pkr @ 4,562' for 15,000# tension, SN @ 4,556', EOT @ 4,572' land tbg w/ injection tree nuwh psi test csg to 1,500 psi, get good test RD rig ready to road in the AM when mud is frozen

**Daily Cost:** \$0

**Cumulative Cost:** \$117,455

---

**2/6/2014 Day: 8**

**Conversion**

WWS #7 on 2/6/2014 - Conduct initial MIT - Initial MIT on the above listed well. On 02/05/2014 the casing was pressured up to 1412 psig and charted for 30 minutes with no pressure loss. The well was not injecting during the test. The tubing pressure was 200 psig during the test. There was not an EPA representative available to witness the test. EPA# UT22197-10195 **Finalized**

**Daily Cost:** \$0

**Cumulative Cost:** \$149,667

---

**Pertinent Files: [Go to File List](#)**

# Federal 13-4-9-18

(Formerly Fed 4-3)

Spud Date: 6/8/1995  
 Put on Production: 8/21/1995  
 GL: 4962' KB: 4972'

Initial Production: 40 BOPD,  
 56 MCFD, 0 BWPD

## Injection Wellbore Diagram

### SURFACE CASING

CSG SIZE: 9-5/8"  
 GRADE: J-55  
 WEIGHT: 36#  
 LENGTH: 300'  
 HOLE SIZE: 12-1/4"  
 CEMENT DATA: 100 sx, Class "A" cement.

### PRODUCTION CASING

CSG SIZE: 5-1/2"  
 GRADE: J-55  
 WEIGHT: 17#  
 LENGTH: 6000'  
 HOLE SIZE: 7-7/8"  
 CEMENT DATA: 400 sxs Class "A" cement,  
 CEMENT TOP: With 70% efficiency - Estimated at 4092'

### TUBING

SIZE/GRADE/WT.: 2-7/8" / J-55 / 6.5#  
 NO. OF JOINTS: 146 jts (4546.7')  
 SEATING NIPPLE: 2-7/8" (1.10')  
 SN LANDED AT: 4556.7' KB  
 ON/OFF TOOL AT: 4557.8'  
 ARROW #1 PACKER CE AT: 4562.9'  
 XO 2-3/8 x 2-7/8 J-55 AT: 4566.5'  
 TBG PUP 2-3/8 J-55 AT: 4567.5'  
 X/N NIPPLE AT: 4571.6'  
 TOTAL STRING LENGTH: EOT @ 4573.19'

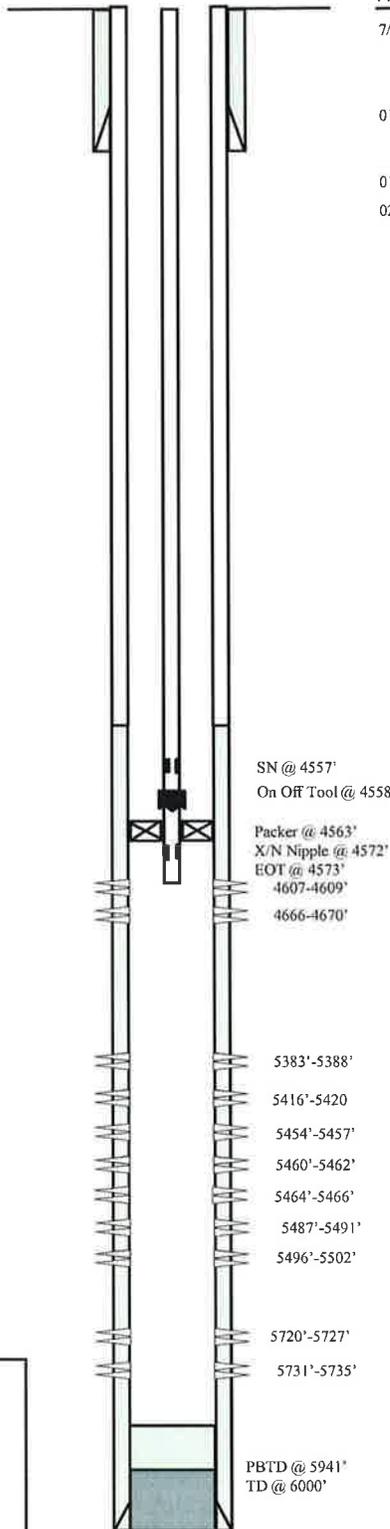
### FRAC JOB

7/21/95 5383'-5735' **Frac zones as follows:**  
 103,300# 20/40 sand in 735 bbls Viking I-35 fluid. Treated @ avg press of 3400 psi w/avg rate of 40 BPM, ISIP 2200 psi.

01/29/14 **4607-4670'** **Frac DS-2 & DS-3 sands as follows:**  
 25140# 20/40 sand in 322 bbls Lightning 17 frac fluid.

01/31/14 **Convert to Injection Well**

02/05/14 **Conversion MIT Finalized - update tbg detail**



### PERFORATION RECORD

Date	Depth Range	SPF	Holes
7/21/95	5383'-5388'	1 SPF	6 holes
7/21/95	5416'-5420'	1 SPF	4 holes
7/21/95	5454'-5457'	1 SPF	4 holes
7/21/95	5460'-5462'	1 SPF	2 holes
7/21/95	5464'-5466'	1 SPF	2 holes
7/21/95	5487'-5491'	1 SPF	3 holes
7/21/95	5496'-5502'	1 SPF	3 holes
7/21/95	5720'-5727'	1 SPF	3 holes
7/21/95	5731'-5735'	1 SPF	3 holes
1/28/14	4666-4670'	2 SPF	4 holes
1/28/14	4607-4609'	2 SPF	4 holes



**Federal 13-4-9-18**  
 691' FSL & 741' FWL  
 SW/SW Section 4-T9S-R18E  
 Uintah Co, Utah  
 API #43-047-32653; Lease #UTU-17424

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		FORM 9
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>		<b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> UTU-17424
Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b>
		<b>7. UNIT or CA AGREEMENT NAME:</b> GMBU (GRRV)
<b>1. TYPE OF WELL</b> Water Injection Well	<b>8. WELL NAME and NUMBER:</b> FEDERAL 13-4-9-18	
<b>2. NAME OF OPERATOR:</b> NEWFIELD PRODUCTION COMPANY	<b>9. API NUMBER:</b> 43047326530000	
<b>3. ADDRESS OF OPERATOR:</b> Rt 3 Box 3630 , Myton, UT, 84052	<b>PHONE NUMBER:</b> 435 646-4825 Ext	<b>9. FIELD and POOL or WILDCAT:</b> 8 MILE FLAT NORTH
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 0691 FSL 0741 FWL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: SWSW Section: 04 Township: 09.0S Range: 18.0E Meridian: S	<b>COUNTY:</b> UINTAH	
	<b>STATE:</b> UTAH	
11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA		
<b>TYPE OF SUBMISSION</b>	<b>TYPE OF ACTION</b>	
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start:  <input checked="" type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion: 5/2/2014  <input type="checkbox"/> SPUD REPORT Date of Spud:  <input type="checkbox"/> DRILLING REPORT Report Date:	<input type="checkbox"/> ACIDIZE <input type="checkbox"/> ALTER CASING <input type="checkbox"/> CHANGE TO PREVIOUS PLANS <input type="checkbox"/> CHANGE TUBING <input checked="" type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input type="checkbox"/> DEEPEN <input type="checkbox"/> FRACTURE TREAT <input type="checkbox"/> OPERATOR CHANGE <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> PRODUCTION START OR RESUME <input type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> WATER SHUTOFF <input type="checkbox"/> SI TA STATUS EXTENSION <input type="checkbox"/> WILDCAT WELL DETERMINATION <input type="checkbox"/> OTHER	
	<input type="checkbox"/> CASING REPAIR <input type="checkbox"/> CHANGE WELL NAME <input checked="" type="checkbox"/> CONVERT WELL TYPE <input type="checkbox"/> NEW CONSTRUCTION <input type="checkbox"/> PLUG BACK <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION <input type="checkbox"/> TEMPORARY ABANDON <input type="checkbox"/> WATER DISPOSAL <input type="checkbox"/> APD EXTENSION OTHER: <input style="width: 100px;" type="text"/>	
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 11:15 AM on 05/02/2014. EPA # UT22197-10195		
<b>Accepted by the Utah Division of Oil, Gas and Mining</b> <b>FOR RECORD ONLY</b> May 08, 2014		
<b>NAME (PLEASE PRINT)</b> Lucy Chavez-Naupoto	<b>PHONE NUMBER</b> 435 646-4874	<b>TITLE</b> Water Services Technician
<b>SIGNATURE</b> N/A	<b>DATE</b> 5/8/2014	