

## NEWFIELD



December 17, 2004

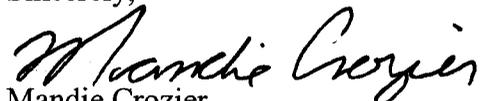
State of Utah  
Division of Oil, Gas & Mining  
Attn: Diana Whitney  
1594 West North Temple - Suite 1210  
P.O. Box 145801  
Salt Lake City, Utah 84114-5801

RE: Applications for Permit to Drill: Federal 5-19-8-18, 6-19-8-18, 9-19-8-18,  
10-19-8-18, 11-19-8-18, 12-19-8-18, 13-19-8-18, 14-19-8-18, 15-19-8-18, and  
16-19-8-18.

Dear Diana:

Enclosed find APD's on the above referenced wells. The proposed Federal 5-19-8-18 and 6-19-8-18 are Exception Locations. Our Land Department will send you the required Exception Location Letter. If you have any questions, feel free to give either Brad or myself a call.

Sincerely,

  
Mandie Crozier  
Regulatory Specialist

mc  
enclosures

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DEC 20 2004  
DIV. OF OIL, GAS & MINING

Form 3160-3  
(September 2001)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

FORM APPROVED  
OMB No. 1004-0136  
Expires January 31, 2004

5. Lease Serial No.  
UTU-36846

6. If Indian, Allottee or Tribe Name  
N/A

7. If Unit or CA Agreement, Name and No.  
N/A

8. Lease Name and Well No.  
Federal 15-19-8-18

9. API Well No.  
43-047-36193

10. Field and Pool, or Exploratory  
Eight Mile Flat

11. Sec., T., R., M., or Blk. and Survey or Area  
SW/SE Sec. 19, T8S R18E

12. County or Parish  
Uintah

13. State  
UT

17. Spacing Unit dedicated to this well  
40 Acres

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DEC 20 2004  
DIV. OF OIL, GAS & MINING

20. BLM/BIA Bond No. on file  
UTU0056

23. Estimated duration  
Approximately seven (7) days from spud to rig release.

24. Attachments

1a. Type of Work:  DRILL  REENTER

1b. Type of Well:  Oil Well  Gas Well  Other  Single Zone  Multiple Zone

2. Name of Operator  
Newfield Production Company

3a. Address  
Route #3 Box 3630, Myton UT 84052

3b. Phone No. (include area code)  
(435) 646-3721

4. Location of Well (Report location clearly and in accordance with any State requirements.)\*  
At surface SW/SE 660' FSL 1980' FEL 590938X 40.092149  
At proposed prod. zone 4438980Y -109.735156

14. Distance in miles and direction from nearest town or post office\*  
Approximatley 16.9 miles southeast of Myton, Utah

15. Distance from proposed\* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) Approx. 1320' f/lse, NA f/unit  
Approx. 1322'

16. No. of Acres in lease  
1178.69

18. Distance from proposed location\* to nearest well, drilling, completed, applied for, on this lease, ft. Approx. 1322'

19. Proposed Depth  
6335'

21. Elevations (Show whether DF, KDB, RT, GL, etc.)  
5060' GL

22. Approximate date work will start\*  
2nd Quarter 2005

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No.1, shall be attached to this form:

- 1. Well plat certified by a registered surveyor.
- 2. A Drilling Plan.
- 3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office).
- 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
- 5. Operator certification.
- 6. Such other site specific information and/or plans as may be required by the authorized officer.

25. Signature *Mandie Crozier* Name (Printed/Typed) Mandie Crozier Date 12/17/04

Title Regulatory Specialist

Approved by (Signature) *Bradley G. Hill* Name (Printed/Typed) BRADLEY G. HILL Date 12-27-04

Title ENVIRONMENTAL SCIENTIST III

Application approval does not warrant or certify the the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.  
Conditions of approval, if any, are attached.

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

\*(Instructions on reverse)

**Federal Approval of this  
Action is Necessary**

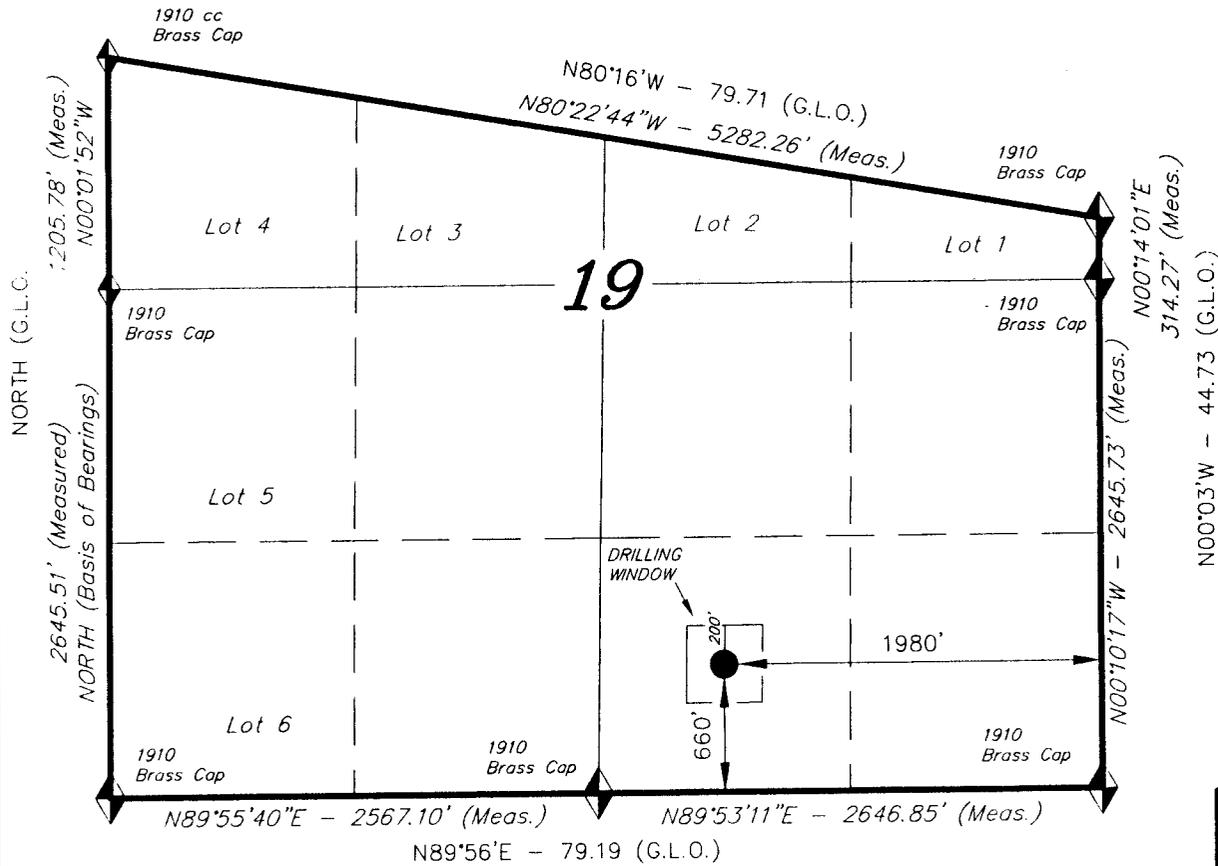
# T8S, R18E, S.L.B.&M.

## NEWFIELD PRODUCTION COMPANY

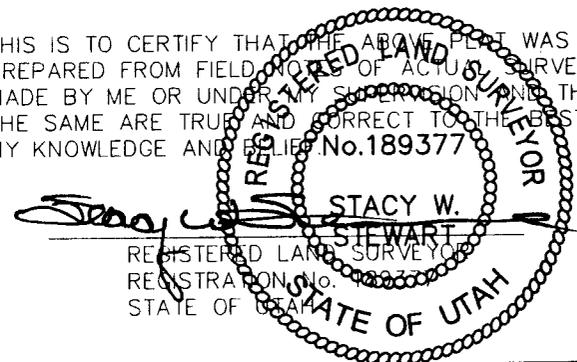
WELL LOCATION, FEDERAL 15-19-8-18,  
 LOCATED AS SHOWN IN THE SW 1/4 SE  
 1/4 OF SECTION 19, T8S, R18E,  
 S.L.B.&M. UINTAH COUNTY, UTAH.

### WELL LOCATION: FEDERAL 15-19-8-18

ELEV. UNGRADED GROUND = 5060.1'



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. No. 189377



◆ = SECTION CORNERS LOCATED

BASIS OF ELEV; U.S.G.S. 7-1/2 min QUAD (PARIETTE DRAW SW)

<b>TRI STATE LAND SURVEYING &amp; CONSULTING</b>	
180 NORTH VERNAL AVE. - VERNAL, UTAH 84078 (435) 781-2501	
SCALE: 1" = 1000'	SURVEYED BY: C.M.
DATE: 11-10-04	DRAWN BY: F.T.M.
NOTES:	FILE #

NEWFIELD PRODUCTION COMPANY  
FEDERAL #15-19-8-18  
SW/SE SECTION 19, T8S, R18E  
UINTAH COUNTY, UTAH

ONSHORE ORDER NO. 1

DRILLING PROGRAM

1. GEOLOGIC SURFACE FORMATION:

Uinta formation of Upper Eocene Age

2. ESTIMATED TOPS OF IMPORTANT GEOLOGIC MARKERS:

Uinta	0' – 1640'
Green River	2355'
Wasatch	6335'

3. ESTIMATED DEPTHS OF ANTICIPATED WATER, OIL, GAS OR MINERALS:

Green River Formation 2355' – 6335' - Oil

4. PROPOSED CASING PROGRAM

Please refer to the Monument Butte Field Standard Operation Procedure (SOP).

5. MINIMUM SPECIFICATIONS FOR PRESSURE CONTROL:

Please refer to the Monument Butte Field SOP. See Exhibit "C".

6. TYPE AND CHARACTERISTICS OF THE PROPOSED CIRCULATION MUDS:

Please refer to the Monument Butte Field SOP.

7. AUXILIARY SAFETY EQUIPMENT TO BE USED:

Please refer to the Monument Butte Field SOP.

8. TESTING, LOGGING AND CORING PROGRAMS:

Please refer to the Monument Butte Field SOP.

9. ANTICIPATED ABNORMAL PRESSURE OR TEMPERATURE:

The anticipated maximum bottom hole pressure is 1800 psi. It is not anticipated that abnormal temperatures will be encountered.

10. ANTICIPATED STARTING DATE AND DURATION OF THE OPERATIONS:

Please refer to the Monument Butte Field SOP.

NEWFIELD PRODUCTION COMPANY  
FEDERAL #15-19-8-18  
SW/SE SECTION 19, T8S, R18E  
UINTAH COUNTY, UTAH

ONSHORE ORDER NO. 1

MULTI-POINT SURFACE USE & OPERATIONS PLAN

1. EXISTING ROADS

See attached Topographic Map "A"

To reach Newfield Production Company well location site Federal #15-19-8-18 located in the SW 1/4 SE 1/4 Section 19, T8S, R18E, Uintah County, Utah:

Proceed southwesterly out of Myton, Utah along Highway 40 - 1.6 miles  $\pm$  to the junction of this highway and UT State Hwy 53; proceed southeasterly along Hwy 53 - 9.1 miles  $\pm$  to its junction with an existing dirt road to the east; proceed easterly - 6.2 miles  $\pm$  to its junction with the beginning of the proposed access road; proceed along the proposed access road - 4879'  $\pm$  to the proposed well location.

2. PLANNED ACCESS ROAD

See Topographic Map "B" for the location of the proposed access road.

3. LOCATION OF EXISTING WELLS

Refer to Exhibit "B".

4. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES

Please refer to the Monument Butte Field Standard Operating Procedure (SOP).

5. LOCATION AND TYPE OF WATER SUPPLY

Please refer to the Monument Butte Field SOP. See Exhibit "A".

6. SOURCE OF CONSTRUCTION MATERIALS

Please refer to the Monument Butte Field SOP.

7. METHODS FOR HANDLING WASTE DISPOSAL

Please refer to the Monument Butte Field SOP.

8. ANCILLARY FACILITIES

Please refer to the Monument Butte Field SOP.

9. WELL SITE LAYOUT

See attached Location Layout Diagram.

10. PLANS FOR RESTORATION OF SURFACE

Please refer to the Monument Butte Field SOP.

11. SURFACE OWNERSHIP - Bureau Of Land Management

12. OTHER ADDITIONAL INFORMATION

The Paleontological Resource Survey for this area is attached. Paleontological Resource Survey prepared by, Wade E. Miller, 9/27/04. See attached report cover page, Exhibit "D". The Archaeological Resource Survey will be forthcoming.

For the Federal #15-19-8-18 Newfield Production Company requests 480' of disturbed area be granted in Lease UTU-75532, 795' of disturbed area be granted in Lease UTU-74870, and 3604' of disturbed area be granted in Lease UTU-36846 to allow for construction of the proposed access road. **Refer to Topographic Map "B"**. The proposed access road will be an 18' crown road (9' either side of the centerline) with drainage ditches along either side of the proposed road whether it is deemed necessary in order to handle any run-off from normal meteorological conditions that are prevalent to this area. The maximum grade will be less than 8%. There will be no culverts required along this access road. There will be barrow ditches and turnouts as needed along this road. There are no fences encountered along this proposed road. There will be no new gates or cattle guards required. All construction material for this access road will be borrowed material accumulated during construction of the access road.

Newfield Production Company requests a 480' of disturbed area be granted in Lease UTU-75532, 795' of disturbed area be granted in Lease UTU-74870, and 3604' of disturbed area be granted in Lease UTU-36846 to allow for construction of the proposed gas lines. It is proposed that the disturbed area will be 50' wide to allow for construction of a 6" gas gathering line, and a 3" poly fuel gas line. Both lines will tie in to the existing pipeline infrastructure. **Refer to Topographic Map "C."** For a ROW plan of development, please refer to the Monument Butte Field SOP.

Newfield Production Company requests a 480' of disturbed area be granted in Lease UTU-75532, 795' of disturbed area be granted in Lease UTU-74870, and 3604' of disturbed area be granted in Lease UTU-36846 to allow for construction of the proposed water lines. It is proposed that the disturbed area will be 50' wide to allow for construction of a buried 3" steel water injection line and a 3" poly water return line. **Refer to Topographic Map "C."** For a ROW plan of development, please refer to the Monument Butte Field SOP.

**Water Disposal**

Immediately upon first production, all produced water will be confined to a steel storage tank. If the production water meets quality guidelines, it is transported to the Ashley, Monument Butte, Jonah, and Beluga water injection facilities by company or contract trucks. Subsequently, the produced water is injected into approved Class II wells to enhance Newfield's secondary recovery project.

Water not meeting quality criteria, is disposed at Newfield's Pariette #4 disposal well (Sec. 7, T9S R19E) or at State of Utah approved surface disposal facilities.

**Threatened, Endangered, And Other Sensitive Species**

None.

**Reserve Pit Liner**

Please refer to the Monument Butte Field SOP.

**Location and Reserve Pit Reclamation**

Please refer to the Monument Butte Field SOP.

The following seed mixture will be used on the topsoil stockpile, to the recontoured surface of the reserve pit, and for final reclamation: (All poundages are in pure live seed)

Shadscale	<i>Atriplex confertifolia</i>	4 lbs/acre
Gardner Saltbush	<i>Atriplex gardneri</i>	4 lbs/acre
Indian Rice Grass	<i>Oryzopsis hymenoides</i>	4 lbs/acre

**Details of the On-Site Inspection**

The proposed Federal #15-19-8-18 was on-sited on 9/15/04. The following were present; Brad Mecham (Newfield Production), David Gerbig (Newfield Production), and Byron Tolman (Bureau of Land Management). Weather conditions were clear at 75 degrees.

**13. LESSEE'S OR OPERATORS REPRESENTATIVE AND CERTIFICATION**

Representative

Name: Brad Mecham

Address: Route #3 Box 3630  
Myton, UT 84052

Telephone: (435) 646-3721

Certification

Please be advised that NEWFIELD PRODUCTION COMPANY is considered to be the operator of well #15-19-8-18 SW/SE Section 19, Township 8S, Range 18E: Lease UTU-36846 Uintah County, Utah: and is responsible under the terms and conditions of the lease for the operations conducted upon the leased lands. Bond coverage is provided by Hartford Accident #4488944.

I hereby certify that the proposed drillsite and access route have been inspected, and I am familiar with the conditions which currently exist; that the statements made in this plan are true and correct to the best of my knowledge; and that the work associated with the operations proposed here will be performed by Newfield Production Company and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provisions of 18 U.S.C. 1001 for the filing of a false statement.

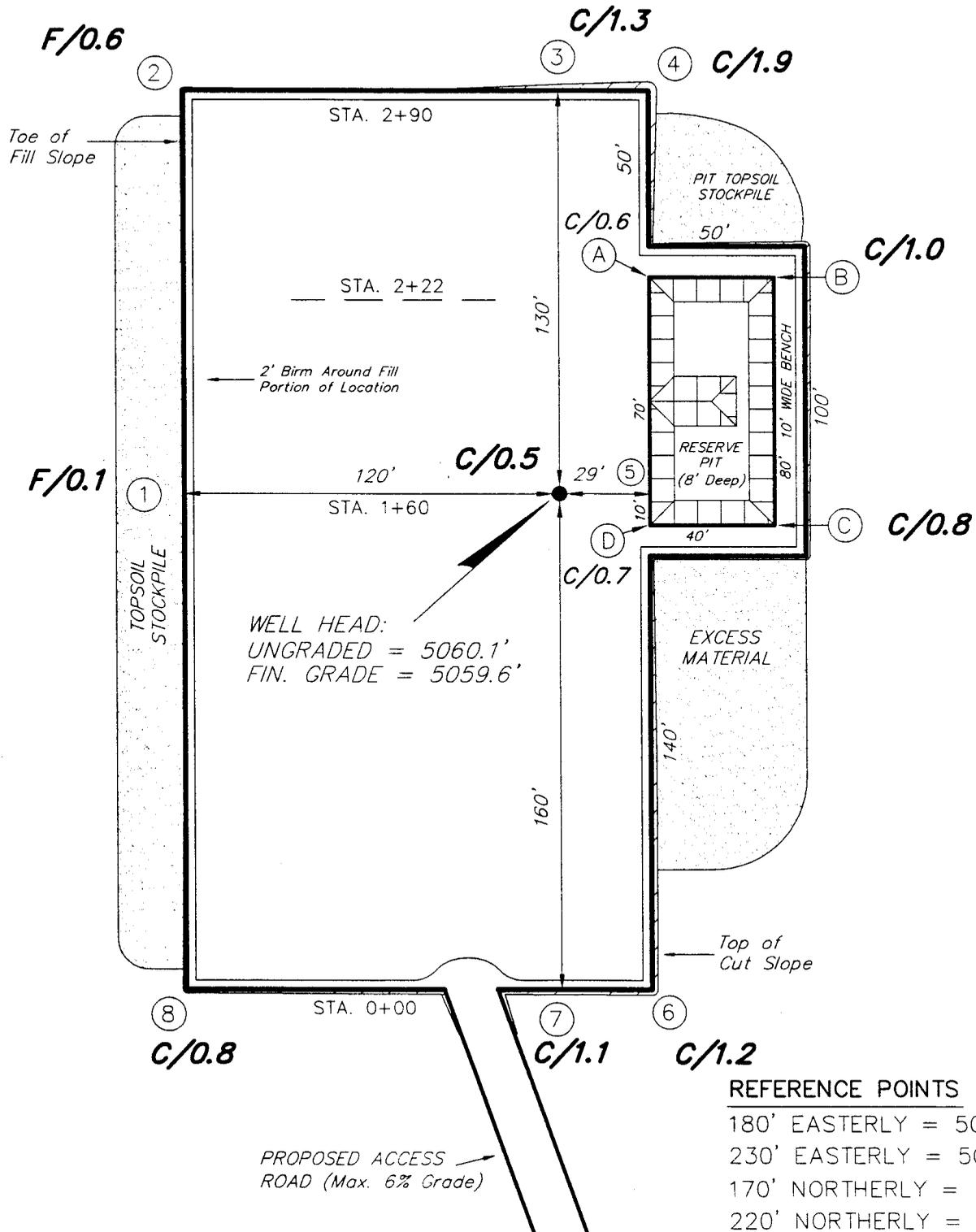
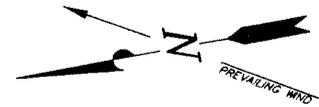
12/17/04  
Date

Mandi Crozier  
Mandie Crozier  
Regulatory Specialist  
Newfield Production Company

# NEWFIELD PRODUCTION COMPANY

FEDERAL 15-19-8-18

Section 19, T8S, R18E, S.L.B.&M.



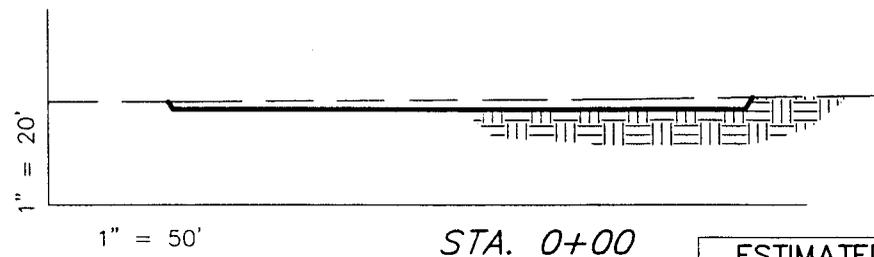
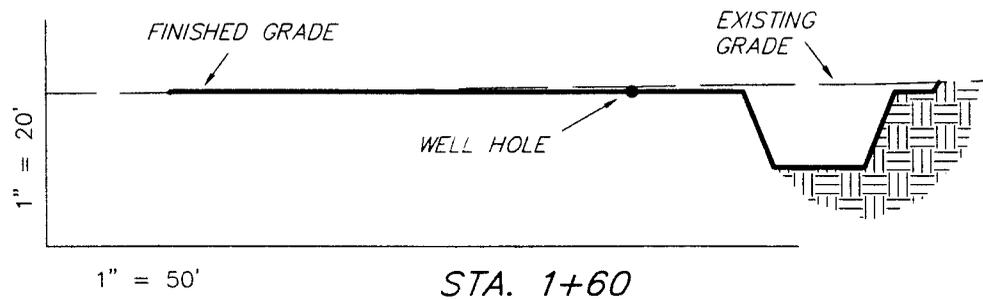
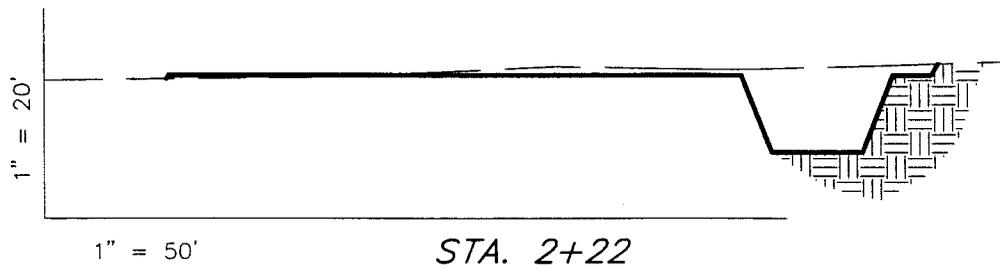
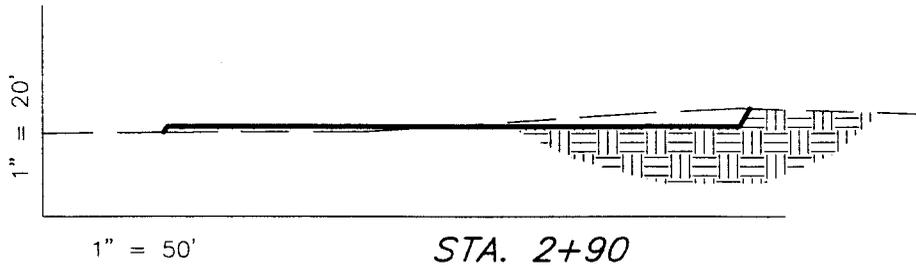
SURVEYED BY: C.M.	SCALE: 1" = 50'
DRAWN BY: F.T.M.	DATE: 11-10-04

**Tri State**  
 Land Surveying, Inc.  
 180 NORTH VERNAL AVE. VERNAL, UTAH 84078  
 (435) 781-2501

# NEWFIELD PRODUCTION COMPANY

## CROSS SECTIONS

FEDERAL 15-19-8-18



ESTIMATED EARTHWORK QUANTITIES  
(No Shrink or swell adjustments have been used)  
(Expressed in Cubic Yards)

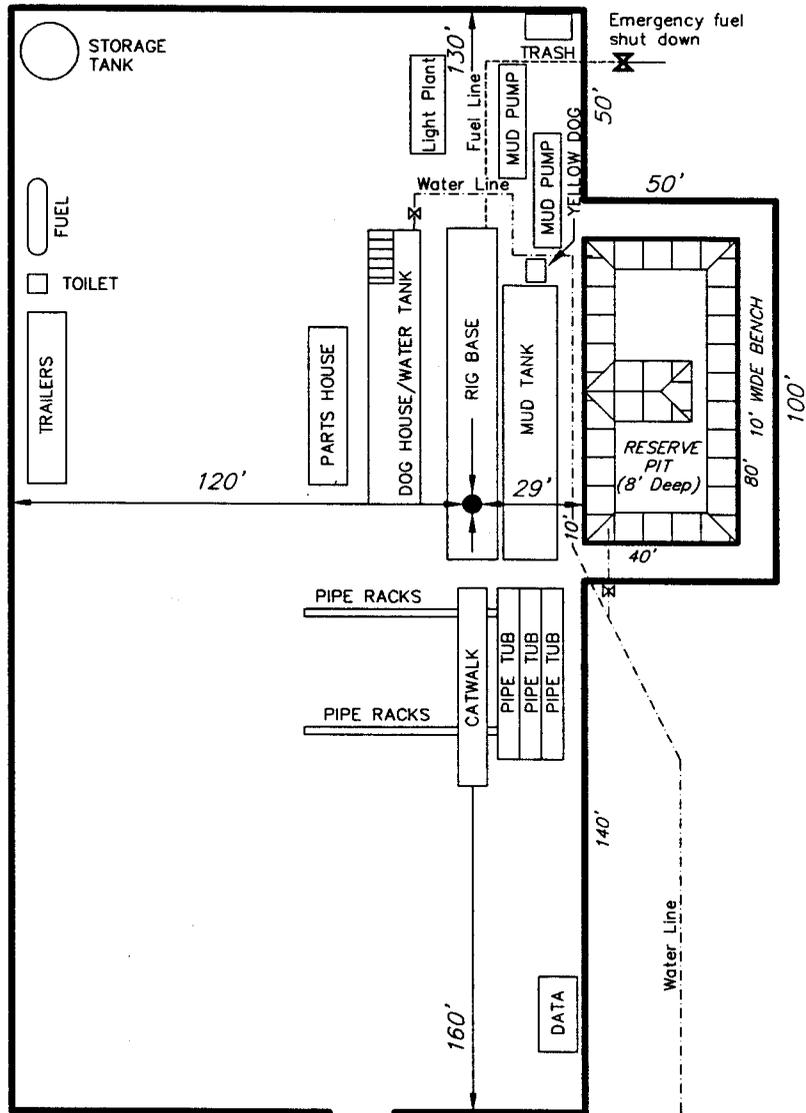
ITEM	CUT	FILL	6" TOPSOIL	EXCESS
PAD	340	340	Topsoil is not included in Pad Cut	0
PIT	640	0		640
TOTALS	980	340	890	640

NOTE:  
UNLESS OTHERWISE NOTED  
ALL CUT/FILL SLOPES ARE  
AT 1.5:1

SURVEYED BY: C.M.	SCALE: 1" = 50'
DRAWN BY: F.T.M.	DATE: 11-10-04

**Tri State** (435) 781-2501  
Land Surveying, Inc.  
180 NORTH VERNAL AVE. VERNAL, UTAH 84078

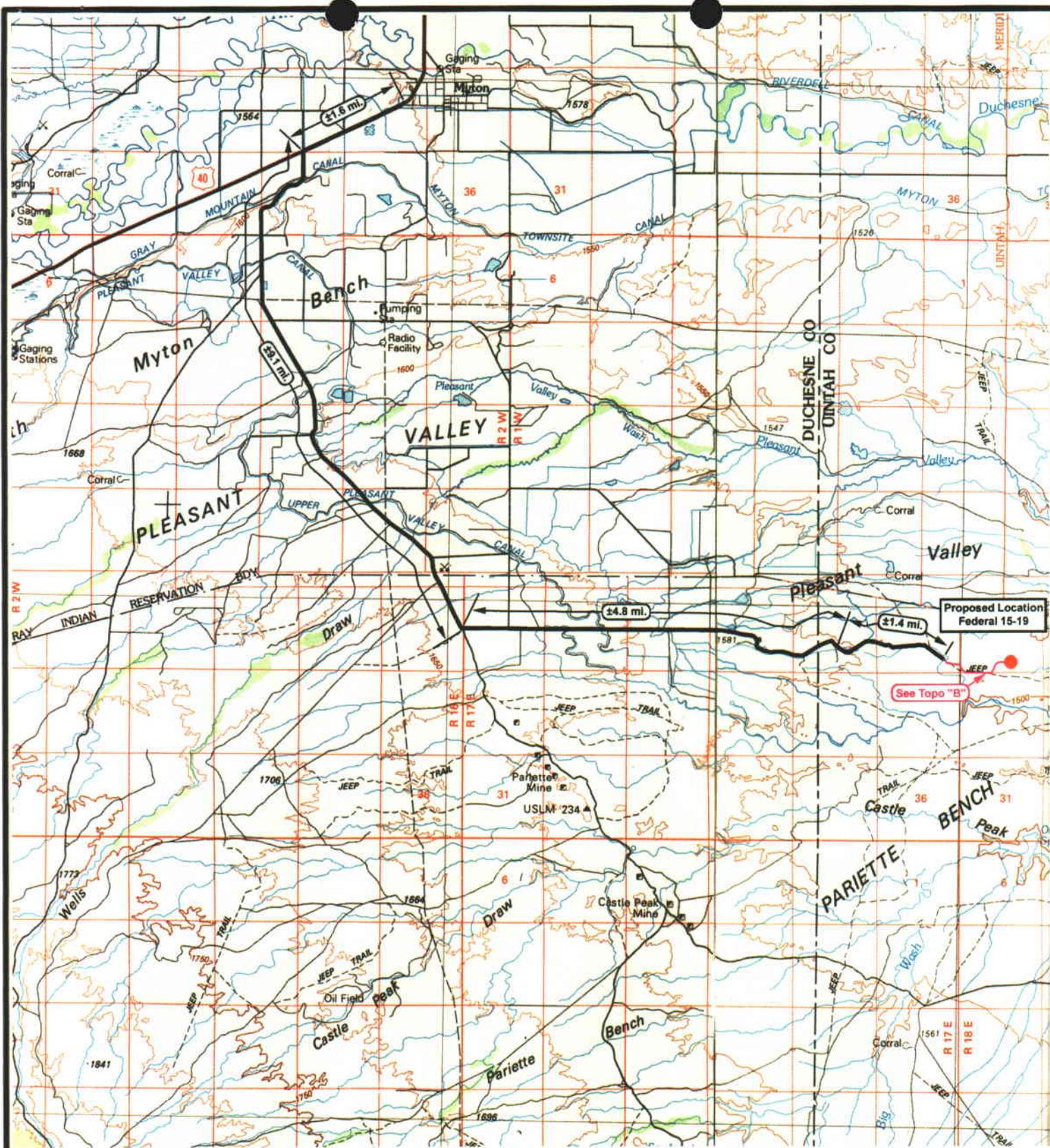
**NEWFIELD PRODUCTION COMPANY**  
**TYPICAL RIG LAYOUT**  
**FEDERAL 15-19-8-18**



PROPOSED ACCESS ROAD (Max. 6% Grade)

SURVEYED BY: C.M.	SCALE: 1" = 50'
DRAWN BY: F.T.M.	DATE: 11-10-04

**Tri State** Land Surveying, Inc. (435) 781-2501  
 180 NORTH VERNAL AVE. VERNAL, UTAH 84078



**NEWFIELD**  
Exploration Company

**Federal Unit 15-19**  
**SEC. 19, T8S, R18E, S.L.B.&M.**



*Tri-State*  
*Land Surveying Inc.*  
(435) 781-2501  
38 West 100 North Vernal, Utah 84078

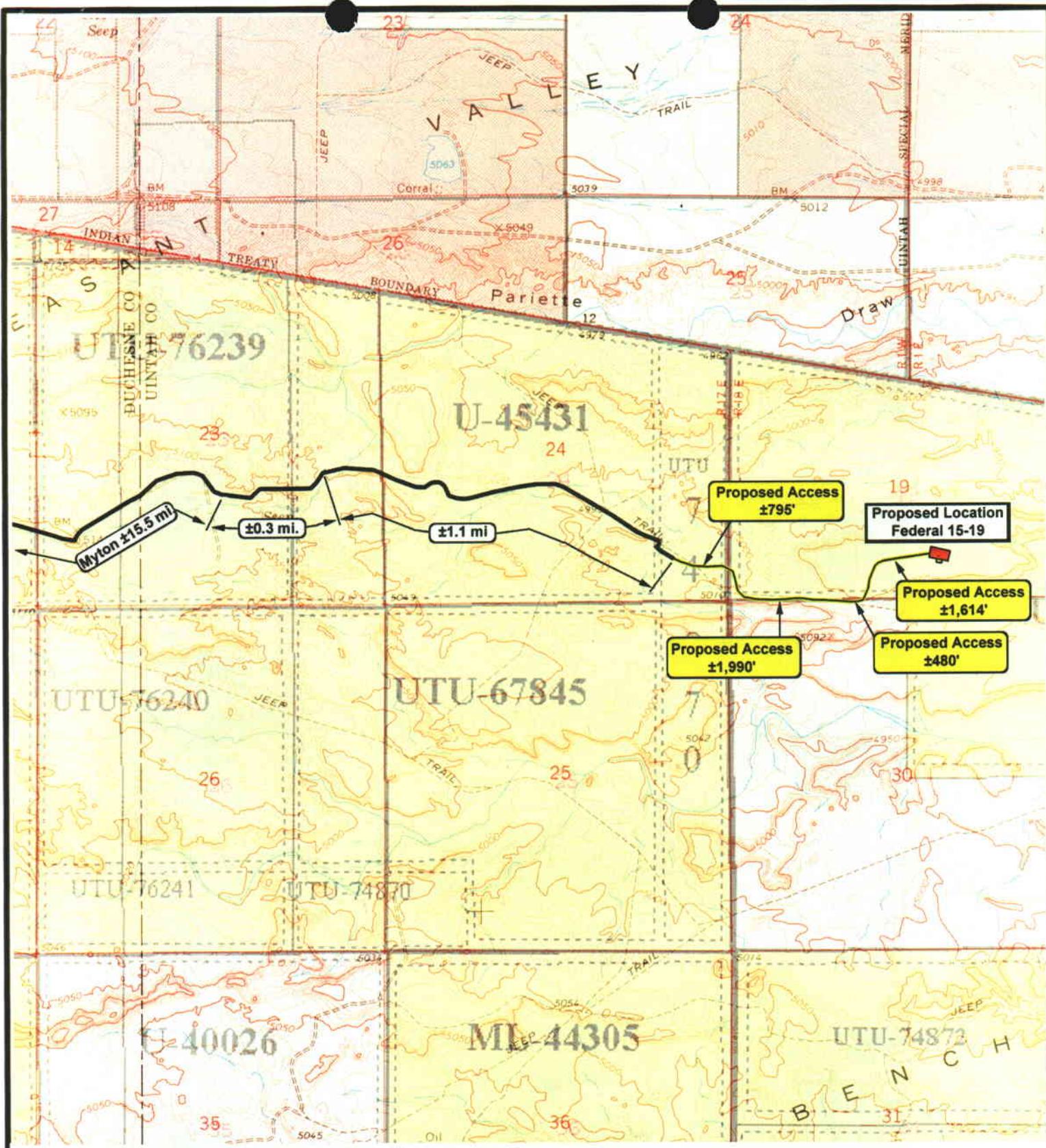
SCALE: 1" = 100,000'  
DRAWN BY: MW  
DATE: 11-11-2004

**Legend**

- Existing Road
- Proposed Access

TOPOGRAPHIC MAP

**"A"**



**NEWFIELD**  
Exploration Company

**Federal Unit 15-19**  
**SEC. 19, T8S, R18E, S.L.B.&M.**



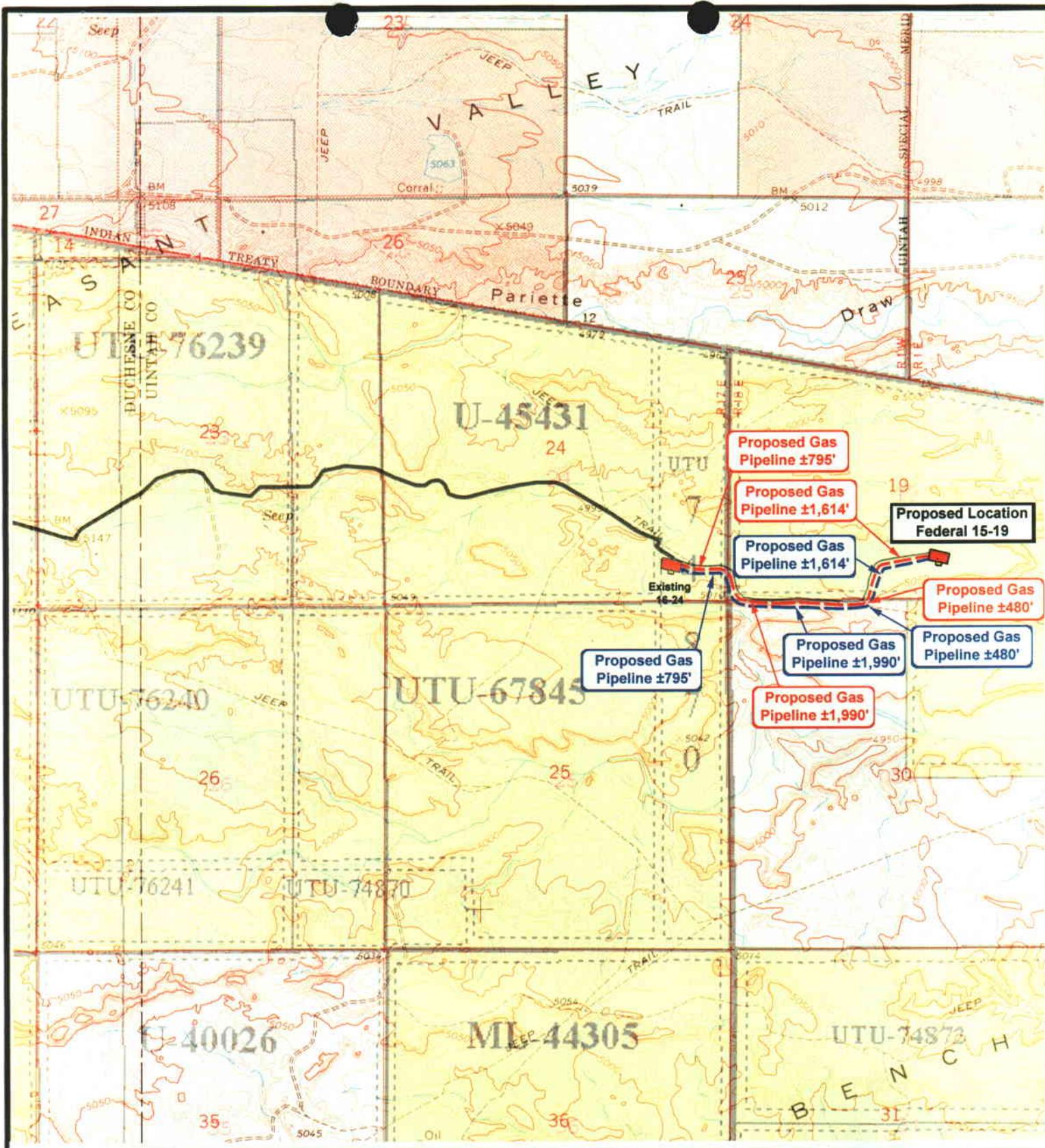
*Tri-State*  
Land Surveying Inc.  
(435) 781-2501  
38 West 100 North Vernal, Utah 84078

SCALE: 1" = 2000"  
DRAWN BY: MW  
DATE: 11-11-2004

**Legend**

- Existing Road
- Proposed Access

TOPOGRAPHIC MAP  
**"B"**



**NEWFIELD**  
Exploration Company

**Federal Unit 15-19**  
**SEC. 19, T8S, R18E, S.L.B.&M.**



**Tri-State**  
Land Surveying Inc.  
(435) 781-2501  
38 West 100 North Vernal, Utah 84078

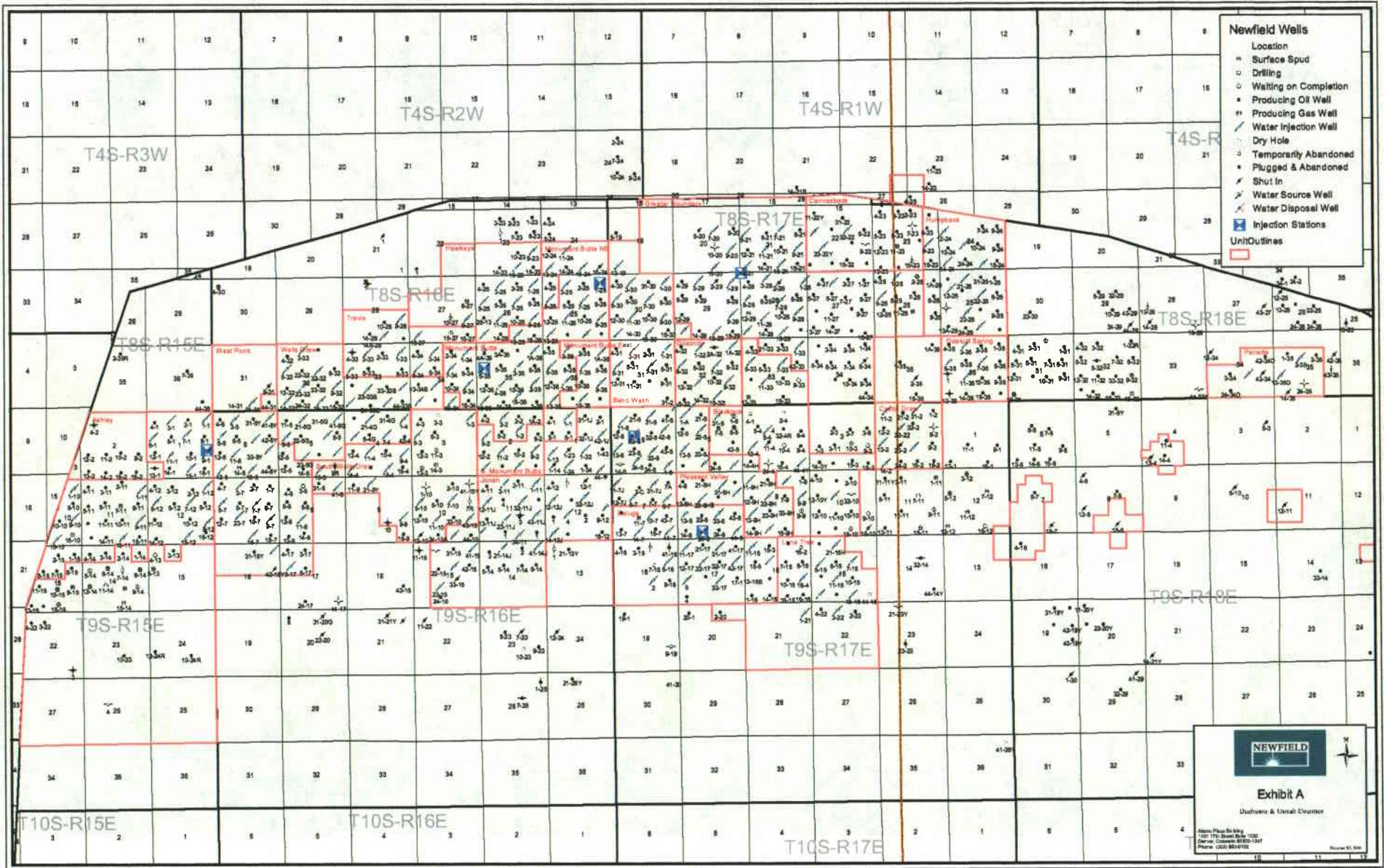
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DATE: 11-11-2004

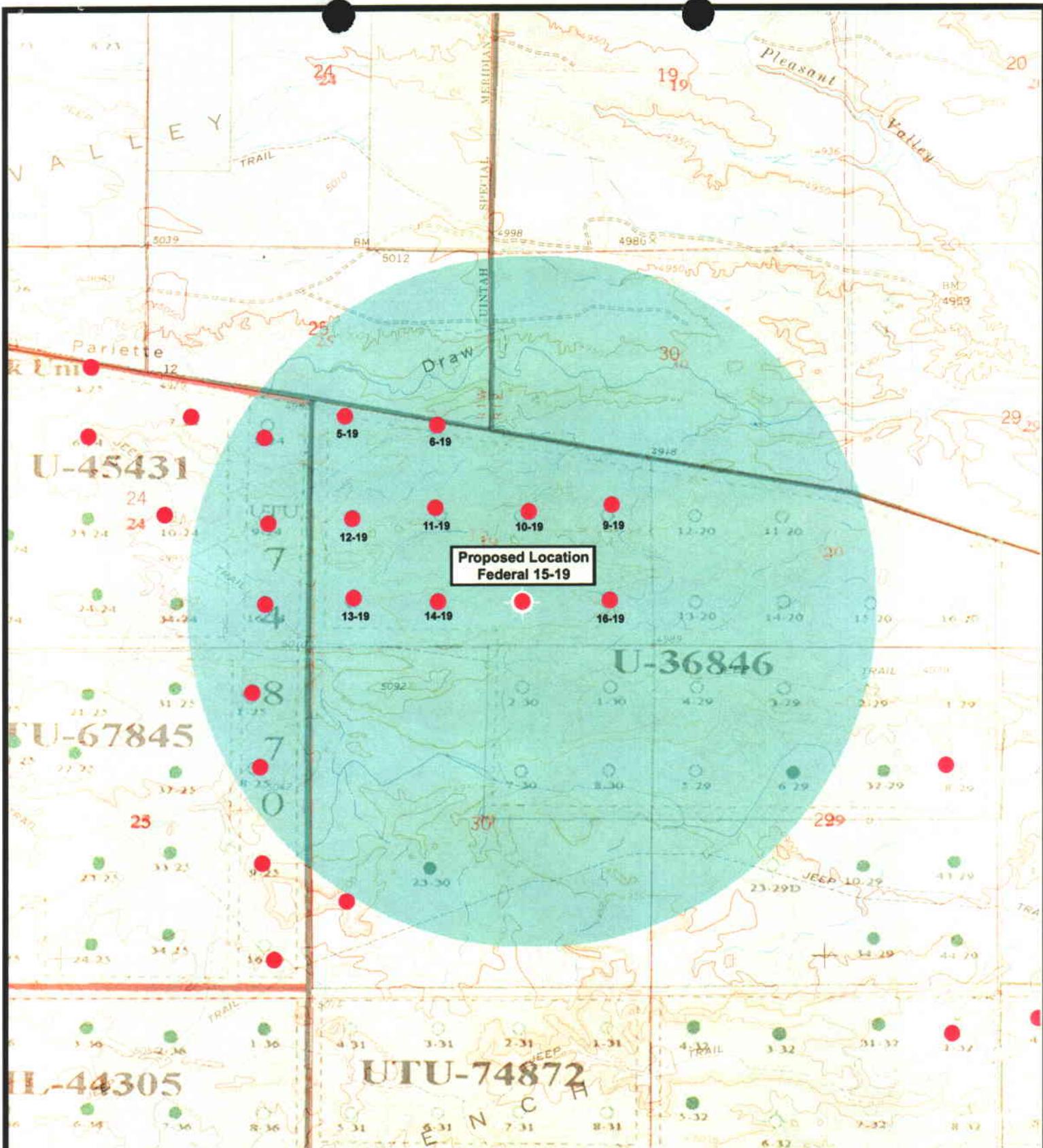
**Legend**

- Roads
- Existing Gas Line
- Proposed Gas Line
- Existing Water Line
- Proposed Water Line

TOPOGRAPHIC MAP

**"C"**





**Federal Unit 15-19**  
**SEC. 19, T8S, R18E, S.L.B.&M.**



**Tri-State**  
*Land Surveying Inc.*  
 (435) 781-2501  
 180 North Vernal Ave. Vernal, Utah 84078

SCALE: 1" = 2000'  
 DRAWN BY: MW  
 DATE: 11-10-2004

**Legend**

- Well Locations
- One-Mile Radius

**Exhibit "B"**

# 2-M SYSTEM

Blowout Prevention Equipment Systems

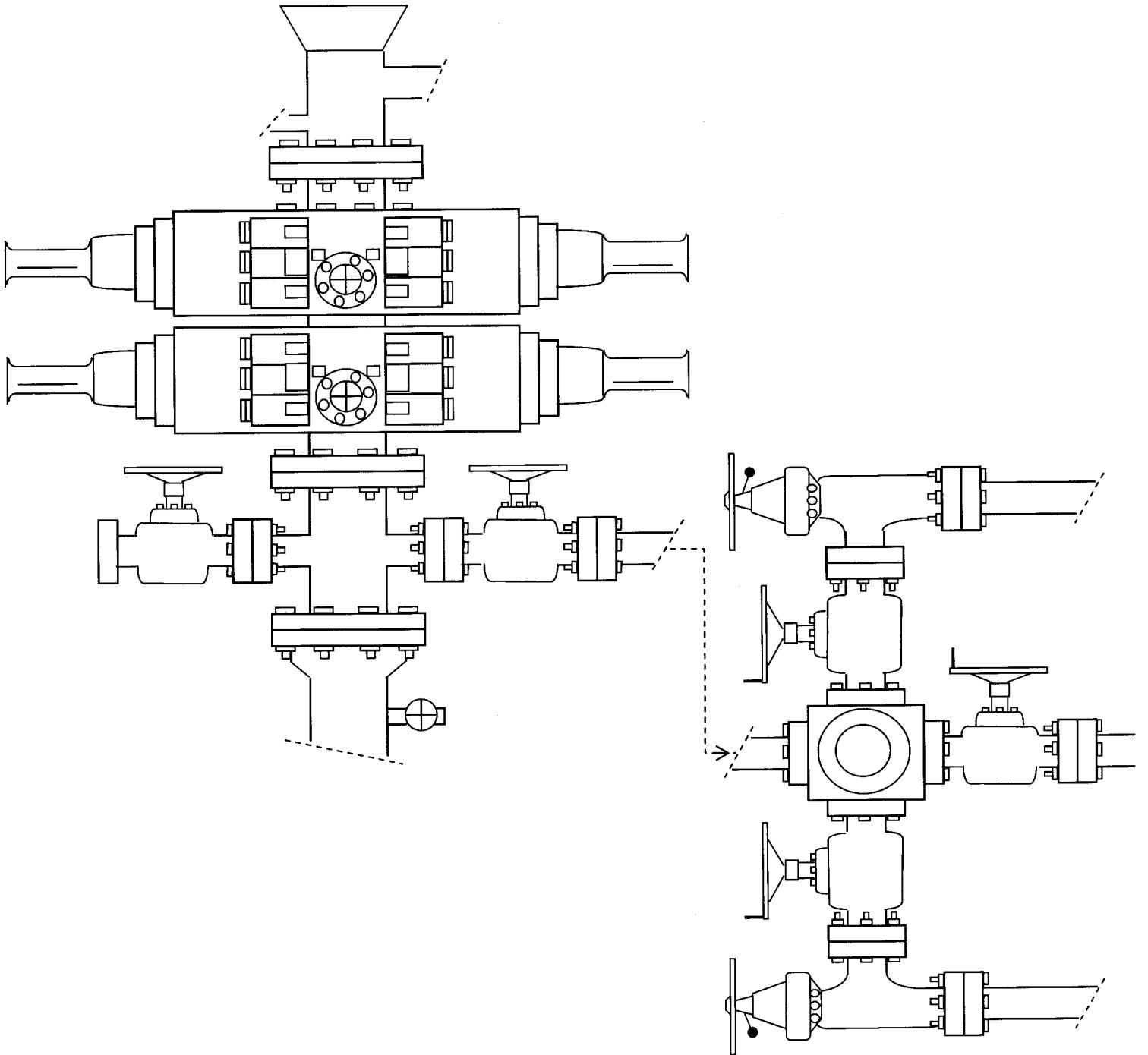


EXHIBIT C

**NEWFIELD PRODUCTION COMPANY**

**PALEONTOLOGICAL FIELD SURVEY OF PROPOSED  
PRODUCTION DEVELOPMENT AREAS,  
UINTAH COUNTY, UTAH**

(SW 1/4 & SE 1/4, NW 1/4 + South 1/2 Section 19; South 1/2 Section 20  
[excluding NE 1/4, SE 1/4]; NE 1/4, NW 1/4 & SE 1/4, NE 1/4; NE 1/4,  
NW 1/4 & SW 1/4, NW 1/4; NW 1/4, SW 1/4 & SE 1/4, SW 1/4, Section 29;  
Section 30 [excluding NE 1/4, SW 1/4], Township 8 South, Range 18 East)

**REPORT OF SURVEY**

Prepared for:

**Newfield Production Company**

Prepared by:

Wade E. Miller  
Consulting Paleontologist  
September 27, 2004

WORKSHEET  
APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 12/20/2004

API NO. ASSIGNED: 43-047-36193

WELL NAME: FEDERAL 15-19-8-18  
OPERATOR: NEWFIELD PRODUCTION ( N2695 )  
CONTACT: MANDIE CROZIER

PHONE NUMBER: 435-646-3721

PROPOSED LOCATION:  
SWSE 19 080S 180E  
SURFACE: 0660 FSL 1980 FEL  
BOTTOM: 0660 FSL 1980 FEL  
UINTAH  
8 MILE FLAT NORTH ( 590 )

INSPECT LOCATN BY: / /		
Tech Review	Initials	Date
Engineering		
Geology		
Surface		

LEASE TYPE: 1 - Federal  
LEASE NUMBER: UTU-36846  
SURFACE OWNER: 1 - Federal  
PROPOSED FORMATION: GRRV  
COALBED METHANE WELL? NO

LATITUDE: 40.09815  
LONGITUDE: -109.9332

RECEIVED AND/OR REVIEWED:

Plat

Bond: Fed[1] Ind[] Sta[] Fee[]  
(No. UTU0056 )

Potash (Y/N)

Oil Shale 190-5 (B) or 190-3 or 190-13

Water Permit  
(No. MUNICIPAL )

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

Fee Surf Agreement (Y/N)

LOCATION AND SITING:

\_\_\_ R649-2-3.

Unit \_\_\_\_\_

R649-3-2. General  
Siting: 460 From Qtr/Qtr & 920' Between Wells

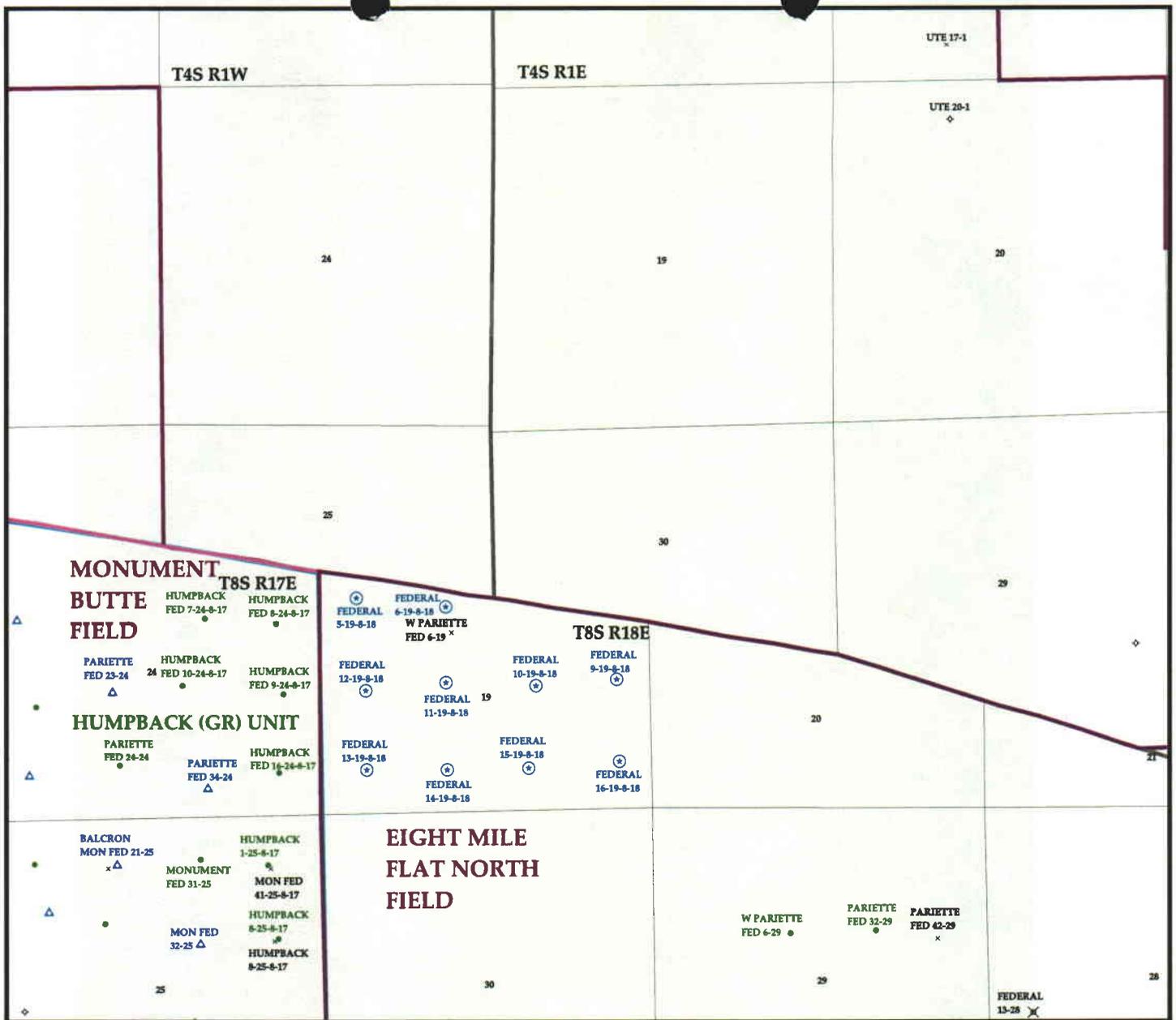
\_\_\_ R649-3-3. Exception

\_\_\_ Drilling Unit  
Board Cause No: \_\_\_\_\_  
Eff Date: \_\_\_\_\_  
Siting: \_\_\_\_\_

\_\_\_ R649-3-11. Directional Drill

COMMENTS: Sep, Separate file

STIPULATIONS: 1. Federal Approval  
2. Spacing Strip



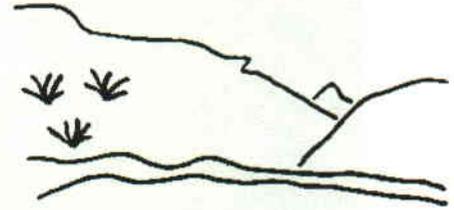
**OPERATOR: NEWFIELD PROD CO (N2695)**

**SEC. 19 T.8S R.18E**

**FIELD: EIGHT MILE FLAT NORTH (590)**

**COUNTY: UINTAH\*\***

**SPACING: R649-3-2 / GENERAL SITING**



Utah Oil Gas and Mining

Wells	Units.shp	Fields.shp
◇ GAS INJECTION	□ EXPLORATORY	□ ABANDONED
◇ GAS STORAGE	□ GAS STORAGE	□ ACTIVE
× LOCATION ABANDONED	□ NF PP OIL	□ COMBINED
⊕ NEW LOCATION	□ NF SECONDARY	□ INACTIVE
◇ PLUGGED & ABANDONED	□ PENDING	□ PROPOSED
* PRODUCING GAS	□ PI OIL	□ STORAGE
● PRODUCING OIL	□ PP GAS	□ TERMINATED
◇ SHUT-IN GAS	□ PP GEOTHERML	
◇ SHUT-IN OIL	□ PP OIL	
× TEMP. ABANDONED	□ SECONDARY	
○ TEST WELL	□ TERMINATED	
△ WATER INJECTION		
◇ WATER SUPPLY		
◇ WATER DISPOSAL		



PREPARED BY: DIANA WHITNEY  
DATE: 27-DECEMBER-2004



State of Utah

Department of  
Natural Resources

ROBERT L. MORGAN  
*Executive Director*

Division of  
Oil, Gas & Mining

MARY ANN WRIGHT  
*Acting Division Director*

OLENE S. WALKER  
*Governor*

GAYLE F. McKEACHNIE  
*Lieutenant Governor*

December 27, 2004

Newfield Production Company  
Rt. #3, Box 3630  
Myton, UT 84052

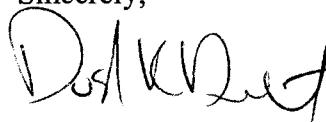
Re: Federal 15-19-8-18 Well, 660' FSL, 1980' FEL, SW SE, Sec. 19, T. 8 South,  
R. 18 East, Uintah County, Utah

Gentlemen:

Pursuant to the provisions and requirements of Utah Code Ann. § 40-6-1 *et seq.*, Utah Administrative Code R649-3-1 *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 43-047-36193.

Sincerely,

  
(for) John R. Baza  
Associate Director

pab  
Enclosures

cc: Uintah County Assessor  
Bureau of Land Management, Vernal District Office

**Operator:** Newfield Production Company

**Well Name & Number** Federal 15-19-8-18

**API Number:** 43-047-36193

**Lease:** UTU-36846

**Location:** SW SE                      **Sec.** 19                      **T.** 8 South                      **R.** 18 East

### 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 of spudding the well.

- Contact Carol Daniels at (801) 538-5284.

Notify the Division prior to commencing operations to plug and abandon the well.

- Contact Dan Jarvis at (801) 538-5338

3. Reporting Requirements

All required reports, forms and submittals will 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.

4. State approval of this well does not supersede the required federal approval, which must be obtained prior to drilling.

5. This proposed well is located in an area for which drilling units (well spacing patterns) have not been established through an order of the Board of Oil, Gas and Mining (the "Board"). In order to avoid the possibility of waste or injury to correlative rights, the operator is requested, once the well has been drilled, completed, and has produced, to analyze geological and engineering data generated therefrom, as well as any similar data from surrounding areas if available. As soon as is practicable after completion of its analysis, and if the analysis suggests an area larger than the quarter-quarter section upon which the well is located is being drained, the operator is requested to seek an appropriate order from the Board establishing drilling and spacing units in conformance with such analysis by filing a Request for Agency Action with the Board.

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

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

**SUNDRY NOTICES AND REPORTS ON WELLS**

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

5. Lease Designation and Serial No.  
**UTU-36846**

6. If Indian, Allottee or Tribe Name  
**NA**

7. If Unit or CA, Agreement Designation  
**N/A**

8. Well Name and No.  
**FEDERAL 15-19-8-18**

9. API Well No.  
**43-047-36193**

10. Field and Pool, or Exploratory Area  
**8 MILE FLAT NORTH**

11. County or Parish, State  
**UINTAH COUNTY, UT.**

**SUBMIT IN TRIPLICATE**

1. Type of Well  
 Oil Well     Gas Well     Other

2. Name of Operator  
**NEWFIELD PRODUCTION COMPANY**

3. Address and Telephone No.  
**Rt. 3 Box 3630, Myton Utah, 84052 435-646-3721**

4. Location of Well (Footage, Sec., T., R., m., or Survey Description)  
**660 FSL 1980 FEL SW/SE Section 19, T8S R18E**

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

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

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

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)\*

Newfield Production Company requests to extend the Permit to Drill this well for one year. The original approval date was 12/27/04 (expiration 12/27/05).

This APD has not been approved yet by the BLM.

**Approved by the  
Utah Division of  
Oil, Gas and Mining**

Date: 12-21-05

By: [Signature]

12-2-05  
CJD

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

Signed Mandie Crozier Title Regulatory Specialist Date 11/29/2005  
Mandie Crozier

CC: UTAH DOGM

(This space for Federal or State office use)

Approved by \_\_\_\_\_ Title \_\_\_\_\_ Date \_\_\_\_\_

Conditions of approval, if any:

CC: Utah DOGM

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NOV 30 2005

SECRET

**Application for Permit to Drill  
Request for Permit Extension  
Validation**

(this form should accompany the Sundry Notice requesting permit extension)

**API:** 43-047-36193  
**Well Name:** Federal 15-19-8-18  
**Location:** SW/SE Section 19, T8S R18E  
**Company Permit Issued to:** Newfield Production Company  
**Date Original Permit Issued:** 12/27/2004

The undersigned as owner with legal rights to drill on the property as permitted above, hereby verifies that the information as submitted in the previously approved application to drill, remains valid and does not require revision.

Following is a checklist of some items related to the application, which should be verified.

If located on private land, has the ownership changed, if so, has the surface agreement been updated? Yes  No  NA

Have any wells been drilled in the vicinity of the proposed well which would affect the spacing or siting requirements for this location? Yes  No

Has there been any unit or other agreements put in place that could affect the permitting or operation of this proposed well? Yes  No

Have there been any changes to the access route including ownership, or right-of-way, which could affect the proposed location? Yes  No

Has the approved source of water for drilling changed? Yes  No

Have there been any physical changes to the surface location or access route which will require a change in plans from what was discussed at the onsite evaluation? Yes  No

Is bonding still in place, which covers this proposed well? Yes  No

Mandi Crozier  
Signature

12/6/2005  
Date

Title: Regulatory Specialist

Representing: Newfield Production Company

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NOV 30 2005

OFFICE OF OIL & GAS REGULATION

DEC 20 2004

Form 3160-3  
(September 2001)

FORM APPROVED  
OMB No. 1004-0136  
Expires January 31, 2004

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

5. Lease Serial No.  
UTU-36846

6. If Indian, Allottee or Tribe Name  
N/A

7. If Unit or CA Agreement, Name and No.  
N/A

8. Lease Name and Well No.  
Federal 15-19-8-18

9. API Well No.  
43047-3684

10. Field and Pool, or Exploratory  
Eight Mile Flat

11. Sec., T., R., M., or Blk. and Survey or Area  
SW/SE Sec. 19, T8S R18E

12. County or Parish  
Utah

13. State  
UT

1a. Type of Work:  DRILL  REENTER

1b. Type of Well:  Oil Well  Gas Well  Other  Single Zone  Multiple Zone

2. Name of Operator  
Newfield Production Company

3a. Address  
Route #3 Box 3630, Myton UT 84052

3b. Phone No. (include area code)  
(435) 646-3721

4. Location of Well (Report location clearly and in accordance with any State requirements. \*)  
At surface SW/SE 660' FSL 1980' FEL  
At proposed prod. zone

14. Distance in miles and direction from nearest town or post office\*  
Approximatley 16.9 miles southeast of Myton, Utah

15. Distance from proposed\* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) Approx. 1320' f/ise, NA f/unit

16. No. of Acres in lease  
1178.69

17. Spacing Unit dedicated to this well  
40 Acres

18. Distance from proposed location\* to nearest well, drilling, completed, applied for, on this lease, ft. Approx. 1322'

19. Proposed Depth  
6335'

20. BLM/BIA Bond No. on file  
UTU0056

21. Elevations (Show whether DF, KDB, RT, GL, etc.)  
5060' GL

22. Approximate date work will start\*  
2nd Quarter 2005

23. Estimated duration  
Approximately seven (7) days from spud to rig release.

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No.1, shall be attached to this form:

- 1. Well plat certified by a registered surveyor.
- 2. A Drilling Plan.
- 3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office).
- 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
- 5. Operator certification.
- 6. Such other site specific information and/or plans as may be required by the authorized officer.

25. Signature *Mandie Crozier* Name (Printed/Typed) Mandie Crozier Date 12/17/04

Title Regulatory Specialist  
Approved by (Signature) *Thomas B. Cleary* Name (Printed/Typed) Office Date 02/13/2006  
Title Assistant Field Manager Mineral Resources

Application approval does not warrant or certify the the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.  
Conditions of approval, if any, are attached.

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

\*(Instructions on reverse)

RECEIVED  
FEB 17 2006

DIV. OF OIL, GAS & MINING

NOTICE OF APPROVAL

CONDITIONS OF APPROVAL ATTACHED

4006M  
05JMO803A

No NOS



UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT  
VERNAL FIELD OFFICE

170 South 500 East VERNAL, UT 84078 (435) 781-4400



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

**Company:** NEWFIELD PRODUCTION CO      **Location:** SWSE Sec.179, T8S, R18E  
**Well No:** Federal 15-19-8-18              **Lease No:** UTU-36846  
**API No:** 43-047-36193                      **Agreement:** N/A

Petroleum Engineer:	Matt Baker	Office: 435-781-4490	Cell: 435-828-4470
Petroleum Engineer:	Michael Lee	Office: 435-781-4432	Cell: 435-828-7875
Supervisory Petroleum Technician:	Jamie Sparger	Office: 435-781-4502	Cell: 435-828-3913
Environmental Scientist:	Paul Buhler	Office: 435-781-4475	Cell: 435-828-4029
Environmental Scientist:	Karl Wright	Office: 435-781-4484	
Natural Resource Specialist:	Holly Villa	Office: 435-781-4404	
Natural Resource Specialist:	Melissa Hawk	Office: 435-781-4476	
<b>Office Fax:</b> (435) 781-4410	<b>After hours message number: (435) 781-4513</b>		

**A COPY OF THESE CONDITIONS SHALL BE FURNISHED TO YOUR  
FIELD REPRESENTATIVE TO INSURE COMPLIANCE**

All lease and/or unit operations are to be conducted in such a manner that full compliance is made with the applicable laws, regulations (43 CFR Part 3160), and this approved Application for Permit to Drill including Surface and Downhole Conditions of Approval. The operator is considered fully responsible for the actions of his subcontractors. A copy of the approved APD must be on location during construction, drilling, and completion operations. **This permit is approved for a one-year period. An additional year extension may be applied for by sundry notice prior to expiration.**

**NOTIFICATION REQUIREMENTS**

- Location Construction (Notify Melissa Hawk ES / NRS) - Forty-Eight (48) hours prior to construction of location and access roads.
- Location Completion (Notify Melissa Hawk ES / NRS) - Prior to moving on the drilling rig.
- Spud Notice (Notify PE) - Twenty-Four (24) hours prior to spudding the well.
- Casing String & Cementing (Notify Jamie Sparger SPT) - Twenty-Four (24) hours prior to running casing and cementing all casing strings.
- BOP & Related Equipment Tests (Notify Jamie Sparger SPT) - Twenty-Four (24) hours prior to initiating pressure tests.
- First Production Notice (Notify PE) - Within Five (5) business days after new well begins or production resumes after well has been off production for more than ninety (90) days.

### ***SURFACE USE PROGRAM***

-This well is being approved in accordance with Washington Instruction Memorandum 2005-247 and Section 390 (Category 3) of the Energy Policy Act which establishes statutory categorical exclusions (CX) under the National Environmental Policy Act (NEPA). Category 3 states that an oil or gas well can be drilled within a developed field for which an approved land use plan or any environmental document prepared pursuant to NEPA analyzed drilling as a reasonably foreseeable activity, so long as such plan or document was approved within five (5) years prior to the date of spudding the well. This well is covered under the *Final Environmental Impact Statement and Record of Decision Castle Peak and Eightmile Flat Oil and Gas Exploration Project Newfield Rocky Mountains Inc.*, signed November 21, 2005. If the well has not been spudded by November 21, 2010, a new environmental document will have to be prepared prior to the approval of the APD.

**-No construction or drilling will be allowed during the golden eagle nesting season (2-1 to 7-15),** unless a clearance is given by the Vernal Field Office wildlife biologist. If the nest is found to be active or was active in the previous year, no drilling will be allowed until the nest has been inactive for two consecutive years.

-A qualified archeologist shall be present to monitor the construction of the access road and well location. If the archeologist determines that any archeological sites would be destroyed which are of historical importance, the operator shall immediately stop work that might further disturb such materials and contact the Authorized Officer (AO). A determination will be made by the AO as to what mitigation will be necessary for the discovered archeological material.

-Immediately stop work that might further disturb such materials and contact the Authorized Officer (AO). A determination will be made by the AO as to what mitigation will be necessary for the discovered paleontologic material.

-4 to 6 inches of topsoil shall be stripped from the location and placed where it can most easily be accessed for interim reclamation instead of as shown in the APD.

-Within 90 calendar days of the approval date for this Application for Permit to Drill (APD), the operator/lessee shall submit to the Authorized Officer (AO), on Sundry Notice Form 3160-5, an Interim Surface Reclamation Plan for surface disturbance on well Pads, access roads, and pipelines. At a minimum, this will include the reshaping of the pad to the original contour to the extent possible; the respreading of the topsoil up to the rig anchor points; and the area reseeded using appropriate reclamation methods. The AO will provide written approval or concurrence within 30 calendar days of receipt.

-The pipeline(s) shall be buried within the identified construction width of an access corridor that contains the access road and pipelines. The operator may request in writing an exception to this COA. Exceptions to this COA may include but are not limited to: laterally extensive, hard indurated bedrock, such as sandstone, which is at or within 2 feet of the surface; and soil types with a poor history for successful rehabilitation. The exception request will be reviewed by the AO and a determination made.

- Following well plugging and abandonment, the location, access roads, pipelines, and other facilities shall be reclaimed. All disturbed surfaces shall be reshaped to approximate the original contour; the top soil respread over the surface; and the surface revegetated. The surface of approved staging areas where construction activities did not occur may require disking or ripping and reseeding.

-Prior to abandonment of a buried pipeline, the operator will obtain authorization from the appropriate regulatory agency. BLM will determine whether the pipeline and all above ground pipeline facilities shall be removed and unsalvageable materials disposed of at approved sites or abandoned in place.

Reshaping and revegetation of disturbed land areas will be completed where necessary. The seed mix identified in the APD shall be used. Other reclamation methods including but not limited to mulching or soil treatments may be require on a site-specific basis.

### ***DOWNHOLE CONDITIONS OF APPROVAL***

**All provisions outlined in Onshore Oil & Gas Order #2 Drilling Operations shall be strictly adhered to.** The following items are emphasized:

#### **SITE SPECIFIC DOWNHOLE CONDITIONS OF APPROVAL**

1. Casing cementing operations for production casing shall return cement to surface.

#### **DRILLING/COMPLETION/PRODUCING OPERATING STANDARDS**

1. There shall be no deviation from the proposed drilling, completion, and/or workover program as approved. Safe drilling and operating practices must be observed. All wells, whether drilling, producing, suspended, or abandoned, shall be identified in accordance with 43 CFR 3162.6. There shall be a sign or marker with the name of the operator, lease serial number, well number, and surveyed description of the well. Any changes in operation must have prior approval from the BLM, Vernal Field Office Petroleum Engineers.
2. The spud date and time shall be reported orally to Vernal Field Office within 24 hours of spudding.
3. **Notify Vernal Field Office Supervisory Petroleum Engineering Technician at least 24 hours in advance of casing cementing operations and BOPE & casing pressure tests.**
4. Blowout prevention equipment (BOPE) will remain in use until the well is completed or abandoned. Closing unit controls must remain unobstructed and readily accessible at all times. Choke manifolds must be located outside of the rig substructure.

All BOPE components will be inspected daily and those inspections shall be recorded in the daily drilling report. Components shall be operated and tested as required by Onshore Oil & Gas Order No. 2 to insure good mechanical working order. All BOPE pressure tests must be performed by a test pump with a chart recorder and **NOT** by the rig pumps. Test must be reported in the driller's log.

BOP drills must be initially conducted by each drilling crew within 24 hours of drilling out from under the surface casing and weekly thereafter as specified in Onshore Oil & Gas Order No. 2.

Casing pressure tests are required before drilling out from under all casing strings set and cemented in place.

No aggressive/fresh hard-banded drill pipe shall be used within casing.

5. All shows of fresh water and minerals will be reported and protected. A sample will be taken of any water flows and a water analysis furnished the BLM, Vernal Field Office. All oil and gas shows will be adequately tested for commercial possibilities, reported, and protected.

6. 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 BLM, Vernal Field Office. If operations are to be suspended for more than 30 days, prior approval of the BLM, Vernal Field Office must be obtained and notification given before resumption of operations.
7. Chronologic drilling progress reports must be filed directly with the BLM, Vernal Field Office on a weekly basis in sundry, letter format or e-mail to the Petroleum Engineers until the well is completed.

Any change in the program must be approved by the BLM, Vernal Field Office. "Sundry Notices and Reports on Wells" (Form BLM 3160-5) must be filed for all changes of plans and other operations in accordance with 43 CFR 3162.3-2.

Emergency approval may be obtained orally, but such approval does not waive the written report requirement. Any additional construction, reconstruction, or alterations of facilities, including roads, gathering lines, batteries, etc., which will result in the disturbance of new ground, will require the filing of a suitable plan pursuant to Onshore Oil & Gas Order No. 1 of 43 CFR 3164.1 and prior approval by the BLM, Vernal Field Office.

In accordance with 43 CFR 3162.4-3, this well must be reported on the "Monthly Report of Operations" (Oil and Gas Operations Report ((OGOR)) starting with the month in which operations commence and continue each month until the well is physically plugged and abandoned. This report shall be filed in duplicate, directly with the Minerals Management Service, P.O. Box 17110, Denver, Colorado 80217-0110, or call 1-800-525-7922 (303) 231-3650 for reporting information.

8. Whether the well is completed as a dry hole or as a producer, "Well Completion and Recompletion Report and Log" (BLM 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 3162.4-1. Two copies of all logs run, core descriptions, and all other surveys or data obtained and compiled during the drilling, workover, and/or completion operations, will be filed on BLM Form 3160-4. Submit with the well completion report a geologic report including, at a minimum, formation tops, and a summary and conclusions. Also include deviation surveys, sample descriptions, strip logs, core data, drill stem test data, and results of production tests if performed. Samples (cuttings, fluid, and/or gas) will be submitted only when requested by the BLM, Vernal Field Office.

**Please submit an electronic copy of all logs run on this well in LAS format to UT\_VN\_Welllogs@BLM.gov. This submission will supersede the requirement for submittal of paper logs to the BLM. The cement bond log must be submitted in raster format (TIF, PDF other).**

9. All off-lease storage, off-lease measurement, or commingling on-lease or off-lease will have prior written approval from the BLM, Vernal Field Office.

All measurement points shall be identified as point of sales or allocation for royalty determination prior to the installation of facilities.

10. Oil and gas meters will be calibrated in place prior to any deliveries. The Field Office Petroleum Engineers 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 BLM, Vernal Field Office. All measurement facilities will conform to the API standards for liquid hydrocarbons and the AGA standards for natural gas measurement.
11. A schematic facilities diagram as required by Onshore Oil & Gas Order No. 3 shall be submitted to the BLM, Vernal Field Office within 30 days of installation or first production, whichever occurs first. All site security regulations as specified in Onshore Oil & Gas Order No. 3 shall be adhered to. All product lines entering and leaving hydrocarbon storage tanks will be effectively sealed in accordance with Onshore Oil & Gas Order No. 3.
12. This APD is approved subject to the requirement that, should the well be successfully completed for production, the BLM, Vernal Field office must be notified when it is placed in a producing status. Such notification will be by written communication and must be received in this office by not later than the fifth business day following the date on which the well is placed on production. The notification shall provide, as a minimum, the following informational items:
  - a. Operator name, address, and telephone number.
  - b. Well name and number.
  - c. Well location ( $\frac{1}{4}$  $\frac{1}{4}$ , Sec., Twn, Rng, and P.M.).
  - d. Date well was placed in a producing status (date of first production for which royalty will be paid).
  - e. The nature of the well's production, (i.e., crude oil, or crude oil and casing head gas, or natural gas and entrained liquid hydrocarbons).
  - f. The Federal or Indian lease prefix and number on which the well is located; otherwise the non-Federal or non-Indian land category, i.e., State or private.
  - g. Unit agreement and / or participating area name and number, if applicable.
  - h. Communitization agreement number, if applicable.
13. Any venting or flaring of gas will be done in accordance with Notice to Lessees (NTL) 4A and needs prior approval from Field Office Petroleum Engineers.

14. All undesirable events (fires, accidents, blowouts, spills, discharges) as specified in NTL 3A will be reported to the BLM, Vernal Field Office. Major events as defined in NTL3A, will be reported verbally within 24 hours, followed by a written report within 15 days. "Other than Major Events" will be reported in writing within 15 days. "Minor Events" will be reported on the Monthly Report of Operations and Production
15. Pursuant to Onshore Oil & Gas Order No. 7, this is authorization for pit disposal of water produced from this well for a period of 90 days from the date of initial production. A permanent disposal method must be approved by this office and in operation prior to the end of this 90-day period. In order to meet this deadline, an application for the proposed permanent disposal method shall be submitted along with any necessary water analyses, as soon as possible, but no later than 45 days after the date of first production. Any method of disposal which has not been approved prior to the end of the authorized 90-day period will be considered as an Incident of Noncompliance and will be grounds for issuing a shut-in order until an acceptable manner for disposing of said water is provided and approved by this office.
16. Unless the plugging is to take place immediately upon receipt of oral approval, the Field Office Petroleum Engineers must be notified at least 24 hours in advance of the plugging of the well, in order that a representative may witness plugging operations. If a well is suspended or abandoned, all pits must be fenced immediately until they are backfilled. The "Subsequent Report of Abandonment" (Form BLM 3160-5) must be submitted within 30 days after the actual plugging of the well bore, showing location of plugs, amount of cement in each, and amount of casing left in hole, and the current status of the surface restoration.

# DIVISION OF OIL, GAS AND MINING

## **SPUDDING INFORMATION**

Name of Company: NEWFIELD PRODUCTION COMANY

Well Name: FEDERAL 15-19-8-18

Api No: 43-047-36193 Lease Type: FEDERAL

Section 19 Township 08S Range 18E County UINTAH

Drilling Contractor NDSI RIG # NS#1

### **SPUDDED:**

Date 03/20/06

Time 9:30 AM

How DRY

**Drilling will Commence:** \_\_\_\_\_

Reported by TROY

Telephone # 1-435-823-6013

Date 03/20/2006 Signed CHD

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

OPERATOR: **NEWFIELD PRODUCTION COMPANY**  
 ADDRESS: **RT. 3 BOX 3830**  
**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		
B	99999	14844 ✓	43-047-36026	FEDERAL 15-33-8-18	SWSE	33	8S	18E	UINTAH	03/15/06	3/23/06
WELL 1 COMMENTS: <i>GRPV Sundance</i> — K											
A	99999	15258	43-047-36192	FEDERAL 14-19-8-18	SE/SW	19	8S	18E	UINTAH	03/18/06	3/23/06
WELL 2 COMMENTS: <i>GRPV</i> — K											
B	99999	14844 ✓	43-047-36346	FEDERAL 8-8-8-18	SE/NE	8	9S	18E	UINTAH	03/18/06	3/23/06
WELL 3 COMMENTS: <i>GRPV Sundance</i> — K											
A	99999	15259	43-047-36183	FEDERAL 15-19-8-18	SWSE	19	8S	18E	UINTAH	03/20/06	3/23/06
WELL 4 COMMENTS: <i>GRPV</i> — K											
B	99999	14844 ✓	43-047-36345	FEDERAL 9-8-9-18	NE/SE	8	9S	18E	UINTAH	03/21/06	3/23/06
WELL 5 COMMENTS: <i>GRPV Sundance</i> — K											
A	99999	15260	43-047-36225	FEDERAL 4-30-8-18	NW/NW	30	8S	18E	UINTAH	03/21/06	3/23/06
WELL 6 COMMENTS: <i>GRPV</i> — K											

- ACTION CODES (See instructions on back of form)
- A - Establish a new entity for new well (single well only)
  - B - Add an owner to existing entity (group or sub 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 comment section)

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

RECEIVED  
 MAR 23 2006

*Lana Nebeker*  
 Signature  
 Production Clerk  
 Title  
 March 23, 2006  
 Date

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

**SUNDRY NOTICES AND REPORTS ON WELLS**  
Do not use this form for proposals to drill or to re-enter an  
abandoned well. Use Form 3160-3 (APD) for such proposals.

<b>SUBMIT IN TRIPLICATE - Other Instructions on reverse side</b>		5. Lease Serial No. UTU36846
		6. If Indian, Allottee or Tribe Name.
		7. If Unit or CA/Agreement, Name and/or No.
1. Type of Well <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other		8. Well Name and No. FEDERAL 15-19-8-18
2. Name of Operator NEWFIELD PRODUCTION COMPANY		9. API Well No. 4304736193
3a. Address   Route 3 Box 3630 Myton, UT 84052	3b. Phone No. (include are code) 435.646.3721	10. Field and Pool, or Exploratory Area Monument Butte
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) 660 FSL 1980 FEL SW/SE Section 19 T8S R18E		11. County or Parish, State Uintah, UT

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

TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production(Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input type="checkbox"/> Other _____
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug & Abandon	<input type="checkbox"/> Temporarily Abandon	_____
	<input type="checkbox"/> Convert to Injector	<input type="checkbox"/> Plug Back	<input checked="" type="checkbox"/> Water Disposal	_____

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

Formation water is produced to a steel storage tank. If the production water meets quality guidelines, it is transported to the Ashley, Monument Butte, Jonah, and Beluga water injection facilities by company or contract trucks. Subsequently, the produced water is injected into approved Class II wells to enhance Newfield's secondary recovery project.

Water not meeting quality criteria, is disposed at Newfield's Pariette #4 disposal well (Sec. 7, T9S R19E) or at State of Utah approved surface disposal facilities.

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

I hereby certify that the foregoing is true and correct Name (Printed/ Typed) Mandie Crozier	Title Regulatory Specialist
Signature 	Date 04/25/2006
<b>THIS SPACE FOR FEDERAL OR STATE OFFICE USE</b>	

Approved by _____ Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.	Title _____	Date _____
	Office _____	

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious and fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on reverse)

**RECEIVED**

APR 26 2006

DIV. OF OIL, GAS & MINING

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

**SUNDRY NOTICES AND REPORTS ON WELLS**  
Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

**SUBMIT IN TRIPLICATE - Other Instructions on reverse side**

1. Type of Well  
 Oil Well    Gas Well    Other

2. Name of Operator  
 NEWFIELD PRODUCTION COMPANY

3a. Address    Route 3 Box 3630  
                   Myton, UT    84052

3b. Phone No. (include area code)  
 435.646.3721

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)  
 660 FSL 1980 FEL  
 SW/SE    Section 19 T8S R18E

5. Lease Serial No.  
 UTU36846

6. If Indian, Allottee or Tribe Name.

7. If Unit or CA/Agreement, Name and/or No.

8. Well Name and No.  
 FEDERAL 15-19-8-18

9. API Well No.  
 4304736193

10. Field and Pool, or Exploratory Area  
 Monument Butte

11. County or Parish, State  
 Uintah, UT

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

TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other _____
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug & Abandon	<input type="checkbox"/> Temporarily Abandon	Variance _____
	<input type="checkbox"/> Convert to Injector	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	_____

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

Newfield Production Company is requesting a variance from Onshore Order 43 CFR Part 3160 Section 4 requiring production tanks to be equipped with Enardo or equivalent vent line valves. Newfield operates wells that produce from the Green River formation, which are relatively low gas producers (20 mcfpd). The majority of the wells are equipped with a three phase separator to maximize gas separation and sales.

Newfield is requesting a variance for safety reasons. Crude oil production tanks equipped with back pressure devices will emit a surge of gas when the thief hatches are open. While gauging tanks, lease operators will be subject to breathing toxic gases as well as risk a fire hazard, under optimum conditions

Accepted by the  
Utah Division of  
Oil, Gas and Mining

Federal Approval Of This  
Action Is Necessary

Date: 4/28/06  
 By: [Signature]

[Signature]

I hereby certify that the foregoing is true and correct	Title
Name (Printed/Typed) Mandie Crozier	Regulatory Specialist
Signature [Signature]	Date 04/25/2006

**THIS SPACE FOR FEDERAL OR STATE OFFICE USE**

Approved by _____ Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.	Title	Date
	Office	

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RECEIVED

(Instructions on reverse)

APR 26 2006



# NEWFIELD PRODUCTION COMPANY - CASING & CEMENT REPORT

8 5/8 CASING SET AT 315.89

LAST CASING 8 5/8" SET AT 315.89'  
 DATUM 12' KB  
 DATUM TO CUT OFF CASING \_\_\_\_\_  
 DATUM TO BRADENHEAD FLANGE \_\_\_\_\_  
 TD DRILLER 310' LOGGER \_\_\_\_\_  
 HOLE SIZE 12 1/4

OPERATOR Newfield Production Company  
 WELL Federal 15-19-8-18  
 FIELD/PROSPECT Monument Butte  
 CONTRACTOR & RIG # NDSI NS #1

LOG OF CASING STRING:							
PIECES	OD	ITEM - MAKE - DESCRIPTION	WT / FT	GRD	THREAD	CONDT	LENGTH
		Shoe Joint 41.87'					
		WHI - 92 csg head			8rd	A	0.95
7	8 5/8"	Maverick ST&C csg	24#	J-55	8rd	A	304.04
		<b>GUIDE</b> shoe			8rd	A	0.9
CASING INVENTORY BAL.		FEET	JTS	TOTAL LENGTH OF STRING			305.89
TOTAL LENGTH OF STRING		305.89	7	LESS CUT OFF PIECE			2
LESS NON CSG. ITEMS		1.85		PLUS DATUM TO T/CUT OFF CSG			12
PLUS FULL JTS. LEFT OUT		0		CASING SET DEPTH			<b>315.89</b>
TOTAL		304.04	7	} COMPARE			
TOTAL CSG. DEL. (W/O THRDS)		304.04	7				
TIMING		1ST STAGE					
BEGIN RUN CSG.	Spud	3/20/2006	9:30 AM	GOOD CIRC THRU JOB			Yes
CSG. IN HOLE		3/21/2006	10:00 AM	Bbls CMT CIRC TO SURFACE			5
BEGIN CIRC		3/22/2006	1:19 PM	RECIPROCATED PIPE FOR			N/A
BEGIN PUMP CMT		3/22/2006	1:32 PM				
BEGIN DSPL. CMT		3/22/2006	1:41 PM	BUMPED PLUG TO			673 PSI
PLUG DOWN		3/22/2006	1:48 PM				
CEMENT USED		CEMENT COMPANY- <b>B. J.</b>					
STAGE	# SX	CEMENT TYPE & ADDITIVES					
1	160	Class "G" w/ 2% CaCL2 + 1/4#/sk Cello-Flake mixed @ 15.8 ppg 1.17 cf/sk yield					
CENTRALIZER & SCRATCHER PLACEMENT		SHOW MAKE & SPACING					
Centralizers - Middle first, top second & third for 3							

COMPANY REPRESENTATIVE Floyd Mitchell DATE 3/22/2006

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
OMB No. 1004-0135  
Expires January 31, 2004

**SUNDRY NOTICES AND REPORTS ON WELLS**  
Do not use this form for proposals to drill or to re-enter an  
abandoned well. Use Form 3160-3 (APD) for such proposals.

**SUBMIT IN TRIPLICATE - Other Instructions on reverse side**

1. Type of Well  
 Oil Well     Gas Well     Other

2. Name of Operator  
 NEWFIELD PRODUCTION COMPANY

3a. Address    Route 3 Box 3630  
 Myton, UT 84052

3b. Phone No. (include area code)  
 435.646.3721

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)  
 660 FSL 1980 FEL  
 SW/SE Section 19 T8S R18E

5. Lease Serial No.  
 UTU36846

6. If Indian, Allottee or Tribe Name.

7. If Unit or CA/Agreement, Name and/or No.

8. Well Name and No.  
 FEDERAL 15-19-8-18

9. API Well No.  
 4304736193

10. Field and Pool, or Exploratory Area  
 Monument Butte

11. County or Parish, State  
 Uintah, UT

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

TYPE OF SUBMISSION	TYPE OF ACTION			
<input type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production(Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input checked="" type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other _____
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug & Abandon	<input type="checkbox"/> Temporarily Abandon	Weekly Status Report
	<input type="checkbox"/> Convert to Injector	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplate horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recomplate in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

On 3/25/2006 MIRU Patterson Rig # 155. Set all equipment. Pressure test Kelly, TIW, Choke manifold, & Bop's to 2,000 psi. Test 8.625 csgn to 1,500 psi. Vernal BLM field, & Roosevelt DOGM office was notified of test. PU BHA and tag cement @ 265'. Drill out cement & shoe. Drill a 7.875 hole with fresh water to a depth of 6,500'. Lay down drill string & BHA. Open hole log w/ Dig/SP/GR log's TD to surface. PU & TIH with Guide shoe, shoe jt, float collar, 152 jt's of 5.5 J-55, 15.5# csgn. Set @ 6482.08' / KB. Cement with 400 sks cement mixed @ 11.0 ppg & 3.43 yld. Then 475 sks cement mixed @ 14.4 ppg & 1.24 yld. With all spacers returned to pit. Nipple down Bop's. Drop slips @ 90,000 #'s tension. Release rig 5:00 pm on 3/29/2006

I hereby certify that the foregoing is true and correct Name (Printed/ Typed) Floyd Mitchell	Title Drilling Supervisor
Signature 	Date 03/29/2006

**THIS SPACE FOR FEDERAL OR STATE OFFICE USE**

Approved by _____	Title _____	Date _____
Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.	Office _____	

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious and fraudulent statements or representations as to any matter within its jurisdiction

(Instructions on reverse)

**RECEIVED**  
**MAR 31 2006**

# NEWFIELD PRODUCTION COMPANY - CASING & CEMENT REPORT

5 1/2" CASING SET AT 6482.08

LAST CASING 8 5/8" SET # 315.89  
 DATUM 12' KB  
 DATUM TO CUT OFF CASING 12'  
 DATUM TO BRADENHEAD FLANGE \_\_\_\_\_  
 TD DRILLER 6500 LOGGER 6500'  
 HOLE SIZE 7 7/8"

Fit cllr @ 6439.78  
 OPERATOR Newfield Production Company  
 WELL Fed-15-19-8-18  
 FIELD/PROSPECT Monument Butte  
 CONTRACTOR & RIG # Patterson # 155

LOG OF CASING STRING:							
PIECES	OD	ITEM - MAKE - DESCRIPTION	WT / FT	GRD	THREAD	CONDT	LENGTH
		Landing Jt					14
		<b>6.73 short jt @ 4574</b>					
<b>152</b>	<b>5 1/2"</b>	ETC LT & C casing	<b>15.5#</b>	<b>J-55</b>	<b>8rd</b>	<b>A</b>	6425.78
		Float collar					0.6
<b>1</b>	<b>5 1/2"</b>	ETC LT&C csg	<b>15.5#</b>	<b>J-55</b>	<b>8rd</b>	<b>A</b>	43.05
		<b>GUIDE</b> shoe			<b>8rd</b>	<b>A</b>	0.65
CASING INVENTORY BAL.		FEET	JTS	TOTAL LENGTH OF STRING			6484.08
TOTAL LENGTH OF STRING		6484.08	153	LESS CUT OFF PIECE			14
LESS NON CSG. ITEMS		15.25		PLUS DATUM TO T/CUT OFF CSG			12
PLUS FULL JTS. LEFT OUT		127.16	3	CASING SET DEPTH			<b>6482.08</b>
TOTAL		<b>6595.99</b>	156	} COMPARE			
TOTAL CSG. DEL. (W/O THRDS)		6595.99	156				
TIMING		1ST STAGE	2nd STAGE				
BEGIN RUN CSG.		3/29/2006	4:00 AM	GOOD CIRC THRU JOB <u>Yes</u>			
CSG. IN HOLE		3/29/2006	8:00 AM	Bbls CMT CIRC TO SURFACE <u>Spacers to pit</u>			
BEGIN CIRC		3/29/2006	8:00 AM	RECIPROCATED PIPE FOR <u>THRUSTROKE</u> No			
BEGIN PUMP CMT		3/29/2006	10:39 AM	DID BACK PRES. VALVE HOLD ? <u>Yes</u>			
BEGIN DSPL. CMT		3/29/2006	11:39	BUMPED PLUG TO <u>2381</u> PSI			
PLUG DOWN		<b>3/29/2006</b>	<b>12:05 PM</b>				
CEMENT USED		CEMENT COMPANY- <b>B. J.</b>					
STAGE	# SX	CEMENT TYPE & ADDITIVES					
<b>1</b>	<b>400</b>	Premilite II w/ 10% gel + 3 % KCL, 3#s /sk CSE + 2# sk/kolseal + 1/2#s/sk Cello Flake					
		mixed @ 11.0 ppg W / 3.43 cf/sk yield					
<b>2</b>	<b>475</b>	50/50 poz W/ 2% Gel + 3% KCL, .5%EC1,1/4# sk C.F. 2% gel. 3% SM mixed @ 14.4 ppg W/ 1.24 YLD					
CENTRALIZER & SCRATCHER PLACEMENT				SHOW MAKE & SPACING			
Centralizers - Middle first, top second & third. Then every third collar for a total of 20.							

COMPANY REPRESENTATIVE Floyd Mitchell DATE 3/29/2006

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
OMB No. 1004-0135  
Expires January 31, 2004

**SUNDRY NOTICES AND REPORTS ON WELLS**  
Do not use this form for proposals to drill or to re-enter an  
abandoned well. Use Form 3160-3 (APD) for such proposals.

5. Lease Serial No.  
UTU36846

6. If Indian, Allottee or Tribe Name.

7. If Unit or CA/Agreement, Name and/or No.

8. Well Name and No.  
FEDERAL 15-19-8-18

9. API Well No.  
4304736193

10. Field and Pool, or Exploratory Area  
Monument Butte

11. County or Parish, State  
Uintah, UT

SUBMITTER COMMENTS AND Other Instructions on reverse side

1. Type of Well  
 Oil Well  Gas Well  Other

2. Name of Operator  
NEWFIELD PRODUCTION COMPANY

3a. Address Route 3 Box 3630  
Myton, UT 84052

3b. Phone No. (include area code)  
435.646.3721

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)  
660 FSL 1980 FEL  
SW/SE Section 19 T8S R18E

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

TYPE OF SUBMISSION	TYPE OF ACTION			
<input type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production(Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input checked="" type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other _____
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug & Abandon	<input type="checkbox"/> Temporarily Abandon	Weekly Status Report
	<input type="checkbox"/> Convert to Injector	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

Status report for time period 04/12/06 - 04/24/06

Subject well had completion procedures initiated in the Green River formation on 04-12-06 without the use of a service rig over the well. A cement bond log was run and a total of four Green River intervals were perforated and hydraulically fracture treated with 20/40 mesh sand. Perforated intervals are as follows: Stage #1 (6308'-6328'); Stage #2 (6212'-6220'),(6168'-6178'); Stage #3 (6106'-6110'),(6070'-6083'); Stage #4 (5388'-5402'). All perforations, were 4 JSPF. Composite flow-through frac plugs were used between stages. Fracs were flowed back through chokes. A service rig was moved over the well on 04-21-2006. Bridge plugs were drilled out and well was cleaned to 6420'. Zones were swab tested for sand cleanup. A new 1 1/2" bore rod pump was run in well on sucker rods. Well was placed on production via rod pump on 04-24-2006.

I hereby certify that the foregoing is true and correct	Title
Name (Printed/ Typed) Lana Nebeker	Production Clerk
Signature <i>Lana Nebeker</i>	Date 05/15/2006

THIS SPACE FOR FEDERAL BUREAU OF LAND MANAGEMENT USE

Approved by _____	Title	Date
Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.	Office	

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(Instructions on reverse)

RECEIVED  
MAY 16 2006  
DIV. OF OIL, GAS & MINING

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

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

**1a. TYPE OF WORK**  
 OIL WELL  GAS WELL  DRY  Other \_\_\_\_\_

**1b. TYPE OF WELL**  
 NEW WELL  WORK OVER  DEEPEN  PLUG BACK  DIFF RESVR.  Other \_\_\_\_\_

**5. LEASE DESIGNATION AND SERIAL NO.**  
UTU-36846

**6. IF INDIAN ALLOTTEE OR TRIBE NAME**  
NA

**7. UNIT AGREEMENT NAME**  
NA

**8. FARM OR LEASE NAME, WELL NO.**  
Federal 15-19-8-18

**2. NAME OF OPERATOR**  
Newfield Exploration Company

**3. ADDRESS AND TELEPHONE NO.**  
1401 17th St. Suite 1000 Denver, CO 80202

**4. LOCATION OF WELL (Report locations clearly and in accordance with any State requirements.)\***  
 At Surface 660' FSL & 1980' FEL (SW/SE) Sec. 19, T8S, R18E  
 At top prod. Interval reported below

**9. WELL NO.**  
43-047-36193

**10. FIELD AND POOL OR WILDCAT**  
Eight Mile Flat

**11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA**  
Sec. 19, T8S, R18E

**14. API NO.** 43-047-36193 **DATE ISSUED** 12/27/04

**12. COUNTY OR PARISH** Uintah **13. STATE** UT

**15. DATE SPUNDED** 3/20/06 **16. DATE T.D. REACHED** 3/28/06 **17. DATE COMPL. (Ready to prod.)** 4/24/06

**18. ELEVATIONS (DF, RKB, RT, GR, ETC.)\*** 5060' GL 5072' KB **19. ELEV. CASINGHEAD**

**20. TOTAL DEPTH, MD & TVD** 6500' **21. PLUG BACK T.D., MD & TVD** 6437'

**22. IF MULTIPLE COMPL., HOW MANY\*** **23. INTERVALS DRILLED BY** -----> **ROTARY TOOLS** X **CABLE TOOLS**

**24. PRODUCING INTERVAL(S), OF THIS COMPLETION--TOP, BOTTOM, NAME (MD AND TVD)\***  
Green River 5388'-6328'

**25. WAS DIRECTIONAL SURVEY MADE** No

**26. TYPE ELECTRIC AND OTHER LOGS RUN**  
Dual Induction Guard, SP, Compensated Density, Compensated Neutron, GR, Caliper, Cement Bond Log

**27. WAS WELL COR'D** No

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

CASING SIZE/GRADE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	TOP OF CEMENT, CEMENTING RECORD	AMOUNT PULLED
8-5/8" - J-55	24#	316'	12-1/4"	To surface with 160 sx Class "G" cmt	
5-1/2" - J-55	15.5#	6482'	7-7/8"	400 sx Premlite II and 475 sx 50/50 Poz	

**29. LINER RECORD** **30. TUBING RECORD**

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)
					2-7/8"	EOT @ 6343'	TA @ 6247'

**31. PERFORATION RECORD (Interval, size and number)** **32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.**

INTERVAL	SIZE	SPF/NUMBER	DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
(CP5) 6308'-6328'	.46"	4/80	6308'-6328'	Frac w/ 60,934# 20/40 sand in 532 bbls fluid
(CP2&3) 6168'-78', 6212'-20'	.43"	4/72	6168'-6220'	Frac w/ 65,854# 20/40 sand in 543 bbls fluid
(CP1) 6070'-83', 6106'-10'	.43"	4/68	6070'-6110'	Frac w/ 40,882# 20/40 sand in 428 bbls fluid
(C) 5388'-5402'	.43"	4/56	5388'-5402'	Frac w/ 38,504# 20/40 sand in 446 bbls fluid

**33.\* PRODUCTION**

DATE FIRST PRODUCTION	PRODUCTION METHOD (Flowing, gas lift, pumping--size and type of pump)	WELL STATUS (Producing or shut-in)
4/24/06	2-1/2" x 1-1/2" x 14.5' RHAC SM Plunger Pump	PRODUCING

DATE OF TEST	HOURS TESTED	CHOKED SIZE	PROP. FOR TEST PERIOD	OIL--BBL/S	GAS--MCF	WATER--BBL	GAS-OIL RATIO
30 day ave			----->	60	1	56	17

FLOW TUBING PRESS	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL--BBL	GAS--MCF	WATER--BBL	OFF GRAVITY VOLUME COR.
		----->				

**34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.)** Sold & Used for Fuel **TEST WITNESSED BY**

**35. LIST OF ATTACHMENTS**

*M. Landis Crozier*

JUN 02 2006

SUMMARY OF POROUS ZONES: (Show all important zones of porosity and contents thereof: cored intervals, and all well-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures, and recoveries):

**38. GEOLOGIC MARKERS**

FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.	NAME	TOP	
					MEAS. DEPTH	TRUE VERT. DEPTH
			<b>Well Name Federal 15-19-8-18</b>	Garden Gulch Mkr	<b>4180'</b>	
				Garden Gulch 1	<b>4400'</b>	
				Garden Gulch 2	<b>4524'</b>	
				Point 3 Mkr	<b>4804'</b>	
				X Mkr	<b>5018'</b>	
				Y-Mkr	<b>5054'</b>	
				Douglas Creek Mkr	<b>5189'</b>	
				BiCarbonate Mkr	<b>5468'</b>	
				B Limestone Mkr		
				Castle Peak	<b>6002'</b>	
				Basal Carbonate	<b>6395'</b>	
				Total Depth (LOGGERS)	<b>6500'</b>	

JUN 07 2006

<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	FORM 9  <b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> UTU-36846
<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>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b>  <b>7. UNIT or CA AGREEMENT NAME:</b> GMBU (GRRV)
<b>1. TYPE OF WELL</b> Oil Well	<b>8. WELL NAME and NUMBER:</b> FEDERAL 15-19-8-18
<b>2. NAME OF OPERATOR:</b> NEWFIELD PRODUCTION COMPANY	<b>9. API NUMBER:</b> 43047361930000
<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> 0660 FSL 1980 FEL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: SWSE Section: 19 Township: 08.0S 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: 9/12/2012	<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 type="checkbox"/> OTHER	OTHER: <input style="width: 100px;" type="text"/>

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

The subject well has been converted from a producing oil well to an injection well on 09/07/2012. On 09/06/2012 Jason Deardorff with the EPA was contacted concerning the initial MIT on the above listed well. On 09/12/2012 the casing was pressured up to 1850 psig and charted for 30 minutes with no pressure loss. The well was not injecting during the test. The tubing pressure was 275 psig during the test. There was not an EPA representative available to witness the test. EPA# UT22238-09666

**Accepted by the**  
**Utah Division of**  
**Oil, Gas and Mining**  
**FOR RECORD ONLY**  
 September 13, 2012

<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> 9/13/2012	

## Mechanical Integrity Test Casing or Annulus Pressure Mechanical Integrity Test

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

EPA Witness: \_\_\_\_\_ Date: 9/12/12  
 Test conducted by: Kevin Powell  
 Others present: \_\_\_\_\_

WT 22235-09666

Well Name: <u>Federal 15-19-8-18</u>	Type: ER SWD	Status: AC TA UC
Field: <u>Monument Point</u>		
Location: <u>15</u> Sec: <u>19</u> T <u>8</u> N <u>(S)</u> R <u>18</u> <u>(E)</u> / W County: <u>Wink</u> State: <u>Utah</u>		
Operator: <u>Kevin Powell</u>		
Last MIT: <u>1</u> / <u>1</u>	Maximum Allowable Pressure: _____	PSIG

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

Pre-test casing/tubing annulus pressure: \_\_\_\_\_ 1850 psig

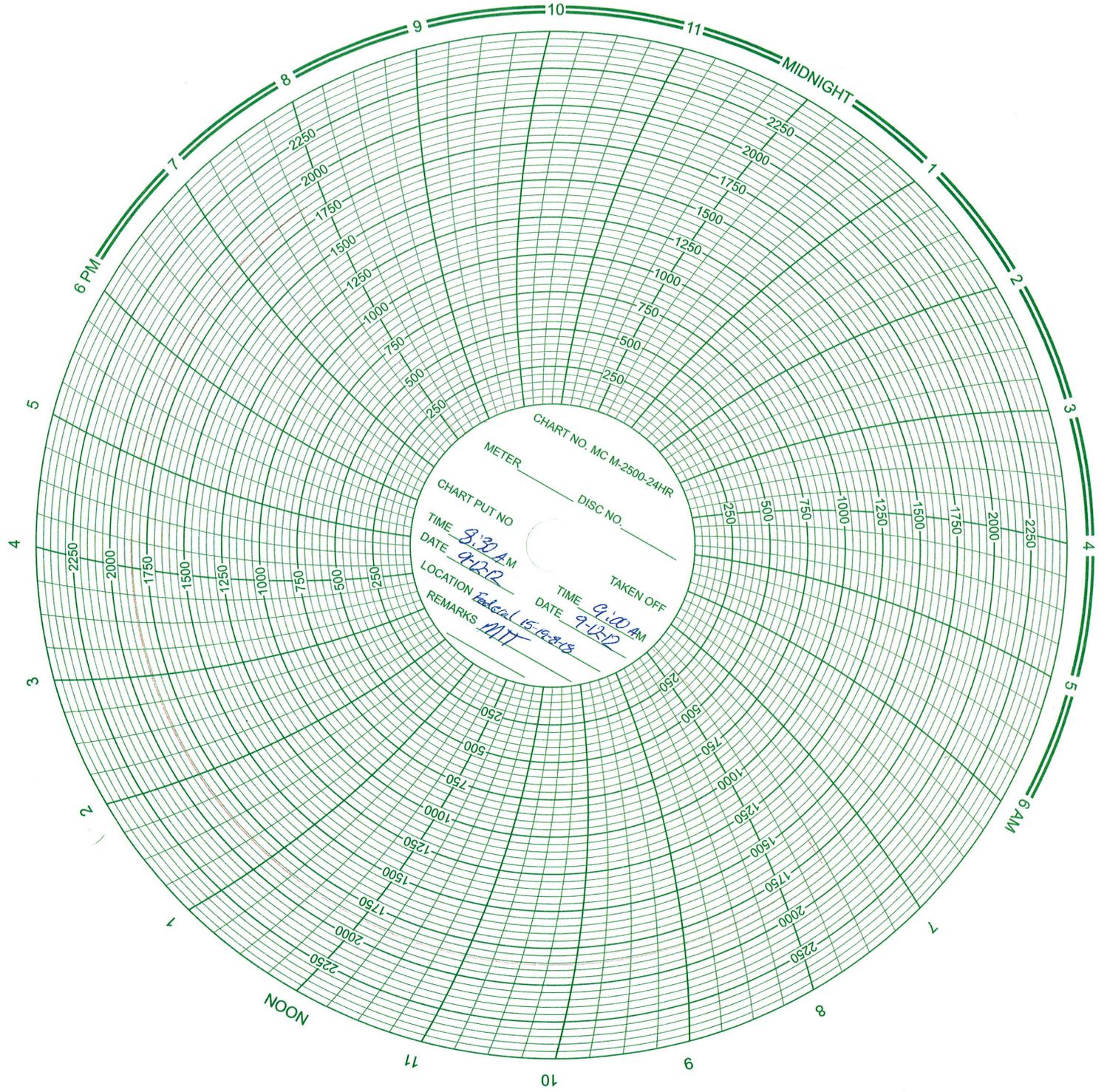
MIT DATA TABLE	Test #1	Test #2	Test #3
<b>TUBING PRESSURE</b>			
Initial Pressure	<u>275</u> psig	psig	psig
End of test pressure	<u>275</u> psig	psig	psig
<b>CASING / TUBING ANNULUS PRESSURE</b>			
0 minutes	<u>1850</u> psig	psig	psig
5 minutes	<u>1850</u> psig	psig	psig
10 minutes	<u>1850</u> psig	psig	psig
15 minutes	<u>1850</u> psig	psig	psig
20 minutes	<u>1850</u> psig	psig	psig
25 minutes	<u>1850</u> psig	psig	psig
30 minutes	<u>1450</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: \_\_\_\_\_





### Daily Workover Report

Well Name: **FEDERAL 15-19-8-18**

AFE: 26907

Report Date: 9/10/12

INJCNV

Operation: POOH L/D Rod Prod, Strt POOH W/T

Field:	GMBU CTB9	Rig Name:		Work Performed:	9/6/2012
Location:	S19 T8S R18E	Supervisor:	Duane Freston	Day:	1
County:	JINTAH	Phone:	435- 823-6771	Daily Cost:	\$9,352
State:	UT	Email:	dfreston@newfield.com	Cum DWR:	\$9,352

Reason for Workover: Conversion

**24 Hr Summary:** R/U, H/O Csg, u/s pmp, flush tbg, s/p, p/tst tbg, pooh l/d rod prod strng & pmp. n/u bop, rel t/a, pooh w/-143 jts tbg, swi, c/sdf.

**24 Hr Plan Forward:** pooh w/remnder of tbg prod, rih w/-pkr & tbg prod.

<b>Incidents:</b>	None	<b>Newfield Pers:</b>	5	<b>Contract Pers:</b>	1	<b>Conditions:</b>
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Critical Comments

Activity Summary

0 Hr(s); P : 5:30AM-6:00AM C/Trvl. 6:00AM R/U NC#1. R/D Unit, BMW H/Oiler pmp 60 BW D/Csg, U/S pmp, Flush Tbg W/-40 BW, S/P, P/Tst Tbg To 3500 Psi, Good Tst. U/S pmp, POOH W/-1 1/2X22' Polish Rod, 7/8X4'-6'-8' Ponys, 100- 7/8 4 Per, 105- 3/4 Slick, 39- 3/4 4 Per, 6 1 1/2 Wt Bars & pmp, Flushed Tbg W/-20 BW On TOOH. N/D W/-HD, N/U BOP, R/U R/Flr, Rel T/A, POOH W/-143 Jts Tbg Breaking & Doping Tool Jts. SWI, 6:30PM- / SDFN, 6:30-7:00PM C/Trvl.



## Daily Workover Report

Well Name: **FEDERAL 15-19-8-18**

AFE: 26907

Report Date: 9/10/12

Operation: **RIH W/Tbg Prod,P/Tst Tbg & Csg Pro**

**INJCNV**

Field:	GMBU CTB9	Rig Name:		Work Performed:	9/7/2012
Location:	S19 T8S R18E	Supervisor:	Duane Freston	Day:	2
County:	UINTAH	Phone:	435- 823-6771	Daily Cost:	\$18,055
State:	UT	Email:	dfreston@newfield.com	Cum DWR:	\$27,407

Reason for Workover: Conversion

**24 Hr Summary:** Pooch w/remndr of tbg prod,rih w/-pkr BHA & tbg prod strng,drop sv,p/tst tbg,n/d bop,pmp pkr fluid,set pkr,n/u w/-hd,p/tst csg & pkr,good tst,R/D Rig,Well Ready For MIT (Final Rig Report).

**24 Hr Plan Forward:** Ready For MIT ( Final Rig Report ).

Incidents:	None	Newfield Pers:	5	Contract Pers:	1	Conditions:
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**Critical Comments**

**Activity Summary**

0 Hr(s); P : 5:30AM-6:00AM C/Trvl. 6:00AM OWU, BMW H/Oiler Flush Tbg W/-20 BW. POOH W/-31 Jts Tbg Breaking & Redoping Tool Jts In Derrick. L/D 29 Jts Tbg, 5 1/2 T/A, 1 Jt Tbg, S/N, 2 Jts Tbg, N/C On Float. P/U & RIH W/-2 3/8 Re entry Guide, 2 3/8 X/N Nipple, 2 3/8X4.18 Tbg Sub, 2 3/8X2 7/8 XO, 5 1/2 Arrow #1 Pkr W/-1.875 X Nipple Top Of Pkr, 4 3/4 OD On Off Tool, 2 7/8 S/N, 174 Jts 2 7/8 Tbg, R/U H/Oiler pmp 20 BW Pad D/Tbg, Drop SV, Fill Tbg W/- 25 BW, P/Test Tbg To 3,000 Psi, Gained 70 Psi In 1 Hr, Good Test. R/U S/Line Ovrshot RIH & Fish SV. R/D R/Flr, N/D BOP, N/U W/-HD, pmp 70 BW W/-20 Gal Pkr Fluid D/Csg, N/D W/-HD, Set Pkr In 15,000 Tension, Fill Csg W/-15 BW, P/Test Csg To 1,500 Psi, Good Test. Rack Out Eq, R/D Rig. Move Rig To 1-19-9-16,6:00PM C/SDFN, 6:00PM-6:30PM C/Trvl, Ready For MIT ( Final Rig Report ).



## Final Daily Workover Report

Well Name: **FEDERAL 15-19-8-18**

AFE: 26907

Report Date: 9/13/12

INJCNV

Operation: **Conversion MIT**

Field:	GMBU CTB9	Rig Name:	Rigless	Work Performed:	9/12/2012
Location:	S19 T8S R18E	Supervisor:	Alfredo Rios	Day:	3
County:	UINTAH	Phone:	435- 823-0173	Daily Cost:	\$88,270
State:	UT	Email:	arios@newfield.com	Cum DWR:	\$115,677

Reason for Workover: Conversion

24 Hr Summary:	Conduct initial MIT				
24 Hr Plan Forward:	Wait for approval to commence injection				
Incidents:	None	Newfield Pers:	1	Contract Pers:	0
Conditions:					

**Critical Comments**

**Activity Summary**

08:30 - 09:00; 0.5 Hr(s); P : On 09/06/2012 Jason Deardorff with the EPA was contacted concerning the initial MIT on the above listed well. On 09/12/2012 the casing was pressured up to 1850 psig and charted for 30 minutes with no pressure loss. The well was not injecting during the test. The tubing pressure was 275 psig during the test. There was not an EPA representative available to witness the test.

EPA# UT22238-09666



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

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

Ref: 8P-W-UIC

AUG 28 2012

**CERTIFIED MAIL**  
**RETURN RECEIPT REQUESTED**

RECEIVED  
SEP 12 2012  
DIV. OF OIL, GAS & MINING

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 UT22238-09666  
Well: Federal 15-19-8-18  
SWSE Sec. 19-T8S-R18E  
Uintah County, UT  
API No.: 4304736193

Dear Mr. Sundberg:

Enclosed is your copy of the FINAL Underground Injection Control (UIC) Program Permit for the proposed Federal 15-19-8-18 injection well. A Statement of Basis that discusses the conditions and requirements of this Environmental Protection Agency (EPA) UIC Permit, is also included.

AUG 24 2012

The public comment period for this permit ended on \_\_\_\_\_ . 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 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 Emmett Schmitz of my staff at (303) 312-6174, or toll-free at (800) 227-8917, ext. 312-6174.

Sincerely,



for

Callie A. Videtich  
Acting Assistant Regional Administrator  
Office of Partnerships and Regulatory Assistance

enclosure: Final UIC Permit  
Statement of Basis  
Aquifer Exemption

cc: Letter Only:  
Uintah & Ouray Business Committee:  
Irene Cuch, Chairman  
Ronald Wopsock, Vice-Chairman  
Frances Poowegup, Councilwoman  
Phillip Chimburas, Councilman  
Stewart Pike, Councilman  
Richards Jenks, Jr., Councilman

Johnna Blackhair  
BIA - Uintah & Ouray Indian Agency

cc: All Enclosures:

Reed Durfey  
District Manager  
Newfield Production Company  
Myton, Utah



Mike Natchees  
Environmental Coordinator  
Ute Indian Tribe

Manual Myore  
Director of Energy & Minerals Dept.

Brad Hill  
Acting Associate Director  
Utah Division of Oil, Gas, and Mining

Fluid Minerals Engineering Office  
BLM - Vernal, Utah Office





**UNDERGROUND INJECTION CONTROL PROGRAM  
PERMIT**

PREPARED: August 2012

**Permit No. UT22238-09666**

Class II Enhanced Oil Recovery Injection Well

**Federal 15-19-8-18  
Uintah County, UT**

Issued To

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

## 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 Co.  
1001 Seventeenth Street, Suite 2000  
Denver, CO 80202

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

Federal 15-19-8-18  
660' FSL & 1980' FEL, SWSE S19, T8S, R18E  
Uintah County, UT

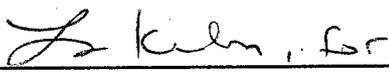
EPA regulates the injection of fluids into injection wells so that injection does not endanger underground sources of drinking water (USDWs). EPA UIC Permit conditions are based on authorities set forth at 40 CFR Parts 144 and 146, and address potential impacts to USDWs.

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.

Issue Date: AUG 28 2012

Effective Date AUG 28 2012

  
Callie A. Videtich  
Acting 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.

#### **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.

### **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 seven calendar days prior to any mechanical integrity test unless the mechanical integrity test is conducted after a well construction, well conversion, or a well rework, in which case any prior notice is sufficient. 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 9.2 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 15-19-8-18 was drilled to total depth of 6,500 feet in the Basal Carbonate Member of the Green River Formation.

Surface casing (8-5/8 inch) was set at a depth of 306 feet (KB) in a 12-1/4 inch hole using 160 sacks of Class "G" cement which was circulated to the surface.

Production casing (5-1/2 inch) was set at a depth of 6,482 feet (KB) in a 7-7/8 inch hole with 875 sacks of cement. Well construction is considered adequate to protect all USDWs. Top of cement by CBL at 450 feet.

Current injection perforations are in the Douglas Creek Member of the Green River Formation. Additional perforations may be added at a later time between the depths of 4,526 feet and the top of the Wasatch Formation (Estimated to be 6,520 feet) provided that the operator first notifies the Director and later submits an updated Well Rework Record (EPA Form 7520-12) and schematic diagram.

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

# Federal 15-19-8-18

Spud Date: 03/20/2006  
 Put on Production: 04/24/2006  
 K.B.: 5072, G.L.: 5060

## Proposed Injection Wellbore Diagram

### SURFACE CASING

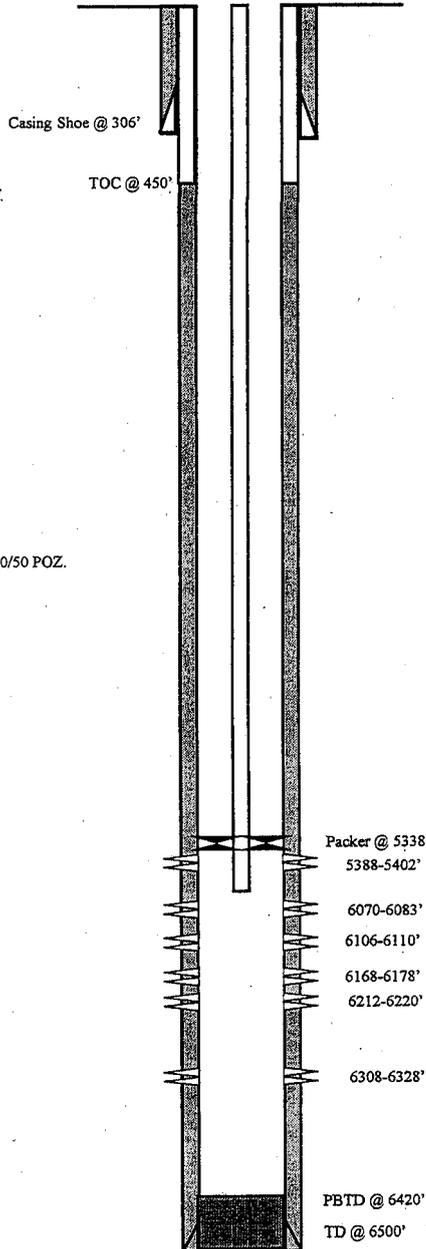
CSG SIZE: 8-5/8"  
 GRADE: J-55  
 WEIGHT: 24#  
 LENGTH: 7 jts. (304.04')  
 DEPTH LANDED: 305.89' KB  
 HOLE SIZE: 12-1/4"  
 CEMENT DATA: 160 sxs. Class "G" cmt, circ. 5 bbls to surf.

### PRODUCTION CASING

CSG SIZE: 5-1/2"  
 GRADE: J-55  
 WEIGHT: 15.5#  
 LENGTH: 153 jts. (6484.08')  
 DEPTH LANDED: 6482.08' KB  
 HOLE SIZE: 7-7/8"  
 CEMENT DATA: 400 sxs Prem. Lite II mixed & 475 sxs 50/50 POZ.  
 CEMENT TOP: 450' per CBL 4/12/06

### TUBING (GI 11/23/09)

SIZE/GRADE/WT.: 2-7/8" / J-55 / 6.5#  
 NO. OF JOINTS: 203 jts (6229.4')  
 TUBING ANCHOR: 6241.4' KB  
 NO. OF JOINTS: 1 jts (30.5')  
 SEATING NIPPLE: 2-7/8" (1.10')  
 SN LANDED AT: 6274.6' KB  
 NO. OF JOINTS: 2 jts (61.30')  
 NOTCHED COLLAR: 2-7/8" (0.5')  
 TOTAL STRING LENGTH: EOT @ 6337' KB



### FRAC JOB

04/19/06 6308-5328' **Frac CP5 sands as follows:**  
 60934# 20/40 sand in 532 bbls Lightning 17 frac fluid. Treated @ avg press of 2559 psi w/avg rate of 25 BPM. ISIP 2800 psi. Calc flush: 5326 gal. Actual flush: 6342 gal.

04/19/06 6168-6220' **Frac CP2, CP3 sands as follows:**  
 65854# 20/40 sand in 4543 bbls Lightning 17 frac fluid. Treated @ avg press of 1658 psi w/avg rate of 25.5 BPM. ISIP 1500 psi. Calc flush: 6218 gal. Actual flush: 6216 gal.

04/19/06 6070-6083' **Frac CP1 sands as follows:**  
 40882# 20/40 sand in 428 bbls Lightning 17 frac fluid. Treated @ avg press of 1757 psi w/avg rate of 25.6 BPM. ISIP 1690 psi. Calc flush: 6081 gal. Actual flush: 6048 gal.

04/19/06 5388-5402' **Frac C sands as follows:**  
 38504# 20/40 sand in 446 bbls Lightning 17 frac fluid. Treated @ avg press of 1629 psi w/avg rate of 25.6 BPM. ISIP 1670 psi. Calc flush: 5400 gal. Actual flush: 6048 gal.

11/27/09 Tubing Leak. Updated rod and tubing detail.

### PERFORATION RECORD

04/12/06	6308-6328'	4 JSPF	80 holes
04/19/06	6212-6220'	4 JSPF	32 holes
04/19/06	6168-6178'	4 JSPF	40 holes
04/19/06	6106-6110'	4 JSPF	16 holes
04/19/06	6070-6083'	4 JSPF	52 holes
04/19/06	5388-5402'	4 JSPF	56 holes

**NEWFIELD**

**Federal 15-19-8-18**

660' FSL & 1980' FEL

SW/SE Section 19-T8S-R18E

Uintah Co, Utah

API #43-047-36193; Lease #UTU-36846

## 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 15-19-8-18

<b>TYPE OF TEST</b>	<b>DATE DUE</b>
Standard Annulus Pressure	Prior to receiving authorization to inject
Pore Pressure	Prior to receiving authorization to inject

# 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 15-19-8-18	1,160

### 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 15-19-8-18	APPROVED INJECTION INTERVAL (KB, ft)		FRACTURE GRADIENT (psi/ft)
	TOP	BOTTOM	
FORMATION NAME			
Green River Formation: Garden Gulch & Douglas Creek Members	4,526.00 - 6,520.00		0.655

### 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:

WELL NAME: Federal 15-19-8-18	
FORMATION NAME	MAXIMUM VOLUME LIMIT (bbls)
Green River Formation: Garden Gulch & Douglas Creek Members	

## 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

.Plugging and Abandonment: The well shall be plugged in a manner that isolates the injection zone and prevents movement of fluids into or between Underground Sources of Drinking Water (USDW). 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. 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. At a minimum, the following plugs are required:

- (1)  Isolate the injection zone: Remove down hole apparatus and perform clean out; displace well fluid with plugging gel. Set a cast iron bridge plug (CIBP) within the innermost casing no more than 50 ft. above the top perforation with a minimum of 20 ft. cement plug on top of the CIBP.
- (2)  Isolate the Trona-Bird's Nest and Mahogany Oil Shale: Perforate and squeeze cement up the backside of the outermost casing from at least 55 ft. above the top of the Trona-Bird's Nest to at least 55 ft. below the base of Mahogany Oil Shale, unless there is existing cement across this interval.
- (3)  Isolate the Uinta Formation from the Green River Formation: Perforate and squeeze a minimum of 110 ft. cement up the backside of the outermost casing to isolate the contact between the Uinta Formation and the Green River Formation, unless there is existing cement across this interval. Set a minimum 110 ft. cement plug in the innermost casing centered on the contact between the Green River and Uinta Formations.
- (4)  Isolate Surface Fluid Migration Paths:
  - a.  If the depth of the lowermost USDW is above the base of surface casing, perforate the outermost casing string 50 ft. below the base of surface casing and circulate cement to the surface, unless there is existing cement across this interval; OR
  - b.  If the depth of the lowermost USDW is below the base of surface casing, perforate the outermost casing string 50 ft. below the base of the lowermost USDW and circulate cement to surface; AND
  - c.  Set a cement plug inside the innermost casing string from 50 ft. below the base of the surface casing to surface.

## APPENDIX F

### CORRECTIVE ACTION REQUIREMENTS

No corrective action is deemed necessary for this project.

# STATEMENT OF BASIS

**NEWFIELD PRODUCTION CO.**

**FEDERAL 15-19-8-18  
UINTAH COUNTY, UT**

**EPA PERMIT NO. UT22238-09666**

**CONTACT:** Emmett Schmitz  
U. S. Environmental Protection Agency Region 8  
Mailcode: 8P-W-UIC  
1595 Wynkoop Street  
Denver, Colorado 80202-1129  
Telephone: 1-800-227-8917 ext. 312-6174

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 Co.  
1001 Seventeenth Street, Suite 2000  
Denver, CO 80202

on

May 25, 2012

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

Federal 15-19-8-18  
660' FSL & 1980' FEL, SWSE S19, T8S, 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 Federal 15-19-8-18 is currently an active Douglas Creek Member of the Green River Formation oil well. The applicant intends to convert this oil well to a Class II enhanced recovery injection facility.

**TABLE 1.1**  
**WELL STATUS / DATE OF OPERATION**

<b>CONVERSION WELLS</b>		
<b>Well Name</b>	<b>Well Status</b>	<b>Date of Operation</b>
Federal 15-19-8-18	Conversion	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 the aquifer, and discharge occurs near the White and Green Rivers (from USGS publication HA 730-C). Water samples from Mesaverde sands in the nearby Natural Buttes Unit yielded highly saline water.

### Geologic Setting (TABLE 2.1)

The proposed Class II enhanced oil recovery injection well is located in the Greater Monument Butte Field, T7-9S and R15-19E, which lies near the center of the broad, gently northward dipping south flank of the Uinta Basin. More than 450 million barrels of oil (63 MT) 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 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

Garden Gulch Member No. 2 (4,526 feet) and the top of the Wasatch Formation which has an estimated top of 6,520 feet.

**TABLE 2.2**  
**INJECTION ZONES**  
Federal 15-19-8-18

Formation Name	Top (ft)	Base (ft)	TDS (mg/l)	Fracture Gradient (psi/ft)	Porosity	Exempted?*
Green River Formation: Garden Gulch & Douglas Creek Members	4,526	6,520	6,399	0.655		P

\* 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 Garden Gulch Member Confining Zone is located between the depths of 4,043 feet and 4,526 feet.

**TABLE 2.3**  
**CONFINING ZONES**  
Federal 15-19-8-18

Formation Name	Formation Lithology	Top (ft)	Base (ft)
Green River	Shale, sand, carbonate	4,043	4,526

**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.

The State of Utah "Water Wells and Springs", <http://NRWRT1.STATE.UT.US>, identifies no public water supply wells within the one-quarter (1/4) mile Area-of-Review (AOR) around the Federal 15-19-8-18.

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 310 feet from the surface.

Absent definitive analyses of water within the Uinta Formation (310 feet to top of Green River

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 Uintah Formation outcrop and compose the surface rock throughout the area. The lower 600 feet to 800 feet of the Uinta Formation, consisting generally of shale interbedded with occasionally water-bearing sandstone lenses between 5 feet to 20 feet 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 feet per 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 feet to 6 feet wide but up to 28 feet wide, may extend many miles in length and occasionally extend as deep as 2,000 feet.

**TABLE 2.1**  
**GEOLOGIC SETTING**  
**Federal 15-19-8-18**

Formation Name	Top (ft)	Base (ft)	TDS (mg/l)	Lithology
Uinta	0	2,010	< 10,000	Sand, shale and carbonates
Uinta: Publication 92	0	310	< 10,000	Sand and shale
Upper Green River	2,010	4,222		Sand, shale, carbonate and evaporite
Green River: Garden Gulch Member	4,222	4,526		Sand, shale and carbonate
Green River: Garden Gulch No. 2	4,526	5,188	6,398	Sand, shale, carbonate
Green River: Douglas Creek Member	5,188	6,395	6,399	Sand, shale and carbonate
Green River: Basal Carbonate Member	6,395	6,520		Carbonate

**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 Class II enhanced recovery injection is located between the top of the

Formation at 2,010 feet), this interval is considered a potential USDW with total dissolved solids less than 10,000 mg/l.

**TABLE 2.4**  
**UNDERGROUND SOURCES OF DRINKING WATER (USDW)**  
**Federal 15-19-8-18**

Formation Name	Formation Lithology	Top (ft)	Base (ft)	TDS (mg/l)
Uinta	Sand, shale and carbonate	0	2,010	
Uinta: Publication 92	Sand and shale	0	310	< 10,000
Green River: Douglas Creek Member	Sand, shale and carbonate	5,188	6,395	6,399

**Exempted Aquifer(s) (40 CFR 144.7 and 146.4)**

Aquifers exempted from protection as a USDW are listed in TABLE 2.5. Exempted is that portion of the aquifer between the depths listed ("TOP" and "BASE") and within the Exempted Radius of the well's surface location, or for an Area Permit, one-quarter (1/4) mile exterior to the defined Area Permit boundary. "Criteria" corresponds to the appropriate criteria (below) for exemption. "VOLUME" is the maximum volume of fluid which can be injected into the exempted area before the injected fluids exceed the exemption boundary, calculated using the following formula:

$$V = \text{Pi} * \text{radius}^2 * \text{height} * \text{porosity} / 5.615$$

where V = VOLUME (in barrels)

Pi = 3.1416

radius<sup>2</sup> = Exempted Radius (squared) - generally 1/4 mile

height = height of reservoir ("BOTTOM" - "TOP")

porosity = reservoir porosity (in percent)

5.615 = conversion factor (cubic feet per barrel)

**TABLE 2.5**  
**AQUIFER EXEMPTION**  
**Federal 15-19-8-18**

Formation Name	Top (ft)	Base (ft)	Criteria	Volume (bbl)
Green River Formation: Garden Gulch & Douglas Creek Members	4,526	6,520	c	

**An aquifer or a portion thereof may be determined to be an "exempted aquifer" provided it meets criteria, listed below.**

- a It does not currently serve as a source of drinking water; AND
- b(1) It cannot now and will not in the future serve as a source of drinking water because it is mineral, hydrocarbon, or geothermal energy producing, or can be

demonstrated by a permit applicant as part of a permit for a Class II or III operation to contain minerals or hydrocarbons that considering their quantity and location are expected to be commercially producible; OR

- b(2) It cannot now and will not in the future serve as a source of drinking water because it is situated at a depth or location which makes recovery of water for drinking water purposes economically or technically impractical; OR
- b(3) It cannot now and will not in the future serve as a source of drinking water because it is so contaminated that it would be economically or technologically impractical to render that water fit for human consumption; OR
- b(4) It cannot now and will not in the future serve as a source of drinking water because it is located over a Class III well mining area subject to subsidence or catastrophic collapse; OR
- c The total dissolved solids content of the ground water is more than 3,000 and less than 10,000 mg/l and it is not reasonably expected to supply a public water system.

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

The Federal 15-19-8-18 was drilled to total depth of 6,500 feet in the Basal Carbonate Member of the Green River Formation.

Surface casing (8-5/8 inch) was set at a depth of 306 feet (KB) in a 12-1/4 inch hole using 160 sacks of Class "G" cement which was circulated to the surface.

Production casing (5-1/2 inch) was set at a depth of 6,482 feet (KB) in a 7-7/8 inch hole with 875 sacks of cement. Well construction is considered adequate to protect all USDWs. Top of cement by CBL at 450 feet.

Current injection perforations are in the Douglas Creek Member of the Green River Formation. Additional perforations may be added at a later time between the depths of 4,526 feet and the top of the Wasatch Formation (Estimated to be 6,520 feet) provided that the operator first notifies the Director and later submits an updated Well Rework Record (EPA Form 7520-12) and schematic diagram.

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

**TABLE 3.1**  
**WELL CONSTRUCTION REQUIREMENTS**  
**Federal 15-19-8-18**

Casing Type	Hole Size (in)	Casing Size (in)	Cased Interval (ft)	Cemented Interval (ft)
Production	7.88	5.50	0 - 6,482	450 - 6,500
Surface	12.25	8.63	0 - 306	0 - 306

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.

**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 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 10-19-8-18	Producer	No	6,445	100	No
Federal 14-19-8-18	Producer	No	6,470	990	No
Sundance Federal 2-30-8-18	Producer	No	6,400	50	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.

### 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 fluid from the Johnson Water District reservoir and/or water from the Green River blended with produced water from Green River Formation wells proximate to the Federal 15-19-8-18 well.

### 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 is no restriction on the cumulative volume injected because the purpose of injection is enhanced recovery of oil. Injected water is expected to move toward production wells within the 1/4-mile AOR and not beyond the 1/4-mile radius of exempted aquifer around the Federal 15-19-8-18 well.

### 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 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 9.2 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 \$42,000 has been reviewed and approved by the EPA on December 21, 2011.

The Director may revise the amount required, and may require the Permittee to obtain and provide updated estimates of plugging and abandonment costs according to the approved Plugging and Abandonment Plan.

Surety Bond, received September 27, 2010

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

# UNDERGROUND INJECTION CONTROL PROGRAM

## AQUIFER EXEMPTION

EPA PERMIT NO. UT22238-09666

Newfield Production Co.

**TABLE 1.1**  
**AQUIFER EXEMPTION PROPOSAL(S)**  
**Federal 15-19-8-18**

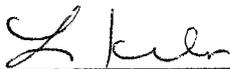
Formation Name	Top (ft)	Base (ft)	TDS (mg/l)
Green River Formation: Garden Gulch & Douglas Creek Members	4,526.00	6,520.00	6,399.00

The formation listed above is hereby exempted from protection as an underground source of drinking water (USDW) in compliance with provisions of the Safe Drinking Water Act as amended (42 USC 300f-300j-9, commonly known as the SDWA) and attendant regulations at Title 40 of the Code of Federal Regulations, within the subsurface interval shown and within a 1/4 mile radial distance from the surface location of the:

Federal 15-19-8-18  
Monument Butte (Uintah)  
660' FSL & 1980' FEL, SWSE S19, T8S, R18E  
Uintah County, UT

This aquifer exemption is granted in conjunction with an Underground Injection Control Permit issued for the injection of Class II fluids. This Aquifer Exemption has no expiration date.

The effective date of this exemption is AUG 28 2012.

  
for Callie A. Videtich  
Acting Assistant Regional Administrator  
Office of Partnerships and Regulatory Assistance

<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		<b>FORM 9</b>
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		<b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> UTU-36846
		<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 15-19-8-18
<b>2. NAME OF OPERATOR:</b> NEWFIELD PRODUCTION COMPANY		<b>9. API NUMBER:</b> 43047361930000
<b>3. ADDRESS OF OPERATOR:</b> Rt 3 Box 3630 , Myton, UT, 84052		<b>9. FIELD and POOL or WILDCAT:</b> 8 MILE FLAT NORTH
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 0660 FSL 1980 FEL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: SWSE Section: 19 Township: 08.0S 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 type="checkbox"/> ACIDIZE <input type="checkbox"/> ALTER CASING <input type="checkbox"/> CASING REPAIR <input type="checkbox"/> CHANGE TO PREVIOUS PLANS <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> CHANGE WELL NAME <input type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input type="checkbox"/> CONVERT WELL TYPE <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"/> WILDCAT WELL DETERMINATION <input checked="" type="checkbox"/> OTHER	
<input checked="" type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion: 10/10/2012	<input type="checkbox"/> APD EXTENSION OTHER: <input type="text" value="Put on Injection"/>	
<input type="checkbox"/> SPUD REPORT Date of Spud:	<input type="checkbox"/> DRILLING REPORT Report Date:	
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 12:00 PM on 10/10/2012. EPA # UT22238-09666		
<b>Accepted by the          Utah Division of          Oil, Gas and Mining          FOR RECORD ONLY          October 17, 2012</b>		
<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> 10/16/2012	



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 8

1595 Wynkoop Street  
DENVER, CO 80202-1129  
Phone 800-227-8917  
<http://www.epa.gov/region08>

OCT 04 2012

Ref: 8P-W-UIC

**CERTIFIED MAIL**  
**RETURN RECEIPT REQUESTED**

**RECEIVED**

OCT 11 2012

**DIV. OF OIL, GAS & MINING**

Mr. Reed Durfey  
District Manager  
Newfield Production Company  
Route 3 – Box 3630  
Myton, Utah

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

RE: Underground Injection Control (UIC)  
Authorization to Commence Injection  
EPA UIC Permit UT22238-09666  
Well: ~~Federal 15-19-8-18~~  
SWSE Sec. 19-T8S-R18E  
Uintah County, Utah  
API No.: 43-047-36193

Dear Mr. Durfey:

The U.S. Environmental Protection Agency Region 8 has received Newfield Production Company's (Newfield) September 13, 2012, letter with enclosures. The enclosed Part I (internal) Mechanical Integrity test, Well Rework Record (EPA Form 7520-12), schematic diagram and calculated pore pressure were reviewed and approved by the EPA, satisfactorily completing all Prior to Commencing Injection Requirements for UIC Permit UT22238-09666.

As of the date of this letter, Newfield is authorized to commence injection into the Federal 15-19-8-18 well at a Maximum Allowable Injection Pressure (MAIP) of 1,160 psig. You may apply for a higher MAIP at a later date. Your application should be accompanied by the interpreted results of a step rate test that measures the fracture parting pressure and calculates the fracture gradient at this depth and location. Newfield must receive prior authorization from the Director to inject at pressures greater than the permitted MAIP during any test.

As of this approval, responsibility for permit compliance and enforcement is transferred to the EPA's UIC Technical Enforcement Program. Therefore, please direct all monitoring and compliance correspondence to Sarah Roberts at the following address, referencing the well name and UIC Permit number on all correspondence:

Ms. Sarah Roberts  
U.S. EPA Region 8: 8ENF-UFO  
1595 Wynkoop Street  
Denver, Colorado 80202-1129

Or, you may reach Ms. Roberts by telephone at (303) 312-6211 or (800) 227-8927, extension 312-6211.

Please remember that it is your responsibility to be aware of, and to comply with, all conditions of injection well Permit UT22238-09666.

If you have questions regarding the above action, please call Bob Near at (303) 312-6278 or (800) 227-8917, extension 312-6278.

Sincerely,



Howard M. Cantor, for  
Assistant Regional Administrator  
Office of Partnerships and Regulatory Assistance

cc: Uintah & Ouray Business Committee:

Irene Cuch, Chairwoman  
Richard Jenks, Jr., Councilman  
Frances Poowegup, Councilwoman  
Ronald Wopsock, Vice-Chairman  
Phillip Chimburas, Councilman  
Stewart Pike, Councilman

Johnna Blackhair  
BIA - Uintah & Ouray Indian Agency

Mike Natchees  
Environmental Coordinator  
Ute Indian Tribe

Manual Myore  
Director of Energy & Minerals Dept.  
Ute Indian Tribe

Brad Hill  
Acting Associate Director  
Utah Division of Oil, Gas, and Mining

Fluid Minerals Engineering Office  
BLM - Vernal Office

Eric Sundberg, Regulatory Analyst  
Newfield Production Company



*Printed on Recycled Paper*

# Federal 15-19-8-18

Spud Date: 03/20/2006  
 Put on Production: 04/24/2006  
 K.B.: 5072, G.L.: 5060

## Injection Wellbore Diagram

### SURFACE CASING

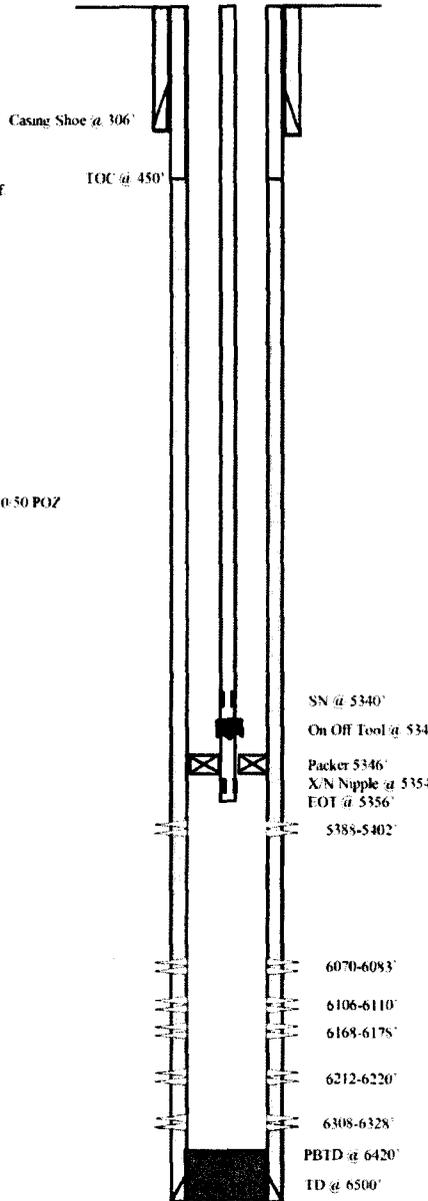
CSG SIZE: 8-5/8"  
 GRADE: J-55  
 WEIGHT: 24#  
 LENGTH: 7 jts. (304.04')  
 DEPTH LANDED: 305.89' KB  
 HOLE SIZE: 12-1/4"  
 CEMENT DATA: 160 sxs Class 'G' cmt. cur. 5 bbls to surf

### PRODUCTION CASING

CSG SIZE: 5-1/2"  
 GRADE: J-55  
 WEIGHT: 15.5#  
 LENGTH: 153 jts. (6484.06')  
 DEPTH LANDED: 6482.08' KB  
 HOLE SIZE: 7-7/8"  
 CEMENT DATA: 400 sxs Prem. Lite II mixed & 475 sxs 50-50 POZ  
 CEMENT TOP: 450' per CBL 4/12/06

### TUBING

SIZE/GRADE/WT.: 2-7/8" / J-55 / 6.5#  
 NO. OF JOINTS: 174 jts. (5327.8')  
 SEATING NIPPLE: 2-7/8" (1.10')  
 SN LANDED AT: 5339.8' KB  
 ON/OFF TOOL AT: 5340.9'  
 ARROW #1 PACKER CE AT 5345.65'  
 XO 2-3/8" x 2-7/8" AT: 5349.3'  
 TBG SUB 2-3/8" J-55 AT 5349.8'  
 X/N NIPPLE AT: 5354.0'  
 TOTAL STRING LENGTH: EOT @ 5356' KB



### FRAC JOB

04/19/06 6308-6328' **Frac CP5 sands as follows:**  
 60934# 20/40 sand in 532 bbls Lightning 17 frac fluid. Treated @ avg press of 2359 psi w/avg rate of 25 BPM. ISIP 2800 psi. Calc flush: 5326 gal. Actual flush: 6342 gal

04/19/06 6168-6220' **Frac CP2, CP3 sands as follows:**  
 65854# 20/40 sand in 4543 bbls Lightning 17 frac fluid. Treated @ avg press of 1658 psi w/avg rate of 25.5 BPM. ISIP 1500 psi. Calc flush: 6218 gal. Actual flush: 6216 gal

04/19/06 6070-6110' **Frac CP1 sands as follows:**  
 40882# 20/40 sand in 428 bbls Lightning 17 frac fluid. Treated @ avg press of 1757 psi w/avg rate of 25.6 BPM. ISIP 1690 psi. Calc flush: 6081 gal. Actual flush: 6048 gal

04/19/06 5388-5402' **Frac C sands as follows:**  
 38504# 20/40 sand in 446 bbls Lightning 17 frac fluid. Treated @ avg press of 1629 psi w/avg rate of 25.6 BPM. ISIP 1670 psi. Calc flush: 5400 gal. Actual flush: 6048 gal.

11/27/09 **Tubing Leak.** Updated rod and tubing detail.

09/07/12 **Convert to Injection Well**

09/12/12 **Conversion MIT Finalized**

### PERFORATION RECORD

Date	Interval	Tool	Holes
04/12/06	6308-6328'	4 JSPF	80 holes
04/19/06	6212-6220'	4 JSPF	32 holes
04/19/06	6168-6178'	4 JSPF	40 holes
04/19/06	6106-6110'	4 JSPF	16 holes
04/19/06	6070-6083'	4 JSPF	52 holes
04/19/06	5388-5402'	4 JSPF	56 holes

**NEWFIELD**



**Federal 15-19-8-18**

660' FSI & 1980' FEL

SW/SE Section 19-T8S-R18E

Uintah Co. Utah

API #43-047-36193; Lease #UTU-36846

# NEWFIELD



September 13, 2012

Mr. Jason Deardorff  
8P-W-GW  
US EPA Region 8  
1595 Wynkoop Street  
Denver, Colorado 80202-1129

RE: Injection Conversion  
Well: Federal 15-19-8-18  
EPA #: UT22238-09666

Dear Mr. Deardorff:

The subject well was converted from a producing oil well to a water injection well. Attached are the EPA Form 7520-12, MIT Pressure Test, an updated wellbore diagram, a copy of the chart, and Daily Activity report. The pore pressure for this well has been calculated to be 1683 psia.

You may contact me at 435-646-4874 or [lchavez-naupoto@newfield.com](mailto:lchavez-naupoto@newfield.com) if you require further information.

Sincerely,

  
Lucy Chavez-Naupoto  
Water Services Technician

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, DC 20460



**WELL REWORK RECORD**

<b>NAME AND ADDRESS OF PERMITTEE</b> Newfield Production Company 410 17th Street, Suite 700 Denver, Colorado 80202-4402	<b>NAME AND ADDRESS OF CONTRACTOR</b> Same as Permittee
--	--

<b>LOCATE WELL AND OUTLINE UNIT ON SECTION PLAY -- 640 ACRES</b> 	<b>STATE</b> Utah	<b>COUNTY</b> Duchesne	<b>PERMIT NUMBER</b> UT22238-09666
	<b>SURFACE LOCATION DESCRIPTION</b> 1/4 OF SW   1/4 OF SE SECTION 19 TOWNSHIP 8S RANGE 18E		
	<b>LOCATE WELL IN TWO DIRECTIONS FROM NEAREST LINES OF QUARTER SECTION AND DRILLING UNIT</b> Surface Location 660 ft. from (N/S) S Line of quarter section and 1980 ft. from (E/W) E Line of quarter section		
	<b>WELL ACTIVITY</b> <input type="checkbox"/> Brine Disposal <input checked="" type="checkbox"/> Enhanced Recovery <input type="checkbox"/> Hydrocarbon Storage	<b>Total Depth Before Rework (ft)</b> 6500 <b>Total Depth After Rework (ft)</b> 6500 <b>Date Rework Commenced</b> 9/6/2012 <b>Date Rework Completed</b> 9/12/2012 <b>Lease Name</b> Federal	<b>TYPE OF PERMIT</b> <input checked="" type="checkbox"/> Individual <input type="checkbox"/> Area <b>Number of Wells</b> 1 <b>Well Number</b> 15-19-8-18

**WELL CASING RECORD -- BEFORE REWORK**

Casing		Cement		Perforations (ft)		Acid or Fracture Treatment Record
Size	Depth (ft)	Sacks	Type	From	To	
8 5/8"	306	160	Class "G"	6308	6328	Perf and frac
5 1/2"	6482	400	Prem Lt II	6168	6220	Perf and frac
		475	50/50 Poz.	6070	6110	Perf and frac
				5388	5402	Perf and frac

**WELL CASING RECORD -- AFTER REWORK (Indicate Additions and Changes Only)**

Casing		Cement		Perforations (ft)		Acid or Fracture Treatment Record
Size	Depth	Sacks	Type	From	To	

DESCRIBE REWORK OPERATIONS IN DETAIL  
USE ADDITIONAL SHEETS IF NECESSARY

WIRE LINE LOGS, LIST EACH TYPE

Log Types	Logged Intervals
-----------	------------------

See attached "Daily Workover Report"

**CERTIFICATION**

I certify under the penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. (Ref. 40 CFR 144.32)

<b>NAME AND OFFICIAL TITLE (Please type or print)</b> Lucy Chavez-Naupoto Water Services Technician	<b>SIGNATURE</b> 	<b>DATE SIGNED</b> September 13, 2012
---	----------------------	--

Sundry Number: 29933 API Well Number: 43047361930000

<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.		5. LEASE DESIGNATION AND SERIAL NUMBER: UTU-36846
1. TYPE OF WELL Oil Well		6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
2. NAME OF OPERATOR: NEWFIELD PRODUCTION COMPANY		7. UNIT or CA AGREEMENT NAME: GMBU (GRRV)
3. ADDRESS OF OPERATOR: Rt 3 Box 3630, Myton, UT, 84052		8. WELL NAME and NUMBER: FEDERAL 15-19-8-18
4. LOCATION OF WELL FOOTAGES AT SURFACE: 0660 FSL 1980 FEL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SWSE Section: 19 Township: 08.0S Range: 18.0E Meridian: S		9. API NUMBER: 43047361930000
		9. FIELD and POOL or WILDCAT: 8 MILE FLAT NORTH
		COUNTY: UINTAH
		STATE: 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 type="checkbox"/> ACIDIZE <input type="checkbox"/> CHANGE TO PREVIOUS PLANS <input checked="" type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> DEEPEN <input type="checkbox"/> OPERATOR CHANGE <input type="checkbox"/> PRODUCTION START OR RESUME <input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> WATER SHUTOFF <input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> ALTER CASING <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> COMINGLE PRODUCING FORMATIONS <input type="checkbox"/> FRACTURE TREAT <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> SI TA STATUS EXTENSION <input type="checkbox"/> OTHER
<input checked="" type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion: 9/12/2012	<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 type="text"/>
<input type="checkbox"/> SPUD REPORT Date of Spud:		
<input type="checkbox"/> DRILLING REPORT Report Date:		
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc. The subject well has been converted from a producing oil well to an injection well on 09/07/2012. On 09/06/2012 Jason Deardorff with the EPA was contacted concerning the initial MIT on the above listed well. On 09/12/2012 the casing was pressured up to 1850 psig and charted for 30 minutes with no pressure loss. The well was not injecting during the test. The tubing pressure was 275 psig during the test. There was not an EPA representative available to witness the test. EPA# UT22238-09666		
NAME (PLEASE PRINT) Lucy Chavez-Naupoto	PHONE NUMBER 435 646-4874	TITLE Water Services Technician
SIGNATURE N/A	DATE 9/13/2012	

RECEIVED: Sep. 13, 2012

# Mechanical Integrity Test

## Casing or Annulus Pressure Mechanical Integrity Test

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

EPA Witness: \_\_\_\_\_ Date: 9/12/12  
 Test conducted by: Karin Powell  
 Others present: \_\_\_\_\_

MIT 22238-09 6/6/6

Well Name: <u>Federal 15-19-8-18</u>	Type: ER SWD	Status: AC TA UC
Field: <u>Abnurgas Court</u>		
Location: <u>15</u> Sec: <u>19</u> T <u>8</u> N <u>18</u> R <u>18</u> E/W County: <u>W. Wash</u> State: <u>Utah</u>		
Operator: <u>Karin Powell</u>		
Last MIT: <u>1</u>	Maximum Allowable Pressure:	PSIG

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

Pre-test casing/tubing annulus pressure: \_\_\_\_\_ 1850 psig

MIT DATA TABLE	Test #1	Test #2	Test #3
<b>TUBING PRESSURE</b>			
Initial Pressure	<u>275</u> psig	psig	psig
End of test pressure	<u>275</u> psig	psig	psig
<b>CASING / TUBING ANNULUS PRESSURE</b>			
0 minutes	<u>1850</u> psig	psig	psig
5 minutes	<u>1850</u> psig	psig	psig
10 minutes	<u>1850</u> psig	psig	psig
15 minutes	<u>1850</u> psig	psig	psig
20 minutes	<u>1850</u> psig	psig	psig
25 minutes	<u>1850</u> psig	psig	psig
30 minutes	<u>1850</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: \_\_\_\_\_

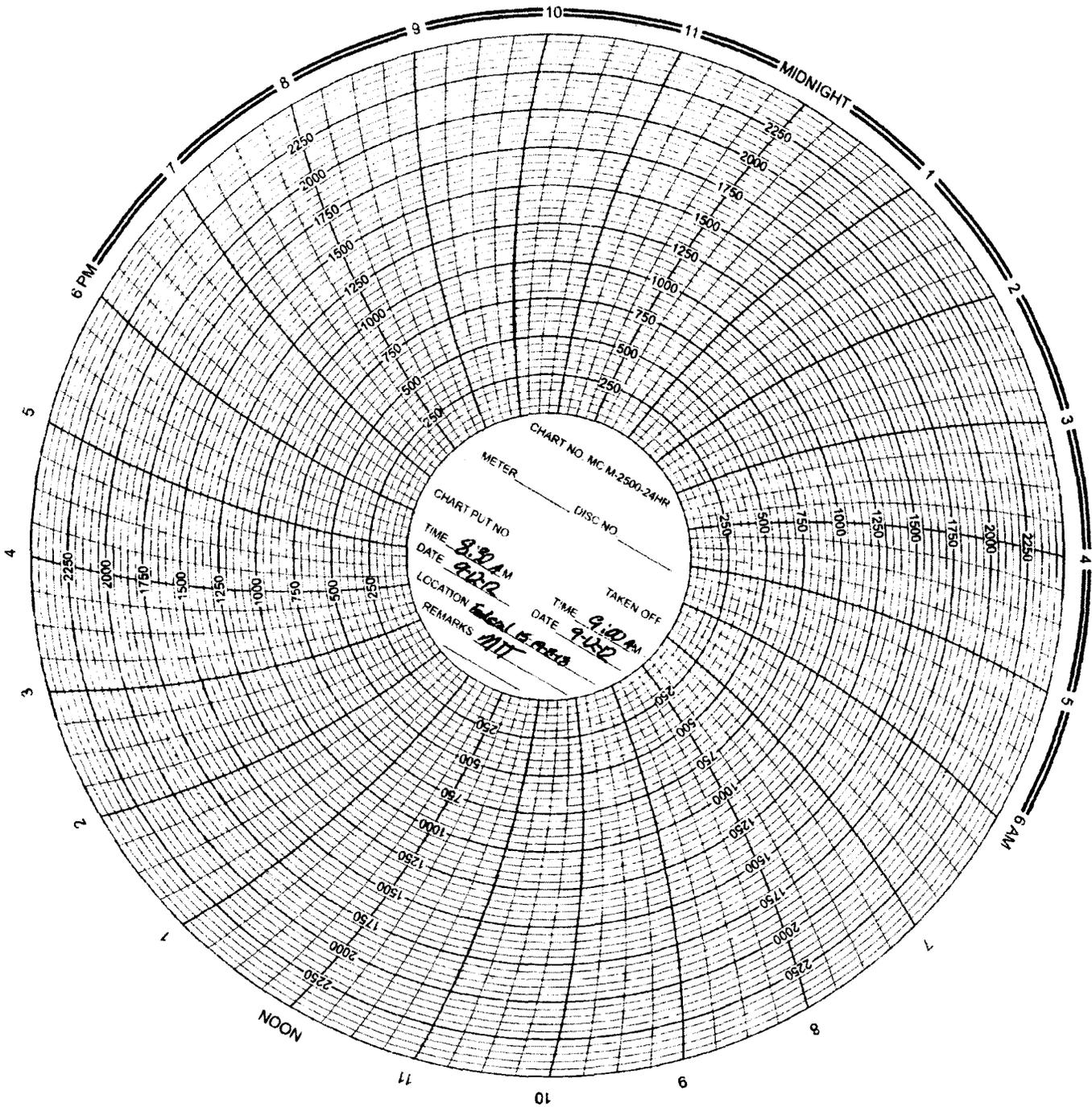


CHART NO. MC M-2500-24HR  
METER \_\_\_\_\_ DISC NO. \_\_\_\_\_  
CHART PUT NO. \_\_\_\_\_  
TIME 9:30 AM  
DATE 9-12-52  
LOCATION Wheat Ridge, CO  
REMARKS MT  
TAKEN OFF  
TIME 9:10 AM  
DATE 9-12-52

**NEWFIELD**

ROCKY MOUNTAINS

**Daily Workover Report**Well Name: FEDERAL 15-19-8-18AFE: 26907Report Date: 9/10/12INJCNVOperation: POOH L/D Rod Prod, Strt POOH W/T

Field:	<u>GMBU CTB9</u>	Rig Name:	<u></u>	Work Performed:	<u>9/6/2012</u>
Location:	<u>S19 T8S R18E</u>	Supervisor:	<u>Duane Freston</u>	Day:	<u>1</u>
County:	<u>UINTAH</u>	Phone:	<u>435-823-6771</u>	Daily Cost:	<u>\$9,352</u>
State:	<u>UT</u>	Email:	<u>dfreston@newfield.com</u>	Cum DWR:	<u>\$9,352</u>

Reason for Workover: Conversion

24 Hr Summary:	<u>R/U, H/O Csg, u/s pmp, flush tbg, s/p, p/tst tbg, pooh l/d rod prod slmg &amp; pmp. n/u bop, rel t/a, pooh w/-143 jts tbg, swi, c/sdf.</u>
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24 Hr Plan Forward:	<u>pooh w/remnder of tbg prod, nh w/-pkr &amp; tbg prod.</u>
---------------------	--

Incidents:	<u>None</u>	Newfield Pers:	<u>5</u>	Contract Pers:	<u>1</u>	Conditions:	<u></u>
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**Critical Comments****Activity Summary**

0 Hr(s); P : 5:30AM-6:00AM C/Trvl. 6:00AM R/U NC#1. R/D Unit, BMW H/Oiler pmp 60 BW D/Csg, U/S pmp, Flush Tbg W/-40 BW, S/P, P/Tst Tbg To 3500 Psi, Good Tst. U/S pmp, POOH W/-1 1/2X22' Polish Rod, 7/8X4'-6'-8' Ponys, 100- 7/8 4 Per, 105- 3/4 Slick, 39- 3/4 4 Per, 6 1 1/2 Wt Bars & pmp, Flushed Tbg W/-20 BW On TOOH. N/D W/-HD, N/U BOP, R/U R/F1r, Rel T/A, POOH W/-143 Jts Tbg Breaking & Doping Tool Jts. SWI, 6:30PM- / SDFN, 6:30-7:00PM C/Trvl.



## Daily Workover Report

Well Name: **FEDERAL 15-19-8-18**

AFE: **26907**

Report Date: **9/10/12**

INJCNV

Operation: **RIH W/Tbg Prod,P/Tst Tbg & Csg Pro**

Field:	GMBU CTB9	Rig Name:	Work Performed:	9/7/2012
Location:	S19 T8S R18E	Supervisor:	Day:	2
County:	UINTAH	Phone:	Daily Cost:	\$18,055
State:	UT	Email:	Cum DWR:	\$27,407

Reason for Workover: **Conversion**

**24 Hr Summary:** Pooch w/remndr of tbg prod,rih w/-pkr BHA & tbg prod strng,drop sv,p/tst tbg,n/d bop,pmp pkr fluid,set pkr,n/u w/-hd,p/tst csg & pkr,good tst,R/D Rig,Well Ready For MIT (Final Rig Report)

**24 Hr Plan Forward:** Ready For MIT ( Final Rig Report )

**Incidents:** None      **Newfield Pers:** 5      **Contract Pers:** 1      **Conditions:**

**Critical Comments**

**Activity Summary**

0 Hr(s): P : 5:30AM-6:00AM C/Trvl. 6:00AM OWD, BMW H/Oiler Flush Tbg W/-20 BW. POOH W/-31 Jts Tbg Breaking & Redoping Tool Jts In Derrick. L/D 29 Jts Tbg, 5 1/2 T/A, 1 Jt Tbg, S/N, 2 Jts Tbg, N/C On Float. P/U & RIH W/-2 3/8 Re entry Guide, 2 3/8 X/N Nipple, 2 3/8X4.18 Tbg Sub, 2 3/8X2 7/8 XO, 5 1/2 Arrow #1 Pkr W/-1.875 X Nipple Top Of Pkr, 4 3/4 OD On Off Tool, 2 7/8 S/N, 174 Jts 2 7/8 Tbg, R/U H/Oiler pmp 20 BW Pad D/Tbg, Drop SV, Fill tbg W/- 25 BW, P/Test Tbg To 3,000 Psi, Gained 70 Psi In 1 Hr, Good Test. R/U S/Line Ovrshot RIH & Fish SV. R/D R/Etc, N/D BOP, N/C W/-HD, pmp 70 BW W/-20 Gal Pkr Fluid D/Csg, N/D W/-HD, Set Pkr In 15,000 Penson, Fill Csg W/-15 BW, P/Test Csg To 1,500 Psi, Good Test. Rack Out Eq, R/D Rig. Move Rig To 1-19-9-16,6:00PM C/SDFN, 6:00PM-6:30PM C/Trvl, Ready For MIT ( Final Rig Report ).

**NEWFIELD**

ROCKY MOUNTAINS

**Final Daily Workover Report**Well Name: **FEDERAL 15-19-8-18**AFE: **26907**Report Date: **9/13/12**

INJCNV

Operation: **Conversion MIT**

Field:	GMBU CTB9	Rig Name:	Rigless	Work Performed:	9/12/2012
Location:	S19 T8S R18E	Supervisor:	Alfredo Rios	Day:	3
County:	UINTAH	Phone:	435-823-0173	Daily Cost:	\$88,270
State:	UT	Email:	arios@newfield.com	Cum DWR:	\$115,877

Reason for Workover: **Conversion**

24 Hr Conduct initial MIT

Summary:

24 Hr Plan Wait for approval to commence injection

Forward:

Incidents: None      Newfield Pers: 1      Contract Pers: 0      Conditions:

Critical Comments

**Activity Summary**

08:30 - 09:00: 0.5 Hr(s); P : On 09/06/2012 Jason Deardorff with the EPA was contacted concerning the initial MIT on the above listed well. On 09/12/2012 the casing was pressured up to 1850 psig and charted for 30 minutes with no pressure loss. The well was not injecting during the test. The tubing pressure was 275 psig during the test. There was not an EPA representative available to witness the test.  
EPA# UT22238-09666