

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-40026

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 5-35-8-17

9. API Well No.  
43-013-32707

10. Field and Pool, or Exploratory  
Monument Butte

11. Sec., T., R., M., or Blk. and Survey or Area  
SW/NW Sec. 35, T8S R17E

12. County or Parish  
Duchesne

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/NW 2096' FNL 660' FWL 586958X 40.075917  
At proposed prod. zone 4436471Y -109.980186

14. Distance in miles and direction from nearest town or post office\*  
Approximatley 16.0 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. 660' f/lse, NA f/unit  
Approx. 1390'

16. No. of Acres in lease  
640.00

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. 1390'

19. Proposed Depth  
6240'

20. BLM/BIA Bond No. on file  
UTU0056

21. Elevations (Show whether DF, KDB, RT, GL, etc.)  
5073' 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:

- Well plat certified by a registered surveyor.
- A Drilling Plan.
- A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office).
- Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
- Operator certification.
- 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 11/12/04

Title Regulatory Specialist

Approved by (Signature) *Bradley Hill* Name (Printed/Typed) BRADLEY G. HILL Date 11-16-04

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)

RECEIVED

NOV 15 2004

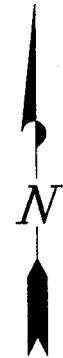
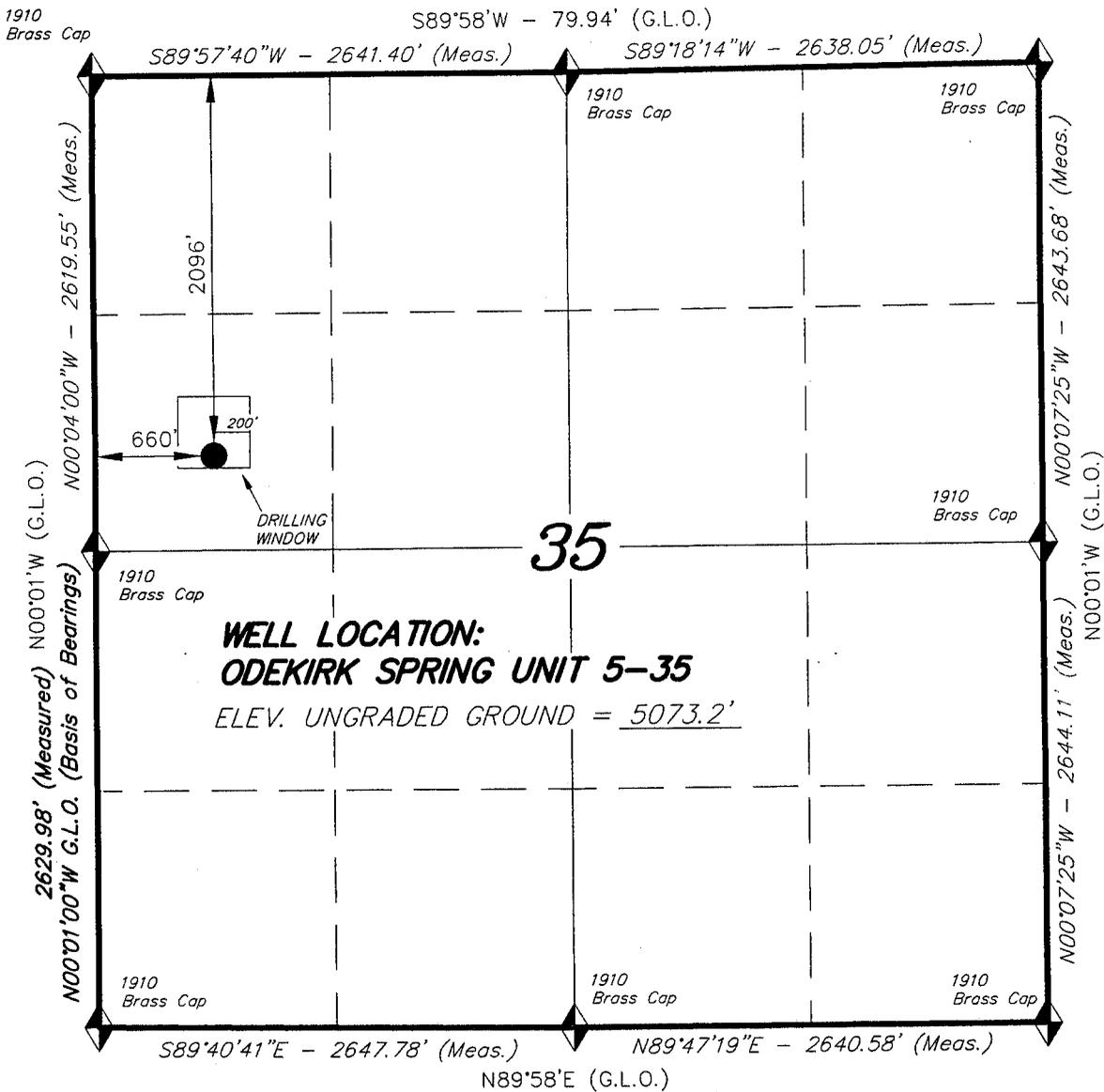
DIV. OF OIL, GAS & MINING

Federal Approval of this  
Action is Necessary

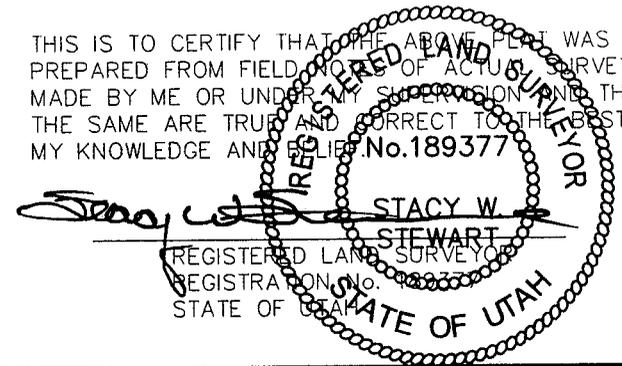
# T8S, R17E, S.L.B.&M.

NEWFIELD PRODUCTION COMPANY

WELL LOCATION, ODEKIRK SPRING UNIT  
5-35, LOCATED AS SHOWN IN THE SW  
1/4 NW 1/4 OF SECTION 35, T8S, R17E,  
S.L.B.&M. DUCHESNE COUNTY, UTAH.



THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS  
PREPARED FROM FIELD NOTES OF ACTUAL SURVEYS  
MADE BY ME OR UNDER MY SUPERVISION AND THAT  
THE SAME ARE TRUE AND CORRECT TO THE BEST OF  
MY KNOWLEDGE AND BELIEF. No. 189377



**TRI STATE LAND SURVEYING & CONSULTING**  
180 NORTH VERNAL AVE. - VERNAL, UTAH 84078  
(435) 781-2501

◆ = SECTION CORNERS LOCATED

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

SCALE: 1" = 1000'

SURVEYED BY: C.M.

DATE: 10-27-04

DRAWN BY: F.T.M.

NOTES:

FILE #

## NEWFIELD



November 12, 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 2A-35-8-17, 3-35-8-17, 4-35-8-17,  
5-35-8-17, 7-35-8-17, 8-35-8-17, 9-35-8-17, 11-35-8-17, 12-35-8-17, 13-35-8-17,  
14-35-8-17, and 16-35-8-17.

Dear Diana:

Enclosed find APD's on the above referenced wells. The 7-35-8-17 and 11-35-8-17 are Exception Locations. The appropriate paper will be sent to you from our office in Denver. If you have any questions, feel free to give either Brad or myself a call.

Sincerely,

Mandie Crozier  
Regulatory Specialist

mc  
enclosures

RECEIVED  
NOV 15 2004  
DIV. OF OIL, GAS & MINING

NEWFIELD PRODUCTION COMPANY  
FEDERAL #5-35-8-17  
SW/NW SECTION 35, T8S, R17E  
DUCHESNE 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	2265'
Wasatch	6240'

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

Green River Formation 2265' – 6240' - 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 #5-35-8-17  
SW/NW SECTION 35, T8S, R17E  
DUCHESNE 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 #5-35-8-17 located in the SW 1/4 NW 1/4 Section 35, T8S, R17E, Duchesne 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 - 14.4 miles  $\pm$  to its junction with the beginning of the proposed access road; proceed northeasterly along the proposed access road - 1,860'  $\pm$  to its junction with the proposed access road to the south; proceed southerly - 715'  $\pm$  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 Archaeological Resource Survey and Paleontological Resource Survey for this area are attached. AERC Report #1598, 7/21/98. Paleontological Resource Survey prepared by, Wade E. Miller, 7/28/03. See attached report cover pages, Exhibit "D".

For the Federal #5-35-8-17 Newfield Production Company requests 715' of disturbed area be granted in Lease UTU-40026 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 715' of disturbed area be granted in Lease UTU-40026 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 715' of disturbed area be granted in Lease UTU-40026 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
Indian Ricegrass	<i>Oryzopsis hymenoides</i>	4 lbs/acre
Four Wing Saltbush	<i>Atriplex canescens</i>	4 lbs/acre

**Details of the On-Site Inspection**

The proposed Federal #5-35-8-17 was on-sited on 8/11/04. The following were present; Brad Mecham (Newfield Production), David Gerbig (Newfield Production), and Byron Tolman (Bureau of Land Management). Weather conditions were clear at 95 degrees.

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

Representative

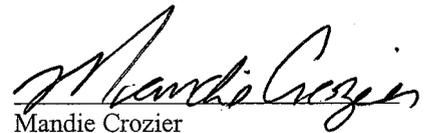
Name: Brad Mecham  
Address: Route #3 Box 3630  
Myton, UT 84052  
Telephone: (435) 646-3721

Certification

Please be advised that NEWFIELD PRODUCTION COMPANY is considered to be the operator of well #5-35-8-17 SW/NW Section 35, Township 8S, Range 17E: Lease UTU-40026 Duchesne 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.

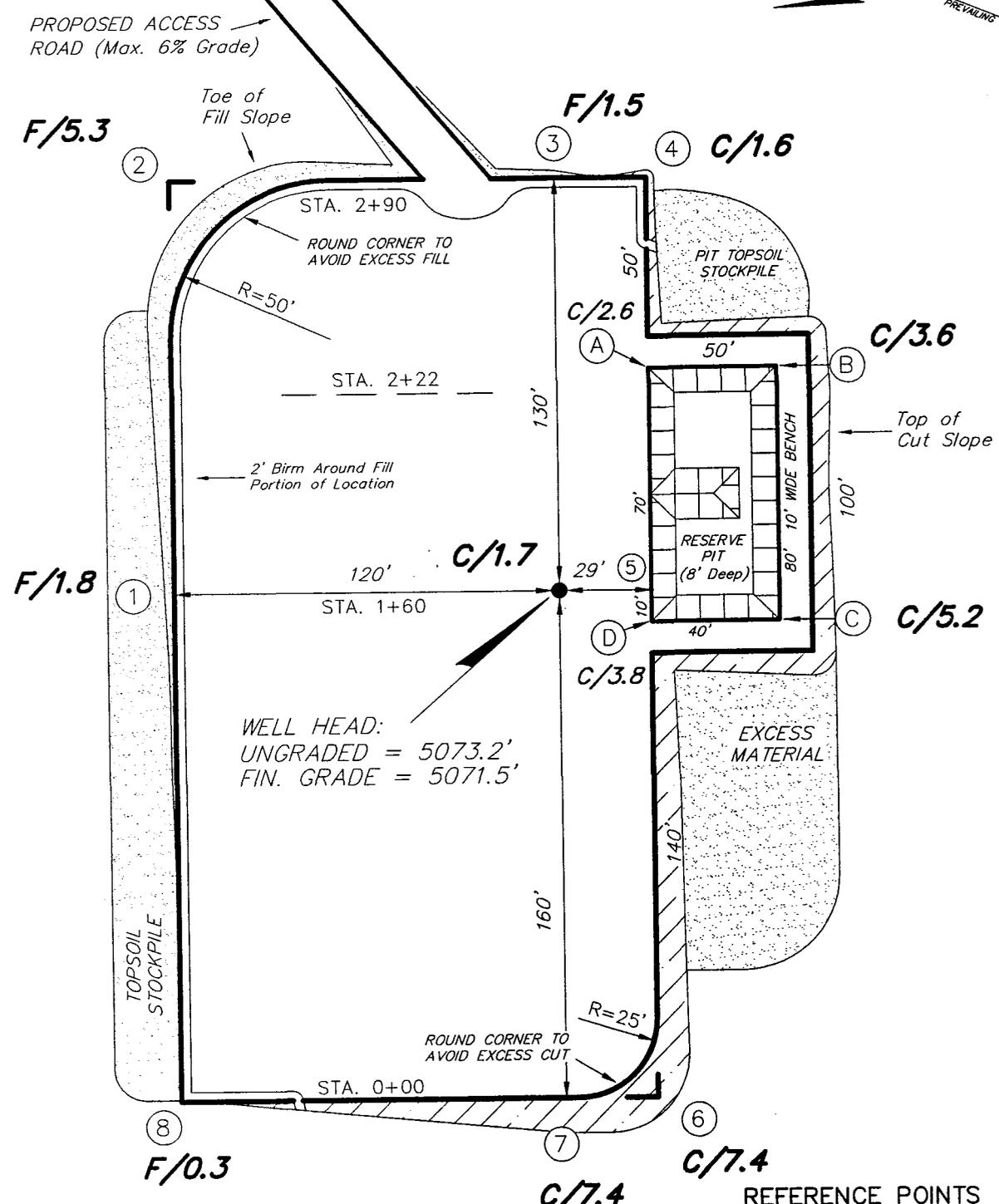
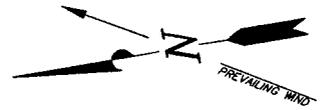
I hereby certify that the proposed drillsite and access route have been inspected, and I am familiar with the conditions which currently exist; that the statements made in this plan are true and correct to the best of my knowledge; and that the work associated with the operations proposed here will be 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.

11/12/04  
Date

  
Mandie Crozier  
Regulatory Specialist  
Newfield Production Company

# NEWFIELD PRODUCTION COMPANY

ODEKIRK SPRING UNIT 5-35  
Section 35, T8S, R17E, S.L.B.&M.



REFERENCE POINTS

170' NORTHERLY	= 5067.8'
220' NORTHERLY	= 5068.6'
210' WESTERLY	= 5080.6'
260' WESTERLY	= 5081.7'

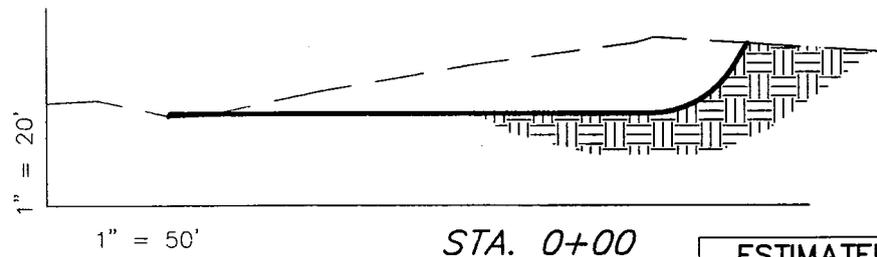
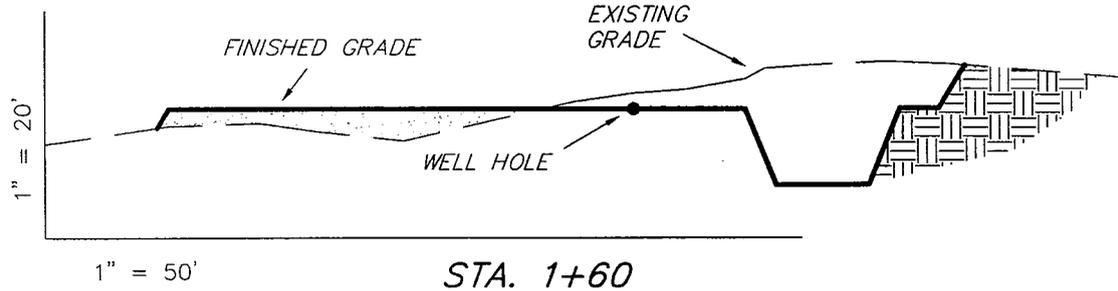
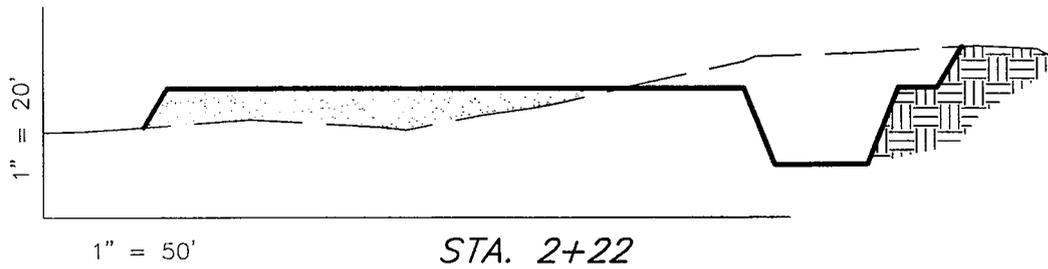
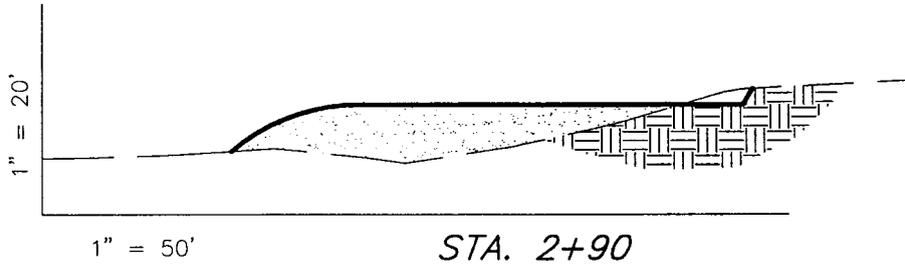
SURVEYED BY: C.M.	SCALE: 1" = 50'
DRAWN BY: F.T.M.	DATE: 10-27-04

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

# NEWFIELD PRODUCTION COMPANY

## CROSS SECTIONS

### ODEKIRK SPRING UNIT 5-35



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

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

ITEM	CUT	FILL	6" TOPSOIL	EXCESS
PAD	2,810	2,800	Topsoil is not included in Pad Cut	10
PIT	640	0		640
TOTALS	3,450	2,800	890	650

SURVEYED BY: C.M.

SCALE: 1" = 50'

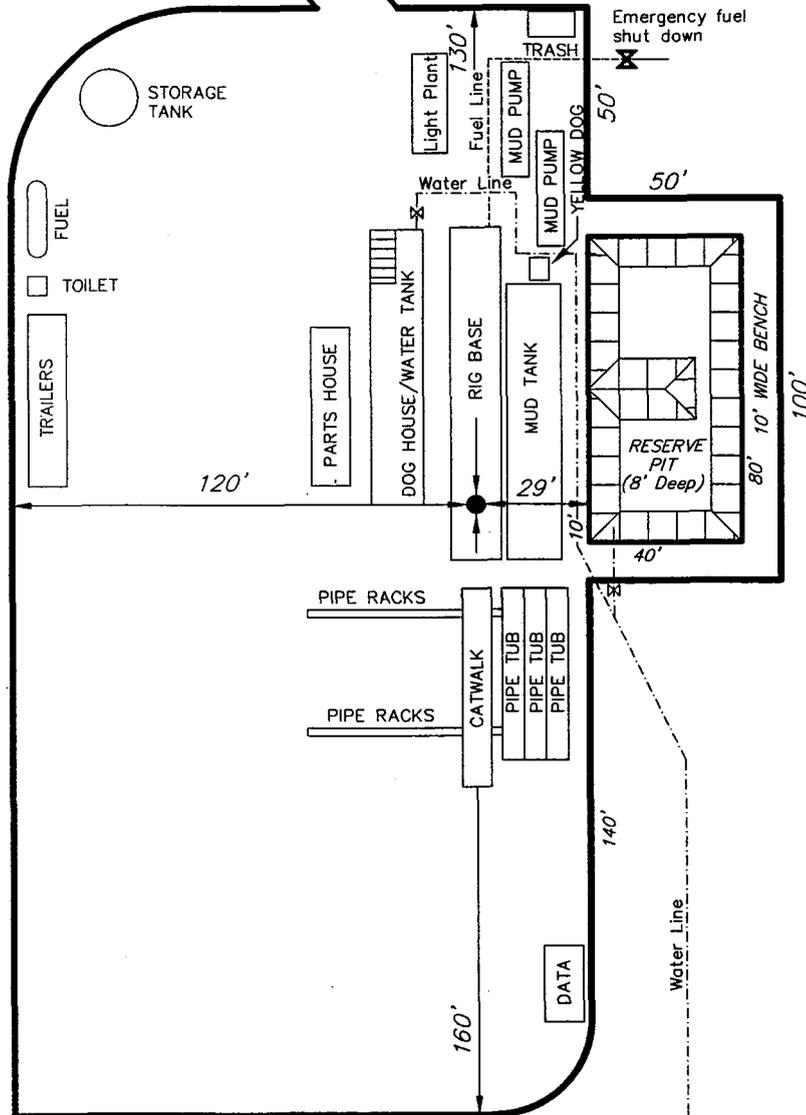
DRAWN BY: F.T.M.

DATE: 10-27-04

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

**NEWFIELD PRODUCTION COMPANY**  
**TYPICAL RIG LAYOUT**  
**ODEKIRK SPRING UNIT 5-35**

PROPOSED ACCESS ROAD (Max. 6% Grade)



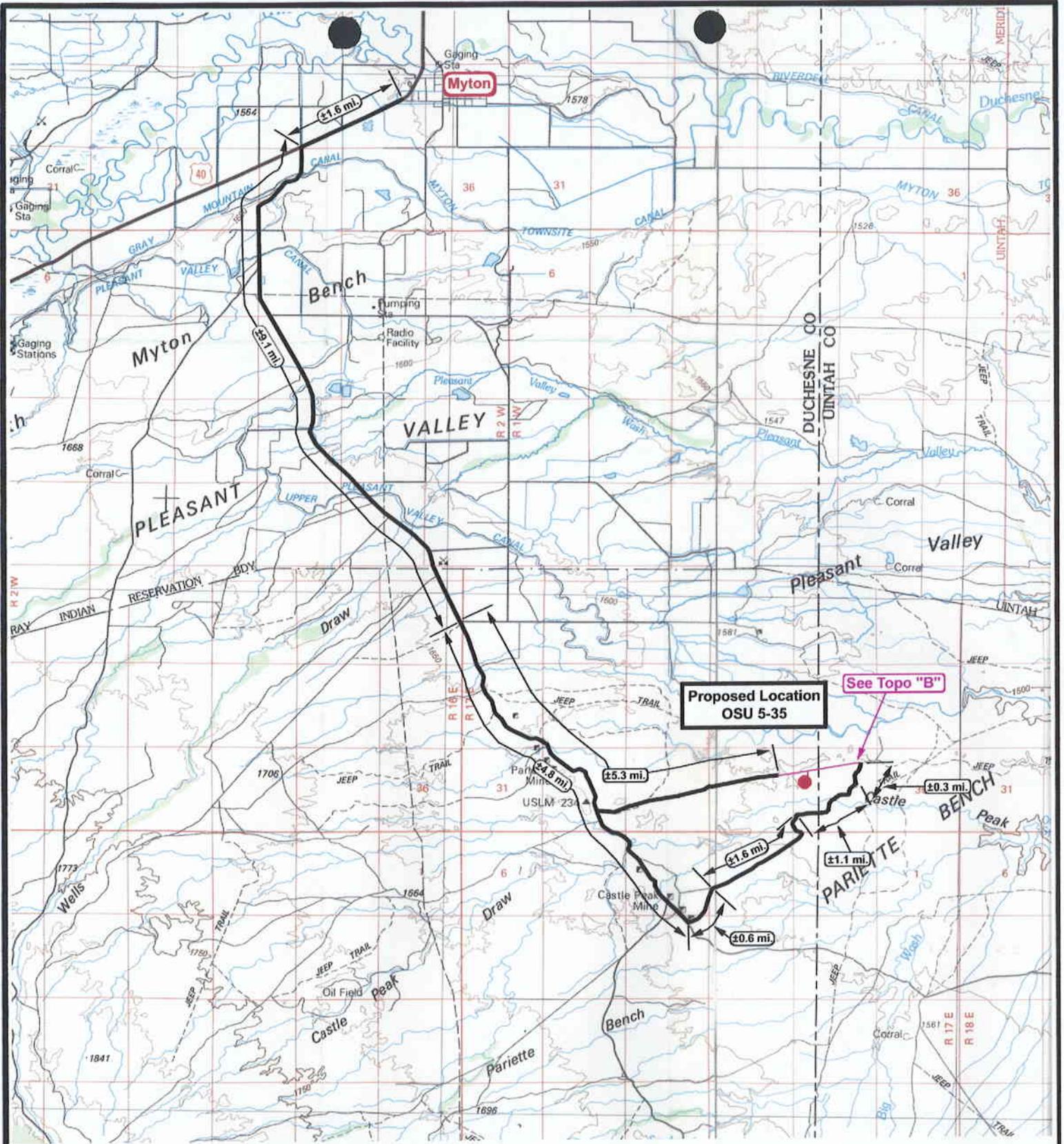
SURVEYED BY: C.M.

SCALE: 1" = 50'

DRAWN BY: F.T.M.

DATE: 10-27-04

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



**NEWFIELD**  
Exploration Company

**Odekirk Spring Unit 5-35**  
**SEC. 35, T8S, R17E, S.L.B.&M.**



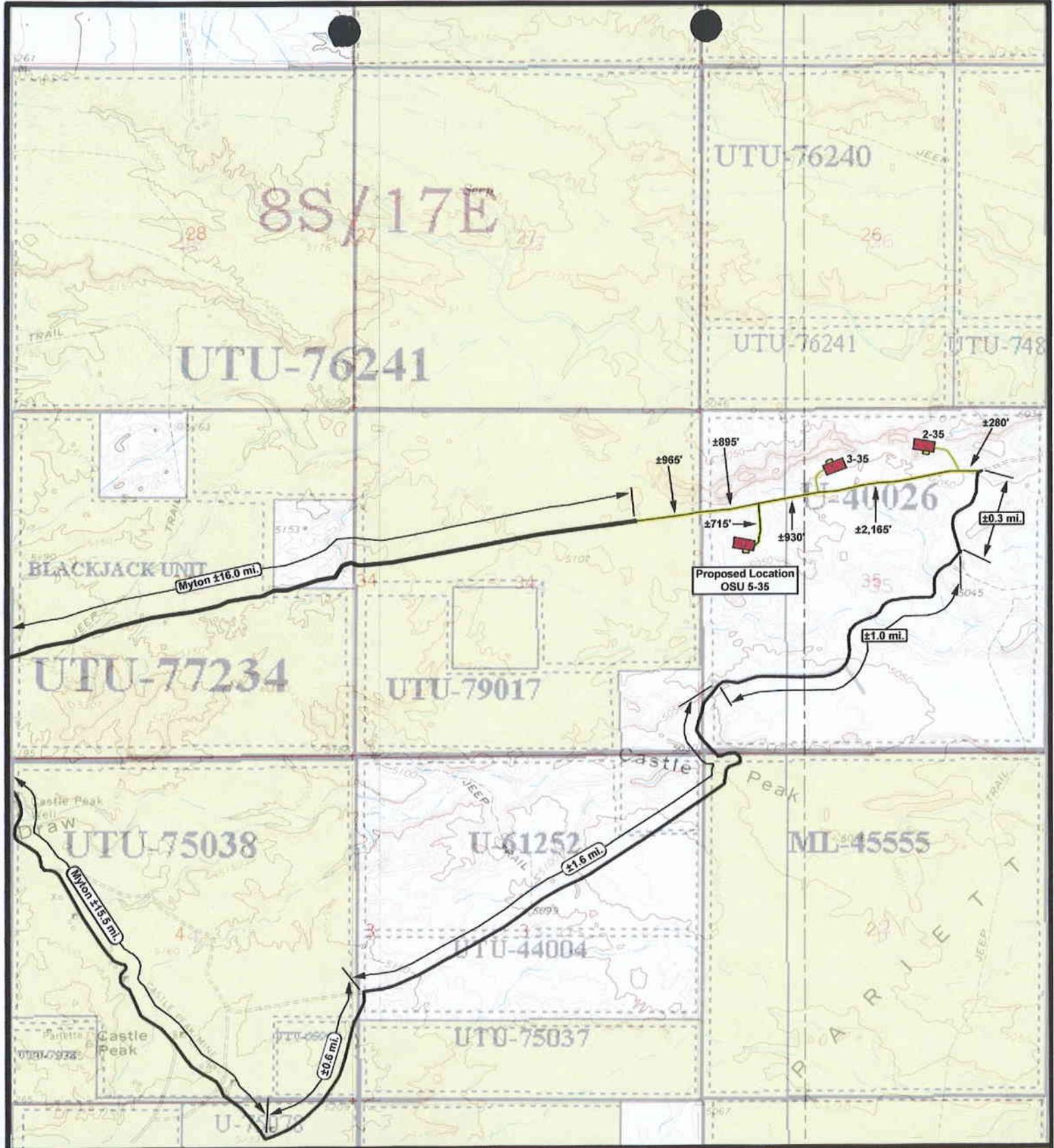
*Tri-State*  
*Land Surveying Inc.*  
(435) 781-2501  
38 West 100 North Vernal, Utah 84078

SCALE: 1 : 100,000  
DRAWN BY: bgm  
DATE: 10-28-2004

**Legend**

- Existing Road
- Proposed Access

TOPOGRAPHIC MAP  
**"A"**



**NEWFIELD**  
Exploration Company

**Odekirk Spring Unit 5-35**  
**SEC. 35, T8S, R17E, S.L.B.&M.**



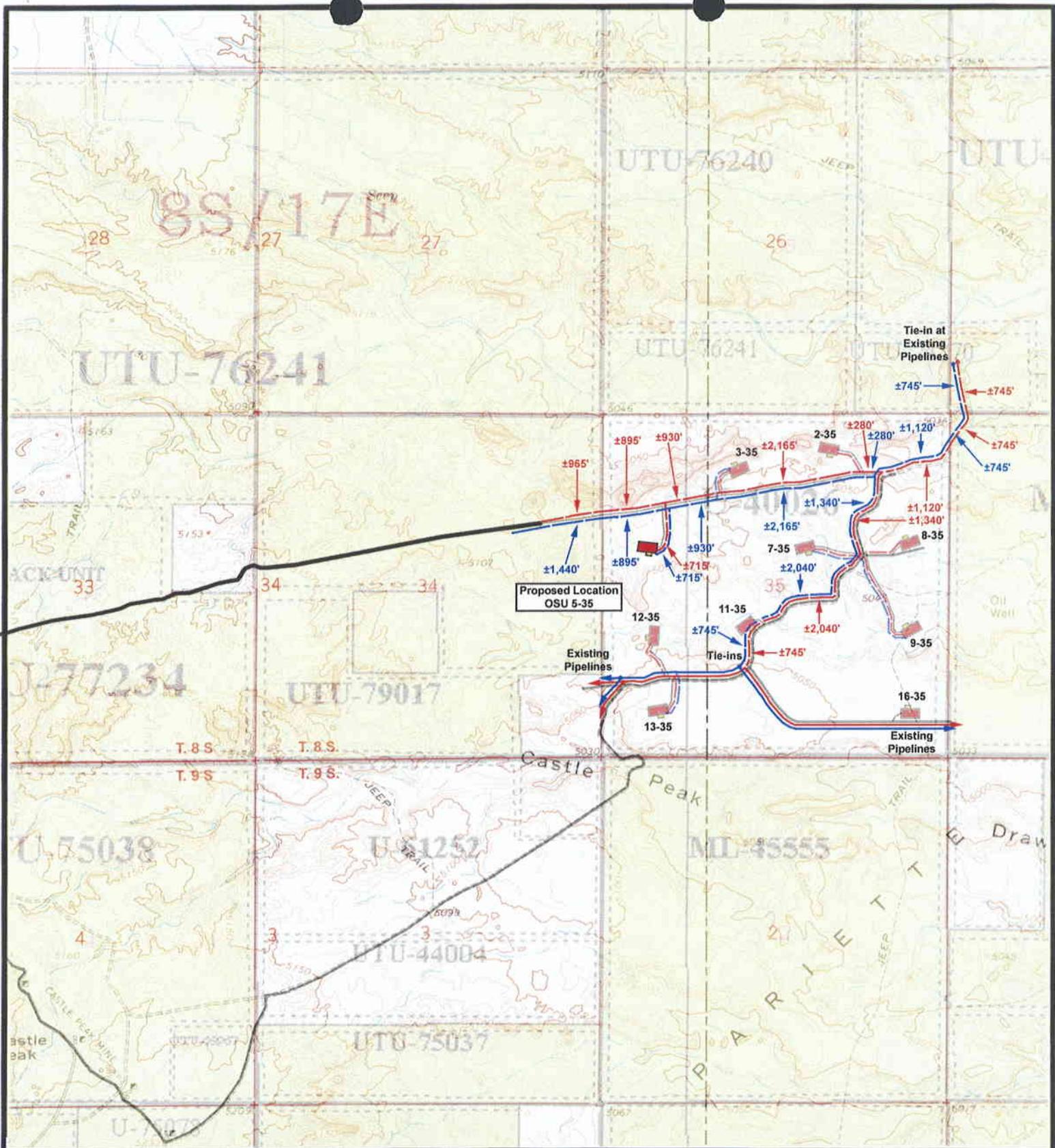
*Tri-State*  
*Land Surveying Inc.*  
(435) 781-2501  
38 West 100 North Vernal, Utah 84078

SCALE: 1" = 2000'  
DRAWN BY: bgm  
DATE: 10-28-2004

**Legend**

- Existing Road
- Proposed Access

**TOPOGRAPHIC MAP**  
**"B"**



**NEWFIELD**  
Exploration Company

**Odekirk Spring Unit 5-35**  
**SEC. 35, T.8S, R.17E, S.L.B.&M.**



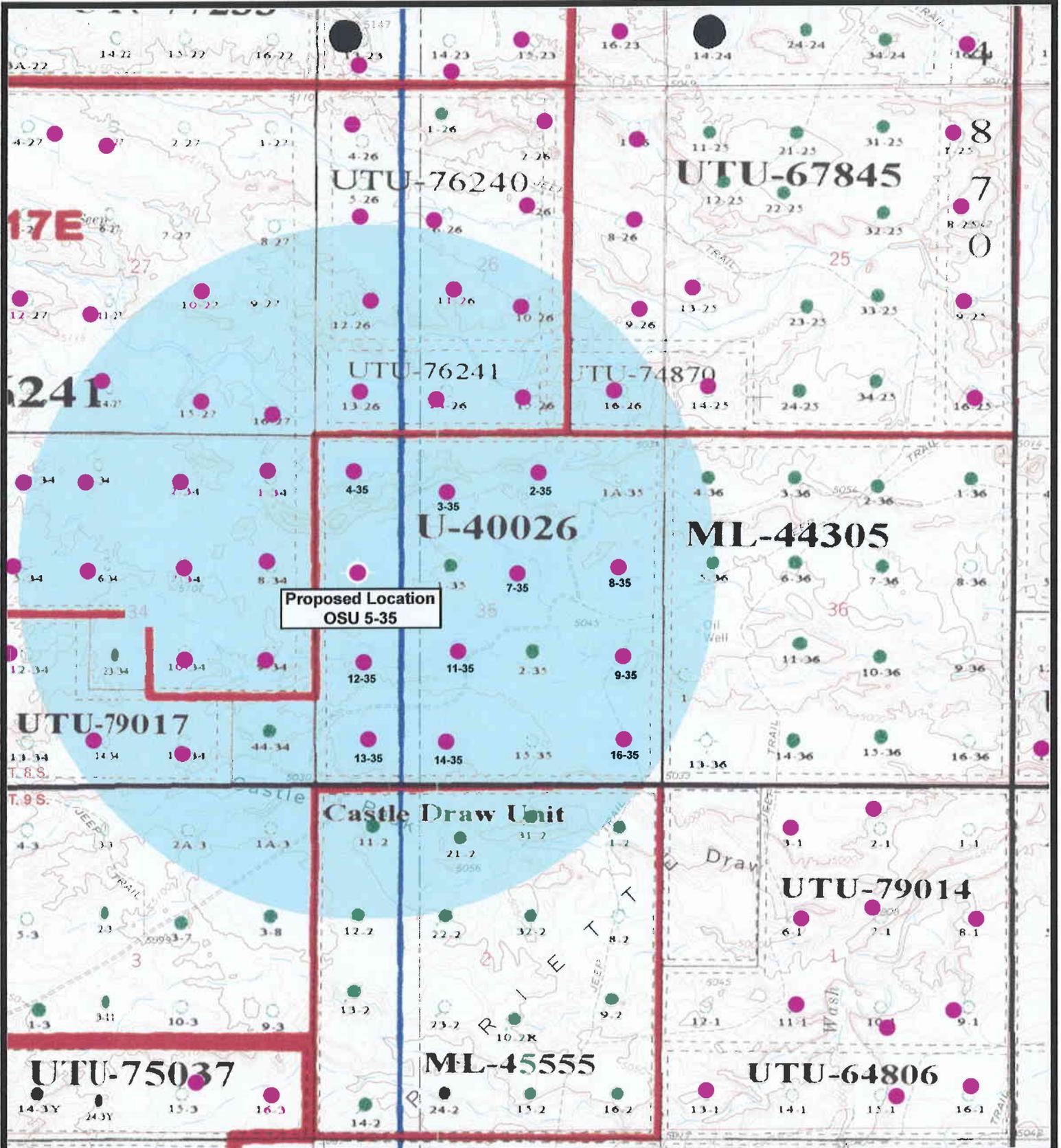
*Tri-State*  
*Land Surveying Inc.*  
(435) 781-2501  
38 West 100 North Vernal, Utah 84078

SCALE: 1" = 2000'  
DRAWN BY: bgm  
DATE: 10-26-2004

Legend	
	Roads
	Existing Gas Line
	Proposed Gas Line
	Existing Water Line
	Proposed Water Line

TOPOGRAPHIC MAP  
**"C"**





**NEWFIELD**  
Exploration Company

**Odekirk Spring Unit 5-35**  
**SEC. 35, T8S, R17E, S.L.B.&M.**



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

SCALE: 1" = 2,000'  
DRAWN BY: bgm  
DATE: 10-26-2004

**Legend**

- Well Locations
- One-Mile Radius

**Exhibit "B"**

# 2-M SYSTEM

Blowout Prevention Equipment Systems

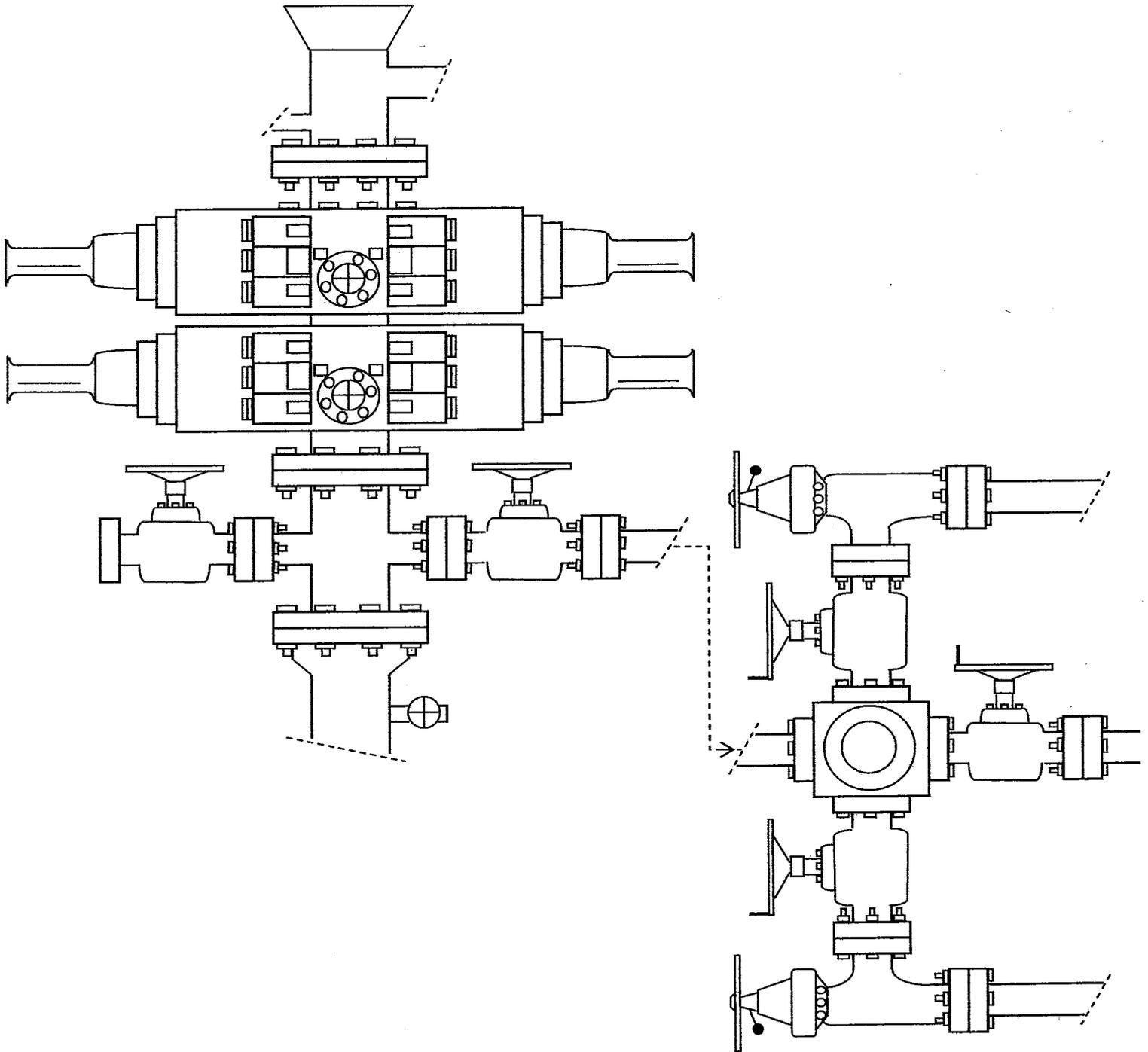


EXHIBIT C

# CULTURAL RESOURCE EVALUATION OF VARIOUS LARGE TRACTS IN THE WELLS DRAW TO PARIETTE BENCH LOCALITY IN DUCHESNE & UINTAH COUNTIES, UTAH

Report Prepared for Inland Resources, Inc.

Department of Interior Permit No.: UT-98-54937

Utah State Project No.: UT-98-AF-0164bs

AERC Project 1598 (IPC98-4)

Author of the Report:  
E. Richard Hauck, Ph.D



## ARCHEOLOGICAL-ENVIRONMENTAL RESEARCH CORPORATION

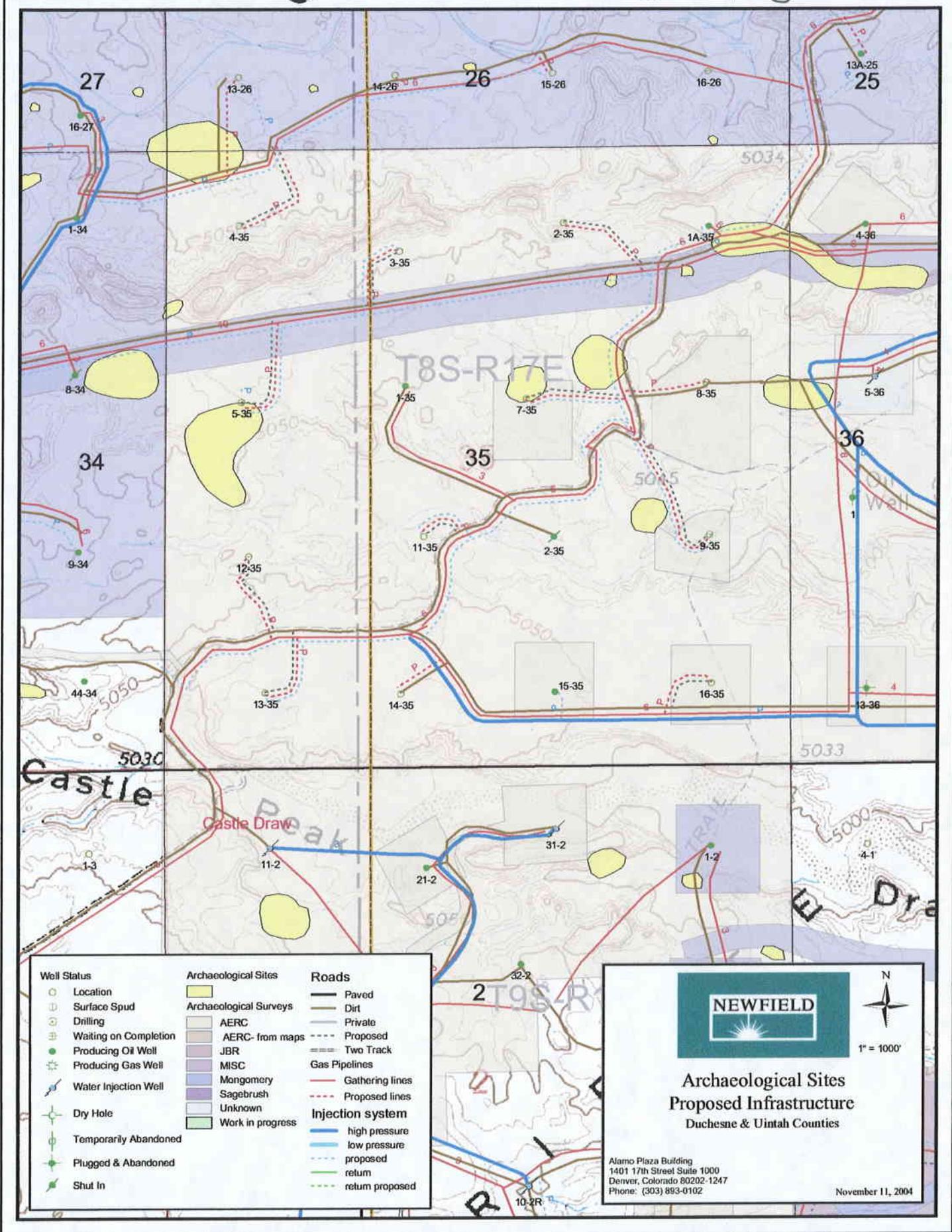
181 North 200 West, Suite 5 -- Bountiful, Utah 84010

P.O. Box 853, Bountiful, Utah 84011

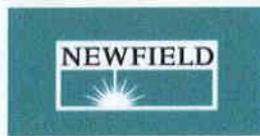
Phone: (801) 292-7061, 292-9668 FAX: (801) 292-0614

E-mail: [ari@xmission.com](mailto:ari@xmission.com) Web page: [www.ari-aerc.org](http://www.ari-aerc.org)

July 21, 1998



Well Status	Archaeological Sites	Roads
○ Location	Archaeological Sites	— Paved
⊕ Surface Spud	Archaeological Surveys	— Dirt
⊙ Drilling	— AERC	— Private
⊗ Waiting on Completion	— AERC- from maps	- - - Proposed
● Producing Oil Well	— JBR	— Two Track
⊙ Producing Gas Well	— MISC	Gas Pipelines
⊕ Water Injection Well	— Montgomery	— Gathering lines
⊕ Dry Hole	— Sagebrush	— Proposed lines
⊕ Temporarily Abandoned	— Unknown	Injection system
⊕ Plugged & Abandoned	— Work in progress	— high pressure
⊕ Shut In		— low pressure
		— proposed
		— return
		— return proposed



**Archaeological Sites  
Proposed Infrastructure**  
Duchesne & Uintah Counties

Alamo Plaza Building  
1401 17th Street Suite 1000  
Denver, Colorado 80202-1247  
Phone: (303) 893-0102

November 11, 2004

**INLAND RESOURCES, INC.**

**PALEONTOLOGICAL FIELD SURVEY OF PROPOSED  
PRODUCTION DEVELOPMENT AREAS,  
DUCHESNE AND Uintah COUNTIES, UTAH**

(Section 35, T 8 S, R 17 E; Sections 13, 14, 23, 24, T 9 S, R 17 E; NE 1/4, NE 1/4,  
Section 15, T 9 S, R 17 E; Sections 18, 19, T 9 S, R 18 E; Sections  
2, 3, 10 and western half of Section 11, T 9 S, R 15 E)

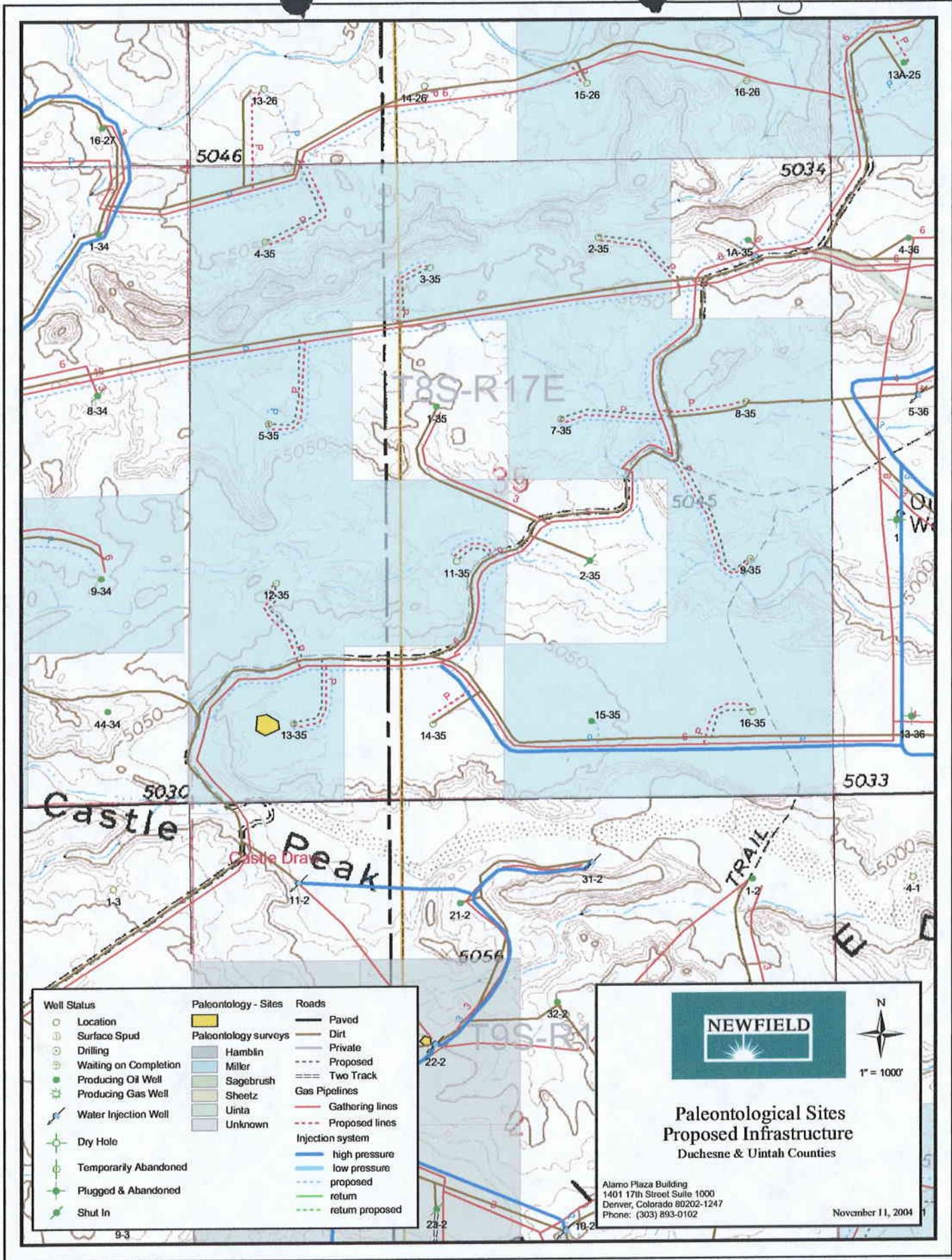
**REPORT OF SURVEY**

Prepared for:

**Inland Resources, Inc.**

Prepared by:

Wade E. Miller  
Consulting Paleontologist  
July 28, 2003



Well Status	Paleontology - Sites	Roads
○ Location	■ Paleontology surveys	— Paved
○ Surface Spud	■ Hamblin	— Dirt
○ Drilling	■ Miller	— Private
○ Waiting on Completion	■ Sagebrush	--- Proposed
○ Producing Oil Well	■ Sheetz	--- Two Track
○ Producing Gas Well	■ Uinta	— Gas Pipelines
○ Water Injection Well	■ Unknown	— Gathering lines
○ Dry Hole		--- Proposed lines
○ Temporarily Abandoned		— Injection system
○ Plugged & Abandoned		— high pressure
○ Shut In		— low pressure
		--- proposed
		--- return
		--- return proposed



**NEWFIELD**



1" = 1000'

**Paleontological Sites  
Proposed Infrastructure**  
Duchesne & Uintah Counties

Alamo Plaza Building  
1401 17th Street Suite 1000  
Denver, Colorado 80202-1247  
Phone: (303) 893-0102

November 11, 2004

WORKSHEET  
APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 11/15/2004

API NO. ASSIGNED: 43-013-32707

WELL NAME: FEDERAL 5-35-8-17  
OPERATOR: NEWFIELD PRODUCTION ( N2695 )  
CONTACT: MANDIE CROZIER

PHONE NUMBER: 435-646-3721

PROPOSED LOCATION:

SWNW 35 080S 170E  
SURFACE: 2096 FNL 0660 FWL  
BOTTOM: 2096 FNL 0660 FWL  
DUCHESNE  
MONUMENT BUTTE ( 105 )

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

LEASE TYPE: 1 - Federal  
LEASE NUMBER: UTU-40026  
SURFACE OWNER: 1 - Federal  
PROPOSED FORMATION: GRRV  
COALBED METHANE WELL? NO

LATITUDE: 40.07592  
LONGITUDE: 109.98019

RECEIVED AND/OR REVIEWED:

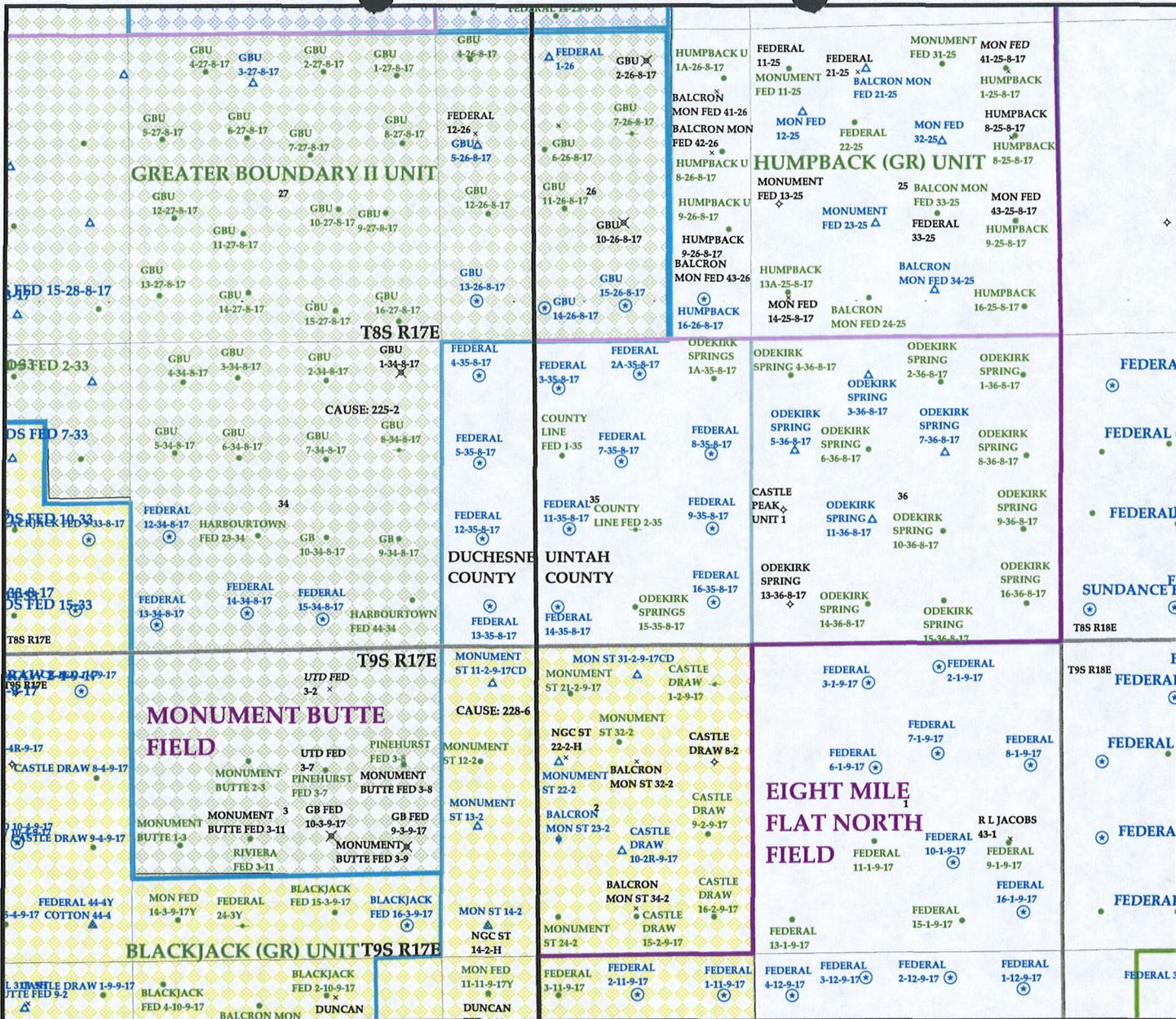
- Plat
- Bond: Fed[1] Ind[] Sta[] Fee[]  
(No. UTU0056 )
- Potash (Y/N)
- Oil Shale 190-5 (B) or 190-3 or 190-13
- Water Permit  
(No. MUNICIPAL )
- RDCC Review (Y/N)  
(Date: \_\_\_\_\_ )
- Fee Surf Agreement (Y/N)

LOCATION AND SITING:

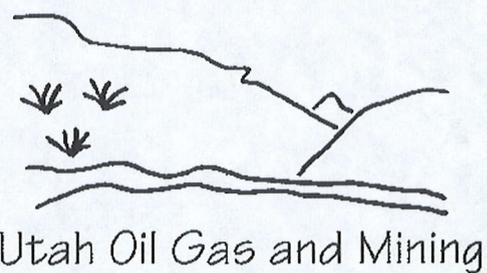
- R649-2-3.
- Unit \_\_\_\_\_
- R649-3-2. General  
Siting: 460 From Qtr/Qtr & 920' Between Wells
- R649-3-3. Exception
- Drilling Unit  
Board Cause No: \_\_\_\_\_  
Eff Date: \_\_\_\_\_  
Siting: \_\_\_\_\_
- R649-3-11. Directional Drill

COMMENTS: See Separate file

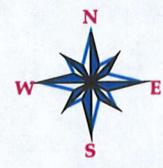
STIPULATIONS: 1- Federal Approval  
2- Spacing Strip



**OPERATOR: NEWFIELD PROD CO (N2695)**  
**SEC. 35 T8S R.17E**  
**FIELD: MONUMENT BUTTE (105)**  
**COUNTY: DUCHESNE**  
**SPACING: R649-3-2 / GENERAL SITING**



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: 16-NOVEMBER-2004



State of Utah

Department of  
Natural Resources

ROBERT L. MORGAN  
*Executive Director*

Division of  
Oil, Gas & Mining

LOWELL P. BRAXTON  
*Division Director*

OLENE S. WALKER  
*Governor*

GAYLE F. McKEACHNIE  
*Lieutenant Governor*

November 16, 2004

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

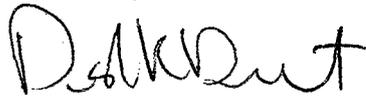
Re: Federal 5-35-8-17 Well, 2096' FNL, 660' FWL, SW NW, Sec. 35, T. 8 South,  
R. 17 East, Duchesne County, Utah

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 43-013-32707.

Sincerely,

  
(for) John R. Baza  
Associate Director

pab  
Enclosures

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

Operator: Newfield Production Company

Well Name & Number Federal 5-35-8-17

API Number: 43-013-32707

Lease: UTU-40026

Location: SW NW                      Sec. 35                      T. 8 South                      R. 17 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

*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)

**2096 FNL 660 FWL SW/NW Section 35, T8S R17E**

5. Lease Designation and Serial No.

**UTU-40026**

6. If Indian, Allottee or Tribe Name

**NA**

7. If Unit or CA, Agreement Designation

**NA**

8. Well Name and No.

**FEDERAL 5-35-8-17**

9. API Well No.

**43-013-32707**

10. Field and Pool, or Exploratory Area

**MONUMENT BUTTE**

11. County or Parish, State

**DUCHESNE COUNTY, UT.**

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

TYPE OF SUBMISSION	TYPE OF ACTION
<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 11/16/04 (expiration 11/16/05).

This APD has not been approved yet by the BLM.

**Approved by the  
Utah Division of  
Oil, Gas and Mining**  
Date: 11-17-05  
By: [Signature]

**NOV 16 2005**

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

Signed

[Signature]  
Mandie Crozier

Title

Regulatory Specialist

Date

11/11/2005

CC: UTAH DOGM

(This space for Federal or State office use)

Approved by \_\_\_\_\_

Title

**COPY SENT TO OPERATOR**  
Date: 11-18-05  
Initials: CHD

Date

Conditions of approval, if any:

CC: Utah DOGM

SECRET

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

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

**API:** 43-013-32707  
**Well Name:** Federal 5-35-8-17  
**Location:** SW/NW Section 35, T8S R17E  
**Company Permit Issued to:** Newfield Production Company  
**Date Original Permit Issued:** 11/16/2004

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

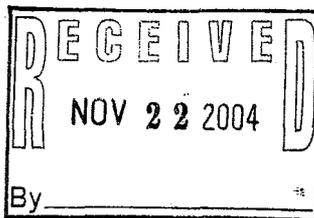
Mando Cruz  
Signature

11/11/2005  
Date

Title: Regulatory Specialist

Representing: Newfield Production Company

NOV 16 2005



UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

5. Lease Serial No.  
UTU-40026

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 5-35-8-17

9. API Well No.  
4301332707

10. Field and Pool, or Exploratory  
Monument Butte

11. Sec., T., R., M., or Blk. and Survey or Area  
SW/NW Sec. 35, T8S R17E

12. County or Parish  
Duchesne

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/NW 2096' FNL 660' FWL  
At proposed prod. zone

14. Distance in miles and direction from nearest town or post office\*  
Approximatley 16.0 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. 660' f/lease, NA f/unit

16. No. of Acres in lease  
640.00

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. 1390'

19. Proposed Depth  
6240'

20. BLM/BIA Bond No. on file  
UT/0056

21. Elevations (Show whether DF, KDB, RT, GL, etc.)  
5073' 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:

- Well plat certified by a registered surveyor.
- A Drilling Plan.
- A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office).
- Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
- Operator certification.
- 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 11/12/04

Title Regulatory Specialist

Approved by (Signature) *Howard R. Claverie* Name (Printed/Typed) \_\_\_\_\_ Date 11/16/2005

Title Assistant Field Manager Office \_\_\_\_\_

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)

NOTICE OF APPROVAL

RECEIVED

NOV 22 2005

DIV. OF OIL, GAS & MINING

UDOGM

CONDITIONS OF APPROVAL  
APPLICATION FOR PERMIT TO DRILL

Operator/Company: Newfield Production Co.

Well Name/Number: Federal 5-35-8-17

API Number: 43-013-32707

Location: SWNW Sec. 35 T. 8S R. 17E

Lease Number: UTU-40026

Agreement Name (If Applicable): N/A

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

**CONDITIONS OF APPROVAL FOR NOTICE TO DRILL**

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

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

**Please submit an electronic copy of all logs run on this well in LAS format. 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 or other).**

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

Matt Baker (435) 828-4470  
Petroleum Engineer

Michael Lee (435) 828-7875  
Petroleum Engineer

BLM FAX Machine (435) 781-4410

**SURFACE USE PROGRAM  
CONDITIONS OF APPROVAL (COAs)**

A qualified botanist shall survey the proposed access and pipelines routes as well as the location prior to construction to ensure that no *Sclerocactus glaucus* plants will be disturbed.

If fossils are encountered during bedrock excavation on any of the wells, construction shall cease at the site, and the Vernal Field Office geologist along with a qualified paleontologist shall be contacted to determine what mitigating measures should be taken prior to resuming construction.

# DIVISION OF OIL, GAS AND MINING

## SPUDDING INFORMATION

Name of Company: NEWFIELD PRODUCTION COMPANY

Well Name: FEDERAL 5-35-8-17

Api No: 43-013-32707 Lease Type: FEDERAL

Section 35 Township 08S Range 17E County DUCHESNE

Drilling Contractor NDSI RIG # NS#1

### SPUDDED:

Date 12/02/05

Time 12:30 PM

How DRY

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

Reported by TROY

Telephone # 1-435-823-6013

Date 12/05/2005 Signed CHD

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

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		
A	99999	15091	43-013-32707	FEDERAL 5-35-8-17	SWNW	35	8S	17E	DUCHESNE	12/02/05	12/8/05
WELL 1 COMMENTS: <i>GRUV</i> - J											
B	99999	12053	43-047-36501	HUMPBACK 4-24-8-17	NWNW	24	8S	17E	UINTAH	12/02/05	12/8/05
WELL 2 COMMENTS: <i>GRUV</i> - K											
B	99999	14844	43-047-36049	FEDERAL 4-9-9-18	NWNW	9	9S	18E	UINTAH	12/03/05	12/8/05
WELL 3 COMMENTS: <i>GRUV</i> - J											
A	99999	15092	43-013-32706	FEDERAL 4-35-8-17	NWNW	35	8S	17E	DUCHESNE	12/05/05	12/8/05
WELL 4 COMMENTS: <i>GRUV</i> - J											
B	99999	12053	43-047-36497	HUMPBACK 6-24-8-17	SENW	24	8S	17E	UINTAH	12/05/05	12/8/05
WELL 5 COMMENTS: <i>GRUV</i> - J											
B	99999	14844	43-047-35840	FEDERAL 13-9-9-18	SWSW	9	9S	18E	UINTAH	12/05/05	12/8/05
WELL 6 COMMENTS: <i>GRUV</i> - J											

ACTION CODES: (See instructions on back of form)

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

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

RECEIVED  
DEC 08 2005

*Kim Kettle*  
Signature **Kim Kettle**  
Production Clerk  
December 8, 2005  
Date

DIV. OF OIL, GAS & MINING

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

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

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

**Submittal Instructions:** See 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)  
 2096 FNL 660 FWL  
 SW/NW Section 35 T8S R17E

5. Lease Serial No.  
 UTU40026

6. If Indian, Allottee or Tribe Name.

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

8. Well Name and No.  
 FEDERAL 5-35-8-17

9. API Well No.  
 4301332707

10. Field and Pool, or Exploratory Area  
 Monument Butte

11. County or Parish, State  
 Duchesne, UT

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

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

On 12-2-05 MIRU NDSI spud rig #1. Drill 300' of 12 1/4" hole with air mist. TIH W/7 Jt's 7 5/8" J-55 24# csgn. Set @ 300.13'KB. On 12-4-05 Cement with 160 sks of Class "G" w/ 2% CaCL+ 1/4# Cello Flake. Mixed @ 15.8 ppg> 1.17 cf/sk yeild. Returned 5 bbls cement to pit.

I hereby certify that the foregoing is true and correct Name (Printed/ Typed) Ray Herrera	Title Drilling Foreman
	Date 12/07/2005

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

Approved by <i>Ray Herrera</i>	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**  
**DEC 12 2005**

# NEWFIELD PRODUCTION COMPANY - CASING & CEMENT REPORT

8 5/8 CASING SET AT 300.13

LAST CASING 8 5/8" SET AT 300.13'  
 DATUM 12' KB  
 DATUM TO CUT OFF CASING \_\_\_\_\_  
 DATUM TO BRADENHEAD FLANGE \_\_\_\_\_  
 TD DRILLER 300' LOGGER \_\_\_\_\_  
 HOLE SIZE 12 1/4

OPERATOR Newfield Production Company  
 WELL Federal 5-35-8-17  
 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 38.40'					
		WHI - 92 csg head			8rd	A	0.95
7	8 5/8"	Maverick ST&C csg	24#	J-55	8rd	A	288.28
		<b>GUIDE</b> shoe			8rd	A	0.9
CASING INVENTORY BAL.		FEET	JTS	TOTAL LENGTH OF STRING			290.13
TOTAL LENGTH OF STRING		290.13	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>300.13</b>
TOTAL		288.28	7	} COMPARE			
TOTAL CSG. DEL. (W/O THRDS)		288.28	7				
TIMING		1ST STAGE					
BEGIN RUN CSG.	Spud	12/2/2005	12:30 PM	GOOD CIRC THRU JOB <u>Yes</u>			
CSG. IN HOLE		12/3/2005	12:00 PM	Bbls CMT CIRC TO SURFACE <u>5 bbls</u>			
BEGIN CIRC		12/4/2005	8:42 AM	RECIPROCATED PIPE FOR <u>N/A</u>			
BEGIN PUMP CMT		12/4/2005	8:49 AM				
BEGIN DSPL. CMT		12/4/2005	9:00 AM	BUMPED PLUG TO <u>550</u> PSI			
PLUG DOWN		12/4/2005	9:10 AM				
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 Ray Herrera DATE December 4, 2005

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.  
UTU40026

6. If Indian, Allottee or Tribe Name.

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

8. Well Name and No.  
FEDERAL 5-35-8-17

9. API Well No.  
4301332707

10. Field and Pool, or Exploratory Area  
Monument Butte

11. County or Parish, State  
Duchesne, UT

**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 3650  
Myton, UT 84052

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

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)  
2096 FNL 660 FWL  
SW/NW Section 35 T8S R17E

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

WELL OPERATOR  
1-20-06  
CHD

I hereby certify that the foregoing is true and correct

Name (Printed/ Typed)  
Mandie Crozier

Signature  
*Mandie Crozier*

Title  
Regulatory Specialist

Date  
01.05.2006

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

Date: 1/12/06

Federal Approval of This Action Is Necessary

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 false, fictitious and fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on reverse)

By: *D. Stull*

RECEIVED  
JAN 09 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 <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other		5. Lease Serial No. UTU40026
2. Name of Operator Newfield Production Company		6. If Indian, Allottee or Tribe Name.
3a. Address   Route 3 Box 3630 Myton, UT 84052	3b. Phone No. (include are code) 435.646.3721	7. If Unit or CA/Agreement, Name and/or No.
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) 2096 FNL 660 FWL SW/NW Section 35 T8S R17E		8. Well Name and No. FEDERAL 5-35-8-17
		9. API Well No. 4301332707
		10. Field and Pool, or Exploratory Area Monument Butte
		11. County or Parish, State Duchesne, UT

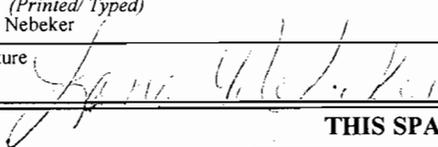
**12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, OR OTHER DATA**

TYPE OF SUBMISSION	TYPE OF ACTION			
<input type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production(Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input checked="" type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other _____
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug & Abandon	<input type="checkbox"/> Temporarily Abandon	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 12/21/05 - 01/04/06

Subject well had completion procedures initiated in the Green River formation on 12-21-05 without the use of a service rig over the well. A cement bond log was run and a total of six Green River intervals were perforated and hydraulically fracture treated with 20/40 mesh sand. Perforated intervals are as follows: Stage #1 (5866'-5870'),(5772'-5787'),(5730-5736); Stage #2 (5310'-5316'); Stage #3 (5208'-5230'); Stage #4 (4958'-4964'); Stage #5 (4838'-4845'); Stage #6 (4511'-4520'),(4448'-4456'). 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 12-30-2005. Bridge plugs were drilled out and well was cleaned to 6139'. 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 01-04-2006.

I hereby certify that the foregoing is true and correct	Title
Name (Printed/ Typed) Lana Nebeker	Production Clerk
Signature 	Date 01/06/2006

**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**  
**JAN 09 2006**  
DIV. OF OIL, GAS & MINING

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

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

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

**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)  
 2096 FNL 660 FWL  
 SW/NW    Section 35 T8S R17E

5. Lease Serial No.  
 UTU40026

6. If Indian, Allottee or Tribe Name.

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

8. Well Name and No.  
 FEDERAL 5-35-8-17

9. API Well No.  
 4301332707

10. Field and Pool, or Exploratory Area  
 Monument Butte

11. County or Parish, State  
 Duchesne, UT

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

TYPE OF SUBMISSION	TYPE OF ACTION			
<input 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 <i>Mandie Crozier</i>	Date 01/05/2006

**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 _____	<b>RECEIVED</b>

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)

**JAN 09 2006**

(See other instructions on reverse side)

OMB NO. 1004-0137  
Expires: February 28, 1995

**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-40026

6. IF INDIAN, ALLOTTEE OR TRIBE NAME  
NA

7. U.S. AGREEMENT NAME  
NA

8. FARM OR LEASE NAME, WELL NO.  
Federal 5-35-8-17

2. NAME OF OPERATOR  
Newfield Exploration Company

9. WELL NO. **013-32707**  
~~43-047-36075~~

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

10. FIELD AND POOL OR WILDCAT  
Monument Butte

4. LOCATION OF WELL. (Report locations clearly and in accordance with any State requirements.)\*  
 At Surface 2096' FNL & 660' FWL (SW/NW) Sec. 35, T8S, R17E  
 At top prod. Interval reported below

11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA  
Sec. 35, T8S, R17E

14. API NO. 43-047-36075 DATE ISSUED 12/6/04

12. COUNTY OR PARISH Uintah 13. STATE UT

15. DATE SPUDDED 11/8/05 16. DATE T.D. REACHED 11/17/05 17. DATE COMPL. (Ready to prod.) 12/14/05 18. ELEVATIONS (DF, RKB, RT, GR, ETC.)\* 5073' GL 5085' KB 19. ELEV. CASINGHEAD

20. TOTAL DEPTH, MD & TVD 6150' 21. PLUG BACK T.D., MD & TVD 6139' 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 4448'-5870'

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 CORED 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 SET
8-5/8" - J-55	24#	300'	12-1/4"	To surface with 160 sx Class "G" cmt	
5-1/2" - J-55	15.5#	6185'	7-7/8"	320 sx Premlite II and 450 sx 50/50 Poz	

29. LINER RECORD

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

30. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)
2-7/8"	EOT @ 5937'	TA @ 5840'

31. PERFORATION RECORD (Interval, size and number)

INTERVAL	SIZE	SPF/NUMBER
(CP.5,1&2) 5730'-36', 5772'-87', 5866'-70'	.41"	4/100
(A.5) 5310'-16'	.41"	4/24
(B2) 5208'-30'	.41"	4/88
(D2) 4958'-64'	.41"	4/24
(DS3) 4838'-45'	.41"	4/28
(GB6&PB7) 4448'-56', 4511'-20'	.41"	4/68

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

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
5730'-5870'	Frac w/ 89,991# 20/40 sand in 677 bbls fluid
5310'-5316'	Frac w/ 18,843# 20/40 sand in 313 bbls fluid
5208'-5230'	Frac w/ 89,704# 20/40 sand in 660 bbls fluid
4958'-4964'	Frac w/ 28,840# 20/40 sand in 369 bbls fluid
4838'-4845'	Frac w/ 19,781# 20/40 sand in 284 bbls fluid
4448'-4520'	Frac w/ 99,785# 20/40 sand in 698 bbls fluid

33.\* PRODUCTION

DATE FIRST PRODUCTION 12/14/05 PRODUCTION METHOD (Flowing, gas lift, pumping--size and type of pump) 2-1/2" x 1-1/2" x 14' RHAC SM Plunger Pump WELL STATUS (Producing or shut-in) PRODUCING

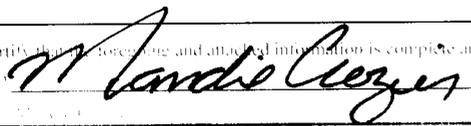
DATE OF TEST	HOURS TESTED	CHOKED SIZE	PRODN. FOR TEST PERIOD	OIL--BBL	GAS--MCF	WATER--BBL	GAS-OIL RATIO
30 day ave			----->	68	9	43	132

FLOW TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL--BBL	GAS--MCF	WATER--BBL	OIL GRAVITY--API (CORR.)
		----->				

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

35. LIST OF ATTACHMENTS

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

  
 Regulatory Specialist  
 DIV. OF OIL, GAS & MINING  
 2/6/2006

**RECEIVED  
FEB 09 2006**

37. SUMMARY OF POROUS ZONES: (Show all important zones of porosity and contents thereof; cored intervals, and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures, and recoveries):				38. GEOLOGIC MARKERS		
FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.	NAME	TOP	
					MEAS. DEPTH	TRUE VERT. DEPTH
			Well Name Federal 5-35-8-17	Garden Gulch Mkr	3926'	
				Garden Gulch 1	4098'	
				Garden Gulch 2	4218'	
				Point 3 Mkr	4474'	
				X Mkr	4704'	
				Y-Mkr	4740'	
				Douglas Creek Mkr	4874'	
				BiCarbonate Mkr	5115'	
				B Limestone Mkr	5278'	
				Castle Peak	5714'	
				Basal Carbonate	6131'	
				Total Depth (LOGGERS)	6195'	

SUBMIT IN DUPLICATE\*  
(See other instructions on reverse side)

FORM APPROVED  
OMB NO. 1004-0137  
Expires: February 28, 1995

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

5. LEASE DESIGNATION AND SERIAL NO.

UTU-40026

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

6. IF INDIAN ALLOTTEE OR TRIBE NAME

NA

1a. TYPE OF WORK

OIL WELL  GAS WELL  DRY  Other \_\_\_\_\_

7. UNIT AGREEMENT NAME

NA

1b. TYPE OF WELL

NEW WELL  WORK OVER  DEEPEN  PLUG BACK  DIFF RESVR.  Other \_\_\_\_\_

8. FARM OR LEASE NAME, WELL NO.

Federal 5-35-8-17

2. NAME OF OPERATOR

Newfield Exploration Company

9. WELL NO.

43-013-32707

3. ADDRESS AND TELEPHONE NO.

1401 17th St. Suite 1000 Denver, CO 80202

10. FIELD AND POOL OR WILDCAT

Monument Butte

4. LOCATION OF WELL (Report locations clearly and in accordance with any State requirements.\*)

At Surface 2096' FNL & 660' FWL (SW/NW) Sec. 35, T8S, R17E

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

Sec. 35, T8S, R17E

At top prod. Interval reported below

At total depth

14. API NO.

43-013-32707

DATE ISSUED

12/6/04

12. COUNTY OR PARISH

Duchesne

13. STATE

UT

15. DATE SPUNDED

12/2/05

16. DATE T.D. REACHED

12/10/05

17. DATE COMPL. (Ready to prod.)

1/4/06

18. ELEVATIONS (DF, RKB, RT, GR, ETC.)\*

5073' GL

19. ELEV. CASINGHEAD

5085' KB

20. TOTAL DEPTH, MD & TVD

6169'

21. PLUG BACK T.D., MD & TVD

6139'

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 4448'-5870'

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 CORED

No

**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#	300'	12-1/4"	To surface with 160 sx Class "G" cmt	
5-1/2" - J-55	15.5#	6185'	7-7/8"	320 sx Premlite II and 450 sx 50/50 Poz	

**29. LINER RECORD**

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

**30. TUBING RECORD**

SIZE	DEPTH SET (MD)	PACKER SET (MD)
2-7/8"	EOT @ 5937'	TA @ 5840'

31. PERFORATION RECORD (Interval, size and number)

INTERVAL	SIZE	SPF/NUMBER
(CP.5,1&2) 5730'-36', 5772'-87', 5866'-70'	.41"	4/100
(A.5) 5310'-16'	.41"	4/24
(B2) 5208'-30'	.41"	4/88
(D2) 4958'-64'	.41"	4/24
(DS3) 4838'-45'	.41"	4/28
(GB6&PB7) 4448'-56', 4511'-20'	.41"	4/68

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

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
5730'-5870'	Frac w/ 89,991# 20/40 sand in 677 bbls fluid
5310'-5316'	Frac w/ 18,843# 20/40 sand in 313 bbls fluid
5208'-5230'	Frac w/ 89,704# 20/40 sand in 660 bbls fluid
4958'-4964'	Frac w/ 28,840# 20/40 sand in 369 bbls fluid
4838'-4845'	Frac w/ 19,781# 20/40 sand in 284 bbls fluid
4448'-4520'	Frac w/ 99,785# 20/40 sand in 698 bbls fluid

33.\* PRODUCTION

DATE FIRST PRODUCTION	PRODUCTION METHOD (Flowing, gas lift, pumping--size and type of pump)	WELL STATUS (Producing or shut-in)					
1/4/06	2-1/2" x 1-1/2" x 14' RHAC SM Plunger Pump	PRODUCING					
DATE OF TEST	HOURS TESTED	CHOKER SIZE	PROD'N. FOR TEST PERIOD	OIL--BBL.	GAS--MCF	WATER--BBL.	GAS-OIL RATIO
30 day ave			----->	68	9	43	132
FLOW, TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL--BBL.	GAS--MCF	WATER--BBL.	OIL GRAVITY--API (CORR.)	
		----->					

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.)

Sold & Used for Fuel

TEST WITNESSED BY

35. LIST OF ATTACHMENTS

**RECEIVED  
MAR 17 2006**

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

SIGNED

*M. Michele Crozier*  
Michele Crozier

DIV. OF OIL, GAS & MINING

DATE: 2/6/2006

37. SUMMARY OF POROUS ZONES: (Show all important zones of porosity and contents thereof; cored intervals, and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures, and recoveries);				38. GEOLOGIC MARKERS		
FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.	NAME	TOP	
					MEAS. DEPTH	TRUE VERT. DEPTH
			<b>Well Name</b> <b>Federal 5-35-8-17</b>	Garden Gulch Mkr	3926'	
				Garden Gulch 1	4098'	
				Garden Gulch 2	4218'	
				Point 3 Mkr	4474'	
				X Mkr	4704'	
				Y-Mkr	4740'	
				Douglas Creek Mkr	4874'	
				BiCarbonate Mkr	5115'	
				B Limestone Mkr	5278'	
				Castle Peak	5714'	
				Basal Carbonate	6131'	
				Total Depth (LOGGERS)	6195'	



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

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

OCT 09 2009

Ref: 8P-W-GW

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

Mr. 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 UT21211-08315  
Well: Federal #5-35-8-17  
SWNW Sec. 35-T8S-R17E  
Duchesne County, UT  
API No.: 43-013-32707

Dear Mr. Sundberg:

Enclosed is your copy of the FINAL Underground Injection Control (UIC) Permit for the proposed Federal #5-35-8-17 injection well. A Statement of Basis that discusses the conditions and requirements of this EPA UIC Permit, is also included.

The Public Comment period for this Permit ended on SEP 25 2009. No comments on the Draft Permit were received during the Public Notice period; therefore the Effective Date for this EPA UIC Permit is the date of issuance. All conditions set forth herein refer to Title 40 Parts 124, 144, 146, and 147 of the Code of Federal Regulations (CFR) and are regulations that are in effect as of the Effective Date of this Permit.

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

RECEIVED

OCT 19 2009



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 Sarah Bahrman of my staff at (303) 312-6243, or toll-free at (800) 227-8917, ext. 312-6243.

FOR RECORD OF

Sincerely,

for

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

enclosure: Final UIC Permit  
Statement of Basis

cc: Final Permit Letter:  
Uintah & Ouray Business Committee, Ute Indian Tribe  
Curtis Cesspooch, Chairman  
Irene Cuch, Vice-Chairwoman  
Frances Poowegup, Councilwoman  
Ronald Groves, Councilman  
Phillip Chimburas, Councilman  
Steven Cesspooch, Councilman

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

All enclosures:

Larry Love, Director  
Energy and Minerals Department  
Ute Indian Tribe

Ferron Secakuku  
Director, Natural Resources  
Ute Indian Tribe



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

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

Michael Guinn, District Manager  
Newfield Production Company  
Myton, Utah





**UNDERGROUND INJECTION CONTROL PROGRAM  
PERMIT**

PREPARED: June 2009

**Permit No. UT21211-08315**

Class II Enhanced Oil Recovery Injection Well

**Federal #5-35-8-17  
Duchesne County, UT**

Issued To

**Newfield Production Company**

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 Company  
1001 Seventeenth Street, Suite 2000  
Denver, CO 80202

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

Federal #5-35-8-17  
2096' FNL & 660' FWL, SWNW S35, T8S, R17E  
Duchesne County, UT

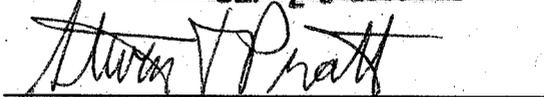
EPA regulates the injection of fluids into injection wells so that injection does not endanger underground sources of drinking water (USDWs). EPA UIC Permit conditions are based on authorities set forth at 40 CFR Parts 144 and 146, and address potential impacts to USDWs.

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: SEP 25 2009

Effective Date SEP 25 2009



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

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

## PART II. SPECIFIC PERMIT CONDITIONS

### Section A. WELL CONSTRUCTION REQUIREMENTS

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

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

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

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

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

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

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

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

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

## **Section C. WELL OPERATION**

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

Injection is approved under the following conditions:

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Monitoring records must include:

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

#### **2. Monitoring Methods.**

- (a) Monitoring observations, measurements, samples, etc. taken for the purpose of complying with these requirements shall be representative of the activity or condition being monitored.

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

### **3. Records Retention.**

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

## PART III. CONDITIONS APPLICABLE TO ALL PERMITS

### Section A. EFFECT OF PERMIT

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

### Section B. CHANGES TO PERMIT CONDITIONS

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

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

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

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

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

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

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

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

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

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

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

### **Section C. SEVERABILITY**

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

### **Section D. CONFIDENTIALITY**

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

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

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

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

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

## **2. Duty to Reapply.**

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

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

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

## **4. Duty to Mitigate.**

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

## **5. Proper Operation and Maintenance.**

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

## **6. Permit Actions.**

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

## **7. Property Rights.**

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

## **8. Duty to Provide Information.**

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

## **9. Inspection and Entry.**

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

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

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

**10. Signatory Requirements.**

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

**11. Reporting Requirements.**

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

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

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

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

## Section F. FINANCIAL RESPONSIBILITY

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

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

### **2. Insolvency.**

In the event of:

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

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

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

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

## APPENDIX A

### WELL CONSTRUCTION REQUIREMENTS

See diagram.

The Federal No. 5-35-8-17 was drilled to a total depth of 6,185 feet (KB) feet in the Basal Carbonate Member of the Green River Formation.

Surface casing (8-5/8 inch) was set at a depth of 300 feet 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 6,185 feet (KB) in a 7-7/8 inch hole with 320 sacks of Premium Lite II and 450 sacks of 50/50 poz mix. This well construction is considered adequate to protect USDWs.

The EPA calculates the top of cement as 194 feet from the surface. The Cement Bond Log (CBL) identifies top of cement at 430 feet. CBL analysis identifies adequate 80% cement bond index within the confining zone.

The schematic diagram shows proposed enhanced recovery injection perforations in the Garden Gulch and Douglas Creek Members of the Green River Formation. Additional perforations may be added at a later time between the depths of 3,930 feet and the top of the Wasatch Formation (Estimated to be 6,256 feet) provided the operator first notifies the Director and later submits an updated well completion report (EPA Form 7520-12) and schematic diagram.

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

# Federal 5-35-8-17

Spud Date: 12/20/08  
 Initial Production: 01/04/09  
 K.T. WIRE, C.T. 0273

Proposed Ejection  
 Wellbore Design

Initial Production: HCPD,  
 MCSE, SWPIS

**SURFACE DATA**

CNO SIZE 4-1/2"  
 GRADE 135  
 WEIGHT 100  
 LENGTH 12000  
 TENSILE STRENGTH 100000  
 YIELD STRENGTH  
 COMMENTS: 100000 Tensile Strength

EPA TOC calc = 194'

**PERFECT ON CASING**

CNO SIZE 4-1/2"  
 GRADE 135  
 WEIGHT 100  
 LENGTH 12000  
 TENSILE STRENGTH 100000  
 YIELD STRENGTH  
 COMMENTS: 100000 Tensile Strength

**LOGGING**

MEASUREMENT 200' x 200'  
 NO OF LOGS 101  
 TUBING ANCHOR 200' x 200'  
 NO OF LOGS 101  
 HEATING SOURCE 200' x 200'  
 INLAND 200' x 200'  
 NO OF LOGS 101  
 TOTAL STRING LENGTH 10000'

80% cement bond  
 index from  
 3902' - 3929'  
 (27ft)

**FRAC JOB**

12200' 5000000' Frac 02L, 03L, 04L water 400000  
 12200' 5000000' Frac 05L, 06L, 07L, 08L, 09L, 10L, 11L, 12L, 13L, 14L, 15L, 16L, 17L, 18L, 19L, 20L, 21L, 22L, 23L, 24L, 25L, 26L, 27L, 28L, 29L, 30L, 31L, 32L, 33L, 34L, 35L, 36L, 37L, 38L, 39L, 40L, 41L, 42L, 43L, 44L, 45L, 46L, 47L, 48L, 49L, 50L, 51L, 52L, 53L, 54L, 55L, 56L, 57L, 58L, 59L, 60L, 61L, 62L, 63L, 64L, 65L, 66L, 67L, 68L, 69L, 70L, 71L, 72L, 73L, 74L, 75L, 76L, 77L, 78L, 79L, 80L, 81L, 82L, 83L, 84L, 85L, 86L, 87L, 88L, 89L, 90L, 91L, 92L, 93L, 94L, 95L, 96L, 97L, 98L, 99L, 100L, 101L, 102L, 103L, 104L, 105L, 106L, 107L, 108L, 109L, 110L, 111L, 112L, 113L, 114L, 115L, 116L, 117L, 118L, 119L, 120L, 121L, 122L, 123L, 124L, 125L, 126L, 127L, 128L, 129L, 130L, 131L, 132L, 133L, 134L, 135L, 136L, 137L, 138L, 139L, 140L, 141L, 142L, 143L, 144L, 145L, 146L, 147L, 148L, 149L, 150L, 151L, 152L, 153L, 154L, 155L, 156L, 157L, 158L, 159L, 160L, 161L, 162L, 163L, 164L, 165L, 166L, 167L, 168L, 169L, 170L, 171L, 172L, 173L, 174L, 175L, 176L, 177L, 178L, 179L, 180L, 181L, 182L, 183L, 184L, 185L, 186L, 187L, 188L, 189L, 190L, 191L, 192L, 193L, 194L, 195L, 196L, 197L, 198L, 199L, 200L, 201L, 202L, 203L, 204L, 205L, 206L, 207L, 208L, 209L, 210L, 211L, 212L, 213L, 214L, 215L, 216L, 217L, 218L, 219L, 220L, 221L, 222L, 223L, 224L, 225L, 226L, 227L, 228L, 229L, 230L, 231L, 232L, 233L, 234L, 235L, 236L, 237L, 238L, 239L, 240L, 241L, 242L, 243L, 244L, 245L, 246L, 247L, 248L, 249L, 250L, 251L, 252L, 253L, 254L, 255L, 256L, 257L, 258L, 259L, 260L, 261L, 262L, 263L, 264L, 265L, 266L, 267L, 268L, 269L, 270L, 271L, 272L, 273L, 274L, 275L, 276L, 277L, 278L, 279L, 280L, 281L, 282L, 283L, 284L, 285L, 286L, 287L, 288L, 289L, 290L, 291L, 292L, 293L, 294L, 295L, 296L, 297L, 298L, 299L, 300L, 301L, 302L, 303L, 304L, 305L, 306L, 307L, 308L, 309L, 310L, 311L, 312L, 313L, 314L, 315L, 316L, 317L, 318L, 319L, 320L, 321L, 322L, 323L, 324L, 325L, 326L, 327L, 328L, 329L, 330L, 331L, 332L, 333L, 334L, 335L, 336L, 337L, 338L, 339L, 340L, 341L, 342L, 343L, 344L, 345L, 346L, 347L, 348L, 349L, 350L, 351L, 352L, 353L, 354L, 355L, 356L, 357L, 358L, 359L, 360L, 361L, 362L, 363L, 364L, 365L, 366L, 367L, 368L, 369L, 370L, 371L, 372L, 373L, 374L, 375L, 376L, 377L, 378L, 379L, 380L, 381L, 382L, 383L, 384L, 385L, 386L, 387L, 388L, 389L, 390L, 391L, 392L, 393L, 394L, 395L, 396L, 397L, 398L, 399L, 400L, 401L, 402L, 403L, 404L, 405L, 406L, 407L, 408L, 409L, 410L, 411L, 412L, 413L, 414L, 415L, 416L, 417L, 418L, 419L, 420L, 421L, 422L, 423L, 424L, 425L, 426L, 427L, 428L, 429L, 430L, 431L, 432L, 433L, 434L, 435L, 436L, 437L, 438L, 439L, 440L, 441L, 442L, 443L, 444L, 445L, 446L, 447L, 448L, 449L, 450L, 451L, 452L, 453L, 454L, 455L, 456L, 457L, 458L, 459L, 460L, 461L, 462L, 463L, 464L, 465L, 466L, 467L, 468L, 469L, 470L, 471L, 472L, 473L, 474L, 475L, 476L, 477L, 478L, 479L, 480L, 481L, 482L, 483L, 484L, 485L, 486L, 487L, 488L, 489L, 490L, 491L, 492L, 493L, 494L, 495L, 496L, 497L, 498L, 499L, 500L, 501L, 502L, 503L, 504L, 505L, 506L, 507L, 508L, 509L, 510L, 511L, 512L, 513L, 514L, 515L, 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682L, 683L, 684L, 685L, 686L, 687L, 688L, 689L, 690L, 691L, 692L, 693L, 694L, 695L, 696L, 697L, 698L, 699L, 700L, 701L, 702L, 703L, 704L, 705L, 706L, 707L, 708L, 709L, 710L, 711L, 712L, 713L, 714L, 715L, 716L, 717L, 718L, 719L, 720L, 721L, 722L, 723L, 724L, 725L, 726L, 727L, 728L, 729L, 730L, 731L, 732L, 733L, 734L, 735L, 736L, 737L, 738L, 739L, 740L, 741L, 742L, 743L, 744L, 745L, 746L, 747L, 748L, 749L, 750L, 751L, 752L, 753L, 754L, 755L, 756L, 757L, 758L, 759L, 760L, 761L, 762L, 763L, 764L, 765L, 766L, 767L, 768L, 769L, 770L, 771L, 772L, 773L, 774L, 775L, 776L, 777L, 778L, 779L, 780L, 781L, 782L, 783L, 784L, 785L, 786L, 787L, 788L, 789L, 790L, 791L, 792L, 793L, 794L, 795L, 796L, 797L, 798L, 799L, 800L, 801L, 802L, 803L, 804L, 805L, 806L, 807L, 808L, 809L, 810L, 811L, 812L, 813L, 814L, 815L, 816L, 817L, 818L, 819L, 820L, 821L, 822L, 823L, 824L, 825L, 826L, 827L, 828L, 829L, 830L, 831L, 832L, 833L, 834L, 835L, 836L, 837L, 838L, 839L, 840L, 841L, 842L, 843L, 844L, 845L, 846L, 847L, 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1727L, 1728L, 1729L, 1730L, 1731L, 1732L, 1733L, 1734L, 1735L, 1736L, 1737L, 1738L, 1739L, 1740L, 1741L, 1742L, 1743L, 1744L, 1745L, 1746L, 1747L, 1748L, 1749L, 1750L, 1751L, 1752L, 1753L, 1754L, 1755L, 1756L, 1757L, 1758L, 1759L, 1760L, 1761L, 1762L, 1763L, 1764L, 1765L, 1766L, 1767L, 1768L, 1769L, 1770L, 1771L, 1772L, 1773L, 1774L, 1775L, 1776L, 1777L, 1778L, 1779L, 1780L, 1781L, 17

## 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.

<b>WELL NAME:</b> Federal #5-35-8-17	
<b>TYPE OF TEST</b>	<b>DATE DUE</b>
Standard Annulus Pressure	Prior to receiving authorization to inject and at least once every five (5) years after the last successful demonstration of Part I Mechanical Integrity
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 #5-35-8-17	1,110

**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 #5-35-8-17			
FORMATION NAME	APPROVED INJECTION INTERVAL (KB, ft)		FRACTURE GRADIENT (psi/ft)
	TOP	BOTTOM	
Green River: Garden Gulch	3,930.00	- 4,873.00	0.690
Green River: Douglas Creek	4,873.00	- 6,131.00	0.770
Green River: Basal Carbonate	6,131.00	- 6,256.00	0.690

**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 #5-35-8-17	
FORMATION NAME	MAXIMUM VOLUME LIMIT (bbis)
Green River: Garden Gulch	
Green River: Douglas Creek	
Green River: Basal Carbonate	

## 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.

<b>OBSERVE MONTHLY AND RECORD AT LEAST ONCE EVERY THIRTY DAYS</b>	
<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)
<b>ANNUALLY</b>	
<b>ANALYZE</b>	Injected fluid total dissolved solids (mg/l)
	Injected fluid specific gravity
	Injected fluid specific conductivity
	Injected fluid pH
<b>ANNUALLY</b>	
<b>REPORT</b>	Each month's maximum and averaged injection pressures (psig)
	Each month's maximum and minimum annulus pressure(s) (psig)
	Each month's injected volume (bbl)
	Fluid volume injected since the well began injecting (bbl)
	Written results of annual injected fluid analysis
	Sources of all fluids injected during the year

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

## APPENDIX E

### PLUGGING AND ABANDONMENT REQUIREMENTS

See Schematic Diagram

The well shall be plugged in a manner that isolates the injection zone and prevents movement of fluid into or between USDWs and in accordance with other applicable Federal, State or local law or regulation. Tubing, packers, and any downhole apparatus shall be removed. Class A, C, G, and H cements, with additives such as accelerators and retarders that control or enhance cement properties, may be used for plugs. However, volume extending additives and gel cements are not approved for plug use. Plug placement shall be verified by tagging. Plugging gel of at least 9.2 lb/gal shall be placed between all plugs. Within 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:

**PLUG NO. 1: Seal Injection Zone:** Set a cast iron bridge plug (CIBP) no more than fifty (50) feet above the top injection perforation. Place at least twenty (20) feet of cement plug on top of the CIBP.

**PLUG NO. 2: Seal Mahogany Shale and Trona intervals:** Squeeze a cement plug on the backside of the 5-1/2 inch casing across the Trona Zone and the Mahogany Shale approximately 3,030 feet to 3,200 feet (unless pre-existing backside cement precludes cement-squeezing this interval) followed by a minimum 170-foot balanced cement plug inside the 5-1/2 inch casing across the Trona Zone and the Mahogany Shale, approximately 3,030 feet to 3,200 feet.

**PLUG NO. 3: Seal USDWs:** Squeeze a cement plug on the backside of the 5-1/2 inch casing across the base of the Uinta formation approximately 1,512 feet to 1,632 feet (unless pre-existing backside cement precludes cement-squeezing this interval), followed by a minimum 120-foot balanced cement plug inside the 5-1/2 inch casing across the base of the Uinta Formation, approximately 1,512 feet to 1,632 feet.

**PLUG NO.4: Seal Surface:** Set a Class "G" cement plug within the 5-1/2 inch casing to 384 feet and up the 5-1/2 inch by 8-5/8 inch casings annulus to the surface.

Federal 5-35-8-17

Well Date: 12/25/15  
 Permit Production: 15/03/16  
 K.B. 300, 05/12/15/15

Proposed P & A  
 Wellbore Diagram

Initial Production: 100 PD,  
 140 PD, 300 PD

SURFACE CASING

LENGTH: 450'  
 GRADE: 150'  
 WEIGHT: 27"  
 LENGTH: 10' (2000)  
 DEPTH LANDING: 100' KH  
 HOLES: 2.04"  
 CEMENT: 100' to 150' (2000) (2000) (2000)

Plug 4  
 Surface  
 to 384'

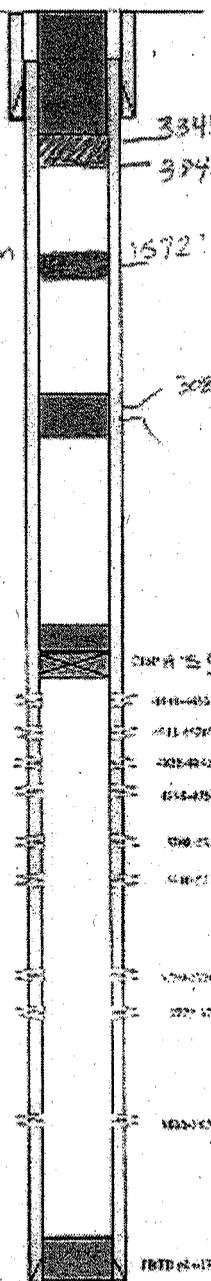
PRODUCTION CASING

LENGTH: 1000'  
 GRADE: 150'  
 WEIGHT: 12.5"  
 LENGTH: 100' (2000)  
 DEPTH LANDING: 100' KH  
 HOLES: 2.04"  
 CEMENT: 100' to 150' (2000) (2000) (2000)  
 HOLES: 2.04"

Plug 3 - 120-foot  
 balanced plug from  
 1512' to 1632'

Plug 2 - 170-foot  
 balanced plug from  
 3030' to 3200'

Plug 1 - CIBP no more than  
 50 feet above top perf.  
 with 20 feet of cement  
 on top.



<b>NEWFIELD</b>
Federal 5-35-8-17
2500' ENL & 500' PWT
3000' W/ 15' 100' R/W
Ditcham Co. Utah
APP# 011-08315; Log# 0110-02205

## APPENDIX F

### CORRECTIVE ACTION REQUIREMENTS

No corrective action is deemed necessary for this project.

# STATEMENT OF BASIS

## NEWFIELD PRODUCTION COMPANY

FEDERAL #5-35-8-17  
DUCHESNE COUNTY, UT

EPA PERMIT NO. UT21211-08315

**CONTACT:** Sarah Bahrman  
U. S. Environmental Protection Agency  
Ground Water Program, 8P-W-GW  
1595 Wynkoop Street  
Denver, Colorado 80202-1129  
Telephone: 1-800-227-8917 ext. 312-6243

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

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

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

## PART I. General Information and Description of Facility

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

on

December 16, 2008

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

Federal #5-35-8-17  
2096' FNL & 660' FWL, SWNW S35, T8S, R17E  
Duchesne 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 No. 5-35-8-17 is currently an active Green River Formation (Garden Gulch-Douglas Creek-Basal Carbonate Members) oil well. It is the initial intent of the applicant to use the current production perforations for Class II enhanced recovery injection. The Federal No. 5-35-8-17 has total depth in the Basal Carbonate Member.

<b>TABLE 1.1</b>		
<b>WELL STATUS / DATE OF OPERATION</b>		
<b>NEW WELLS</b>		
<b>Well Name</b>	<b>Well Status</b>	<b>Date of Operation</b>
Federal #5-35-8-17	New	N/A

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

### Hydrogeologic Setting

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

The Uinta-Animas aquifer in the Uinta Basin is present in water-yielding beds of sandstone, conglomerate, and siltstone of the Duchesne River and Uinta Formations, the Renegade Tongue of the Wasatch Formation, and the Douglas Creek Member of the Green River Formation. The Renegade Tongue of the Wasatch Formation and the Douglas Creek Member of the Green River Formation contain an aquifer along the southern and eastern margins of the basin where the rocks primarily consist of fluvial, massive, irregularly bedded sandstone and siltstone. Water-yielding units in the Uinta-Animas aquifer in the Uinta Basin commonly are separated from each other and from the underlying Mesaverde aquifer by units of low permeability composed of claystone, shale, marlstone, or limestone. In the Uinta Basin, for example, the part of the aquifer in the Duchesne River and Uinta Formations ranges in thickness from 0 feet at the southern margin of the aquifer to as much as 9,000 feet in the north-central part of the aquifer. Ground-water recharge to the Uinta-Animas aquifer generally occurs in the areas of higher altitude along the margins of the basin. Ground water is discharged mainly to streams, springs, and by transpiration from vegetation growing along stream valleys. The rate of groundwater 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 enhanced oil recovery injection well is located in the Eight Mile North Flat Field, which is part of 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 9300 square mi (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 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 ft to 6 ft wide but up to 28 ft wide, may extend many miles in length and occasionally extend as deep as 2000 ft. In this area within the Greater Monument Butte Field there is one known gilsonite vein. This vein is not considered to present a pathway for migration of fluid out of the injection zone because it terminates at depth of about 2000 ft, far above the protective confining layer and much deeper injection zone.

**TABLE 2.1**  
**GEOLOGIC SETTING**  
**Federal #5-35-8-17**

Formation Name	Top (ft)	Base (ft)	TDS (mg/l)	Lithology
Uinta (Pub 92)	0	334	< 10,000	predominantly lenticular fluvial sand and shale, with minor lacustrine carbonates
Uinta	334	1,572		predominantly lenticular fluvial sand and shale, with minor lacustrine carbonates
Green River	1,572	6,256		tight sandstone and interbedded shale forming confining layers between individual permeable lenticular sandstones
Upper Green River: Trona	3,082	3,126		carbonate
Upper Green River: Mahogany Bench	3,126	3,146		oil shale
Upper Green River: Shale	3,718	3,930		lacustrine sand, shale, carbonate, interbedded with fluvial sandstone
Green River: Garden Gulch	3,930	4,873	4,511	lacustrine sand, shale, carbonate, interbedded with fluvial sand and shale
Green River: Douglas Creek	4,873	6,131	4,511	interbedded sand, shale, and limestone
Green River: Basal Carbonate	6,131	6,256	4,511	carbonate
Wasatch	6,256			mudstone, siltstone, lenticular sandstone, shale and conglomerate, identified by reddish color

**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 EPA approved interval for Class II enhanced recovery injection is located between the top of the Garden Gulch Member (3,930 feet) and the top of the Wasatch Formation estimated to be 6,256 feet.

**TABLE 2.2  
INJECTION ZONES  
Federal #5-35-8-17**

Formation Name	Top (ft)	Base (ft)	TDS (mg/l)	Fracture Gradient (psi/ft)	Porosity	Exempted?*
Green River: Garden Gulch	3,930	4,873	4,511	0.690		N/A
Green River: Douglas Creek	4,873	6,131	4,511	0.770		N/A
Green River: Basal Carbonate	6,131	6,256	4,511	0.690		N/A

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

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

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

The 212-foot (3,718 - 3,930 feet) shale Confining Zone overlies the top of the Garden Gulch Member.

**TABLE 2.3  
CONFINING ZONES  
Federal #5-35-8-17**

Formation Name	Formation Lithology	Top (ft)	Base (ft)
Upper Green River: Shale	lacustrine sand, shale, carbonate, interbedded with fluvial sandstone	3,718	3,930

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

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

Throughout the Greater Monument Butte Field area undergoing enhanced oil recovery operations, water analyses of the Green River Formation generally exhibit total dissolved solids (TDS) content

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

The State of Utah Division of Water Rights identifies no public water supply wells within the one-quarter (1/4) mile Area-of-Review (AOR) around the Federal No. 5-35-8-17.

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 334 feet from the surface. However, absent definitive information relative to the water quality of the Uinta Formation, from the depth of 334 feet to the base of the Uinta Formation (1,572 feet), the EPA will require, during plugging and abandonment, a cement plug at the base of the Uinta Formation to prevent contamination of possible Uinta USDWs.

The TDS of water produced from the proposed injection well is less than 10,000 mg/l. However, EPA has evaluated additional data and information and has concluded that the original Green River formation water was saline prior to enhanced oil recovery water flooding. The weight of evidence supports the conclusion that the occasional water sample from this area showing less than 10,000 mg/l total dissolved solids (TDS) is not representative of original Green River formation water, and is attributed to injection of relatively freshwater during enhanced oil recovery operations. Because this freshening effect from water flood operations is considered by EPA to be a temporary, artificial condition, an aquifer exemption is not required for this injection well.

**TABLE 2.4**  
**UNDERGROUND SOURCES OF DRINKING WATER (USDW)**  
**Federal #5-35-8-17**

Formation Name	Formation Lithology	Top (ft)	Base (ft)	TDS (mg/l)
Uinta (Pub 92)	predominantly lenticular fluvial sand and shale, with minor lacustrine carbonates	0	334	< 10,000
Uinta	predominantly lenticular fluvial sand and shale, with minor lacustrine carbonates	334	1,572	

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

**TABLE 3.1**  
**WELL CONSTRUCTION REQUIREMENTS**  
**Federal #5-35-8-17**

Casing Type	Hole Size (in)	Casing Size (in)	Cased Interval (ft)	Cemented Interval (ft)
Longstring	7.88	5.50	0 - 6,185	430 - 6,185
Surface	12.25	8.63	0 - 300	0 - 300

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.

See diagram.

The Federal No. 5-35-8-17 was drilled to a total depth of 6,185 feet (KB) feet in the Basal Carbonate Member of the Green River Formation.

Surface casing (8-5/8 inch) was set at a depth of 300 feet 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 6,185 feet (KB) in a 7-7/8 inch hole with 320 sacks of Premium Lite II and 450 sacks of 50/50 poz mix. This well construction is considered adequate to protect USDWs.

The EPA calculates the top of cement as 194 feet from the surface. The Cement Bond Log (CBL) identifies top of cement at 430 feet. CBL analysis identifies adequate 80% cement bond index within the confining zone.

The schematic diagram shows proposed enhanced recovery injection perforations in the Garden Gulch and Douglas Creek Members of the Green River Formation. Additional perforations may be added at a later time between the depths of 3,930 feet and the top of the Wasatch Formation (Estimated to be 6,256 feet) provided the operator first notifies the Director and later submits an updated well completion report (EPA Form 7520-12) and schematic diagram.

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

### **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 conditions of the Permit.

### Monitoring Devices

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

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

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

**TABLE 4.1  
AOR AND CORRECTIVE ACTION**

Well Name	Type	Status (Abandoned Y/N)	Total Depth (ft)	TOC Depth (ft)	CAP Required (Y/N)
County Line Federal #1-35	Producer	No	6,200	1,850	No
Federal #12-35-8-17	Producer	No	6,125	374	No
Greater Boundary Unit #8-34-8-17	Producer	No	6,289	160	No

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

### Area Of Review

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

than one quarter (1/4) mile or a calculated zone of endangering influence. For Area Permits, a fixed width of not less than one quarter (1/4) mile for the circumscribing area may be used.

### Corrective Action Plan

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

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

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

**TABLE 5.1**  
**INJECTION ZONE PRESSURES**  
Federal #5-35-8-17

Formation Name	Depth Used to Calculate MAIP (ft)	Fracture Gradient (psi/ft)	Initial MAIP (psi)
Green River: Garden Gulch	4,448	0.690	1,110
Green River: Douglas Creek	4,958	0.770	1,635
Green River: Basal Carbonate	6,131	0.690	1,535

### Approved Injection Fluid

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

The proposed injectate will be a blend of drinking-quality water from the Johnson Water District supply line and/or water from the Green River supply line, as well as Green River Formation water from wells proximate to the Federal No. 5-35-8-17 and mixed at the Boundary Injection Facility.

### Injection Pressure Limitation

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

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

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

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

FP = formation fracture pressure (measured at surface)

fg = fracture gradient (from submitted data or tests)

sg = specific gravity (of injected fluid)

d = depth to top of injection zone (or top perforation)

### **Injection Volume Limitation**

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

There will be no restrictions on the cumulative volume or daily volume of authorized Class II fluid to be injected into the approved Green River Formation Interval. The Permittee shall not exceed the maximum authorized injection pressure.

### **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.

Well construction and site-specific conditions dictate the following requirements for Mechanical Integrity (MI) demonstrations:

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

**Part II MI:** The CBL indicates that cement meets minimum requirements needed to demonstrate zone isolation (at least 18 feet of continuous 80% cement bond index, or better) through the Confining Zone. Therefore, further testing for Part II MI will not be required.

## **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.

See Schematic Diagram

The well shall be plugged in a manner that isolates the injection zone and prevents movement of fluid into or between USDWs and in accordance with other applicable Federal, State or local law or regulation. Tubing, packers, and any downhole apparatus shall be removed. Class A, C, G, and H cements, with additives such as accelerators and retarders that control or enhance cement properties, may be used for plugs. However, volume extending additives and gel cements are not approved for plug use. Plug placement shall be verified by tagging. Plugging gel of at least 9.2 lb/gal shall be placed between all plugs. Within 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:

**PLUG NO. 1: Seal Injection Zone:** Set a cast iron bridge plug (CIBP) no more than fifty (50) feet above the top injection perforation. Place at least twenty (20) feet of cement plug on top of the CIBP.

**PLUG NO. 2: Seal Mahogany Shale and Trona intervals:** Squeeze a cement plug on the backside of the 5-1/2 inch casing across the Trona Zone and the Mahogany Shale approximately 3,030 feet to 3,200 feet (unless pre-existing backside cement precludes cement-squeezing this interval)

followed by a minimum 170-foot balanced cement plug inside the 5-1/2 inch casing across the Trona Zone and the Mahogany Shale, approximately 3,030 feet to 3,200 feet.

PLUG NO. 3: Seal USDWs: Squeeze a cement plug on the backside of the 5-1/2 inch casing across the base of the Uinta formation approximately 1,512 feet to 1,632 feet (unless pre-existing backside cement precludes cement-squeezing this interval), followed by a minimum 120-foot balanced cement plug inside the 5-1/2 inch casing across the base of the Uinta Formation, approximately 1,512 feet to 1,632 feet.

PLUG NO.4: Seal Surface: Set a Class "G" cement plug within the 5-1/2 inch casing to 384 feet and up the 5-1/2 inch by 8-5/8 inch casings annulus to the surface.

## **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:

The applicant has demonstrated financial responsibility by a Financial Statement in the amount of \$59,344 that has been approved by the EPA. The Director may revise the amount required, and may require the permittee to obtain and provide updated estimates of costs for plugging the well according to the approved Plugging and Abandonment plan.

Financial Statement, received May 16, 2008

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

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

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

FP = formation fracture pressure (measured at surface)

fg = fracture gradient (from submitted data or tests)

sg = specific gravity (of injected fluid)

d = depth to top of injection zone (or top perforation)

### **Injection Volume Limitation**

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

There will be no restrictions on the cumulative volume or daily volume of authorized Class II fluid to be injected into the approved Green River Formation Interval. The Permittee shall not exceed the maximum authorized injection pressure.

### **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.

Well construction and site-specific conditions dictate the following requirements for Mechanical Integrity (MI) demonstrations:

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

**Part II MI:** The CBL indicates that cement meets minimum requirements needed to demonstrate zone isolation (at least 18 feet of continuous 80% cement bond index, or better) through the Confining Zone. Therefore, further testing for Part II MI will not be required.

## **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.

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

5. LEASE DESIGNATION AND SERIAL NUMBER:

USA UTU-40026

**SUNDRY NOTICES AND REPORTS ON WELLS**

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

7. UNIT or CA AGREEMENT NAME:

GMBU

1. TYPE OF WELL:

OIL WELL  GAS WELL  OTHER

8. WELL NAME and NUMBER:

FEDERAL 5-35-8-17

2. NAME OF OPERATOR:

NEWFIELD PRODUCTION COMPANY

9. API NUMBER:

4301332707

3. ADDRESS OF OPERATOR:

Route 3 Box 3630 CITY Myton STATE UT ZIP 84052

PHONE NUMBER

435.646.3721

10. FIELD AND POOL, OR WILDCAT:

MONUMENT BUTTE

4. LOCATION OF WELL:

FOOTAGES AT SURFACE: 2096 FNL 660 FWL

COUNTY: DUCHESNE

OTR/OTR. SECTION. TOWNSHIP. RANGE. MERIDIAN: SWNW, 35, T8S, R17E

STATE: UT

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

TYPE OF SUBMISSION	TYPE OF ACTION		
<input type="checkbox"/> NOTICE OF INTENT (Submit in Duplicate)  Approximate date work will  _____	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> REPERFORATE CURRENT FORMATION
	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> SIDETRACK TO REPAIR WELL
<input checked="" type="checkbox"/> SUBSEQUENT REPORT (Submit Original Form Only)  Date of Work Completion:  03/11/2010	<input type="checkbox"/> CASING REPAIR	<input type="checkbox"/> NEW CONSTRUCTION	<input type="checkbox"/> TEMPORARITLY ABANDON
	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> TUBING REPAIR
	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> VENT OR FLAIR
	<input type="checkbox"/> CHANGE WELL NAME	<input type="checkbox"/> PLUG BACK	<input type="checkbox"/> WATER DISPOSAL
	<input checked="" type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> PRODUCTION (START/STOP)	<input type="checkbox"/> WATER SHUT-OFF
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> OTHER: -
	<input checked="" type="checkbox"/> CONVERT WELL TYPE	<input type="checkbox"/> RECOMPLETE - DIFFERENT FORMATION	

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

The subject well has been converted from a producing oil well to an injection well on 03/08/2010.

On 03/08/2010 Jason Deardorff with the EPA was contacted concerning the initial MIT on the above listed well. Permission was given at that time to perform the test on 03/08/2010. On 03/11/2010 the casing was pressured up to 1195 psig and charted for 30 minutes with no pressure loss. The well was not injecting during the test. The tubing pressure was 325 psig during the test. There was not an EPA representative available to witness the test.

EPA# UT21211-08315 API# 43-013-32707

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

NAME (PLEASE PRINT) Lucy Chavez-Naupoto

TITLE Administrative Assistant

SIGNATURE



DATE 03/23/2010

(This space for State use only)

**RECEIVED**  
**MAR 29 2010**  
DIV. OF OIL, GAS & MINING

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
OMB No. 1004-0137  
Expires: July 31, 2010

**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.  
USA UTU-40026

6. If Indian, Allottee or Tribe Name.

**SUBMIT IN TRIPLICATE - Other Instructions on page 2**

7. If Unit or CA/Agreement, Name and/or  
GMBU

1. Type of Well  
 Oil Well  Gas Well  Other

8. Well Name and No.  
FEDERAL 5-35-8-17

2. Name of Operator  
NEWFIELD PRODUCTION COMPANY

9. API Well No.  
4301332707

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

3b. Phone (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)  
2096 FNL 660 FWL  
SWNW Section 35 T8S R17E

11. County or Parish, State  
DUCHESNE, UT

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

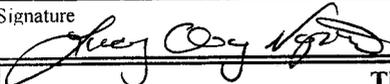
TYPE OF SUBMISSION	TYPE OF ACTION			
<input type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input checked="" type="checkbox"/> Subsequent Report	<input type="checkbox"/>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

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

The subject well has been converted from a producing oil well to an injection well on 03/08/2010.

On 03/08/2010 Jason Deardorff with the EPA was contacted concerning the initial MIT on the above listed well. Permission was given at that time to perform the test on 03/08/2010. On 03/11/2010 the casing was pressured up to 1195 psig and charted for 30 minutes with no pressure loss. The well was not injecting during the test. The tubing pressure was 325 psig during the test. There was not an EPA representative available to witness the test.

EPA# UT21211-08315 API# 43-013-32707

I hereby certify that the foregoing is true and correct (Printed/ Typed) Lucy Chavez-Nauboto	Title Administrative Assistant
Signature 	Date 03/23/2010
<b>THIS SPACE FOR FEDERAL OR STATE OFFICE USE</b>	

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

**RECEIVED**

**MAR 29 2010**

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

## Daily Activity Report

Format For Sundry

**FEDERAL 5-35-8-17**

**1/1/2010 To 5/30/2010**

**3/6/2010 Day: 1**

**Conversion**

WWS #7 on 3/6/2010 - LD rod string & pump. - MIRU Western rig #7. RU HO trk to annulus & pump 60 BW @ 250°F. RU pumping unit & unseat rod pump. Flush tbg & rods W/ 30 BW @ 250°F. Re-seat pump, soft joint rod string & strip off flow-T. Fill tbg W/ 10 BW. Pressure test tbg to 3000 psi. Retrieve rod string & unseat pump. TOH & LD rod string and pump. Re-flushed rods twice more on TOH W/ add'l 30 bbls. SIFN..

**Daily Cost:** \$0

**Cumulative Cost:** \$10,584

**3/8/2010 Day: 3**

**Conversion**

WWS #7 on 3/8/2010 - Set & test packer. RDMOSU. - Thaw wellhead & tbg stump W/ HO trk. Tbg pressure @ 2100 psi. RU HO trk & bump pressure to 3000 psi. Final test held solid for 30 minutes. Retrieve standing valve W/ overshot on sandline. ND BOP & land tbg on flange. Mix 15 gals Multi-Chem C-6031 & 5 gals B-8850 in 70 bbls fresh water. Pump dn annulus @ 90°F. PU on tbg & set pkr W/ SN @ 4406', CE @ 4410' & EOT @ 4414'. Land tbg W/ 15,000# tension. NU wellhead. Pressure test annulus & pkr to 1500 psi. Bled air & bumped back up to 1500 psi. Final test held solid for 1 hour. RDMOSU. Well ready for MIT. - ND wellhead & release TA @ 5840'. NU BOP. RU HO trk & flush tbg W/ 40 BW @ 250°F. TOH & talley production tbg. Break each connection, clean & inspect pins and apply Liquid O-ring to pins. LD btm 50 jts tbg and BHA. Re-flushed tbg W/ add'l 30 BW halfway out. MU & TIH W/ Weatherford 5 1/2" Arrowset 1-X packer (W/ wicker slips & W.L. re-entry guide), new 2 7/8 SN & 144 jts 2 7/8 8rd 6.5# J-55 tbg. RU HO trk & pump 10 bbl pad. Drop standing valve & pump to SN. Pressure test tbg to 3000 psi. Leave pressure on overnight. - RU Vaughn Energy Services & run gyro survey. RDWLT. - ND wellhead & release TA @ 5840'. NU BOP. RU HO trk & flush tbg W/ 40 BW @ 250°F. TOH & talley production tbg. Break each connection, clean & inspect pins and apply Liquid O-ring to pins. LD btm 50 jts tbg and BHA. Re-flushed tbg W/ add'l 30 BW halfway out. MU & TIH W/ Weatherford 5 1/2" Arrowset 1-X packer (W/ wicker slips & W.L. re-entry guide), new 2 7/8 SN & 144 jts 2 7/8 8rd 6.5# J-55 tbg. RU HO trk & pump 10 bbl pad. Drop standing valve & pump to SN. Pressure test tbg to 3000 psi. Leave pressure on overnight. - Thaw wellhead & tbg stump W/ HO trk. Tbg pressure @ 2100 psi. RU HO trk & bump pressure to 3000 psi. Final test held solid for 30 minutes. Retrieve standing valve W/ overshot on sandline. ND BOP & land tbg on flange. Mix 15 gals Multi-Chem C-6031 & 5 gals B-8850 in 70 bbls fresh water. Pump dn annulus @ 90°F. PU on tbg & set pkr W/ SN @ 4406', CE @ 4410' & EOT @ 4414'. Land tbg W/ 15,000# tension. NU wellhead. Pressure test annulus & pkr to 1500 psi. Bled air & bumped back up to 1500 psi. Final test held solid for 1 hour. RDMOSU. Well ready for MIT. - RU Vaughn Energy Services & run gyro survey. RDWLT.

**Daily Cost:** \$0

**Cumulative Cost:** \$19,970

**3/12/2010 Day: 4**

**Conversion**

Rigless on 3/12/2010 - MIT on Well - On 3/8/2010 Jason Deardorff with the EPA was contacted concerning the initial MIT on the above listed well (Federal 5-35-8-17). Permission was given at that time to perform the test on 3/8/2010. On 3/11/2010 the csg was pressured up to 1195 psig and charted for 30 minutes with no pressure loss. The well was not injecting

during the test. The tbg pressure was 325 psig during the test. There was not an EPA representative available to witness the test. EPA# UT21211-08315 API# 43-013-32707

**Finalized**

**Daily Cost:** \$0

**Cumulative Cost:** \$20,270

---

**Pertinent Files: Go to File List**

# 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: 03 / 11 / 2010  
 Test conducted by: Lynn Monson  
 Others present: \_\_\_\_\_

Well Name: <u>Federal 5-35-8-17</u>	Type: ER SWD	Status: AC TA UC
Field: <u>Monument Butte</u>		
Location: <u>SW/NW</u> Sec: <u>35</u> T <u>8</u> N <u>10</u> R <u>17</u> <u>E/W</u> County: <u>Duchesne</u> State: <u>UT</u>		
Operator: <u>New Field</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: 0 psig

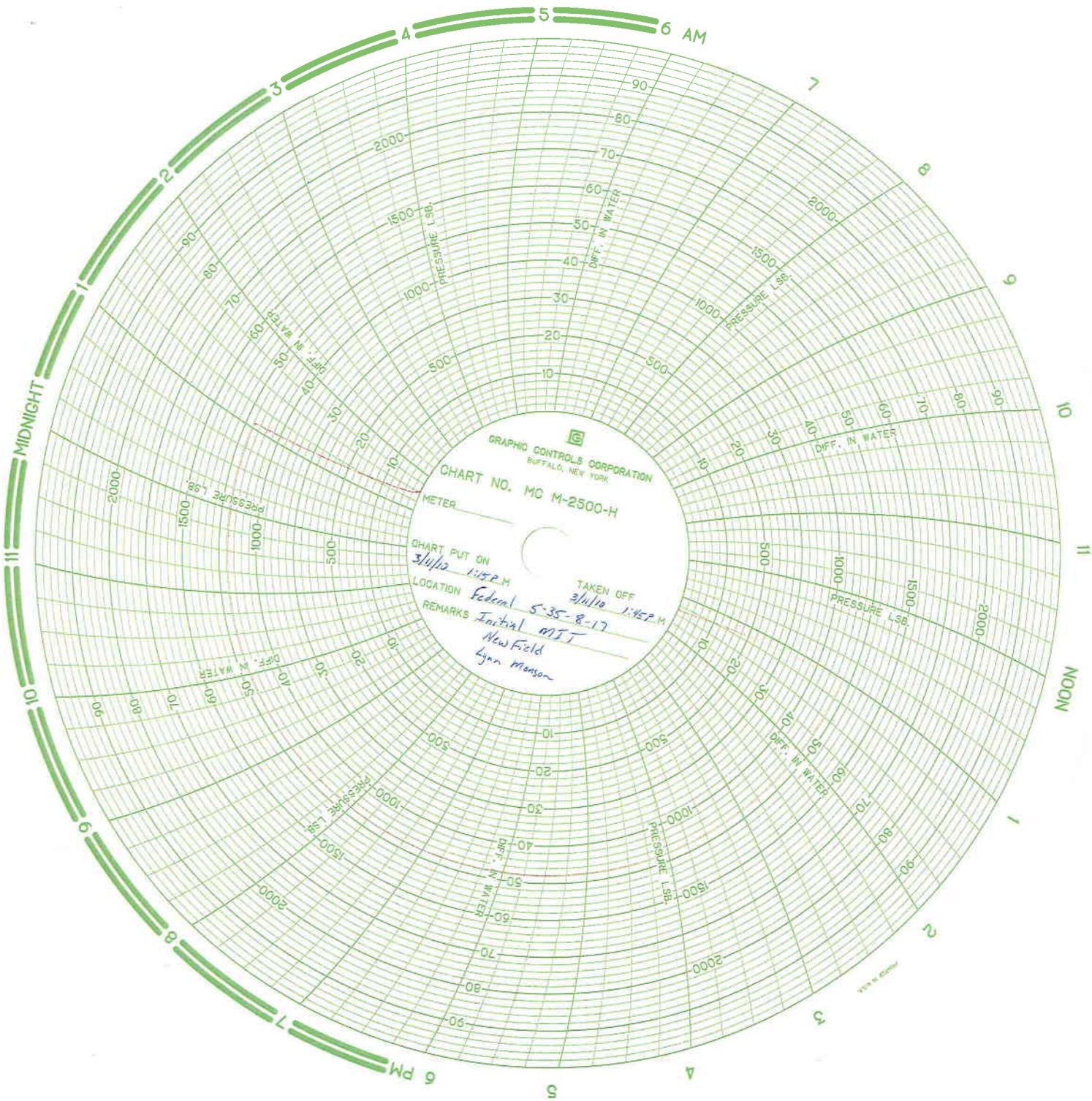
MIT DATA TABLE	Test #1	Test #2	Test #3
<b>TUBING PRESSURE</b>			
Initial Pressure	<u>325</u> psig	psig	psig
End of test pressure	<u>325</u> psig	psig	psig
<b>CASING / TUBING ANNULUS PRESSURE</b>			
0 minutes	<u>1195</u> psig	psig	psig
5 minutes	<u>1195</u> psig	psig	psig
10 minutes	<u>1195</u> psig	psig	psig
15 minutes	<u>1195</u> psig	psig	psig
20 minutes	<u>1195</u> psig	psig	psig
25 minutes	<u>1195</u> psig	psig	psig
30 minutes	<u>1195</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: \_\_\_\_\_





**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 8**

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

**APR 08 2010**

Ref: 8P-W-GW

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

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

Mr. Michael Guinn  
District Manager  
Newfield Production Company  
Route 3 - Box 3630  
Myton, UT 84052

RE: Underground Injection Control (UIC)  
Authorization to Commence Injection  
EPA UIC Permit UT21211-08315  
Well: Federal 5-35-8-17  
SWNW Sec. 35-T8S-R17E  
Duchesne County, UT  
API No.: 43-013-32707

Dear Mr. Guinn:

The Environmental Protection Agency Region 8 (EPA) has received Newfield Production Company's (Newfield) March 23, 2010, 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 EPA, satisfactorily completing all Prior to Commencing Injection Requirements for UIC Permit UT21211-08315.

As of the date of this letter, Newfield is authorized to commence injection into the Federal 5-35-8-17 well at a Maximum Allowable Injection Pressure (MAIP) of 1,110 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 EPA's UIC Technical Enforcement Program. Therefore, please direct all monitoring and compliance correspondence to Nathan Wisner at the following address, referencing the well name and UIC Permit number on all correspondence:

**RECEIVED**

**APR 15 2010**

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

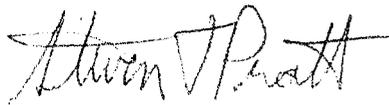
Mr. Nathan Wisner  
U.S. EPA Region 8: 8ENF-UFO  
1595 Wynkoop Street  
Denver, CO 80202-1129

Or, you may reach Mr. Wisner by telephone at 303-312-6211, or 1 800-227-8927, ext. 312-6211.

Please remember that it is your responsibility to be aware of and to comply with all conditions of injection well Permit UT21211-08315.

If you have questions regarding the above action, please call Jason Deardorff at 303-312-6583 or 1-800-227-8917, ext. 312-6583.

Sincerely,



for

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

cc: Uintah & Ouray Business Committee:  
Curtis Cesspooch, Chairman  
Ronald Groves, Councilman  
Irene Cuch, Vice-Chairwoman  
Steven Cesspooch, Councilman  
Phillip Chimburas, Councilman  
Frances Poowegup, Councilwoman

Daniel Picard  
BIA - Uintah & Ouray Indian Agency

Ferron Secakuku  
Director, Natural Resources  
Ute Indian Tribe

Larry Love  
Director of Energy & Minerals Dept.  
Ute Indian Tribe

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

Fluid Minerals Engineering Office  
BLM - Vernal Office

Eric Sundberg, Regulatory Analyst  
Newfield Production Company



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

5. LEASE DESIGNATION AND SERIAL NUMBER:  
USA UTU-40026

**SUNDRY NOTICES AND REPORTS ON WELLS**

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6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7. UNIT or CA AGREEMENT NAME:  
GMBU

1. TYPE OF WELL:  
OIL WELL  GAS WELL  OTHER

8. WELL NAME and NUMBER:  
FEDERAL 5-35-8-17

2. NAME OF OPERATOR:  
NEWFIELD PRODUCTION COMPANY

9. API NUMBER:  
4301332707

3. ADDRESS OF OPERATOR:  
Route 3 Box 3630 CITY Myton STATE UT ZIP 84052

PHONE NUMBER  
435.646.3721

10. FIELD AND POOL, OR WILDCAT:  
MONUMENT BUTTE

4. LOCATION OF WELL:  
FOOTAGES AT SURFACE: 2096 FNL 660 FWL  
  
OTR/OTR. SECTION. TOWNSHIP. RANGE. MERIDIAN: SWNW, 35, T8S, R17E

COUNTY: DUCHESNE  
  
STATE: UT

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

TYPE OF SUBMISSION	TYPE OF ACTION		
<input checked="" type="checkbox"/> NOTICE OF INTENT (Submit in Duplicate)  Approximate date work will <u>04/14/2010</u>	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> REPERFORATE CURRENT FORMATION
	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> SIDETRACK TO REPAIR WELL
<input type="checkbox"/> SUBSEQUENT REPORT (Submit Original Form Only)  Date of Work Completion:	<input type="checkbox"/> CASING REPAIR	<input type="checkbox"/> NEW CONSTRUCTION	<input type="checkbox"/> TEMPORARILY ABANDON
	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> TUBING REPAIR
	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> VENT OR FLAIR
	<input type="checkbox"/> CHANGE WELL NAME	<input type="checkbox"/> PLUG BACK	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> PRODUCTION (START/STOP)	<input type="checkbox"/> WATER SHUT-OFF
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input checked="" type="checkbox"/> OTHER: - Put on Injection
	<input checked="" type="checkbox"/> CONVERT WELL TYPE	<input type="checkbox"/> RECOMPLETE - DIFFERENT FORMATION	

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.  
The above reference well was put on injection at 7:30 PM on 04-14-2010.

EPA: UT21211-08315

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

NAME (PLEASE PRINT) Lucy Chavez-Naupoto TITLE Administrative Assistant

SIGNATURE  DATE 04/15/2010

(This space for State use only)

**RECEIVED**  
**APR 20 2010**  
**DIV. OF OIL, GAS & MINING**

<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		<b>FORM 9</b>
		<b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> UTU-40026
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>		<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</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>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 5-35-8-17
<b>2. NAME OF OPERATOR:</b> NEWFIELD PRODUCTION COMPANY		<b>9. API NUMBER:</b> 43013327070000
<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> MONUMENT BUTTE
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 2096 FNL 0660 FWL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: SWNW Section: 35 Township: 08.0S Range: 17.0E Meridian: S		<b>COUNTY:</b> DUCHESNE
		<b>STATE:</b> UTAH

11.

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

TYPE OF SUBMISSION	TYPE OF ACTION		
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start:	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> CASING REPAIR
<input checked="" type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion: 2/9/2015	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> CHANGE WELL NAME
<input type="checkbox"/> SPUD REPORT Date of Spud:	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> CONVERT WELL TYPE
<input type="checkbox"/> DRILLING REPORT Report Date:	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> NEW CONSTRUCTION
	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> PLUG BACK
	<input type="checkbox"/> PRODUCTION START OR RESUME	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION
	<input type="checkbox"/> REPERFORATE CURRENT FORMATION	<input type="checkbox"/> SIDETRACK TO REPAIR WELL	<input type="checkbox"/> TEMPORARY ABANDON
	<input type="checkbox"/> TUBING REPAIR	<input type="checkbox"/> VENT OR FLARE	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> WATER SHUTOFF	<input type="checkbox"/> SI TA STATUS EXTENSION	<input type="checkbox"/> APD EXTENSION
	<input type="checkbox"/> WILDCAT WELL DETERMINATION	<input checked="" type="checkbox"/> OTHER	OTHER: <input type="text" value="5 YR MIT"/>

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

5 YR MIT performed on the above listed well. On 02/09/2015 the casing was pressured up to 1073 psig and charted for 30 minutes with no pressure loss. The well was injecting during the test. The tbq pressure was 1433 psig during the test. There was not an EPA representative available to witness the test. EPA #UT22197-08315

**Accepted by the  
Utah Division of  
Oil, Gas and Mining  
FOR RECORD ONLY  
February 17, 2015**

<b>NAME (PLEASE PRINT)</b> Lucy Chavez-Naupoto	<b>PHONE NUMBER</b> 435 646-4874	<b>TITLE</b> Water Services Technician
<b>SIGNATURE</b> N/A	<b>DATE</b> 2/11/2015	

## 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: 02 109 15  
 Test conducted by: Michael Jensen  
 Others present: \_\_\_\_\_

Well Name: <u>Federal 5-35-8-17</u>	Type: ER SWD	Status: AC TA UC
Field: <u>Monument Butte</u>		
Location: <u>SW/WW</u> Sec: <u>35</u> T <u>8</u> N <u>(S)</u> R <u>17</u> E/W County: <u>Duchesne</u> State: <u>UT</u>		
Operator: <u>New Field</u>		
Last MIT: <u>1</u> / <u>1</u>	Maximum Allowable Pressure: <u>1586</u>	PSIG

Is this a regularly scheduled test?  Yes  No  
 Initial test for permit?  Yes  No  
 Test after well rework?  Yes  No  
 Well injecting during test?  Yes  No      If Yes, rate: 180 bpd

Pre-test casing/tubing annulus pressure: 0/1423 psig

MIT DATA TABLE	Test #1	Test #2	Test #3
<b>TUBING PRESSURE</b>			
Initial Pressure	<u>1423</u> psig	psig	psig
End of test pressure	<u>1433</u> psig	psig	psig
<b>CASING / TUBING ANNULUS PRESSURE</b>			
0 minutes	<u>1073.8</u> psig	psig	psig
5 minutes	<u>1073.6</u> psig	psig	psig
10 minutes	<u>1073.6</u> psig	psig	psig
15 minutes	<u>1073.4</u> psig	psig	psig
20 minutes	<u>1073.0</u> psig	psig	psig
25 minutes	<u>1072.8</u> psig	psig	psig
30 minutes	<u>1073.0</u> psig	psig	psig
_____ minutes	psig	psig	psig
_____ minutes	psig	psig	psig
<b>RESULT</b>	<input checked="" type="checkbox"/> Pass <input type="checkbox"/> Fail	<input type="checkbox"/> Pass <input type="checkbox"/> Fail	<input type="checkbox"/> Pass <input type="checkbox"/> Fail

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

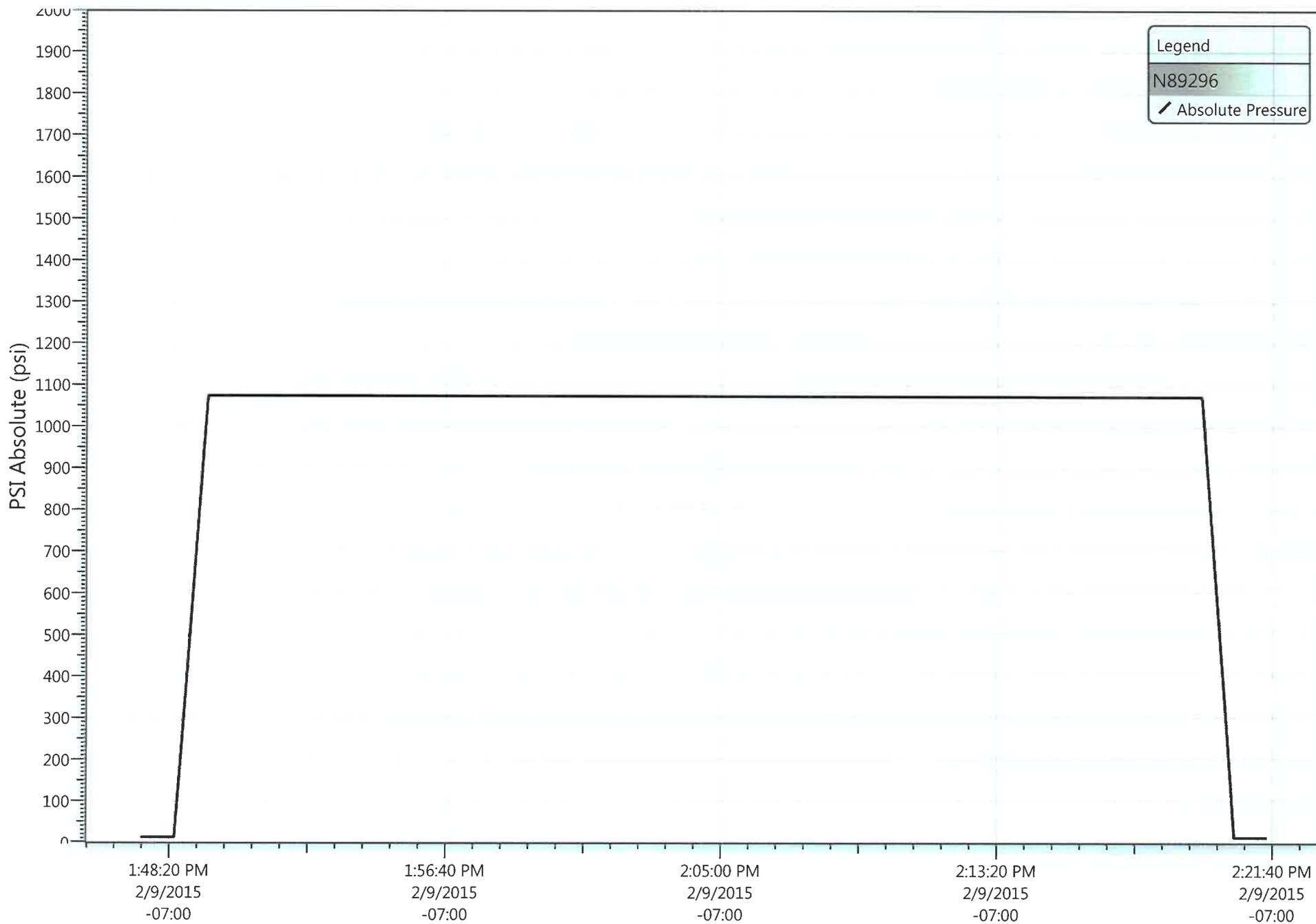
### MECHANICAL INTEGRITY PRESSURE TEST

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

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

### Federal 5-35-8-17 5 Year MIT (2-9-15)

2/9/2015 1:47:22 PM



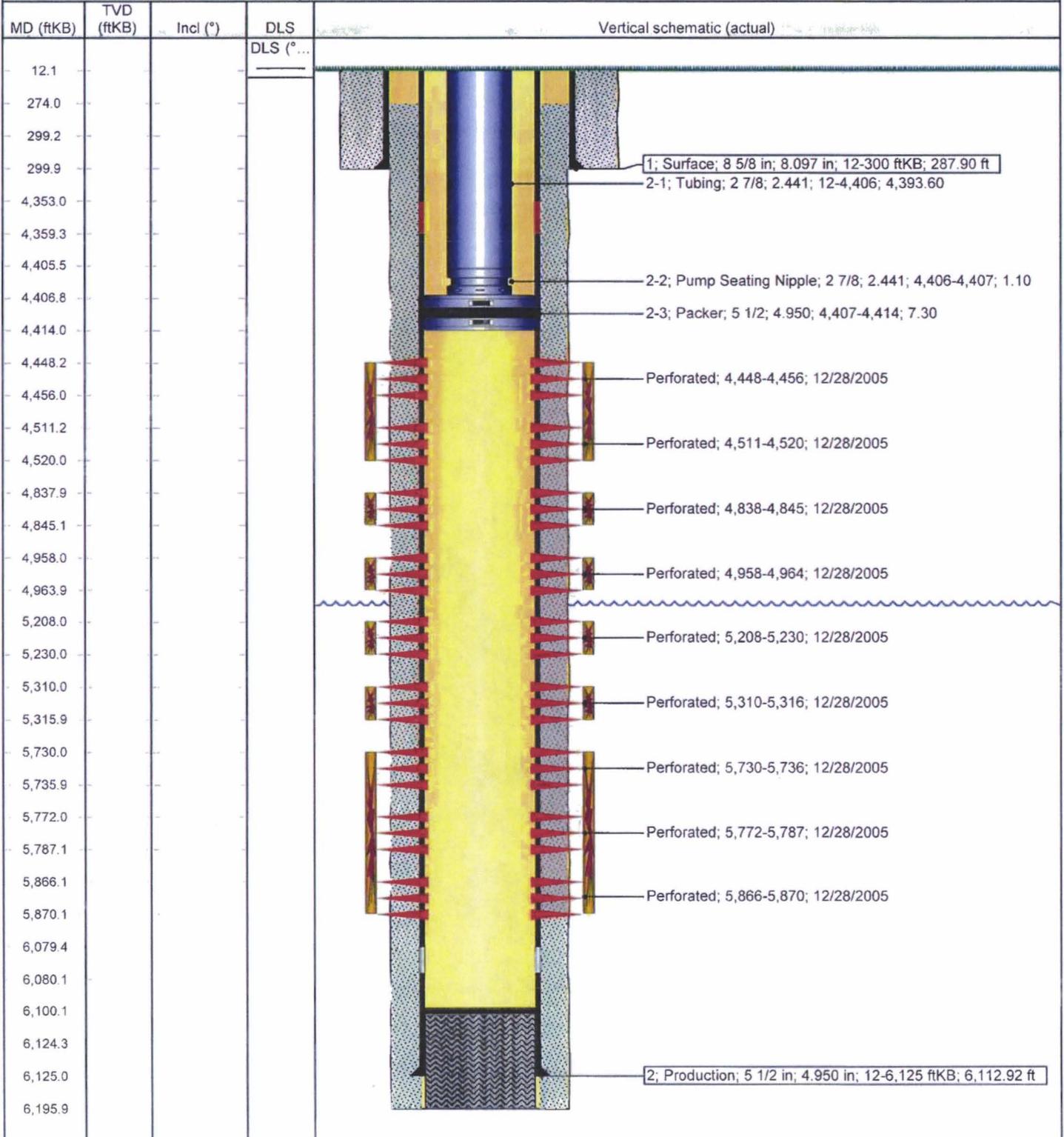
Well Name: **Federal 5-35-8-17**

**43-013-32707**

Surface Legal Location 35-8S-17E	API/UWI 43013327070000	Well RC 500150868	Lease	State/Province Utah	Field Name GMBU CTB7	County Duchesne
Spud Date	Rig Release Date	On Production Date 1/4/2006	Original KB Elevation (ft) 5,085	Ground Elevation (ft) 5,073	Total Depth All (TVD) (ftKB)	PBTD (All) (ftKB) Original Hole - 6,100.0

<b>Most Recent Job</b>				
Job Category Testing	Primary Job Type	Secondary Job Type N/A	Job Start Date 2/9/2015	Job End Date 2/9/2015

**TD: 6,196.0** Vertical - Original Hole, 9/15/2015 1:53:25 PM





## Newfield Wellbore Diagram Data Federal 5-35-8-17

Surface Legal Location 35-8S-17E		API/UWI 43013327070000		Lease	
County Duchesne		State/Province Utah		Basin	
Well Start Date 12/2/2005		Spud Date		Final Rig Release Date	
Original KB Elevation (ft) 5,085		Ground Elevation (ft) 5,073		Total Depth (ftKB) 6,196.0	
				Total Depth All (TVD) (ftKB)	
				PBTD (All) (ftKB) Original Hole - 6,100.0	

### Casing Strings

Csg Des	Run Date	OD (in)	ID (in)	Wt/Len (lb/ft)	Grade	Set Depth (ftKB)
Surface	12/2/2005	8 5/8	8.097	24.00	J-55	300
Production	12/11/2005	5 1/2	4.950	15.50	J-55	6,125

### Cement

#### String: Surface, 300ftKB 12/4/2005

Cementing Company	Top Depth (ftKB) 12.0	Bottom Depth (ftKB) 300.0	Full Return?	Vol Cement Ret (bbl)
Fluid Description 2% CaCL2 + 1/4#/sk Cello-Flake mixed	Fluid Type Lead	Amount (sacks) 160	Class G	Estimated Top (ftKB) 12.0

#### String: Production, 6,125ftKB 12/11/2005

Cementing Company	Top Depth (ftKB) 274.0	Bottom Depth (ftKB) 6,196.0	Full Return?	Vol Cement Ret (bbl)
Fluid Description	Fluid Type Lead	Amount (sacks) 320	Class Premilite II	Estimated Top (ftKB) 274.0
Fluid Description	Fluid Type Tail	Amount (sacks) 450	Class 50/50 poz	Estimated Top (ftKB) 3,000.0

### Tubing Strings

Tubing Description Tubing					Run Date 3/5/2010	Set Depth (ftKB) 4,414.0			
Item Des	Jts	OD (in)	ID (in)	Wt (lb/ft)	Grade	Len (ft)	Top (ftKB)	Btm (ftKB)	
Tubing	144	2 7/8	2.441	6.50	J-55	4,393.60	12.0	4,405.6	
Pump Seating Nipple	1	2 7/8	2.441			1.10	4,405.6	4,406.7	
Packer	1	5 1/2	4.950			7.30	4,406.7	4,414.0	

### Rod Strings

Rod Description					Run Date	Set Depth (ftKB)			
Item Des	Jts	OD (in)	Wt (lb/ft)	Grade	Len (ft)	Top (ftKB)	Btm (ftKB)		

### Perforation Intervals

Stage#	Zone	Top (ftKB)	Btm (ftKB)	Shot Dens (shots/ft)	Phasing (*)	Nom Hole Dia (in)	Date
6	GB6, Original Hole	4,448	4,456	4			12/28/2005
6	PB7, Original Hole	4,511	4,520	4			12/28/2005
5	DS3, Original Hole	4,838	4,845	4			12/28/2005
4	D2, Original Hole	4,958	4,964	4			12/28/2005
3	B2, Original Hole	5,208	5,230	4			12/28/2005
2	A.5, Original Hole	5,310	5,316	4			12/28/2005
1	CP 5, Original Hole	5,730	5,736	4			12/28/2005
1	CP1, Original Hole	5,772	5,787	4			12/28/2005
1	CP2, Original Hole	5,866	5,870	4			12/28/2005

### Stimulations & Treatments

Stage#	ISIP (psi)	Frac Gradient (psi/ft)	Max Rate (bbl/min)	Max PSI (psi)	Total Clean Vol (bbl)	Total Slurry Vol (bbl)	Vol Recov (bbl)
1	1,700	0.73	25.3	1,905			
2	1,345	0.69	25.3	2,010			
3	1,650	0.75	25.3	1,780			
4	1,650	0.77	25.3	1,705			
5	1,950	0.84	25.3	1,805			
6	2,480	0.99	25.3	2,530			

### Proppant

Stage#	Total Prop Vol Pumped (lb)	Total Add Amount
1		Proppant Sand 89991 lb
2		Proppant Sand 18843 lb
3		Proppant Sand 89704 lb
4		Proppant Sand 28840 lb
5		Proppant Sand 19781 lb
6		Proppant Sand 99785 lb