



May 18, 2006

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

RE: Applications for Permit to Drill: Federal 5-19-9-16, 9-22-9-16, 3-23-9-16, 4-23-9-16, 11-23-9-16, 12-23-9-16, 13-23-9-16, 14-23-9-16, 15-23-9-16, and 16-23-9-16.

Dear Diana:

Enclosed find APD's on the above referenced wells. The proposed Federal 11-23-9-16 is an Exception Location. Our Land Department will send you the required Exception Location Letter. If you have any questions, feel free to give either Shon Mckinnon or myself a call.

Sincerely,

Mandie Crozier  
Regulatory Specialist

mc  
enclosures

**RECEIVED**  
**MAY 19 2006**

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

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. <b>UTU-15855</b>
6. If Indian, Allottee or Tribe Name <b>N/A</b>
7. If Unit or CA Agreement, Name and No. <b>N/A</b>
8. Lease Name and Well No. <b>Federal 12-23-9-16</b>
9. API Well No. <b>43-013-33179</b>
10. Field and Pool, or Exploratory <b>Monument Butte</b>
11. Sec., T., R., M., or Blk. and Survey or Area <b>NW/SW Sec. 23, T9S R16E</b>
12. County or Parish <b>Duchesne</b>
13. State <b>UT</b>

1a. Type of Work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		
1b. Type of Well: <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other <input checked="" type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		
2. Name of Operator <b>Newfield Production Company</b>		
3a. Address <b>Route #3 Box 3630, Myton UT 84052</b>	3b. Phone No. (include area code) <b>(435) 646-3721</b>	
4. Location of Well (Report location clearly and in accordance with any State requirements.)* At surface <b>NW/SW 2120' FSL 794' FWL 577445 X 40.014946</b> At proposed prod. zone <b>4429600 Y - 110.092553</b>		
14. Distance in miles and direction from nearest town or post office* <b>Approximatley 19.2 miles southwest of Myton, Utah</b>		17. Spacing Unit dedicated to this well <b>40 Acres</b>
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) <b>Approx. 794' f/lse, NA' f/unit</b>	16. No. of Acres in lease <b>1200.00</b>	20. BLM/BIA Bond No. on file <b>UTB000192</b>
18. Distance from proposed* location to nearest well, drilling, completed, applied for, on this lease, ft. <b>Approx. 1244'</b>	19. Proposed Depth <b>5916'</b>	23. Estimated duration <b>Approximately seven (7) days from spud to rig release</b>
21. Elevations (Show whether DF, KDB, RT, GL, etc.) <b>5774' GL</b>	22. Approximate date work will start* <b>3rd Quarter 2006</b>	

**24. Attachments**

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

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

25. Signature 	Name (Printed/Typed) <b>Mandie Crozier</b>	Date <b>5/18/06</b>
Title <b>Regulatory Specialist</b>		
Approved by (Signature) 	Name (Printed/Typed) <b>BRADLEY G. HILL</b>	Date <b>05-25-06</b>
Title <b>ENVIRONMENTAL MANAGER</b>		

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

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

\*(Instructions on reverse)

**Federal Approval of this  
Action is Necessary**

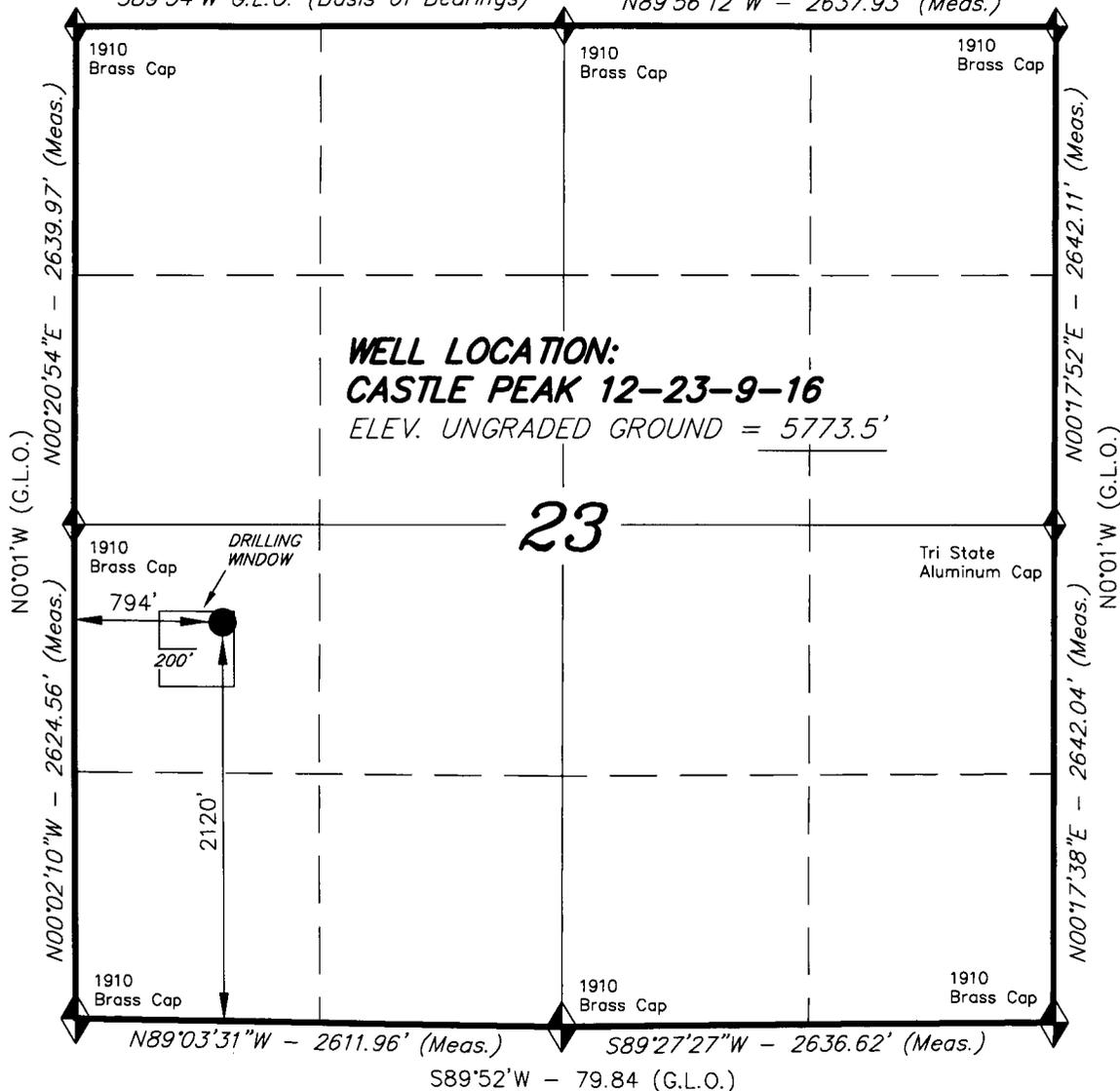
**RECEIVED  
MAY 19 2006  
DIV. OF OIL, GAS & MINING**

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

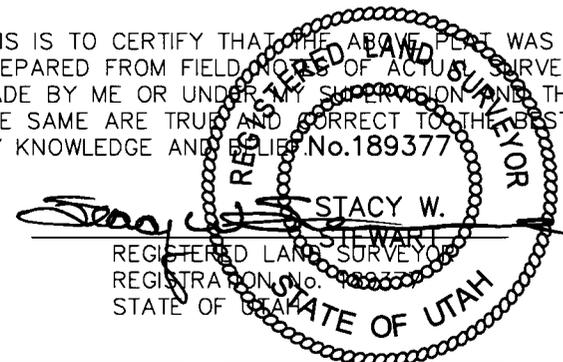
NEWFIELD PRODUCTION COMPANY

2623.06' (Measured) S89°54'W - 79.82 (G.L.O.)  
 S89°54'W G.L.O. (Basis of Bearings) N89°56'12"W - 2637.93' (Meas.)

WELL LOCATION, CASTLE PEAK 12-23-9-16,  
 LOCATED AS SHOWN IN THE NW 1/4 SW 1/4  
 OF SECTION 23, T9S, R16E, S.L.B.&M.  
 DUCHESNE COUNTY, UTAH.



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



◆ = SECTION CORNERS LOCATED

BASIS OF ELEV;  
 U.S.G.S. 7-1/2 min QUAD (MYTON SE)

CASTLE PEAK 12-23-9-16  
 (Surface Location) NAD 83  
 LATITUDE = 40° 00' 53.66"  
 LONGITUDE = 110° 05' 35.37"

## TRI STATE LAND SURVEYING & CONSULTING

180 NORTH VERNAL AVE. - VERNAL, UTAH 84078  
 (435) 781-2501

DATE SURVEYED: 4-18-06	SURVEYED BY: C.M.
DATE DRAWN: 04-24-06	DRAWN BY: F.T.M.
REVISED:	SCALE: 1" = 1000'

NEWFIELD PRODUCTION COMPANY  
FEDERAL #12-23-9-16  
NW/SW SECTION 23, T9S, R16E  
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' – 2221'
Green River	2221'
Wasatch	5916'

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

Green River Formation 2221' – 5916' - 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 #12-23-9-16  
NW/SW SECTION 23, T9S, R16E  
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 #12-23-9-16 located in the NW 1/4 SW 1/4 Section 23, T9S, R16E, 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 - 11.7 miles  $\pm$  to it's junction with an existing dirt road to the southwest; proceed southwesterly - 5.6 miles  $\pm$  to it's junction with the beginning of the proposed access road to the southeast; proceed southeasterly along the proposed access road - 0.3 miles  $\pm$  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**

All permanent surface equipment will be painted Carlsbad Canyon.  
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 (Proposed location and access roads leading to).

12. **OTHER ADDITIONAL INFORMATION**

The Archaeological Resource Survey and Paleontological Resource Survey for this area are attached. MOAC Report #05-270, 9/7/05. Paleontological Resource Survey prepared by, Wade E. Miller, 9/28/05. See attached report cover pages, Exhibit "D".

For the Federal #12-23-9-16 Newfield Production Company requests a 350' ROW be granted in Lease UTU-64379, a 490' ROW be granted in Lease UTU-74392, and 750' of disturbed area be granted in Lease UTU-15855 to allow for construction of the proposed access road. **Refer to Topographic Map "B"**. The proposed access road will be an 18' crown road (9' either side of the centerline) with drainage ditches along either side of the proposed road whether it is deemed necessary in order to handle any run-off from normal meteorological conditions that are prevalent to this area. The maximum grade will be less than 8%. There will be no culverts required along this access road. There will be barrow ditches and turnouts as needed along this road. There are no fences encountered along this proposed road. There will be no new gates or cattle guards required. All construction material for this access road will be borrowed material accumulated during construction of the access road.

Newfield Production Company requests a 350' ROW be granted in Lease UTU-64379, a 490' ROW be granted in Lease UTU-74392, and 750' of disturbed area be granted in Lease UTU-15855 to allow for construction of the proposed gas lines. It is proposed that the ROW and disturbed area will be 50' wide to allow for construction of a buried 6" gas gathering line, and a buried 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.

**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**

A 12 mil liner with felt is required. 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)

Western Wheatgrass	<i>Pascopyrum Smithii</i>	6 lbs/acre
Galletta Grass	<i>Hilaria Jamesii</i>	6 lbs/acre

**Details of the On-Site Inspection**

The proposed Federal #12-23-9-16 was on-sited on 3/22/06. The following were present; Shon Mckinnon (Newfeild Production), Nate West (Bureau of Land Management), and Brandon McDonald (Bureau of Landmanagement). Weather conditions were clear and ground cover was 100% open.

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

Representative

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

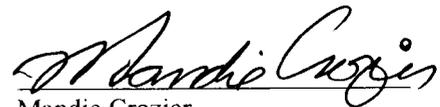
Certification

Please be advised that NEWFIELD PRODUCTION COMPANY is considered to be the operator of well #12-23-9-16 NW/SW Section 23, Township 9S, Range 16E: Lease UTU-15855 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 US Specialty Insurance #B001832.

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.

5/18/06

Date

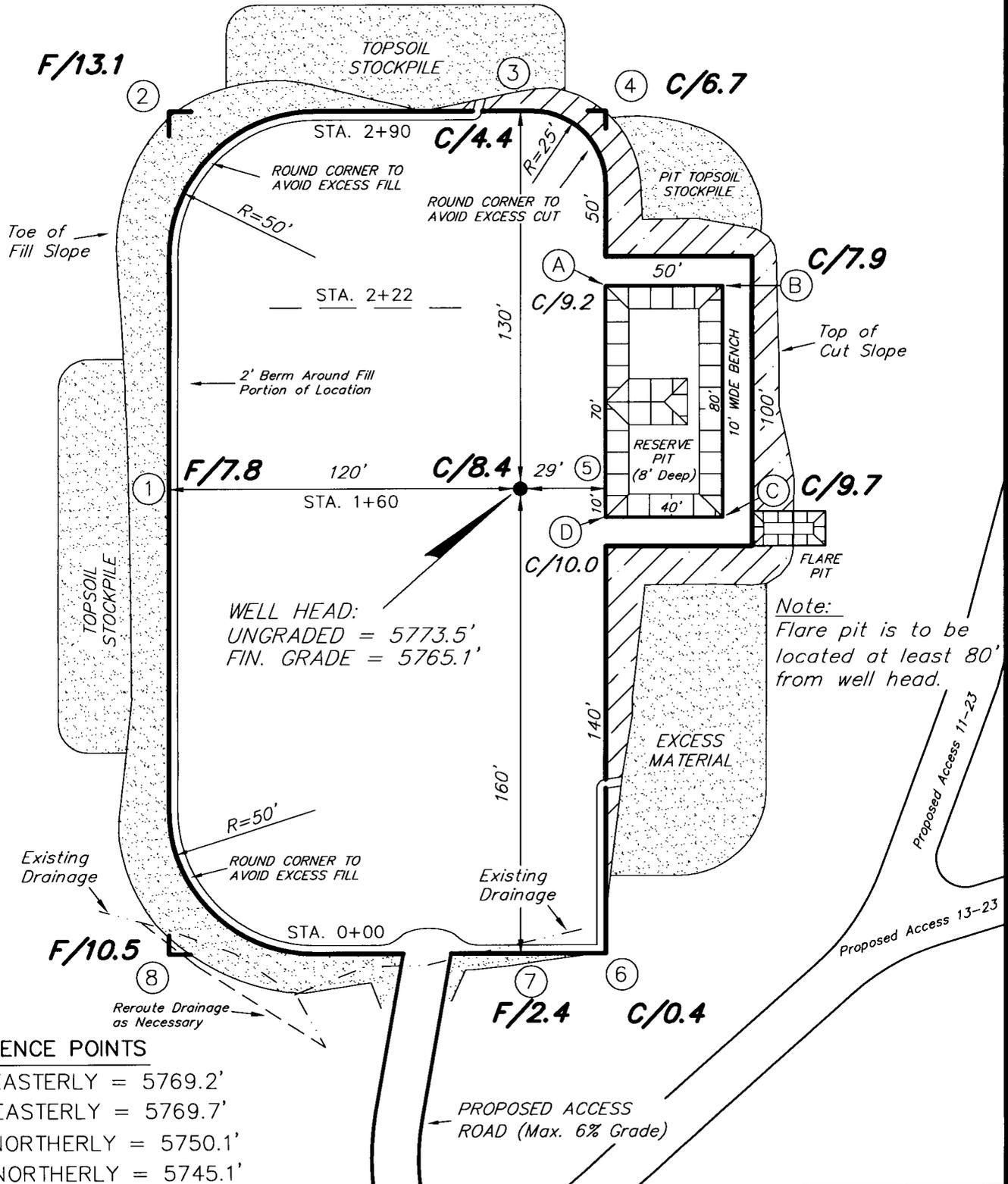
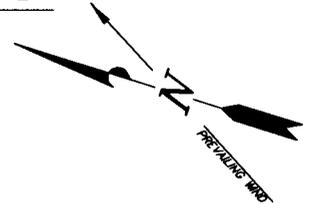


Mandie Crozier  
Regulatory Specialist  
Newfield Production Company

# NEWFIELD PRODUCTION COMPANY

CASTLE PEAK 12-23-9-16

Section 23, T9S, R16E, S.L.B.&M.



**REFERENCE POINTS**

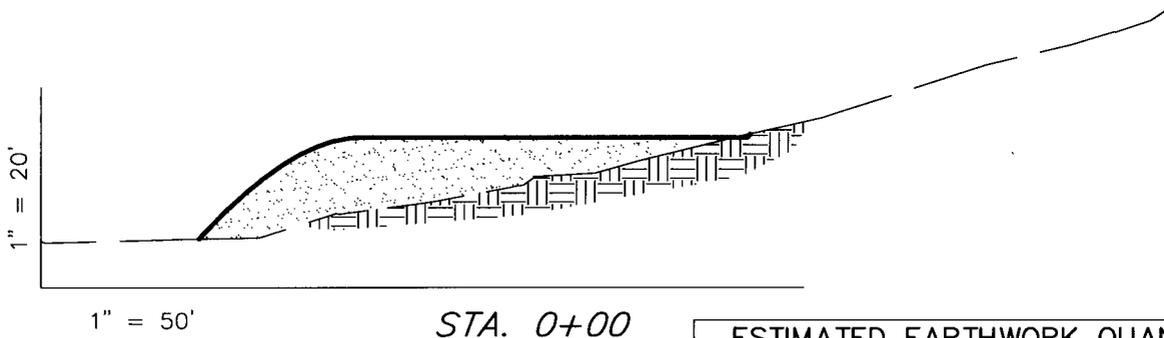
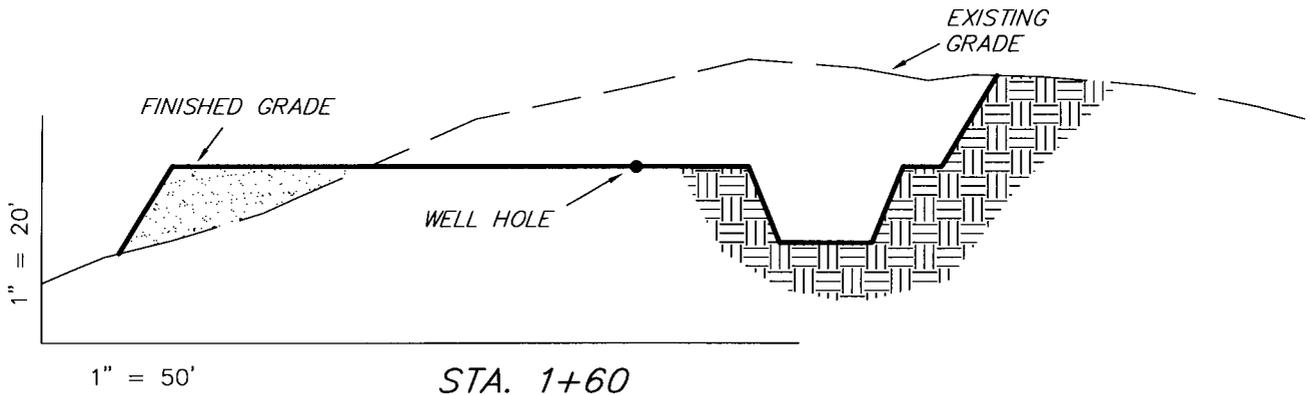
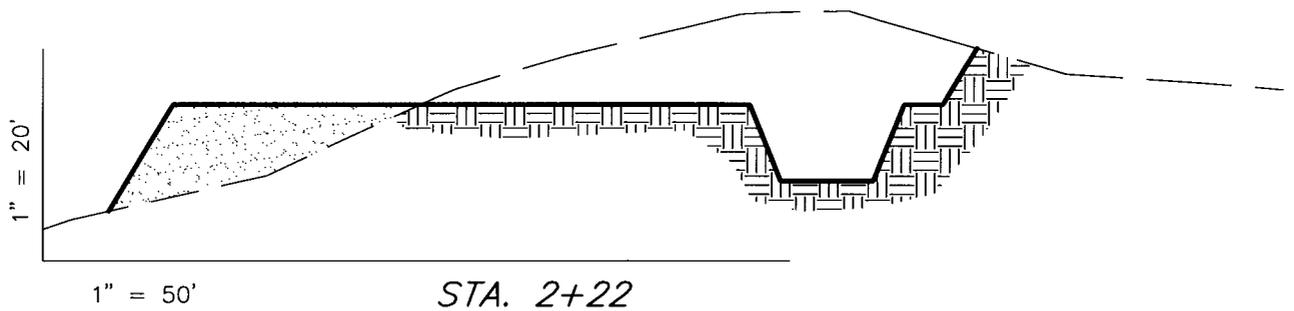
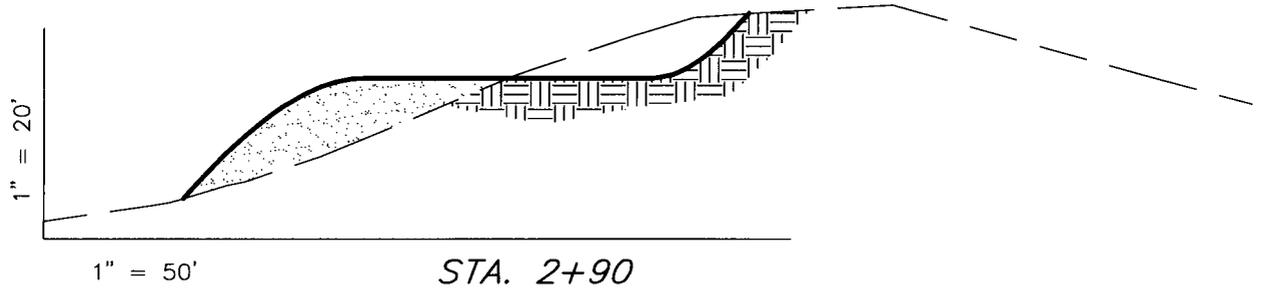
- 180' EASTERLY = 5769.2'
- 230' EASTERLY = 5769.7'
- 170' NORTHERLY = 5750.1'
- 220' NORTHERLY = 5745.1'

SURVEYED BY: C.M.	SCALE: 1" = 50'	<b>Tri State</b> Land Surveying, Inc. 180 NORTH VERNAL AVE. VERNAL, UTAH 84078	(435) 781-2501
DRAWN BY: F.T.M.	DATE: 04-24-06		

# NEW FIELD PRODUCTION COMPANY

## CROSS SECTIONS

### CASTLE PEAK 12-23-9-16



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	5,300	5,300	Topsoil is not included in Pad Cut	0
PIT	640	0		640
TOTALS	5,940	5,300	1,070	640

SURVEYED BY: C.M.

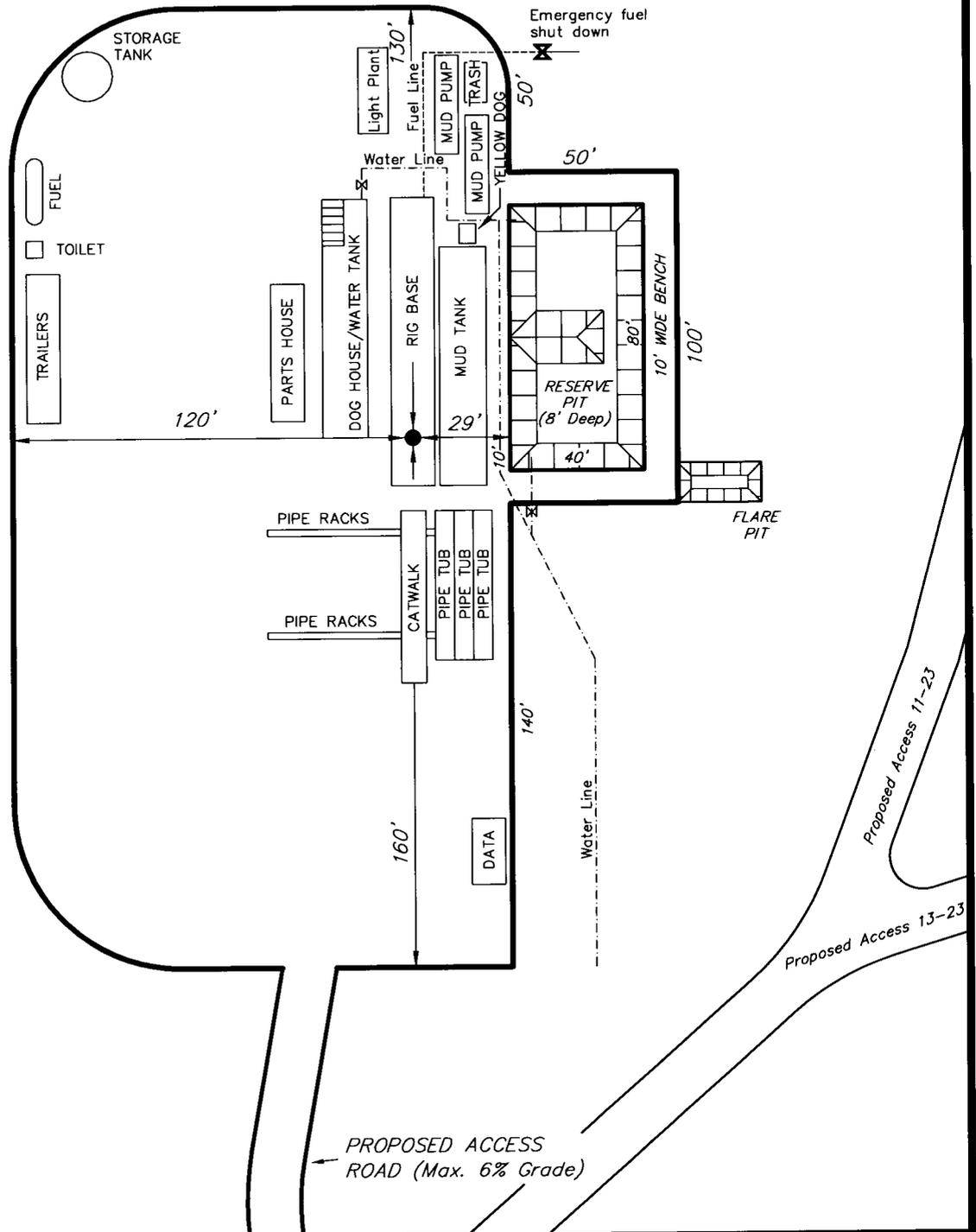
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DRAWN BY: F.T.M.

DATE: 04-24-06

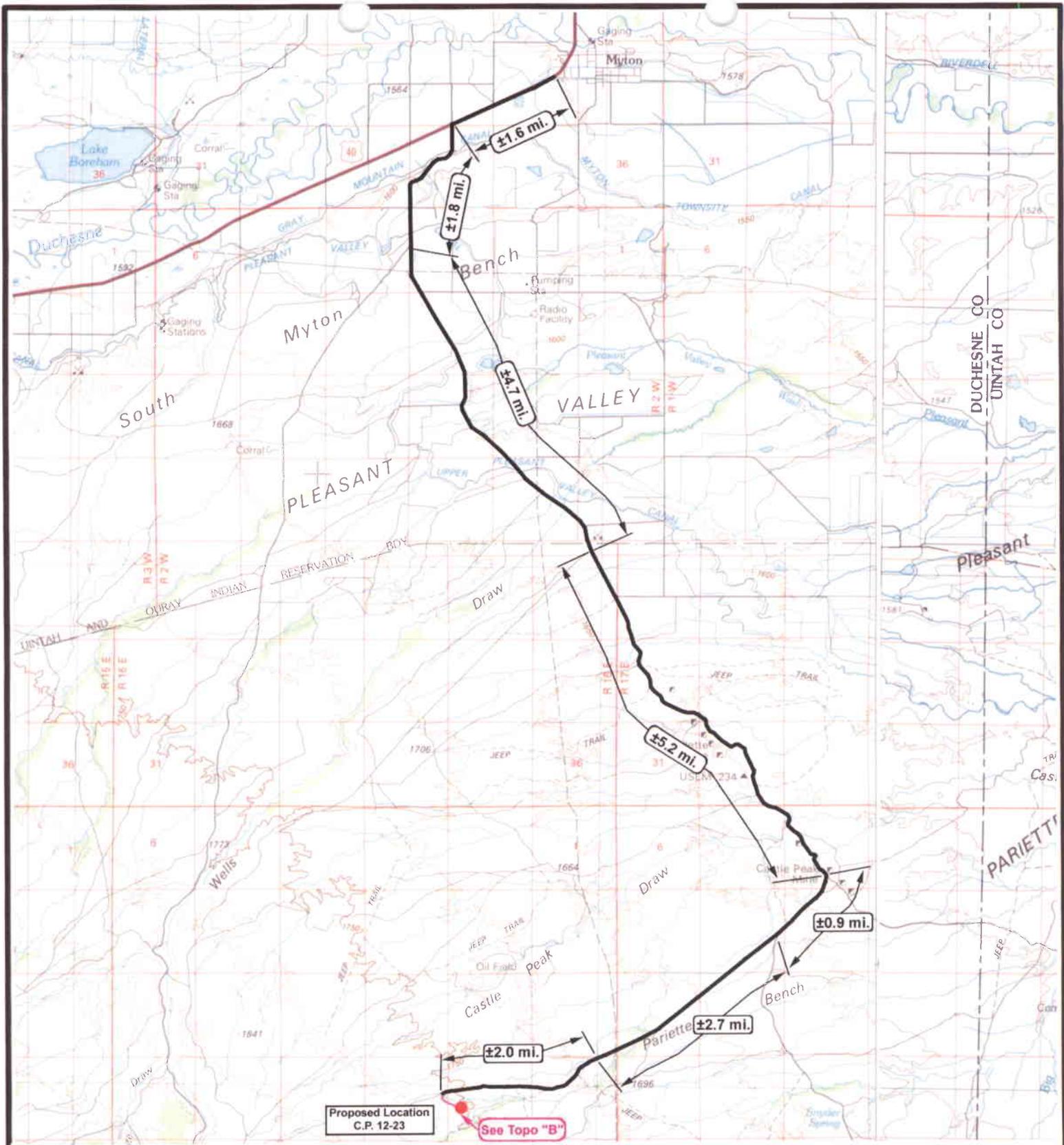
**Tri State** (435) 781-2501  
Land Surveying, Inc.  
180 NORTH VERNAL AVE. VERNAL, UTAH 84078

**NEWFIELD PRODUCTION COMPANY**  
**TYPICAL RIG LAYOUT**  
**CASTLE PEAK 12-23-9-16**



SURVEYED BY: C.M.	SCALE: 1" = 50'
DRAWN BY: F.T.M.	DATE: 04-24-06

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



Proposed Location  
C.P. 12-23

See Topo "B"

**NEWFIELD**  
Exploration Company

**Castle Peak 12-23-9-16**  
**SEC. 23, T9S, R16E, S.L.B.&M.**



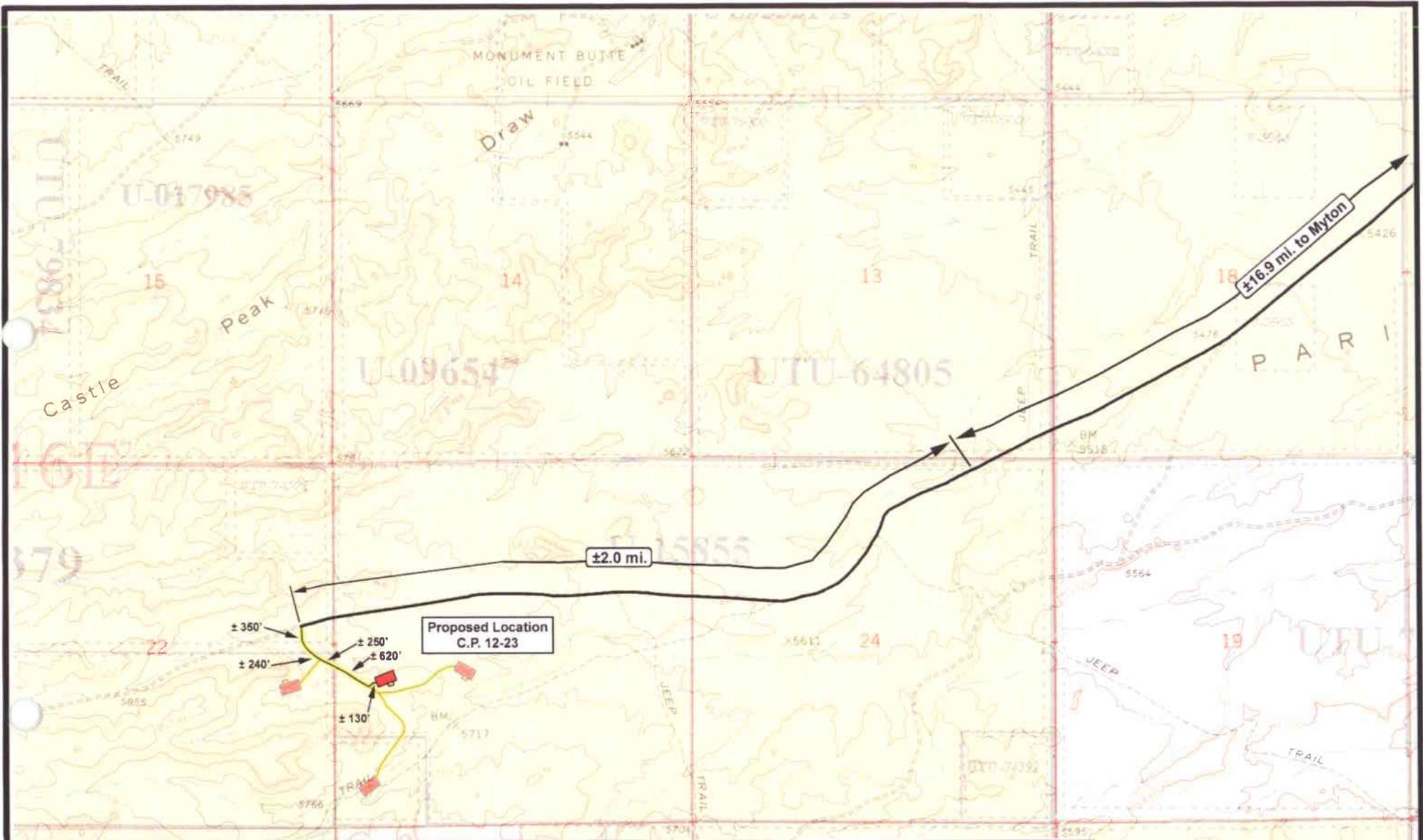
*Tri-State*  
Land Surveying Inc.  
(435) 781-2501  
180 North Vernal Ave. Vernal, Utah 84078

SCALE: 1 = 100,000  
DRAWN BY: mw  
DATE: 04-25-2006

**Legend**

- Existing Road
- Proposed Access

**TOPOGRAPHIC MAP**  
**"A"**



**NEWFIELD**  
Exploration Company

**Castle Peak 12-23-9-16**  
**SEC. 23, T9S, R16E, S.L.B.&M.**



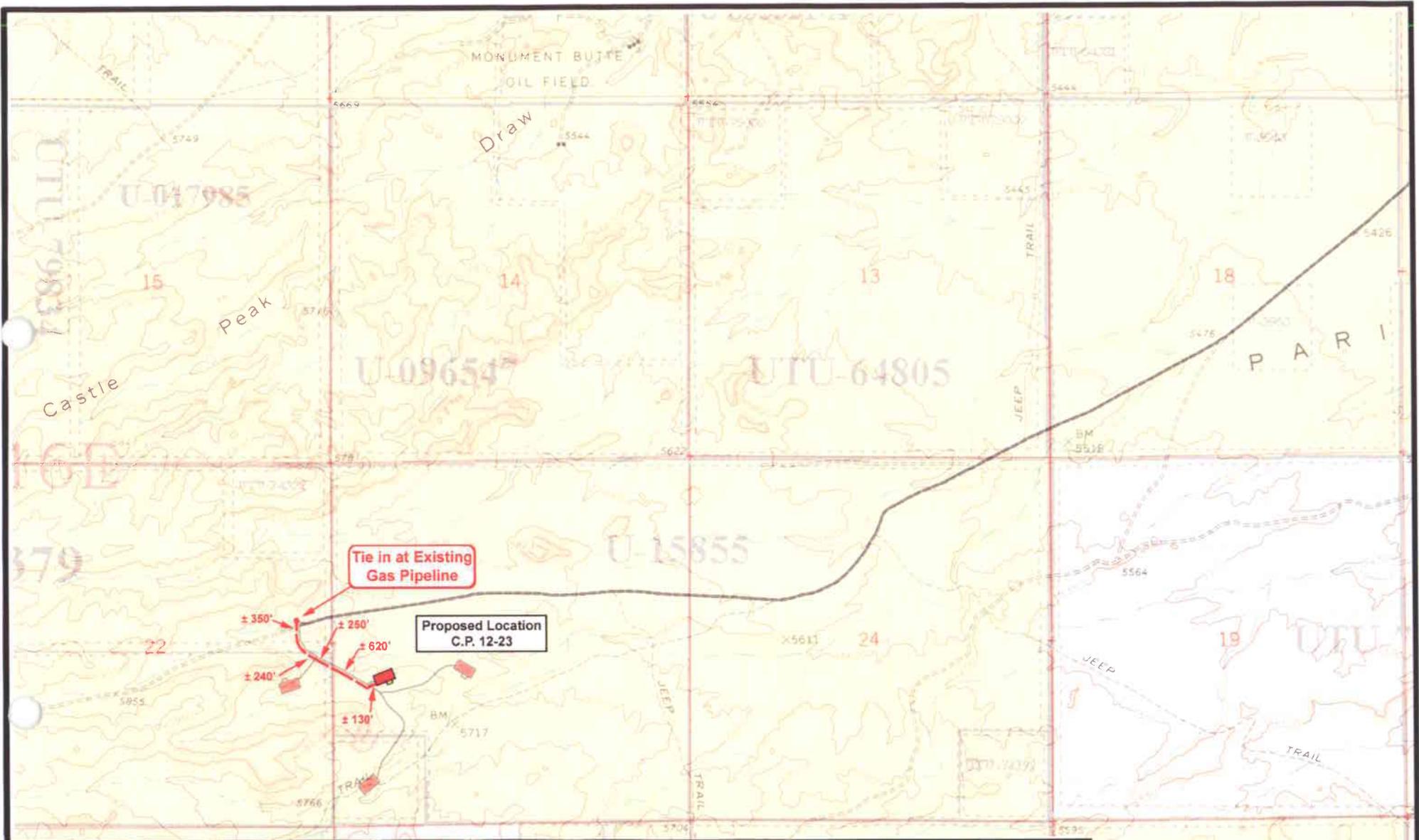
*Tri-State*  
Land Surveying Inc.  
(435) 781-2501  
180 North Vernal Ave. Vernal, Utah 84078

SCALE: 1" = 2,000'  
DRAWN BY: mw  
DATE: 4-25-2006

**Legend**

- Existing Road
- Proposed Access

TOPOGRAPHIC MAP  
**"B"**



**Castle Peak 12-23-9-16  
SEC. 23, T9S, R16E, S.L.B.&M.**

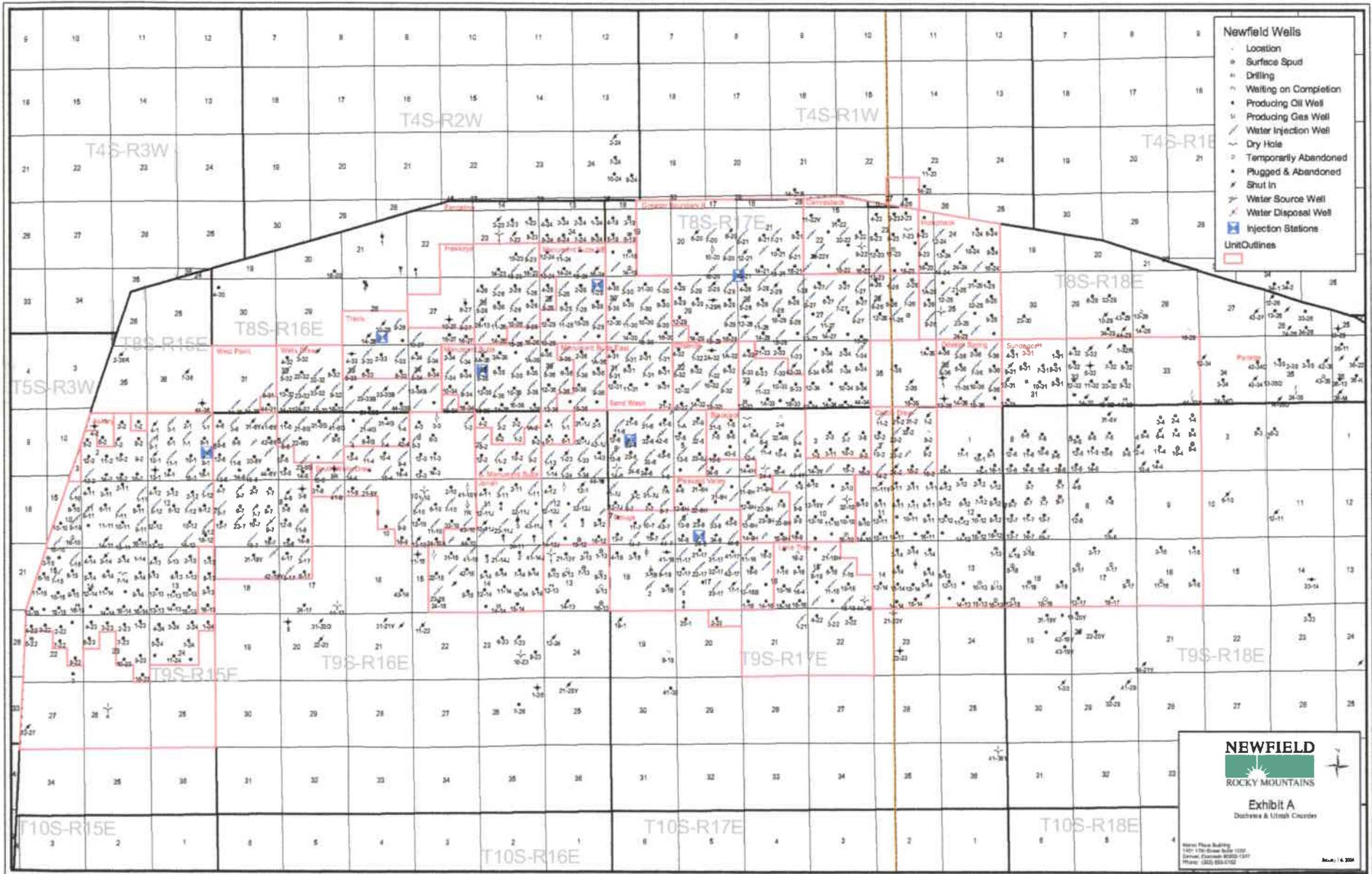
**Tri-State Land Surveying Inc.**  
 (435) 781-2501  
 180 North Vernal Ave. Vernal, Utah 84078

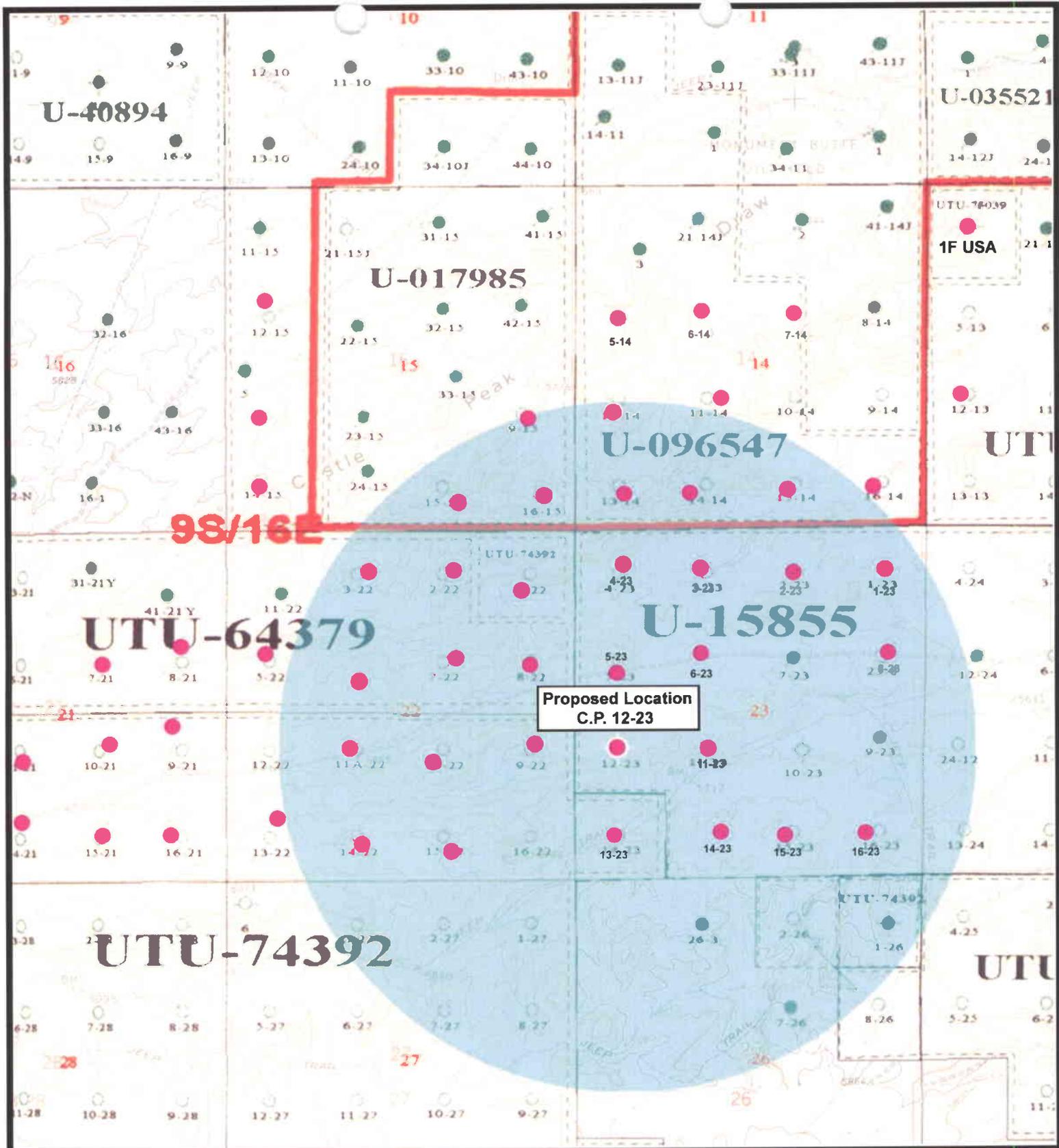
SCALE: 1" = 2,000'  
 DRAWN BY: mw  
 DATE: 04-25-2006

**Legend**

- Roads
- - - Proposed Gas Line

TOPOGRAPHIC MAP  
**"C"**





Proposed Location  
C.P. 12-23



**NEWFIELD**  
Exploration Company

**Castle Peak 12-23-9-16**  
**SEC. 23, T9S, R16E, 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: mw**  
**DATE: 04-25-2006**

**Legend**

- Well Locations
- One-Mile Radius

**Exhibit "B"**

# 2-M SYSTEM

Blowout Prevention Equipment Systems

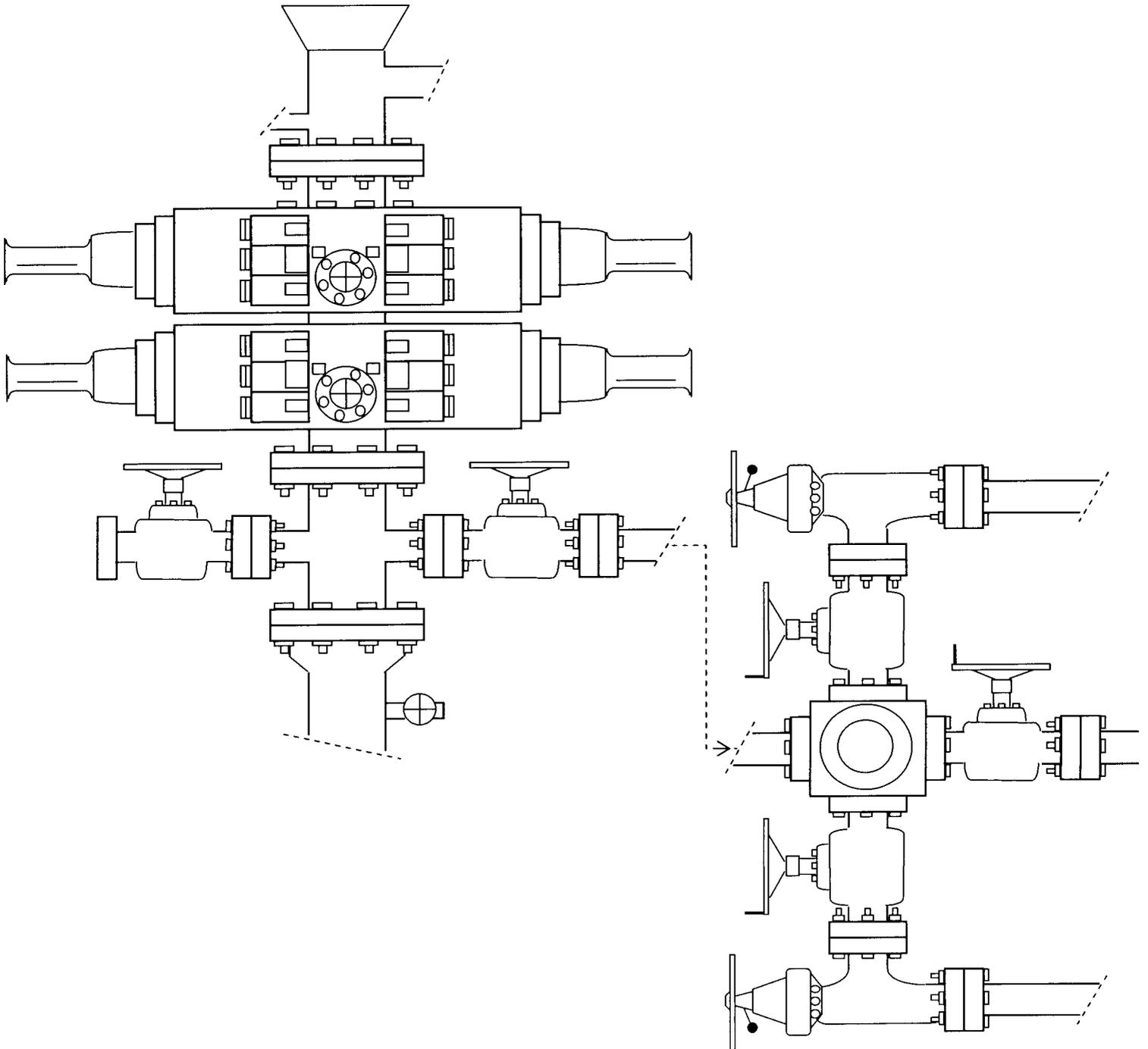


EXHIBIT C

Exhibit "D"

Page 1 of 2

CULTURAL RESOURCE INVENTORY OF  
NEWFIELD EXPLORATION'S BLOCK PARCEL  
IN TOWNSHIP 9S, RANGE 16E, SECTION 23 and 24,  
DUCHESNE COUNTY, UTAH

By:

Andre' Jendresen  
and  
Keith Montgomery

Prepared For:

Bureau of Land Management Vernal Field Office

Prepared Under Contract With:

Newfield Exploration Company  
Rt. 3 Box 3630  
Myton, UT 84052

Submitted By:

Keith R. Montgomery  
Montgomery Archaeological Consultants, Inc.  
P.O. Box 147  
Moab, Utah 84532

MOAC Report No. 05-270

September 7, 2005

United States Department of Interior (FLPMA)  
Permit No. 05-UT-60122

State of Utah Antiquities Project (Survey)  
Permit No. U-05-MQ-0831b

**NEWFIELD PRODUCTION COMPANY**

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

SW 1/4, SE 1/4, and SW 1/4, Section 9 [9,11,12,13 & 14-9-9-16]; Entire Section 22 (excluding NE 1/4, NE 1/4 & NW 1/4, NW 1/4) [2,3,5 through 16-9-9-16]; Entire Section 23 (excluding SE 1/4, NW 1/4, SW 1/4, NE 1/4, NE 1/4 & NW 1/4, SE 1/4) [1 through 5, 8,11 through 16-9-9-16]; Entire Section 24 (excluding SW 1/4, NW 1/4) [1 through 4, 6 through 16-9-9-16] all in Township 9 South, Range 16 East

**REPORT OF SURVEY**

Prepared for:

**Newfield Production Company**

Prepared by:

Wade E. Miller  
Consulting Paleontologist  
September 28, 2005

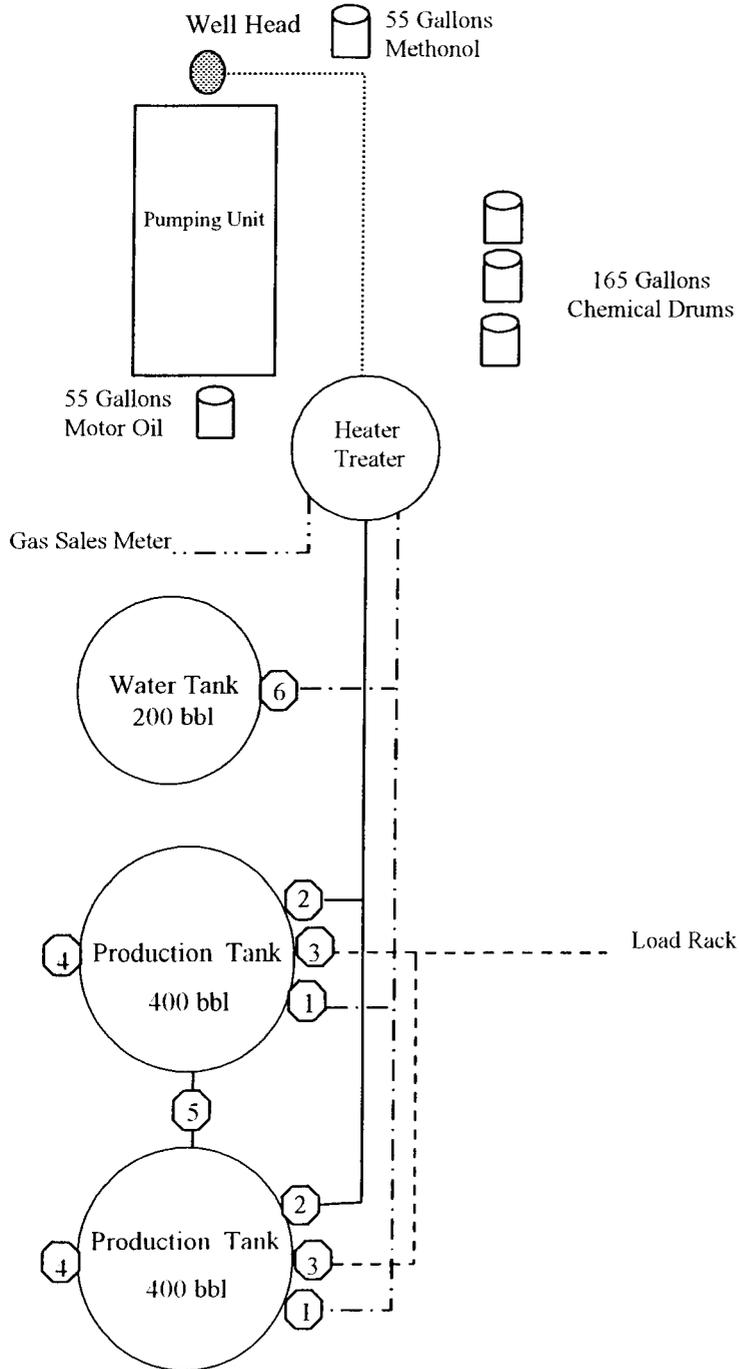
# Newfield Production Company Proposed Site Facility Diagram

Federal 12-23-9-16

NW/SW Sec. 23 T9S, 16E

Duchesne County, Utah

UTU-15855



## Legend

<b>Emulsion Line</b>	.....
<b>Load Rack</b>	- - - - -
<b>Water Line</b>	- . - . -
<b>Gas Sales</b>	- . . . .
<b>Oil Line</b>	—————

**Production Phase:**

- 1) Valves 1, 3, and 4 sealed closed
- 2) Valves 2, 5, and 6 sealed open

**Sales Phase:**

- 1) Valves 1, 2, 4, 5, and 6 sealed closed
- 2) Valve 3 open

**Draining Phase:**

- 1) Valves 1 and 6 open

Diked Section



**WORKSHEET  
APPLICATION FOR PERMIT TO DRILL**

APD RECEIVED: 05/19/2006

API NO. ASSIGNED: 43-013-33179

WELL NAME: FEDERAL 12-23-9-16  
 OPERATOR: NEWFIELD PRODUCTION ( N2695 )  
 CONTACT: MANDIE CROZIER

PHONE NUMBER: 435-646-3721

PROPOSED LOCATION:

NWSW 23 090S 160E  
 SURFACE: 2120 FSL 0794 FWL  
 BOTTOM: 2120 FSL 0794 FWL  
 COUNTY: DUCHESNE  
 LATITUDE: 40.01495 LONGITUDE: -110.0926  
 UTM SURF EASTINGS: 577445 NORTHINGS: 4429600  
 FIELD NAME: MONUMENT BUTTE ( 105 )

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

LEASE TYPE: 1 - Federal  
 LEASE NUMBER: UTU-15855  
 SURFACE OWNER: 1 - Federal

PROPOSED FORMATION: GRRV  
 COALBED METHANE WELL? NO

RECEIVED AND/OR REVIEWED:

- Plat
- Bond: Fed[1] Ind[] Sta[] Fee[]  
(No. UTB000192 )
- 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)
- Intent to Commingle (Y/N)

LOCATION AND SITING:

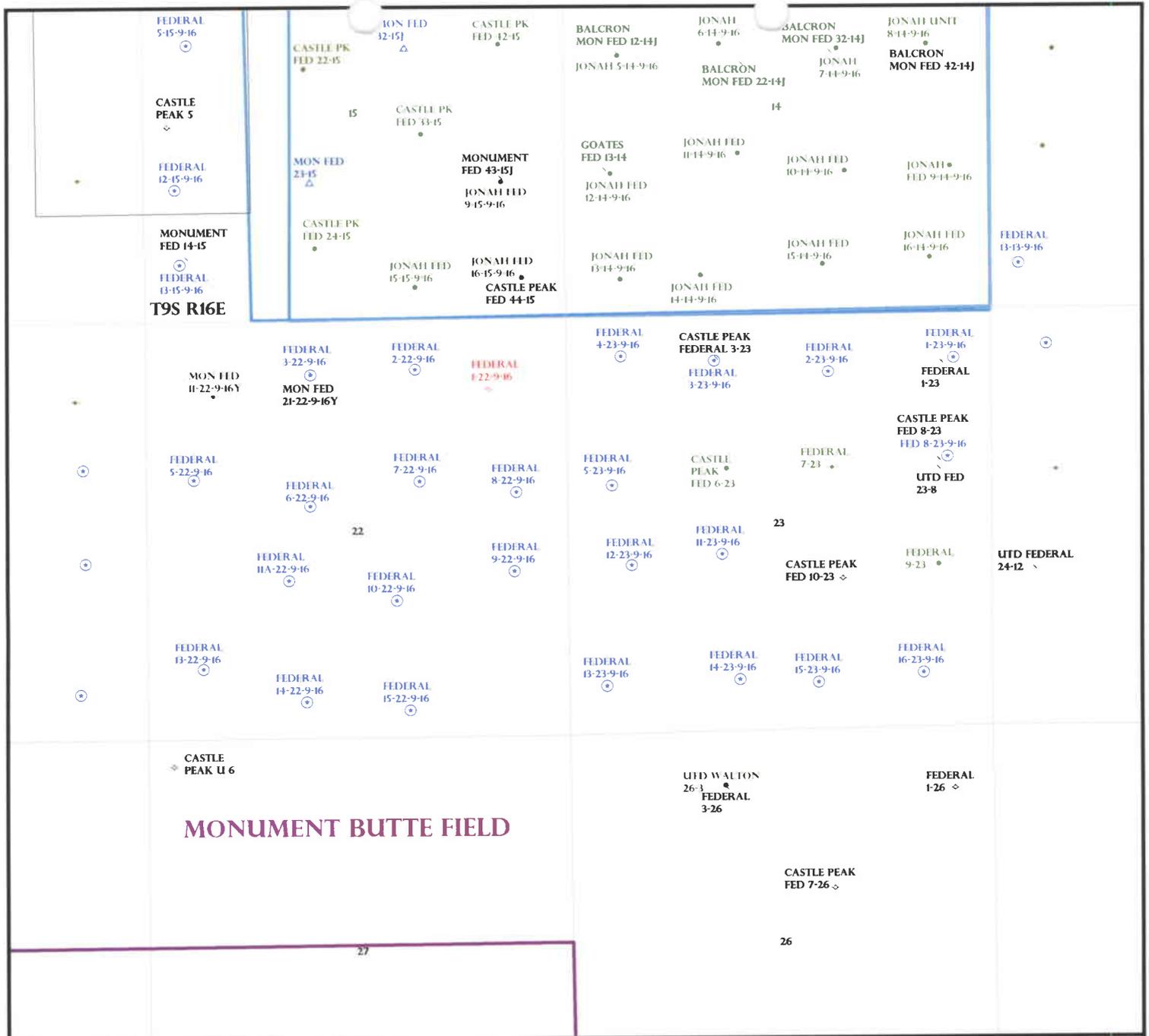
- R649-2-3.
- Unit: \_\_\_\_\_
- R649-3-2. General  
Siting: 460 From Qtr/Qtr & 920' Between Wells
- R649-3-3. Exception
- Drilling Unit  
Board Cause No: \_\_\_\_\_  
Eff Date: \_\_\_\_\_  
Siting: \_\_\_\_\_
- R649-3-11. Directional Drill

COMMENTS:

*See Separate file*

STIPULATIONS:

- 1- Federal Approval
- 2- Spacing Strip



T9S R16E

### MONUMENT BUTTE FIELD

OPERATOR: NEWFIELD PROD CO (N2695)

SEC: 22,23 T. 9S R. 16E

FIELD: MONUMENT BUTTE (105)

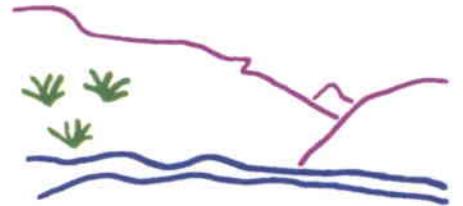
COUNTY: DUCHESNE

SPACING: R649-3-2 / GENERAL SITING

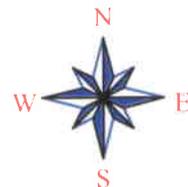
- Field Status**
- ABANDONED
  - ACTIVE
  - COMBINED
  - INACTIVE
  - PROPOSED
  - STORAGE
  - TERMINATED

- Unit Status**
- EXPLORATORY
  - GAS STORAGE
  - NF PP OIL
  - NF SECONDARY
  - PENDING
  - PI OIL
  - PP GAS
  - PP GEOTHERML
  - PP OIL
  - SECONDARY
  - TERMINATED

- Wells Status**
- \* GAS INJECTION
  - \* GAS STORAGE
  - \* LOCATION ABANDONED
  - \* NEW LOCATION
  - \* PLUGGED & ABANDONED
  - \* PRODUCING GAS
  - \* PRODUCING OIL
  - \* SHUT-IN GAS
  - \* SHUT-IN OIL
  - \* TEMP. ABANDONED
  - \* TEST WELL
  - \* WATER INJECTION
  - \* WATER SUPPLY
  - \* WATER DISPOSAL
  - \* DRILLING



Utah Oil Gas and Mining



PREPARED BY: DIANA WHITNEY  
DATE: 24-MAY-2006



**State of Utah**

**Department of  
Natural Resources**

MICHAEL R. STYLER  
*Executive Director*

**Division of  
Oil, Gas & Mining**

JOHN R. BAZA  
*Division Director*

JON M. HUNTSMAN, JR.  
*Governor*

GARY R. HERBERT  
*Lieutenant Governor*

May 25, 2006

Newfield Production Company  
Route 3 Box 3630  
Myton, UT 84052

Re: Federal 12-23-9-16 Well, 2120' FSL, 794' FWL, NW SW, Sec. 23, T. 9 South,  
R. 16 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 43-013-33179.

Sincerely,

Gil Hunt  
Associate Director

mf  
Enclosures

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

**Operator:** Newfield Production Company  
**Well Name & Number** Federal 12-23-9-16  
**API Number:** 43-013-33179  
**Lease:** UTU-15855

**Location:** NW SW                      **Sec.** 23                      **T.** 9 South                      **R.** 16 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.**

RECEIVED  
VERNAL FIELD OFFICE

2006 MAY 19 PM 2:24

DEPT. OF THE INTERIOR  
BUREAU OF LAND MGMT.

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-15855

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 12-23-9-16

9. API Well No.  
43-013-33179

10. Field and Pool, or Exploratory  
Monument Butte

11. Sec., T., R., M., or Blk. and Survey or Area  
NW/SW Sec. 23, T9S R16E

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 NW/SW 2120' FSL 794' FWL  
At proposed prod. zone

14. Distance in miles and direction from nearest town or post office\*  
Approximatley 19.2 miles southwest of Myton, Utah

15. Distance from proposed\* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) Approx. 794' f/lse, NA' f/unit

16. No. of Acres in lease  
1200.00

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. 1244'

19. Proposed Depth  
5916'

20. BLM/BIA Bond No. on file  
UTB000192

21. Elevations (Show whether DF, KDB, RT, GL, etc.)  
5774' GL

22. Approximate date work will start\*  
3rd Quarter 2006

23. Estimated duration  
Approximately seven (7) days from spurt 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:

- |  |   |
|--|---|
| <ul style="list-style-type: none"> <li>1. Well plat certified by a registered surveyor.</li> <li>2. A Drilling Plan.</li> <li>3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office).</li> </ul> | <ul style="list-style-type: none"> <li>4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).</li> <li>5. Operator certification.</li> <li>6. Such other site specific information and/or plans as may be required by the authorized officer.</li> </ul> |
|--|---|

25. Signature *Mandie Crozier*  
Title  
Regulatory Specialist

Name (Printed/Typed)  
Mandie Crozier

Date  
5/18/06

Approved by (Signature) *Jerry Kencena*  
Title  
Assistant Field Manager  
Lands & Mineral Resources

Name (Printed/Typed)  
JERRY KENCENA

Date  
3-28-2007

Office  
VERNAL FIELD OFFICE

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.

CONDITIONS OF APPROVAL 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

APR 09 2007

NOTICE OF APPROVAL

DIV. OF OIL, GAS & MINING

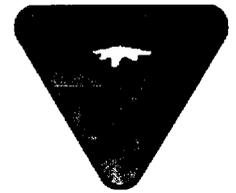


No NOS

07BM4753A



UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT  
VERNAL FIELD OFFICE  
170 South 500 East VERNAL, UT 84078 (435) 781-4400



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

**Company:** Newfield Production Company      **Location:** NWSW, Sec 23, T9S, R16E  
**Well No:** Federal 12-23-9-16      **Lease No:** UTU-15855  
**API No:** 43-013-33179      **Agreement:** N/A

Petroleum Engineer:	Matt Baker	Office: 435-781-4490	Cell: 435-828-4470
Petroleum Engineer:	Michael Lee	Office: 435-781-4432	Cell: 435-828-7875
Petroleum Engineer:	Jim Ashley	Office: 435-781-4470	Cell: 435-828-7874
Petroleum Engineer:	Ryan Angus	Office: 435-781-4430	Cell: 435-828-7368
Supervisory Petroleum Technician:	Jamie Sparger	Office: 435-781-4502	Cell: 435-828-3913
Environmental Scientist:	Paul Buhler	Office: 435-781-4475	Cell: 435-828-4029
Environmental Scientist:	Karl Wright	Office: 435-781-4484	
Natural Resource Specialist:	Holly Villa	Office: 435-781-4404	
Natural Resource Specialist:	Melissa Hawk	Office: 435-781-4476	
Natural Resource Specialist:	Chuck Macdonald	Office: 435-781-4441	
Natural Resource Specialist:	Darren Williams	Office: 435-781-4447	
Natural Resource Specialist:	Verlyn Pindell	Office: 435-781-3402	
		Fax: 435-781-4410	

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

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

**NOTIFICATION REQUIREMENTS**

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

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

**STIPULATIONS AND NOTICES**

- Adhere to Executive Order 5327 of April 15, 1930, stipulations for lands in oil shale withdrawal.
- Wildlife stipulations:  
None.

**Lease Notices from Resource Management Plan:**

The lessee/operator is given notice the area has been identified as containing Golden Eagle and Ferruginous Hawk habitat. Modifications may be required in the Surface Use Plan to protect the Golden Eagle and Ferruginous Hawk and/or its habitat from surface disturbance activities in accordance with Section 6 of the lease terms, Endangered Species Act, and 43 CFR 3101.1-2.

**CONDITIONS OF APPROVAL**

- **ROW (Right of Way):**  
Access roads will be Crowned (2 to 3%), ditched, and constructed with a running surface of 18 feet and a maximum disturbed width of 30 feet during construction. The estimated time required for construction will be 15 days.  
Construction of gas pipelines. The disturbed area will be 50 feet wide to allow for construction and 30 feet wide for operations. The gas pipelines will be a surface 6" gas gathering line, and a surface 3" poly fuel gas line. Both lines will tie in to the existing pipeline infrastructure. The estimated time required for construction will be 15 days.
- All applicable local, state, and/or federal laws, regulations, and/or statutes will be complied with.
- All traffic related to this action will be restricted to approved routes. Cross-country vehicle travel will not be allowed.
- No vehicle travel, construction or routine maintenance activities shall be performed during periods when the soil is too wet to adequately support vehicles and/or construction equipment. If such equipment creates ruts in excess of four inches deep, the soil shall be deemed too wet to adequately support construction equipment.
- The access road will be crowned and ditched. Flat-bladed roads are not allowed.
- If additional erosion occurs during the life of this project, more culverts, low water crossings, berms, wing ditches or etc. will be needed to control the erosion.
- Low-water crossings will be appropriately constructed to avoid sedimentation of drainage ways and other water resources.
- Pipelines will be buried at all major drainage crossings.

- Prevent fill and stock piles from entering drainages.
- The reserve pit will be lined with a 12 ml or greater liner and felt prior to spudding.
- The liner is to be cut 5 feet below ground surface or at the level of the cuttings, whichever is deeper, and the excess liner material is to be disposed of at an authorized disposal site.
- When the reserve pit contains fluids or toxic substances, the operator must ensure animals do not ingest or become entrapped in pit fluids.
- If paleontologic or cultural materials are uncovered during construction, the operator shall immediately stop work that might further disturb or move such materials and contact the Authorized Officer (AO) within 48 hours. A determination will be made by the AO as to necessary mitigation for the discovered paleontologic/cultural material.
- If Uinta Basin hookless cactus or other special status plants are found, construction will cease and the AO will be notified to determine the appropriate mitigation.
- The interim seed mix for this location shall be:

Crested Wheatgrass ( <i>Agropyron cristatum</i> ):	6 lbs/acre
Indian Ricegrass ( <i>Achnatherum hymenoides</i> ):	6 lbs/acre
Scarlet Globemallow ( <i>Sphaeralcea coccinea</i> )	1 lbs/acre

- All pounds are in pure live seed.
  - Rates are set for drill seeding; double the rate if broadcasting.
  - Reseeding may be required if initial seeding is not successful.
- The operator will be responsible for treatment and control of invasive and noxious weeds.
  - The topsoil from the reserve pit shall be stripped and piled separately near the reserve pit. When the reserve pit is closed, it shall be recontoured and the topsoil respread, and the area shall be seeded in the same manner as the location topsoil.
  - Once the location is plugged and abandoned, it shall be recontoured to natural topology, topsoil shall be respread, and the entire location shall be seeded with a seed mix recommended by the AO (preferably of native origin). Seed application will follow all guidelines in the interim seed mix bullet statement above. If reclamation seeding should take place using the broadcast method, the seed at a minimum will be walked into the soil with a dozer immediately after the seeding is completed.
  - The authorized officer may prohibit surface disturbing activities during severe winter conditions to minimize watershed damage. This limitation does not apply to operation and maintenance of producing wells.

- The authorized officer may prohibit surface disturbing activities during wet or muddy conditions to minimize watershed damage. This limitation does not apply to operation and maintenance of producing wells.
- All well facilities not regulated by OSHA will be painted Carlsbad Canyon.
- All boulders with a length or diameter greater than 3 feet, that are found showing at the surface, will be stockpiled for use during final reclamation.
- Notify the Authorized Officer 48 hours prior to surface disturbing activities.
- Operator shall notify any active gilsonite mining operation within 2 miles of the location 48 hours prior to any blasting during construction for this well.

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

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

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

1. None.

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

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

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

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

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

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

Cement baskets shall not be run on surface casing.

5. The lessee/operator must report all shows of water or water-bearing sands to the BLM. If flowing water is encountered it must be sampled and analyzed (a copy of the analyses to be submitted to the BLM Field Office in Vernal, Utah).
6. All oil and gas shows shall be adequately tested for commercial possibilities, reported, and protected.

7. The lessee/operator must report encounters of all non oil and gas mineral resources (such as gilsonite, tar sands, oil shale, etc.) to the Vernal Field Office in writing within 5 working days of each encounter. Each report shall include the well name/number, well location, date and depth (from KB or GL) of encounter, vertical footage of the encounter and, the name of the person making the report (along with a telephone number) should the BLM need to obtain additional information.
8. No location shall be constructed or moved, no well shall be plugged, and no drilling or workover equipment shall be removed from a well to be placed in a suspended status without prior approval of the BLM, Vernal Field Office. If operations are to be suspended for more than 30 days, prior approval of the BLM, Vernal Field Office shall be obtained and notification given before resumption of operations.
9. Chronologic drilling progress reports shall be filed directly with the BLM, Vernal Field Office on a weekly basis in sundry, letter format or e-mail to the Petroleum Engineers until the well is completed.

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

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

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

10. Whether the well is completed as a dry hole or as a producer, "Well Completion and Recompletion Report and Log" (BLM Form 3160-4) shall be submitted not later than 30 days after completion of the well or after completion of operations being performed, in accordance with 43 CFR 3162.4-1. Two copies of all logs run, core descriptions, and all other surveys or data obtained and compiled during the drilling, workover, and/or completion operations, shall be filed on BLM Form 3160-4. Submit with the well completion report a geologic report including, at a minimum, formation tops, and a summary and conclusions. Also include deviation surveys, sample descriptions, strip logs, core data, drill stem test data, and results of production tests if performed. Samples (cuttings, fluid, and/or gas) shall be submitted only when requested by the BLM, Vernal Field Office.

A cement bond log (CBL) will be run from the production casing shoe to the top of cement and shall be utilized to determine the bond quality for the production casing. Submit a field copy of the CBL to this office.

**Please submit an electronic copy of all other logs run on this well in LAS format to UT\_VN\_Wellologs@BLM.gov. This submission will supersede the requirement for submittal of paper logs to the BLM.**

11. All off-lease storage, off-lease measurement, or commingling on-lease or off-lease shall have prior written approval from the BLM, Vernal Field Office.  
  
All measurement points shall be identified as point of sales or allocation for royalty determination prior to the installation of facilities.
12. Oil and gas meters shall be calibrated in place prior to any deliveries. The Field Office Petroleum Engineers will be provided with a date and time for the initial meter calibration and all future meter proving schedules. A copy of the meter calibration reports shall be submitted to the BLM, Vernal Field Office. All measurement facilities will conform to the API standards for liquid hydrocarbons and the AGA standards for natural gas measurement.
13. A schematic facilities diagram as required by Onshore Oil & Gas Order No. 3 shall be submitted to the BLM, Vernal Field Office within 30 days of installation or first production, whichever occurs first. All site security regulations as specified in Onshore Oil & Gas Order No. 3 shall be adhered to. All product lines entering and leaving hydrocarbon storage tanks will be effectively sealed in accordance with Onshore Oil & Gas Order No. 3.
14. This APD is approved subject to the requirement that, should the well be successfully completed for production, the BLM, Vernal Field office must be notified when it is placed in a producing status. Such notification will be by written communication and must be received in this office by not later than the fifth business day following the date on which the well is placed on production. The notification shall provide, as a minimum, the following informational items:
  - a. Operator name, address, and telephone number.
  - b. Well name and number.
  - c. Well location (¼¼, Sec., Twn, Rng, and P.M.).
  - d. Date well was placed in a producing status (date of first production for which royalty will be paid).
  - e. The nature of the well's production, (i.e., crude oil, or crude oil and casing head gas, or natural gas and entrained liquid hydrocarbons).
  - f. The Federal or Indian lease prefix and number on which the well is located; otherwise the non-Federal or non-Indian land category, i.e., State or private.

- g. Unit agreement and / or participating area name and number, if applicable.
  - h. Communitization agreement number, if applicable.
15. Any venting or flaring of gas shall be done in accordance with Notice to Lessees (NTL) 4A and needs prior approval from Field Office Petroleum Engineers.
  16. All undesirable events (fires, accidents, blowouts, spills, discharges) as specified in NTL 3A will be reported to the BLM, Vernal Field Office. Major events as defined in NTL3A, shall be reported verbally within 24 hours, followed by a written report within 15 days. "Other than Major Events" will be reported in writing within 15 days. "Minor Events" will be reported on the Monthly Report of Operations and Production
  17. Pursuant to Onshore Oil & Gas Order No. 7, this is authorization for pit disposal of water produced from this well for a period of 90 days from the date of initial production. A permanent disposal method must be approved by this office and in operation prior to the end of this 90-day period. In order to meet this deadline, an application for the proposed permanent disposal method shall be submitted along with any necessary water analyses, as soon as possible, but no later than 45 days after the date of first production. Any method of disposal which has not been approved prior to the end of the authorized 90-day period will be considered as an Incident of Noncompliance and will be grounds for issuing a shut-in order until an acceptable manner for disposing of said water is provided and approved by this office.
  18. Unless the plugging is to take place immediately upon receipt of oral approval, the Field Office Petroleum Engineers must be notified at least 24 hours in advance of the plugging of the well, in order that a representative may witness plugging operations. If a well is suspended or abandoned, all pits must be fenced immediately until they are backfilled. The "Subsequent Report of Abandonment" (Form BLM 3160-5) must be submitted within 30 days after the actual plugging of the well bore, showing location of plugs, amount of cement in each, and amount of casing left in hole, and the current status of the surface restoration.

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

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

**SUNDRY NOTICES AND REPORTS ON WELLS**

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

5. Lease Designation and Serial No.  
**UTU-15855**

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

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

8. Well Name and No.  
**FEDERAL 12-23-9-16**

9. API Well No.  
**43-013-33179**

10. Field and Pool, or Exploratory Area  
**MONUMENT BUTTE**

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

**SUBMIT IN TRIPLICATE**

1. Type of Well

Oil Well     Gas Well     Other

2. Name of Operator

**NEWFIELD PRODUCTION COMPANY**

3. Address and Telephone No.

**Rt. 3 Box 3630, Myton Utah, 84052 435-646-3721**

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

**2120 FSL 794 FWL      NW/SW Section 23, T9S R16E**

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

TYPE OF SUBMISSION

Notice of Intent

Subsequent Report

Final Abandonment Notice

TYPE OF ACTION

Abandonment

Recompletion

Plugging Back

Casing Repair

Altering Casing

Other **Permit Extension**

Change of Plans

New Construction

Non-Routine Fracturing

Water Shut-Off

Conversion to Injection

Dispose Water

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

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

Newfield Production Company requests to extend the Permit to Drill this well for one year. The original approval date was 5/25/06 (expiration 5/25/07).

This APD is not yet due to expire with the BLM.

Approved by the  
Utah Division of  
Oil, Gas and Mining

Date: 05-01-07  
By: [Signature]

5-3-07  
RM

RECEIVED

MAY 01 2007

DIV. OF OIL, GAS & MINING

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

Signed

[Signature]  
Mandie Crozier

Title

Regulatory Specialist

Date

4/30/2007

CC: UTAH DOGM

(This space for Federal or State office use)

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

Title \_\_\_\_\_

Date \_\_\_\_\_

Conditions of approval, if any:

CC: Utah DOGM

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

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

**API:** 43-013-33179  
**Well Name:** Federal 12-23-9-16  
**Location:** NW/SW Section 23, T9S R16E  
**Company Permit Issued to:** Newfield Production Company  
**Date Original Permit Issued:** 5/25/2006

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

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

  
Signature

4/30/2007  
Date

**Title:** Regulatory Specialist

**Representing:** Newfield Production Company

# DIVISION OF OIL, GAS AND MINING

## **SPUDDING INFORMATION**

Name of Company: NEWFIELD PRODUCTION COMPANY

Well Name: FEDERAL 12-23-9-16

Api No: 43-013-33179 Lease Type: FEDERAL

Section 23 Township 09S Range 16E County DUCHESNE

Drilling Contractor NDSI RIG # NS#1

### **SPUDDED:**

Date 02/05/08

Time 6:00 PM

How DRY

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

Reported by BRANDON HALL

Telephone # (435) 828-6110

Date 02/06/08 Signed CHD

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

OPERATOR: NEWFIELD PRODUCTION COMPANY  
ADDRESS: RT. 3 BOX 3630  
MYTON, UT 84082

OPERATOR ACCT. NO. N2695

ACTION CODE	CURRENT ENTITY NO.	NEW ENTITY NO.	API NUMBER	WELL NAME	WELL LOCATION				COUNTY	SPUD DATE	EFFECTIVE DATE
					QQ	SC	TP	RG			
A	99999	16691	4304733661	Ute Tribal 11-30-4-2W	NESW	30	4S	2W	Duchesne	2/7/2008	2/15/08
WELL 1 COMMENTS: <i>GRRV</i>											
A	99999	16692	4304733662	Ute Tribal 15-19-4-2W	NESW	19	4S	2W	Duchesne	2/8/2008	2/15/08
WELL 2 COMMENTS: <i>GRRV</i> <i>9WSE</i>											
A	99999	16693	4301333119	Federal 8-20-9-17	SENE	20	9S	17E	Duchesne	2/4/2008	2/15/08
WELL 3 COMMENTS: <i>GRRV</i> <i>43-013-33227</i>											
A	99999	16694	4301333179	Federal 12-23-9-16	NWSW	23	9S	16E	Duchesne	2/5/2008	2/15/08
WELL 4 COMMENTS: <i>GRRV</i>											
WELL 5 COMMENTS:											
WELL 6 COMMENTS:											

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

RECEIVED

FEB 12 2008

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

*Tammi Lee*  
Signature

Tammi Lee

Production Clerk

02/12/08

Date

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

5. LEASE DESIGNATION AND SERIAL NUMBER:  
**UTU-15855**

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7. UNIT or CA AGREEMENT NAME:

**SUNDRY NOTICES AND REPORTS ON WELLS**

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

1. TYPE OF WELL:      OIL WELL       GAS WELL       OTHER

2. NAME OF OPERATOR:  
**NEWFIELD PRODUCTION COMPANY**

3. ADDRESS OF OPERATOR:      PHONE NUMBER  
Route 3 Box 3630      CITY Myton      STATE UT      ZIP 84052      435.646.3721

4. LOCATION OF WELL:  
FOOTAGES AT SURFACE: 2120 FSL 794 FWL      COUNTY: DUCHESNE

OTR/OTR. SECTION. TOWNSHIP. RANGE. MERIDIAN: NWSW, 23, T9S, R16E      STATE: UT

8. WELL NAME and NUMBER:  
**FEDERAL 12-23-9-16**

9. API NUMBER:  
**4301333179**

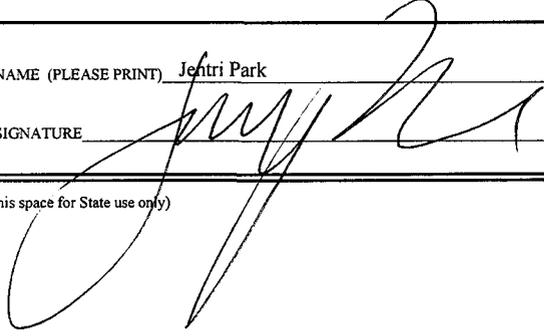
10. FIELD AND POOL, OR WILDCAT:  
**MONUMENT BUTTE**

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

TYPE OF SUBMISSION	TYPE OF ACTION		
<input type="checkbox"/> NOTICE OF INTENT (Submit in Duplicate)  Approximate date work will _____	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> REPERFORATE CURRENT FORMATION
	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> SIDETRACK TO REPAIR WELL
	<input type="checkbox"/> CASING REPAIR	<input type="checkbox"/> NEW CONSTRUCTION	<input type="checkbox"/> 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 checked="" type="checkbox"/> SUBSEQUENT REPORT (Submit Original Form Only)  Date of Work Completion: <u>06/12/2008</u>	<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: - Weekly Status Report
	<input type="checkbox"/> CONVERT WELL TYPE	<input type="checkbox"/> RECOMPLETE - DIFFERENT FORMATION	

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.  
The above subject well was completed on 05-22-08, attached is a daily completion status report.

NAME (PLEASE PRINT) Jentri Park      TITLE Production Clerk

SIGNATURE       DATE 06/12/2008

(This space for State use only)

**RECEIVED**

**JUN 18 2008**

DIV. OF OIL, GAS & MINING

## Daily Activity Report

Format For Sundry

**FEDERAL 12-23-9-16**

**3/1/2008 To 7/30/2008**

**5/14/2008 Day: 1**

**Completion**

Rigless on 5/13/2008 - Install 5m frac head. NU 6" 5K Cameron BOP. RU H/O truck & pressure test casing, blind rams, frac head, csg & casing valves to 4500 psi. RU Perforators LLC WLT w/ mast & run CBL under pressure. WLTD @ 5704' & cement top @ 104'. Perforate stage #1, A3 sds @ 4902-26' w/ 3-1/8" Slick Guns (19 gram, .49"EH, 120°) w/ 4 spf for total of 96 shots. 136 BWTR. SWIFN.

**5/17/2008 Day: 2**

**Completion**

Rigless on 5/17/2008 - Stage #1 A3 sds. RU BJ Services. 0 psi on well. Frac A3 sds w/ 119,316#'s of 20/40 sand in 996 bbls of Lightning 17 fluid. Broke @ 3363 psi. Treated w/ ave pressure of 1818 psi w/ ave rate of 23.4 BPM. ISIP 2198 psi. Leave pressure on well. 996 BWTR. Stage #2 A.5 sds. RU Phoenix Surverys, inc WLT, crane & Lubricator. RIH w/ Weatherford 5-1/2" 6K composite flow through frac plug & 7' perf gun. Set plug @ 4850'. Perforate A.5 sds @ 4815-22' w/ 3-1/8" Slick Guns (.39"EH, 19 gram, 120°) w/ 4 spf for total of 28 shots. RU BJ Services. 1936 psi on well. Perfs would not break. Dump bail acid on perfs. RU BJ Services. 1525 psi on well. Frac A.5 sds w/ 14,762#'s of 20/40 sand in 260 bbls of Lightning 17 fluid. Broke @ 3711 psi. Treated w/ ave pressure of 3169 psi w/ ave rate of 23.3 BPM. Screened out perfs w/ 12 bbls water remaining in flush. ISIP 4200 psi. Open well to pit for cleanup. Recovered 150 bbls water. Stage #3 B2 sds. RU Phoenix Surverys, inc WLT, crane & Lubricator. RIH w/ Weatherford 5-1/2" 6K composite flow through frac plug & 6' perf gun. Set plug @ 4775'. Perforate B2 sds @ 4743-49' w/ 3-1/8" Slick Guns (.39"EH, 19 gram, 120°) w/ 4 spf for total of 24 shots. RU BJ Services. 310 psi on well. Perfs would not break. Dump bail acid on perfs. RU BJ Services. 345 psi on well. Frac B2 sds w/ 25,365#'s of 20/40 sand in 342 bbls of Lightning 17 fluid. Broke @ 3771 psi. Treated w/ ave pressure of 2818 psi w/ ave rate of 21.6 BPM. ISIP 3290 psi. Leave pressure on well. 1448 BWTR. Stage #4 C sds. RU Phoenix Surverys, inc WLT, crane & Lubricator. RIH w/ Weatherford 5-1/2" 6K composite flow through frac plug & 11' perf gun. Set plug @ 4690'. Perforate C sds @ 4604-15' w/ 3-1/8" Slick Guns (.39"EH, 19 gram, 120°) w/ 4 spf for total of 44 shots. RU BJ Services. 1580 psi on well. Perfs would not break. Dump bail acid on perfs (tagged sand @ 4600'). RU BJ Services. 1391 psi on well. Perfs would not break. Open well to pit for immediate flowback @ approx. 1 bpm. Well flowed for 2 hrs & died. SWIFN.

**5/18/2008 Day: 3**

**Completion**

Rigless on 5/18/2008 - Bleed off well. RU The Perforators, llc. RIH w/ collar locator. Tag sand @ 4602'. Stuck collar locator @ 4555'. Pulled out of rope socket. RD wireline truck. SWIFN.

**5/19/2008 Day: 4**

**Completion**

Rigless on 5/19/2008 - MIRU Western #2. ND Cameron BOP & 5m frac head. NU 3m production head & Schafer BOP. RIH w/ overshot w/ 3 1/8" grapple, x-over, bumper sub, super jars, x-over & 140 new 2 7/8" tbg. from pipe rack (tallying & drifting). Circulate well clean. LD 1 jt 2 7/8" tbg. SWIFN.

**5/20/2008 Day: 5****Completion**

Western #2 on 5/20/2008 - RIH w/ tbg. Tag sand @ 4564'. C/O to 4662'. Latch on to fish. POOH w/ tbg. LD fish. RU BJ Services. 0 psi on well. Frac C sds w/ 46,658#'s of 20/40 sand in 534 bbls of Lightning 17 fluid. Broke @ 3413 psi. Treated w/ ave pressure of 2361 psi w/ ave rate of 23.4 BPM. ISIP 2680 psi. Open well to pit for immediate flowback @ approx. 1 bpm. Well flowed for 2 hrs. Recovered 120 bbls water. SWIFN.

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**5/21/2008 Day: 6****Completion**

Western #2 on 5/21/2008 - RIH w/ 4 3/4" chomp bit, bit sub & 2 7/8" tbg. Tag sand @ 4607'. RU powerswivel & pump. C/O to CBP @ 4690'. DU CBP in 25 min. Cont. RIH w/ tbg. Tag sand @ 4745'. C/O to CBP @ 4775'. DU CBP in 11 min. Cont. RIH w/ tbg. Tag CBP @ 4850'. DU CBP in 9 min. Cont. RIH w/ tbg. Tag sand @ 5562'. C/O to PBTD @ 5747'. Circulate well clean. Pull up 5696'. RIH w/ swab. SFL @ surface. Made 12 runs. Recovered 134 bbls. Trace of oil, no show of sand. EFL @ 1600'. RD swab equipment. SWIFN.

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**5/22/2008 Day: 7****Completion**

Western #2 on 5/22/2008 - Bleed off well. RIH w/ tbg. Tag sand @ 5744'. C/O to PBTD @ 5747'. Circulate well clean. POOH w/ tbg. LD BHA. RIH w/ 2 7/8" notched collar, 2 jts 2 7/8", PSN, 1 jt 2 7/8", 5 1/2" TAC, 155 jts 2 7/8" tbg. ND BOP. Set TAC @ 4883' w/ 16,000# tension. NU wellhead. X-over for rods. Flush tbg. w/ 60 bbls water. RIH w/ CDI 2 1/2" x 1 1/2" x 12' x 16' RHAC rod pump, 6- 1 1/2" weight bars, 20- 3/4" guided rods, 77- 3/4" slick rods, 93- 3/4" guided rods, 1- 8', 6', 4', 2' x 3/4" pony subs, 1 1/2" x 26' polished rod. Seat pump. Fill tbg. w/ 2 bbls water. Stroke test to 800 psi. RU pumping unit. Hang off rods. RD. Put well on production @ 6:30 p.m. 5 spm, 72" stroke length. Final Report.

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**Pertinent Files: Go to File List**

**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 \_\_\_\_\_

2. NAME OF OPERATOR

Newfield Exploration Company

3. ADDRESS AND TELEPHONE NO.

1401 17th St. Suite 1000 Denver, CO 80202

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

At Surface 2120' FSL & 794' FWL (NW/SW) Sec. 23, T9S, R16E  
At top prod. Interval reported below

At total depth

14. API NO. 43-013-33179 DATE ISSUED 05/25/06

12. COUNTY OR PARISH Duchesne 13. STATE UT

15. DATE SPUNDED 02/05/08 16. DATE T.D. REACHED 02/17/08 17. DATE COMPL. (Ready to prod.) 05/22/08 18. ELEVATIONS (DF, RKB, RT, GR, ETC.)\* 5774' GL 5786' KB 19. ELEV. CASINGHEAD

20. TOTAL DEPTH, MD & TVD 5800' 21. PLUG BACK T.D., MD & TVD 5747' 22. IF MULTIPLE COMPL., HOW MANY\* 23. INTERVALS DRILLED BY -----> 24. PRODUCING INTERVAL(S), OF THIS COMPLETION--TOP, BOTTOM, NAME (MD AND TVD)\* Green River 4604'-4926'

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#	333'	12-1/4"	To surface with 160 sx Class "G" cmt	
5-1/2" - J-55	15.5#	5792'	7-7/8"	300 sx Premlite II and 400 sx 50/50 Poz	

29. LINER RECORD				30. TUBING RECORD			
SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)
					2-7/8"	EOT @ 4982'	TA @ 4883'

31. PERFORATION RECORD (Interval, size and number)			32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.	
INTERVAL	SIZE	SPF/NUMBER	DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
(A3) 4902'-4926'	.49"	4/96	4902'-4926'	Frac w/ 119,316# 20/40 sand in 996 bbls fluid
(A.5) 4815'-4822'	.49"	4/28	4815'-4822'	Frac w/ 14,762# 20/40 sand in 260 bbls fluid
(B2) 4743'-4749'	.49"	4/24	4743'-4749'	Frac w/ 25,365# 20/40 sand in 342 bbls fluid
(C) 4604'-4615'	.49"	4/44	4604'-4615'	Frac w/ 46,658# 20/40s and in 534 bbls fluid

33.\* **PRODUCTION**

DATE FIRST PRODUCTION 05/29/08	PRODUCTION METHOD (Flowing, gas lift, pumping--size and type of pump) 2-1/2" x 1-1/2" x 12' x 16' RHAC SM Plunger Pump	WELL STATUS (Producing or shut-in) PRODUCING					
DATE OF TEST 06-09-08	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD ----->	OIL--BBL. 30	GAS--MCF. 40	WATER--BBL. 38	GAS-OIL RATIO 1333
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 JUL 14 2008

35. LIST OF ATTACHMENTS

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records  
SIGNED Jentri Park TITLE Production Tech DATE 7/9/2008

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

FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.	GEOLOGIC MARKERS		
				NAME	MEAS. DEPTH	TRUE VERT. DEPTH
			Well Name Federal 12-23-9-16			
				Garden Gulch Mkr	3442'	
				Garden Gulch 1	3650'	
				Garden Gulch 2	3760'	
				Point 3 Mkr	4023'	
				X Mkr	4273'	
				Y-Mkr	4306'	
				Douglas Creek Mkr	4426'	
				BiCarbonate Mkr	4656'	
				B Limestone Mkr	4759'	
				Castle Peak	5286'	
				Basal Carbonate	5724'	
				Total Depth (LOGGERS)	5799'	

<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		<b>FORM 9</b>
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		<b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> UTU-15855
		<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b>
<b>1. TYPE OF WELL</b> Oil Well		<b>7. UNIT or CA AGREEMENT NAME:</b> GMBU (GRRV)
<b>2. NAME OF OPERATOR:</b> NEWFIELD PRODUCTION COMPANY		<b>8. WELL NAME and NUMBER:</b> FEDERAL 12-23-9-16
<b>3. ADDRESS OF OPERATOR:</b> Rt 3 Box 3630 , Myton, UT, 84052		<b>9. API NUMBER:</b> 43013331790000
<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> 2120 FSL 0794 FWL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: NWSW Section: 23 Township: 09.0S Range: 16.0E 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: 7/22/2014	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> CHANGE WELL NAME
<input type="checkbox"/> SPUD REPORT Date of Spud:	<input checked="" type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input checked="" type="checkbox"/> CONVERT WELL TYPE
<input type="checkbox"/> DRILLING REPORT Report Date:	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> NEW CONSTRUCTION
	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> PLUG BACK
	<input type="checkbox"/> PRODUCTION START OR RESUME	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION
	<input type="checkbox"/> REPERFORATE CURRENT FORMATION	<input type="checkbox"/> SIDETRACK TO REPAIR WELL	<input type="checkbox"/> TEMPORARY ABANDON
	<input type="checkbox"/> TUBING REPAIR	<input type="checkbox"/> VENT OR FLARE	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> WATER SHUTOFF	<input type="checkbox"/> SI TA STATUS EXTENSION	<input type="checkbox"/> APD EXTENSION
	<input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> OTHER	OTHER: <input style="width: 100px;" type="text"/>

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

The subject well has been converted from a producing oil well to an injection well on 07/16/2014. On 07/16/2014 Chris Jensen with the State of Utah DOGM was contacted concerning the initial MIT on the above listed well. On 07/22/2014 the casing was pressured up to 1199 psig and charted for 30 minutes with no pressure loss. The well was not injecting during the test. The tubing pressure was 390 psig during the test. There was a State representative available to witness the test - Chris Jensen.

**Accepted by the  
Utah Division of  
Oil, Gas and Mining**  
**FOR RECORD ONLY**  
July 28, 2014

<b>NAME (PLEASE PRINT)</b> Lucy Chavez-Naupoto	<b>PHONE NUMBER</b> 435 646-4874	<b>TITLE</b> Water Services Technician
<b>SIGNATURE</b> N/A	<b>DATE</b> 7/25/2014	

# Mechanical Integrity Test Casing or Annulus Pressure Test

Newfield Production Company  
Rt. 3 Box 3630  
Myton, UT 84052  
435-646-3721

Witness: Christensen Date: 7/22/2014 Time: 9:00 A.M.

Test Conducted by: Everett Unruh

Others Present: \_\_\_\_\_

Well:	Federal 12-23-9-16	Field:	Monument Butte
Well Location:	NWSW Sec 23 T9S R16E Duchesne County, UT	API No:	43-013-33179

Time	Casing Pressure
0 min	<u>1203</u> psig
5	<u>1202</u> psig
10	<u>1201</u> psig
15	<u>1200</u> psig
20	<u>1200</u> psig
25	<u>1200</u> psig
30 min	<u>1199</u> psig
35	_____ psig
40	_____ psig
45	_____ psig
50	_____ psig
55	_____ psig
60 min	_____ psig

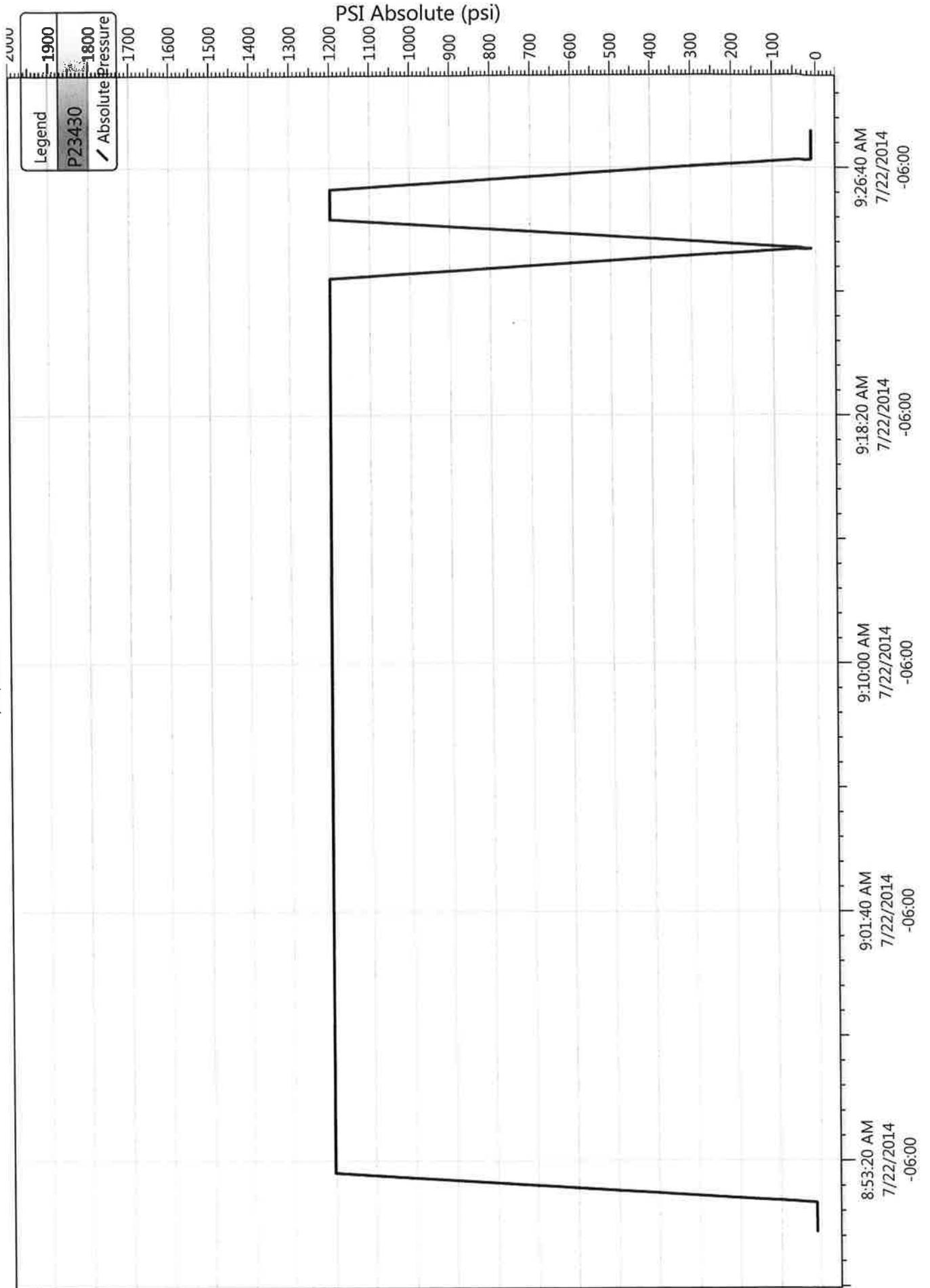
Tubing Pressure: 390 psig

Result: Pass Fail

Signature of Witness: Christensen

Signature of Person Conducting Test: Everett Unruh

Federal 12-23-9-16 (7/22/2014, conversion MIT)  
7/22/2014 8:49:49 AM





Well Name: Federal 12-23-9-16

### Job Detail Summary Report

Jobs	Primary Job Type	Job Start Date	Job End Date
Conversion		7/10/2014	7/22/2014

Daily Operations		24hr Activity Summary
Report Start Date	Report End Date	MIRUSU, LD rods, Tag fill.
7/10/2014	7/11/2014	
Start Time	End Time	Comment
00:00	10:00	Well was pumping.
Start Time	End Time	Comment
10:00	12:30	SPOT RIG, PREP TO R.U, R.U, PULL HEAD
Start Time	End Time	Comment
12:30	14:00	PUMPED 60 BBL DOWN CSG, UNSEAT PUMP, L.D POLISH ROD, FLUSH RODS W/ 40 BBL, S.S.T, TESTED TBG TO 3000 PSI
Start Time	End Time	Comment
14:00	18:00	POOH & L.D 3/4" X 2' PONY, 2 3/4" X 4' PONY, 1 3/4" X 8' PONY, 1 3/4" X 8' PONY, 91 3/4" 4 PER, 58 3/4" SLICK, 40 3/4" 4 PER, 6 WEIGHT BARS, PUMP, STOPPED TWICE ON WAY OUT TO FLUSH RODS W/ 30 BBLs EACH TIME.
Start Time	End Time	Comment
18:00	19:00	R.U & RIH W/ SANDLINE, TAGGED @ 5700', 47' OF FILL, POOH & R.D SANDLINE
Start Time	End Time	Comment
19:00	00:00	SHUT WELL IN FOR NIGHT.
7/11/2014	7/12/2014	
Report Start Date	Report End Date	24hr Activity Summary
7/11/2014	7/12/2014	RU BOP's, TOOH w/ tbg, TIH w/ Bit & scraper.
Start Time	End Time	Comment
00:00	07:00	Well was shut in for night.
Start Time	End Time	Comment
07:00	08:00	Open well w/ 0 psi on casing, RD well head. Release TA. RU BOP's.
Start Time	End Time	Comment
08:00	09:00	Hot oil well w/ 100 bbls water.
Start Time	End Time	Comment
09:00	12:00	TOOH w/ 128 jts tbg breaking & doping. LD 28 jts.
Start Time	End Time	Comment
12:00	16:00	TIH w/ bit & scraper to 4068'. TOOH w/ tbg.
Start Time	End Time	Comment
16:00	18:00	RD BOP's. RD 3k W/H. Instal 5K well head. RU FMC valve, Blind rams.
Start Time	End Time	Comment
18:00	00:00	Shut in for weekend.
7/14/2014	7/15/2014	
Report Start Date	Report End Date	24hr Activity Summary
7/14/2014	7/15/2014	RU WLT, Set plug. Test casing & BOP's. Perforate GB6 sds. Break sands down. Wait on frac crew.
Start Time	End Time	Comment
00:00	07:00	Was shut in for weekend.
Start Time	End Time	Comment
07:00	08:00	Held safety meeting. Open well w/ 0 psi on casing. Pump 30 bbls water down casing.
Start Time	End Time	Comment
08:00	09:30	RU Perforators LLC WLT & lubricator. RIH & set "HE" RBP @ 4015'.
Start Time	End Time	Comment
09:30	10:30	RU hot oiler. Pump 75 bbls to fill casing. Pressure casing to 4300 PSI for 5 min.
Start Time	End Time	Comment
10:30	11:30	RIH w/ 3-1/8" disposable perf guns (.34EH, 16 gram, 21" pen.) w/ 3 spf for total of 21 shots.
Start Time	End Time	Comment
11:30	12:00	RU Hot oiler & break GB6 sds down @ 2445 psi back to 1400 psi @ .5 bpm. ISIP was 1200 psi. RD WLT & hot oiler.
Start Time	End Time	Comment
12:00	13:00	RU Halliburton frac crew.



Well Name: Federal 12-23-9-16

### Job Detail Summary Report

Start Time	13:00	End Time	00:00	Comment
Report Start Date	7/15/2014	Report End Date	7/16/2014	24hr Activity Summary
Start Time	00:00	End Time	06:00	RU Halliburton. Frac well. Flow well back. TIH w/ tbg. Retrieve RBP. TIH w/ Injection.
Start Time	06:00	End Time	08:00	Well was Shut in for night. Comment Stage #1. GB6 sds. Test lines to 4971 psi. Open well w/ 53 psi on casing. Broke @ 3008 psi back to 2105 psi. Spear head 6 bbis of 15% HCL (rec'd 900 psi drop when hit perfs). Treated @ ave pressure of 1990 @ ave rate of 30 bpm w/ 434 bbis of 17# Delta 140 frac fluid in fresh wtr. Treated w/ 40,020 of 20/40 white sand @ 6 ppa. ISIP was 1871 w/ .90FG. Leave pressure on well.
Start Time	08:00	End Time	09:30	Comment RD HES crew. Open well up to flow back on 10 choke. Well flowed for 1 hours & rec'd 120 bbis fluid.
Start Time	09:30	End Time	11:30	Comment RD single blind rams. RU WCS double BOP's.
Start Time	11:30	End Time	13:00	Comment RU Retrieving head. TIH w/ 128 jts tbg to tag 10' of fill. C/O to RBP @ 4015'. Release pkr.
Start Time	13:00	End Time	14:30	Comment TOOH w/ tbg. LD RBP.
Start Time	14:30	End Time	17:00	Comment RU 2-3/8" wireline entry guide. 2-3/8" XN nipple 1.87" ID. 4' x 2-3/8" pup jt. 5-1/2" x 2-7/8" Arrow set pkr. X nipple 1.87" ID On/Off tool. 2-7/8" SN. TIH w/ 124 jts of used 2-7/8" J-55 tbg.
Start Time	17:00	End Time	00:00	Comment Shut in for night.
Report Start Date	7/16/2014	Report End Date	7/17/2014	24hr Activity Summary
Start Time	00:00	End Time	07:00	Test tbg. Set pkr. MIT on casing. RDMOSU.
Start Time	07:00	End Time	09:00	Comment Well was shut in for night.
Start Time	09:00	End Time	11:00	Comment Held safety meeting. Open well w/ 0 psi on casing. Pump 10 bbis wtr down tbg. Drop Std vlv. Pump 18 bbis to seat. Test tbg to 3000 psi for 30 min. RU SL. Fish Std vlv. RD SL.
Start Time	09:00	End Time	11:00	Comment RD BOP's. Pump 50 bbis packer fluid.
Start Time	11:00	End Time	14:00	Comment Set pkr w/ CE @ 3915' & EOT @ 3925' w/ 15,000#'s tension. Test casing to 1500 psi. RU Newfield Water Services & MIT casing for 30 min.
Start Time	14:00	End Time	17:00	Comment RDMOSU.
Start Time	17:00	End Time	00:00	Comment Well Shut in wait on permission to inject.
Report Start Date	7/22/2014	Report End Date	7/22/2014	24hr Activity Summary
Start Time	08:50	End Time	09:20	CONDUCT MIT Comment On 07/16/2014 Chris Jensen with the State of Utah DOGM was contacted concerning the initial MIT on the above listed well. On 07/22/2014 the casing was pressured up to 1199 psig and charted for 30 minutes with no pressure loss. The well was not injecting during the test. The tubing pressure was 390 psig during the test. There was a State representative available to witness the test - Chris Jensen.

**NEWFIELD**

**Schematic**

**Well Name: Federal 12-23-9-16**

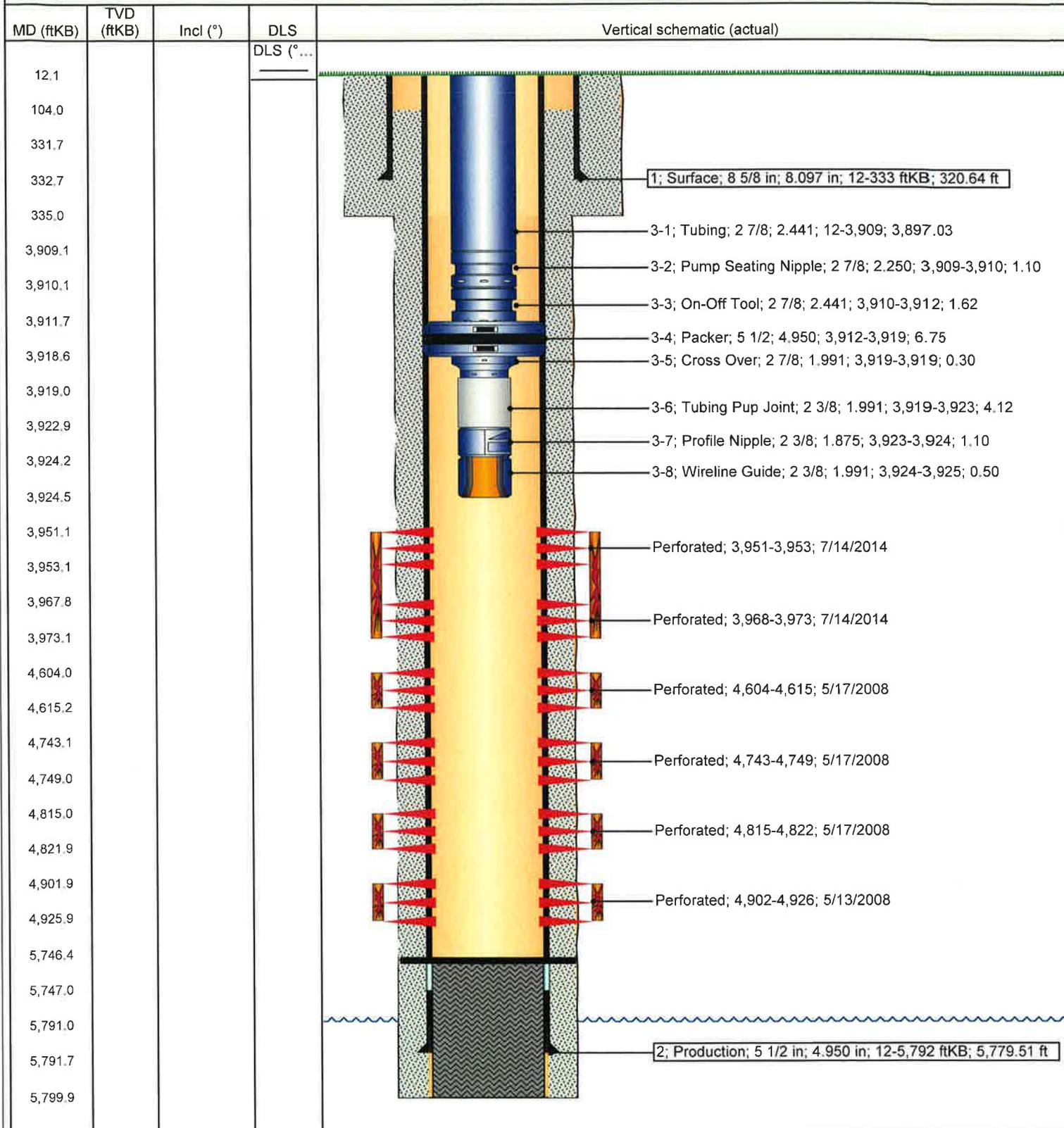
Surface Legal Location 23-9S-16E		API/UWI 43013331790000	Well RC 500159245	Lease	State/Province Utah	Field Name GMBU CTB6	County DUCHESNE
Spud Date 2/5/2008	Rig Release Date 2/18/2008	On Production Date 5/22/2008	Original KB Elevation (ft) 5,786	Ground Elevation (ft) 5,774	Total Depth All (TVD) (ftKB)	PBTD (All) (ftKB) Original Hole - 5,746.5	

**Most Recent Job**

Job Category Production / Workover	Primary Job Type Conversion	Secondary Job Type OAP	Job Start Date 7/10/2014	Job End Date 7/22/2014
---------------------------------------	--------------------------------	---------------------------	-----------------------------	---------------------------

**TD: 5,800.0**

Vertical - Original Hole, 7/23/2014 10:15:38 AM



**NEWFIELD****Newfield Wellbore Diagram Data  
Federal 12-23-9-16**

Surface Legal Location 23-9S-16E		API/UWI 43013331790000		Lease	
County DUCHESNE		State/Province Utah		Basin	
Well Start Date 2/5/2008		Spud Date 2/5/2008		Final Rig Release Date 2/18/2008	
Original KB Elevation (ft) 5,786		Ground Elevation (ft) 5,774		Total Depth (ftKB) 5,800.0	
				Total Depth All (TVD) (ftKB)	
				PBTD (All) (ftKB) Original Hole - 5,746.5	

**Casing Strings**

Csg Des	Run Date	OD (in)	ID (in)	W/Len (lb/ft)	Grade	Set Depth (ftKB)
Surface	2/6/2008	8 5/8	8.097	24.00	J-55	333
Production	2/18/2008	5 1/2	4.950	15.50	J-55	5,792

**Cement****String: Surface, 333ftKB 2/8/2008**

Cementing Company BJ Services Company		Top Depth (ftKB) 12.0	Bottom Depth (ftKB) 335.0	Full Return?	Vol Cement Ret (bbl)
Fluid Description w/ 2% CaCL2 + 1/4#/sk Cello-Flake		Fluid Type Lead	Amount (sacks) 160	Class G	Estimated Top (ftKB) 12.0

**String: Production, 5,792ftKB 2/18/2008**

Cementing Company BJ Services Company		Top Depth (ftKB) 104.0	Bottom Depth (ftKB) 5,800.0	Full Return?	Vol Cement Ret (bbl)
Fluid Description w/ 10% gel + 3% KCL, 3#s /sk CSE + 2# sk/kolseal + 1/2#s/sk Cello Flake		Fluid Type Lead	Amount (sacks) 300	Class PL II	Estimated Top (ftKB) 104.0
Fluid Description W/ 2% Gel + 3% KCL, .5%EC1, 1/4# sk C.F. 2% gel. 3% SM		Fluid Type Tail	Amount (sacks) 400	Class 50/50 Poz	Estimated Top (ftKB) 3,000.0

**Tubing Strings**

Tubing Description		Run Date		Set Depth (ftKB)				
Tubing		7/16/2014		3,924.6				
Item Des	Jts	OD (in)	ID (in)	Wt (lb/ft)	Grade	Len (ft)	Top (ftKB)	Btm (ftKB)
Tubing	124	2 7/8	2.441	6.50	J-55	3,897.03	12.0	3,909.1
Pump Seating Nipple	1	2 7/8	2.250		N-80	1.10	3,909.1	3,910.2
On-Off Tool	1	2 7/8	2.441			1.62	3,910.2	3,911.8
Packer	1	5 1/2	4.950			6.75	3,911.8	3,918.5
Cross Over	1	2 7/8	1.991			0.30	3,918.5	3,918.8
Tubing Pup Joint	1	2 3/8	1.991	4.70	J-55	4.12	3,918.8	3,923.0
Profile Nipple	1	2 3/8	1.875		N-80	1.10	3,923.0	3,924.1
Wireline Guide	1	2 3/8	1.991			0.50	3,924.1	3,924.6

**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
1	GB-6 SAND, Original Hole	3,951	3,953	3	120	0.360	7/14/2014
1	GB-6 SAND, Original Hole	3,968	3,973	3	120	0.360	7/14/2014
4	C sds, Original Hole	4,604	4,615	4	120	0.390	5/17/2008
3	B2 sds, Original Hole	4,743	4,749	4	120	0.390	5/17/2008
2	A.5 sds, Original Hole	4,815	4,822	4	120	0.390	5/17/2008
1	A3 sds, Original Hole	4,902	4,926	4	120	0.490	5/13/2008

**Stimulations & Treatments**

Stage#	ISIP (psi)	Frac Gradient (psi/ft)	Max Rate (bbl/min)	Max PSI (psi)	Total Clean Vol (bbl)	Total Slurry Vol (bbl)	Vol Recov (bbl)
1	2,198	0.88	23.8	2,005			
2	4,200	1.3	23.5	4,200			
3	3,290	1.1	22.9	3,290			
4	2,680	1.0	23.6	2,872			
5	1,871	0.905	30.6	2,233	435	475	435

**Proppant**

Stage#	Total Prop Vol Pumped (lb)	Total Add Amount
1		Proppant White Sand 119316 lb
2		Proppant White Sand 14762 lb
3		Proppant White Sand 25365 lb
4		Proppant White Sand 46658 lb
5	40,020	Main White Sand 40020 lbs

<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	<b>FORM 9</b>
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.	5. LEASE DESIGNATION AND SERIAL NUMBER: UTU-15855
1. TYPE OF WELL Water Injection Well	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
2. NAME OF OPERATOR: NEWFIELD PRODUCTION COMPANY	7. UNIT or CA AGREEMENT NAME: GMBU (GRRV)
3. ADDRESS OF OPERATOR: Rt 3 Box 3630 , Myton, UT, 84052	8. WELL NAME and NUMBER: FEDERAL 12-23-9-16
4. LOCATION OF WELL FOOTAGES AT SURFACE: 2120 FSL 0794 FWL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NWSW Section: 23 Township: 09.0S Range: 16.0E Meridian: S	9. API NUMBER: 43013331790000
3. ADDRESS OF OPERATOR: Rt 3 Box 3630 , Myton, UT, 84052	PHONE NUMBER: 435 646-4825 Ext
9. FIELD and POOL or WILDCAT: MONUMENT BUTTE	COUNTY: DUCHESNE
STATE: UTAH	STATE: 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: 11/20/2014	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> CHANGE WELL NAME
<input type="checkbox"/> SPUD REPORT Date of Spud:	<input checked="" type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input checked="" type="checkbox"/> CONVERT WELL TYPE
<input type="checkbox"/> DRILLING REPORT Report Date:	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> NEW CONSTRUCTION
	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> PLUG BACK
	<input type="checkbox"/> PRODUCTION START OR RESUME	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION
	<input type="checkbox"/> REPERFORATE CURRENT FORMATION	<input type="checkbox"/> SIDETRACK TO REPAIR WELL	<input type="checkbox"/> TEMPORARY ABANDON
	<input type="checkbox"/> TUBING REPAIR	<input type="checkbox"/> VENT OR FLARE	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> WATER SHUTOFF	<input type="checkbox"/> SI TA STATUS EXTENSION	<input type="checkbox"/> APD EXTENSION
	<input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> OTHER	OTHER: <input style="width: 100px;" type="text"/>

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

The above reference well was put on injection at 9:50 AM on 11/20/2014.

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

Date: ~~December 03, 2014~~

By:

NAME (PLEASE PRINT) Lucy Chavez-Naupoto	PHONE NUMBER 435 646-4874	TITLE Water Services Technician
SIGNATURE N/A	DATE 11/20/2014	



GARY R. HERBERT  
Governor

SPENCER J. COX  
Lieutenant Governor

# State of Utah

## DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER  
Executive Director

### Division of Oil, Gas and Mining

JOHN R. BAZA  
Division Director

## UNDERGROUND INJECTION CONTROL PERMIT

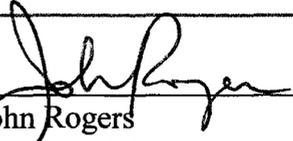
Cause No. UIC-420

**Operator:** Newfield Production Company  
**Well:** Federal 12-23-9-16  
**Location:** Section 23, Township 9 South, Range 16 East  
**County:** Duchesne  
**API No.:** 43-013-33179  
**Well Type:** Enhanced Recovery (waterflood)

### Stipulations of Permit Approval

1. Approval for conversion to Injection Well issued on May 8, 2014.
2. Maximum Allowable Injection Pressure: 2,000 psig
3. Maximum Allowable Injection Rate: (restricted by pressure limitation)
4. Injection Interval: Green River Formation (3,759' – 5,747')
5. Any subsequent wells drilled within a ½ mile radius of this well shall have production casing cement brought up to or above the top of the unitized interval for the Greater Monument Butte Unit.

Approved by:

  
John Rogers  
Associate Director

Date

10/1/2014

JR/MLR/js

cc: Bruce Suchomel, Environmental Protection Agency  
Bureau of Land Management, Verna  
Jill Loyle, Newfield Production Company, Denver  
Newfield Production Company, Myton  
Duchesne County  
Well File

N:\O&G Reviewed Docs\ChronFile\UIC\Newfield





GARY R. HERBERT  
Governor

GREGORY S. BELL  
Lieutenant Governor

# State of Utah

## DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER  
Executive Director

### Division of Oil, Gas and Mining

JOHN R. BAZA  
Division Director

May 8, 2014

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

Subject: Greater Monument Butte Unit Well: Federal 12-23-9-16, Section 23, Township 9 South, Range 16 East, SLBM, Duchesne County, Utah, API Well # 43-013-33179

Newfield Production Company:

Pursuant to Utah Admin. Code R649-5-3-3, the Division of Oil, Gas and Mining (the "Division") issues its administrative approval for conversion of the referenced well to a Class II injection well. Accordingly, the following stipulations shall apply for full compliance with this approval:

1. Compliance with all applicable requirements for the operation, maintenance and reporting for Underground Injection Control ("UIC") Class II injection wells pursuant to Utah Admin. Code R649-1 et seq.
2. Conformance with all conditions and requirements of the complete application submitted by Newfield Production Company.
3. A casing\tubing pressure test shall be conducted prior to commencing injection.
4. Pressure shall be monitored between the surface casing and the production casing on a regular basis. Any pressure changes observed shall be reported to the Division immediately.
5. The top of the injection interval shall be limited to a depth no higher than 3,759 feet in the Federal 12-23-9-16 well.

A final approval to commence injection will be issued upon satisfactory completion of the listed stipulations. If you have any questions regarding this approval or the necessary requirements, please contact Mark Reinbold at 801-538-5333 or Brad Hill at 801-538-5315.

Sincerely,

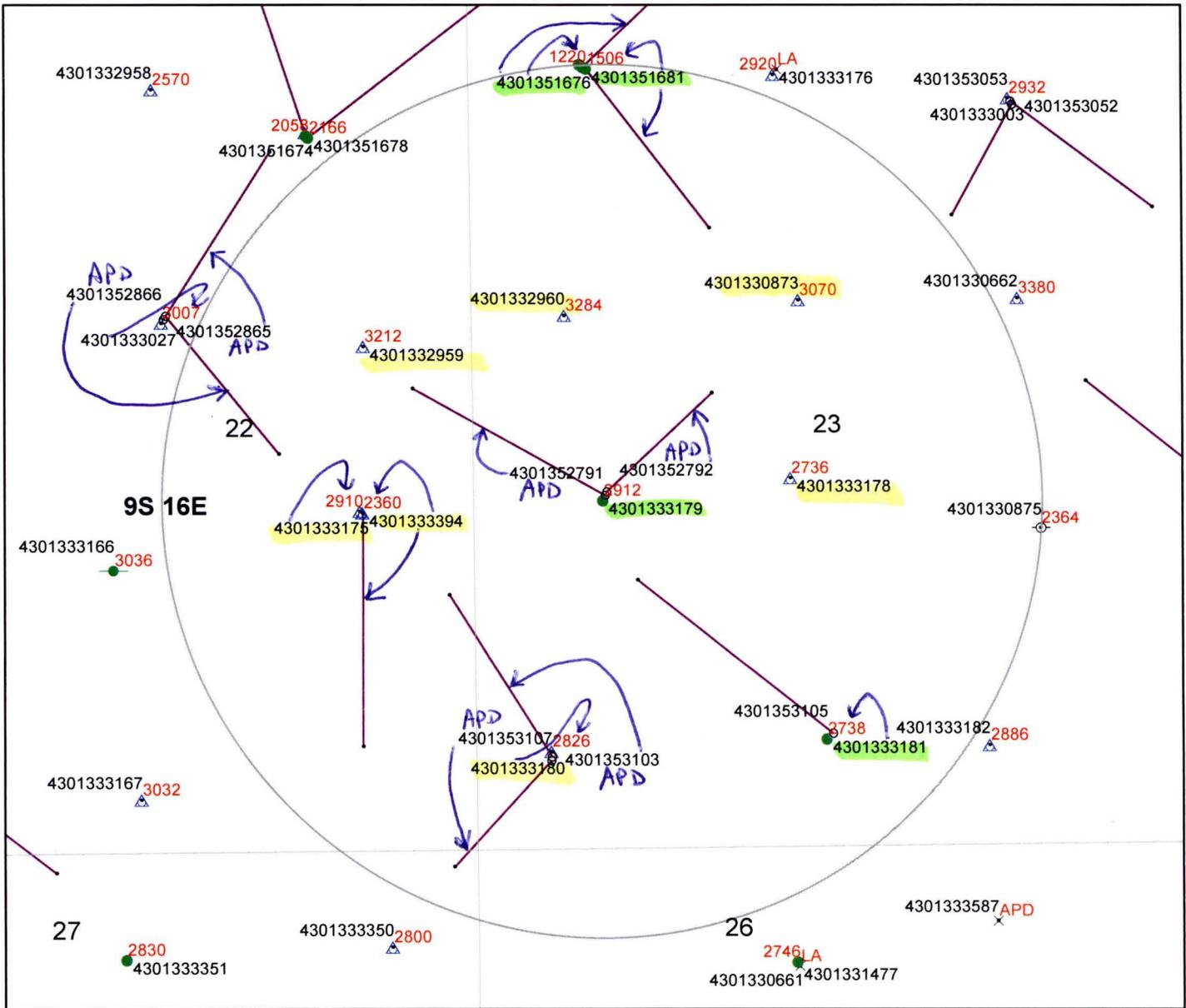
John Rogers  
Associate Director

JR/MLR/js

cc: Bruce Suchomel, Environmental Protection Agency  
Bureau of Land Management, Vernal  
Duchesne County  
Newfield Production Company, Myton  
Well File

N:\O&G Reviewed Docs\ChronFile\UIC





**Legend**

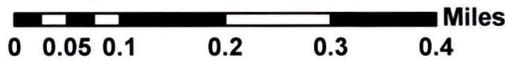
**Oil & Gas Well Type**

- APD-Approved Permit
- ⊙ DRL-Spudded (Drilling Commenced)
- ⊙ GIW-Gas Injection Well
- <sub>GS</sub> GSW-Gas Storage Well
- × LA-Location Abandoned
- LOC-New Location Well
- OPS-Drilling Operations Suspended
- ⊙ PA-Pugged & Abandoned
- ⊙ PGW-Producing Gas Well
- POW-Producing Oil Well *in AOR*
- ▲ RET-Returned APD
- ⊙ SGW-Shut-in Gas Well
- SOW-Shut-in Oil Well
- ⊙ TA-Temp Abandoned
- TW-Test Well
- ⊙ WDW-Water Disposal Well
- ▲ WIW-Water Injection Well *in AOR*
- WSW-Water Supply Well

- 4585 Depth to top of suitable cement bond
- Well Bottom Hole Location
- Oil & Gas Wells Hole Directional Path Wells-CbltopsMaster 1-31-13
- DNR Oil Gas Wells Buffer
- County Boundaries
- PLSS Sections
- PLSS Townships

**Cement Bond Tops  
Federal 12-23-9-16  
API #43-013-33179  
UIC-420.6**

*(updated 10/1/2014)*



**DIVISION OF OIL, GAS AND MINING  
UNDERGROUND INJECTION CONTROL PROGRAM  
PERMIT  
STATEMENT OF BASIS**

**Applicant:** Newfield Production Company      **Well:** Federal 12-23-9-16

**Location:** 23/9S/16E      **API:** 43-013-33179

**Ownership Issues:** The proposed well is located on BLM land. The well is located in the Greater Monument Butte Unit. Lands in the one-half mile radius of the well are administered by the BLM. The Federal Government is the mineral owner within the area of review (AOR). Newfield and other various individuals hold the leases in the unit. Newfield has provided a list of all surface, mineral and lease holders in the half-mile radius. Newfield is the operator of the Greater Monument Butte Unit. Newfield has submitted an affidavit stating that all owners and interest owners have been notified of their intent.

**Well Integrity:** The proposed well has surface casing set at 333 feet and has a cement top at the surface. A 5½ inch production casing is set at 5,718 feet. The cement bond log is somewhat problematic but appears to demonstrate adequate bond in this well up to about 2,912 feet or higher. A 2 7/8 inch tubing with a packer is proposed to be set at 4,554 feet. Higher perforations will be opened at a later date. A mechanical integrity test will be run on the well prior to injection. At the time of this revision (10/1/2014), based on surface locations, there are 4 producing wells, 7 injection wells, and 1 P/A well in the AOR. One of the producing wells is directionally drilled, with a surface location inside the AOR and a bottom hole location outside the AOR. Additionally, there is 1 approved surface location outside the AOR, from which a directional well will be drilled to a bottom hole location inside the AOR. All of the wells have evidence of adequate casing and cement for the proposed injection interval.

**Ground Water Protection:** As interpreted from the Utah Geological Survey's DOE Project-Uinta Basin Water Draft Map (Paul B. Anderson, December 2, 2011), the base of moderately saline water (3000-10,000 mg/l TDS) is at a depth of approximately 2400 feet. Injection shall be limited to the interval between 3,759 feet and 5,747 feet in the Green River Formation. Information submitted by Newfield indicates that the fracture gradient for the 12-23-9-16 well is 0.88 psi/ft., which was the lowest reported fracture gradient for the injection zone. The resulting minimum fracture pressure for the proposed injection interval is 2,166 psig. The requested maximum pressure is 2,166 psig. We intend to permit this well at a maximum pressure of 2,000 psig. The anticipated average injection pressure is 1100 psig. Injection at this pressure should not initiate any new fractures or propagate existing fractures in the adjacent confining intervals. Any ground water present should be adequately protected.

**Federal 12-23-9-16**

**page 2**

**Oil/Gas& Other Mineral Resources Protection:** The Board of Oil, Gas & Mining approved the Greater Monument Butte Unit on December 1, 2009. Correlative rights issues were addressed at this time. Previous reviews in this area indicate that other mineral resources in the area have been protected or are not at issue.

**Bonding:** Bonded with the BLM

**Actions Taken and Further Approvals Needed:** A notice of agency action has been sent to the Salt Lake Tribune and the Uinta Basin Standard. A casing/tubing pressure test will be required prior to injection. It is recommended that approval of this application be granted.

Note: Applicable technical publications concerning water resources in the general vicinity of this project have been reviewed and taken into consideration during the permit review process.

Reviewer(s): Mark Reinbold

Date: 5/5/2014 (revised 10/1/2014)

4770 S. 5600 W.  
 P.O. BOX 704005  
 WEST VALLEY CITY, UTAH 84170  
 FED. TAX I.D.# 87-0217663  
 801-204-6910

The Salt Lake Tribune

MEDIAOne

Deseret News

PROOF OF PUBLICATION

CUSTOMER'S COPY

CUSTOMER NAME AND ADDRESS	ACCOUNT NUMBER	DATE
DIV OF OIL-GAS & MINING, Rose Nolton 1594 W NORTH TEMP #1210 P.O. BOX 145801 SALT LAKE CITY, UT 84114	9001402352 <b>RECEIVED</b> APR 24 2014	4/17/2014

ACCOUNT NAME	
DIV OF OIL-GAS & MINING,	
TELEPHONE	ADORDER# / INVOICE
8015385340	0000952488 /
SCHEDULE	
Start 04/17/2014	End 04/17/2014
CUST. REF. NO.	
CAUSE NO UIC-420	
CAPTION	
BEFORE THE DIVISION OF OIL, GAS AND MINING DEPARTMENT OF NA	
SIZE	
73 Lines	2.00 COLUMNS
TIMES	RATE
3	
MISC. CHARGES	AD CHARGE
	TOTAL COST
	250.28

**BEFORE THE DIVISION OF OIL, GAS AND MINING  
 DEPARTMENT OF NATURAL RESOURCES  
 STATE OF UTAH  
 NOTICE OF AGENCY ACTION  
 CAUSE NO. UIC-420**

IN THE MATTER OF THE APPLICATION OF NEWFIELD PRODUCTION COMPANY FOR ADMINISTRATIVE APPROVAL OF CERTAIN WELLS LOCATED IN SECTIONS 13, 15, 19, 21, and 23, TOWNSHIP 9 SOUTH, RANGE 16 EAST, DUCHESE COUNTY, UTAH, AS CLASS II INJECTION WELLS.

THE STATE OF UTAH TO ALL PERSONS INTERESTED IN THE ABOVE ENTITLED MATTER.

Notice is hereby given that the Division of Oil, Gas and Mining (the "Division") is commencing an informal adjudicative proceeding to consider the application of Newfield Production Company, 1001 17th Street, Suite 2000, Denver, Colorado 80202, telephone 303-893-0102, for administrative approval of the following wells located in Duchesne County, Utah, for conversion to Class II injection wells:

**Greater Monument Butte Unit:**  
 Federal 10-13-9-16 well located in NW/4 SE/4, Section 13, Township 9 South, Range 16 East  
 API 43-013-32653  
 Federal 12-13-9-16 well located in NW/4 SW/4, Section 13, Township 9 South, Range 16 East  
 API 43-013-32651  
 State 16-16-9-16 well located in SE/4 SE/4, Section 16, Township 9 South, Range 16 East  
 API 43-013-33854  
 Federal 8-19-9-16 well located in SE/4 NE/4, Section 19, Township 9 South, Range 16 East  
 API 43-013-33101  
 Federal 16-21-9-16 well located in SE/4 SE/4, Section 21, Township 9 South, Range 16 East  
 API 43-013-33165  
 Federal 12-23-9-16 well located in NW/4 SW/4, Section 23, Township 9 South, Range 16 East  
 API 43-013-33179

The proceeding will be conducted in accordance with Utah Admin. R649-10, Administrative Procedures.

Selected zones in the Green River Formation will be used for water injection. The maximum requested injection pressures and rates will be determined based on fracture gradient information submitted by Newfield Production Company.

Any person desiring to object to the application or otherwise intervene in the proceeding, must file a written protest or notice of intervention with the Division within fifteen days following publication of this notice. The Division's Presiding Officer for the proceeding is Brad Hill, Permitting Manager, at P.O. Box 145801, Salt Lake City, UT 84114-5801, phone number (801) 538-5340. If such a protest or notice of intervention is received, a hearing will be scheduled in accordance with the aforementioned administrative procedural rules. Protestants and/or interveners should be prepared to demonstrate at the hearing how this matter affects their interests.

Dated this 14th day of April, 2014:

STATE OF UTAH  
 DIVISION OF OIL, GAS & MINING  
 /s/  
 Brad Hill  
 Permitting Manager  
 952488

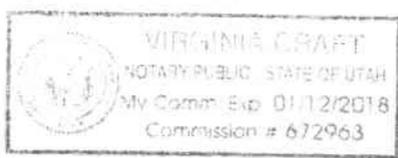
AFFIDAVIT OF PUBLICATION

AS NEWSPAPER AGENCY COMPANY, LLC dba MEDIAONE OF UTAH LEGAL BOOKER, I CERTIFY THAT BEFORE THE DIVISION OF OIL, GAS AND MINING DEPARTMENT OF NATURAL RESOURCES' CAUSE NO. UIC-420 IN THE MATTER OF THE APPLICA FOR DIV OF OIL-GAS & MINING, WAS COMPANY, LLC dba MEDIAONE OF UTAH, AGENT FOR THE SALT LAKE TRIBUNE AND DESERET NEWS IN ENGLISH LANGUAGE WITH GENERAL CIRCULATION IN UTAH, AND PUBLISHED IN SALT LAKE CITY, SALT LAKE COUNTY IN THE STATE OF UTAH. NOTICE IS ALSO POSTED ON UTAHLEGALS.COM ON THE SAME DAY AS THE FIRST NEWSPAPER PUBLICATION DATE AND REMAINS ON UTAHLEGALS.COM INDEFINATELY. COMPLIES WITH UTAH DIGITAL SIGNATURE ACT UTAH CODE 46-2-101; 46-3-104.

PUBLISHED ON Start 04/17/2014 End 04/17/2014

SIGNATURE 

DATE 4/17/2014



*Virginia Craft*  
 NOTARY SIGNATURE

**THIS IS NOT A STATEMENT BUT A "PROOF OF PUBLICATION"  
 PLEASE PAY FROM BILLING STATEMENT**

# AFFIDAVIT OF PUBLICATION

County of Duchesne,  
STATE OF UTAH

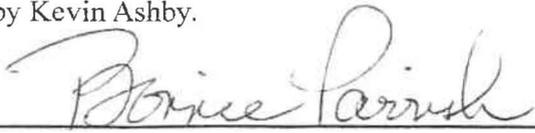
I, Kevin Ashby on oath, say that I am the PUBLISHER of the Uintah Basin Standard, a weekly newspaper of general circulation, published at Roosevelt, State and County aforesaid, and that a certain notice, a true copy of which is hereto attached, was published in the full issue such newspaper for 1 consecutive issues, and that the first publication was on the 22 day of April, 20 14, and that the last publication of such notice was in the issue of such newspaper dated the 27 day of April, 20 14, and that said notice was published on Utahlegals.com on the same day as the first newspaper publication and the notice remained on Utahlegals.com until the end of the scheduled run.

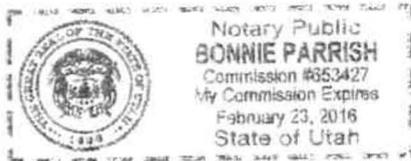
  
\_\_\_\_\_  
Publisher

Subscribed and sworn to before me on this

23 day of April, 20 14

by Kevin Ashby.

  
\_\_\_\_\_  
Notary Public



## BEFORE THE DIVISION OF OIL, GAS AND MINING DEPART- MENT OF NATURAL RESOURCES STATE OF UTAH NOTICE OF AGENCY ACTION CAUSE NO. UIC-420

IN THE MATTER  
OF THE APPLICA-  
TION OF NEW-  
FIELD PRODUC-  
TION COMPANY  
FOR ADMINISTRA-  
TIVE APPROVAL  
OF CERTAIN  
WELLS LOCATED  
IN SECTIONS  
13, 16, 19, 21, and  
23, TOWNSHIP 9  
SOUTH, RANGE 16  
EAST, DUCHESNE  
COUNTY, UTAH,  
AS CLASS II INJEC-  
TION WELLS.

THE STATE OF  
UTAH TO ALL PER-  
SONS INTERESTED  
IN THE ABOVE  
ENTITLED MAT-  
TER.

Notice is hereby  
given that the Divi-  
sion of Oil, Gas and  
Mining (the "Divi-  
sion") is commencing  
an informal adjudi-  
cative proceeding  
to consider the ap-  
plication of Newfield  
Production Company,  
1001 17th Street,  
Suite 2000, Denver,  
Colorado 80202, tele-  
phone 303-893-0102,  
for administrative  
approval of the fol-  
lowing wells located  
in Duchesne County,  
Utah, for conversion  
to Class II injection  
wells:

Greater Monument  
Butte Unit:

Federal 10-13-9-16  
well located in NW/4  
SE/4, Section 13,  
Township 9 South,  
Range 16 East

API 43-013-32653  
Federal 12-13-9-16  
well located in NW/4  
SW/4, Section 13,  
Township 9 South,  
Range 16 East

API 43-013-32651  
State 16-16-9-16  
well located in SE/4  
SE/4, Section 16,  
Township 9 South,  
Range 16 East

API 43-013-33854  
Federal 8-19-9-16  
well located in SE/4  
NE/4, Section 19,  
Township 9 South,  
Range 16 East

API 43-013-33101  
Federal 16-21-9-16  
well located in SE/4  
SE/4, Section 21,  
Township 9 South,  
Range 16 East

API 43-013-33165  
Federal 12-23-9-16  
well located in NW/4  
SW/4, Section 23,  
Township 9 South,  
Range 16 East

API 43-013-33179  
The proceeding  
will be conducted in  
accordance with Utah  
Admin. R649-10,  
Administrative Proce-  
dures.

Selected zones  
in the Green River  
Formation will be

*Erish*

Notary Public



NE/4, Section 19,  
Township 9 South,  
Range 16 East  
API 43-013-33101  
Federal 16-21-9-16  
well located in SE/4  
SE/4, Section 21,  
Township 9 South,  
Range 16 East  
API 43-013-33165  
Federal 12-23-9-16  
well located in NW/4  
SW/4, Section 23,  
Township 9 South,  
Range 16 East  
API 43-013-33179

The proceeding  
will be conducted in  
accordance with Utah  
Admin. R649-10,  
Administrative Proce-  
dures.

Selected zones  
in the Green River  
Formation will be  
used for water injec-  
tion. The maximum  
requested injection  
pressures and rates  
will be determined  
based on fracture  
gradient informa-  
tion submitted by  
Newfield Production  
Company.

Any person  
desiring to object to  
the application or  
otherwise intervene  
in the proceeding,  
must file a written  
protest or notice of  
intervention with  
the Division within  
fifteen days following  
publication of this  
notice. The Division's  
Presiding Officer  
for the proceeding is  
Brad Hill, Permitting  
Manager, at P.O. Box  
145801, Salt Lake  
City, UT 84114-5801,  
phone number (801)  
538-5340. If such  
a protest or notice  
of intervention is  
received, a hearing  
will be scheduled  
in accordance with  
the aforementioned  
administrative  
procedural rules.  
Protestants and/or  
interveners should be  
prepared to demon-  
strate at the hearing  
how this matter af-  
fects their interests.

Dated this 14th day  
of April, 2014.

STATE OF UTAH  
DIVISION OF  
OIL, GAS & MIN-  
ING

/s/

Brad Hill  
Published in the  
Uintah Basin Stan-  
dard April 22, 2014.

BEFORE THE DIVISION OF OIL, GAS AND MINING  
DEPARTMENT OF NATURAL RESOURCES  
STATE OF UTAH  
NOTICE OF AGENCY ACTION  
CAUSE NO. UIC-420

IN THE MATTER OF THE APPLICATION OF NEWFIELD PRODUCTION COMPANY FOR ADMINISTRATIVE APPROVAL OF CERTAIN WELLS LOCATED IN SECTIONS 13, 16, 19, 21, and 23, TOWNSHIP 9 SOUTH, RANGE 16 EAST, DUCHESNE COUNTY, UTAH, AS CLASS II INJECTION WELLS.

THE STATE OF UTAH TO ALL PERSONS INTERESTED IN THE ABOVE ENTITLED MATTER.

Notice is hereby given that the Division of Oil, Gas and Mining (the "Division") is commencing an informal adjudicative proceeding to consider the application of Newfield Production Company, 1001 17<sup>th</sup> Street, Suite 2000, Denver, Colorado 80202, telephone 303-893-0102, for administrative approval of the following wells located in Duchesne County, Utah, for conversion to Class II injection wells:

Greater Monument Butte Unit:

Federal 10-13-9-16 well located in NW/4 SE/4, Section 13, Township 9 South, Range 16 East  
API 43-013-32653

Federal 12-13-9-16 well located in NW/4 SW/4, Section 13, Township 9 South, Range 16 East  
API 43-013-32651

State 16-16-9-16 well located in SE/4 SE/4, Section 16, Township 9 South, Range 16 East  
API 43-013-33854

Federal 8-19-9-16 well located in SE/4 NE/4, Section 19, Township 9 South, Range 16 East  
API 43-013-33101

Federal 16-21-9-16 well located in SE/4 SE/4, Section 21, Township 9 South, Range 16 East  
API 43-013-33165

Federal 12-23-9-16 well located in NW/4 SW/4, Section 23, Township 9 South, Range 16 East  
API 43-013-33179

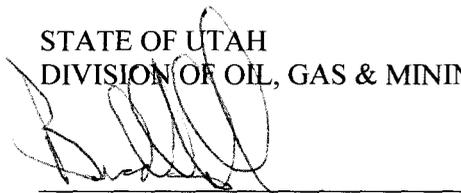
The proceeding will be conducted in accordance with Utah Admin. R649-10, Administrative Procedures.

Selected zones in the Green River Formation will be used for water injection. The maximum requested injection pressures and rates will be determined based on fracture gradient information submitted by Newfield Production Company.

Any person desiring to object to the application or otherwise intervene in the proceeding, must file a written protest or notice of intervention with the Division within fifteen days following publication of this notice. The Division's Presiding Officer for the proceeding is Brad Hill, Permitting Manager, at P.O. Box 145801, Salt Lake City, UT 84114-5801, phone number (801) 538-5340. If such a protest or notice of intervention is received, a hearing will be scheduled in accordance with the aforementioned administrative procedural rules. Protestants and/or interveners should be prepared to demonstrate at the hearing how this matter affects their interests.

Dated this 14th day of April, 2014.

STATE OF UTAH  
DIVISION OF OIL, GAS & MINING



Brad Hill  
Permitting Manager

**Newfield Production Company**

**FEDERAL 10-13-9-16, FEDERAL 12-13-9-16, STATE 16-16-9-16,  
FEDERAL 8-19-9-16, FEDERAL 16-21-9-16, FEDERAL 12-23-9-16**

**Cause No. UIC-420**

Publication Notices were sent to the following:

Newfield Production Company  
1001 17th Street, Suite 2000  
Denver, CO 80202

SITLA  
675 E 500 S Ste 500  
Salt Lake City, UT 84102-2818

Uintah Basin Standard  
268 South 200 East  
Roosevelt, UT 84066  
via e-mail [legals @ubstandard.com](mailto:legals@ubstandard.com)

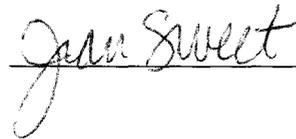
Duchesne County Planning  
P O Box 317  
Duchesne, UT 84021-0317

Salt Lake Tribune  
P O Box 45838  
Salt Lake City, UT 84145  
via e-mail [naclegal@mediaoneutah.com](mailto:naclegal@mediaoneutah.com)

Bruce Suchomel  
US EPA Region 8  
MS 8P-W-GW  
1595 Wynkoop Street  
Denver, CO 80202-1129

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

Newfield Production Company  
Rt 3 Box 3630  
Myton, UT 84052

  
\_\_\_\_\_



GARY R. HERBERT  
Governor

SPENCER J. COX  
Lieutenant Governor

# State of Utah

DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER  
Executive Director

Division of Oil, Gas and Mining

JOHN R. BAZA  
Division Director

April 15, 2014

Via e-mail: [legals@ubstandard.com](mailto:legals@ubstandard.com)

Uintah Basin Standard  
268 South 200 East  
Roosevelt, UT 84066

Subject: Notice of Agency Action – Newfield Production Company Cause No. UIC-420

To Whom It May Concern:

Enclosed is a copy of the referenced Notice of Agency Action. Please publish the Notice, once only, as soon as possible. Please notify me via e-mail of the date it will be published. My e-mail address is: [jsweet@utah.gov](mailto:jsweet@utah.gov).

Please send proof of publication and billing to:

Division of Oil, Gas and Mining  
PO Box 145801  
Salt Lake City, UT 84114-5801

Sincerely,

Jean Sweet  
Executive Secretary

Enclosure

Jean Sweet <[jsweet@utah.gov](mailto:jsweet@utah.gov)>

---

**Re: Notice of Agency Action - Newfield Production Company Cause No. UIC-420**

1 message

---

**Cindy Kleinfelter** <[ckleinfelter@ubmedia.biz](mailto:ckleinfelter@ubmedia.biz)>  
To: Jean Sweet <[jsweet@utah.gov](mailto:jsweet@utah.gov)>

Thu, Apr 17, 2014 at 2:08 PM

On 4/15/2014 9:08 AM, Jean Sweet wrote:

To Whom It May Concern:

Enclosed is a copy of the referenced Notice of Agency Action. Please publish the Notice, once only, as soon as possible. Please notify me via e-mail of the date it will be published. My e-mail address is: [jsweet@utah.gov](mailto:jsweet@utah.gov).

Please send proof of publication and billing to:

Division of Oil, Gas and Mining

PO Box 145801

Salt Lake City, UT 84114-5801

Sincerely,

—  
Jean Sweet  
Executive Secretary  
Utah Division of Oil, Gas and Mining  
801-538-5329

Received. Thank you. It will publish April 22.  
Cindy



GARY R. HERBERT  
Governor

SPENCER J. COX  
Lieutenant Governor

# State of Utah

DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER  
Executive Director

Division of Oil, Gas and Mining

JOHN R. BAZA  
Division Director

April 15, 2014

Via e-mail [naclegal@mediaoneutah.com](mailto:naclegal@mediaoneutah.com)

Salt Lake Tribune  
P. O. Box 45838  
Salt Lake City, UT 84145

Subject: Notice of Agency Action – Newfield Production Company Cause No. UIC-420

To Whom It May Concern:

Enclosed is a copy of the referenced Notice of Agency Action. Please publish the Notice, once only, as soon as possible. Please notify me via e-mail of the date it will be published. My e-mail address is: [jsweet@utah.gov](mailto:jsweet@utah.gov).

Please send proof of publication and billing for **account #9001402352** to:

Division of Oil, Gas and Mining  
PO Box 145801  
Salt Lake City, UT 84114-5801

Sincerely,

Jean Sweet  
Executive Secretary

Enclosure

**Order Confirmation for Ad #0000952488-01**

<b>Client</b>	DIV OF OIL-GAS & MINING	<b>Payor Customer</b>	DIV OF OIL-GAS & MINING
<b>Client Phone</b>	801-538-5340	<b>Payor Phone</b>	801-538-5340
<b>Account#</b>	9001402352	<b>Payor Account</b>	9001402352
<b>Address</b>	1594 W NORTH TEMPLE STE 1210, SALT LAKE CITY UT 84116-3154 USA	<b>Payor Address</b>	1594 W NORTH TEMPLE STE 1210, SALT LAKE CITY UT 84116-3154

<b>Fax</b>	801-359-3940	<b>Ordered By</b>	<b>Acct. Exec</b>
<b>Email</b>	juliecarter@utah.gov	<b>Jean</b>	<b>kstowe</b>

<b>Total Amount</b>	<b>\$250.28</b>			
<b>Payment Amt</b>	<b>\$0.00</b>			
<b>Amount Due</b>	<b>\$250.28</b>	<b>Tear Sheets</b>	<b>Proofs</b>	<b>Affidavits</b>
		0	0	1
<b>Payment Method</b>		<b>PO Number</b>	CAUSE NO. UIC-420	

**Confirmation Notes:**

**Text:** Jean

<b>Ad Type</b>	<b>Ad Size</b>	<b>Color</b>
Legal Liner	2.0 X 73 Li	<NONE>

<b>Product</b>	<b>Placement</b>	<b>Position</b>
Salt Lake Tribune::	Legal Liner Notice - 0998	998-Other Legal Notices
<b>Scheduled Date(s):</b>	4/17/2014	
<b>Product</b>	<b>Placement</b>	<b>Position</b>
Deseret News::	Legal Liner Notice - 0998	998-Other Legal Notices
<b>Scheduled Date(s):</b>	4/17/2014	
<b>Product</b>	<b>Placement</b>	<b>Position</b>
utahlegals.com::	utahlegals.com	utahlegals.com
<b>Scheduled Date(s):</b>	4/17/2014	

**Ad Content Proof Actual Size**

BEFORE THE DIVISION OF OIL, GAS AND MINING  
DEPARTMENT OF NATURAL RESOURCES  
STATE OF UTAH  
NOTICE OF AGENCY ACTION  
CAUSE NO. UIC-420

IN THE MATTER OF THE APPLICATION OF NEWFIELD PRODUCTION COMPANY FOR ADMINISTRATIVE APPROVAL OF CERTAIN WELLS LOCATED IN SECTIONS 13, 16, 19, 21, and 23, TOWNSHIP 9 SOUTH, RANGE 16 EAST, DUCHESNE COUNTY, UTAH, AS CLASS II INJECTION WELLS.

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API 43-013-32653  
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API 43-013-32651  
Stone 16-16-9-16 well located in SE/4 SE/4, Section 16, Township 9 South, Range 16 East  
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Federal 8-19-9-16 well located in SE/4 NE/4, Section 19, Township 9 South, Range 16 East  
API 43-013-33101  
Federal 16-21-9-16 well located in SE/4 SE/4, Section 21, Township 9 South, Range 16 East  
API 43-013-33165  
Federal 12-23-9-16 well located in NW/4 SW/4, Section 23, Township 9 South, Range 16 East  
API 43-013-33179

The proceeding will be conducted in accordance with Utah Admin. R649-10, Administrative Procedures.

Selected zones in the Green River Formation will be used for water injection. The maximum requested injection pressures and rates will be determined based on fracture gradient information submitted by Newfield Production Company.

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Dated this 14th day of April, 2014.

STATE OF UTAH  
DIVISION OF OIL, GAS & MINING  
/s/  
Brad Hill  
Permitting Manager

952488

UPAXLP

**NEWFIELD**



**Newfield Exploration Company**

1001 17th Street | Suite 2000

Denver, Colorado 80202

PH 303-893-0102 | FAX 303-893-0103

April 7, 2014

Mr. Mark Reinbold  
State of Utah  
Division of Oil, Gas and Mining  
1594 W North Temple  
Salt Lake City, Utah 84114-5801

RE: Permit Application for Water Injection Well  
Federal #12-23-9-16  
Monument Butte Field, Lease #UTU-15855  
Section 23-Township 9S-Range 16E  
Duchesne County, Utah

**RECEIVED**

**APR 08 2014**

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

Dear Mr. Reinbold:

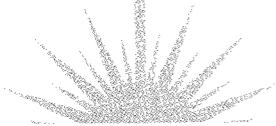
Newfield Production Company herein requests approval to convert the Federal #12-23-9-16 from a producing oil well to a water injection well in the Monument Butte (Green River) Field.

I hope you find this application complete; however, if you have any questions or require additional information, please contact me at (303) 893-0102.

Sincerely,

A handwritten signature in black ink that reads "Jill L. Loyle".

Jill L. Loyle  
Regulatory Associate



**NEWFIELD PRODUCTION COMPANY**  
**APPLICATION FOR APPROVAL OF CLASS II INJECTION WELL**  
**FEDERAL #12-23-9-16**  
**MONUMENT BUTTE FIELD (GREEN RIVER) FIELD**  
**LEASE #UTU-15855**  
**APRIL 7, 2014**

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ATTACHMENT H-1	WELLBORE DIAGRAM OF PROPOSED PLUGGED WELL



# FEDERAL 12-23-9-16

Spud Date: 2/5/08  
 Put on Production: 5/22/08  
 GL: 5774' KB: 5786'

Initial Production: BOPD,  
 MCFD, BWPD

## Proposed Injection Wellbore Diagram

### SURFACE CASING

CSG SIZE: 8-5/8"  
 GRADE: J-55  
 WEIGHT: 24#  
 LENGTH: 8 jts (322.64')  
 DEPTH LANDED: 333'  
 HOLE SIZE: 12-1/4"  
 CEMENT DATA: To surface with 160 sx Class "G" cmt

### PRODUCTION CASING

CSG SIZE: 5-1/2"  
 GRADE: J-55  
 WEIGHT: 15.5#  
 LENGTH: 141 jts  
 DEPTH LANDED: 5718.33' KB  
 HOLE SIZE: 7-7/8"  
 CEMENT DATA: 300 sxs Prem. Lite II mixed & 400 sxs 50/50 POZ.  
 CEMENT TOP: 104'

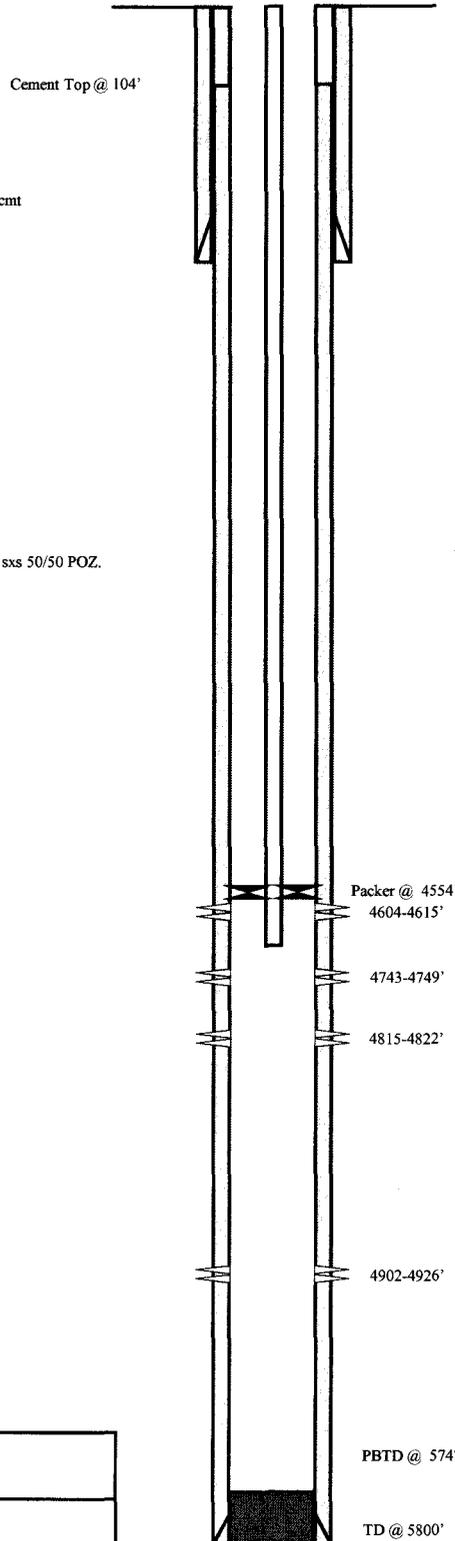
### TUBING

SIZE/GRADE/WT.: 2-7/8" / J-55 / 6.5#  
 NO. OF JOINTS: 155 jts (4873.6')  
 TUBING ANCHOR: 4885.6' KB  
 NO. OF JOINTS: 1 jts (31.45')  
 SEATING NIPPLE: 2-7/8" (1.10')  
 SN LANDED AT: 4919.9' KB  
 NO. OF JOINTS: 2 jts (62.6')  
 TOTAL STRING LENGTH: EOT @ 4984' KB

### FRAC JOB

5/17/08 4902-4926' **Frac A3 sds as follows:**  
 119,316# 20/40 sand in 996 bbls of Lightning 17 fluid. Treated w/ ave pressure of 1818 psi w/ ave rate of 23.4 BPM. ISIP 2198 psi. Actual Flush: 4397 gal.  
 5/17/08 4815-4822' **Frac A.5 sds as follows:**  
 14,762# 20/40 sand in 260 bbls of Lightning 17 fluid. Treated w/ ave pressure of 3169 psi w/ ave rate of 23.3 BPM. ISIP 4200 psi. Actual Flush: 3818 gal.  
 5/17/08 4743-4749' **Frac B2 sds as follows:**  
 25,365# 20/40 sand in 342 bbls of Lightning 17 fluid. Treated w/ ave pressure of 2818 psi w/ ave rate of 21.6 BPM. ISIP 3290 psi. Actual Flush: 4238 gal.

12/12/2009 **Tubing leak.** Updated rod and tubind detail.



### PERFORATION RECORD

Date	Interval	Tool	Holes
10/23/07	4604-4615'	4 JSPF	44 holes
10/26/07	4743-4749'	4 JSPF	24 holes
10/23/07	4815-4822'	4 JSPF	28 holes
10/26/07	4902-4926'	4 JSPF	96 holes

**NEWFIELD**

---

**FEDERAL 12-23-9-16**

2120'FSL & 794' FWL  
 NW/SW Section 23-T9S-R16E  
 Duchesne Co, Utah  
 API #43-013-33179; Lease # UTU-15855

## **WORK PROCEDURE FOR INJECTION CONVERSION**

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

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

**1. Operations to increase ultimate recovery, such as cycling of gas, the maintenance of pressure, the introduction of gas, water or other substances into a reservoir for the purpose of secondary or other enhanced recovery or for storage and the injection of water into any formation for the purpose of water disposal shall be permitted only by order of the Board after notice and hearing.**

**2. A request for agency action for authority for the injection of gas, liquified petroleum gas, air, water or any other medium into any formation for any reason, including but not necessarily limited to the establishment of or the expansion of waterflood projects, enhanced recovery projects, and pressure maintenance projects shall contain:**

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

Newfield Production Company  
1001 17<sup>th</sup> Street, Suite 2000  
Denver, Colorado 80202

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

See Attachment A.

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

Approval is requested to convert the Federal #12-23-9-16 from a producing oil well to a water injection well in Monument Butte (Green River) Field.

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

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

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

The injection zone is in the Green River Formation. For the Federal #12-23-9-16 well, the proposed injection zone is from Garden Gulch to Basal Carbonate (3759' - 5747'). The confining strata directly above and below the injection zones are the Garden Gulch and the top of the Wasatch Formation or TD, which ever is shallower. The Garden Gulch Marker top is at 3440' and the TD is at 5800'.

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

The referenced log for the Federal #12-23-9-16 is on file with the Utah Division of Oil, Gas and Mining.

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

The primary type and source of fluid to be used for injection will be culinary water commingled with produced water. The average estimated injection of fluids will be at a rate of 300 BPD, and the estimated maximum injection will be at a rate of 500 BPD.

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

See Attachment B.

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

See Attachment C.

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

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

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

This proposed injection well is on a Federal lease (Lease #UTU-15855) in the Monument Butte Federal (Green River) Field, and this request is for administrative approval.

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

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

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

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

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

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

The casing program is 8-5/8", 24# surface casing run to 333' KB, and 5-1/2", 15.5# casing run from surface to 5718' KB. A casing integrity test will be conducted at the time of conversion. See Attachment E.
  
  - 2.6 A statement as to the type of fluid to be used for injection, its source and estimated amounts to be injected daily.**

The primary type and source of fluid to be used for injection will be culinary water commingled with produced water. The estimated average rate of injection will be 300 BPD, and the estimated maximum rate of injection will be 500 BPD.
  
  - 2.7 Standard laboratory analysis of the fluid to be injected, the fluid in the formation into which the fluid is being injected, and the compatibility of the fluids.**

See Attachment F.

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

The proposed average injection pressure will be approximately 1100 psig and the maximum injection pressure will not exceed 2166 psig.

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

The minimum fracture gradient for the Federal #12-23-9-16, for existing perforations (4743' - 4923') calculates at 0.88 psig/ft. The maximum injection pressures will be limited so as not to exceed this gradient. A step rate test will be performed periodically to ensure we are below parting pressure. The proposed maximum injection pressure is 2166 psig. We may add additional perforations between 3440' and 5800'. See Attachments G and G-1.

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

In the Federal #12-23-9-16, the proposed injection zone (3759' - 5747') is in the Garden Gulch to the Basal Carbonate of the Green River Formation. The reservoir is a very fine-grained sandstone with minor imbedded shale streaks. The estimated porosity is 13%. The members are composed of porous and permeable lenticular calcareous sandstone and low porosity carbonates and calcareous shale. The porous and lenticular sandstone varies in thickness from 0-31' and is confined to the Monument Butte Federal Field. Outside the Monument Butte Federal Field, the sandstone is composed of tight, very fine, silty, calcareous sandstone, less than 3' thick. The stratum confining the injection zone is composed of tight, moderately calcareous, sandy lacustrine shale. All of the confining strata are impermeable, and will effectively seal off the oil, gas, and water of the injection zone from any strata directly above or below it.

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

See Attachments E through E-12.

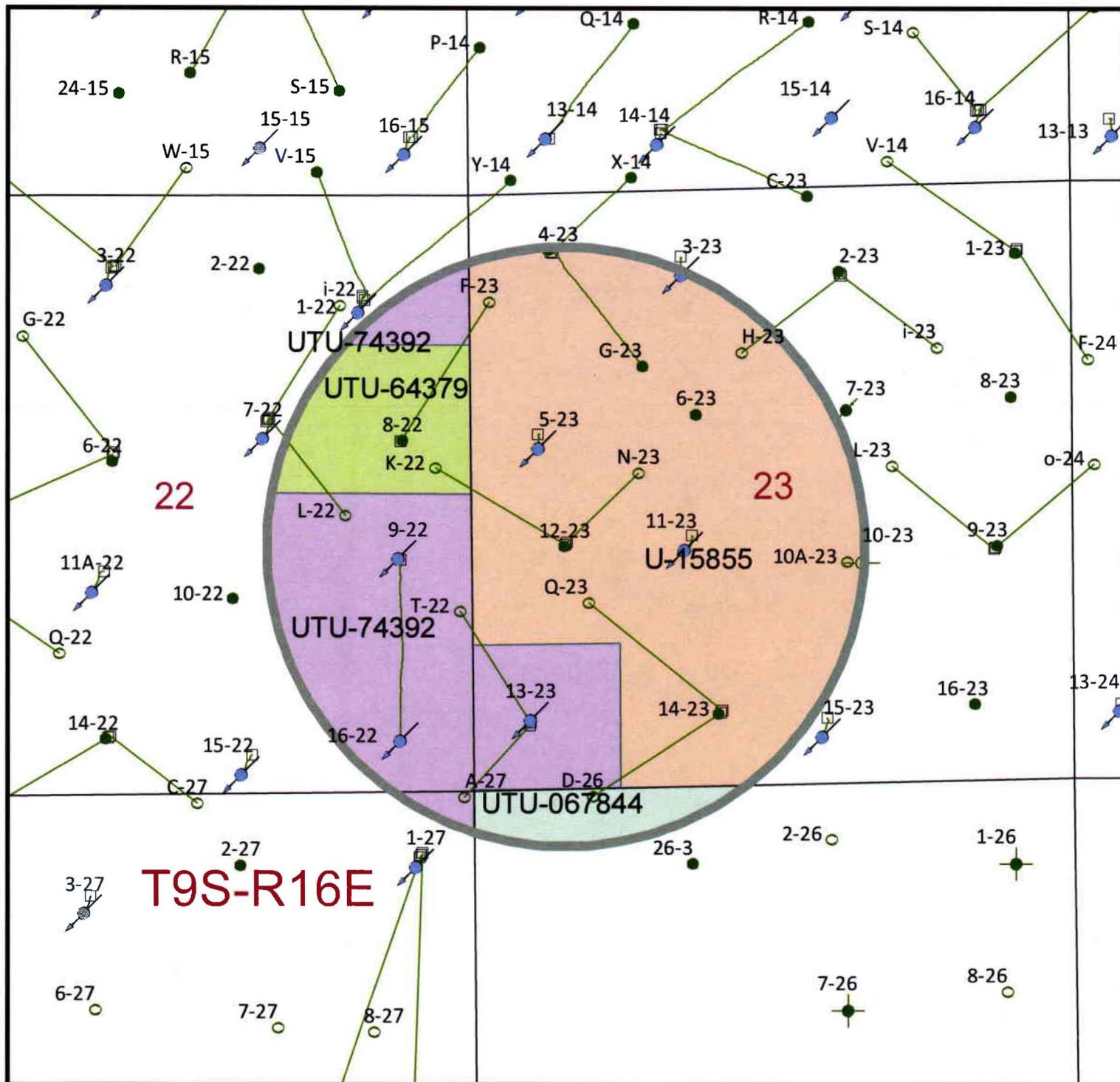
Additionally, the injection system will be equipped with high and low pressure shut down devices that will automatically shut in injection waters if a system blockage or leakage occurs. One way check valves will also ensure proper flow management. Relief valves will also be utilized for high-pressure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

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

See Attachment C.

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

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



**Lease Number**

- U-15855
- UTU-067844
- UTU-64379
- UTU-74392

**Well Status**

- Half-Mile Buffer
- Location
- Surface Spud
- Drilling
- Waiting on Completion
- Producing Oil Well
- Producing Gas Well
- Water Injection Well
- Water Disposal Well
- Dry Hole
- Temporarily Abandoned
- Plugged & Abandoned
- Shut In
- Well Surface Location

Federal 12-23-9-16  
Section 23, T9S-R16E

**NEWFIELD**  
ROCKY MOUNTAINS<sup>1</sup> in = 1,250 feet

1/2 Mile Radius Map  
Duchesne County

1001 17th Street Suite 2000  
Denver, Colorado 80202  
Phone: (303) 893-0102

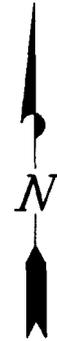
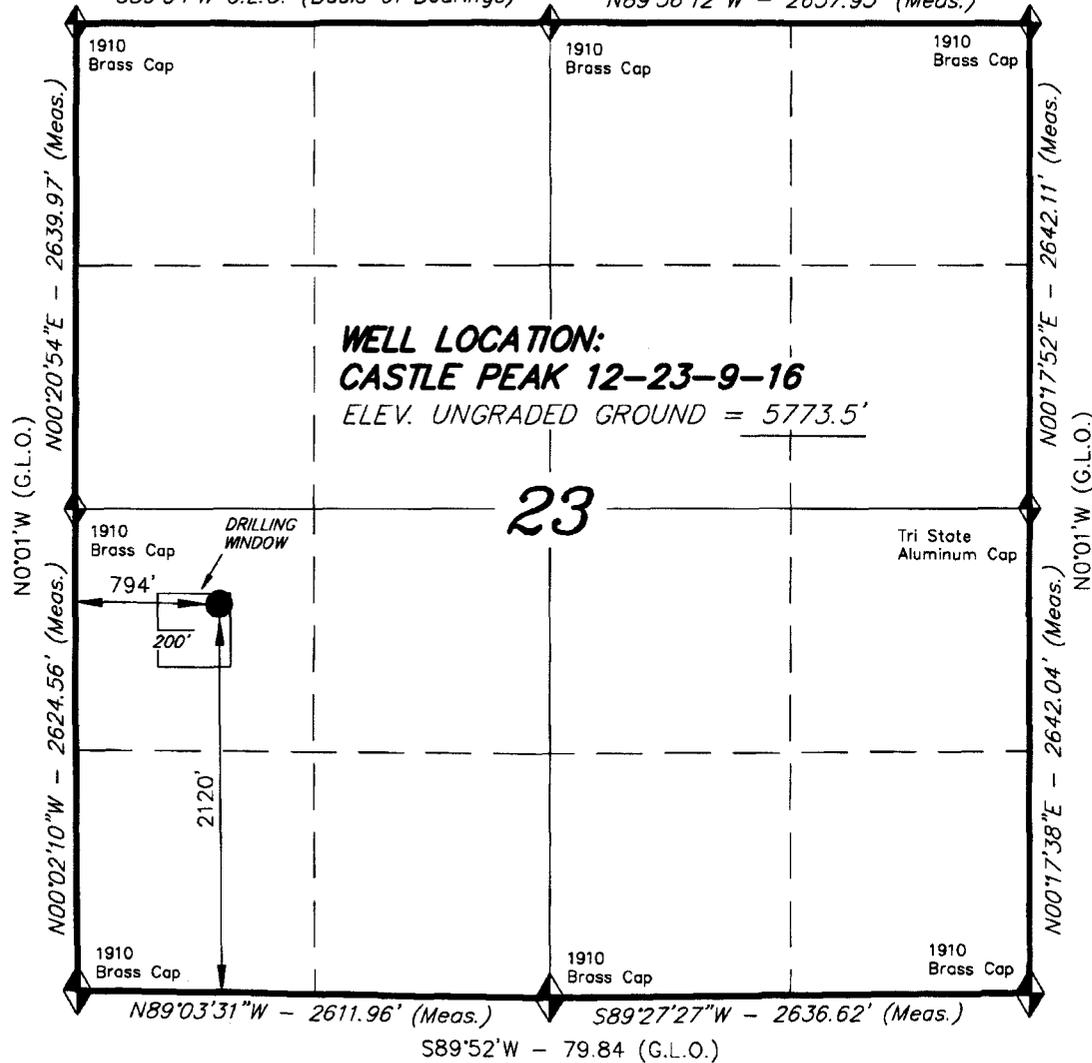
March 13, 2014

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

**NEWFIELD PRODUCTION COMPANY**

2623.06' (Measured) S89°54'W - 79.82 (G.L.O.)  
 S89°54'W G.L.O. (Basis of Bearings) N89°56'12"W - 2637.93' (Meas.)

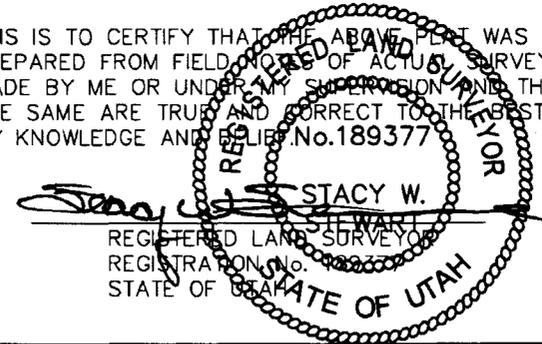
WELL LOCATION, CASTLE PEAK 12-23-9-16,  
 LOCATED AS SHOWN IN THE NW 1/4 SW 1/4  
 OF SECTION 23, T9S, R16E, S.L.B.&M.  
 DUCHESNE COUNTY, UTAH.



**WELL LOCATION:  
 CASTLE PEAK 12-23-9-16**  
 ELEV. UNGRADED GROUND = 5773.5'

23

THIS IS TO CERTIFY THAT THE ABOVE PLAN 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

DATE SURVEYED: 4-18-06	SURVEYED BY: C.M.
DATE DRAWN: 04-24-06	DRAWN BY: F.T.M.
REVISED:	SCALE: 1" = 1000'

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

**CASTLE PEAK 12-23-9-16**  
 (Surface Location) NAD 83  
 LATITUDE = 40° 00' 53.66"  
 LONGITUDE = 110° 05' 35.37"

**EXHIBIT B**

<b>#</b>	<b>Legal Description</b>	<b>Lessor &amp; Expiration</b>	<b>Lessee &amp; Operating Rights</b>	<b>Surface Owner</b>
1	T9S-16E SLM Section 23: E2, NW, E2SW, NWSW Section 24: N2, SW, N2SE, SWSE	USA UTU-15855 HBP	Newfield Production Company Newfield RMI LLC Bee Hive Oil LLC Journey Properties LLC King Oil & Gas of Texas LTD Six Gold Oil LLC Stone Energy Corp	USA
2	T9S-R16E SLM Section 8: SWNE, SE Section 9: SWSW Section 17: NE Section 18: E2SW, SE, LOTS 3,4 Section 19: NE, E2NW, LOTS 1,2 Section 21: N2 Section 22: W2NE, SENE, NW	USA UTU-64379 HBP	Newfield Production Company Newfield RMI LLC Yates Petroleum Corp	USA
3	T9S-R16E SLM Section 21: S2 Section 22: NENE, S2 Section 23: SWSW Section 24: SESE Section 26: NENE Section 27: All Section 28: All	USA UTU-74392 HBP	Newfield Production Company Newfield RMI LLC ABO Petroleum Corp MYCO Industries Inc OXY Y-1 Company Yates Petroleum Corp	USA

ATTACHMENT C

CERTIFICATION FOR SURFACE OWNER NOTIFICATION

RE: Application for Approval of Class II Injection Well  
Federal #12-23-9-16

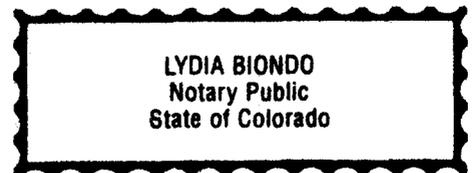
I hereby certify that a copy of the injection application has been provided to all surface owners within a one-half mile radius of the proposed injection well.

Signed: Jill I. Loyle  
Newfield Production Company  
Jill I. Loyle  
Regulatory Associate

Sworn to and subscribed before me this 7<sup>th</sup> day of April, 2014.

Notary Public in and for the State of Colorado: Lydia Biondo

My Commission Expires: 12/31/15



## FEDERAL 12-23-9-16

Spud Date: 2/5/08  
Put on Production: 5/22/08

GL: 5774' KB: 5786'

### SURFACE CASING

CSG SIZE: 8-5/8"  
GRADE: J-55  
WEIGHT: 24#  
LENGTH: 8 jts (322.64')  
DEPTH LANDED: 333'  
HOLE SIZE: 12-1/4"  
CEMENT DATA: To surface with 160 sxs Class "G" cmt

### PRODUCTION CASING

CSG SIZE: 5-1/2"  
GRADE: J-55  
WEIGHT: 15.5#  
LENGTH: 141 jts  
DEPTH LANDED: 5718.33' KB  
HOLE SIZE: 7-7/8"  
CEMENT DATA: 300 sxs Prem. Lite II mixed & 400 sxs 50/50 POZ.  
CEMENT TOP: 104'

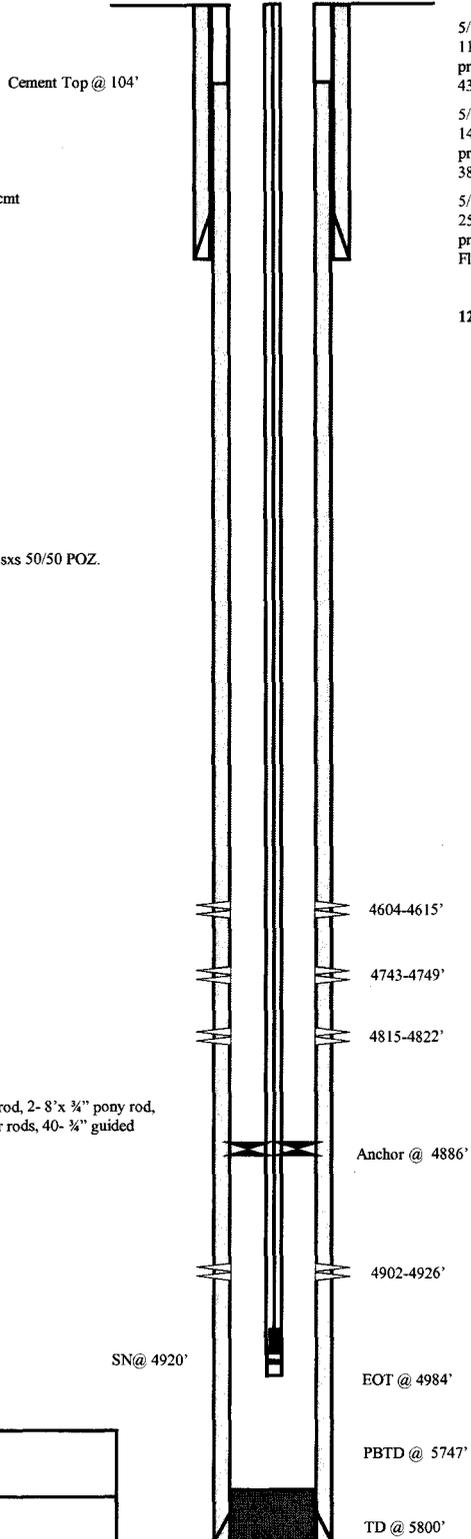
### TUBING

SIZE/GRADE/WT.: 2-7/8" / J-55 / 6.5#  
NO. OF JOINTS: 155 jts (4873.6')  
TUBING ANCHOR: 4885.6' KB  
NO. OF JOINTS: 1 jts (31.45')  
SEATING NIPPLE: 2-7/8" (1.10')  
SN LANDED AT: 4919.9' KB  
NO. OF JOINTS: 2 jts (62.6')  
TOTAL STRING LENGTH: EOT @ 4984' KB

### SUCKER RODS

POLISHED ROD: 1-1/2" x 26' polished rod  
SUCKER RODS: 1-8' x 3/4" pony rod, 1-6' x 3/4" pony rod, 2-8' x 3/4" pony rod, 1-2' x 3/4" pony rod, 91- 3/4" guided rods, 58- 3/4" sucker rods, 40- 3/4" guided rods, 6- 1 1/2" weight bars  
PUMP SIZE: 2-1/2" x 1-1/2" x 12x 16' RHAC  
STROKE LENGTH: 72"  
PUMP SPEED, SPM: 4

### Wellbore Diagram



Initial Production: BOPD,  
MCFD, BWPD

### FRAC JOB

5/17/08 4902-4926' **Frac A3 sds as follows:**  
119,316# 20/40 sand in 996 bbls of Lightning 17 fluid. Treated w/ ave pressure of 1818 psi w/ ave rate of 23.4 BPM. ISIP 2198 psi. Actual Flush: 4397 gal.  
5/17/08 4815-4822' **Frac A.5 sds as follows:**  
14,762# 20/40 sand in 260 bbls of Lightning 17 fluid. Treated w/ ave pressure of 3169 psi w/ ave rate of 23.3 BPM. ISIP 4200 psi. Actual Flush: 3818 gal.  
5/17/08 4743-4749' **Frac B2 sds as follows:**  
25,365# 20/40 sand in 342 bbls of Lightning 17 fluid. Treated w/ ave pressure of 2818 psi w/ ave rate of 21.6 BPM. ISIP 3290 psi. Actual Flush: 4238 gal.

12/12/2009

**Tubing leak.** Updated rod and tubind detail.

### PERFORATION RECORD

Date	Depth Range	Tool	Holes
10/23/07	4604-4615'	4 JSPF	44 holes
10/26/07	4743-4749'	4 JSPF	24 holes
10/23/07	4815-4822'	4 JSPF	28 holes
10/26/07	4902-4926'	4 JSPF	96 holes

**NEWFIELD**

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**FEDERAL 12-23-9-16**

2120'FSL & 794' FWL  
NW/SW Section 23-T9S-R16E  
Duchesne Co, Utah  
API #43-013-33179; Lease # UTU-15855

## FEDERAL 3-23-9-16

Spud Date: 01/08/08  
 Put on Production: 03/07/08  
 GL:5680' KB:5692'

### Injection Wellbore Diagram

#### SURFACE CASING

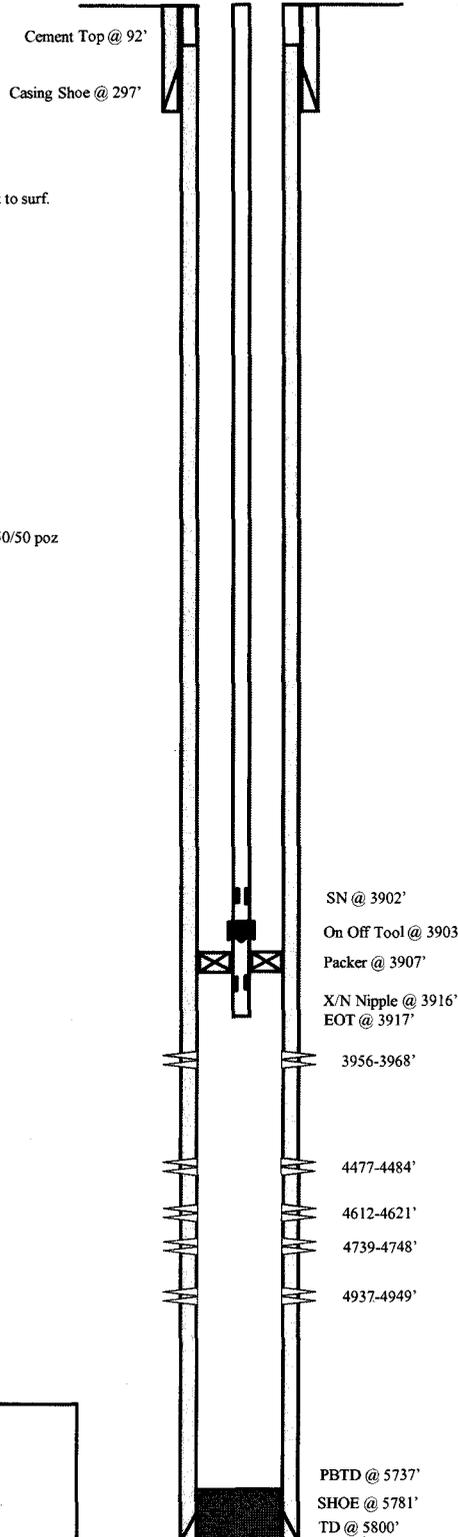
CSG SIZE: 8-5/8"  
 GRADE: J-55  
 WEIGHT: 24#  
 LENGTH: 7 jts. (284.85')  
 DEPTH LANDED: 296.70' KB  
 HOLE SIZE: 12-1/4"  
 CEMENT DATA: 1- 160, sxs Class "G" cmt, est 5 bbls cmt to surf.

#### PRODUCTION CASING

CSG SIZE: 5-1/2"  
 GRADE: J-55  
 WEIGHT: 15.5#  
 LENGTH: 130 jts. (5811.31')  
 DEPTH LANDED: 5781.17' KB  
 HOLE SIZE: 7-7/8"  
 CEMENT DATA: 300 sxs Prem. Lite II mixed & 400 sxs 50/50 poz  
 CEMENT TOP: 92'

#### TUBING

SIZE/GRADE/WT.: 2-7/8" / J-55 / 6.5#  
 NO. OF JOINTS: 124 jts (3889.7')  
 SEATING NIPPLE: 2-7/8" (1.10')  
 SN LANDED AT: 3901.7' KB  
 ON/OFF TOOL AT: 3902.8'  
 ARROW #1 PACKER CE AT: 3907'  
 XO 2-3/8 x 2-7/8 J-55 AT: 3911.6'  
 TBG PUP 2-3/8 J-55 AT: 3912.1'  
 X/N NIPPLE AT: 3916.1'  
 TOTAL STRING LENGTH: EOT @ 3917.5'



#### FRAC JOB

02/28/08 4937-4949' **Frac A3 sands as follows:**  
 60177# 20/40 sand in 519 bbls Lightning 17 frac fluid. Treated @ avg press of 2021 psi w/avg rate of 23.3 BPM. ISIP 2150 psi.

02/28/08 4739-4748' **Frac B2 sands as follows:**  
 40603# 20/40 sand in 407 bbl Lightning 17 frac fluid. Treated @ avg press of 1923 psi w/avg rate of 23.2 BPM. ISIP 1964 psi.

02/28/08 4612-4621' **Frac C sands as follows:**  
 25535# 20/40 sand in 350 bbls Lightning 17 frac fluid. Treated @ avg press of 2360 psi w/avg rate of 23.1 BPM. ISIP 2760 psi.

02/28/08 4477-4484' **Frac D1 sands as follows:**  
 20500# 20/40 sand in 300 bbls Lightning 17 frac fluid. Treated @ avg press of 2099 psi w/avg rate of 23.2 BPM. ISIP 2016 psi.

02/28/08 3956-3968' **Frac GB4 sands as follows:**  
 23017# 20/40 sand in 301 bbls Lightning 17 frac fluid. Treated @ avg press of 1777 psi w/avg rate of 23.0 BPM. ISIP 1817 psi.

10/11/11 **Parted Rods.** Updated rod & tubing detail.

11/20/12 **Convert to Injection Well**

11/21/12 **Conversion MIT Finalized** - update tbg detail

#### PERFORATION RECORD

4937-4949'	4 JSPF	48 holes
4739-4748'	4 JSPF	36 holes
4612-4621'	4 JSPF	36 holes
4477-4484'	4 JSPF	28 holes
3956-3968'	4 JSPF	48 holes

**NEWFIELD**

**FEDERAL 3-23-9-16**  
 586' FNL & 1849' FWL  
 NE/NW Section 23-T9S-R16E  
 Duchesne Co, Utah  
 API #43-013-33176; Lease #UTU-15855

## Federal 4-23-9-16

Spud Date: 01-09-08  
 Put on Production: 3-10-08  
 GL: 5716' KB: 5728'

### Wellbore Diagram

#### SURFACE CASING

CSG SIZE: 8-5/8"  
 GRADE: J-55  
 WEIGHT: 24#  
 LENGTH: 7 jts. (312.55')  
 HOLE SIZE: 12-1/4"  
 CEMENT DATA: 160 sxs Class "G" cmt

#### PRODUCTION CASING

CSG SIZE: 5-1/2"  
 GRADE: J-55  
 WEIGHT: 15.5#  
 LENGTH: 133jts. (5715.22')  
 HOLE SIZE: 7-7/8"  
 DEPTH LANDED: 5728.47'  
 CEMENT DATA: 300 sk Prem. Lite II mixed & 400 sxs 50/50 POZ.  
 CEMENT TOP AT: 134'

#### TUBING

SIZE/GRADE/WT.: 2-7/8" / J-55 / 6.5#  
 NO. OF JOINTS: 175 jts (5507.16')  
 TUBING ANCHOR: 5519.16'  
 NO. OF JOINTS: 1 jts (31.39')  
 SEATING NIPPLE: 2-7/8" (1.10')  
 SN LANDED AT: 5553.35' KB  
 NO. OF JOINTS: 1 jts (31.48')  
 TOTAL STRING LENGTH: EOT @ 5586.38' w/12' KB

#### SUCKER RODS

POLISHED ROD: 1-1/2" x 26'  
 SUCKER RODS: 1-6', 1-4' & 1-2' X 3/4" ponies, 100-3/4" guided rods, 95- 3/4" plain rods, 20-3/4" guided rods, 6- 1/2" weighted bars.  
 PUMP SIZE: 2-1/2" x 1-1/2" x 12' X 15.5' RHAC pump w/ SM plunger  
 STROKE LENGTH: 86"  
 PUMP SPEED, SPM:4

#### FRAC JOB

2-29-08 5547-5562' **Frac CP4 sands as follows:**  
 Frac with 40523# 20/40 sand in 434 bbls Lightning 17 fluid. Treat at an ave pressure of 1786 psi @ 23.2 BPM. ISIP 1970 psi.

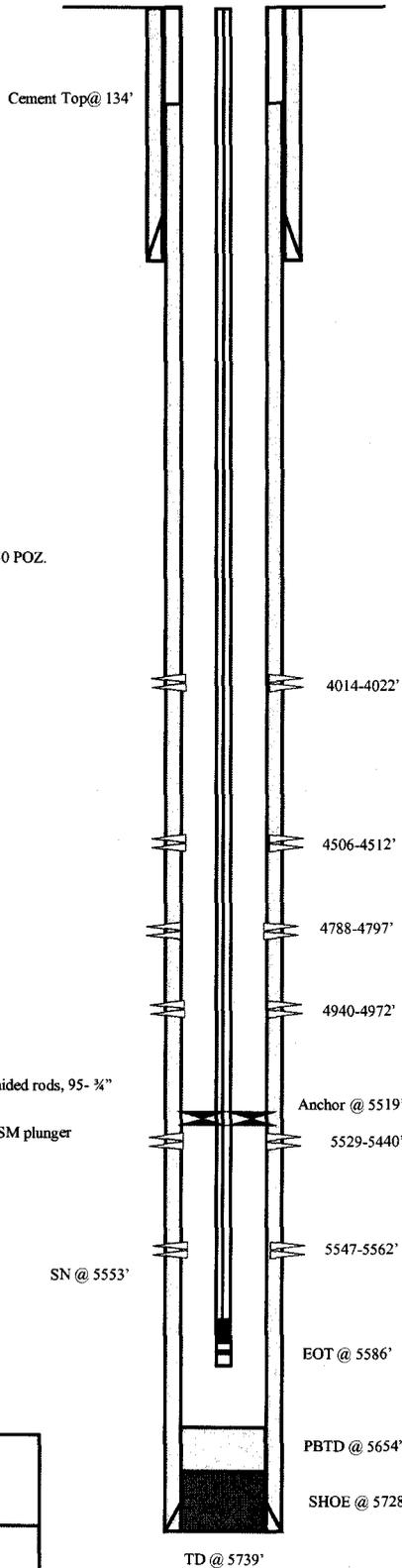
2-29-08 5429-5440' **Frac CP2 sands as follows:**  
 Frac with 20386 # 20/40 sand in 333 bbls Lightning 17 fluid. Treat at an ave pressure of 1963 psi @ 25 BPM. ISIP 1840 psi.

2-29-08 4940-4972' **Frac A1 sands as follows:**  
 Frac with 120556 #'s 20/40 sand in 869 bbls Lightning 17 fluid. Treat at an ave pressure of 1845 psi @ 24.5 BPM. ISIP 2105 psi.

2-29-08 4788-4797' **Frac B2 sand as follows:**  
 Frac with 50665 #'s of 20/40 sand in 450 bbls Lightning 17 fluid. Treat at an ave pressure of 1990 psi @ 24.5 BPM. ISIP 1945 psi.

2-29-08 4506-4512' **Frac D1 sands as follows:**  
 Frac with 15200 #'s 20/40 sand in 259 bbls Lightning 17 fluid. Treat at an ave pressure of 1942 psi @ 24.3 BPM. ISIP 1825 psi.

2-29-08 4014-4022' **Frac GB6 sands as follows:**  
 Frac with 40122 #'s 20/40 sand in 384 bbls Lightning 17 fluid. Treat at an ave pressure of 2036 psi @ 24.3 BPM. ISIP 1880 psi.



#### PERFORATION RECORD

4014-4022'	4 JSPF	32 holes
4506-4512'	4 JSPF	24 holes
4788-4797'	4 JSPF	36 holes
4940-4972'	4 JSPF	128 holes
5429-5440'	4 JSPF	44 holes
5547-5562'	4 JSPF	60 holes

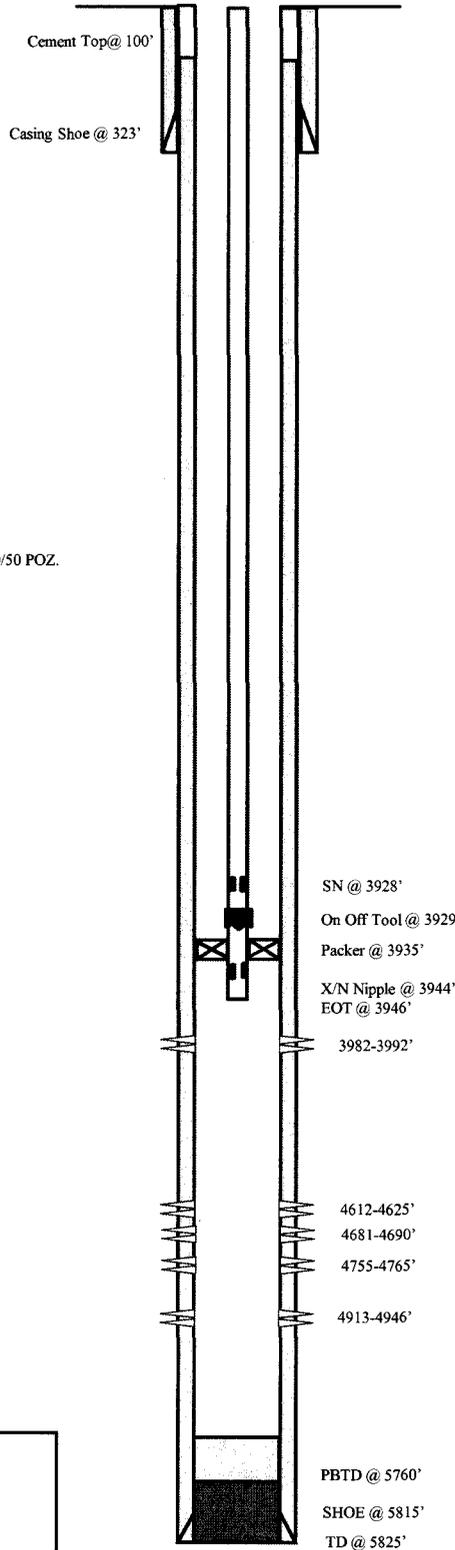
**NEWFIELD**

Federal 4-23-9-16  
 499' FNL & 685' FWL  
 NWNW Section 23-T9S-R16E  
 Duchesne Co, Utah  
 API #43-013-33177; Lease #UTU-15855

## Federal 5-23-9-16

Spud Date: 1/17/08  
 Put on Production: 3-5-08  
 GL: 5749' KB: 5761'

### Injection Wellbore Diagram



#### SURFACE CASING

CSG SIZE: 8-5/8"  
 GRADE: J-55  
 WEIGHT: 24#  
 LENGTH: 7 jts. (311.39')  
 HOLE SIZE: 12-1/4"  
 DEPTH LANDED: 323.24'  
 CEMENT DATA: 160 sxs Class "G" cmt

#### PRODUCTION CASING

CSG SIZE: 5-1/2"  
 GRADE: J-55  
 WEIGHT: 15.5#  
 LENGTH: 146 jts. (5781.03')  
 HOLE SIZE: 7-7/8"  
 DEPTH LANDED: 5814.84'  
 CEMENT DATA: 300 sk Prem. Lite II mixed & 400 sxs 50/50 POZ.  
 CEMENT TOP AT: 100'

#### TUBING

SIZE/GRADE/WT.: 2-7/8" / J-55 / 6.5#  
 NO. OF JOINTS: 123 jts (3915.9')  
 SEATING NIPPLE: 2-7/8" (1.10')  
 SN LANDED AT: 3927.9' KB  
 ON/OFF TOOL AT: 3929.0'  
 ARROW #1 PACKER CE AT: 3934.8'  
 XO 2-3/8 x 2-7/8 J-55 AT: 3937.7'  
 TBG PUP 2-3/8 J-55 AT: 3938.2'  
 X/N NIPPLE AT: 3944.4'  
 TOTAL STRING LENGTH: EOT @ 3946'

#### FRAC JOB

2-27-08 4913-4946' **Frac A1 sands as follows:**  
 Frac with 160392 #'s of 20/40 sand in 1152 bbls Lightning 17 fluid. Treat at an ave pressure of 1802 psi @ 23.2 BPM. ISIP 2132 psi.

2-27-08 4755-4765' **Frac B2 sands as follows:**  
 Frac with 40119 #'s of 20/40 sand in 422 bbls Lightning 17 fluid. Treat at an ave pressure of 1740 psi @ 23.2 BPM. ISIP 1900 psi.

2-27-08 4681-4690' **Frac B.5 sands as follows:**  
 Frac with 15432 #'s of 20/40 sand in 275 bbls Lightning 17 fluid. Treat at an ave pressure of 2350 psi @ 23.3 BPM. ISIP 1943 psi.

2-27-08 4612-4625' **Frac C sand as follows:**  
 Frac with 60639 #'s of 20/40 sand in 500 bbls of Lightning 17 fluid. Treat at an ave pressure of 2137 psi @ 23.2 BPM. ISIP 2346 psi.

2-27-08 3982-3992' **Frac GB6 sands as follows:**  
 Frac with 46568 #'s of 20/40 sand in 418 bbls of Lightning 17 fluid. Treat at an ave pressure of 1726 psi @ 23.3 BPM. ISIP 1825 psi.

1/24/09 **Pump Change.** Updated r & t details.  
 12/11/12 **Convert to Injection Well**  
 12/12/12 **Conversion MIT Finalized** - update tbg detail

#### PERFORATION RECORD

3982-3992'	4 JSPF	40 holes
4612-4625'	4 JSPF	52 holes
4681-4690'	4 JSPF	36 holes
4755-4765'	4 JSPF	40 holes
4913-4946'	4 JSPF	132 holes

**NEWFIELD**



**Federal 5-23-9-16**  
 2125' FNL & 595' FWL  
 SWNW Section 23-T9S-R16E  
 Duchesne Co, Utah  
 API #43-013-32960; Lease #UTU-15855

## FEDERAL 11-23-9-16

Spud Date: 1-15-08  
 Put on Production: 3-7-08  
 GL: 5726' KB: 5738'

### Injection Wellbore Diagram

#### SURFACE CASING

CSG SIZE: 8-5/8"  
 GRADE: J-55  
 WEIGHT: 24#  
 LENGTH: 7 jts (309.09')  
 DEPTH LANDED: 320.94' KB  
 HOLE SIZE: 12-1/4"  
 CEMENT DATA: 160 sxs Class "G" cmt, est 3 bbls cmt to surf.

#### PRODUCTION CASING

CSG SIZE: 5-1/2"  
 GRADE: J-55  
 WEIGHT: 15.5#  
 LENGTH: 134 jts. (5775.25')  
 DEPTH LANDED: 5768.37' KB  
 HOLE SIZE: 7-7/8"  
 CEMENT DATA: 300 sxs Prem. Lite II mixed & 400 sxs 50/50 POZ.  
 CEMENT TOP AT: 26'

#### TUBING

SIZE/GRADE/WT.: 2-7/8" / J-55 / 6.5#  
 NO. OF JOINTS: 124 jts (3903.0')  
 SEATING NIPPLE: 2-7/8" (1.10')  
 SN LANDED AT: 3915.0' KB  
 ON/OFF TOOL AT: 3916.1'  
 ARROW #1 PACKER CE AT: 3922'  
 XO 2-3/8 x 2-7/8 J-55 AT: 3925.1'  
 TBG PUP 2-3/8 J-55 AT: 3925.6'  
 X/N NIPPLE AT: 3929.8'  
 TOTAL STRING LENGTH: EOT @ 3931'

#### FRAC JOB

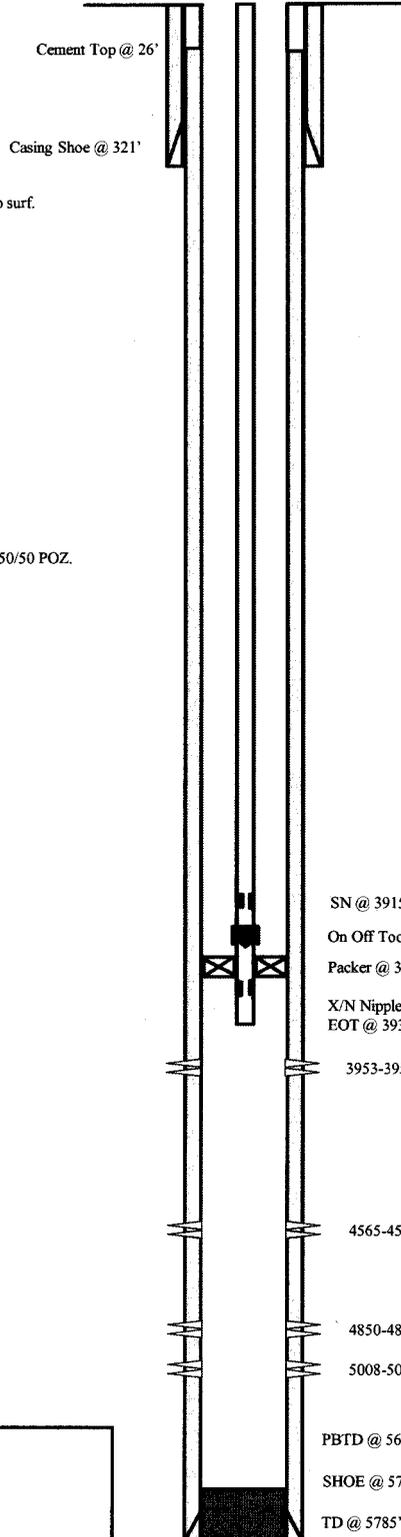
03-04-08 4565-4586' **Frac C sands as follows:**  
 90836# 20/40 sand in 686 bbls Lightning 17 frac fluid. Treated @ avg press of 2017 psi w/avg rate of 23.1 BPM. ISIP 2180 psi. Calc flush: 4563 gal. Actual flush: 4477 gal.

06/05/2008 3953-3959' **Frac GB6, sands as follows:**  
 16621# 20/40 sand in 206 bbls Lightning 17 frac fluid. Treated @ avg. press. of 2261 psi w/avg. rate of 15 BPM. ISIP 1696 psi.

06/05/2008 4850-4863' **Frac A1, sands as follows:**  
 50043# 20/40 sand in 446 bbls Lightning 17 frac fluid. Treated @ ave. press. of 3342 psi w/avg. rate 15 BPM. ISIP 2218 psi.

06/05/2008 5008-5017' **Frac LODC, sands as follows:**  
 45090# 20/40 sand in 445 bbls of Lightning 17 frac fluid. Treated @ ave. press. of 4224 psi w/avg. rate 15 BPM W/ 6.5 ppg of sand. ISIP 3173 psi.

12/13/12 **Convert to Injection Well**  
 12/13/12 **Conversion MIT Finalized – update tbg detail**



#### PERFORATION RECORD

Date	Interval	JSPF	Holes
02-29-08	4565-4586'	4 JSPF	84 holes
06-05-08	3953-3959'	4 JSPF	24 holes
06-05-08	4850-4863'	4 JSPF	52 holes
06-05-08	5008-5017'	4 JSPF	36 holes

**NEWFIELD**

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**FEDERAL 11-23-9-16**  
 2236' FSL & 1922' FWL  
 NE/SW Section 23-T9S-R16E  
 Duchesne Co, Utah  
 API #43-013-33178; Lease # UTU-15855

## Federal 13-23-9-16

Spud Date: 10/5/07  
 Put on Production: 6/5/08  
 GL: 5751' KB: 5763'

### Injection Wellbore Diagram

#### SURFACE CASING

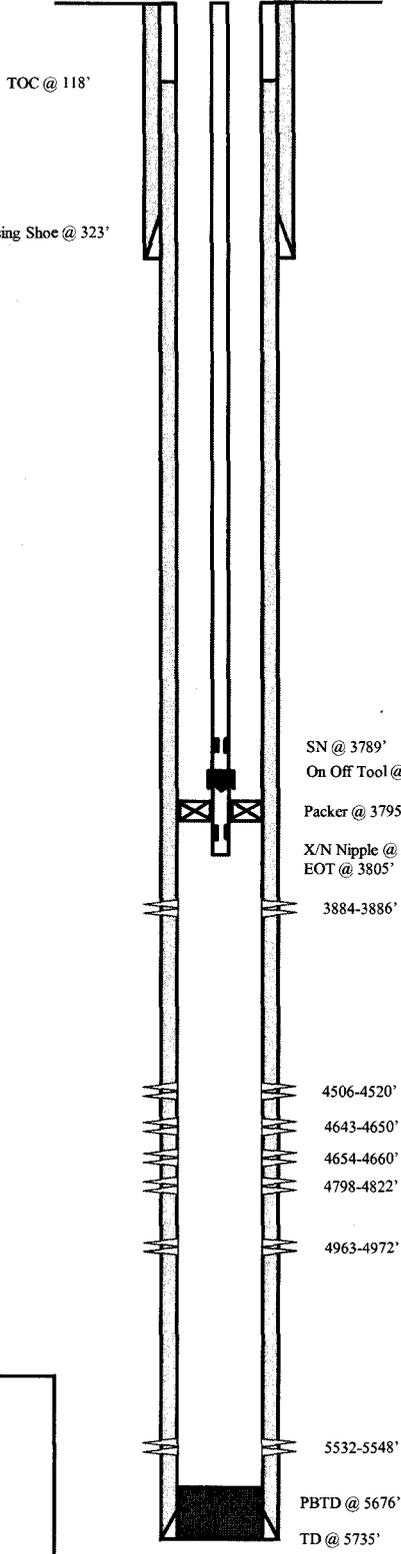
CSG SIZE: 8-5/8"  
 GRADE: J-55  
 WEIGHT: 24#  
 LENGTH: 7 jts. (312.58')  
 DEPTH LANDED: 322.58'  
 HOLE SIZE: 12-1/4"  
 CEMENT DATA: 160 sxs Class "G" cmt, circ. 4 bbls to surf.

#### PRODUCTION CASING

CSG SIZE: 5-1/2"  
 GRADE: J-55  
 WEIGHT: 15.5#  
 LENGTH: 150 jts. (5720.33')  
 DEPTH LANDED: 5718.33'  
 HOLE SIZE: 7-7/8"  
 CEMENT DATA: 300 sxs Premelite II & 400 sxs 50/50 POZ.  
 CEMENT TOP: 118' per CBL 10/23/07

#### TUBING

SIZE/GRADE/WT.: 2-7/8" / J-55 / 6.5#  
 NO. OF JOINTS: 124 jts (3777.2')  
 SEATING NIPPLE: 2-7/8" (1.10')  
 SN LANDED AT: 3789.2' KB  
 ON/OFF TOOL AT: 3790.3'  
 ARROW #1 PACKER CE AT: 3795.1'  
 XO 2-3/8 x 2-7/8 J-55 AT: 3798.7'  
 TBG PUP 2-3/8 J-55 AT: 3799.2'  
 X/N NIPPLE AT: 3803.3'  
 TOTAL STRING LENGTH: EOT @ 3804.94'



#### FRAC JOB

10/26/07	5532-5548'	<b>Frac CP5 sands as follows:</b> 89901# 20/40 sand in 710 bbls Lightning 17 frac fluid. Treated @ avg press of 1990 psi w/avg rate of 24.8 BPM. ISIP 2180 psi.
10/26/07	4963-4972'	<b>Frac LODC sands as follows:</b> 56448# 20/40 sand in 493 bbl Lightning 17 frac fluid. Treated @ avg press of 2830 psi w/avg rate of 24.8 BPM. ISIP 3045 psi.
06/03/08	4798-4822'	<b>Frac A1 sands as follows:</b> 159955# 20/40 sand in 1112 bbls Lightning 17 frac fluid. Treated @ avg press of 1807 psi w/avg rate of 26.6 BPM. ISIP 1971 psi.
06/03/08	4643-4600'	<b>Frac B2 sands as follows:</b> 99834# 20/40 sand in 748 bbls Lightning 17 frac fluid. Treated @ avg press of 1930 psi w/avg rate of 25.5 BPM. ISIP 2135 psi.
06/03/08	4874-4888'	<b>Frac C sands as follows:</b> 79546# 20/40 sand in 617 bbls Lightning 17 frac fluid. Treated @ avg press of 2034 psi w/avg rate of 26.3 BPM. ISIP 1907 psi.
3/16/10		<b>Pump change.</b> Updated rod and tubing detail.
1/8/2011		<b>Pump Change.</b> Update rod and tubing details.
10/10/13	3884-3886'	<b>Frac GB6 sands as follows:</b> 17000# 20/40 sand in 182 bbls Lightning 17 frac fluid
10/11/13		<b>Convert to Injection Well</b>
10/16/13		<b>Conversion MIT Finalized</b> - update tbg detail

#### PERFORATION RECORD

5532-5548'	4 JSPF	64 holes
4963-4972'	4 JSPF	36 holes
4798-4822'	4 JSPF	96 holes
4654-4660'	4 JSPF	24 holes
4643-4650'	4 JSPF	28 holes
4506-4520'	4 JSPF	56 holes
3884-3886'	3 JSPF	6 holes

**NEWFIELD**

**Federal 13-23-9-16**  
 612' FSL & 466' FWL  
 SW/SW Section 23-T9S-R16E  
 Duchesne Co, Utah  
 API #43-013-33180; Lease # UTU-74392

## Federal 14-23-9-16

Spud Date: 11-28-07  
 Put on Production: 3-3-08  
 GL: 5782' KB: 5794'

Wellbore Diagram

### SURFACE CASING

CSG SIZE: 8-5/8"  
 GRADE: J-55  
 WEIGHT: 24#  
 LENGTH: 7jts (310.88')  
 HOLE SIZE: 12-1/4"  
 CEMENT DATA: 160sxs Class "G" cmt, circ 3bbls to surf

### PRODUCTION CASING

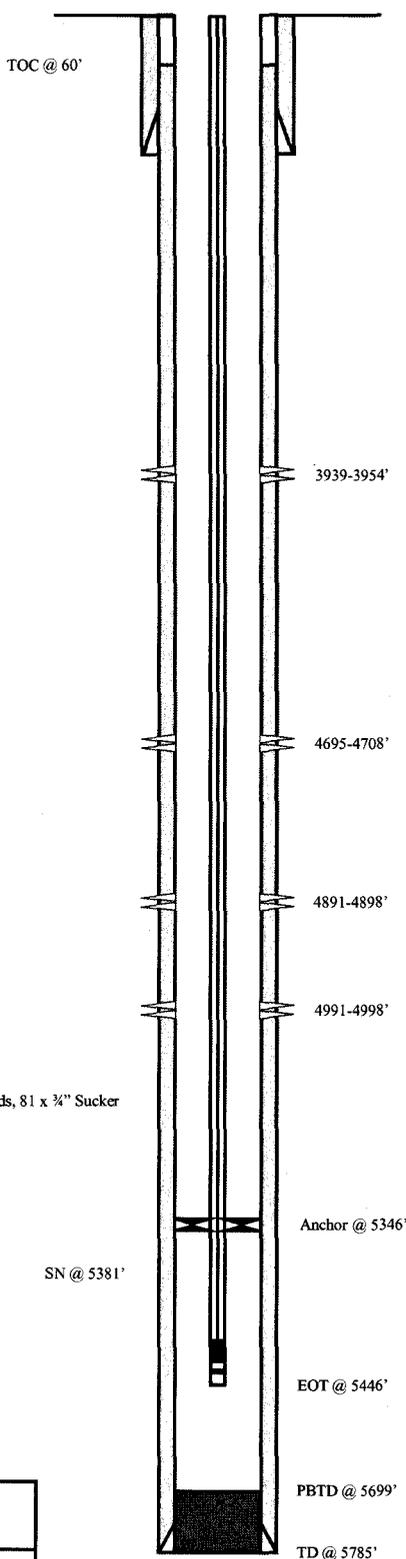
CSG SIZE: 5-1/2"  
 GRADE: J-55  
 WEIGHT: 15.5#  
 LENGTH: 133jts (5745.3')  
 HOLE SIZE: 7-7/8"  
 DEPTH LANDED: 5743.3'  
 CEMENT DATA: 325sxs Prelite II & 400sxs 50/50 POZ.  
 CEMENT TOP AT: 60' per CBL 2/20/08

### TUBING (KS 12/30/09)

SIZE/GRADE/WT.: 2-7/8" / J-55 / 6.5#  
 NO. OF JOINTS: 168jts (5333.9')  
 TUBING ANCHOR: 5345.9'  
 NO. OF JOINTS: 1jt (32.5')  
 SEATING NIPPLE: 2-7/8" (1.10')  
 SN LANDED AT: 5381.2'  
 NO. OF JOINTS: 2jts (63.1')  
 TOTAL STRING LENGTH: EOT @ 5446'

### SUCKER RODS (KS 12/30/09)

POLISHED ROD: 26' x 1-1/2"  
 SUCKER RODS: 6' x 3/4" Pony Rod, 98 x 3/4" 4per Guided Rods, 81 x 3/4" Sucker Rods, 30 x 3/4" 4per Guided Rods, 6 x 1-1/2" Sinker Bars  
 PUMP SIZE: 2-1/2" x 1-1/2" x 10' x 14" RHAC  
 STROKE LENGTH: 81"  
 PUMP SPEED, SPM: 4.5  
 PUMPING UNIT: C-228-246-86



### FRAC JOB

2-26-08	4991-4998'	<b>Frac A3 sands as follows:</b> Frac with 15465 #'s of 20/40 sand in 275 bbls Lightning 17 fluid. Treat w/ an ave pressure 2863 psi @ 23.2 BPM. ISIP 2882 psi.
2-26-08	4891-4898'	<b>Frac A1 sands as follows:</b> Frac with 15196 #'s of 20/40 sand in 282 bbls Lightning 17 fluid. Treat w/ an ave pressure 2226 psi @ 23.2 BPM. ISIP 2125 psi.
2-26-08	4695-4708'	<b>Frac B2 sands as follows:</b> Frac with 30350 #'s of 20/40 sand in 381 bbls Lightning 17 fluid. Treat w/ an ave pressure of 2054 psi @ 23.2 BPM. ISIP 2054 psi.
2-26-08	3939-3954'	<b>Frac GB6 sand as follows:</b> Frac with 93199 #'s of 20/40 sand in 674 bbls Lightning 17 fluid. Treat w/ an ave pressure of 1568 psi @ 23.2 BPM. ISIP 1641 psi.

### PERFORATION RECORD

3939-3954'	4 JSPF	60 holes
4695-4708'	4 JSPF	52 holes
4891-4898'	4 JSPF	28 holes
4991-4998'	4 JSPF	28 holes

**NEWFIELD**

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Federal 14-23-9-16  
 658' FSL & 2145' FWL  
 SESW Section 23-T9S-R16E  
 Duchesne Co, Utah  
 API #43-013-33181; Lease #UTU-15855

**NEWFIELD**

**Schematic**

Well Name: Federal 8-22-9-16

43013-32959

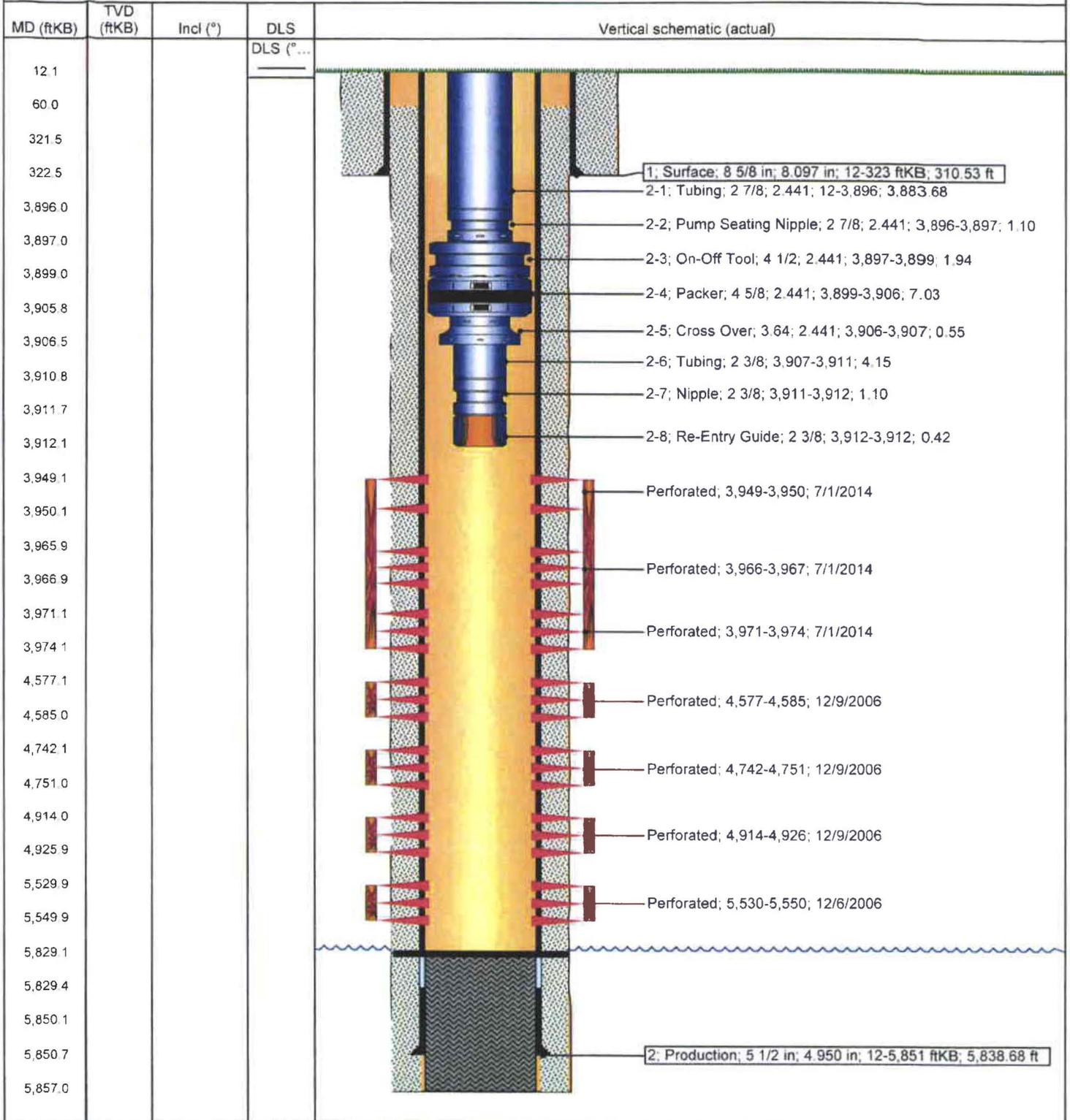
Surface Legal Location 22-9S-16E		API/UWI 43013329590000	Well RC 500159036	Lease	State/Province Utah	Field Name GMBU CT B6	County DUCHESNE
Spud Date 11/1/2006	Rig Release Date 11/24/2006	On Production Date 12/13/2006	Original KB Elevation (ft) 5,791	Ground Elevation (ft) 5,779	Total Depth All (TVD) (ftKB)	PBD (All) (ftKB) Original Hole - 5,828.9	

**Most Recent Job**

Job Category Production / Workover	Primary Job Type Conversion	Secondary Job Type OAP	Job Start Date 6/30/2014	Job End Date 7/3/2014
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**TD: 5,857.0**

Vertical - Original Hole, 7/23/2014 8:41:09 AM



## Federal 9-22-9-16

Spud Date: 4-19-2007  
 Put on Production: 6-08-2007  
 GL: 5803' KB: 5815'

### Injection Wellbore Diagram

#### SURFACE CASING

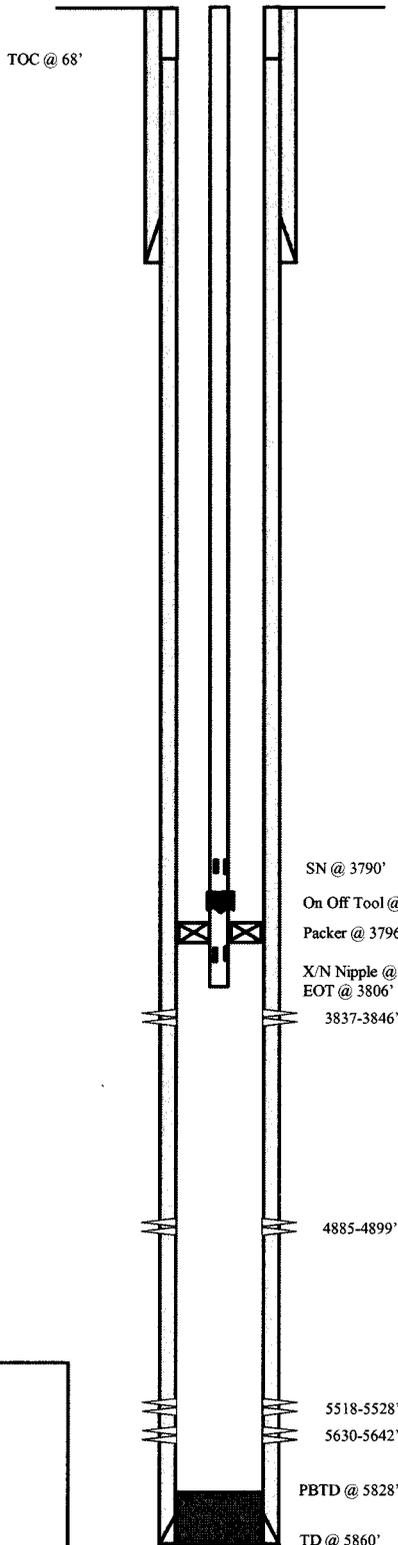
CSG SIZE: 8-5/8"  
 GRADE: J-55  
 WEIGHT: 24#  
 LENGTH: 7jts (312.91')  
 DEPTH LANDED: 322.91'  
 HOLE SIZE: 12-1/4"  
 CEMENT DATA: 160sxs Class "G" cmt, circ 5 bbls to surf.

#### PRODUCTION CASING

CSG SIZE: 5-1/2"  
 GRADE: J-55  
 WEIGHT: 15.5#  
 LENGTH: 133jts (5855.48')  
 DEPTH LANDED: 5852.48'  
 HOLE SIZE: 7-7/8"  
 CEMENT DATA: 325sxs Premlite II & 425sxs 50/50 POZ.  
 CEMENT TOP AT: 68' per CBL 5/30/07

#### TUBING

SIZE/GRADE/WT.: 2-7/8" / J-55 / 6.5#  
 NO. OF JOINTS: 123 jts (3778')  
 SEATING NIPPLE: 2-7/8" (1.10')  
 SN LANDED AT: 3790' KB  
 ON/OFF TOOL AT: 3791.1'  
 ARROW #1 PACKER CE AT: 3796.4'  
 XO 2-3/8 x 2-7/8 J-55 AT: 3800.1'  
 TBG PUP 2-3/8 J-55 AT: 3800.6'  
 X/N NIPPLE AT: 3804.8'  
 TOTAL STRING LENGTH: EOT @ 3806.3'



#### FRAC JOB

06-05-07	5630-5642'	<b>Frac CP5 sands as follows:</b> 39984# 20/40 sand in 405 bbls Lightning 17 frac fluid. Treated @ avg press of 1953 psi w/avg rate of 24.7 BPM. ISIP 2165 psi. Calc flush: 5328 gal. Actual flush: 5208 gal.
06-05-07	5518-5528'	<b>Frac CP4 sands as follows:</b> 25037# 20/40 sand in 336 bbls Lightning 17 frac fluid. Treated @ avg press of 2283 psi w/avg rate of 24.7 BPM. ISIP 2241 psi. Calc flush: 5516 gal. Actual flush: 4998 gal.
06-05-07	4885-4899'	<b>Frac A1 sands as follows:</b> 59792# 20/40 sand in 485 bbls Lightning 17 frac fluid. Treated @ avg press of 1701 psi w/avg rate of 24.7 BPM. ISIP 2240 psi. Calc flush: 4883 gal. Actual flush: 4368 gal.
06-05-07	3837-3846'	<b>Frac GB2 sands as follows:</b> 35741# 20/40 sand in 345 bbls Lightning 17 frac fluid. Treated @ avg press of 1806 w/ avg rate of 24.7 BPM. ISIP 2950 psi. Calc flush: 3835 gal. Actual flush: 3738 gal.
12-13-07		<b>Pump Change.</b> Updated rod & tubing details.
1-30-08		<b>Pump Change.</b> Updated rod & tubing details.
8-29-08		<b>Pump Change.</b> Updated rod & tubing details.
1/23/09		<b>Pump Change.</b> Updated r & t details.
10/05/11		<b>Pump Change.</b> Rods & tubing updated.
08/21/13		<b>Convert to Injection Well</b>
08/23/13		<b>Conversion MIT Finalized</b> - update tbg detail

#### PERFORATION RECORD

05-30-07	5630-5642'	4 JSPF	48 holes
06-05-07	5518-5528'	4 JSPF	40 holes
06-05-07	4885-4899'	4 JSPF	96 holes
06-05-07	3837-3846'	4 JSPF	36 holes

**NEWFIELD**



**Federal 9-22-9-16**  
 2079' FSL & 668' FEL  
 NE/SE Section 22-T9S-R16E  
 Duchesne Co, Utah  
 API # 43-013-33175; Lease # UTU-74392

## FEDERAL 16-22-9-16

Spud Date: 08/27/07  
 Put on Production: 10/10/07  
 GL: 5800' KB: 5812'

### Injection Wellbore Diagram

#### SURFACE CASING

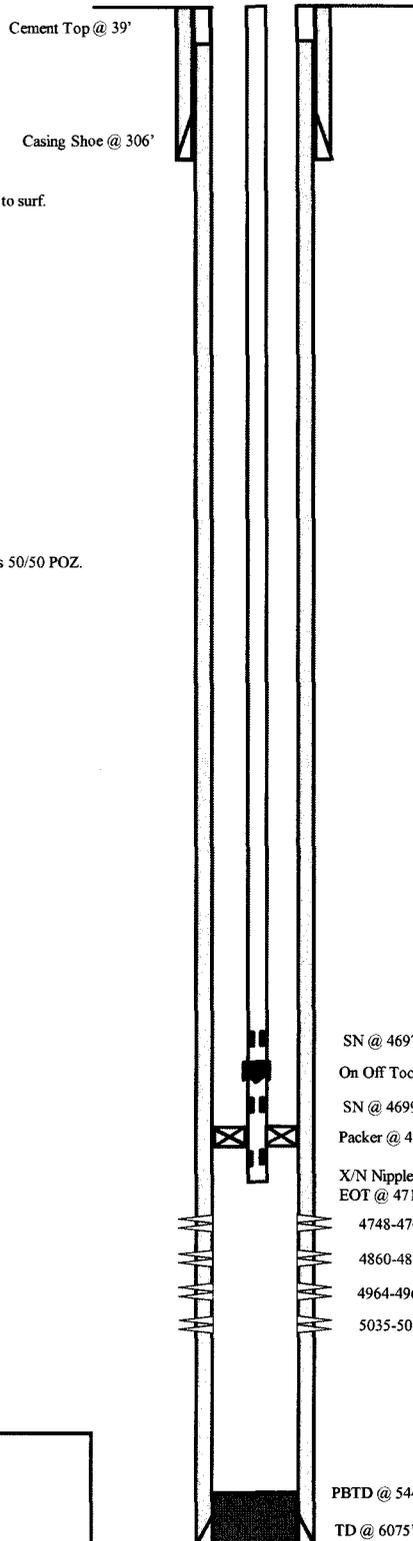
CSG SIZE: 8-5/8"  
 GRADE: J-55  
 WEIGHT: 24#  
 LENGTH: 7 jts. (293.76')  
 DEPTH LANDED: 305.61' KB  
 HOLE SIZE: 12-1/4"  
 CEMENT DATA: 160 sxs Class "G" cmt, est 6 bbls cmt to surf.

#### PRODUCTION CASING

CSG SIZE: 5-1/2"  
 GRADE: J-55  
 WEIGHT: 15.5#  
 LENGTH: ? jts. (')  
 DEPTH LANDED: 6051' KB  
 HOLE SIZE: 7-7/8"  
 CEMENT DATA: 350 sxs Prem. Lite II mixed & 525 sxs 50/50 POZ.  
 CEMENT TOP: 39'

#### TUBING

SIZE/GRADE/WT.: 2-7/8" / N-80 / 6.5#  
 NO. OF JOINTS: 42 jts (1309')  
 SIZE/GRADE/WT.: 2-7/8" / J-55 / 6.5#  
 NO. OF JOINTS: 108 jts (3375.7')  
 SEATING NIPPLE: 2-7/8" (1.10')  
 SN LANDED AT: 4696.7' KB  
 ON/OFF TOOL AT: 4697.8'  
 X-SEAL LANDED AT: 4699.3' KB  
 ARROW #1 PACKER CE AT: 4703.09'  
 XO 2-3/8 x 2-7/8 J-55 AT: 4706.6'  
 TBG PUP 2-3/8 J-55 AT: 4707.1'  
 X/N NIPPLE AT: 4711.1'  
 TOTAL STRING LENGTH: EOT @ 4713'



#### FRAC JOB

10/05/07	5035-5071'	<b>Frac A1 sands as follows:</b> 140366# 20/40 sand in 1008 bbl Lightning 17 frac fluid. Treated @ avg press of 1851 psi w/avg rate of 24.8 BPM. ISIP 2081 psi. Calc flush: 5033 gal. Actual flush: 4536 gal.
10/06/07	4964-4969'	<b>Frac A.5 sands as follows:</b> 15004# 20/40 sand in 274 bbls Lightning 17 frac fluid. Treated @ avg press of 2605 psi w/avg rate of 24.8 BPM. ISIP 1909 psi. Calc flush: 4962 gal. Actual flush: 4456 gal.
10/05/07	4860-4867'	<b>Frac B2 sands as follows:</b> 13965# 20/40 sand in 269 bbls Lightning 17 frac fluid. Treated @ avg press of 2130 psi w/avg rate of 24.8 BPM. ISIP 1925 psi. Calc flush: 4858 gal. Actual flush: 4355 gal.
10/05/07	4748-4760'	<b>Frac C sands as follows:</b> 41811# 20/40 sand in 406 bbls Lightning 17 frac fluid. Treated @ avg press of 2620 psi w/avg rate of 24.8 BPM. ISIP 2235 psi. Calc flush: 4746 gal. Actual flush: 4662 gal.
6/17/08		<b>Parted rods.</b> Updated rod and tubing detail
11/19/08		<b>Pump Change.</b> Updated rod & tubing details.
2/13/09		<b>Tubing Leak.</b> Updated r & t details.
6/18/2010		<b>Tubing leak.</b> Updated rod and tubing detail.
11/21/12		<b>Convert to Injection Well</b>
11/27/12		<b>Conversion MIT Finalized</b> - update tbg detail

#### PERFORATION RECORD

10/02/07	5035-5071'	4 JSPF	144 holes
10/05/07	4964-4969'	4 JSPF	20 holes
10/05/07	4860-4867'	4 JSPF	28 holes
10/05/07	4748-4760'	4 JSPF	48 holes



**FEDERAL 16-22-9-16**  
 2068' FSL & 649' FEL  
 NE/SE Section 22-T9S-R16E  
 Duchesne Co, Utah  
 API #43-013-33394; Lease # UTU-74392

## Castle Peak Federal 6-23-9-16

Spud Date: 7-30-84  
 Put on Production: 9-11-84  
 GL: 5725' KB: 5739'

Injection Wellbore  
 Diagram

**SURFACE CASING**

CSG SIZE: 8-5/8"  
 GRADE: J-55  
 WEIGHT: 24#  
 LENGTH: 7 jts. (295.0')  
 DEPTH LANDED: 295'  
 HOLE SIZE: 12-1/4"  
 CEMENT DATA: 210sxs Class "G" cmt + 2" CaCl + sk Flocele.

**PRODUCTION CASING**

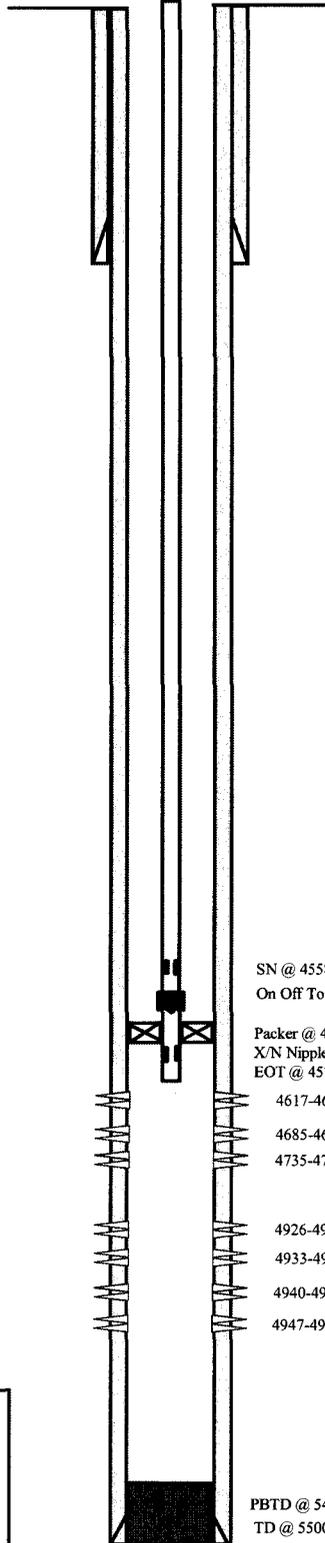
CSG SIZE: 5-1/2"  
 GRADE: J-55  
 WEIGHT: 17#  
 LENGTH: 140 jts.(5497.24')  
 HOLE SIZE: 7-7/8"  
 DEPTH LANDED: 5495.95'  
 CEMENT DATA: 120 sxs Lodense, 250 sxs Gypseal.  
 CEMENT TOP AT:000'

**TUBING**

SIZE/GRADE/WT.: 2-7/8" / J-55 / 6.5#  
 NO. OF JOINTS: 145 jts (4545.3')  
 SEATING NIPPLE: 2-7/8" (1.10')  
 SN LANDED AT: 4558.3' KB  
 ON/OFF TOOL AT: 4559.4'  
 ARROW #1 PACKER CE AT: 4564.6'  
 XO 2-3/8 x 2-7/8 J-55 AT: 4568.3'  
 TBG PUP 2-3/8 J-55 AT: 4569'  
 X/N NIPPLE AT: 4573.1'  
 TOTAL STRING LENGTH: EOT @ 4574.65'

**FRAC JOB**

8-22-84 4926-4949' **Frac sands as follows:**  
 Frac with 28500# 20/40 sand in  
 96500bbls Lightning 17 fluid.  
 3/12/11 **Tubing Leak.** Updated rod and tubing detail  
 02/27/14 4685-4737' **Frac B.5 & B2 sands as follows:**  
 22138# 20/40 sand in 282 bbls Lightning 17  
 frac fluid.  
 02/27/14 4685-4737' **Frac C sands as follows:** 31402# 20/40 sand  
 in 282 bbls Lightning 17 frac fluid.  
 03/04/14 **Conversion MIT Finalized** - update tbg  
 detail



**PERFORATION RECORD**

4926-4930'	1 JSPF	4 holes
4933-4937'	1 JSPF	4 holes
4940-4945'	1 JSPF	5 holes
4947-4949'	1 JSPF	2 holes
4735-4737'	3 JSPF	6 holes
4685-4687'	3 JSPF	6 holes
4617-4625'	3 JSPF	24 holes

**NEWFIELD**



**Castle Peak Federal 6-23-9-16**  
 1970'FWL & 1980 'FNL  
 Section 23, T9S, R16E  
 Duchesne Co, Utah  
 API # 43-013-30873; Lease # UTU-15855

SN @ 4558'  
 On Off Tool @ 4559'

Packer @ 4565'  
 X/N Nipple @ 4573'  
 EOT @ 4575'

4617-4625'

4685-4687'

4735-4737'

4926-4930'

4933-4937'

4940-4945'

4947-4937'

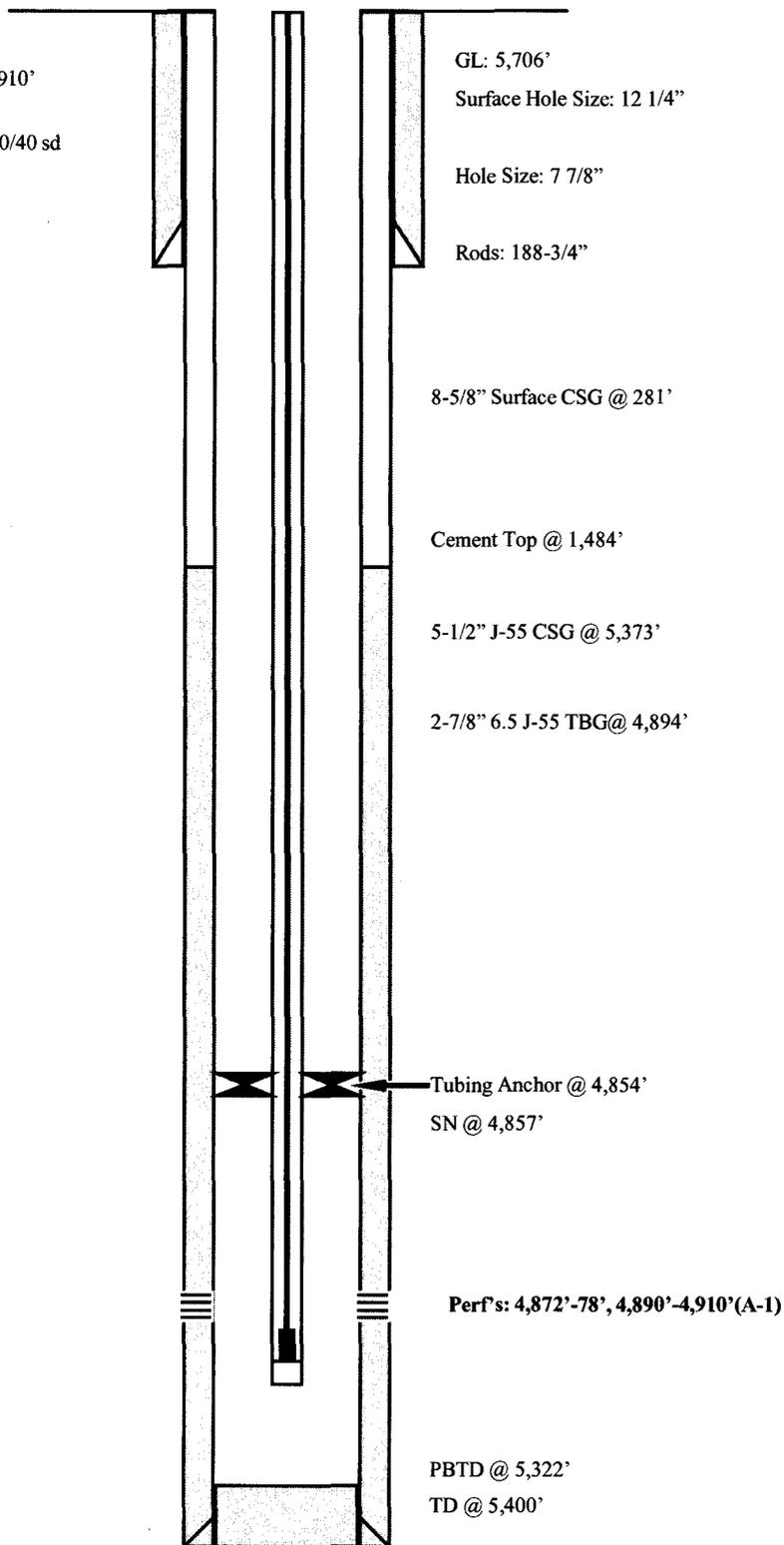
PBTD @ 5444'  
 TD @ 5500'

## Castle Peak Federal #7-23

Wellbore Diagram

**Well History:**

7-26-83 Spud Well  
 8-11-83 Perf: 4,872'-4,878', 4,890'-4,910'  
 Frac A-3 zone as follows:  
 Totals 38,000 gal, 130,800# 20/40 sd  
 Max TP 2,600 @ 31 BPM  
 Avg TP 2,000 @ 31 BPM  
 ISIP 2,000, after 5 min 1,450



**NEWFIELD**

Castle Peak Federal #7-23  
 1967 FNL 1985 FEL  
 SWNE Section 23-T9S-R16E  
 Duchesne Co, Utah  
 API #43-013-30662; Lease #U-15855

43-013-51681

Well Name: GMBU G-23-9-16

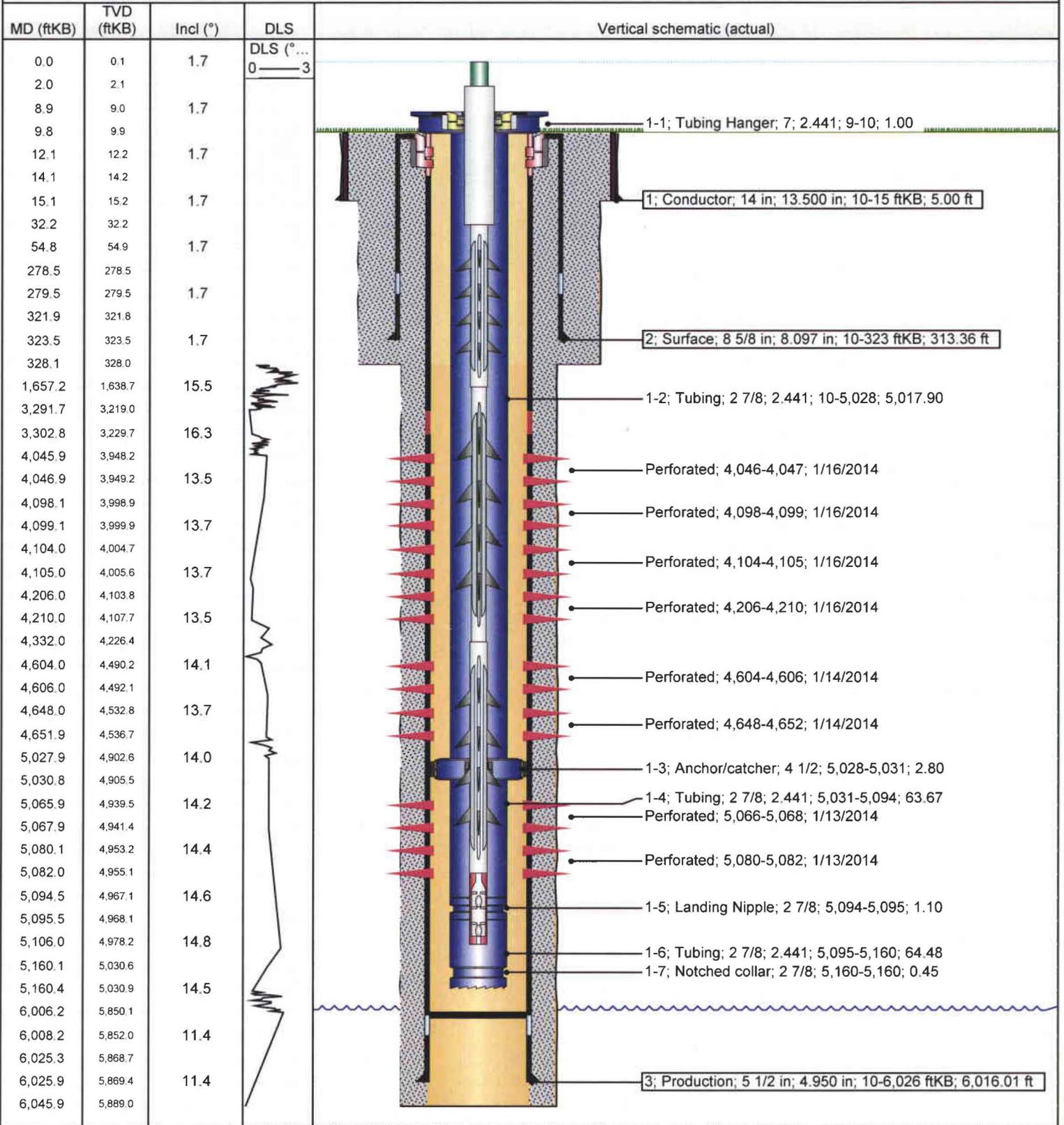
Surface Legal Location NWNW 527 FNL 726 FWL Sec 23 T9S R16E Mer SLB		API/JWI 43013516810000	Well RC 500334455	Lease UTU15855	State/Province Utah	Field Name GMBU CTB5	County Duchesne
Spud Date 12/14/2013	Rig Release Date 12/31/2013	On Production Date 1/24/2014	Original KB Elevation (ft) 5,728	Ground Elevation (ft) 5,718	Total Depth All (TVD) (ftKB) Original Hole - 5,889.0	PBTD (All) (ftKB) Original Hole - 6,006.3	

Most Recent Job

Job Category Initial Completion	Primary Job Type Fracture Treatment	Secondary Job Type P&P	Job Start Date 1/13/2014	Job End Date 1/21/2014
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TD: 6,046.0

Slant - Original Hole, 4/2/2014 3:11:32 PM



43-013-51676

Well Name: GMBU X-14-9-16

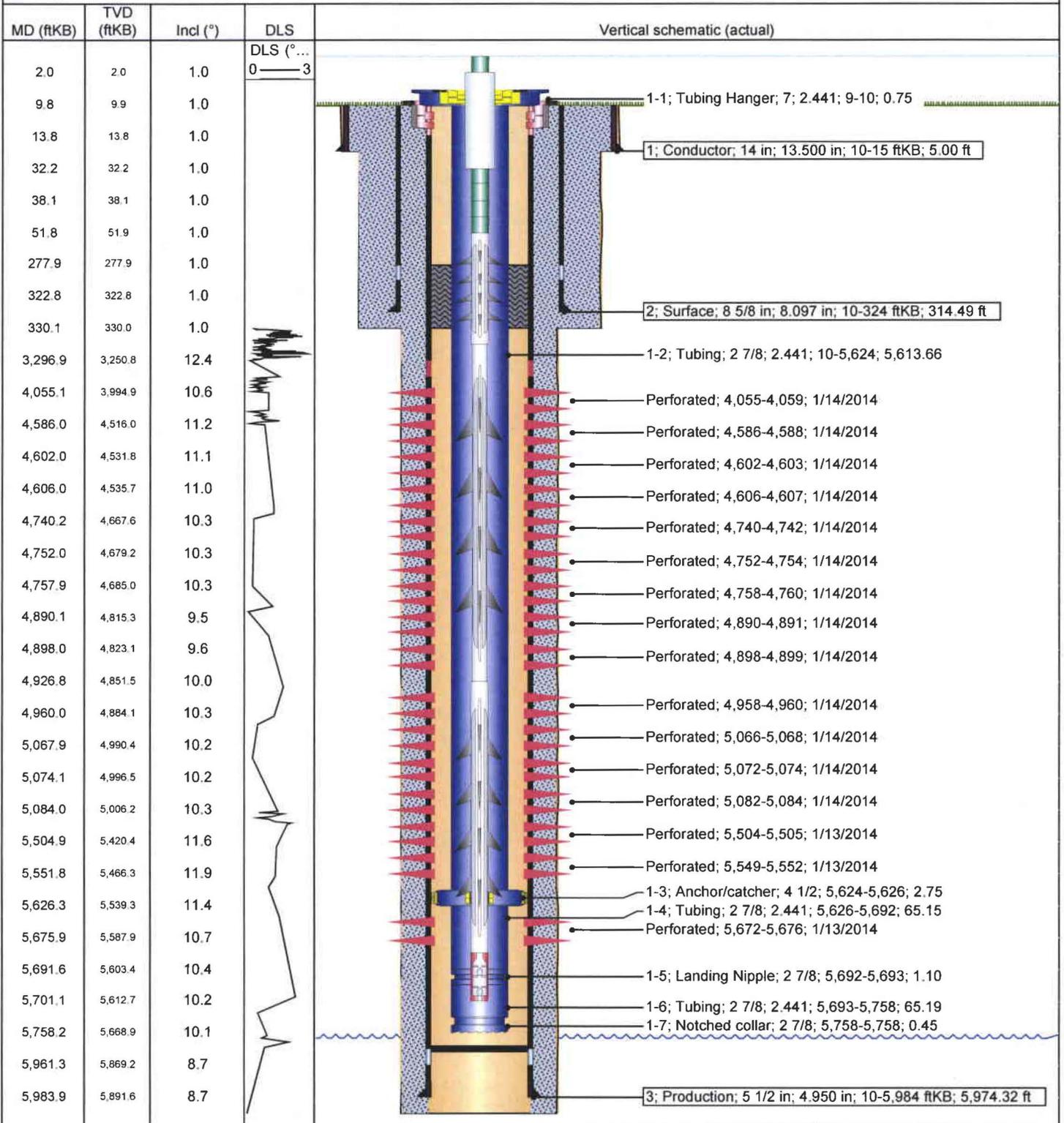
Surface Legal Location NWNW 518 FNL 707 FWL Sec 23 T9S R16E Mer SLB				API/UWI 43013516760000	Well RC 500346788	Lease UTU15855	State/Province Utah	Field Name GMBU CTB5	County Duchesne
Spud Date 12/13/2013	Rig Release Date 12/28/2013	On Production Date 1/24/2014	Original KB Elevation (ft) 5,728	Ground Elevation (ft) 5,718	Total Depth All (TVD) (ftKB) Original Hole - 5,901.5	PBTB (All) (ftKB) Original Hole - 5,959.6			

Most Recent Job

Job Category Initial Completion	Primary Job Type Fracture Treatment	Secondary Job Type P&P	Job Start Date 1/13/2014	Job End Date 1/24/2014
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TD: 5,994.0

Slant - Original Hole, 4/7/2014 11:33:43 AM



Units of Measurement: **Standard**

Water Analysis Report

Production Company: **NEWFIELD PRODUCTION**

Sales Rep: **Pete Prodromides**

Well Name: **FEDERAL 12-23-9-16**

Lab Tech: **Gary Winegar**

Sample Point:

Sample Date: **1/24/2014**

Scaling potential predicted using ScaleSoftPitzer from  
Brine Chemistry Consortium (Rice University)

Sample ID: **WA-264546**

Sample Specifics		Analysis @ Properties in Sample Specifics			
		Cations		Anions	
		mg/L		mg/L	
Test Date:	1/24/2014	Sodium (Na):	6399.00	Chloride (Cl):	15000.00
System Temperature 1 (°F):	120	Potassium (K):	39.00	Sulfate (SO4):	145.00
System Pressure 1 (psig):	60	Magnesium (Mg):	8.30	Bicarbonate (HCO3):	1952.00
System Temperature 2 (°F):	210	Calcium (Ca):	12.50	Carbonate (CO3):	
System Pressure 2 (psig):	60	Strontium (Sr):	9.20	Acetic Acid (CH3COO)	
Calculated Density (g/ml):	1.013	Barium (Ba):	17.40	Propionic Acid (C2H5COO)	
pH:	7.90	Iron (Fe):	577.00	Butanoic Acid (C3H7COO)	
Calculated TDS (mg/L):	24166.37	Zinc (Zn):	2.20	Isobutyric Acid ((CH3)2CHCOO)	
CO2 in Gas (%):		Lead (Pb):	0.37	Fluoride (F):	
Dissolved CO2 (mg/L):	39.60	Ammonia NH3:		Bromine (Br):	
H2S in Gas (%):		Manganese (Mn):	4.40	Silica (SiO2):	
H2S in Water (mg/L):	5.00				

Notes:

AI=1.15      B=8.2      LI=1.7

(PTB = Pounds per Thousand Barrels)

Temp (°F)	PSI	Calcium Carbonate		Barium Sulfate		Iron Sulfide		Iron Carbonate		Gypsum CaSO4·2H2O		Celestite SrSO4		Halite NaCl		Zinc Sulfide		
		SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	
210.00	60.00	1.05	9.82	1.09	9.44	4.83	4.54	4.72	419.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.05	1.15
200.00	60.00	0.99	9.65	1.10	9.48	4.81	4.54	4.67	418.93	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.12	1.15
190.00	60.00	0.93	9.45	1.13	9.52	4.79	4.54	4.61	418.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.20	1.15
180.00	60.00	0.87	9.24	1.15	9.57	4.78	4.54	4.55	418.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.29	1.15
170.00	60.00	0.82	9.01	1.18	9.62	4.77	4.54	4.50	418.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.38	1.15
160.00	60.00	0.77	8.76	1.22	9.68	4.77	4.54	4.44	418.22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.49	1.15
150.00	60.00	0.72	8.49	1.26	9.74	4.78	4.54	4.38	417.95	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.60	1.15
140.00	60.00	0.67	8.20	1.30	9.80	4.79	4.54	4.31	417.61	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.71	1.15
130.00	60.00	0.62	7.90	1.35	9.87	4.81	4.54	4.25	417.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.84	1.15
120.00	60.00	0.58	7.59	1.41	9.93	4.83	4.54	4.19	416.71	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.98	1.15

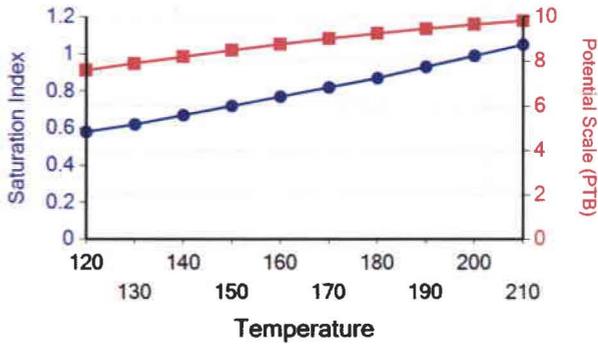
Water Analysis Report

Temp (°F)	PSI	Hemihydrate CaSO4~0.5H2O		Anhydrate CaSO4		Calcium Fluoride		Zinc Carbonate		Lead Sulfide		Mg Silicate		Ca Mg Silicate		Fe Silicate	
		SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB
210.00	60.00	0.00	0.00	0.00	0.00	0.00	0.00	2.20	1.47	9.34	0.15	0.00	0.00	0.00	0.00	0.00	0.00
200.00	60.00	0.00	0.00	0.00	0.00	0.00	0.00	2.12	1.47	9.48	0.15	0.00	0.00	0.00	0.00	0.00	0.00
190.00	60.00	0.00	0.00	0.00	0.00	0.00	0.00	2.03	1.47	9.63	0.15	0.00	0.00	0.00	0.00	0.00	0.00
180.00	60.00	0.00	0.00	0.00	0.00	0.00	0.00	1.93	1.46	9.79	0.15	0.00	0.00	0.00	0.00	0.00	0.00
170.00	60.00	0.00	0.00	0.00	0.00	0.00	0.00	1.84	1.46	9.97	0.15	0.00	0.00	0.00	0.00	0.00	0.00
160.00	60.00	0.00	0.00	0.00	0.00	0.00	0.00	1.73	1.45	10.15	0.15	0.00	0.00	0.00	0.00	0.00	0.00
150.00	60.00	0.00	0.00	0.00	0.00	0.00	0.00	1.62	1.44	10.35	0.15	0.00	0.00	0.00	0.00	0.00	0.00
140.00	60.00	0.00	0.00	0.00	0.00	0.00	0.00	1.51	1.43	10.56	0.15	0.00	0.00	0.00	0.00	0.00	0.00
130.00	60.00	0.00	0.00	0.00	0.00	0.00	0.00	1.39	1.42	10.78	0.15	0.00	0.00	0.00	0.00	0.00	0.00
120.00	60.00	0.00	0.00	0.00	0.00	0.00	0.00	1.26	1.40	11.02	0.15	0.00	0.00	0.00	0.00	0.00	0.00

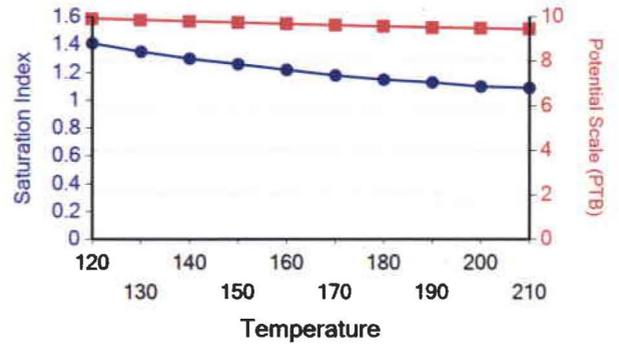
These scales have positive scaling potential under initial temperature and pressure: Calcium Carbonate Barium Sulfate Iron Sulfide Iron Carbonate Zinc Sulfide Zinc Carbonate Lead Sulfide

These scales have positive scaling potential under final temperature and pressure: Calcium Carbonate Barium Sulfate Iron Sulfide Iron Carbonate Zinc Sulfide Zinc Carbonate Lead Sulfide

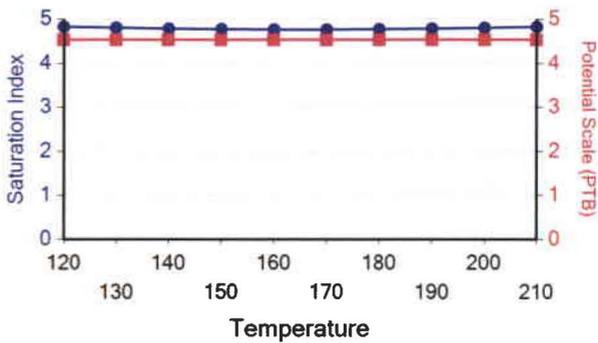
Calcium Carbonate



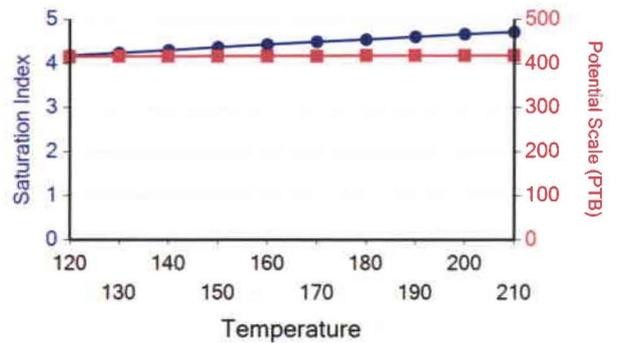
Barium Sulfate



Iron Sulfide

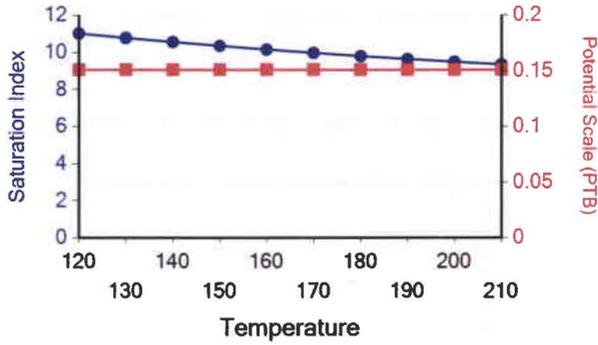


Iron Carbonate

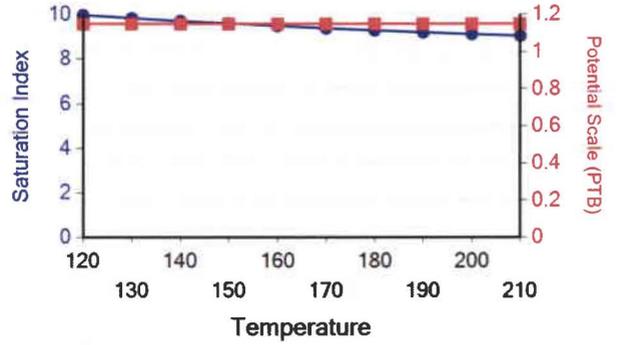


Water Analysis Report

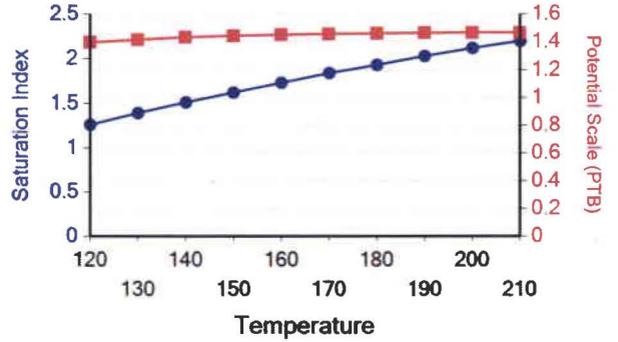
Lead Sulfide



Zinc Sulfide



Zinc Carbonate



# ATTACHMENT F

4 of 7

multi-chem®

A HALLIBURTON SERVICE

Multi-Chem Analytical Laboratory

1553 East Highway 40

Vernal, UT 84078

Units of Measurement: **Standard**

## Water Analysis Report

Production Company: **NEWFIELD PRODUCTION**  
 Well Name: **BELUGA INJ FACILITY**  
 Sample Point: **Commingled After**  
 Sample Date: **11/4/2013**  
 Sample ID: **WA-257478**

Sales Rep: **Jacob Bird**  
 Lab Tech: **Gary Winegar**

Scaling potential predicted using ScaleSoftPitzer from  
 Brine Chemistry Consortium (Rice University)

Sample Specifics		Analysis @ Properties in Sample Specifics			
		Cations		Anions	
		mg/L		mg/L	
Test Date:	11/11/2013	Sodium (Na):	2661.00	Chloride (Cl):	5000.00
System Temperature 1 (°F):	300	Potassium (K):	34.00	Sulfate (SO4):	266.00
System Pressure 1 (psig):	1300	Magnesium (Mg):	24.00	Bicarbonate (HCO3):	1654.00
System Temperature 2 (°F):	70	Calcium (Ca):	46.00	Carbonate (CO3):	
System Pressure 2 (psig):	15	Strontium (Sr):	4.90	Acetic Acid (CH3COO)	
Calculated Density (g/ml):	1.004	Barium (Ba):	3.90	Propionic Acid (C2H5COO)	
pH:	8.30	Iron (Fe):	1.23	Butanoic Acid (C3H7COO)	
Calculated TDS (mg/L):	9712.71	Zinc (Zn):	0.33	Isobutyric Acid ((CH3)2CHCOO)	
CO2 in Gas (%):		Lead (Pb):	0.08	Fluoride (F):	
Dissolved CO2 (mg/L):	224.00	Ammonia NH3:		Bromine (Br):	
H2S in Gas (%):		Manganese (Mn):	0.36	Silica (SiO2):	16.91
H2S in Water (mg/L):	9.00				

**Notes:**

**B=4.9 AI=.07 LI=.58**

(PTB = Pounds per Thousand Barrels)

Temp (°F)	PSI	Calcium Carbonate		Barium Sulfate		Iron Sulfide		Iron Carbonate		Gypsum CaSO4.2H2O		Celestite SrSO4		Halite NaCl		Zinc Sulfide	
		SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB
70.00	14.00	1.36	34.40	1.80	2.29	3.26	0.68	1.61	0.87	0.00	0.00	0.00	0.00	0.00	0.00	10.92	0.17
95.00	157.00	1.40	34.75	1.56	2.26	3.05	0.68	1.75	0.88	0.00	0.00	0.00	0.00	0.00	0.00	10.41	0.17
121.00	300.00	1.48	35.82	1.38	2.23	2.93	0.68	1.90	0.88	0.00	0.00	0.00	0.00	0.00	0.00	10.00	0.17
146.00	443.00	1.57	36.86	1.25	2.19	2.87	0.68	2.04	0.89	0.00	0.00	0.00	0.00	0.00	0.00	9.66	0.17
172.00	585.00	1.68	37.77	1.16	2.16	2.86	0.68	2.19	0.89	0.00	0.00	0.00	0.00	0.00	0.00	9.39	0.17
197.00	728.00	1.81	38.51	1.10	2.13	2.88	0.68	2.32	0.89	0.00	0.00	0.00	0.00	0.00	0.00	9.16	0.17
223.00	871.00	1.94	39.07	1.06	2.12	2.94	0.68	2.45	0.89	0.00	0.00	0.00	0.00	0.00	0.00	8.97	0.17
248.00	1014.00	2.09	39.48	1.05	2.12	3.03	0.68	2.56	0.89	0.00	0.00	0.00	0.00	0.00	0.00	8.82	0.17
274.00	1157.00	2.24	39.75	1.06	2.12	3.13	0.68	2.67	0.89	0.00	0.00	0.00	0.00	0.00	0.00	8.69	0.17
300.00	1300.00	2.39	39.94	1.08	2.13	3.25	0.68	2.76	0.89	0.00	0.00	0.00	0.00	0.00	0.00	8.57	0.17

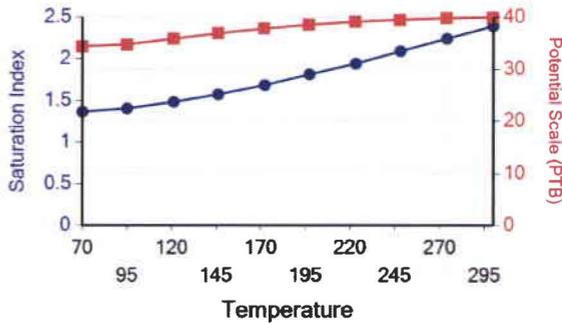
## Water Analysis Report

Temp (°F)	PSI	Hemihydrate CaSO4·0.5H2O		Anhydrate CaSO4		Calcium Fluoride		Zinc Carbonate		Lead Sulfide		Mg Silicate		Ca Mg Silicate		Fe Silicate	
		SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB
70.00	14.00	0.00	0.00	0.00	0.00	0.00	0.00	0.22	0.09	12.71	0.03	0.28	1.78	0.00	0.00	5.30	0.94
95.00	157.00	0.00	0.00	0.00	0.00	0.00	0.00	0.58	0.16	11.88	0.03	1.28	6.70	0.20	1.31	5.82	0.95
121.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00	0.92	0.20	11.19	0.03	2.42	11.92	0.83	4.31	6.53	0.95
146.00	443.00	0.00	0.00	0.00	0.00	0.00	0.00	1.22	0.21	10.60	0.03	3.60	16.34	1.49	6.86	7.30	0.95
172.00	585.00	0.00	0.00	0.00	0.00	0.00	0.00	1.49	0.21	10.11	0.03	4.78	19.10	2.16	8.69	8.11	0.95
197.00	728.00	0.00	0.00	0.00	0.00	0.00	0.00	1.73	0.22	9.69	0.03	5.93	20.16	2.83	9.75	8.94	0.96
223.00	871.00	0.00	0.00	0.00	0.00	0.00	0.00	1.93	0.22	9.33	0.03	7.06	20.43	3.49	10.27	9.76	0.96
248.00	1014.00	0.00	0.00	0.00	0.00	0.00	0.00	2.10	0.22	9.03	0.03	8.12	20.49	4.12	10.50	10.55	0.96
274.00	1157.00	0.00	0.00	0.00	0.00	0.00	0.00	2.24	0.22	8.76	0.03	9.12	20.50	4.71	10.60	11.29	0.96
300.00	1300.00	0.00	0.00	0.00	0.00	0.00	0.00	2.35	0.22	8.53	0.03	10.04	20.50	5.25	10.64	11.98	0.96

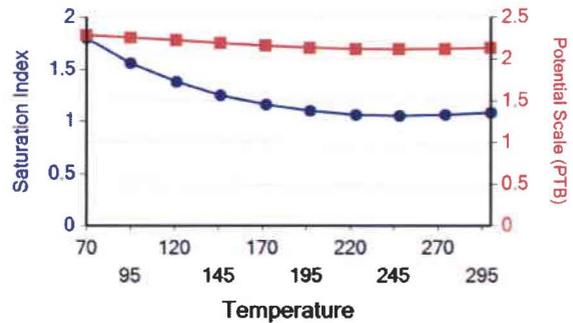
These scales have positive scaling potential under initial temperature and pressure: Calcium Carbonate Barium Sulfate Iron Sulfide Iron Carbonate Zinc Sulfide Zinc Carbonate Lead Sulfide Mg Silicate Fe Silicate

These scales have positive scaling potential under final temperature and pressure: Calcium Carbonate Barium Sulfate Iron Sulfide Iron Carbonate Zinc Sulfide Zinc Carbonate Lead Sulfide Mg Silicate Ca Mg Silicate Fe Silicate

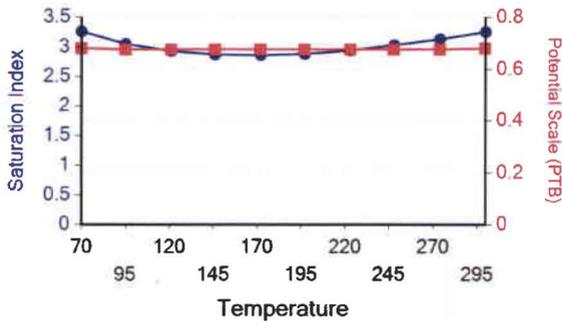
Calcium Carbonate



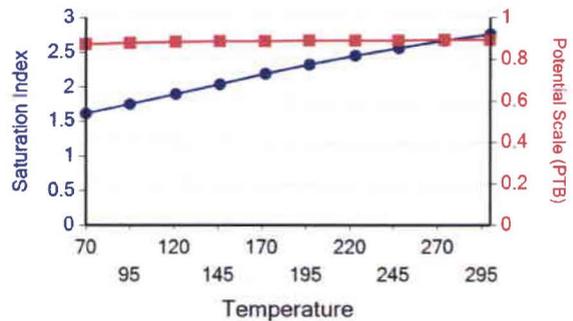
Barium Sulfate



Iron Sulfide

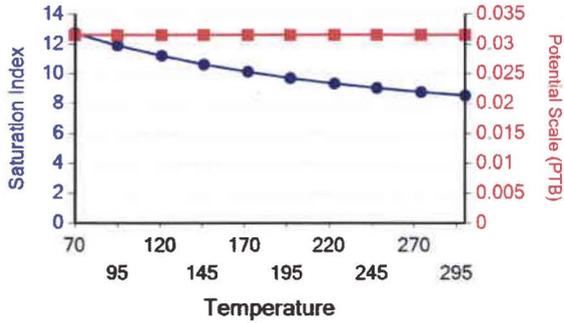


Iron Carbonate

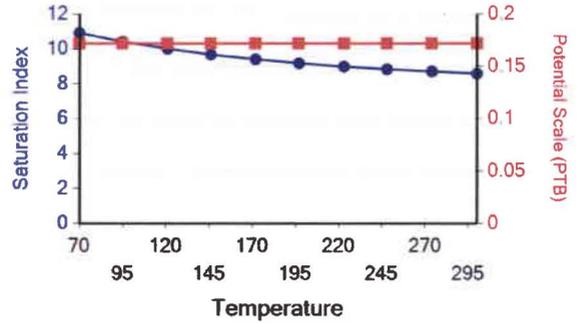


Water Analysis Report

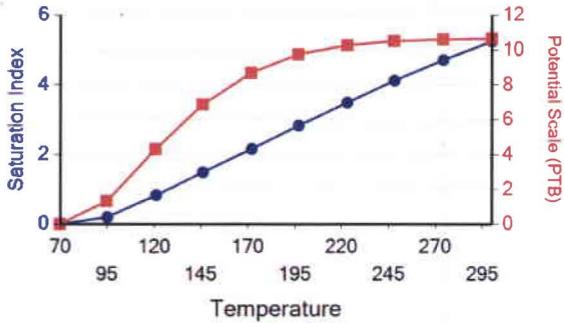
**Lead Sulfide**



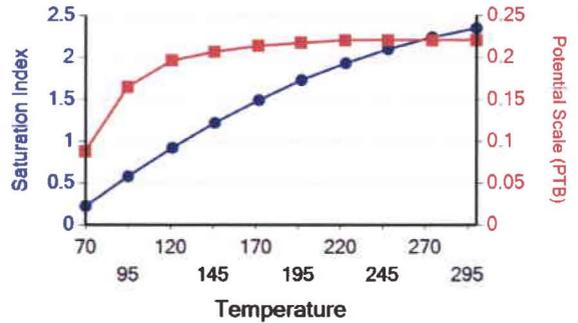
**Zinc Sulfide**



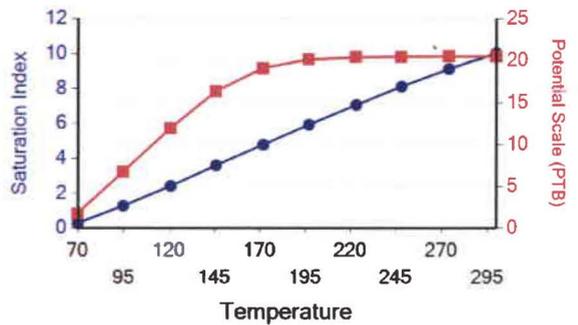
**Ca Mg Silicate**



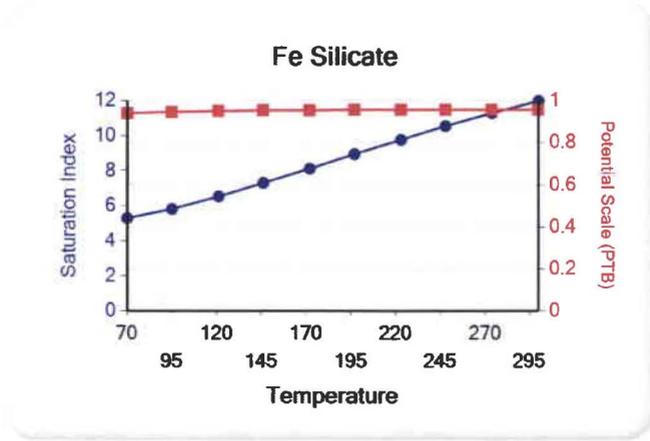
**Zinc Carbonate**



**Mg Silicate**



Water Analysis Report



**Attachment "G"**

**Federal 12-23-9-16  
Proposed Maximum Injection Pressure**

Frac Interval (feet)		Avg. Depth (feet)	ISIP (psi)	Calculated Frac Gradient (psi/ft)	Pmax
Top	Bottom				
4902	4926	4914	2198	0.88	2166 ←
4815	4822	4819	4200	1.31	4169
4743	4749	4746	3290	1.13	3259
				<b>Minimum</b>	<u><u>2166</u></u>

Calculation of Maximum Surface Injection Pressure  

$$P_{max} = (\text{Frac Grad} - (0.433 \times 1.015)) \times \text{Depth of Top Perf}$$
 where pressure gradient for the fresh water is .433 psi/ft and specific gravity of the injected water is 1.015.

$$\text{Frac Gradient} = (\text{ISIP} + (0.433 \times \text{Top Perf.})) / \text{Top Perf.}$$

**Please note:** These are existing perforations; additional perforations may be added during the actual conversion procedure.

**Daily Activity Report**

Format For Sundry

**FEDERAL 12-23-9-16****3/1/2008 To 7/30/2008****5/14/2008 Day: 1****Completion**

Rigless on 5/13/2008 - Install 5m frac head. NU 6" 5K Cameron BOP. RU H/O truck & pressure test casing, blind rams, frac head, csg & casing valves to 4500 psi. RU Perforators LLC WLT w/ mast & run CBL under pressure. WLTD @ 5704' & cement top @ 104'. Perforate stage #1, A3 sds @ 4902-26' w/ 3-1/8" Slick Guns (19 gram, .49"EH, 120°) w/ 4 spf for total of 96 shots. 136 BWTR. SWIFN.

**5/17/2008 Day: 2****Completion**

Rigless on 5/17/2008 - Stage #1 A3 sds. RU BJ Services. 0 psi on well. Frac A3 sds w/ 119,316#'s of 20/40 sand in 996 bbls of Lightning 17 fluid. Broke @ 3363 psi. Treated w/ ave pressure of 1818 psi w/ ave rate of 23.4 BPM. ISIP 2198 psi. Leave pressure on well. 996 BWTR. Stage #2 A.5 sds. RU Phoenix Surverys, inc WLT, crane & Lubricator. RIH w/ Weatherford 5-1/2" 6K composite flow through frac plug & 7' perf gun. Set plug @ 4850'. Perforate A.5 sds @ 4815-22' w/ 3-1/8" Slick Guns (.39"EH, 19 gram, 120°) w/ 4 spf for total of 28 shots. RU BJ Services. 1936 psi on well. Perfs would not break. Dump bail acid on perfs. RU BJ Services. 1525 psi on well. Frac A.5 sds w/ 14,762#'s of 20/40 sand in 260 bbls of Lightning 17 fluid. Broke @ 3711 psi. Treated w/ ave pressure of 3169 psi w/ ave rate of 23.3 BPM. Screened out perfs w/ 12 bbls water remaining in flush. ISIP 4200 psi. Open well to pit for cleanup. Recovered 150 bbls water. Stage #3 B2 sds. RU Phoenix Surverys, inc WLT, crane & Lubricator. RIH w/ Weatherford 5-1/2" 6K composite flow through frac plug & 6' perf gun. Set plug @ 4775'. Perforate B2 sds @ 4743-49' w/ 3-1/8" Slick Guns (.39"EH, 19 gram, 120°) w/ 4 spf for total of 24 shots. RU BJ Services. 310 psi on well. Perfs would not break. Dump bail acid on perfs. RU BJ Services. 345 psi on well. Frac B2 sds w/ 25,365#'s of 20/40 sand in 342 bbls of Lightning 17 fluid. Broke @ 3771 psi. Treated w/ ave pressure of 2818 psi w/ ave rate of 21.6 BPM. ISIP 3290 psi. Leave pressure on well. 1448 BWTR. Stage #4 C sds. RU Phoenix Surverys, inc WLT, crane & Lubricator. RIH w/ Weatherford 5-1/2" 6K composite flow through frac plug & 11' perf gun. Set plug @ 4690'. Perforate C sds @ 4604-15' w/ 3-1/8" Slick Guns (.39"EH, 19 gram, 120°) w/ 4 spf for total of 44 shots. RU BJ Services. 1580 psi on well. Perfs would not break. Dump bail acid on perfs (tagged sand @ 4600'). RU BJ Services. 1391 psi on well. Perfs would not break. Open well to pit for immediate flowback @ approx. 1 bpm. Well flowed for 2 hrs & died. SWIFN.

**5/18/2008 Day: 3****Completion**

Rigless on 5/18/2008 - Bleed off well. RU The Perforators, llc. RIH w/ collar locator. Tag sand @ 4602'. Stuck collar locator @ 4555'. Pulled out of rope socket. RD wireline truck. SWIFN.

**5/19/2008 Day: 4****Completion**

Rigless on 5/19/2008 - MIRU Western #2. ND Cameron BOP & 5m frac head. NU 3m production head & Schafer BOP. RIH w/ overshot w/ 3 1/8" grapple, x-over, bumper sub, super jars, x-over & 140 new 2 7/8" tbg. from pipe rack (tallying & drifting). Circulate well clean. LD 1 jt 2 7/8" tbg. SWIFN.

**5/20/2008 Day: 5****Completion**

Western #2 on 5/20/2008 - RIH w/ tbg. Tag sand @ 4564'. C/O to 4662'. Latch on to fish. POOH w/ tbg. LD fish. RU BJ Services. 0 psi on well. Frac C sds w/ 46,658#'s of 20/40 sand in 534 bbls of Lightning 17 fluid. Broke @ 3413 psi. Treated w/ ave pressure of 2361 psi w/ ave rate of 23.4 BPM. ISIP 2680 psi. Open well to pit for immediate flowback @ approx. 1 bpm. Well flowed for 2 hrs. Recovered 120 bbls water. SWIFN.

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**5/21/2008 Day: 6****Completion**

Western #2 on 5/21/2008 - RIH w/ 4 3/4" chomp bit, bit sub & 2 7/8" tbg. Tag sand @ 4607'. RU powerswivel & pump. C/O to CBP @ 4690'. DU CBP in 25 min. Cont. RIH w/ tbg. Tag sand @ 4745'. C/O to CBP @ 4775'. DU CBP in 11 min. Cont. RIH w/ tbg. Tag CBP @ 4850'. DU CBP in 9 min. Cont. RIH w/ tbg. Tag sand @ 5562'. C/O to PBTD @ 5747'. Circulate well clean. Pull up 5696'. RIH w/ swab. SFL @ surface. Made 12 runs. Recovered 134 bbls. Trace of oil, no show of sand. EFL @ 1600'. RD swab equipment. SWIFN.

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**5/22/2008 Day: 7****Completion**

Western #2 on 5/22/2008 - Bleed off well. RIH w/ tbg. Tag sand @ 5744'. C/O to PBTD @ 5747'. Circulate well clean. POOH w/ tbg. LD BHA. RIH w/ 2 7/8" notched collar, 2 jts 2 7/8", PSN, 1 jt 2 7/8", 5 1/2" TAC, 155 jts 2 7/8" tbg. ND BOP. Set TAC @ 4883' w/ 16,000# tension. NU wellhead. X-over for rods. Flush tbg. w/ 60 bbls water. RIH w/ CDI 2 1/2" x 1 1/2" x 12' x 16' RHAC rod pump, 6- 1 1/2" weight bars, 20- 3/4" guided rods, 77- 3/4" slick rods, 93- 3/4" guided rods, 1- 8', 6', 4', 2' x 3/4" pony subs, 1 1/2" x 26' polished rod. Seat pump. Fill tbg. w/ 2 bbls water. Stroke test to 800 psi. RU pumping unit. Hang off rods. RD. Put well on production @ 6:30 p.m. 5 spm, 72" stroke length. Final Report.

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**Pertinent Files: Go to File List**

## ATTACHMENT H

### WORK PROCEDURE FOR PLUGGING AND ABANDONMENT

1. Set CIBP @ 4554'
2. Plug #1 Set 100' plug on top of CIBP using 12 sx Class "G" cement
3. Plug #2 140' balance plug using 17 sx Class "G" cement 50' above Trona-Bird's Nest extending 50' below base of Mahogany Oil Shale
4. Plug #3 120' balance plug using 14 sx Class "G" cement 60' above Uinta/Green River and extending 60' below
5. Plug #4 Pump 46 sx Class "G" cement down 5 ½" casing to 383'

The approximate cost to plug and abandon this well is \$42,000.

## FEDERAL 12-23-9-16

Spud Date: 2/5/08  
 Put on Production: 5/22/08  
 GL: 5774' KB: 5786'

Initial Production: BOPD,  
 MCFD, BWPD

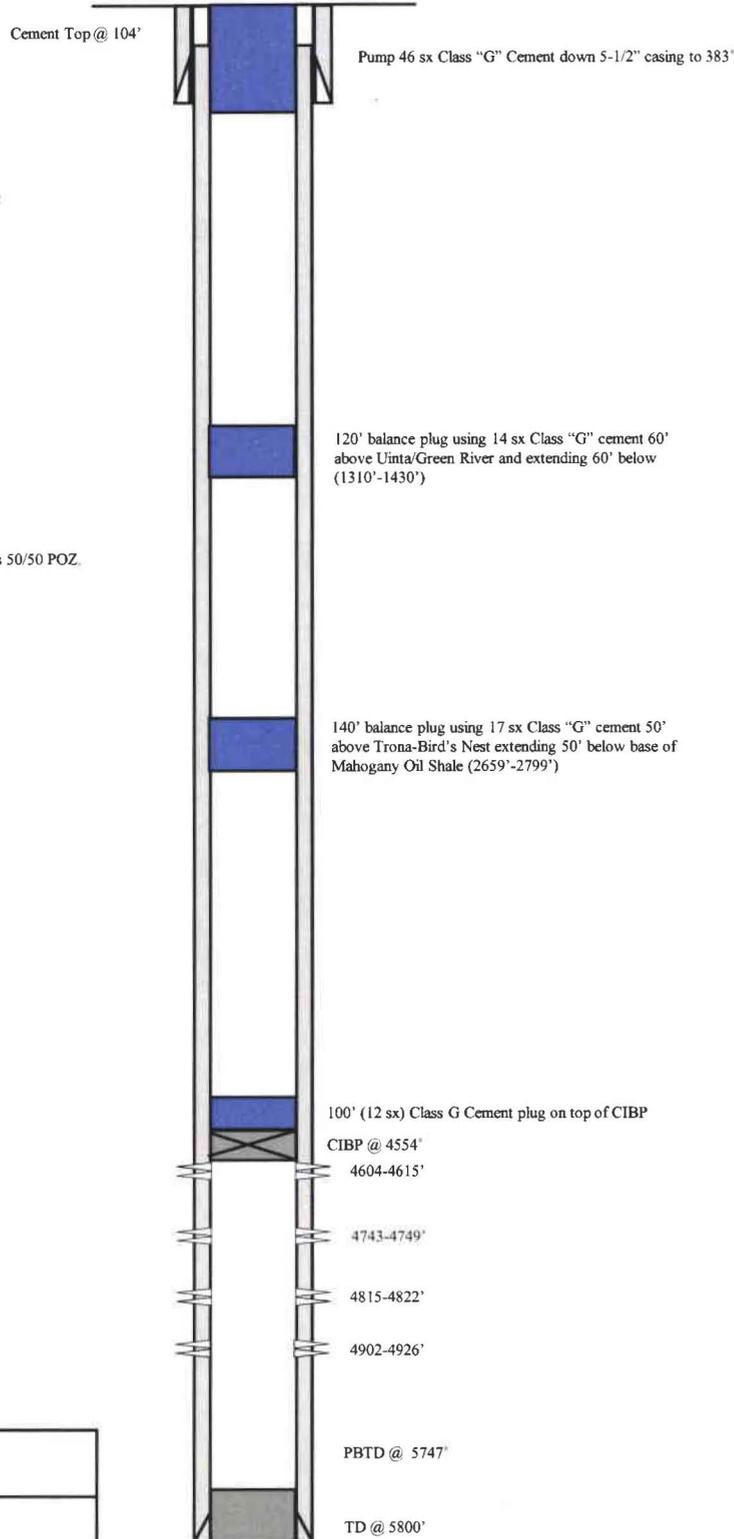
### Proposed P & A Wellbore Diagram

#### SURFACE CASING

CSG SIZE: 8-5/8"  
 GRADE: J-55  
 WEIGHT: 24#  
 LENGTH: 8 jts (322.64')  
 DEPTH LANDED: 333'  
 HOLE SIZE: 12-1/4"  
 CEMENT DATA: To surface with 160 sx Class "G" cmt

#### PRODUCTION CASING

CSG SIZE: 5-1/2"  
 GRADE: J-55  
 WEIGHT: 15.5#  
 LENGTH: 141 jts  
 DEPTH LANDED: 5718.33' KB  
 HOLE SIZE: 7-7/8"  
 CEMENT DATA: 300 sxs Prem. Lite II mixed & 400 sxs 50/50 POZ.  
 CEMENT TOP: 104'




<p><b>FEDERAL 12-23-9-16</b>                  2120' FSL &amp; 794' FWL                  NW/SW Section 23-T9S-R16E                  Duchesne Co, Utah                  API #43-013-33179; Lease # UTU-15855</p>