

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

5. LEASE DESIGNATION AND SERIAL NO. <b>UTU-65970</b>
6. IF INDIAN, ALLOTTEE OR TRIBE NAME <b>N/A</b>
7. UNIT AGREEMENT NAME <b>N/A</b>
8. FARM OR LEASE NAME WELL NO. <b>Federal #5-6-9-18</b>
9. API WELL NO. <b>43-047-34932</b>
10. FIELD AND POOL OR WILDCAT <b>Eight Mile Flat</b>
11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA <b>SW/NW Sec. 6, T9S, R18E</b>
12. County <b>Uintah</b>
13. STATE <b>UT</b>

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

1a. TYPE OF WORK **DRILL**  **DEEPEN**

1b. TYPE OF WELL

OIL WELL  GAS WELL  OTHER  SINGLE ZONE  MULTIPLE ZONE

2. NAME OF OPERATOR  
**Inland Production Company**

3. ADDRESS OF OPERATOR  
**Route #3 Box 3630, Myton, UT 84052 Phone: (435) 646-3721**

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)\*  
At Surface **SW/NW 2067' FNL 709' FWL**  
At proposed Prod. Zone **4434905 Y 40.06147**  
**590196 X -109.94243**

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\*  
**Approximately 18.0 miles southeast of Myton, Utah**

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to <b>Approx. 709' f/lse line</b> )	16. NO. OF ACRES IN LEASE <b>1,036.24</b>	17. NO. OF ACRES ASSIGNED TO THIS WELL <b>40</b>
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18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR ON THIS LEASE, FT. <b>Approx. 1269'</b>	19. PROPOSED DEPTH <b>6500'</b>	20. ROTARY OR CABLE TOOLS <b>Rotary</b>
--	------------------------------------	--

21. ELEVATIONS (Show whether DF, RT, GR, etc.) <b>5000' GR</b>	22. APPROX. DATE WORK WILL START* <b>3rd Quarter 2003</b>
---	--

23. **PROPOSED CASING AND CEMENTING PROGRAM**

SIZE OF HOLE	SIZE OF CASING	WEIGHT/FOOT	SETTING DEPTH	QUANTITY OF CEMENT
<b>Refer to Monument Butte Field SOP's Drilling Program/Casing Design</b>				

**Inland Production Company proposes to drill this well in accordance with the attached exhibits.**

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM : If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24. SIGNED *Markie Crozier* TITLE **Regulatory Specialist** DATE **4/15/03**

(This space for Federal or State office use)

PERMIT NO. **43-047-34932** APPROVAL **Federal Approval of this Action is Necessary**

Application approval does not warrant or certify that the applicant holds legal or equitable interests in those rights in the subject lease which would entitle the applicant to conduct operations thereon.

CONDITIONS OF APPROVAL, IF ANY:

APPROVED BY *Bradley G. Hill* TITLE **BRADLEY G. HILL ENVIRONMENTAL SCIENTIST III** DATE **04-21-03**

**\*See Instructions On Reverse Side**

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

**RECEIVED  
APR 17 2003  
DIV. OF OIL, GAS & MINING**

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

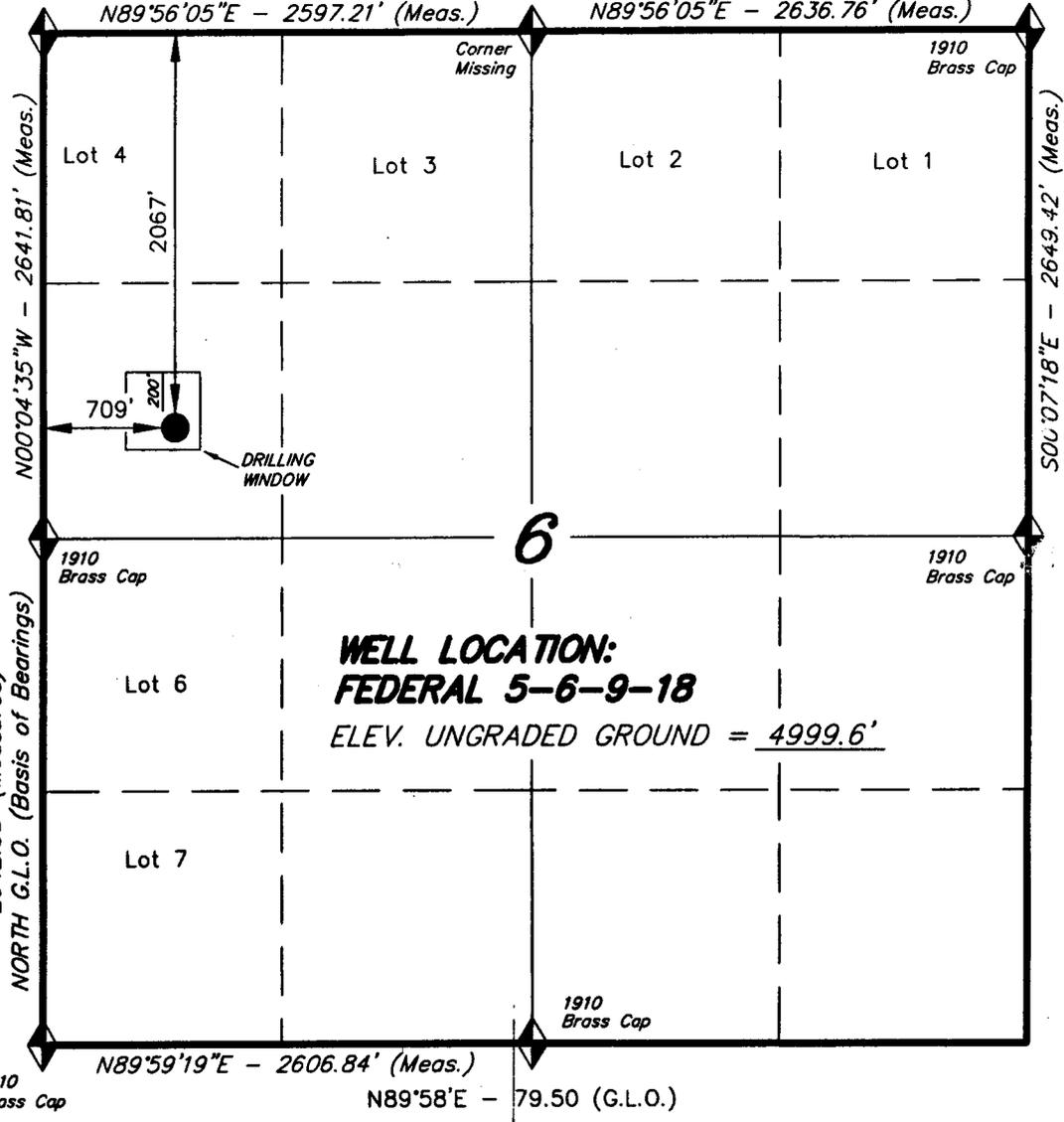
INLAND PRODUCTION COMPANY

Corner Missing:  
(Position Double  
Proportioned)

N89°59'E - 79.40 (G.L.O.)

N89°56'05"E - 2597.21' (Meas.)

N89°56'05"E - 2636.76' (Meas.)



WELL LOCATION, FEDERAL 5-6-9-18,  
LOCATED AS SHOWN IN SW/4 OF  
SECTION 6, T9S, R18E, S.L.B.&M. UINTAH  
COUNTY, UTAH.

NORTH - 80.00 (G.L.O.)

2642.58' (Measured)

NORTH G.L.O. (Basis of Bearings)

N00°04'35"W - 2641.81' (Meas.)

Lot 4

Lot 3

Lot 2

Lot 1

2067'

709'



DRILLING WINDOW

1910 Brass Cap

6

1910 Brass Cap

Lot 6

**WELL LOCATION:  
FEDERAL 5-6-9-18**

ELEV. UNGRADED GROUND = 4999.6'

Lot 7

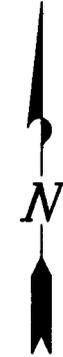
1910 Brass Cap

N89°59'19"E - 2606.84' (Meas.)

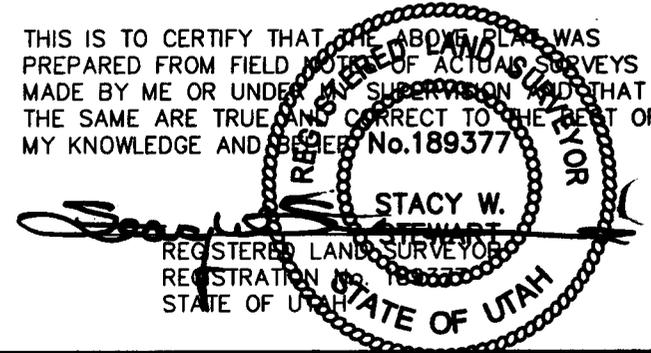
N89°58'E - 79.50 (G.L.O.)

1910 Brass Cap

S00°07'18"E - 2649.42' (Meas.)  
S0°03'E - 79.98 (G.L.O.)



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



◆ = SECTION CORNERS LOCATED

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

**TRI STATE LAND SURVEYING & CONSULTING**

38 WEST 100 NORTH - VERNAL, UTAH 84078  
(435) 781-2501

SCALE: 1" = 1000'

SURVEYED BY: K.G.S.

DATE: 3-10-03

DRAWN BY: J.R.S.

NOTES:

FILE #



April 15, 2003

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

RE: Applications for Permit to Drill: Federal 2-6, 3-6, 5-6, 6-6, 7-6, 8-6, 13-6, and  
14-6-9-18.

Dear Diana:

Enclosed find APD's on the above referenced wells. If you have any questions, feel free  
to give either Brad or myself a call.

Sincerely,

Mandie Crozier  
Regulatory Specialist

mc  
enclosures

RECEIVED  
APR 17 2003  
DIV. OF OIL, GAS & MINING

INLAND PRODUCTION COMPANY  
FEDERAL #5-6-9-18  
SW/NW SECTION 6, T9S, R18E  
UINTAH COUNTY, UTAH

ONSHORE ORDER NO. 1

DRILLING PROGRAM

1. GEOLOGIC SURFACE FORMATION:

Uinta formation of Upper Eocene Age

2. ESTIMATED TOPS OF IMPORTANT GEOLOGIC MARKERS:

Uinta	0' – 1640'
Green River	1640'
Wasatch	6500'

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

Green River Formation 1640' – 6500' - 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 2000 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.

**INLAND PRODUCTION COMPANY  
FEDERAL #5-6-9-18  
SW/NW SECTION 6, T9S, R18E  
UINTAH COUNTY, UTAH**

**ONSHORE ORDER NO. 1**

**MULTI-POINT SURFACE USE & OPERATIONS PLAN**

**1. EXISTING ROADS**

See attached Topographic Map "A"

To reach Inland Production Company well location site Federal # 5-6-9-18 located in the SW 1/4 NW 1/4 Section 6, T9S, R18E, Uintah County, Utah:

Proceed southwesterly out of Myton, Utah along Highway 40 - 1.6 miles  $\pm$  to the junction of this highway and UT State Hwy 53; proceed southeasterly along Hwy 53 - 15.3 miles  $\pm$  to its junction with an existing dirt road to the northeast; proceed northeasterly - 0.9 miles  $\pm$  to the beginning of a two track road to be upgraded; proceed along this road - 0.8 miles  $\pm$  to its junction with the beginning of the proposed access road; proceed westerly and then northerly along the proposed access road 2,370'  $\pm$  to the proposed well location.

**2. PLANNED ACCESS ROAD**

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

**3. LOCATION OF EXISTING WELLS**

Refer to Exhibit "B".

**4. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES**

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

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

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

**6. SOURCE OF CONSTRUCTION MATERIALS**

Please refer to the Monument Butte Field SOP.

**7. METHODS FOR HANDLING WASTE DISPOSAL**

Please refer to the Monument Butte Field SOP.

**8. ANCILLARY FACILITIES**

Please refer to the Monument Butte Field SOP.

9. **WELL SITE LAYOUT**

The attached Location Layout Diagram describes drill pad cross-sections, cuts and fills, and locations of the mud tanks, reserve pit, pipe racks, trailer parking, spoil dirt stockpile(s), and surface material stockpile(s).

10. **PLANS FOR RESTORATION OF SURFACE**

Please refer to the Monument Butte Field SOP.

11. **SURFACE OWNERSHIP** - Bureau Of Land Management

12. **OTHER ADDITIONAL INFORMATION**

The Paleontological Resource Survey and Archaeological Resource Survey for this area are attached.

Inland Production Company requests a 60' ROW for the Federal #5-6-9-18 to allow for construction of a 6" gas gathering line, and a 3" poly fuel gas line. Both lines will tie in to the existing pipeline infrastructure. **Refer to Topographic Map "C."**

Inland Production Company also requests a 60' ROW be granted for the Federal #5-6-9-18 to allow for construction of a 3" steel water injection line and a 3" poly water return line. **Refer to Topographic Map "C."**

**Water Disposal**

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

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

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

Representative

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

Certification

Please be advised that INLAND PRODUCTION COMPANY is considered to be the operator of well #5-6-9-18 SW/NW Section 6, Township 9S, Range 18E: Lease UTU-65970 Uintah County, Utah: and is responsible under the terms and conditions of the lease for the operations conducted upon the leased lands. Bond coverage is provided by Hartford Accident #4488944.

I hereby certify that the proposed drillsite and access route have been inspected, and I am familiar with the conditions which currently exist; that the statements made in this plan are true

and correct to the best of my knowledge; and that the work associated with the operations proposed here will be performed by Inland 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.

4/15/03

Date

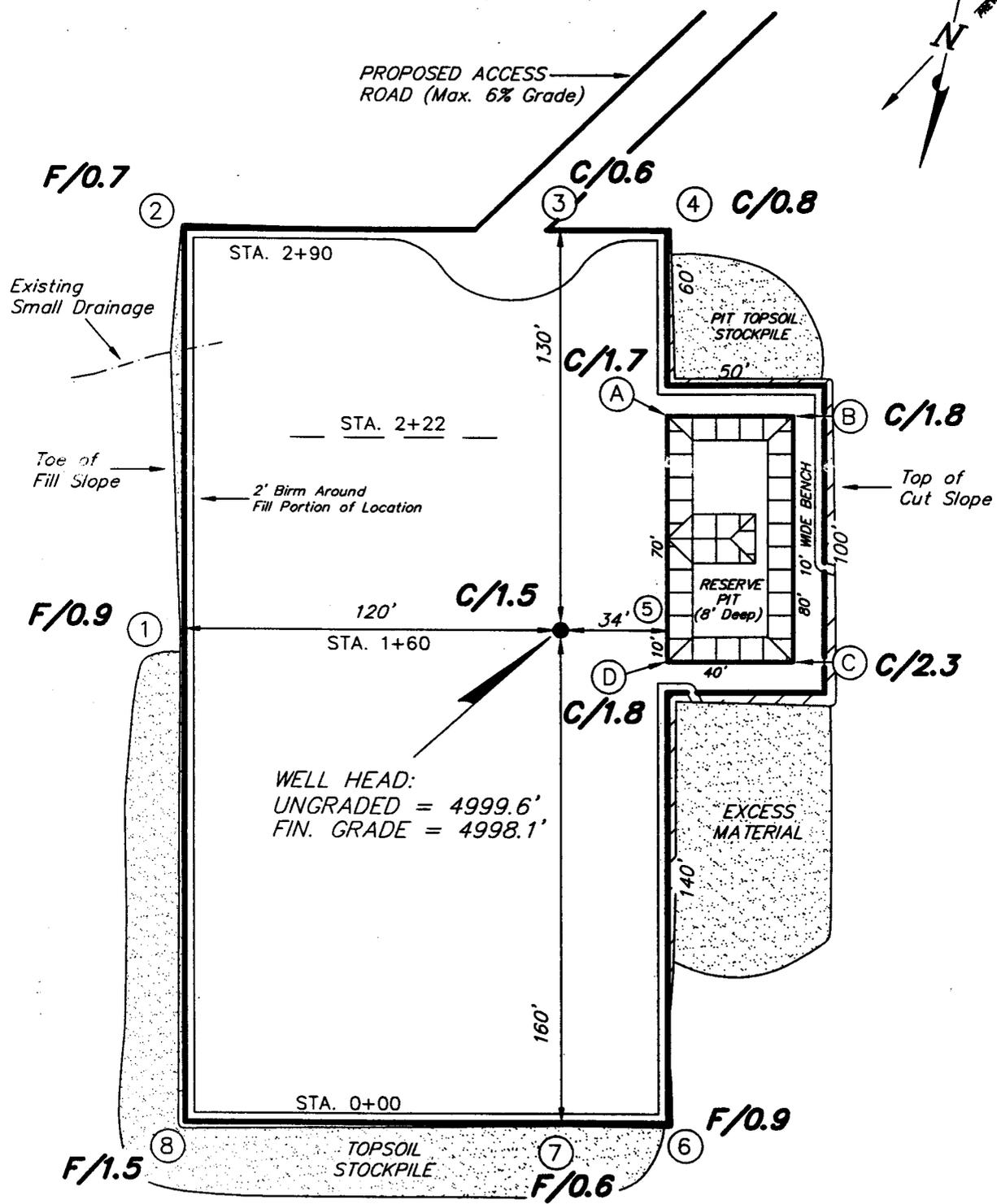


Mandie Crozier  
Permit Clerk

# INLAND PRODUCTION COMPANY

**FEDERAL 5-6-9-18**

Section 6, T9S, R18E, S.L.B.&M.



**REFERENCE POINTS**

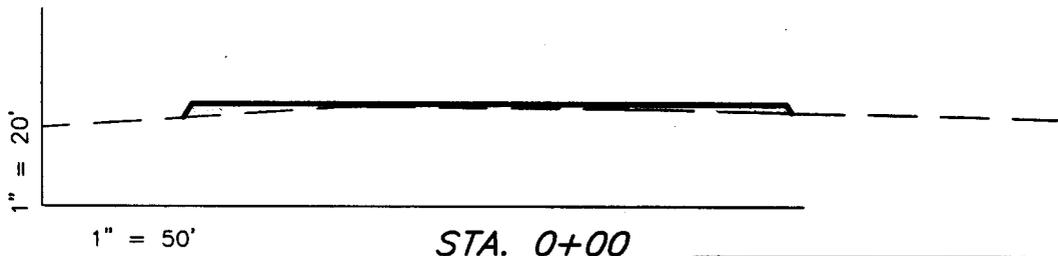
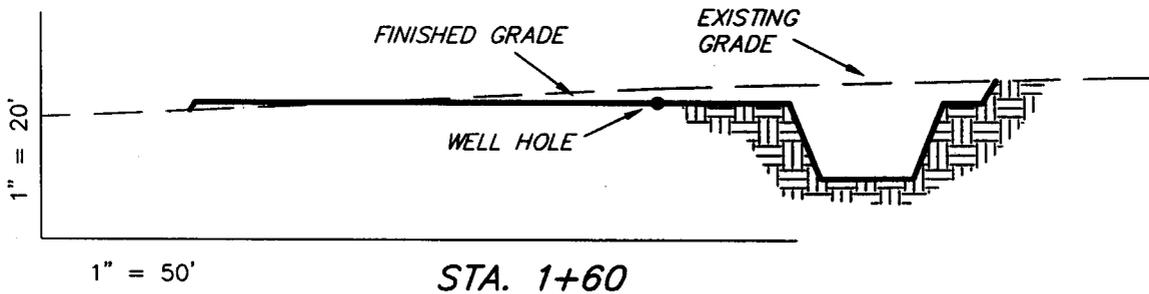
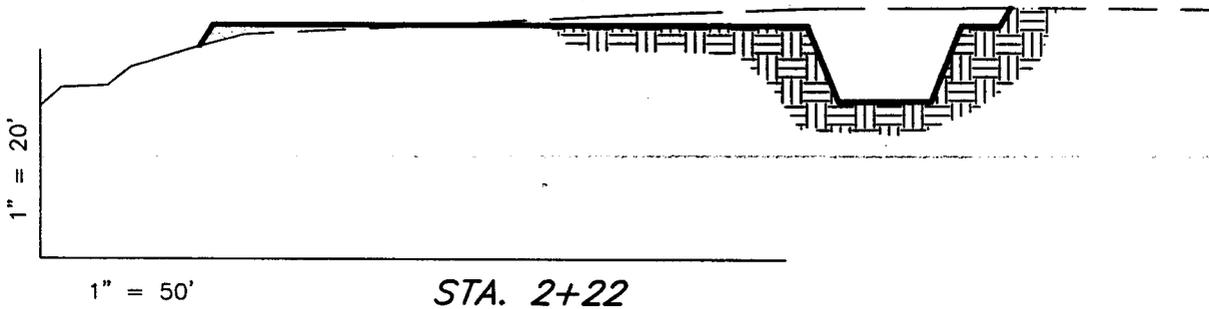
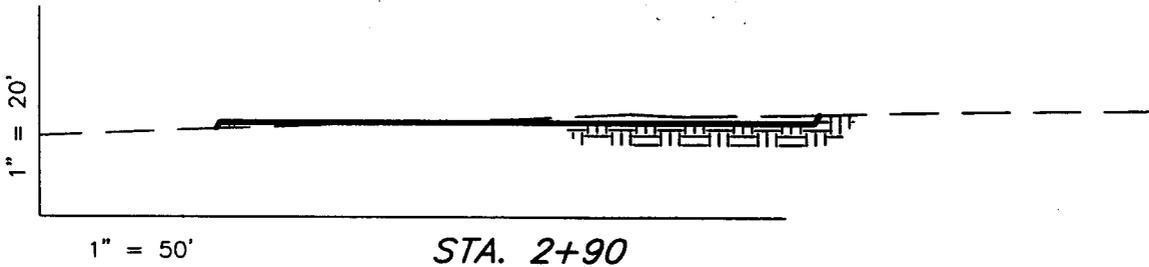
- 210' NORTH = 4997.0'
- 260' NORTH = 4997.5'
- 170' EAST = 4996.3'
- 220' EAST = 4994.8'

SURVEYED BY: K.G.S.	SCALE: 1" = 50'
DRAWN BY: J.R.S.	DATE: 3-10-03

(435) 781-2501

**Tri State**  
Land Surveying, Inc.  
38 WEST 100 NORTH VERNAL, UTAH 84078

**INLAND PRODUCTION COMPANY**  
**CROSS SECTIONS**  
**FEDERAL 5-6-9-18**



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

ESTIMATED EARTHWORK QUANTITIES				
(Expressed in Cubic Yards)				
ITEM	CUT	FILL	6" TOPSOIL	EXCESS
PAD	770	750	Topsoil is not included in Pad Cut	20
PIT	640	0		640
<b>TOTALS</b>	<b>1,410</b>	<b>750</b>	<b>920</b>	<b>660</b>

SURVEYED BY: K.G.S.

SCALE: 1" = 50'

DRAWN BY: J.R.S.

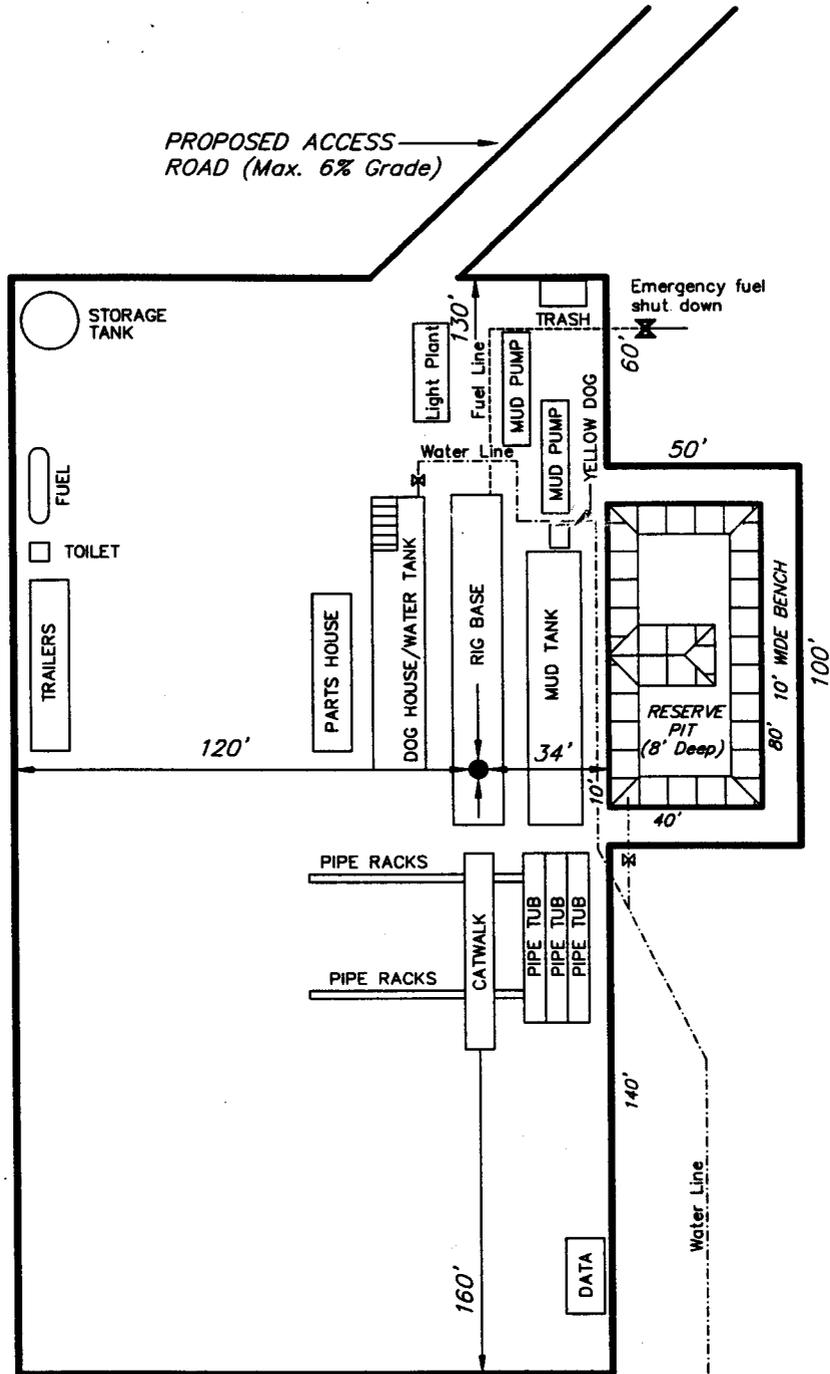
DATE: 3-10-03

**Tri State** (435) 781-2501  
**Land Surveying, Inc.**  
 38 WEST 100 NORTH VERNAL, UTAH 84078

# INLAND PRODUCTION COMPANY

## TYPICAL RIG LAYOUT

### FEDERAL 5-6-9-18



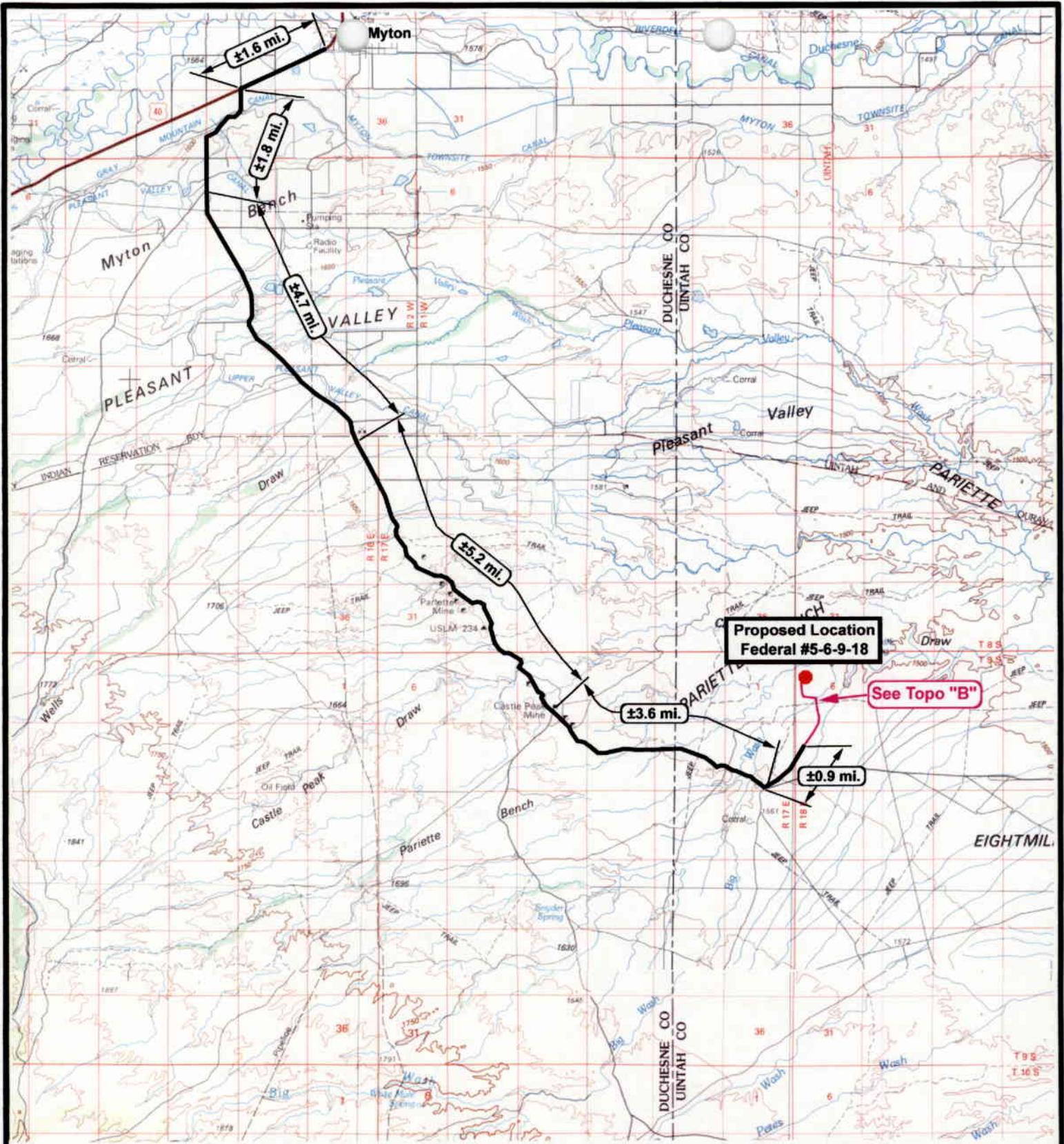
SURVEYED BY: K.G.S.

SCALE: 1" = 50'

DRAWN BY: J.R.S.

DATE: 3-10-03

Tri State  
Land Surveying, Inc.  
38 WEST 100 NORTH VERNAL, UTAH 84078  
(435) 781-2501



**Federal #5-6-9-18**  
**SEC. 6, T9S, R18E, S.L.B.&M.**



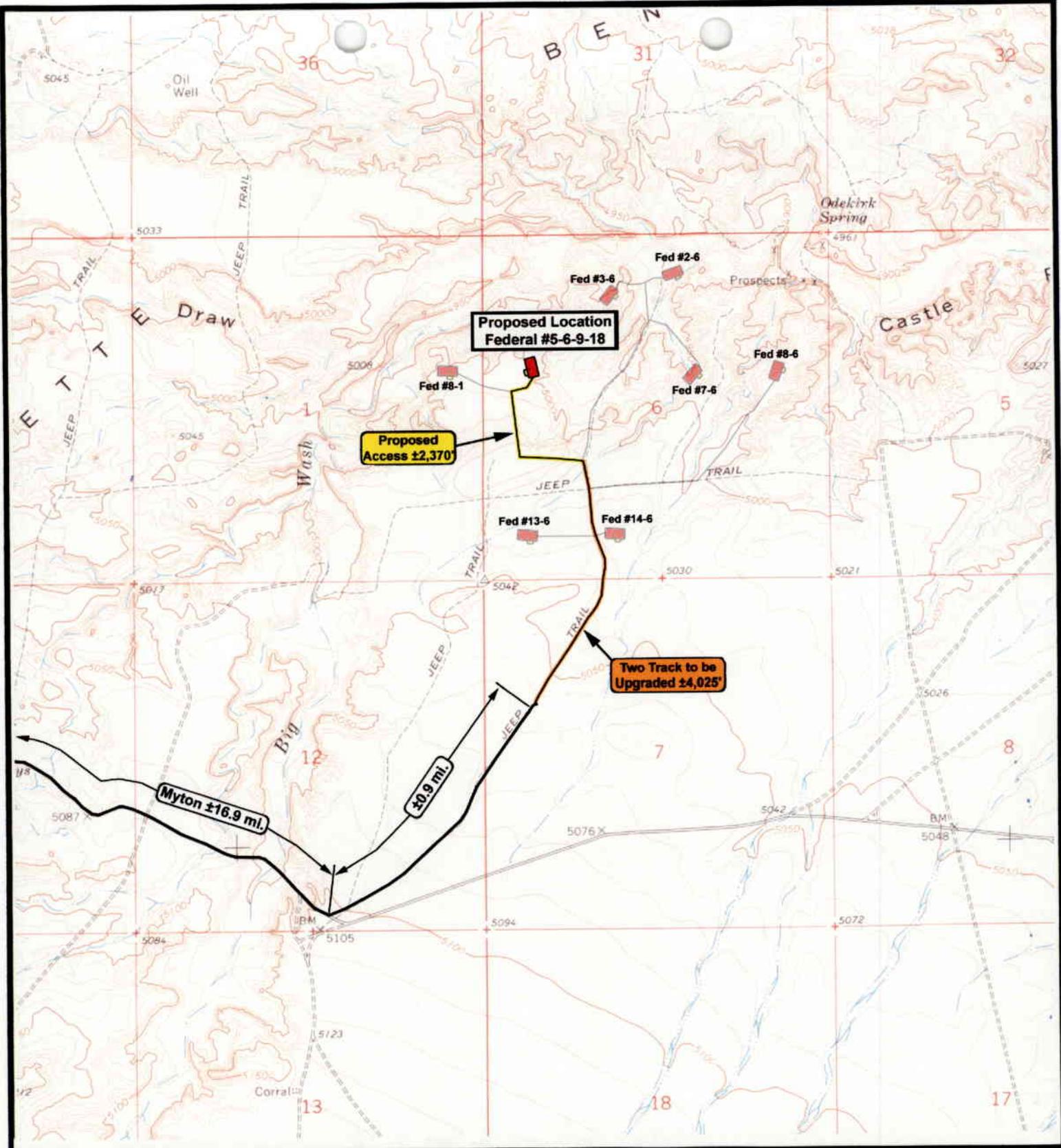
**Tri-State**  
*Land Surveying Inc.*  
 (435) 781-2501  
 180 North Vernal Ave. Vernal, Utah 84078

SCALE: 1 = 120,000  
 DRAWN BY: R.A.B.  
 DATE: 03-10-2003

**Legend**

— Existing Road  
 — Proposed Access

TOPOGRAPHIC MAP  
**"A"**



**Federal #5-6-9-18**  
**SEC. 6, T9S, R18E, S.L.B.&M.**

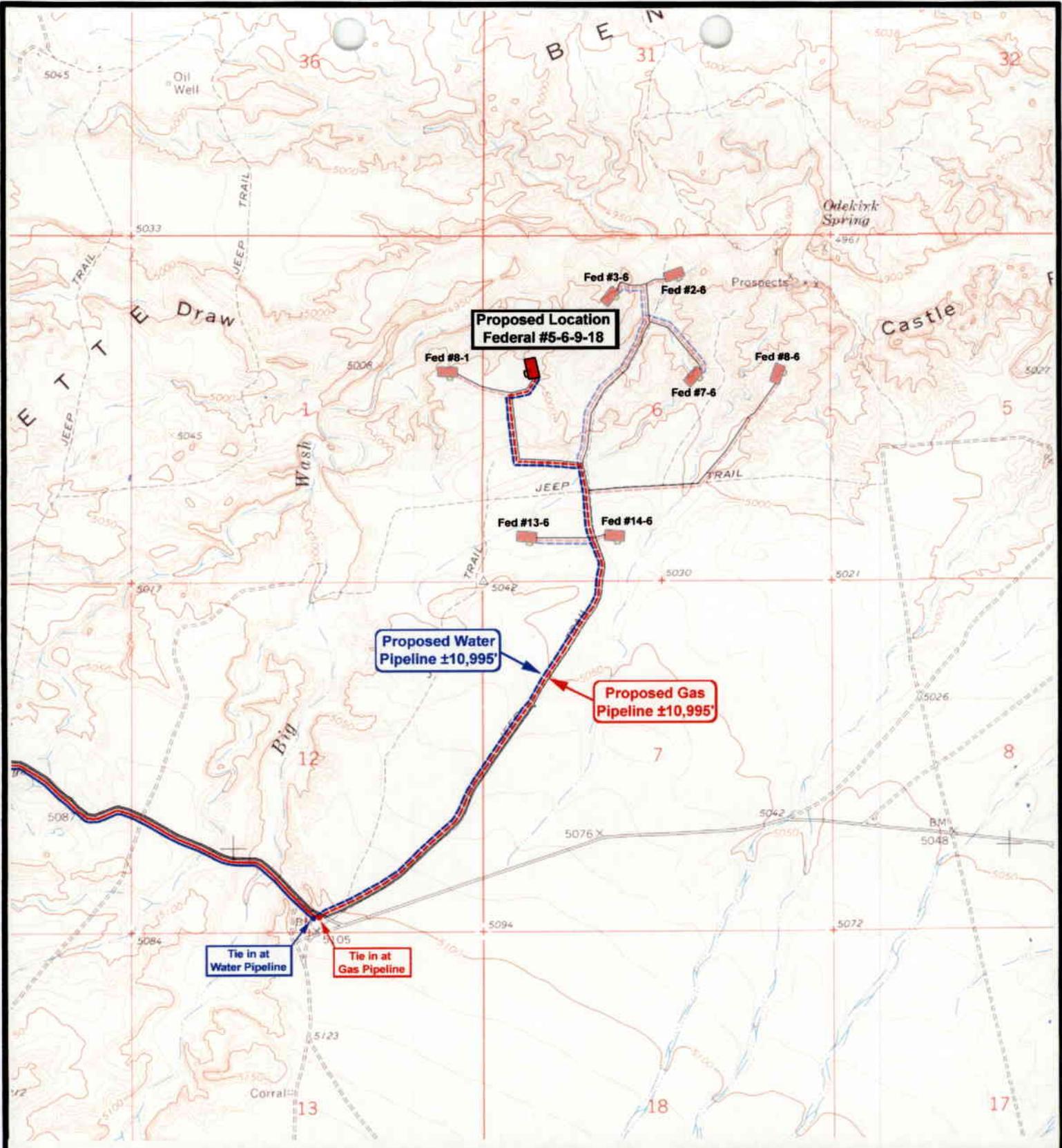


**Tri-State**  
*Land Surveying Inc.*  
 (435) 781-2501  
 180 North Vernal Ave. Vernal, Utah 84078

SCALE: 1" = 2,000'  
 DRAWN BY: R.A.B.  
 DATE: 03-07-2003

Legend	
	Existing Road
	Proposed Access
	Upgraded Access

TOPOGRAPHIC MAP  
**"B"**



**Gas and Water Pipelines  
Federal #5-6-9-18  
SEC. 6, T9S, R18E, S.L.B.&M.**

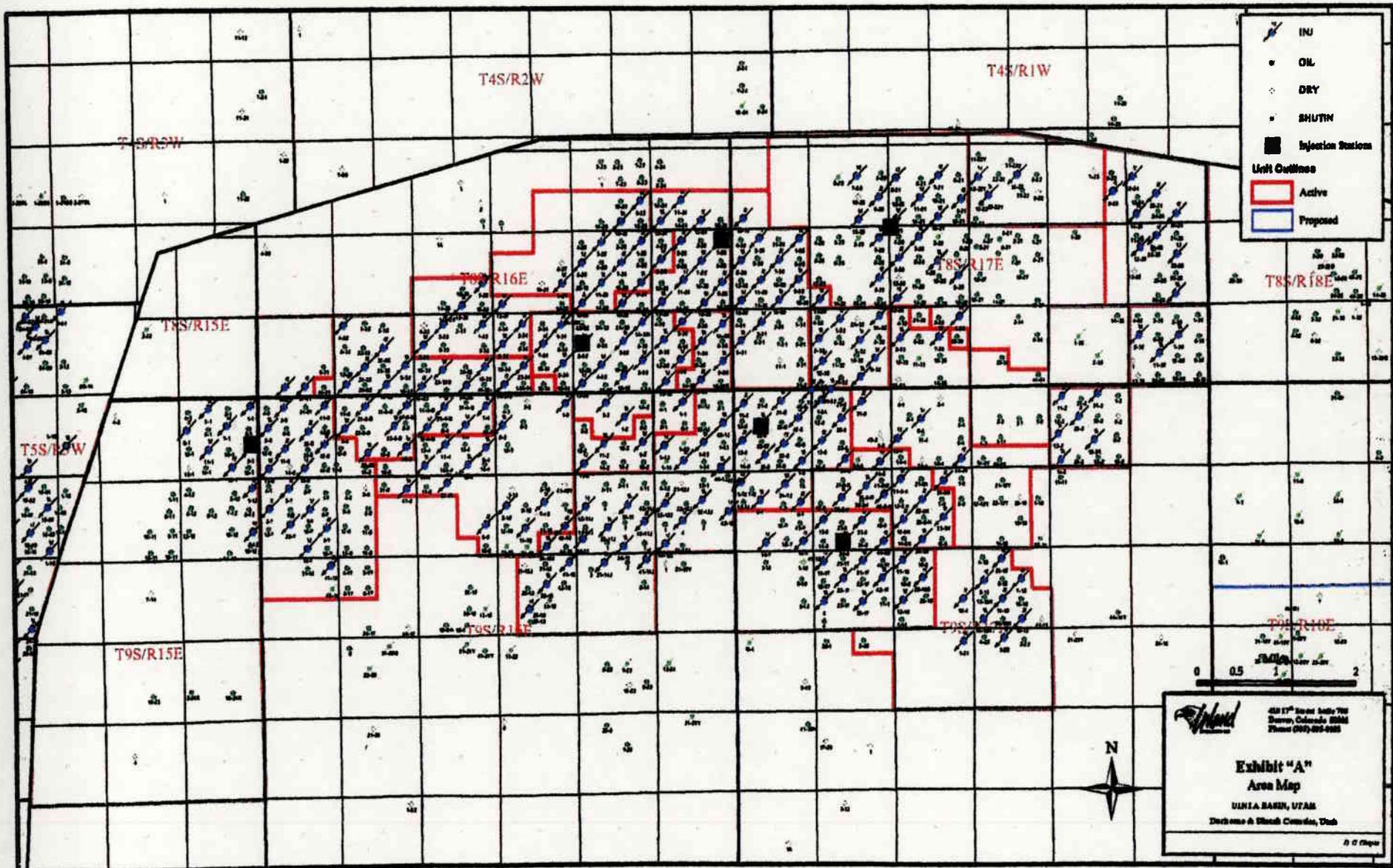


**Tri-State  
Land Surveying Inc.**  
(435) 781-2501  
180 North Vernal Ave. Vernal, Utah 84078

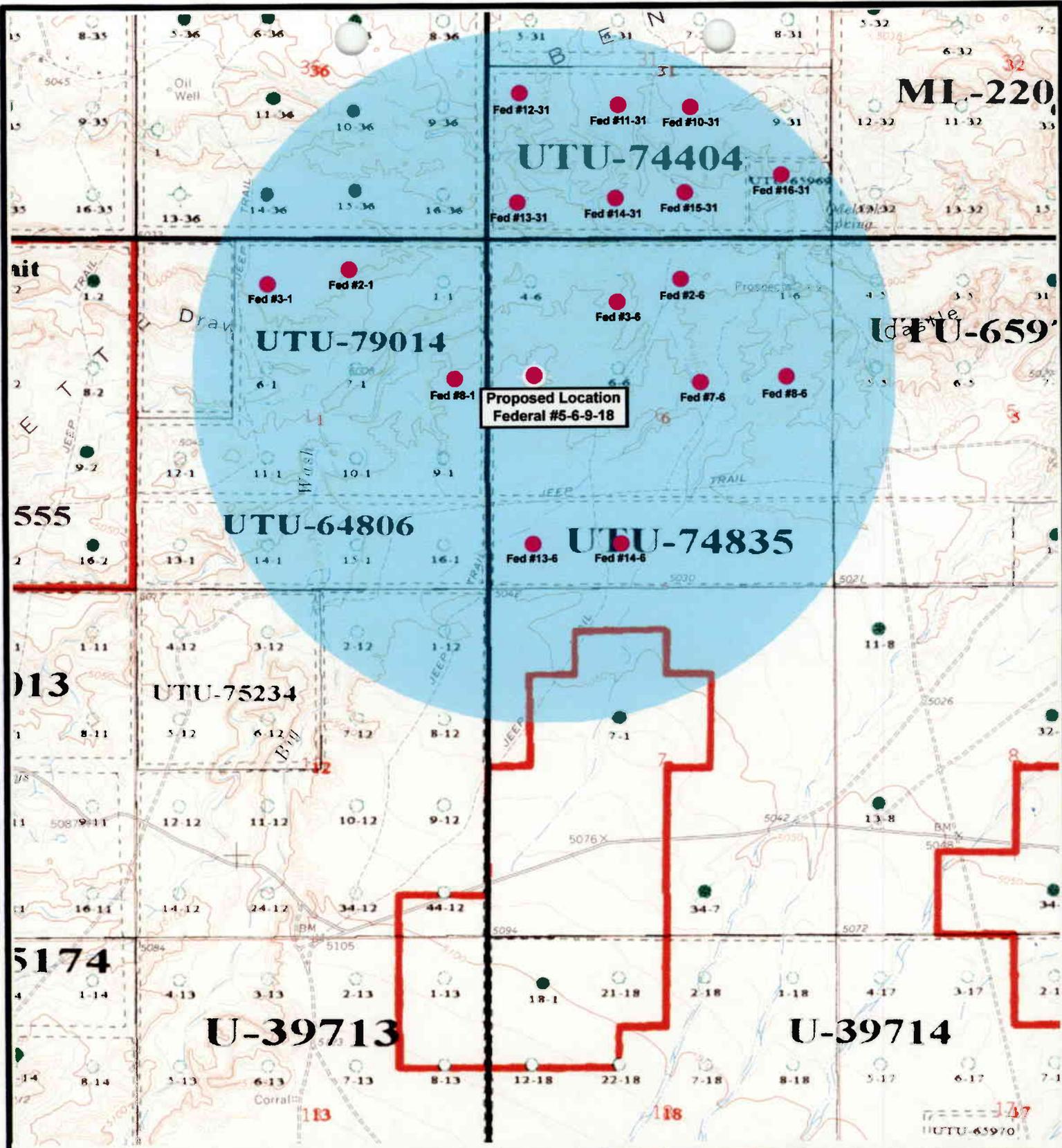
SCALE: 1" = 2,000'  
DRAWN BY: R.A.B.  
DATE: 03-10-2003

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

TOPOGRAPHIC MAP  
**"C"**



January 15, 2003



MI-220

UTU-74404

UTU-79014

UTU-659

UTU-64806

UTU-74835

UTU-75234

U-39713

U-39714

Proposed Location  
Federal #5-6-9-18



**Federal #5-6-9-18**  
**SEC. 6, T9S, R18E, 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: R.A.B.  
DATE: 03-10-2003

**Legend**

- Well Locations
- One-Mile Radius

**Exhibit "B"**

# 2-M SYSTEM

Blowout Prevention Equipment Systems

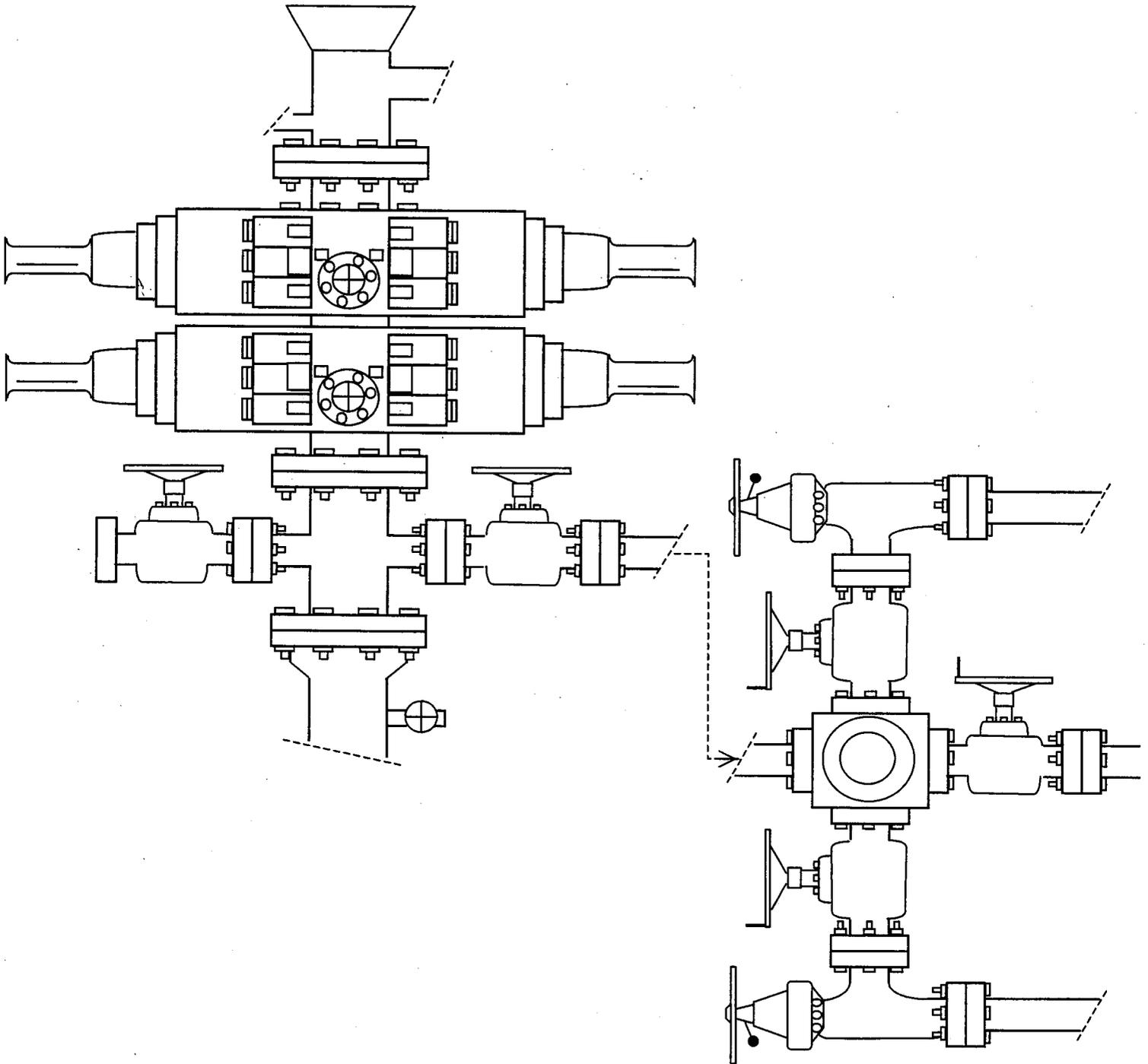


EXHIBIT C

WORKSHEET  
APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 04/17/2003

API NO. ASSIGNED: 43-047-34932

WELL NAME: FEDERAL 5-6-9-18  
OPERATOR: INLAND PRODUCTION ( N5160 )  
CONTACT: MANDIE CROZIER

PHONE NUMBER: 435-646-3721

PROPOSED LOCATION:

SWNW 06 090S 180E  
SURFACE: 2067 FNL 0709 FWL  
BOTTOM: 2067 FNL 0709 FWL  
UINTAH  
8 MILE FLAT NORTH ( 590 )

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

LEASE TYPE: 1 - Federal  
LEASE NUMBER: UTU-65970  
SURFACE OWNER: 1 - Federal

LATITUDE: 40.06147  
LONGITUDE: 109.94243

PROPOSED FORMATION: GRRV

RECEIVED AND/OR REVIEWED:

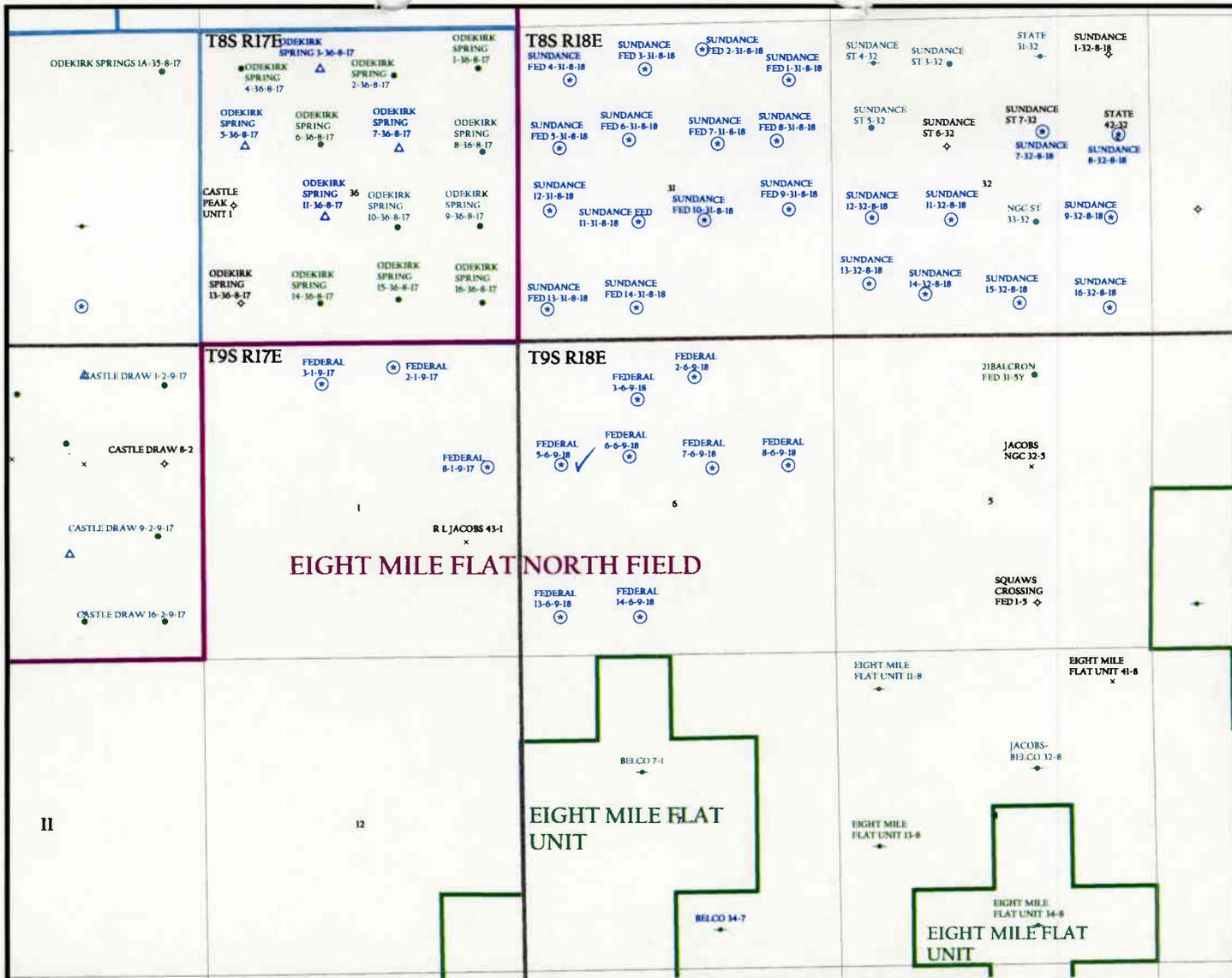
- Plat
- Bond: Fed[1] Ind[] Sta[] Fee[]  
(No. 4488944 )
- Potash (Y/N)
- Oil Shale 190-5 (B) or 190-3 or 190-13
- Water Permit  
(No. MUNICIPAL )
- RDCC Review (Y/N)  
(Date: )
- Fee Surf Agreement (Y/N)

LOCATION AND SITING:

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

COMMENTS: Sep. Separate file

STIPULATIONS: 1- Federal Approval  
2- Spacing Strip



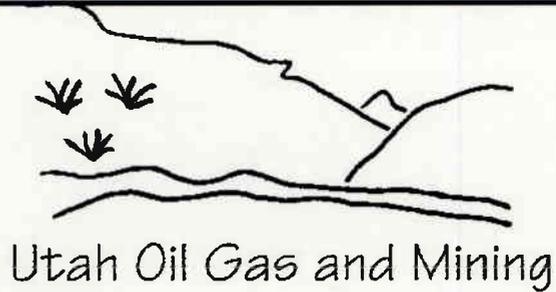
OPERATOR: INLAND PRODUCTION (N5160)

SEC. 6 T9S, R18E

FIELD: EIGHT MILE FLAT NORTH (590)

COUNTY: UINTAH

SPACING: R649-3-2 / GENERAL SITING



WELLS

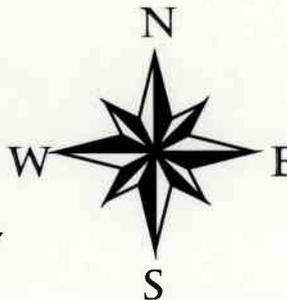
- ⤴ GAS INJECTION
- GAS STORAGE
- × LOCATION ABANDONED
- ⊙ NEW LOCATION
- ◊ PLUGGED & ABANDONED
- PRODUCING GAS
- PRODUCING OIL
- SHUT-IN GAS
- SHUT-IN OIL
- × TEMP. ABANDONED
- TEST WELL
- ▲ WATER INJECTION
- ◆ WATER SUPPLY
- ⤵ WATER DISPOSAL

UNIT STATUS

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

FIELD STATUS

- ABANDONED
- ACTIVE
- COMBINED
- INACTIVE
- PROPOSED
- STORAGE
- TERMINATED
- COUNTY BOUNDARY
- SECTION LINES
- TOWNSHIP LINES



PREPARED BY: DIANA MASON  
DATE: 17-APRIL-2003



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

Michael O. Leavitt  
Governor  
Robert L. Morgan  
Executive Director  
Lowell P. Braxton  
Division Director

1594 West North Temple, Suite 1210  
PO Box 145801  
Salt Lake City, Utah 84114-5801  
(801) 538-5340 telephone  
(801) 359-3940 fax  
(801) 538-7223 TTY  
www.nr.utah.gov

April 21, 2003

Inland Production Company  
Route #3, Box 3630  
Myton, UT 84052

Re: Federal 5-6-9-18 Well, 2067' FNL, 709' FWL, SW NW, Sec. 6, T. 9 South, R. 18 East,  
Uintah County, Utah

Gentlemen:

Pursuant to the provisions and requirements of Utah Code Ann. § 40-6-1 *et seq.*, Utah Administrative Code R649-3-1 *et seq.*, and the attached Conditions of Approval, approval to drill the referenced well is granted.

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date. The API identification number assigned to this well is 43-047-34932.

Sincerely,

A handwritten signature in black ink, appearing to read "John R. Baza".

John R. Baza  
Associate Director

pab  
Enclosures

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

**Operator:** Inland Production Company  
**Well Name & Number** Federal 5-6-9-18  
**API Number:** 43-047-34932  
**Lease:** UTU-65970

**Location:** SW NW                      **Sec.** 6                      **T.** 9 South                      **R.** 18 East

### Conditions of Approval

1. General

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

2. Notification Requirements

Notify the Division within 24 hours of spudding the well.

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

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

- Contact Dan Jarvis at (801) 538-5338

3. Reporting Requirements

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

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

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

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

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

005

**SUNDRY NOTICES AND REPORTS ON WELLS**

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

**SUBMIT IN TRIPLICATE**

1. Type of Well

Oil Well     Gas Well     Other

2. Name of Operator

**INLAND 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)

**2067 FNL 709 FWL SW/NW Section 6, T9S R18E**

5. Lease Designation and Serial No.  
**UTU-65970**

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

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

8. Well Name and No.  
**FEDERAL 5-6-9-18**

9. API Well No.  
**43-047-34932**

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

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

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

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

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

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

Inland Production Company requests to extend the Permit to Drill this well for one year. The original approval date was 4/21/03 (expiration 4/21/04).

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

Date: 4-16-04  
By: [Signature]

**COPY SENT TO OPERATOR**  
Date: 4-21-04  
Initials: CHD

**RECEIVED  
APR 16 2004  
DIV. OF OIL, GAS & MINING**

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

Signed Mandie Crozier Title Regulatory Specialist Date 4/8/2004  
Mandie Crozier

CC: UTAH DOGM

(This space for Federal or State office use)

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

Conditions of approval, if any:

CC: Utah DOGM

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

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

**API:** 43-047-34932  
**Well Name:** Federal 5-6-9-18  
**Location:** SW/NW Section 6, T9S R18E  
**Company Permit Issued to:** Inland Production Company  
**Date Original Permit Issued:** 4/21/2003

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

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

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

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

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

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

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

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

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

  
Signature

4/8/2004  
Date

Title: Regulatory Specialist

Representing: Inland Production Company

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

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

0-06

**SUNDRY NOTICES AND REPORTS ON WELLS**

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Use "APPLICATION FOR PERMIT -" for such proposals

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**FEDERAL 5-6-9-18**

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**EIGHT MILE FLAT NORTI**

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

**SUBMIT IN TRIPLICATE**

1. Type of Well  
 Oil Well     Gas Well     Other

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

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

4. Location of Well (Footage, Sec., T., R., m., or Survey Description)  
**2067 FNL 709 FWL SW/NW Section 6, T9S R18E**

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

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Newfield Production Company requests to extend the Permit to Drill this well for one year. The original approval date was 4/21/03 (expiration 4/19/05).

This APD has not yet been approved by the BLM.

**Approved by the  
Utah Division of  
Oil, Gas and Mining**  
 Date: 04-11-05  
 By: [Signature]

COPIES SENT TO OPERATOR  
 Date: 4-14-05  
 Initials: CHD

**RECEIVED  
APR 11 2005**

14. I hereby certify that the foregoing is true and correct  
 Signed Mandie Crozier Title Regulatory Specialist Date 4/7/2005  
 Mandie Crozier

**DIV. OF OIL, GAS & MINING  
4/7/2005**

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)

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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

4/7/2005  
Date

Title: Regulatory Specialist

Representing: Newfield Production Company

RECEIVED  
APR 11 2005  
DIV. OF OIL, GAS & MINING



## Office of the Secretary of State

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

Newfield Production Company  
Filing Number: 41530400

Articles of Amendment

September 02, 2004

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



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

Secretary of State

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

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

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

ARTICLE 1 – Name

The name of the corporation is Inland Production Company.

ARTICLE 2 – Amended Name

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

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

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

ARTICLE 3 – Effective Date of Filing

This document will become effective upon filing.

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

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

INLAND RESOURCES INC.

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



# United States Department of the Interior



## BUREAU OF LAND MANAGEMENT

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

IN REPLY REFER TO:  
3106  
(UT-924)

September 16, 2004

### Memorandum

To: Vernal Field Office

From: Acting Chief, Branch of Fluid Minerals

Subject: Merger Approval

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

Michael Coulthard  
Acting Chief, Branch of  
Fluid Minerals

### Enclosure

#### 1. State of Texas Certificate of Registration

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

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

**OPERATOR CHANGE WORKSHEET**

**ROUTING**

1. GLH
2. CDW
3. FILE

007

Change of Operator (Well Sold)

Designation of Agent/Operator

**X Operator Name Change**

**Merger**

The operator of the well(s) listed below has changed, effective:	<b>9/1/2004</b>
<b>FROM: (Old Operator):</b> N5160-Inland Production Company Route 3 Box 3630 Myton, UT 84052 Phone: 1-(435) 646-3721	<b>TO: ( New Operator):</b> N2695-Newfield Production Company Route 3 Box 3630 Myton, UT 84052 Phone: 1-(435) 646-3721

<b>CA No.</b>	<b>Unit:</b>
---------------	--------------

**WELL(S)**

NAME	SEC	TWN	RNG	API NO	ENTITY NO	LEASE TYPE	WELL TYPE	WELL STATUS	
FEDERAL 3-31-8-18	31	080S	180E	4304734496	13915	Federal	OW	P	K
FEDERAL 4-31-8-18	31	080S	180E	4304734497	13942	Federal	OW	DRL	K
FEDERAL 5-31-8-18	31	080S	180E	4304734498	13898	Federal	OW	P	K
FEDERAL 6-31-8-18	31	080S	180E	4304734499	13960	Federal	OW	P	K
FEDERAL 7-31-8-18	31	080S	180E	4304734500	13925	Federal	OW	P	K
FEDERAL 11-31-8-18	31	080S	180E	4304734501	13924	Federal	OW	P	K
FEDERAL 12-31-8-18	31	080S	180E	4304734502	13958	Federal	OW	P	K
FEDERAL 13-31-8-18	31	080S	180E	4304734503	14324	Federal	OW	P	K
FEDERAL 8-31-8-18	31	080S	180E	4304734504	13961	Federal	OW	P	K
FEDERAL 10-31-8-18	31	080S	180E	4304734930	13986	Federal	OW	P	K
FEDERAL 9-31-8-18	31	080S	180E	4304734931	13963	Federal	OW	P	K
FEDERAL 2-1-9-17	01	090S	170E	4304734938		Federal	OW	APD	K
FEDERAL 3-1-9-17	01	090S	170E	4304734939		Federal	OW	APD	K
FEDERAL 8-1-9-17	01	090S	170E	4304734940		Federal	OW	APD	K
FEDERAL 5-6-9-18	06	090S	180E	4304734932		Federal	OW	APD	K
FEDERAL 6-6-9-18	06	090S	180E	4304734933	14152	Federal	OW	P	K
FEDERAL 7-6-9-18	06	090S	180E	4304734934	14126	Federal	OW	P	K
FEDERAL 8-6-9-18	06	090S	180E	4304734935		Federal	OW	APD	K
FEDERAL 13-6-9-18	06	090S	180E	4304734936	14049	Federal	OW	P	K
FEDERAL 14-6-9-18	06	090S	180E	4304734937	14064	Federal	OW	P	K

**OPERATOR CHANGES DOCUMENTATION**

Enter date after each listed item is completed

- (R649-8-10) Sundry or legal documentation was received from the **FORMER** operator on: 9/15/2004
- (R649-8-10) Sundry or legal documentation was received from the **NEW** operator on: 9/15/2004
- The new company was checked on the **Department of Commerce, Division of Corporations Database** on: 2/23/2005
- Is the new operator registered in the State of Utah: YES Business Number: 755627-0143
- If **NO**, the operator was contacted on:

6a. (R649-9-2)Waste Management Plan has been received on: IN PLACE

6b. Inspections of LA PA state/fee well sites complete on: waived

7. **Federal and Indian Lease Wells:** The BLM and or the BIA has approved the merger, name change, or operator change for all wells listed on Federal or Indian leases on: BLM BIA

8. **Federal and Indian Units:**

The BLM or BIA has approved the successor of unit operator for wells listed on: n/a

9. **Federal and Indian Communization Agreements ("CA"):**

The BLM or BIA has approved the operator for all wells listed within a CA on: na/

10. **Underground Injection Control ("UIC")** The Division has approved UIC Form 5, **Transfer of Authority to Inject**, for the enhanced/secondary recovery unit/project for the water disposal well(s) listed on: 2/23/2005

**DATA ENTRY:**

1. Changes entered in the Oil and Gas Database on: 2/28/2005

2. Changes have been entered on the Monthly Operator Change Spread Sheet on: 2/28/2005

3. Bond information entered in RBDMS on: 2/28/2005

4. Fee/State wells attached to bond in RBDMS on: 2/28/2005

5. Injection Projects to new operator in RBDMS on: 2/28/2005

6. Receipt of Acceptance of Drilling Procedures for APD/New on: waived

**FEDERAL WELL(S) BOND VERIFICATION:**

1. Federal well(s) covered by Bond Number: UT 0056

**INDIAN WELL(S) BOND VERIFICATION:**

1. Indian well(s) covered by Bond Number: 61BSBDH2912

**FEE & STATE WELL(S) BOND VERIFICATION:**

1. (R649-3-1) The NEW operator of any fee well(s) listed covered by Bond Number 61BSBDH2919

2. The FORMER operator has requested a release of liability from their bond on: n/a\*  
The Division sent response by letter on: n/a

**LEASE INTEREST OWNER NOTIFICATION:**

3. (R649-2-10) The FORMER operator of the fee wells has been contacted and informed by a letter from the Division of their responsibility to notify all interest owners of this change on: n/a

**COMMENTS:**

\*Bond rider changed operator name from Inland Production Company to Newfield Production Company - received 2/23/05

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

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

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**UTU-65970**

6. If Indian, Allottee or Tribe Name

**NA**

7. If Unit or CA, Agreement Designation

**SUNDANCE**

8. Well Name and No.

**FEDERAL 5-6-9-18**

9. API Well No.

**43-047-34932**

10. Field and Pool, or Exploratory Area

**EIGHT MILE FLAT NORTH**

11. County or Parish, State

**UINTAH COUNTY, UT.**

**SUBMIT IN TRIPLICATE**

1. Type of Well

Oil Well     Gas Well     Other

2. Name of Operator

**NEWFIELD PRODUCTION COMPANY**

3. Address and Telephone No.

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

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

**2067 FNL 709 FWL SW/NW Section 6, T9S R18E**

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TYPE OF SUBMISSION	TYPE OF ACTION
<input checked="" type="checkbox"/> Notice of Intent <input type="checkbox"/> Subsequent Report <input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Abandonment <input type="checkbox"/> Recompletion <input type="checkbox"/> Plugging Back <input type="checkbox"/> Casing Repair <input type="checkbox"/> Altering Casing <input checked="" type="checkbox"/> Other <b>Permit Extension</b>
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Newfield Production Company requests to extend the Permit to Drill this well for one year. The original approval date was 4/21/03 (expiration 4/21/06).

This APD has not been approved yet by the BLM.

**Approved by the  
Utah Division of  
Oil, Gas and Mining**  
Date: 04-05-06  
By: [Signature]

4-14-06  
CHD

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

Signed Mandie Crozier Title Regulatory Specialist Date 3/31/2006  
Mandie Crozier

CC: UTAHDOGMI

(This space for Federal or State office use)

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

Comments (optional): \_\_\_\_\_

**RECEIVED**

**APR 04 2006**

DIV. OF OIL, GAS & MINING



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

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

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**Well Name:** Federal 5-6-9-18  
**Location:** SW/NW Section 6, T9S R18E  
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Has the approved source of water for drilling changed? Yes  No

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

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

Mandi Cozjin  
Signature

4/3/2006  
Date

Title: Regulatory Specialist

Representing: Newfield Production Company

RECEIVED

APR 04 2006

DIV. OF OIL, GAS & MINING

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

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

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**SUNDANCE**

8. Well Name and No.

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**EIGHT MILE FLAT NORTH**

11. County or Parish, State

**UINTAH COUNTY, UT.**

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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**

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**2067 FNL 709 FWL SW/NW Section 6, T9S R18E**

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**TYPE OF SUBMISSION**

Notice of Intent  
 Subsequent Report  
 Final Abandonment Notice

**TYPE OF ACTION**

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 Plugging Back  
 Casing Repair  
 Altering Casing  
 Other **Permit Extension**

Change of Plans  
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 Non-Routine Fracturing  
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 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 4/21/03 (expiration 4/21/07).

This APD has not been approved yet by the BLM.

Approved by the  
Utah Division of  
Oil, Gas and Mining

Date: 04-09-07  
By: [Signature]

**RECEIVED**  
**APR 09 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

4/4/2007

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:** 43-047-34932  
**Well Name:** Federal 5-6-9-18  
**Location:** SW/NW Section 6, T9S R18E  
**Company Permit Issued to:** Newfield Production Company  
**Date Original Permit Issued:** 4/21/2003

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

*Mandi Crozier*  
Signature

4/4/2007  
Date

Title: Regulatory Specialist

Representing: Newfield Production Company

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**APR 09 2007**  
DIV. OF OIL, GAS & MINING

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK DRILL  DEEPEN

1b. TYPE OF WELL

OIL WELL  GAS WELL  OTHER  SINGLE ZONE  MULTIPLE ZONE

5. LEASE DESIGNATION AND SERIAL NO.  
**UTU-65970**

6. IF INDIAN, ALLOTTEE OR TRIBE NAME  
**N/A**

7. UNIT AGREEMENT NAME  
**N/A Sundance Unit**

8. FARM OR LEASE NAME WELL NO  
**Federal #5-6-9-18**

9. API WELL NO.  
**43-047-34932**

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

2. NAME OF OPERATOR  
**Inland Production Company**

3. ADDRESS OF OPERATOR  
**Route #3 Box 3630, Myton, UT 84052**

Phone: **(435) 646-3721**

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

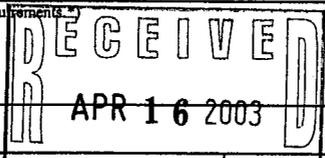
At Surface **SW/NW 2067' FNL 709' FWL**

At proposed Prod. Zone

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA  
**SW/NW Sec. 6, T9S, R18E**

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\*  
**Approximately 18.0 miles southeast of Myton, Utah**

15. DISTANCE FROM PROPOSED\* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to **Approx. 709' f/lse line**)



12. County **Uintah** 13. STATE **UT**

16. NO. OF ACRES IN LEASE **1,036.24** 17. NO. OF ACRES ASSIGNED TO THIS WELL **40**

18. DISTANCE FROM PROPOSED LOCATION\* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR ON THIS LEASE, FT.  
**Approx. 1269'**

19. PROPOSED DEPTH **6500'** 20. ROTARY OR CABLE TOOLS **Rotary**

21. ELEVATIONS (Show whether DF, RT, GR, etc.) **5000' GR**

22. APPROX. DATE WORK WILL START\* **3rd Quarter 2003**

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT/FOOT	SETTING DEPTH	QUANTITY OF CEMENT
Refer to Monument Butte Field SOP's Drilling Program/Casing Design				

Inland Production Company proposes to drill this well in accordance with the attached exhibits.

Approved by the  
Division of  
Oil and Mining  
NO COPY

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JUL 13 2007

DIV. OF OIL, GAS & MINING

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM : If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24. SIGNED *M. Landie Cozies* TITLE **Regulatory Specialist** DATE **4/15/03**

(This space for Federal or State office use)

PERMIT NO. \_\_\_\_\_ APPROVAL DATE \_\_\_\_\_

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

CONDITIONS OF APPROVAL, IF ANY:

APPROVED BY *Jim Kempf* TITLE **Assistant Field Manager Lands & Mineral Resources** DATE **7-5-2007**

CONDITIONS OF APPROVAL ATTACHED

\*See Instructions On Reverse Side

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

NOTICE OF APPROVAL

VERNAL FIELD OFFICE

UDOGM

No NOS

03P50457A



**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  
**Well No:** Federal 5-6-9-18  
**API No:** 43-047-34932

**Location:** <sup>10x5</sup> SWNW, Sec. 6, T9S, R18E  
**Lease No:** UTU-65970  
**Agreement:** Sundance (GR) Unit

Title	Name	Office Phone Number	Cell Phone Number
Petroleum Engineer:	Matt Baker	(435) 781-4490	(435) 828-4470
Petroleum Engineer:	Michael Lee	(435) 781-4432	(435) 828-7875
Petroleum Engineer:	James Ashley	(435) 781-4470	(435) 828-7874
Petroleum Engineer:	Ryan Angus	(435) 781-4430	(435) 828-7368
Supervisory Petroleum Technician:	Jamie Sparger	(435) 781-4502	(435) 828-3913
NRS/Enviro Scientist:	Paul Buhler	(435) 781-4475	(435) 828-4029
NRS/Enviro Scientist:	Karl Wright	(435) 781-4484	
NRS/Enviro Scientist:	Holly Villa	(435) 781-4404	
NRS/Enviro Scientist:	Vacant	(435) 781-4476	(435) 828-7381
NRS/Enviro Scientist:	Chuck Macdonald	(435) 781-4441	(435) 828-7481
NRS/Enviro Scientist:	Jannice Cutler	(435) 781-3400	
NRS/Enviro Scientist:	Michael Cutler	(435) 781-3401	
NRS/Enviro Scientist:	Anna Figueroa	(435) 781-3407	
NRS/Enviro Scientist:	Verlyn Pindell	(435) 781-3402	
NRS/Enviro Scientist:	Darren Williams	(435) 781-4447	
NRS/Enviro Scientist:	Nathan Packer	(435) 781-3405	

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 two (2) year period, or until lease expiration, whichever occurs first. An additional extension, up to two (2) years, may be applied for by sundry notice prior to expiration.**

**NOTIFICATION REQUIREMENTS**

Location Construction (Notify Environmental Scientist)	-	Forty-Eight (48) hours prior to construction of location and access roads.
Location Completion (Notify Environmental Scientist)	-	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 Supv. Petroleum Tech.)	-	Twenty-Four (24) hours prior to running casing and cementing all casing strings.
BOP & Related Equipment Tests (Notify Supv. Petroleum Tech.)	-	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)**

### **Surface COAs:**

- If there is an active Gilsonite mining operation within 2 miles of the well location, operator shall notify the Gilsonite operator at least 48 hours prior to any blasting during construction.
- If paleontological materials are uncovered during construction, the operator is to immediately stop work and contact the Authorized Officer (AO). A determination will be made by the AO as to what mitigation may be necessary for the discovered paleontologic material before construction can continue.

### **LEASE STIPULATIONS AND NOTICES**

- Adhere to Executive Order 5327 of April 15, 1930, stipulations for lands in oil shale withdrawal.
- Lands in this lease have been identified as containing Burrowing Owl habitat. Modifications to the Surface Use Plan of Operations will be required in order to protect the Burrowing Owl habitat from surface disturbing activities in accordance with Section 6 of the lease term, Endangered Species Act, and 43 CFR 3101.1-2.
- Timing Limitations (for construction and drilling) – **April 1 through August 15** – in order to protect Burrowing Owl habitat.

### **CONDITIONS OF APPROVAL**

- This well is being approved in accordance with Washington Instruction Memorandum 2005-247 and Section 390 (Category 3) of the Energy Policy Act which establishes statutory categorical exclusions (CX) under the National Environmental Policy Act (NEPA). Category 3 states that an oil or gas well can be drilled within a developed field for which an approved land use plan or any environmental document prepared pursuant to NEPA analyzed drilling as a reasonably foreseeable activity, so long as such plan or document was approved within five (5) years prior to the date of spudding the well. This well is covered under the *Final Environmental Impact Statement and Record of Decision Castle Peak and Eightmile Flat Oil and Gas Exploration Project Newfield Rocky Mountains Inc.*, signed August 24, 2005. If the well has not been spudded by August 24, 2010, a new environmental document will have to be prepared prior to the approval of the APD.
- All applicable local, state, and/or federal laws, regulations, and/or statutes will be complied with.
- Right of way (ROW) will not be required:
- 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 three 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 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 following seed mix (PLS formula) will be used for interim reclamation:

	<u>lbs/acre</u>
Gardner Saltbush ( <i>Atriplex gardneri</i> ).....	3
Shadscale ( <i>Atriplex confertifolia</i> ) .....	3
Galleta Grass ( <i>Hilaria jamesii</i> ).....	3
Indian Ricegrass ( <i>Achnatherum hymenoides</i> ).....	3
<b>TOTAL.....</b>	<b>12</b>

- 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.

### **DOWNHOLE COAs:**

#### **SITE SPECIFIC DOWNHOLE COAs:**

- Monument Butte Field Standard Operating Practices (SOP) dated Sept. 20, 2005 shall be followed.

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

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

- The spud date and time shall be reported orally to Vernal Field Office within 24 hours of spudding.
- Notify Vernal Field Office Supervisory Petroleum Engineering Technician at least 24 hours in advance of casing cementing operations and BOPE & casing pressure tests.
- 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.**
- The operator must report all shows of water or water-bearing sands to the BLM. If flowing water is encountered it must be sampled, analyzed, and a copy of the analyses submitted to the BLM Vernal Field Office.
- The operator must report encounters of all non oil & gas mineral resources (such as Gilsonite, tar sands, oil shale, trona, 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.

- A complete set of angular deviation and directional surveys of a directional well will be submitted to the Vernal BLM office engineer within 30 days of the completion of the well.
- 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.
- 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\_Welllogs@BLM.gov. This submission will supersede the requirement for submittal of paper logs to the BLM.**
- There shall be no deviation from the proposed drilling, completion, and/or workover program as approved. Safe drilling and operating practices must be observed. Any changes in operation must have prior approval from the BLM Vernal Field Office.

## OPERATING REQUIREMENT REMINDERS:

- 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.
- 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.
- 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:
  - Operator name, address, and telephone number.
  - Well name and number.
  - Well location ( $\frac{1}{4}$  $\frac{1}{4}$ , Sec., Twn, Rng, and P.M.).
  - Date well was placed in a producing status (date of first production for which royalty will be paid).
  - 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).
  - 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.
  - Unit agreement and/or participating area name and number, if applicable.
  - Communitization agreement number, if applicable.
- Any venting or flaring of gas shall be done in accordance with Notice to Lessees (NTL) 4A and needs prior approval from the BLM Vernal Field Office.
- 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.
- 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.

- 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.
- Oil and gas meters shall be calibrated in place prior to any deliveries. The BLM Vernal 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. All measurement points shall be identified as the point of sale or allocation for royalty purposes.
- 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.
- 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 and need prior approval of the BLM Vernal Field Office. Emergency approval may be obtained orally, but such approval does not waive the written report requirement.
- 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.
- 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.
- 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

**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-65970**

6. If Indian, Allottee or Tribe Name

**NA**

7. If Unit or CA, Agreement Designation

**SUNDANCE**

8. Well Name and No.

**FEDERAL 5-6-9-18**

9. API Well No.

**43-047-34932**

10. Field and Pool, or Exploratory Area

**EIGHT MILE FLAT NORTH**

11. County or Parish, State

**UINTAH COUNTY, UT.**

**SUBMIT IN TRIPLICATE**

1. Type of Well

<input checked="" type="checkbox"/> Oil Well	<input type="checkbox"/> Gas Well	<input type="checkbox"/> 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)

**2067 FNL 709 FWL SW/NW Section 6, T9S R18E**

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

**TYPE OF SUBMISSION**

<input checked="" type="checkbox"/> Notice of Intent
<input type="checkbox"/> Subsequent Report
<input type="checkbox"/> Final Abandonment Notice

**TYPE OF ACTION**

<input type="checkbox"/> Abandonment	<input type="checkbox"/> Change of Plans
<input type="checkbox"/> Recompletion	<input type="checkbox"/> New Construction
<input type="checkbox"/> Plugging Back	<input type="checkbox"/> Non-Routine Fracturing
<input type="checkbox"/> Casing Repair	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Altering Casing	<input type="checkbox"/> Conversion to Injection
<input checked="" type="checkbox"/> Other <b>APD Change</b>	<input type="checkbox"/> Dispose Water

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

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

**Newfield Production Company requests to change the name for the Federal 5-6-9-18 to the Sundance Federal 5-6-9-18.**

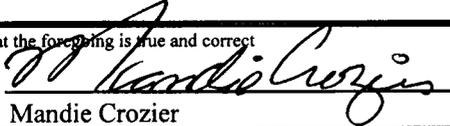
The remainder of the APD will remain the same.

**RECEIVED**

**JUL 13 2007**

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

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

Signed		Title	<u>Regulatory Specialist</u>	Date	<u>7/11/2007</u>
	<b>Mandie Crozier</b>				

CC: UTAH DOGM

(This space for Federal or State office use)

Approved by	_____	Title	_____	Date	_____
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Conditions of approval, if any:

CC: Utah DOGM

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

# DIVISION OF OIL, GAS AND MINING

## **SPUDDING INFORMATION**

Name of Company: NEWFIELD PRODUCTION COMPANY

Well Name: SUNDANCE FED 5-6-9-18

Api No: 43-047-34932 Lease Type: FEDERAL

Section 06 Township 09S Range 18E County UINTAH

Drilling Contractor LEON ROSS DRLG RIG # 24

### **SPUDDED:**

Date 07/28/07

Time 10:30 AM

How DRY

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

Reported by ALVIN NIELSEN

Telephone # (435) 823-7468

Date 07/30/07 Signed CHD

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

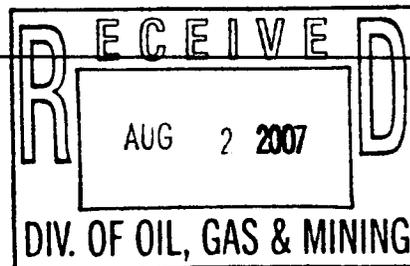
OPERATOR: **NEWFIELD PRODUCTION COMPANY**  
 ADDRESS: **RT. 3 BOX 3630**  
**MYTON, UT 84052**

OPERATOR ACCT. NO. **N2695**

ACTION CODE	CURRENT ENTITY NO.	NEW ENTITY NO.	API NUMBER	WELL NAME	WELL LOCATION					SPUD DATE	EFFECTIVE DATE
					QQ	SC	TP	RG	COUNTY		
A	99999	16293	4301333062	FEDERAL 1-19-9-16	NENE	19	9S	16E	DUCHESNE	7/28/2007	8/9/07
WELL 1 COMMENTS: <i>GRU</i>											
A	99999	16294	4301333108	FEDERAL 10-20-9-16	NWSE	20	9S	16E	DUCHESNE	7/25/2007	8/9/07
<i>GRU</i>											
B	99999	12391	4301333597	ROBERTS 2-21-8-17	NWNE	21	8S	17E	DUCHESNE	7/23/2007	8/9/07
<i>GRU</i>											
B	99999	14844	4304734932	SD FEDERAL 5-6-9-18	SWNW	6	9S	18E	UINTAH	7/28/2007	8/9/07
<i>GRU</i>											
B	99999	14844	4304738194	SD FEDERAL 4-6-9-18	SWNW	6	9S	18E	UINTAH	7/30/2007	8/9/07
WELL 5 COMMENTS: <i>GRU BHL = NWNW</i>											
WELL 5 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 - ther (explain in comments section)

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



Signature \_\_\_\_\_ **Jentri Park**  
 Production Clerk \_\_\_\_\_  
 Date **August 2, 2007**

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

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

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

5. Lease Serial No.  
SUNDANCE FEDERAL 5-6-9-18

6. If Indian, Allottee or Tribe Name.

7. If Unit or CA/Agreement, Name and/or  
SUNDANCE UNIT

8. Well Name and No.  
FEDERAL 5-6-9-18

9. API Well No.  
4304734932

10. Field and Pool, or Exploratory Area  
MONUMENT BUTTE

11. County or Parish, State  
UT

1. Type of Well  
 Oil Well  Gas Well  Other

2. Name of Operator  
NEWFIELD PRODUCTION COMPANY

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

3b. Phone (include area code)  
435.646.3721

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)  
Section 6 T9S R18E

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

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

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

On 7/28/07 MIRU Ross Rig # 24. Spud well @ 10:30 AM. Drill 305' of 12 1/4" hole with air mist. TIH W/ 7 Jt's 8 5/8" J-55 24 # csgn. Set @ 313.56 KB On 8/1/07 cement with 160 sks of class "G" w/ 2% CaCL2 + 1/4# sk Cello- Flake Mixed @ 15.8 ppg > 1.17 cf/ sk yeild. Returned 3 bbls cement to pit. WOC.

I hereby certify that the foregoing is true and correct (Printed/ Typed)  
Alvin Nielsen  
Signature *Alvin Nielsen*

Title  
Drilling Foreman

Date  
08/01/2007

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

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

Office \_\_\_\_\_

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

(Instructions on reverse)

RECEIVED

AUG 06 2007

DIV. OF OIL, GAS & MINING

**NEWFIELD PRODUCTION COMPANY - CASING & CEMENT REPORT**

8 5/8 CASING SET AT 313.56

LAST CASING 8 5/8" set @ 313.56  
 DATUM 12' KB  
 DATUM TO CUT OFF CASING \_\_\_\_\_  
 DATUM TO BRADENHEAD FLANGE \_\_\_\_\_  
 TD DRILLER 305' LOGGER \_\_\_\_\_  
 HOLE SIZE 12 1/4

OPERATOR Newfield Production Company  
 WELL SD Federal 5-6-9-18  
 FIELD/PROSPECT Monument Butte  
 CONTRACTOR & RIG # Ross Rig # 24

LOG OF CASING STRING:								
PIECES	OD	ITEM - MAKE - DESCRIPTION	WT / FT	GRD	THREAD	CONDT	LENGTH	
		Shoe Joint 40.54'						
		WHI - 92 csg head			8rd	A	0.95	
7	8 5/8"	Maverick ST&C csg	24#	J-55	8rd	A	301.56	
		<b>GUIDE</b> shoe			8rd	A	0.9	
CASING INVENTORY BAL.		FEET	JTS	TOTAL LENGTH OF STRING			303.56	
TOTAL LENGTH OF STRING		303.56	7	LESS CUT OFF PIECE			2	
LESS NON CSG. ITEMS		1.85		PLUS DATUM TO T/CUT OFF CSG			12	
PLUS FULL JTS. LEFT OUT		0		CASING SET DEPTH			<b>313.56</b>	
TOTAL		303.56	7	} COMPARE				
TOTAL CSG. DEL. (W/O THRDS)		303.56	7					
TIMING		1ST STAGE						
BEGIN RUN CSG.		Spud	7/28/2007	10:30 AM	GOOD CIRC THRU JOB			YES
CSG. IN HOLE			7/28/2007	5:00 PM	Bbls CMT CIRC TO SURFACE			3
BEGIN CIRC			8/1/2007	8:29 AM	RECIPROCATED PIPE FOR			N/A
BEGIN PUMP CMT			8/1/2007	8:41 AM				
BEGIN DSPL. CMT			8/1/2007	8:53 AM	BUMPED PLUG TO			356 PSI
PLUG DOWN			8/1/2007	9:02 AM				
CEMENT USED		CEMENT COMPANY- <b>B. J.</b>						
STAGE	# SX	CEMENT TYPE & ADDITIVES						
1	160	Class "G" w/ 2% CaCL2 + 1/4#/sk Cello-Flake mixed @ 15.8 ppg 1.17 cf/sk yield						
CENTRALIZER & SCRATCHER PLACEMENT			SHOW MAKE & SPACING					
Centralizers - Middle first, top second & third for 3								

COMPANY REPRESENTATIVE Alvin Nielse DATE 8/1/2007

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

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

1. Type of Well  
 Oil Well    Gas Well    Other

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

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

3b. Phone    (include are code)  
                   435.646.3721

4. Location of Well    (Footage, Sec., T., R., M., or Survey Description)  
  
                   Section 6 T9S R18E

5. Lease Serial No.  
**SUNDANCE FEDERAL 5-6-9-18**

6. If Indian, Allottee or Tribe Name.

7. If Unit or CA/Agreement, Name and/or  
**SUNDANCE UNIT**

8. Well Name and No.  
**FEDERAL 5-6-9-18**

9. API Well No.  
**4304734932**

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

11. County or Parish, State  
                   , UT

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

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

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

On 8/6/07 MIRU NDSI Rig # 2. Set all equipment. Pressure test Kelly, TIW, Choke manifold, & Bop's to 2,000 psi. Test 8.625 csgn to 1,500 psi. Vernal BLM field, & Roosevelt DOGM office was notified of test. PU BHA and tag cement @ 273'. Drill out cement & shoe. Drill a 7.875 hole with fresh water to a depth of 6,055'. Lay down drill string & BHA. Open hole log w/ Dig/SP/GR log's TD to surface. PU & TIH with Guide shoe, shoe jt, float collar, 156 jt's of 5.5 J-55, 15.5# csgn. Set @ 6039.13' / KB. Cement with 300 sks cement mixed @ 11.0 ppg & 3.49 yld. Then 450 sks cement mixed @ 14.4 ppg & 1.24 yld. With 13 bbls cement returned to pit. Nipple down Bop's. Drop slips @83,000 #'s tension. Release rig 1:30 AM 8/13/07

I hereby certify that the foregoing is true and correct (Printed/ Typed) Alvin Nielsen	Title Drilling Foreman
Signature 	Date 08/13/2007

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

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

(Instructions on reverse)

**RECEIVED**  
**AUG 15 2007**  
DIV. OF OIL, GAS & MINING

# NEWFIELD PRODUCTION COMPANY - CASING & CEMENT REPORT

5 1/2" CASING SET AT 6039.13

Flt cllr @ 6019.26

LAST CASING 8 5/8" SET # 313.56'

OPERATOR Newfield Production Company

DATUM 12' KB

WELL SD Federal 5-6-9-18

DATUM TO CUT OFF CASING 12'

FIELD/PROSPECT Monument Butte

DATUM TO BRADENHEAD FLANGE \_\_\_\_\_

CONTRACTOR & RIG # NDSI #2

TD DRILLER 6055' Loggers 6061'

HOLE SIZE 7 7/8"

LOG OF CASING STRING:							
PIECES	OD	ITEM - MAKE - DESCRIPTION	WT / FT	GRD	THREAD	CONDT	LENGTH
		Landing Jt					14
		Short jt 4002' (6.02')					
155	5 1/2"	ETC LT & C casing	15.5#	J-55	8rd	A	6005.26
		Float collar					0.6
1	5 1/2"	ETC LT&C csg	15.5#	J-55	8rd	A	20.62
		<b>GUIDE</b> shoe			8rd	A	0.65
CASING INVENTORY BAL.		FEET	JTS	TOTAL LENGTH OF STRING			6041.13
TOTAL LENGTH OF STRING		6041.13	156	LESS CUT OFF PIECE			14
LESS NON CSG. ITEMS		15.25		PLUS DATUM TO T/CUT OFF CSG			12
PLUS FULL JTS. LEFT OUT		194.15	5	CASING SET DEPTH			<b>6039.13</b>
TOTAL		<b>6220.03</b>	161	} COMPARE			
TOTAL CSG. DEL. (W/O THRDS)		6791.85	161				
TIMING		1ST STAGE	2nd STAGE				
BEGIN RUN CSG.		8/12/2007	2:00 PM	GOOD CIRC THRU JOB		YES	
CSG. IN HOLE		8/12/2007	6:30 PM	Bbls CMT CIRC TO SURFACE		13	
BEGIN CIRC		8/12/2007	6:30 PM	RECIPROCATED PIPE FOR <u>THRUSTROKE NA</u>			
BEGIN PUMP CMT		8/12/2007	7:29 PM	DID BACK PRES. VALVE HOLD ? <u>YES</u>			
BEGIN DSPL. CMT		8/12/2007	8:19 PM	BUMPED PLUG TO		1875	PSI
PLUG DOWN		8/12/2007	8:41 PM				
CEMENT USED		CEMENT COMPANY- <b>B. J.</b>					
STAGE	# SX	CEMENT TYPE & ADDITIVES					
1	300	Premilite II w/ 10% gel + 3 % KCL, 3#s /sk CSE + 2# sk/kolseal + 1/2#s/sk Cello Flake					
		mixed @ 11.0 ppg W / 3.49 cf/sk yield					
2	450	50/50 poz W/ 2% Gel + 3% KCL, .5%EC1, 1/4# sk C.F. 2% gel. 3% SM mixed @ 14.4 ppg W/ 1.24 YLD					
CENTRALIZER & SCRATCHER PLACEMENT			SHOW MAKE & SPACING				
Centralizers - Middle first, top second & third. Then every third collar for a total of 20.							

COMPANY REPRESENTATIVE Alvin Nielsen

DATE 8/12/2007

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

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

**SUBMIT THIS INFORMATION TO THE INSPECTOR ON REVERSE SIDE**

1. Type of Well  
 Oil Well    Gas Well    Other

2. Name of Operator  
 NEWFIELD PRODUCTION COMPANY

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

3b. Phone    (include area code)  
                   435.646.3721

4. Location of Well    (Footage, Sec., T., R., M., or Survey Description)  
                             2065' FNL 709' FWL  
                             SWNW Section 6 T9S R18E

5. Lease Serial No.  
 USA UTU-65970

6. If Indian, Allottee or Tribe Name.

7. If Unit or CA/Agreement, Name and/or  
 SUNDANCE UNIT

8. Well Name and No.  
 FEDERAL 5-6-9-18

9. API Well No.  
 4304734932

10. Field and Pool, or Exploratory Area  
 MONUMENT BUTTE

11. County or Parish, State  
 Uintah, UT

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

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

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

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

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

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

I hereby certify that the foregoing is true and correct (Printed/ Typed) Mandie Crozier	Title Regulatory Specialist
Signature <i>Mandie Crozier</i>	Date 09/24/2007

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

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

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

(Instructions on reverse)

**RECEIVED**  
**SEP 27 2007**  
DIV. OF OIL, GAS & MINING

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

5. LEASE DESIGNATION AND SERIAL NUMBER:  
USA UTU-65970

**SUNDRY NOTICES AND REPORTS ON WELLS**

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

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7. UNIT or CA AGREEMENT NAME:  
SUNDANCE UNIT

1. TYPE OF WELL: OIL WELL  GAS WELL  OTHER

8. WELL NAME and NUMBER:  
FEDERAL 5-6-9-18 *Sundance*

2. NAME OF OPERATOR:  
NEWFIELD PRODUCTION COMPANY

9. API NUMBER:  
4304734932

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

PHONE NUMBER  
435.646.3721

10. FIELD AND POOL, OR WILDCAT:  
MONUMENT BUTTE

4. LOCATION OF WELL:  
FOOTAGES AT SURFACE:

COUNTY: UINTAH

OTR/OTR SECTION, TOWNSHIP, RANGE, MERIDIAN: SWNW, 6, T9S, R18E

STATE: UT

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

TYPE OF SUBMISSION	TYPE OF ACTION		
<input type="checkbox"/> NOTICE OF INTENT (Submit in Duplicate)  Approximate date work will  _____	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> REPERFORATE CURRENT FORMATION
	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> SIDETRACK TO REPAIR WELL
<input checked="" type="checkbox"/> SUBSEQUENT REPORT (Submit Original Form Only)  Date of Work Completion:  <u>09/27/2007</u>	<input type="checkbox"/> CASING REPAIR	<input type="checkbox"/> NEW CONSTRUCTION	<input type="checkbox"/> TEMPORARITLY ABANDON
	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> TUBING REPAIR
	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> VENT OR FLAIR
	<input type="checkbox"/> CHANGE WELL NAME	<input type="checkbox"/> PLUG BACK	<input type="checkbox"/> WATER DISPOSAL
	<input 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 09/19/07, attached is a daily completion status report.

NAME (PLEASE PRINT) Jenri Park

TITLE Production Clerk

SIGNATURE *Jenri Park*

DATE 09/27/2007

(This space for State use only)

RECEIVED

OCT 01 2007

DIV. OF OIL, GAS & MINING

**Daily Activity Report**

Format For Sundry

**SUNDANCE FEDERAL 5-6-9-18**

7/1/2007 To 11/30/2007

**9/8/2007 Day: 1****Completion**

Rigless on 9/7/2007 - 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 @ 5964' & cement top @ 139'. Perforate stage #1, CP2 sds @ 5637-47', CP1 sds @ 5596-5608', & CP.5 sds @ 5539-44' w/ 3-1/8" Slick Guns (19 gram, .49"EH, 120°) w/ 4 spf for total of 108 shots. 143 BWTR. SWIFN.

---

**9/13/2007 Day: 2****Completion**

Rigless on 9/12/2007 - Stage #1 CP.5, CP1 & CP2 sds. RU BJ Services. 0 psi on well. Frac CP.5, CP1 & CP2 sds w/ 69,930#'s of 20/40 sand in 591 bbls of Lightning 17 fluid. Broke @ 3091 psi. Treated w/ ave pressure of 1234 psi w/ ave rate of 24.9 BPM. ISIP 1454 psi. Leave pressure on well. 734 BWTR. Stage #2 A3 & LODC sds. RU The Perforators, llc WLT, crane & Lubricator. RIH w/ Weatherford 5-1/2" 6K composite flow through frac plug & 2- 11', 1- 15' perf guns. Set plug @ 5380'. Perforate LODC sds @ 5270-81' & 5236-47' & A3 sds @ 5201-16'w/ 3-1/8" Slick Guns (.43"HE, 23 gram, 90°) w/ 4 spf for total of 148 shots. SWIFN.

---

**9/14/2007 Day: 3****Completion**

Rigless on 9/13/2007 - Stage #2 A3 & LODC sds. RU BJ Services. 675 psi on well. Frac A3 & LODC sds w/ 179,901#'s of 20/40 sand in 1245 bbls of Lightning 17 fluid. Broke @ 3018 psi. Treated w/ ave pressure of 836 psi w/ ave rate of 24.9 BPM. ISIP 1413 psi. Leave pressure on well. 1979 BWTR. Stage # A1 sds. RU The Perforators, llc WLT, crane & Lubricator. RIH w/ Weatherford 5-1/2" 6K composite flow through frac plug & 15' perf gun. Set plug @ 5180". Perforate A1 sds @ 5124-39' w/ 3-1/8" Slick Guns (.49"EH, 19 gram, 120°) w/ 4 spf for total of 60 shots. RU BJ Services. 1020 psi on well. Frac A1 sds w/ 49,566#'s of 20/40 sand in 455 bbls of Lightning 17 fluid. Broke @ 2599 psi. Treated w/ ave pressure of 1466 psi w/ ave rate of 24.8 BPM. ISIP 1659 psi. Leave pressure on well. 2434 BWTR. Stage # D2 sds. RU The Perforators, llc WLT, crane & Lubricator. RIH w/ Weatherford 5-1/2" 6K composite flow through frac plug & 7' perf gun. Set plug @ 4890'. Perforate D2 sds @ 4777-84' w/ 3-1/8" Slick Guns (.49"EH, 19 gram, 120°) w/ 4 spf for total of 28 shots. RU BJ Services. 1061 psi on well. Frac D2 sds w/ 18,921#'s of 20/40 sand in 309 bbls of Lightning 17 fluid. Broke @ 3693 psi. Treated w/ ave pressure of 1559 psi w/ ave rate of 24.8 BPM. ISIP 2023 psi. Open well to pit for immediate flowback @ 1 bpm. Well flowed for 9 hrs. & died. Recovered 500 bbls. SWIFN.

---

**9/18/2007 Day: 4****Completion**

NC #1 on 9/17/2007 - 6:30AM MIRU NC#1, OWU W/-0 Psi, N/D 10,000 BOP & Frac HD, N/U 3,000 Finge & 5,000 BOP. P/U & RIH W/-4 3/4 Bit, Bit Sub, 153 Jts Tbg To Fill @ 4797', R/U R/pmp, R/U Nabors Pwr Swvl, C/Out To Plg @ 4890', Drill Up Plg, 12 Min Drill Time, Swvl I/Hle To 5100', SWI 6:30PM C/SDFN.

---

**9/19/2007 Day: 5****Completion**

NC #1 on 9/18/2007 - 6:30AM OWU, Swvl I/Hle W/-Tbg To Plg @ 5180', Drill Up

**Plg, Swvl I/Hle To Fill @ 5350', C/Out To Plg @ 5380', Drill Up Plg, Swvl I/Hle To Fill @ 5837', Drill & C/Out To PBTD @ 5998', Curc Well Clean, POOH W/-5 Jts Tbg, EOB @ 5850', R/U Swab, RIH IFL @ Surf, Made15 Swab Runs, Recvred 169 Bbls Wtr, Lite Trce Oil, Lite Trce Sand, FFL @ 1500', R/D Swab, RIH W/-Tbg To Fill @ 5991', R/U R/pmp & C/Out To PBTD @ 5998', Curc Well Clean, POOH W/- Jts Tbg, Bit Sub & Bit. P/U & RIH W/-N/C, 2 Jts Tbg, S/N, 1 Jt Tbg, 5 1/2 T/A, 57 Jts Tbg, SWI, 6:30PM C/SDFN. Lost 180 Bbls Wtr On Drill Out To PBTD, Recvred 169 Bbls Wtr Swabbing, Lost 123 Bbls Wtr On Curc Out @ PBTD, Total Wtr Loss For Day = 134 Bbls.**

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**9/20/2007 Day: 6**

**Completion**

**NC #1 on 9/19/2007 - 6:30AM OWU, RIH W/-120 Jts Tbg, N/D BOP, Set 5 1/2 T/A In 15,000 Tension, N/U W/-HD. R/U R/pmp & Flsh Tbg W/-60 Bbls Wtr. P/U Stroke & RIH W/-CDI-2 1/2x1 1/2x14x18' RHAC, 6-1 1/2x25' Wt Bars, 20-3/4x25' Guided Rods, 97-3/4x25' Slick Rods, 100-3/4x25' Guided Rods, 3/4x8'-6'-4' Pony Rods, 1 1/2x26' Polish Rod, Seat pmp, R/U Unit, Hole Standing Full, Stroke Unit & Tbg To 800 Psi, Good Test. R/D Rig @ 2:00PM, POP @ , 102" SL, 6 SPM, ( 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 <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> DRY <input type="checkbox"/> Other _____		7. UNIT AGREEMENT NAME <b>Federal</b>	
1b. TYPE OF WELL NEW WELL <input checked="" type="checkbox"/> WORK OVER <input type="checkbox"/> DEEPEN <input type="checkbox"/> PLUG BACK <input type="checkbox"/> DIFF RESVR. <input type="checkbox"/> Other _____		8. FARM OR LEASE NAME, WELL NO. <b>Federal 5-6-9-18</b>	
2. NAME OF OPERATOR <b>Newfield Exploration Company</b>		9. WELL NO. <b>43-047-34932</b>	
3. ADDRESS AND TELEPHONE NO. <b>1401 17th St. Suite 1000 Denver, CO 80202</b>		10. FIELD AND POOL OR WILDCAT <b>Monument Butte</b>	
4. LOCATION OF WELL (Report locations clearly and in accordance with any State requirements.*) At Surface <b>2067' FNL &amp; 709' FWL (SW/NW) Sec. 6, T9S, R18E</b> At top prod. Interval reported below		11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA <b>Sec. 6, T9S, R18E</b>	
At total depth		14. API NO. <b>43-047-34932</b>	13. STATE <b>UT</b>
		DATE ISSUED <b>04/21/07</b>	12. COUNTY OR PARISH <b>Duchesne</b>
15. DATE SPURRED <b>07/28/07</b>	16. DATE T.D. REACHED <b>08/11/07</b>	17. DATE COMPL. (Ready to prod.) <b>09/19/07</b>	18. ELEVATIONS (DF, RKB, RT, GR, ETC.)* <b>5000' GL 5012' GL</b>
20. TOTAL DEPTH, MD & TVD <b>6055'</b>		21. PLUG BACK T.D., MD & TVD <b>5998'</b>	19. ELEV. CASINGHEAD <b>No</b>
		22. IF MULTIPLE COMPL., HOW MANY*	23. INTERVALS DRILLED BY <b>-----&gt;</b>
			ROTARY TOOLS <b>X</b>
			CABLE TOOLS
24. PRODUCING INTERVAL(S), OF THIS COMPLETION--TOP, BOTTOM, NAME (MD AND TVD)* <b>Green River 4777'-5647'</b>			25. WAS DIRECTIONAL SURVEY MADE <b>No</b>
26. TYPE ELECTRIC AND OTHER LOGS RUN <b>Dual Induction Guard, SP, Compensated Density, Compensated Neutron, GR, Caliper, Cement Bond Log</b>			27. WAS WELL CORED <b>No</b>

**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#	314'	12-1/4"	To surface with 160 sx Class "G" cmt	
5-1/2" - J-55	15.5#	6039'	7-7/8"	300 sx Premlite II and 450 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 @ 5674'	TA @ 5575'

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	
1 & 5) 5637'-5647', 5596'-5608', 5539'-44'	.49"	4/78	5539'-5647'	Frac w/ 69,930# 20/40 sand in 591 bbls fluid	
(LODC & A3) 5270'-5281', 5236'-5247'	.49"	4/148	5201'-5281'	Frac w/ 179,901# 20/40 sand in 1245 bbls fluid	
(A1) 5124'-5139'	.49"	4/60	5124'-5139'	Frac w/ 49,566# 20/40 sand in 455 bbls fluid	
(D2) 4777'-4784'	.49"	4/28	4777'-4784'	Frac w/ 18,921# 20/40 sand in 309 bbls fluid	

**PRODUCTION**

33.* DATE FIRST PRODUCTION <b>09/19/07</b>		PRODUCTION METHOD (Flowing, gas lift, pumping--size and type of pump) <b>2-1/2" x 1-1/2" x 14' x 18' RHAC SM Plunger Pump</b>				WELL STATUS (Producing or shut-in) <b>PRODUCING</b>	
DATE OF TEST <b>10 day ave</b>	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD ----->	OIL--BBL. <b>86</b>	GAS--MCF. <b>90</b>	WATER--BBL. <b>18</b>	GAS-OIL RATIO <b>1047</b>
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.) <b>Sold &amp; Used for Fuel</b>	<b>OCT 12 2007</b>	TEST WITNESSED BY
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35. LIST OF ATTACHMENTS  
**DIV. OF OIL, GAS & MINING**

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

SIGNED *Jenri Park* TITLE **Production Clerk** DATE **10/10/2007**

JP

\*(See Instructions and Spaces for Additional Data on Reverse Side)

37. SUMMARY OF POROUS ZONES: (Show all important zones of porosity and contents thereof; cored intervals, and all drill-stem, tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures, and recoveries);				38. GEOLOGIC MARKERS		
FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.	NAME	TOP	
					MEAS. DEPTH	TRUE VERT. DEPTH
			Well Name Federal 5-6-9-18	Garden Gulch Mkr	3770'	
				Garden Gulch 1	3943'	
				Garden Gulch 2	4059'	
				Point 3 Mkr	4312'	
				X Mkr	4540'	
				Y-Mkr	4580'	
				Douglas Creek Mkr	4708'	
				BiCarbonate Mkr	4940'	
				B Limestone Mkr	5059'	
				Castle Peak	5517'	
				Basal Carbonate	5942'	
				Total Depth (LOGGERS)	6061'	



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

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

Ref: 8P-W-GW

JUL 30 2009

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

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

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

Re: Final Permit  
EPA UIC Permit UT21233-08387  
Sundance Federal 5-6-9-18  
SWNW Sec. 6-T9S-R18E  
Uintah County, Utah  
API No.: 43-047-34932

Dear Mr. Sundberg:

Enclosed is your copy of the FINAL Underground Injection Control (UIC) Permit for the proposed Sundance Federal 5-6-9-18 injection well. A Statement of Basis that discusses the conditions and requirements of this EPA UIC Permit, is also included.

The Public Comment period for this Permit ended on JUL 23 2009. No comments on the Draft Permit were received during the Public Notice period; therefore the Effective Date for this EPA UIC Permit is the date of issuance. All conditions set forth herein refer to Title 40 Parts 124, 144, 146, and 147 of the Code of Federal Regulations (CFR) and are regulations that are in effect as of the Effective Date of this Permit.

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

**RECEIVED**

AUG 06 2009



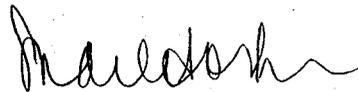
DIV. OF OIL, GAS & MINING  
Printed on Recycled Paper

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

If you have any questions on the enclosed Final Permit or Statement of Basis, please call Emmett Schmitz of my staff at (303) 312-6174, or toll-free at (800) 227-8917, ext. 312-6174.

FOR RECORD ONLY

Sincerely,



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

enclosure: Final UIC Permit  
Statement of Basis

cc: Letter:

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

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

cc: all enclosures:

Michael Guinn  
District Manager  
Newfield Production Company  
Myton, Utah

Larry Love  
Director  
Energy & Minerals Dept.  
Ute Indian Tribe

Ferron Secakuku  
Director, Natural Resources  
Ute Indian Tribe

Gilbert Hunt  
Associate Director  
State of Utah - Natural Resources

Fluid Minerals Engineering Dept.  
U.S. Bureau of Land Management  
Vernal, Utah





**UNDERGROUND INJECTION CONTROL PROGRAM  
PERMIT**

PREPARED: July 2009

**Permit No. UT21233-08387**

Class II Enhanced Oil Recovery Injection Well

**Sundance Federal 5-6-9-18  
Uintah County, UT**

Issued To

**Newfield Production Company**

1001 Seventeenth Street, Suite 2000

Denver, CO 80202

## Part I. AUTHORIZATION TO CONSTRUCT AND OPERATE

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

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

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

Sundance Federal 5-6-9-18  
2067' FNL & 709' FWL, SWNW S6, T9S, R18E  
Uintah County, UT

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

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

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

Issue Date: JUL 30 2009

Effective Date JUL 30 2009



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

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

## PART II. SPECIFIC PERMIT CONDITIONS

### Section A. WELL CONSTRUCTION REQUIREMENTS

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

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

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

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

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

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

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

The Permittee shall install and maintain in good operating condition:

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

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

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

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

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

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

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

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

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

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

An injection well has mechanical integrity if:

- (a) There is no significant leak in the casing, tubing, or packer (Part I); and
- (b) There is no significant fluid movement into an underground source of drinking water through vertical channels adjacent to the injection well bore (Part II).

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

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

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

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

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

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

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

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

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

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

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

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

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

## **Section C. WELL OPERATION**

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

Injection is approved under the following conditions:

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Monitoring records must include:

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

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

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

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

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

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

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

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

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

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

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

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

**2. Well Plugging Requirements**

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

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

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

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

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

**5. Plugging and Abandonment Report.**

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

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

**6. Inactive Wells.**

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

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

## PART III. CONDITIONS APPLICABLE TO ALL PERMITS

### Section A. EFFECT OF PERMIT

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

### Section B. CHANGES TO PERMIT CONDITIONS

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

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

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

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

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

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

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

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

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

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

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

### **Section C. SEVERABILITY**

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

### **Section D. CONFIDENTIALITY**

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

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

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

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

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

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

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

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

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

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

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

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

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

## **6. Permit Actions.**

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

## **7. Property Rights.**

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

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

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

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

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

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

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

**10. Signatory Requirements.**

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

**11. Reporting Requirements.**

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

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

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

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

## **Section F. FINANCIAL RESPONSIBILITY**

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

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

### ***2. Insolvency.***

In the event of:

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

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

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

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

## APPENDIX A

### WELL CONSTRUCTION REQUIREMENTS

See diagram.

Sundance Federal No. 5-6-9-18 was drilled to a total depth of 6,055 feet (KB) feet in the Basal Carbonate Member of the Green River Formation.

Surface casing (8-5/8 inch) was set at a depth of 314 feet in a 12-1/4 inch hole using 160 sacks of Class "G" cement which was circulated to the surface.

Production casing (5-1/2 inch) was set at a depth of 6,039 feet (KB) in a 7-7/8 inch hole with 300 sacks of Premium Lite II mixed and 450 sacks of 50/50 Pozmix cement. Top of cement at 139 feet..

Adequate 80% bond index cement bond within the Confining Zone.

The schematic diagram shows enhanced recovery injection perforations in the Douglas Creek Member of the Green River Formation. Additional perforations may be added at a later time between the depths of 3,770 feet (top of Garden Gulch Member) and the top of the Wasatch Formation, estimated at 6068 feet, provided the operator first notifies the Director and later submits an updated well completion report (EPA Form 7520-12) and schematic diagram.

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

# UT 21233-08387 SUNDANCE FEDERAL 5-6-9-18

Spud Date: 07/28/07  
Put on Production: 09/19/07

Initial Production: BOPD,  
MCFD, BWPD

GL: 5000' KB: 5012'

### Proposed Injection Wellbore Diagram

#### SURFACE CASING

CSG SIZE: 8-5/8"  
GRADE: J-55  
WEIGHT: 24#  
LENGTH: 7 jts. (301.56')  
DEPTH LANDED: 313.56' KB  
HOLE SIZE: 12-1/4" *Base USDW's*  
CEMENT DATA: 160 sxs Class "G" cmt, est 3 bbls cmt to surf.

#### PRODUCTION CASING

CSG SIZE: 5-1/2" *Green River*  
GRADE: J-55  
WEIGHT: 15.5#  
LENGTH: 156 jts. (6025.88')  
DEPTH LANDED: 6039.13' KB  
HOLE SIZE: 7-7/8"  
CEMENT DATA: 300 sxs Prem. Lite II mixed & 450 sxs 50/50 POZ.  
CEMENT TOP: 139'  
*80% Bond 3738' - 4221'*

#### TUBING

SIZE/GRADE/WT.: 2-7/8" / J-55 / 6.5#  
NO. OF JOINTS: 177 jts (4570.33')  
TUBING ANCHOR: 5575.22' KB  
NO. OF JOINTS: 1 jts (31.32')  
SEATING NIPPLE: 2-7/8" (1.10')  
SN LANDED AT: 5609.34' KB  
NO. OF JOINTS: 2 jts (62.89')  
TOTAL STRING LENGTH: EOT @ 5673.78' KB

#### FRAC JOB

09/12/07 5539-5647' Frac CP2, CP1, CP.5 sands as follows:  
69930# 20/40 sand in 591 bbls Lightning 17  
frac fluid. Treated @ avg press of 1234 psi  
w/avg rate of 24.9 BPM. ISIP 1454 psi. Calc  
flush: 5537 gal. Actual flush: 5032 gal.

09/13/07 5201-5281' Frac A3 & LODC sands as follows:  
179901# 20/40 sand in 1245 bbls Lightning 17  
frac fluid. Treated @ avg press of 836 psi  
w/avg rate of 24.9 BPM. ISIP 1413 psi. Calc  
flush: 5199 gal. Actual flush: 4692 gal.

09/13/07 5124-5139' Frac A1 sands as follows:  
49566# 20/40 sand in 455 bbls Lightning 17  
frac fluid. Treated @ avg press of 1466 psi  
w/avg rate of 24.8 BPM. ISIP 1659 psi. Calc  
flush: 5122 gal. Actual flush: 4616 gal.

09/13/07 4777-4784' Frac D2 sands as follows:  
18921# 20/40 sand in 309 bbls Lightning 17  
frac fluid. Treated @ avg press of 1559 psi  
w/avg rate of 24.8 BPM. ISIP 2023 psi. Calc  
flush: 5122 gal. Actual flush: 4687 gal.

Cement Top @ 139'

*TOC/EPA 1196'*

*4250'*

*1437'*

*2934-2973' Trona*  
*2973'-2988' Mahogany Bench*  
*3746'-3770' Confining Zone*  
*3770' Garden Gulch*

*4708' Douglas Creek*

Packer @ 4742'  
4777-4784'

5124-5139'

5201-5216'

5236-5247'

5270-5281'

5270-5281'

5539-5544'

5596-5608'

5637-5647'

PBTD @ 5998'

SHOE @ 6039'

TD @ 6055'

#### PERFORATION RECORD

Date	Interval	Tool	Holes
09/13/07	5637-5608'	4 JSPF	10 holes
09/13/07	5596-5608'	4 JSPF	48 holes
19/13/07	5539-5544'	4 JSPF	20 holes
09/13/07	5270-5281'	4 JSPF	44 holes
09/13/07	5236-5247'	4 JSPF	44 holes
09/13/07	5201-5216'	4 JSPF	60 holes
09/13/07	5124-5139'	4 JSPF	60 holes
09/13/07	4777-4784'	4 JSPF	28 holes

*5948' Basal Carbonate*

*Est Hasatch 6068'*

**NEWFIELD**



**SUNDANCE FEDERAL 5-6-9-18**

2067' FNL & 709' FWL

SW/NW Section 6-T9S-R18E

Uintah Co, Utah

API #43-047-34932; Lease # UTU-65970

## APPENDIX B

### LOGGING AND TESTING REQUIREMENTS

#### Logs.

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

#### NO LOGGING REQUIREMENTS

#### Tests.

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

<b>WELL NAME:</b> Sundance Federal 5-6-9-18	
<b>TYPE OF TEST</b>	<b>DATE DUE</b>
Pore Pressure	Prior to receiving authorization to inject.
Standard Annulus Pressure	Prior to receiving authorization to inject and at least once within any five (5) year period following the last successful test.

## APPENDIX C

### OPERATING REQUIREMENTS

#### MAXIMUM ALLOWABLE INJECTION PRESSURE:

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

WELL NAME	MAXIMUM ALLOWED INJECTION PRESSURE (psi)
	ZONE 1 (Upper)
Sundance Federal 5-6-9-18	1,240

#### INJECTION INTERVAL(S):

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

WELL NAME: Sundance Federal 5-6-9-18	APPROVED INJECTION INTERVAL (KB, ft)		FRACTURE GRADIENT (psi/ft)
	TOP	BOTTOM	
FORMATION NAME			
Green River: Garden Gulch-Douglas Creek-Basal Carbonate Members.	3,770.00	6,068.00	0.700

#### ANNULUS PRESSURE:

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

#### MAXIMUM INJECTION VOLUME:

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

## APPENDIX D

### MONITORING AND REPORTING PARAMETERS

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

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

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

## APPENDIX E

### PLUGGING AND ABANDONMENT REQUIREMENTS

See diagram.

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

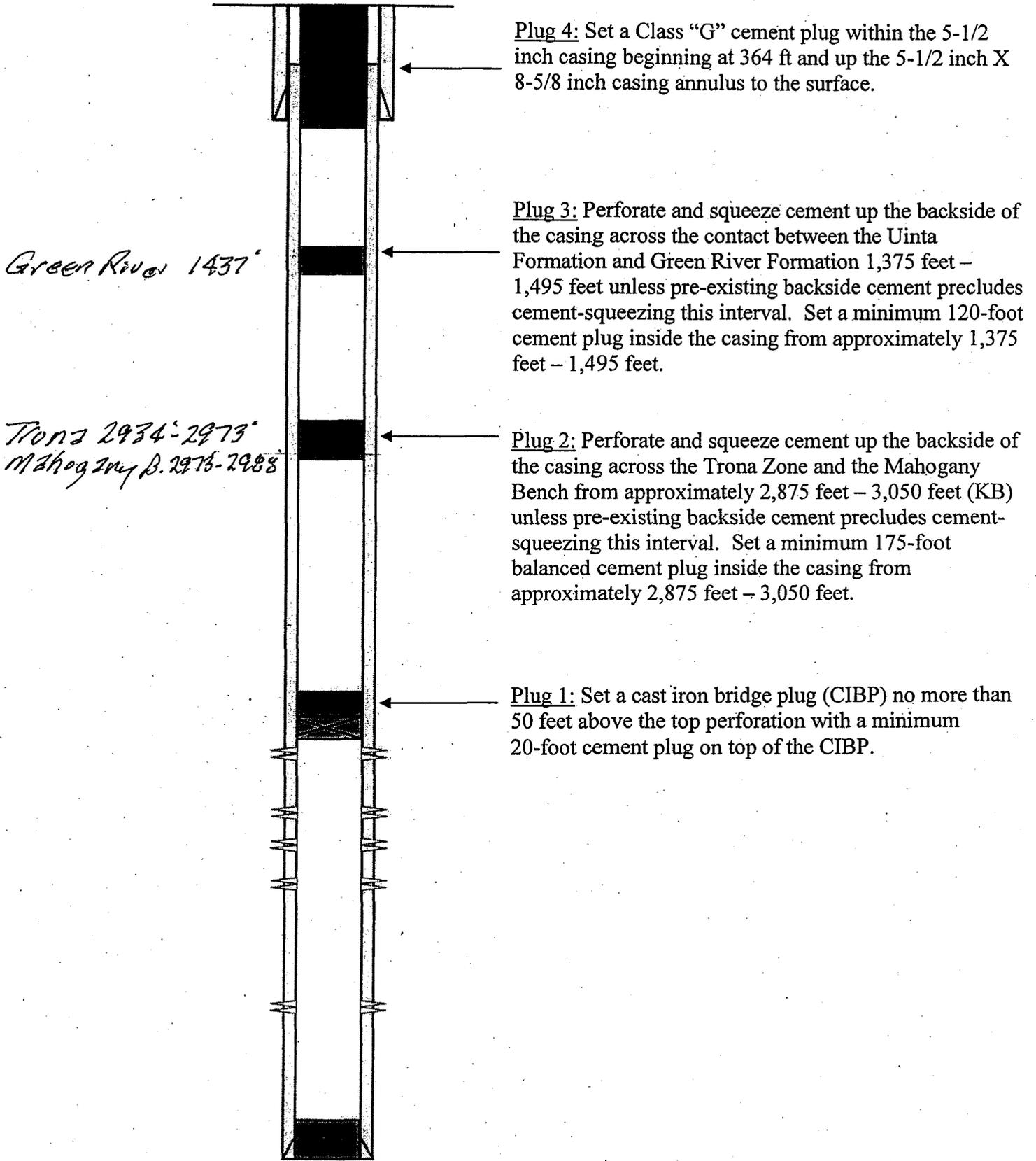
**PLUG NO. 1: Seal Injection Zone:** Set a cast iron bridge plug (CIBP) no more than fifty (50) feet above the top injection perforation. Place at least twenty (20) feet of cement plug on top of the CIBP.

**PLUG NO. 2: Seal Mahogany Shale and Trona intervals:** Squeeze a cement plug on the backside of the 5-1/2 inch casing across the Trona Zone and the Mahogany Shale approximately 2,875 feet to 3,050 feet (unless pre-existing backside cement precludes cement-squeezing this interval) followed by a minimum 175-foot balanced cement plug inside the 5-1/2 inch casing across the Trona Zone and the Mahogany Shale, approximately 2,875 feet to 3,050 feet.

**PLUG NO. 3: Seal USDWs:** Squeeze a cement plug (1,375 feet - 1,495 feet) on the backside of the 5-1/2 inch casing across the base of the Uinta formation (unless pre-existing backside cement precludes cement-squeezing this interval), followed by a minimum 120-foot (1,375 feet - 1,495 feet) balanced cement plug.

**PLUG NO.4: Seal Surface:** Set a Class "G" cement plug within the 5-1/2 inch casing to 364 feet and up the 5-1/2 inch by 8-5/8 inch casings annulus to the surface

## Plugging and Abandonment Diagram for Sundance Federal No. 5-6-9-18



Plug 4: Set a Class "G" cement plug within the 5-1/2 inch casing beginning at 364 ft and up the 5-1/2 inch X 8-5/8 inch casing annulus to the surface.

*Green River 1437'*

Plug 3: Perforate and squeeze cement up the backside of the casing across the contact between the Uinta Formation and Green River Formation 1,375 feet – 1,495 feet unless pre-existing backside cement precludes cement-squeezing this interval. Set a minimum 120-foot cement plug inside the casing from approximately 1,375 feet – 1,495 feet.

*Trona 2934-2973'  
Mahogany B. 2975-2988'*

Plug 2: Perforate and squeeze cement up the backside of the casing across the Trona Zone and the Mahogany Bench from approximately 2,875 feet – 3,050 feet (KB) unless pre-existing backside cement precludes cement-squeezing this interval. Set a minimum 175-foot balanced cement plug inside the casing from approximately 2,875 feet – 3,050 feet.

Plug 1: Set a cast iron bridge plug (CIBP) no more than 50 feet above the top perforation with a minimum 20-foot cement plug on top of the CIBP.

## APPENDIX F

### CORRECTIVE ACTION REQUIREMENTS

Sundance Federal No. 6-6-9-18 will be monitored weekly at the surface for evidence of fluid movement out of the injection zone.

In addition, Newfield developed a corrective action monitoring program, effective July 10, 2008, entitled "Procedure related to proposed Class II Enhanced Oil Recovery Injection Wells determined by the EPA to have specific Area of Review (AOR) wells with inadequate cement across the Confining Zone".

If possible fluid movement out of the injection zone is identified, either through the weekly monitoring, through Newfield's July 10, 2008 procedure described above, or through any other means (for example, evidence of fluid flow or increased bradenhead annulus pressure readings, tubing-casing annulus pressure readings, or other evidence of a mechanical integrity failure), the Permittee will shut in the Sundance Federal No. 5-6-9-18 immediately and notify the Director. No injection into the Sundance Federal No. 5-6-9-18 will be permitted until the Permittee has notified the Director that the situation has been resolved, submitted Rework Records (EPA Form No. 7520-12) and a schematic diagram, and received authorization from the Director to re-commence injection.



**RE: Procedure related to proposed Class II Enhanced Oil Recovery Injection Wells determined by the EPA to have specific Area of Review (AOR) wells with inadequate cement across the confining zone**

Effective July 10, 2008 Newfield Production Company will implement the following procedure to address concerns related to protection of Underground Sources of Drinking Water (USDW) in AOR wells where the interval of cement bond index across the confining zone behind pipe has been determined to be inadequate. The procedure is intended to meet the corrective action requirements found in the UIC Class II permit, as well as provide data that could be used to detect and prevent fluid movement out of the proposed injection zone.

- 1) Establish baseline production casing by surface casing annulus pressures prior to water injection in subject well with a calibrated gauge.
- 2) Record the baseline pressure, report findings to Newfield engineering group and keep on file so it is available upon request
- 3) Place injection well in service. Run packer integrity and radioactive tracer logs to verify wellbore integrity and determine zones taking water.
- 4) Construct a geologic cross section showing zones taking water and their geologic equivalent zones in the AOR wells.
- 5) Submit a report of the packer integrity log, radioactive tracer log, and geologic cross section to the Newfield engineering staff for review and keep on file so it is available upon request
- 6) Weekly observations of the site will be made by Newfield during normal well operating activities. Any surface discharge of fluids will be reported immediately.
- 7) After injection well is placed in service, weekly observations of annulus pressure will be made and compared to baseline pressure and will be recorded once monthly. The recorded pressure information will be kept on file and be available upon request.
- 8) If pressure increases by more than 10% above baseline at any time in an AOR well with insufficient cement bond, Newfield will run a temperature survey log in subject well. This log, in concert with the geologic cross section, will enable the determination of water movement in the open hole by production casing annulus through a shift in geothermal gradient.
- 9) If water movement is determined in annulus, Newfield will shut in the injection well and repair the production casing by open hole annulus or leave the injection well out of service.

# STATEMENT OF BASIS

**NEWFIELD PRODUCTION COMPANY  
SUNDANCE FEDERAL 5-6-9-18  
UINTAH COUNTY, UT**

**EPA PERMIT NO. UT21233-08387**

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

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

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

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

## PART I. General Information and Description of Facility

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

on

March 11, 2009

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

Sundance Federal 5-6-9-18  
2067' FNL & 709' FWL, SWNW S6, T9S, R18E  
Uintah County, UT

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

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

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

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

Sundance Federal No. 5-6-9-18 is currently an active Green River Formation Douglas Creek Member oil well. It is the initial intent of the applicant to use current Douglas Creek Member perforations for Class II enhanced recovery injection. The Sundance Federal No. 5-6-9-18 has adequate 80% bond index cement bond across the Confining Zone. This well has total depth in the Basal Carbonate Member.

<b>NEW WELLS</b>		
<b>Well Name</b>	<b>Well Status</b>	<b>Date of Operation</b>
Sundance Federal 5-6-9-18	New	N/A

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

### Hydrogeologic Setting

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

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

### Geologic Setting (TABLE 2.1)

The proposed enhanced oil recovery injection well is located in the Greater Monument Butte Field, T7-9S and R15-19E, which lies near the center of the broad, gently northward dipping south flank of the Uinta Basin. More than 450 million barrels of oil (63 MT) have been produced from sediments of the Uinta Basin. The Uinta Basin is a topographic and structural trough encompassing an area of more than 9,300 square miles (14,900 km) in northeast Utah. The basin is sharply asymmetrical, with a steep north flank bounded by the east-west-trending Uinta Mountains, and a gently dipping south flank. The Uinta Basin was formed in Paleocene to Eocene time, creating a large area of internal drainage which was filled by the ancestral Lake Uinta. The lacustrine, or fresh water lake-formed, sediments deposited in and around Lake Uinta make up the Uintah and Green River Formations. The southern shore of Lake Uinta was very broad and flat, resulting in large cyclic shifts of the location of the shoreline during the many repeated transgressive and regressive cycles caused by the climatic and tectonic-induced rise and fall of water levels of the lake. Distributary-mouth bars, distributary channels, and near-shore bars are the primary oil producing sandstone reservoirs in the area. (Ref: "Reservoir Characterization of the Lower Green River Formation, Southwest Uinta Basin, Utah Biannual Technical Progress Report, 4/1/99-9/30/99", by C. D. Morgan, Program Manager, November 1999, Contract DE-AC26-98BC15103).

The Duchesne River Formation is absent in this area. Shale and siltstone of the Uintah Formation outcrop and compose the surface rock throughout the area. The lower 600 feet to 800 feet of the Uinta Formation, consisting generally of shale interbedded with occasionally water-bearing sandstone lenses between 5 feet to 20 feet thick, is underlain by the Green River Formation. The

Green River Formation is further subdivided into several Member and local marker units. The cyclic nature of Green River deposition in the southern shore area resulted in numerous stacked, intertonguing deltaic and near-shore sand and silt deposits. Red alluvial shale and siltstone deposits that intertongue with the Green River sediments are of the Colton and Wasatch Formations. Under the Wasatch Formation is the Mesaverde Formation, which consists primarily of continental-origin deposits of interbedded shale, sandstone, and coal.

The geologic dip is about 200 feet per mile, and there are no known surface faults in this area. Veins of gilsonite, a natural resinous hydrocarbon occasionally mined as a resource, occurs in the greater Uintah Basin though it is predominantly found on the eastern margin of the basin near the Colorado border. Vertical veins, generally between 2 feet to 6 feet wide but up to 28 feet wide, may extend many miles in length and occasionally extend as deep as 2,000 feet. In this area, within the Greater Monument Butte Field, there is one known gilsonite vein. This vein is not considered to present a pathway for migration of fluid out of the injection zone because it terminates at depth of about 2,000 feet, far above the protective confining layer and much deeper injection zone.

**TABLE 2.1  
GEOLOGIC SETTING  
Sundance Federal 5-6-9-18**

Formation Name	Top (ft)	Base (ft)	TDS (mg/l)	Lithology
Uinta: Publ. 92	0	250	< 10,000	Sand and shale.
Uinta	250	1,437		Interbedded lacustrine sand, shale and carbonate with fluvial sand and shale.
Green River	1,437	6,068		Interbedded lacustrine sand, shale and carbonate with fluvial sand and shale.
Green River: Trona	2,934	2,973		Evaporite
Green River: Mahogany Bench	2,973	2,988		Oil shale.
Green River: Confining Zone	3,746	3,770		Shale.
Green River: Garden Gulch Member	3,770	4,708		Interbedded lacustrine sand, shale and carbonate with fluvial sand and shale.
Green River: Douglas Creek Member	4,708	5,943	15,209	Interbedded lacustrine sand, shale and carbonate with fluvial sand and shale.
Green River: Basal Carbonate	5,943	6,068		Carbonate

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

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

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

The EPA-approved interval for Class II enhanced recovery injection in the Sundance Federal No. 5-6-9-18 is located between the top of the Garden Gulch Member (3,770 feet) and the top of the Wasatch Formation estimated to be 6,068 feet.

**TABLE 2.2**  
**INJECTION ZONES**  
**Sundance Federal 5-6-9-18**

Formation Name	Top (ft)	Base (ft)	TDS (mg/l)	Fracture Gradient (psi/ft)	Porosity	Exempted?*
Green River: Garden Gulch-Douglas Creek-Basal Carbonate Members.	3,770	6,068		0.700		N/A

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

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

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

The 24-foot (3,746 feet - 3,770 feet) shale Confining Zone directly overlies the top of the Garden Gulch Member.

**TABLE 2.3**  
**CONFINING ZONES**  
**Sundance Federal 5-6-9-18**

Formation Name	Formation Lithology	Top (ft)	Base (ft)
Green River	Shale	3,746	3,770

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

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

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

The State of Utah "Water Wells and Springs" identifies no public water supply wells within the one-

quarter (1/4) mile Area-of-Review (AOR) around the Sundance Federal No. 5-6-9-18.

Technical Publication No. 92: State of Utah, Department of Natural Resources, cites the base of Underground Sources of Drinking Water (USDW) in the Uinta Formation approximately 250 feet from the surface. However, absent definitive information relative to the water quality of the Uinta Formation, from the depth of 250 feet to the base of the Uinta Formation (1,437 feet), the EPA will require, during plugging and abandonment, a cement plug at the base of the Uinta Formation to protect contamination of possible Uinta USDWs.

**TABLE 2.4**  
**UNDERGROUND SOURCES OF DRINKING WATER (USDW)**  
**Sundance Federal 5-6-9-18**

Formation Name	Formation Lithology	Top (ft)	Base (ft)	TDS (mg/l)
Uinta: Public. 92	Sand and shale.	0	250	< 10,000
Uinta	Interbedded lacustrine sand, shale and carbonate with fluvial sand and shale.	250	1,437	

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

See diagram.

Sundance Federal No. 5-6-9-18 was drilled to a total depth of 6,055 feet (KB) feet in the Basal Carbonate Member of the Green River Formation.

Surface casing (8-5/8 inch) was set at a depth of 314 feet in a 12-1/4 inch hole using 160 sacks of Class "G" cement which was circulated to the surface.

Production casing (5-1/2 inch) was set at a depth of 6,039 feet (KB) in a 7-7/8 inch hole with 300 sacks of Premium Lite II mixed and 450 sacks of 50/50 Pozmix of cement. Top of cement at 139 feet..

Adequate 80% bond index cement bond within the Confining Zone.

The schematic diagram shows enhanced recovery injection perforations in the Douglas Creek Member of the Green River Formation. Additional perforations may be added at a later time between the depths of 3,770 feet (top of Garden Gulch Member) and the top of the Wasatch Formation, estimated to be 6068 feet, provided the operator first notifies the Director and later submits an updated well completion report (EPA Form 7520-12) and schematic diagram.

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

**TABLE 3.1**  
**WELL CONSTRUCTION REQUIREMENTS**  
**Sundance Federal 5-6-9-18**

Casing Type	Hole Size (in)	Casing Size (in)	Cased Interval (ft)	Cemented Interval (ft)
Production	7.88	5.50	0 - 6,039	139 - 6,039
Surface	12.25	8.63	0 - 314	0 - 314

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

**Casing and Cementing (TABLE 3.1)**

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

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

**Tubing and Packer**

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

**Tubing-Casing Annulus (TCA)**

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

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

**Monitoring Devices**

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

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

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

**TABLE 4.1  
AOR AND CORRECTIVE ACTION**

Well Name	Type	Status (Abandoned Y/N)	Total Depth (ft)	TOC Depth (ft)	CAP Required (Y/N)
Federal No. 8-1-9-17	Producer	No	6,000	100	No
Federal NO. 12-6-9-18	Producer	No	5,980	310	No
Federal No. 6-6-8-18	Producer	No	5,950	160	Yes
Fedferal No. 4-6-9-18	Producer	No	6,267	114	No

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

### Area Of Review

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

### Corrective Action Plan

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

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

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

**TABLE 5.1**  
**INJECTION ZONE PRESSURES**  
**Sundance Federal 5-6-9-18**

Formation Name	Depth Used to Calculate MAIP (ft)	Fracture Gradient (psi/ft)	Initial MAIP (psi)
Green River: Garden Gulch-Douglas Creek-Basal Carbonate Members.	4,777	0.700	1,240

### Approved Injection Fluid

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

The proposed injectate will be a blend of culinary quality water from the Johnson Water District pipeline and/or water from the Green River pipeline, and produced Green River Formation water from wells proximate to the Sundance Federal No. 5-6-9-18.

### Injection Pressure Limitation

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

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

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

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

FP = formation fracture pressure (measured at surface)

fg = fracture gradient (from submitted data or tests)

sg = specific gravity (of injected fluid)

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

### Injection Volume Limitation

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

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

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

An injection well has mechanical integrity if:

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

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

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

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

PART I MI: Internal MI will be demonstrated prior to beginning injection. Since this well is constructed with a standard casing, tubing, and packer configuration, a successful mechanical integrity test (MIT) is required to take place at least once every five (5) years. A demonstration of Part I MI is also required prior to resuming injection following any workover operation that affects the casing, tubing or packer. Part I MI may be demonstrated by a standard tubing-casing annulus pressure test using the maximum permitted injection pressure or 1,000 psi, which ever is less, with a ten (10) percent or less pressure loss over thirty (30) minutes

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

### **Injection Well Monitoring Program**

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

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

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

### **Plugging and Abandonment Plan**

Prior to abandonment, the well shall be plugged in a manner that isolates the injection zone and prevents movement of fluid into or between USDWs, and in accordance with any applicable

Federal, State or local law or regulation. Tubing, packer and other downhole apparatus shall be removed. Cement with additives such as accelerators and retarders that control or enhance cement properties may be used for plugs; however, volume-extending additives and gel cements are not approved for plug use. Plug placement shall be verified by tagging. Plugging gel of at least 9.2 lb/gal shall be placed between all plugs. A minimum 50 ft surface plug shall be set inside and outside of the surface casing to seal pathways for fluid migration into the subsurface. Within sixty (60) days after plugging the owner or operator shall submit Plugging Record (EPA Form 7520-13) to the Director. The Plugging Record must be certified as accurate and complete by the person responsible for the plugging operation. The plugging and abandonment plan is described in Appendix E of the Permit.

See diagram.

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

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

**PLUG NO. 2: Seal Mahogany Shale and Trona intervals:** Squeeze a cement plug on the backside of the 5-1/2 inch casing across the Trona Zone and the Mahogany Shale approximately 2,875 feet to 3,050 feet (unless pre-existing backside cement precludes cement-squeezing this interval) followed by a minimum 175-foot balanced cement plug inside the 5-1/2 inch casing across the Trona Zone and the Mahogany Shale, approximately 2,875 feet to 3,050 feet.

**PLUG NO. 3: Seal USDWs:** Squeeze a cement plug (1,375 feet - 1,495 feet) on the backside of the 5-1/2 inch casing across the base of the Uinta formation (unless pre-existing backside cement precludes cement-squeezing this interval), followed by a minimum 120-foot (1,375 feet - 1,495 feet) balanced cement plug.

**PLUG NO.4: Seal Surface:** Set a Class "G" cement plug within the 5-1/2 inch casing to 364 feet and up the 5-1/2 inch by 8-5/8 inch casings annulus to the surface

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

### **Demonstration of Financial Responsibility**

The permittee is required to maintain financial responsibility and resources to close, plug, and abandon the underground injection operation in a manner prescribed by the Director. The permittee shall show evidence of such financial responsibility to the Director by the submission of a surety bond, or other adequate assurance such as financial statements or other materials acceptable to the Director. The Regional Administrator may, on a periodic basis, require the

holder of a lifetime permit to submit a revised estimate of the resources needed to plug and abandon the well to reflect inflation of such costs, and a revised demonstration of financial responsibility if necessary. Initially, the operator has chosen to demonstrate financial responsibility with:

An April 29, 2009 demonstration of Financial Responsibility in the amount of \$59,344 has been provided.

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

Financial Statement, received May 16, 2008

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

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

5. LEASE DESIGNATION AND SERIAL NUMBER:  
USA UTU-65970

**SUNDRY NOTICES AND REPORTS ON WELLS**

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

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

7. UNIT or CA AGREEMENT NAME:  
GMBU

1. TYPE OF WELL: OIL WELL  GAS WELL  OTHER

8. WELL NAME and NUMBER:  
SUNDANCE FEDERAL 5-6-9-18

2. NAME OF OPERATOR:  
NEWFIELD PRODUCTION COMPANY

9. API NUMBER:  
4304734932

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

PHONE NUMBER  
435.646.3721

10. FIELD AND POOL, OR WILDCAT:  
MONUMENT BUTTE

4. LOCATION OF WELL:

FOOTAGES AT SURFACE:

COUNTY: UINTAH

OTR/OTR. SECTION. TOWNSHIP. RANGE. MERIDIAN: SWNW, 6, T9S, R18E

STATE: UT

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

TYPE OF SUBMISSION	TYPE OF ACTION		
<input type="checkbox"/> NOTICE OF INTENT (Submit in Duplicate) Approximate date work will _____	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> REPERFORATE CURRENT FORMATION
	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> SIDETRACK TO REPAIR WELL
	<input type="checkbox"/> CASING REPAIR	<input type="checkbox"/> NEW CONSTRUCTION	<input type="checkbox"/> TEMPORARILY ABANDON
	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> TUBING REPAIR
	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> VENT OR FLAIR
<input checked="" type="checkbox"/> SUBSEQUENT REPORT (Submit Original Form Only) Date of Work Completion: 02/18/2010	<input type="checkbox"/> CHANGE WELL NAME	<input type="checkbox"/> PLUG BACK	<input type="checkbox"/> WATER DISPOSAL
	<input checked="" type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> PRODUCTION (START/STOP)	<input type="checkbox"/> WATER SHUT-OFF
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> OTHER: -
	<input checked="" type="checkbox"/> CONVERT WELL TYPE	<input type="checkbox"/> RECOMPLETE - DIFFERENT FORMATION	

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

The subject well has been converted from a producing oil well to an injection well on 02/18/2010.

On 02/08/2010 Jason Deardorff with the EPA was contacted concerning the initial MIT on the above listed well. Permission was given at that time to perform the test on 02/08/2010. On 02/18/2010 the casing was pressured up to 1495 psig and charted for 30 minutes with no pressure loss. The well was not injecting during the test. The tubing pressure was 250 psig during the test. There was not an EPA representative available to witness the test.

EPA# UT21233-08387

API# 43-047-34932

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

**RECEIVED**

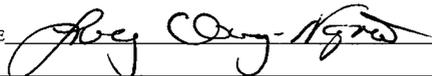
FEB 24 2010

DIV. OF OIL, GAS & MINING

NAME (PLEASE PRINT) Lucy Chavez-Naupoto

TITLE Administrative Assistant

SIGNATURE



DATE 02/22/2010

(This space for State use only)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

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

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

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

1. Type of Well  
 Oil Well  Gas Well  Other

2. Name of Operator  
NEWFIELD PRODUCTION COMPANY

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

3b. Phone (include are code)  
435.646.3721

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

SWNW Section 6 T9S R18E

5. Lease Serial No.

USA UTU-65970

6. If Indian, Allottee or Tribe Name.

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

GMBU

8. Well Name and No.

SUNDANCE FEDERAL 5-6-9-18

9. API Well No.

4304734932

10. Field and Pool, or Exploratory Area

MONUMENT BUTTE

11. County or Parish, State

UINTAH, UT

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

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

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

The subject well has been converted from a producing oil well to an injection well on 02/18/2010.

On 02/08/2010 Jason Deardorff with the EPA was contacted concerning the initial MIT on the above listed well. Permission was given at that time to perform the test on 02/08/2010. On 02/18/2010 the casing was pressured up to 1495 psig and charted for 30 minutes with no pressure loss. The well was not injecting during the test. The tubing pressure was 250 psig during the test. There was not an EPA representative available to witness the test.

EPA# UT21233-08387

API# 43-047-34932

RECEIVED

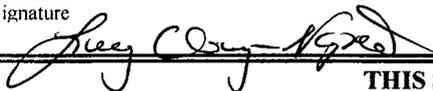
FEB 24 2010

DIV. OF OIL, GAS & MINING

I hereby certify that the foregoing is true and correct (Printed/ Typed)

Lucy Chavez-Naunoto

Signature



Title

Administrative Assistant

Date

02/22/2010

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

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

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

Title

Office

Date

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

(Instructions on page 2)

**Daily Activity Report**

Format For Sundry

**FEDERAL 5-6-9-18****12/1/2009 To 4/28/2010****RECEIVED****FEB 24 2010****DIV. OF OIL, GAS & MINING****2/13/2010 Day: 1****Conversion**

WWS #7 on 2/13/2010 - LD rod string. Start TOH W/ production tbg. - MIRU Western rig #7. RU HO trk to annulus & pump 60 BW @ 250°F. RU pumping unit & unseat rod pump. Flush tbg & rods W/ 30 BW @ 250°F. Re-seat pump, soft joint rod string & strip off flow-T. Fill tbg W/ 15 BW. Pressure test tbg to 3000 psi. Retrieve rod string & unseat pump. TOH & LD rod string and pump. Re-flushed rods twice more W/ 60 BW total on TOH. ND wellhead & release TA @ 5575'. NU BOP. TOH & talley production tbg. Break each connection, clean & inspect pins and apply Liquid O-ring to pins. Out W/ 80 jts. SIFN.

**Daily Cost:** \$0**Cumulative Cost:** \$22,001**2/15/2010 Day: 2****Conversion**

WWS #7 on 2/15/2010 - TOH W/ production tbg. TIH W/ packer & injection tbg. Trying to get tbg test. - Bleed gas off well. RU HO trk & flush tbg W/ 30 BW @ 250°F. Con't TOH & talley production tbg. Break each connection, clean & inspect pins and apply Liquid O-ring to pins. Re-flushed tbg twice more W/ 60 bbls. LD btm 30 jts tbg and BHA. MU & TIH W/ new Weatherford 5 1/2" Arrowset 1-X packer (W/ wicker slips & W.L. re-entry guide), new 2 7/8 SN & 150 jts 2 7/8 8rd 6.5# J-55 tbg. RU HO trk to tbg & pump 15 bbl pad. Drop standing valve & pump to SN. Pressure test tbg to 3000 psi. Bled gas off tbg several times, still can't get solid test. Re-pressure to 3000 psi & leave on over weekend.

**Daily Cost:** \$0**Cumulative Cost:** \$30,515**2/16/2010 Day: 3****Conversion**

WWS #7 on 2/16/2010 - Had solid tbg test. Pumped packer fluids & set packer. Having gas issues W/ casing test. - Thaw wellhead & tbg stump W/ HO trk. Bleed gas off casing. Tbg pressure @ 1750 psi. Bleed gas off tbg. RU HO trk & re-pressure tbg to 3000 psi. Holding solid for 30 minutes. Retrieve standing valve W/ overshot on sandline. ND BOP & land tbg on flange. Mix 15 gals Multi-Chem C-6031 & 5 gals B-8850 in 70 bbls fresh water. Pump dn annulus @ 90°F. PU on tbg & set pkr. Land tbg W/ 15,000# tension. NU wellhead. Pressure test annulus & pkr to 1500 psi. Bleed gas off & re-pressure several times. Can't call it a solid test. Re-pressure to 3000 psi & watch overnight.

**Daily Cost:** \$0**Cumulative Cost:** \$36,450**2/17/2010 Day: 4****Conversion**

WWS #7 on 2/17/2010 - Unable to get casing test. Start TOH to change packers. - Thaw wellhead W/ HO trk. Bleed gas off tbg, casing has slight blow? RU HO trk & re-pressure casing to 1500 psi. Leaking off 150 psi in 30 minutes. RU HO trk to tbg, pump 10 bbl pad & drop standing valve. Fill tbg & pressure test to 3000 psi. Holding solid, casing still leaking off. Retrieve standing valve W/ overshot on sandline. ND wellhead. Try to release pkr, having trouble W/ equalization. Add tbg sub & NU BOP. Pump 40 bbls down tbg (no pressure), finally able to release pkr. TOH W/ 20 jts tbg. SIFN.

**Daily Cost:** \$0**Cumulative Cost:** \$44,500

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**2/18/2010 Day: 5****Conversion**

WWS #7 on 2/18/2010 - Tripped new pkr. Re-tested tbg. Set pkr & pressure test annulus & packer. RDMOSU. - SICP @ 100 psi, SITP @ 150 psi. Bleed gas off well. RU HO trk & flush tbg W/ 30 BW @ 250°F and pump 30 bbls dn casing. Con't TOH W/ tbg. Packer is dragging through casing collars. Inspect packer--had a broken slip and all 3 elements are torn up. MU new packer, old SN & RIH on 149 jts injection tbg (shorten string by 1 jt). Pressure tested tbg in 3 increments on TIH. Final test of 3000 psi held solid. Retrieve standing valve W/ overshot on sandline. ND BOP. Set pkr W/ SN @ 4698', CE @ 4702' & EOT @ 4706'. Land tbg W/ 15,000# tension. NU wellhead. Mix packer fluids in 70 bbls fresh water & pump dn annulus @ 90°F. Casing filled in 63 bbls. Bled air & repressured annulus for 2 hrs. Holding 1500 psi solid for 1 hour. RDMOSU.

**Daily Cost:** \$0**Cumulative Cost:** \$50,445

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**2/19/2010 Day: 6****Conversion**

Rigless on 2/19/2010 - MIT on well - On 2/8/2010 Jason Deardorff with the EPA was contacted concerning the initial MIT on the above listed well (Federal 5-6-9-18). Permission was given at that time to perform the test on 2/8/2010. On 2/18/2010 the csg was pressured up to 1495 psig and charted for 30 minutes with no pressure loss. The well was not injecting during the test. The tbg pressure was 250 psig during the test. There was not an EPA representative available to witness the test. EPA# UT21233-08387 API#43-047-34932

**Finalized****Daily Cost:** \$0**Cumulative Cost:** \$50,745

---

**Pertinent Files: Go to File List**

RECEIVED  
FEB 24 2010  
DIV. OF OIL, GAS & MINING

# Mechanical Integrity Test

## Casing or Annulus Pressure Mechanical Integrity Test

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

EPA Witness: \_\_\_\_\_ Date: 2 / 18 / 2010  
 Test conducted by: Alfredo Rios  
 Others present: \_\_\_\_\_

Well Name: <u>Federal 5-6-9-18</u>	Type: ER SWD	Status: AC TA UC
Field: <u>Monument Butte</u>		
Location: <u>SW/NW</u> Sec: <u>6</u> T <u>9</u> N <u>(S)</u> R <u>18</u> <u>(E)</u> /W County: <u>Uintah</u> State: <u>Utah</u>		
Operator: _____		
Last MIT: <u>/ /</u>	Maximum Allowable Pressure: _____	PSIG

**RECEIVED**

Is this a regularly scheduled test?  Yes  No  
 Initial test for permit?  Yes  No  
 Test after well rework?  Yes  No  
 Well injecting during test?  Yes  No

FEB 24 2010

If Yes, rate: DIV. OF OIL, GAS & MINING pd

Pre-test casing/tubing annulus pressure: 0 psig

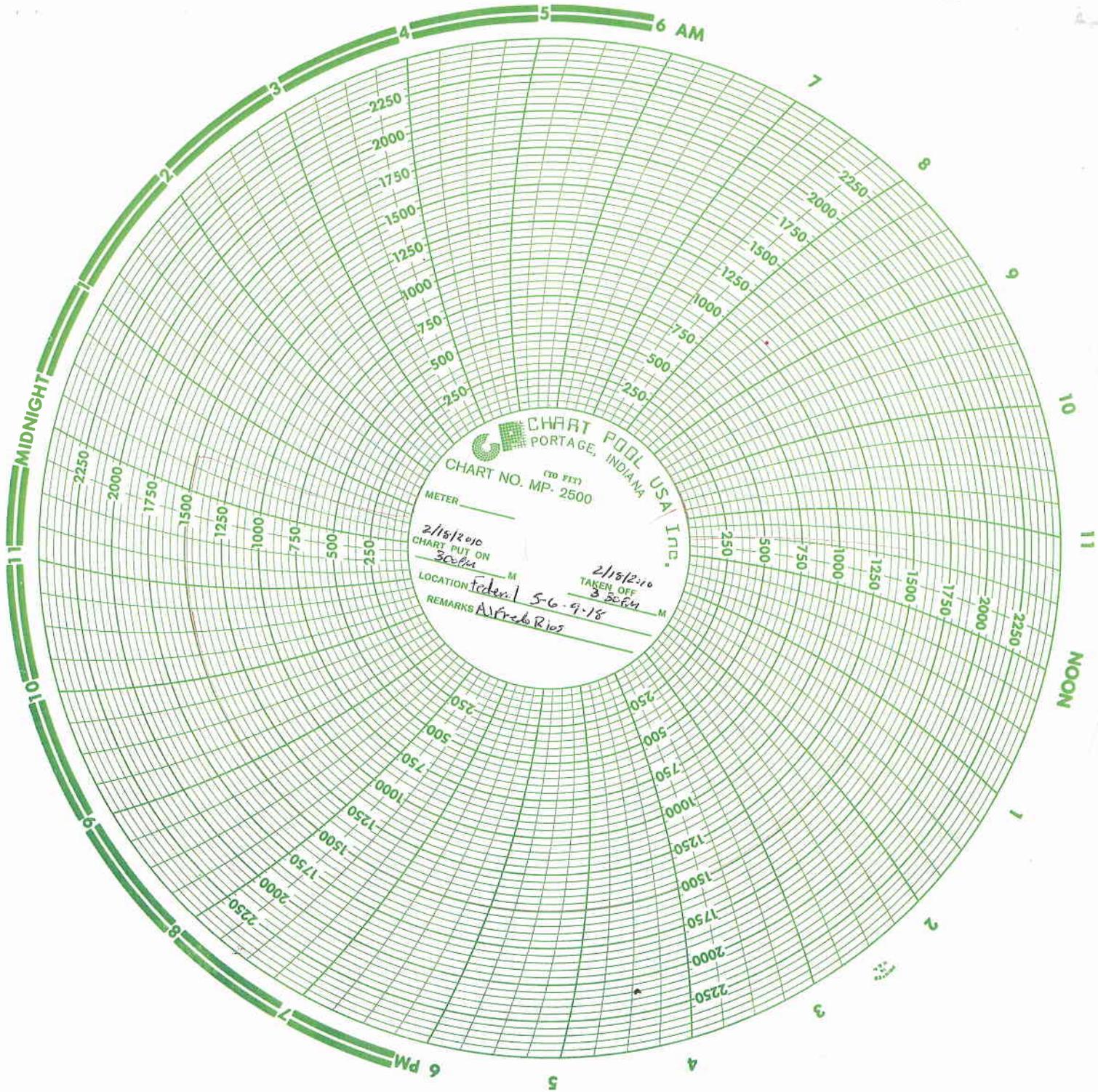
MIT DATA TABLE	Test #1	Test #2	Test #3
<b>TUBING PRESSURE</b>			
Initial Pressure	250 psig	psig	psig
End of test pressure	250 psig	psig	psig
<b>CASING / TUBING ANNULUS PRESSURE</b>			
0 minutes	1495 psig	psig	psig
5 minutes	1495 psig	psig	psig
10 minutes	1495 psig	psig	psig
15 minutes	1495 psig	psig	psig
20 minutes	1500 psig	psig	psig
25 minutes	1495 psig	psig	psig
30 minutes	1495 psig	psig	psig
_____ minutes	psig	psig	psig
_____ minutes	psig	psig	psig
<b>RESULT</b>	<input checked="" type="checkbox"/> Pass <input type="checkbox"/> Fail	<input type="checkbox"/> Pass <input type="checkbox"/> Fail	<input type="checkbox"/> Pass <input type="checkbox"/> Fail

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

### MECHANICAL INTEGRITY PRESSURE TEST

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

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



RECEIVED

FEB 24 2010

DIV. OF OIL, GAS & MINING



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 8**

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

**APR 07 2010**

Ref: 8P-W-GW

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

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

RE: Underground Injection Control (UIC)  
Authorization to Commence Injection  
EPA UIC Permit UT21233-08387  
Well: Sundance Federal 5-6-9-18  
SW NW Sec. 6-T9S-R18E  
Uintah County, UT  
API No.: 43-047-34932

Dear Mr. Guinn:

The Environmental Protection Agency Region 8 (EPA) has received Newfield Production Company's (Newfield) February 22, 2010, letter with enclosures. The enclosed Part I (internal) Mechanical Integrity test, Well Rework Record (EPA Form 7520-12), schematic diagram, and calculated pore pressure were reviewed and approved by EPA, satisfactorily completing all Prior to Commencing Injection Requirements for UIC Permit UT21233-08387.

As of the date of this letter, Newfield is authorized to commence injection into the Sundance Federal 5-6-9-18 well at a Maximum Allowable Injection Pressure (MAIP) of 1,240 psig. You may apply for a higher MAIP at a later date. Your application should be accompanied by the interpreted results of a step rate test that measures the fracture parting pressure and calculates the fracture gradient at this depth and location. Newfield must receive prior authorization from the Director to inject at pressures greater than the permitted MAIP during any test.

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

**RECEIVED**

**APR 15 2010**

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

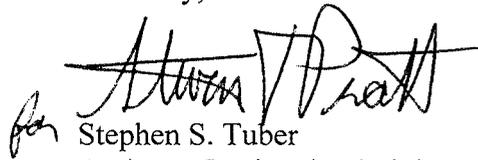
Mr. Nathan Wiser  
U.S. EPA Region 8: 8ENF-UFO  
1595 Wynkoop Street  
Denver, CO 80202-1129

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

Please remember that it is your responsibility to be aware of and to comply with all conditions of injection well Permit UT21233-08387.

If you have questions regarding the above action, please call Emmett Schmitz at 303-312-6174 or 1-800-227-8917, ext. 312-6174.

Sincerely,

A handwritten signature in black ink, appearing to read "Stephen S. Tuber". The signature is stylized with a large, sweeping "S" and "T".

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

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

Daniel Picard  
BIA - Uintah & Ouray Indian Agency

Ferron Secakuku  
Director, Natural Resources  
Ute Indian Tribe

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

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

Fluid Minerals Engineering Office  
BLM - Vernal Office

Eric Sundberg, Regulatory Analyst  
Newfield Production Company



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

5. LEASE DESIGNATION AND SERIAL NUMBER:  
USA UTU-65970

**SUNDRY NOTICES AND REPORTS ON WELLS**

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

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7. UNIT or CA AGREEMENT NAME:  
GMBU

1. TYPE OF WELL: OIL WELL  GAS WELL  OTHER

8. WELL NAME and NUMBER:  
SUNDANCE FEDERAL 5-6-9-18

2. NAME OF OPERATOR:  
NEWFIELD PRODUCTION COMPANY

9. API NUMBER:  
4304734932

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

10. FIELD AND POOL, OR WILDCAT:  
MONUMENT BUTTE

4. LOCATION OF WELL:  
FOOTAGES AT SURFACE:

COUNTY: Uintah

OTR/OTR. SECTION. TOWNSHIP. RANGE. MERIDIAN: SWNW, 6, T9S, R18E

STATE: UT

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

TYPE OF SUBMISSION	TYPE OF ACTION		
<input checked="" type="checkbox"/> NOTICE OF INTENT (Submit in Duplicate)  Approximate date work will 04/19/2010	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> REPERFORATE CURRENT FORMATION
	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> SIDETRACK TO REPAIR WELL
<input type="checkbox"/> SUBSEQUENT REPORT (Submit Original Form Only)  Date of Work Completion:	<input type="checkbox"/> CASING REPAIR	<input type="checkbox"/> NEW CONSTRUCTION	<input type="checkbox"/> TEMPORARITLY ABANDON
	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> TUBING REPAIR
	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> VENT OR FLAIR
	<input type="checkbox"/> CHANGE WELL NAME	<input type="checkbox"/> PLUG BACK	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> PRODUCTION (START/STOP)	<input type="checkbox"/> WATER SHUT-OFF
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input checked="" type="checkbox"/> OTHER: - Put on Injection
	<input checked="" type="checkbox"/> CONVERT WELL TYPE	<input type="checkbox"/> RECOMPLETE - DIFFERENT FORMATION	

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

The above reference well was put on injection at 2:30 PM on 04/19/2010.

EPA: UT21233-08387

NAME (PLEASE PRINT) Lucy Chavez-Naupoto

TITLE Administrative Assistant

SIGNATURE 

DATE 04/20/2010

(This space for State use only)

**RECEIVED**  
**APR 26 2010**  
DIV. OF OIL, GAS & MINING

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

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

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

1. Type of Well  
 Oil Well    Gas Well    Other

2. Name of Operator  
 NEWFIELD PRODUCTION COMPANY

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

3b. Phone    (include area code)  
                   435.646.3721

4. Location of Well    (Footage, Sec., T., R., M., or Survey Description)  
                             SWNW Section 6 T9S R18E

5. Lease Serial No.  
 USA UTU-65970

6. If Indian, Allottee or Tribe Name.

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

8. Well Name and No.  
 SUNDANCE FEDERAL 5-6-9-18

9. API Well No.  
 4304734932

10. Field and Pool, or Exploratory Area  
 MONUMENT BUTTE

11. County or Parish, State  
 UTAH, UT

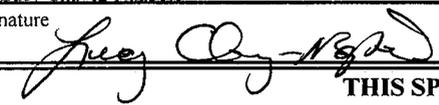
**12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, OR OTHER DATA**

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

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

The above reference well was put on injection at 2:30 PM on 04/19/2010.

EPA: UT21233-08387

I hereby certify that the foregoing is true and correct (Printed/ Typed) Lucy Chavez-Naupoto	Title Administrative Assistant
Signature 	Date 04/20/2010
<b>THIS SPACE FOR FEDERAL OR STATE OFFICE USE</b>	

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

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

(Instructions on page 2)

**RECEIVED**  
**APR 26 2010**  
DIV. OF OIL, GAS & MINING

<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		<b>FORM 9</b>
<b>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-65970
<b>1. TYPE OF WELL</b> Water Injection Well		<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b>
<b>2. NAME OF OPERATOR:</b> NEWFIELD PRODUCTION COMPANY		<b>7. UNIT or CA AGREEMENT NAME:</b> GMBU (GRRV)
<b>3. ADDRESS OF OPERATOR:</b> Rt 3 Box 3630 , Myton, UT, 84052		<b>8. WELL NAME and NUMBER:</b> SUNDANCE FED 5-6-9-18
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 2067 FNL 0709 FWL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: SWNW Section: 06 Township: 09.0S Range: 18.0E Meridian: S		<b>9. API NUMBER:</b> 43047349320000
<b>PHONE NUMBER:</b> 435 646-4825 Ext		<b>9. FIELD and POOL or WILDCAT:</b> 8 MILE FLAT NORTH
<b>COUNTY:</b> UINTAH		<b>STATE:</b> UTAH
11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA		
<b>TYPE OF SUBMISSION</b>	<b>TYPE OF ACTION</b>	
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start:	<input type="checkbox"/> ACIDIZE <input type="checkbox"/> ALTER CASING <input type="checkbox"/> CASING REPAIR <input type="checkbox"/> CHANGE TO PREVIOUS PLANS <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> CHANGE WELL NAME <input type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input type="checkbox"/> CONVERT WELL TYPE <input type="checkbox"/> DEEPEN <input type="checkbox"/> FRACTURE TREAT <input type="checkbox"/> NEW CONSTRUCTION <input type="checkbox"/> OPERATOR CHANGE <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> PLUG BACK <input type="checkbox"/> PRODUCTION START OR RESUME <input type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION <input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> TEMPORARY ABANDON <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> WATER DISPOSAL <input type="checkbox"/> WATER SHUTOFF <input type="checkbox"/> SI TA STATUS EXTENSION <input type="checkbox"/> WILDCAT WELL DETERMINATION	
<input checked="" type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion: <b>1/15/2015</b>	<input checked="" type="checkbox"/> OTHER	
<input type="checkbox"/> SPUD REPORT Date of Spud:	OTHER: <input type="text" value="5 YR MIT"/>	
<input type="checkbox"/> DRILLING REPORT Report Date:		
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc. 5 YR MIT performed on the above listed well. On 01/15/2015 the casing was pressured up to 1212 psig and charted for 30 minutes with no pressure loss. The well was injecting during the test. The tbq pressure was 1485 psig during the test. There was not an EPA representative available to witness the test. EPA #UT22197-08387		
<b>Accepted by the          Utah Division of          Oil, Gas and Mining          FOR RECORD ONLY          January 26, 2015</b>		
<b>NAME (PLEASE PRINT)</b> Lucy Chavez-Naupoto	<b>PHONE NUMBER</b> 435 646-4874	<b>TITLE</b> Water Services Technician
<b>SIGNATURE</b> N/A	<b>DATE</b> 1/16/2015	

# Casing or Annulus Pressure Mechanical Integrity Test

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

EPA Witness: \_\_\_\_\_ Date: 1/15/15  
 Test conducted by: JOHANNY SLIM  
 Others present: \_\_\_\_\_

Well Name: <u>SANDANCE FEDERAL 5-6918</u>	Type: ER SWD	Status: AC TA UC
Field: <u>CIRCLE MONUMENT BITE</u>		
Location: <u>5</u> Sec: <u>6 T 9 N 10 R 13 E W</u>	County: <u>VILLAGE</u>	State: <u>UT</u>
Operator: <u>NEWFIELD EXPLORATION COMPANY</u>		
Last MIT: <u>1</u>	Maximum Allowable Pressure: <u>1550</u>	PSIG

Is this a regularly scheduled test?  Yes  No  
 Initial test for permit?  Yes  No  
 Test after well rework?  Yes  No  
 Well injecting during test?  Yes  No If Yes, rate: 55 bpd

Pre-test casing/tubing annulus pressure: 0/1485 psig

MIT DATA TABLE	Test #1	Test #2	Test #3
<b>TUBING PRESSURE</b>			
Initial Pressure	<u>1485</u> psig	psig	psig
End of test pressure	<u>1485</u> psig	psig	psig
<b>CASING / TUBING ANNULUS PRESSURE</b>			
0 minutes	<u>1212</u> psig	psig	psig
5 minutes	<u>1212</u> psig	psig	psig
10 minutes	<u>1212</u> psig	psig	psig
15 minutes	<u>1212</u> psig	psig	psig
20 minutes	<u>1212</u> psig	psig	psig
25 minutes	<u>1212</u> psig	psig	psig
30 minutes	<u>1212</u> psig	psig	psig
_____ minutes	psig	psig	psig
_____ minutes	psig	psig	psig
<b>RESULT</b>	<input checked="" type="checkbox"/> Pass <input type="checkbox"/> Fail	<input type="checkbox"/> Pass <input type="checkbox"/> Fail	<input type="checkbox"/> Pass <input type="checkbox"/> Fail

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

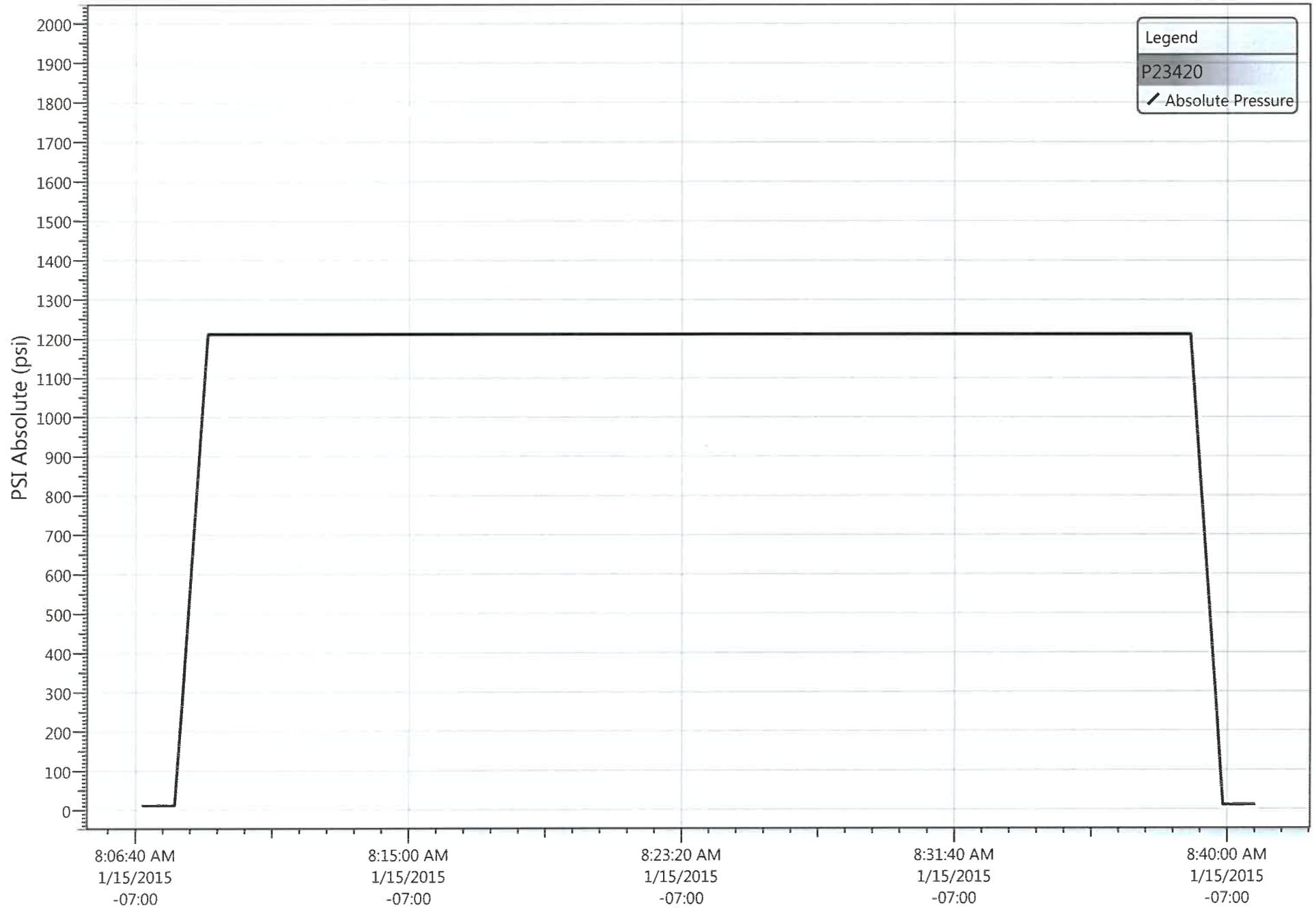
## MECHANICAL INTEGRITY PRESSURE TEST

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

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

### Sundance Federal 5-6-9-18 5yr MIT (1-15-15)

1/15/2015 8:05:31 AM



# SUNDANCE FEDERAL 5-6-9-18

Spud Date: 07/28/07  
 Put on Production: 09/19/07  
 GL: 5000' KB: 5012'

Initial Production: BOPD,  
 MCFD, BWPD

## Injection Wellbore Diagram

### SURFACE CASING

CSG SIZE: 8-5/8"  
 GRADE: J-55  
 WEIGHT: 24#  
 LENGTH: 7 jts. (301.56')  
 DEPTH LANDED: 313.56' 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: 156 jts. (6025.88')  
 DEPTH LANDED: 6039.13' KB  
 HOLE SIZE: 7-7/8"  
 CEMENT DATA: 300 sxs Prem. Lite II mixed & 450 sxs 50/50 POZ.  
 CEMENT TOP: 139'

### TUBING

SIZE/GRADE/WT.: 2-7/8" / J-55 / 6.5#  
 NO. OF JOINTS: 149 jts (4685.2')  
 SEATING NIPPLE: 2-7/8" (1.10')  
 SN LANDED AT: 4697.2' KB  
 CE @ 4701.57' w/ 12" KB  
 TOTAL STRING LENGTH: EOT @ 4706' KB

### FRAC JOB

09/12/07 5539-5647' **Frac CP2, CP1, CP.5 sands as follows:**  
 69930# 20/40 sand in 591 bbls Lightning 17 frac fluid. Treated @ avg press of 1234 psi w/avg rate of 24.9 BPM. ISIP 1454 psi. Calc flush: 5537 gal. Actual flush: 5032 gal.

09/13/07 5201-5281' **Frac A3 & LODC sands as follows:**  
 179901# 20/40 sand in 1245 bls Lightning 17 frac fluid. Treated @ avg press of 836 psi w/avg rate of 24.9 BPM. ISIP 1413 psi. Calc flush: 5199 gal. Actual flush: 4692 gal.

09/13/07 5124-5139' **Frac A1 sands as follows:**  
 49566# 20/40 sand in 455 bbls Lightning 17 frac fluid. Treated @ avg press of 1466 psi w/avg rate of 24.8 BPM. ISIP 1659 psi. Calc flush: 5122 gal. Actual flush: 4616 gal.

09/13/07 4777-4784' **Frac D2 sands as follows:**  
 18921# 20/40 sand in 309 bbls Lightning 17 frac fluid. Treated @ avg press of 1559 psi w/avg rate of 24.8 BPM. ISIP 2023 psi. Calc flush: 5122 gal. Actual flush: 4687 gal.

02/17/10 **Convert to Injection well**  
 02/18/10 **MIT completed - update tbg detail**

Cement Top @ 139'

Packer @ 4702'  
 EOT @ 4706'

4777-4784'

5124-5139'

5201-5216'

5236-5247'

5270-5281'

5539-5544'

5596-5608'

5637-5647'

PBTD @ 5998'

SHOE @ 6039'

TD @ 6055'

### PERFORATION RECORD

Date	Interval	JSFP	Holes
09/13/07	5637-5647'	4 JSFP	10 holes
09/13/07	5596-5608'	4 JSFP	48 holes
19/13/07	5539-5544'	4 JSFP	20 holes
09/13/07	5270-5281'	4 JSFP	44 holes
09/13/07	5236-5247'	4 JSFP	44 holes
09/13/07	5201-5216'	4 JSFP	60 holes
09/13/07	5124-5139'	4 JSFP	60 holes
09/13/07	4777-4784'	4 JSFP	28 holes

**NEWFIELD**

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**SUNDANCE FEDERAL 5-6-9-18**

2067' FNL & 709' FWL

SW/NW Section 6-T9S-R18E

Uintah Co, Utah

API #43-047-34932; Lease # UTU-65970