

Form 3160-3  
(September 2001)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

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

5. Lease Serial No.  
UTU-72106

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

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

8. Lease Name and Well No.  
Beluga Federal 16-18-9-17

9. API Well No.  
43-013-3 2809

10. Field and Pool, or Exploratory  
Monument Butte

11. Sec., T., R., M., or Blk. and Survey or Area  
SE/SE Sec. 18, T9S R17E

12. County or Parish  
Duchesne

13. State  
UT

1a. Type of Work:  DRILL  REENTER

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

2. Name of Operator  
Newfield Production Company

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

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

4. Location of Well (Report location clearly and in accordance with any State requirements. \*)  
At surface SE/SE 853' FSL 716' FEL 581774X 40.026036  
At proposed prod. zone 4430877Y -110.041671

14. Distance in miles and direction from nearest town or post office\*  
Approximatley 20.0 miles south of Myton, Utah

15. Distance from proposed\* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) Approx. 716' f/lse, 853' f/unit  
Approx. 1183'

16. No. of Acres in lease  
1188.92

17. Spacing Unit dedicated to this well  
40 Acres

18. Distance from proposed location\* to nearest well, drilling, completed, applied for, on this lease, ft. Approx. 1183'

19. Proposed Depth  
5715'

20. BLM/BIA Bond No. on file  
UT0056

21. Elevations (Show whether DF, KDB, RT, GL, etc.)  
5449' GL

22. Approximate date work will start\*  
4th Quarter 2005

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

24. Attachments

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

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

25. Signature *Mandie Crozier* Name (Printed/Typed) Mandie Crozier Date 6/2/05  
Title Regulatory Specialist

Approved by Signature *Bradley G. Hill* Name (Printed/Typed) BRADLEY G. HILL Date 06-14-05  
Title ENVIRONMENTAL SCIENTIST III

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

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

\*(Instructions on reverse)

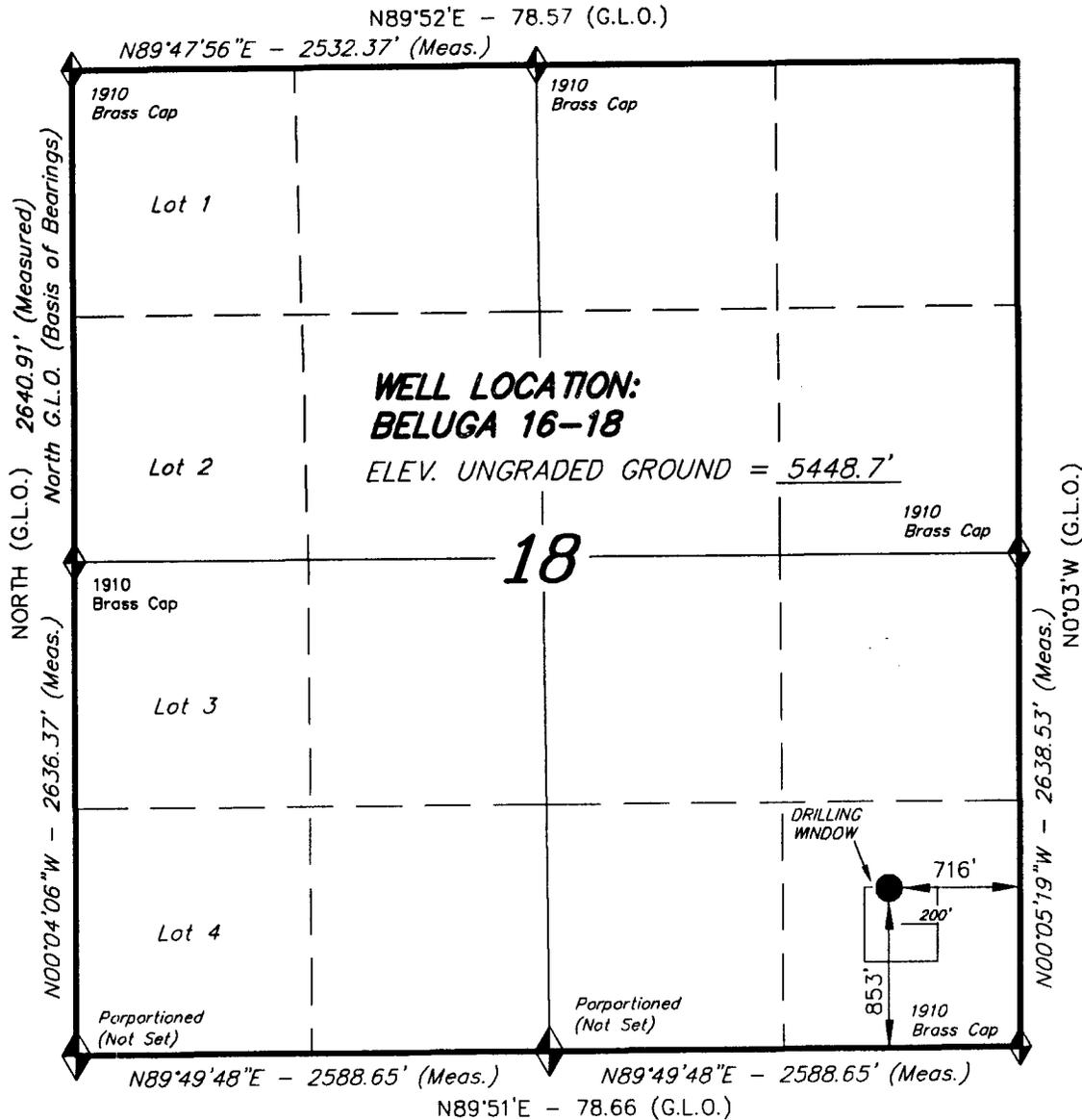
Federal Approval of this  
Action is Necessary

RECEIVED  
JUN 0 / 2005  
DIV. OF OIL, GAS & MINING

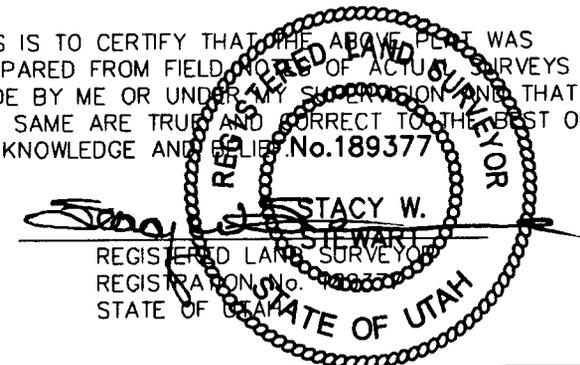
# T9S, R17E, S.L.B.&M.

## NEWFIELD PRODUCTION COMPANY

WELL LOCATION, BELUGA 16-18,  
 LOCATED AS SHOWN IN THE SE 1/4 SE  
 1/4 OF SECTION 18, T9S, R17E,  
 S.L.B.&M. DUCHESNE COUNTY, UTAH.



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



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

<b>TRI STATE LAND SURVEYING &amp; CONSULTING</b>	
180 NORTH VERNAL AVE. - VERNAL, UTAH 84078 (435) 781-2501	
SCALE: 1" = 1000'	SURVEYED BY: C.M.
DATE: 2-8-05	DRAWN BY: F.T.M.
NOTES:	FILE #

# United States Department of the Interior

## BUREAU OF LAND MANAGEMENT

Utah State Office

P.O. Box 45155

Salt Lake City, Utah 84145-0155

**IN REPLY REFER TO:**

3160

(UT-922)

June 10, 2005

Memorandum

To: Assistant District Manager Minerals, Vernal District  
 From: Michael Coulthard, Petroleum Engineer  
 Subject: 2004 Plan of Development Beluga Unit,  
 Duchesne County, Utah.

Pursuant to email between Diana Whitney, Division of Oil, Gas and Mining, and Mickey Coulthard, Utah State Office, Bureau of Land Management, the following wells are planned for calendar year 2004 within the Beluga Unit, Duchesne County, Utah.

API #	WELL NAME	LOCATION
(Proposed PZ Green River)		
43-013-32808	Beluga Federal	15-18-9-17 Sec 18 T09S R17E 0666 FSL 1979 FEL
43-013-32809	Beluga Federal	16-18-9-17 Sec 18 T09S R17E 0853 FSL 0716 FEL
43-013-32810	Beluga Federal	5-18-9-17 Sec 18 T09S R17E 1983 FNL 0661 FWL
43-013-32811	Beluga Federal	6-18-9-17 Sec 18 T09S R17E 2009 FNL 1829 FWL
43-013-32812	Beluga Federal	11-18-9-17 Sec 18 T09S R17E 1970 FSL 1980 FWL
43-013-32813	Beluga Federal	12-18-9-17 Sec 18 T09S R17E 1974 FSL 0659 FWL
43-013-32814	Beluga Federal	14-18-9-17 Sec 18 T09S R17E 0613 FSL 2056 FWL
43-013-32815	Beluga Federal	13-18-9-17 Sec 18 T09S R17E 0616 FSL 0678 FWL

This office has no objection to permitting the wells at this time.

/s/ Michael L. Coulthard

bcc: File - Beluga Unit  
 Division of Oil Gas and Mining  
 Central Files  
 Agr. Sec. Chron  
 Fluid Chron

MCoulthard:mc:6-10-05

NEWFIELD



June 2, 2005

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

RE: Applications for Permit to Drill: 15-18-9-17 and 16-18-9-17. ✓

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,

A handwritten signature in cursive script that reads "Mandie Crozier".

Mandie Crozier  
Regulatory Specialist

mc  
enclosures

RECEIVED

JUN 0 / 2005

DIV. OF OIL, GAS & MINING

NEWFIELD PRODUCTION COMPANY  
BELUGA FEDERAL #16-18-9-17  
SE/SE SECTION 18, T9S, R17E  
DUCHESNE COUNTY, UTAH

ONSHORE ORDER NO. 1

DRILLING PROGRAM

1. GEOLOGIC SURFACE FORMATION:

Uinta formation of Upper Eocene Age

2. ESTIMATED TOPS OF IMPORTANT GEOLOGIC MARKERS:

Uinta	0' – 2190'
Green River	2190'
Wasatch	5715'

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

Green River Formation 2190' – 5715' - Oil

4. PROPOSED CASING PROGRAM

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

5. MINIMUM SPECIFICATIONS FOR PRESSURE CONTROL:

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

6. TYPE AND CHARACTERISTICS OF THE PROPOSED CIRCULATION MUDS:

Please refer to the Monument Butte Field SOP.

7. AUXILIARY SAFETY EQUIPMENT TO BE USED:

Please refer to the Monument Butte Field SOP.

8. TESTING, LOGGING AND CORING PROGRAMS:

Please refer to the Monument Butte Field SOP.

9. ANTICIPATED ABNORMAL PRESSURE OR TEMPERATURE:

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

10. ANTICIPATED STARTING DATE AND DURATION OF THE OPERATIONS:

Please refer to the Monument Butte Field SOP.

**NEWFIELD PRODUCTION COMPANY  
BELUGA FEDERAL #16-18-9-17  
SE/SE SECTION 18, T9S, R17E  
DUCHESNE COUNTY, UTAH**

**ONSHORE ORDER NO. 1**

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

**1. EXISTING ROADS**

See attached Topographic Map "A"

To reach Newfield Production Company well location site Beluga Federal #16-18-9-17 located in the SE 1/4 SE1/4 Section 18, T9S, R17E, Duchesne County, Utah:

Proceed southwesterly out of Myton, Utah along Highway 40 - 1.6 miles  $\pm$  to the junction of this highway and UT State Hwy 53; proceed southerly along Hwy 53 - 14.6 miles  $\pm$  to an existing road to the southwest; proceed southwesterly and then southeasterly - 3.8 miles  $\pm$  to it's junction with the beginning of the proposed access road; proceed southwesterly along the proposed access road - 1,120'  $\pm$  to the proposed well location.

**2. PLANNED ACCESS ROAD**

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

**3. LOCATION OF EXISTING WELLS**

Refer to Exhibit "B".

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

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

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

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

**6. SOURCE OF CONSTRUCTION MATERIALS**

Please refer to the Monument Butte Field SOP.

**7. METHODS FOR HANDLING WASTE DISPOSAL**

Please refer to the Monument Butte Field SOP.

**8. ANCILLARY FACILITIES**

Please refer to the Monument Butte Field SOP.

9. WELL SITE LAYOUT

See attached Location Layout Diagram.

10. PLANS FOR RESTORATION OF SURFACE

Please refer to the Monument Butte Field SOP.

11. SURFACE OWNERSHIP - Bureau Of Land Management

12. OTHER ADDITIONAL INFORMATION

The Archaeological Resource Survey and Paleontological Resource Survey for this area are attached. AERC Report #1598, 7/21/98. Paleontological Resource Survey prepared by, Wade E. Miller, 5/11/05. See attached report cover pages, Exhibit "D".

For the Beluga Federal #16-18-9-17 Newfield Production Company requests 600' of disturbed area be granted in Lease UTU-74108 and 520' of disturbed area be granted in Lease UTU-72106 to allow for construction of the proposed access road. **Refer to Topographic Map "B"**. The proposed access road will be an 18' crown road (9' either side of the centerline) with drainage ditches along either side of the proposed road whether it is deemed necessary in order to handle any run-off from normal meteorological conditions that are prevalent to this area. The maximum grade will be less than 8%. There will be no culverts required along this access road. There will be barrow ditches and turnouts as needed along this road. There are no fences encountered along this proposed road. There will be no new gates or cattle guards required. All construction material for this access road will be borrowed material accumulated during construction of the access road.

Newfield Production Company requests 1940' of disturbed area be granted in Lease UTU-74108 and 1660' of disturbed area be granted in Lease UTU-72106 to allow for construction of the proposed gas lines. It is proposed that the disturbed area will be 50' wide to allow for construction of a 6" gas gathering line, and a 3" poly fuel gas line. Both lines will tie in to the existing pipeline infrastructure. **Refer to Topographic Map "C."** For a ROW plan of development, please refer to the Monument Butte Field SOP.

**Water Disposal**

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

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

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

**None.**

**Reserve Pit Liner**

Please refer to the Monument Butte Field SOP.

**Location and Reserve Pit Reclamation**

Please refer to the Monument Butte Field SOP.

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

Shadscale	<i>Atriplex confertifolia</i>	4 lbs/acre
Scarlet Globmallow	<i>Sphaeralcea conccinea</i>	4 lbs/acre
Crested Wheatgrass	<i>Agropyron cristatum</i>	4 lbs/acre

**Details of the On-Site Inspection**

The proposed Beluga Federal #16-18-9-17 was on-sited on 10/13/04. The following were present; Brad Mecham (Newfield Production), David Gerbig (Newfield Production), and Byron Tolman (Bureau of Land Management). Weather conditions were clear.

13. LESSEE'S OR OPERATORS REPRESENTATIVE AND CERTIFICATION

Representative

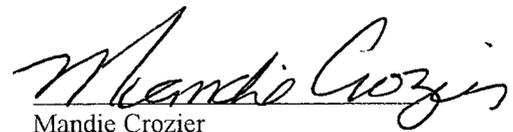
Name: Brad Mecham  
Address: Route #3 Box 3630  
Myton, UT 84052  
Telephone: (435) 646-3721

Certification

Please be advised that NEWFIELD PRODUCTION COMPANY is considered to be the operator of well #16-18-9-17 SE/SE Section 18, Township 9S, Range 17E: Lease UTU-72106 Duchesne County, Utah: and is responsible under the terms and conditions of the lease for the operations conducted upon the leased lands. Bond coverage is provided by Hartford Accident #4488944.

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

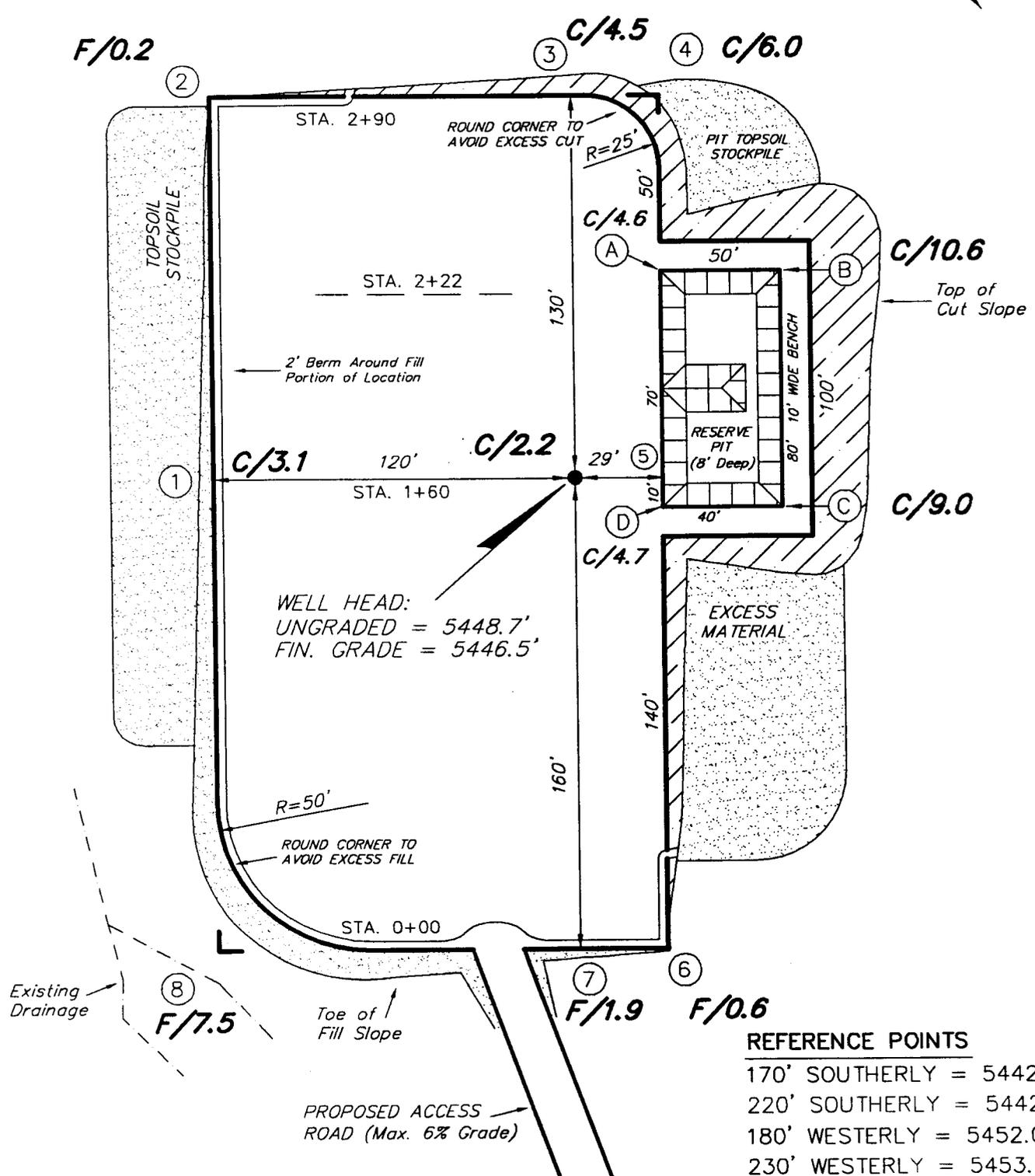
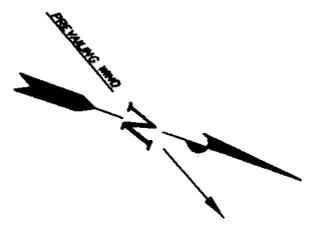
5/31/05  
Date

  
Mandie Crozier  
Regulatory Specialist  
Newfield Production Company

# NEWFIELD PRODUCTION COMPANY

## BELUGA 16-18

Section 18, T9S, R17E, S.L.B.&M.



**REFERENCE POINTS**

170' SOUTHERLY	= 5442.6'
220' SOUTHERLY	= 5442.8'
180' WESTERLY	= 5452.0'
230' WESTERLY	= 5453.7'

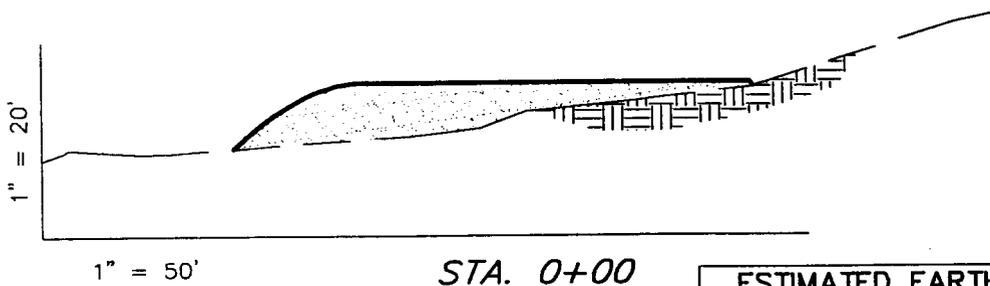
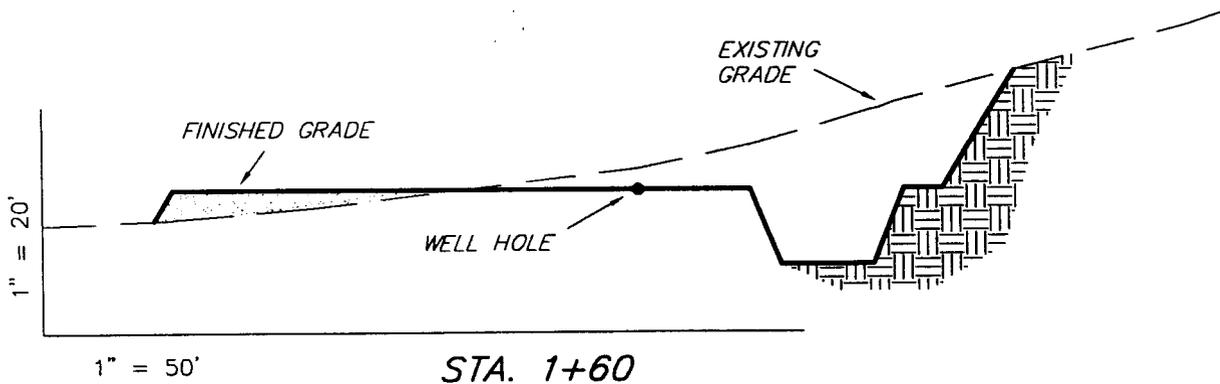
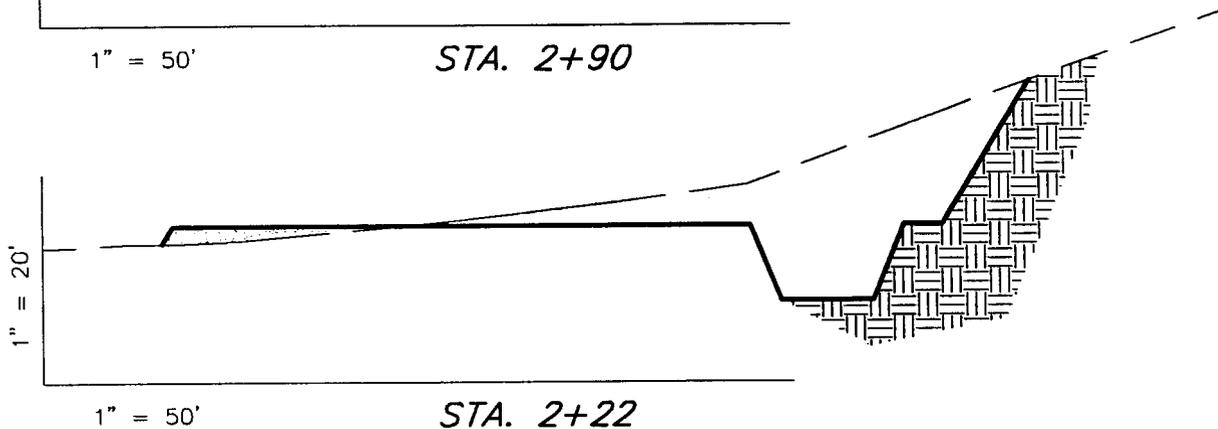
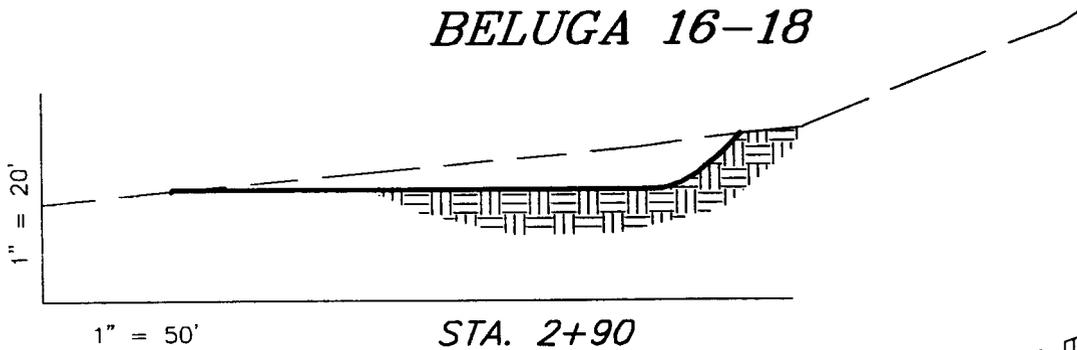
SURVEYED BY: C.M.	SCALE: 1" = 50'
DRAWN BY: F.T.M.	DATE: 2-8-05

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

# NEWFIELD PRODUCTION COMPANY

## CROSS SECTIONS

### BELUGA 16-18



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

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

ITEM	CUT	FILL	6" TOPSOIL	EXCESS
PAD	3,070	3,070	Topsoil is not included in Pad Cut	0
PIT	640	0		640
TOTALS	3,710	3,070	1,020	640

SURVEYED BY: C.M.

SCALE: 1" = 50'

DRAWN BY: F.T.M.

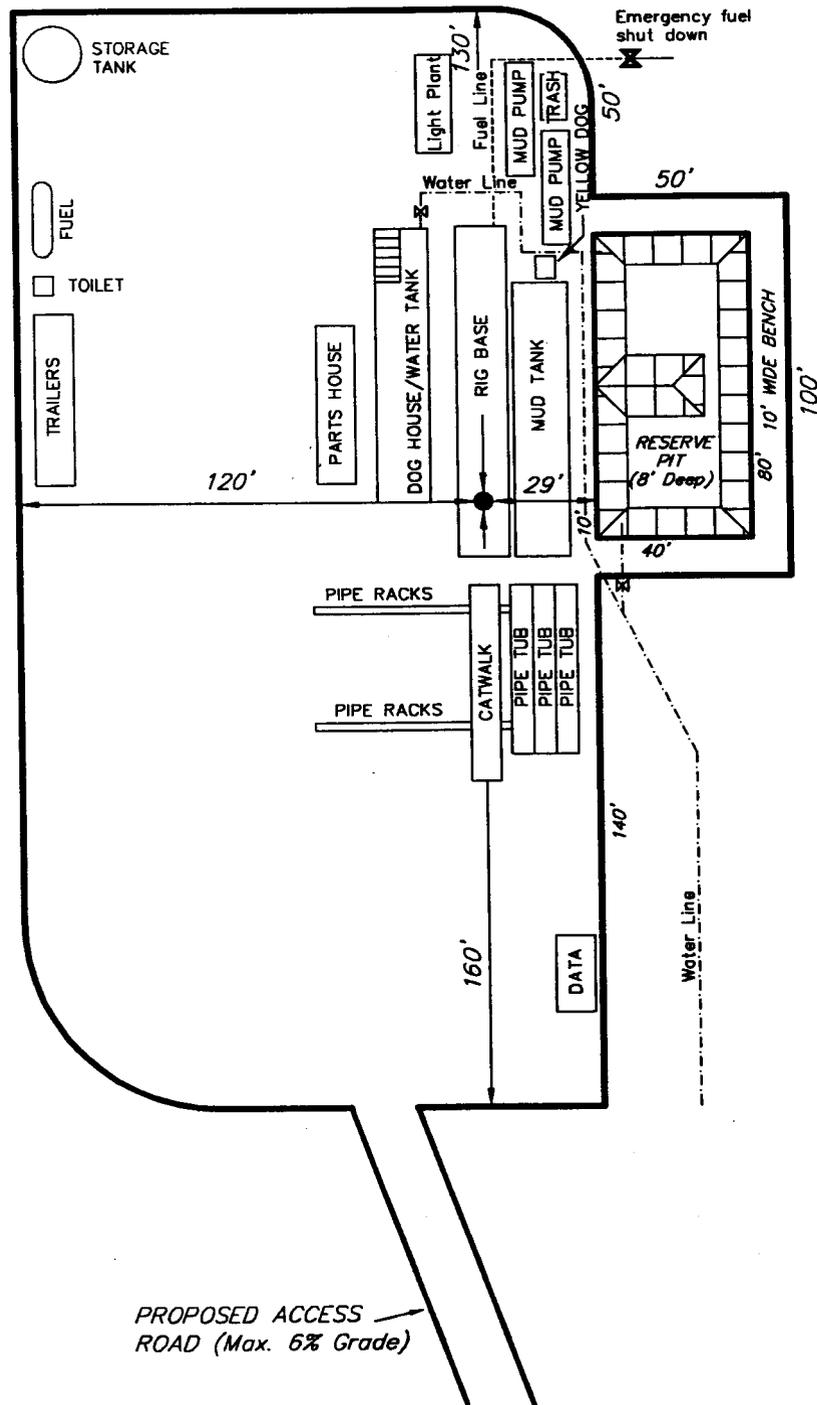
DATE: 2-8-05

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

# NEWFIELD PRODUCTION COMPANY

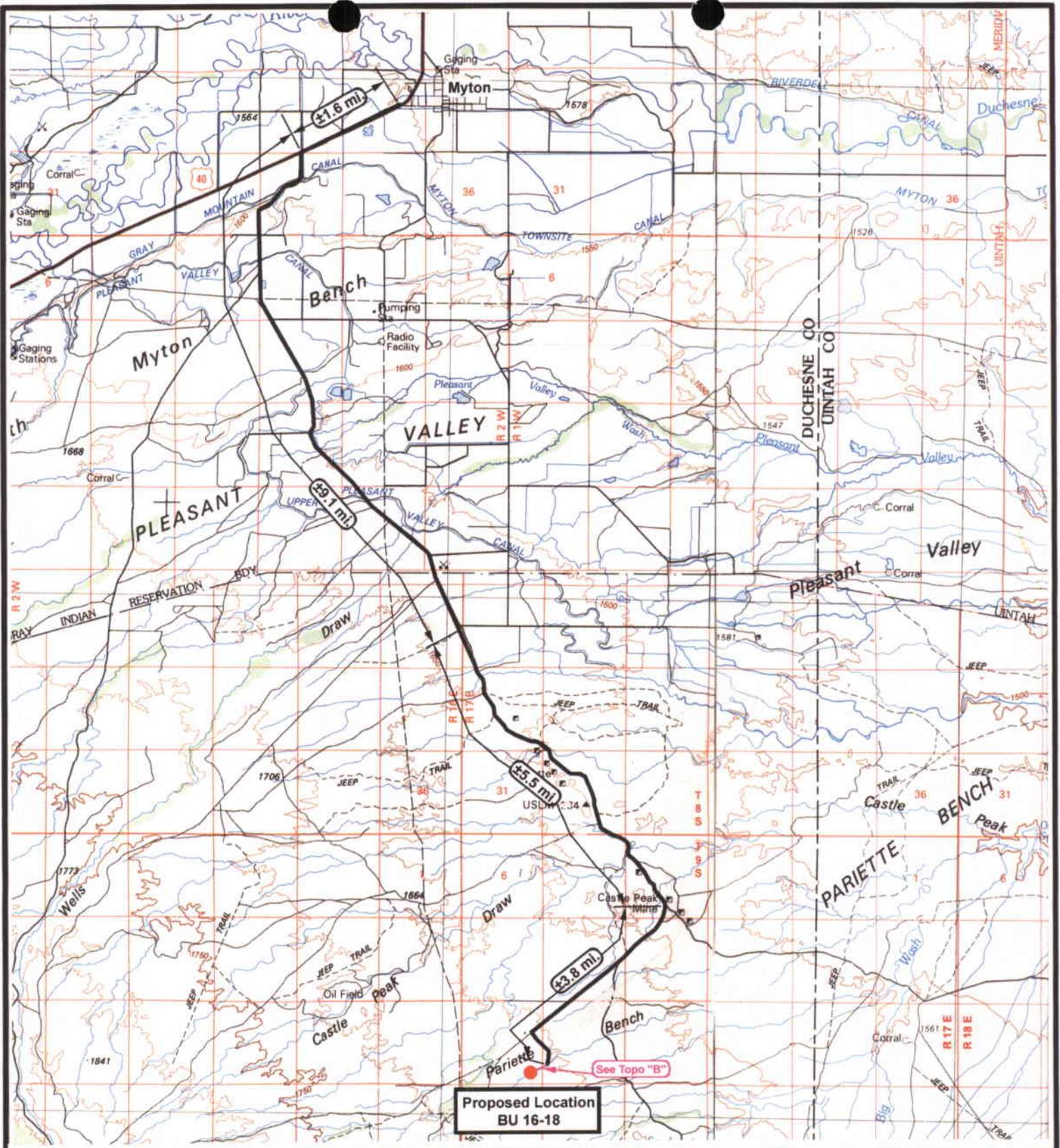
## TYPICAL RIG LAYOUT

### BELUGA 16-18



PROPOSED ACCESS ROAD (Max. 6% Grade)

SURVEYED BY: C.M.	SCALE: 1" = 50'	<b>Tri State</b> Land Surveying, Inc. <small>80 NORTH VERNAL AVE. VERNAL, UTAH 84078</small>
DRAWN BY: F.T.M.	DATE: 2-8-05	



Proposed Location  
BU 16-18

See Topo "B"

**NEWFIELD**  
Exploration Company

**Beluga Unit 16-18-9-17**  
**SEC. 18, T9S, R17E, S.L.B.&M.**



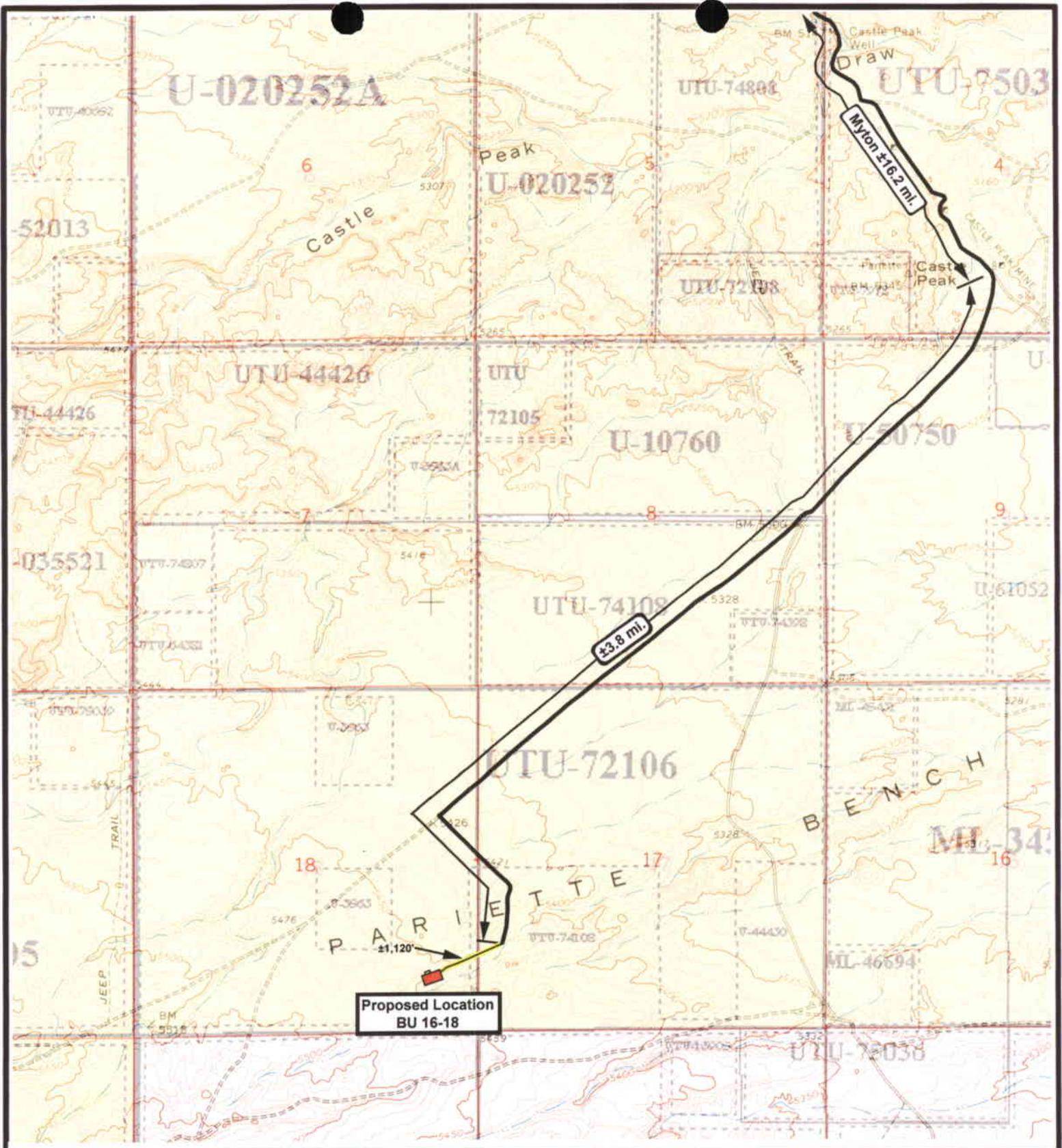
**Tri-State**  
Land Surveying Inc.  
(435) 781-2501  
180 North Vernal Ave. Vernal, Utah 84078

SCALE: 1 = 100,000  
DRAWN BY: mw  
DATE: 02-15-2005

**Legend**

- Existing Road
- Proposed Access

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



**Proposed Location  
BU 16-18**

  
**NEWFIELD**  
 Exploration Company

---

**Beluga Unit 16-18-9-17**  
**SEC. 18, T9S, R17E, S.L.B.&M.**



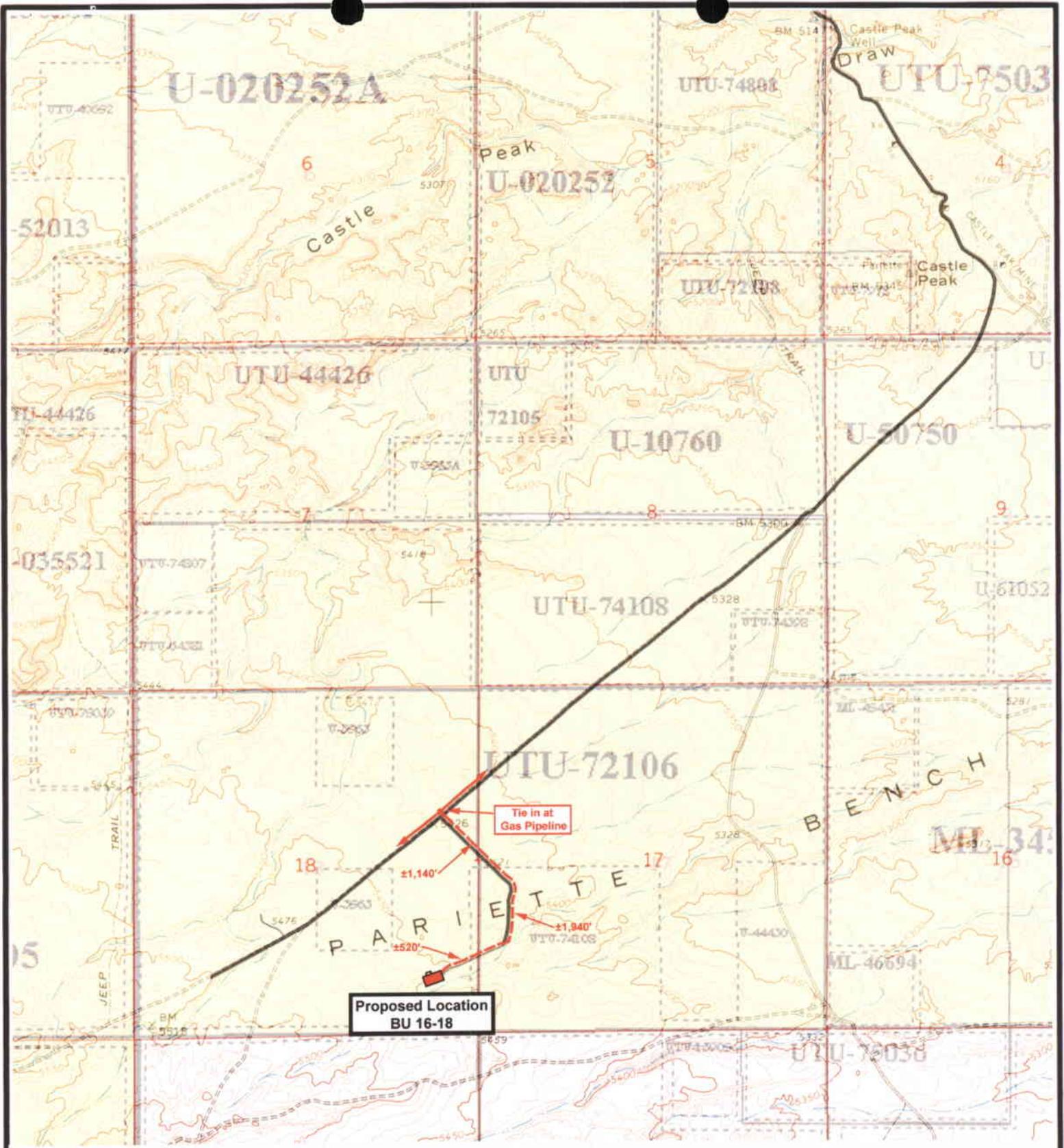
  
**Tri-State**  
*Land Surveying Inc.*  
 (435) 781-2501  
 180 North Vernal Ave. Vernal, Utah 84078

SCALE: 1" = 2000'  
 DRAWN BY: mw  
 DATE: 02-16-2005

**Legend**

 Existing Road  
 Proposed Access

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



**NEWFIELD**  
Exploration Company

**Beluga Unit 16-18-9-17**  
**SEC. 18, T9S, R17E, S.L.B.&M.**

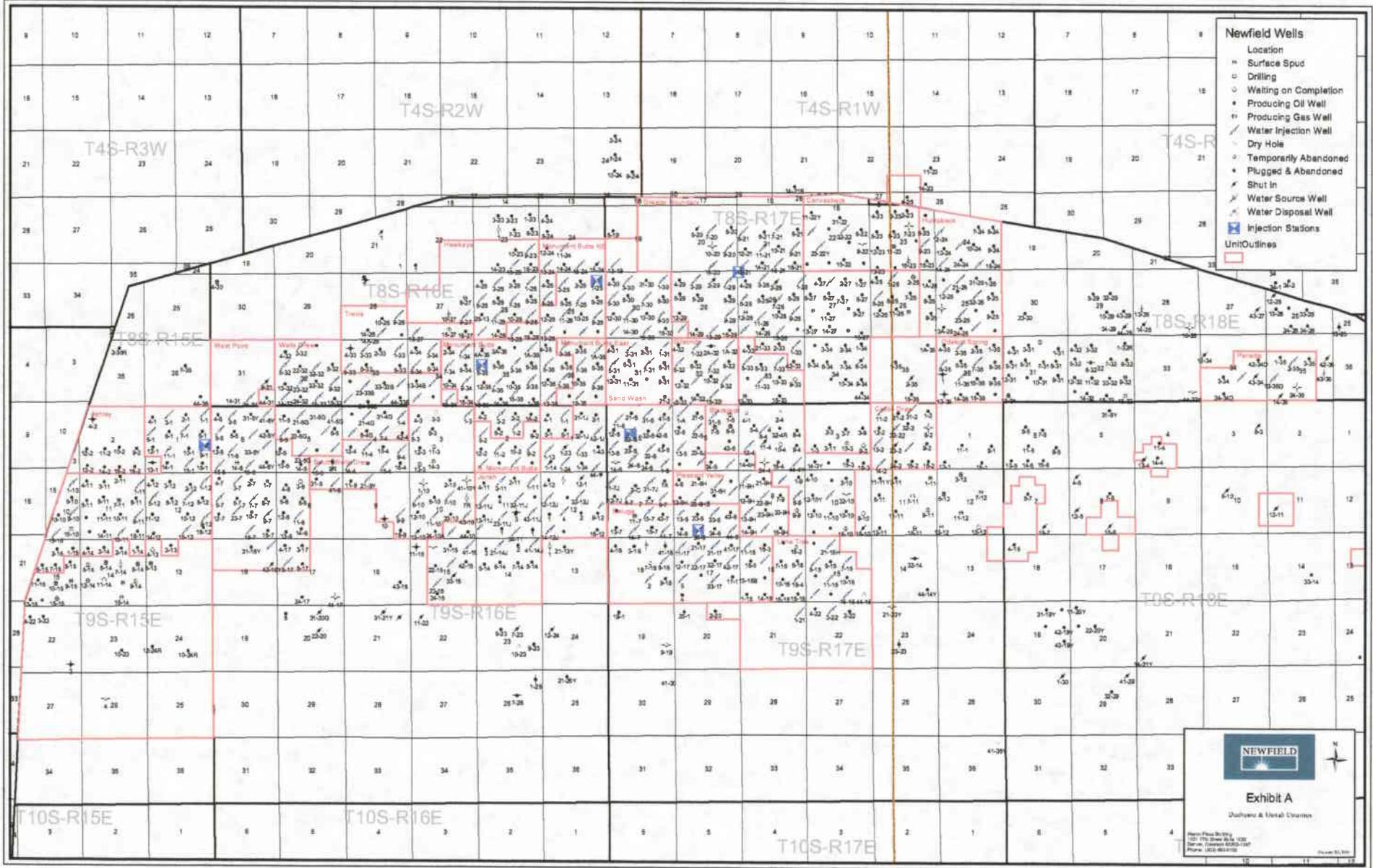


*Tri-State*  
*Land Surveying Inc.*  
(435) 781-2501  
180 North Vernal Ave. Vernal, Utah 84078

SCALE: 1" = 2000'  
DRAWN BY: mw  
DATE: 02-15-2005

Legend	
	Roads
	Existing Gas Line
	Proposed Gas Line

**TOPOGRAPHIC MAP**  
**"C"**



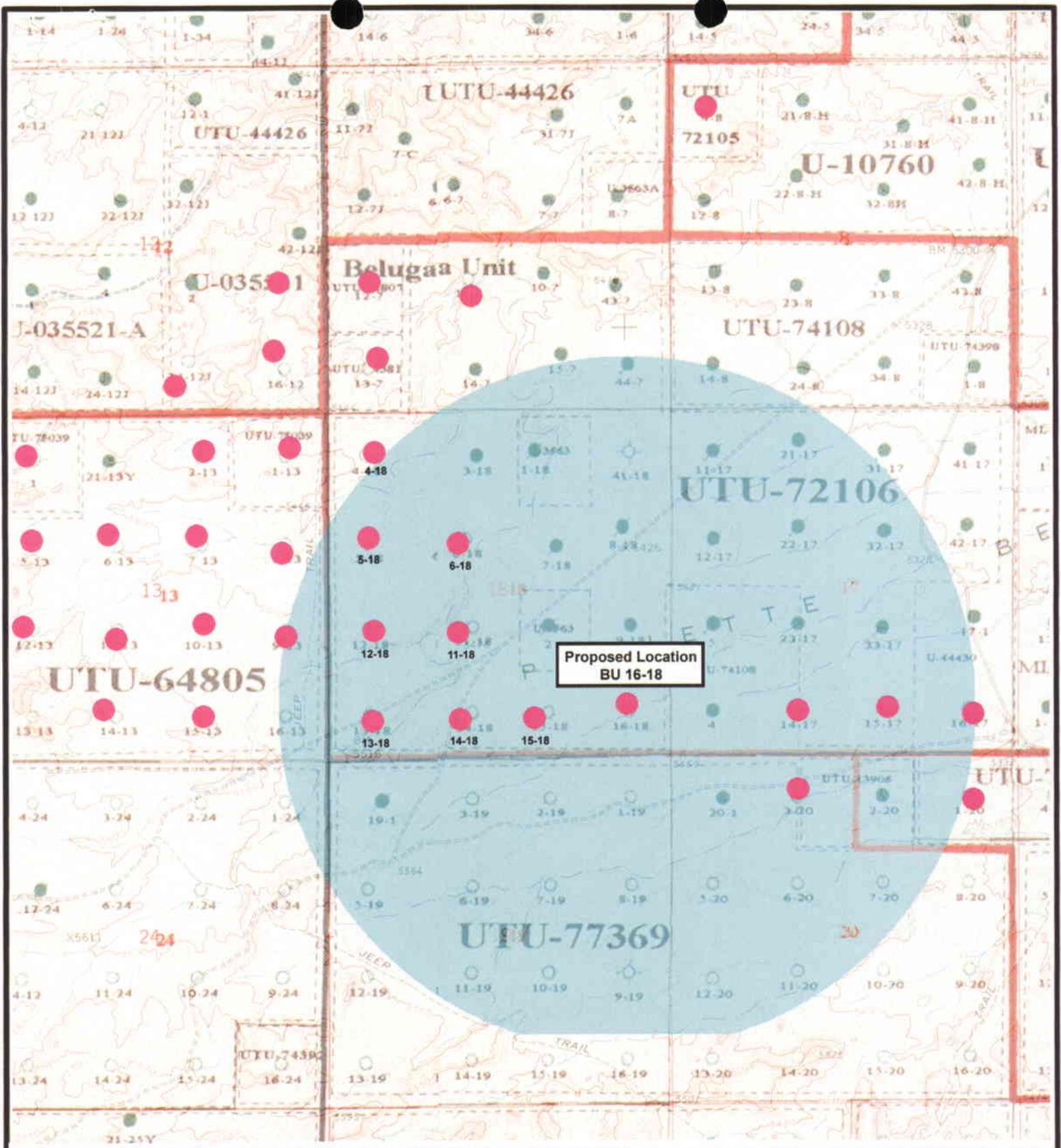
- Newfield Wells**
- Location
  - ⊙ Surface Spud
  - Drilling
  - Waiting on Completion
  - Producing Oil Well
  - Producing Gas Well
  - ⊙ Water Injection Well
  - Dry Hole
  - Temporarily Abandoned
  - ⊙ Plugged & Abandoned
  - ⊙ Shut In
  - ⊙ Water Source Well
  - ⊙ Water Disposal Well
  - ⊙ Injection Stations
- Unit Outlines**
- 

**NEWFIELD**

**Exhibit A**

Dakota & West Counties

North Platte District  
 1201 17th Street, Box 1028  
 North Platte, Nebraska 68901-1028  
 Phone: (402) 632-1100



**NEWFIELD**  
Exploration Company



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

**Legend**

- Proposed Location
- One-Mile Radius

**Belugaa Unit 16-18-9-17**  
**SEC. 18, T9S, R17E, S.L.B.&M.**

SCALE: 1" = 2000'  
DRAWN BY: mw  
DATE: 02-15-2005

**Exhibit "B"**

# 2-M SYSTEM

Blowout Prevention Equipment Systems

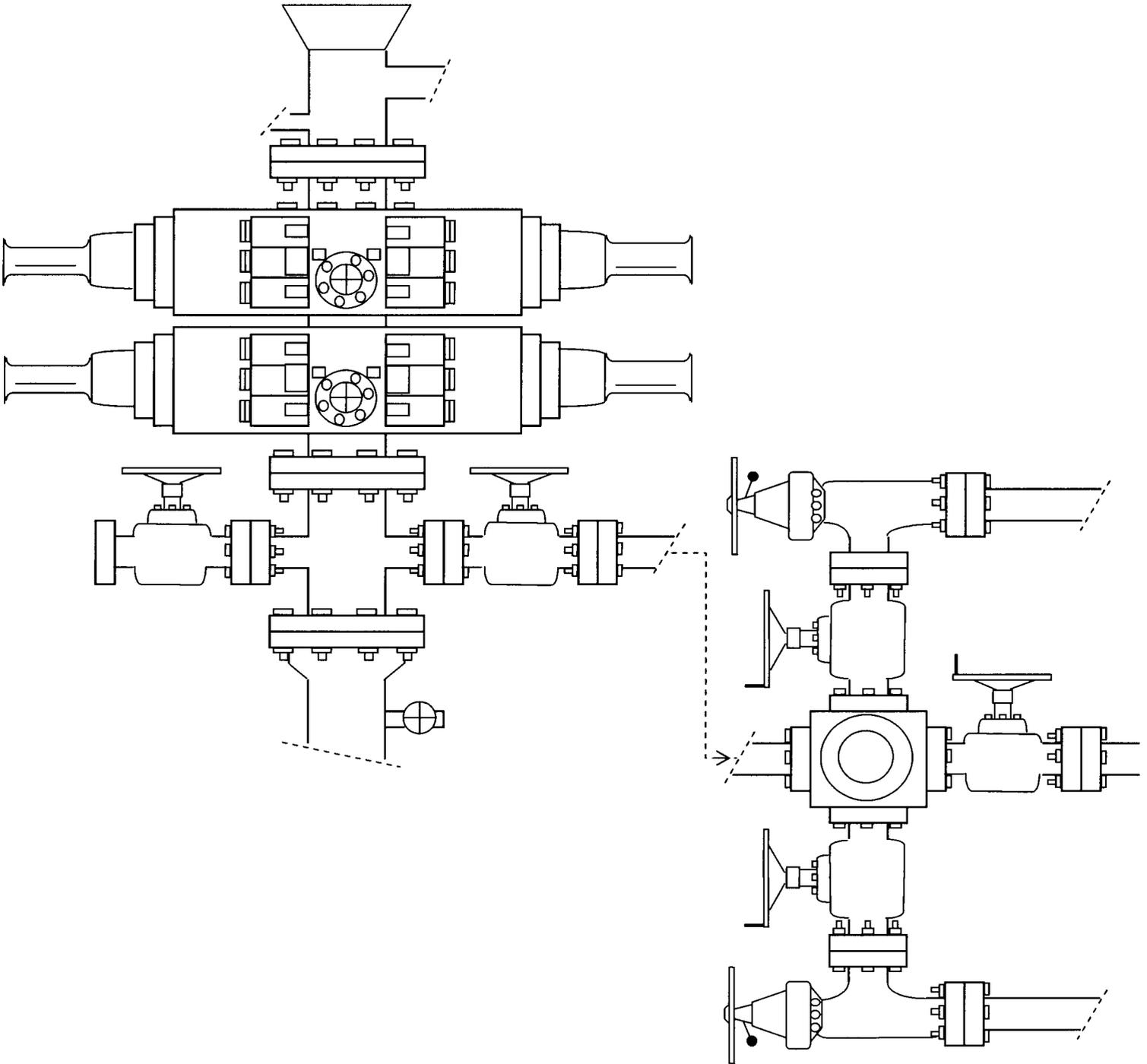


EXHIBIT C

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

Report Prepared for Inland Resources, Inc.

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

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

AERC Project 1598 (IPC98-4)

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



ARCHEOLOGICAL-ENVIRONMENTAL RESEARCH CORPORATION

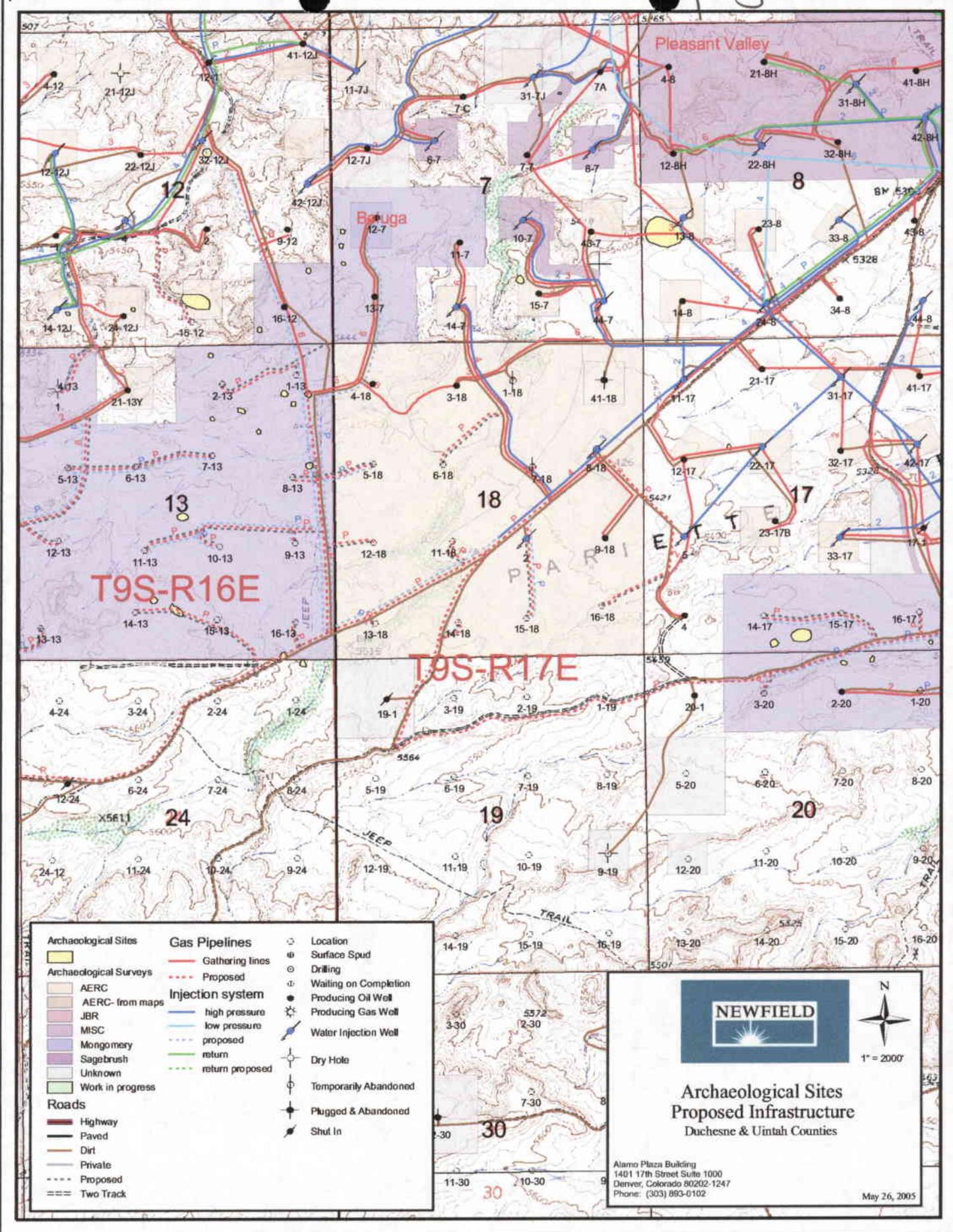
181 North 200 West, Suite 5 -- Bountiful, Utah 84010

P.O. Box 853, Bountiful, Utah 84011

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

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

July 21, 1998



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



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

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

May 26, 2005

**NEWFIELD PRODUCTION COMPANY**

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

Section 3, T 9 S, R 17 E [NE 1/4 & NW 1/4, NE 1/4 and NE 1/4, NW 1/4  
& SW 1/4, NW 1/4, and NE 1/4 & NW 1/4, SE 1/4]; Section 18, T 9 S, R 16 E  
[excluding NE 1/4, NW 1/4, & SE 1/4, NE 1/4]; Section 15, T 9 S, R 17 E [SE 1/4/ NE 1/4];  
Section 18, T 9 S, R 17 E [western half of section plus SE 1/4 & SW 1/4, SE 1/4];  
Section 33, T 8 S, R 16 E [NW 1/4, NW 1/4 and SW 1/4, NE 1/4]

**REPORT OF SURVEY**

Prepared for:

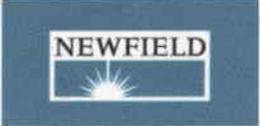
**Newfield Production Company**

Prepared by:

Wade E. Miller  
Consulting Paleontologist  
May 11, 2005



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



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

  
 1" = 2000'

Alamo Plaza Building  
1401 17th Street Suite 1000  
Denver, Colorado 80202-1247  
Phone: (303) 693-0102

May 26, 2005

WORKSHEET  
APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 06/07/2005

API NO. ASSIGNED: 43-013-32809

WELL NAME: BELUGA FED 16-18-9-17  
OPERATOR: NEWFIELD PRODUCTION ( N2695 )  
CONTACT: MANDIE CROZIER

PHONE NUMBER: 435-646-3721

PROPOSED LOCATION:

SESE 18 090S 170E  
SURFACE: 0853 FSL 0716 FEL  
BOTTOM: 0853 FSL 0716 FEL  
DUCHESNE  
MONUMENT BUTTE ( 105 )

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

LEASE TYPE: 1 - Federal  
LEASE NUMBER: UTU-72106  
SURFACE OWNER: 1 - Federal  
PROPOSED FORMATION: GRRV  
COALBED METHANE WELL? NO

LATITUDE: 40.02604  
LONGITUDE: -110.0417

RECEIVED AND/OR REVIEWED:

- Plat
- Bond: Fed[1] Ind[] Sta[] Fee[]  
(No. UT0056 )
- 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 BELUGA (GREEN RIVER)
- \_\_\_ R649-3-2. General  
Siting: 460' From Qtr/Qtr & 920' Between Wells
- \_\_\_ R649-3-3. Exception
- Drilling Unit  
Board Cause No: 228-4  
Eff Date: 2-4-96  
Siting: 460' fr u bdrz & 920' fr other wells.
- \_\_\_ R649-3-11. Directional Drill

COMMENTS: Sup. Separate file

STIPULATIONS: 1. Federal Approval



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

**SEC: 18 T. 9S R. 17E**

**FIELD: MONUMENT BUTTE (105)**

**COUNTY: DUCHESNE**

**CAUSE: 228-4 / 2-4-1996**



Wells	Units.shp	Fields.shp
⚡ GAS INJECTION	🔵 EXPLORATORY	⬛ ABANDONED
⊙ GAS STORAGE	🔷 GAS STORAGE	🔴 ACTIVE
✕ LOCATION ABANDONED	🟢 NF PP OIL	🟡 COMBINED
⊕ NEW LOCATION	🔵 NF SECONDARY	🟠 INACTIVE
⬥ PLUGGED & ABANDONED	🔵 PENDING	🟡 PROPOSED
⚡ PRODUCING GAS	🟢 PI OIL	🔴 STORAGE
⊙ PRODUCING OIL	🔴 PP GAS	⬛ TERMINATED
⊕ SHUT-IN GAS	🔷 PP GEOTHERML	
⊕ SHUT-IN OIL	🟢 PP OIL	
✕ TEMP. ABANDONED	🔵 SECONDARY	
⊙ TEST WELL	⬛ TERMINATED	
⚡ WATER INJECTION		
⊕ WATER SUPPLY		
⚡ WATER DISPOSAL		



**PREPARED BY: DIANA WHITNEY**  
**DATE: 9-JUNE-2005**

**State of Utah****Department of  
Natural Resources**

MICHAEL R. STYLER  
*Executive Director*

**Division of  
Oil, Gas & Mining**

JOHN R. BAZA  
*Division Director*

JON M. HUNTSMAN, JR.  
*Governor*

GARY R. HERBERT  
*Lieutenant Governor*

June 14, 2005

Newfield Production Company  
Route #3, Box 3630  
Myton, Utah 84052

Re: Beluga Federal 16-18-9-17 Well, 853' FSL, 716' FEL, SE SE, Sec. 18,  
T. 9 South, R. 17 East, Duchesne County, Utah

Gentlemen:

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

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date. The API identification number assigned to this well is 43-013-32809.

Sincerely,

A handwritten signature in black ink, appearing to read "Gil Hunt".

Gil Hunt  
Acting Associate Director

jc  
Enclosures

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



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

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

**SUNDRY NOTICES AND REPORTS ON WELLS**

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

5. Lease Designation and Serial No.  
**UTU-72106**

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

7. If Unit or CA, Agreement Designation  
**BELUGA**

8. Well Name and No.  
**BELUGA FEDERAL 16-18-9-17**

9. API Well No.  
**43-013-32809**

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

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

**SUBMIT IN TRIPLICATE**

1. Type of Well  
 Oil Well     Gas Well     Other

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

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

4. Location of Well (Footage, Sec., T., R., m., or Survey Description)  
**853 FSL 716 FEL                      SE/SE Section 18, T9S R17E**

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

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 6/14/05 (expiration 6/14/06).

This APD has not been approved yet by the BLM.

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

Date: 06-05-06  
 By: [Signature]

COPY SENT TO OPERATOR  
 Date: 10/6/06  
 Initials: DM

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

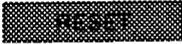
Signed Mandie Crozier Title Regulatory Specialist Date 6/1/2006  
 Mandie Crozier

CC: CLAIM DOGM

(This space for Federal or State office use)

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

**RECEIVED**  
**JUN 02 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)

**API:** 43-013-32809  
**Well Name:** Beluga Federal 16-18-9-17  
**Location:** SE/SE Section 18, T9S R17E  
**Company Permit Issued to:** Newfield Production Company  
**Date Original Permit Issued:** 6/14/2005

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

6/1/2006  
Date

Title: Regulatory Specialist

Representing: Newfield Production Company

**RECEIVED**  
**JUN 02 2006**  
 DIV. OF OIL, GAS & MINING

RECEIVED

JUN - 3 2005

BLM VERNAL, UTAH

Form 3160-3  
(September 2001)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

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

5. Lease Serial No.  
UTU-72106

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

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

8. Lease Name and Well No.  
Beluga Federal 16-18-9-17

9. API Well No.  
43-013-32809

10. Field and Pool, or Exploratory  
Monument Butte

11. Sec., T., R., M., or Blk. and Survey or Area  
SE/SE Sec. 18, T9S R17E

12. County or Parish  
Duchesne

13. State  
UT

1a. Type of Work:  DRILL  REENTER

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

2. Name of Operator  
Newfield Production Company

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

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

4. Location of Well (Report location clearly and in accordance with any State requirements.)\*  
At surface SE/SE 853' FSL 716' FEL  
At proposed prod. zone

14. Distance in miles and direction from nearest town or post office\*  
Approximatley 20.0 miles south of Myton, Utah

15. Distance from proposed\* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) Approx. 716' f/lse, 853' f/unit

16. No. of Acres in lease  
1188.92

17. Spacing Unit dedicated to this well  
40 Acres

18. Distance from proposed location\* to nearest well, drilling, completed, applied for, on this lease, ft. Approx. 1183'

19. Proposed Depth  
5715'

20. BLM/BIA Bond No. on file  
UT0056

21. Elevations (Show whether DF, KDB, RT, GL, etc.)  
5449' GL

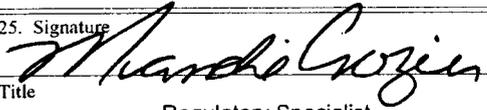
22. Approximate date work will start\*  
4th Quarter 2005

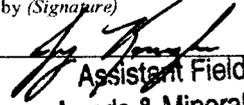
23. Estimated duration  
Approximately seven (7) days from spud to rig release.

24. Attachments

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

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

25. Signature  Name (Printed/Typed) Mandie Crozier Date 6/2/05  
Title Regulatory Specialist

Approved by (Signature)  Name (Printed/Typed) Jerry Hancock Date 2-15-2007  
Title Assistant Field Manager Office VERNAL FIELD OFFICE  
Lands & Mineral Resources

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

Conditions of approval, if any, are attached.

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

\*(Instructions on reverse)

NOTICE OF APPROVAL CONDITIONS OF APPROVAL ATTACHED RECEIVED

FEB 22 2007

DIV. OF OIL, GAS & MINING

07BM4854A



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:** Beluga Federal 16-18-9-17  
**API No:** 43-013-32809

**Location:** SESE, Sec 18, T9S, R17E  
**Lease No:** UTU-72106  
**Agreement:** Beluga (Green River) 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	
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:	Melissa Hawk	435-781-4476	435-828-7381
NRS/Enviro Scientist:	Chuck MacDonald	435-781-4441	
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	

**After Hours Contact Number:** 435-781-4513      Fax: 435-781-4410

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

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

**NOTIFICATION REQUIREMENTS**

Location Construction (Notify NRS/Enviro Scientist)	-	Forty-Eight (48) hours prior to construction of location and access roads.
Location Completion (Notify NRS/Enviro 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 Supervisory Petroleum Technician)	-	Twenty-Four (24) hours prior to running casing and cementing all casing strings
BOP & Related Equipment Tests (Notify Supervisory Petroleum Technician)	-	Twenty-Four (24) hours prior to initiating pressure tests
First Production Notice (Notify Petroleum Engineer)	-	Within Five (5) business days after new well begins or production resumes after well has been off production for more than ninety (90) days

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

**STIPULATIONS:**

Wildlife stipulations:  
None

**CONDITIONS OF APPROVAL:**

- All applicable local, state, and/or federal laws, regulations, and/or statutes will be complied with.
- All traffic related to this action will be restricted to approved routes. Cross-country vehicle travel will not be allowed.
- No vehicle travel, construction or routine maintenance activities shall be performed during periods when the soil is too wet to adequately support vehicles and/or construction equipment. If such equipment creates ruts in excess of four inches deep, the soil shall be deemed too wet to adequately support construction equipment.
- The access road will be crowned and ditched. Flat-bladed roads are not allowed.
- If additional erosion occurs during the life of this project, more culverts, low water crossings, berms, wing ditches or etc. will be needed to control the erosion.
- Low-water crossings will be appropriately constructed to avoid sedimentation of drainage ways and other water resources.
- Pipelines will be buried at all major drainage crossings.
- Prevent fill and stock piles from entering drainages.
- The reserve pit will be lined with a 12 ml or greater liner and felt prior to spudding.
- The liner is to be cut 5 feet below ground surface or at the level of the cuttings, whichever is deeper, and the excess liner material is to be disposed of at an authorized disposal site.
- When the reserve pit contains fluids or toxic substances, the operator must ensure animals do not ingest or become entrapped in pit fluids.
- If paleontologic or cultural materials are uncovered during construction, the operator shall immediately stop work that might further disturb or move such materials and contact the Authorized Officer (AO) within 48 hours. A determination will be made by the AO as to necessary mitigation for the discovered paleontologic/cultural material.
- If Uinta Basin hookless cactus or other special status plants are found, construction will cease and the AO will be notified to determine the appropriate mitigation.

The interim seed mix for this location shall be:

Crested Wheat grass (Agropyron cristatum):	4 lbs/acre
Indian Rice grass (Achnatherum hymenoides):	4 lbs/acre
Shadscale (triplex confertifolia):	4 lbs/acre
Scarlet Globemallow (Sphaeralcea coccinea)	1 lbs/acre

All pounds are in pure live seed.

Rates are set for drill seeding; double the rate if broadcasting.

Reseeding may be required if initial seeding is not successful.

- The operator will be responsible for treatment and control of invasive and noxious weeds.
- The topsoil from the reserve pit shall be stripped and piled separately near the reserve pit. When the reserve pit is closed, it shall be recontoured and the topsoil respread, and the area shall be seeded in the same manner as the location topsoil.
- Once the location is plugged and abandoned, it shall be recontoured to natural topology, topsoil shall be respread, and the entire location shall be seeded with a seed mix recommended by the AO (preferably of native origin). Seed application will follow all guidelines in the interim seed mix bullet statement above. If reclamation seeding should take place using the broadcast method, the seed at a minimum will be walked into the soil with a dozer immediately after the seeding is completed.
- The authorized officer may prohibit surface disturbing activities during severe winter conditions to minimize watershed damage. This limitation does not apply to operation and maintenance of producing wells.
- The authorized officer may prohibit surface disturbing activities during wet or muddy conditions to minimize watershed damage. This limitation does not apply to operation and maintenance of producing wells.
- All well facilities not regulated by OSHA will be painted Carlsbad Canyon.
- All boulders with a length or diameter greater than 3 feet, that are found showing at the surface, will be stockpiled for use during final reclamation.
- Notify the Authorized Officer 48 hours prior to surface disturbing activities.

### **General Surface COA**

**Operator shall notify any active Gilsonite mining operation within 2 miles of the location 48 hours prior to any blasting during construction for this well.**

## **DOWNHOLE CONDITIONS OF APPROVAL**

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

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

- None

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

- There shall be no deviation from the proposed drilling, completion, and/or workover program as approved. Safe drilling and operating practices must be observed. All wells, whether drilling, producing, suspended, or abandoned, shall be identified in accordance with 43 CFR 3162.6. There shall be a sign or marker with the name of the operator, lease serial number, well number, and surveyed description of the well. Any changes in operation must have prior approval from the BLM, Vernal Field Office Petroleum Engineers.
- 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 lessee/operator must report all shows of water or water-bearing sands to the BLM. If flowing water is encountered it must be sampled and analyzed (a copy of the analyses to be submitted to the BLM Field Office in Vernal, Utah).
- All oil and gas shows shall be adequately tested for commercial possibilities, reported, and protected.

- The lessee/operator must report encounters of all non oil & gas mineral resources (such as Gilsonite, tar sands, oil shale, etc.) to the Vernal Field Office, in writing, within 5 working days of each encounter. Each report shall include the well name/number, well location, date and depth (from KB or GL) of encounter, vertical footage of the encounter and, the name of the person making the report (along with a telephone number) shall the BLM need to obtain additional information.
- All shows of fresh water and minerals shall be reported and protected. A sample shall be taken of any water flows and a water analysis furnished the BLM, Vernal Field Office. All oil and gas shows shall be adequately tested for commercial possibilities, reported, and protected.
- 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.
- Chronologic drilling progress reports shall be filed directly with the BLM, Vernal Field Office on a weekly basis in sundry, letter format or e-mail to the Petroleum Engineers until the well is completed.
- Any change in the program shall be approved by the BLM, Vernal Field Office. "Sundry Notices and Reports on Wells" (Form BLM 3160-5) shall be filed for all changes of plans and other operations in accordance with 43 CFR 3162.3-2.
- Emergency approval may be obtained orally, but such approval does not waive the written report requirement. Any additional construction, reconstruction, or alterations of facilities, including roads, gathering lines, batteries, etc., which will result in the disturbance of new ground, shall require the filing of a suitable plan pursuant to Onshore Oil & Gas Order No. 1 of 43 CFR 3164.1 and prior approval by the BLM, Vernal Field Office.
- In accordance with 43 CFR 3162.4-3, this well shall be reported on the "Monthly Report of Operations" (Oil and Gas Operations Report ((OGOR)) starting with the month in which operations commence and continue each month until the well is physically plugged and abandoned. This report shall be filed in duplicate, directly with the Minerals Management Service, P.O. Box 17110, Denver, Colorado 80217-0110, or call 1-800-525-7922 (303) 231-3650 for reporting information.
- Whether the well is completed as a dry hole or as a producer, "Well Completion and Recompletion Report and Log" (BLM Form 3160-4) shall be submitted not later than 30 days after completion of the well or after completion of operations being performed, in accordance with 43 CFR 3162.4-1. Two copies of all logs run, core descriptions, and all other surveys or data obtained and compiled during the drilling, workover, and/or completion operations, shall be filed on BLM Form 3160-4. Submit with the well completion report a geologic report including, at a minimum, formation tops, and a summary and conclusions. Also include deviation surveys, sample descriptions, strip logs, core data, drill stem test data, and results of production tests if performed. Samples (cuttings, fluid, and/or gas) shall be submitted only when requested by the BLM, Vernal Field Office.

- A cement bond log (CBL) will be run from the production casing shoe to the surface casing shoe 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.**
- All off-lease storage, off-lease measurement, or commingling on-lease or off-lease shall have prior written approval from the BLM, Vernal Field Office.
- All measurement points shall be identified as point of sales or allocation for royalty determination prior to the installation of facilities.
- Oil and gas meters shall be calibrated in place prior to any deliveries. The Field Office Petroleum Engineers will be provided with a date and time for the initial meter calibration and all future meter proving schedules. A copy of the meter calibration reports shall be submitted to the BLM, Vernal Field Office. All measurement facilities will conform to the API standards for liquid hydrocarbons and the AGA standards for natural gas measurement.
- 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.
- This APD is approved subject to the requirement that, shall 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 (¼ ¼, 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 Field Office Petroleum Engineers.
- 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.

- 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**

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

**SUNDRY NOTICES AND REPORTS ON WELLS**

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

5. Lease Designation and Serial No.  
**UTU-72106**

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

7. If Unit or CA, Agreement Designation  
**BELUGA**

8. Well Name and No.  
**BELUGA FEDERAL 16-18-9-17**

9. API Well No.  
**43-013-32809**

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

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

**SUBMIT IN TRIPLICATE**

1. Type of Well  
 Oil Well     Gas Well     Other

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

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

4. Location of Well (Footage, Sec., T., R., m., or Survey Description)  
**853 FSL 716 FEL                      SE/SE Section 18, T9S R17E**

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.)\*

Newfield Production Company requests to extend the Permit to Drill this well for one year. The original approval date was 6/14/05 (expiration 6/14/07).

Approved by the  
Utah Division of  
Oil, Gas and Mining

**RECEIVED**

**MAY 31 2007**

DIV. OF OIL, GAS & MINING

Date: 05-30-07  
By: [Signature]

COPY SENT TO OPERATOR  
Date: 3-31-07  
Initials: PM

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

Signed Mandie Crozier Title Regulatory Specialist Date 5/29/2007  
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:** 43-013-32809  
**Well Name:** Beluga Federal 16-18-9-17  
**Location:** SE/SE Section 18,T9S R17E  
**Company Permit Issued to:** Newfield Production Company  
**Date Original Permit Issued:** 6/14/2005

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

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

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

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

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

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

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

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

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

  
 \_\_\_\_\_  
 Signature

5/29/2007  
 \_\_\_\_\_  
 Date

Title: Regulatory Specialist

Representing: Newfield Production Company

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

OPERATOR: NEWFIELD PRODUCTION COMPANY  
 ADDRESS: RT. 3 BOX 3830  
MYTON, UT 84052

OPERATOR ACCT. NO. N2696

ACTION CODE	CURRENT ENTITY NO.	NEW ENTITY NO.	API NUMBER	WELL NAME	WELL LOCATION				SPUD DATE	EFFECTIVE DATE	
					QQ	SC	TP	RG			COUNTY
B	99999	12187	4301333250	HAWKEYE M-26-8-16	SENW	26	8S	16E	DUCHESNE	7/10/2007	7/23/07
WELL 1 COMMENTS: <i>GRUV</i>											
B	99999	15150	4301333271	MON BT NE Q-24-8-16	SESW	24	8S	16E	DUCHESNE	7/11/2007	7/23/07
WELL 2 COMMENTS: <i>GRUV</i>											
B	99999	11880	4301332809	BELUGA FEDERAL 16-18-9-17	SESE	18	9S	17E	DUCHESNE	7/16/2007	7/26/07
WELL 3 COMMENTS: <i>GRUV</i>											
											2NS
WELL 5 COMMENTS:											
WELL 5 COMMENTS:											

R

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

RECEIVED  
 JUL 18 2007

*Jentri Park*  
 Signature  
 Jentri Park  
 Production Clerk  
 July 18, 2007  
 Date

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

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.

1. Type of Well <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other		5. Lease Serial No. USA UTU-72106
2. Name of Operator NEWFIELD PRODUCTION COMPANY		6. If Indian, Allottee or Tribe Name.
3a. Address    Route 3 Box 3630 Myton, UT 84052	3b. Phone    (include are code) 435.646.3721	7. If Unit or CA/Agreement, Name and/or BELUGA UNIT
4. Location of Well    (Footage, Sec., T., R., M., or Survey Description) 853 FSL 716 FEL  SESE Section 18 T9S R17E		8. Well Name and No. <i>BELUGA</i> FEDERAL 16-18-9-17
		9. API Well No. 4301332809
		10. Field and Pool, or Exploratory Area MONUMENT BUTTE
		11. County or Parish, State DUCHESNE, UT

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

TYPE OF SUBMISSION	TYPE OF ACTION				
<input type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production(Start/Resume)	<input type="checkbox"/> Water Shut-Off	
<input checked="" type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity	
<input type="checkbox"/> Final Abandonment	<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 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.)

On 7/16/07 MIRU NDSI spud rig #1. Drill 320' of 12 1/4" hole with air mist. TIH W/7 Jt's 8 5/8" J-55 24# csgn. Set @ 321.06'. On 7/20/07 Cement with 160 sks of Class "G" w/ 2% CaCl+ 1/4# Cello Flake. Mixed @ 15.8 ppg> 1.17 cf/sk yeild. Returned 3 bbls cement to pit.

I hereby certify that the foregoing is true and correct (Printed/ Typed) Johnny Davis	Title Drilling Foreman
	Date 07/21/2007

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

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

(Instructions on reverse)

**RECEIVED**

**JUL 25 2007**

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.

5. Lease Serial No.  
USA UTU-72106

6. If Indian, Allottee or Tribe Name.

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

8. Well Name and No. *BELUGA*  
FEDERAL 16-18-9-17

9. API Well No.  
4301332809

10. Field and Pool, or Exploratory Area  
MONUMENT BUTTE

11. County or Parish, State  
DUCHESNE, 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 are code)  
435.646.3721

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)  
853 FSL 716 FEL  
SESE Section 18 T9S R17E

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	Weekly Status Report	
	<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 type="checkbox"/> Water Disposal			

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

On 8/13/07 MIRU NDSI Rig # 3. 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 @ 270'. Drill out cement & shoe. Drill a 7.875 hole with fresh water to a depth of 5750'. 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, 143 jt's of 5.5 J-55, 15.5# csgn. Set @ 5738.16' / KB. Cement with 300 sks cement mixed @ 11.0 ppg & 3.43 yld. The 400 sks cement mixed @ 14.4 ppg & 1.24 yld. Returned 10 bbls of cement to reserve pit. Nipple down Bop's. Drop slips @ 100,000 #'s tension. Release rig @ 4:00 PM on 8/17/07.

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

Title  
Drilling Foreman

Date  
08/17/2007

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 20 2007

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

5 1/2" CASING SET AT 5738.16

Flt cllr @ 5694.89

LAST CASING 8 5/8" Set @ 321.06

OPERATOR Newfield F

DATUM 12' KB

WELL Beluga Fed 16-18-9-17

DATUM TO CUT OFF CASING 12'

FIELD/PROSPECT Monument Butte

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

CONTRACTOR & RIG # NDSI #3

TD DRILLER 5750' Loggers

HOLE SIZE 7 7/8"

LOG OF CASING STRING:							
PIECES	OD	ITEM - MAKE - DESCRIPTION	WT / FT	GRD	THREAD	CONDT	LENGTH
		Landing Jt					15
		Short jt 4009(5.90)					
142	5 1/2"	ETC LT & C casing	15.5#	J-55	8rd	A	5679.29
		Float collar					0.6
1	5 1/2"	ETC LT&C csg	15.5#	J-55	8rd	A	44.62
		<b>GUIDE</b> shoe			8rd	A	0.65
CASING INVENTORY BAL.		FEET	JTS	TOTAL LENGTH OF STRING			5740.16
TOTAL LENGTH OF STRING		5740.16	143	LESS CUT OFF PIECE			14
LESS NON CSG. ITEMS		16.25		PLUS DATUM TO T/CUT OFF CSG			12
PLUS FULL JTS. LEFT OUT		119.33	3	CASING SET DEPTH			<b>5738.16</b>
TOTAL		<b>5843.24</b>	146	} COMPARE			
TOTAL CSG. DEL. (W/O THRDS)		5843.24	146				
TIMING		1ST STAGE	2nd STAGE				
BEGIN RUN CSG.		8/17/2007	2:30 AM	GOOD CIRC THRU JOB			YES
CSG. IN HOLE		8/17/2007	5:30 AM	Bbls CMT CIRC TO SURFACE			10
BEGIN CIRC		8/17/2007	5:45 AM	RECIPROCATED PIPE FOR			THRUSTROKE NA
BEGIN PUMP CMT		8/17/2007	9:55 AM	DID BACK PRES. VALVE HOLD ?			YES
BEGIN DSPL. CMT		8/17/2007	11:00 AM	BUMPED PLUG TO			1800 PSI
PLUG DOWN		8/17/2007	11:29 AM				
CEMENT USED		CEMENT COMPANY- <b>B. J.</b>					
STAGE	# SX	CEMENT TYPE & ADDITIVES					
1	300	Premlite II w/ 10% gel + 3% KCL, 5#s /sk CSE + 2# sk/kolseal + 1/2#s/sk Cello Flake					
		mixed @ 11.0 ppg W / 3.43 cf/sk yield					
2	400	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 Jim Smith

DATE 8/17/2007



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

5. LEASE DESIGNATION AND SERIAL NUMBER:  
USA UTU-72106

**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:  
BELUGA UNIT

1. TYPE OF WELL: OIL WELL  GAS WELL  OTHER

8. WELL NAME and NUMBER:  
BELUGA FEDERAL 16-18-9-17

2. NAME OF OPERATOR:  
NEWFIELD PRODUCTION COMPANY

9. API NUMBER:  
4301332809

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: 853 FSL 716 FEL

COUNTY: DUCHESNE

OTR/OTR. SECTION. TOWNSHIP. RANGE. MERIDIAN: SESE, 18, T9S, R17E

STATE: UT

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

TYPE OF SUBMISSION	TYPE OF ACTION		
<input type="checkbox"/> NOTICE OF INTENT (Submit in Duplicate)  Approximate date work will  <hr/>	<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: 09/27/2007	<input type="checkbox"/> CASING REPAIR	<input type="checkbox"/> NEW CONSTRUCTION	<input type="checkbox"/> TEMPORARILY ABANDON
	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> TUBING REPAIR
	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> VENT OR FLAIR
	<input type="checkbox"/> CHANGE WELL NAME	<input type="checkbox"/> PLUG BACK	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> PRODUCTION (START/STOP)	<input type="checkbox"/> WATER SHUT-OFF
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input checked="" type="checkbox"/> OTHER: - 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 09/10/07, attached is a daily completion status report.

NAME (PLEASE PRINT) Jentri Park

TITLE Production Clerk

SIGNATURE 

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

**BELUGA 16-18-9-17**

**7/1/2007 To 11/30/2007**

**8/29/2007 Day: 1**

**Completion**

Rigless on 8/28/2007 - 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 @ 5644' & cement top @ 19'. Perforate stage #1, LODC sds @ 5132-39' w/ 3-1/8" Slick Guns (19 gram, .49"HE. 120°) w/ 4 spf for total of 28 shots. 110 bbls BWTR. SWIFN.

**9/4/2007 Day: 2**

**Completion**

NC #1 on 9/3/2007 - RU BJ Services. 190 psi on well. Frac LODC sds w/ 20,024#'s of 20/40 sand in 332 bbls of Lightning 17 fluid. Broke @ 2876 psi. Pumped 780 gals of fresh wtr mixed with 30 gals of Techni-Hib 767W. Treated w/ ave pressure of 2345 psi @ ave rate of 24.7 BPM. Pumped 504 gals of 15% HCL in flush for Stage #2. ISIP 2218 psi. Leave pressure on well. 442 BWTR. RU Lone Wolf WLT, crane & lubricator. RIH w/ Weatherford 5-1/2" 5K composite flow through frac plug & 9' perf gun. Set plug @ 4700'. Perforate C sds @ 4591- 4600' w/ 3-1/8" Slick Guns w/ 4 spf for total of 36 shots. RU BJ Services. 1850 psi on well. Pressured up to 4200 psi, Would not breakdown. RU WL & dump bail acid. RU BJ Services. 1825 psi on well. Frac C sds w/ 24,810#'s of 20/40 sand in 349 bbls of Lightning 17 fluid. Broke @ 4090 psi. Pumped 780 gals of fresh wtr mixed with 30 gals of Techni-Hib 767W. Treated w/ ave pressure of 2088 psi @ ave rate of 24.7 BPM. Pumped 504 gals of 15% HCL in flush for Stage #3. ISIP 1858 psi. Leave pressure on well. 791 BWTR. RU Lone Wolf WLT, crane & lubricator. RIH w/ Weatherford 5-1/2" 5K composite flow through frac plug, 8' & 7' perf gun. Set plug @ 4080'. Perforate GB6 sds @ 3968- 76', GB4 sds @ 3932-39' w/ 3-1/8" Slick Guns w/ 4 spf for total of 60 shots. RU BJ Services. 1550 psi on well. Frac GB4 & GB6 sds w/ 89,060#'s of 20/40 sand in 664 bbls of Lightning 17 fluid. Broke @ 2029 psi. Pumped 780 gals of fresh wtr mixed with 30 gals of Techni-Hib 767W. Treated w/ ave pressure of 2035 psi @ ave rate of 24.8 BPM. ISIP 2085 psi. Begin immediate flowback on 12/64 choke @ 1 BPM. Flowed for 3 1/2 hrs & died. Rec. 210 BTF. 1245 BWTR.

**9/6/2007 Day: 3**

**Completion**

NC #1 on 9/5/2007 - 2:30PM MIRU NC#1, OWU W/-75 Psi, Flowed 30 Bbls Wtr, N/D 10,000 BOP & Frac HD, N/U 3,000 Flng & 5,000 BOP, R/U Flr, 6:00PM C/SDFN.

**9/7/2007 Day: 4**

**Completion**

NC #1 on 9/6/2007 - 6:30AM OWU, P/U & RIH W/-4 3/4 Bit, Bit Sub, 126 Jts Tbg To Fill @ 3995', R/U Nabors Pwr Swvl, R/U R/pmp, Drill & C/Out To Plg @ 4080', Drill Up Plg, 17 Min Drill Time, Swvl I/Hle To Fill @ 4685', Drill & C/Out To Plg @ 4700', Drill Up Plg, 25 Min Drill Time, Swvl I/Hle To Fill @ 5572', C/Out To PBTD @ 5681', Curc Well Clean, R/D Swvl, POOH W/-5 Jts Tbg, EOB @ 5536', SWI, 7:00PM C/SDFN. No Wtr Loss For Day.

**9/8/2007 Day: 5**

**Completion**

NC #1 on 9/7/2007 - 6:30AM OWU, R/U Swab, RIH IFL @ Surf, Made 12 Swab Runs Recvrd 140 Bbls Wtr, Lite Trce Oil, Lite Trce Sand FFL @ , RIH W/-Tbg To Fill @

5677', R/U pmp, C/Out To PBTD @ 5681', Curc Well Clean, POOH W/-179 Jts Tbg, Bit Sub & Bit. P/U & RIH W/-N/C, 2 Jts Tbg, S/N, 2 Jts Tbg, 5 1/2 T/A, 160 Jts Tbg, N/D BOP, Set 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 1/2x12x16' RHAC, 6-1 1/2x25' Wt Bars, 20-3/4x25' Guided Rods, SWI, 6:00PM C/SDFN. Lost 86 Bbls Wtr On C/Out To PBTD & Flshing Tbg W/-60 Bbls Wtr, Recvred 140 Bbls Wtr Swabbing, Total Wtr Recvery For Day = 54 Bbls

---

9/11/2007 Day: 6

Completion

NC #1 on 9/10/2007 - 6:30AM OWU, RIH W/-79-3/4x25' Guided Rods, 99-3/4x25' Guided Rods Bttm 7 A/Grade, 3/4x8'-6'-4'-2' Ponys, 1 1/2x26' Polish Rod, Seat pmp, R/U Unit, Hole Standing Full, Stroke Unit & Tbg To 800 Psi, Good Test. POP @ 11:00AM, 56" SL, 5 SPM, ( Final Report ).

---

**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 _____
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 _____	
2. NAME OF OPERATOR <p align="center">Newfield Exploration Company</p>					
3. ADDRESS AND TELEPHONE NO. <p align="center">1401 17th St. Suite 1000 Denver, CO 80202</p>					
4. LOCATION OF WELL (Report locations clearly and in accordance with any State requirements.)* At Surface <p align="center">853' FSL &amp; 716' FEL (SE/SE) Sec. 18, T9S, R17E</p> At top prod. Interval reported below  At total depth					
14. API NO. <p align="center">43-013-32809</p>			DATE ISSUED <p align="center">06/14/07</p>		
15. DATE SPUNDED <p align="center">07/16/07</p>		16. DATE T.D. REACHED <p align="center">08/16/07</p>		17. DATE COMPL. (Ready to prod.) <p align="center">09/10/07</p>	
18. ELEVATIONS (DF, RKB, RT, GR, ETC.)* <p align="center">5449' GL</p>		12. COUNTY OR PARISH <p align="center">Duchesne</p>		13. STATE <p align="center">UT</p>	
20. TOTAL DEPTH, MD & TVD <p align="center">5750'</p>		21. PLUG BACK T.D., MD & TVD <p align="center">5681'</p>		19. ELEV. CASINGHEAD <p align="center">5461' KB</p>	
22. IF MULTIPLE COMPL., HOW MANY*		23. INTERVALS DRILLED BY <p align="center">-----&gt;</p>		ROTARY TOOLS <p align="center">X</p>	
24. PRODUCING INTERVAL(S), OF THIS COMPLETION--TOP, BOTTOM, NAME (MD AND TVD)* <p align="center">Green River 3932'-5139'</p>		25. WAS DIRECTIONAL SURVEY MADE <p align="center">No</p>		27. WAS WELL CORED <p align="center">No</p>	

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

23. 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#	321'	12-1/4"	To surface with 160 sx Class "G" cmt	
5-1/2" - J-55	15.5#	5738'	7-7/8"	300 sx Premlite II and 400 sx 50/50 Poz	

29. LINER RECORD				30. TUBING RECORD		
SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)	SIZE	DEPTH SET (MD)
					2-7/8"	EOT @ 5228'
						TA @ 5098'

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	
(LODC) 5132'-5139'	.49"	4/28	5132'-5139'	Frac w/ 20,024# 20/40 sand in 332 bbbs fluid	
(C) 4591'-4600'	.43"	4/36	4591'-4600'	Frac w/ 24,810# 20/40 sand in 349 bbbs fluid	
(GB6 & 4) 3968'-3976', 3932'-3939'	.43"	4/60	3932'-3976'	Frac w/ 89,060# 20/40 sand in 664 bbbs fluid	

33.\* PRODUCTION

DATE FIRST PRODUCTION <p align="center">09/10/07</p>	PRODUCTION METHOD (Flowing, gas lift, pumping--size and type of pump) <p align="center">2-1/2" x 1-1/2" x 12' x 16' RHAC SM Plunger Pump</p>	WELL STATUS (Producing or shut-in) <p align="center">PRODUCING</p>					
DATE OF TEST <p align="center">10 day ave</p>	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD <p align="center">----&gt;</p>	OIL--BBL.S. <p align="center">41</p>	GAS--MCF. <p align="center">12</p>	WATER--BBL. <p align="center">10</p>	GAS-OIL RATIO <p align="center">293</p>
FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE <p align="center">----&gt;</p>	OIL--BBL.	GAS--MCF.	WATER--BBL.	OIL GRAVITY-API (CORR.)	

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

Sold & Used for Fuel

**RECEIVED**  
**OCT 12 2007**

TEST WITNESSED BY \_\_\_\_\_

35. LIST OF ATTACHMENTS

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

SIGNED *Jeffrey Park* TITLE Regulatory Specialist DATE 8/29/2006

*Mandie Crozier* Production Clerk MC

37. SUMMARY OF POROUS ZONES: (Show all important zones of porosity and contents thereof; cored intervals, and all drill-stem, tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures, and recoveries);				38. GEOLOGIC MARKERS		
FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.	NAME	TOP	
					MEAS. DEPTH	TRUE VERT. DEPTH
			<b>Well Name Beluga Federal 16-18-9-17</b>	Garden Gulch Mkr	<b>3438'</b>	
				Garden Gulch 1	<b>3639'</b>	
				Garden Gulch 2	<b>3749'</b>	
				Point 3 Mkr	<b>3998'</b>	
				X Mkr	<b>4256'</b>	
				Y-Mkr	<b>4292'</b>	
				Douglas Creek Mkr	<b>4418'</b>	
				BiCarbonate Mkr	<b>4650'</b>	
				B Limestone Mkr	<b>4746'</b>	
				Castle Peak	<b>5248'</b>	
				Basal Carbonate	<b>5684'</b>	
				Total Depth (LOGGERS	<b>5750'</b>	

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

5. LEASE DESIGNATION AND SERIAL NUMBER:  
USA UTU-72106

**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:  
BELUGA UNIT

1. TYPE OF WELL: OIL WELL  GAS WELL  OTHER

8. WELL NAME and NUMBER:  
BELUGA FEDERAL 16-18-9-17

2. NAME OF OPERATOR:  
NEWFIELD PRODUCTION COMPANY

9. API NUMBER:  
4301332809

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: 853 FSL 716 FEL

COUNTY: DUCHESNE

OTR/OTR. SECTION. TOWNSHIP. RANGE. MERIDIAN: SESE, 18, T9S, R17E

STATE: UT

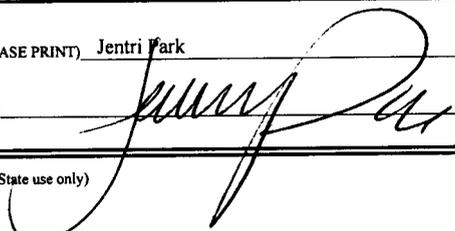
11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
<input type="checkbox"/> NOTICE OF INTENT (Submit in Duplicate)  Approximate date work will  <hr/>	<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: 10/11/2007	<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 09/10/07, attached is a daily completion status report.

NAME (PLEASE PRINT) Jentri Park

TITLE Production Clerk

SIGNATURE 

DATE 10/11/2007

(This space for State use only)

**RECEIVED**  
**OCT 12 2007**

## Daily Activity Report

Format For Sundry

**BELUGA 16-18-9-17**

**7/1/2007 To 11/30/2007**

**8/29/2007 Day: 1**

**Completion**

Rigless on 8/28/2007 - 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 @ 5644' & cement top @ 19'. Perforate stage #1, LODC sds @ 5132-39' w/ 3-1/8" Slick Guns (19 gram, .49"HE. 120°) w/ 4 spf for total of 28 shots. 110 bbls BWTR. SWIFN.

**9/4/2007 Day: 2**

**Completion**

NC #1 on 9/3/2007 - RU BJ Services. 190 psi on well. Frac LODC sds w/ 20,024#'s of 20/40 sand in 332 bbls of Lightning 17 fluid. Broke @ 2876 psi. Pumped 780 gals of fresh wtr mixed with 30 gals of Techni-Hib 767W. Treated w/ ave pressure of 2345 psi @ ave rate of 24.7 BPM. Pumped 504 gals of 15% HCL in flush for Stage #2. ISIP 2218 psi. Leave pressure on well. 442 BWTR. RU Lone Wolf WLT, crane & lubricator. RIH w/ Weatherford 5-1/2" 5K composite flow through frac plug & 9' perf gun. Set plug @ 4700'. Perforate C sds @ 4591- 4600' w/ 3-1/8" Slick Guns w/ 4 spf for total of 36 shots. RU BJ Services. 1850 psi on well. Pressured up to 4200 psi, Would not breakdown. RU WL & dump bail acid. RU BJ Services. 1825 psi on well. Frac C sds w/ 24,810#'s of 20/40 sand in 349 bbls of Lightning 17 fluid. Broke @ 4090 psi. Pumped 780 gals of fresh wtr mixed with 30 gals of Techni-Hib 767W. Treated w/ ave pressure of 2088 psi @ ave rate of 24.7 BPM. Pumped 504 gals of 15% HCL in flush for Stage #3. ISIP1858 psi. Leave pressure on well. 791 BWTR. RU Lone Wolf WLT, crane & lubricator. RIH w/ Weatherford 5-1/2" 5K composite flow through frac plug, 8' & 7' perf gun. Set plug @ 4080'. Perforate GB6 sds @ 3968- 76', GB4 sds @ 3932-39' w/ 3-1/8" Slick Guns w/ 4 spf for total of 60 shots. RU BJ Services. 1550 psi on well. Frac GB4 & GB6 sds w/ 89,060#'s of 20/40 sand in 664 bbls of Lightning 17 fluid. Broke @ 2029 psi. Pumped 780 gals of fresh wtr mixed with 30 gals of Techni-Hib 767W. Treated w/ ave pressure of 2035 psi @ ave rate of 24.8 BPM. ISIP 2085 psi. Begin immediate flowback on 12/64 choke @ 1 BPM. Flowed for 3 1/2 hrs & died. Rec. 210 BTF. 1245 BWTR.

**9/6/2007 Day: 3**

**Completion**

NC #1 on 9/5/2007 - 2:30PM MIRU NC#1, OWU W/-75 Psi, Flowed 30 Bbls Wtr, N/D 10,000 BOP & Frac HD, N/U 3,000 Flng & 5,000 BOP, R/U Flr, 6:00PM C/SDFN.

**9/7/2007 Day: 4**

**Completion**

NC #1 on 9/6/2007 - 6:30AM OWU, P/U & RIH W/-4 3/4 Bit, Bit Sub, 126 Jts Tbg To Fill @ 3995', R/U Nabors Pwr Swvl, R/U R/pmp, Drill & C/Out To Plg @ 4080', Drill Up Plg, 17 Min Drill Time, Swvl I/Hle To Fill @ 4685', Drill & C/Out To Plg @ 4700', Drill Up Plg, 25 Min Drill Time, Swvl I/Hle To Fill @ 5572', C/Out To PBD @ 5681', Curc Well Clean, R/D Swvl, POOH W/-5 Jts Tbg, EOB @ 5536', SWI, 7:00PM C/SDFN. No Wtr Loss For Day.

**9/8/2007 Day: 5**

**Completion**

NC #1 on 9/7/2007 - 6:30AM OWU, R/U Swab, RIH IFL @ Surf, Made 12 Swab Runs Recvrd 140 Bbls Wtr, Lite Trce Oil, Lite Trce Sand FFL @ , RIH W/-Tbg To Fill @

'5677', R/U pmp, C/Out To PBTD @ 5681', Curc Well Clean, POOH W/-179 Jts Tbg, Bit Sub & Bit. P/U & RIH W/-N/C, 2 Jts Tbg, S/N, 2 Jts Tbg, 5 1/2 T/A, 160 Jts Tbg, N/D BOP, Set 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 1/2x12x16' RHAC, 6-1 1/2x25' Wt Bars, 20-3/4x25' Guided Rods, SWI, 6:00PM C/SDFN. Lost 86 Bbls Wtr On C/Out To PBTD & Flshing Tbg W/-60 Bbls Wtr, Recvred 140 Bbls Wtr Swabbing, Total Wtr Recvery For Day = 54 Bbls

**9/11/2007 Day: 6**

**Completion**

NC #1 on 9/10/2007 - 6:30AM OWU, RIH W/-79-3/4x25' Guided Rods, 99-3/4x25' Guided Rods Bttm 7 A/Grade, 3/4x8'-6'-4'-2' Ponys, 1 1/2x26' Polish Rod, Seat pmp, R/U Unit, Hole Standing Full, Stroke Unit & Tbg To 800 Psi, Good Test. POP @ 11:00AM, 56" SL, 5 SPM, ( Final Report ).

**Pertinent Files: Go to File List**



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 8

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

Ref: 8P-W-GW

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

**MAR 05 2009**

Mr. Eric Sundberg  
Regulatory Analyst  
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: Additional Well: Beluga Area Permit  
Corrective Action Required  
**UIC Permit No. UT20798-00000**  
**Well ID: UT20798-08326**  
Beluga Federal 16-18-9-17  
853' FSL & 716' FEL  
SE SE Sec. 18 T9S-R17E  
Duchesne County, Utah  
API #43-013-32809

Dear Mr. Sundberg:

The Newfield Production Company's request to convert the former Green River Formation oil well Beluga Federal 16-18-9-17 to an enhanced recovery injection well under the Beluga Area Permit is hereby authorized by the Environmental Protection Agency (EPA) under the terms and conditions of the Authorization for Additional Well.

The addition of the proposed injection well, within the exterior boundary of the Uintah & Ouray Indian Reservation, is being made under the authority of 40 CFR §144.33 (c) and terms of the Beluga Area Permit No. UT20798-00000 and subsequent modifications.

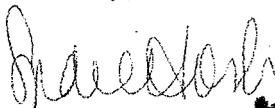
Please be aware that Newfield does not have authorization to begin injection operations into the well until all Prior to Commencing Injection requirements have been submitted and evaluated by the EPA, and has received written authorization from the Director to begin injection. Please note that the Permit limits injection to the gross interval within the Green River Formation between the depths of 3,437 feet and the top of the Wasatch Formation, estimated at 5,809 feet.

Prior to receiving authorization to inject, the EPA requires that Newfield submit for review and approval: (1) the results of a **Part 1 (Internal) mechanical integrity test (MIT)**, (2) a **pore pressure** calculation of the injection interval, and (3) a **completed EPA Form No. 7520-12** (Well Rework Record) with a new schematic diagram.

The initial Maximum Allowable Injection Pressure (MAIP) for the Beluga Federal 16-18-9-17 was determined to be **1,260 psig**. UIC Area Permit UT20798-00000 also provides the opportunity for the permittee to request a change in the MAIP based upon results of a step rate test that demonstrates that the formation breakdown pressure will not be exceeded.

If you have any questions, please call Ms. Sarah Bahrman at (303) 312-6243 or 1-(800)-227-8917 (Ext. 312-6243). Please submit the required data to **ATTENTION: Sarah Bahrman**, at the letterhead address, citing **MAIL CODE: 8P-W-GW** very prominently.

Sincerely,



Eddie A. Sierra  
Acting Assistant Regional Administrator  
Office of Partnerships and Regulatory Assistance



FOR RECORD ONLY  
ACCEPTED FOR RECORDING  
MAY 20 2010

Encl: Authorization for Conversion of An Additional Well  
EPA Form No. 7520-12 (Well Rework Record)  
Proposed Wellbore and P&A Wellbore schematics for Beluga Federal 16-18-9-17

cc: Draft Permit Letter and Public Notice:  
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

All Enclosures:

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

Michael Guinn  
District Manager  
Newfield Production Company  
Myton, Utah



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**

**REGION 8**

**1595 WYNKOOP STREET**

**DENVER, CO 80202-1129**

**Phone 800-227-8917**

**<http://www.epa.gov/region08>**

**AUTHORIZATION FOR ADDITIONAL WELL**

**UIC Area Permit No: UT20798-00000**

The Beluga Unit Final UIC Area Permit No. UT20798-00000, effective October 25, 1996, authorizes injection for the purpose of enhanced oil recovery in the Monument Butte Field. On January 7, 2009, Newfield Production Company notified the Director concerning the following additional enhanced recovery injection well:

Well Name:	<b><u>Beluga Federal 16-18-9-17</u></b>
EPA Well ID Number:	<b><u>UT20798-08326</u></b>
Location:	853' FSL & 716' FEL SE SE Sec. 18 T9S-R17E Duchesne County, Utah API #43-013-32809

Pursuant to 40 CFR §144.33, Area UIC Permit No. UT20798-00000 authorizes the permittee to construct and operate, convert, or plug and abandon additional enhanced recovery injection wells within the area permit. This well was determined to satisfy additional well criteria required by the permit.

This well is subject to all provisions of UIC Area Permit No. UT20798-00000, as modified and as specified in the Injection Well-Specific Requirements detailed below. This Authorization shall expire one year after the Effective Date unless the permittee has converted the well to injection or submits a written request to extend this Authorization prior to the expiration date.

This Authorization is effective upon signature.

Date: **MAR 05 2009**

**Eddie A. Sierra**

**\*Acting Assistant Regional Administrator**

**Office of Partnerships and Regulatory Assistance**

*\* The person holding this title is referred to as the Director throughout the permit and Authorization*

Authorization for Additional Well: UIC Area Permit UT20798-00000

Well: Beluga Federal 16-18-9-17 EPA Well ID: UT20798-08326

## INJECTION WELL-SPECIFIC REQUIREMENTS

Well Name: **Beluga Federal 16-18-9-17**  
EPA Well ID Number: **UT20798-08326**

### Prior to Commencing Injection Operations, the permittee shall submit the following information:

1. Completed Well Rework Record (EPA Form No. 7520-12) and schematic diagram.
2. Pore pressure calculation of the proposed injection zone;
3. A successful Part I (internal) Mechanical Integrity test (MIT)

Once these records are received and approved by EPA, the Director will provide written authorization to inject.

**Approved Injection Zone:** Injection is approved between the top of the Garden Gulch Member of the Green River Formation [3,437 feet (KB)] to the top of the Wasatch Formation, which is estimated to be at a depth of [5,809 feet (KB)].

**Maximum Allowable Injection Pressure (MAIP):** The initial MAIP is **1,260 psig**, based on the following calculation:

$$\begin{aligned} \text{MAIP} &= [\text{FG} - (0.433)(\text{SG})] * \text{D}, \text{ where} \\ \text{FG} &= 0.76 \text{ psi/foot} \quad \text{SG} = 1.015 \quad \text{D} = \mathbf{3,932 \text{ feet}} \text{ (top perforation depth KB)} \\ \text{MAIP} &= \mathbf{1,260 \text{ psig}} \end{aligned}$$

UIC Area Permit No. UT20798-00000 provides the opportunity for the permittee to request a change of the MAIP based upon the submitted results of a Step Rate Test that demonstrates the formation breakdown pressure will not be exceeded.

**Well Construction: Casing and Cementing:** The well was constructed in compliance with existing regulatory controls for casing and cementing pursuant to 40 CFR § 146.22(c). Cementing records, including the cement bond log, have satisfactorily demonstrated the presence of adequate cement to prevent the migration of injection fluids behind the casing from the injection zone.

**Well Construction: Tubing and Packer:** 2-7/8" or similar size injection tubing is approved; the packer shall be set at a depth no more than 50 feet above the top perforation.

### **Demonstration of Mechanical Integrity:**

(1) A successful demonstration of Part I (Internal) Mechanical Integrity using a Casing-Tubing Annulus Pressure Test is required prior to injection, and no less than every five years after the last successful test.

(2) EPA reviewed the cementing records and determined the cement will provide an effective barrier to significant upward movement of fluids through vertical channels adjacent to the well bore pursuant to 40 CFR §146.8 (a)(2). Therefore, further demonstration of Part II (External) Mechanical Integrity is not required at this time.

*Authorization for Additional Well:* UIC Area Permit UT20798-00000  
*Well:* Beluga Federal 16-18-9-17 EPA Well ID: UT20798-08326

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

**Plugging and Abandonment:** The well shall be plugged in a manner that isolates the injection zone and prevents movement of fluids into or between USDWs. Tubing, packers, and any downhole apparatus shall be removed. Class A, C, G, and H cements, with additives such as accelerators and retarders that control or enhance cement properties, may be used for plugs; however, volume extending additives and gel cements are not approved for plug use. Plug placement shall be verified by tagging. Plugging gel of at least 9.2 lb/gal shall be placed between all plugs. A minimum 50 ft. surface plug shall be set inside and outside of the surface casing to seal pathways for fluid migration into the subsurface. Within sixty (60) days after plugging the owner or operator shall submit Plugging Record (EPA Form 7520-13) to the Director. The Plugging Record must be certified as accurate and complete by the person responsible for the plugging operation. At a minimum, the following plugs are required:

- PLUG NO. 1: Set a cast iron bridge plug (CIBP) no more than 50 ft above the top perforation with a minimum of 20 ft cement plug on top of the CIBP.
- PLUG NO. 2: Perforate and squeeze cement up the backside of the 5-1/2" casing across the Trona Zone and the Mahogany Bench from approximately 2,607 ft to 2,769 ft (KB) unless pre-existing backside cement precludes cement-squeezing this interval. Set a minimum 162-foot balanced cement plug inside the 5-1/2" casing from approximately 2,607 to 2,769 ft (KB).
- PLUG NO. 3: Perforate and squeeze cement up the backside of the 5-1/2" casing across the contact between the Uinta Formation and Green River Formation at 1,279 ft (KB) unless pre-existing backside cement precludes cement-squeezing this interval. Set a minimum 120-foot plug inside the 5-1/2" casing from approximately 1,219-1,339 ft (KB).
- PLUG NO. 4: Set a Class "G" cement plug within the 5-1/2" casing to 371 ft. and up the 5-1/2" x 8-5/8" casing annulus to the surface.

## **INJECTION WELL-SPECIFIC CONSIDERATIONS**

Well Name: **Beluga Federal 16-18-9-17**  
EPA Well ID Number: **UT20798-08326**

**Underground Sources of Drinking Water (USDWs):** USDWs in the Beluga Unit Area Permit generally occur within the Uinta Formation. According to "*Base of Moderately Saline Ground Water in the Uinta Basin, Utah, State of Utah Technical Publication No. 92,*" the base of

*Authorization for Additional Well:* UIC Area Permit UT20798-00000  
*Well:* Beluga Federal 16-18-9-17 EPA Well ID: UT20798-08326

moderately saline ground water may be found at approximately 307 ft (KB) below ground surface in the Beluga Federal 16-18-9-17 well.

**http:NRWRT1.NR.STATE.UT.US:**

There are no reservoirs, streams, domestic or agricultural water wells within a quarter (1/4) mile of the well.

**Composition of Source, Formation, and Injectate Water: (Total Dissolved Solids [TDS]:**

- TDS of the Douglas Creek Member of the Green River Formation Water: 20,484 mg/l.

- TDS of Jonah Facility Injection System source water: 13,555 mg/l.

The **injectate** is water from the Jonah Facility Injection System blended with produced Green River Formation Water.

**Aquifer Exemption** is not required because the TDS of water produced from the proposed injection well is greater than 10,000 mg/l.

**Confining Zone:** The Confining Zone, which directly overlies the Garden Gulch Member of the Green River Formation, is approximately 189 feet of shale between the depths of 3,248 ft and 3,437 ft (KB).

**Injection Zone:** The Injection Zone at this well location is approximately 2,372 ft of multiple lenticular sand units interbedded with shale, marlstone and limestone from the top of the Garden Gulch Member at 3,437 feet (KB) to the top of the Wasatch Formation which is estimated to be at 5,809 ft (KB). All formation tops are based on correlations to the Newfield Production Federal #1-26-8-17 (UT20702-04671) Type Log.

**Well Construction:** The CBL shows 20 feet of 80% or greater cement bond index in the Confining Zone (3,384 ft to 3,404 ft). Thus, further demonstration that well cement is adequate to prevent significant migration of injection fluids behind casing is not required.

**Surface Casing:** 8-5/8" casing is set at 321 ft (KB) in a 12-1/4" hole, using 160 sacks Class G cement, cemented to the surface.

**Longstring Casing:** 5-1/2" casing is set at 5,738 ft (KB) in a 7-7/8" hole secured with 700 sacks of cement. Total drilled depth 5,750 ft. Plugged back total depth is 5,681 ft. EPA calculates top of cement at 1,213 ft. Estimated CBL top of cement is 19 ft.

**Perforations:** Top perforation: **3,932 ft** (KB) Bottom perforation: **5,139 ft** (KB)

## AREA OF REVIEW (AOR) WELL REQUIREMENTS

The following three (3) wells that penetrate the confining zone within or proximate to a 1/4 mile radius around the Beluga Federal 16-18-9-17 were evaluated to determine if any corrective action is necessary to prevent fluid movement into USDWs.

Well: Beluga Federal 15-18-9-17      API: 43-013-32808      SWSE Sec.18-T9S-R17E

Well: Beluga Federal 9-18-9-17      API: 43-013-32053      NESE Sec. 8-T9S-R17E

Well: POMCO #4      API: 43-013-30506      SWSW Sec.17-T9S-R17E

### Corrective Action Required on three AOR wells:

Well: Beluga Federal 15-18-9-17      API: 43-013-32808      SWSE Sec.18-T9S-R17E  
Less than 18 feet of 80 percent cement bond index across confining zone (3,282-3,464 ft). TOC at 1,903 ft. Refer to corrective action plan described below.

Well: Beluga Federal 9-18-9-17      API: 43-013-32053      NESE Sec. 8-T9S-R17E  
Less than 18 feet of 80 percent cement bond index across confining zone (3,386-3,474 ft). TOC at surface. Refer to corrective action plan described below.

Well: POMCO #4      API: 43-013-30506      SWSW Sec.17-T9S-R17E  
Less than 18 feet of 80 percent cement bond index across confining zone (3,335-3,422 ft). TOC at 2,300 ft. Refer to corrective action plan described below.

**AOR Well Corrective Action Plan:** The Beluga Federal 15-18-9-17, Beluga Federal 9-18-9-17, and POMCO #4 wells shall 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" and the permittee is referred to this document.

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, the Permittee will shut in the Beluga Federal 16-18-9-17 well immediately and notify the Director. No injection into the Beluga Federal 16-18-9-17 well 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.

**Reporting of Noncompliance:**

- (a) Anticipated Noncompliance. The operator 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.
- (b) Compliance Schedules. Reports of compliance or noncompliance with, or any progress on, interim and final requirements contained in any compliance schedule of this Permit shall be submitted no later than thirty (30) days following each schedule date.
- (c) Written Notice of any noncompliance which may endanger health or the environment shall be reported to the Director within five (5) days of the time the operator becomes aware of the noncompliance. The written notice shall contain a description of the noncompliance and its cause; the period of noncompliance including dates and times; if the noncompliance has not been corrected the anticipated time it is expected to continue; and steps taken or planned to prevent or reduce recurrence of the noncompliance.

**Twenty-Four Hour Noncompliance Reporting:** The operator shall report to the Director any noncompliance which may endanger health or environment. Information shall be provided, either orally or by leaving a message, within twenty-four (24) hours from the time the operator becomes aware of the circumstances by telephoning 1-(800)-227-8917 and asking for the EPA Region 8 UIC Program Compliance and Enforcement Director, or by contacting the Region 8 Emergency Operations Center at (303)-293-1788, if calling from outside EPA Region 8. The following information shall be included in the verbal report:

- (a) Any monitoring or other information which indicates that any contaminant may cause an endangerment to a USDW.
- (b) Any noncompliance with a Permit condition or malfunction of the injection system which may cause fluid migration into or between underground sources of drinking water.

**Oil Spill and Chemical Release Reporting:** The operator shall comply with all other reporting requirements related to oil spills and chemical releases or other potential impacts to human health or the environment by contacting the **National Response Center (NRC) 1-(800)-424-8802 or 1-(202)-267-2675**, or through the NRC website at <http://www.nrc.uscg.mil/index.htm>

**Other Noncompliance:** The operator shall report all other instances of noncompliance not otherwise reported at the time monitoring reports are submitted.

**Other Information:** Where the operator becomes aware that he 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 operator shall submit such correct facts or information within two (2) weeks of the time such information became known to him.

# BELUGA FEDERAL 16-18-9-17

Spud Date: 07/16/07  
 Put on Production: 09/10/07  
 GI.: 5449' KB: 5461' ✓

Initial Production: BCOPD,  
 MCFD, BWPID

## Proposed Injection Wellbore Diagram

### FRAC JOB

#### SURFACE CASING

- ✓ CSG SIZE: 8-5/8"
- ✓ GRADE: J-55
- ✓ WEIGHT: 24#
- ✓ LENGTH: 7 jts (309.21')
- ✓ DEPTH LANDED: 321.06' KB
- ✓ HOLE SIZE: 12-1/4"
- ✓ CEMENT DATA: 160 sxs Class "G" cmt, est 3 bbls cmt to surf

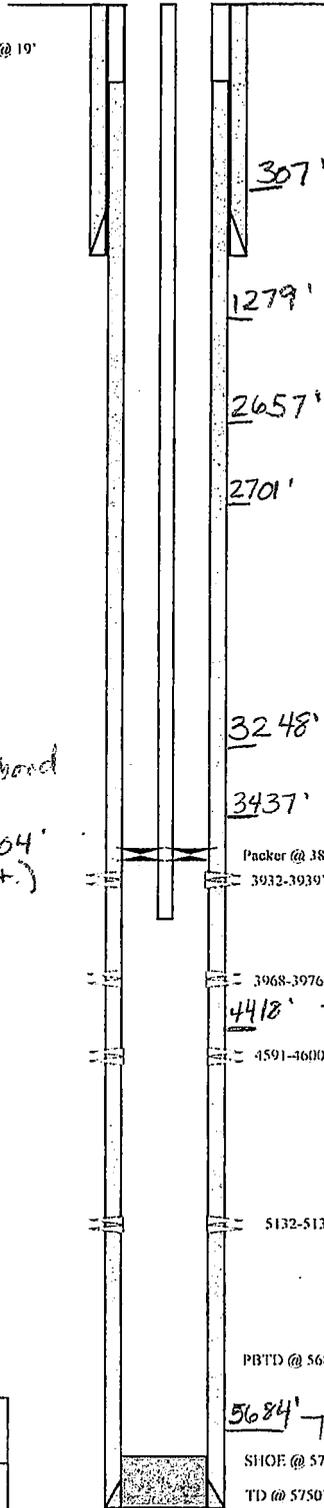
#### PRODUCTION CASING

- ✓ CSG SIZE: 5-1/2"
- ✓ GRADE: J-55
- ✓ WEIGHT: 15.5#
- ✓ LENGTH: 143 jts (5723.91')
- ✓ DEPTH LANDED: 5738.16' KB
- ✓ HOLE SIZE: 7-7/8"
- ✓ CEMENT DATA: 300 sxs Prem Lite II mixed & 400 sxs 50/50 POZ.
- CEMENT TOP: 19'

#### TUBING

- ✓ SIZE/GRADE/WT: 2-7/8" J-55 / 6.5#
  - NO. OF JOINTS: 160 jts (5086.11')
  - TUBING ANCHOR: 5098.11' KB
  - NO. OF JOINTS: 2 jts (61.96')
  - SEATING NIPPLE: 2-7/8" (1.10')
  - SN LANDED AT: 5162.87' KB
  - NO. OF JOINTS: 2 jts (63.16')
  - TOTAL STRING LENGTH: BOT @ 5227.58' KB ✓
- 80% cement bond index from 3384' to 3404' (20ft+)*

✓ Cement Top @ 19'



09/03/07 5132-5139'

Frac L/D/C sands as follows:  
 20024# 20/40 sand in 332 bbls Lightning 17 frac fluid. Treated @ avg press of 2345 psi w/avg rate of 24.7 BPM. ISIP 2218 psi Calc flush: 5130 gal. Actual flush: 4578 gal

09/03/07 4591-4600'

Frac C sands as follows:  
 24810# 20/40 sand in 349 bbls Lightning 17 frac fluid. Treated @ avg press of 2088 psi w/avg rate of 24.7 BPM. ISIP 1858 psi Calc flush: 4589 gal. Actual flush: 4032 gal.

09/03/07 3932-3976'

Frac GB4 & GB6 sands as follows:  
 89060# 20/40 sand in 664 bbls Lightning 17 frac fluid. Treated @ avg press of 2035 psi w/avg rate of 24.8 BPM. ISIP 2085 psi Calc flush: 3930 gal. Actual flush: 3868 gal

#### PERFORATION RECORD

Date	Interval	Tool	Holes	Status
08/28/07	5132-5139'	4 JSPF	28 holes	✓
09/03/07	4591-4600'	4 JSPF	36 holes	✓
09/03/07	3968-3976'	4 JSPF	32 holes	✓
09/03/07	3932-3939'	4 JSPF	28 holes	✓

**NEWFIELD**

---

**BELUGA FEDERAL 16-18-9-17**

853' FSL & 716' FEL

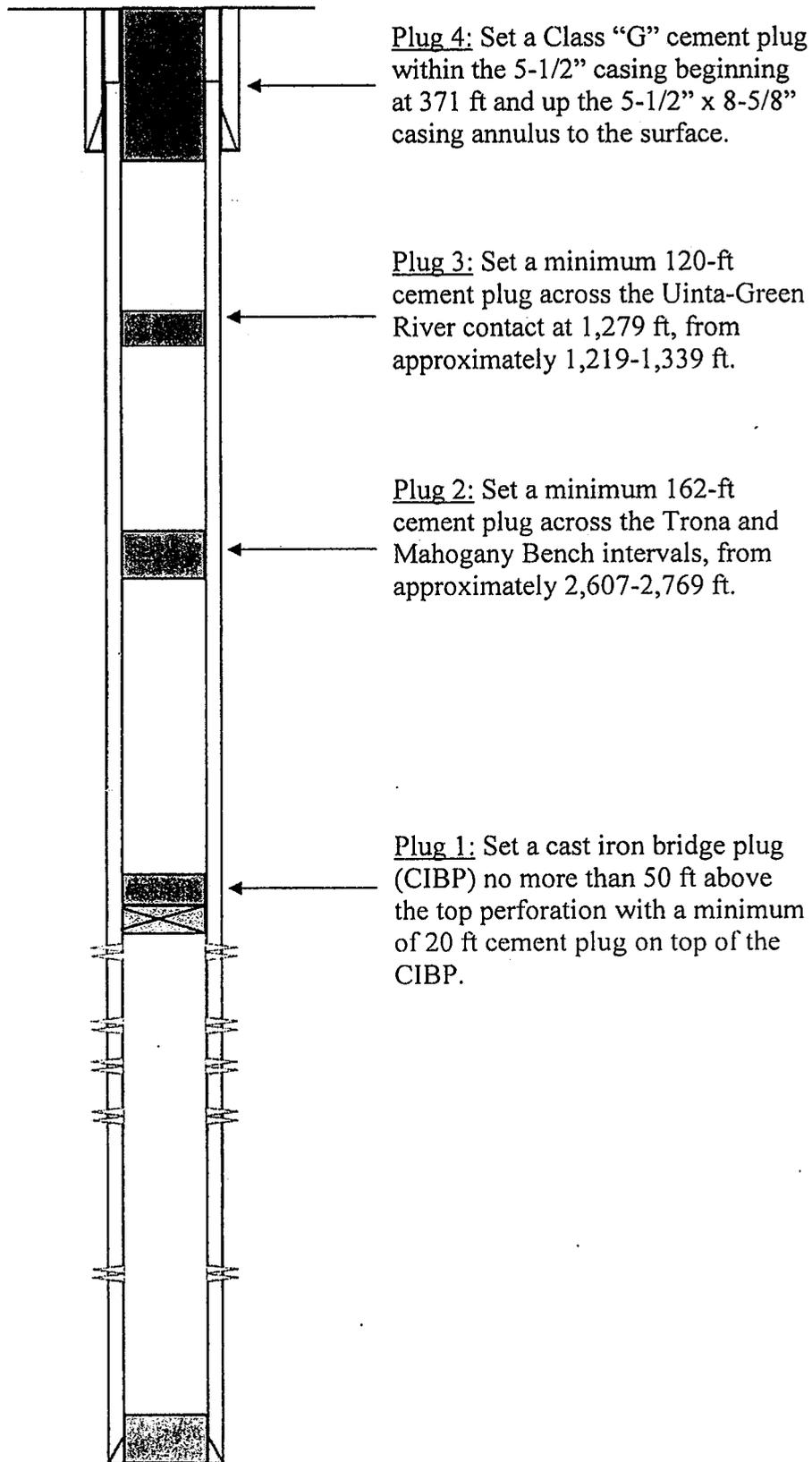
SE/SE Section 18-T9S-R17E

Duchesne Co, Utah

API #43-013-32809; Lease # UTU-72106

*est. Top Wasatch @ 5809'*

## Plugging and Abandonment Diagram for Beluga Federal 16-18-9-17





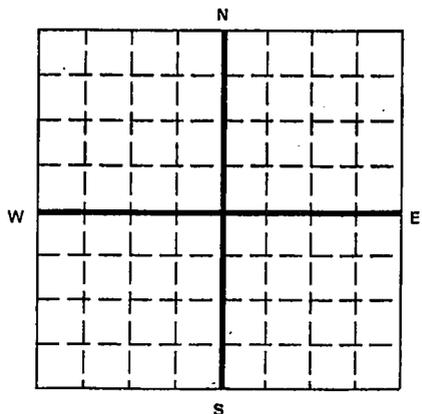
United States Environmental Protection Agency  
Washington, DC 20460

### WELL REWORK RECORD

Name and Address of Permittee \_\_\_\_\_

Name and Address of Contractor \_\_\_\_\_

Locate Well and Outline Unit on  
Section Plat - 640 Acres



State \_\_\_\_\_ County \_\_\_\_\_ Permit Number \_\_\_\_\_

Surface Location Description  
\_\_\_\_ 1/4 of \_\_\_\_ 1/4 of \_\_\_\_ 1/4 of \_\_\_\_ 1/4 of Section \_\_\_\_ Township \_\_\_\_ Range \_\_\_\_

Locate well in two directions from nearest lines of quarter section and drilling unit  
Surface  
Location \_\_\_\_ ft. frm (N/S) \_\_\_\_ Line of quarter section  
and \_\_\_\_ ft. from (E/W) \_\_\_\_ Line of quarter section.

WELL ACTIVITY: <input type="checkbox"/> Brine Disposal <input type="checkbox"/> Enhanced Recovery <input type="checkbox"/> Hydrocarbon Storage  Lease Name _____	Total Depth Before Rework _____	TYPE OF PERMIT <input type="checkbox"/> Individual <input type="checkbox"/> Area Number of Wells ____  Well Number _____
	Total Depth After Rework _____	
	Date Rework Commenced _____	
	Date Rework Completed _____	

#### WELL CASING RECORD -- BEFORE REWORK

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

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

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

DESCRIBE REWORK OPERATIONS IN DETAIL  
USE ADDITIONAL SHEETS IF NECESSARY

#### WIRE LINE LOGS, LIST EACH TYPE

Log Types	Logged Intervals

#### Certification

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

Name and Official Title (Please type or print) \_\_\_\_\_

Signature \_\_\_\_\_

Date Signed \_\_\_\_\_

## PAPERWORK REDUCTION ACT

The public reporting and record keeping burden for this collection of information is estimated to average 4 hours per response annually. Burden means the total time, effort, or financial resource expended by persons to generate, maintain, retain, or disclose or provide information to or for a Federal Agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems for the purposes of collecting, validating, and verifying information, processing and maintaining information, and disclosing and providing information; adjust the existing ways to comply with any previously applicable instructions and requirements; train personnel to be able to respond to the collection of information; search data sources; complete and review the collection of information; and, transmit or otherwise disclose the information. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. Send comments on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including the use of automated collection techniques to Director, Collection Strategies Division, U.S. Environmental Protection Agency (2822), 1200 Pennsylvania Ave., NW., Washington, D.C. 20460. Include the OMB control number in any correspondence. Do not send the completed forms to this address.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 8

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

MAY 10 2012

Ref: 8P-W-UIC

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

Mr. Eric Sundberg  
Regulatory Analyst  
Newfield Production Company  
1001 Seventeenth Street – Suite 2000  
Denver, Colorado 80202

Accepted by the  
Utah Division of  
Oil, Gas and Mining

FOR RECORD ONLY

RE: Underground Injection Control (UIC)  
Additional Well to Beluga Area Permit  
EPA UIC Permit UT20798-09608  
Well: Beluga Federal 16-18-9-17  
SESE Sec. 18-T9S-R17E  
Duchesne County, Utah  
API No.: 43-013-32809

Dear Mr. Sundberg:

The U.S. Environmental Protection Agency Region 8 hereby authorizes Newfield Production Company (Newfield) to convert the oil well Beluga Federal 16-18-9-17 to an enhanced recovery injection well according to the terms and conditions of the enclosed Authorization for Additional Well. The addition of this injection well, within the exterior boundary of the Uintah & Ouray Indian Reservation, is being made under the authority of 40 CFR §144.33 (c) and terms of the Beluga Area Permit No. UT20798-00000 and subsequent modifications.

Please be aware that Newfield does not have authorization to begin well injection until all Prior to Commencing Injection requirements are met and written authorization to inject is given by the Director. Prior to receiving authorization to inject Newfield must submit for review and approval (1) the results of a Part I (internal) Mechanical Integrity test, (2) a pore pressure calculation of the injection interval and (3) a completed EPA Form No. 7520-12 (Well Rework Record) with a new schematic diagram.

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

Please submit the required data to Jason Deardorff at the letterhead address citing mail code 8P-W-UIC.

Sincerely,



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

Enclosures: Authorization for Additional Well  
Wellbore Schematic for Beluga Federal 16-18-9-17

cc: Letter Only:

Uintah & Ouray Business Committee:

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

Daniel Picard  
BIA - Uintah & Ouray Indian Agency

cc: All Enclosures:

Mike Natchees  
Environmental Coordinator  
Ute Indian Tribe

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

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

Fluid Minerals Engineering Office  
BLM - Vernal Office

Reed Durfey  
District Manager  
Newfield Production Company  
Myton, Utah



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 8

1595 WYNKOOP STREET

DENVER, CO 80202-1129

Phone 800-227-8917

http://www.epa.gov/region08

AUTHORIZATION FOR ADDITIONAL WELL

**UIC Area Permit UT20798-00000**

The Beluga UIC Area Permit UT20798-00000, effective October 25, 1996 authorizes injection for the purpose of enhanced oil recovery in the Monument Butte Field. On March 23, 2012, Newfield Production Company notified the Director concerning the following additional enhanced recovery injection well:

Well Name:	<b>Beluga Federal 16-18-9-17</b>
EPA Permit ID Number:	<b>UT20798-09608</b>
Location:	853' FSL & 716' FEL SESE Sec. 18-T9S-R17E Duchesne County, Utah API #43-013-32809

Pursuant to 40 CFR §144.33, Area UIC Permit UT20798-00000 authorizes the permittee to construct and operate, convert, or plug and abandon additional enhanced recovery injection wells within the area permit. This well was determined to satisfy additional well criteria required by the permit.

This well is subject to all provisions of UIC Area Permit No. UT20798-00000, as modified and as specified in the Injection Well-Specific Requirements detailed below. This Authorization shall expire one year after the Effective Date unless the permittee has converted the well to injection or submits a written request to extend this Authorization prior to the expiration date.

This Authorization is effective upon signature.

Date: 5/7/12

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

*\* The person holding this title is referred to as the Director throughout the permit and Authorization*

## **INJECTION WELL-SPECIFIC REQUIREMENTS**

Well Name: **Beluga Federal 16-18-9-17**

EPA Well ID Number: **UT20798-09608**

### **Prior to Commencing Injection Operations, the permittee shall submit the following information:**

1. Completed Well Rework Record (EPA Form No. 7520-12) and schematic diagram;
2. Pore pressure calculation of the proposed injection zone;
3. Results from a successful part I (internal) Mechanical Integrity test.

Once these records are received and approved by EPA, the Director will provide written authorization to inject.

**Note:** All depths given in this authorization reference the Kelly Bushing datum unless otherwise specified.

**Approved Injection Interval:** The injection interval is the part of the injection zone where fluids are directly emplaced. The approved injection interval for this well is from the top of the Garden Gulch Sand #2 to the top of the Wasatch Formation. Additional injection perforations may be added provided that they remain within the approved injection interval. Injection between the outermost casing protecting USDWs and the well bore is prohibited.

**Maximum Allowable Injection Pressure (MAIP):** The initial MAIP is **1,415 psig**, based on the calculation  $MAIP = [FG - (0.433)(SG)] * D$ , where "FG" is the fracture gradient, "SG" is the specific gravity of injectate and "D" is the Kelly Bushing depth to the shallowest casing perforation. For this well, FG is 0.800 psi/ft, SG is 1.015 and D is 3,932 ft.

UIC Area Permit No. UT20798-00000 provides the opportunity for the permittee to request a change of the MAIP based upon the submitted results of a step rate test that demonstrates the formation parting pressure.

**Well Construction: Casing and Cementing:** The well was constructed in compliance with existing regulatory controls for casing and cementing pursuant to 40 CFR § 146.22(c). Cementing records, including the cement bond log, have satisfactorily demonstrated the presence of adequate cement to prevent the migration of injection fluids behind the casing from the injection zone.

**Well Construction: Tubing and Packer:** 2-7/8" or similar size injection tubing is approved. The packer shall be set at a depth no more than 100 ft. above the top perforation.

### **Demonstration of Mechanical Integrity:**

- (1) A successful demonstration of part I (internal) mechanical integrity using a Casing-Tubing Annulus Pressure Test is required prior to injection, and no less than every five years after the last successful test.

- (2) EPA reviewed the cementing records and determined the cement will provide an effective barrier to significant upward movement of fluids through vertical channels adjacent to the well bore pursuant to 40 CFR §146.8 (a)(2). Therefore, further demonstration of Part II (external) Mechanical Integrity is not required at this time.

**Demonstration of Financial Responsibility:** The applicant has demonstrated financial responsibility by a Surety Bond in the amount of \$42,000 and a Standby Trust Agreement that have been approved by EPA. The Director may revise the amount required and may require the permittee to obtain and provide updated estimates of costs for plugging the well according to the approved Plugging and Abandonment plan.

**Plugging and Abandonment:** The well shall be plugged in a manner that isolates the injection zone and prevents movement of fluids into or between Underground Sources of Drinking Water (USDW). Tubing, packers, and any downhole apparatus shall be removed. Class A, C, G, and H cements, with additives such as accelerators and retarders that control or enhance cement properties, may be used for plugs; however, volume extending additives and gel cements are not approved for plug use. Plug placement shall be verified by tagging. Plugging gel of at least 9.2 lb/gal shall be placed between all plugs. A minimum 50 ft. surface plug shall be set inside and outside of the surface casing to seal pathways for fluid migration into the subsurface. Within sixty (60) days after plugging the owner or operator shall submit Plugging Record (EPA Form 7520-13) to the Director. The Plugging Record must be certified as accurate and complete by the person responsible for the plugging operation. At a minimum, the following plugs are required:

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

(4) Isolate Surface Fluid Migration Paths:

- a. If the depth of the lowermost USDW is above the base of surface casing, perforate the outermost casing string 50 ft. below the base of surface casing and circulate cement to the surface, unless there is existing cement across this interval; OR
- b. If the depth of the lowermost USDW is below the base of surface casing, perforate the outermost casing string 50 ft. below the base of the lowermost USDW and circulate cement to surface; AND
- c. Set a cement plug inside the innermost casing string from 50 ft. below the base of the surface casing to surface.

### **INJECTION WELL-SPECIFIC CONSIDERATIONS**

Well Name: **Beluga Federal 16-18-9-17**  
EPA Well ID Number: **UT20798-09608**

**Underground Sources of Drinking Water (USDWs):** USDWs in the Lone Tree Area Permit generally occur within the Uinta Formation. According to "*Base of Moderately Saline Ground Water in the Uinta Basin, Utah, State of Utah Technical Publication No. 92,*" the base of moderately saline ground water may be found at approximately 499 ft. below ground surface in the Beluga Federal 16-18-9-17 well. Water samples from the Green River Formation taken in conjunction with oil production show that USDWs do occur at deeper depths within the Humpback unit and as deep as 6,026 ft. in the Balcron Monument Federal 33-25-8-17 well. Freshening of the injection zone due to the injection of relatively fresh water for the purpose of enhanced oil recovery has been demonstrated to be occurring in parts of the Monument Butte Field, including this permit area.

**http:NRWRT1.NR.STATE.UT.US:** According to the state of Utah, any water wells present within the permit area are shallow and do not intersect the injection zone.

**Composition of Source, Formation, and Injectate Water:** A water sample analysis was not required as part of the application to add this well to the area permit because EPA considers the water quality of the injection zone to be well documented. Area UIC Permit UT20771-00000 and Statement of Basis describe originally in place formation fluid within the injection zone to be greater than 10,000 mg/l Total Dissolved Solids (TDS) content. However, due to injection of relatively fresh water for the purpose of enhanced oil recovery within the permit area, produced water samples showing TDS values less than 10,000 mg/l have occurred and this occurrence has been observed to increase in frequency with time. Newfield has demonstrated and EPA has confirmed that freshening of the injection zone is occurring and that more recent water samples showing TDS values less than 10,000 mg/l are not likely representative of the original formation fluid at or near this well. EPA considers the presence of waters less than 10,000 mg/l within the injection zone to be a temporary, artificial condition and therefore does not require an aquifer exemption to allow injection to occur.

Authorization for Additional Well: UIC Area Permit UT207983-00000  
Well: Beluga Federal 16-18-9-17 EPA Well ID: UT20798-09608

The injectate is water from a Monument Butte Field Injection Facility and consists of culinary water from the Johnson Water District and/or water from the Green River, blended with produced Green River Formation water and resulting in TDS content less than 10,000 mg/l.

**Confining Zone:** A *Confining Zone* is a geological formation, group of formations, or part of a formation that is capable of limiting fluid movement above an injection zone. The designated Confining Zone for this well consists of three interbedded, thick impervious shales, confining marlstones and siltstones. The Confining Zone extends from approximately 200 feet above the Garden Gulch Marker to the top of the Garden Gulch Number 2 Sand within the Garden Gulch Member of the Green River Formation. This interval is found between the depths of 3,970 feet to 4,466 feet in the Federal 1-26-8-17 Type Gamma Log for the Monument Butte Field.

**Injection Zone:** An *injection zone* is a geological formation, group of formations, or part of a formation that receives fluids through a well. The Injection Zone for this well consists of the lower part of the Garden Gulch member starting at the top of the Garden Gulch #2 Sand and includes the Douglas Creek and Basal Carbonate members of the Green River Formation to the top of the Wasatch Formation.

**Well Construction:** This well was constructed according to BLM requirements and controls for production wells at the time of well completion. EPA has reviewed and approved the construction and determined that it is adequate to protect USDWs.

**Surface Casing:** 8-5/8" casing is set at 309 ft. in a 12-1/4" hole, using 160 sacks Class "G" cement, cemented to the surface.

**Longstring Casing:** 5-1/2" casing is set at 5,738 ft. in a 7-7/8" hole secured with 700 sacks of cement. Total driller depth is 5,750 ft. Plugged back total depth is 5,681 ft. EPA calculates top of cement at 1,213 ft. Estimated CBL top of cement is 19 ft.

**Perforations:** Top perforation: 3,932 ft. Bottom perforation: 5,139 ft.

## **AREA OF REVIEW (AOR) WELL REQUIREMENTS**

The following four wells that penetrate the confining zone within or proximate to a ¼-mile radius around the Beluga Federal 16-18-9-17 well were evaluated to determine if any corrective action is necessary to prevent fluid movement into USDWs:

Beluga Federal 9-18-9-17                      API: 43-013-32053                      NESE Sec. 18-T9S-R17E  
This well is an injection well authorized by UIC Permit UT20798-04665

GMBU T-18-9-17                      API: 43-013-50512                      SWSW Sec. 17-T9S-R17E  
The cement bond log shows the top of cement to be at 47 ft..                      BHL-NESE Sec. 18

Pomco 4-17-9-17                      API: 43-013-30506                      SWSW Sec. 17-T9S-R17E  
The top of cement is at 2,150 ft. and above the base of the Confining Zone.

*Authorization for Additional Well: UIC Area Permit UT20798-00000*  
*Well: Beluga Federal 16-18-9-17 EPA Well ID: UT20798-09608*

The top of cement is at 1,902 ft. and above the base of the Confining Zone.

**No Corrective Action Required on AOR wells:** EPA reviewed all wells penetrating the Confining Zone within a ¼-mile radius of the proposed injection well and determined that cement in these wells is adequate to prevent the movement of fluid into USDWs. Top of cement is above the base of the Confining Zone in all AOR wells.

**Reporting of Noncompliance:**

- 1) Anticipated Noncompliance. The operator 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.
- 2) Compliance Schedules. Reports of compliance or noncompliance with, or any progress 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.
- 3) (Written Notice of any noncompliance which may endanger health or the environment shall be reported to the Director within five days of the time the operator becomes aware of the noncompliance. The written notice shall contain a description of the noncompliance and its cause, the period of noncompliance including dates and times, if the noncompliance has not been corrected the anticipated time it is expected to continue, and steps taken or planned to prevent or reduce recurrence of the noncompliance.

**Twenty-Four Hour Noncompliance Reporting:** The operator shall report to the Director any noncompliance which may endanger health or environment. Information shall be provided, either orally or by leaving a message, within twenty-four (24) hours from the time the operator becomes aware of the circumstances by telephoning 1-(800)-227-8917 and asking for the EPA Region 8 UIC Program Compliance and Enforcement Director, or by contacting the Region 8 Emergency Operations Center at (303)-293-1788, if calling from outside EPA Region 8. The following information shall be included in the verbal report:

- 1) Any monitoring or other information which indicates that any contaminant may cause an endangerment to an underground source of drinking water.
- 2) Any noncompliance with a Permit condition or malfunction of the injection system which may cause fluid migration into or between underground sources of drinking water.

**Oil Spill and Chemical Release Reporting:** The operator shall comply with all other reporting requirements related to oil spills and chemical releases or other potential impacts to human health or the environment by contacting the **National Response Center (NRC) 1-(800)-424-8802 or 1-(202)-267-2675**, or through the **NRC website at <http://www.nrc.uscg.mil/index.htm>**

**Other Noncompliance:** The operator shall report all other instances of noncompliance not

otherwise reported at the time monitoring reports are submitted.

**Other Information:** Where the operator becomes aware that he 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 operator shall submit such correct facts or information within two weeks of the time such information became known.

# BELUGA FEDERAL 16-18-9-17

Spud Date: 07/16/07  
 Put on Production: 09/10/07  
 GL: 5449' KB: 5461'

Initial Production: BOPD,  
 MCFD, BWPD

## Proposed Injection Wellbore Diagram

### SURFACE CASING

CSG SIZE: 8-5/8"  
 GRADE: J-55  
 WEIGHT: 24#  
 LENGTH: 7 jts. (309.21')  
 DEPTH LANDED: 321.06' 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: 143 jts. (5723.91')  
 DEPTH LANDED: 5738.16' KB  
 HOLE SIZE: 7-7/8"  
 CEMENT DATA: 300 sxs Prem. Lite II mixed & 400 sxs 50/50 POZ.  
 CEMENT TOP: 19'

### TUBING

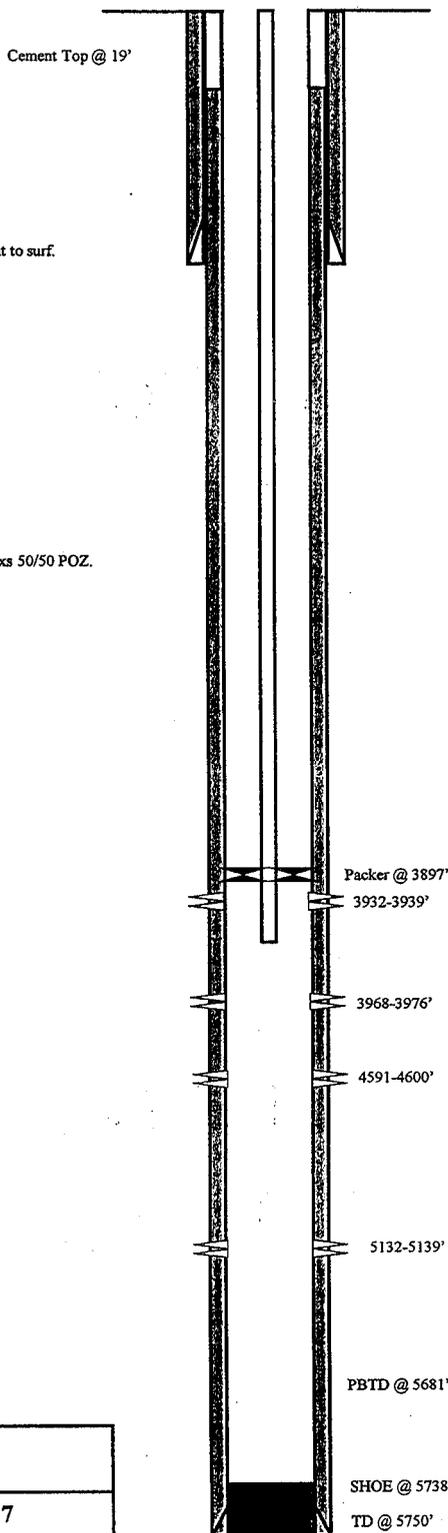
SIZE/GRADE/WT.: 2-7/8" / J-55 / 6.5#  
 NO. OF JOINTS: 160 jts (5086.11')  
 TUBING ANCHOR: 5098.11' KB  
 NO. OF JOINTS: 2 jts (61.96')  
 SEATING NIPPLE: 2-7/8" (1.10')  
 SN LANDED AT: 5162.87' KB  
 NO. OF JOINTS: 2 jts (63.16')  
 TOTAL STRING LENGTH: EOT @ 5227.58' KB

### FRAC JOB

09/03/07 5132-5139' **Frac LODC sands as follows:**  
 20024# 20/40 sand in 332 bbls Lightning 17  
 frac fluid. Treated @ avg press of 2345 psi  
 w/avg rate of 24.7 BPM. ISIP 2218 psi. Calc  
 flush: 5130 gal. Actual flush: 4578 gal.

09/03/07 4591-4600' **Frac C sands as follows:**  
 24810# 20/40 sand in 349 bbls Lightning 17  
 frac fluid. Treated @ avg press of 2088 psi  
 w/avg rate of 24.7 BPM. ISIP 1858 psi. Calc  
 flush: 4589 gal. Actual flush: 4032 gal.

09/03/07 3932-3976' **Frac GB4 & GB6 sands as follows:**  
 89060# 20/40 sand in 664 bbls Lightning 17  
 frac fluid. Treated @ avg press of 2035 psi  
 w/avg rate of 24.8 BPM. ISIP 2085 psi. Calc  
 flush: 3930 gal. Actual flush: 3868 gal.



### PERFORATION RECORD

Date	Interval	Tool Joint	Holes
08/28/07	5132-5139'	4 JSPF	28 holes
09/03/07	4591-4600'	4 JSPF	36 holes
09/03/07	3968-3976'	4 JSPF	32 holes
09/03/07	3932-3939'	4 JSPF	28 holes

**NEWFIELD**

**BELUGA FEDERAL 16-18-9-17**

853' FSL & 716' FEL  
 SE/SE Section 18-T9S-R17E  
 Duchesne Co, Utah  
 API #43-013-32809; Lease # UTU-72106

<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		FORM 9
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		<b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> UTU-72106
		<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b>
<b>1. TYPE OF WELL</b> Oil Well		<b>7. UNIT or CA AGREEMENT NAME:</b> GMBU (GRRV)
<b>2. NAME OF OPERATOR:</b> NEWFIELD PRODUCTION COMPANY		<b>8. WELL NAME and NUMBER:</b> BELUGA FED 16-18-9-17
<b>3. ADDRESS OF OPERATOR:</b> Rt 3 Box 3630 , Myton, UT, 84052		<b>9. API NUMBER:</b> 43013328090000
<b>PHONE NUMBER:</b> 435 646-4825 Ext		<b>9. FIELD and POOL or WILDCAT:</b> MONUMENT BUTTE
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 0853 FSL 0716 FEL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: SESE Section: 18 Township: 09.0S Range: 17.0E Meridian: S		<b>COUNTY:</b> DUCHESNE
		<b>STATE:</b> UTAH

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

TYPE OF SUBMISSION	TYPE OF ACTION		
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start:	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> CASING REPAIR
<input checked="" type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion: 7/2/2012	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> CHANGE WELL NAME
<input type="checkbox"/> SPUD REPORT Date of Spud:	<input checked="" type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input checked="" type="checkbox"/> CONVERT WELL TYPE
<input type="checkbox"/> DRILLING REPORT Report Date:	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> NEW CONSTRUCTION
	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> PLUG BACK
	<input type="checkbox"/> PRODUCTION START OR RESUME	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION
	<input type="checkbox"/> REPERFORATE CURRENT FORMATION	<input type="checkbox"/> SIDETRACK TO REPAIR WELL	<input type="checkbox"/> TEMPORARY ABANDON
	<input type="checkbox"/> TUBING REPAIR	<input type="checkbox"/> VENT OR FLARE	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> WATER SHUTOFF	<input type="checkbox"/> SI TA STATUS EXTENSION	<input type="checkbox"/> APD EXTENSION
	<input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> OTHER	OTHER: <input style="width: 100px;" type="text"/>

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

The subject well has been converted from a producing oil well to an injection well on 06/26/2012. On 06/25/2012 Jason Deardorff with the EPA was contacted concerning the initial MIT on the above listed well. On 07/02/2012 the casing was pressured up to 1700 psig and charted for 30 minutes with no pressure loss. The well was not injecting during the test. The tubing pressure was 0 psig during the test. There was not an EPA representative available to witness the test. EPA# UT20798-09608

**Accepted by the  
Utah Division of  
Oil, Gas and Mining  
FOR RECORD ONLY  
July 11, 2012**

<b>NAME (PLEASE PRINT)</b> Lucy Chavez-Naupoto	<b>PHONE NUMBER</b> 435 646-4874	<b>TITLE</b> Water Services Technician
<b>SIGNATURE</b> N/A	<b>DATE</b> 7/3/2012	

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

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

EPA Witness: \_\_\_\_\_ Date: 7/2/12  
 Test conducted by: Cody Marx  
 Others present: \_\_\_\_\_

*UT 20798 - 09608*

Well Name: <u>Beluga Federal 16-18-9-17</u>	Type: ER SWD	Status: AC TA UC
Field: <u>Monument Butte</u>		
Location: <u>SE/SE</u> Sec: <u>18</u> T <u>9</u> N/S R <u>17</u> E/W	County: <u>Duchesne</u>	State: <u>Ut.</u>
Operator: <u>Cody Marx</u>		
Last MIT: <u>/ /</u>		Maximum Allowable Pressure: _____ PSIG

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

Pre-test casing/tubing annulus pressure: 1700 psig

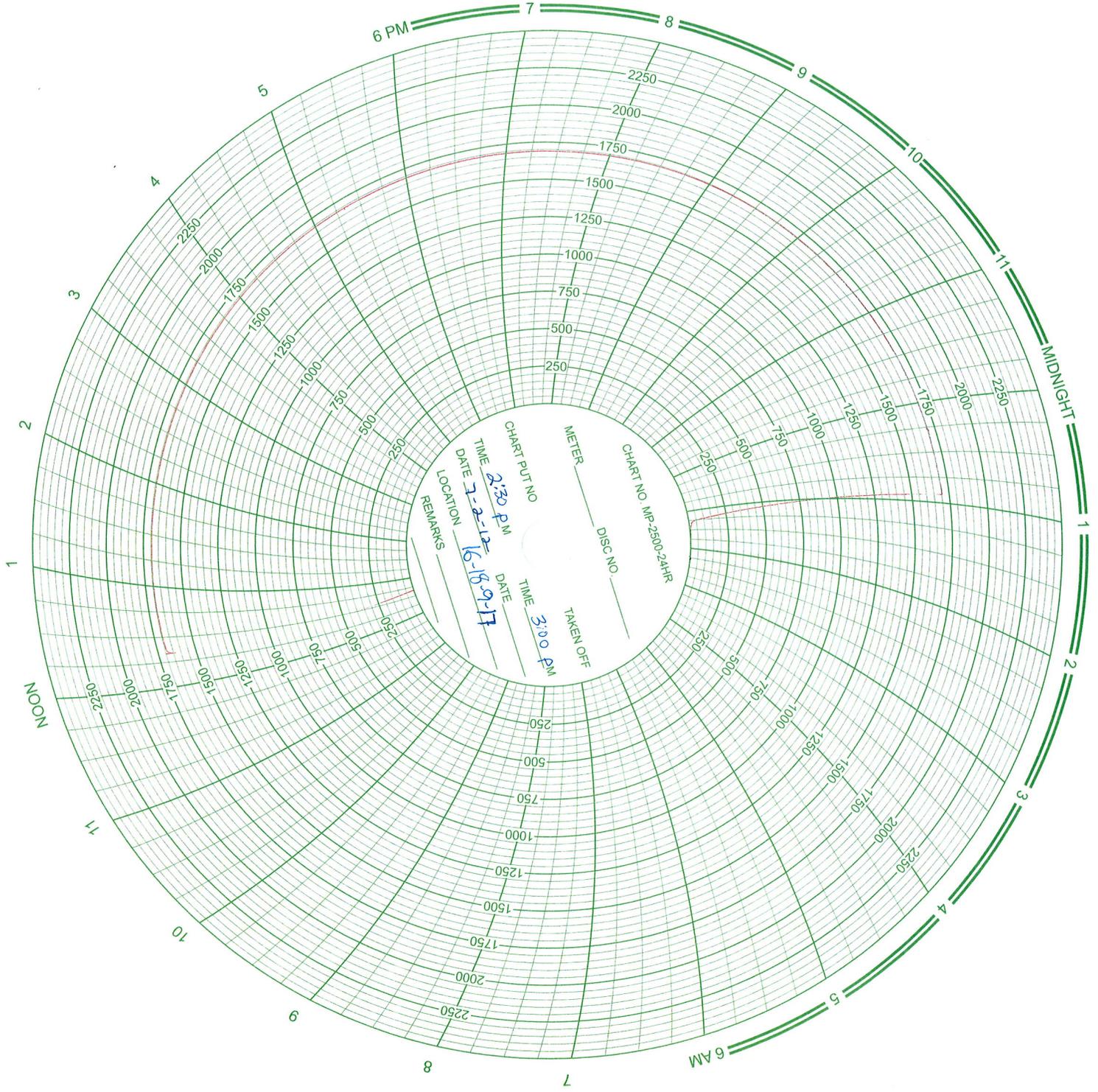
MIT DATA TABLE	Test #1	Test #2	Test #3
<b>TUBING PRESSURE</b>			
Initial Pressure	0 psig	psig	psig
End of test pressure	0 psig	psig	psig
<b>CASING / TUBING ANNULUS PRESSURE</b>			
0 minutes	1700 psig	psig	psig
5 minutes	1700 psig	psig	psig
10 minutes	1700 psig	psig	psig
15 minutes	1700 psig	psig	psig
20 minutes	1700 psig	psig	psig
25 minutes	1700 psig	psig	psig
30 minutes	1700 psig	psig	psig
_____ minutes	psig	psig	psig
_____ minutes	psig	psig	psig
<b>RESULT</b>	<input checked="" type="checkbox"/> Pass <input type="checkbox"/> Fail	<input type="checkbox"/> Pass <input type="checkbox"/> Fail	<input type="checkbox"/> Pass <input type="checkbox"/> Fail

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

### MECHANICAL INTEGRITY PRESSURE TEST

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

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



**Daily Activity Report****Format For Sundry****BELUGA 16-18-9-17****4/1/2012 To 8/30/2012****6/25/2012 Day: 1****Conversion**

NC #1 on 6/25/2012 - MIRU NC#1,H/O Csg, U/S pmp,Flush Tbg,Soft Seat pmp,P/Tst Tbg To 3500 Psi, POOH L/D Rod Prod On Float,SWI, C/SDFN. - 5:30AM-6:00AM C/Trvl. 6:00AM OWU, N/D W/-HD, N/U BOP, R/U R/Flr, Rel T/A, BMW H/Oiler Flush Tbg W/-20 BW. POOH W/-122 Jts Tbg In Derrick Breaking & Redoping Tool Jts W/-Liq O Ring, L/D 38 Jts Tbg,T/A, 2 Jts Tbg, S/N, 2 Jts Tbg, N/C On Float. BMW H/Oiler Flush Tbg W/-20 BW On TOOH Due To Oil. P/U & RIH W/-2 3/8 Collar, 2 3/8 X/N Nipple, 2 3/8X2 7/8 XO, 5 1/2" Arrow #1 Pkr, On Off Tool, 2 7/8 S/N, 122 Jts Tbg, POOH L/D 1 Jt Tbg On Float. R/U H/Oiler Flush Tbg W/-23 BW Drop 2 7/8 SV D/Tbg, pmp SV To SN W/-14 BW, P/Test Tbg To 3,000 Psi, Tbg Psi Unstabilized, 5:30PM C/SDFN, 5:30PM-6:00PM C/Trvl. - 11:00AM MIRU NC#1, 5 Mile Rig Move, Pmp 60 BW Down Csg, Pull Pmp Off Seat, L/D 2 Rods, R/U Flsh Cap & Flush Tbg W/ 40BW, P/U 3 Rods & Soft Seat Test Tbg To 3500psi, Tst Good, R/U Rod Eqp & TOOH W/ 1-2',4',6', & 8' 3/4 Ponys, 99-3/4 4 Pers, 80 Slicks, 20-3/4 4 Pers, & 6 Wt Bars, Change BOP Rams To 2 7/8, 6:00PM C/SDFN, 6:00PM-6:30PM C/Trvl. - 11:00AM MIRU NC#1, 5 Mile Rig Move, Pmp 60 BW Down Csg, Pull Pmp Off Seat, L/D 2 Rods, R/U Flsh Cap & Flush Tbg W/ 40BW, P/U 3 Rods & Soft Seat Test Tbg To 3500psi, Tst Good, R/U Rod Eqp & TOOH W/ 1-2',4',6', & 8' 3/4 Ponys, 99-3/4 4 Pers, 80 Slicks, 20-3/4 4 Pers, & 6 Wt Bars, Change BOP Rams To 2 7/8, 6:00PM C/SDFN, 6:00PM-6:30PM C/Trvl. - 5:30AM-6:00AM C/Trvl. 6:00AM OWU, N/D W/-HD, N/U BOP, R/U R/Flr, Rel T/A, BMW H/Oiler Flush Tbg W/-20 BW. POOH W/-122 Jts Tbg In Derrick Breaking & Redoping Tool Jts W/-Liq O Ring, L/D 38 Jts Tbg,T/A, 2 Jts Tbg, S/N, 2 Jts Tbg, N/C On Float. BMW H/Oiler Flush Tbg W/-20 BW On TOOH Due To Oil. P/U & RIH W/-2 3/8 Collar, 2 3/8 X/N Nipple, 2 3/8X2 7/8 XO, 5 1/2" Arrow #1 Pkr, On Off Tool, 2 7/8 S/N, 122 Jts Tbg, POOH L/D 1 Jt Tbg On Float. R/U H/Oiler Flush Tbg W/-23 BW Drop 2 7/8 SV D/Tbg, pmp SV To SN W/-14 BW, P/Test Tbg To 3,000 Psi, Tbg Psi Unstabilized, 5:30PM C/SDFN, 5:30PM-6:00PM C/Trvl.

**Daily Cost:** \$0**Cumulative Cost:** \$4,655**6/26/2012 Day: 3****Conversion**

NC #1 on 6/26/2012 - Chek Tbg Psi Good Tst,Fish SV.N/D pmp Pkr Flud,Set Pkr,P/Tst Csg & Pkr To 1,500 Psi,Good Test. Well Ready For MIT ( Final Rig Report ). - 5:30AM-6:00AM C/Trvl. 6:00AM OWU W/-3,020 Psi On Tbg, Good Test. R/U S/Line Ovrshot RIH & Fish SV. R/D R/Flr, N/D BOP,N/U W/-HD, BMW H/Oiler pmp 61 BW W/-20 Gal Pkr Fluid D/Csg, N/D W/-HD, Set Pkr In 18,000 Tension, N/U W/-HD, P/Test Csg & Pkr To 1,500 Psi, Held Good 1 Hr, Rack Out Eq, R/D Rig, Well Ready For MIT ( Final Rig Report ).

**Daily Cost:** \$0**Cumulative Cost:** \$26,598**7/3/2012 Day: 4****Conversion**

Rigless on 7/3/2012 - Conduct initial MIT - On 06/25/2012 Jason Deardorff with the EPA was contacted concerning the initial MIT on the above listed well. On 07/02/2012 the casing was pressured up to 1700 psig and charted for 30 minutes with no pressure loss. The well was not injecting during the test. The tubing pressure was 0 psig during the test. There was not an EPA representative available to witness the test. EPA# UT20798-09608 **Finalized**

**Daily Cost:** \$0

**Cumulative Cost:** \$103,368

---

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

<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	FORM 9  <b>5.LEASE DESIGNATION AND SERIAL NUMBER:</b> UTU-72106
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.	<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b>  <b>7.UNIT or CA AGREEMENT NAME:</b> GMBU (GRRV)
<b>1. TYPE OF WELL</b> Water Injection Well	<b>8. WELL NAME and NUMBER:</b> BELUGA FED 16-18-9-17
<b>2. NAME OF OPERATOR:</b> NEWFIELD PRODUCTION COMPANY	<b>9. API NUMBER:</b> 43013328090000
<b>3. ADDRESS OF OPERATOR:</b> Rt 3 Box 3630 , Myton, UT, 84052	<b>PHONE NUMBER:</b> 435 646-4825 Ext
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 0853 FSL 0716 FEL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: SESE Section: 18 Township: 09.0S Range: 17.0E Meridian: S	<b>9. FIELD and POOL or WILDCAT:</b> MONUMENT BUTTE  <b>COUNTY:</b> DUCHESNE  <b>STATE:</b> UTAH

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

TYPE OF SUBMISSION	TYPE OF ACTION		
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start:	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> CASING REPAIR
<input checked="" type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion: 8/16/2012	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> CHANGE WELL NAME
<input type="checkbox"/> SPUD REPORT Date of Spud:	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input checked="" type="checkbox"/> CONVERT WELL TYPE
<input type="checkbox"/> DRILLING REPORT Report Date:	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> NEW CONSTRUCTION
	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> PLUG BACK
	<input type="checkbox"/> PRODUCTION START OR RESUME	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION
	<input type="checkbox"/> REPERFORATE CURRENT FORMATION	<input type="checkbox"/> SIDETRACK TO REPAIR WELL	<input type="checkbox"/> TEMPORARY ABANDON
	<input type="checkbox"/> TUBING REPAIR	<input type="checkbox"/> VENT OR FLARE	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> WATER SHUTOFF	<input type="checkbox"/> SI TA STATUS EXTENSION	<input type="checkbox"/> APD EXTENSION
	<input type="checkbox"/> WILDCAT WELL DETERMINATION	<input checked="" type="checkbox"/> OTHER	OTHER: <input type="text" value="Put on Injection"/>

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 1:45 PM on 08/16/2012. EPA # UT20798-09608

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

**FOR RECORD ONLY**

August 28, 2012

<b>NAME (PLEASE PRINT)</b> Lucy Chavez-Naupoto	<b>PHONE NUMBER</b> 435 646-4874	<b>TITLE</b> Water Services Technician
<b>SIGNATURE</b> N/A	<b>DATE</b> 8/17/2012	



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 8

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

**AUG 06 2012**

Ref: 8P-W-UIC

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

RECEIVED

**AUG 15 2012**

DIV. OF OIL, GAS & MINING

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

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

RE: Underground Injection Control (UIC)  
Authorization to Commence Injection  
EPA UIC Permit UT20798-09608  
Well: Beluga Federal 16-18-9-17  
SESE Sec. 18-T9S-R17E  
Duchesne County, Utah  
API No.: 43-013-32809

Dear Mr. Durfey:

The U.S. Environmental Protection Agency Region 8 has received Newfield Production Company's (Newfield) July 3, 2012, letter with enclosures. The enclosed Part I (internal) Mechanical Integrity test, Well Rework Record (EPA Form 7520-12), schematic diagram and calculated pore pressure were reviewed and approved by the EPA, satisfactorily completing all Prior to Commencing Injection Requirements for UIC Permit UT20798-09608.

As of the date of this letter, Newfield is authorized to commence injection into the Beluga Federal 16-18-9-17 well at a Maximum Allowable Injection Pressure (MAIP) of 1,415 psig. You may apply for a higher MAIP at a later date. Your application should be accompanied by the interpreted results of a step rate test that measures the fracture parting pressure and calculates the fracture gradient at this depth and location. Newfield must receive prior authorization from the Director to inject at pressures greater than the permitted MAIP during any test.

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

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

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

Please remember that it is your responsibility to be aware of and to comply with all conditions of injection well Permit UT20798-09608.

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

Sincerely,



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

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

Daniel Picard  
BIA - Uintah & Ouray Indian Agency

Mike Natchees  
Environmental Coordinator  
Ute Indian Tribe

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

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

Fluid Minerals Engineering Office  
BLM - Vernal Office

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

Eric Sundberg, Regulatory Analyst  
Newfield Production Company



*Printed on Recycled Paper*

**NEWFIELD**



**Schematic**

43-013-32809

**Well Name: Beluga 16-18-9-17**

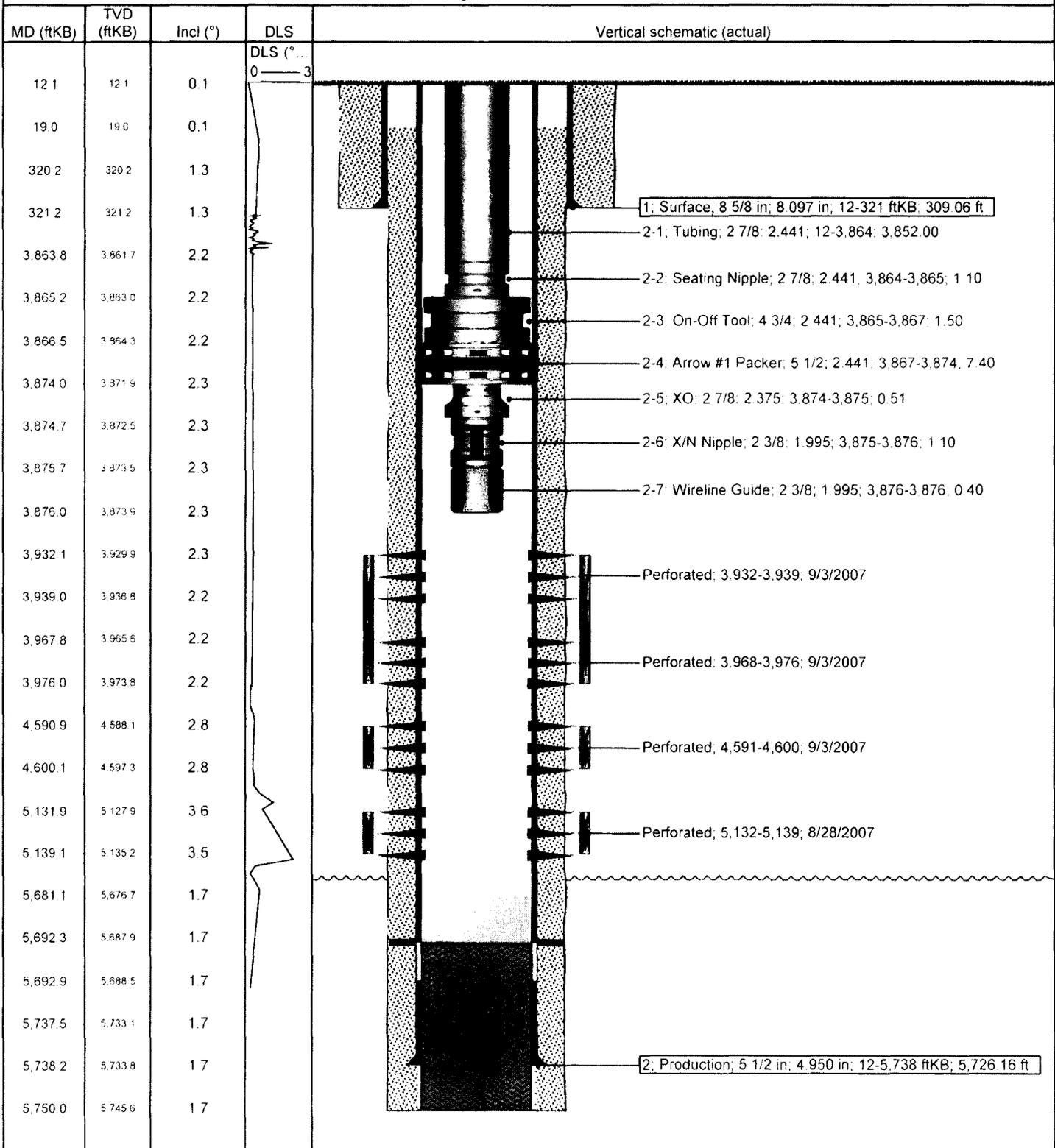
Surface Legal Location 18-9S-17E		API/UWI 43013328090000	Well RC 500159109	Lease	State/Province Utah	Field Name GMBU CTB6	County Duchesne
Spud Date 7/16/2007	Rig Release Date 8/17/2007	On Production Date 9/10/2007	Original KB Elevation (ft) 5,461	Ground Elevation (ft) 5,449	Total Depth All (TVD) (ftKB)	PBTD (All) (ftKB) Original Hole - 5,692.3	

**Most Recent Job**

Job Category Production / Workover	Primary Job Type Clean-out	Secondary Job Type N/A	Job Start Date 7/3/2014	Job End Date 7/3/2014
---------------------------------------	-------------------------------	---------------------------	----------------------------	--------------------------

**TD: 5,750.0**

Vertical - Original Hole, 1/8/2016 10:21:32 AM





## Newfield Wellbore Diagram Data Beluga 16-18-9-17

Surface Legal Location 18-9S-17E		API/UWI 43013328090000		Lease	
County Duchesne		State/Province Utah		Basin	
Well Start Date 7/16/2007		Spud Date 7/16/2007		Field Name GMBU CTB6	
Original KB Elevation (ft) 5,461		Ground Elevation (ft) 5,449		On Production Date 9/10/2007	
Total Depth (ftKB) 5,750.0		Total Depth All (TVD) (ftKB)		PBDT (All) (ftKB) Original Hole - 5,692.3	

### Casing Strings

Csg Des	Run Date	OD (in)	ID (in)	Wt/Len (lb/ft)	Grade	Set Depth (ftKB)
Surface	7/16/2007	8 5/8	8.097	24.00	J-55	321
Production	8/17/2007	5 1/2	4.950	15.50	J-55	5,738

### Cement

#### String: Surface, 321ftKB 7/20/2007

Cementing Company BJ Services Company		Top Depth (ftKB) 12.0	Bottom Depth (ftKB) 321.1	Full Return?	Vol Cement Ret (bbl)
Fluid Description w/ 2% CaCL2 + 1/4#/sk Cello-Flake		Fluid Type Lead	Amount (sacks) 160	Class G	Estimated Top (ftKB) 12.0

#### String: Production, 5,738ftKB 8/17/2007

Cementing Company BJ Services Company		Top Depth (ftKB) 19.0	Bottom Depth (ftKB) 5,750.0	Full Return?	Vol Cement Ret (bbl)
Fluid Description w/ 10% gel + 3% KCL, 5#'s /sk CSE + 2# sk/kolseal + 1/2#'s/sk Cello Flake		Fluid Type Lead	Amount (sacks) 300	Class PL II	Estimated Top (ftKB) 19.0
Fluid Description W/ 2% Gel + 3% KCL .5%EC1,1/4# sk C.F. 2% gel. 3% SM		Fluid Type Tail	Amount (sacks) 400	Class 50/50 Poz	Estimated Top (ftKB) 3,000.0

### Tubing Strings

Tubing Description		Run Date		Set Depth (ftKB)				
Tubing		6/25/2012		3,876.0				
Item Des	Jts	OD (in)	ID (in)	Wt (lb/ft)	Grade	Len (ft)	Top (ftKB)	Btn (ftKB)
Tubing	160	2 7/8	2.441	6.50	J-55	3,852.00	12.0	3,864.0
Seating Nipple		2 7/8	2.441	6.50	J-55	1.10	3,864.0	3,865.1
On-Off Tool		4 3/4	2.441		J-55	1.50	3,865.1	3,866.6
Arrow #1 Packer		5 1/2	2.441		J-55	7.40	3,866.6	3,874.0
XO		2 7/8	2.375	6.50	J-55	0.51	3,874.0	3,874.5
X/N Nipple		2 3/8	1.995	4.70	J-55	1.10	3,874.5	3,875.6
Wireline Guide		2 3/8	1.995	4.70	J-55	0.40	3,875.6	3,876.0

### Rod Strings

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

### Other In Hole

Des	Top (ftKB)	Btn (ftKB)	Run Date	Pull Date
Cement (PBDT)	5,681	5,692	9/7/2007	

### Perforation Intervals

Stage#	Zone	Top (ftKB)	Btn (ftKB)	Shot Dens (shots/ft)	Phasing (*)	Nom Hole Dia (in)	Date
3	GB4 sds, Original Hole	3,932	3,939	4		0.430	9/3/2007
3	GB6 sds, Original Hole	3,968	3,976	4		0.430	9/3/2007
2	C sds, Original Hole	4,591	4,600	4		0.430	9/3/2007
1	LODC sds, Original Hole	5,132	5,139	4	120	0.490	8/28/2007

### Stimulations & Treatments

Stage#	ISIP (psi)	Frac Gradient (psi/ft)	Max Rate (bbl/mn)	Max PSI (psi)	Total Clean Vol (bbl)	Total Slurry Vol (bbl)	Vol Recov (bbl)
1	2,218	0.87	24.9	2,600			
2	1,858	0.84	24.8	2,375			
3	2,085	0.96	25.1	2,270			

### Proppant

Stage#	Total Prop Vol Pumped (lb)	Total Add Amount
1		Proppant White Sand 20024 lb
2		Proppant White Sand 24810 lb
3		Proppant White Sand 89060 lb

43-013-32809

**Well Name: Beluga 16-18-9-17**

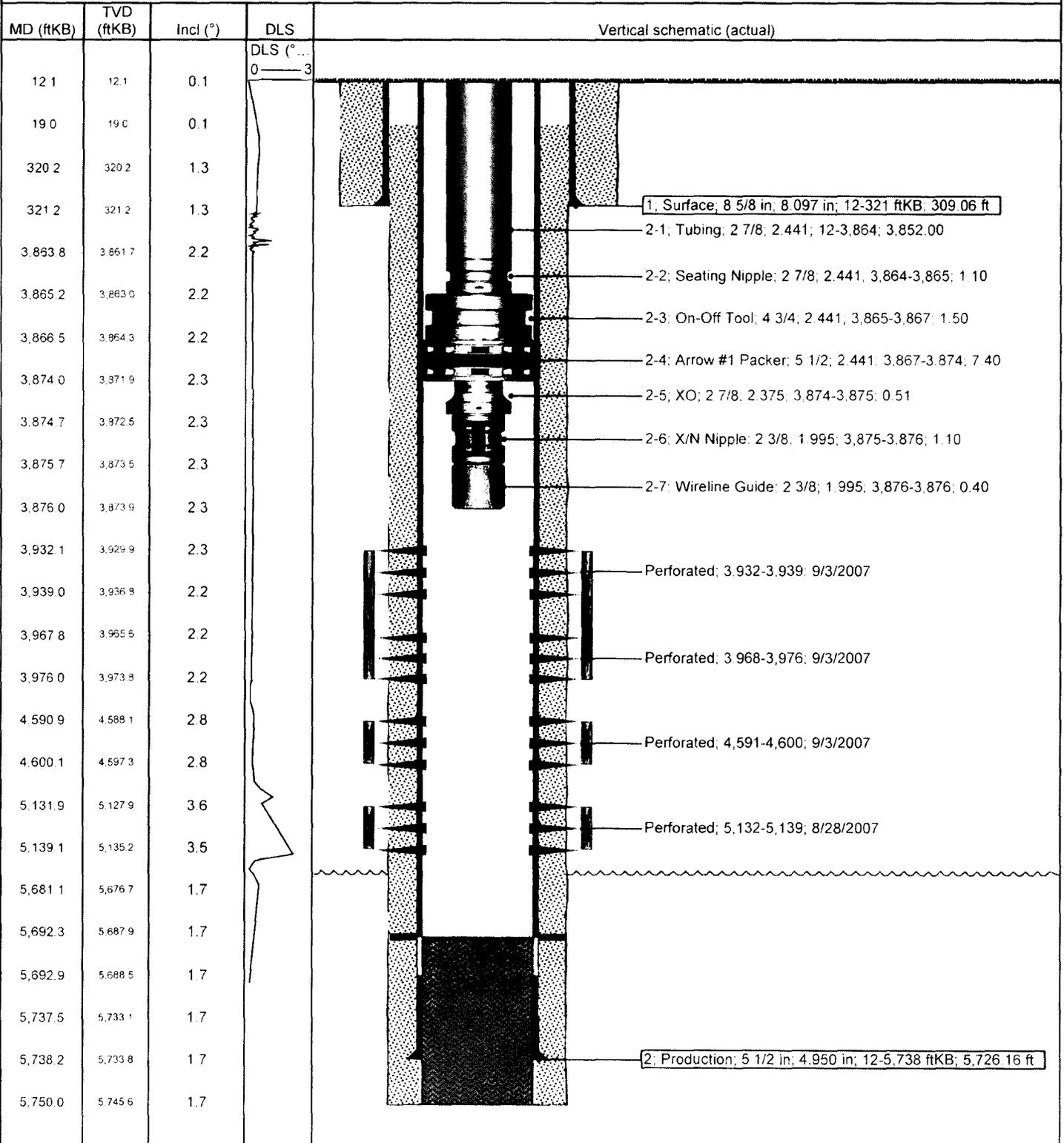
Surface Legal Location 18-9S-17E		API/UWI 43013328090000	Well RC 500159109	Lease	State/Province Utah	Field Name GMBU CTB6	County Duchesne
Spud Date 7/16/2007	Rig Release Date 8/17/2007	On Production Date 9/10/2007	Original KB Elevation (ft) 5,461	Ground Elevation (ft) 5,449	Total Depth All (TVD) (ftKB)	PBTD (All) (ftKB) Original Hole - 5,692.3	

**Most Recent Job**

Job Category Production / Workover	Primary Job Type Clean-out	Secondary Job Type N/A	Job Start Date 7/3/2014	Job End Date 7/3/2014
---------------------------------------	-------------------------------	---------------------------	----------------------------	--------------------------

**TD: 5,750.0**

Vertical - Original Hole, 1/8/2016 10:21:32 AM



# NEWFIELD



## Newfield Wellbore Diagram Data Beluga 16-18-9-17

Surface Legal Location 18-9S-17E		API/UWI 43013328090000		Lease	
County Duchesne		State/Province Utah		Basin	
Well Start Date 7/16/2007		Spud Date 7/16/2007		Final Rig Release Date 8/17/2007	
Original KB Elevation (ft) 5,461		Ground Elevation (ft) 5,449		Total Depth (ftKB) 5,750.0	
				Total Depth All (TVD) (ftKB) 5,738	
				PBTD (All) (ftKB) Original Hole - 5,692.3	

### Casing Strings

Csg Des	Run Date	OD (in)	ID (in)	W/Len (lb/ft)	Grade	Set Depth (ftKB)
Surface	7/16/2007	8 5/8	8.097	24.00	J-55	321
Production	8/17/2007	5 1/2	4.950	15.50	J-55	5,738

### Cement

#### String: Surface, 321ftKB 7/20/2007

Cementing Company BJ Services Company		Top Depth (ftKB) 12.0	Bottom Depth (ftKB) 321.1	Full Return?	Vol Cement Ret (bbl)
Fluid Description w/ 2% CaCL2 + 1/4#/sk Cello-Flake		Fluid Type Lead	Amount (sacks) 160	Class G	Estimated Top (ftKB) 12.0

#### String: Production, 5,738ftKB 8/17/2007

Cementing Company BJ Services Company		Top Depth (ftKB) 19.0	Bottom Depth (ftKB) 5,750.0	Full Return?	Vol Cement Ret (bbl)
Fluid Description w/ 10% gel + 3% KCL, 5#s/sk CSE + 2# sk/kolseal + 1/2#s/sk Cello Flake		Fluid Type Lead	Amount (sacks) 300	Class PL II	Estimated Top (ftKB) 19.0
Fluid Description W/ 2% Gel + 3% KCL, .5%EC1,1/4# sk C.F. 2% gel. 3% SM		Fluid Type Tail	Amount (sacks) 400	Class 50/50 Poz	Estimated Top (ftKB) 3,000.0

### Tubing Strings

Tubing Description		Run Date		Set Depth (ftKB)				
Item Des	Jts	OD (in)	ID (in)	Wt (lb/ft)	Grade	Len (ft)	Top (ftKB)	Btm (ftKB)
Tubing		6/25/2012				3,876.0		
Tubing	160	2 7/8	2.441	6.50	J-55	3,852.00	12.0	3,864.0
Seating Nipple		2 7/8	2.441	6.50	J-55	1.10	3,864.0	3,865.1
On-Off Tool		4 3/4	2.441		J-55	1.50	3,865.1	3,866.6
Arrow #1 Packer		5 1/2	2.441		J-55	7.40	3,866.6	3,874.0
XO		2 7/8	2.375	6.50	J-55	0.51	3,874.0	3,874.5
X/N Nipple		2 3/8	1.995	4.70	J-55	1.10	3,874.5	3,875.6
Wireline Guide		2 3/8	1.995	4.70	J-55	0.40	3,875.6	3,876.0

### Rod Strings

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

### Other In Hole

Des	Top (ftKB)	Btm (ftKB)	Run Date	Pull Date
Cement (PBTD)	5,681	5,692	9/7/2007	

### Perforation Intervals

Stage#	Zone	Top (ftKB)	Btm (ftKB)	Shot Dens (shots/ft)	Phasing (")	Nom Hole Dia (in)	Date
3	GB4 sds, Original Hole	3,932	3,939	4		0.430	9/3/2007
3	GB6 sds, Original Hole	3,968	3,976	4		0.430	9/3/2007
2	C sds, Original Hole	4,591	4,600	4		0.430	9/3/2007
1	LODC sds, Original Hole	5,132	5,139	4	120	0.490	8/28/2007

### Stimulations & Treatments

Stage#	ISIP (psi)	Frac Gradient (psi/ft)	Max Rate (bbl/min)	Max PSI (psi)	Total Clean Vol (bbl)	Total Slurry Vol (bbl)	Vol Recov (bbl)
1	2,218	0.87	24.9	2,600			
2	1,858	0.84	24.8	2,375			
3	2,085	0.96	25.1	2,270			

### Proppant

Stage#	Total Prop Vol Pumped (lb)	Total Add Amount
1		Proppant White Sand 20024 lb
2		Proppant White Sand 24810 lb
3		Proppant White Sand 89060 lb