

001

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK DRILL <input type="checkbox"/> DEEPEN <input checked="" type="checkbox"/>		5. LEASE DESIGNATION AND SERIAL NO. U-45431	
1b. TYPE OF WELL OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/>		6. IF INDIAN, ALLOTTEE OR TRIBE NAME N/A	
2. NAME OF OPERATOR Inland Production Company		7. UNIT AGREEMENT NAME Humpback	
3. ADDRESS OF OPERATOR Route #3 Box 3630, Myton, UT 84052 Phone: (435) 646-3721		8. FARM OR LEASE NAME WELL NO 16-23-8-17	
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)* At Surface SE/SE 778' FSL 655' FEL 4438969 40.09829 At proposed Prod. Zone 588' 150 - 109.96584		9. API WELL NO. 43-047-34558	
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE* Approximately 15.7 miles southeast of Myton, Utah		10. FIELD AND POOL OR WILDCAT Monument Butte	
15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to Approx. 665' f/lse line & 665' f/unit line	16. NO. OF ACRES IN LEASE 548.53	17. NO. OF ACRES ASSIGNED TO THIS WELL 40	
18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR ON THIS LEASE, FT. Approx. 1499'	19. PROPOSED DEPTH 6500'	20. ROTARY OR CABLE TOOLS Rotary	
21. ELEVATIONS (Show whether DF, RT, GR, etc.) 5064' GR		22. APPROX. DATE WORK WILL START* 4th Quarter 2002	
23. PROPOSED CASING AND CEMENTING PROGRAM			
SIZE OF HOLE	SIZE OF CASING	WEIGHT/FOOT	SETTING DEPTH
Refer to Monument Butte Field SOP's Drilling Program/Casing Design			

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

The Conditions of Approval are also attached.

RECEIVED

APR 22 2002

DIVISION OF  
OIL, GAS AND MINING

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

24. SIGNED Mandie Crozier TITLE Permit Clerk DATE 4/19/02

(This space for Federal or State office use)

PERMIT NO. \_\_\_\_\_

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

CONDITIONS OF APPROVAL, IF ANY:

APPROVED BY [Signature] TITLE BRADLEY G. HILL RECLAMATION SPECIALIST III DATE 05-02-02

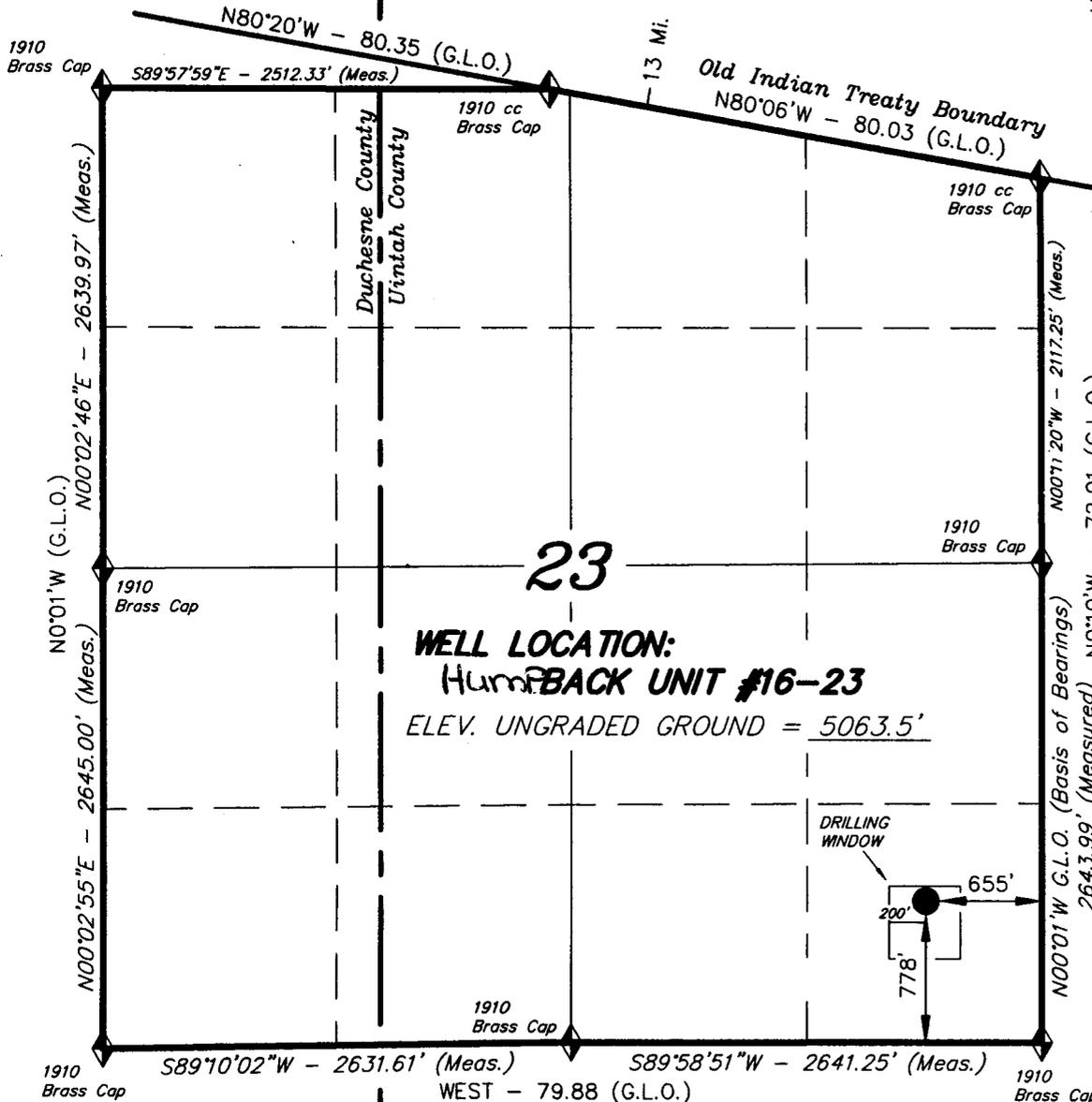
\*See Instructions On Reverse Side

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

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

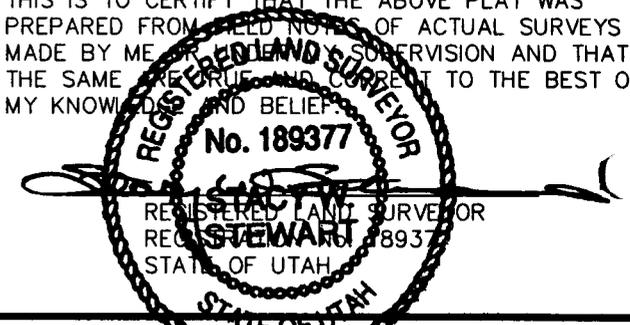
**INLAND PRODUCTION COMPANY**

WELL LOCATION, Humpbacks Unit #16-23, LOCATED AS SHOWN IN THE SE 1/4 SE 1/4 OF SECTION 23, T8S, R17E, S.L.B.&M. UTAH COUNTY, UTAH.



**23**  
**WELL LOCATION:**  
**HumpBACK UNIT #16-23**  
 ELEV. UNGRADED GROUND = 5063.5'

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.



**TRI STATE LAND SURVEYING & CONSULTING**  
 38 WEST 100 NORTH - VERNAL, UTAH 84078  
 (435) 781-2501

◆ = SECTION CORNERS LOCATED

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

SCALE: 1" = 1000'	SURVEYED BY: K.G.S.
DATE: 2-26-02	DRAWN BY: J.R.S.
NOTES:	FILE #



**RECEIVED**

APR 22 2002

DIVISION OF  
OIL, GAS AND MINING

April 19, 2002

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

RE: Applications for Permit to Drill: 13-23-8-17, 14-23-8-17, 15-23-8-17, and 16-23-8-17.

Dear Brad:

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

Sincerely,

Mandie Crozier  
Permit Clerk

mc  
enclosures

INLAND PRODUCTION COMPANY  
HUMPBACK #16-23-8-17  
SE/SE SECTION 23, T8S, R17E  
UINTAH COUNTY, UTAH

ONSHORE ORDER NO. 1

DRILLING PROGRAM

1. GEOLOGIC SURFACE FORMATION:

Uinta formation of Upper Eocene Age

2. ESTIMATED TOPS OF IMPORTANT GEOLOGIC MARKERS:

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

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

Green River Formation 1640' – 6500' - Oil

4. PROPOSED CASING PROGRAM

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

5. MINIMUM SPECIFICATIONS FOR PRESSURE CONTROL:

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

6. TYPE AND CHARACTERISTICS OF THE PROPOSED CIRCULATION MUDS:

Please refer to the Monument Butte Field SOP.

7. AUXILIARY SAFETY EQUIPMENT TO BE USED:

Please refer to the Monument Butte Field SOP.

8. TESTING, LOGGING AND CORING PROGRAMS:

Please refer to the Monument Butte Field SOP.

9. ANTICIPATED ABNORMAL PRESSURE OR TEMPERATURE:

The anticipated maximum bottom hole pressure is 2000 psi. It is not anticipated that abnormal temperatures will be encountered.

10. ANTICIPATED STARTING DATE AND DURATION OF THE OPERATIONS:

Please refer to the Monument Butte Field SOP.

INLAND PRODUCTION COMPANY  
HUMPBAC #16-23-8-17  
SE/SE SECTION 23, T8S, R17E  
UINTAH COUNTY, UTAH

ONSHORE ORDER NO. 1

MULTI-POINT SURFACE USE & OPERATIONS PLAN

1. EXISTING ROADS

See attached Topographic Map "A"

To reach Inland Production Company well location site Humpback # 16-23-8-17 located in the SE 1/4 SE 1/4 Section 23, T8S, R17E, Uintah County, Utah:

Proceed southwesterly out of Myton, Utah along Highway 40 - 1.6 miles ± to the junction of this highway and UT State Hwy 53; proceed southeasterly along Hwy 53 - 9.1 miles ± to it's junction with an existing dirt road; proceed easterly - 3.7 miles ± to it's junction with an existing road; proceed easterly - 1.3 miles ± to it's junction with the beginning of the proposed access road; proceed easterly along the proposed access road 930' ± to the proposed well location.

2. PLANNED ACCESS ROAD

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

3. LOCATION OF EXISTING WELLS

Refer to Exhibit "B".

4. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES

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

5. LOCATION AND TYPE OF WATER SUPPLY

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

6. SOURCE OF CONSTRUCTION MATERIALS

Please refer to the Monument Butte Field SOP.

7. METHODS FOR HANDLING WASTE DISPOSAL

Please refer to the Monument Butte Field SOP.

8. ANCILLARY FACILITIES

Please refer to the Monument Butte Field SOP.

9. WELL SITE LAYOUT

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

10. PLANS FOR RESTORATION OF SURFACE

Please refer to the Monument Butte Field SOP.

11. SURFACE OWNERSHIP - Bureau Of Land Management

12. OTHER ADDITIONAL INFORMATION

Archaeological Resource Surveys for this area are attached. The reports reference other work done previously, and state that a Paleontological study is not needed as no paleo localities were observed.

Inland Production Company requests a 60' ROW for the Humpback #16-23-8-17 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."**

**Water Disposal**

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

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

13. LESSEE'S OR OPERATORS REPRESENTATIVE AND CERTIFICATION

Representative

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

Certification

Please be advised that INLAND PRODUCTION COMPANY is considered to be the operator of well #16-23-8-17 SE/SE Section 23, Township 8S, Range 17E: Lease U-45431 Uintah County, Utah: and is responsible under the terms and conditions of the lease for the operations conducted upon the leased lands. Bond coverage is provided by Hartford Accident #4488944.

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

4/19/03  
Date

  
Mandie Crozier  
Permit Clerk

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

Company/Operator: Inland Production Company

Well Name & Number: Humpback 16-23-8-17

API Number:

Lease Number: U-45431

Location: SE/SE Sec. 23, T8S, R17E

**SURFACE USE PROGRAM**  
**CONDITIONS OF APPROVAL**

**CULTURAL RESOURCES**

See *DIAMOND MOUNTAIN RESOURCE AREA RESOURCE MANAGEMENT PLAN AND RECORD OF DECISION* (Fall 1994).

**PALEONTOLOGICAL RESOURCES**

See *DIAMOND MOUNTAIN RESOURCE AREA RESOURCE MANAGEMENT PLAN AND RECORD OF DECISION* (Fall 1994).

**SOILS, WATERSHEDS, AND FLOODPLAINS**

Due to the proposed well location's proximity to perennial waters, the reserve pit must be lined with a 12-mil synthetic liner to avoid seepage.

**WILDLIFE AND FISHERIES**

See *DIAMOND MOUNTAIN RESOURCE AREA RESOURCE MANAGEMENT PLAN AND RECORD OF DECISION* (Fall 1994).

**THREATENED, ENDANGERED, AND OTHER SENSITIVE SPECIES**

See *DIAMOND MOUNTAIN RESOURCE AREA RESOURCE MANAGEMENT PLAN AND RECORD OF DECISION* (Fall 1994).

**LOCATION AND RESERVE PIT RECLAMATION**

During construction of the reserve pit, a small amount of topsoil shall be stockpiled nearby, to be spread over the reserve pit area at the time the reserve pit is reclaimed.

The topsoil stockpile shall be reseeded immediately after site construction by broadcasting the seed, then walking the topsoil stockpile with the dozer to plant the seed.

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

Gardner saltbush	<i>Atriplex gardneri</i>	3 lbs/acre
------------------	--------------------------	------------

Mat saltbush	<i>Atriplex corrugata</i>	3 lbs/acre
Indian ricegrass	<i>Oryzopsis hymenoides</i>	3 lbs/acre
Galleta grass	<i>Hilaria jamesii</i>	3 lbs/acre

The reserve pit shall be reclaimed immediately after drilling operations have ceased. The pit shall be reclaimed by: 1) removing all liquids and any oily debris according to Utah Division of Oil, Gas, & Mining pit closure rules; 2) perforating and folding the liner in place; 3) recontouring the surface; 4) broadcasting the seed over the recontoured surface; and 5) walking the surface of the pit with a dozer to plant the seed.

At the time of final abandonment, the location and access will be recontoured to natural topography and topsoil spread over the area and the surface seeded immediately.

**PIPELINES**

Installation of a surface gas pipeline and/or any subsequent buried gas or water pipelines will follow the conditions of approval outlined above.

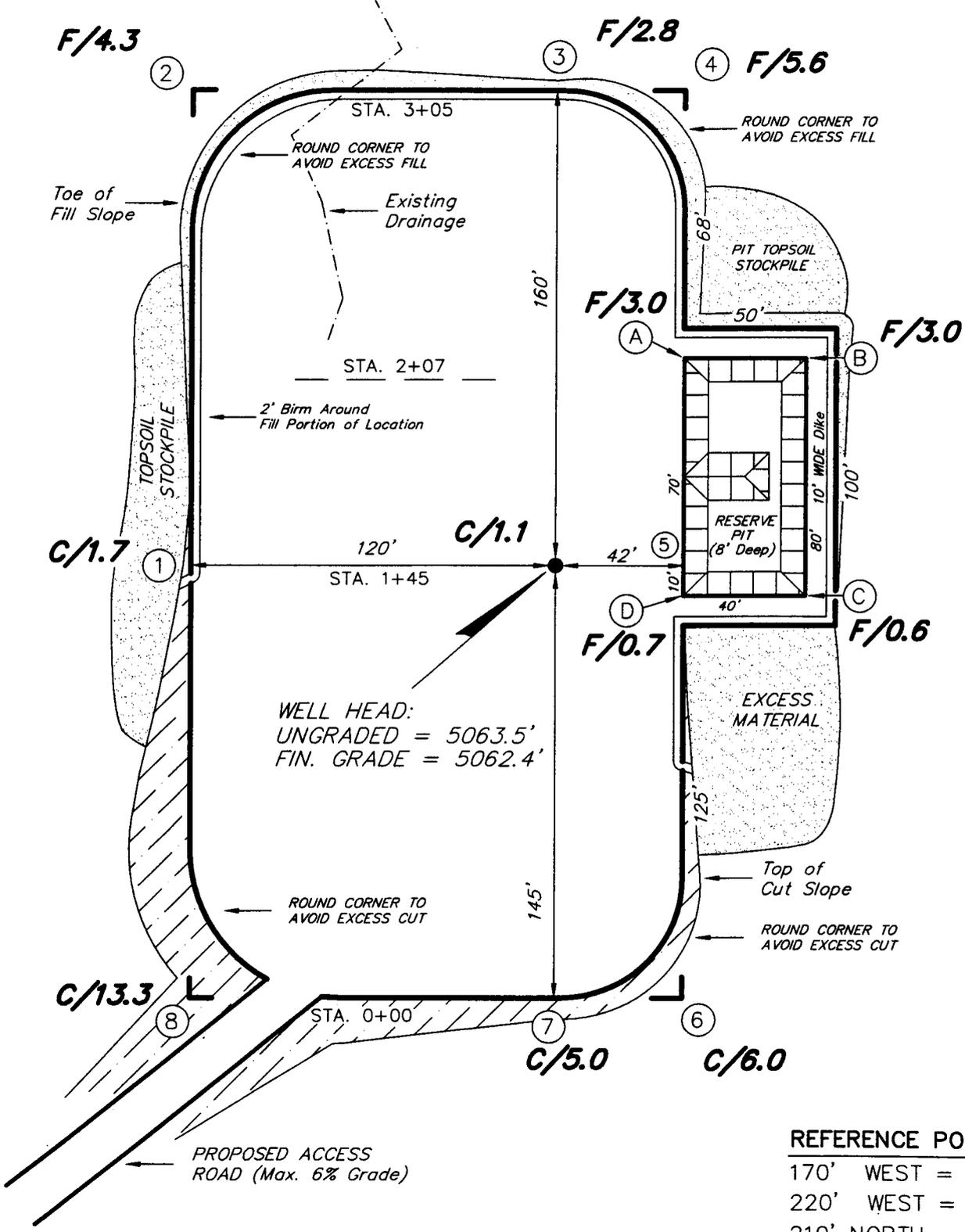
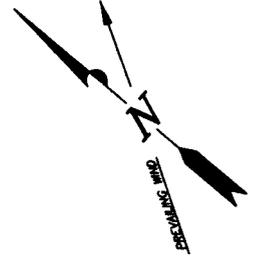
Except as specified in the APD, the installation of the surface gas line and any subsequent buried pipelines will follow the edge of the existing roadways without interfering with the normal travel and maintenance of the roadway.

The installation of any buried pipelines will disturb as little surface as possible and will not exceed 60 feet in width. Reclamation of the disturbance area associated with buried pipelines will be completed within 10 days after installation. The surface will be recontoured to natural or near natural contours. Reseeding will be with the same seed mixture specified for reclamation of the reserve pit and well site. The interface of the buried line disturbance area and the edge of any adjacent access roads will be constructed with a borrow ditch and road berm to minimize vehicular travel along the water line route.

**OTHER**

# INLAND PRODUCTION COMPANY

Humpback UNIT #16-23  
SEC. 23, T8S, R17E, S.L.B.&M.



REFERENCE POINTS	
170' WEST	= 5064.7'
220' WEST	= 5067.6'
210' NORTH	= 5057.7'
260' NORTH	= 5054.8'

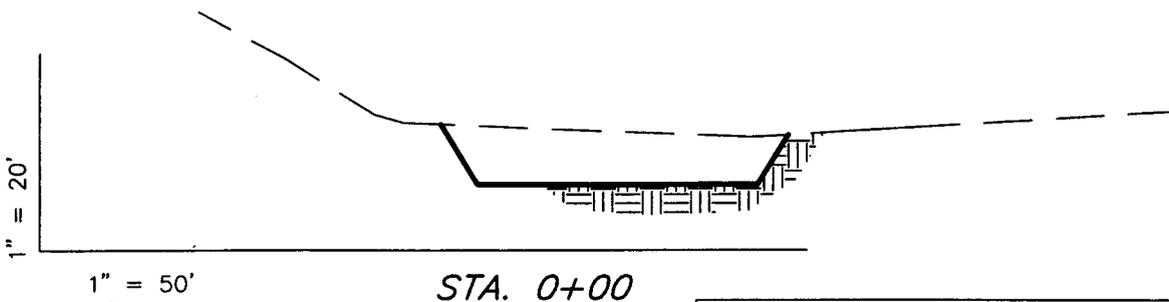
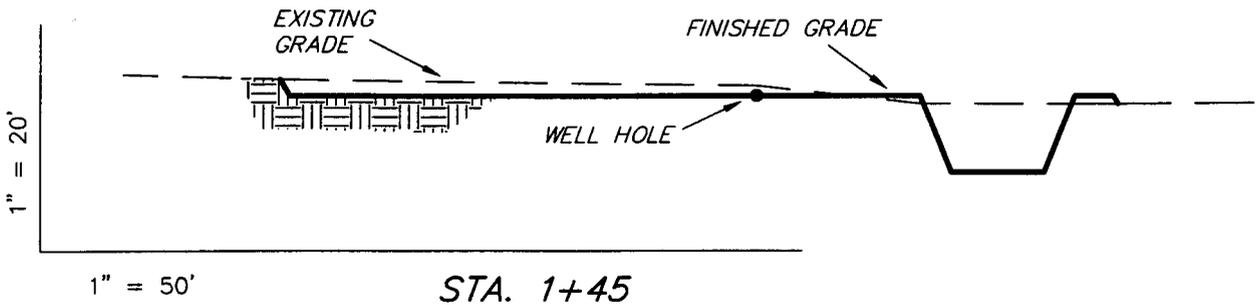
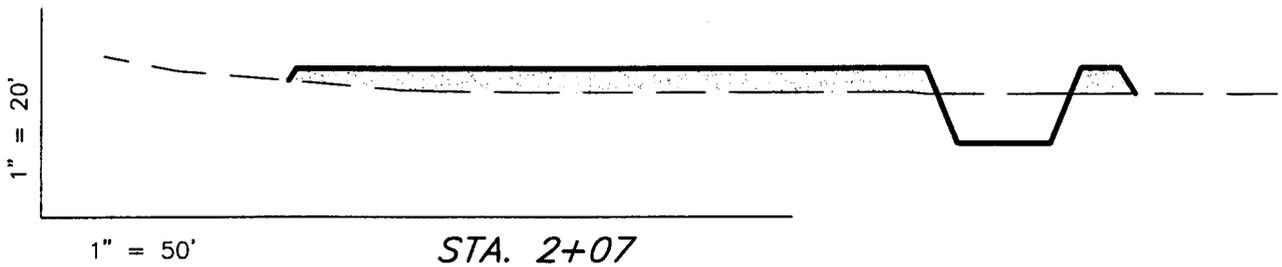
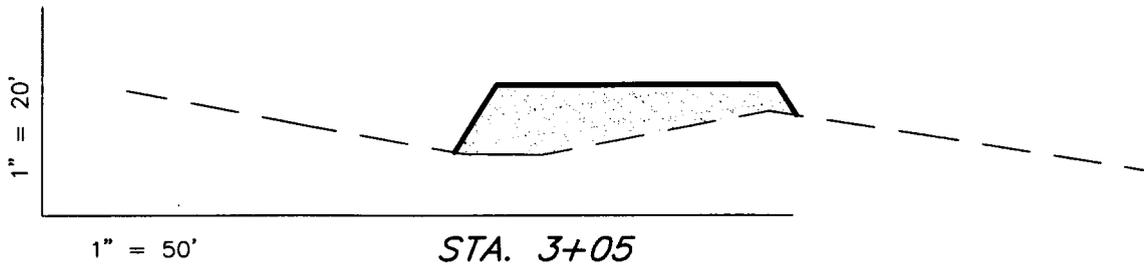
SURVEYED BY: K.G.S.	SCALE: 1" = 50'
DRAWN BY: J.R.S.	DATE: 2-28-02

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

# INLAND PRODUCTION COMPANY

## CROSS SECTIONS

### HumpBACK UNIT #16-23



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

ESTIMATED EARTHWORK QUANTITIES				
(Expressed in Cubic Yards)				
ITEM	CUT	FILL	6" TOPSOIL	EXCESS
PAD	3,440	3,440	Topsoil is not included in Pad Cut	0
PIT	640	0		640
TOTALS	4,080	3,440	1,010	640

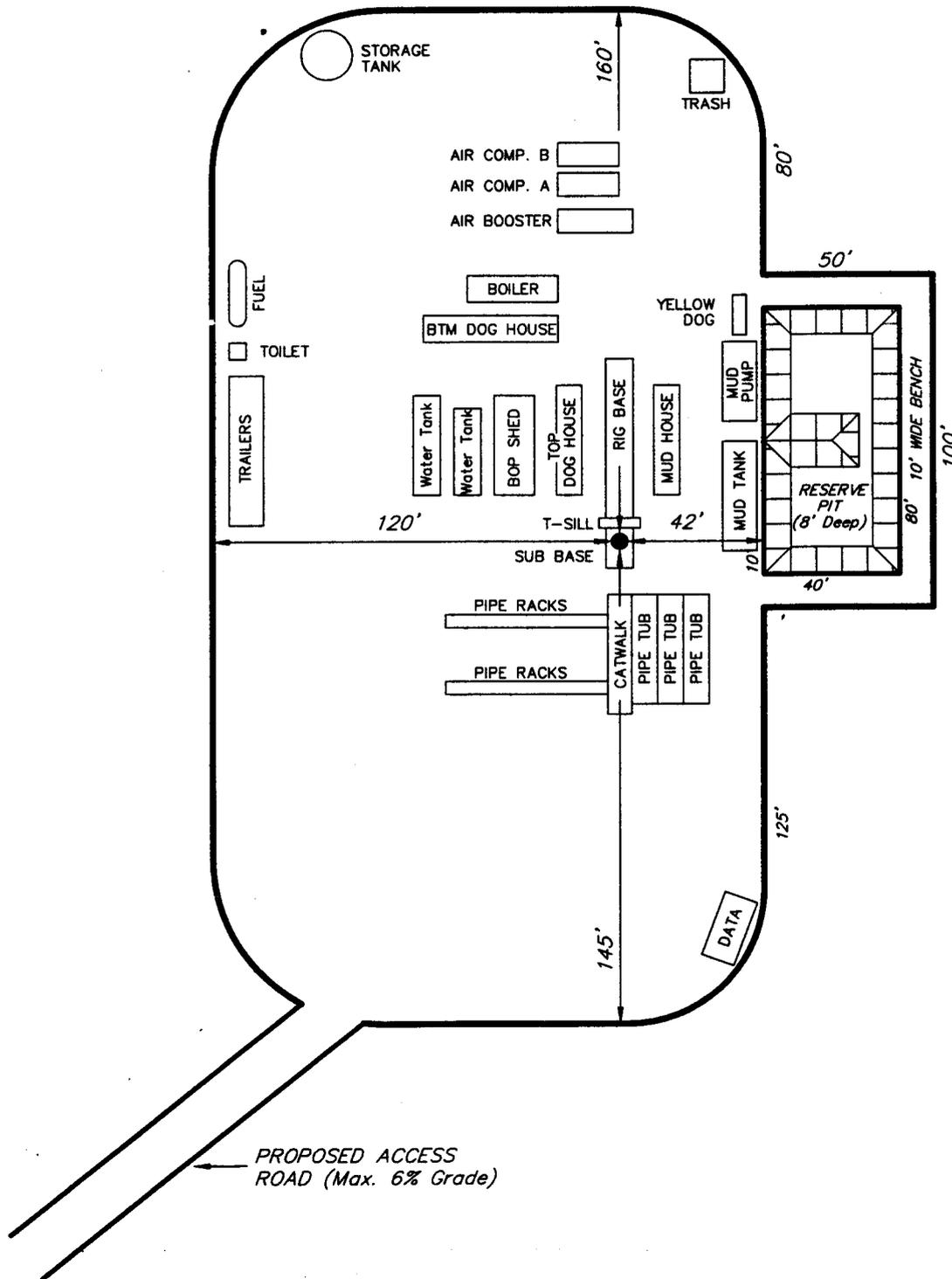
SURVEYED BY: K.G.S.	SCALE: 1" = 50'
DRAWN BY: J.R.S.	DATE: 2-28-02

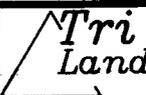
**Tri State** (435) 781-2501  
**Land Surveying, Inc.**  
 38 WEST 100 NORTH VERNAL, UTAH 84078

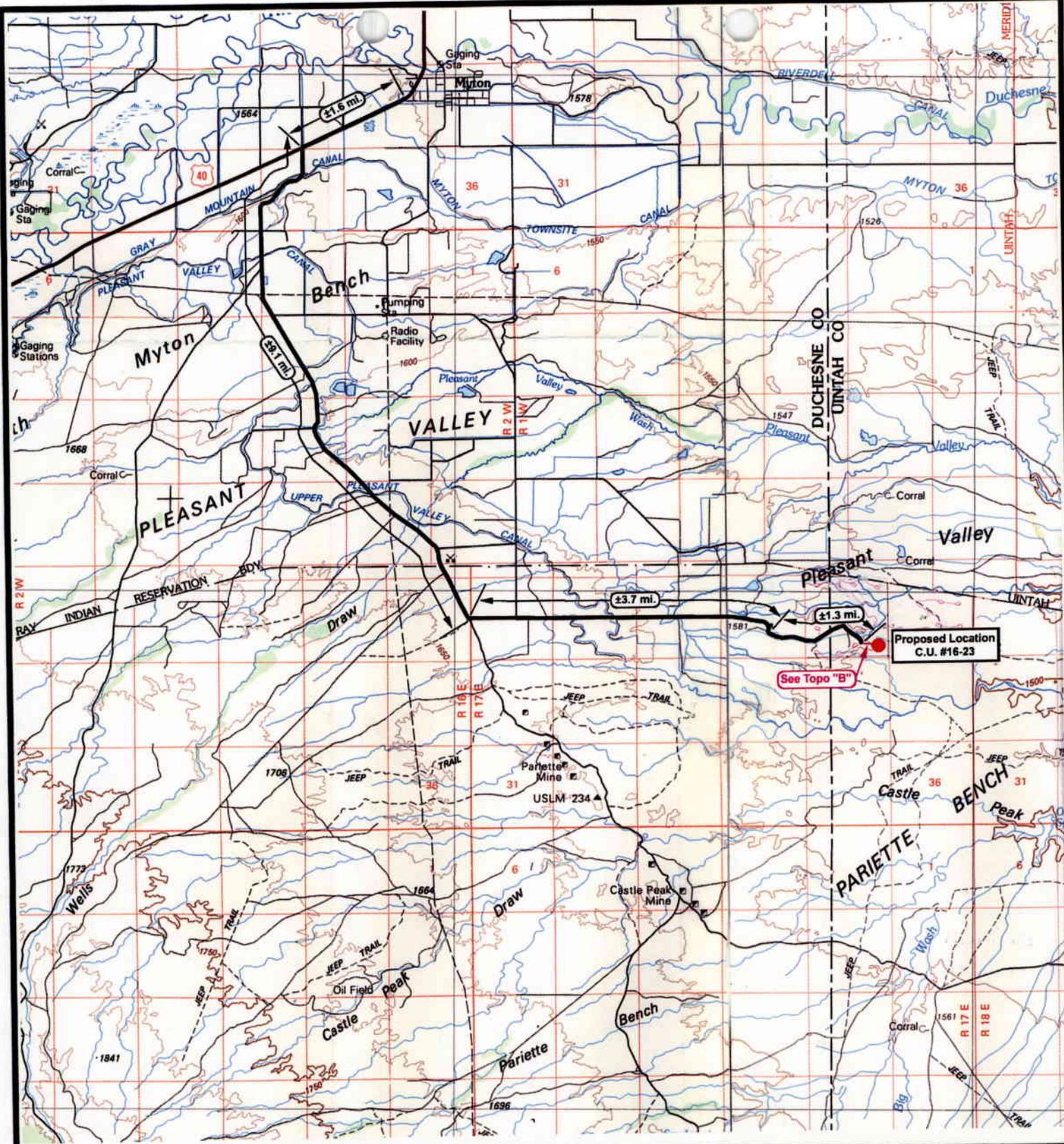
# INLAND PRODUCTION COMPANY

## TYPICAL RIG LAYOUT

### HumpBACK UNIT #16-23



SURVEYED BY: K.G.S.	SCALE: 1" = 50'	 <b>Tri State</b> Land Surveying, Inc. 38 WEST 100 NORTH VERNAL, UTAH 84078 (435) 781-2501
DRAWN BY: J.R.S.	DATE: 2-28-02	



**Humpback Unit #16-23  
SEC. 23, T8S, R17E, S.L.B.&M.**



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

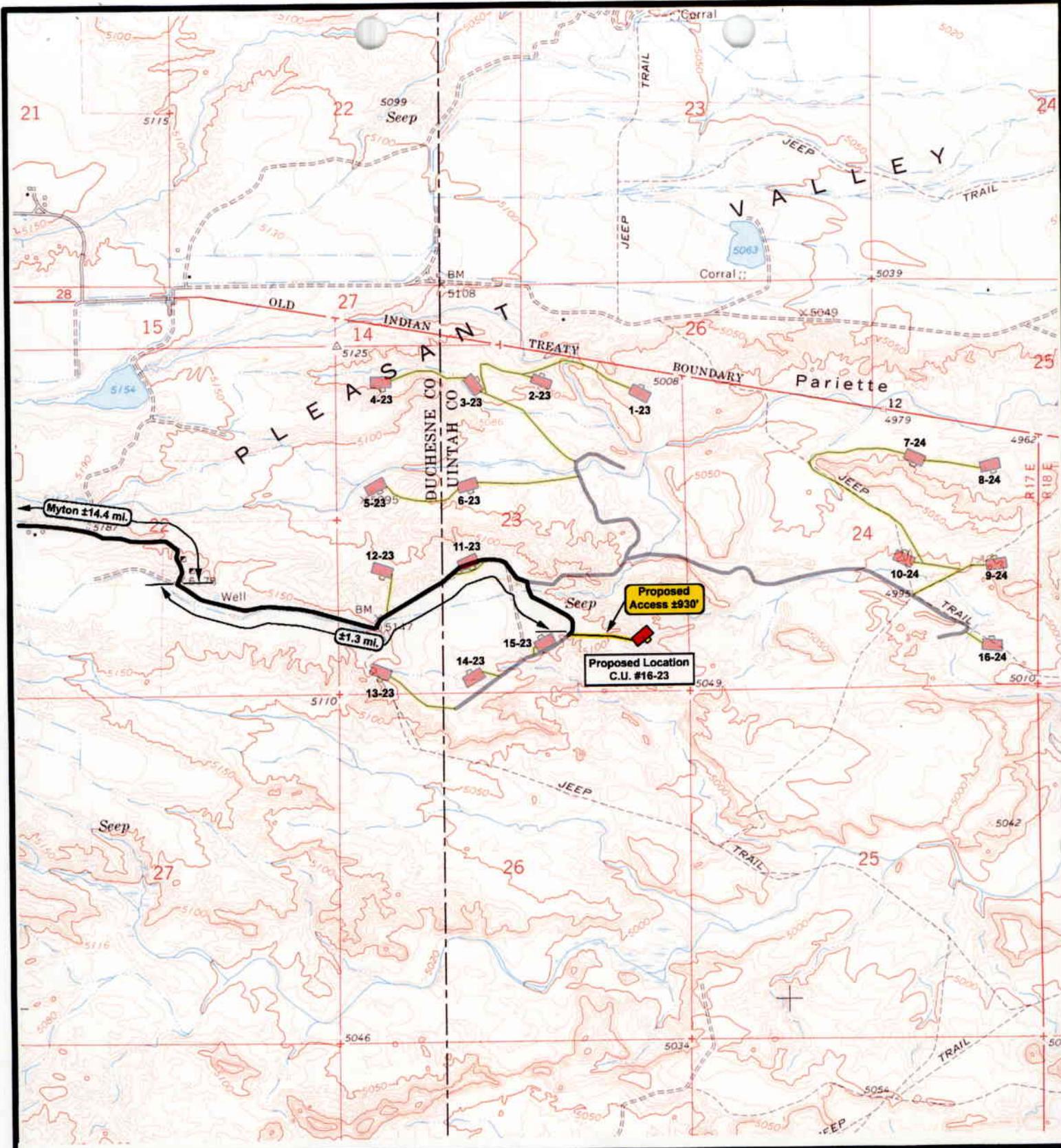
SCALE: 1" = 100,000'  
DRAWN BY: D.J.  
DATE: 03-08-2002

**Legend**

- Existing Road
- Proposed Access

TOPOGRAPHIC MAP

**"A"**



**Humpback Unit #16-23**  
**SEC. 23, T8S, R17E, S.L.B.&M.**



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

SCALE: 1" = 2000'

DRAWN BY: D.J.

DATE: 03-08-2002

**Legend**

- Existing Road
- Proposed Access

TOPOGRAPHIC MAP

**"B"**

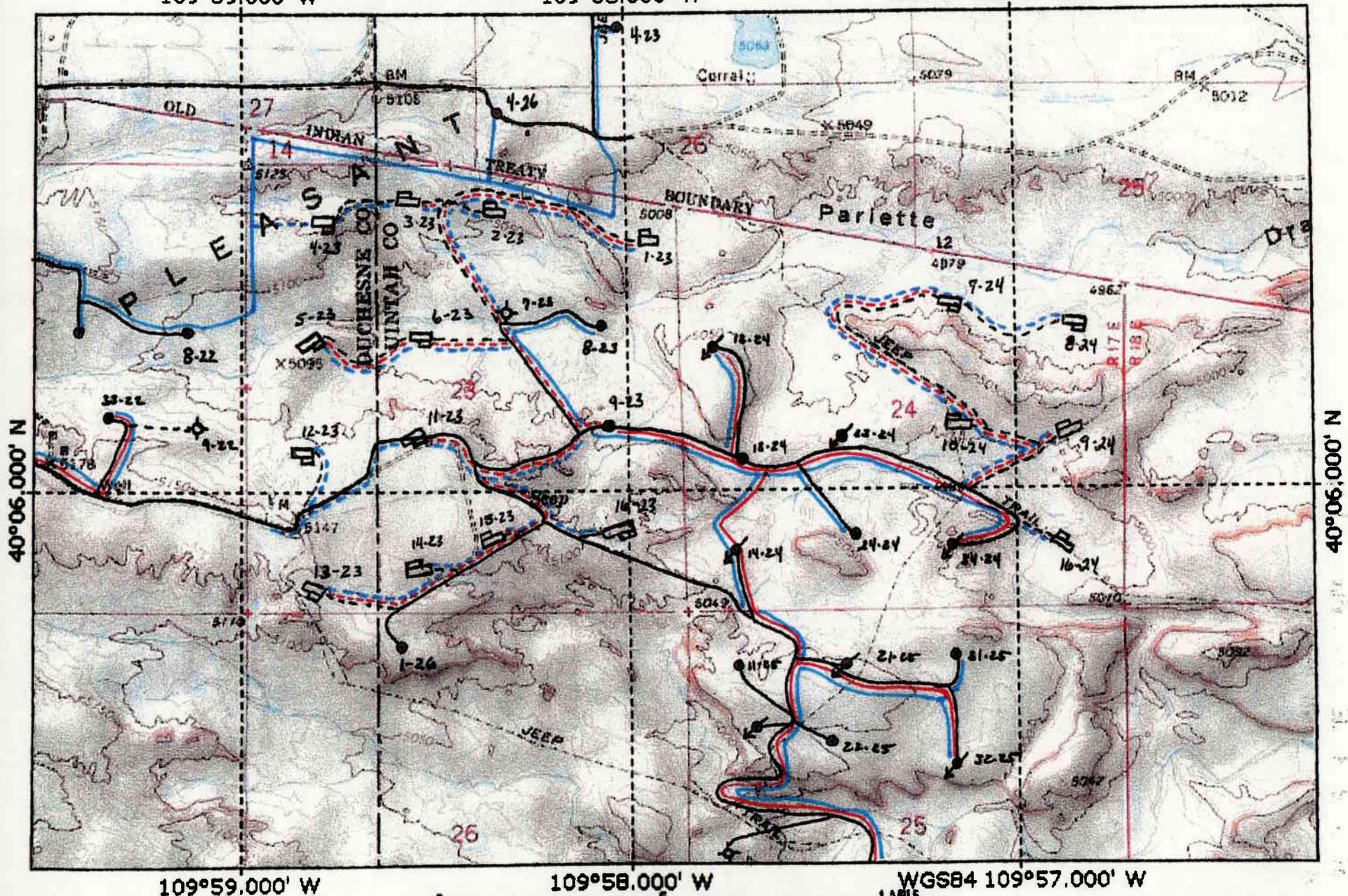
# Topo Map "C"

TOPOI map printed on 01/28/02 from "Utah.tpo" and "Untitled.tpg"

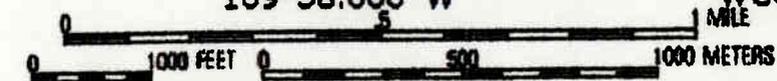
109°59.000' W

109°58.000' W

WGS84 109°57.000' W

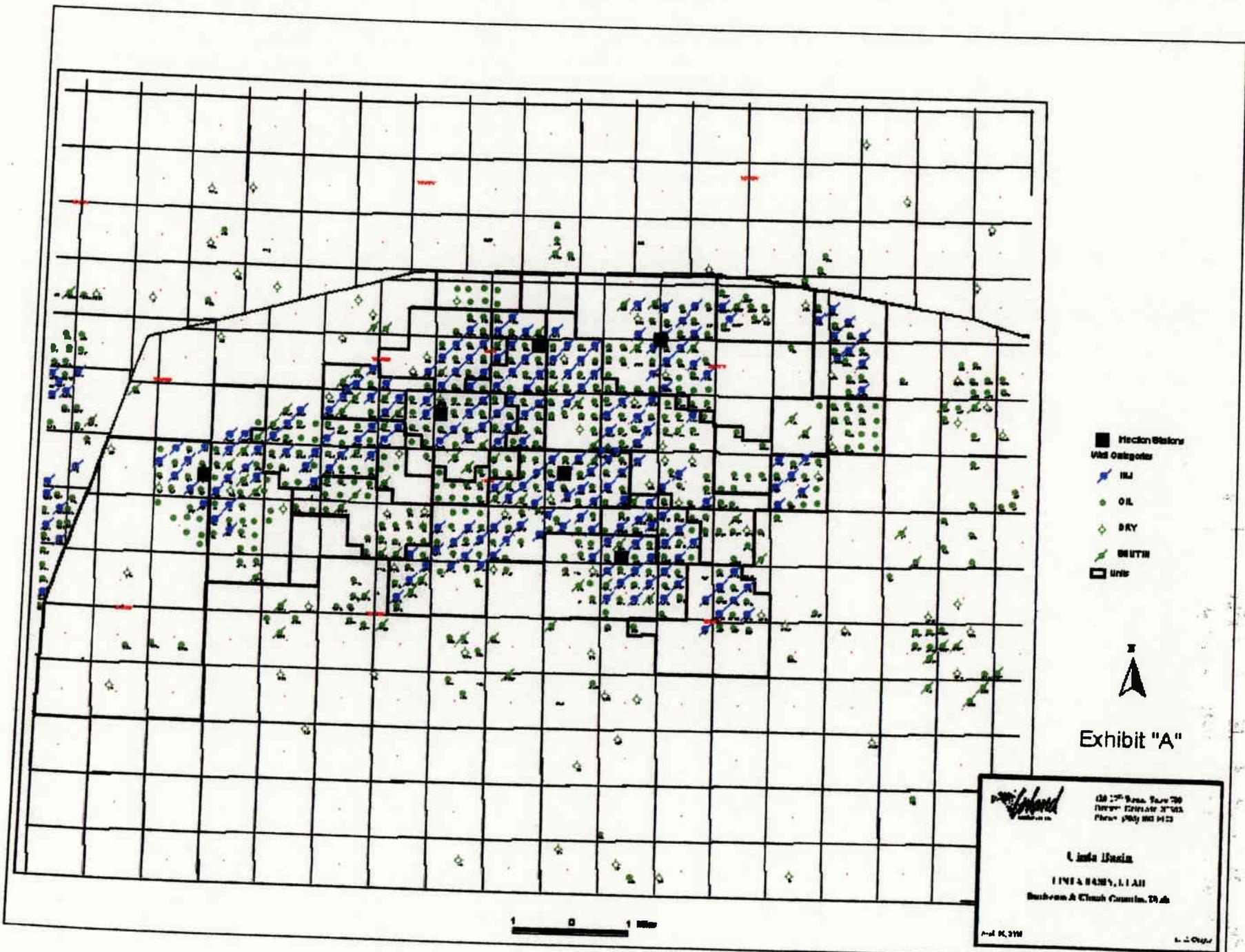


TN ↑ MN  
12 1/2°



Printed from TOPOI ©2000 National Geographic Holdings (www.topo.com)

- Proposed Road
- - - Proposed Water Line
- - - Proposed Gas Line
- Existing Gas Line
- Existing Water Line

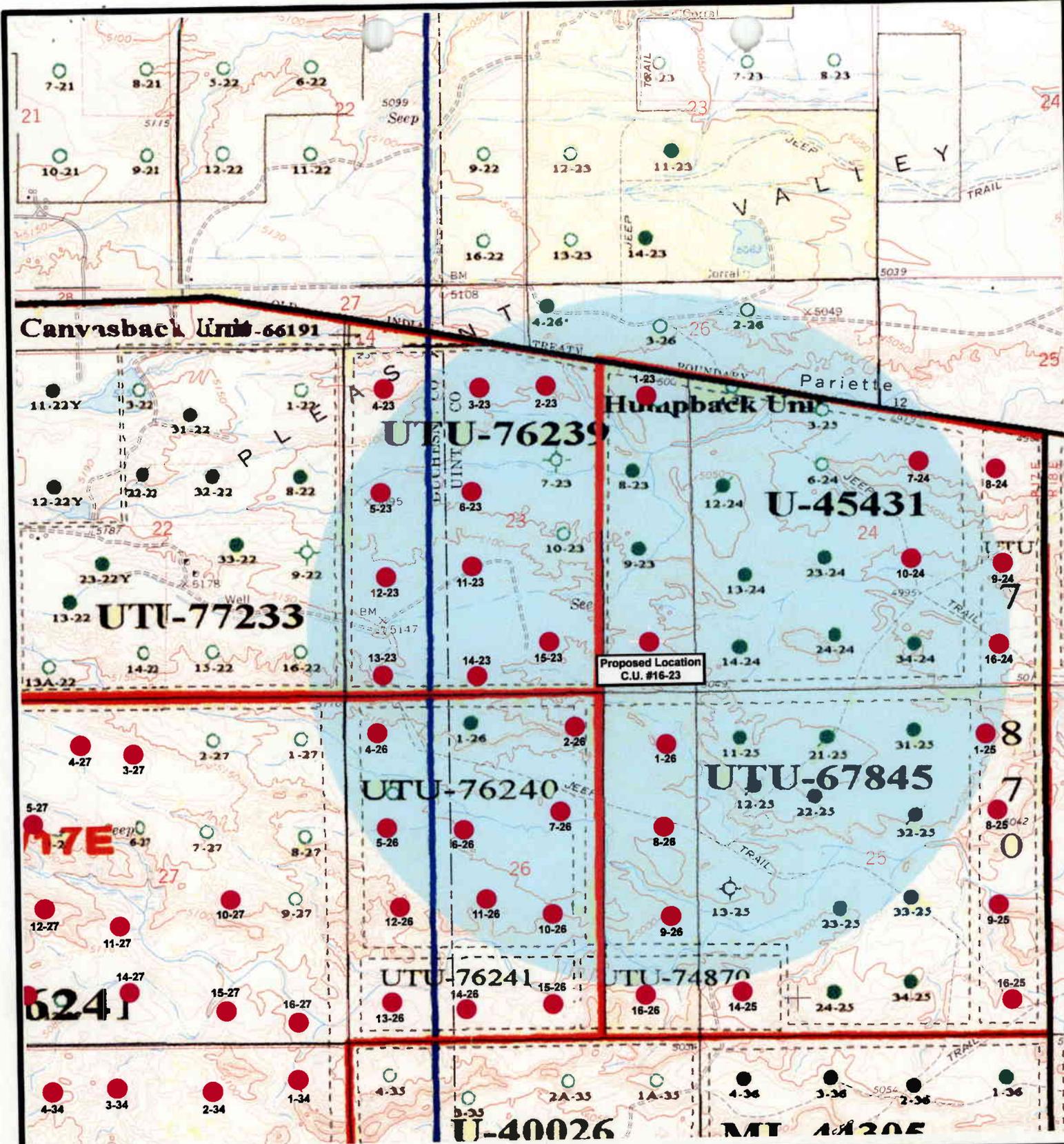


- Heckon Wells
- ▬ Wells Outlets
- ↗ WU
- OIL
- ◇ DRY
- ▲ SEETH
- ▭ WHS



Exhibit "A"

*L. J. O'Neil*  
 Oil & Gas, Inc.  
 Survey of Section 37, T14N,  
 R10E, M12S  
 Barren & Clark Counties, TN  
 L. J. O'Neil  
 P-4 K, 3W



Humpback Unit #16-23  
 SEC. 23, T8S, R17E, S.L.B.&M.



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

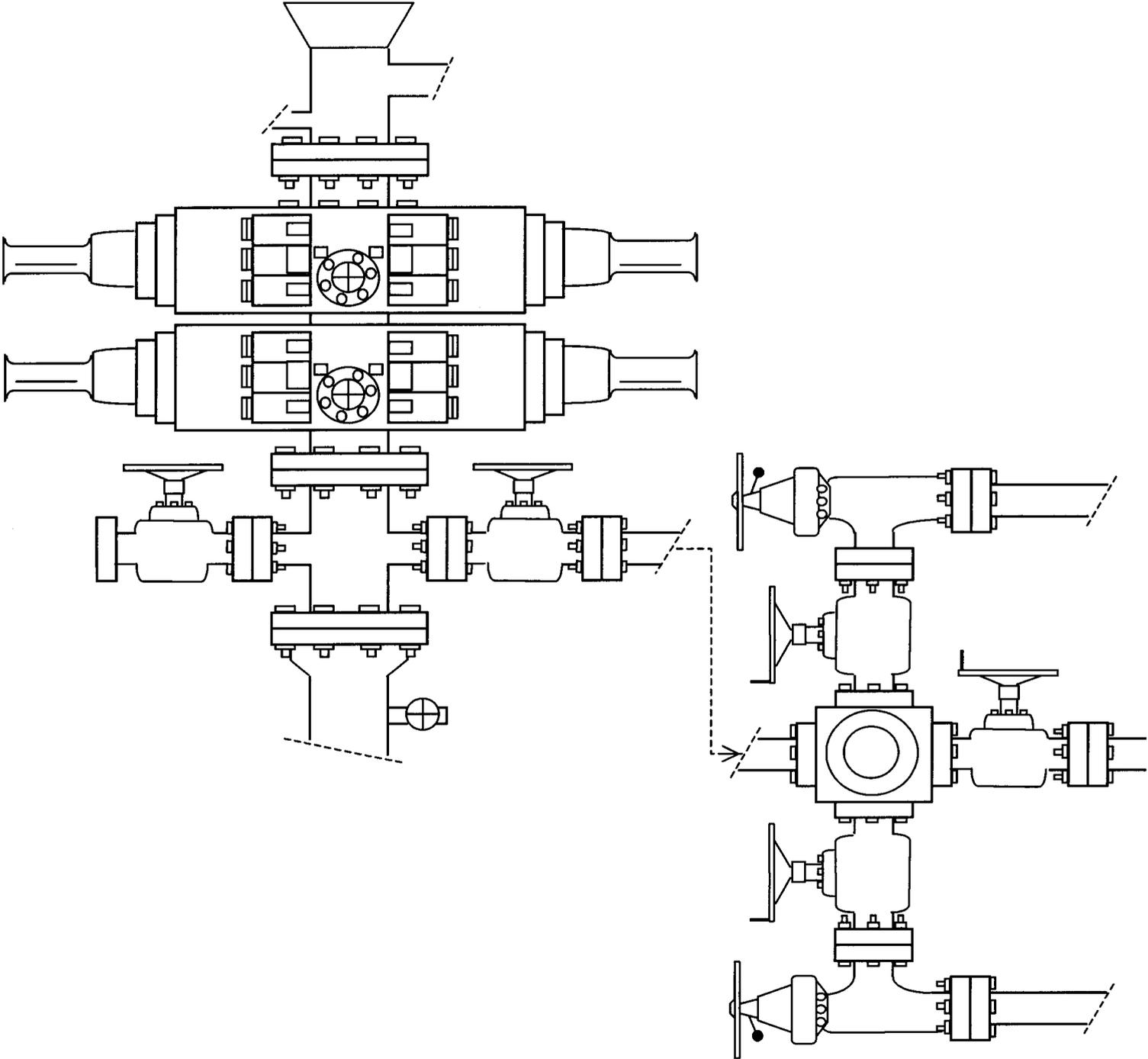
SCALE: 1" = 2000'  
 DRAWN BY: D.J.  
 DATE: 03-08-2002

**Legend**

- Proposed Locations
- One Mile Radius

**Exhibit "B"**

**2-M SYSTEM**  
Blowout Prevention Equipment Systems



**EXHIBIT C**

002

WORKSHEET  
APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 04/22/2002

API NO. ASSIGNED: 43-047-34558

WELL NAME: HUMPBAC 16-23-8-17  
OPERATOR: INLAND PRODUCTION ( N5160 )  
CONTACT: MANDIE CROZIER

PHONE NUMBER: 435-646-3721

PROPOSED LOCATION:

SESE 23 080S 170E  
SURFACE: 0778 FSL 0655 FEL  
BOTTOM: 0778 FSL 0655 FEL  
UINTAH  
MONUMENT BUTTE ( 105 )

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

LEASE TYPE: 1 - Federal  
LEASE NUMBER: U-45431  
SURFACE OWNER: 1 - Federal

PROPOSED FORMATION: GRRV

RECEIVED AND/OR REVIEWED:

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

LOCATION AND SITING:

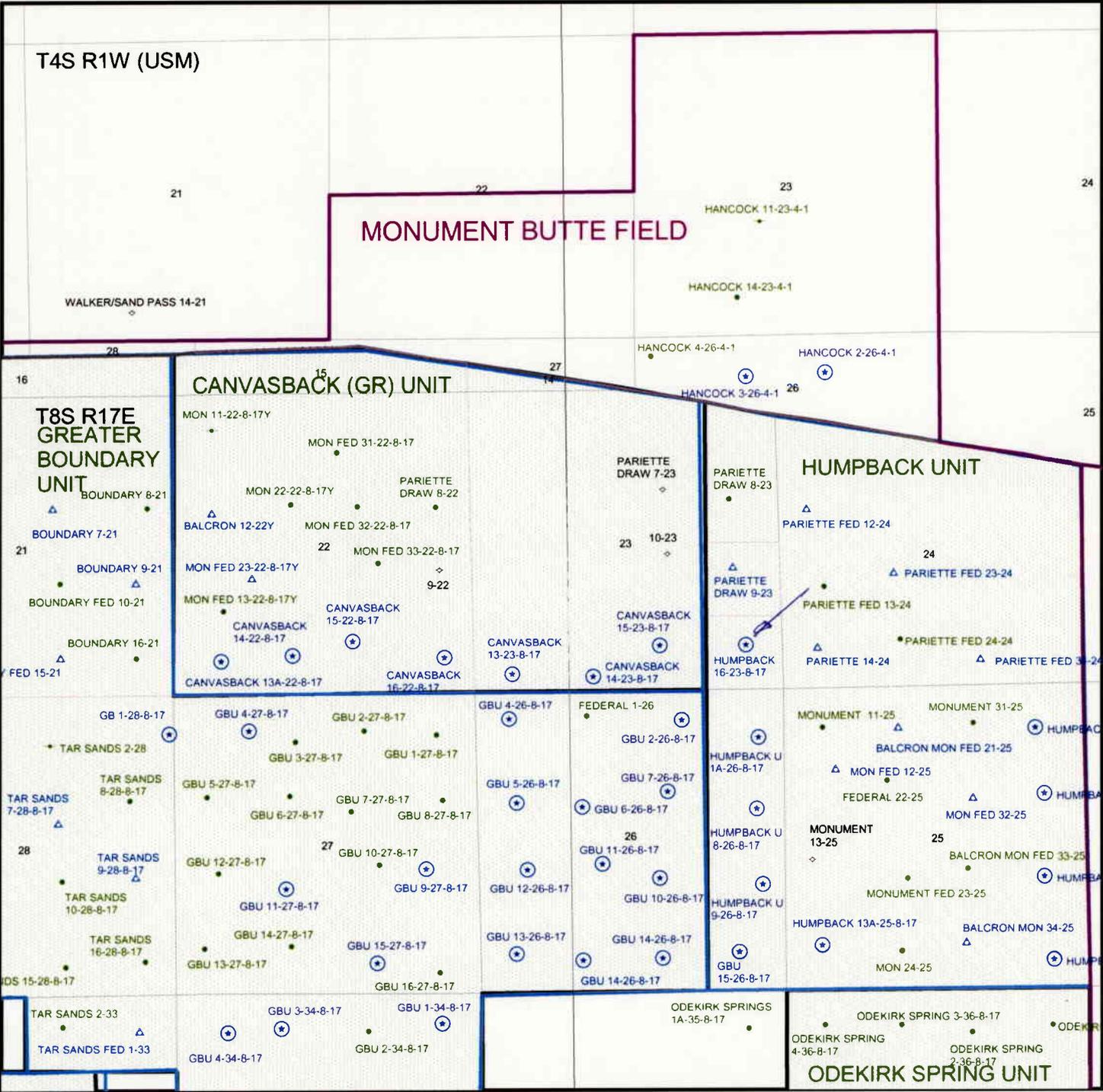
- R649-2-3. Unit HUMPBAC (GREEN RIVER)
- R649-3-2. General  
Siting: 460 From Qtr/Qtr & 920' Between Wells
- R649-3-3. Exception
- Drilling Unit  
Board Cause No: 238-1  
Eff Date: 1-1-97  
Siting: \*Vacats Spacing, Not Gen Siting
- R649-3-11. Directional Drill

COMMENTS: Separate file

STIPULATIONS: 1- Federal Approval



OPERATOR: INLAND PROD CO (N5160)  
 SEC. 23 , T8S, R17E  
 FIELD: MONUMENT BUTTE (105)  
 COUNTY: UINTAH UNIT: HUMPBACK (GR)  
 CAUSE: 238-1



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)

April 29, 2002

Memorandum

To: Assistant District Manager Minerals, Vernal District  
From: Michael Coulthard, Petroleum Engineer  
Subject: 2002 Plan of Development Humpback Unit Duchesne County,  
Utah.

Pursuant to email between Lisha Cordova, Division of Oil, Gas and Mining, and Mickey Coulthard, Utah State Office, Bureau of Land Management. The following well is planned for calendar year 2002 within the Humpback Unit, Duchesne County, Utah.

API #	WELL NAME	LOCATION
-------	-----------	----------

(Proposed PZ Green River)

43-047-34558 Humpback 16-23-8-17 Sec. 23, T8S, R17E 778 FSL 655 FEL

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

/s/ Michael L. Coulthard

bcc: File - Humpback  
Division of Oil Gas and Mining  
Agr. Sec. Chron  
Fluid Chron

003



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

Michael O. Leavitt  
Governor  
Kathleen Clarke  
Executive Director  
Lowell P. Braxton  
Division Director

1594 West North Temple, Suite 1210  
PO Box 145801  
Salt Lake City, Utah 84114-5801  
801-538-5340  
801-359-3940 (Fax)  
801-538-7223 (TDD)

May 2, 2002

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

Re: Humpback 16-23-8-17 Well, 778' FSL, 655' FEL, SE SE, Sec. 23, T. 8 South, R. 17 East, Uintah County, Utah

Gentlemen:

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

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date. The API identification number assigned to this well is 43-047-34558.

Sincerely,

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

John R. Baza  
Associate Director

er

Enclosures

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

**Operator:** Inland Production Company  
**Well Name & Number** Humpback 16-23-8-17  
**API Number:** 43-047-34558  
**Lease:** U-45431

**Location:** SE SE      **Sec.** 23      **T.** 8 South      **R.** 17 East

### Conditions of Approval

1. General

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

2. Notification Requirements

Notify the Division within 24 hours of spudding the well.

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

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

- Contact Dan Jarvis at (801) 538-5338

3. Reporting Requirements

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

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

004

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

5. LEASE DESIGNATION AND SERIAL NO. <b>U-45431</b>
6. IF INDIAN, ALLOTTEE OR TRIBE NAME <b>N/A</b>
7. UNIT AGREEMENT NAME <b>Humpback</b>
8. FARM OR LEASE NAME WELL NO <b>16-23-8-17</b>
9. API WELL NO.
10. FIELD AND POOL OR WILDCAT <b>Monument Butte</b>
11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA <b>SE/SE Sec. 23, T8S, R17E</b>
12. County <b>Uintah</b>
13. STATE <b>UT</b>

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK **DRILL**  **DEEPEN**   
 1b. TYPE OF WELL  
 OIL WELL  GAS WELL  SINGLE ZONE  MULTIPLE ZONE  OTHER

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

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)\*  
 At Surface **SE/SE 778' FSL 655' FEL**  
 At proposed Prod. Zone

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\*  
**Approximately 15.7 miles southeast of Myton, Utah**

15. DISTANCE FROM PROPOSED\* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to **Approx. 665' f/lse line & 665' f/unit line**)  
 16. NO. OF ACRES IN LEASE **548.53**  
 17. NO. OF ACRES ASSIGNED TO THIS WELL **40**

18. DISTANCE FROM PROPOSED LOCATION\* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR ON THIS LEASE, FT. **Approx. 1499'**  
 19. PROPOSED DEPTH **6500'**  
 20. ROTARY OR CABLE TOOLS **Rotary**

21. ELEVATIONS (Show whether DF, RT, GR, etc.) **5064' GR**  
 22. APPROX. DATE WORK WILL START\* **4th Quarter 2002**

23. PROPOSED CASING AND CEMENTING PROGRAM

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

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

The Conditions of Approval are also attached.

RECEIVED

OCT 09 2002

DIVISION OF  
OIL, GAS AND MINING

RECEIVED

APR 22 2002

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

24. SIGNED Mandie Crozier TITLE Permit Clerk DATE 4/19/02

CONDITIONS OF APPROVAL ATTACHED

NOTICE OF APPROVAL

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

CONDITIONS OF APPROVAL, IF ANY:

APPROVED BY [Signature] Assistant Field Manager  
 Mineral Resources DATE 10/03/2002

\*See Instructions On Reverse Side

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

006M

CONDITIONS OF APPROVAL  
APPLICATION FOR PERMIT TO DRILL

Company/Operator: Inland Production Company

Well Name & Number: Humpback 16-23-8-17

Lease Number: U - 45431

API Number: 43-047-34558

Location: SESE Sec. 23 T. 8S R. 17E

Agreement: Humpback (GR) SR

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

**CONDITIONS OF APPROVAL FOR NOTICE TO DRILL**

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

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

The area contains several east-west trending normal faults that are associated with the Duchesne fault zone. The proposed well location is very near to a southward dipping normal fault. If a fault is encountered during drilling, it could cause loss circulation and severe drilling difficulties.

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

Ed Forsman (435) 828-7874  
Petroleum Engineer

Kirk Fleetwood (435) 828-7875  
Petroleum Engineer

BLM FAX Machine (435) 781-4410

**THERE ARE NO ADDITIONAL CONDITIONS FOR THE SURFACE USE PROGRAM.**

**DIVISION OF OIL, GAS AND MINING****SPUDDING INFORMATION**Name of Company: INLAND PRODUCTION COMPANYWell Name: HUMPBACK 16-23-8-17Api No: 43-047-34558 Lease Type: FEDERALSection 23 Township 08S Range 17E County UINTAHDrilling Contractor STUBBS DRILLING RIG# 111**SPUDDED:**Date 04/04/03Time 7:00 AMHow DRY**Drilling will commence:** \_\_\_\_\_Reported by RAY HERRERATelephone # 1-435-823-1990Date 04/04/2003 Signed: CHD

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

OPERATOR: INLAND PRODUCTION COMPANY  
 ADDRESS: RT. 3 BOX 3639  
MYTON, UT 84052

OPERATOR ACCT. NO. N5160

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	12391	43-013-32243	Boundary #11-27-8-17	NE/SW	27	8S	17E	Duchesne	February 26, 2003	4/30/03
WELL 1 COMMENTS:											
A	99999	12299	43-047-34556	Canvasback #14-23-8-17	SE/SW	23	8S	17E	Uintah	March 27, 2003	4/30/03
WELL 2 COMMENTS: Corrected formation from Wasatch to Green River per Operator phone call											
B	99999	12053	43-047-34160	Humpback #1A-26-8-17	NE/NE	26	8S	17E	Uintah	March 31, 2003	4/30/03
WELL 3 COMMENTS:											
B	99999	12053	43-047-34558	Humpback #16-23-8-17	SE/SE	23	8S	17E	Uintah	April 4, 2003	4/30/03
WELL 4 COMMENTS:											
WELL 5 COMMENTS:											

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

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

*Kellie S. Jones*  
 Signature  
 Kellie S. Jones  
 Production Clerk  
 Title  
 April 8, 2003  
 Date

RECEIVED

APR 08 2003

DIV. OF OIL, GAS & MINING

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

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

006

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.  
**U-45431**

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

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

8. Well Name and No.  
**16-23-8-17**

9. API Well No.  
**43-047-34558**

10. Field and Pool, or Exploratory Area

11. County or Parish, State  
**Unitah, Utah**

SUBMIT IN TRIPLICATE

1. Type of Well  
 Oil Well     Gas Well     Other

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

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

4. Location of Well (Footage, Sec., T., R., m., or Survey Description)  
**778' FSL & 655' FEL SE/SE Sec 26. TWN 8S. R17E**

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

TYPE OF SUBMISSION	TYPE OF ACTION
<input type="checkbox"/> Notice of Intent	<input type="checkbox"/> Abandonment
<input checked="" type="checkbox"/> Subsequent Report	<input type="checkbox"/> Recompletion
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Plugging Back
	<input type="checkbox"/> Casing Repair
	<input type="checkbox"/> Altering Casing
	<input checked="" type="checkbox"/> Other <b>Spud Report</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.)\*

On 4-04-03. MIRU Stubbs # 111. Drill 310' of 12 1/4" hole with air mist. TIH w/ 7 Jt's 85/8" J-55 24# csgn. Set @ 310.03'/KB On 4/07/03 cement with 140 sks of Class "G" w/ 2% CaCL2 + 1/4# sk Cello-Flake Mixed @ 15.8 ppg > 1.17 cf/sk yeild. 4 bbls cement returned to surface.

RECEIVED

APR 09 2003

DIV. OF OIL, GAS & MINING

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

Signed Pat Wisener Title Drilling Foreman Date 04/14/2003  
Pat Wisener

CC: UTAH DOGM

(This space for Federal or State office use)

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

Conditions of approval, if any:

CC: Utah DOGM

# INLAND PRODUCTION COMPANY - CASING & CEMENT REPORT

8 5/8 CASING SET AT 310.03

LAST CASING 8 5/8" SET AT 310.03'  
 DATUM 12' KB  
 DATUM TO CUT OFF CASING \_\_\_\_\_  
 DATUM TO BRADENHEAD FLANGE \_\_\_\_\_  
 TD DRILLER 310 LOGGER \_\_\_\_\_  
 HOLE SIZE 12 1/4

OPERATOR Inland Production Company  
 WELL Humback 16-23-8-17  
 FIELD/PROSPECT Monument Butte  
 CONTRACTOR & RIG # Stubbs # 111

**LOG OF CASING STRING:**

PIECES	OD	ITEM - MAKE - DESCRIPTION	WT / FT	GRD	THREAD	CONDT	LENGTH
		41.39'1' sh jt' shjt					
		WHI - 92 csg head			8rd	A	0.95
7	8 5/8"	Maverick ST&C csg	24#	J-55	8rd	A	298.18
		<b>GUIDE</b> shoe			8rd	A	0.9

CASING INVENTORY BAL.	FEET	JTS	TOTAL LENGTH OF STRING	300.03
TOTAL LENGTH OF STRING	300.03	7	LESS CUT OFF PIECE	2
LESS NON CSG. ITEMS	1.85		PLUS DATUM TO T/CUT OFF CSG	12
PLUS FULL JTS. LEFT OUT	0		CASING SET DEPTH	<b>310.03</b>

TOTAL	298.18	7	} COMPARE	
TOTAL CSG. DEL. (W/O THRDS)	298.18	7		
TIMING	1ST STAGE			
BEGIN RUN CSG.	SPUD	04/04/2003	GOOD CIRC THRU JOB	Yes
CSG. IN HOLE		8:00am	Bbls CMT CIRC TO SURFACE	4
BEGIN CIRC			RECIPROCATED PIPE FOR _____ THRU _____ FT STROKE	
BEGIN PUMP CMT			DID BACK PRES. VALVE HOLD ?	N/A
BEGIN DSPL. CMT			BUMPED PLUG TO _____ 200 _____ PSI	
PLUG DOWN	Cemented	04/07/2003		

CEMENT USED	CEMENT COMPANY- <b>B. J.</b>		
STAGE	# SX	CEMENT TYPE & ADDITIVES	
1	140	Class "G" w/ 2% CaCL2 + 1/4#/sk Cello-Flake mixed @ 15.8 ppg 1.17 cf/sk yield	

CENTRALIZER & SCRATCHER PLACEMENT	SHOW MAKE & SPACING
Centralizers - Middle first, top second & third for 3	<b>RECEIVED</b>
	<b>APR 09 2003</b>
	DIV. OF OIL, GAS & MINING

COMPANY REPRESENTATIVE Pat Wisener DATE 04/07/2003

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.  
**U-45431**

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

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

8. Well Name and No.  
**16-23-8-17**

9. API Well No.  
**43-047-34558**

10. Field and Pool, or Exploratory Area

11. County or Parish, State  
**Unitah, Utah**

**SUBMIT IN TRIPLICATE**

1. Type of Well  
 Oil Well     Gas Well     Other

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

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

4. Location of Well (Footage, Sec., T., R., m., or Survey Description)  
**778' FSL & 655' FEL    SE/SE Sec. 26. TWN 8S. R17E**  
**23**

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

TYPE OF SUBMISSION	TYPE OF ACTION
<input type="checkbox"/> Notice of Intent <input checked="" 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>Weekly Status Report</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.)\*

Weekly Status report for the period of 5-31-03 thru 6-7-03.

On 5-31-03 MIRU Eagle # 1. Set equipment. Pressure test Bop's, Kelly, TIW to 2,000 psi. Test 85/8" csgn to 1,500 psi. Vernal BLM office was notified of test. PU & MU BHA and tag cement @ 265'. Drill out cement and shoe. Con't to drill 77/8" hole with fresh water to a depth of 6441'. Lay down drill string. Open hole log. PU & MU Guide shoe, 1 jt 5 1/2" csg, Float collar & 149 jt's J-55 15.5 # 5 1/2" csgn. Set @ 6434'/KB. Cement with 400\* sks. 50/50 POZ w/ 3% KCL, 1/4#sk Cello-Flake, 2% Gel, .3%SMS, .05#sk Static free, Mixed @ 14.4PPG >1.24 YLD. Then 320\* sks Prem Litell w/ 3% KCL, 3#/sk Kolseal, 8% Gel, .5SMS 3#sk CSE mixed @ 11.0PPG >3.43. Good returns thru job with 50 bbls of 50 bbls dye water returned to pit. Set slips with 84,000# tension. Nipple down BOP's. Release rig @ 3:00 pm on 6-06-03

**RECEIVED**  
**JUN 10 2003**

DIV. OF OIL, GAS & MINING

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

Signed Pat Wisener Title Drilling Foreman Date 06/08/2003

CC: UTAH DOGM

(This space for Federal or State office use)

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

Conditions of approval, if any:

CC: Utah DOGM

# INLAND PRODUCTION COMPANY - CASING & CEMENT REPORT

5 1/2" CASING SET AT 6434.3

Flt cllr @ 6409'

LAST CASING 8 5/8" SET AT 310.03'

OPERATOR Inland Production Company

DATUM 12' KB

WELL Humpback 16-23-8-17

DATUM TO CUT OFF CASING 12'

FIELD/PROSPECT Monument Butte

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

CONTRACTOR & RIG # Eagle # 1

TD DRILLER 6441 LOGGER 6435

HOLE SIZE 7 7/8"

**LOG OF CASING STRING:**

PIECES	OD	ITEM - MAKE - DESCRIPTION	WT / FT	GRD	THREAD	CONDT	LENGTH
		Landing Jt					14
		<b>37' @4199'</b>					
<b>149</b>	<b>5 1/2"</b>	ETC LT & C casing	<b>15.5#</b>	<b>J-55</b>	<b>8rd</b>	<b>A</b>	6397.58
		Float collar					0.6
<b>1</b>	<b>5 1/2"</b>	ETC LT&C csg	<b>15.5#</b>	<b>J-55</b>	<b>8rd</b>	<b>A</b>	23.47
		<b>GUIDE</b> shoe			<b>8rd</b>	<b>A</b>	0.65

CASING INVENTORY BAL.	FEET	JTS	TOTAL LENGTH OF STRING	6436.3
TOTAL LENGTH OF STRING	6436.3	150	LESS CUT OFF PIECE	14
LESS NON CSG. ITEMS	15.25		PLUS DATUM TO T/CUT OFF CSG	12
PLUS FULL JTS. LEFT OUT	0		CASING SET DEPTH	<b>6434.3</b>

TOTAL	<b>6421.05</b>	150	} COMPARE
TOTAL CSG. DEL. (W/O THRDS)	6421.05	150	
TIMING	1ST STAGE	2nd STAGE	
BEGIN RUN CSG.	5:30am		GOOD CIRC THRU JOB <u>YES</u>
CSG. IN HOLE	9:00am		Bbls CMT CIRC TO SURFACE <u>50 OF 50 bbls Dye water to pit</u>
BEGIN CIRC	9:05am	10:03 AM	RECIPROCATED PIPE FOR <u>THRUSTROKE</u>
BEGIN PUMP CMT	10:12am	10:43am	DID BACK PRES. VALVE HOLD ? <u>Yes</u>
BEGIN DSPL. CMT	11:04am		BUMPED PLUG TO <u>2050</u> PSI
PLUG DOWN	<b>11:32am</b>		

CEMENT USED		CEMENT COMPANY- <b>B. J.</b>
STAGE	# SX	CEMENT TYPE & ADDITIVES
<b>1</b>	<b>320</b>	Premite II w/ 10% gel + 3 % KCL, 3#s /sk CSE + 2# sk/kolseal + 1/4#s/sk Cello Flake mixed @ 11.0 ppg W / 3.43 cf/sk yield
<b>2</b>	<b>400</b>	50/50 poz W/ 2% Gel + 3% KCL, .5%EC1, 1/4# sk C.F. 2% gel. 3% SM mixed @ 14.4 ppg W/ 1.24 YLD

CENTRALIZER & SCRATCHER PLACEMENT SHOW MAKE & SPACING

Centralizers - Middle first, top second & third. Then every third collar for a total of 20.

**RECEIVED**

**JUN 10 2003**

DIV. OF OIL, GAS & MINING

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

FORM APPROVED

Budget Bureau No. 1004-0135

Expires: March 31, 1993

008

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. U-45431
6. If Indian, Allottee or Tribe Name NA
7. If Unit or C.A. Agreement Designation HUMPBAC (GR RVR)
8. Well Name and No. HUMPBAC 16-23-8-17
9. API Well No. 43-047-34558
10. Field and Pool, or Exploratory Area MONUMENT BUTTE
11. County or Parish, State UTAH COUNTY, UT

SUBMIT IN TRIPLIC,

Copy from elect. file @ 7/6/05

1. Type of Well [X] Oil Well [ ] Gas Well [ ] Other
2. Name of Operator INLAND PRODUCTION COMPANY
3. Address and Telephone No. Rt. 3 Box 3630, Myton Utah, 84052 435-646-3721
4. Location of Well (Footage, Sec., T., R., m., or Survey Description) 778 FSL 655 FEL SE/SE Section 23, T8S R17E

12. CHECK APPROPRIATE BOX(S) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA
TYPE OF SUBMISSION: [ ] Notice of Intent, [X] Subsequent Report, [ ] Final Abandonment Notice
TYPE OF ACTION: [ ] Abandonment, [ ] Recompletion, [ ] Plugging Back, [ ] Casing Repair, [ ] Altering Casing, [X] Weekly Status Report, [ ] Change of Plans, [ ] New Construction, [ ] Non-Routine Fracturing, [ ] Water Shut-Off, [ ] Conversion to Injection, [ ] Dispose Water

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.)

Status report for time period 06/17/03-06/21/03

Subject well had completion procedures initiated in the Green River formation on 6/17/03 without the use of a service rig over the well. A cement bond log was run and a total of three Green River intervals were perforated and hydraulically fracture treated with 20/40 mesh sand. Perforated intervals as follows: Stage #1: (6318'-6323'); Stage #2: (5989'-5996'), (6088'-6094'); Stage #3: (5830'-5838'), (5847'-5855'), (5867'-5872'), (5876'-5880'), (5889'-5895'), (5906'-5912'). All were 4 JSPF. Composite flow through frac plugs were used between stages. Fracs were flowed back through chokes. A service rig was moved on well 6/19/03. Bridge plugs were drilled out and well was cleaned out to PBTD @ 6409'. Zones were swab tested for sand cleanup. A BHA and production tubing were run in and anchored in well. End of tubing string @ 6304'. A repaired 1 1/2" rod pump was run in well on sucker rods. Well was placed on production via rod pump 6/21/03.

RECEIVED

JUN 26 2003

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

Signed

[Signature]

Title

Production Clerk

Date

6/24/2003

Matthew Richmond

CC: UTAH DOGM

(This space for Federal or State office use)

Approved by

Title

Date

Conditions of approval, if any:

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

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

**008**

**SUNDRY NOTICES AND REPORTS ON WELLS**

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

**SUBMIT IN TRIPLICATE**

1. Type of Well  
 Oil Well     Gas Well     Other

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

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

4. Location of Well (Footage, Sec., T., R., m., or Survey Description)  
**778 FSL 655 FEL                      SE/SE Section 23, T8S R17E**

5. Lease Designation and Serial No.  
**U-45431**

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

7. If Unit or CA, Agreement Designation  
**HUMPBACK (GR RVR)**

8. Well Name and No.  
**HUMPBACK 16-23-8-17**

9. API Well No.  
**43-047-34558**

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

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

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

TYPE OF SUBMISSION	TYPE OF ACTION
<input type="checkbox"/> Notice of Intent	<input type="checkbox"/> Abandonment
<input checked="" type="checkbox"/> Subsequent Report	<input type="checkbox"/> Recompletion
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Plugging Back
	<input type="checkbox"/> Casing Repair
	<input type="checkbox"/> Altering Casing
	<input checked="" type="checkbox"/> <b>Weekly Status Report</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.)\*

Status report for time period 06/17/03-06/21/03

Subject well had completion procedures initiated in the Green River formation on 6/17/03 without the use of a service rig over the well. A cement bond log was run and a total of three Green River intervals were perforated and hydraulically fracture treated with 20/40 mesh sand. Perforated intervals as follows: Stage #1: (6318'-6323'); Stage #2: (5989'-5996'), (6088'-6094'); Stage #3: (5830'-5838'), (5847'-5855'), (5867'-5872'), (5876'-5880'), (5889'-5895'), (5906'-5912'). All were 4 JSPF. Composite flow through frac plugs were used between stages. Fracs were flowed back through chokes. A service rig was moved on well 6/19/03. Bridge plugs were drilled out and well was cleaned out to PBTD @ 6409'. Zones were swab tested for sand cleanup. A BHA and production tubing were run in and anchored in well. End of tubing string @ 6304'. A repaired 1 1/2" rod pump was run in well on sucker rods. Well was placed on production via rod pump 6/21/03.

**RECEIVED  
JUN 26 2003**

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

Signed Matthew Richmond Title Production Clerk Date 6/24/2003

DIV. OF OIL, GAS & MINING

CC: UTAH DOGM

(This space for Federal or State office use)

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

Conditions of approval, if any:

(See other instructions on reverse side)

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

010

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

5. LEASE DESIGNATION AND SERIAL NO  
U-45431

6. IF INDIAN, ALLOTTEE OR TRIBE NAME  
NA

7. UNIT AGREEMENT NAME  
Humpback

8. FARM OR LEASE NAME, WELL NO  
Humpback 16-23-8-17

9. WELL NO  
43-047-34558

10. FIELD AND POOL OR WILDCAT  
Monument Butte

11. SEC. T. R., M. OR BLOCK AND SURVEY OR AREA  
Sec. 23, Twp. 8S, Rng. 17E

12. COUNTY OR PARISH  
Uintah

13. STATE  
UT

WELL COMPLETION OR RECOMPLETION REPORT AND LOG\*

1a. TYPE OF WORK  
OIL WELL  GAS WELL  DRY

1b. TYPE OF WELL  
NEW WELL  WORK OVER  DEEPEN  PLUG BACK  DIFF RESVR

2. NAME OF OPERATOR  
INLAND RESOURCES INC.

3. ADDRESS AND TELEPHONE NO.  
410 17th St. Suite 700 Denver, CO

4. LOCATION OF WELL (Report locations clearly and in accordance with any State requirements)  
At Surface 778' FSL & 655' FEL (SESE) Sec. 23, Twp 8S, Rng 17E  
At top prod. Interval reported below

14. API NO  
43-047-34558

DATE ISSUED  
10/03/02

15. DATE SPLUDDED  
4/4/03

16. DATE T.D. REACHED  
6/5/03

17. DATE COMPL. (Ready to prod.)  
6/21/03

*Copy from elect. file 7/6/05*

18. ELEVATIONS (DF, RKB, RT, GR, ETC.)\*  
5064' GL

19. ELEV. CASINGHEAD  
5076' KB

20. TOTAL DEPTH, MD & TVD  
6441' KB

21. PLUG BACK T.D., MD & TVD  
6409'

22. IF MULTIPLE COMPL., HOW MANY\*  
----->

23. INTERVALS DRILLED BY  
----->

ROTARY TOOLS  
X

CABLE TOOLS

24. PRODUCING INTERVAL(S) OF THIS COMPLETION--TOP, BOTTOM, NAME (MD AND TVD)\*  
Green River 5830'-6323'

25. WAS DIRECTIONAL SURVEY MADE  
No

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

27. WAS WELL CORED  
No

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

CASING SIZE/GRADE	WEIGHT, LB./FT	DEPTH SET (MD)	HOLE SIZE	TOP OF CEMENT, CEMENTING RECORD	AMOUNT PULLED
8-5/8" - J-55	24#	310'	12-1/4"	To surface with 140 sx Class "G" cmt	
5-1/2" - J-55	15.5#	6434'	7-7/8"	320 sx Premlite II and 400 sx 50/50 Poz	

29. LINER RECORD

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

30. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)
2-7/8"	EOT @ 6303'	TA @ 6205'

31. PERFORATION RECORD (Interval, size and number)

INTERVAL	SIZE	SPF/NUMBER
(CP 5) 6318'-6323'	.038"	4/20
(CP2, CP.5) 6088'-6094', 5989'-5996'	.038"	4/52
(LODC) 5830-38', 5847-55', 5867-72'		
5876-80', 5889-95', 5906-12'	.038"	4/48

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

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
6318'-6323'	Frac w/ 21,035# 20/40 sand in 99 bbls fluid.
5989'-6094'	Frac w/ 49,467# 20/40 sand in 211 bbls fluid.
5830'-5912'	Frac w/ 116,938# 20/40 sand in 512 bbls fluid.

33. PRODUCTION

DATE FIRST PRODUCTION	PRODUCTION METHOD (Flowing, gas lift, pumping--size and type of pump)	WELL STATUS (Producing or shut-in)					
6/21/03	2-1/2" x 1-1/2" x 15' RHAC Pump	PRODUCING					
DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N FOR TEST PERIOD	OIL--BBL.	GAS--MCF	WATER--BBL	GAS-OIL RATIO
10 day ave			----->	20	51	3	2550
FLOW TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL-BBL.	GAS--MCF.	WATER--BBL.	OIL GRAVITY-API (CORR.)	
		----->					

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

TEST WITNESSED BY  
AUG 19 2003

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 Brian Harns TITLE Engineering Technician DATE 7/30/2003

Brian Harns

010

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

WELL COMPLETION OR RECOMPLETION REPORT AND LOG\*

1a. TYPE OF WORK  
 OIL WELL  GAS WELL  DRY  Other \_\_\_\_\_  
 1b. TYPE OF WELL  
 NEW WELL  WORK OVER  DEEPEN  PLUG BACK  DIFF RESVR.  Other \_\_\_\_\_

5. LEASE DESIGNATION AND SERIAL NO.  
U-45431  
 6. IF INDIAN, ALLOTTEE OR TRIBE NAME  
NA  
 7. UNIT AGREEMENT NAME  
Humpback  
 8. FARM OR LEASE NAME, WELL NO.  
Humpback 16-23-8-17

2. NAME OF OPERATOR  
INLAND RESOURCES INC.

3. ADDRESS AND TELEPHONE NO.  
410 17th St. Suite 700 Denver, CO 80202

4. LOCATION OF WELL (Report locations clearly and in accordance with any State requirements.)  
 At Surface 778' FSL & 655' FEL (SESE) Sec. 23, Twp 8S, Rng 17E  
 At top prod. interval reported below  
 At total depth

9. WELL NO.  
43-047-34558  
 10. FIELD AND POOL OR WILDCAT  
Monument Butte  
 11. SEC., T., R., M. OR BLOCK AND SURVEY OR AREA  
Sec. 23, Twp. 8S, Rng. 17E

14. API NO. 43-047-34558 DATE ISSUED 10/03/02  
 12. COUNTY OR PARISH Uintah 13. STATE UT

15. DATE SPUDDED 4/4/03 16. DATE T.D. REACHED 6/5/03 17. DATE COMPL. (Ready to prod.) 6/21/03 18. ELEVATIONS (DF, RKB, RT, GR, ETC.)\* 5064' GL 5076' KB 19. ELEV. CASINGHEAD

20. TOTAL DEPTH, MD & TVD 6441' KB 21. PLUG BACK T.D., MD & TVD 6409' 22. IF MULTIPLE COMPL., HOW MANY\* 23. INTERVALS DRILLED BY -----> 24. ROTARY TOOLS X 25. CABLE TOOLS

24. PRODUCING INTERVAL(S), OF THIS COMPLETION--TOP, BOTTOM, NAME (MD AND TVD)\*  
Green River 5830'-6323'  
 25. WAS DIRECTIONAL SURVEY MADE No

26. TYPE ELECTRIC AND OTHER LOGS RUN  
 Dual Induction Guard, SP, Compensated Neutron, GR, Caliper, Cement Bond Log  
 27. WAS WELL CORED No

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#	310'	12-1/4"	To surface with 140 sx Class "G" cmt	
5-1/2" - J-55	15.5#	6434'	7-7/8"	320 sx Premlite II and 400 sx 50/50 Poz	

29. LINER RECORD 30. TUBING RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)
					2-7/8"	EOT @ 6303'	TA @ 6205'

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
(CP 5) 6318'-6323'	.038"	4/20	6318'-6323'	Frac w/ 21,035# 20/40 sand in 99 bbls fluid.
(CP2, CP.5) 6088'-6094', 5989'-5996'	.038"	4/52	5989'-6094'	Frac w/ 49,467# 20/40 sand in 211 bbls fluid.
(LODC) 5876'-80', 5889'-95', 5906'-12'	.038"	4/48	5830'-5912'	Frac w/ 116,938# 20/40 sand in 512 bbls fluid.

33.\* PRODUCTION

DATE FIRST PRODUCTION 6/21/03 PRODUCTION METHOD (Flowing, gas lift, pumping--size and type of pump) 2-1/2" x 1-1/2" x 15' RHAC Pump WELL STATUS (Producing or shut-in) PRODUCING

DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD	OIL--BBL.	GAS--MCF.	WATER--BBL.	GAS-OIL RATIO
10 day ave			→	20	51	3	2550

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

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.) Sold & Used for Fuel TEST WITNESSED BY AUG 19 2003

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 Brian Harris TITLE Engineering Technician DATE 7/30/2003  
 Brian Harris

RECEIVED  
AUG 19 2003  
DIV. OF OIL, GAS & MININ

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

38. GEOLOGIC MARKERS

FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.	NAME	TOP	
					MEAS. DEPTH	TRUE VERT. DEPTH
			Well Name Humpback 16-23-8-17	Garden Gulch Mkr	4161'	
				Garden Gulch 1	4343'	
				Garden Gulch 2	4460'	
				Point 3 Mkr	4730'	
				X Mkr	4960'	
				Y-Mkr	4998'	
				Douglas Creek Mkr	5130'	
				BiCarbonate Mkr	5397'	
				B Limestone Mkr	5542'	
				Castle Peak	5974'	
				Basal Carbonate	6382'	
				Total Depth (LOGGERS)	6441'	



June 23, 2003

State of Utah, Division of Oil, Gas and Mining  
Attn: Ms. Carol Daniels  
P.O. Box 145801  
Salt Lake City, Utah 84144-5801

Attn: Ms. Carol Daniels

Humpback 16-23-8-17 (43-047-34558)  
Uintah County, UT

Dear Ms. Carol Daniels

Enclosed is a Well Completion or Recompletion Report and Log form (Form 3160-4). We are no longer sending Log copies since Dave Jull of Phoenix Surveys is already doing so.

If you should have any questions, please contact me at (303) 382-4449.

Sincerely,

Brian Harris  
Engineering Tech

Enclosures

cc: Bureau of Land Management  
Vernal District Office, Division of Minerals  
Attn: Edwin I. Forsman  
170 South 500 East  
Vernal, Utah 84078

Well File – Denver  
Well File – Roosevelt  
Patsy Barreau/Denver  
Bob Jewett/Denver

RECEIVED  
AUG 19 2003  
DIV. OF OIL, GAS & MINERALS

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

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

013

**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.  
**U-45431**

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

7. If Unit or CA, Agreement Designation  
**HUMPBACK (GR RVR)**

8. Well Name and No.  
**HUMPBACK 16-23-8-17**

9. API Well No.  
**43-047-34558**

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

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

**SUBMIT IN TRIPLICATE**

1. Type of Well  
 Oil Well     Gas Well     Other

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

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

4. Location of Well (Footage, Sec., T., R., m., or Survey Description)  
**778 FSL 655 FEL                      SE/SE Section 23, T8S R17E**

12. CHECK APPROPRIATE BOX(es) 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 type="checkbox"/> Other _____ <input checked="" 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 checked="" 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.)\*

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

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

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

RECEIVED  
NOV 21 2003  
DIV. OF OIL, GAS & MINING

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

Signed Mandie Crozier Title Regulatory Specialist Date 11/14/2003  
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

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

Print out  
#15

**OPERATOR CHANGE WORKSHEET**

9 3 10

**ROUTING**

1. GLH
2. CDW
3. FILE

011

Change of Operator (Well Sold)

Designation of Agent/Operator

Operator Name Change

Merger

[Redacted]  
[Redacted]  
[Redacted]

The operator of the well(s) listed below has changed, effective:

9/1/2004

<b>FROM: (Old Operator):</b> N5160-Inland Production Company Route 3 Box 3630 Myton, UT 84052 Phone: 1-(435) 646-3721	<b>TO: ( New Operator):</b> N2695-Newfield Production Company Route 3 Box 3630 Myton, UT 84052 Phone: 1-(435) 646-3721
---	--

CA No.

Unit:

HUMPBACK (GREEN RIVER)

**WELL(S)**

NAME	SEC	TWN	RNG	API NO	ENTITY NO	LEASE TYPE	WELL TYPE	WELL STATUS	
HUMPBACK 16-23-8-17	23	080S	170E	4304734558	12053	Federal	OW	P	K
HUMPBACK 1-23-8-17	23	080S	170E	4304734566	12053	Federal	OW	P	K
HUMPBACK FED 16-24-8-17	24	080S	170E	4304734879	12053	Federal	OW	P	K
HUMPBACK FED 10-24-8-17	24	080S	170E	4304734880	12053	Federal	OW	P	K
HUMPBACK FED 9-24-8-17	24	080S	170E	4304734881	12053	Federal	OW	P	K
HUMPBACK FED 8-24-8-17	24	080S	170E	4304734885	12053	Federal	OW	P	K
HUMPBACK FED 7-24-8-17	24	080S	170E	4304734886	12053	Federal	OW	P	K
HUMPBACK 13A-25-8-17	25	080S	170E	4304734200	12053	Federal	WI	A	K
HUMPBACK 1-25-8-17	25	080S	170E	4304734485	12053	Federal	OW	P	K
HUMPBACK 8-25-8-17	25	080S	170E	4304734486	12053	Federal	OW	P	K
HUMPBACK 9-25-8-17	25	080S	170E	4304734487	12053	Federal	OW	P	K
HUMPBACK 16-25-8-17	25	080S	170E	4304734488	12053	Federal	OW	P	K
HUMPBACK U 9-26-8-17	26	080S	170E	4304734162	12053	Federal	OW	P	
HUMPBACK 16-26-8-17	26	080S	170E	4304734177		Federal	OW	APD	

**OPERATOR CHANGES DOCUMENTATION**

Enter date after each listed item is completed

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



6a. (R649-9-2)Waste Management Plan has been received on: IN PLACE  
6b. Inspections of LA PA state/fee well sites complete on: waived

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

8. **Federal and Indian Units:**  
The BLM or BIA has approved the successor of unit operator for wells listed on: n/a

9. **Federal and Indian Communization Agreements ("CA"):**  
The BLM or BIA has approved the operator for all wells listed within a CA on: na/

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

**DATA ENTRY:**

- 1. Changes entered in the **Oil and Gas Database** on: 2/28/2005
- 2. Changes have been entered on the **Monthly Operator Change Spread Sheet** on: 2/28/2005
- 3. Bond information entered in RBDMS on: 2/28/2005
- 4. Fee/State wells attached to bond in RBDMS on: 2/28/2005
- 5. Injection Projects to new operator in RBDMS on: 2/28/2005
- 6. Receipt of Acceptance of Drilling Procedures for APD/New on: waived

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

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

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

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

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

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

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

**LEASE INTEREST OWNER NOTIFICATION:**

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

**COMMENTS:**

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



# United States Department of the Interior



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

IN REPLY REFER TO:  
3106  
(UT-924)

September 16, 2004

## Memorandum

To: Vernal Field Office  
From: Acting Chief, Branch of Fluid Minerals  
Subject: Merger Approval

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

Michael Coulthard  
Acting Chief, Branch of  
Fluid Minerals

## Enclosure

1. State of Texas Certificate of Registration

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

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



## Office of the Secretary of State

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

Newfield Production Company  
Filing Number: 41530400

Articles of Amendment

September 02, 2004

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



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

Secretary of State

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

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

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

ARTICLE 1 – Name

The name of the corporation is Inland Production Company.

ARTICLE 2 – Amended Name

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

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

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

ARTICLE 3 – Effective Date of Filing

This document will become effective upon filing.

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

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

INLAND RESOURCES INC.

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

**OPERATOR CHANGE WORKSHEET**

<b>ROUTING</b>	
1. GLH	
2. CDW	
3. FILE	

**012**

Change of Operator (Well Sold)

Designation of Agent/Operator

**X Operator Name Change**

**Merger**

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

**CA No. Unit: HUMPBACK (GREEN RIVER)**

**WELL(S)**

NAME	SEC	TWN	RNG	API NO	ENTITY NO	LEASE TYPE	WELL TYPE	WELL STATUS	
HUMPBACK 16-23-8-17	23	080S	170E	4304734558	12053	Federal	OW	P	K
HUMPBACK 1-23-8-17	23	080S	170E	4304734566	12053	Federal	OW	P	K
HUMPBACK FED 16-24-8-17	24	080S	170E	4304734879	12053	Federal	OW	P	K
HUMPBACK FED 10-24-8-17	24	080S	170E	4304734880	12053	Federal	OW	P	K
HUMPBACK FED 9-24-8-17	24	080S	170E	4304734881	12053	Federal	OW	P	K
HUMPBACK FED 8-24-8-17	24	080S	170E	4304734885	12053	Federal	OW	P	K
HUMPBACK FED 7-24-8-17	24	080S	170E	4304734886	12053	Federal	OW	P	K
HUMPBACK 13A-25-8-17	25	080S	170E	4304734200	12053	Federal	WI	A	K
HUMPBACK 1-25-8-17	25	080S	170E	4304734485	12053	Federal	OW	P	K
HUMPBACK 8-25-8-17	25	080S	170E	4304734486	12053	Federal	OW	P	K
HUMPBACK 9-25-8-17	25	080S	170E	4304734487	12053	Federal	OW	P	K
HUMPBACK 16-25-8-17	25	080S	170E	4304734488	12053	Federal	OW	P	K
HUMPBACK U 9-26-8-17	26	080S	170E	4304734162	12053	Federal	OW	P	
HUMPBACK 16-26-8-17	26	080S	170E	4304734177		Federal	OW	APD	

**OPERATOR CHANGES DOCUMENTATION**

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

6a. (R649-9-2)Waste Management Plan has been received on: IN PLACE  
6b. Inspections of LA PA state/fee well sites complete on: waived

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

8. **Federal and Indian Units:**  
The BLM or BIA has approved the successor of unit operator for wells listed on: n/a

9. **Federal and Indian Communization Agreements ("CA"):**  
The BLM or BIA has approved the operator for all wells listed within a CA on: na/

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

**DATA ENTRY:**

1. Changes entered in the Oil and Gas Database on: 2/28/2005  
2. Changes have been entered on the Monthly Operator Change Spread Sheet on: 2/28/2005  
3. Bond information entered in RBDMS on: 2/28/2005  
4. Fee/State wells attached to bond in RBDMS on: 2/28/2005  
5. Injection Projects to new operator in RBDMS on: 2/28/2005  
6. Receipt of Acceptance of Drilling Procedures for APD/New on: waived

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

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

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

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

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

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

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

**LEASE INTEREST OWNER NOTIFICATION:**

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

**COMMENTS:**

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



UNITED STATES 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

DEC 07 2009

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

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: Humpback Area Permit  
UIC Permit No. UT20852-00000  
Well ID: UT20852-08518  
Humpback No. 16-23-8-17  
778' FSL & 655' FEL  
SE SE Sec. 23 T8S-R17E  
Uintah County, Utah  
API #43-047-34558

RECEIVED

DEC 14 2009

DIV. OF OIL, GAS & MINING

Dear Mr. Sundberg:

Newfield Production Company's (Newfield) request to convert the former Green River Formation oil well Humpback No. 16-23-8-17 to an enhanced recovery injection well under the Humpback 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 Humpback Area Permit No. UT20852-00000 and subsequent modifications.

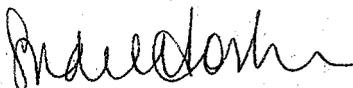
Please be aware that Newfield does not have authorization to begin injection operations into the well until all Prior to Commencing Injection requirements have been submitted and evaluated by EPA, and has received written authorization from the Director to begin injection. Please note that the Permit limits injection to the gross interval within the Green River Formation between the depths of 4,155 feet and the top of Wasatch Formation, estimated at 6,509 feet.

Prior to receiving authorization to inject into Humpback No. 16-23-8-17, EPA requires Newfield submit for review and approval the results of a Part 1 (Internal) mechanical integrity test (MIT), a pore pressure calculation of the injection interval and an EPA Form No. 7520-12 (Well Rework Record) with a new schematic diagram. Once these requirements have been approved by EPA, the Director will provide written authorization to inject for a limited period of 180 days during which time a Radioactive Traced Survey (RTS) is required.

The initial Maximum Allowable Injection Pressure (MAIP) for Humpback No. 16-23-8-17 was determined to be 1,635 psig. UIC Area Permit UT20852-00000 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 Emmett Schmitz at (303) 312-6174 or 1-(800)-227-8917 (Ext. 312-6174). Please submit the required data to Attention: Emmett Schmitz at the letterhead address, citing MAIL CODE: 8P-W-GW very prominently.

Sincerely,



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

Encl: Authorization for Conversion of An Additional Well  
EPA Form No. 7520-12 (Well Rework Record)  
Proposed Conversion Schematic: Humpback No. 16-23-8-17  
P&A Schematic: Humpback No. 16-23-8-17  
EPA Form No. 7520-13 (Plugging Record)  
Newfield procedure for addressing wells without adequate Confining Zone cement

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

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

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

RECEIVED

DEC 14 2009

DIV. OF OIL, GAS & MINING



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**

**REGION 8**  
1595 WYNKOOP STREET  
DENVER, CO 80202-1129  
Phone 800-227-8917  
<http://www.epa.gov/region08>

**AUTHORIZATION FOR ADDITIONAL WELL**

**UIC Area Permit No: UT20852-00000**

The Humpback Final UIC Area Permit No. UT20852-00000, effective October 8, 1998 authorizes Class II authorized fluid injection for the purpose of enhanced oil recovery in the Monument Butte Field. On August 19, 2009, Newfield Production Company (Newfield) notified the Director concerning the following additional enhanced recovery injection well:

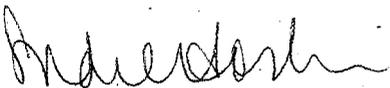
Humpback No. 16-23-8-17  
EPA Well ID Number: UT20852-08518  
SE SE (778' FSL & 665' FEL) Section 23 - T8S - R17E  
Uintah County, Utah  
API No. 43-047-34558

Pursuant to 40 CFR §144.33, Area UIC Permit No. UT20852-00000 authorizes the Permittee to construct and/or 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. UT20852-00000, 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: **DEC 07 2009**

  
*for* **Stephen S. Tuber**  
\*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*

**RECEIVED**

**DEC 14 2009**

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

*Authorization for Additional Well: UIC Area Permit UT20852-00000  
Well: Humpback No. 16-23-8-17 EPA Well ID: UT20852-08518*

*Printed on Recycled Paper*

## INJECTION WELL-SPECIFIC REQUIREMENTS

Well Name: Humpback No. 16-23-8-17  
EPA Well ID Number: UT20852-08518

### Prior to Commencing Injection Operations, the Permittee shall submit the following information for Humpback No. 16-23-8-17:

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 for a limited period of 180 days, during which time a Radioactive Tracer Survey (RTS) is required. The RTS will supplement the cementing records, which show an insufficient interval of 80 percent cement bond index or greater through the Confining Zone. It is intended that a maximum of 180 days of injection will allow the injection zone to achieve the Maximum Allowable Injection Pressure (MAIP) for the purpose of executing the RTS. If 180 days is not sufficient to achieve the MAIP specified in the Permit, an extension of the period of Limited Authorization to Inject may be requested.

A successful RTS will be considered a valid confirmation that cementing records show adequate cement to prevent the upward migration of injection fluids from the injection zone at injection pressures up to the MAIP, until one of the following events occurs, at which time a subsequent RTS is required:

- a) If the submitted RTS is determined to be inconclusive or inadequate by EPA;
- b) If the MAIP of the injection well is exceeded for any reason (*It is a violation to exceed the MAIP without prior EPA approval*);
- c) If new injection perforations are added to the injection well, either through the creation of new perforations or the adjustment of the packer depth to inject into a set of existing perforations that were previously inactive;
- d) If the injection formation is acid-treated, hydraulically stimulated, or stimulated by any other method through the injection well, which may affect the cement integrity of the well, and
- e) If the Director requests that a RTS be run for any reason.

A submitted RTS which indicates the movement of fluid behind casing from the injection zone will result in a requirement to demonstrate Part II Mechanical Integrity using an approved Part II demonstration method such as a Temperature Log, Oxygen Activation Log, or Noise Log at a frequency no less than once every five years following the last successful test.

Authorization for Additional Well: UIC Area Permit UT20852-00000  
Well: Humpback No. 16-23-8-17 EPA Well ID: UT20852-08518

**Approved Injection Zone:** Injection is approved between the top of the Garden Gulch Member of the Green River Formation (4,155 feet) to the top of the Wasatch Formation, at an estimated depth of 6,509 feet (KB).

**Maximum Allowable Injection Pressure (MAIP):** The initial MAIP is 1,635 psig, based on the following calculation:

MAIP = [FG - (0.433)(SG)] \* D, where

FG = 0.72 psi/ft. SG = 1.015 D = 5830 feet (top perforation depth KB)

**MAIP = 1,635 psig**

UIC Area Permit No. UT20852-00000 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). Cement records, including Cement Bond Log, have not satisfactorily demonstrated the presence of adequate Confining Zone annulus cement to prevent migration of injection fluids behind the casing from the injection zone.

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

**Demonstration of Mechanical Integrity:** 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 once every five years after the last successful test.

Because the cementing records have not satisfactorily demonstrated the presence of adequate cement to prevent migration of injection fluids behind the casing from the injection zone, a RTS is required to confirm the presence of adequate cement. The RTS shall be run within a 180-day Limited Authorization to inject period. If the RTS is not run, or if the RTS does not confirm adequate cement, the Permittee shall demonstrate Part II (External) Mechanical Integrity pursuant to 40 CFR §146.8(a)(2) using an approved test method such as Temperature Log, Noise Log or Oxygen Activation Log, and the demonstration of Part II Mechanical Integrity shall be repeated no less than every five years after the last successful test.

**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.

RECEIVED

DEC 14 2009

DIV. OF OIL, GAS & MINING

**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-foot 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 feet above the top perforation with a minimum of 20 feet of cement plug on top of the CIBP.

PLUG NO. 2: Perforate and squeeze cement up the backside of the 5-1/2 inch casing across the Trona Zone and the Mahogany Bench from approximately 3,271 feet – 3,427 feet (KB) unless pre-existing backside cement precludes cement-squeezing this interval. Set a minimum 156-foot balanced cement plug inside the 5-1/2 inch casing from approximately 3,271 feet – 3,427 feet (KB).

PLUG NO. 3: Perforate and squeeze cement up the backside of the 5-1/2 inch casing across the contact between the Uinta Formation and Green River Formation 1,885 feet – 2,005 feet (KB) unless pre-existing backside cement precludes cement-squeezing this interval. Set a minimum 120-foot cement plug inside the 5-1/2 inch casing from approximately 1,885 feet – 2,005 feet (KB).

PLUG NO. 4: Set a Class "G" cement plug within the 5-1/2 inch casing to 375 feet and up the 5-1/2 inch X 8-5/8 inch casing annulus to the surface.

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

Well Name: Humpback No. 16-23-8-17  
EPA Well ID Number: UT20852-08518

**Underground Sources of Drinking Water (USDWs):** USDWs in the Boundary 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 326 feet below ground surface in Humpback No. 16-23-8-17.

**http:NRWRT1.NR.STATE.UT.US:** There are no reservoirs, streams, domestic or agricultural water wells within one-quarter (1/4) mile of the well.

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

TDS of the produced Garden Gulch and Douglas Creek Members water: 6,425 mg/l.

The blended injectate (3,186 mg/l) is produced Green River Formation water, water from the Johnson Water District pipeline and/or water from the Green River pipeline, and produced water from Green River Formation wells proximate to the Humpback No. 16-23-8-17.

**Aquifer Exemption:** The TDS of water produced from the proposed injection well is less than 10,000 mg/l. An aquifer exemption for the Garden Gulch, Douglas Creek, and Basal Carbonate Members within the Humpback Area Permit was issued in September 2000. This Aquifer Exemption includes an area within a one-quarter (1/4) mile radius of the Humpback No. 16-23-8-17.

**Confining Zone:** The Confining Zone, which directly overlies the Garden Gulch Member of the Green River Formation, contains 28 feet of shale and impervious carbonate between the depths of 4,127 feet and 4,155 feet (KB).

**Injection Zone:** The Injection Zone at this well location is approximately 2,354 feet of multiple lenticular sand units interbedded with shale, marlstone and limestone from the top of the Garden Gulch Member at 4,155 feet (KB) to the estimated top of the Wasatch Formation at 6,509 feet (KB). All formation tops are based on correlations to Newfield Production Company Federal No. 1-26-8-17 (UT20702-04671) Type Log.

**Well Construction:** The CBL does not show 80% or greater cement bond index in the Confining Zone (4,127 feet – 4,155 feet KB). Thus, further demonstration that well cement is adequate to prevent significant migration of injection fluids behind casing is required.

**Surface Casing:** 8-5/8 inch casing is set at 310 feet (KB) in a 12-1/4 inch hole, using 140 sacks Class "G" cement, cemented to the surface.

**Longstring Casing:** 5-1/2 inch casing is set at 6,434 feet (KB) in a 7-7/8 inch hole secured with 720 sacks of cement. Total driller depth is 6,441 feet. Plugged back total depth (PBSD) is 6,409 feet. EPA calculates top of cement at 1,775 feet. CBL top of cement is 310 feet. Operator identifies top of cement at 1,300 feet.

**Perforations:** Top perforation: 5,830 feet (KB). Bottom perforation: 6,323 feet (KB).

RECEIVED

DEC 14 2009

DIV. OF OIL, GAS & MINING

**Area-of-Review Wells:** There is one (1) Green River Formation producing oil well and one (1) Green River Class II enhanced recovery injection wells in the one-quarter (1/4) mile Area-of-Review (AOR). The producing oil well (T-23-8-17) requires Corrective Action.

Pariette Federal No. 14-24-8-17                      UT20852-04453                      API: 43-047-32645  
- Adequate Confining Zone cement.      Successful RTS 7/14/2006

**AOR Well Corrective Action Plan:** The Federal T-23-8-17 shall be monitored weekly at the surface for evidence of fluid movement out of the injection zone.

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 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 Humpback No. 16-23-8-17 immediately and notify the Director. No injection into Humpback No. 16-23-8-17-17 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.

RECEIVED

DEC 14 2009

DIV. OF OIL, GAS & MINING



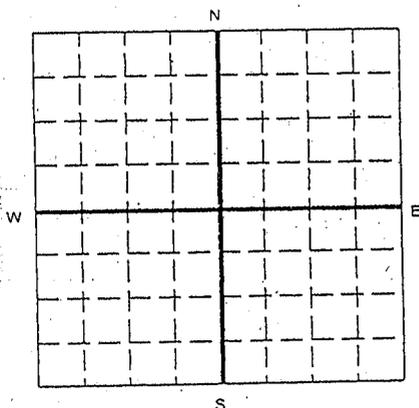
United States Environmental Protection Agency  
Washington, DC 20460

**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. from (N/S) ____ Line of quarter section and ____ ft. from (E/W) ____ Line of quarter section.		
<b>WELL ACTIVITY</b> <input type="checkbox"/> Brine Disposal <input type="checkbox"/> Enhanced Recovery <input type="checkbox"/> Hydrocarbon Storage  Lease Name _____	Total Depth Before Rework: _____ Total Depth After Rework: _____ Date Rework Commenced: _____ Date Rework Completed: _____	<b>TYPE OF PERMIT</b> <input type="checkbox"/> Individual <input type="checkbox"/> Area Number of Wells _____  Well Number _____

**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

UT 20852-08518  
Humpback #16-23-8-17

Spud Date: 6/1/03  
Put on Production: 6/21/03  
GL: 5064' KB: 5076'

Initial Production: 20 BOPD,  
15 MCFD, 3 BWPD

Proposed Injection  
Wellbore Diagram

SURFACE CASING

CSG SIZE: 8 5/8"  
GRADE: J-55  
WEIGHT: 24#  
LENGTH: 7 jts. (300.03")  
DEPTH LANDED: 310.03' KB  
HOLE SIZE: 12 1/4"  
CEMENT DATA: 140 sxs Class "G" cmt, est 4 bbls cmt to surf.

PRODUCTION CASING

CSG SIZE: 5 1/2"  
GRADE: J-55  
WEIGHT: 15.5#  
LENGTH: 150 jts. (6436.30")  
DEPTH LANDED: 6434.30' KB  
HOLE SIZE: 7 7/8"  
CEMENT DATA: 320 sxs Prem. Lite II mixed & 400 sxs 50/50 POZ.  
CEMENT TOP AT: 1300'

TUBING

SIZE/GRADE/WT: 2 7/8" / J-55 / 6.5#  
NO. OF JOINTS: 197 jts (6183.55")  
TUBING ANCHOR: 6195.55' KB  
NO. OF JOINTS: 1 jt (31.45")  
SEATING NIPPLE: 2 7/8" (1.10")  
SN LANDED AT: 6229.80' KB  
NO. OF JOINTS: 2 jts (62.90")  
TOTAL STRING LENGTH: EOT @ 6294.25' KB

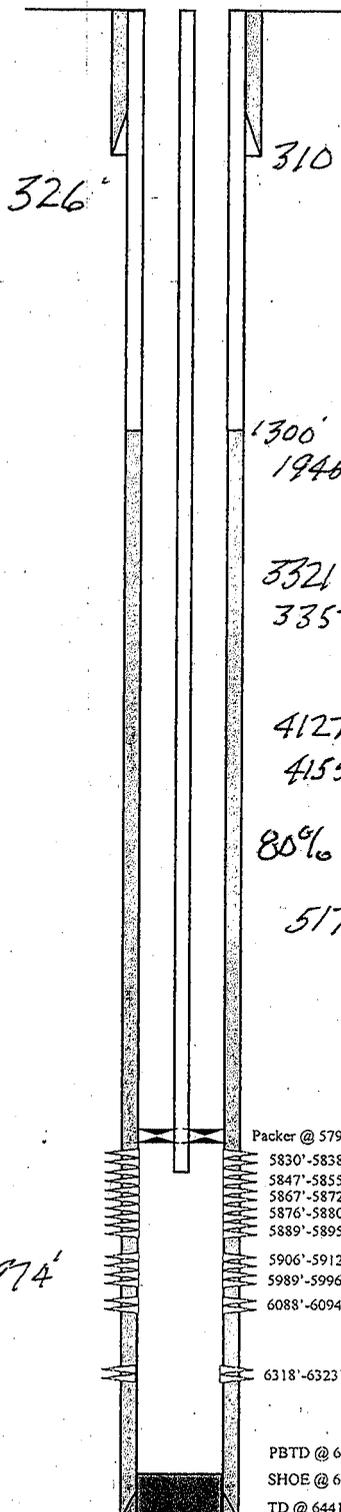
FRAC JOB

6/18/03 6318'-6323' Frac CPS sands as follows:  
21,035# 20/40 sand in 285 Bbls Viking I-2S fluid. Treated @ avg. press of 2215 psi w/ avg. rate of 24.7 BPM. ISIP: 2090 psi. Calc flush: 6315 gal. Actual flush: 6229 gal.

6/18/03 5989'-6094' Frac CP2 and CP.5 sands as follows:  
49,467# 20/40 sand in 442 Bbls Viking I-2S fluid. Treated @ avg. press of 1670 psi w/ avg. rate of 26 BPM. ISIP: 1690 psi. Calc flush: 5987 gal. Actual flush: 5901 gal.

6/18/03 5830'-5912' Frac LODC sands as follows:  
116,938# 20/40 sand in 863 Bbls Viking I-2S fluid. Treated @ avg. press of 1830 psi w/ avg. rate of 24.7 BPM. ISIP: 2155 psi. Calc flush: 5828 gal. Actual flush: 5754 gal.

8/23/03 Parted rods. Update rod detail.  
10/20/04 Tubing leak. Update tubing and rod detail.  
2/24/09 Tubing Leak. Updated r & t details.



PERFORATION RECORD

Date	Depth Range	Tool	Holes
6/17/03	6318'-6323'	4 JSPF	20 holes
6/18/03	6088'-6094'	4 JSPF	24 holes
6/18/03	5989'-5996'	4 JSPF	28 holes
6/18/03	5906'-5912'	4 JSPF	24 holes
6/18/03	5889'-5895'	4 JSPF	24 holes
6/18/03	5876'-5880'	4 JSPF	16 holes
6/18/03	5867'-5872'	4 JSPF	20 holes
6/18/03	5847'-5855'	4 JSPF	32 holes
6/18/03	5830'-5838'	4 JSPF	32 holes

NEWFIELD

Humpback #16-23-8-17  
778' FSL & 655' FEL  
SE/SE Section 23-T8S-R17E  
Uintah Co, Utah  
API #43-047-34558 ; Lease #U-45431

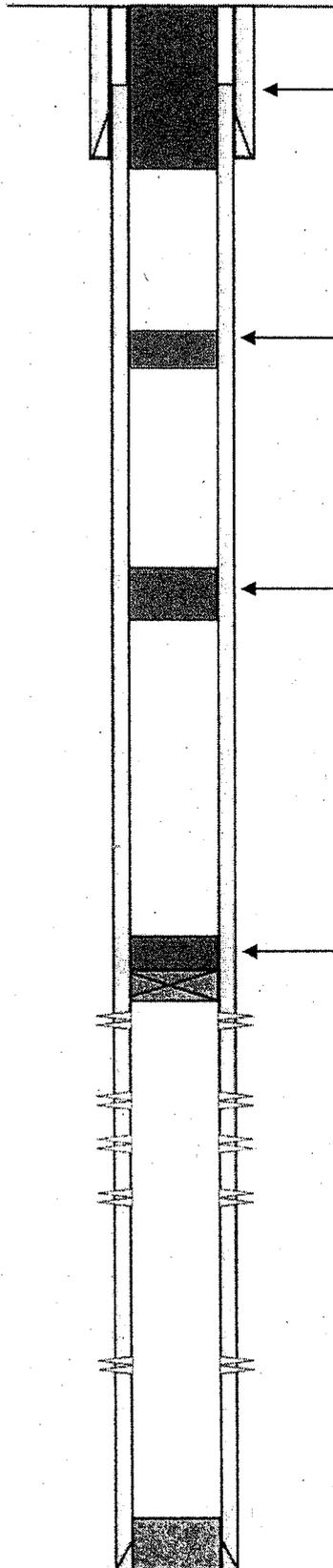
RECEIVED

DEC 14 2009

DIV. OF OIL, GAS & MINING

CT 7/14/09

## Plugging and Abandonment Diagram Humpback No. 16-23-8-17



Plug 4: Set a Class "G" cement plug within the 5-1/2 inch casing surface to 375 feet and up the 5-1/2 inch X 8-5/8 inch casing annulus to the surface.

Plug 3: Perforate and squeeze cement up the backside of the casing across the contact between the Uinta Formation and Green River Formation 1,885 feet – 2,005 feet (KB) unless pre-existing backside cement precludes cement-squeezing this interval. Set a minimum 120-foot cement plug inside the casing from approximately 1,885 feet – 2,005 feet.

Plug 2: Perforate and squeeze cement up the backside of the casing across the Trona Zone and the Mahogany Bench from approximately 3,271 feet – 3,427 feet (KB) unless pre-existing backside cement precludes cement-squeezing this interval. Set a minimum 156-foot balanced cement plug inside the casing from approximately 3,271 feet – 3,427 feet.

Plug 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.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, DC 20460  
**PLUGGING RECORD**

NAME AND ADDRESS OF PERMITTEE

NAME AND ADDRESS OF CEMENTING COMPANY

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. from (N/S) Line of quarter section

and ft. from (E/W) Line of quarter section

TYPE OF AUTHORIZATION

- Individual Permit
- Area Permit
- Rule

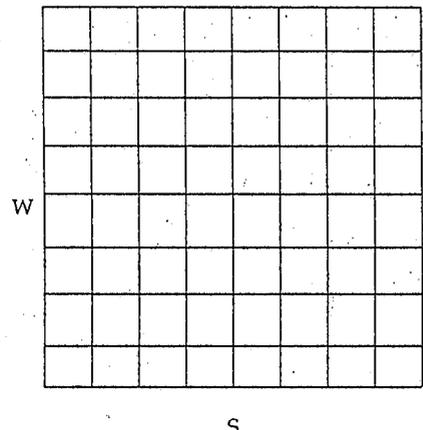
Number of Wells

Describe in detail the manner in which the fluid was placed and the method used in introducing it into the hole

**RECEIVED**

**DEC 14 2009**

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



Lease Name

CASING AND TUBING RECORD AFTER PLUGGING

METHOD OF EMPLACEMENT OF CEMENT PLUGS

SIZE	WT(LB/FT)	TO BE PUT IN WELL(FT)	TO BE LEFT IN WELL(FT)	HOLE SIZE

- CLASS I
  - The Balance Method
- CLASS II
  - The Dump Bailer Method
  - The Two-Plug Method
- Brine Disposal
- Enhanced Recovery
- Other
- Hydrocarbon Storage
- CLASS III

CEMENTING TO PLUG AND ABANDONED DATA	PLUG #1	PLUG #2	PLUG #3	PLUG #4	PLUG #5	PLUG #6	PLUG #7
Size of Hole or Pipe in which Plug Will Be Placed (inches)							
Depth to Bottom of Tubing or Drill Pipe (ft.)							
Sacks of Cement To Be Used (each plug)							
Slurry Volume To Be Pumped (cu. ft.)							
Calculated Top of Plug (ft.)							
Measured Top of Plug (if tagged ft.)							
Slurry Wt. (Lb./Gal.)							
Type cement or other material (Class III)							

LIST ALL OPEN HOLE AND/OR PERFORATED INTERVALS

From	To	From	To

Signature of Cementer or Authorized Representative

Signature of EPA Representative

CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. (REF. 40 CFR 122.22)

NAME AND OFFICIAL TITLE (Please type or print)	SIGNATURE	DATE SIGNED

# NEWFIELD



ROCKY MOUNTAINS

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

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

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



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 8**

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

**MAR 05 2012**

Ref: 8P-W-GW

**CERTIFIED MAIL  
RETURN RECEIPT REQUESTED**

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

**RECEIVED**

**MAR 14 2012**

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

Accepted by the  
Utah Division of  
Oil, Gas and Mining

**FOR RECORD ONLY**

RE: Underground Injection Control (UIC)  
Additional Well to Humpback Area Permit  
EPA UIC Permit UT20852-09439  
Well: Humpback 16-23-8-17  
SESE Sec. 23-T8S-R17E  
Uintah County, Utah  
API No.: 43-047-34558

Dear Mr. Sundberg:

The U.S. Environmental Protection Agency Region 8 hereby authorizes Newfield Production Company (Newfield) to convert the oil well Humpback 16-23-8-17 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 Humpback Area Permit No. UT20852-00000 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 Emmett Schmitz at (303) 312-6174 or (800) 227-8917, extension 312-6174. Please submit the required data to Jason Deardorff at the letterhead address citing mail code 8P-W-GW.

Sincerely,



for Callie A. Videtich

Acting Assistant Regional Administrator  
Office of Partnerships and Regulatory Assistance

Enclosures: Authorization for Additional Well  
Wellbore Schematic for Humpback 16-23-8-17

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 UT20852-00000**

The Humpback Final UIC Area Permit UT20852-00000, effective October 8, 1998, authorizes injection for the purpose of enhanced oil recovery in the Monument Butte Field. On December 16, 2011 Newfield Production Company notified the Director concerning the following additional enhanced recovery injection well:

Well Name:	Humpback 16-23-8-17
EPA Permit ID Number:	UT20852-09439
Location:	778' FSL & 655' FEL SESE Sec. 23 T8S-R17E Uintah County, Utah API #43-047-34558

Pursuant to 40 CFR §144.33, Area UIC Permit UT20852-00000 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. UT20852-00000, 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 2012

  
for **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

Authorization for Additional Well: UIC Area Permit UT20852-00000  
Well: Humpback 16-23-8-17 EPA Well ID: UT20852-09439

## **INJECTION WELL-SPECIFIC REQUIREMENTS**

Well Name: Humpback 16-23-8-17  
EPA Well ID Number: UT20852-09439

### **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 1,485 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 0.695 psi/ft, SG is 1.015 and D is 5,830 ft.

UIC Area Permit No. UT20852-00000 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: Humpback 16-23-8-17  
EPA Well ID Number: UT20852-09439

**Underground Sources of Drinking Water (USDWs):** USDWs in the Humpback 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 326 ft. below ground surface in the Humpback 16-23-8-17 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 UT20852-00000 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

Authorization for Additional Well: UIC Area Permit UT20852-00000  
Well: Humpback 16-23-8-17 EPA Well ID: UT20852-09439

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.

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 310 ft. in a 12-1/4" hole, using 140 sacks Class "G" cement, cemented to the surface.

**Longstring Casing:** 5-1/2" casing is set at 6,434 ft. in a 7-7/8" hole secured with 720 sacks of cement. Total driller depth is 6,441 ft. Plugged back total depth is 6,441 ft. EPA calculates top of cement at 1,660 ft. Estimated CBL top of cement is 1,300 ft.

**Perforations:** Top perforation: 5,830 ft.                      Bottom perforation: 6,323 ft.



**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.

# Humpback #16-23-8-17

Spud Date: 6/1/03  
 Put on Production: 6/21/03  
 GL: 5064' KB: 5076'

Initial Production: 20 BOPD,  
 15 MCFD, 3 BWPD

Proposed Injection  
 Wellbore Diagram

**SURFACE CASING**

CSG SIZE: 8 5/8"  
 GRADE: J-55  
 WEIGHT: 24#  
 LENGTH: 7 jts. (300.03')  
 DEPTH LANDED: 310.03' KB  
 HOLE SIZE: 12 1/4"  
 CEMENT DATA: 140 sxs Class "G" cmt, est 4 bbls cmt to surf.

**PRODUCTION CASING**

CSG SIZE: 5 1/2"  
 GRADE: J-55  
 WEIGHT: 15.5#  
 LENGTH: 150 jts. (6436.30')  
 DEPTH LANDED: 6434.30' KB  
 HOLE SIZE: 7 7/8"  
 CEMENT DATA: 320 sxs Prem. Lite II mixed & 400 sxs 50/50 POZ.  
 CEMENT TOP AT: 1300'

**TUBING**

SIZE/GRADE/WT: 2 7/8" / J-55 / 6.5#  
 NO. OF JOINTS: 197 jts (6183.55')  
 TUBING ANCHOR: 6195.55' KB  
 NO. OF JOINTS: 1 jt (31.45')  
 SEATING NIPPLE: 2 7/8" (1.10')  
 SN LANDED AT: 6229.80' KB  
 NO. OF JOINTS: 2 jts (62.90')  
 TOTAL STRING LENGTH: EOT @ 6294.25' KB

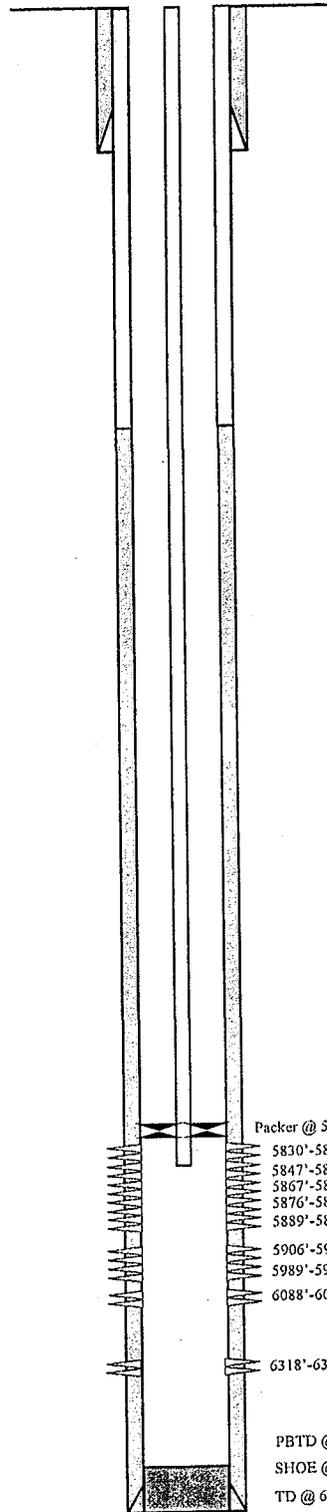
**FRAC JOB**

6/18/03 6318'-6323' Frac CP5 sands as follows:  
 21,035# 20/40 sand in 285 Bbls Viking I-25  
 fluid. Treated @ avg. press of 2215 psi w/  
 avg. rate of 24.7 BPM. ISIP: 2090 psi. Calc  
 flush: 6315 gal. Actual flush: 6229 gal.

6/18/03 5989'-6094' Frac CP2 and CP.5 sands as follows:  
 49,467# 20/40 sand in 442 Bbls Viking I-25  
 fluid. Treated @ avg. press of 1670 psi w/  
 avg. rate of 26 BPM. ISIP: 1690 psi. Calc  
 flush: 5987 gal. Actual flush: 5901 gal.

6/18/03 5830'-5912' Frac LODC sands as follows:  
 116,938# 20/40 sand in 863 Bbls Viking I-25  
 fluid. Treated @ avg. press of 1830 psi w/  
 avg. rate of 24.7 BPM. ISIP: 2155 psi. Calc  
 flush: 5828 gal. Actual flush: 5754 gal.

8/23/03 Parted rods. Update rod detail.  
 10/20/04 Tubing leak. Update tubing and rod detail.  
 2/24/09 Tubing Leak. Updated r & t details.



**PERFORATION RECORD**

Date	Depth Range	Perforation Type	Holes
6/17/03	6318'-6323'	4 JSPF	20 holes
6/18/03	6088'-6094'	4 JSPF	24 holes
6/18/03	5989'-5996'	4 JSPF	28 holes
6/18/03	5906'-5912'	4 JSPF	24 holes
6/18/03	5889'-5895'	4 JSPF	24 holes
6/18/03	5876'-5880'	4 JSPF	16 holes
6/18/03	5867'-5872'	4 JSPF	20 holes
6/18/03	5847'-5855'	4 JSPF	32 holes
6/18/03	5830'-5838'	4 JSPF	32 holes

**NEWFIELD**

Humpback #16-23-8-17  
 778' FSL & 655' FEL  
 SE/SE Section 23-T8S-R17E  
 Uintah Co, Utah  
 API #43-047-34558 ; Lease #U-45431



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 8**

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

**MAR 05 2012**

Ref: 8P-W-GW

**CERTIFIED MAIL  
RETURN RECEIPT REQUESTED**

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

**RECEIVED**

**MAR 14 2012**

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

Accepted by the  
Utah Division of  
Oil, Gas and Mining

**FOR RECORD ONLY**

RE: Underground Injection Control (UIC)  
Additional Well to Humpback Area Permit  
EPA UIC Permit UT20852-09439  
Well: Humpback 16-23-8-17  
SESE Sec. 23-T8S-R17E  
Uintah County, Utah  
API No.: 43-047-34558

Dear Mr. Sundberg:

The U.S. Environmental Protection Agency Region 8 hereby authorizes Newfield Production Company (Newfield) to convert the oil well Humpback 16-23-8-17 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 Humpback Area Permit No. UT20852-00000 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 Emmett Schmitz at (303) 312-6174 or (800) 227-8917, extension 312-6174. Please submit the required data to Jason Deardorff at the letterhead address citing mail code 8P-W-GW.

Sincerely,



for Callie A. Videtich

Acting Assistant Regional Administrator  
Office of Partnerships and Regulatory Assistance

Enclosures: Authorization for Additional Well  
Wellbore Schematic for Humpback 16-23-8-17

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 UT20852-00000**

The Humpback Final UIC Area Permit UT20852-00000, effective October 8, 1998, authorizes injection for the purpose of enhanced oil recovery in the Monument Butte Field. On December 16, 2011 Newfield Production Company notified the Director concerning the following additional enhanced recovery injection well:

Well Name: Humpback 16-23-8-17  
EPA Permit ID Number: UT20852-09439  
Location: 778' FSL & 655' FEL  
SESE Sec. 23 T8S-R17E  
Uintah County, Utah  
API #43-047-34558

Pursuant to 40 CFR §144.33, Area UIC Permit UT20852-00000 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. UT20852-00000, 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 2012

  
for **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

Authorization for Additional Well: UIC Area Permit UT20852-00000  
Well: Humpback 16-23-8-17 EPA Well ID: UT20852-09439

## **INJECTION WELL-SPECIFIC REQUIREMENTS**

Well Name: Humpback 16-23-8-17  
EPA Well ID Number: UT20852-09439

### **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 1,485 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 0.695 psi/ft, SG is 1.015 and D is 5,830 ft.

UIC Area Permit No. UT20852-00000 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: Humpback 16-23-8-17  
EPA Well ID Number: UT20852-09439

**Underground Sources of Drinking Water (USDWs):** USDWs in the Humpback 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 326 ft. below ground surface in the Humpback 16-23-8-17 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 UT20852-00000 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

Authorization for Additional Well: UIC Area Permit UT20852-00000  
Well: Humpback 16-23-8-17 EPA Well ID: UT20852-09439

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.

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 310 ft. in a 12-1/4" hole, using 140 sacks Class "G" cement, cemented to the surface.

**Longstring Casing:** 5-1/2" casing is set at 6,434 ft. in a 7-7/8" hole secured with 720 sacks of cement. Total driller depth is 6,441 ft. Plugged back total depth is 6,441 ft. EPA calculates top of cement at 1,660 ft. Estimated CBL top of cement is 1,300 ft.

**Perforations:** Top perforation: 5,830 ft.

Bottom perforation: 6,323 ft.



**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.

# Humpback #16-23-8-17

Spud Date: 6/1/03  
 Put on Production: 6/21/03  
 GL: 5064' KB: 5076'

Initial Production: 20 BOPD,  
 15 MCFD, 3 BWPD

Proposed Injection  
 Wellbore Diagram

## SURFACE CASING

CSG SIZE: 8 5/8"  
 GRADE: J-55  
 WEIGHT: 24#  
 LENGTH: 7 jts. (300.03')  
 DEPTH LANDED: 310.03' KB  
 HOLE SIZE: 12 1/4"  
 CEMENT DATA: 140 sxs Class "G" cmt, est 4 bbls cmt to surf.

## PRODUCTION CASING

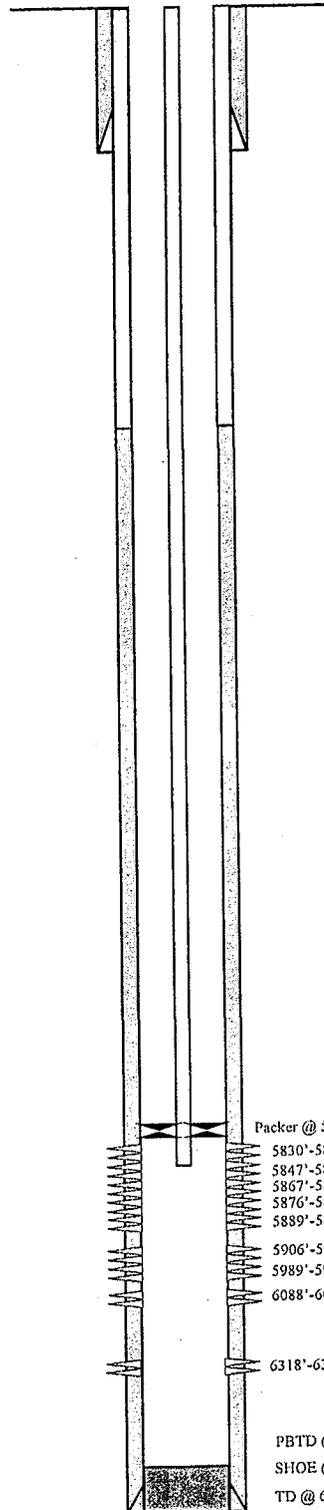
CSG SIZE: 5 1/2"  
 GRADE: J-55  
 WEIGHT: 15.5#  
 LENGTH: 150 jts. (6436.30')  
 DEPTH LANDED: 6434.30' KB  
 HOLE SIZE: 7 7/8"  
 CEMENT DATA: 320 sxs Prem. Lite II mixed & 400 sxs 50/50 POZ.  
 CEMENT TOP AT: 1300'

## TUBING

SIZE/GRADE/WT: 2 7/8" / J-55 / 6.5#  
 NO. OF JOINTS: 197 jts (6183.55')  
 TUBING ANCHOR: 6195.55' KB  
 NO. OF JOINTS: 1 jt (31.45')  
 SEATING NIPPLE: 2 7/8" (1.10')  
 SN LANDED AT: 6229.80' KB  
 NO. OF JOINTS: 2 jts (62.90')  
 TOTAL STRING LENGTH: EOT @ 6294.25' KB

## FRAC JOB

6/18/03	6318'-6323'	Frac CP5 sands as follows: 21,035# 20/40 sand in 285 Bbls Viking I-25 fluid. Treated @ avg. press of 2215 psi w/ avg. rate of 24.7 BPM. ISIP: 2090 psi. Calc flush: 6315 gal. Actual flush: 6229 gal.
6/18/03	5989'-6094'	Frac CP2 and CP.5 sands as follows: 49,467# 20/40 sand in 442 Bbls Viking I-25 fluid. Treated @ avg. press of 1670 psi w/ avg. rate of 26 BPM. ISIP: 1690 psi. Calc flush: 5987 gal. Actual flush: 5901 gal.
6/18/03	5830'-5912'	Frac LODC sands as follows: 116,938# 20/40 sand in 863 Bbls Viking I-25 fluid. Treated @ avg. press of 1830 psi w/ avg. rate of 24.7 BPM. ISIP: 2155 psi. Calc flush: 5828 gal. Actual flush: 5754 gal.
8/23/03		Parted rods. Update rod detail.
10/20/04		Tubing leak. Update tubing and rod detail.
2/24/09		Tubing Leak. Updated r & t details.



## PERFORATION RECORD

Date	Depth Range	Perforation Type	Holes
6/17/03	6318'-6323'	4 JSPF	20 holes
6/18/03	6088'-6094'	4 JSPF	24 holes
6/18/03	5989'-5996'	4 JSPF	28 holes
6/18/03	5906'-5912'	4 JSPF	24 holes
6/18/03	5889'-5895'	4 JSPF	24 holes
6/18/03	5876'-5880'	4 JSPF	16 holes
6/18/03	5867'-5872'	4 JSPF	20 holes
6/18/03	5847'-5855'	4 JSPF	32 holes
6/18/03	5830'-5838'	4 JSPF	32 holes

**NEWFIELD**

Humpback #16-23-8-17  
 778' FSL & 655' FEL  
 SE/SE Section 23-T8S-R17E  
 Uintah Co, Utah  
 API #43-047-34558 ; Lease #U-45431

<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-45431
		<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> HUMPBACK 16-23-8-17
<b>3. ADDRESS OF OPERATOR:</b> Rt 3 Box 3630 , Myton, UT, 84052		<b>9. API NUMBER:</b> 43047345580000
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 0778 FSL 0655 FEL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: SESE Section: 23 Township: 08.0S Range: 17.0E Meridian: S		<b>9. FIELD and POOL or WILDCAT:</b> MONUMENT BUTTE
		<b>COUNTY:</b> UINTAH
		<b>STATE:</b> UTAH

11.

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

TYPE OF SUBMISSION	TYPE OF ACTION		
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start:	<input type="checkbox"/> ACIDIZE <input type="checkbox"/> CHANGE TO PREVIOUS PLANS <input checked="" type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> DEEPEN <input type="checkbox"/> OPERATOR CHANGE <input type="checkbox"/> PRODUCTION START OR RESUME <input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> WATER SHUTOFF <input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> ALTER CASING <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input type="checkbox"/> FRACTURE TREAT <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> SI TA STATUS EXTENSION <input checked="" type="checkbox"/> OTHER	<input type="checkbox"/> CASING REPAIR <input type="checkbox"/> CHANGE WELL NAME <input checked="" type="checkbox"/> CONVERT WELL TYPE <input type="checkbox"/> NEW CONSTRUCTION <input type="checkbox"/> PLUG BACK <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION <input type="checkbox"/> TEMPORARY ABANDON <input type="checkbox"/> WATER DISPOSAL <input type="checkbox"/> APD EXTENSION OTHER: <input type="text" value="New Perforations"/>
<input checked="" type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion: 12/12/2012			
<input type="checkbox"/> SPUD REPORT Date of Spud:			
<input type="checkbox"/> DRILLING REPORT Report Date:			

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

The subject well has been converted from a producing oil well to an injection well on 12/10/2012. New intervals added: 4508-4519' 3JSPF & 5216-5221' 3 JSPF. On 12/11/2012 Jason Deardorff with the EPA was contacted concerning the initial MIT on the above listed well. On 12/12/2012 the casing was pressured up to 1190 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# UT22197-09439

**Accepted by the**  
**Utah Division of**  
**Oil, Gas and Mining**  
**FOR RECORD ONLY**  
 December 24, 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> 12/19/2012	

## 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: 12/12/12  
 Test conducted by: Dale Giles  
 Others present: \_\_\_\_\_

UT 20852-09439

Well Name: <u>Humpback 16-23-8-17</u>	Type: ER SWD	Status: AC TA UC
Field: <u>Monument Butte</u>		
Location: <u>SE/SE</u> Sec: <u>23</u> T <u>8</u> N <u>(S)</u> R <u>17</u> (E) W	County: <u>Uintah</u>	State: <u>UT</u>
Operator: <u>Newfield Production Co.</u>		
Last MIT: <u>1</u> / <u>1</u>	Maximum Allowable Pressure: _____	PSIG

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

Pre-test casing/tubing annulus pressure: 0 psig

MIT DATA TABLE	Test #1	Test #2	Test #3
<b>TUBING PRESSURE</b>			
Initial Pressure	<u>0</u> psig	psig	psig
End of test pressure	<u>0</u> psig	psig	psig
<b>CASING / TUBING ANNULUS PRESSURE</b>			
0 minutes	<u>1190</u> psig	psig	psig
5 minutes	<u>1190</u> psig	psig	psig
10 minutes	<u>1190</u> psig	psig	psig
15 minutes	<u>1190</u> psig	psig	psig
20 minutes	<u>1190</u> psig	psig	psig
25 minutes	<u>1190</u> psig	psig	psig
30 minutes	<u>1190</u> psig	psig	psig
_____ minutes	psig	psig	psig
_____ minutes	psig	psig	psig
<b>RESULT</b>	<input checked="" type="checkbox"/> Pass <input type="checkbox"/> Fail	<input type="checkbox"/> Pass <input type="checkbox"/> Fail	<input type="checkbox"/> Pass <input type="checkbox"/> Fail

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

### MECHANICAL INTEGRITY PRESSURE TEST

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

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

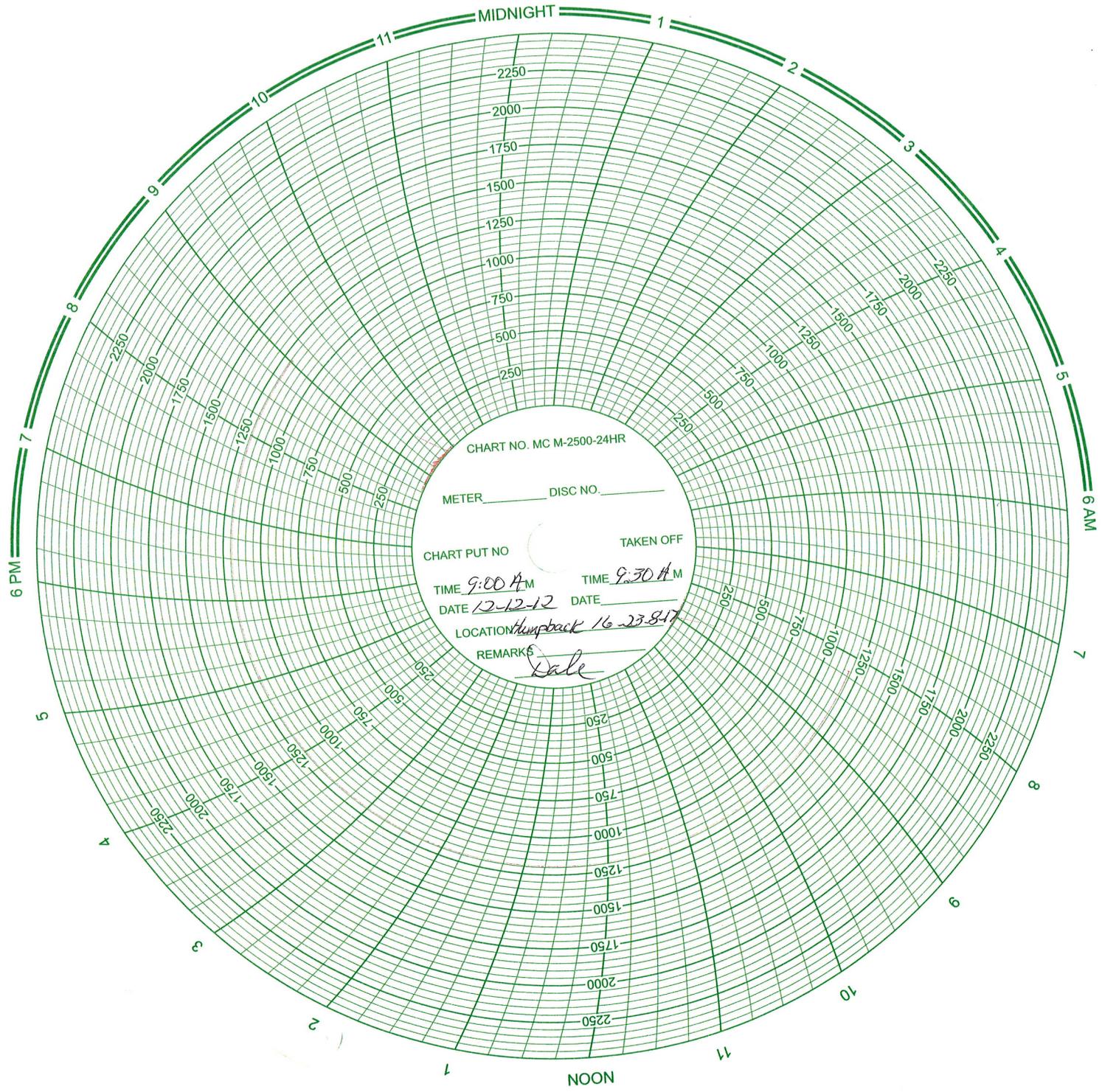


CHART NO. MC M-2500-24HR

METER \_\_\_\_\_ DISC NO. \_\_\_\_\_

CHART PUT NO \_\_\_\_\_

TAKEN OFF \_\_\_\_\_

TIME 9:00 AM

TIME 9:30 AM

DATE 12-12-12

DATE \_\_\_\_\_

LOCATION Humpback 16 23-8-17

REMARKS Dale

## Daily Activity Report

Format For Sundry

**HUMPBACK 16-23-8-17**

**10/1/2012 To 2/28/2013**

**12/4/2012 Day: 1**

**Conversion**

WWS #7 on 12/4/2012 - MIRU, Test tbg, LD rods, Release TAC, Tag fill @ 6410', RU workfloor - Change over to tbg equip, Release TAC, RU work floor, RIH w/ sandline using depthometer & tag fill @ 6410', No new fill, POOH w/ sandline, SWIFN - Crew Travel & Safety Meeting - Road Rig from 6-30-8-17 to 16-23-8-17, MIRU - RU H/O truck & pump 60 bbls down csg, RD pumping unit, Unseat pump & flush tbg w/ 30 bbls, Soft seat pump & test tbg to 3000 psi, Good test, - POOH LD Rods on trailer, Flushed rods 3 times on the wat out, LD 157 3/4" 4-per, 49- 3/4" slick, 49- 3/4" 4-per, 2- 1 1/2" WT Bars, 3- 1 5/8" WT Bars & Pump - Crew Travel

**Daily Cost:** \$0

**Cumulative Cost:** \$13,875

---

**12/6/2012 Day: 2**

**Conversion**

WWS #7 on 12/6/2012 - TOO H Breaking & Doping Tbg, Perforate D-2 @ 5216'-21' & GB-2 @ 4508'-19', PU PKR & PLUG, TIH w/ 144 jts tbg - Crew Travel & Safety Meeting - Crew Travel & Safety Meeting - RU H/O truck, Flush tbg w/ 40 bbls, TOO H w/ 142-jts 2 7/8" tbg breaking & doping, LD extra 58-jts tbg on trailer. - RU H/O truck, Flush tbg w/ 40 bbls, TOO H w/ 142-jts 2 7/8" tbg breaking & doping, LD extra 58-jts tbg on trailer. - PU 5 1/2" " HD" PKR & " TS" RBP, Tally & PU N-80 tbg, RIH w/ 144 jts tbg, EOT @ 4573', SWIFN - RU Extreme W/L, RIH w/ 4 3/4" guage ring to 5250', POOH w/ guage ring, MU & RIH w/ 3 1/8" slick guns w/ 16 gram charges & perforate D-2 formation @ 5216'-21', GB-2 formation @ 4508'-19', POOH & RD W/L. - RU Extreme W/L, RIH w/ 4 3/4" guage ring to 5250', POOH w/ guage ring, MU & RIH w/ 3 1/8" slick guns w/ 16 gram charges & perforate D-2 formation @ 5216'-21', GB-2 formation @ 4508'-19', POOH & RD W/L. - PU 5 1/2" " HD" PKR & " TS" RBP, Tally & PU N-80 tbg, RIH w/ 144 jts tbg, EOT @ 4573', SWIFN - Crew Travel - Crew Travel - POOH w/ N-80 tbg, LD 79-jts of tbg on trailer, EOT @ 1930', Drain pump & lines, SWIFW - POOH w/ N-80 tbg, LD 79-jts of tbg on trailer, EOT @ 1930', Drain pump & lines, SWIFW - Release pkr, Circulate bottoms up, PU 3-jts tbg & circulate 30' sand off plug, Release plug - Release pkr, Circulate bottoms up, PU 3-jts tbg & circulate 30' sand off plug, Release plug - RD Baker frac equip, RU flow back equip, Open well on 20 choke, Flow back 140 bbls fluid. - RD Baker frac equip, RU flow back equip, Open well on 20 choke, Flow back 140 bbls fluid. - 2nd stg. RU Baker frac equip, Test lines to 8200 psi, Open well w/ 0 psi, Break down GB-2 formation @ 2056 psi w/ 1.2 bbls @ 4.2 bpm, Pump 8 bbls 15% HCL, Pump 72 bbls fresh water to get to rate & acid on perms, Pump 28.6 bbls Lightning 17 pad, Pump 59.5 bbls 1-2# sand (ramped), Pump 125.3 bbls 2-4# sand (ramped), Pump 25.9 bbls flush, ISIP 1401, FG .74, Max press 3630, Avg press 3010, Max rate 17.4 bpm, Avg rate 17.1 bpm, 17821# sand pumped into formation, 318.9 total bbls pumped. - 2nd stg. RU Baker frac equip, Test lines to 8200 psi, Open well w/ 0 psi, Break down GB-2 formation @ 2056 psi w/ 1.2 bbls @ 4.2 bpm, Pump 8 bbls 15% HCL, Pump 72 bbls fresh water to get to rate & acid on perms, Pump 28.6 bbls Lightning 17 pad, Pump 59.5 bbls 1-2# sand (ramped), Pump 125.3 bbls 2-4# sand (ramped), Pump 25.9 bbls flush, ISIP 1401, FG .74, Max press 3630, Avg press 3010, Max rate 17.4 bpm, Avg rate 17.1 bpm, 17821# sand pumped into formation, 318.9 total bbls pumped. - Release pkr & circ bottoms up, RIH w 3-jts tbg & circ 30' of sand off plug, Release plug, TOO H LD 22-jts tbg on tbg trailer, Set plug @ 4576', LD 3 more jts tbg, Set pkr @ 4470', EOT @ 4480' - Release pkr & circ bottoms up, RIH w 3-jts tbg & circ 30' of sand off plug, Release plug, TOO H LD 22-jts tbg on tbg trailer, Set plug @ 4576', LD 3 more jts tbg, Set pkr @ 4470', EOT @ 4480' - RD Baker frac equip, RU flow back equip, Open well on 20

choke, Flow back 80 bbls fluid. - RD Baker frac equip, RU flow back equip, Open well on 20 choke, Flow back 80 bbls fluid. - 1st stg. RU Baker frac equip, Test lines to 8200 psi, Fill csg w/ 10 bbls, Fill tbg w/ 4 bbls, Open well w/ 0 psi, Break down D-2 formation @ 2804 psi w/ 3.1 bbls @ 4.6 bpm, Pump 8 bbls 15% HCL, Pump 88 bbls fresh water to get to rate & acid on perfs, Pump 28.6 bbls Lightning 17 pad, Pump 50.8 bbls 1-2# sand (ramped), Pump 95.1 bbls 2-4# sand (ramped), Pump 30.6 bbls flush, ISIP 1435, FG .71, Max press 5146, Avg press 3757, Max rate 18.9 bpm, Avg rate 18.6 bpm, 14,346# sand pumped into formation, 298.2 total bbls pumped. - 1st stg. RU Baker frac equip, Test lines to 8200 psi, Fill csg w/ 10 bbls, Fill tbg w/ 4 bbls, Open well w/ 0 psi, Break down D-2 formation @ 2804 psi w/ 3.1 bbls @ 4.6 bpm, Pump 8 bbls 15% HCL, Pump 88 bbls fresh water to get to rate & acid on perfs, Pump 28.6 bbls Lightning 17 pad, Pump 50.8 bbls 1-2# sand (ramped), Pump 95.1 bbls 2-4# sand (ramped), Pump 30.6 bbls flush, ISIP 1435, FG .71, Max press 5146, Avg press 3757, Max rate 18.9 bpm, Avg rate 18.6 bpm, 14,346# sand pumped into formation, 298.2 total bbls pumped. - Continue PU 166-jts N-80 work string, Set plug @ 5266', LD 3-jts tbg, Set pkr @ 5170', EOT @ 5180' - Continue PU 166-jts N-80 work string, Set plug @ 5266', LD 3-jts tbg, Set pkr @ 5170', EOT @ 5180' - Crew Travel & Safety Meeting - Crew Travel & Safety Meeting - Crew Travel - Crew Travel

**Daily Cost:** \$0

**Cumulative Cost:** \$25,912

---

**12/11/2012 Day: 4**

**Conversion**

WWS #1 on 12/11/2012 - Cot. OOH w/ frac string, P/U RIH w/ prod. Pkr assy. Set pkr w/ 15k tension & pres. Test to 1500# (good) - 0# SIP, Flush tbg. w/ 30bbls htd.wtr. Cont. OOH w/ 2-7/8 frac string L/D Pkr & Rbp, P/U & RIH w/ prod. Pkr assy. Flowed by 141 jts. 2-7/8 j-55 tbg. Drop S/V pres. Test tbg. To 3000# lost 150# bump back up to 3000# for 30min. (good) R/U sand line RIH ret. S/V N/D BOP pump 80bbls pkr fluid set pkr w/ 15k tension @ 4448' top off w/ 10 bbls pres. Test to 1500# (good) RDMOL

**Daily Cost:** \$0

**Cumulative Cost:** \$112,109

---

**12/12/2012 Day: 5**

**Conversion**

Rigless on 12/12/2012 - Conduct initial MIT - On 12/11/2012 Jason Deardorff with the EPA was contacted concerning the initial MIT on the above listed well. On 12/12/2012 the casing was pressured up to 1190 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# UT20852-09439 **Finalized**

**Daily Cost:** \$0

**Cumulative Cost:** \$191,043

---

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

<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		<b>FORM 9</b>
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		<b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> U-45431
		<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b>
<b>1. TYPE OF WELL</b> Water Injection 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> HUMPBAC 16-23-8-17
<b>3. ADDRESS OF OPERATOR:</b> Rt 3 Box 3630, Myton, UT, 84052		<b>9. API NUMBER:</b> 43047345580000
<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> 0778 FSL 0655 FEL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: SESE Section: 23 Township: 08.0S Range: 17.0E Meridian: S		<b>COUNTY:</b> UINTAH
		<b>STATE:</b> UTAH

11.

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

TYPE OF SUBMISSION	TYPE OF ACTION		
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start:	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> CASING REPAIR
<input checked="" type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion: 1/15/2013	<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 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 1:30 PM on  
01/15/2013. EPA # UT22197-09436

**Accepted by the  
Utah Division of  
Oil, Gas and Mining  
FOR RECORD ONLY  
January 24, 2013**

<b>NAME (PLEASE PRINT)</b> Lucy Chavez-Naupoto	<b>PHONE NUMBER</b> 435 646-4874	<b>TITLE</b> Water Services Technician
<b>SIGNATURE</b> N/A	<b>DATE</b> 1/17/2013	

# Humpback 16-23-8-17

Spud Date: 6/1/03  
 Put on Production: 6/21/03  
 GL: 5064' KB: 5076'

Initial Production: 20 BOPD,  
 15 MCFD, 3 BWPD

Injection Wellbore  
 Diagram

## SURFACE CASING

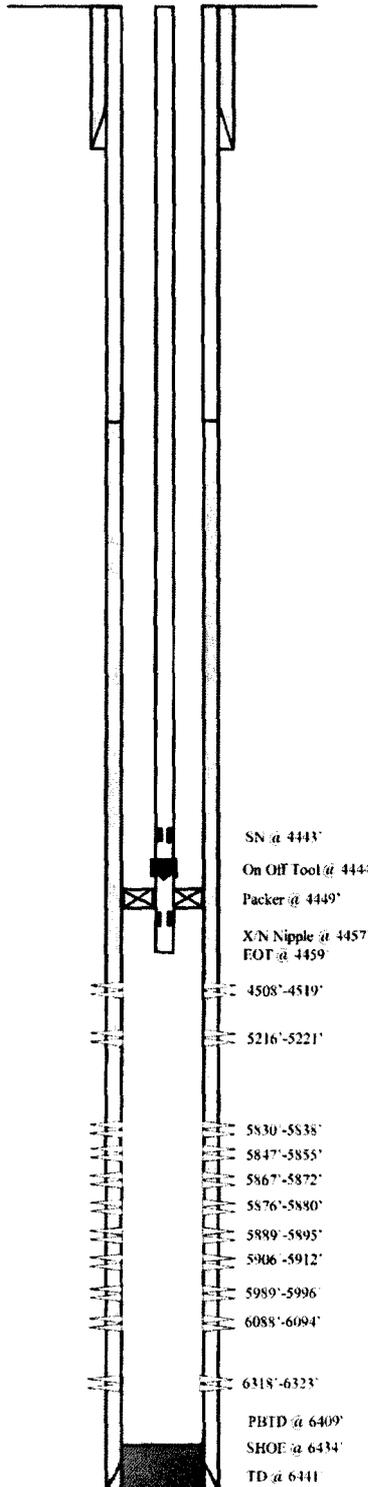
CSG SIZE: 8.5/8"  
 GRADE: J-55  
 WEIGHT: 24#  
 LENGTH: 7 jts. (300.03')  
 DEPTH LANDED: 310.03' KB  
 HOLE SIZE: 12.1/4"  
 CEMENT DATA: 140 sxs Class "G" cmt, est 4 bbls cmt to surf

## PRODUCTION CASING

CSG SIZE: 5.1/2"  
 GRADE: J-55  
 WEIGHT: 15.5#  
 LENGTH: 150 jts. (6436.30')  
 DEPTH LANDED: 6434.30' KB  
 HOLE SIZE: 7.7/8"  
 CEMENT DATA: 320 sxs Prem. Lite II mixed & 400 sxs 50/50 POZ.  
 CEMENT TOP AT: 1300'

## TUBING

SIZE/GRADE/WT: 2.7/8" J-55 6.5#  
 NO. OF JOINTS: 141 jts (4430.6')  
 SEATING NIPPLE: 2.7/8" (1.10')  
 SN LANDED AT: 4442.6' KB  
 ON/OFF TOOL AT: 4443.7'  
 ARROW #1 PACKER CE AT: 4448.52'  
 XO 2-3/8 x 2-7/8 J-55 AT: 4452.7'  
 TBG PUP 2-3/8 J-55 AT: 4453.3'  
 X/N NIPPLE AT: 4457.4'  
 TOTAL STRING LENGTH: EOT @ 4459'



## FRAC JOB

6/18/03 6318'-6323' **Frac CP5 sands as follows:**  
 21,035# 20/40 sand in 285 Bbls Viking I-25 fluid. Treated @ avg. press of 2215 psi w/ avg. rate of 24.7 BPM. ISIP: 2090 psi. Calc flush: 6315 gal. Actual flush: 6229 gal.

6/18/03 5989'-6094' **Frac CP2 and CP.5 sands as follows:**  
 49,467# 20/40 sand in 442 Bbls Viking I-25 fluid. Treated @ avg. press of 1670 psi w/ avg. rate of 26 BPM. ISIP: 1690 psi. Calc flush: 5987 gal. Actual flush: 5901 gal.

6/18/03 5830'-5912' **Frac LODC sands as follows:**  
 116,938# 20/40 sand in 863 Bbls Viking I-25 fluid. Treated @ avg. press of 1830 psi w/ avg. rate of 24.7 BPM. ISIP: 2155 psi. Calc flush: 5828 gal. Actual flush: 5754 gal.

8/23/03 **Parted rods.** Update rod detail.

10/20/04 **Tubing leak.** Update tubing and rod detail.

2/24/09 **Tubing Leak.** Updated r & t details.

12/06/12 5216'-5221' **Frac D2 sands as follows:** 13346# 20/40 sand in 290 bbls Lightning 17 frac fluid.

12/06/12 4508'-4519' **Frac GB2 sands as follows:** 17821# 20/40 sand in 311 bbls Lightning 17 frac fluid

12/10/12 **Convert to Injection Well**

12/12/12 **Conversion MIT Finalized** - update the detail

## PERFORATION RECORD

Date	Depth Range	Number of JSPF	Total Holes
6/17/03	6318'-6323'	4 JSPF	20 holes
6/18/03	6088'-6094'	4 JSPF	24 holes
6/18/03	5989'-5996'	4 JSPF	28 holes
6/18/03	5906'-5912'	4 JSPF	24 holes
6/18/03	5889'-5895'	4 JSPF	24 holes
6/18/03	5876'-5880'	4 JSPF	16 holes
6/18/03	5867'-5872'	4 JSPF	20 holes
6/18/03	5847'-5855'	4 JSPF	32 holes
6/18/03	5830'-5838'	4 JSPF	32 holes
12/05/12	5216'-5221'	3 JSPF	15 holes
12/05/12	4508'-4519'	3 JSPF	33 holes

**NEWFIELD**

**Humpback 16-23-8-17**

778' FSL & 655' FEL  
 SE/SE Section 23-T8S-R17E  
 Uintah Co, Utah  
 API #43-047-34558 ; Lease #U-45431