API Well Number: 43047517450000

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

FORM 3

AMENDED REPORT ☐

## APPLICATION FOR PERMIT TO DRILL

**1. WELL NAME and NUMBER**
GMBU Q-24-8-17

**2. TYPE OF WORK**
DRILL NEW WELL ■ REENTER P&A WELL ○ DEEPEN WELL ○

**3. FIELD OR WILDCAT**
MONUMENT BUTTE

**4. TYPE OF WELL**
Oil Well Coalbed Methane Well: NO

**5. UNIT or COMMUNITIZATION AGREEMENT NAME**
GMBU (GRRV)

**6. NAME OF OPERATOR**
NEWFIELD PRODUCTION COMPANY

**7. OPERATOR PHONE**
435 646-4825

**8. ADDRESS OF OPERATOR**
Rt 3 Box 3630 , Myton, UT, 84052

**9. OPERATOR E-MAIL**
mcrozier@newfield.com

**10. MINERAL LEASE NUMBER (FEDERAL, INDIAN, OR STATE)**
UTU-45431

**11. MINERAL OWNERSHIP**
FEDERAL ■ INDIAN ○ STATE ○ FEE ○

**12. SURFACE OWNERSHIP**
FEDERAL ■ INDIAN ○ STATE ○ FEE ○

**13. NAME OF SURFACE OWNER (if box 12 = 'fee')**

**14. SURFACE OWNER PHONE (if box 12 = 'fee')**

**15. ADDRESS OF SURFACE OWNER (if box 12 = 'fee')**

**16. SURFACE OWNER E-MAIL (if box 12 = 'fee')**

**17. INDIAN ALLOTTEE OR TRIBE NAME (if box 12 = 'INDIAN')**

**18. INTEND TO COMMINGLE PRODUCTION FROM MULTIPLE FORMATIONS**
YES ○ (Submit Commingling Application) NO ■

**19. SLANT**
VERTICAL ○ DIRECTIONAL ■ HORIZONTAL ○

| 20. LOCATION OF WELL | FOOTAGES | QTR-QTR | SECTION | TOWNSHIP | RANGE | MERIDIAN |
|---|---|---|---|---|---|---|
| LOCATION AT SURFACE | 676 FSL 666 FWL | SWSW | 24 | 8.0 S | 17.0 E | S |
| Top of Uppermost Producing Zone | 1082 FSL 1123 FWL | SWSW | 24 | 8.0 S | 17.0 E | S |
| At Total Depth | 1402 FSL 1509 FWL | NESW | 24 | 8.0 S | 17.0 E | S |

**21. COUNTY**
UINTAH

**22. DISTANCE TO NEAREST LEASE LINE (Feet)**
1402

**23. NUMBER OF ACRES IN DRILLING UNIT**
20

**25. DISTANCE TO NEAREST WELL IN SAME POOL (Applied For Drilling or Completed)**
1049

**26. PROPOSED DEPTH**
MD: 6658 TVD: 6658

**27. ELEVATION - GROUND LEVEL**
5026

**28. BOND NUMBER**
WYB000493

**29. SOURCE OF DRILLING WATER / WATER RIGHTS APPROVAL NUMBER IF APPLICABLE**
437478

### Hole, Casing, and Cement Information

| String | Hole Size | Casing Size | Length | Weight | Grade & Thread | Max Mud Wt. | Cement | Sacks | Yield | Weight |
|---|---|---|---|---|---|---|---|---|---|---|
| Surf | 12.25 | 8.625 | 0 - 300 | 24.0 | J-55 ST&C | 8.3 | Class G | 138 | 1.17 | 15.8 |
| Prod | 7.875 | 5.5 | 0 - 6658 | 15.5 | J-55 LT&C | 8.3 | Premium Lite High Strength | 322 | 3.26 | 11.0 |
| | | | | | | | 50/50 Poz | 363 | 1.24 | 14.3 |

### ATTACHMENTS

**VERIFY THE FOLLOWING ARE ATTACHED IN ACCORDANCE WITH THE UTAH OIL AND GAS CONSERVATION GENERAL RULES**

- ✔ WELL PLAT OR MAP PREPARED BY LICENSED SURVEYOR OR ENGINEER
- ✔ COMPLETE DRILLING PLAN
- ☐ AFFIDAVIT OF STATUS OF SURFACE OWNER AGREEMENT (IF FEE SURFACE)
- ☐ FORM 5. IF OPERATOR IS OTHER THAN THE LEASE OWNER
- ✔ DIRECTIONAL SURVEY PLAN (IF DIRECTIONALLY OR HORIZONTALLY DRILLED)
- ✔ TOPOGRAPHICAL MAP

**NAME** Mandie Crozier **TITLE** Regulatory Tech **PHONE** 435 646-4825

**SIGNATURE** **DATE** 07/11/2011 **EMAIL** mcrozier@newfield.com

**API NUMBER ASSIGNED**
43047517450000

**APPROVAL**

Permit Manager

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NEWFIELD PRODUCTION COMPANY
GMBU Q-24-8-17
AT SURFACE: SW/SW SECTION 24, T8S, R17E
UINTAH COUNTY, UTAH

TEN POINT DRILLING PROGRAM

1. **GEOLOGIC SURFACE FORMATION:**

Uinta formation of Upper Eocene Age

2. **ESTIMATED TOPS OF IMPORTANT GEOLOGIC MARKERS:**

| | |
|---|---|
| Uinta | 0' – 1840' |
| Green River | 1840' |
| Wasatch | 6490' |
| **Proposed TD** | 6658' |

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

Green River Formation (Oil) 1840' – 6490'

Fresh water may be encountered in the Uinta Formation, but would not be expected below about 350'. All water shows and water bearing geologic units shall be reported to the geologic and engineering staff of the Vernal Office prior to running the next string of casing or before plugging orders are requested. All water shows must be reported within one (1) business day after being encountered.

All usable (<10,000 PPM TDS) water and prospectively valuable minerals (as described by BLM at onsite) encountered during drilling will be recorded by depth and adequately protected. This information shall be reported to the Vernal Office.

Detected water flows shall be sampled, analyzed, and reported to the geologic & engineering staff of the Vernal Office. The office may request additional water samples for further analysis. Usage of the State of Utah form *Report of Water Encountered* is acceptable, but not required.

The following information is requested for water shows and samples where applicable:

| | |
|---|---|
| Location & Sampled Interval | Date Sampled |
| Flow Rate | Temperature |
| Hardness | pH |
| Water Classification (State of Utah) | Dissolved Calcium (Ca) (mg/l) |
| Dissolved Iron (Fe) (ug/l) | Dissolved Sodium (Na) (mg/l) |
| Dissolved Magnesium (Mg) (mg/l) | Dissolved Carbonate ($CO_3$) (mg/l) |
| Dissolved Bicarbonate ($NaHCO_3$) (mg/l) | Dissolved Chloride (Cl) (mg/l) |
| Dissolved Sulfate ($SO_4$) (mg/l) | Dissolved Total Solids (TDS) (mg/l) |

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## 4. *PROPOSED CASING PROGRAM*

### a. Casing Design: GMBU Q-24-8-17

| Size | Interval | | Weight | Grade | Coupling | Design Factors | | |
|---|---|---|---|---|---|---|---|---|
| | Top | Bottom | | | | Burst | Collapse | Tension |
| Surface casing 8-5/8" | 0' | 300' | 24.0 | J-55 | STC | 2,950<br>17.53 | 1,370<br>14.35 | 244,000<br>33.89 |
| Prod casing 5-1/2" | 0' | 6,658' | 15.5 | J-55 | LTC | 4,810<br>2.27 | 4,040<br>1.91 | 217,000<br>2.10 |

Assumptions:
1) Surface casing max anticipated surface press (MASP) = Frac gradient – gas gradient
2) Prod casing MASP (production mode) = Pore pressure – gas gradient
3) All collapse calculations assume fully evacuated casing w/ gas gradient
4) All tension calculations assume air weight

| | |
|---|---|
| Frac gradient at surface casing shoe = | 13.0 ppg |
| Pore pressure at surface casing shoe = | 8.33 ppg |
| Pore pressure at prod casing shoe = | 8.33 ppg |
| Gas gradient = | 0.115 psi/ft |

All casing shall be new or, if used, inspected and tested. Used casing shall meet or exceed API standards for new casing.

All casing strings shall have a minimum of 1 (one) centralizer on each of the bottom three (3) joints.

### b. Cementing Design: GMBU Q-24-8-17

| Job | Fill | Description | Sacks<br>$ft^3$ | OH Excess* | Weight (ppg) | Yield ($ft^3$/sk) |
|---|---|---|---|---|---|---|
| Surface casing | 300' | Class G w/ 2% CaCl | 138<br>161 | 30% | 15.8 | 1.17 |
| Prod casing Lead | 4,658' | Prem Lite II w/ 10% gel + 3% KCl | 322<br>1049 | 30% | 11.0 | 3.26 |
| Prod casing Tail | 2,000' | 50/50 Poz w/ 2% gel + 3% KCl | 363<br>451 | 30% | 14.3 | 1.24 |

*Actual volume pumped will be 15% over the caliper log
- Compressive strength of lead cement: 1800 psi @ 24 hours, 2250 psi @ 72 hours
- Compressive strength of tail cement: 2500 psi @ 24 hours

Hole Sizes: A 12-1/4" hole will be drilled for the 8-5/8" surface casing. A 7-7/8" hole will be drilled for the 5-1/2" production casing.

The 8-5/8" surface casing shall in all cases be cemented back to surface. In the event that during the primary surface cementing operation the cement does not circulate to surface, or if the cement level should fall back more than 8 feet from surface, then a remedial surface cementing operation shall be performed to insure adequate isolation and stabilization of the surface casing.

## 5. MINIMUM SPECIFICATIONS FOR PRESSURE CONTROL:

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The operator's minimum specifications for pressure control equipment are as follows:

An 8" Double Ram Hydraulic unit with a closing unit will be utilized. Function test of BOP's will be check daily.

Refer to **Exhibit C** for a diagram of BOP equipment that will be used on this well.

6. **TYPE AND CHARACTERISTICS OF THE PROPOSED CIRCULATION MUDS:**

From surface to ±300 feet will be drilled with an air/mist system. The air rig is equipped with a 6 ½" blooie line that is straight run and securely anchored. The blooie line is used with a discharge less than 100 ft from the wellbore in order to minimize the well pad size. The blooie line is not equipped with an automatic igniter or continuous pilot light and the compressor is located less than 100 ft from the well bore due to the low possibility of combustion with the air dust mixture. The trailer mounted compressor (capacity of 2000 CFM) has a safety shut-off valve which is located 15 feet from the air rig. A truck with 70 bbls of water is on stand by to be used as kill fluid, if necessary. From about ±300 feet to TD, a fresh water system will be utilized. Clay inhibition and hole stability will be achieved with a KCl substitute additive. This additive will be identified in the APD and reviewed to determine if the reserve pit shall be lined. This fresh water system will typically contain Total Dissolved Solids (TDS) of less than 3000 PPM. Anticipated mud weight is 8.4 lbs/gal. If necessary to control formation fluids or pressure, the system will be weighted with the addition of bentonite gel, and if pressure conditions warrant, with barite

No chromate additives will be used in the mud system on Federal and/or Indian lands without prior BLM approval to ensure adequate protection of fresh aquifers.

No chemicals subject to reporting under SARA Title III in an amount equal to or greater than 10,000 pounds will be used, produced, stored, transported, or disposed of annually in association with the drilling, testing, or completing of this well. Furthermore, no extremely hazardous substances, as defined in 40 CFR 355, in threshold planning quantities, will be used, produced, stored, transported, or disposed of in association with the drilling, testing, or completing of this well.

Hazardous substances specifically listed by the EPA as a hazardous waste or demonstrating a characteristic of a hazardous waste will not be used in drilling, testing, or completion operations.

Newfield Production will **visually** monitor pit levels and flow from the well during drilling operations.

7. **AUXILIARY SAFETY EQUIPMENT TO BE USED:**

Auxiliary safety equipment will be a Kelly Cock, bit float, and a TIW valve with drill pipe threads.

8. **TESTING, LOGGING AND CORING PROGRAMS:**

The logging program will consist of a Dual Induction, Gamma Ray and Caliper log from TD to base of surface casing @ 300' +/-, and a Compensated Neutron-Formation Density Log from TD to 3500' +-. A cement bond log will be run from PBTD to cement top. No drill stem testing or coring is planned for this well.

9. **ANTICIPATED ABNORMAL PRESSURE OR TEMPERATURE:**

No abnormal temperatures or pressures are anticipated. No hydrogen sulfide has been encountered or is known to exist from previous drilling in the area at this depth. Maximum anticipated

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bottomhole pressure will approximately equal total depth in feet multiplied by a 0.433 psi/foot gradient.

10. **ANTICIPATED STARTING DATE AND DURATION OF THE OPERATIONS:**

It is anticipated that the drilling operations will commence the third quarter of 2011, and take approximately seven (7) days from spud to rig release.

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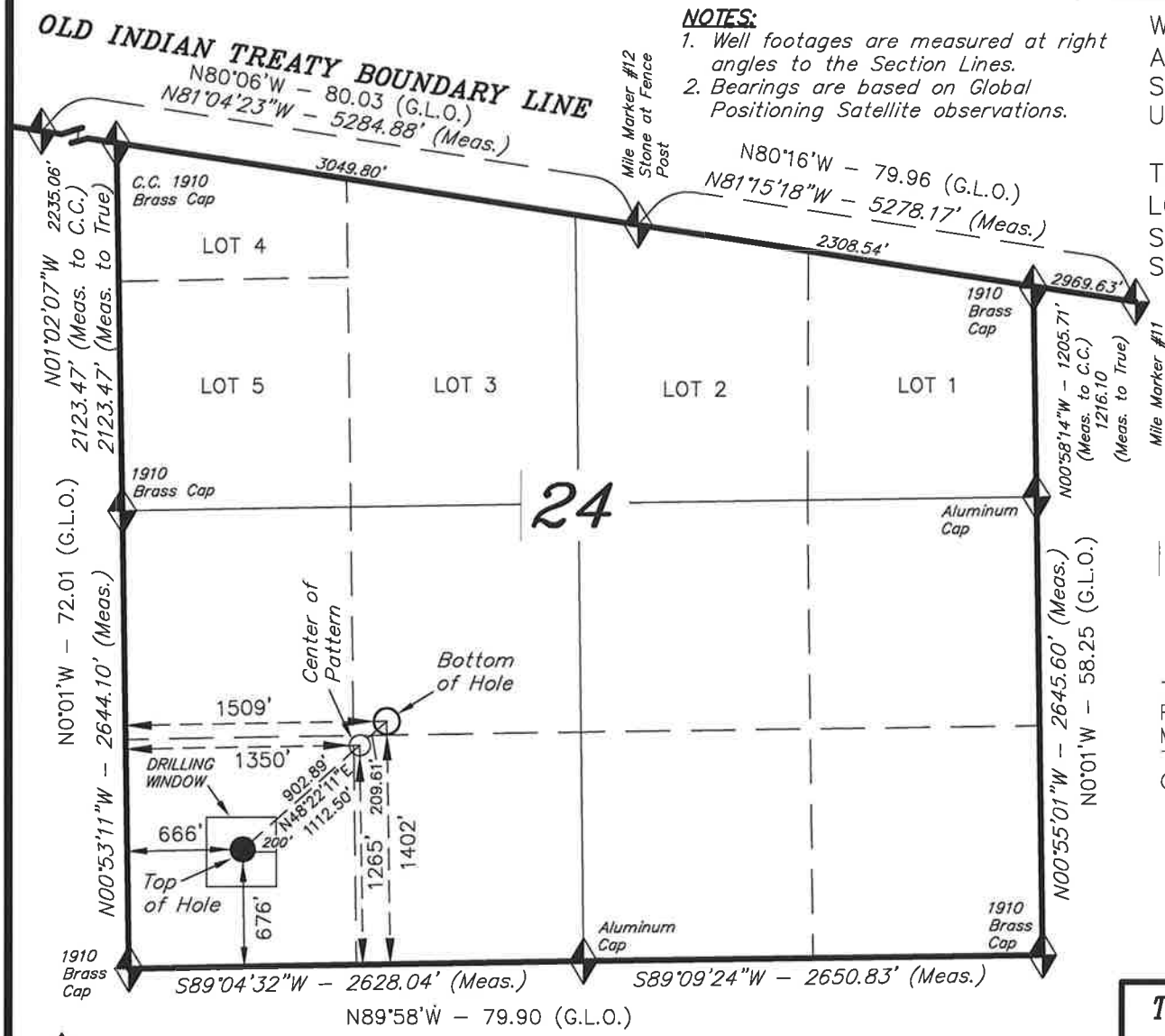
# T8S, R17E, S.L.B.&M.

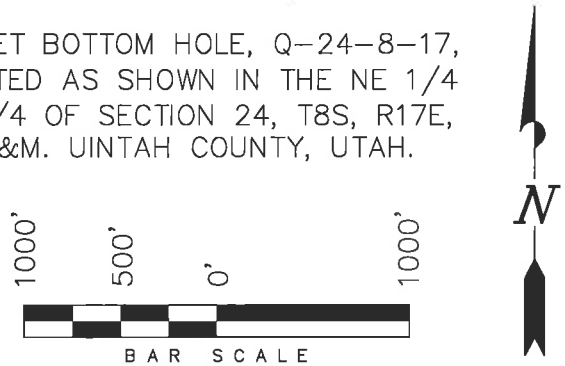
## NEWFIELD EXPLORATION COMPANY

**NOTES:**
1. Well footages are measured at right angles to the Section Lines.
2. Bearings are based on Global Positioning Satellite observations.

WELL LOCATION, Q-24-8-17, LOCATED AS SHOWN IN THE SW 1/4 SW 1/4 OF SECTION 24, T8S, R17E, S.L.B.&M. UINTAH COUNTY, UTAH.

TARGET BOTTOM HOLE, Q-24-8-17, LOCATED AS SHOWN IN THE NE 1/4 SW 1/4 OF SECTION 24, T8S, R17E, S.L.B.&M. UINTAH COUNTY, UTAH.




**WELL LOCATION:**
**Q-24-8-17**
ELEV. EXIST. GRADED GROUND = 5026'

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.

REGISTERED LAND SURVEYOR No. 189377 STATE OF UTAH

STACY W. STEWART
REGISTERED LAND SURVEYOR
REGISTRATION No. 189377
STATE OF UTAH

= SECTION CORNERS LOCATED

BASIS OF ELEV; Elevations are base on LOCATION: an N.G.S. OPUS Correction. LAT. 40°04'09.56" LONG. 110°00'43.28" (Tristate Aluminum Cap) Elev. 5281.57'

**Q-24-8-17**
**(Surface Location) NAD 83**
LATITUDE = 40° 05' 53.17"
LONGITUDE = 109° 57' 42.94"

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

| | |
|---|---|
| DATE SURVEYED: 10-07-10 | SURVEYED BY: D.G. |
| DATE DRAWN: 01-20-11 | DRAWN BY: M.W. |
| REVISED: | SCALE: 1" = 1000' |

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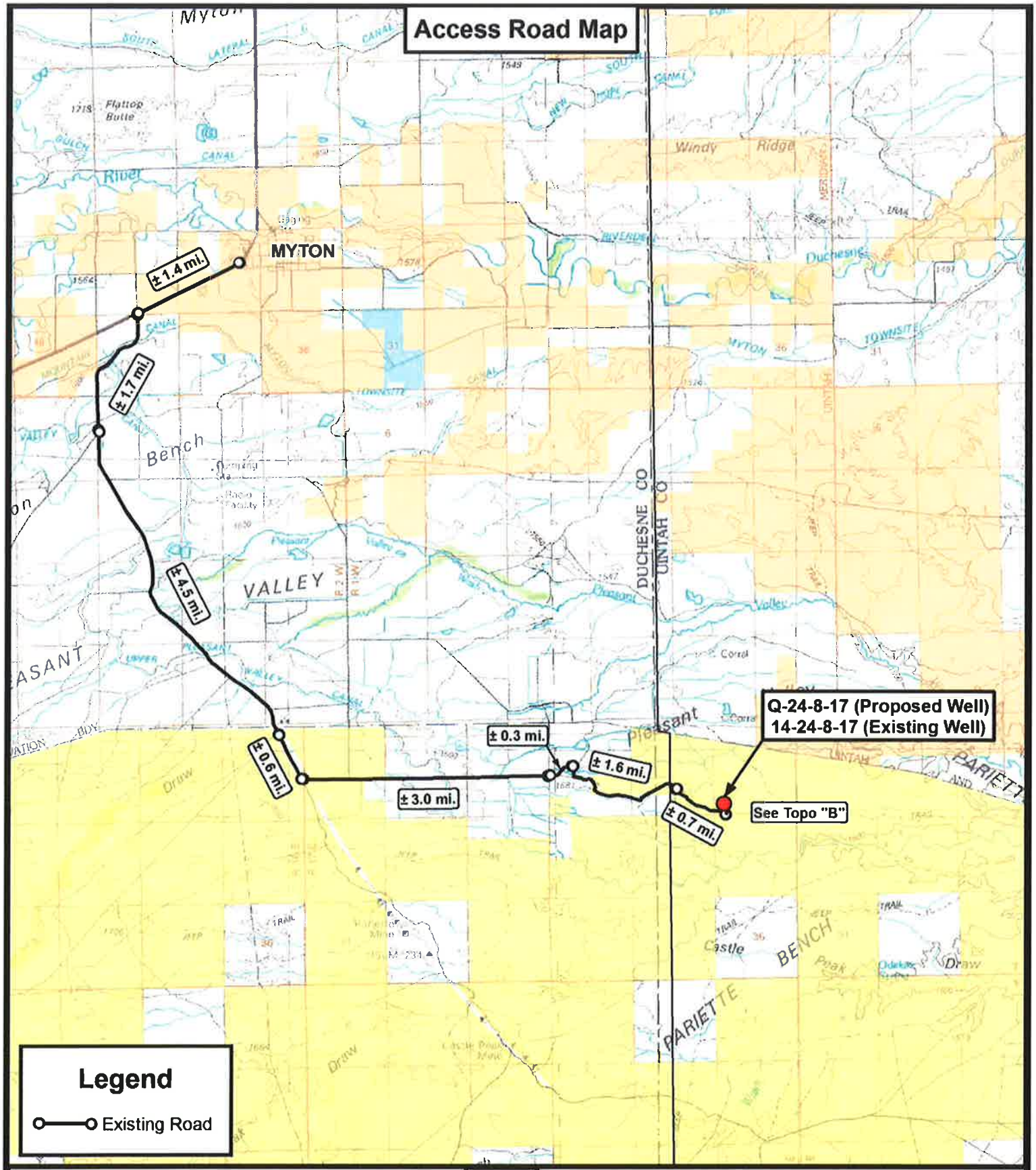
API Well Number: 43047517450000





Tri State Land Surveying, Inc.
180 NORTH VERNAL AVE. VERNAL, UTAH 84078
P: (435) 781-2501
F: (435) 781-2518


N

**NEWFIELD EXPLORATION COMPANY**

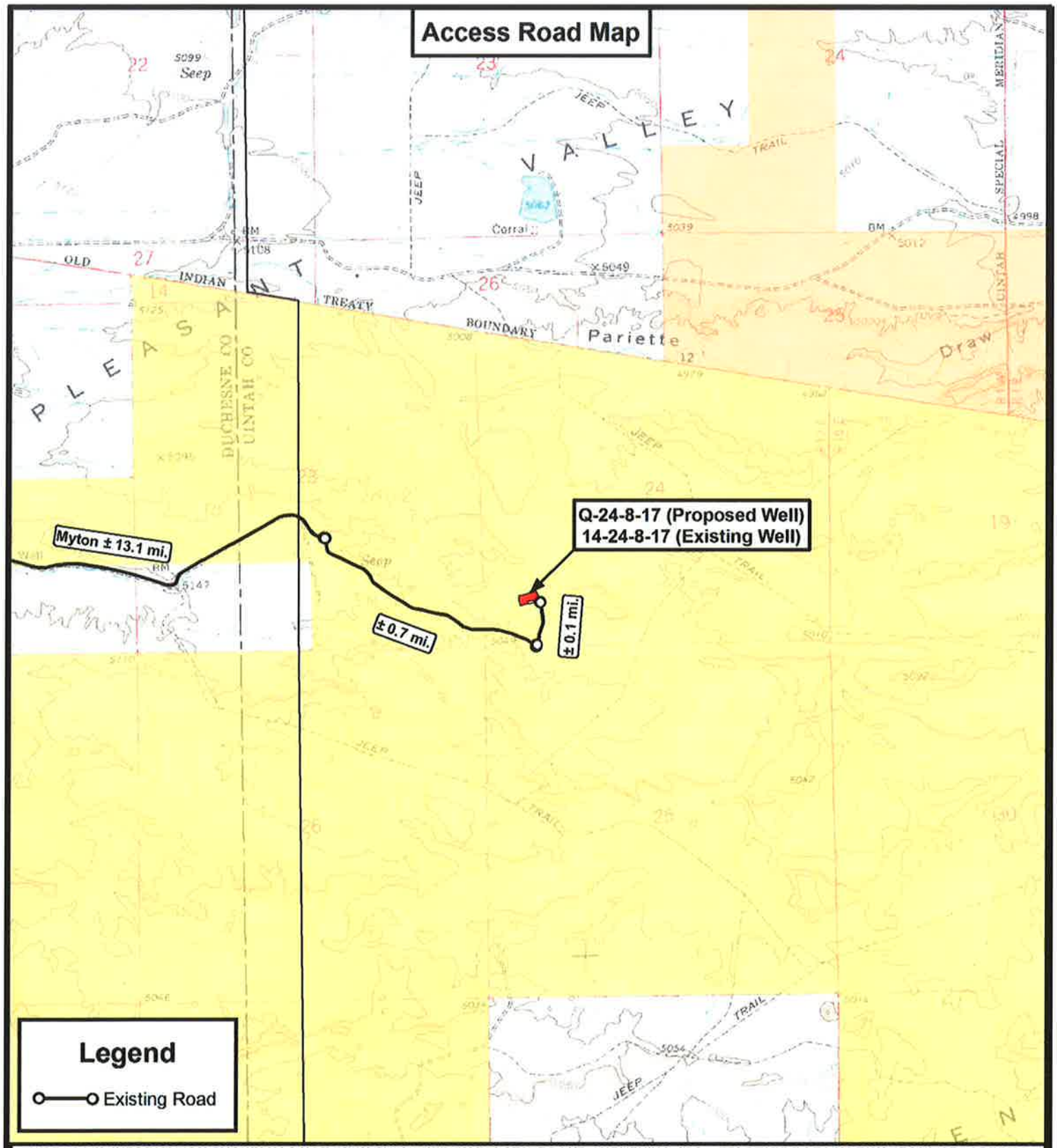
Q-24-8-17 (Proposed Well)
14-24-8-17 (Existing Well)
SEC. 24, T8S, R17E, S.L.B.&M.
Uintah County, UT.

| | |
|---|---|
| DRAWN BY: | C.H.M. |
| DATE: | 01-20-2011 |
| SCALE: | 1:100,000 |

**TOPOGRAPHIC MAP**

SHEET A

RECEIVED: Jul. 12, 2011




THE PARCEL INFORMATION SHOWN HAS NOT BEEN SURVEYED BY TRI-STATE LAND SURVEYING, INC. - TRI-STATE DOES NOT WARRANTY PROPERTY PARCEL DATA OR ANY ASSOCIATED INFORMATION. A PROPERTY SURVEY IS REQUIRED TO DETERMINE THE ACTUAL LOCATION OF PROPERTY LINES AND SHOW ACCURATE DISTANCES ACROSS PARCELS.

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F: (435) 781-2518

N

**NEWFIELD EXPLORATION COMPANY**

Q-24-8-17 (Proposed Well)
14-24-8-17 (Existing Well)
SEC. 24, T8S, R17E, S.L.B.&M.
Uintah County, UT.

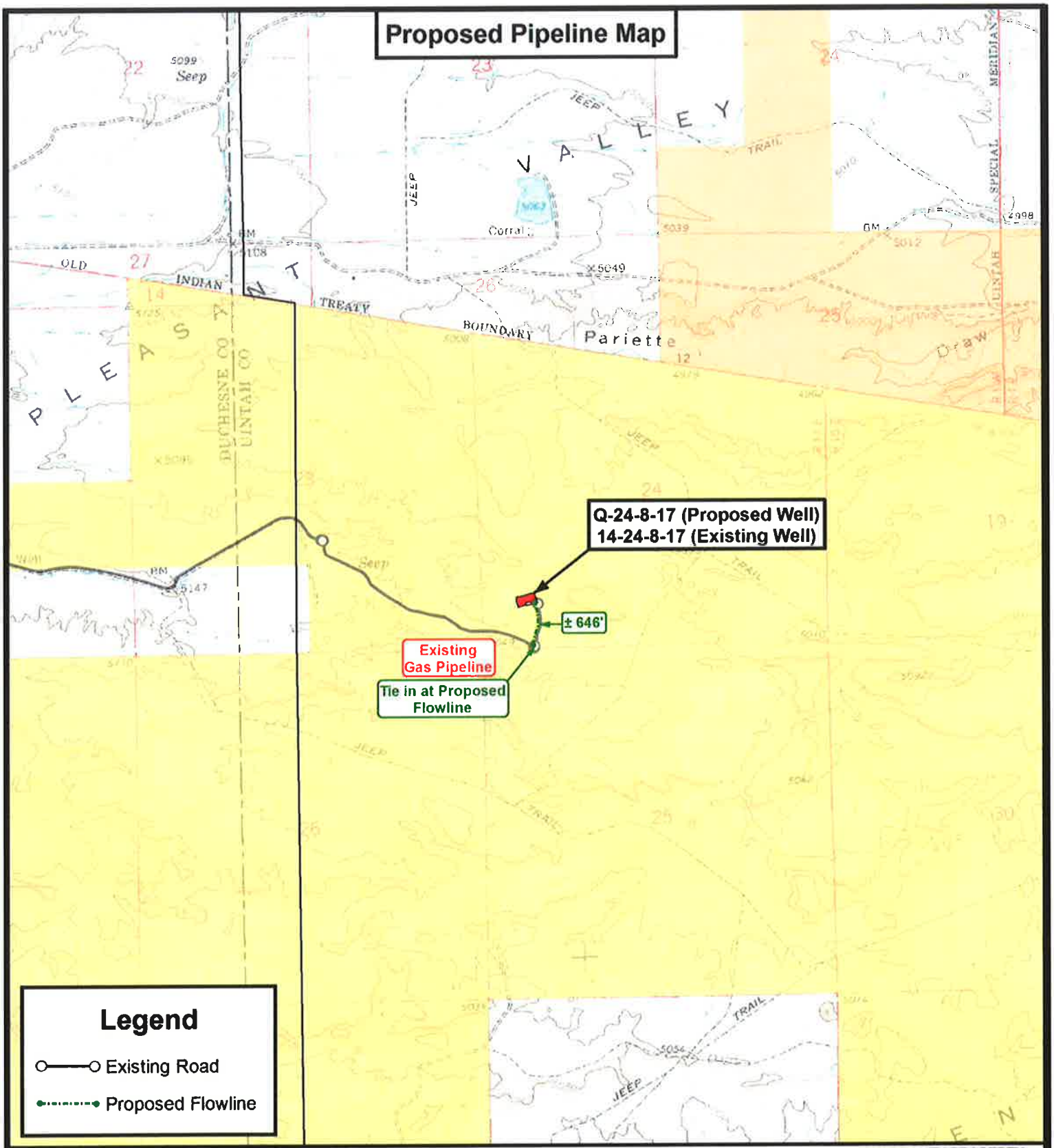
| | |
|---|---|
| DRAWN BY: | C.H.M. |
| DATE: | 01-20-2011 |
| SCALE: | 1 " = 2,000 ' |

**TOPOGRAPHIC MAP**

SHEET B

RECEIVED: Jul. 12, 2011

API Well Number: 43047517450000

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F: (435) 781-2518


| | |
|---|---|
| DRAWN BY: | C.H.M. |
| DATE: | 01-20-2011 |
| SCALE: | 1 " = 2,000 ' |

N

**NEWFIELD EXPLORATION COMPANY**

Q-24-8-17 (Proposed Well)
14-24-8-17 (Existing Well)
SEC. 24, T8S, R17E, S.L.B.&M.
Uintah County, UT.

**TOPOGRAPHIC MAP**

SHEET C

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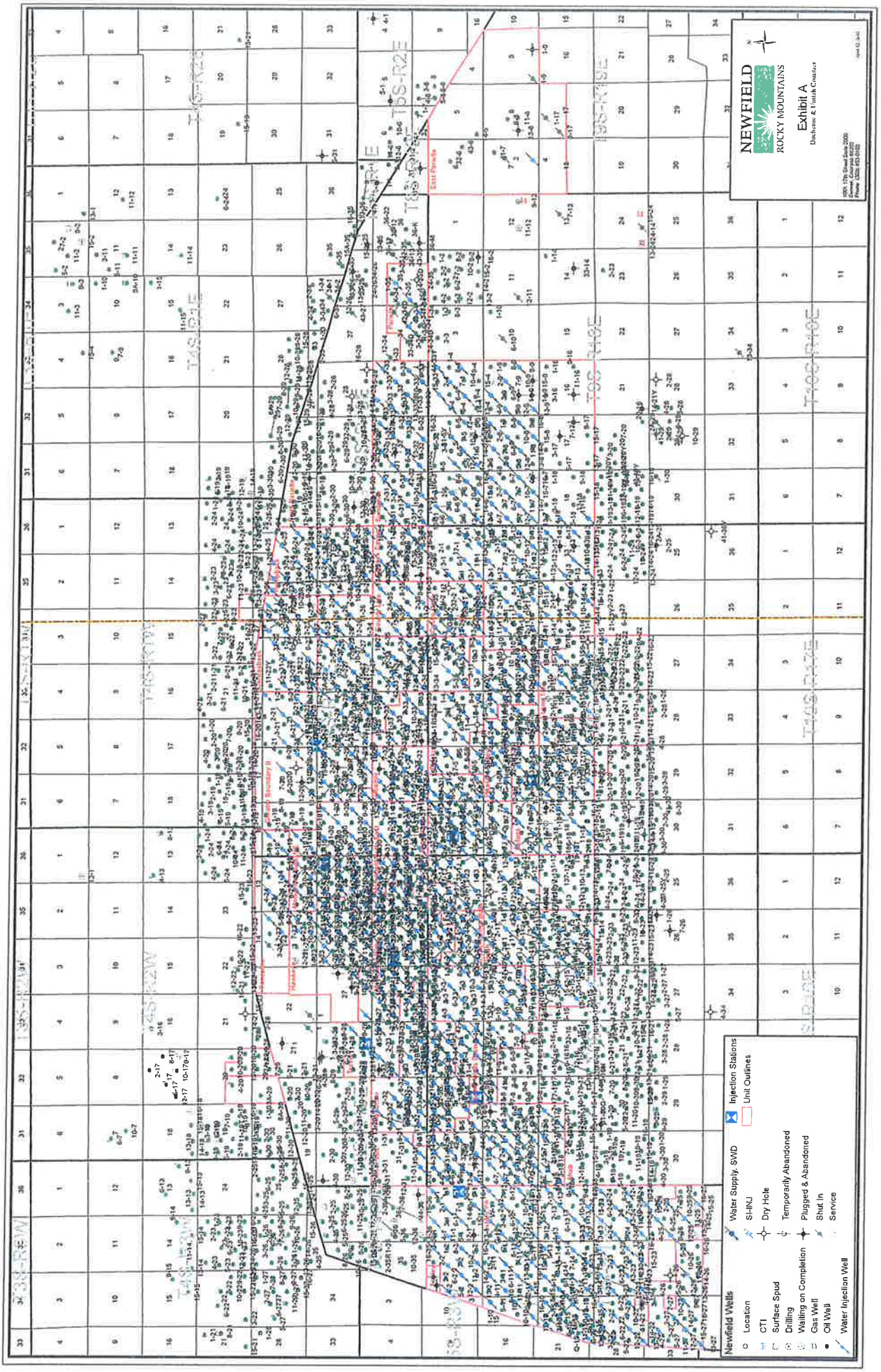


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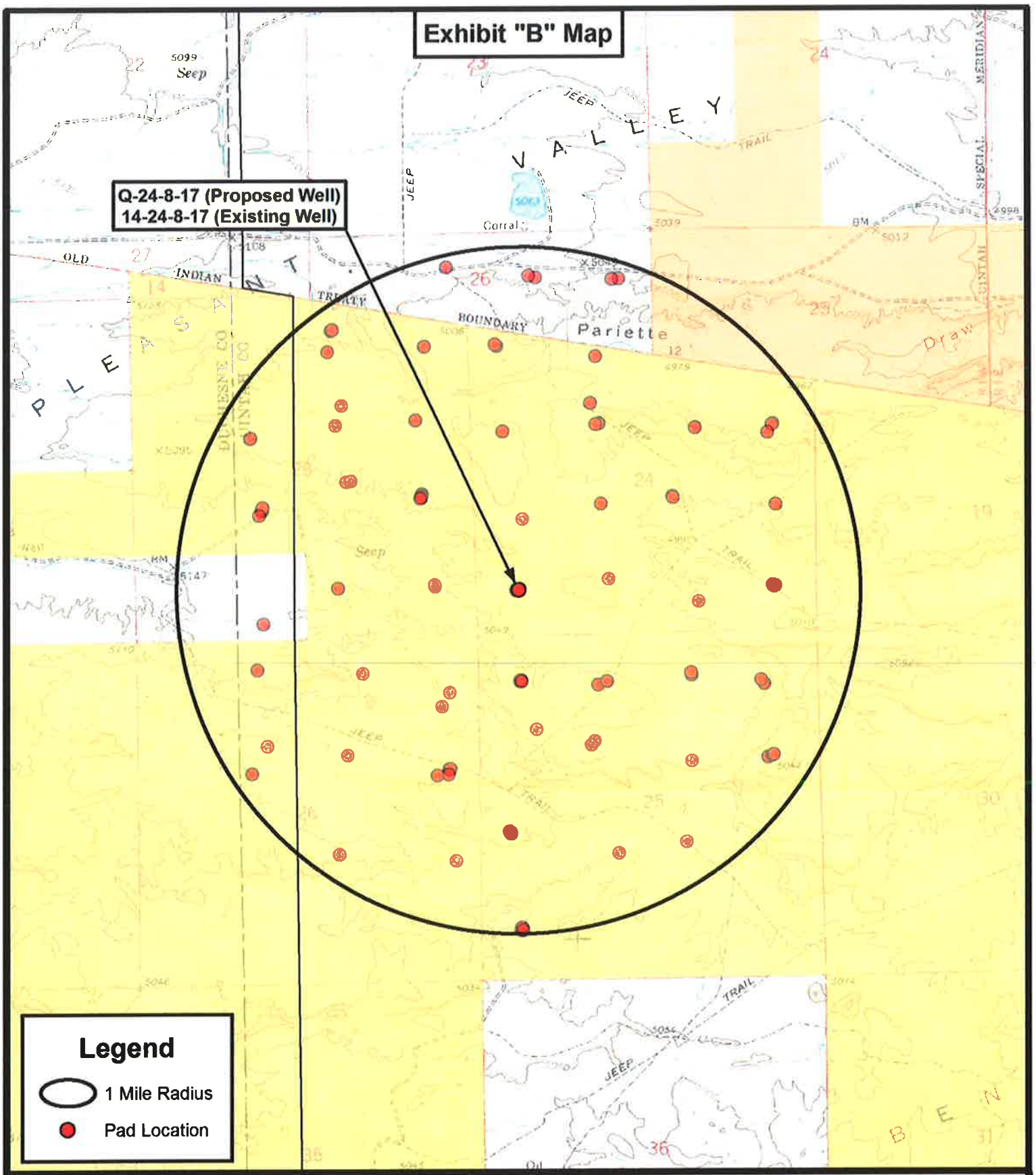
API Well Number: 43047517450000





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180 NORTH VERNAL AVE. VERNAL, UTAH 84078
P: (435) 781-2501
F: (435) 781-2518


| | |
|---|---|
| DRAWN BY: | C.H.M. |
| DATE: | 01-20-2011 |
| SCALE: | 1 " = 2,000 ' |

N

**NEWFIELD EXPLORATION COMPANY**

Q-24-8-17 (Proposed Well)
14-24-8-17 (Existing Well)
SEC. 24, T8S, R17E, S.L.B.&M.
Uintah County, UT.

**TOPOGRAPHIC MAP**

SHEET D

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NEWFIELD

# NEWFIELD EXPLORATION

USGS Myton SW (UT)
SECTION 24 T8S R17E
Q-24-8-17

Wellbore #1

Plan: Design #1

# Standard Planning Report

18 January, 2011

PAYZONE DIRECTIONAL

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NEWFIELD

# PayZone Directional Services, LLC.

## Planning Report

| | | | |
|---|---|---|---|
| **Database:** | EDM 2003.21 Single User Db | **Local Co-ordinate Reference:** | Well Q-24-8-17 |
| **Company:** | NEWFIELD EXPLORATION | **TVD Reference:** | Q-24-8-17 @ 5037.0ft (Newfield Rig) |
| **Project:** | USGS Myton SW (UT) | **MD Reference:** | Q-24-8-17 @ 5037.0ft (Newfield Rig) |
| **Site:** | SECTION 24 T8S R17E | **North Reference:** | True |
| **Well:** | Q-24-8-17 | **Survey Calculation Method:** | Minimum Curvature |
| **Wellbore:** | Wellbore #1 | | |
| **Design:** | Design #1 | | |

**Project** USGS Myton SW (UT), DUCHESNE COUNTY, UT, USA

| | | | |
|---|---|---|---|
| **Map System:** | US State Plane 1983 | **System Datum:** | Mean Sea Level |
| **Geo Datum:** | North American Datum 1983 | | |
| **Map Zone:** | Utah Central Zone | | |

**Site** SECTION 24 T8S R17E

| | | | | | |
|---|---|---|---|---|---|
| **Site Position:** | | **Northing:** | 7,209,800.00 ft | **Latitude:** | 40° 6' 9.036 N |
| **From:** | Lat/Long | **Easting:** | 2,072,800.00 ft | **Longitude:** | 109° 57' 14.911 W |
| **Position Uncertainty:** | 0.0 ft | **Slot Radius:** | " | **Grid Convergence:** | 0.99 ° |

**Well** Q-24-8-17, SHL LAT: 40 05 53.17 LONG: -109 57 42.94

| | | | | | | |
|---|---|---|---|---|---|---|
| **Well Position** | **+N/-S** | -1,605.5 ft | **Northing:** | 7,208,157.31 ft | **Latitude:** | 40° 5' 53.170 N |
| | **+E/-W** | -2,177.8 ft | **Easting:** | 2,070,650.10 ft | **Longitude:** | 109° 57' 42.940 W |
| **Position Uncertainty** | | 0.0 ft | **Wellhead Elevation:** | 5,037.0 ft | **Ground Level:** | 5,025.0 ft |

**Wellbore** Wellbore #1

| Magnetics | Model Name | Sample Date | Declination (°) | Dip Angle (°) | Field Strength (nT) |
|---|---|---|---|---|---|
| | IGRF2010 | 2011/01/18 | 11.33 | 65.87 | 52,358 |

**Design** Design #1

**Audit Notes:**

| | | | | |
|---|---|---|---|---|
| **Version:** | **Phase:** | PROTOTYPE | **Tie On Depth:** | 0.0 |

| Vertical Section: | Depth From (TVD) (ft) | +N/-S (ft) | +E/-W (ft) | Direction (°) |
|---|---|---|---|---|
| | 5,500.0 | 0.0 | 0.0 | 48.37 |

**Plan Sections**

| Measured Depth (ft) | Inclination (°) | Azimuth (°) | Vertical Depth (ft) | +N/-S (ft) | +E/-W (ft) | Dogleg Rate (°/100ft) | Build Rate (°/100ft) | Turn Rate (°/100ft) | TFO (°) | Target |
|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 0.00 | 0.00 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 600.0 | 0.00 | 0.00 | 600.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 1,352.7 | 11.29 | 48.37 | 1,347.8 | 49.1 | 55.3 | 1.50 | 1.50 | 0.00 | 48.37 | |
| 5,586.8 | 11.29 | 48.37 | 5,500.0 | 599.8 | 674.9 | 0.00 | 0.00 | 0.00 | 0.00 | Q-24-8-17 TGT |
| 6,657.5 | 11.29 | 48.37 | 6,550.0 | 739.1 | 831.5 | 0.00 | 0.00 | 0.00 | 0.00 | |



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# PayZone Directional Services, LLC.

## Planning Report

| | | | |
|---|---|---|---|
| **Database:** | EDM 2003.21 Single User Db | **Local Co-ordinate Reference:** | Well Q-24-8-17 |
| **Company:** | NEWFIELD EXPLORATION | **TVD Reference:** | Q-24-8-17 @ 5037.0ft (Newfield Rig) |
| **Project:** | USGS Myton SW (UT) | **MD Reference:** | Q-24-8-17 @ 5037.0ft (Newfield Rig) |
| **Site:** | SECTION 24 T8S R17E | **North Reference:** | True |
| **Well:** | Q-24-8-17 | **Survey Calculation Method:** | Minimum Curvature |
| **Wellbore:** | Wellbore #1 | | |
| **Design:** | Design #1 | | |

**Planned Survey**

| Measured Depth (ft) | Inclination (°) | Azimuth (°) | Vertical Depth (ft) | +N/-S (ft) | +E/-W (ft) | Vertical Section (ft) | Dogleg Rate (°/100ft) | Build Rate (°/100ft) | Turn Rate (°/100ft) |
|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 0.00 | 0.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 100.0 | 0.00 | 0.00 | 100.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 200.0 | 0.00 | 0.00 | 200.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 300.0 | 0.00 | 0.00 | 300.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 400.0 | 0.00 | 0.00 | 400.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 500.0 | 0.00 | 0.00 | 500.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 600.0 | 0.00 | 0.00 | 600.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 700.0 | 1.50 | 48.37 | 700.0 | 0.9 | 1.0 | 1.3 | 1.50 | 1.50 | 0.00 |
| 800.0 | 3.00 | 48.37 | 799.9 | 3.5 | 3.9 | 5.2 | 1.50 | 1.50 | 0.00 |
| 900.0 | 4.50 | 48.37 | 899.7 | 7.8 | 8.8 | 11.8 | 1.50 | 1.50 | 0.00 |
| 1,000.0 | 6.00 | 48.37 | 999.3 | 13.9 | 15.6 | 20.9 | 1.50 | 1.50 | 0.00 |
| 1,100.0 | 7.50 | 48.37 | 1,098.6 | 21.7 | 24.4 | 32.7 | 1.50 | 1.50 | 0.00 |
| 1,200.0 | 9.00 | 48.37 | 1,197.5 | 31.2 | 35.2 | 47.0 | 1.50 | 1.50 | 0.00 |
| 1,300.0 | 10.50 | 48.37 | 1,296.1 | 42.5 | 47.8 | 64.0 | 1.50 | 1.50 | 0.00 |
| 1,352.7 | 11.29 | 48.37 | 1,347.8 | 49.1 | 55.3 | 73.9 | 1.50 | 1.50 | 0.00 |
| 1,400.0 | 11.29 | 48.37 | 1,394.2 | 55.3 | 62.2 | 83.2 | 0.00 | 0.00 | 0.00 |
| 1,500.0 | 11.29 | 48.37 | 1,492.3 | 68.3 | 76.8 | 102.8 | 0.00 | 0.00 | 0.00 |
| 1,600.0 | 11.29 | 48.37 | 1,590.4 | 81.3 | 91.4 | 122.3 | 0.00 | 0.00 | 0.00 |
| 1,700.0 | 11.29 | 48.37 | 1,688.4 | 94.3 | 106.1 | 141.9 | 0.00 | 0.00 | 0.00 |
| 1,800.0 | 11.29 | 48.37 | 1,786.5 | 107.3 | 120.7 | 161.5 | 0.00 | 0.00 | 0.00 |
| 1,900.0 | 11.29 | 48.37 | 1,884.5 | 120.3 | 135.3 | 181.1 | 0.00 | 0.00 | 0.00 |
| 2,000.0 | 11.29 | 48.37 | 1,982.6 | 133.3 | 150.0 | 200.7 | 0.00 | 0.00 | 0.00 |
| 2,100.0 | 11.29 | 48.37 | 2,080.7 | 146.3 | 164.6 | 220.2 | 0.00 | 0.00 | 0.00 |
| 2,200.0 | 11.29 | 48.37 | 2,178.7 | 159.3 | 179.2 | 239.8 | 0.00 | 0.00 | 0.00 |
| 2,300.0 | 11.29 | 48.37 | 2,276.8 | 172.3 | 193.9 | 259.4 | 0.00 | 0.00 | 0.00 |
| 2,400.0 | 11.29 | 48.37 | 2,374.9 | 185.3 | 208.5 | 279.0 | 0.00 | 0.00 | 0.00 |
| 2,500.0 | 11.29 | 48.37 | 2,472.9 | 198.3 | 223.1 | 298.5 | 0.00 | 0.00 | 0.00 |
| 2,600.0 | 11.29 | 48.37 | 2,571.0 | 211.3 | 237.8 | 318.1 | 0.00 | 0.00 | 0.00 |
| 2,700.0 | 11.29 | 48.37 | 2,669.1 | 224.3 | 252.4 | 337.7 | 0.00 | 0.00 | 0.00 |
| 2,800.0 | 11.29 | 48.37 | 2,767.1 | 237.3 | 267.0 | 357.3 | 0.00 | 0.00 | 0.00 |
| 2,900.0 | 11.29 | 48.37 | 2,865.2 | 250.4 | 281.7 | 376.9 | 0.00 | 0.00 | 0.00 |
| 3,000.0 | 11.29 | 48.37 | 2,963.3 | 263.4 | 296.3 | 396.4 | 0.00 | 0.00 | 0.00 |
| 3,100.0 | 11.29 | 48.37 | 3,061.3 | 276.4 | 310.9 | 416.0 | 0.00 | 0.00 | 0.00 |
| 3,200.0 | 11.29 | 48.37 | 3,159.4 | 289.4 | 325.6 | 435.6 | 0.00 | 0.00 | 0.00 |
| 3,300.0 | 11.29 | 48.37 | 3,257.5 | 302.4 | 340.2 | 455.2 | 0.00 | 0.00 | 0.00 |
| 3,400.0 | 11.29 | 48.37 | 3,355.5 | 315.4 | 354.9 | 474.7 | 0.00 | 0.00 | 0.00 |
| 3,500.0 | 11.29 | 48.37 | 3,453.6 | 328.4 | 369.5 | 494.3 | 0.00 | 0.00 | 0.00 |
| 3,600.0 | 11.29 | 48.37 | 3,551.6 | 341.4 | 384.1 | 513.9 | 0.00 | 0.00 | 0.00 |
| 3,700.0 | 11.29 | 48.37 | 3,649.7 | 354.4 | 398.8 | 533.5 | 0.00 | 0.00 | 0.00 |
| 3,800.0 | 11.29 | 48.37 | 3,747.8 | 367.4 | 413.4 | 553.1 | 0.00 | 0.00 | 0.00 |
| 3,900.0 | 11.29 | 48.37 | 3,845.8 | 380.4 | 428.0 | 572.6 | 0.00 | 0.00 | 0.00 |
| 4,000.0 | 11.29 | 48.37 | 3,943.9 | 393.4 | 442.7 | 592.2 | 0.00 | 0.00 | 0.00 |
| 4,100.0 | 11.29 | 48.37 | 4,042.0 | 406.4 | 457.3 | 611.8 | 0.00 | 0.00 | 0.00 |
| 4,200.0 | 11.29 | 48.37 | 4,140.0 | 419.4 | 471.9 | 631.4 | 0.00 | 0.00 | 0.00 |
| 4,300.0 | 11.29 | 48.37 | 4,238.1 | 432.4 | 486.6 | 651.0 | 0.00 | 0.00 | 0.00 |
| 4,400.0 | 11.29 | 48.37 | 4,336.2 | 445.4 | 501.2 | 670.5 | 0.00 | 0.00 | 0.00 |
| 4,500.0 | 11.29 | 48.37 | 4,434.2 | 458.5 | 515.8 | 690.1 | 0.00 | 0.00 | 0.00 |
| 4,600.0 | 11.29 | 48.37 | 4,532.3 | 471.5 | 530.5 | 709.7 | 0.00 | 0.00 | 0.00 |
| 4,700.0 | 11.29 | 48.37 | 4,630.4 | 484.5 | 545.1 | 729.3 | 0.00 | 0.00 | 0.00 |
| 4,800.0 | 11.29 | 48.37 | 4,728.4 | 497.5 | 559.7 | 748.8 | 0.00 | 0.00 | 0.00 |
| 4,900.0 | 11.29 | 48.37 | 4,826.5 | 510.5 | 574.4 | 768.4 | 0.00 | 0.00 | 0.00 |
| 5,000.0 | 11.29 | 48.37 | 4,924.6 | 523.5 | 589.0 | 788.0 | 0.00 | 0.00 | 0.00 |
| 5,100.0 | 11.29 | 48.37 | 5,022.6 | 536.5 | 603.6 | 807.6 | 0.00 | 0.00 | 0.00 |
| 5,200.0 | 11.29 | 48.37 | 5,120.7 | 549.5 | 618.3 | 827.2 | 0.00 | 0.00 | 0.00 |



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NEWFIELD

# PayZone Directional Services, LLC.

## Planning Report

| | | | |
|---|---|---|---|
| **Database:** | EDM 2003.21 Single User Db | **Local Co-ordinate Reference:** | Well Q-24-8-17 |
| **Company:** | NEWFIELD EXPLORATION | **TVD Reference:** | Q-24-8-17 @ 5037.0ft (Newfield Rig) |
| **Project:** | USGS Myton SW (UT) | **MD Reference:** | Q-24-8-17 @ 5037.0ft (Newfield Rig) |
| **Site:** | SECTION 24 T8S R17E | **North Reference:** | True |
| **Well:** | Q-24-8-17 | **Survey Calculation Method:** | Minimum Curvature |
| **Wellbore:** | Wellbore #1 | | |
| **Design:** | Design #1 | | |

**Planned Survey**

| Measured Depth (ft) | Inclination (°) | Azimuth (°) | Vertical Depth (ft) | +N/-S (ft) | +E/-W (ft) | Vertical Section (ft) | Dogleg Rate (°/100ft) | Build Rate (°/100ft) | Turn Rate (°/100ft) |
|---|---|---|---|---|---|---|---|---|---|
| 5,300.0 | 11.29 | 48.37 | 5,218.7 | 562.5 | 632.9 | 846.7 | 0.00 | 0.00 | 0.00 |
| 5,400.0 | 11.29 | 48.37 | 5,316.8 | 575.5 | 647.5 | 866.3 | 0.00 | 0.00 | 0.00 |
| 5,500.0 | 11.29 | 48.37 | 5,414.9 | 588.5 | 662.2 | 885.9 | 0.00 | 0.00 | 0.00 |
| 5,586.8 | 11.29 | 48.37 | 5,500.0 | 599.8 | 674.9 | 902.9 | 0.00 | 0.00 | 0.00 |
| **Q-24-8-17 TGT** | | | | | | | | | |
| 5,600.0 | 11.29 | 48.37 | 5,512.9 | 601.5 | 676.8 | 905.5 | 0.00 | 0.00 | 0.00 |
| 5,700.0 | 11.29 | 48.37 | 5,611.0 | 614.5 | 691.4 | 925.1 | 0.00 | 0.00 | 0.00 |
| 5,800.0 | 11.29 | 48.37 | 5,709.1 | 627.5 | 706.1 | 944.6 | 0.00 | 0.00 | 0.00 |
| 5,900.0 | 11.29 | 48.37 | 5,807.1 | 640.5 | 720.7 | 964.2 | 0.00 | 0.00 | 0.00 |
| 6,000.0 | 11.29 | 48.37 | 5,905.2 | 653.6 | 735.3 | 983.8 | 0.00 | 0.00 | 0.00 |
| 6,100.0 | 11.29 | 48.37 | 6,003.3 | 666.6 | 750.0 | 1,003.4 | 0.00 | 0.00 | 0.00 |
| 6,200.0 | 11.29 | 48.37 | 6,101.3 | 679.6 | 764.6 | 1,022.9 | 0.00 | 0.00 | 0.00 |
| 6,300.0 | 11.29 | 48.37 | 6,199.4 | 692.6 | 779.2 | 1,042.5 | 0.00 | 0.00 | 0.00 |
| 6,400.0 | 11.29 | 48.37 | 6,297.5 | 705.6 | 793.9 | 1,062.1 | 0.00 | 0.00 | 0.00 |
| 6,500.0 | 11.29 | 48.37 | 6,395.5 | 718.6 | 808.5 | 1,081.7 | 0.00 | 0.00 | 0.00 |
| 6,600.0 | 11.29 | 48.37 | 6,493.6 | 731.6 | 823.1 | 1,101.3 | 0.00 | 0.00 | 0.00 |
| 6,657.5 | 11.29 | 48.37 | 6,550.0 | 739.1 | 831.5 | 1,112.5 | 0.00 | 0.00 | 0.00 |

**Targets**

| Target Name - hit/miss target - Shape | Dip Angle (°) | Dip Dir. (°) | TVD (ft) | +N/-S (ft) | +E/-W (ft) | Northing (ft) | Easting (ft) | Latitude | Longitude |
|---|---|---|---|---|---|---|---|---|---|
| Q-24-8-17 TGT<br>- plan hits target<br>- Circle (radius 75.0) | 0.00 | 0.00 | 5,500.0 | 599.8 | 674.9 | 7,208,768.63 | 2,071,314.55 | 40° 5' 59.098 N | 109° 57' 34.255 W |



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API Well Number: 43047517450000

NEWFIELD

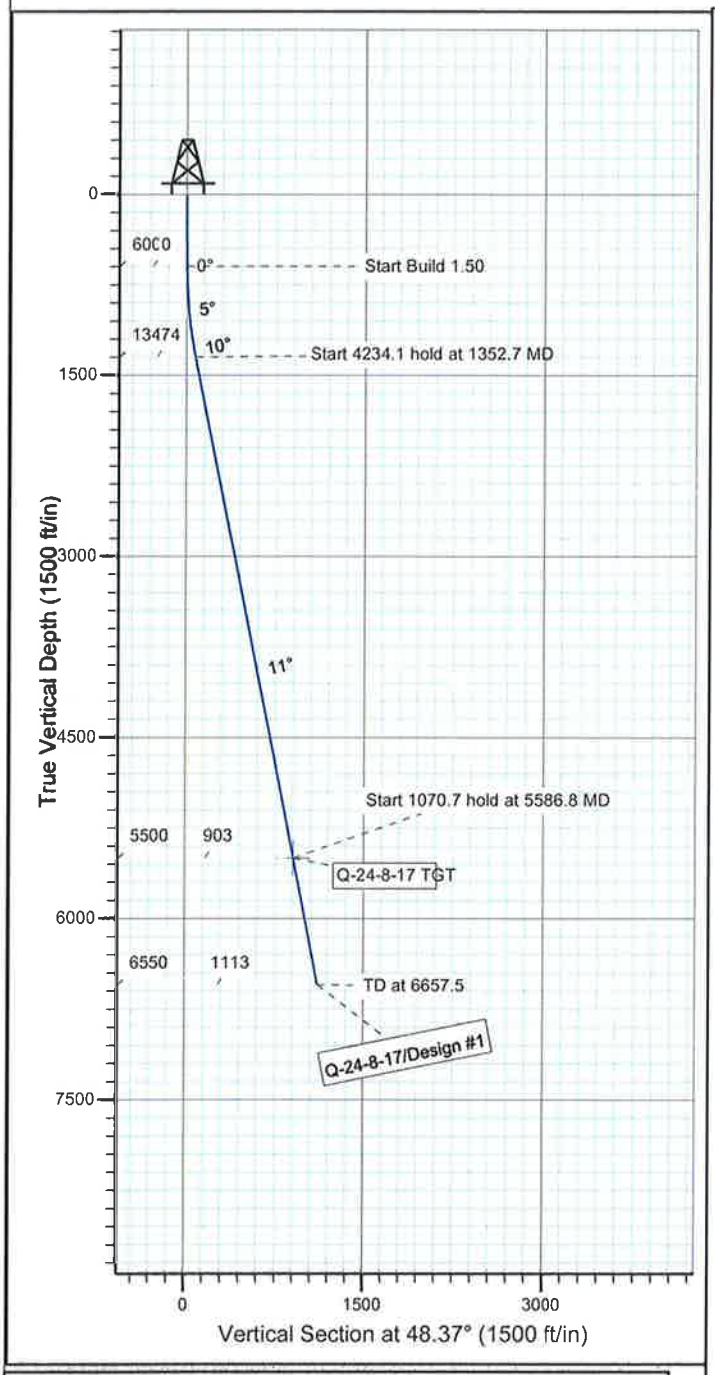
Project: USGS Myton SW (UT)
Site: SECTION 24 T8S R17E
Well: Q-24-8-17
Wellbore: Wellbore #1
Design: Design #1

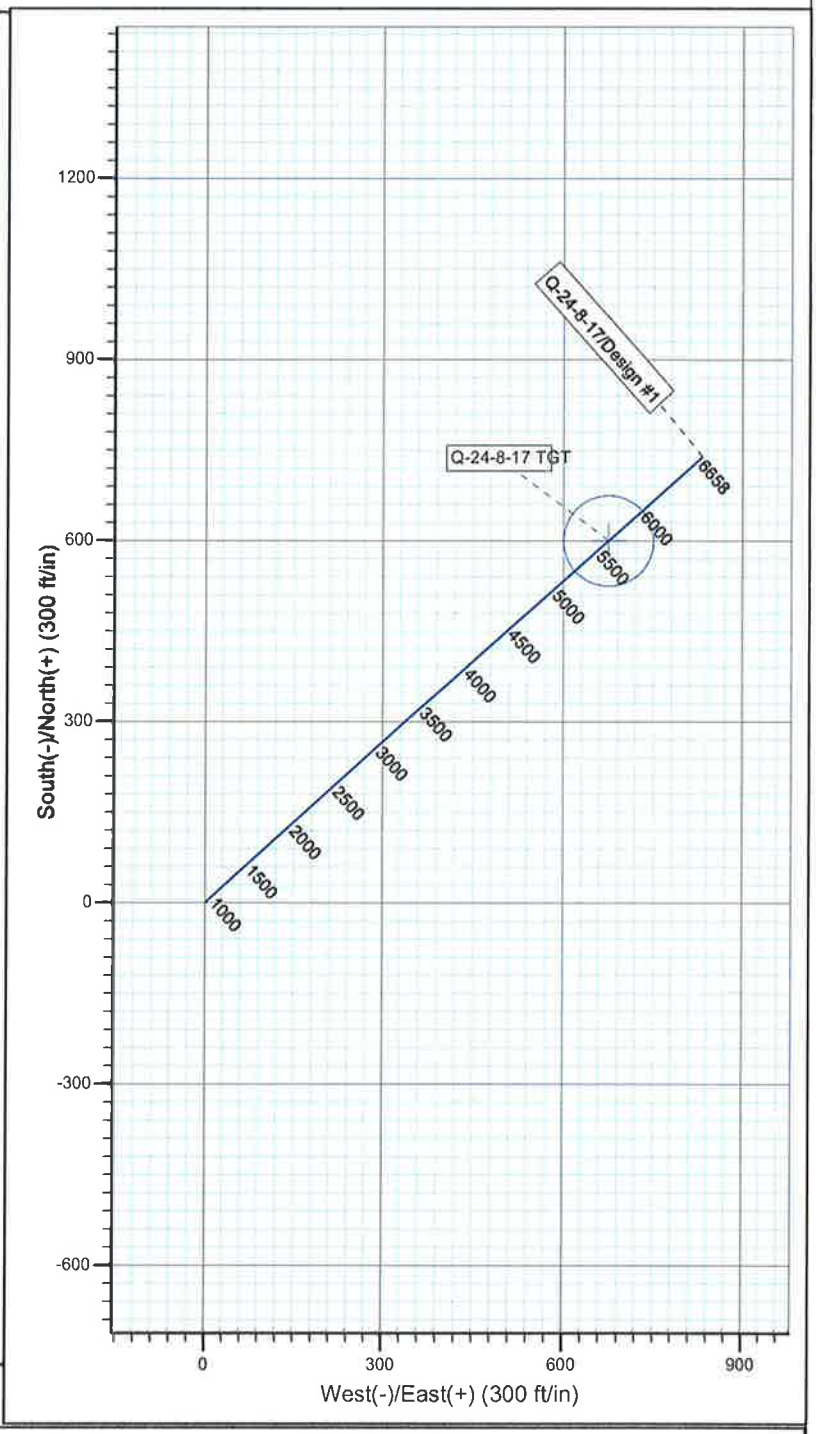
T M

Azimuths to True North
Magnetic North: 11.33°

Magnetic Field
Strength: 52357.5snT
Dip Angle: 65.87°
Date: 2011/01/18
Model: IGRF2010

KOP @ 600'
DOGLEG RATE 1.5 DEG/100
TARGET RADIUS IS 75'




WELLBORE TARGET DETAILS

| Name | TVD | +N/-S | +E/-W | Shape |
|---|---|---|---|---|
| Q-24-8-17 TGT | 5500.0 | 599.8 | 674.9 | Circle (Radius: 75.0) |

SECTION DETAILS

| Sec | MD | Inc | Azi | TVD | +N/-S | +E/-W | DLeg | TFace | VSec | Target |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.0 | 0.00 | 0.00 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.0 | |
| 2 | 600.0 | 0.00 | 0.00 | 600.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.0 | |
| 3 | 1352.7 | 11.29 | 48.37 | 1347.8 | 49.1 | 55.3 | 1.50 | 48.37 | 73.9 | |
| 4 | 5586.8 | 11.29 | 48.37 | 5500.0 | 599.8 | 674.9 | 0.00 | 0.00 | 902.9 | Q-24-8-17 TGT |
| 5 | 6657.5 | 11.29 | 48.37 | 6550.0 | 739.1 | 831.5 | 0.00 | 0.00 | 1112.5 | |

PAYZONE DIRECTIONAL

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**NEWFIELD PRODUCTION COMPANY**
**GMBU Q-24-8-17**
**AT SURFACE: SW/SW SECTION 24, 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 Newfield Production Company well location site GMBU Q-24-8-17 located in the SW 1/4 SW 1/4 Section 24, T8S, R17E, Uintah County, Utah:

Proceed southwesterly out of Myton, Utah along Highway 40 – 1.4 miles ± to the junction of this highway and UT State Hwy 53; proceed in a southeasterly direction – 6.8 miles ± to it's junction with an existing road to the east; proceed easterly – 3.0 miles to it's junction with an existing road to the nnortheast; proceed northeasterly – 0.3 miles to it's junction with an existing road to the southeast; proceed southeasterly – 2.3 miles to it's junction with an existing road to the the north; proceec northerly – 0.1 miles to it's junction with the beginning of the access road to the existing 14-24-8-17 well location.

The aforementioned dirt oil field service roads and other roads in the vicinity are constructed out of existing native materials that are prevalent to the existing area they are located in and range from clays to a sandy-clay shale material.

The roads for access during the drilling, completion and production phase will be maintained at the standards required by the State of Utah, or other controlling agencies. This maintenance will consist of some minor grader work for smoothing road surfaces and for snow removal. Any necessary fill material for repair will be purchase and hauled from private sources.

### *2. PLANNED ACCESS ROAD*

There is no proposed access road for this location. The proposed well will be drilled directionaly off of the existing 14-24-8-17 well pad. See attached **Topographic Map "B"**.

There will be **no** culverts required along this access road. There will be barrow ditches and turnouts as needed along this road.

There are no fences encountered along this proposed road. There will be no new gates or cattle guards required.

All construction material for this access road will be borrowed material accumulated during construction of the access road.

### *3. LOCATION OF EXISTING WELLS*

Refer to Exhibit "B".

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

There are no existing facilities that will be used by this well.

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It is anticipated that this well will be a producing oil well.

Upon construction of a tank battery, the well pad will be surrounded by a dike of sufficient capacity to contain at minimum 110% of the largest tank volume within the facility battery.

Tank batteries will be built to State specifications.

All permanent (on site for six (6) months or longer) structures, constructed or installed (including pumping units), will be painted a flat, non-reflective, earth tone color to match one of the standard environmental colors, as determined by the Rocky Mountain Five State Interagency Committee. All facilities will be painted within six months of installation.

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

Newfield Production will transport water by truck from nearest water source as determined by a Newfield representative for the purpose of drilling the above mentioned well. The available water sources are as follows:

Johnson Water District
Water Right : 43-10136

Maurice Harvey Pond
Water Right: 47-1358

Neil Moon Pond
Water Right: 43-11787

Newfield Collector Well
Water Right: 47-1817 (A30414DVA, contracted with the Duchesne County Conservancy District).

There will be no water well drilled at this site.

## *6. SOURCE OF CONSTRUCTION MATERIALS*

All construction material for this location shall be borrowed material accumulated during construction of the location site and access road.

A mineral material application is not required for this location.

## *7. METHODS FOR HANDLING WASTE DISPOSAL*

A small reserve pit (90’ x 40’ x 8’ deep, or less) will be constructed from native soil and clay materials. The reserve pit will receive the processed drill cutting (wet sand, shale & rock) removed from the wellbore. Any drilling fluids, which do accumulate in the pit as a result of shale-shaker carryover, cleaning of the sand trap, etc., will be promptly reclaimed. All drilling fluids will be fresh water based, typically containing Total Dissolved Solids of less than 3000 PPM. No potassium chloride, chromates, trash, debris, nor any other substance deemed hazardous will be placed in this pit. Therefore, it is proposed that no synthetic liner be required in the reserve pit. However, if upon constructing the pit there is insufficient fine clay and silt present, a liner will be used for the purpose of reducing water loss through percolation.

Newfield requests approval that a flare pit not be constructed or utilized on this location.

A portable toilet will be provided for human waste.

A trash basket will be provided for garbage (trash) and hauled away to an approved disposal site at the completion of the drilling activities.

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***8. ANCILLARY FACILITIES***

There are no ancillary facilities planned for at the present time and none foreseen in the near future.

***9. WELL SITE LAYOUT***

See attached Location Layout Sheet.

**Fencing Requirements**

All pits will be fenced according to the following minimum standards:

a) A 39-inch net wire shall be used with at least one strand of barbed wire on top of the net.

b) The net wire shall be no more than two (2) inches above the ground. The barbed wire shall be three (3) inches above the net wire. Total height of the fence shall be at least forty-two (42) inches.

c) Corner posts shall be centered and/or braced in such a manner to keep tight at all times

d) Standard steel, wood or pipe posts shall be used between the corner braces. Maximum distance between any two posts shall be no greater than sixteen (16) feet.

e) All wire shall be stretched, by using a stretching device, before it is attached to the corner posts.

The reserve pit fencing will be on three (3) sides during drilling operations and on the fourth side when the rig moves off location. Pits will be fenced and maintained until cleanup.

Existing fences to be crossed by the access road will be braced and tied off before cutting so as to prevent slacking in the wire. The opening shall be closed temporarily as necessary during construction to prevent the escape of livestock, and upon completion of construction the fence shall be repaired to BLM specifications.

10. **PLANS FOR RESTORATION OF SURFACE**:

a) Producing Location

Immediately upon well completion, the location and surrounding area will be cleared of all unused tubing, equipment, debris, material, trash and junk not required for production.

The reserve pit and that portion of the location not needed for production facilities/operations will be recontoured to the approximated natural contours. Weather permitting, the reserve pit will be reclaimed within one hundred twenty (120) days from the date of well completion. Before any dirt work takes place, the reserve pit must have all fluids and hydrocarbons removed.

b) Dry Hole Abandoned Location

At such time as the well is plugged and abandoned, the operator shall submit a subsequent report of abandonment and the State of Utah will attach the appropriate surface rehabilitation conditions of approval.

***11. SURFACE OWNERSHIP*** – Bureau of Land Management.

***12. OTHER ADDITIONAL INFORMATION***

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The Archaeological Resource Survey and Paleontological Resource Survey for this area are attached. State of Utah Antiquities Project Permit #U-11-MQ-0009b 1/12/11, prepared by Montgomery Archaeological Consultants. Paleontological Resource Survey prepared by, Wade E. Miller, 4/27/11. See attached report cover pages, Exhibit "D".

**Surface Flow Line**
Newfield requests 646' of surface flow line be granted. The Surface Flow Line will consist of up to a 14" bundled pipe consisting of 2-2" poly glycol lines and 1-3" production line. For all new wells, Newfield. **Refer to Topographic Map "C"** for the proposed location of the proposed flow line. Flow lines will be tan and will be constructed using the following procedures:

Clearing and Grading: No clearing or grading of the ROW will be required. The centerline of the proposed route will be staked prior to installation. Flow lines shall be placed as close to existing roads as possible without interfering with normal road travel or road maintenance activities. Due to the proximity of existing facilities, no temporary use or construction/storage areas are anticipated. If necessary, temporary use or construction/storage areas will be identified on a topographic map included in the approved permit.

Installation: The proposed flow lines will be installed 4-6" above the ground. For portions along existing two-track and primary access roads, lengths of pipe will be strung out in the borrow ditch, welded together, and rolled or dragged into place with heavy equipment. For pipelines that are installed cross-country (not along existing or proposed roads), travel along the lines will be infrequent and for maintenance needs only. No installation activities will be performed during periods when the soil is too wet to adequately support installation equipment. If such equipment creates ruts in excess of three (3) inches deep, the soil will be deemed too wet to adequately support the equipment.

Termination and Final Reclamation: After abandonment of the associated production facilities, the flow lines will be cut and removed, and any incidental surface disturbance reclaimed. Reclamation procedures will follow those outlined in the Castle Peak and Eight Mile Flat Reclamation and Weed Management Plan.

**Water Disposal**
After first production, if the production water meets quality guidelines, it will be transported to the Ashley, Monument Butte, Jonah, South Wells Draw and Beluga water injection facilities by company or contract trucks. Subsequently, the produced water is injected into approved Class II wells to enhance Newfield's secondary recovery project. Water not meeting quality criteria, will be disposed at Newfield's Pariette #4 disposal well (Sec. 7, T9S R19E), Federally approved surface disposal facilities or at a State of Utah approved surface disposal facilities.

**Additional Surface Stipulations**
All lease and/or unit operations will be conducted in such a manner that full compliance is made with all applicable laws and regulations, Onshore Oil and Gas Orders, the approved plan of operations and any applicable Notice to Lessees. A copy of these conditions will be furnished to the field representative to ensure compliance.

**Details of the On-Site Inspection**
The proposed GMBU Q-24-8-17 was on-sited on 2/24/11. The following were present; Tim Eaton (Newfield Production), Christine Cimiluca (Bureau of Land Management), and Suzanne Grayson (Bureau of Land Management).

**Hazardous Material Declaration**

Newfield Production Company guarantees that during the drilling and completion of the GMBU Q-24-8-17, Newfield will not use, produce, store, transport or dispose 10,000# annually of any of the hazardous chemicals contained in the Environmental Protection Agency's consolidated list of chemicals subject to reporting under Title III Superfund Amendments and Reauthorization Act (SARA) of 1986. Newfield also guarantees that during the drilling and completion of the GMBU Q-24-8-17, Newfield will use, produce,

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store, transport or dispose less than the threshold planning quantity (T.P.Q.) of any extremely hazardous substances as defined in 40 CFR 355.

A complete copy of the approved APD, if applicable, shall be on location during the construction of the location and drilling activities.

Newfield Production Company or a contractor employed by Newfield Production shall contact the State office at (801) 722-3417, 48 hours prior to construction activities.

13. **LESSEE'S OR OPERATOR'S REPRENSENTATIVE AND CERTIFICATION:**

Representative

Name: Tim Eaton
Address: Newfield Production Company
Route 3, Box 3630
Myton, UT 84052
Telephone: (435) 646-3721

Certification

Please be advised that NEWFIELD PRODUCTION COMPANY is considered to be the operator of well #Q-24-8-17, Section 24, Township 8S, Range 17E: Lease UTU-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, Federal Bond #WYB000493.

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

6/20/11
Date

Mandie Crozier
Digitally signed by Mandie Crozier
DN: cn=Mandie Crozier, o=Newfield Production, ou, email=mcrozier@newfield.com, c=US
Date: 2011.07.11 15:02:03 -06'00'

Mandie Crozier
Regulatory Specialist
Newfield Production Company

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# 2-M SYSTEM

Blowout Prevention Equipment Systems

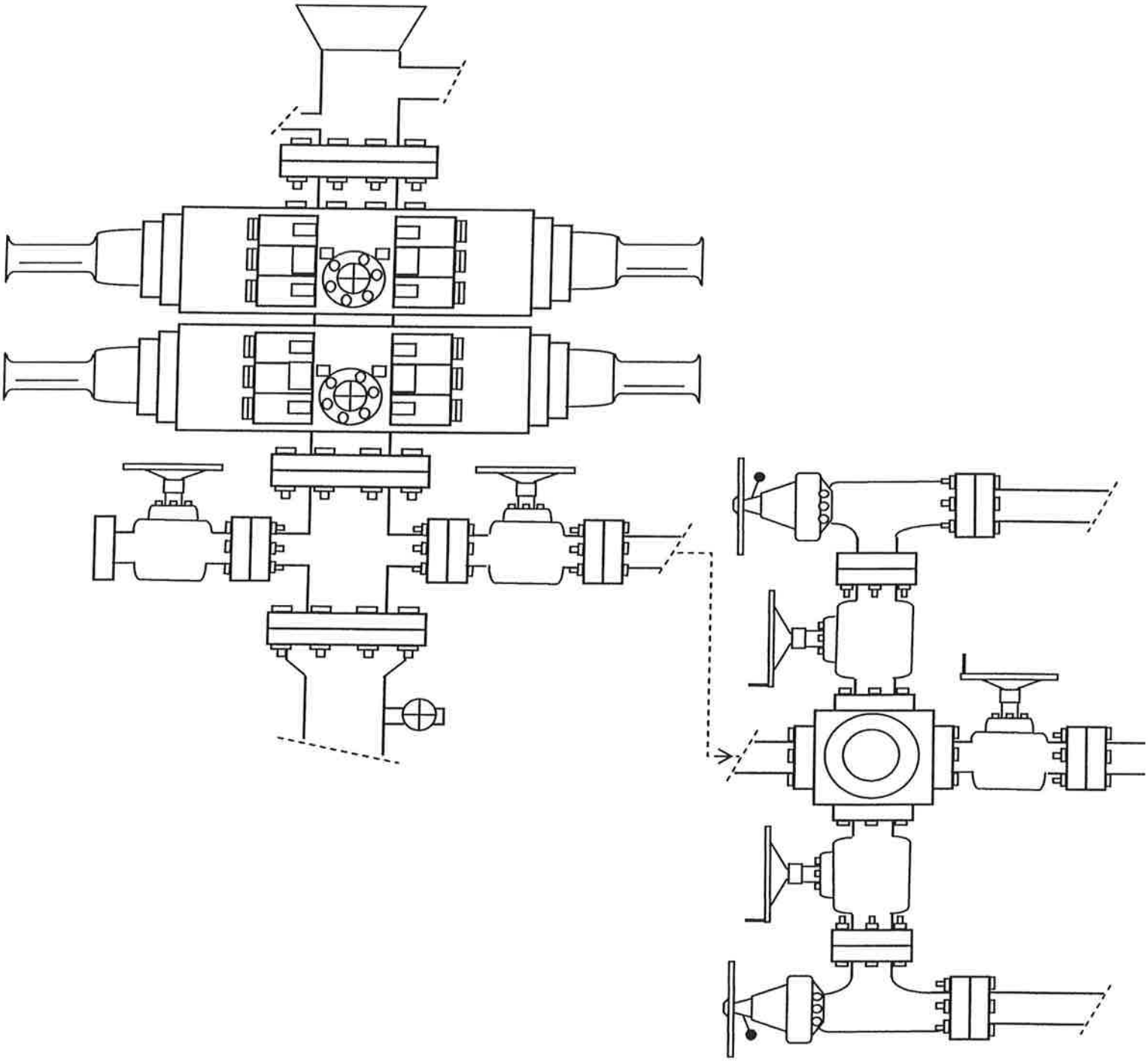

**EXHIBIT C**

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NEWFIELD
ROCKY MOUNTAINS

*VIA ELECTRONIC DELIVERY*

June 21, 2011

State of Utah, Division of Oil, Gas and Mining
ATTN: Diana Mason
P.O. Box 145801
Salt Lake City, UT 84114-5801

RE: Directional Drilling
**GMBU Q-24-8-17**
Greater Monument Butte (Green River) Unit

Surface Hole: T8S-R17E Section 24: SWSW (UTU-45431)
676' FSL 666' FWL

At Target: T8S-R17E Section 24: NESW (UTU-45431)
1402' FSL 1509' FWL

Uintah County, Utah

Dear Ms. Mason:

Pursuant to the filing by Newfield Production Company ("NPC") of an Application for Permit to Drill the above referenced well dated 6/20/2011, a copy of which is attached, and in accordance with Oil and Gas Conservation Rule R649-3-11, NPC hereby submits this letter as notice of our intention to directionally drill this well.

The surface hole and target locations of this well are both within the boundaries of the Greater Monument Butte Unit (UTU-87538X), of which Newfield certifies that it is the operator. Further, Newfield certifies that all lands within 460 feet of the entire directional well bore are within the Greater Monument Butte Unit.

NPC is permitting this well as a directional well in order to mitigate surface disturbance by utilizing pre-exiting roads and pipelines.

NPC hereby requests our application for permit to drill be granted pursuant to R649-3-11. If you have any questions or require further information, please contact the undersigned at 303-383-4153 or by email at pburns@newfield.com. Your consideration in this matter is greatly appreciated.

Sincerely,
Newfield Production Company

Peter Burns
Land Associate

1001 17th Street, Suite 2000 Denver, CO 80202 (303) 893-0102 Fax (303) 893-0103
RECEIVED: Jul. 12, 2011

Form 3160-3
(August 2007)

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

# APPLICATION FOR PERMIT TO DRILL OR REENTER

5. Lease Serial No.
UTU-45431

6. If Indian, Allotee or Tribe Name
NA

1a. Type of work: ☑ DRILL ☐ REENTER

7. If Unit or CA Agreement, Name and No.
Greater Monument Butte

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

8. Lease Name and Well No.
GMBU Q-24-8-17

2. Name of Operator Newfield Production Company

9. API Well No.

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

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

10. Field and Pool, or Exploratory
Monument Butte

4. Location of Well *(Report location clearly and in accordance with any State requirements.*)*
At surface SW/SW 676' FSL 666' FWL Sec. 24, T8S R17E (UTU-45431)
At proposed prod. zone NE/SW 1402' FSL 1509' FWL Sec. 24, T8S R17E (UTU-45431)

11. Sec., T. R. M. or Blk. and Survey or Area
Sec. 24, T8S R17E

14. Distance in miles and direction from nearest town or post office*
Approximately 13.9 miles southeast of Myton, UT

12. County or Parish
Uintah

13. State
UT

15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drlg. unit line, if any) Approx. 1,402' f/lse, NA f/unit

16. No. of acres in lease
548.53

17. Spacing Unit dedicated to this well
20 Acres

18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. Approx. 1,049'

19. Proposed Depth
6,658'

20. BLM/BIA Bond No. on file
WYB000493

21. Elevations (Show whether DF, KDB, RT, GL, etc.)
5026' GL

22. Approximate date work will start*
3rd Qtr 2011

23. Estimated duration
(7) days from SPUD to rig release

## 24. Attachments

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

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

25. Signature Mandie Crozier
Name *(Printed Typed)* Mandie Crozier
Date 6/20/11

Title
Regulatory Specialist

Approved by *(Signature)*
Name *(Printed Typed)*
Date

Title
Office

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

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

(Continued on page 2)

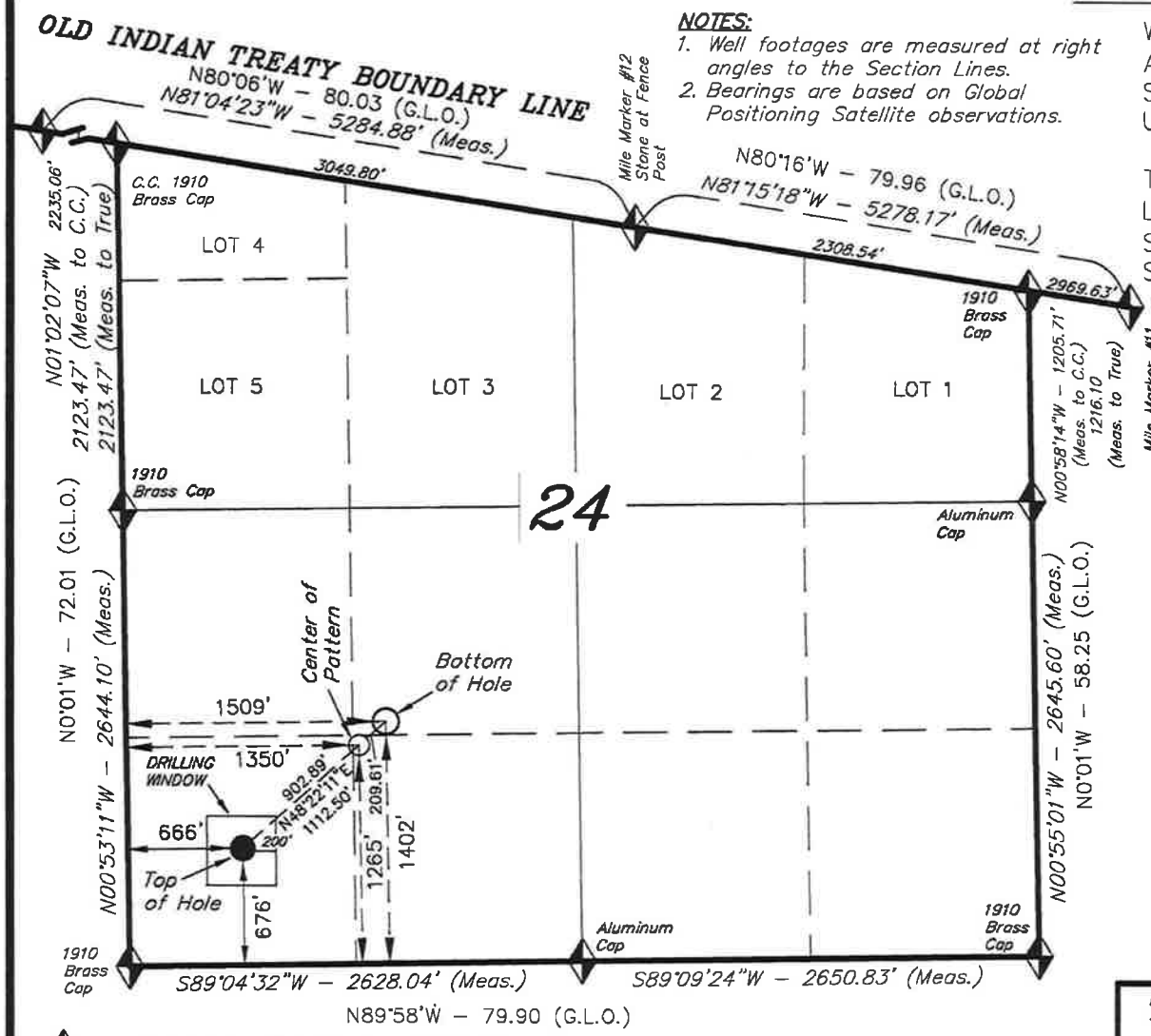
*(Instructions on page 2)

RECEIVED: Jul. 12, 2011

API Well Number: 43047517450000

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

## NEWFIELD EXPLORATION COMPANY

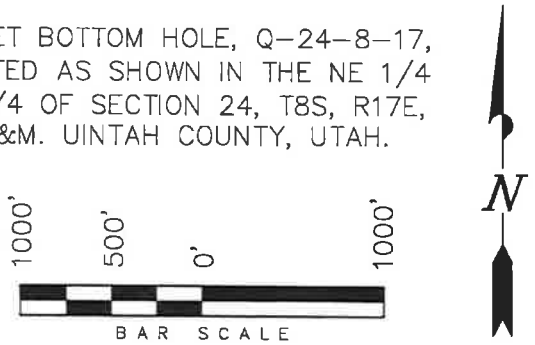



**NOTES:**

1. Well footages are measured at right angles to the Section Lines.
2. Bearings are based on Global Positioning Satellite observations.

WELL LOCATION, Q–24–8–17, LOCATED AS SHOWN IN THE SW 1/4 SW 1/4 OF SECTION 24, T8S, R17E, S.L.B.&M. UINTAH COUNTY, UTAH.

TARGET BOTTOM HOLE, Q–24–8–17, LOCATED AS SHOWN IN THE NE 1/4 SW 1/4 OF SECTION 24, T8S, R17E, S.L.B.&M. UINTAH COUNTY, UTAH.




**WELL LOCATION:**
**Q–24–8–17**

ELEV. EXIST. GRADED GROUND = 5026'

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.

REGISTERED LAND SURVEYOR
REGISTRATION No. 189377
STATE OF UTAH

STACY W. STEWART
REGISTERED LAND SURVEYOR
REGISTRATION No. 189377
STATE OF UTAH

◆ = SECTION CORNERS LOCATED

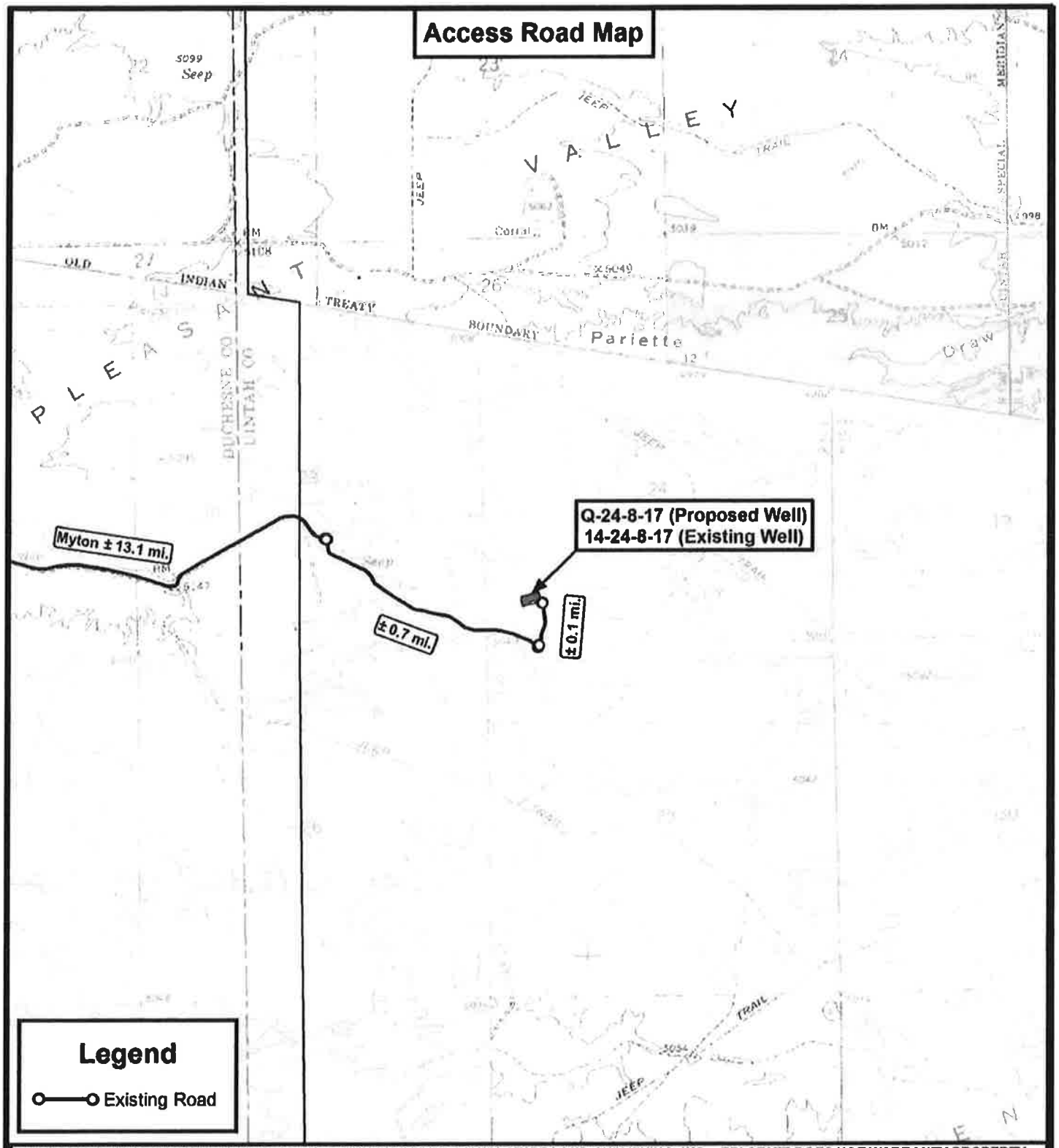
BASIS OF ELEV; Elevations are base on LOCATION: an N.G.S. OPUS Correction. LAT. 40°04'09.56" LONG. 110°00'43.28" (Tristate Aluminum Cap) Elev. 5281.57'

**Q–24–8–17**
**(Surface Location) NAD 83**
LATITUDE = 40° 05' 53.17"
LONGITUDE = 109° 57' 42.94"

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

| | |
|---|---|
| DATE SURVEYED: 10–07–10 | SURVEYED BY: D.G. |
| DATE DRAWN: 01–20–11 | DRAWN BY: M.W. |
| REVISED: | SCALE: 1" = 1000' |

RECEIVED: Jul. 12, 2011




THE PARCEL INFORMATION SHOWN HAS NOT BEEN SURVEYED BY TRI-STATE LAND SURVEYING, INC. - TRI-STATE DOES NOT WARRANTY PROPERTY PARCEL DATA OR ANY ASSOCIATED INFORMATION. A PROPERTY SURVEY IS REQUIRED TO DETERMINE THE ACTUAL LOCATION OF PROPERTY LINES AND SHOW ACCURATE DISTANCES ACROSS PARCELS.

Tri State Land Surveying, Inc.
P: (435) 781-2501
F: (435) 781-2518
180 NORTH VERNAL AVE. VERNAL, UTAH 84078

N

**NEWFIELD EXPLORATION COMPANY**

Q-24-8-17 (Proposed Well)
14-24-8-17 (Existing Well)
SEC. 24, T8S, R17E, S.L.B.&M.
Uintah County, UT.

| | |
|---|---|
| DRAWN BY: | C.H.M. |
| DATE: | 01-20-2011 |
| SCALE: | 1" = 2,000' |

**TOPOGRAPHIC MAP**

SHEET B

RECEIVED: Jul. 12, 2011

API Well Number: 43047517450000

# NEWFIELD EXPLORATION COMPANY

## WELL PAD INTERFERENCE PLAT

**Q-24-8-17 (Proposed Well)**

**14-24-8-17 (Existing Well)**

Pad Location: SWSW Section 24, T8S, R17E, S.L.B.&M.

**TOP HOLE FOOTAGES**

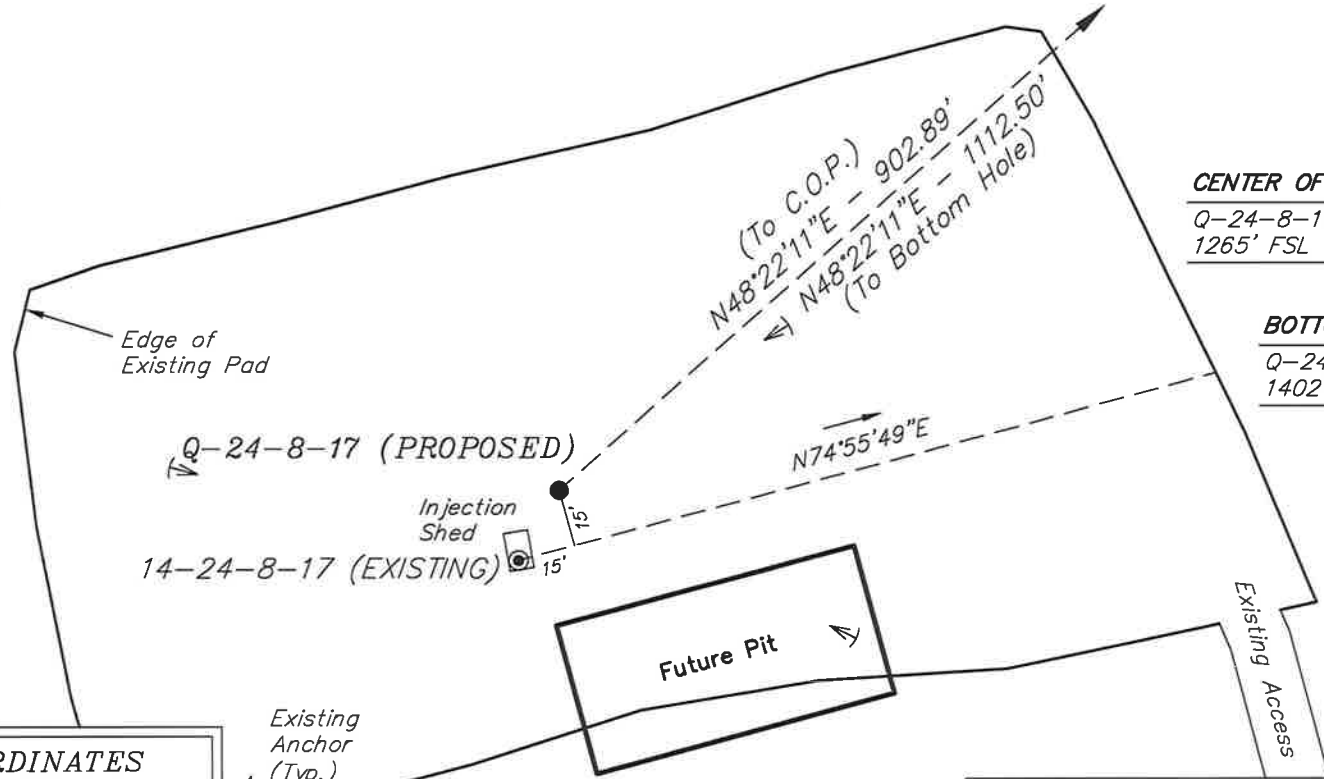
Q-24-8-17 (PROPOSED)
676' FSL & 666' FWL

**CENTER OF PATTERN FOOTAGES**

Q-24-8-17 (PROPOSED)
1265' FSL & 1350' FWL

**BOTTOM HOLE FOOTAGES**

Q-24-8-17 (PROPOSED)
1402' FSL & 1350' FWL




**Note:**
Bearings are based on GPS Observations.

**RELATIVE COORDINATES**
**From Top Hole to Bottom Hole**

| WELL | NORTH | EAST |
|---|---|---|
| Q-24-8-17 | 739' | 832' |

**RELATIVE COORDINATES**
**From Top Hole to C.O.P.**

| WELL | NORTH | EAST |
|---|---|---|
| Q-24-8-17 | 600' | 675' |

**LATITUDE & LONGITUDE**
**Surface position of Wells (NAD 83)**

| WELL | LATITUDE | LONGITUDE |
|---|---|---|
| Q-24-8-17 | 40° 05' 53.17" | 109° 57' 42.94" |
| 14-24-8-17 | 40° 05' 52.99" | 109° 57' 43.08" |

| | | | |
|---|---|---|---|
| SURVEYED BY: | D.G. | DATE SURVEYED: | 10-07-10 |
| DRAWN BY: | M.W. | DATE DRAWN: | 01-20-11 |
| SCALE: | 1" = 50' | REVISED: | |

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

RECEIVED: Jul. 12, 2011

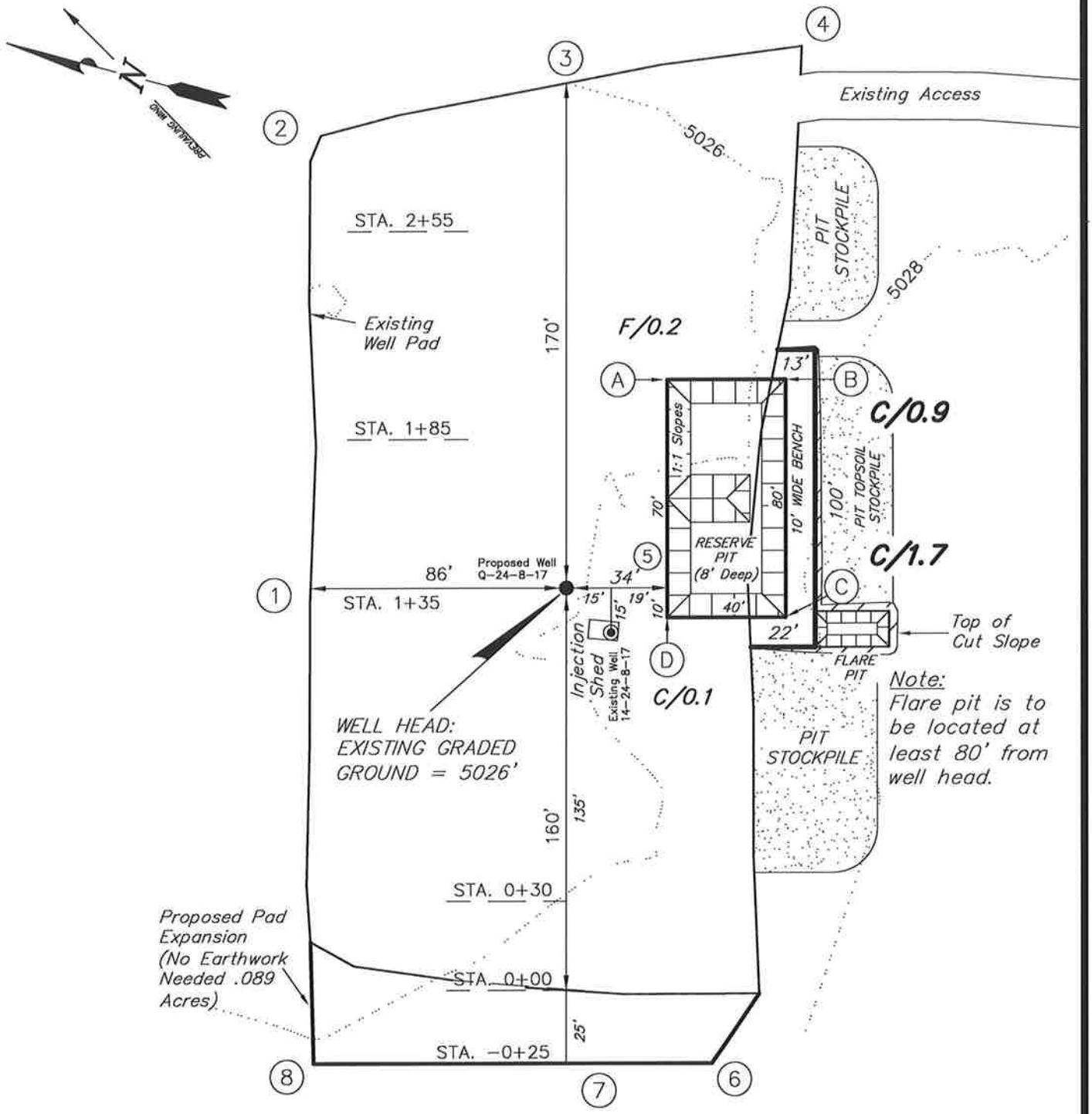
# NEWFIELD EXPLORATION COMPANY

## LOCATION LAYOUT

**Q-24-8-17 (Proposed Well)**

**14-24-8-17 (Existing Well)**

Pad Location: SWSW Section 24, T8S, R17E, S.L.B.&M.




| | | | |
|---|---|---|---|
| SURVEYED BY: D.G. | DATE SURVEYED: | 10-07-10 | Tri State Land Surveying, Inc. (435) 781-2501 |
| DRAWN BY: M.W. | DATE DRAWN: | 01-20-11 | 180 NORTH VERNAL AVE. VERNAL, UTAH 84078 |
| SCALE: 1" = 50' | REVISED: | | |

RECEIVED: Jul. 12, 2011

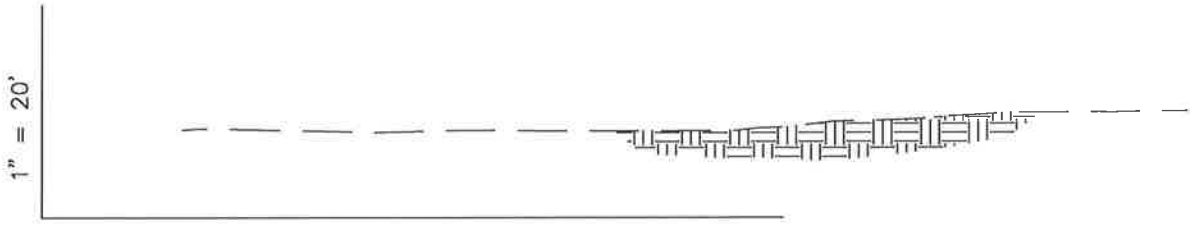
# NEWFIELD EXPLORATION COMPANY

## CROSS SECTIONS

**Q-24-8-17 (Proposed Well)**

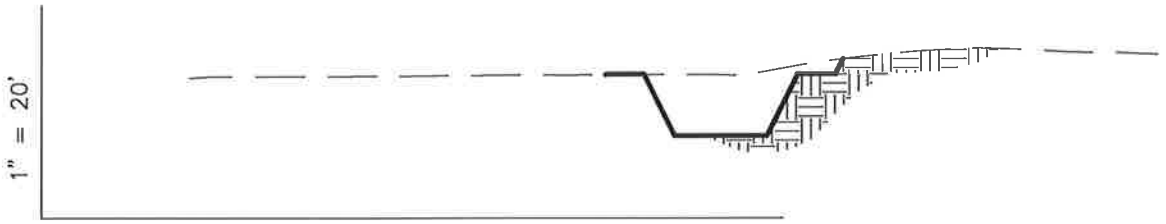
**14-24-8-17 (Existing Well)**

*Pad Location: SWSW Section 24, T8S, R17E, S.L.B.&M.*



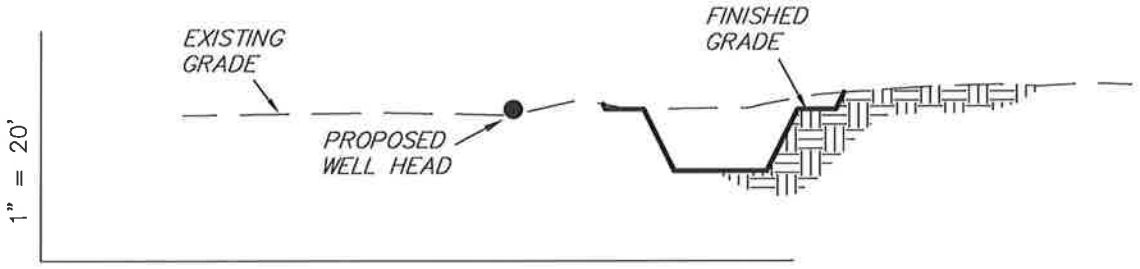

1" = 50'

STA. 2+55




1" = 50'

STA. 1+85




1" = 50'

STA. 1+35

1" = 50'

STA. 0+30

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

| ITEM | CUT | FILL | 6" TOPSOIL | EXCESS |
|---|---|---|---|---|
| PAD | 20 | 0 | Topsoil is not included in Pad Cut | 20 |
| PIT | 640 | 0 | | 640 |
| TOTALS | 660 | 0 | 120 | 660 |

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

| | | | |
|---|---|---|---|
| SURVEYED BY: | D.G. | DATE SURVEYED: | 10-07-10 |
| DRAWN BY: | M.W. | DATE DRAWN: | 01-20-11 |
| SCALE: | 1" = 50' | REVISED: | |

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

RECEIVED: Jul. 12, 2011

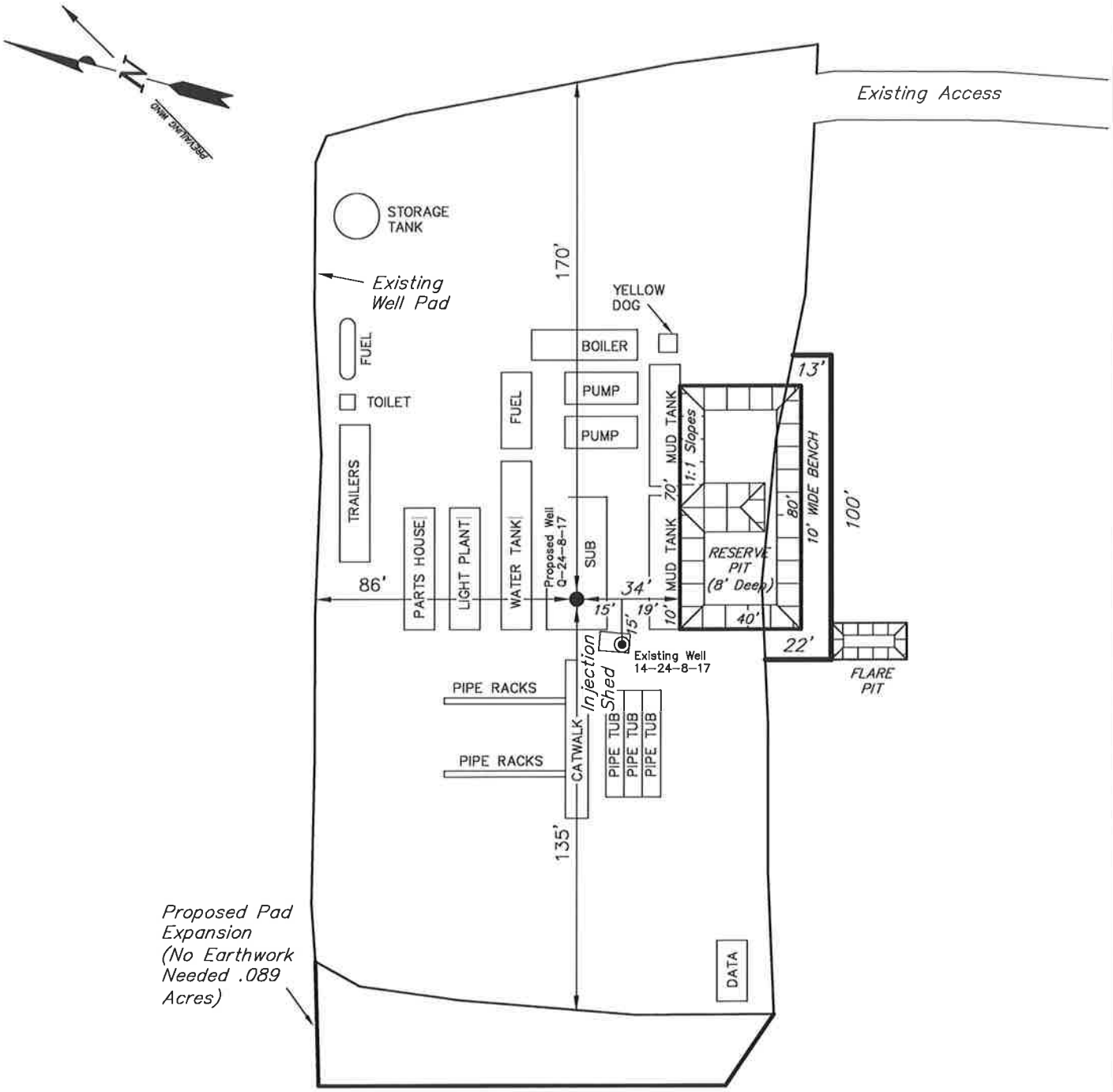
# NEWFIELD EXPLORATION COMPANY

## TYPICAL RIG LAYOUT

**Q-24-8-17 (Proposed Well)**

**14-24-8-17 (Existing Well)**

Pad Location: SWSW Section 24, T8S, R17E, S.L.B.&M.




| | | | |
|---|---|---|---|
| SURVEYED BY: D.G. | DATE SURVEYED: 10-07-10 | Tri State Land Surveying, Inc. | (435) 781-2501 |
| DRAWN BY: M.W. | DATE DRAWN: 01-20-11 | 180 NORTH VERNAL AVE. VERNAL, UTAH 84078 | |
| SCALE: 1" = 50' | REVISED: | | |

RECEIVED: Jul. 12, 2011

# United States Department of the Interior

BUREAU OF LAND MANAGEMENT
**Utah State Office**
**P.O. Box 45155**
**Salt Lake City, Utah 84145-0155**

**IN REPLY REFER TO:**
**3160**
**(UT-922)**

June 24, 2011

Memorandum

To: Assistant District Manager Minerals, Vernal District

From: Michael Coulthard, Petroleum Engineer

Subject: 2011 Plan of Development Greater Monument Butte Unit, Duchesne and Uintah Counties, Utah.

Pursuant to email between Diana Whitney, Division of Oil, Gas and Mining, and Mickey Coulthard, Utah State Office, Bureau of Land Management, the following wells are planned for calendar year 2011 within the Greater Monument Butte Unit, Duchesne and Uintah Counties, Utah.

| API # | WELL NAME | LOCATION |
|---|---|---|
| (Proposed PZ GREEN RIVER) | | |
| 43-013-50856 | GMBU Q-24-8-17 | Sec 24 T08S R17E 0676 FSL 0666 FWL<br>BHL Sec 24 T08S R17E 1402 FSL 1509 FWL |

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

Michael L. Coulthard

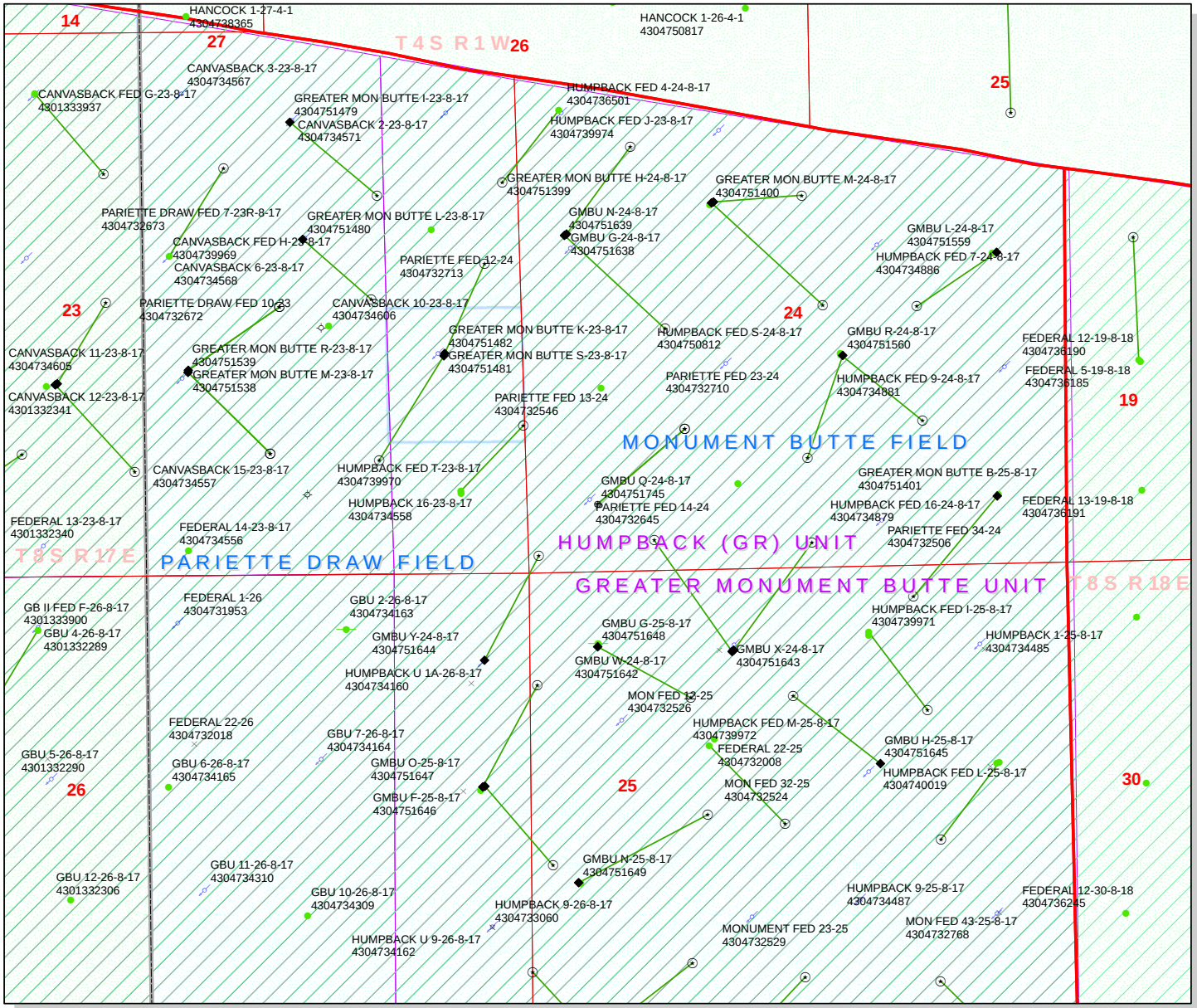
Digitally signed by Michael L. Coulthard
DN: cn=Michael L. Coulthard, o=Bureau of Land Management, ou=Branch of Minerals, email=Michael_Coulthard@blm.gov, c=US
Date: 2011.06.24 11:48:38 -06'00'

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

MCoulthard:mc:6-24-11

RECEIVED: Jul. 12, 2011

API Well Number: 43047517450000




**API Number: 4304751745**

**Well Name: GMBU Q-24-8-17**

**Township T0.8 . Range R1.7 . Section 24**

**Meridian: SLBM**

Operator: NEWFIELD PRODUCTION COMPANY

Map Prepared:
Map Produced by Diana Mason

**Units**
**STATUS**
ACTIVE
EXPLORATORY
GAS STORAGE
NF PP OIL
NF SECONDARY
PI OIL
PP GAS
PP GEOTHERML
PP OIL
SECONDARY
TERMINATED

**Fields**
**STATUS**
Unknown
ABANDONED
ACTIVE
COMBINED
INACTIVE
STORAGE
TERMINATED
Sections
Township

**Wells Query**
**Status**
APD - Aproved Permit
DRL - Spuded (Drilling Commenced)
GIW - Gas Injection
GS - Gas Storage
LA - Location Abandoned
LOC - New Location
OPS - Operation Suspended
PA - Plugged Abandoned
PGW - Producing Gas Well
POW - Producing Oil Well
RET - Returned APD
SGW - Shut-in Gas Well
SOW - Shut-in Oil Well
TA - Temp. Abandoned
TW - Test Well
WDW - Water Disposal
WIW - Water Injection Well
WSW - Water Supply Well

1,250 625 0 1,250 Feet

1:12,000

RECEIVED: Jul. 12, 2011

# WORKSHEET
# APPLICATION FOR PERMIT TO DRILL

**APD RECEIVED:** 7/11/2011 **API NO. ASSIGNED:** 43047517450000
**WELL NAME:** GMBU Q-24-8-17
**OPERATOR:** NEWFIELD PRODUCTION COMPANY (N2695) **PHONE NUMBER:** 435 646-4825
**CONTACT:** Mandie Crozier

**PROPOSED LOCATION:** SWSW 24 080S 170E **Permit Tech Review:** ✔

**SURFACE:** 0676 FSL 0666 FWL **Engineering Review:** ☐

**BOTTOM:** 1402 FSL 1509 FWL **Geology Review:** ✔

**COUNTY:** UINTAH
**LATITUDE:** 40.09797 **LONGITUDE:** -109.96114
**UTM SURF EASTINGS:** 588553.00 **NORTHINGS:** 4438938.00
**FIELD NAME:** MONUMENT BUTTE
**LEASE TYPE:** 1 - Federal
**LEASE NUMBER:** UTU-45431 **PROPOSED PRODUCING FORMATION(S):** GREEN RIVER
**SURFACE OWNER:** 1 - Federal **COALBED METHANE:** NO

**RECEIVED AND/OR REVIEWED:**

- ✔ **PLAT**
- ✔ **Bond:** FEDERAL - WYB000493
- ☐ **Potash**
- ☐ **Oil Shale 190-5**
- ☐ **Oil Shale 190-3**
- ☐ **Oil Shale 190-13**
- ✔ **Water Permit:** 437478
- ☐ **RDCC Review:**
- ☐ **Fee Surface Agreement**
- ☐ **Intent to Commingle**

**Commingling Approved**

**LOCATION AND SITING:**

- ☐ **R649-2-3.**

**Unit:** GMBU (GRRV)

- ☐ **R649-3-2. General**
- ☐ **R649-3-3. Exception**
- ✔ **Drilling Unit**

**Board Cause No:** Cause 213-11
**Effective Date:** 11/30/2009
**Siting:** Suspends General Siting

- ✔ **R649-3-11. Directional Drill**

**Comments:** Presite Completed
UNIT POD OK:

**Stipulations:** 4 - Federal Approval - dmason
15 - Directional - dmason
27 - Other - bhill

**RECEIVED:** Jul. 12, 2011

GARY R. HERBERT
*Governor*

GREGORY S. BELL
*Lieutenant Governor*

# State of Utah

**DEPARTMENT OF NATURAL RESOURCES**

MICHAEL R. STYLER
*Executive Director*

**Division of Oil, Gas and Mining**

JOHN R. BAZA
*Division Director*

# Permit To Drill

**********

**Well Name:** GMBU Q-24-8-17
**API Well Number:** 43047517450000
**Lease Number:** UTU-45431
**Surface Owner:** FEDERAL
**Approval Date:** 7/12/2011

**Issued to:**
NEWFIELD PRODUCTION COMPANY , Rt 3 Box 3630 , Myton, UT 84052

**Authority:**
Pursuant to Utah Code Ann. §40-6-1 et seq., and Utah Administrative Code R649-3-1 et seq., the Utah Division of Oil, Gas and Mining issues conditions of approval, and permit to drill the listed well. This permit is issued in accordance with the requirements of Cause 213-11. The expected producing formation or pool is the GREEN RIVER Formation(s), completion into any other zones will require filing a Sundry Notice (Form 9). Completion and commingling of more than one pool will require approval in accordance with R649-3-22.

**Duration:**
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

**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.

**Conditions of Approval:**
State approval of this well does not supercede the required federal approval, which must be obtained prior to drilling.

In accordance with Utah Admin. R.649-3-11, Directional Drilling, the operator shall submit a complete angular deviation and directional survey report to the Division within 30 days following completion of the well.

Production casing cement shall be brought up to or above the top of the unitized interval for the Greater Monument Butte Unit (Cause No. 213-11).

**Notification Requirements:**
The operator is required to notify the Division of Oil, Gas and Mining of the following actions during drilling of this well:

- Within 24 hours following the spudding of the well – contact Carol Daniels at 801-538-5284 (please leave a voicemail message if not available)
  OR
  submit an electronic sundry notice (pre-registration required) via the Utah Oil & Gas website at http://oilgas.ogm.utah.gov

API Well No: 43047517450000

**Reporting Requirements:**
All reports, forms and submittals as required by the Utah Oil and Gas Conservation General Rules will be promptly filed with the Division of Oil, Gas and Mining, including but not limited to:

- Entity Action Form (Form 6) – due within 5 days of spudding the well
- Monthly Status Report (Form 9) – due by 5th day of the following calendar month
- Requests to Change Plans (Form 9) – due prior to implementation
- Written Notice of Emergency Changes (Form 9) – due within 5 days
- Notice of Operations Suspension or Resumption (Form 9) – due prior to implementation
- Report of Water Encountered (Form 7) – due within 30 days after completion
- Well Completion Report (Form 8) – due within 30 days after completion or plugging

**Approved By:**

For John Rogers
Associate Director, Oil & Gas

RECEIVED

Form 3160-3
(August 2007)

JUN 23 2011

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

BLM, Vernal Utah

**APPLICATION FOR PERMIT TO DRILL OR REENTER**

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

5. Lease Serial No. UTU-45431

6. If Indian, Allotee or Tribe Name NA

7. If Unit or CA Agreement, Name and No. Greater Monument Butte

8. Lease Name and Well No. GMBU Q-24-8-17

9. API Well No. 43-047-51745

1a. Type of work: ☑ DRILL ☐ REENTER

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

2. Name of Operator Newfield Production Company

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

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

10. Field and Pool, or Exploratory Monument Butte

4. Location of Well *(Report location clearly and in accordance with any State requirements.*)*
At surface SW/SW 676' FSL 666' FWL Sec. 24, T8S R17E (UTU-45431)
At proposed prod. zone NE/SW 1402' FSL 1509' FWL Sec. 24, T8S R17E (UTU-45431)

11. Sec., T. R. M. or Blk. and Survey or Area Sec. 24, T8S R17E

14. Distance in miles and direction from nearest town or post office*
Approximately 13.9 miles southeast of Myton, UT

12. County or Parish Uintah

13. State UT

15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drlg. unit line, if any) Approx. 1,402' f/lse, NA f/unit

16. No. of acres in lease 548.53

17. Spacing Unit dedicated to this well 20 Acres

18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. Approx. 1,049'

19. Proposed Depth 6,658'

20. BLM/BIA Bond No. on file WYB000493

21. Elevations (Show whether DF, KDB, RT, GL, etc.) 5026' GL

22. Approximate date work will start* 3rd Qrtr. 2011

23. Estimated duration (7) days from SPUD to rig release

24. Attachments

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

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

25. Signature Mandie Crozier — Name *(Printed/Typed)* Mandie Crozier — Date 6/20/11

Title Regulatory Specialist

Approved by *(Signature)* — Name *(Printed/Typed)* James H. Sparger — Date 12-16-11

Title Acting Assistant Field Manager Lands & Mineral Resources — Office VERNAL FIELD OFFICE

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

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

(Continued on page 2)

*(Instructions on page 2)

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DIV. OF OIL, GAS & MINING

NOS 2-10-2011

NOTICE OF APPROVAL

UDOGM

AFMSS# 11SX0407A

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

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

| | | | |
|---|---|---|---|
| **Company:** | **Newfield Production Company** | **Location:** | **SWSW, Sec. 24, T8S, R17E** |
| **Well No:** | **GMBU Q-24-8-17** | **Lease No:** | **UTU-45431** |
| **API No:** | **43-047-51745** | **Agreement:** | **Greater Monument Butte** |

# OFFICE NUMBER: (435) 781-4400

# OFFICE FAX NUMBER: (435) 781-3420

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

All lease and/or unit operations are to be conducted in such a manner that full compliance is made with the applicable laws, regulations (43 CFR Part 3160), and this approved Application for Permit to Drill including Surface and Downhole Conditions of Approval. The operator is considered fully responsible for the actions of his subcontractors. A copy of the approved APD must be on location during construction, drilling, and completion operations. **This permit is approved for a two (2) year period, or until lease expiration, whichever occurs first. An additional extension, up to two (2) years, may be applied for by sundry notice prior to expiration.**

## NOTIFICATION REQUIREMENTS

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

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

- All new and replacement internal combustion gas field engines of less than or equal to 300 design-rated horsepower must not emit more than 2 gms of $NO_x$ per horsepower-hour. This requirement does not apply to gas field engines of less than or equal to 40 design-rated horsepower.

- All and replacement internal combustion gas field engines of greater than 300 design rated horsepower must not emit more than 1.0 gms of $NO_x$ per horsepower-hour.

- If there is an active Gilsonite mining operation within 2 miles of the well location, operator shall notify the Gilsonite operator at least 48 hours prior to any blasting during construction.

- If paleontological materials are uncovered during construction, the operator is to immediately stop work and contact the Authorized Officer (AO). A determination will be made by the AO as to what mitigation may be necessary for the discovered paleontologic material before construction can continue.

- After cessation of drilling and completion operations, any visible or measurable layer of oil must be removed from the surface of the reserve pit and the pit kept free of oil.

- Pits must be free of oil and other liquid and solid wastes prior to filling. Pit liners must not be breached (cut) or filled (squeezed) while still containing fluids. The pit liner must be removed to the solids level or treated to prevent its reemergence to the surface or its interference with long-term successful revegetation.

**Reclamation**

- Reclamation will be completed in accordance with the Newfield Exploration Company Castle Peak and Eight Mile Flat Reclamation Plan on file with the Vernal Field Office of the BLM.

- The reclamation seed mix will incorporate low growing grasses, instead of crested wheatgrass, which negatively impacts mountain plover habitat.

- Appropriate erosion control and revegetation measures will be employed. In areas with unstable soils where seeding alone may not adequately control erosion, grading will be used to minimize slopes and water bars will be installed on disturbed slopes. Erosion control efforts will be monitored by Newfield and, if necessary, modifications will be made to control erosion.

**Seed Mix (Interim and Final Reclamation)**

| Common Name | Latin Name | Pure Live Seed (lbs/acre) | Seed Planting Depth |
|---|---|---|---|
| Squirreltail grass | *Elymus elymoides* | 2.0 | ¼ - ½" |
| Needle and thread grass | *Hesperostipa comata* | 2.0 | ½" |
| Siberian Wheatgrass | *Agropyron fragile* | 2.0 | ½" |
| Shadscale saltbush | *Atriplex confertifolia* | 2.0 | ½" |
| Four-wing saltbush | *Atriplex canescens* | 2.0 | ½" |
| Gardner's saltbush | *Atriplex gardneri* | 2.0 | ½" |
| Blue flax (Lewis flax) | *Linum lewisii* | 1.0 | ⅛ – ¼" |

- All pounds are pure live seed.
- All seed and mulch will be certified weed free.
- Rates are set for drill seeding; double rate if broadcasting.

**Monitoring and Reporting**

- The operator shall submit a Sundry Notice (Form 3160-5) to the BLM Authorized Officer (AO) that designates the proposed site-specific monitoring and reference sites chosen for the location. A description of the proposed sites shall be included, as well as a map showing the locations of the proposed sites.

- The operator shall submit a Sundry Notice (Form 3160-5) to the BLM Authorized Officer (AO) 3 growing seasons after reclamation efforts have occurred evaluating the status of the reclaimed areas in order to determine whether the BLM standards set forth in the Green River District Reclamation Guidelines have been met (30% or greater basal cover).

## *DOWNHOLE PROGRAM*
## *CONDITIONS OF APPROVAL (COAs)*

**SITE SPECIFIC DOWNHOLE COAs:**

- Newfield Production Co. shall comply with all applicable requirements in the SOP (version: "Greater Monument Butte Green River Development Program", June 24, 2008). The operator shall also comply with applicable laws and regulations; with lease terms, Onshore Oil and Gas Orders, NTL's; and with other orders and instructions of the authorized officer.

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

**DRILLING/COMPLETION/PRODUCING OPERATING STANDARDS**

- The spud date and time shall be reported orally to Vernal Field Office within 24 hours of spudding.
- Notify Vernal Field Office Supervisory Petroleum Engineering Technician at least 24 hours in advance of casing cementing operations and BOPE & casing pressure tests.
- All requirements listed in Onshore Order #2 III. E. Special Drilling Operations are applicable for air drilling of surface hole.
- Blowout prevention equipment (BOPE) shall remain in use until the well is completed or abandoned. Closing unit controls shall remain unobstructed and readily accessible at all times. Choke manifolds shall be located outside of the rig substructure.
- All BOPE components shall be inspected daily and those inspections shall be recorded in the daily drilling report. Components shall be operated and tested as required by Onshore Oil & Gas Order No. 2 to insure good mechanical working order. All BOPE pressure tests shall be performed by a test pump with a chart recorder and **NOT** by the rig pumps. Test shall be reported in the driller's log.
- BOP drills shall be initially conducted by each drilling crew within 24 hours of drilling out from under the surface casing and weekly thereafter as specified in Onshore Oil & Gas Order No. 2.
- Casing pressure tests are required before drilling out from under all casing strings set and cemented in place.
- No aggressive/fresh hard-banded drill pipe shall be used within casing.
- **Cement baskets shall not be run on surface casing.**
- The operator must report all shows of water or water-bearing sands to the BLM. If flowing water is encountered it must be sampled, analyzed, and a copy of the analyses submitted to the BLM Vernal Field Office.
- The operator must report encounters of all non oil & gas mineral resources (such as Gilsonite, tar sands, oil shale, trona, etc.) to the Vernal Field Office, in writing, within 5 working days of each encounter. Each report shall include the well name/number, well location, date and depth (from KB

or GL) of encounter, vertical footage of the encounter and, the name of the person making the report (along with a telephone number) should the BLM need to obtain additional information.

- A complete set of angular deviation and directional surveys of a directional well will be submitted to the Vernal BLM office engineer within 30 days of the completion of the well.

- While actively drilling, chronologic drilling progress reports shall be filed directly with the BLM, Vernal Field Office on a weekly basis in sundry, letter format or e-mail to the Petroleum Engineers until the well is completed.

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

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

- There shall be no deviation from the proposed drilling, completion, and/or workover program as approved. Safe drilling and operating practices must be observed. Any changes in operation must have prior approval from the BLM Vernal Field Office.

**OPERATING REQUIREMENT REMINDERS:**

- All wells, whether drilling, producing, suspended, or abandoned, shall be identified in accordance with 43 CFR 3162.6. There shall be a sign or marker with the name of the operator, lease serial number, well number, and surveyed description of the well.

- For information regarding production reporting, contact the Office of Natural Resources Revenue (ONRR) at www.ONRR.gov.

- Should the well be successfully completed for production, the BLM Vernal Field office must be notified when it is placed in a producing status. Such notification will be by written communication and must be received in this office by not later than the fifth business day following the date on which the well is placed on production. The notification shall provide, as a minimum, the following informational items:

    - Operator name, address, and telephone number.

    - Well name and number.

    - Well location (¼¼, Sec., Twn, Rng, and P.M.).

    - Date well was placed in a producing status (date of first production for which royalty will be paid).

    - The nature of the well's production, (i.e., crude oil, or crude oil and casing head gas, or natural gas and entrained liquid hydrocarbons).

    - The Federal or Indian lease prefix and number on which the well is located; otherwise the non-Federal or non-Indian land category, i.e., State or private.

    - Unit agreement and/or participating area name and number, if applicable.

    - Communitization agreement number, if applicable.

- Any venting or flaring of gas shall be done in accordance with Notice to Lessees (NTL) 4A and needs prior approval from the BLM Vernal Field Office.

- All undesirable events (fires, accidents, blowouts, spills, discharges) as specified in NTL 3A will be reported to the BLM, Vernal Field Office. Major events, as defined in NTL3A, shall be reported verbally within 24 hours, followed by a written report within 15 days. "Other than Major Events" will be reported in writing within 15 days. "Minor Events" will be reported on the Monthly Report of Operations and Production.

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

core data, drill stem test data, and results of production tests if performed. Samples (cuttings, fluid, and/or gas) shall be submitted only when requested by the BLM, Vernal Field Office.

- All off-lease storage, off-lease measurement, or commingling on-lease or off-lease, shall have prior written approval from the BLM Vernal Field Office.

- Oil and gas meters shall be calibrated in place prior to any deliveries. The BLM Vernal Field Office Petroleum Engineers will be provided with a date and time for the initial meter calibration and all future meter proving schedules. A copy of the meter calibration reports shall be submitted to the BLM Vernal Field Office. All measurement facilities will conform to the API standards for liquid hydrocarbons and the AGA standards for natural gas measurement. All measurement points shall be identified as the point of sale or allocation for royalty purposes.

- A schematic facilities diagram as required by Onshore Oil & Gas Order No. 3 shall be submitted to the BLM Vernal Field Office within 30 days of installation or first production, whichever occurs first. All site security regulations as specified in Onshore Oil & Gas Order No. 3 shall be adhered to. All product lines entering and leaving hydrocarbon storage tanks will be effectively sealed in accordance with Onshore Oil & Gas Order No. 3.

- Any additional construction, reconstruction, or alterations of facilities, including roads, gathering lines, batteries, etc., which will result in the disturbance of new ground, shall require the filing of a suitable plan and need prior approval of the BLM Vernal Field Office. Emergency approval may be obtained orally, but such approval does not waive the written report requirement.

- No location shall be constructed or moved, no well shall be plugged, and no drilling or workover equipment shall be removed from a well to be placed in a suspended status without prior approval of the BLM Vernal Field Office. If operations are to be suspended for more than 30 days, prior approval of the BLM Vernal Field Office shall be obtained and notification given before resumption of operations.

- Pursuant to Onshore Oil & Gas Order No. 7, this is authorization for pit disposal of water produced from this well for a period of 90 days from the date of initial production. A permanent disposal method must be approved by this office and in operation prior to the end of this 90-day period. In order to meet this deadline, an application for the proposed permanent disposal method shall be submitted along with any necessary water analyses, as soon as possible, but no later than 45 days after the date of first production. Any method of disposal which has not been approved prior to the end of the authorized 90-day period will be considered as an Incident of Noncompliance and will be grounds for issuing a shut-in order until an acceptable manner for disposing of said water is provided and approved by this office.

- Unless the plugging is to take place immediately upon receipt of oral approval, the Field Office Petroleum Engineers must be notified at least 24 hours in advance of the plugging of the well, in order that a representative may witness plugging operations. If a well is suspended or abandoned, all pits must be fenced immediately until they are backfilled. The "Subsequent Report of Abandonment" (Form BLM 3160-5) must be submitted within 30 days after the actual plugging of the well bore, showing location of plugs, amount of cement in each, and amount of casing left in hole, and the current status of the surface restoration.

BLM - Vernal Field Office - Notification Form

Operator Newfield Exploration Rig Name/# 29 Submitted By Mike Braithwaite Phone Number 435-401-8392
Well Name/Number GMBU Q-24-8-17
Qtr/Qtr SW/SW Section 24 Township 8S Range 17E
Lease Serial Number UTU-45431
API Number 43-047-51745

Spud Notice – Spud is the initial spudding of the well, not drilling out below a casing string.

Date/Time 2/15/2012 9:00 AM ☒ PM ☐

Casing – Please report time casing run starts, not cementing times.

☒ Surface Casing
☐ Intermediate Casing
☐ Production Casing
☐ Liner
☐ Other

Date/Time 2/15/2012 3:00 AM ☐ PM ☒

BOPE

☐ Initial BOPE test at surface casing point
☐ BOPE test at intermediate casing point
☐ 30 day BOPE test
☐ Other

Date/Time _____ _____ AM ☐ PM ☐

Remarks _____

_____

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

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

OPERATOR ACCT NO **N2695**

| ACTION CODE | CURRENT ENTITY NO | NEW ENTITY NO | API NUMBER | WELL NAME | WELL LOCATION QQ | SC | TP | RG | COUNTY | SPUD DATE | EFFECTIVE DATE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| B | 99999 | 17400 | 4304751641 | GMBU P-36-8-17 | NESE | 36 | 8S | 17E | UINTAH | 2/13/2012 | 2/23/2012 |

WELL 1 COMMENTS:
GRRV BHL: NESE 36

| ACTION CODE | CURRENT ENTITY NO | NEW ENTITY NO | API NUMBER | WELL NAME | WELL LOCATION QQ | SC | TP | RG | COUNTY | SPUD DATE | EFFECTIVE DATE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| B | 99999 | 17400 | 4301350796 | GMBU J-11-9-16 | NWNW | 12 | 9S | 16E | DUCHESNE | 2/17/2012 | 2/23/2012 |

GRRV BHL: NWNW 11

| ACTION B | CURRENT ENTITY NO | NEW ENTITY NO | API NUMBER | WELL NAME | WELL LOCATION QQ | SC | TP | RG | COUNTY | SPUD DATE | EFFECTIVE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| B | 99999 | 17400 | 4301350795 | GMBU X-1-9-16 | NWNW | 12 | 9S | 16E | DUCHESNE | 2/16/2012 | 2/23/2012 |

GRRV BHL: SE SESW

| ACTION CODE | CURRENT ENTITY NO | NEW ENTITY NO. | API NUMBER | WELL NAME | WELL LOCATION QQ | SC | TP | RG | COUNTY | SPUD DATE | EFFECTIVE DATE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| B | 99999 | 17400 | 4304751745 | GMBU Q-24-8-17 | SWSW | 24 | 8S | 17E | UINTAH | 2/15/2012 | 2/23/2012 |

GRRV BHL: NESW

| ACTION CODE | CURRENT ENTITY NO | NEW ENTITY NO. | API NUMBER | WELL NAME | WELL LOCATION QQ | SC | TP | RG | COUNTY | SPUD DATE | EFFECTIVE DATE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | |

| ACTION CODE | CURRENT ENTITY NO | NEW ENTITY NO | API NUMBER | WELL NAME | WELL LOCATION QQ | SC | TP | RG | COUNTY | SPUD DATE | EFFECTIVE DATE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | |

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

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

RECEIVED
FEB 23 2012
Div. of Oil, Gas & Mining

Signature: Jentri Park
Production Clerk 02/22/12

FORM 3160-5
(August 2007)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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

## SUNDRY NOTICES AND REPORTS ON WELLS

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

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

5. Lease Serial No.
USA UTU-45431

6. If Indian, Allottee or Tribe Name.

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

1. Type of Well
☒ Oil Well ☐ Gas Well ☐ Other

8. Well Name and No.
GMBU Q-24-8-17

2. Name of Operator
NEWFIELD PRODUCTION COMPANY

9. API Well No.
4304751745

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

3b. Phone *(include are code)*
435.646.3721

10. Field and Pool, or Exploratory Area
GREATER MB UNIT

4. Location of Well *(Footage, Sec., T., R., M., or Survey Description)*
0676 FSL 0666 FWL
Section 24 T8S R17E

11. County or Parish, State
UINTAH, UT

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

| TYPE OF SUBMISSION | TYPE OF ACTION | | | |
|---|---|---|---|---|
| ☐ Notice of Intent | ☐ Acidize | ☐ Deepen | ☐ Production (Start/Resume) | ☐ Water Shut-Off |
| ☒ Subsequent Report | ☐ Alter Casing | ☐ Fracture Treat | ☐ Reclamation | ☐ Well Integrity |
| ☐ Final Abandonment | ☐ Casing Repair | ☐ New Construction | ☐ Recomplete | ☒ Other Spud Notice |
| | ☐ Change Plans | ☐ Plug & Abandon | ☐ Temporarily Abandon | |
| | ☐ Convert to Injector | ☐ Plug Back | ☐ Water Disposal | |

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

On 2/15/12 MIRU Ross #29. Spud well @9:00 AM. Drill 310'of 12 1/4" hole with air mist. TIH W/ 7 Jt's 8 5/8" J-55 24# csgn. Set @ 311.12. 2/15/12 cement with 160 sks of class "G" w/ 2% CaCL2 + 0.25#/sk Cello- Flake Mixed @ 15.8ppg w/ 1.17ft3/sk yield. Returned 6 barrels cement to pit. WOC.

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

Title

Signature
Branden Arnold

Date
02/16/2012

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

Approved by ..... Title ..... Date

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

Office

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

*(Instructions on page 2)*

RECEIVED
FEB 22 2012
DIV. OF OIL, GAS & MINING

# Casing / Liner Detail

| | |
|---|---|
| **Well** | GMBU Q-24-8-17 |
| **Prospect** | Monument Butte |
| **Foreman** | |
| **Run Date:** | 2/15/2012 |
| **String Type** | Surface, 8.625", 24#, J-55, LTC (Generic) |

## - Detail From Top To Bottom -

| Depth | Length | JTS | Description | OD | ID |
|---|---|---|---|---|---|
| 311.70 | 1.42 | | Wellhead | | |
| 313.12 | -2.00 | | Cutoff | | |
| 10.00 | 0.90 | | Guide shoe | | |
| 10.90 | 258.10 | 6 | 8 5/8 Surface casing | 8.620 | |
| 269.00 | 42.70 | 1 | Shoe joint | 8.620 | |
| 311.70 | | | Total KB | | |

## Cement Detail

**Cement Company:** BJ

| Slurry | # of Sacks | Weight (ppg) | Yield | Volume ($ft^3$) | Description - Slurry Class and Additives |
|---|---|---|---|---|---|
| Slurry 1 | 160 | 15.8 | 1.17 | 187.2 | class G+2%kcl+.25#CF mixed @ 15.8 ppg and 1.17 yield |

| | |
|---|---|
| Stab-In-Job? | No |
| BHT: | 0 |
| Initial Circulation Pressure: | |
| Initial Circulation Rate: | |
| Final Circulation Pressure: | |
| Final Circulation Rate: | |
| Displacement Fluid: | Water |
| Displacement Rate: | 4 |
| Displacement Volume: | 16.4 |
| Mud Returns: | Full |
| Centralizer Type And Placement: | |

| | |
|---|---|
| Cement To Surface? | Yes |
| Est. Top of Cement: | 0 |
| Plugs Bumped? | Yes |
| Pressure Plugs Bumped: | 105 |
| Floats Holding? | Yes |
| Casing Stuck On / Off Bottom? | No |
| Casing Reciprocated? | No |
| Casing Rotated? | No |
| CIP: | 19:39 |
| Casing Wt Prior To Cement: | |
| Casing Weight Set On Slips: | |

Middle of first, top of second and third for a total of three.

# Casing / Liner Detail

| | |
|---|---|
| ***Well*** | GMBU Q-24-8-17 |
| ***Prospect*** | Monument Butte |
| ***Foreman*** | |
| ***Run Date:*** | 2/15/2012 |
| ***String Type*** | Conductor, 14", 32#, H-40, W (Welded) |

## - Detail From Top To Bottom -

| *Depth* | *Length* | *JTS* | *Description* | *OD* | *ID* |
|---|---|---|---|---|---|
| 10.00 | 10.00 | 1 | 14" Conductor | 14.000 | |

## *Cement Detail*

**Cement Company:**

| Slurry | # of Sacks | Weight (ppg) | Yield | Volume (ft³) | Description - Slurry Class and Additives |
|---|---|---|---|---|---|
| | | | | | |

| | |
|---|---|
| tab-In-Job? | |
| HT: | 0 |
| itial Circulation Pressure: | |
| itial Circulation Rate: | |
| inal Circulation Pressure: | |
| inal Circulation Rate: | |
| isplacement Fluid: | |
| isplacement Rate: | |
| isplacement Volume: | |
| lud Returns: | |
| entralizer Type And Placement: | |

| | |
|---|---|
| Cement To Surface? | |
| Est. Top of Cement: | |
| Plugs Bumped? | |
| Pressure Plugs Bumped: | |
| Floats Holding? | |
| Casing Stuck On / Off Bottom? | |
| Casing Reciprocated? | |
| Casing Rotated? | |
| CIP: | |
| Casing Wt Prior To Cement: | |
| Casing Weight Set On Slips: | |

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

FORM 9

**5.LEASE DESIGNATION AND SERIAL NUMBER:** UTU-45431

## SUNDRY NOTICES AND REPORTS ON WELLS

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

**6. IF INDIAN, ALLOTTEE OR TRIBE NAME:**

**7.UNIT or CA AGREEMENT NAME:** GMBU (GRRV)

**1. TYPE OF WELL** Oil Well

**8. WELL NAME and NUMBER:** GMBU Q-24-8-17

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

**9. API NUMBER:** 43047517450000

**3. ADDRESS OF OPERATOR:** Rt 3 Box 3630 , Myton, UT, 84052

**PHONE NUMBER:** 435 646-4825 Ext

**9. FIELD and POOL or WILDCAT:** MONUMENT BUTTE

**4. LOCATION OF WELL**
**FOOTAGES AT SURFACE:** 0676 FSL 0666 FWL
**QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:** Qtr/Qtr: SWSW Section: 24 Township: 08.0S Range: 17.0E Meridian: S

**COUNTY:** UINTAH

**STATE:** UTAH

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

| TYPE OF SUBMISSION | TYPE OF ACTION | | |
|---|---|---|---|
| ☐ NOTICE OF INTENT<br>Approximate date work will start: | ☐ ACIDIZE | ☐ ALTER CASING | ☐ CASING REPAIR |
| | ☐ CHANGE TO PREVIOUS PLANS | ☐ CHANGE TUBING | ☐ CHANGE WELL NAME |
| ☐ SUBSEQUENT REPORT<br>Date of Work Completion: | ☐ CHANGE WELL STATUS | ☐ COMMINGLE PRODUCING FORMATIONS | ☐ CONVERT WELL TYPE |
| | ☐ DEEPEN | ☐ FRACTURE TREAT | ☐ NEW CONSTRUCTION |
| | ☐ OPERATOR CHANGE | ☐ PLUG AND ABANDON | ☐ PLUG BACK |
| ☐ SPUD REPORT<br>Date of Spud: | ✓ PRODUCTION START OR RESUME | ☐ RECLAMATION OF WELL SITE | ☐ RECOMPLETE DIFFERENT FORMATION |
| | ☐ REPERFORATE CURRENT FORMATION | ☐ SIDETRACK TO REPAIR WELL | ☐ TEMPORARY ABANDON |
| | ☐ TUBING REPAIR | ☐ VENT OR FLARE | ☐ WATER DISPOSAL |
| ✓ DRILLING REPORT<br>Report Date:<br>4/12/2012 | ☐ WATER SHUTOFF | ☐ SI TA STATUS EXTENSION | ☐ APD EXTENSION |
| | ☐ WILDCAT WELL DETERMINATION | ☐ OTHER | OTHER: |

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

The above well was placed on production on 04/12/2012 at 14:00 hours.

**Accepted by the Utah Division of Oil, Gas and Mining**
**FOR RECORD ONLY**
May 18, 2012

| NAME (PLEASE PRINT) | PHONE NUMBER | TITLE |
|---|---|---|
| Jennifer Peatross | 435 646-4885 | Production Technician |

| SIGNATURE | DATE |
|---|---|
| N/A | 5/18/2012 |

RECEIVED: May. 18, 2012

Form 3160-4
(August 2007)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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

# WELL COMPLETION OR RECOMPLETION REPORT AND LOG

5. Lease Serial No.
UTU-45431

1a. Type of Well ☑ Oil Well ☐ Gas Well ☐ Dry ☐ Other
b. Type of Completion: ☑ New Well ☐ Work Over ☐ Deepen ☐ Plug Back ☐ Diff. Resvr.,
Other: _____

6. If Indian, Allottee or Tribe Name
NA

7. Unit or CA Agreement Name and No.
GMBU (GRRV)

2. Name of Operator
NEWFIELD EXPLORATION COMPANY

8. Lease Name and Well No.
GMBU Q-24-8-17

3. Address
1401 17TH ST. SUITE 1000 DENVER, CO 80202

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

9. AFI Well No.
43-047-51745

4. Location of Well *(Report location clearly and in accordance with Federal requirements)**

At surface 676' FSL & 666' FWL (SW/SW) SEC. 24, T8S, R17E (UTU-45431)

At top prod. interval reported below 1170' FSL & 1223' FWL (SW/SW) SEC. 24, T8S, R17E (UTU-45431)

At total depth 1397' FSL & 1486' FWL (NE/SW) SEC. 24, T8S, R17E (UTU-45431) BHL by HSM

10. Field and Pool or Exploratory
MONUMENT BUTTE

11. Sec., T., R., M., on Block and Survey or Area
SEC. 24, T8S, R17E

12. County or Parish
UINTAH

13. State
UT

14. Date Spudded
02/15/2012

15. Date T.D. Reached
02/24/2012

16. Date Completed 04/12/2012
☐ D & A ☑ Ready to Prod.

17. Elevations (DF, RKB, RT, GL)*
5026' GL 5036' KB

18. Total Depth: MD 6652'
TVD 6547'

19. Plug Back T.D.: MD 6602'
TVD 6497

20. Depth Bridge Plug Set: MD
TVD

21. Type Electric & Other Mechanical Logs Run (Submit copy of each)
DUAL IND GRD, SP, COMP. DENSITY,COMP. NEUTRON,GR,CALIPER, CMT BOND

22. Was well cored? ☑ No ☐ Yes (Submit analysis)
Was DST run? ☑ No ☐ Yes (Submit report)
Directional Survey? ☐ No ☑ Yes (Submit copy)

23. Casing and Liner Record *(Report all strings set in well)*

| Hole Size | Size/Grade | Wt. (#/ft.) | Top (MD) | Bottom (MD) | Stage Cementer Depth | No. of Sks. & Type of Cement | Slurry Vol. (BBL) | Cement Top* | Amount Pulled |
|---|---|---|---|---|---|---|---|---|---|
| 12-1/4" | 8-5/8" J-55 | 24# | 0 | 311' | | 160 CLASS G | | | |
| 7-7/8" | 5-1/2" J-55 | 15.5# | 0 | 6632' | | 275 PRIMLITE | | 64' | |
| | | | | | | 450 50/50 POZ | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

24. Tubing Record

| Size | Depth Set (MD) | Packer Depth (MD) | Size | Depth Set (MD) | Packer Depth (MD) | Size | Depth Set (MD) | Packer Depth (MD) |
|---|---|---|---|---|---|---|---|---|
| 2-7/8" | EOT@ 6472' | TA @ 6378' | | | | | | |

25. Producing Intervals

| Formation | Top | Bottom |
|---|---|---|
| A) Green River | 4689' | 6427' |
| B) | | |
| C) | | |
| D) | | |

26. Perforation Record

| Perforated Interval | Size | No. Holes | Perf. Status |
|---|---|---|---|
| 4689-6427' | .34 | 66 | |
| | | | |
| | | | |
| | | | |

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27. Acid, Fracture, Treatment, Cement Squeeze, etc.

| Depth Interval | Amount and Type of Material |
|---|---|
| 4689-6427' | Frac w/ 239025# 20/40 sand in 2259 bbls Lightning 17 fluid, in 5 stages. |
| | |
| | |
| | |

28. Production - Interval A

| Date First Produced | Test Date | Hours Tested | Test Production | Oil BBL | Gas MCF | Water BBL | Oil Gravity Corr. API | Gas Gravity | Production Method |
|---|---|---|---|---|---|---|---|---|---|
| 4/13/12 | 4/23/12 | 24 | → | 79 | 24 | 30 | | | 2-1/2" x 1-3/4" x 20' x 21' x 24' RHAC Pump |

| Choke Size | Tbg. Press. Flwg. SI | Csg. Press. | 24 Hr. Rate | Oil BBL | Gas MCF | Water BBL | Gas/Oil Ratio | Well Status |
|---|---|---|---|---|---|---|---|---|
| | | | → | | | | | PRODUCING |

28a. Production - Interval B

| Date First Produced | Test Date | Hours Tested | Test Production | Oil BBL | Gas MCF | Water BBL | Oil Gravity Corr. API | Gas Gravity | Production Method |
|---|---|---|---|---|---|---|---|---|---|
| | | | → | | | | | | |

| Choke Size | Tbg. Press. Flwg. SI | Csg. Press. | 24 Hr. Rate | Oil BBL | Gas MCF | Water BBL | Gas/Oil Ratio | Well Status |
|---|---|---|---|---|---|---|---|---|
| | | | → | | | | | |

*(See instructions and spaces for additional data on page 2)

28b. Production - Interval C

| Date First Produced | Test Date | Hours Tested | Test Production → | Oil BBL | Gas MCF | Water BBL | Oil Gravity Corr. API | Gas Gravity | Production Method |
|---|---|---|---|---|---|---|---|---|---|
| Choke Size | Tbg. Press. Flwg. SI | Csg. Press. | 24 Hr. Rate → | Oil BBL | Gas MCF | Water BBL | Gas/Oil Ratio | Well Status | |

28c. Production - Interval D

| Date First Produced | Test Date | Hours Tested | Test Production → | Oil BBL | Gas MCF | Water BBL | Oil Gravity Corr. API | Gas Gravity | Production Method |
|---|---|---|---|---|---|---|---|---|---|
| Choke Size | Tbg. Press. Flwg. SI | Csg. Press. | 24 Hr. Rate → | Oil BBL | Gas MCF | Water BBL | Gas/Oil Ratio | Well Status | |

29. Disposition of Gas *(Solid, used for fuel, vented, etc.)*

SOLD AND USED FOR FUEL

30. Summary of Porous Zones (Include Aquifers):

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.

31. Formation (Log) Markers

GEOLOGICAL MARKERS

| Formation | Top | Bottom | Descriptions, Contents, etc. | Name | Top Meas. Depth |
|---|---|---|---|---|---|
| GREEN RIVER | 4689' | 6427' | | GARDEN GULCH MARKER | 4190' |
| | | | | GARDEN GULCH 1 | 4374' |
| | | | | GARDEN GULCH 2 | 4492' |
| | | | | POINT 3 MRKR | 4770' |
| | | | | X MRKR | 4991' |
| | | | | Y MRKR | 5033' |
| | | | | DOUGLAS CREEK | 5166' |
| | | | | BI-CARBONATE | 5445' |
| | | | | B LIMESTONE | 5590' |
| | | | | CASTLE PEAK | 6019' |
| | | | | BASAL CARBONATE | 6435' |

32. Additional remarks (include plugging procedure):

33. Indicate which items have been attached by placing a check in the appropriate boxes:

- ☐ Electrical/Mechanical Logs (1 full set req'd.)
- ☐ Geologic Report
- ☐ DST Report
- ☑ Directional Survey
- ☐ Sundry Notice for plugging and cement verification
- ☐ Core Analysis
- ☐ Other:

34. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records (see attached instructions)*

Name *(please print)* Jennifer Peatross Title Production Technician

Signature Date 05/21/2012

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

(Continued on page 3)

NEWFIELD

# NEWFIELD EXPLORATION

**USGS Myton SW (UT)**
**SECTION 24 T8S R17E**
**Q-24-8-17**

**Wellbore #1**

**Design: Actual**

# Standard Survey Report

**06 March, 2012**

NEWFIELD

# Payzone Directional

Survey Report

| | | | |
|---|---|---|---|
| **Company:** | NEWFIELD EXPLORATION | **Local Co-ordinate Reference:** | Well Q-24-8-17 |
| **Project:** | USGS Myton SW (UT) | **TVD Reference:** | Q-24-8-17 @ 5038.0ft (NDSI SS #2) |
| **Site:** | SECTION 24 T8S R17E | **MD Reference:** | Q-24-8-17 @ 5038.0ft (NDSI SS #2) |
| **Well:** | Q-24-8-17 | **North Reference:** | True |
| **Wellbore:** | Wellbore #1 | **Survey Calculation Method:** | Minimum Curvature |
| **Design:** | Actual | **Database:** | EDM 2003.21 Single User Db |

**Project** USGS Myton SW (UT), DUCHESNE COUNTY, UT, USA

| | | | |
|---|---|---|---|
| **Map System:** | US State Plane 1983 | **System Datum:** | Mean Sea Level |
| **Geo Datum:** | North American Datum 1983 | | |
| **Map Zone:** | Utah Central Zone | | |

**Site** SECTION 24 T8S R17E

| | | | | | |
|---|---|---|---|---|---|
| **Site Position:** | | **Northing:** | 7,209,800.00 ft | **Latitude:** | 40° 6' 9.036 N |
| **From:** | Lat/Long | **Easting:** | 2,072,800.00 ft | **Longitude:** | 109° 57' 14.911 W |
| **Position Uncertainty:** | 0.0 ft | **Slot Radius:** | " | **Grid Convergence:** | 0.99 ° |

**Well** Q-24-8-17, SHL LAT: 40 05 53.17 LONG: -109 57 42.94

| | | | | | | |
|---|---|---|---|---|---|---|
| **Well Position** | **+N/-S** | 0.0 ft | **Northing:** | 7,208,157.30 ft | **Latitude:** | 40° 5' 53.170 N |
| | **+E/-W** | 0.0 ft | **Easting:** | 2,070,650.10 ft | **Longitude:** | 109° 57' 42.940 W |
| **Position Uncertainty** | | 0.0 ft | **Wellhead Elevation:** | 5,038.0 ft | **Ground Level:** | 5,026.0 ft |

**Wellbore** Wellbore #1

| **Magnetics** | **Model Name** | **Sample Date** | **Declination (°)** | **Dip Angle (°)** | **Field Strength (nT)** |
|---|---|---|---|---|---|
| | IGRF2010 | 1/18/2011 | 11.33 | 65.87 | 52,358 |

**Design** Actual

**Audit Notes:**

| | | | | | |
|---|---|---|---|---|---|
| **Version:** | 1.0 | **Phase:** | ACTUAL | **Tie On Depth:** | 0.0 |

| **Vertical Section:** | **Depth From (TVD) (ft)** | **+N/-S (ft)** | **+E/-W (ft)** | **Direction (°)** |
|---|---|---|---|---|
| | 0.0 | 0.0 | 0.0 | 48.37 |

**Survey Program** **Date** 3/6/2012

| **From (ft)** | **To (ft)** | **Survey (Wellbore)** | **Tool Name** | **Description** |
|---|---|---|---|---|
| 348.0 | 6,652.0 | Survey #1 (Wellbore #1) | MWD | MWD - Standard |

**Survey**

| **Measured Depth (ft)** | **Inclination (°)** | **Azimuth (°)** | **Vertical Depth (ft)** | **+N/-S (ft)** | **+E/-W (ft)** | **Vertical Section (ft)** | **Dogleg Rate (°/100ft)** | **Build Rate (°/100ft)** | **Turn Rate (°/100ft)** |
|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 0.00 | 0.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 348.0 | 1.41 | 8.02 | 348.0 | 4.2 | 0.6 | 3.3 | 0.41 | 0.41 | 0.00 |
| 378.0 | 1.21 | 9.72 | 378.0 | 4.9 | 0.7 | 3.8 | 0.68 | -0.67 | 5.67 |
| 409.0 | 1.32 | 15.33 | 408.9 | 5.6 | 0.9 | 4.3 | 0.53 | 0.35 | 18.10 |
| 439.0 | 1.29 | 12.55 | 438.9 | 6.2 | 1.0 | 4.9 | 0.23 | -0.10 | -9.27 |
| 470.0 | 1.35 | 6.80 | 469.9 | 7.0 | 1.1 | 5.5 | 0.47 | 0.19 | -18.55 |
| 500.0 | 1.32 | 13.04 | 499.9 | 7.6 | 1.3 | 6.0 | 0.49 | -0.10 | 20.80 |
| 531.0 | 1.28 | 14.30 | 530.9 | 8.3 | 1.4 | 6.6 | 0.16 | -0.13 | 4.06 |
| 561.0 | 1.27 | 11.94 | 560.9 | 9.0 | 1.6 | 7.1 | 0.18 | -0.03 | -7.87 |
| 592.0 | 1.35 | 9.81 | 591.9 | 9.7 | 1.7 | 7.7 | 0.30 | 0.26 | -6.87 |
| 622.0 | 1.30 | 3.10 | 621.9 | 10.4 | 1.8 | 8.2 | 0.54 | -0.17 | -22.37 |
| 652.0 | 1.40 | 1.20 | 651.9 | 11.1 | 1.8 | 8.7 | 0.37 | 0.33 | -6.33 |
| 683.0 | 1.50 | 13.30 | 682.9 | 11.8 | 1.9 | 9.3 | 1.04 | 0.32 | 39.03 |

NEWFIELD

# Payzone Directional

Survey Report

| | | | |
|---|---|---|---|
| **Company:** | NEWFIELD EXPLORATION | **Local Co-ordinate Reference:** | Well Q-24-8-17 |
| **Project:** | USGS Myton SW (UT) | **TVD Reference:** | Q-24-8-17 @ 5038.0ft (NDSI SS #2) |
| **Site:** | SECTION 24 T8S R17E | **MD Reference:** | Q-24-8-17 @ 5038.0ft (NDSI SS #2) |
| **Well:** | Q-24-8-17 | **North Reference:** | True |
| **Wellbore:** | Wellbore #1 | **Survey Calculation Method:** | Minimum Curvature |
| **Design:** | Actual | **Database:** | EDM 2003.21 Single User Db |

**Survey**

| Measured Depth (ft) | Inclination (°) | Azimuth (°) | Vertical Depth (ft) | +N/-S (ft) | +E/-W (ft) | Vertical Section (ft) | Dogleg Rate (°/100ft) | Build Rate (°/100ft) | Turn Rate (°/100ft) |
|---|---|---|---|---|---|---|---|---|---|
| 714.0 | 1.80 | 23.50 | 713.9 | 12.7 | 2.2 | 10.1 | 1.35 | 0.97 | 32.90 |
| 744.0 | 2.30 | 28.10 | 743.8 | 13.6 | 2.7 | 11.1 | 1.75 | 1.67 | 15.33 |
| 775.0 | 2.90 | 34.20 | 774.8 | 14.8 | 3.4 | 12.4 | 2.13 | 1.94 | 19.68 |
| 806.0 | 3.40 | 36.30 | 805.8 | 16.2 | 4.4 | 14.1 | 1.66 | 1.61 | 6.77 |
| 836.0 | 3.90 | 40.30 | 835.7 | 17.7 | 5.6 | 15.9 | 1.87 | 1.67 | 13.33 |
| 880.0 | 4.70 | 43.10 | 879.6 | 20.2 | 7.8 | 19.2 | 1.88 | 1.82 | 6.36 |
| 924.0 | 5.80 | 46.70 | 923.4 | 23.0 | 10.6 | 23.2 | 2.61 | 2.50 | 8.18 |
| 968.0 | 6.20 | 51.60 | 967.2 | 26.0 | 14.1 | 27.8 | 1.48 | 0.91 | 11.14 |
| 1,012.0 | 6.80 | 54.70 | 1,010.9 | 29.0 | 18.1 | 32.8 | 1.58 | 1.36 | 7.05 |
| 1,055.0 | 7.40 | 56.50 | 1,053.5 | 32.0 | 22.5 | 38.1 | 1.49 | 1.40 | 4.19 |
| 1,099.0 | 7.80 | 56.90 | 1,097.2 | 35.2 | 27.3 | 43.8 | 0.92 | 0.91 | 0.91 |
| 1,143.0 | 8.30 | 57.60 | 1,140.7 | 38.5 | 32.5 | 49.9 | 1.16 | 1.14 | 1.59 |
| 1,187.0 | 8.90 | 57.60 | 1,184.2 | 42.1 | 38.1 | 56.4 | 1.36 | 1.36 | 0.00 |
| 1,231.0 | 9.50 | 55.50 | 1,227.7 | 45.9 | 43.9 | 63.4 | 1.56 | 1.36 | -4.77 |
| 1,274.0 | 10.50 | 53.60 | 1,270.0 | 50.3 | 50.0 | 70.8 | 2.45 | 2.33 | -4.42 |
| 1,318.0 | 11.60 | 52.10 | 1,313.2 | 55.4 | 56.7 | 79.2 | 2.58 | 2.50 | -3.41 |
| 1,362.0 | 12.30 | 51.70 | 1,356.2 | 61.0 | 63.9 | 88.3 | 1.60 | 1.59 | -0.91 |
| 1,406.0 | 12.50 | 50.60 | 1,399.2 | 66.9 | 71.3 | 97.7 | 0.70 | 0.45 | -2.50 |
| 1,450.0 | 12.00 | 48.60 | 1,442.2 | 73.0 | 78.4 | 107.1 | 1.49 | -1.14 | -4.55 |
| 1,493.0 | 12.30 | 46.60 | 1,484.2 | 79.1 | 85.1 | 116.1 | 1.20 | 0.70 | -4.65 |
| 1,537.0 | 12.50 | 46.50 | 1,527.2 | 85.6 | 91.9 | 125.5 | 0.46 | 0.45 | -0.23 |
| 1,581.0 | 12.80 | 46.40 | 1,570.1 | 92.2 | 98.9 | 135.2 | 0.68 | 0.68 | -0.23 |
| 1,625.0 | 13.30 | 46.20 | 1,613.0 | 99.1 | 106.1 | 145.1 | 1.14 | 1.14 | -0.45 |
| 1,669.0 | 13.80 | 45.91 | 1,655.8 | 106.2 | 113.5 | 155.4 | 1.15 | 1.14 | -0.66 |
| 1,713.0 | 14.11 | 46.53 | 1,698.5 | 113.6 | 121.2 | 166.0 | 0.78 | 0.70 | 1.41 |
| 1,756.0 | 14.24 | 46.22 | 1,740.2 | 120.8 | 128.8 | 176.5 | 0.35 | 0.30 | -0.72 |
| 1,800.0 | 14.40 | 45.83 | 1,782.8 | 128.4 | 136.6 | 187.4 | 0.42 | 0.36 | -0.89 |
| 1,844.0 | 15.00 | 45.83 | 1,825.4 | 136.2 | 144.6 | 198.6 | 1.36 | 1.36 | 0.00 |
| 1,888.0 | 15.10 | 46.10 | 1,867.9 | 144.1 | 152.8 | 210.0 | 0.28 | 0.23 | 0.61 |
| 1,932.0 | 14.60 | 45.90 | 1,910.4 | 151.9 | 161.0 | 221.2 | 1.14 | -1.14 | -0.45 |
| 1,975.0 | 14.70 | 46.10 | 1,952.0 | 159.5 | 168.8 | 232.1 | 0.26 | 0.23 | 0.47 |
| 2,019.0 | 14.50 | 46.80 | 1,994.6 | 167.1 | 176.8 | 243.2 | 0.61 | -0.45 | 1.59 |
| 2,063.0 | 14.10 | 46.40 | 2,037.2 | 174.6 | 184.7 | 254.1 | 0.94 | -0.91 | -0.91 |
| 2,107.0 | 13.80 | 45.40 | 2,079.9 | 182.0 | 192.3 | 264.7 | 0.87 | -0.68 | -2.27 |
| 2,151.0 | 13.80 | 45.50 | 2,122.6 | 189.3 | 199.8 | 275.1 | 0.05 | 0.00 | 0.23 |
| 2,194.0 | 14.00 | 43.00 | 2,164.4 | 196.7 | 207.0 | 285.4 | 1.47 | 0.47 | -5.81 |
| 2,238.0 | 14.80 | 40.55 | 2,207.0 | 204.9 | 214.3 | 296.3 | 2.29 | 1.82 | -5.57 |
| 2,282.0 | 14.90 | 40.42 | 2,249.5 | 213.5 | 221.6 | 307.5 | 0.24 | 0.23 | -0.30 |
| 2,326.0 | 15.10 | 39.24 | 2,292.0 | 222.2 | 228.9 | 318.7 | 0.83 | 0.45 | -2.68 |
| 2,370.0 | 15.00 | 40.70 | 2,334.5 | 231.0 | 236.3 | 330.0 | 0.89 | -0.23 | 3.32 |
| 2,413.0 | 14.59 | 39.70 | 2,376.1 | 239.4 | 243.3 | 340.9 | 1.12 | -0.95 | -2.33 |
| 2,457.0 | 14.00 | 41.30 | 2,418.7 | 247.6 | 250.4 | 351.7 | 1.61 | -1.34 | 3.64 |
| 2,501.0 | 13.14 | 43.70 | 2,461.5 | 255.2 | 257.4 | 361.9 | 2.34 | -1.95 | 5.45 |
| 2,545.0 | 12.30 | 46.50 | 2,504.4 | 262.1 | 264.2 | 371.6 | 2.37 | -1.91 | 6.36 |
| 2,589.0 | 11.60 | 49.10 | 2,547.5 | 268.2 | 271.0 | 380.7 | 2.01 | -1.59 | 5.91 |
| 2,633.0 | 11.12 | 50.00 | 2,590.6 | 273.8 | 277.6 | 389.4 | 1.16 | -1.09 | 2.05 |
| 2,676.0 | 10.35 | 50.40 | 2,632.9 | 279.0 | 283.7 | 397.4 | 1.80 | -1.79 | 0.93 |
| 2,720.0 | 9.80 | 49.20 | 2,676.2 | 283.9 | 289.6 | 405.1 | 1.34 | -1.25 | -2.73 |
| 2,764.0 | 9.10 | 47.00 | 2,719.6 | 288.7 | 295.0 | 412.3 | 1.79 | -1.59 | -5.00 |
| 2,808.0 | 9.00 | 47.20 | 2,763.0 | 293.5 | 300.0 | 419.2 | 0.24 | -0.23 | 0.45 |
| 2,852.0 | 9.14 | 48.46 | 2,806.5 | 298.1 | 305.2 | 426.2 | 0.55 | 0.32 | 2.86 |
| 2,895.0 | 8.80 | 49.34 | 2,849.0 | 302.5 | 310.2 | 432.9 | 0.85 | -0.79 | 2.05 |
| 2,939.0 | 8.80 | 50.30 | 2,892.4 | 306.9 | 315.4 | 439.6 | 0.33 | 0.00 | 2.18 |
| 2,983.0 | 8.80 | 53.00 | 2,935.9 | 311.0 | 320.7 | 446.3 | 0.94 | 0.00 | 6.14 |

NEWFIELD

# Payzone Directional

Survey Report

| | | | |
|---|---|---|---|
| **Company:** | NEWFIELD EXPLORATION | **Local Co-ordinate Reference:** | Well Q-24-8-17 |
| **Project:** | USGS Myton SW (UT) | **TVD Reference:** | Q-24-8-17 @ 5038.0ft (NDSI SS #2) |
| **Site:** | SECTION 24 T8S R17E | **MD Reference:** | Q-24-8-17 @ 5038.0ft (NDSI SS #2) |
| **Well:** | Q-24-8-17 | **North Reference:** | True |
| **Wellbore:** | Wellbore #1 | **Survey Calculation Method:** | Minimum Curvature |
| **Design:** | Actual | **Database:** | EDM 2003.21 Single User Db |

**Survey**

| Measured Depth (ft) | Inclination (°) | Azimuth (°) | Vertical Depth (ft) | +N/-S (ft) | +E/-W (ft) | Vertical Section (ft) | Dogleg Rate (°/100ft) | Build Rate (°/100ft) | Turn Rate (°/100ft) |
|---|---|---|---|---|---|---|---|---|---|
| 3,027.0 | 9.64 | 53.90 | 2,979.4 | 315.2 | 326.3 | 453.3 | 1.94 | 1.91 | 2.05 |
| 3,070.0 | 10.55 | 54.00 | 3,021.7 | 319.7 | 332.4 | 460.8 | 2.12 | 2.12 | 0.23 |
| 3,114.0 | 10.50 | 51.72 | 3,065.0 | 324.5 | 338.8 | 468.8 | 0.95 | -0.11 | -5.18 |
| 3,158.0 | 10.50 | 48.60 | 3,108.2 | 329.7 | 345.0 | 476.8 | 1.29 | 0.00 | -7.09 |
| 3,202.0 | 9.74 | 48.20 | 3,151.5 | 334.8 | 350.8 | 484.6 | 1.73 | -1.73 | -0.91 |
| 3,245.0 | 9.24 | 46.50 | 3,193.9 | 339.6 | 356.0 | 491.7 | 1.33 | -1.16 | -3.95 |
| 3,289.0 | 9.10 | 49.50 | 3,237.4 | 344.3 | 361.2 | 498.7 | 1.13 | -0.32 | 6.82 |
| 3,333.0 | 8.80 | 49.60 | 3,280.8 | 348.7 | 366.4 | 505.5 | 0.68 | -0.68 | 0.23 |
| 3,377.0 | 9.10 | 50.60 | 3,324.3 | 353.1 | 371.6 | 512.4 | 0.77 | 0.68 | 2.27 |
| 3,420.0 | 9.40 | 52.60 | 3,366.7 | 357.4 | 377.1 | 519.3 | 1.02 | 0.70 | 4.65 |
| 3,464.0 | 10.02 | 51.89 | 3,410.1 | 362.0 | 382.9 | 526.7 | 1.44 | 1.41 | -1.61 |
| 3,508.0 | 9.80 | 49.83 | 3,453.5 | 366.7 | 388.8 | 534.2 | 0.95 | -0.50 | -4.68 |
| 3,552.0 | 10.11 | 51.72 | 3,496.8 | 371.5 | 394.7 | 541.8 | 1.02 | 0.70 | 4.30 |
| 3,596.0 | 9.76 | 53.30 | 3,540.1 | 376.2 | 400.7 | 549.4 | 1.01 | -0.80 | 3.59 |
| 3,639.0 | 10.11 | 51.54 | 3,582.5 | 380.7 | 406.6 | 556.8 | 1.08 | 0.81 | -4.09 |
| 3,683.0 | 10.81 | 52.37 | 3,625.8 | 385.6 | 412.9 | 564.8 | 1.63 | 1.59 | 1.89 |
| 3,727.0 | 11.78 | 52.55 | 3,668.9 | 390.9 | 419.7 | 573.4 | 2.21 | 2.20 | 0.41 |
| 3,771.0 | 11.38 | 50.70 | 3,712.0 | 396.3 | 426.6 | 582.2 | 1.24 | -0.91 | -4.20 |
| 3,814.0 | 11.03 | 51.45 | 3,754.2 | 401.6 | 433.1 | 590.5 | 0.88 | -0.81 | 1.74 |
| 3,858.0 | 10.81 | 50.22 | 3,797.4 | 406.9 | 439.6 | 598.9 | 0.73 | -0.50 | -2.80 |
| 3,902.0 | 10.33 | 50.84 | 3,840.7 | 412.0 | 445.8 | 606.9 | 1.12 | -1.09 | 1.41 |
| 3,946.0 | 10.46 | 51.80 | 3,883.9 | 416.9 | 452.0 | 614.9 | 0.49 | 0.30 | 2.18 |
| 3,990.0 | 10.42 | 50.34 | 3,927.2 | 422.0 | 458.2 | 622.8 | 0.61 | -0.09 | -3.32 |
| 4,033.0 | 10.24 | 51.06 | 3,969.5 | 426.8 | 464.2 | 630.5 | 0.52 | -0.42 | 1.67 |
| 4,077.0 | 10.46 | 50.22 | 4,012.8 | 431.9 | 470.3 | 638.4 | 0.61 | 0.50 | -1.91 |
| 4,121.0 | 10.06 | 50.22 | 4,056.1 | 436.9 | 476.3 | 646.3 | 0.91 | -0.91 | 0.00 |
| 4,165.0 | 9.45 | 50.70 | 4,099.4 | 441.6 | 482.1 | 653.7 | 1.40 | -1.39 | 1.09 |
| 4,209.0 | 8.57 | 49.25 | 4,142.9 | 446.0 | 487.4 | 660.6 | 2.07 | -2.00 | -3.30 |
| 4,253.0 | 8.57 | 47.23 | 4,186.4 | 450.4 | 492.2 | 667.1 | 0.68 | 0.00 | -4.59 |
| 4,296.0 | 8.83 | 47.67 | 4,228.9 | 454.8 | 497.0 | 673.6 | 0.62 | 0.60 | 1.02 |
| 4,340.0 | 9.45 | 50.79 | 4,272.4 | 459.4 | 502.3 | 680.6 | 1.80 | 1.41 | 7.09 |
| 4,384.0 | 9.60 | 55.40 | 4,315.8 | 463.7 | 508.2 | 687.9 | 1.77 | 0.34 | 10.48 |
| 4,428.0 | 10.30 | 56.90 | 4,359.1 | 468.0 | 514.5 | 695.4 | 1.70 | 1.59 | 3.41 |
| 4,472.0 | 10.50 | 58.60 | 4,402.4 | 472.2 | 521.2 | 703.3 | 0.83 | 0.45 | 3.86 |
| 4,516.0 | 10.90 | 59.76 | 4,445.6 | 476.4 | 528.2 | 711.3 | 1.03 | 0.91 | 2.64 |
| 4,559.0 | 11.20 | 59.40 | 4,487.8 | 480.6 | 535.3 | 719.4 | 0.72 | 0.70 | -0.84 |
| 4,603.0 | 11.00 | 59.80 | 4,531.0 | 484.8 | 542.6 | 727.7 | 0.49 | -0.45 | 0.91 |
| 4,647.0 | 11.10 | 58.30 | 4,574.2 | 489.2 | 549.8 | 736.0 | 0.69 | 0.23 | -3.41 |
| 4,691.0 | 11.10 | 55.80 | 4,617.3 | 493.8 | 557.0 | 744.3 | 1.09 | 0.00 | -5.68 |
| 4,734.0 | 10.80 | 53.56 | 4,659.6 | 498.5 | 563.6 | 752.4 | 1.21 | -0.70 | -5.21 |
| 4,778.0 | 10.40 | 51.10 | 4,702.8 | 503.4 | 570.0 | 760.5 | 1.37 | -0.91 | -5.59 |
| 4,822.0 | 10.30 | 47.40 | 4,746.1 | 508.6 | 576.0 | 768.4 | 1.53 | -0.23 | -8.41 |
| 4,866.0 | 9.90 | 45.50 | 4,789.4 | 513.9 | 581.6 | 776.1 | 1.18 | -0.91 | -4.32 |
| 4,909.0 | 9.89 | 46.54 | 4,831.8 | 519.0 | 586.9 | 783.5 | 0.42 | -0.02 | 2.42 |
| 4,953.0 | 9.84 | 46.18 | 4,875.1 | 524.3 | 592.4 | 791.0 | 0.18 | -0.11 | -0.82 |
| 4,997.0 | 9.98 | 47.98 | 4,918.5 | 529.4 | 597.9 | 798.6 | 0.77 | 0.32 | 4.09 |
| 5,041.0 | 10.46 | 50.31 | 4,961.8 | 534.5 | 603.8 | 806.4 | 1.44 | 1.09 | 5.30 |
| 5,084.0 | 11.07 | 53.43 | 5,004.0 | 539.5 | 610.2 | 814.4 | 1.96 | 1.42 | 7.26 |
| 5,128.0 | 11.60 | 55.10 | 5,047.2 | 544.5 | 617.2 | 823.0 | 1.42 | 1.20 | 3.80 |
| 5,172.0 | 12.20 | 55.80 | 5,090.2 | 549.7 | 624.6 | 832.0 | 1.40 | 1.36 | 1.59 |
| 5,216.0 | 12.10 | 54.50 | 5,133.2 | 554.9 | 632.2 | 841.2 | 0.66 | -0.23 | -2.95 |
| 5,260.0 | 11.70 | 53.70 | 5,176.3 | 560.3 | 639.6 | 850.3 | 0.98 | -0.91 | -1.82 |
| 5,303.0 | 11.30 | 52.50 | 5,218.4 | 565.4 | 646.5 | 858.8 | 1.08 | -0.93 | -2.79 |
| 5,347.0 | 11.20 | 52.30 | 5,261.6 | 570.6 | 653.3 | 867.4 | 0.24 | -0.23 | -0.45 |

NEWFIELD

# Payzone Directional

Survey Report

| | | | |
|---|---|---|---|
| **Company:** | NEWFIELD EXPLORATION | **Local Co-ordinate Reference:** | Well Q-24-8-17 |
| **Project:** | USGS Myton SW (UT) | **TVD Reference:** | Q-24-8-17 @ 5038.0ft (NDSI SS #2) |
| **Site:** | SECTION 24 T8S R17E | **MD Reference:** | Q-24-8-17 @ 5038.0ft (NDSI SS #2) |
| **Well:** | Q-24-8-17 | **North Reference:** | True |
| **Wellbore:** | Wellbore #1 | **Survey Calculation Method:** | Minimum Curvature |
| **Design:** | Actual | **Database:** | EDM 2003.21 Single User Db |

**Survey**

| Measured Depth (ft) | Inclination (°) | Azimuth (°) | Vertical Depth (ft) | +N/-S (ft) | +E/-W (ft) | Vertical Section (ft) | Dogleg Rate (°/100ft) | Build Rate (°/100ft) | Turn Rate (°/100ft) |
|---|---|---|---|---|---|---|---|---|---|
| 5,391.0 | 11.00 | 51.80 | 5,304.7 | 575.9 | 659.9 | 875.8 | 0.50 | -0.45 | -1.14 |
| 5,435.0 | 11.70 | 49.65 | 5,347.9 | 581.3 | 666.6 | 884.5 | 1.86 | 1.59 | -4.89 |
| 5,478.0 | 12.20 | 45.90 | 5,390.0 | 587.3 | 673.2 | 893.4 | 2.15 | 1.16 | -8.72 |
| 5,522.0 | 11.50 | 43.40 | 5,433.0 | 593.7 | 679.6 | 902.4 | 1.97 | -1.59 | -5.68 |
| 5,566.0 | 11.20 | 42.30 | 5,476.2 | 600.1 | 685.5 | 911.0 | 0.84 | -0.68 | -2.50 |
| 5,587.9 | 11.30 | 42.45 | 5,497.7 | 603.3 | 688.3 | 915.3 | 0.47 | 0.45 | 0.69 |
| **Q-24-8-17 TGT** | | | | | | | | | |
| 5,610.0 | 11.40 | 42.60 | 5,519.3 | 606.5 | 691.3 | 919.6 | 0.47 | 0.45 | 0.68 |
| 5,654.0 | 10.90 | 43.50 | 5,562.5 | 612.7 | 697.1 | 928.0 | 1.20 | -1.14 | 2.05 |
| 5,697.0 | 10.60 | 41.30 | 5,604.7 | 618.6 | 702.5 | 936.0 | 1.18 | -0.70 | -5.12 |
| 5,741.0 | 10.30 | 41.20 | 5,648.0 | 624.6 | 707.8 | 943.9 | 0.68 | -0.68 | -0.23 |
| 5,785.0 | 10.20 | 41.52 | 5,691.3 | 630.5 | 712.9 | 951.7 | 0.26 | -0.23 | 0.73 |
| 5,829.0 | 10.59 | 44.38 | 5,734.6 | 636.3 | 718.3 | 959.6 | 1.47 | 0.89 | 6.50 |
| 5,872.0 | 10.00 | 44.30 | 5,776.9 | 641.8 | 723.7 | 967.3 | 1.37 | -1.37 | -0.19 |
| 5,916.0 | 9.10 | 47.45 | 5,820.3 | 646.9 | 728.9 | 974.6 | 2.36 | -2.05 | 7.16 |
| 5,960.0 | 9.70 | 48.42 | 5,863.7 | 651.7 | 734.3 | 981.8 | 1.41 | 1.36 | 2.20 |
| 6,004.0 | 9.76 | 51.41 | 5,907.0 | 656.5 | 740.0 | 989.2 | 1.16 | 0.14 | 6.80 |
| 6,048.0 | 10.20 | 53.43 | 5,950.4 | 661.1 | 746.0 | 996.8 | 1.28 | 1.00 | 4.59 |
| 6,092.0 | 10.20 | 54.13 | 5,993.7 | 665.7 | 752.3 | 1,004.5 | 0.28 | 0.00 | 1.59 |
| 6,135.0 | 10.59 | 53.12 | 6,036.0 | 670.3 | 758.5 | 1,012.3 | 1.00 | 0.91 | -2.35 |
| 6,179.0 | 10.99 | 53.47 | 6,079.2 | 675.2 | 765.1 | 1,020.5 | 0.92 | 0.91 | 0.80 |
| 6,223.0 | 10.90 | 52.55 | 6,122.4 | 680.3 | 771.8 | 1,028.8 | 0.45 | -0.20 | -2.09 |
| 6,267.0 | 10.40 | 50.35 | 6,165.6 | 685.3 | 778.2 | 1,036.9 | 1.46 | -1.14 | -5.00 |
| 6,311.0 | 10.50 | 48.20 | 6,208.9 | 690.5 | 784.2 | 1,044.9 | 0.91 | 0.23 | -4.89 |
| 6,355.0 | 9.70 | 48.68 | 6,252.2 | 695.7 | 790.0 | 1,052.6 | 1.83 | -1.82 | 1.09 |
| 6,398.0 | 8.80 | 51.00 | 6,294.7 | 700.1 | 795.3 | 1,059.5 | 2.27 | -2.09 | 5.40 |
| 6,442.0 | 8.40 | 49.50 | 6,338.2 | 704.3 | 800.3 | 1,066.1 | 1.04 | -0.91 | -3.41 |
| 6,486.0 | 7.60 | 50.18 | 6,381.7 | 708.3 | 805.0 | 1,072.2 | 1.83 | -1.82 | 1.55 |
| 6,573.0 | 6.60 | 52.90 | 6,468.1 | 715.0 | 813.4 | 1,083.0 | 1.21 | -1.15 | 3.13 |
| 6,598.0 | 6.42 | 51.60 | 6,492.9 | 716.7 | 815.7 | 1,085.8 | 0.93 | -0.72 | -5.20 |
| 6,652.0 | 6.42 | 51.60 | 6,546.6 | 720.5 | 820.4 | 1,091.8 | 0.00 | 0.00 | 0.00 |

Checked By: _____ Approved By: _____ Date: _____