

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

FORM 3  
 AMENDED REPORT

|                                                                                                                                                             |                   |                                                                                                                                                                            |                |                                                                                                                                                                         |              |                 |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|-----------------|
| <b>APPLICATION FOR PERMIT TO DRILL</b>                                                                                                                      |                   |                                                                                                                                                                            |                | <b>1. WELL NAME and NUMBER</b><br>Greater Monument Butte Q-34-8-16                                                                                                      |              |                 |
| <b>2. TYPE OF WORK</b><br>DRILL NEW WELL <input checked="" type="checkbox"/> REENTER P&A WELL <input type="checkbox"/> DEEPEN WELL <input type="checkbox"/> |                   |                                                                                                                                                                            |                | <b>3. FIELD OR WILDCAT</b><br>MONUMENT BUTTE                                                                                                                            |              |                 |
| <b>4. TYPE OF WELL</b><br>Oil Well <input type="checkbox"/> Coalbed Methane Well: NO <input type="checkbox"/>                                               |                   |                                                                                                                                                                            |                | <b>5. UNIT or COMMUNITIZATION AGREEMENT NAME</b><br>GMBU (GRRV)                                                                                                         |              |                 |
| <b>6. NAME OF OPERATOR</b><br>NEWFIELD PRODUCTION COMPANY                                                                                                   |                   |                                                                                                                                                                            |                | <b>7. OPERATOR PHONE</b><br>435 646-4825                                                                                                                                |              |                 |
| <b>8. ADDRESS OF OPERATOR</b><br>Rt 3 Box 3630 , Myton, UT, 84052                                                                                           |                   |                                                                                                                                                                            |                | <b>9. OPERATOR E-MAIL</b><br>mcrozier@newfield.com                                                                                                                      |              |                 |
| <b>10. MINERAL LEASE NUMBER (FEDERAL, INDIAN, OR STATE)</b><br>UTU-47171                                                                                    |                   | <b>11. MINERAL OWNERSHIP</b><br>FEDERAL <input checked="" type="checkbox"/> INDIAN <input type="checkbox"/> STATE <input type="checkbox"/> FEE <input type="checkbox"/>    |                | <b>12. SURFACE OWNERSHIP</b><br>FEDERAL <input checked="" type="checkbox"/> INDIAN <input type="checkbox"/> STATE <input type="checkbox"/> FEE <input type="checkbox"/> |              |                 |
| <b>13. NAME OF SURFACE OWNER (if box 12 = 'fee')</b>                                                                                                        |                   |                                                                                                                                                                            |                | <b>14. SURFACE OWNER PHONE (if box 12 = 'fee')</b>                                                                                                                      |              |                 |
| <b>15. ADDRESS OF SURFACE OWNER (if box 12 = 'fee')</b>                                                                                                     |                   |                                                                                                                                                                            |                | <b>16. SURFACE OWNER E-MAIL (if box 12 = 'fee')</b>                                                                                                                     |              |                 |
| <b>17. INDIAN ALLOTTEE OR TRIBE NAME (if box 12 = 'INDIAN')</b>                                                                                             |                   | <b>18. INTEND TO COMMINGLE PRODUCTION FROM MULTIPLE FORMATIONS</b><br>YES <input type="checkbox"/> (Submit Commingling Application) NO <input checked="" type="checkbox"/> |                | <b>19. SLANT</b><br>VERTICAL <input type="checkbox"/> DIRECTIONAL <input checked="" type="checkbox"/> HORIZONTAL <input type="checkbox"/>                               |              |                 |
| <b>20. LOCATION OF WELL</b>                                                                                                                                 | <b>FOOTAGES</b>   | <b>QTR-QTR</b>                                                                                                                                                             | <b>SECTION</b> | <b>TOWNSHIP</b>                                                                                                                                                         | <b>RANGE</b> | <b>MERIDIAN</b> |
| <b>LOCATION AT SURFACE</b>                                                                                                                                  | 713 FSL 1968 FWL  | SESW                                                                                                                                                                       | 34             | 8.0 S                                                                                                                                                                   | 16.0 E       | S               |
| <b>Top of Uppermost Producing Zone</b>                                                                                                                      | 1110 FSL 1556 FWL | SESW                                                                                                                                                                       | 34             | 8.0 S                                                                                                                                                                   | 16.0 E       | S               |
| <b>At Total Depth</b>                                                                                                                                       | 1320 FSL 1358 FWL | SESW                                                                                                                                                                       | 34             | 8.0 S                                                                                                                                                                   | 16.0 E       | S               |
| <b>21. COUNTY</b><br>DUCHESNE                                                                                                                               |                   | <b>22. DISTANCE TO NEAREST LEASE LINE (Feet)</b><br>1320                                                                                                                   |                | <b>23. NUMBER OF ACRES IN DRILLING UNIT</b><br>20                                                                                                                       |              |                 |
|                                                                                                                                                             |                   | <b>25. DISTANCE TO NEAREST WELL IN SAME POOL (Applied For Drilling or Completed)</b><br>1196                                                                               |                | <b>26. PROPOSED DEPTH</b><br>MD: 6486 TVD: 6486                                                                                                                         |              |                 |
| <b>27. ELEVATION - GROUND LEVEL</b><br>5656                                                                                                                 |                   | <b>28. BOND NUMBER</b><br>WYB000493                                                                                                                                        |                | <b>29. SOURCE OF DRILLING WATER / WATER RIGHTS APPROVAL NUMBER IF APPLICABLE</b><br>43-7478                                                                             |              |                 |

**ATTACHMENTS**

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

|                                                                                                        |                                                                            |
|--------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------|
| <input checked="" type="checkbox"/> WELL PLAT OR MAP PREPARED BY LICENSED SURVEYOR OR ENGINEER         | <input checked="" type="checkbox"/> COMPLETE DRILLING PLAN                 |
| <input type="checkbox"/> AFFIDAVIT OF STATUS OF SURFACE OWNER AGREEMENT (IF FEE SURFACE)               | <input type="checkbox"/> FORM 5. IF OPERATOR IS OTHER THAN THE LEASE OWNER |
| <input checked="" type="checkbox"/> DIRECTIONAL SURVEY PLAN (IF DIRECTIONALLY OR HORIZONTALLY DRILLED) | <input checked="" type="checkbox"/> TOPOGRAPHICAL MAP                      |

|                                              |                                                                                                                                |                                    |
|----------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------|------------------------------------|
| <b>NAME</b> Mandie Crozier                   | <b>TITLE</b> Regulatory Tech                                                                                                   | <b>PHONE</b> 435 646-4825          |
| <b>SIGNATURE</b>                             | <b>DATE</b> 03/12/2010                                                                                                         | <b>EMAIL</b> mcrozier@newfield.com |
| <b>API NUMBER ASSIGNED</b><br>43013502780000 | <b>APPROVAL</b><br><br><br>Permit Manager |                                    |

**Proposed Hole, Casing, and Cement**

| <b>String</b> | <b>Hole Size</b> | <b>Casing Size</b> | <b>Top (MD)</b> | <b>Bottom (MD)</b> |  |  |
|---------------|------------------|--------------------|-----------------|--------------------|--|--|
| Prod          | 7.875            | 5.5                | 0               | 6486               |  |  |
| <b>Pipe</b>   | <b>Grade</b>     | <b>Length</b>      | <b>Weight</b>   |                    |  |  |
|               | Grade J-55 LT&C  | 6486               | 15.5            |                    |  |  |
|               |                  |                    |                 |                    |  |  |

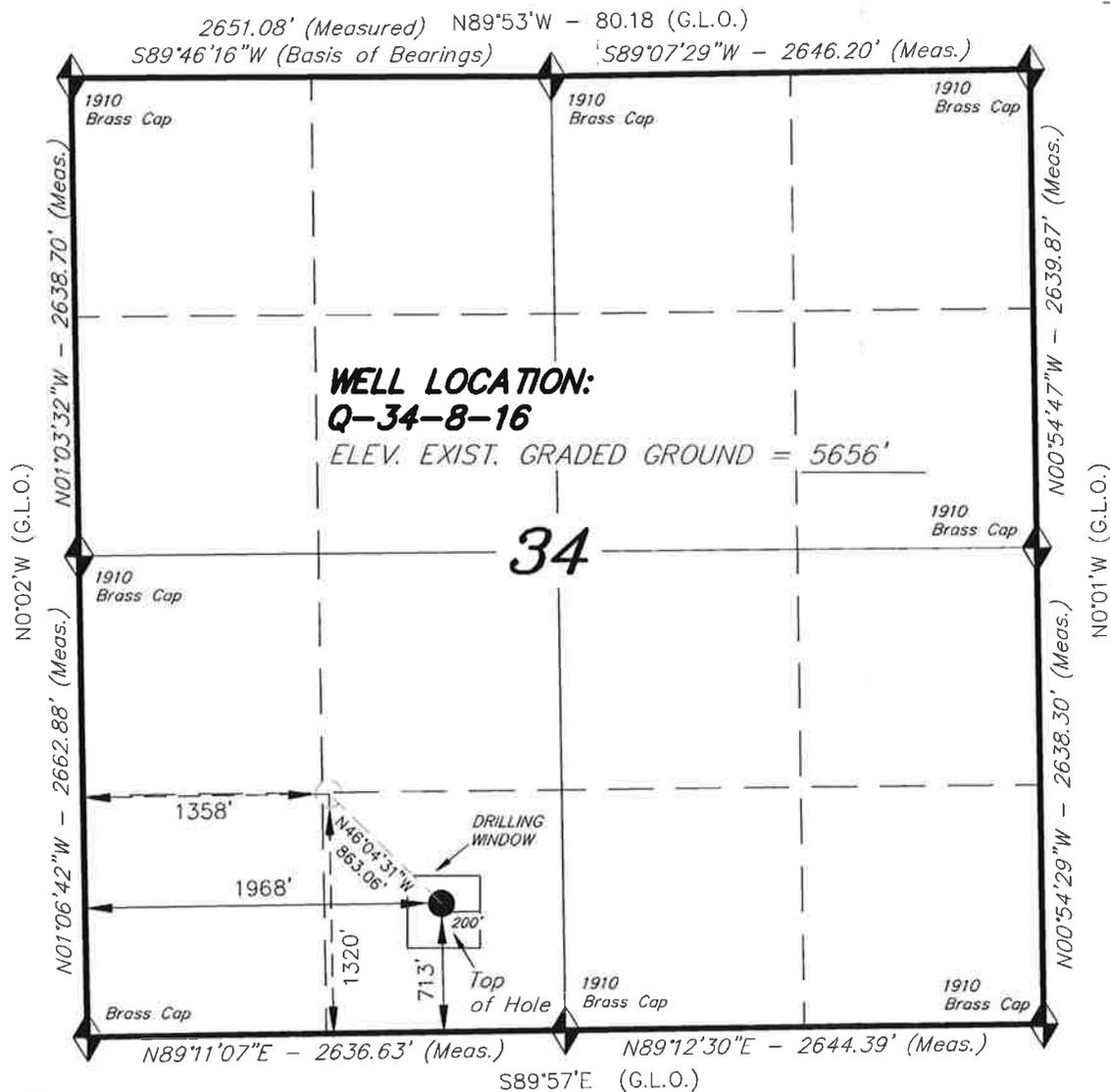
**Proposed Hole, Casing, and Cement**

| <b>String</b> | <b>Hole Size</b> | <b>Casing Size</b> | <b>Top (MD)</b> | <b>Bottom (MD)</b> |  |  |
|---------------|------------------|--------------------|-----------------|--------------------|--|--|
| Surf          | 12.25            | 8.625              | 0               | 300                |  |  |
| <b>Pipe</b>   | <b>Grade</b>     | <b>Length</b>      | <b>Weight</b>   |                    |  |  |
|               | Grade J-55 ST&C  | 300                | 24.0            |                    |  |  |
|               |                  |                    |                 |                    |  |  |

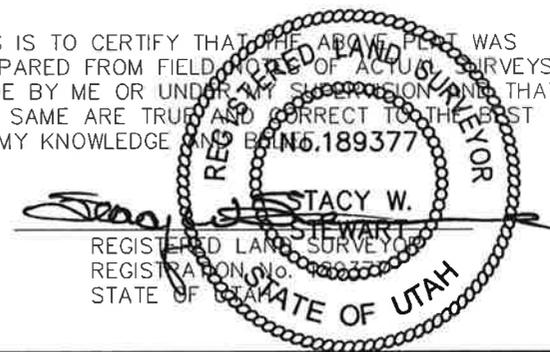
# T8S, R16E, S.L.B.&M.

## NEWFIELD PRODUCTION COMPANY

WELL LOCATION, Q-34-8-16, LOCATED AS SHOWN IN THE SE 1/4 SW 1/4 OF SECTION 34, T8S, R16E, S.L.B.&M. DUCHESNE COUNTY, UTAH.



THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.



◆ = 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-34-8-16**  
 (Surface Location) NAD 83  
 LATITUDE = 40° 04' 08.86"  
 LONGITUDE = 110° 06' 28.58"

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

|                             |                   |
|-----------------------------|-------------------|
| DATE SURVEYED:<br>08-11-09  | SURVEYED BY: T.H. |
| DATE DRAWN:<br>08-19-09     | DRAWN BY: M.W.    |
| REVISED:<br>01-15-10 - M.W. | SCALE: 1" = 1000' |



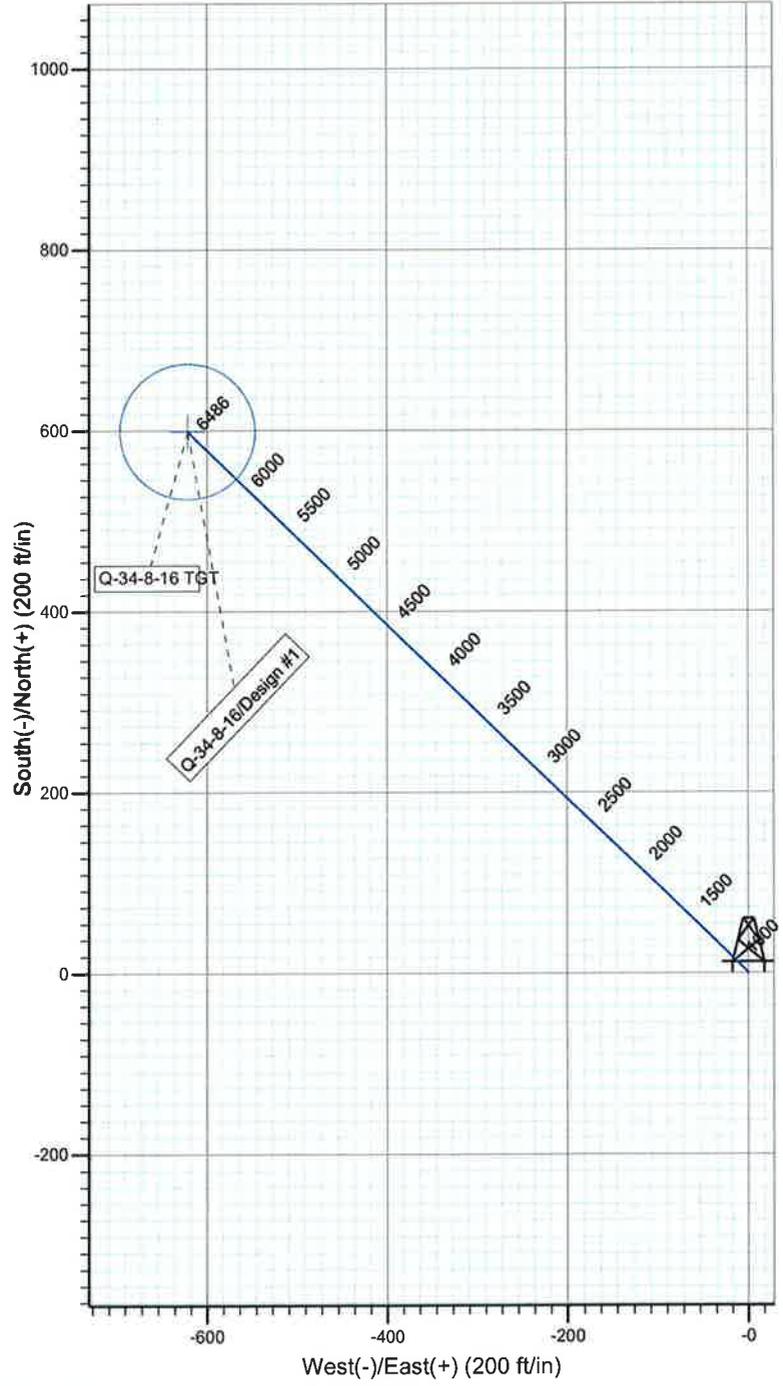
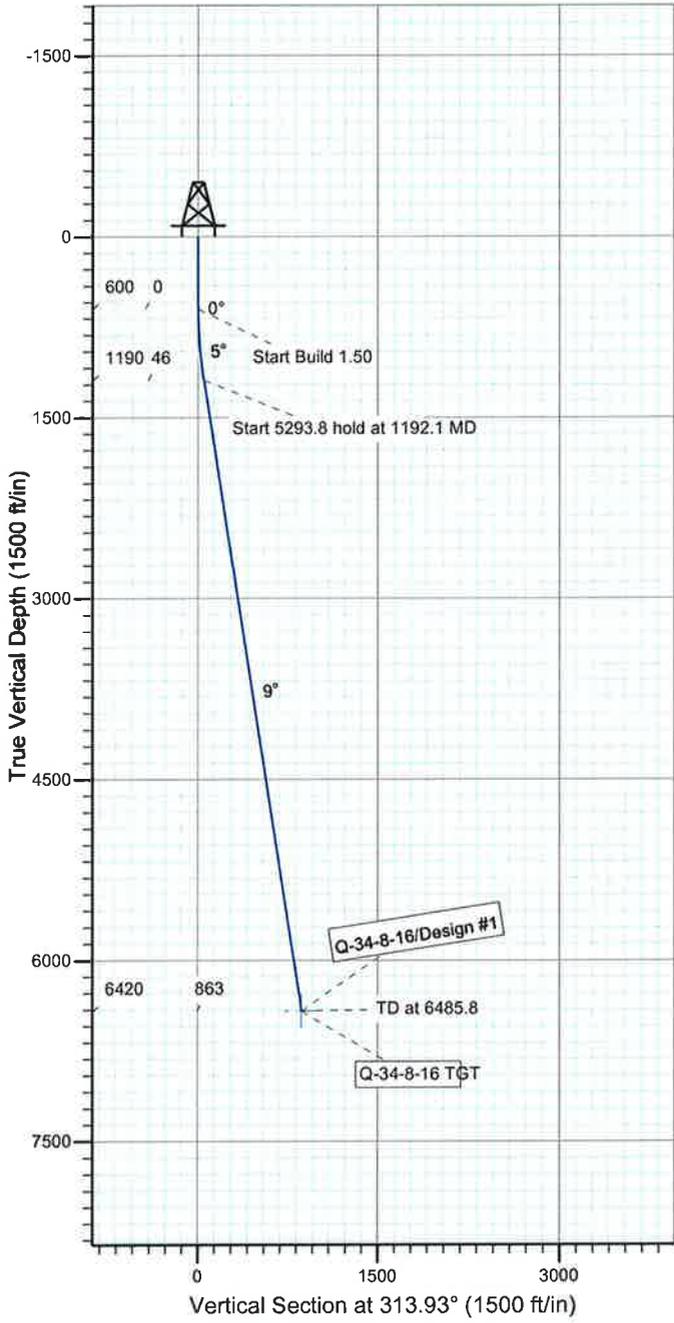
Project: USGS Myton SW (UT)  
 Site: SECTION 34 T8S, R16E  
 Well: Q-34-8-16  
 Wellbore: Wellbore #1  
 Design: Design #1



Azimuths to True North  
 Magnetic North: 11.51°

Magnetic Field  
 Strength: 52409.1snT  
 Dip Angle: 65.84°  
 Date: 2010/02/08  
 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-34-8-16 TGT | 6420.0 | 598.8 | -621.6 | 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   | 1192.1 | 8.88 | 313.93 | 1189.7 | 31.8  | -33.0  | 1.50 | 313.93 | 45.8  |               |
| 4   | 6485.8 | 8.88 | 313.93 | 6420.0 | 598.8 | -621.6 | 0.00 | 0.00   | 863.1 | Q-34-8-16 TGT |



**NEWFIELD**



# **NEWFIELD EXPLORATION**

**USGS Myton SW (UT)  
SECTION 34 T8S, R16E  
Q-34-8-16**

**Wellbore #1**

**Plan: Design #1**

## **Standard Planning Report**

**08 February, 2010**

**HATHAWAY HB BURNHAM**  
DIRECTIONAL & MWD SERVICES



## HATHAWAY BURNHAM

Planning Report



|                  |                            |                                     |                                    |
|------------------|----------------------------|-------------------------------------|------------------------------------|
| <b>Database:</b> | EDM 2003.21 Single User Db | <b>Local Co-ordinate Reference:</b> | Well Q-34-8-16                     |
| <b>Company:</b>  | NEWFIELD EXPLORATION       | <b>TVD Reference:</b>               | Q-34-8-16 @ 5668.0ft (CAPSTAR 328) |
| <b>Project:</b>  | USGS Myton SW (UT)         | <b>MD Reference:</b>                | Q-34-8-16 @ 5668.0ft (CAPSTAR 328) |
| <b>Site:</b>     | SECTION 34 T8S, R16E       | <b>North Reference:</b>             | True                               |
| <b>Well:</b>     | Q-34-8-16                  | <b>Survey Calculation Method:</b>   | Minimum Curvature                  |
| <b>Wellbore:</b> | Wellbore #1                |                                     |                                    |
| <b>Design:</b>   | Design #1                  |                                     |                                    |

|                                                             |                           |                      |                             |
|-------------------------------------------------------------|---------------------------|----------------------|-----------------------------|
| <b>Project</b> USGS Myton SW (UT), DUCHESNE COUNTY, UT, USA |                           |                      |                             |
| <b>Map System:</b>                                          | US State Plane 1983       | <b>System Datum:</b> | Mean Sea Level              |
| <b>Geo Datum:</b>                                           | North American Datum 1983 |                      |                             |
| <b>Map Zone:</b>                                            | Utah Central Zone         |                      | Using geodetic scale factor |

|                                                    |          |                          |                  |
|----------------------------------------------------|----------|--------------------------|------------------|
| <b>Site</b> SECTION 34 T8S, R16E, SEC 34 T8S, R16E |          |                          |                  |
| <b>Site Position:</b>                              |          | <b>Northing:</b>         | 7,199,000.00ft   |
| <b>From:</b>                                       | Lat/Long | <b>Easting:</b>          | 2,031,000.00ft   |
| <b>Position Uncertainty:</b>                       | 0.0 ft   | <b>Slot Radius:</b>      | "                |
|                                                    |          | <b>Latitude:</b>         | 40° 4' 29.106 N  |
|                                                    |          | <b>Longitude:</b>        | 110° 6' 14.985 W |
|                                                    |          | <b>Grid Convergence:</b> | 0.89 °           |

|                                                           |        |                            |                   |
|-----------------------------------------------------------|--------|----------------------------|-------------------|
| <b>Well</b> Q-34-8-16, SHL N 40 04 08.86, E -110 06 28.58 |        |                            |                   |
| <b>Well Position</b>                                      | +N/-S  | -2,048.8 ft                | <b>Northing:</b>  |
|                                                           | +E/-W  | -1,056.9 ft                | <b>Easting:</b>   |
|                                                           |        |                            | 7,196,935.21 ft   |
|                                                           |        |                            | <b>Latitude:</b>  |
|                                                           |        |                            | 40° 4' 8.860 N    |
|                                                           |        |                            | <b>Longitude:</b> |
|                                                           |        |                            | 110° 6' 28.580 W  |
| <b>Position Uncertainty</b>                               | 0.0 ft | <b>Wellhead Elevation:</b> | 5,668.0 ft        |
|                                                           |        | <b>Ground Level:</b>       | 5,656.0 ft        |

|                             |                   |                    |                        |                      |                            |
|-----------------------------|-------------------|--------------------|------------------------|----------------------|----------------------------|
| <b>Wellbore</b> Wellbore #1 |                   |                    |                        |                      |                            |
| <b>Magnetics</b>            | <b>Model Name</b> | <b>Sample Date</b> | <b>Declination (°)</b> | <b>Dip Angle (°)</b> | <b>Field Strength (nT)</b> |
|                             | IGRF2010          | 2010/02/08         | 11.51                  | 65.84                | 52,409                     |

|                          |                              |                   |                      |                      |  |
|--------------------------|------------------------------|-------------------|----------------------|----------------------|--|
| <b>Design</b> Design #1  |                              |                   |                      |                      |  |
| <b>Audit Notes:</b>      |                              |                   |                      |                      |  |
| <b>Version:</b>          | <b>Phase:</b>                | PROTOTYPE         | <b>Tie On Depth:</b> | 0.0                  |  |
| <b>Vertical Section:</b> | <b>Depth From (TVD) (ft)</b> | <b>+N/-S (ft)</b> | <b>+E/-W (ft)</b>    | <b>Direction (°)</b> |  |
|                          | 6,420.0                      | 0.0               | 0.0                  | 313.93               |  |

| <b>Plan Sections</b> |                 |             |                     |            |            |                       |                      |                     |         |               |
|----------------------|-----------------|-------------|---------------------|------------|------------|-----------------------|----------------------|---------------------|---------|---------------|
| 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    |               |
| 1,192.1              | 8.88            | 313.93      | 1,189.7             | 31.8       | -33.0      | 1.50                  | 1.50                 | 0.00                | 313.93  |               |
| 6,485.8              | 8.88            | 313.93      | 6,420.0             | 598.8      | -621.6     | 0.00                  | 0.00                 | 0.00                | 0.00    | Q-34-8-16 TGT |



# HATHAWAY BURNHAM

## Planning Report



**Database:** EDM 2003.21 Single User Db  
**Company:** NEWFIELD EXPLORATION  
**Project:** USGS Myton SW (UT)  
**Site:** SECTION 34 T8S, R16E  
**Well:** Q-34-8-16  
**Wellbore:** Wellbore #1  
**Design:** Design #1

**Local Co-ordinate Reference:** Well Q-34-8-16  
**TVD Reference:** Q-34-8-16 @ 5668.0ft (CAPSTAR 328)  
**MD Reference:** Q-34-8-16 @ 5668.0ft (CAPSTAR 328)  
**North Reference:** True  
**Survey Calculation Method:** Minimum Curvature

### 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            | 313.93      | 700.0               | 0.9        | -0.9       | 1.3                   | 1.50                  | 1.50                 | 0.00                |
| 800.0               | 3.00            | 313.93      | 799.9               | 3.6        | -3.8       | 5.2                   | 1.50                  | 1.50                 | 0.00                |
| 900.0               | 4.50            | 313.93      | 899.7               | 8.2        | -8.5       | 11.8                  | 1.50                  | 1.50                 | 0.00                |
| 1,000.0             | 6.00            | 313.93      | 999.3               | 14.5       | -15.1      | 20.9                  | 1.50                  | 1.50                 | 0.00                |
| 1,100.0             | 7.50            | 313.93      | 1,098.6             | 22.7       | -23.5      | 32.7                  | 1.50                  | 1.50                 | 0.00                |
| 1,192.1             | 8.88            | 313.93      | 1,189.7             | 31.8       | -33.0      | 45.8                  | 1.50                  | 1.50                 | 0.00                |
| 1,200.0             | 8.88            | 313.93      | 1,197.5             | 32.6       | -33.9      | 47.0                  | 0.00                  | 0.00                 | 0.00                |
| 1,300.0             | 8.88            | 313.93      | 1,296.3             | 43.3       | -45.0      | 62.5                  | 0.00                  | 0.00                 | 0.00                |
| 1,400.0             | 8.88            | 313.93      | 1,395.1             | 54.0       | -56.1      | 77.9                  | 0.00                  | 0.00                 | 0.00                |
| 1,500.0             | 8.88            | 313.93      | 1,493.9             | 64.8       | -67.2      | 93.3                  | 0.00                  | 0.00                 | 0.00                |
| 1,600.0             | 8.88            | 313.93      | 1,592.7             | 75.5       | -78.3      | 108.8                 | 0.00                  | 0.00                 | 0.00                |
| 1,700.0             | 8.88            | 313.93      | 1,691.5             | 86.2       | -89.5      | 124.2                 | 0.00                  | 0.00                 | 0.00                |
| 1,800.0             | 8.88            | 313.93      | 1,790.3             | 96.9       | -100.6     | 139.6                 | 0.00                  | 0.00                 | 0.00                |
| 1,900.0             | 8.88            | 313.93      | 1,889.1             | 107.6      | -111.7     | 155.1                 | 0.00                  | 0.00                 | 0.00                |
| 2,000.0             | 8.88            | 313.93      | 1,987.9             | 118.3      | -122.8     | 170.5                 | 0.00                  | 0.00                 | 0.00                |
| 2,100.0             | 8.88            | 313.93      | 2,086.7             | 129.0      | -133.9     | 186.0                 | 0.00                  | 0.00                 | 0.00                |
| 2,200.0             | 8.88            | 313.93      | 2,185.5             | 139.7      | -145.0     | 201.4                 | 0.00                  | 0.00                 | 0.00                |
| 2,300.0             | 8.88            | 313.93      | 2,284.3             | 150.4      | -156.2     | 216.8                 | 0.00                  | 0.00                 | 0.00                |
| 2,400.0             | 8.88            | 313.93      | 2,383.2             | 161.1      | -167.3     | 232.3                 | 0.00                  | 0.00                 | 0.00                |
| 2,500.0             | 8.88            | 313.93      | 2,482.0             | 171.9      | -178.4     | 247.7                 | 0.00                  | 0.00                 | 0.00                |
| 2,600.0             | 8.88            | 313.93      | 2,580.8             | 182.6      | -189.5     | 263.2                 | 0.00                  | 0.00                 | 0.00                |
| 2,700.0             | 8.88            | 313.93      | 2,679.6             | 193.3      | -200.6     | 278.6                 | 0.00                  | 0.00                 | 0.00                |
| 2,800.0             | 8.88            | 313.93      | 2,778.4             | 204.0      | -211.8     | 294.0                 | 0.00                  | 0.00                 | 0.00                |
| 2,900.0             | 8.88            | 313.93      | 2,877.2             | 214.7      | -222.9     | 309.5                 | 0.00                  | 0.00                 | 0.00                |
| 3,000.0             | 8.88            | 313.93      | 2,976.0             | 225.4      | -234.0     | 324.9                 | 0.00                  | 0.00                 | 0.00                |
| 3,100.0             | 8.88            | 313.93      | 3,074.8             | 236.1      | -245.1     | 340.3                 | 0.00                  | 0.00                 | 0.00                |
| 3,200.0             | 8.88            | 313.93      | 3,173.6             | 246.8      | -256.2     | 355.8                 | 0.00                  | 0.00                 | 0.00                |
| 3,300.0             | 8.88            | 313.93      | 3,272.4             | 257.5      | -267.3     | 371.2                 | 0.00                  | 0.00                 | 0.00                |
| 3,400.0             | 8.88            | 313.93      | 3,371.2             | 268.3      | -278.5     | 386.7                 | 0.00                  | 0.00                 | 0.00                |
| 3,500.0             | 8.88            | 313.93      | 3,470.0             | 279.0      | -289.6     | 402.1                 | 0.00                  | 0.00                 | 0.00                |
| 3,600.0             | 8.88            | 313.93      | 3,568.8             | 289.7      | -300.7     | 417.5                 | 0.00                  | 0.00                 | 0.00                |
| 3,700.0             | 8.88            | 313.93      | 3,667.6             | 300.4      | -311.8     | 433.0                 | 0.00                  | 0.00                 | 0.00                |
| 3,800.0             | 8.88            | 313.93      | 3,766.4             | 311.1      | -322.9     | 448.4                 | 0.00                  | 0.00                 | 0.00                |
| 3,900.0             | 8.88            | 313.93      | 3,865.2             | 321.8      | -334.1     | 463.9                 | 0.00                  | 0.00                 | 0.00                |
| 4,000.0             | 8.88            | 313.93      | 3,964.0             | 332.5      | -345.2     | 479.3                 | 0.00                  | 0.00                 | 0.00                |
| 4,100.0             | 8.88            | 313.93      | 4,062.8             | 343.2      | -356.3     | 494.7                 | 0.00                  | 0.00                 | 0.00                |
| 4,200.0             | 8.88            | 313.93      | 4,161.6             | 353.9      | -367.4     | 510.2                 | 0.00                  | 0.00                 | 0.00                |
| 4,300.0             | 8.88            | 313.93      | 4,260.4             | 364.7      | -378.5     | 525.6                 | 0.00                  | 0.00                 | 0.00                |
| 4,400.0             | 8.88            | 313.93      | 4,359.2             | 375.4      | -389.7     | 541.0                 | 0.00                  | 0.00                 | 0.00                |
| 4,500.0             | 8.88            | 313.93      | 4,458.0             | 386.1      | -400.8     | 556.5                 | 0.00                  | 0.00                 | 0.00                |
| 4,600.0             | 8.88            | 313.93      | 4,556.8             | 396.8      | -411.9     | 571.9                 | 0.00                  | 0.00                 | 0.00                |
| 4,700.0             | 8.88            | 313.93      | 4,655.6             | 407.5      | -423.0     | 587.4                 | 0.00                  | 0.00                 | 0.00                |
| 4,800.0             | 8.88            | 313.93      | 4,754.4             | 418.2      | -434.1     | 602.8                 | 0.00                  | 0.00                 | 0.00                |
| 4,900.0             | 8.88            | 313.93      | 4,853.2             | 428.9      | -445.2     | 618.2                 | 0.00                  | 0.00                 | 0.00                |
| 5,000.0             | 8.88            | 313.93      | 4,952.0             | 439.6      | -456.4     | 633.7                 | 0.00                  | 0.00                 | 0.00                |
| 5,100.0             | 8.88            | 313.93      | 5,050.8             | 450.3      | -467.5     | 649.1                 | 0.00                  | 0.00                 | 0.00                |
| 5,200.0             | 8.88            | 313.93      | 5,149.6             | 461.1      | -478.6     | 664.5                 | 0.00                  | 0.00                 | 0.00                |



**HATHAWAY BURNHAM**  
Planning Report



|                  |                            |                                     |                                    |
|------------------|----------------------------|-------------------------------------|------------------------------------|
| <b>Database:</b> | EDM 2003.21 Single User Db | <b>Local Co-ordinate Reference:</b> | Well Q-34-8-16                     |
| <b>Company:</b>  | NEWFIELD EXPLORATION       | <b>TVD Reference:</b>               | Q-34-8-16 @ 5668.0ft (CAPSTAR 328) |
| <b>Project:</b>  | USGS Myton SW (UT)         | <b>MD Reference:</b>                | Q-34-8-16 @ 5668.0ft (CAPSTAR 328) |
| <b>Site:</b>     | SECTION 34 T8S, R16E       | <b>North Reference:</b>             | True                               |
| <b>Well:</b>     | Q-34-8-16                  | <b>Survey Calculation Method:</b>   | Minimum Curvature                  |
| <b>Wellbore:</b> | Wellbore #1                |                                     |                                    |
| <b>Design:</b>   | 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             | 8.88            | 313.93      | 5,248.4             | 471.8      | -489.7     | 680.0                 | 0.00                  | 0.00                 | 0.00                |
| 5,400.0             | 8.88            | 313.93      | 5,347.2             | 482.5      | -500.8     | 695.4                 | 0.00                  | 0.00                 | 0.00                |
| 5,500.0             | 8.88            | 313.93      | 5,446.0             | 493.2      | -512.0     | 710.9                 | 0.00                  | 0.00                 | 0.00                |
| 5,600.0             | 8.88            | 313.93      | 5,544.8             | 503.9      | -523.1     | 726.3                 | 0.00                  | 0.00                 | 0.00                |
| 5,700.0             | 8.88            | 313.93      | 5,643.6             | 514.6      | -534.2     | 741.7                 | 0.00                  | 0.00                 | 0.00                |
| 5,800.0             | 8.88            | 313.93      | 5,742.4             | 525.3      | -545.3     | 757.2                 | 0.00                  | 0.00                 | 0.00                |
| 5,900.0             | 8.88            | 313.93      | 5,841.2             | 536.0      | -556.4     | 772.6                 | 0.00                  | 0.00                 | 0.00                |
| 6,000.0             | 8.88            | 313.93      | 5,940.0             | 546.7      | -567.5     | 788.1                 | 0.00                  | 0.00                 | 0.00                |
| 6,100.0             | 8.88            | 313.93      | 6,038.8             | 557.4      | -578.7     | 803.5                 | 0.00                  | 0.00                 | 0.00                |
| 6,200.0             | 8.88            | 313.93      | 6,137.6             | 568.2      | -589.8     | 818.9                 | 0.00                  | 0.00                 | 0.00                |
| 6,300.0             | 8.88            | 313.93      | 6,236.4             | 578.9      | -600.9     | 834.4                 | 0.00                  | 0.00                 | 0.00                |
| 6,400.0             | 8.88            | 313.93      | 6,335.2             | 589.6      | -612.0     | 849.8                 | 0.00                  | 0.00                 | 0.00                |
| 6,485.8             | 8.88            | 313.93      | 6,420.0             | 598.8      | -621.6     | 863.1                 | 0.00                  | 0.00                 | 0.00                |

**Q-34-8-16 TGT**

**Targets**

| Target Name            | Dip Angle (°) | Dip Dir. (°) | TVD (ft) | +N/-S (ft) | +E/-W (ft) | Northing (ft) | Easting (ft) | Latitude        | Longitude        |
|------------------------|---------------|--------------|----------|------------|------------|---------------|--------------|-----------------|------------------|
| Q-34-8-16 TGT          | 0.00          | 0.00         | 6,420.0  | 598.8      | -621.6     | 7,197,524.18  | 2,029,344.49 | 40° 4' 14.777 N | 110° 6' 36.575 W |
| - hit/miss target      |               |              |          |            |            |               |              |                 |                  |
| - Shape                |               |              |          |            |            |               |              |                 |                  |
| - plan hits target     |               |              |          |            |            |               |              |                 |                  |
| - Circle (radius 75.0) |               |              |          |            |            |               |              |                 |                  |

NEWFIELD PRODUCTION COMPANY  
GREATER MONUMENT BUTTE Q-34-8-16  
AT SURFACE: SE/SW SECTION 34, T8S, R16E  
DUCHESNE 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 – 1730' |
| Green River | 1730'     |
| Wasatch     | 6486'     |

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

Green River Formation 1730' – 6486' -- Oil

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 <sub>3</sub> ) (mg/l) |
| Dissolved Bicarbonate (NaHCO <sub>3</sub> ) (mg/l) | Dissolved Chloride (Cl) (mg/l)                |
| Dissolved Sulfate (SO <sub>4</sub> ) (mg/l)        | Dissolved Total Solids (TDS) (mg/l)           |

4. **PROPOSED CASING PROGRAM**

a. **Casing Design: Greater Monument Butte Q-34-8-16**

| Size                     | Interval |        | Weight | Grade | Coupling | Design Factors |                |                  |
|--------------------------|----------|--------|--------|-------|----------|----------------|----------------|------------------|
|                          | Top      | Bottom |        |       |          | Burst          | Collapse       | Tension          |
| Surface casing<br>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<br>5-1/2"    | 0'       | 6,486' | 15.5   | J-55  | LTC      | 4,810<br>2.33  | 4,040<br>1.96  | 217,000<br>2.16  |

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: Greater Monument Butte Q-34-8-16**

| Job                 | Fill   | Description                      | Sacks           | OH Excess* | Weight (ppg) | Yield (ft <sup>3</sup> /sk) |
|---------------------|--------|----------------------------------|-----------------|------------|--------------|-----------------------------|
|                     |        |                                  | ft <sup>3</sup> |            |              |                             |
| Surface casing      | 300'   | Class G w/ 2% CaCl               | 138<br>161      | 30%        | 15.8         | 1.17                        |
| Prod casing<br>Lead | 4,486' | Prem Lite II w/ 10% gel + 3% KCl | 310<br>1010     | 30%        | 11.0         | 3.26                        |
| Prod casing<br>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:**

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 ±350 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 ±350 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 PBDT 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

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 2010, and take approximately seven (7) days from spud to rig release.

# 2-M SYSTEM

Blowout Prevention Equipment Systems

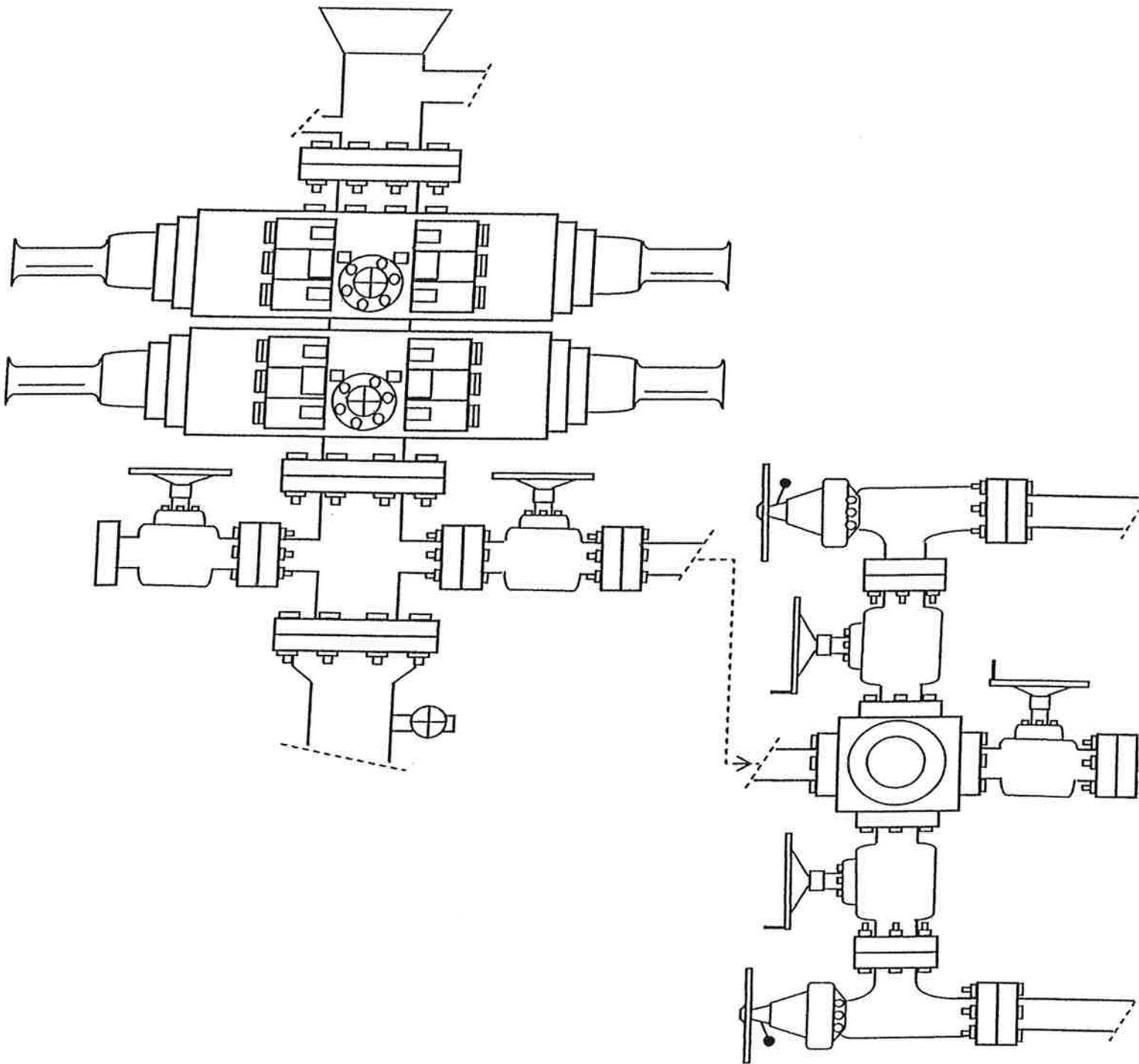
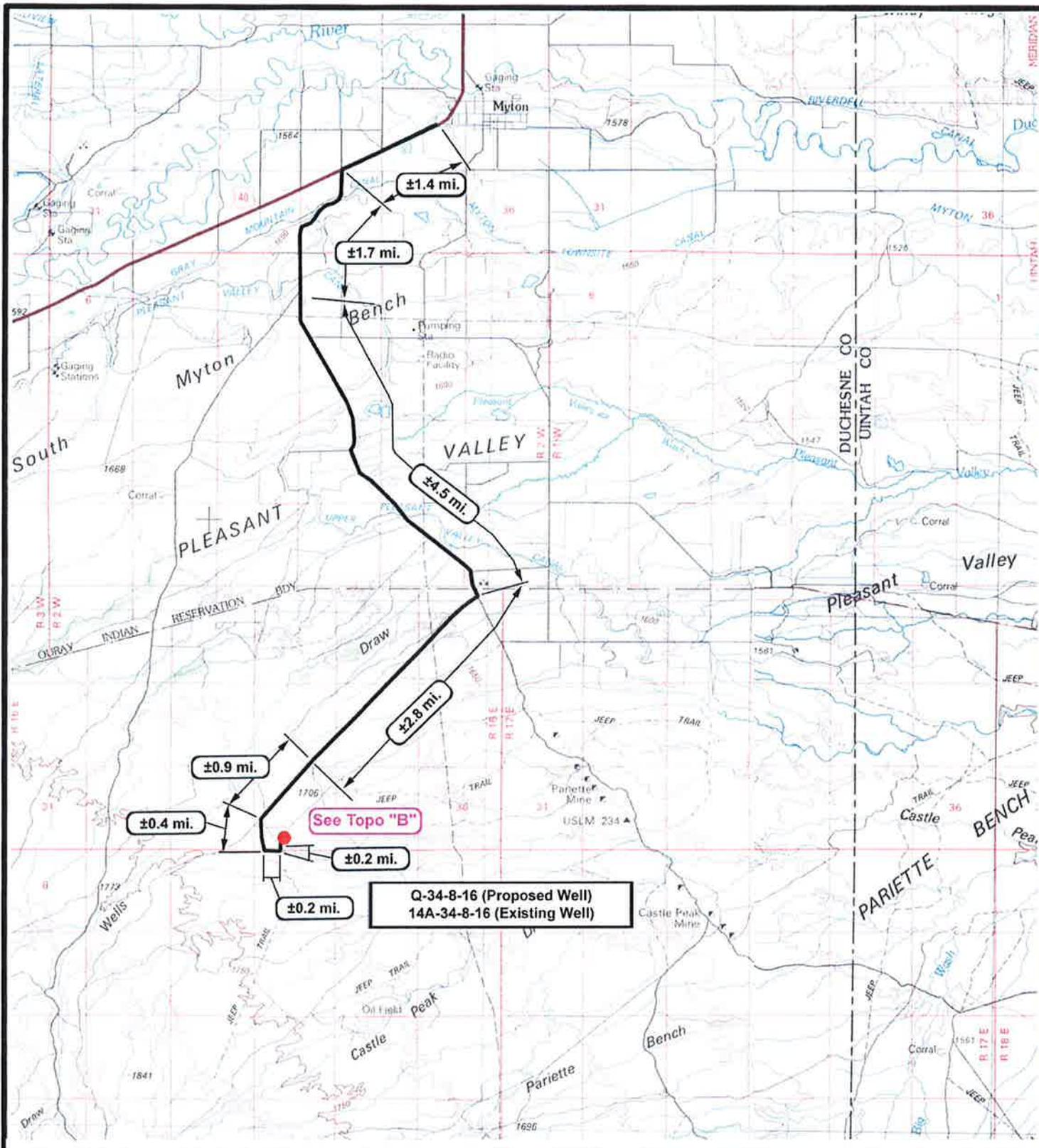


EXHIBIT C



**Q-34-8-16 (Proposed Well)**  
**14A-34-8-16 (Existing Well)**

See Topo "B"

**NEWFIELD**  
 Exploration Company

**Q-34-8-16 (Proposed Well)**  
**14A-34-8-16 (Existing Well)**  
 Pad Location: SE SW SEC. 34, T8S, R16E, S.L.B.&M.



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

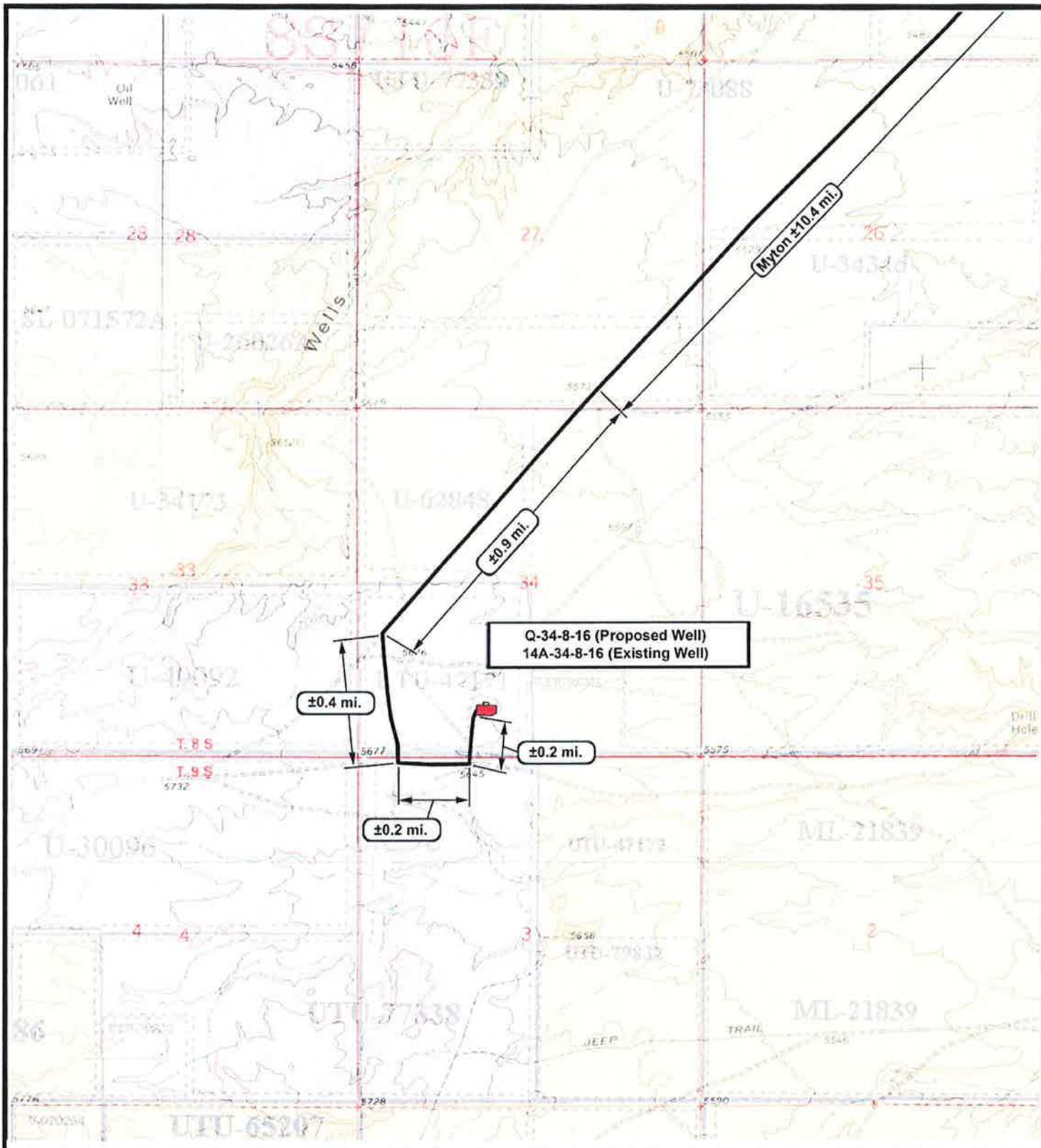
SCALE: 1 = 100,000  
 DRAWN BY: mww  
 DATE: 01-15-2010

**Legend**

Existing Road

**TOPOGRAPHIC MAP**

**"A"**



 **NEWFIELD**  
Exploration Company

**Q-34-8-16 (Proposed Well)**  
**14A-34-8-16 (Existing Well)**  
Pad Location: **SESW SEC. 34, T8S, R16E, S.L.B.&M.**



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

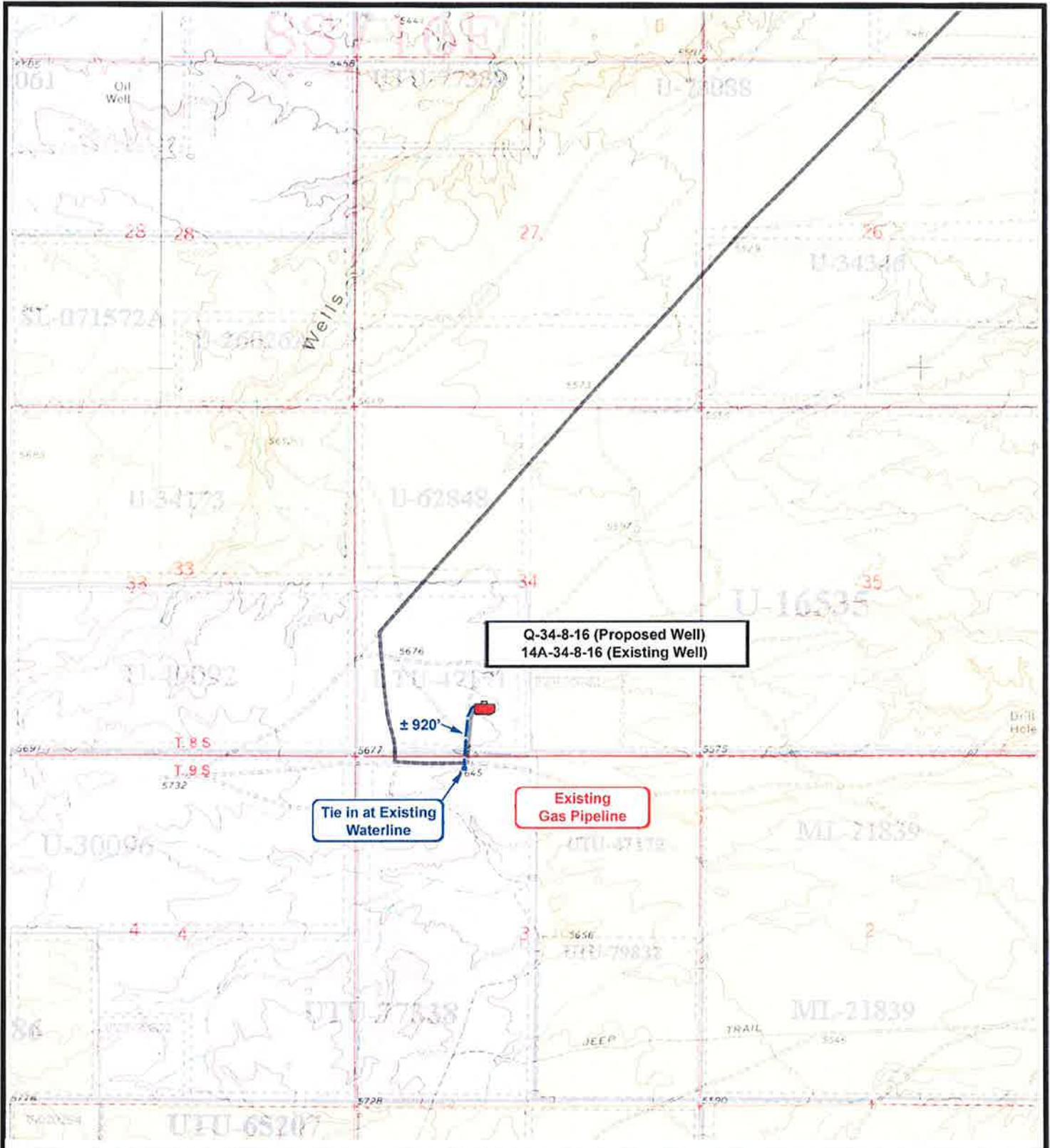
**SCALE: 1" = 2,000'**  
**DRAWN BY: mw**  
**DATE: 01-15-2010**

**Legend**

 Existing Road

**TOPOGRAPHIC MAP**

**"B"**



**Q-34-8-16 (Proposed Well)**  
**14A-34-8-16 (Existing Well)**

**Tie in at Existing Waterline**

**Existing Gas Pipeline**

± 920'

**NEWFIELD**  
Exploration Company

**Q-34-8-16 (Proposed Well)**  
**14A-34-8-16 (Existing Well)**  
 Pad Location: **SESW SEC. 34, T8S, R16E, S.L.B.&M.**



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

**SCALE: 1" = 2,000'**  
**DRAWN BY: mw**  
**DATE: 01-15-2010**

**Legend**

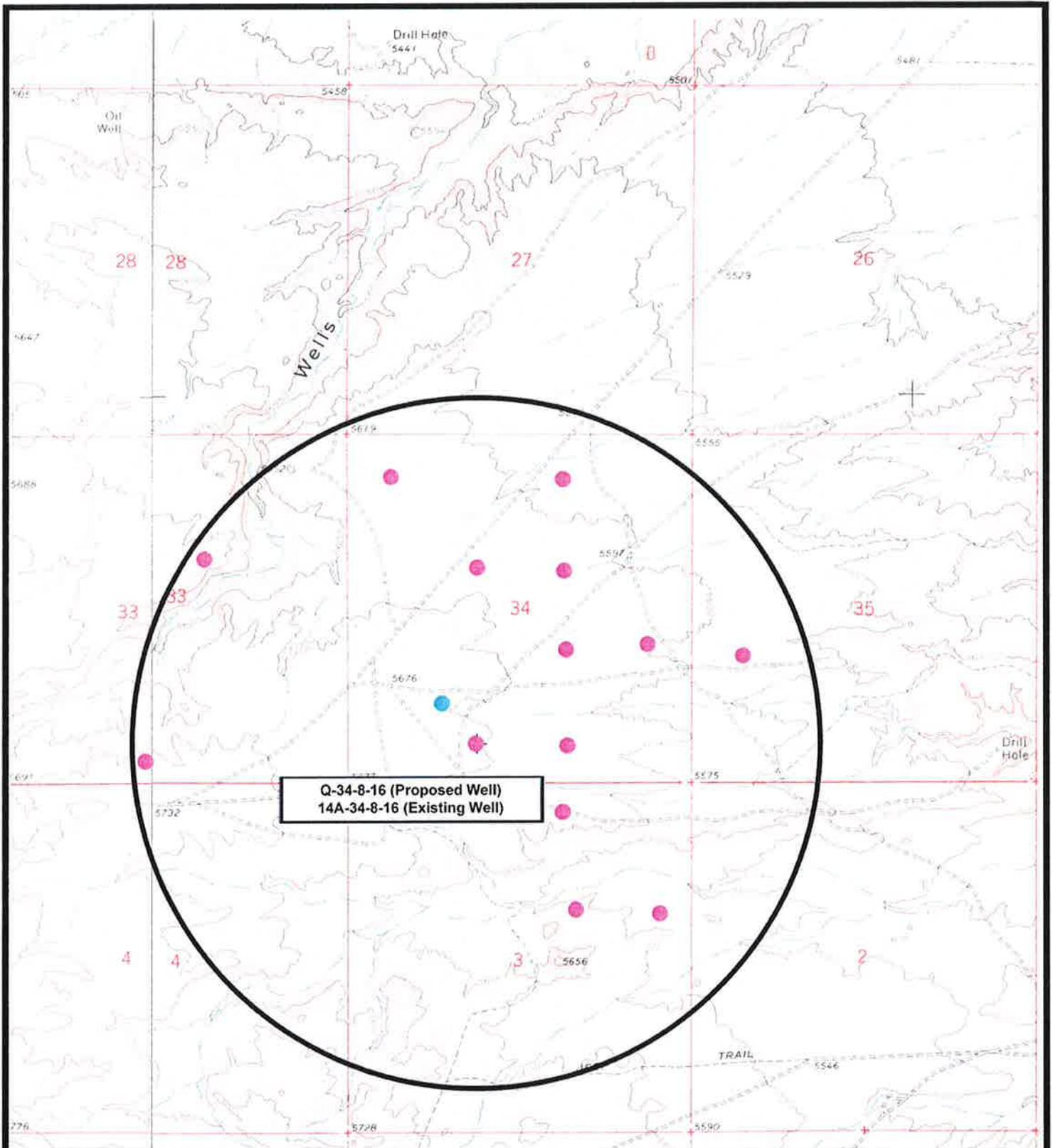
- Roads
- Proposed Water Line

**TOPOGRAPHIC MAP**

**"C"**







 **NEWFIELD**  
Exploration Company

**Q-34-8-16 (Proposed Well)**  
**14A-34-8-16 (Existing Well)**  
Pad Location: SESW SEC. 34, T8S, R16E, S.L.B.&M.



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

SCALE: 1" = 2000'  
DRAWN BY: mw  
DATE: 01-15-2010

**Legend**

-  Pad Location
-  Bottom Hole Location
-  One-Mile Radius

**Exhibit "B"**

**NEWFIELD PRODUCTION COMPANY  
GREATER MONUMENT BUTTE Q-34-8-16  
AT SURFACE: SE/SW SECTION 34, T8S, R16E  
DUCHESNE COUNTY, UTAH**

**ONSHORE ORDER NO. 1**

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

**1. EXISTING ROADS**

See attached Topographic Map "A"

To reach Newfield Production Company well location site Greater Monument Butte Q-34-8-16 located in the SE 1/4 SW 1/4 Section 34, T8S, R16E, Duchesne 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 southeasterly - 6.2 miles ± to its junction with an existing dirt road to the southwest; proceed southwesterly - 3.7 miles ± to its junction with an existing road to the south; proceed southerly - 0.4 miles ± to its junction with an existing road to the east; proceed easterly - 0.2 miles ± to its junction with an existing road to the north; proceed northerly - 0.2 miles ± to its junction with the beginning of the access road to the existing 14A-34-8-16 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 off of the existing 14A-34-8-16 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.

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

There are no existing facilities that will be used by this 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 : 43-7478

Neil Moon Pond  
Water Right: 43-11787

Maurice Harvey Pond  
Water Right: 47-1358

Newfield Collector Well  
Water Right: 41-3530 (A30414DV, contracted with the Duchesne County Conservancy District).

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

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.

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

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

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**

Newfield Production Company is responsible for informing all persons in the area who are associated with this project that they will be subject to prosecution for knowingly disturbing historic or archaeological sites, or for collecting artifacts. If historic or archaeological materials are uncovered during construction, Newfield is to immediately stop work that might further disturb such materials and contact the Authorized Officer.

- a) Newfield Production will control noxious weeds along rights-of-way for roads, pipelines, well sites or other applicable facilities. On State administered land it is required that a Pesticide Use Proposal shall be submitted and given approval prior to the application of herbicides or other possible hazardous chemicals.
- b) Drilling rigs and/or equipment used during drilling operations on this well site will not be stacked or stored on State Lands after the conclusion of drilling operations or at any other time without State authorization. However, if State authorization is obtained, it is only a temporary measure to allow time to make arrangements for permanent storage on commercial facilities.

The Archaeological Resource Survey and Paleontological Resource Survey for this area are attached. MOAC Report #09-165, 10/21/09. Paleontological Resource Survey prepared by, Wade E. Miller, 10/1/09. See attached report cover pages, Exhibit "D".

Newfield Production Company requests 920' of disturbed area be granted in Lease UTU-47171 to allow for construction of the proposed water lines. It is proposed that the disturbed area will temporarily be 50' wide to allow for construction of a buried 3" steel water injection line and a buried 3" poly water return line and 30' wide upon completion of the proposed water lines. **Refer to Topographic Map "C."** For a ROW plan of development, please refer to the Monument Butte Field SOP. In the event that the proposed well is converted to a water injection well, a separate injection permit will be applied for through the proper agencies.

**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.

**Hazardous Material Declaration**

Newfield Production Company guarantees that during the drilling and completion of the Greater Monument Butte Q-34-8-16, 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 Greater Monument Butte Q-34-8-16, Newfield will use, produce, 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.

The State office shall be notified upon site completion prior to moving on the drilling rig.

13. **LESSEE'S OR OPERATOR'S REPRESENTATIVE 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-34-8-16, Duchesne County, Utah and is responsible under the terms and conditions of the lease for the operations conducted upon the leased lands. Bond coverage is provided by, 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.

3/11/10  
Date

  
Mandie Crozier  
Regulatory Specialist  
Newfield Production Company

# NEWFIELD PRODUCTION COMPANY

**Q-34-8-16 (Proposed Well)**

**14A-34-8-16 (Existing Well)**

Pad Location: *SESW Section 34, T8S, R16E, S.L.B.&M.*



*N46°04'31"W - 863.06'*  
(To Bottom Hole)

Future Pit

**TOP HOLE FOOTAGES**

Q-34-8-16 (PROPOSED)  
713' FSL & 1968' FWL

**BOTTOM HOLE FOOTAGES**

Q-34-8-16 (PROPOSED)  
1320' FSL & 1358' FWL

Existing Tanks

Treater

Pump Jack

*S89°13'25"W*

15'

15'

Q-34-8-16 (PROPOSED)

14A-34-8-16 (EXISTING)

Existing Access

Edge of Existing Pad

Existing Stock Pile

**Note:**  
Bearings are based on  
GLO Information.

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

| WELL        | LATITUDE       | LONGITUDE       |
|-------------|----------------|-----------------|
| Q-34-8-16   | 40° 04' 08.86" | 110° 06' 28.58" |
| 14A-34-8-16 | 40° 04' 09.01" | 110° 06' 28.39" |

**RELATIVE COORDINATES**  
From top hole to bottom hole

| WELL      | NORTH | EAST  |
|-----------|-------|-------|
| Q-34-8-16 | 599'  | -622' |

|                   |                          |
|-------------------|--------------------------|
| SURVEYED BY: T.H. | DATE SURVEYED: 08-11-09  |
| DRAWN BY: M.W.    | DATE DRAWN: 08-19-09     |
| SCALE: 1" = 50'   | REVISED: M.W. - 01-15-10 |

**Tri State**  
Land Surveying, Inc.  
180 NORTH VERNAL AVE. VERNAL, UTAH 84078

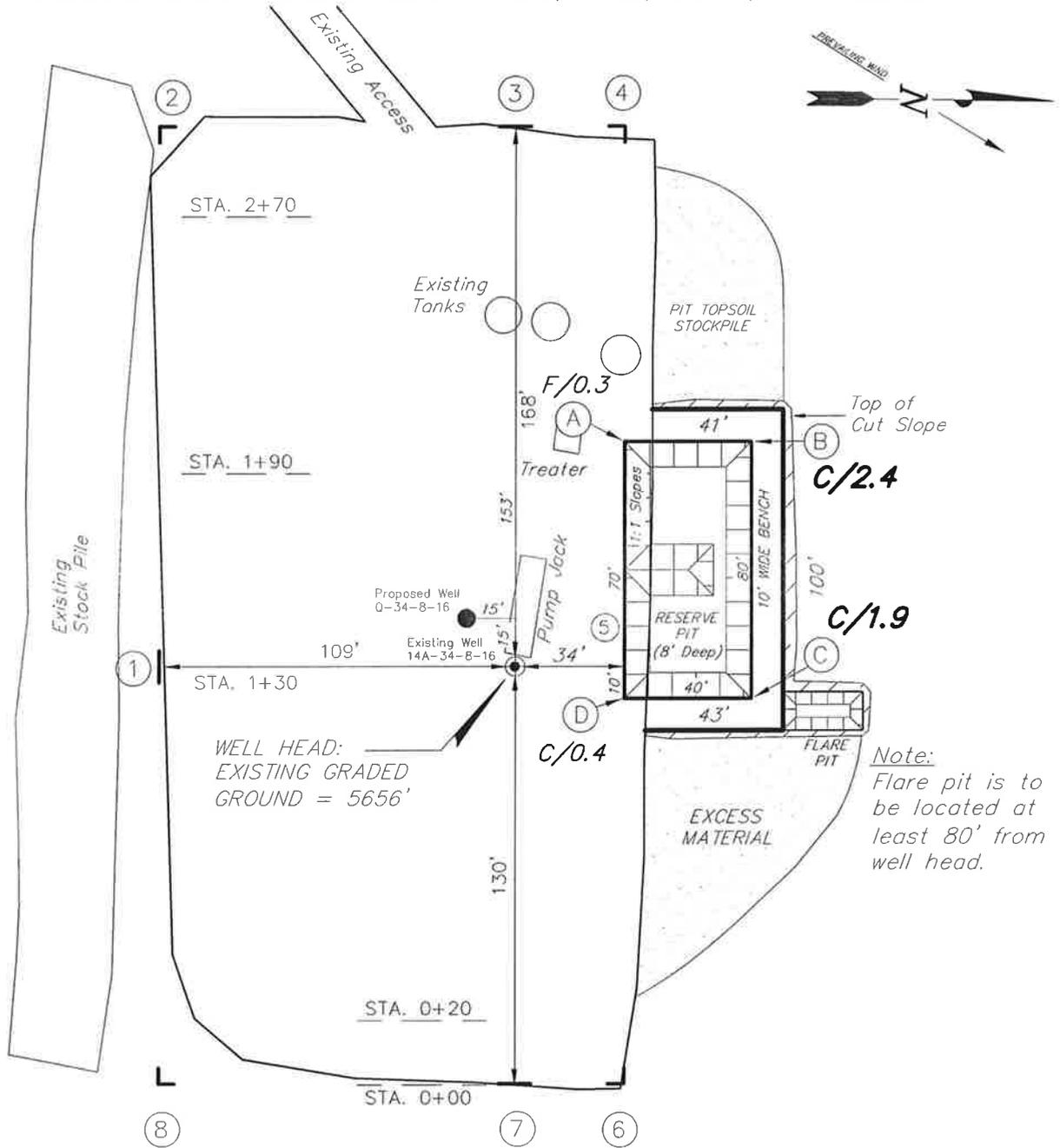
APIWellNo:43013502780000

# NEWFIELD PRODUCTION COMPANY

Q-34-8-16 (Proposed Well)

14A-34-8-16 (Existing Well)

Pad Location: SESW Section 34, T8S, R16E, S.L.B.&M.



|                   |                          |
|-------------------|--------------------------|
| SURVEYED BY: T.H. | DATE SURVEYED: 8-11-09   |
| DRAWN BY: M.W.    | DATE DRAWN: 8-19-09      |
| SCALE: 1" = 50'   | REVISED: M.W. - 01-15-10 |

(435) 781-2501

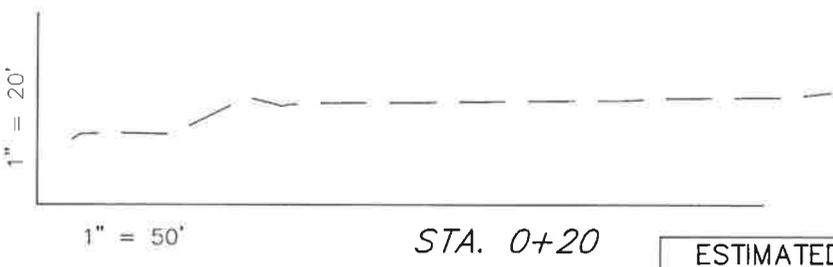
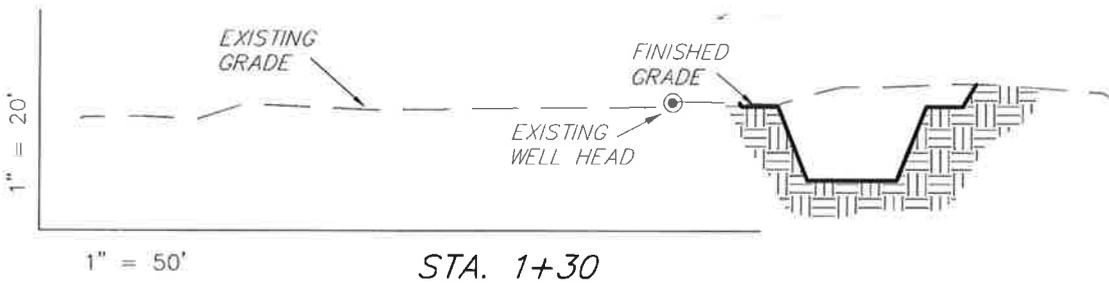
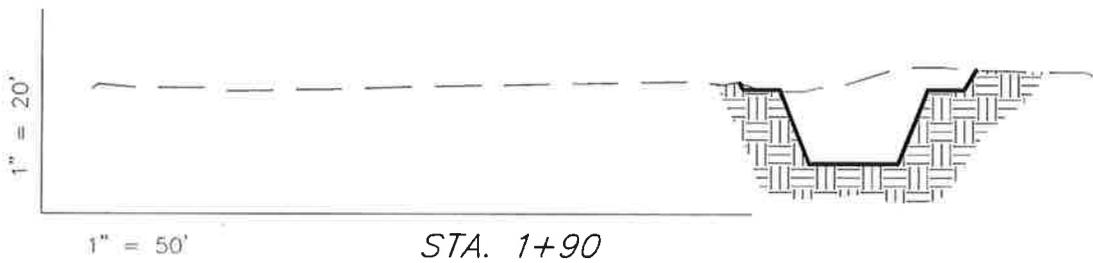
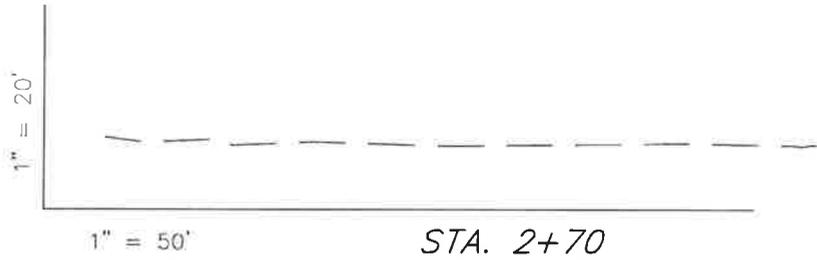
**Tri State**  
Land Surveying, Inc.

180 NORTH VERNAL AVE. VERNAL, UTAH 84078

# NEWFIELD PRODUCTION COMPANY

## CROSS SECTIONS

Q-34-8-16 (Proposed Well)  
 14A-34-8-16 (Existing Well)



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

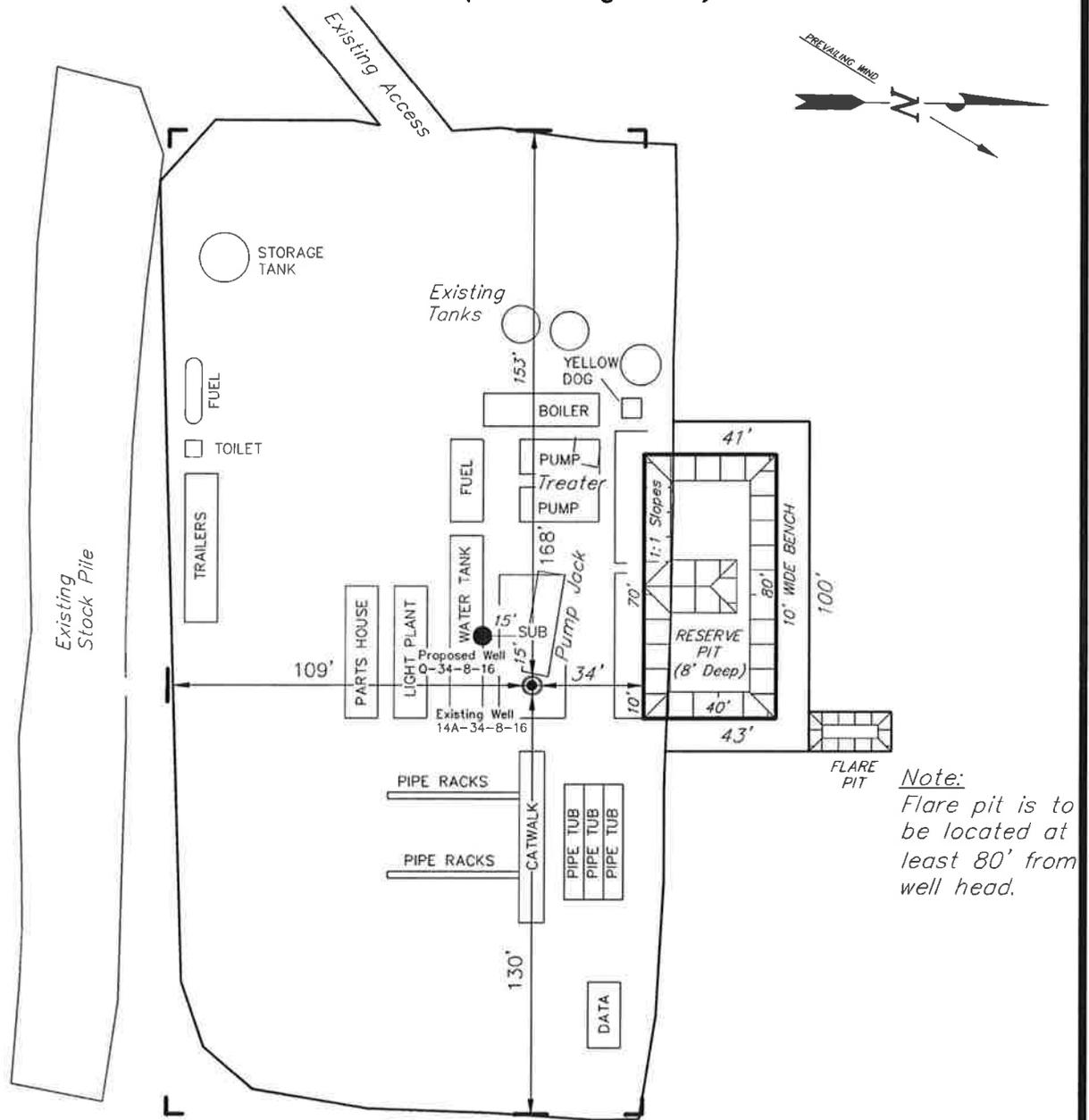
| ESTIMATED EARTHWORK QUANTITIES<br>(No Shrink or swell adjustments have been used)<br>(Expressed in Cubic Yards) |     |      |                                          |        |
|-----------------------------------------------------------------------------------------------------------------|-----|------|------------------------------------------|--------|
| ITEM                                                                                                            | CUT | FILL | 6" TOPSOIL                               | EXCESS |
| PAD                                                                                                             | 270 | 0    | Topsoil is<br>not included<br>in Pad Cut | 270    |
| PIT                                                                                                             | 640 | 0    |                                          | 640    |
| TOTALS                                                                                                          | 910 | 0    | 130                                      | 910    |

|                   |                          |
|-------------------|--------------------------|
| SURVEYED BY: T.H. | DATE SURVEYED: 8-11-09   |
| DRAWN BY: M.W.    | DATE DRAWN: 8-19-09      |
| SCALE: 1" = 50'   | REVISED: M.W. - 01-15-10 |

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

# NEWFIELD PRODUCTION COMPANY

## TYPICAL RIG LAYOUT Q-34-8-16 (Proposed Well) 14A-34-8-16 (Existing Well)



*Note:*  
Flare pit is to be located at least 80' from well head.

|                   |                          |
|-------------------|--------------------------|
| SURVEYED BY: T.H. | DATE SURVEYED: 8-11-09   |
| DRAWN BY: M.W.    | DATE DRAWN: 8-19-09      |
| SCALE: 1" = 50'   | REVISED: M.W. - 01-15-10 |

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

# Newfield Production Company Proposed Site Facility Diagram

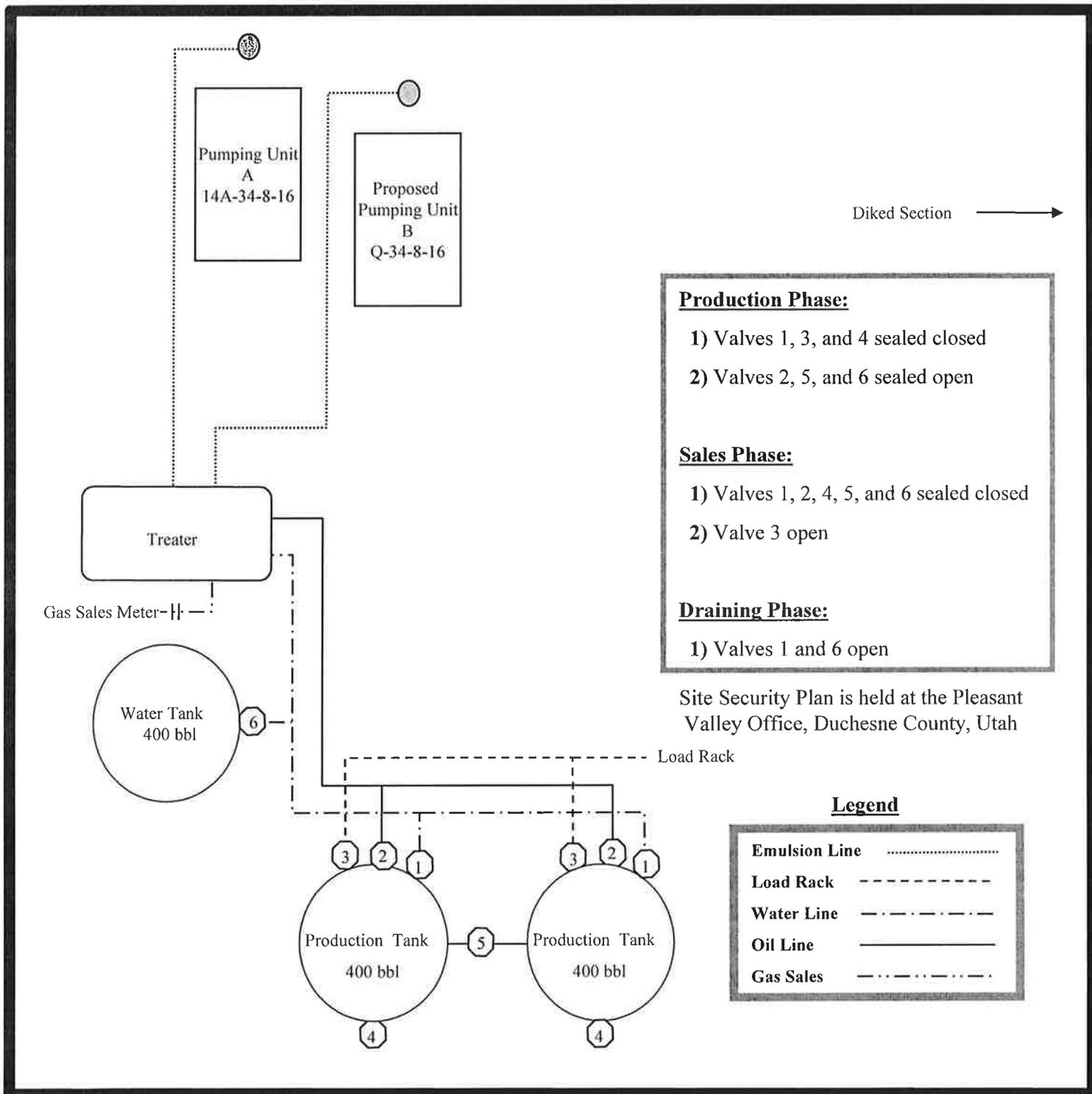
Greater Monument Butte Q-34-8-16

From the 14A-34-8-16 Location

SE/SW Sec. 34 T8S, R16E

Duchesne County, Utah

UTU-47171



- Production Phase:**
- 1) Valves 1, 3, and 4 sealed closed
  - 2) Valves 2, 5, and 6 sealed open
- Sales Phase:**
- 1) Valves 1, 2, 4, 5, and 6 sealed closed
  - 2) Valve 3 open
- Draining Phase:**
- 1) Valves 1 and 6 open

Site Security Plan is held at the Pleasant Valley Office, Duchesne County, Utah

**Legend**

|               |             |
|---------------|-------------|
| Emulsion Line | .....       |
| Load Rack     | -----       |
| Water Line    | - . - . - . |
| Oil Line      | —————       |
| Gas Sales     | - . . . . . |

Q-34-8-16

Exhibit "D"  
1 of 2

CULTURAL RESOURCE INVENTORY OF  
NEWFIELD EXPLORATION'S PROPOSED WELL LOCATIONS  
MB NE D-25-8-16, MB NE E-25-8-16, MB NE P-24-8-16  
AND WELLS DRAW Q-34-8-16  
(TOWNSHIP 8S, RANGE 16E, SEC. 24 AND 34)  
DUCHESNE COUNTY, UTAH

By:

Patricia Stavish

Prepared For:

Bureau of Land Management  
Vernal Field Office

Prepared Under Contract With:

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

Prepared By:

Montgomery Archaeological Consultants, Inc.  
P.O. Box 219  
Moab, Utah 84532

MOAC Report No. 09-165

October 21, 2009

United States Department of Interior (FLPMA)  
Permit No. 09-UT-60122

State of Utah Antiquities Project (Survey)  
Permit No. U-09-MQ-0637b

**NEWFIELD EXPLORATION COMPANY**

**PALEONTOLOGICAL SURVEY OF PROPOSED  
PRODUCTION DEVELOPMENT AREAS,  
AND PROPOSED PIPELINE ROUTES  
DUCHESNE & UINTAH COUNTIES, UTAH**

**Site Surveys of Proposed Wells**

NE 1/4, NE 1/4, Sec. 25, (1-25-8-16), SE 1/4, NE 1/4, Sec. 24, (D-25-8-16), SW 1/4, SW 1/4, Sec. 24, (E-25-8-16 & P-24-8-16), SE 1/4, SW 1/4, Sec. 34, (Q-34-8-16), NW 1/4, SE 1/4, Sec. 34, (L-34-8-16 & S-34-8-16), NW 1/4, SW 1/4, Sec. 35, (T-34-8-16), NE 1/4, SW 1/4, Sec. 35, (R-35-8-16), SE 1/4, SE 1/4 Sec. 26, (S-26-8-16), NW 1/4, SW 1/4, Sec. 26, (N-26-8-16), SE 1/4, NE 1/4, Sec. 26, (O-25-8-16), SE 1/4, NE 1/4, Sec. 25, (J-25-8-16), NE 1/4, SE 1/4, Sec. 27 (S-27-8-16), SE 1/4, SW 1/4, Sec. 36, (C-1-9-16), SW 1/4, SE 1/4, Sec. 36, (B-1-9-16 & R-36-8-16), SE 1/4, SE 1/4, Sec. 36, (T-36-8-16, A-1-9-16 & K-36-8-16), SW 1/4, NW 1/4, Sec. 26, (O-26-8-16), SW 1/4, NE 1/4, Sec. 34, (H-34-8-16 & M-34-8-16), SW 1/4, SE 1/4, Sec. 27, (B-34-8-16 & C-34-8-16), T 8 S, R 16 E; NE 1/4, SW 1/4, Sec.1, (M-1-9-16), NW 1/4, SE 1/4, Sec.11, (S-11-9-16), T 9 S, R 16 E.

**Proposed Pipeline Surveys**

SW 1/4, SW 1/4, Sec. 8, T 9 S, R 17 E (14-8-9-17); NW 1/4, SW 1/4, Sec. 7 to SW 1/4, NW 1/4, Sec. 20, T 9 S, R 16 E (12-7-9-16 to 5-20-9-16); SE 1/4, NE 1/4 (8-31-8-18); NW 1/4, SE 1/4 (10-31-8-18); NW 1/4, SE 1/4, to SW 1/4, NE 1/4 (32-29-8-18);

**REPORT OF SURVEY**

Prepared for:

**Newfield Exploration Company**

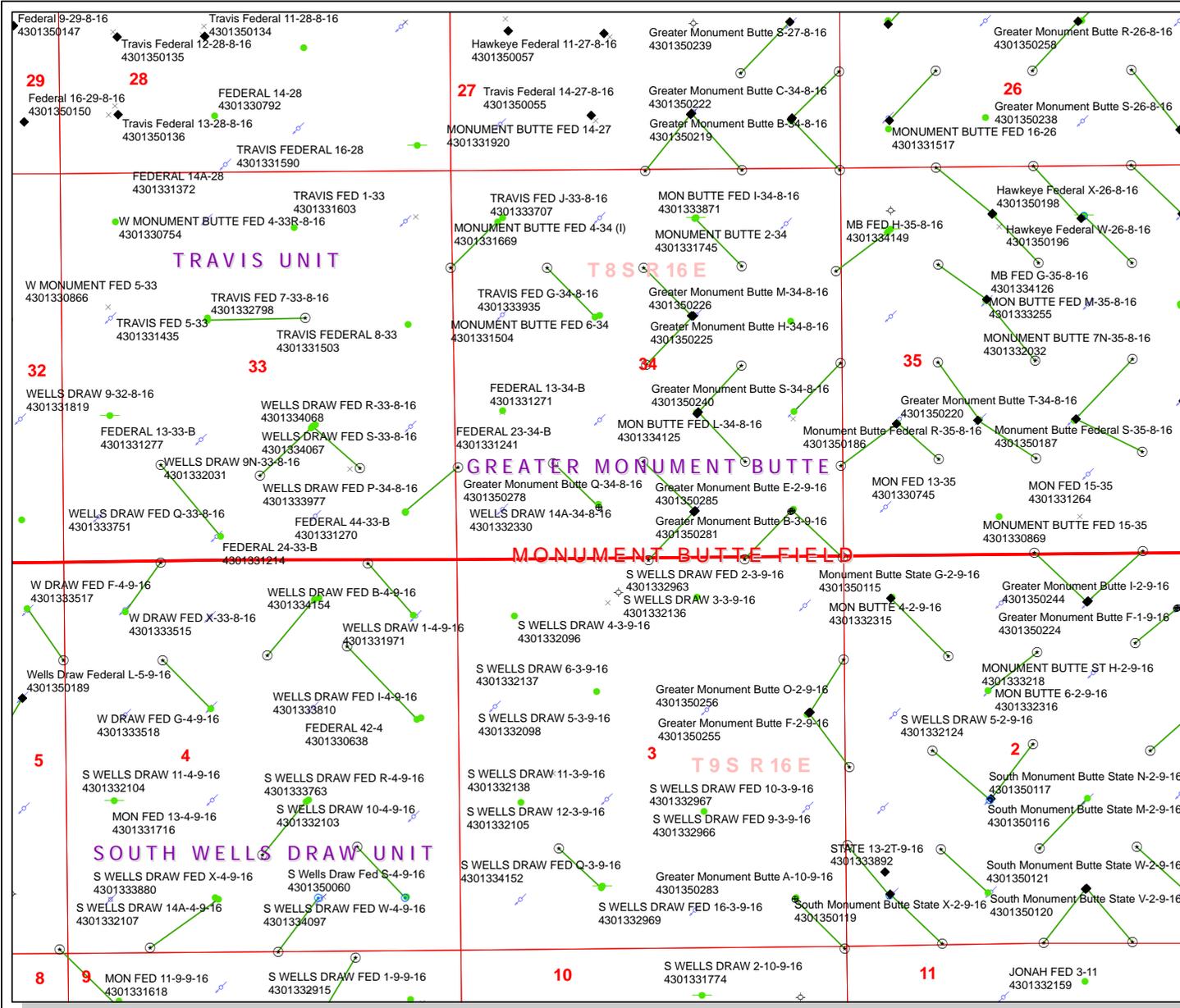
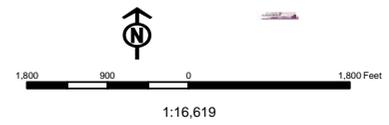
Prepared by:

Wade E. Miller  
Consulting Paleontologist  
October 1, 2009

**API Number: 4301350278**  
**Well Name: Greater Monument Butte Q-34-8-16**  
 Township 08.0 S Range 16.0 E Section 34  
 Meridian: SLBM  
 Operator: NEWFIELD PRODUCTION COMPANY

Map Prepared:  
 Map Produced by Diana Mason

- |                     |                                    |
|---------------------|------------------------------------|
| <b>Units STATUS</b> | <b>Wells Query</b>                 |
| ACTIVE              | <all other values>                 |
| EXPLORATORY         | APD - Approved Permit              |
| GAS STORAGE         | DRL - Spudded (Drilling Commenced) |
| NF PP OIL           | GW - Gas Injection                 |
| NF SECONDARY        | GS - Gas Storage                   |
| PI OIL              | LA - Location Abandoned            |
| PP GAS              | LOC - New Location                 |
| PP GEOTHERMAL       | OPS - Operation Suspended          |
| PP OIL              | PA - Plugged Abandoned             |
| SECONDARY           | PGW - Producing Gas Well           |
| TERMINATED          | POW - Producing Oil Well           |
| Sections            | RET - Returned APD                 |
| Township            | 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            |





2479

March 12, 2010

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  
**Greater Monument Butte Q-34-8-16**  
Greater Monument Butte (Green River) Unit

Surface Hole: T8S-R16E Section 34: SESW (UTU-47171)  
713' FSL 1968' FWL

At Target: T8S-R16E Section 34: SESW (UTU-47171)  
1320' FSL 1358' FWL

Duchesne 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 3/11/10, 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-existing 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 303-383-4197 or by email at [sgillespie@newfield.com](mailto:sgillespie@newfield.com). Your consideration in this matter is greatly appreciated.

Sincerely,  
Newfield Production Company

A handwritten signature in blue ink that reads "Shane Gillespie".

Shane Gillespie  
Land Associate

RECEIVED

MAR 16 2010

DIV. OF OIL, GAS & MINING

# 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)

March 22, 2010

Memorandum

To: Assistant District Manager Minerals, Vernal District  
From: Michael Coulthard, Petroleum Engineer  
Subject: 2010 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 2010 within the Greater Monument Butte Unit, Duchesne and Uintah Counties, Utah.

| API#                      | WELL NAME      | LOCATION                                                                     |
|---------------------------|----------------|------------------------------------------------------------------------------|
| (Proposed PZ GREEN RIVER) |                |                                                                              |
| 43-013-50276              | GMBU R-24-8-16 | Sec 24 T08S R16E 0644 FSL 1993 FEL<br>BHL Sec 24 T08S R16E 1320 FSL 2640 FEL |
| 43-013-50277              | GMBU P-25-8-16 | Sec 25 T08S R16E 1858 FSL 0670 FWL<br>BHL Sec 25 T08S R16E 1245 FSL 0000 FWL |
| 43-013-50278              | GMBU Q-34-8-16 | Sec 34 T08S R16E 0713 FSL 1968 FWL<br>BHL Sec 34 T08S R16E 1320 FSL 1358 FWL |
| 43-013-50279              | GMBU S-11-9-16 | Sec 11 T09S R16E 1992 FSL 2015 FEL<br>BHL Sec 11 T09S R16E 1330 FSL 1370 FEL |
| 43-013-50280              | GMBU A-1-9-16  | Sec 06 T09S R17E 1100 FNL 0979 FWL<br>BHL Sec 01 T09S R16E 0038 FNL 0075 FEL |
| 43-013-50281              | GMBU B-3-9-16  | Sec 34 T08S R16E 0632 FSL 0692 FEL<br>BHL Sec 03 T09S R16E 0010 FNL 1325 FEL |
| 43-013-50282              | GMBU A-25-8-16 | Sec 19 T08S R17E 0742 FSL 0803 FWL<br>BHL Sec 25 T08S R16E 0010 FNL 0010 FEL |
| 43-013-50283              | GMBU A-10-9-16 | Sec 03 T09S R16E 0666 FSL 0675 FEL<br>BHL Sec 10 T09S R16E 0010 FNL 0010 FEL |

| API#                      | WELL NAME      | LOCATION                                                                     |
|---------------------------|----------------|------------------------------------------------------------------------------|
| (Proposed PZ GREEN RIVER) |                |                                                                              |
| 43-013-50284              | GMBU G-25-8-16 | Sec 25 T08S R16E 2095 FNL 2111 FWL<br>BHL Sec 25 T08S R16E 1301 FNL 1301 FWL |
| 43-013-50285              | GMBU E-2-9-16  | Sec 34 T08S R16E 0645 FSL 0675 FEL<br>BHL Sec 02 T09S R16E 0010 FNL 0010 FWL |

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

/s/ Michael L. Coulthard

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

MCoulthard:mc:3-22-10

# WORKSHEET APPLICATION FOR PERMIT TO DRILL

**APD RECEIVED:** 3/12/2010

**API NO. ASSIGNED:** 43013502780000

**WELL NAME:** Greater Monument Butte Q-34-8-16

**OPERATOR:** NEWFIELD PRODUCTION COMPANY (N2695)

**PHONE NUMBER:** 435 646-4825

**CONTACT:** Mandie Crozier

**PROPOSED LOCATION:** SESW 34 080S 160E

**Permit Tech Review:**

**SURFACE:** 0713 FSL 1968 FWL

**Engineering Review:**

**BOTTOM:** 1320 FSL 1358 FWL

**Geology Review:**

**COUNTY:** DUCHESNE

**LATITUDE:** 40.06908

**LONGITUDE:** -110.10719

**UTM SURF EASTINGS:** 576135.00

**NORTHINGS:** 4435597.00

**FIELD NAME:** MONUMENT BUTTE

**LEASE TYPE:** 1 - Federal

**LEASE NUMBER:** UTU-47171

**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: 43-7478
- RDCC Review:
- Fee Surface Agreement
- Intent to Commingle

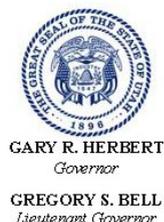
Commingling Approved

## 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

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



# 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:** Greater Monument Butte Q-34-8-16  
**API Well Number:** 43013502780000  
**Lease Number:** UTU-47171  
**Surface Owner:** FEDERAL  
**Approval Date:** 3/25/2010

**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:

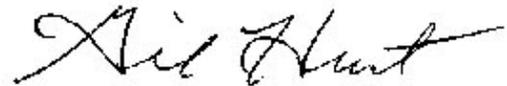
- Within 24 hours following the spudding of the well – contact Carol Daniels at 801-538-5284 (please leave a voicemail message if not available)  
OR  
submit an electronic sundry notice (pre-registration required) via the Utah Oil & Gas website at <https://oilgas.ogm.utah.gov>

**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:**

A handwritten signature in black ink that reads "Gil Hunt". The signature is written in a cursive, flowing style.

Gil Hunt  
Associate Director, Oil & Gas

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

**APPLICATION FOR PERMIT TO DRILL OR REENTER**

|                                                                                                                                                                                                                                                      |                                                                                                                                |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------|
| 5. Lease Serial No.<br>UTU-47171                                                                                                                                                                                                                     |                                                                                                                                |
| 6. If Indian, Allottee or Tribe Name<br>NA                                                                                                                                                                                                           |                                                                                                                                |
| 7. If Unit or CA Agreement, Name and No.<br>Greater Monument Butte                                                                                                                                                                                   |                                                                                                                                |
| 8. Lease Name and Well No.<br>Greater Monument Butte Q-34-8-16                                                                                                                                                                                       |                                                                                                                                |
| 9. API Well No.<br>43-013-50278                                                                                                                                                                                                                      |                                                                                                                                |
| 10. Field and Pool, or Exploratory<br>Monument Butte                                                                                                                                                                                                 |                                                                                                                                |
| 11. Sec., T. R. M. or Blk. and Survey or Area<br>Sec. 34, T8S R16E                                                                                                                                                                                   |                                                                                                                                |
| 12. County or Parish<br>Duchesne                                                                                                                                                                                                                     |                                                                                                                                |
| 13. State<br>UT                                                                                                                                                                                                                                      |                                                                                                                                |
| 1a. Type of work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER                                                                                                                                                         | 17. Spacing Unit dedicated to this well<br>20 Acres                                                                            |
| 1b. Type of Well: <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other <input checked="" type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone                               | 18. Distance from proposed location*<br>to nearest well, drilling, completed,<br>applied for, on this lease, ft. Approx. 1196' |
| 2. Name of Operator<br>Newfield Production Company                                                                                                                                                                                                   | 19. Proposed Depth<br>6,486'                                                                                                   |
| 3a. Address<br>Route #3 Box 3630, Myton UT 84052                                                                                                                                                                                                     | 20. BLM/BIA Bond No. on file<br>WYB000493                                                                                      |
| 3b. Phone No. (include area code)<br>(435) 646-3721                                                                                                                                                                                                  | 21. Elevations (Show whether DF, KDB, RT, GL, etc.)<br>5656' GL                                                                |
| 4. Location of Well (Report location clearly and in accordance with any State requirements.)*<br>At surface SE/SW 713' FSL 1968' FWL Sec. 34, T8S R16E (UTU-47171)<br>At proposed prod. zone SE/SW 1320' FSL 1358' FWL Sec. 34, T8S R16E (UTU-47171) | 22. Approximate date work will start*<br>3rd Qtr. 2010                                                                         |
| 14. Distance in miles and direction from nearest town or post office*<br>Approximately 12.1 miles south of Myton, UT                                                                                                                                 | 23. Estimated duration<br>(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.                                                                                               | 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above). |
| 2. A Drilling Plan.                                                                                                                            | 5. Operator certification                                                                       |
| 3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO must be filed with the appropriate Forest Service Office). | 6. Such other site specific information and/or plans as may be required by the BLM.             |

|                                        |                                        |                 |
|----------------------------------------|----------------------------------------|-----------------|
| 25. Signature<br><i>Mandie Crozier</i> | Name (Printed/Typed)<br>Mandie Crozier | Date<br>3/11/10 |
|----------------------------------------|----------------------------------------|-----------------|

Title  
Regulatory Specialist

|                                                    |                                          |                     |
|----------------------------------------------------|------------------------------------------|---------------------|
| Approved by (Signature)<br><i>James H. Sparger</i> | Name (Printed/Typed)<br>James H. Sparger | Date<br>OCT 07 2010 |
|----------------------------------------------------|------------------------------------------|---------------------|

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.

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)

BUREAU OF LAND MANAGEMENT  
DEPT OF THE INTERIOR

\*(Instructions on page 2)

NOS 10/8/2009  
AFMSS# 105X5012

2010 MAR 15 PM 2 52

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VERNAL FIELD OFFICE

NOTICE OF APPROVAL

DIV. OF OIL, GAS & MINING

CONDITIONS OF APPROVAL ATTACHED



UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT  
VERNAL FIELD OFFICE

170 South 500 East

VERNAL, UT 84078

(435) 781-4400



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

Company: Newfield Production Company  
Well No: Greater Monument Butte Q-34-8-16  
API No: 43-013-50278

Location: SESW, Sec. 34, T8S R16E  
Lease No: UTU-47171  
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: <a href="mailto:ut_vn_opreport@blm.gc.v">ut_vn_opreport@blm.gc.v</a> . |
| 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<sub>x</sub> 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<sub>x</sub> 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.

**SITE SPECIFIC CONDITIONS OF APPROVAL:**

- Construction and drilling is not allowed from May 1<sup>st</sup> – June 15<sup>th</sup> to minimize impacts during Mountain plover nesting.
- Construction and drilling is not allowed from March 1 – August 15 to minimize impacts during burrowing owl nesting.
- If it is anticipated that construction or drilling will occur during the given timing restriction, a BLM or qualified biologist should be notified so surveys can be conducted. Depending upon the results of the surveys, permission to proceed may or may not be recommended or granted by the BLM biologist.
- Prior to construction, an invasive plants/noxious weeds inventory will be completed for all areas where surface disturbance will occur, and a completed Weed Inventory Form will be submitted to the BLM Authorized Officer.

**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.

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

| Common name             | Latin name                    | lbs/acre | Recommended seed planting depth |
|-------------------------|-------------------------------|----------|---------------------------------|
| Squirreltail grass      | <i>Elymus elymoides</i>       | 3.0      | ¼ - ½"                          |
| Needle and thread grass | <i>Hesperostipa comata</i>    | 3.0      | ½"                              |
| Idaho fescue            | <i>Festuca idahoensis</i>     | 2.0      | ¼ - ½"                          |
| Shadscale saltbush      | <i>Atriplex confertifolia</i> | 3.0      | ½"                              |
| Four-wing saltbush      | <i>Atriplex canescens</i>     | 3.0      | ½"                              |

|                        |                          |     |            |
|------------------------|--------------------------|-----|------------|
| Gardner's saltbush     | <i>Atriplex gardneri</i> | 2.0 | 1/2"       |
| Blue flax (Lewis flax) | <i>Linum lewisii</i>     | 2.0 | 1/8 - 1/4" |

- All pounds are pure live seed.
- All seed and mulch would 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:**

- The operator 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 the 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 [UT\\_VN\\_Welllogs@BLM.gov](mailto:UT_VN_Welllogs@BLM.gov). This submission will supersede the requirement for submittal of paper logs to the BLM.**
- There shall be no deviation from the proposed drilling, completion, and/or workover program as approved. Safe drilling and operating practices must be observed. Any changes in operation must have prior approval from the BLM Vernal Field Office.

## OPERATING REQUIREMENT REMINDERS:

- All wells, whether drilling, producing, suspended, or abandoned, shall be identified in accordance with 43 CFR 3162.6. There shall be a sign or marker with the name of the operator, lease serial number, well number, and surveyed description of the well.
- In accordance with 43 CFR 3162.4-3, this well shall be reported on the "Monthly Report of Operations" (Oil and Gas Operations Report ((OGOR)) starting with the month in which operations commence and continue each month until the well is physically plugged and abandoned. This report shall be filed in duplicate, directly with the Minerals Management Service, P.O. Box 17110, Denver, Colorado 80217-0110, or call 1-800-525-7922 (303) 231-3650 for reporting information.
- Should the well be successfully completed for production, the BLM Vernal Field office must be notified when it is placed in a producing status. Such notification will be by written communication and must be received in this office by not later than the fifth business day following the date on which the well is placed on production. The notification shall provide, as a minimum, the following informational items:
  - Operator name, address, and telephone number.
  - Well name and number.
  - Well location (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.

Spud  
BLM - Vernal Field Office - Notification Form

Operator Newfield Exploration Rig Name/# Ross Rig # 21  
Submitted By Don Bastian Phone Number 435-823-6012

Well Name/Number Greater Monument Butte Q-34-8-16  
Qtr/Qtr SE/SW Section 34 Township 8S Range 16E  
Lease Serial Number UTU- 47171  
API Number 43-013-50278

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

Date/Time 11/3/10      8:00 AM  PM

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

- Surface Casing
- Intermediate Casing
- Production Casing
- Liner
- Other

Date/Time 11/3/10      2:00 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 Ross Rig #21 Will Spud The Greater Monument Butte Q-34-8-16 @ 8:00 AM. On 11/3/10. Run 8 5/8" Casing @ 2:00 PM 11/3/10

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 |          |    |            | COUNTY   | SPUD DATE | EFFECTIVE DATE |
|-------------------------------------------------------------|--------------------|----------------|------------|-----------------------------------|---------------|----------|----|------------|----------|-----------|----------------|
|                                                             |                    |                |            |                                   | QQ            | SC       | TP | RG         |          |           |                |
| B                                                           | 99999              | 17400 ✓        | 4301334199 | WEST POINT FEDERAL<br>3-31-8-16   | NENW          | 31       | 8S | 16E        | DUCHESNE | 11/9/2010 | 11/10/10       |
| WELL 1 COMMENTS: <i>GRRV</i>                                |                    |                |            |                                   |               |          |    |            |          |           |                |
| B                                                           | 99999              | 17400 ✓        | 4301334179 | FEDERAL 15-30-8-16                | SWSE          | 30       | 8S | 16E        | DUCHESNE | 11/9/2010 | 11/10/10       |
| WELL 2 COMMENTS: <i>GRRV</i>                                |                    |                |            |                                   |               |          |    |            |          |           |                |
| B                                                           | 99999              | 17400 ✓        | 4301334234 | STATE 1-36-8-15                   | NENE          | 36       | 8S | 15E        | DUCHESNE | 11/5/2010 | 11/10/10       |
| WELL 3 COMMENTS: <i>GRRV</i>                                |                    |                |            |                                   |               |          |    |            |          |           |                |
| A                                                           | 99999              | 17857 ✓        | 4301350309 | UTE TRIBAL 11-22-4-2              | NESW          | 22       | 4S | 2W         | DUCHESNE | 11/5/2010 | 11/10/10       |
| WELL 4 COMMENTS: <i>GRRV</i>                                |                    |                |            |                                   |               |          |    |            |          |           |                |
| B                                                           | 99999              | 17400 ✓        | 4301350194 | MON BUTTE NE FEDERAL<br>K-25-8-16 | NWSW          | 30<br>25 | 8S | 17E<br>16E | DUCHESNE | 11/2/2010 | 11/10/10       |
| WELL 5 COMMENTS: <i>GRRV</i> <i>BHL = Sec 25 R 16E SENE</i> |                    |                |            |                                   |               |          |    |            |          |           |                |
| B                                                           | 99999              | 17400 ✓        | 4301350278 | GREATER MON BUTTE<br>Q-34-8-16    | SESW          | 34       | 8S | 16E        | DUCHESNE | 11/3/2010 | 11/10/10       |
| WELL 6 COMMENTS: <i>GRRV</i> <i>BHL = SESW</i>              |                    |                |            |                                   |               |          |    |            |          |           |                |

- ACTION CODES (See instructions on back of form)
- A - 1 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)

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Signature *[Signature]* Jentri Park  
Production Clerk  
11/09/10

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



**Daily Activity Report**

Format For Sundry

**GRTR MB Q-34-8-16****10/1/2010 To 2/28/2011****11/30/2010 Day: 1****Completion**

Rigless on 11/30/2010 - Run CBL & shoot first stage. - Install 5M frac head. NU 5M Cameron BOP. RU H/O truck & pressure test casing, blind rams, frac head & casing valves to 4500 psi. RU Perforators LLC WLT w/ mast & run CBL under pressure. WLTD @ 6471' cement top @ 46'. Perforate CP5 sds as shown in perforation report. 155 BWTR. SWIFN.

**Daily Cost:** \$0**Cumulative Cost:** \$15,608**12/6/2010 Day: 2****Completion**

Rigless on 12/6/2010 - MIRU BJ Services and Perforators LLC. Frac 1st stage. Perforate & frac remaining 6 stages. RD BJ Services and Perforators LLC. Flowback well for 4 hrs. Rec 655 BTF. SIWFN w/ 2444 BWTR. - MIRU BJ Services and Perforators LLC. Frac 1st stage. Perforate & frac remaining 6 stages. RD BJ Services and Perforators LLC. Flowback well for 4 hrs. Rec 655 BTF. SIWFN w/ 2444 BWTR.

**Daily Cost:** \$0**Cumulative Cost:** \$145,763**12/8/2010 Day: 4****Completion**

WWS #1 on 12/8/2010 - 450 psi on well. Bleed off pressure. Continue PU tbg. RU Nabors power swivel. D/O 6 CBP's. Circulate well clean w/ EOT @ 6128'. SIWFN w/ 1291 BWTR. - MIRU WWS #1. 700 psi on well. Bleed off pressure. Flow for 2 hrs. Rec 114 BTF. ND Cameron BOP & 5M WH. NU 3M WH & Schaffer BOP. Talley, PU & RIH w/ 4 3/4" chomp bit & 2 7/8" J-55 tbg. EOT @ 3661'. SIWFN w/ 1330 BWTR. - MIRU WWS #1. 700 psi on well. Bleed off pressure. Flow for 2 hrs. Rec 114 BTF. ND Cameron BOP & 5M WH. NU 3M WH & Schaffer BOP. Talley, PU & RIH w/ 4 3/4" chomp bit & 2 7/8" J-55 tbg. EOT @ 3661'. SIWFN w/ 1330 BWTR. - Hot oiler steamed and thawed out BOP & WH. 450 psi on well. Bleed off pressure. Continue PU tbg. Tagged fill @ 4505'. RU Nabors power swivel. Circulate sand and drill out 6 composite flow through plugs. Circulate well clean w/ EOT @ 6128'. SIWFN w/ 1291 BWTR. - Hot oiler steamed and thawed out BOP & WH. 450 psi on well. Bleed off pressure. Continue PU tbg. Tagged fill @ 4505'. RU Nabors power swivel. Circulate sand and drill out 6 composite flow through plugs. Circulate well clean w/ EOT @ 6128'. SIWFN w/ 1291 BWTR.

**Daily Cost:** \$0**Cumulative Cost:** \$198,327**12/10/2010 Day: 5****Completion**

WWS #1 on 12/10/2010 - C/O to PBTD. Swab. C/O to PBTD. TOH w/ tbg. TIH w/ production tbg. (100 jts). SIWFN w/ 1235 BWTR. - 100 psi on well. Tag fill @ 6400'. C/O to PBTD @ 6509'. RD power swivel. LD 2 jts of tbg. EOT @ 6441'. Swab. IFL @ surface. Made 13 runs. Rec 155 BTF. FFL @ 700'. RD swab equipment. TIH w/ tbg to PBTD. Circulate well clean. LD 5 jts of tbg. TOH w/ tbg. LD bit. TIH w/ production tbg as follows: NC, 2- jts, SN, 1 jt, TA & 100 jts of tbg. SIWFN w/ 1235 BWTR. - 100 psi on well. Tag fill @ 6400'. C/O to PBTD @ 6509'. RD power swivel. LD 2 jts of tbg. EOT @ 6441'. Swab. IFL @ surface. Made 13 runs. Rec 155 BTF. FFL @ 700'. RD swab equipment. TIH w/ tbg to PBTD. Circulate well clean. LD 5 jts of

tbg. TOH w/ tbg. LD bit. TIH w/ production tbg as follows: NC, 2- jts, SN, 1 jt, TA & 100 jts of tbg. SIWFN w/ 1235 BWTR. - psi on tbg, psi on csg. Continue TIH w/ production tbg. Detail as follows: NC, 2- jts, SN, 1 jt, TA & 201 jts of 2 7/8" J-55 tbg. ND BOP. Set TA w/ 18,000#'s of tension. NU WH. Flush tbg w/ 60 BW. PU & RIH w/ "A" rod string as follows: Central hydraulic 2 1/2" X 1 3/4" X 24' RHAC, 4- 1 1/2" wt bars, 246- 7/8" 8 per guided rods, 1- 2' X 7/8" pony rod, 1 1/2" X 30' polish rod. Hang head, Space out rods. Pressure test to 800 psi. RDMOSU. POP @ 4:00 PM w/ 144" SL @ 5 SPM. 1315 BWTR. - psi on tbg, psi on csg. Continue TIH w/ production tbg. Detail as follows: NC, 2- jts, SN, 1 jt, TA & 201 jts of 2 7/8" J-55 tbg. ND BOP. Set TA w/ 18,000#'s of tension. NU WH. Flush tbg w/ 60 BW. PU & RIH w/ "A" rod string as follows: Central hydraulic 2 1/2" X 1 3/4" X 24' RHAC, 4- 1 1/2" wt bars, 246- 7/8" 8 per guided rods, 1- 2' X 7/8" pony rod, 1 1/2" X 30' polish rod. Hang head, Space out rods. Pressure test to 800 psi. RDMOSU. POP @ 4:00 PM w/ 144" SL @ 5 SPM. 1315 BWTR.

**Finalized****Daily Cost:** \$0**Cumulative Cost:** \$210,225

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**Pertinent Files: Go to File List**

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-47171

6. If Indian, Allottee or Tribe Name

7. Unit or CA Agreement Name and No.  
GMBU

8. Lease Name and Well No.  
GREATER MONUMENT BT Q-34-8-16

9. AFI Well No.  
43-013-50278

10. Field and Pool or Exploratory  
GREATER MB UNIT

11. Sec., T., R., M., on Block and Survey or Area  
SEC. 34, T8S, R16E

12. County or Parish  
DUCHESNE

13. State  
UT

1a. Type of Well  Oil Well  Gas Well  Dry  Other

b. Type of Completion:  New Well  Work Over  Deepen  Plug Back  Diff. Resvr.,  
Other: \_\_\_\_\_

2. Name of Operator  
NEWFIELD EXPLORATION COMPANY

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

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

4. Location of Well (Report location clearly and in accordance with Federal requirements)\*  
At surface 713' FSL & 1968' FWL (SE/SW) SEC. 34, T8S, R16E (UTU-47171)  
At top prod. interval reported below 1200' FSL & 1472' FWL (SE/SW) SEC. 34, T8S, R16E (UTU-47171)  
At total depth 1481' FSL & 1182' FWL (NW/SW) SEC. 34, T8S, R16E (UTU-47171)

14. Date Spudded  
11/03/2010

15. Date T.D. Reached  
11/20/2010

16. Date Completed 12/10/2010  
 D & A  Ready to Prod.

17. Elevations (DF, RKB, RT, GL)\*  
5656' GL 5668' KB

18. Total Depth: MD 6560' TVD 6451'

19. Plug Back T.D.: MD 6509' TVD 6401'

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 Sk. & Type of Cement | Slurry Vol. (BBL) | Cement Top* | Amount Pulled |
|-----------|-------------|-------------|----------|-------------|----------------------|-----------------------------|-------------------|-------------|---------------|
| 12-1/4"   | 8-5/8" J-55 | 24#         | 0        | 349'        |                      | 180 CLASS G                 |                   |             |               |
| 7-7/8"    | 5-1/2" J-55 | 15.5#       | 0        | 6553'       |                      | 275 PRIMLITE                |                   | 46'         |               |
|           |             |             |          |             |                      | 400 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@ 6364'     | TA @ 6267'        |      |                |                   |      |                |                   |

25. Producing Intervals

| Formation      | Top   | Bottom | Perforated Interval | Size | No. Holes | Perf. Status |
|----------------|-------|--------|---------------------|------|-----------|--------------|
| A) Green River | 4390' | 6307'  | 4390-6307'          | .36" | 225       |              |
| B)             |       |        |                     |      |           |              |
| C)             |       |        |                     |      |           |              |
| D)             |       |        |                     |      |           |              |

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

| Depth Interval | Amount and Type of Material                                                |
|----------------|----------------------------------------------------------------------------|
| 4390-6307'     | Frac w/ 278416#s 20/40 sand in 2018 bbls of Lightning 17 fluid in 7 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               |
|---------------------|----------------------|--------------|-----------------|---------|---------|-----------|-----------------------|-------------|---------------------------------|
| 12/11/10            | 12/28/10             | 24           | →               | 99      | 108     | 61        |                       |             | 2-1/2" x 1-3/4" 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 |                   |
|                     |                      |              | →               |         |         |           |                       |             |                   |

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JAN 18 2011  
DIV. OF OIL, GAS & MINING

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

28b. Production - Interval C

|                     |                      |              |                      |         |         |           |                       |             |                   |
|---------------------|----------------------|--------------|----------------------|---------|---------|-----------|-----------------------|-------------|-------------------|
| Date First Produced | Test Date            | Hours Tested | Test Production<br>→ | 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<br>→     | Oil BBL | Gas MCF | Water BBL | Gas/Oil Ratio         | Well Status |                   |

28c. Production - Interval D

|                     |                      |              |                      |         |         |           |                       |             |                   |
|---------------------|----------------------|--------------|----------------------|---------|---------|-----------|-----------------------|-------------|-------------------|
| Date First Produced | Test Date            | Hours Tested | Test Production<br>→ | 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<br>→     | Oil BBL | Gas MCF | Water BBL | Gas/Oil Ratio         | Well Status |                   |

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

SOLD & 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 | 4390' | 6307'  |                              | GARDEN GULCH MRK  | 3982'       |
|             |       |        |                              | GARDEN GULCH 1    | 4204'       |
|             |       |        |                              | GARDEN GULCH 2    | 4323'       |
|             |       |        |                              | POINT 3           | 4595'       |
|             |       |        |                              | X MRKR            | 4852'       |
|             |       |        |                              | Y MRKR            | 4884'       |
|             |       |        |                              | DOUGALS CREEK MRK | 5009'       |
|             |       |        |                              | BI CARBONATE MRK  | 5269'       |
|             |       |        |                              | B LIMESTON MRK    | 5402'       |
|             |       |        |                              | CASTLE PEAK       | 5923'       |
|             |       |        |                              | BASAL CARBONATE   | 6366'       |
|             |       |        |                              | WASATCH           | 6494'       |

32. Additional remarks (include plugging procedure):

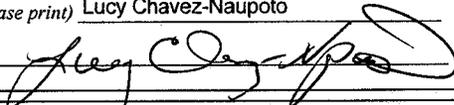
33. Indicate which items have been attached by placing a check in the appropriate boxes:

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

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) Lucy Chavez-Naupoto

Title Administrative Assistant

Signature 

Date 01/11/2011

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.



# **NEWFIELD EXPLORATION**

**USGS Myton SW (UT)  
SECTION 34 T8S, R16E  
Q-34-8-16**

**Wellbore #1**

**Design: Actual**

## **Standard Survey Report**

**03 December, 2010**



# PayZone Directional Services, LLC.

## Survey Report



|                  |                      |                                     |                                    |
|------------------|----------------------|-------------------------------------|------------------------------------|
| <b>Company:</b>  | NEWFIELD EXPLORATION | <b>Local Co-ordinate Reference:</b> | Well Q-34-8-16                     |
| <b>Project:</b>  | USGS Myton SW (UT)   | <b>TVD Reference:</b>               | Q-34-8-16 @ 5668.0ft (CAPSTAR 328) |
| <b>Site:</b>     | SECTION 34 T8S, R16E | <b>MD Reference:</b>                | Q-34-8-16 @ 5668.0ft (CAPSTAR 328) |
| <b>Well:</b>     | Q-34-8-16            | <b>North Reference:</b>             | True                               |
| <b>Wellbore:</b> | Wellbore #1          | <b>Survey Calculation Method:</b>   | Minimum Curvature                  |
| <b>Design:</b>   | Actual               | <b>Database:</b>                    | EDM 2003.21 Single User Db         |

|                    |                                              |                      |                |
|--------------------|----------------------------------------------|----------------------|----------------|
| <b>Project</b>     | USGS Myton SW (UT), DUCHESNE COUNTY, UT, USA |                      |                |
| <b>Map System:</b> | US State Plane 1983                          | <b>System Datum:</b> | Mean Sea Level |
| <b>Geo Datum:</b>  | North American Datum 1983                    |                      |                |
| <b>Map Zone:</b>   | Utah Central Zone                            |                      |                |

|                              |                                        |                          |                  |
|------------------------------|----------------------------------------|--------------------------|------------------|
| <b>Site</b>                  | SECTION 34 T8S, R16E, SEC 34 T8S, R16E |                          |                  |
| <b>Site Position:</b>        |                                        | <b>Northing:</b>         | 7,199,000.00 ft  |
| <b>From:</b>                 | Lat/Long                               | <b>Easting:</b>          | 2,031,000.00 ft  |
| <b>Position Uncertainty:</b> | 0.0 ft                                 | <b>Slot Radius:</b>      | "                |
|                              |                                        | <b>Latitude:</b>         | 40° 4' 29.106 N  |
|                              |                                        | <b>Longitude:</b>        | 110° 6' 14.985 W |
|                              |                                        | <b>Grid Convergence:</b> | 0.89 °           |

|                             |                                               |                            |                  |                      |                   |                  |
|-----------------------------|-----------------------------------------------|----------------------------|------------------|----------------------|-------------------|------------------|
| <b>Well</b>                 | Q-34-8-16, SHL N 40 04 08.86, E -110 06 28.58 |                            |                  |                      |                   |                  |
| <b>Well Position</b>        | <b>+N/-S</b>                                  | 0.0 ft                     | <b>Northing:</b> | 7,196,935.21 ft      | <b>Latitude:</b>  | 40° 4' 8.860 N   |
|                             | <b>+E/-W</b>                                  | 0.0 ft                     | <b>Easting:</b>  | 2,029,975.24 ft      | <b>Longitude:</b> | 110° 6' 28.580 W |
| <b>Position Uncertainty</b> | 0.0 ft                                        | <b>Wellhead Elevation:</b> | 5,668.0 ft       | <b>Ground Level:</b> | 5,656.0 ft        |                  |

|                  |                   |                    |                        |                      |                            |
|------------------|-------------------|--------------------|------------------------|----------------------|----------------------------|
| <b>Wellbore</b>  | Wellbore #1       |                    |                        |                      |                            |
| <b>Magnetics</b> | <b>Model Name</b> | <b>Sample Date</b> | <b>Declination (°)</b> | <b>Dip Angle (°)</b> | <b>Field Strength (nT)</b> |
|                  | IGRF2010          | 2010/11/15         | 11.41                  | 65.82                | 52,333                     |

|                          |                         |               |              |                      |     |
|--------------------------|-------------------------|---------------|--------------|----------------------|-----|
| <b>Design</b>            | Actual                  |               |              |                      |     |
| <b>Audit Notes:</b>      |                         |               |              |                      |     |
| <b>Version:</b>          | 1.0                     | <b>Phase:</b> | ACTUAL       | <b>Tie On Depth:</b> | 0.0 |
| <b>Vertical Section:</b> | <b>Depth From (TVD)</b> | <b>+N/-S</b>  | <b>+E/-W</b> | <b>Direction</b>     |     |
|                          | (ft)                    | (ft)          | (ft)         | (°)                  |     |
|                          | 0.0                     | 0.0           | 0.0          | 313.92               |     |

|                       |                |                          |                  |                    |  |
|-----------------------|----------------|--------------------------|------------------|--------------------|--|
| <b>Survey Program</b> | <b>Date</b>    | 2010/12/03               |                  |                    |  |
| <b>From (ft)</b>      | <b>To (ft)</b> | <b>Survey (Wellbore)</b> | <b>Tool Name</b> | <b>Description</b> |  |
| 577.0                 | 6,560.0        | Actual (Wellbore #1)     | MWD              | MWD - Standard     |  |

| 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                |
| 577.0               | 0.40            | 17.80       | 577.0               | 1.9        | 0.6        | 0.9                   | 0.07                  | 0.07                 | 0.00                |
| 607.0               | 0.60            | 345.00      | 607.0               | 2.2        | 0.6        | 1.1                   | 1.14                  | 0.67                 | -109.33             |
| 638.0               | 0.90            | 327.90      | 638.0               | 2.5        | 0.4        | 1.4                   | 1.20                  | 0.97                 | -55.16              |
| 669.0               | 1.10            | 327.50      | 669.0               | 3.0        | 0.1        | 2.0                   | 0.65                  | 0.65                 | -1.29               |
| 699.0               | 1.50            | 319.60      | 699.0               | 3.5        | -0.3       | 2.6                   | 1.46                  | 1.33                 | -26.33              |
| 730.0               | 1.80            | 316.60      | 730.0               | 4.2        | -0.9       | 3.5                   | 1.01                  | 0.97                 | -9.68               |
| 761.0               | 1.90            | 315.40      | 761.0               | 4.9        | -1.6       | 4.5                   | 0.35                  | 0.32                 | -3.87               |
| 791.0               | 2.30            | 316.70      | 790.9               | 5.7        | -2.3       | 5.6                   | 1.34                  | 1.33                 | 4.33                |
| 822.0               | 3.00            | 318.00      | 821.9               | 6.8        | -3.3       | 7.1                   | 2.27                  | 2.26                 | 4.19                |
| 853.0               | 3.30            | 318.20      | 852.8               | 8.0        | -4.4       | 8.8                   | 0.97                  | 0.97                 | 0.65                |
| 884.0               | 3.70            | 317.20      | 883.8               | 9.4        | -5.7       | 10.6                  | 1.31                  | 1.29                 | -3.23               |
| 916.0               | 4.40            | 318.80      | 915.7               | 11.1       | -7.2       | 12.9                  | 2.22                  | 2.19                 | 5.00                |



# PayZone Directional Services, LLC.

## Survey Report



**Company:** NEWFIELD EXPLORATION  
**Project:** USGS Myton SW (UT)  
**Site:** SECTION 34 T8S, R16E  
**Well:** Q-34-8-16  
**Wellbore:** Wellbore #1  
**Design:** Actual

**Local Co-ordinate Reference:** Well Q-34-8-16  
**TVD Reference:** Q-34-8-16 @ 5668.0ft (CAPSTAR 328)  
**MD Reference:** Q-34-8-16 @ 5668.0ft (CAPSTAR 328)  
**North Reference:** True  
**Survey Calculation Method:** Minimum Curvature  
**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) |
|---------------------|-----------------|-------------|---------------------|------------|------------|-----------------------|-----------------------|----------------------|---------------------|
| 947.0               | 5.20            | 321.30      | 946.6               | 13.1       | -8.9       | 15.5                  | 2.67                  | 2.58                 | 8.06                |
| 979.0               | 5.80            | 320.50      | 978.5               | 15.5       | -10.8      | 18.5                  | 1.89                  | 1.88                 | -2.50               |
| 1,011.0             | 6.50            | 316.20      | 1,010.3             | 18.0       | -13.1      | 21.9                  | 2.62                  | 2.19                 | -13.44              |
| 1,042.0             | 7.10            | 313.90      | 1,041.1             | 20.6       | -15.7      | 25.6                  | 2.13                  | 1.94                 | -7.42               |
| 1,074.0             | 7.40            | 315.30      | 1,072.8             | 23.5       | -18.6      | 29.6                  | 1.09                  | 0.94                 | 4.38                |
| 1,106.0             | 8.00            | 315.00      | 1,104.5             | 26.5       | -21.6      | 33.9                  | 1.88                  | 1.88                 | -0.94               |
| 1,138.0             | 8.30            | 315.00      | 1,136.2             | 29.7       | -24.8      | 38.5                  | 0.94                  | 0.94                 | 0.00                |
| 1,169.0             | 8.70            | 315.00      | 1,166.8             | 33.0       | -28.0      | 43.0                  | 1.29                  | 1.29                 | 0.00                |
| 1,201.0             | 9.00            | 314.10      | 1,198.5             | 36.4       | -31.5      | 48.0                  | 1.03                  | 0.94                 | -2.81               |
| 1,233.0             | 9.60            | 311.50      | 1,230.0             | 39.9       | -35.3      | 53.1                  | 2.29                  | 1.88                 | -8.13               |
| 1,264.0             | 10.20           | 308.60      | 1,260.6             | 43.3       | -39.4      | 58.5                  | 2.52                  | 1.94                 | -9.35               |
| 1,296.0             | 10.60           | 308.40      | 1,292.1             | 46.9       | -43.9      | 64.2                  | 1.26                  | 1.25                 | -0.63               |
| 1,328.0             | 10.80           | 308.00      | 1,323.5             | 50.6       | -48.6      | 70.1                  | 0.67                  | 0.63                 | -1.25               |
| 1,359.0             | 10.70           | 308.60      | 1,354.0             | 54.2       | -53.1      | 75.9                  | 0.48                  | -0.32                | 1.94                |
| 1,391.0             | 10.90           | 309.30      | 1,385.4             | 58.0       | -57.8      | 81.8                  | 0.75                  | 0.63                 | 2.19                |
| 1,423.0             | 11.00           | 310.40      | 1,416.8             | 61.9       | -62.5      | 87.9                  | 0.72                  | 0.31                 | 3.44                |
| 1,454.0             | 11.30           | 312.50      | 1,447.2             | 65.8       | -67.0      | 93.9                  | 1.63                  | 0.97                 | 6.77                |
| 1,486.0             | 11.50           | 313.50      | 1,478.6             | 70.1       | -71.6      | 100.2                 | 0.88                  | 0.63                 | 3.13                |
| 1,518.0             | 11.90           | 314.90      | 1,509.9             | 74.7       | -76.2      | 106.7                 | 1.53                  | 1.25                 | 4.38                |
| 1,550.0             | 11.90           | 315.40      | 1,541.2             | 79.3       | -80.9      | 113.3                 | 0.32                  | 0.00                 | 1.56                |
| 1,582.0             | 12.10           | 316.30      | 1,572.5             | 84.1       | -85.5      | 120.0                 | 0.86                  | 0.63                 | 2.81                |
| 1,614.0             | 12.10           | 313.30      | 1,603.8             | 88.8       | -90.3      | 126.7                 | 1.96                  | 0.00                 | -9.38               |
| 1,645.0             | 12.40           | 312.40      | 1,634.1             | 93.3       | -95.1      | 133.2                 | 1.15                  | 0.97                 | -2.90               |
| 1,677.0             | 12.22           | 311.17      | 1,665.4             | 97.9       | -100.2     | 140.1                 | 0.99                  | -0.56                | -3.84               |
| 1,708.0             | 12.20           | 310.60      | 1,695.7             | 102.2      | -105.2     | 146.6                 | 0.39                  | -0.06                | -1.84               |
| 1,740.0             | 12.50           | 310.60      | 1,726.9             | 106.6      | -110.3     | 153.4                 | 0.94                  | 0.94                 | 0.00                |
| 1,772.0             | 12.50           | 311.10      | 1,758.2             | 111.1      | -115.6     | 160.3                 | 0.34                  | 0.00                 | 1.56                |
| 1,804.0             | 13.00           | 311.40      | 1,789.4             | 115.8      | -120.9     | 167.4                 | 1.58                  | 1.56                 | 0.94                |
| 1,835.0             | 13.01           | 311.74      | 1,819.6             | 120.4      | -126.1     | 174.4                 | 0.25                  | 0.03                 | 1.10                |
| 1,867.0             | 12.70           | 311.20      | 1,850.8             | 125.1      | -131.4     | 181.5                 | 1.04                  | -0.97                | -1.69               |
| 1,899.0             | 12.40           | 311.40      | 1,882.0             | 129.7      | -136.7     | 188.4                 | 0.95                  | -0.94                | 0.63                |
| 1,930.0             | 12.30           | 311.10      | 1,912.3             | 134.1      | -141.7     | 195.1                 | 0.38                  | -0.32                | -0.97               |
| 1,962.0             | 12.00           | 310.70      | 1,943.6             | 138.5      | -146.7     | 201.8                 | 0.97                  | -0.94                | -1.25               |
| 1,994.0             | 11.70           | 310.00      | 1,974.9             | 142.8      | -151.8     | 208.3                 | 1.04                  | -0.94                | -2.19               |
| 2,025.0             | 11.50           | 310.30      | 2,005.3             | 146.8      | -156.5     | 214.6                 | 0.67                  | -0.65                | 0.97                |
| 2,057.0             | 11.30           | 311.00      | 2,036.7             | 150.9      | -161.3     | 220.9                 | 0.76                  | -0.63                | 2.19                |
| 2,089.0             | 11.20           | 310.00      | 2,068.0             | 155.0      | -166.1     | 227.1                 | 0.69                  | -0.31                | -3.13               |
| 2,121.0             | 11.30           | 309.60      | 2,099.4             | 159.0      | -170.9     | 233.3                 | 0.40                  | 0.31                 | -1.25               |
| 2,154.0             | 11.60           | 309.80      | 2,131.8             | 163.1      | -175.9     | 239.9                 | 0.92                  | 0.91                 | 0.61                |
| 2,184.0             | 11.30           | 311.70      | 2,161.2             | 167.0      | -180.4     | 245.8                 | 1.61                  | -1.00                | 6.33                |
| 2,216.0             | 10.90           | 312.90      | 2,192.6             | 171.2      | -185.0     | 252.0                 | 1.44                  | -1.25                | 3.75                |
| 2,247.0             | 10.80           | 313.60      | 2,223.0             | 175.2      | -189.2     | 257.8                 | 0.53                  | -0.32                | 2.26                |
| 2,279.0             | 10.90           | 313.30      | 2,254.4             | 179.3      | -193.6     | 263.8                 | 0.36                  | 0.31                 | -0.94               |
| 2,311.0             | 11.00           | 312.30      | 2,285.9             | 183.4      | -198.1     | 269.9                 | 0.67                  | 0.31                 | -3.13               |
| 2,343.0             | 11.30           | 312.60      | 2,317.3             | 187.6      | -202.6     | 276.1                 | 0.95                  | 0.94                 | 0.94                |
| 2,374.0             | 11.10           | 312.60      | 2,347.7             | 191.7      | -207.1     | 282.1                 | 0.65                  | -0.65                | 0.00                |
| 2,406.0             | 10.90           | 312.40      | 2,379.1             | 195.8      | -211.6     | 288.2                 | 0.64                  | -0.63                | -0.63               |
| 2,438.0             | 10.80           | 313.60      | 2,410.5             | 199.9      | -216.0     | 294.2                 | 0.77                  | -0.31                | 3.75                |
| 2,470.0             | 10.20           | 314.50      | 2,442.0             | 204.0      | -220.2     | 300.1                 | 1.94                  | -1.88                | 2.81                |
| 2,501.0             | 9.90            | 316.30      | 2,472.5             | 207.8      | -224.0     | 305.5                 | 1.40                  | -0.97                | 5.81                |
| 2,533.0             | 10.20           | 316.70      | 2,504.0             | 211.9      | -227.8     | 311.1                 | 0.96                  | 0.94                 | 1.25                |
| 2,565.0             | 10.50           | 317.60      | 2,535.5             | 216.1      | -231.7     | 316.8                 | 1.06                  | 0.94                 | 2.81                |
| 2,597.0             | 10.63           | 320.60      | 2,566.9             | 220.5      | -235.5     | 322.6                 | 1.77                  | 0.41                 | 9.38                |
| 2,628.0             | 10.90           | 322.00      | 2,597.4             | 225.0      | -239.2     | 328.4                 | 1.21                  | 0.87                 | 4.52                |



# PayZone Directional Services, LLC.

## Survey Report



Company: NEWFIELD EXPLORATION  
 Project: USGS Myton SW (UT)  
 Site: SECTION 34 T8S, R16E  
 Well: Q-34-8-16  
 Wellbore: Wellbore #1  
 Design: Actual

Local Co-ordinate Reference: Well Q-34-8-16  
 TVD Reference: Q-34-8-16 @ 5668.0ft (CAPSTAR 328)  
 MD Reference: Q-34-8-16 @ 5668.0ft (CAPSTAR 328)  
 North Reference: True  
 Survey Calculation Method: Minimum Curvature  
 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) |
|---------------------|-----------------|-------------|---------------------|------------|------------|-----------------------|-----------------------|----------------------|---------------------|
| 2,660.0             | 11.20           | 321.90      | 2,628.8             | 229.9      | -242.9     | 334.5                 | 0.94                  | 0.94                 | -0.31               |
| 2,692.0             | 11.10           | 320.80      | 2,660.2             | 234.7      | -246.8     | 340.6                 | 0.73                  | -0.31                | -3.44               |
| 2,724.0             | 11.40           | 319.40      | 2,691.6             | 239.5      | -250.8     | 346.8                 | 1.27                  | 0.94                 | -4.38               |
| 2,755.0             | 11.40           | 318.10      | 2,722.0             | 244.1      | -254.9     | 352.9                 | 0.83                  | 0.00                 | -4.19               |
| 2,787.0             | 11.20           | 316.60      | 2,753.4             | 248.7      | -259.1     | 359.2                 | 1.11                  | -0.63                | -4.69               |
| 2,819.0             | 10.80           | 315.60      | 2,784.8             | 253.1      | -263.3     | 365.3                 | 1.38                  | -1.25                | -3.13               |
| 2,850.0             | 10.40           | 314.50      | 2,815.2             | 257.2      | -267.4     | 371.0                 | 1.45                  | -1.29                | -3.55               |
| 2,882.0             | 10.50           | 314.70      | 2,846.7             | 261.2      | -271.5     | 376.8                 | 0.33                  | 0.31                 | 0.63                |
| 2,914.0             | 10.60           | 315.00      | 2,878.2             | 265.4      | -275.6     | 382.6                 | 0.36                  | 0.31                 | 0.94                |
| 2,946.0             | 10.70           | 315.60      | 2,909.6             | 269.6      | -279.8     | 388.5                 | 0.47                  | 0.31                 | 1.88                |
| 2,977.0             | 10.80           | 316.60      | 2,940.1             | 273.7      | -283.8     | 394.3                 | 0.68                  | 0.32                 | 3.23                |
| 3,008.0             | 11.30           | 317.80      | 2,970.5             | 278.1      | -287.9     | 400.2                 | 1.78                  | 1.61                 | 3.87                |
| 3,039.0             | 12.10           | 317.30      | 3,000.8             | 282.7      | -292.1     | 406.5                 | 2.60                  | 2.58                 | -1.61               |
| 3,071.0             | 12.90           | 315.80      | 3,032.1             | 287.8      | -296.9     | 413.4                 | 2.70                  | 2.50                 | -4.69               |
| 3,103.0             | 13.67           | 313.50      | 3,063.2             | 292.9      | -302.1     | 420.8                 | 2.92                  | 2.41                 | -7.19               |
| 3,136.0             | 14.00           | 312.09      | 3,095.3             | 298.3      | -307.9     | 428.7                 | 1.43                  | 1.00                 | -4.27               |
| 3,167.0             | 13.64           | 310.00      | 3,125.4             | 303.1      | -313.5     | 436.1                 | 1.99                  | -1.16                | -6.74               |
| 3,199.0             | 12.93           | 309.44      | 3,156.5             | 307.8      | -319.1     | 443.4                 | 2.25                  | -2.22                | -1.75               |
| 3,230.0             | 13.10           | 309.90      | 3,186.7             | 312.3      | -324.5     | 450.4                 | 0.64                  | 0.55                 | 1.48                |
| 3,262.0             | 12.45           | 313.30      | 3,217.9             | 317.0      | -329.8     | 457.4                 | 3.10                  | -2.03                | 10.63               |
| 3,294.0             | 12.30           | 316.70      | 3,249.2             | 321.8      | -334.6     | 464.3                 | 2.32                  | -0.47                | 10.63               |
| 3,325.0             | 12.10           | 318.90      | 3,279.5             | 326.7      | -339.0     | 470.8                 | 1.63                  | -0.65                | 7.10                |
| 3,357.0             | 11.30           | 317.70      | 3,310.8             | 331.5      | -343.4     | 477.3                 | 2.61                  | -2.50                | -3.75               |
| 3,389.0             | 10.70           | 316.50      | 3,342.2             | 336.0      | -347.5     | 483.4                 | 2.01                  | -1.88                | -3.75               |
| 3,421.0             | 10.70           | 316.00      | 3,373.7             | 340.3      | -351.6     | 489.3                 | 0.29                  | 0.00                 | -1.56               |
| 3,452.0             | 11.00           | 318.20      | 3,404.1             | 344.6      | -355.6     | 495.1                 | 1.65                  | 0.97                 | 7.10                |
| 3,484.0             | 11.00           | 319.00      | 3,435.5             | 349.2      | -359.6     | 501.2                 | 0.48                  | 0.00                 | 2.50                |
| 3,516.0             | 11.20           | 318.80      | 3,466.9             | 353.8      | -363.7     | 507.4                 | 0.64                  | 0.63                 | -0.63               |
| 3,548.0             | 11.90           | 315.80      | 3,498.3             | 358.5      | -368.0     | 513.8                 | 2.88                  | 2.19                 | -9.38               |
| 3,579.0             | 12.60           | 314.50      | 3,528.6             | 363.2      | -372.7     | 520.3                 | 2.43                  | 2.26                 | -4.19               |
| 3,611.0             | 12.90           | 314.60      | 3,559.8             | 368.1      | -377.7     | 527.4                 | 0.94                  | 0.94                 | 0.31                |
| 3,642.0             | 12.70           | 315.20      | 3,590.0             | 373.0      | -382.6     | 534.3                 | 0.77                  | -0.65                | 1.94                |
| 3,674.0             | 12.60           | 316.00      | 3,621.3             | 378.0      | -387.5     | 541.3                 | 0.63                  | -0.31                | 2.50                |
| 3,705.0             | 12.70           | 316.60      | 3,651.5             | 382.9      | -392.2     | 548.1                 | 0.53                  | 0.32                 | 1.94                |
| 3,737.0             | 12.90           | 317.10      | 3,682.7             | 388.1      | -397.0     | 555.1                 | 0.71                  | 0.63                 | 1.56                |
| 3,769.0             | 13.20           | 316.20      | 3,713.9             | 393.3      | -402.0     | 562.4                 | 1.13                  | 0.94                 | -2.81               |
| 3,800.0             | 13.50           | 315.50      | 3,744.0             | 398.4      | -406.9     | 569.5                 | 1.10                  | 0.97                 | -2.26               |
| 3,832.0             | 13.30           | 315.20      | 3,775.2             | 403.7      | -412.2     | 576.9                 | 0.66                  | -0.63                | -0.94               |
| 3,863.0             | 12.80           | 314.00      | 3,805.4             | 408.6      | -417.1     | 583.9                 | 1.83                  | -1.61                | -3.87               |
| 3,895.0             | 12.50           | 312.80      | 3,836.6             | 413.4      | -422.2     | 590.9                 | 1.25                  | -0.94                | -3.75               |
| 3,927.0             | 12.20           | 312.14      | 3,867.9             | 418.1      | -427.3     | 597.8                 | 1.04                  | -0.94                | -2.06               |
| 3,959.0             | 12.00           | 312.40      | 3,899.1             | 422.6      | -432.2     | 604.5                 | 0.65                  | -0.63                | 0.81                |
| 3,991.0             | 11.40           | 311.70      | 3,930.5             | 426.9      | -437.1     | 611.0                 | 1.93                  | -1.88                | -2.19               |
| 4,023.0             | 11.00           | 312.30      | 3,961.9             | 431.1      | -441.7     | 617.2                 | 1.30                  | -1.25                | 1.88                |
| 4,055.0             | 10.80           | 313.10      | 3,993.3             | 435.2      | -446.1     | 623.2                 | 0.78                  | -0.63                | 2.50                |
| 4,087.0             | 11.00           | 314.10      | 4,024.7             | 439.4      | -450.5     | 629.3                 | 0.86                  | 0.63                 | 3.13                |
| 4,118.0             | 11.50           | 316.60      | 4,055.1             | 443.7      | -454.8     | 635.3                 | 2.25                  | 1.61                 | 8.06                |
| 4,150.0             | 11.60           | 317.00      | 4,086.5             | 448.3      | -459.1     | 641.7                 | 0.40                  | 0.31                 | 1.25                |
| 4,182.0             | 11.90           | 317.90      | 4,117.8             | 453.1      | -463.5     | 648.2                 | 1.10                  | 0.94                 | 2.81                |
| 4,213.0             | 12.10           | 317.50      | 4,148.1             | 457.9      | -467.9     | 654.7                 | 0.70                  | 0.65                 | -1.29               |
| 4,245.0             | 12.30           | 318.10      | 4,179.4             | 462.9      | -472.4     | 661.4                 | 0.74                  | 0.63                 | 1.88                |
| 4,277.0             | 12.20           | 317.40      | 4,210.7             | 467.9      | -477.0     | 668.2                 | 0.56                  | -0.31                | -2.19               |
| 4,308.0             | 12.20           | 316.00      | 4,241.0             | 472.7      | -481.5     | 674.7                 | 0.95                  | 0.00                 | -4.52               |
| 4,340.0             | 12.30           | 314.90      | 4,272.2             | 477.5      | -486.2     | 681.5                 | 0.79                  | 0.31                 | -3.44               |



# PayZone Directional Services, LLC.

## Survey Report



Company: NEWFIELD EXPLORATION  
 Project: USGS Myton SW (UT)  
 Site: SECTION 34 T8S, R16E  
 Well: Q-34-8-16  
 Wellbore: Wellbore #1  
 Design: Actual

Local Co-ordinate Reference: Well Q-34-8-16  
 TVD Reference: Q-34-8-16 @ 5668.0ft (CAPSTAR 328)  
 MD Reference: Q-34-8-16 @ 5668.0ft (CAPSTAR 328)  
 North Reference: True  
 Survey Calculation Method: Minimum Curvature  
 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) |
|----------------------|-----------------|-------------|---------------------|------------|------------|-----------------------|-----------------------|----------------------|---------------------|
| 4,372.0              | 12.20           | 315.20      | 4,303.5             | 482.4      | -491.0     | 688.3                 | 0.37                  | -0.31                | 0.94                |
| 4,403.0              | 12.30           | 315.20      | 4,333.8             | 487.0      | -495.7     | 694.9                 | 0.32                  | 0.32                 | 0.00                |
| 4,435.0              | 12.17           | 314.60      | 4,365.1             | 491.8      | -500.5     | 701.6                 | 0.57                  | -0.41                | -1.88               |
| 4,466.0              | 11.40           | 313.70      | 4,395.4             | 496.2      | -505.0     | 708.0                 | 2.55                  | -2.48                | -2.90               |
| 4,498.0              | 11.10           | 313.30      | 4,426.8             | 500.5      | -509.6     | 714.2                 | 0.97                  | -0.94                | -1.25               |
| 4,529.0              | 11.25           | 312.69      | 4,457.2             | 504.6      | -513.9     | 720.2                 | 0.62                  | 0.48                 | -1.97               |
| 4,561.0              | 11.30           | 311.60      | 4,488.6             | 508.8      | -518.6     | 726.5                 | 0.68                  | 0.16                 | -3.41               |
| 4,593.0              | 11.00           | 312.30      | 4,520.0             | 512.9      | -523.2     | 732.7                 | 1.03                  | -0.94                | 2.19                |
| 4,624.0              | 10.50           | 313.20      | 4,550.5             | 516.9      | -527.4     | 738.4                 | 1.70                  | -1.61                | 2.90                |
| 4,656.0              | 10.20           | 312.30      | 4,581.9             | 520.8      | -531.7     | 744.2                 | 1.06                  | -0.94                | -2.81               |
| 4,688.0              | 9.80            | 310.20      | 4,613.4             | 524.4      | -535.8     | 749.7                 | 1.69                  | -1.25                | -6.56               |
| 4,720.0              | 9.40            | 309.50      | 4,645.0             | 527.9      | -539.9     | 755.1                 | 1.30                  | -1.25                | -2.19               |
| 4,751.0              | 9.60            | 310.77      | 4,675.6             | 531.2      | -543.8     | 760.2                 | 0.93                  | 0.65                 | 4.10                |
| 4,783.0              | 10.30           | 312.00      | 4,707.1             | 534.8      | -548.0     | 765.7                 | 2.29                  | 2.19                 | 3.84                |
| 4,815.0              | 10.60           | 312.00      | 4,738.6             | 538.7      | -552.3     | 771.5                 | 0.94                  | 0.94                 | 0.00                |
| 4,847.0              | 10.50           | 309.70      | 4,770.0             | 542.5      | -556.7     | 777.3                 | 1.35                  | -0.31                | -7.19               |
| 4,878.0              | 10.00           | 310.50      | 4,800.5             | 546.1      | -561.0     | 782.8                 | 1.68                  | -1.61                | 2.58                |
| 4,910.0              | 10.15           | 312.95      | 4,832.0             | 549.8      | -565.1     | 788.4                 | 1.42                  | 0.47                 | 7.66                |
| 4,942.0              | 10.33           | 315.56      | 4,863.5             | 553.8      | -569.2     | 794.1                 | 1.56                  | 0.56                 | 8.16                |
| 4,973.0              | 10.60           | 316.90      | 4,894.0             | 557.8      | -573.1     | 799.8                 | 1.17                  | 0.87                 | 4.32                |
| 5,005.0              | 11.20           | 315.60      | 4,925.4             | 562.2      | -577.3     | 805.8                 | 2.03                  | 1.88                 | -4.06               |
| 5,037.0              | 11.80           | 313.60      | 4,956.8             | 566.7      | -581.8     | 812.2                 | 2.25                  | 1.88                 | -6.25               |
| 5,068.0              | 12.20           | 310.90      | 4,987.1             | 571.0      | -586.6     | 818.6                 | 2.22                  | 1.29                 | -8.71               |
| 5,100.0              | 12.60           | 310.30      | 5,018.4             | 575.5      | -591.8     | 825.5                 | 1.31                  | 1.25                 | -1.88               |
| 5,132.0              | 12.80           | 310.10      | 5,049.6             | 580.0      | -597.2     | 832.5                 | 0.64                  | 0.63                 | -0.63               |
| 5,164.0              | 11.87           | 309.93      | 5,080.8             | 584.4      | -602.4     | 839.3                 | 2.91                  | -2.91                | -0.53               |
| 5,195.0              | 11.50           | 309.20      | 5,111.2             | 588.4      | -607.3     | 845.6                 | 1.29                  | -1.19                | -2.35               |
| 5,227.0              | 11.70           | 310.90      | 5,142.5             | 592.6      | -612.2     | 852.0                 | 1.24                  | 0.63                 | 5.31                |
| 5,259.0              | 11.50           | 311.20      | 5,173.9             | 596.8      | -617.0     | 858.4                 | 0.65                  | -0.63                | 0.94                |
| 5,290.0              | 11.50           | 312.80      | 5,204.3             | 600.9      | -621.6     | 864.6                 | 1.03                  | 0.00                 | 5.16                |
| 5,321.0              | 11.10           | 313.20      | 5,234.7             | 605.1      | -626.1     | 870.7                 | 1.31                  | -1.29                | 1.29                |
| 5,353.0              | 10.85           | 313.93      | 5,266.1             | 609.3      | -630.5     | 876.8                 | 0.89                  | -0.78                | 2.28                |
| 5,383.7              | 11.25           | 312.93      | 5,296.2             | 613.3      | -634.8     | 882.6                 | 1.43                  | 1.29                 | -3.26               |
| <b>Q-34-8-16 TGT</b> |                 |             |                     |            |            |                       |                       |                      |                     |
| 5,384.0              | 11.25           | 312.92      | 5,296.5             | 613.4      | -634.8     | 882.7                 | 1.43                  | 1.30                 | -3.14               |
| 5,416.0              | 11.65           | 312.92      | 5,327.9             | 617.7      | -639.5     | 889.1                 | 1.25                  | 1.25                 | 0.00                |
| 5,448.0              | 11.40           | 314.20      | 5,359.2             | 622.1      | -644.1     | 895.5                 | 1.12                  | -0.78                | 4.00                |
| 5,479.0              | 10.80           | 316.60      | 5,389.6             | 626.3      | -648.3     | 901.4                 | 2.44                  | -1.94                | 7.74                |
| 5,511.0              | 10.70           | 314.40      | 5,421.1             | 630.6      | -652.5     | 907.4                 | 1.32                  | -0.31                | -6.88               |
| 5,543.0              | 11.00           | 313.70      | 5,452.5             | 634.8      | -656.8     | 913.4                 | 1.02                  | 0.94                 | -2.19               |
| 5,575.0              | 11.20           | 312.30      | 5,483.9             | 639.0      | -661.3     | 919.6                 | 1.05                  | 0.63                 | -4.38               |
| 5,606.0              | 10.90           | 310.60      | 5,514.3             | 642.9      | -665.8     | 925.5                 | 1.43                  | -0.97                | -5.48               |
| 5,638.0              | 10.50           | 310.10      | 5,545.8             | 646.8      | -670.3     | 931.4                 | 1.28                  | -1.25                | -1.56               |
| 5,670.0              | 10.50           | 310.90      | 5,577.3             | 650.5      | -674.7     | 937.3                 | 0.46                  | 0.00                 | 2.50                |
| 5,702.0              | 10.90           | 312.70      | 5,608.7             | 654.5      | -679.1     | 943.2                 | 1.63                  | 1.25                 | 5.63                |
| 5,734.0              | 12.10           | 312.20      | 5,640.1             | 658.8      | -683.8     | 949.6                 | 3.76                  | 3.75                 | -1.56               |
| 5,766.0              | 12.90           | 313.00      | 5,671.3             | 663.5      | -688.9     | 956.5                 | 2.56                  | 2.50                 | 2.50                |
| 5,797.0              | 13.25           | 315.90      | 5,701.5             | 668.4      | -693.9     | 963.5                 | 2.40                  | 1.13                 | 9.35                |
| 5,829.0              | 13.90           | 317.90      | 5,732.6             | 673.9      | -699.1     | 971.0                 | 2.51                  | 2.03                 | 6.25                |
| 5,860.0              | 14.20           | 320.52      | 5,762.7             | 679.6      | -704.0     | 978.5                 | 2.27                  | 0.97                 | 8.45                |
| 5,892.0              | 13.70           | 324.60      | 5,793.7             | 685.7      | -708.7     | 986.1                 | 3.45                  | -1.56                | 12.75               |
| 5,924.0              | 13.10           | 325.30      | 5,824.9             | 691.8      | -712.9     | 993.4                 | 1.94                  | -1.88                | 2.19                |
| 5,955.0              | 13.10           | 324.30      | 5,855.0             | 697.5      | -717.0     | 1,000.3               | 0.73                  | 0.00                 | -3.23               |
| 5,987.0              | 13.70           | 321.10      | 5,886.2             | 703.4      | -721.5     | 1,007.6               | 2.98                  | 1.88                 | -10.00              |



# PayZone Directional Services, LLC.



## Survey Report

Company: NEWFIELD EXPLORATION  
 Project: USGS Myton SW (UT)  
 Site: SECTION 34 T8S, R16E  
 Well: Q-34-8-16  
 Wellbore: Wellbore #1  
 Design: Actual

Local Co-ordinate Reference: Well Q-34-8-16  
 TVD Reference: Q-34-8-16 @ 5668.0ft (CAPSTAR 328)  
 MD Reference: Q-34-8-16 @ 5668.0ft (CAPSTAR 328)  
 North Reference: True  
 Survey Calculation Method: Minimum Curvature  
 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) |
|---------------------|-----------------|-------------|---------------------|------------|------------|-----------------------|-----------------------|----------------------|---------------------|
| 6,019.0             | 13.35           | 321.02      | 5,917.3             | 709.2      | -726.2     | 1,015.0               | 1.10                  | -1.09                | -0.25               |
| 6,050.0             | 12.70           | 318.80      | 5,947.5             | 714.6      | -730.7     | 1,022.0               | 2.65                  | -2.10                | -7.16               |
| 6,082.0             | 11.96           | 318.20      | 5,978.8             | 719.7      | -735.2     | 1,028.8               | 2.35                  | -2.31                | -1.88               |
| 6,114.0             | 11.16           | 318.00      | 6,010.1             | 724.5      | -739.5     | 1,035.2               | 2.50                  | -2.50                | -0.63               |
| 6,145.0             | 10.70           | 318.30      | 6,040.5             | 728.9      | -743.4     | 1,041.1               | 1.50                  | -1.48                | 0.97                |
| 6,177.0             | 10.20           | 317.30      | 6,072.0             | 733.2      | -747.3     | 1,046.9               | 1.66                  | -1.56                | -3.13               |
| 6,209.0             | 9.90            | 316.90      | 6,103.5             | 737.2      | -751.1     | 1,052.4               | 0.96                  | -0.94                | -1.25               |
| 6,241.0             | 9.70            | 317.50      | 6,135.1             | 741.2      | -754.8     | 1,057.9               | 0.70                  | -0.63                | 1.88                |
| 6,272.0             | 9.30            | 316.40      | 6,165.6             | 745.0      | -758.3     | 1,063.0               | 1.42                  | -1.29                | -3.55               |
| 6,304.0             | 8.90            | 317.00      | 6,197.2             | 748.7      | -761.8     | 1,068.0               | 1.28                  | -1.25                | 1.88                |
| 6,336.0             | 8.00            | 317.01      | 6,228.9             | 752.1      | -765.0     | 1,072.7               | 2.81                  | -2.81                | 0.03                |
| 6,368.0             | 7.16            | 316.10      | 6,260.6             | 755.2      | -767.9     | 1,076.9               | 2.65                  | -2.63                | -2.84               |
| 6,400.0             | 7.00            | 310.50      | 6,292.4             | 757.9      | -770.8     | 1,080.9               | 2.21                  | -0.50                | -17.50              |
| 6,431.0             | 7.00            | 305.80      | 6,323.1             | 760.2      | -773.7     | 1,084.6               | 1.85                  | 0.00                 | -15.16              |
| 6,462.0             | 6.77            | 302.59      | 6,353.9             | 762.3      | -776.8     | 1,088.3               | 1.45                  | -0.74                | -10.35              |
| 6,494.0             | 6.20            | 301.00      | 6,385.7             | 764.2      | -779.9     | 1,091.8               | 1.87                  | -1.78                | -4.97               |
| 6,544.0             | 6.20            | 301.00      | 6,435.4             | 767.0      | -784.5     | 1,097.1               | 0.00                  | 0.00                 | 0.00                |
| 6,560.0             | 6.20            | 301.00      | 6,451.3             | 767.9      | -786.0     | 1,098.8               | 0.00                  | 0.00                 | 0.00                |

### Wellbore Targets

| Target Name                                                                       | Dip Angle (°) | Dip Dir. (°) | TVD (ft) | +N/-S (ft) | +E/-W (ft) | Northing (ft) | Easting (ft) | Latitude        | Longitude        |
|-----------------------------------------------------------------------------------|---------------|--------------|----------|------------|------------|---------------|--------------|-----------------|------------------|
| Q-34-8-16 TGT                                                                     | 0.00          | 0.00         | 5,300.0  | 598.7      | -621.7     | 7,197,524.13  | 2,029,344.33 | 40° 4' 14.776 N | 110° 6' 36.577 W |
| - hit/miss target                                                                 |               |              |          |            |            |               |              |                 |                  |
| - Shape                                                                           |               |              |          |            |            |               |              |                 |                  |
| - actual wellpath misses by 20.0ft at 5383.7ft MD (5296.2 TVD, 613.3 N, -634.8 E) |               |              |          |            |            |               |              |                 |                  |
| - Circle (radius 75.0)                                                            |               |              |          |            |            |               |              |                 |                  |

Checked By: \_\_\_\_\_ Approved By: \_\_\_\_\_ Date: \_\_\_\_\_



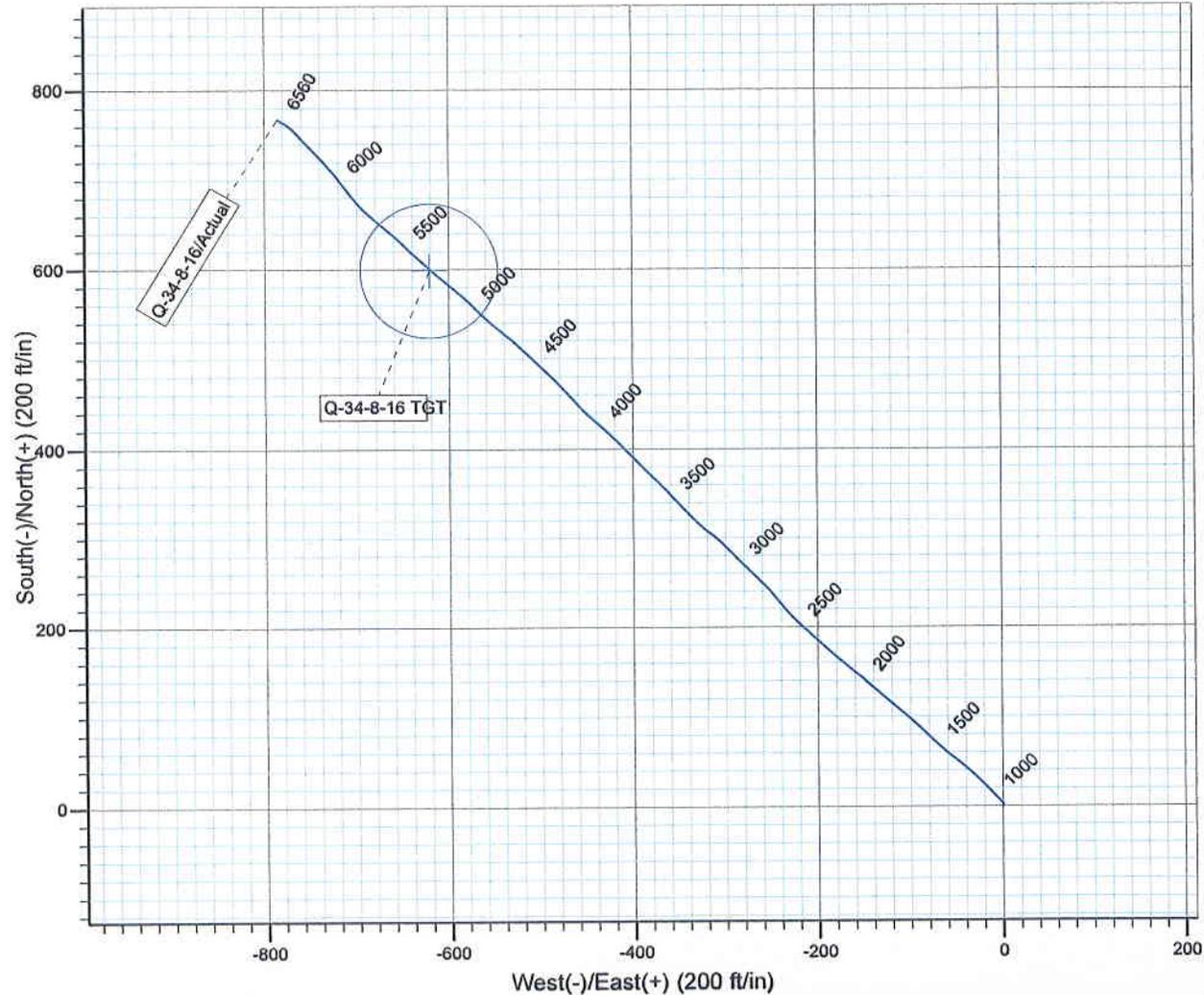
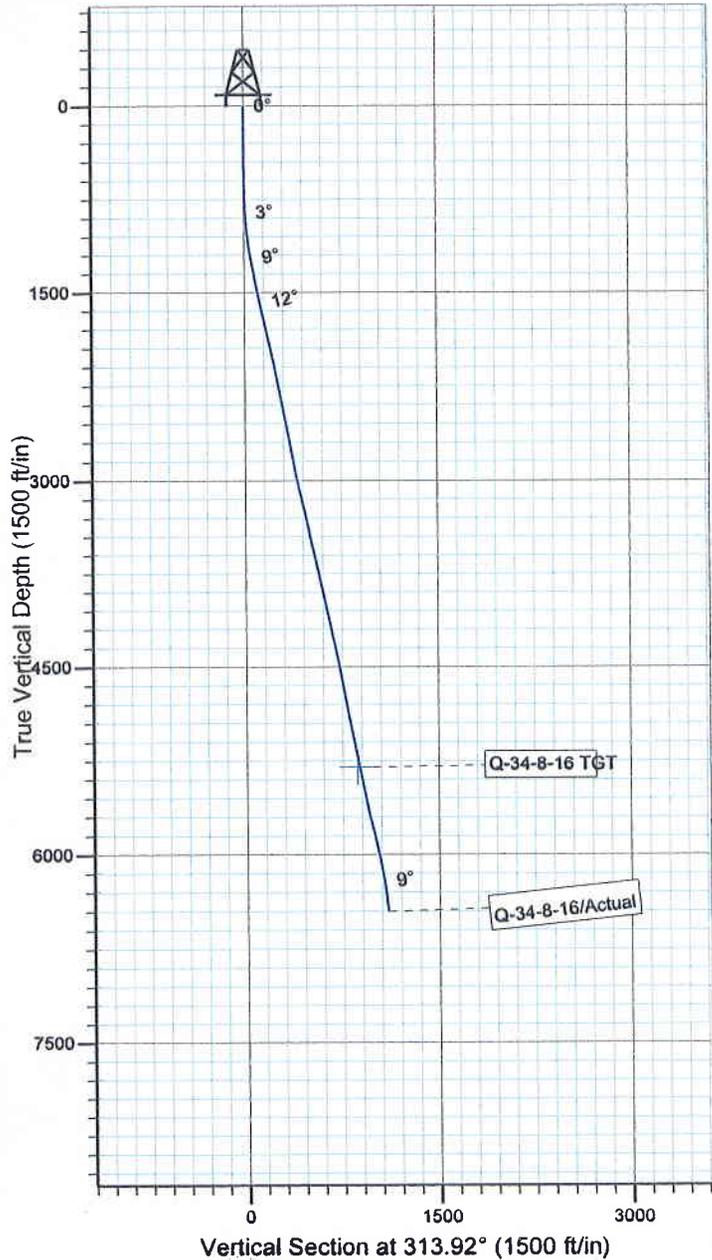
Project: USGS Myton SW (UT)  
 Site: SECTION 34 T8S, R16E  
 Well: Q-34-8-16  
 Wellbore: Wellbore #1  
 SURVEY: Actual

FINAL SURVEY REPORT



Azimuths to True North  
 Magnetic North: 11.41°

Magnetic Field  
 Strength: 52333.3snT  
 Dip Angle: 65.82°  
 Date: 2010/11/15  
 Model: IGRF2010



Design: Actual (Q-34-8-16/Wellbore #1)



Created By: *Jim Hudson* Date: 13:33, December 03 2010  
 THIS SURVEY IS CORRECT TO THE BEST OF MY  
 KNOWLEDGE AND IS SUPPORTED BY ACTUAL FIELD DATA.

**Daily Activity Report**

Format For Sundry

**GRTR MB Q-34-8-16****9/1/2010 To 1/30/2011****GRTR MB Q-34-8-16****Waiting on Cement****Date:** 11/13/2010

Ross #21 at 350. Days Since Spud - 8 bbls To Pit - Casing With 180 sks ClassG +2% Calcium Chloride +.25# Cello Flake At 15.8 ppg W/ 1.17 yield Returned - Spud On 11/3/10 With Ross Rig # 21 Drilled 350' Of 12 1/4" Hole. And Run 8 jts of 8 5/8" Casing - ( Guide Shoe Shoe Jt Baffel Plate 7 jts) Set@ 349.02' KB. On 11/10/10 BJ Services Cemented 8 5/8"

**Daily Cost:** \$0**Cumulative Cost:** \$53,239**GRTR MB Q-34-8-16****Rigging Up****Date:** 11/15/2010

NDSI #2 at 350. 0 Days Since Spud - Rig Down Repair For Move

**Daily Cost:** \$0**Cumulative Cost:** \$62,854**GRTR MB Q-34-8-16****Drill 7 7/8" hole with fresh water****Date:** 11/16/2010

NDSI #2 at 1728. 1 Days Since Spud - Housekeeping Clean ( Boards Out Of Pipe Tubs& Rig Floor) - Drill 7 7/8" Hole From 300' To 1728', WOB 20,000 lbs,TRPM 168,GPM 344, AVG ROP 129.8 fph - No H2s Reported Last 24 Hrs - P/U BHA as follows Varel VM616 R 7 7/8" PDC,6.5" Hunting Mud Motor 7/8 4.8, .33 Rev,1.5 Deg, 1x30' - everything Tested OK - Blind Rams,Choke Line & Manfold To 2000# psi for 10 Mins And 8 5/8" Casing To 1500# PSI FOR 30 mins - Accepted Rig @ 3:00 PM 11/15/10.R/U B&C Quick Test,Test Upper Kelly Valve,Safety Valve,Pipe Rams, - On 11/15/10 MIRU Set Surface Equipment W/Marcus Liddell Trucking.( 3 Mile Rig Move From V-26-8-16 ) - Monel DC,1x3' Gap Sub,1x2' index Sub,1x5' Pony Monel,26 jts HWDP.

**Daily Cost:** \$0**Cumulative Cost:** \$98,698**GRTR MB Q-34-8-16****Drill 7 7/8" hole with fresh water****Date:** 11/17/2010

NDSI #2 at 4011. 2 Days Since Spud - Rig Service Check Crown-A-Matic,Function Test Bop's,Bop Drill Hads @ Stations ! Min. - Drill 7 7/8" Hole From 2553' To 4011' WOB 20,000 lbs,TRPM 168,GPM 344, AVG ROP81 fph. - Trouble With MWD Tool.Had To Keep Re - Sync from 3300' to 4000' - No H2s Reported Last 24 Hrs. - Drill 7 7/8" Hole From 1728' To 2553'. WOB 18,000 LBS,TRPM 168,GPM 344,AVG ROP 150 fph

**Daily Cost:** \$0**Cumulative Cost:** \$118,507**GRTR MB Q-34-8-16****Drill 7 7/8" hole with fresh water****Date:** 11/18/2010

NDSI #2 at 4867. 3 Days Since Spud - Trip In Hole W/Bit #2 - Drill 7 7/8" Hole From 4011' To 4480', WOB 22,000 lbs,TRPM 168,GPM 344,AVG ROP 72.1 fph - Rig Service,Check Crown-A-Matic,Function Test Pipe Rams, ( Bop Drill Hands In Place 1min 15 sec.) - Drill 7 7/8" Hole From 4480' To 4613', WOB 22,000 lbs,TRPM 168, GPM 344,AVG Rop 53.2 fph - Try to Resync MWD Tools - Circ Hole Wait For 10# Brine. Hole Flowing 3 gal/min - Pump 260 bbls 10# Brine

- Trip Out Hole For MWD Tools - Change Out MWD Tools & Bit - P/U Kelly, Gain Circ, Wash 60' To Bottom. No Fill - Work On Pason Encoder - Drill 7 7/8" Hole From 4613' To 4867' WOB 20,000 lbs, TRPM 168, GPM 344. AVG ROP 79.3 fph - No H2s Reported Last 24 Hrs - Well flowing 3 gal/min @ 4613'

**Daily Cost:** \$0

**Cumulative Cost:** \$173,678

**GRTR MB Q-34-8-16**

**Lay Down Drill Pipe/BHA**

**Date:** 11/19/2010

NDSI #2 at 6560. 4 Days Since Spud - Drill 7 7/8" Hole From 4867' To 5437' WOB 20,000 lbs, TRPM 168, GPM 344, AVG ROP 67.0 fph - Rig Service, Check Crown-A-Matic, Function Test Bop's - Drill 7 7/8" Hole From 5437' To 6560', WOB 25,000 lbs, TRPM 168, GPM 344, AVG ROP 83.1 fph - LDDP. - Circ Hole For Laydown & Logs

**Daily Cost:** \$0

**Cumulative Cost:** \$203,687

**GRTR MB Q-34-8-16**

**Wait on Completion**

**Date:** 11/20/2010

NDSI #2 at 6560. 5 Days Since Spud - Returned 24 bbls To Pit, Bumped Plug To 2416 psi. - yield ( 50:50:2 + 3% KCL + 0.5% CE-1 + .25#CF .05#SF + .3SMS + FP-6L ) Displaced With 155.0 bbls, - ( PL II + 3%KCL + 5#CSE + 0.5%#CF + 5#KOL + .5SMS FP+SF ) Then 400 sks Lead Cement @ 14.4 ppg W/ 1.24 - R/U BJ Services Test Lines To 4000# psi. Pump 275 sks Lead Cement @ 11 ppg w/ 3.53 yield - R/U Circ Casing - 1 jt will be transferred to ( MBNE Fed K-25-8-16) - R/U Marcus Liddells Casing Crew, Run 156 jts, 5,5" J-55 15.5#LT&C, Shoe Set 6552' Float Set @ 6508'. - R/U B&C Quick Test, Test 5 1/2" Pipe Rams To 2000# psi for 10 mins. Tested OK - And DSN/SDL/GR/CAL Suite Logs From 6556' To 3000' - R/U Phoenix Surveys, Run Wireline Logs, Run DISGL/SP/GR Suite From Loggers TD 6556' TO Surface Casing. - Nipple Down Bop's Set Slips With 94,000# Tesnion - LDDP & BHA - Wait On Brine Water, Pump 260 bbls 10# Brine Water - LDDP To 4000' - Clean Mud Tanks. - Released Rig @ 3:30 AM 11/20/10 **Finalized**

**Daily Cost:** \$0

**Cumulative Cost:** \$367,223

**Pertinent Files: Go to File List**