

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

FORM 3

AMENDED REPORT

**APPLICATION FOR PERMIT TO DRILL**

|   |                   |  |                |   |              |                 |
|---|-------------------|--|----------------|---|--------------|-----------------|
| <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>1. WELL NAME and NUMBER</b><br>NBU 1021-12B3DS   |              |                 |
| <b>4. TYPE OF WELL</b><br>Gas Well Coalbed Methane Well: NO   |                   |  |                | <b>3. FIELD OR WILDCAT</b><br>NATURAL BUTTES  |              |                 |
| <b>6. NAME OF OPERATOR</b><br>KERR-MCGEE OIL & GAS ONSHORE, L.P.  |                   |  |                | <b>5. UNIT or COMMUNITIZATION AGREEMENT NAME</b><br>NATURAL BUTTES  |              |                 |
| <b>8. ADDRESS OF OPERATOR</b><br>P.O. Box 173779, Denver, CO, 80217   |                   |  |                | <b>7. OPERATOR PHONE</b><br>307-752-1169  |              |                 |
| <b>10. MINERAL LEASE NUMBER (FEDERAL, INDIAN, OR STATE)</b><br>ML 23612   |                   | <b>11. MINERAL OWNERSHIP</b><br>FEDERAL <input type="checkbox"/> INDIAN <input type="checkbox"/> STATE <input checked="" type="checkbox"/> FEE <input type="checkbox"/>    |                | <b>12. SURFACE OWNERSHIP</b><br>FEDERAL <input type="checkbox"/> INDIAN <input type="checkbox"/> STATE <input checked="" 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 checked="" type="checkbox"/> (Submit Commingling Application) NO <input 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> |
| LOCATION AT SURFACE   | 374 FSL 2433 FEL  | SWSE   | 1              | 10.0 S  | 21.0 E       | S               |
| Top of Uppermost Producing Zone   | 1160 FNL 2250 FEL | NWNE   | 12             | 10.0 S  | 21.0 E       | S               |
| At Total Depth  | 1160 FNL 2250 FEL | NWNE   | 12             | 10.0 S  | 21.0 E       | S               |
| <b>21. COUNTY</b><br>UINTAH   |                   | <b>22. DISTANCE TO NEAREST LEASE LINE (Feet)</b><br>1160   |                | <b>23. NUMBER OF ACRES IN DRILLING UNIT</b><br>571  |              |                 |
|   |                   | <b>25. DISTANCE TO NEAREST WELL IN SAME POOL (Applied For Drilling or Completed)</b><br>1000   |                | <b>26. PROPOSED DEPTH</b><br>MD: 9656 TVD: 9392   |              |                 |
| <b>27. ELEVATION - GROUND LEVEL</b><br>5223   |                   | <b>28. BOND NUMBER</b><br>22013542   |                | <b>29. SOURCE OF DRILLING WATER / WATER RIGHTS APPROVAL NUMBER IF APPLICABLE</b><br>Permit #43-8496   |              |                 |

**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> Danielle Piernot                 | <b>TITLE</b> Regulatory Analyst   | <b>PHONE</b> 720 929-6156               |
| <b>SIGNATURE</b>                             | <b>DATE</b> 12/18/2009  | <b>EMAIL</b> gnbregulatory@anadarko.com |
| <b>API NUMBER ASSIGNED</b><br>43047508560000 | <b>APPROVAL</b><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               | 4.5                | 0               | 9656               |  |  |
| <b>Pipe</b>   | <b>Grade</b>        | <b>Length</b>      | <b>Weight</b>   |                    |  |  |
|               | Grade I-80 Buttress | 9656               | 11.6            |                    |  |  |
|               |                     |                    |                 |                    |  |  |

**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          | 11               | 8.625              | 0               | 2220               |  |  |
| <b>Pipe</b>   | <b>Grade</b>     | <b>Length</b>      | <b>Weight</b>   |                    |  |  |
|               | Grade I-80 LT&C  | 2220               | 28.0            |                    |  |  |
|               |                  |                    |                 |                    |  |  |





# **ANADARKO PETROLEUM CORP.**

**UINTAH COUNTY, UTAH (nad 27)**

**NBU 1021-10 Pad**

**NBU 1021-12B3DS**

**NBU 1021-12B3DS**

**Plan: PLAN #1 11-19-09 RHS**

## **Standard Planning Report**

**19 November, 2009**



**Weatherford®**



| WELL DETAILS: NBU 1021-12B3DS |       |             |                          |                       |                  |                   |
|-------------------------------|-------|-------------|--------------------------|-----------------------|------------------|-------------------|
| +N/-S                         | +E/-W | Northing    | Ground Level:<br>Easting | 5221.00<br>2061103.42 | Latitude         | Longitude         |
| 0.00                          | 0.00  | 14519166.96 |                          |                       | 39° 58' 16.993 N | 109° 29' 54.661 W |
| Slot                          |       |             |                          |                       |                  |                   |

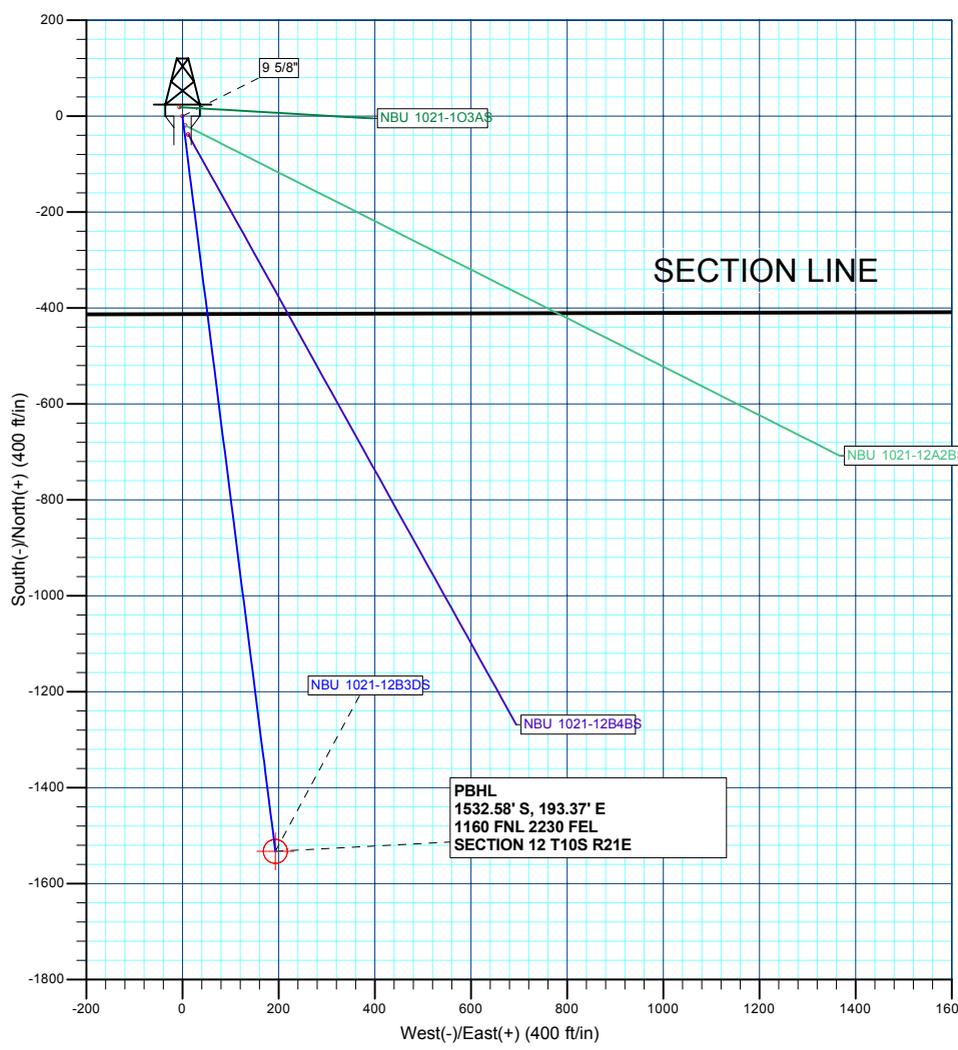
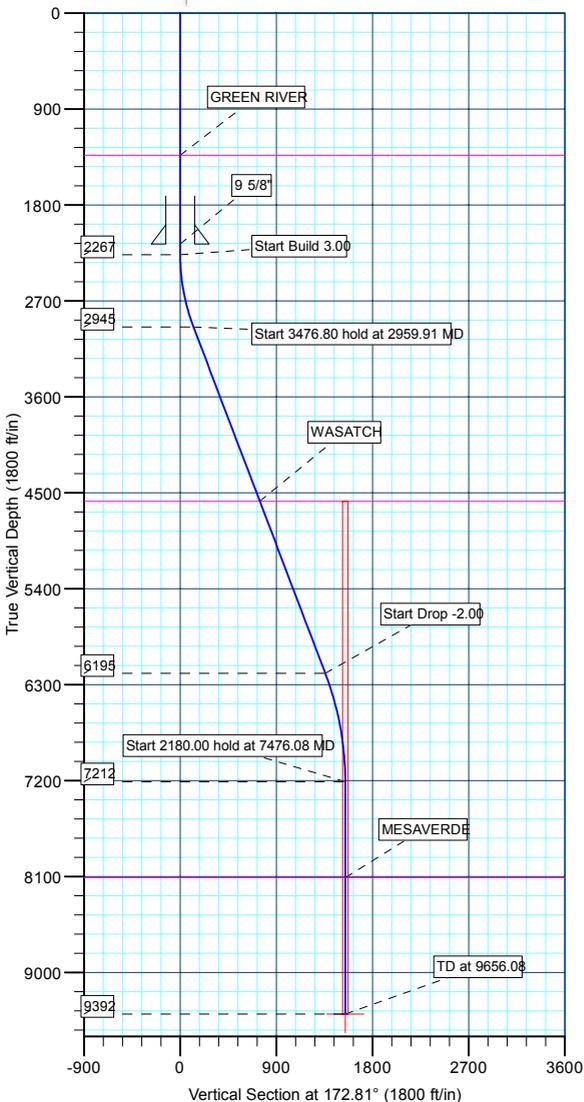
| WELLBORE TARGET DETAILS (LAT/LONG) |         |          |        |                 |                   |                        |
|------------------------------------|---------|----------|--------|-----------------|-------------------|------------------------|
| Name                               | TVD     | +N/-S    | +E/-W  | Latitude        | Longitude         | Shape                  |
| PBHL                               | 9392.00 | -1532.58 | 193.37 | 39° 58' 1.844 N | 109° 29' 52.177 W | Circle (Radius: 25.00) |

| FORMATION TOP DETAILS |         |             |
|-----------------------|---------|-------------|
| TVDPath               | MDPath  | Formation   |
| 1334.00               | 1334.00 | GREEN RIVER |
| 4580.00               | 4708.96 | WASATCH     |
| 8111.00               | 8375.08 | MESAVERDE   |

| SECTION DETAILS |       |        |         |          |        |      |        |         |        |   |
|-----------------|-------|--------|---------|----------|--------|------|--------|---------|--------|---|
| MD              | Inc   | Azi    | TVD     | +N/-S    | +E/-W  | DLeg | TFace  | VSec    | Target |   |
| 0.00            | 0.00  | 0.00   | 0.00    | 0.00     | 0.00   | 0.00 | 0.00   | 0.00    |        |   |
| 2267.00         | 0.00  | 0.00   | 2267.00 | 0.00     | 0.00   | 0.00 | 0.00   | 0.00    |        |   |
| 2959.91         | 20.79 | 172.81 | 2944.81 | -123.35  | 15.56  | 3.00 | 172.81 | 124.32  |        |   |
| 6436.71         | 20.79 | 172.81 | 6195.28 | -1347.56 | 170.03 | 0.00 | 0.00   | 1358.24 |        |   |
| 7476.08         | 0.00  | 0.00   | 7212.00 | -1532.58 | 193.37 | 2.00 | 180.00 | 1544.73 |        |   |
| 9656.08         | 0.00  | 0.00   | 9392.00 | -1532.58 | 193.37 | 0.00 | 0.00   | 1544.73 |        | PBHL_NBU 1021-12B3DS(1160 FNL 2230 FEL)25' TGT RA |

| CASING DETAILS |         |        |      |
|----------------|---------|--------|------|
| TVD            | MD      | Name   | Size |
| 2167.00        | 2167.00 | 9 5/8" | 9.62 |

KB ELEV: WELL @ 5235.00ft (Original Well Elev)  
 RD ELEV: 5221.00





|                  |                              |                                     |                                       |
|------------------|------------------------------|-------------------------------------|---------------------------------------|
| <b>Database:</b> | EDM 2003.21 Single User Db   | <b>Local Co-ordinate Reference:</b> | Well NBU 1021-12B3DS                  |
| <b>Company:</b>  | ANADARKO PETROLEUM CORP.     | <b>TVD Reference:</b>               | WELL @ 5235.00ft (Original Well Elev) |
| <b>Project:</b>  | UINTAH COUNTY, UTAH (nad 27) | <b>MD Reference:</b>                | WELL @ 5235.00ft (Original Well Elev) |
| <b>Site:</b>     | NBU 1021-1O Pad              | <b>North Reference:</b>             | True                                  |
| <b>Well:</b>     | NBU 1021-12B3DS              | <b>Survey Calculation Method:</b>   | Minimum Curvature                     |
| <b>Wellbore:</b> | NBU 1021-12B3DS              |                                     |                                       |
| <b>Design:</b>   | PLAN #1 11-19-09 RHS         |                                     |                                       |

|                    |  |                      |                |
|--------------------|--|----------------------|----------------|
| <b>Project</b>     | UINTAH COUNTY, UTAH (nad 27),                |                      |                |
| <b>Map System:</b> | Universal Transverse Mercator (US Survey Fee | <b>System Datum:</b> | Mean Sea Level |
| <b>Geo Datum:</b>  | NAD 1927 (NADCON CONUS)                      |                      |                |
| <b>Map Zone:</b>   | Zone 12N (114 W to 108 W)                    |                      |                |

|                              |                                      |                     |                  |                          |                   |
|------------------------------|--------------------------------------|---------------------|------------------|--------------------------|-------------------|
| <b>Site</b>                  | NBU 1021-1O Pad, SECTION 1 T10S R21E |                     |                  |                          |                   |
| <b>Site Position:</b>        |                                      | <b>Northing:</b>    | 14,519,185.79 ft | <b>Latitude:</b>         | 39° 58' 17.180 N  |
| <b>From:</b>                 | Lat/Long                             | <b>Easting:</b>     | 2,061,097.22 ft  | <b>Longitude:</b>        | 109° 29' 54.737 W |
| <b>Position Uncertainty:</b> | 0.00 ft                              | <b>Slot Radius:</b> | in               | <b>Grid Convergence:</b> | 0.96 °            |

|                             |                 |           |                            |                  |                      |                   |
|-----------------------------|-----------------|-----------|----------------------------|------------------|----------------------|-------------------|
| <b>Well</b>                 | NBU 1021-12B3DS |           |                            |                  |                      |                   |
| <b>Well Position</b>        | <b>+N/-S</b>    | -18.94 ft | <b>Northing:</b>           | 14,519,166.96 ft | <b>Latitude:</b>     | 39° 58' 16.993 N  |
|                             | <b>+E/-W</b>    | 5.88 ft   | <b>Easting:</b>            | 2,061,103.42 ft  | <b>Longitude:</b>    | 109° 29' 54.661 W |
| <b>Position Uncertainty</b> |                 | 0.00 ft   | <b>Wellhead Elevation:</b> | ft               | <b>Ground Level:</b> | 5,221.00 ft       |

|                  |                   |                    |                        |                      |                            |
|------------------|-------------------|--------------------|------------------------|----------------------|----------------------------|
| <b>Wellbore</b>  | NBU 1021-12B3DS   |                    |                        |                      |                            |
| <b>Magnetics</b> | <b>Model Name</b> | <b>Sample Date</b> | <b>Declination (°)</b> | <b>Dip Angle (°)</b> | <b>Field Strength (nT)</b> |
|                  | BGGM2009          | 11/19/2009         | 11.30                  | 65.90                | 52,478                     |

|                          |                              |                   |                      |                      |
|--------------------------|------------------------------|-------------------|----------------------|----------------------|
| <b>Design</b>            | PLAN #1 11-19-09 RHS         |                   |                      |                      |
| <b>Audit Notes:</b>      |                              |                   |                      |                      |
| <b>Version:</b>          | <b>Phase:</b>                | PLAN              | <b>Tie On Depth:</b> | 0.00                 |
| <b>Vertical Section:</b> | <b>Depth From (TVD) (ft)</b> | <b>+N/-S (ft)</b> | <b>+E/-W (ft)</b>    | <b>Direction (°)</b> |
|                          | 0.00                         | 0.00              | 0.00                 | 172.81               |

| <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          |
| 0.00                 | 0.00            | 0.00        | 0.00                | 0.00       | 0.00       | 0.00                  | 0.00                 | 0.00                | 0.00    |                 |
| 2,267.00             | 0.00            | 0.00        | 2,267.00            | 0.00       | 0.00       | 0.00                  | 0.00                 | 0.00                | 0.00    |                 |
| 2,959.91             | 20.79           | 172.81      | 2,944.81            | -123.35    | 15.56      | 3.00                  | 3.00                 | 0.00                | 172.81  |                 |
| 6,436.71             | 20.79           | 172.81      | 6,195.28            | -1,347.56  | 170.03     | 0.00                  | 0.00                 | 0.00                | 0.00    |                 |
| 7,476.08             | 0.00            | 0.00        | 7,212.00            | -1,532.58  | 193.37     | 2.00                  | -2.00                | 0.00                | 180.00  |                 |
| 9,656.08             | 0.00            | 0.00        | 9,392.00            | -1,532.58  | 193.37     | 0.00                  | 0.00                 | 0.00                | 0.00    | PBHL_NBU 1021-1 |



|                  |                              |                                     |                                       |
|------------------|------------------------------|-------------------------------------|---------------------------------------|
| <b>Database:</b> | EDM 2003.21 Single User Db   | <b>Local Co-ordinate Reference:</b> | Well NBU 1021-12B3DS                  |
| <b>Company:</b>  | ANADARKO PETROLEUM CORP.     | <b>TVD Reference:</b>               | WELL @ 5235.00ft (Original Well Elev) |
| <b>Project:</b>  | UINTAH COUNTY, UTAH (nad 27) | <b>MD Reference:</b>                | WELL @ 5235.00ft (Original Well Elev) |
| <b>Site:</b>     | NBU 1021-10 Pad              | <b>North Reference:</b>             | True                                  |
| <b>Well:</b>     | NBU 1021-12B3DS              | <b>Survey Calculation Method:</b>   | Minimum Curvature                     |
| <b>Wellbore:</b> | NBU 1021-12B3DS              |                                     |                                       |
| <b>Design:</b>   | PLAN #1 11-19-09 RHS         |                                     |                                       |

**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) |
|---|-----------------|-------------|---------------------|------------|------------|-----------------------|-----------------------|----------------------|---------------------|
| <b>Start Build 3.00</b>                 |                 |             |                     |            |            |                       |                       |                      |                     |
| 2,267.00                                | 0.00            | 0.00        | 2,267.00            | 0.00       | 0.00       | 0.00                  | 0.00                  | 0.00                 | 0.00                |
| 2,300.00                                | 0.99            | 172.81      | 2,300.00            | -0.28      | 0.04       | 0.29                  | 3.00                  | 3.00                 | 0.00                |
| 2,400.00                                | 3.99            | 172.81      | 2,399.89            | -4.59      | 0.58       | 4.63                  | 3.00                  | 3.00                 | 0.00                |
| 2,500.00                                | 6.99            | 172.81      | 2,499.42            | -14.08     | 1.78       | 14.20                 | 3.00                  | 3.00                 | 0.00                |
| 2,600.00                                | 9.99            | 172.81      | 2,598.32            | -28.73     | 3.62       | 28.96                 | 3.00                  | 3.00                 | 0.00                |
| 2,700.00                                | 12.99           | 172.81      | 2,696.30            | -48.49     | 6.12       | 48.87                 | 3.00                  | 3.00                 | 0.00                |
| 2,800.00                                | 15.99           | 172.81      | 2,793.11            | -73.31     | 9.25       | 73.89                 | 3.00                  | 3.00                 | 0.00                |
| 2,900.00                                | 18.99           | 172.81      | 2,888.47            | -103.13    | 13.01      | 103.94                | 3.00                  | 3.00                 | 0.00                |
| <b>Start 3476.80 hold at 2959.91 MD</b> |                 |             |                     |            |            |                       |                       |                      |                     |
| 2,959.91                                | 20.79           | 172.81      | 2,944.81            | -123.35    | 15.56      | 124.32                | 3.00                  | 3.00                 | 0.00                |
| 3,000.00                                | 20.79           | 172.81      | 2,982.29            | -137.46    | 17.34      | 138.55                | 0.00                  | 0.00                 | 0.00                |
| 3,100.00                                | 20.79           | 172.81      | 3,075.78            | -172.67    | 21.79      | 174.04                | 0.00                  | 0.00                 | 0.00                |
| 3,200.00                                | 20.79           | 172.81      | 3,169.27            | -207.88    | 26.23      | 209.53                | 0.00                  | 0.00                 | 0.00                |
| 3,300.00                                | 20.79           | 172.81      | 3,262.76            | -243.09    | 30.67      | 245.02                | 0.00                  | 0.00                 | 0.00                |
| 3,400.00                                | 20.79           | 172.81      | 3,356.25            | -278.31    | 35.11      | 280.51                | 0.00                  | 0.00                 | 0.00                |
| 3,500.00                                | 20.79           | 172.81      | 3,449.74            | -313.52    | 39.56      | 316.00                | 0.00                  | 0.00                 | 0.00                |
| 3,600.00                                | 20.79           | 172.81      | 3,543.23            | -348.73    | 44.00      | 351.49                | 0.00                  | 0.00                 | 0.00                |
| 3,700.00                                | 20.79           | 172.81      | 3,636.72            | -383.94    | 48.44      | 386.98                | 0.00                  | 0.00                 | 0.00                |
| 3,800.00                                | 20.79           | 172.81      | 3,730.21            | -419.15    | 52.89      | 422.47                | 0.00                  | 0.00                 | 0.00                |
| 3,900.00                                | 20.79           | 172.81      | 3,823.70            | -454.36    | 57.33      | 457.96                | 0.00                  | 0.00                 | 0.00                |
| 4,000.00                                | 20.79           | 172.81      | 3,917.19            | -489.57    | 61.77      | 493.45                | 0.00                  | 0.00                 | 0.00                |
| 4,100.00                                | 20.79           | 172.81      | 4,010.68            | -524.78    | 66.21      | 528.94                | 0.00                  | 0.00                 | 0.00                |
| 4,200.00                                | 20.79           | 172.81      | 4,104.17            | -559.99    | 70.66      | 564.43                | 0.00                  | 0.00                 | 0.00                |
| 4,300.00                                | 20.79           | 172.81      | 4,197.66            | -595.20    | 75.10      | 599.92                | 0.00                  | 0.00                 | 0.00                |
| 4,400.00                                | 20.79           | 172.81      | 4,291.15            | -630.42    | 79.54      | 635.41                | 0.00                  | 0.00                 | 0.00                |
| 4,500.00                                | 20.79           | 172.81      | 4,384.64            | -665.63    | 83.98      | 670.90                | 0.00                  | 0.00                 | 0.00                |
| 4,600.00                                | 20.79           | 172.81      | 4,478.13            | -700.84    | 88.43      | 706.39                | 0.00                  | 0.00                 | 0.00                |
| 4,700.00                                | 20.79           | 172.81      | 4,571.63            | -736.05    | 92.87      | 741.88                | 0.00                  | 0.00                 | 0.00                |
| <b>WASATCH</b>                          |                 |             |                     |            |            |                       |                       |                      |                     |
| 4,708.96                                | 20.79           | 172.81      | 4,580.00            | -739.20    | 93.27      | 745.06                | 0.00                  | 0.00                 | 0.00                |
| 4,800.00                                | 20.79           | 172.81      | 4,665.12            | -771.26    | 97.31      | 777.37                | 0.00                  | 0.00                 | 0.00                |
| 4,900.00                                | 20.79           | 172.81      | 4,758.61            | -806.47    | 101.75     | 812.86                | 0.00                  | 0.00                 | 0.00                |
| 5,000.00                                | 20.79           | 172.81      | 4,852.10            | -841.68    | 106.20     | 848.35                | 0.00                  | 0.00                 | 0.00                |
| 5,100.00                                | 20.79           | 172.81      | 4,945.59            | -876.89    | 110.64     | 883.84                | 0.00                  | 0.00                 | 0.00                |
| 5,200.00                                | 20.79           | 172.81      | 5,039.08            | -912.10    | 115.08     | 919.33                | 0.00                  | 0.00                 | 0.00                |
| 5,300.00                                | 20.79           | 172.81      | 5,132.57            | -947.31    | 119.52     | 954.82                | 0.00                  | 0.00                 | 0.00                |
| 5,400.00                                | 20.79           | 172.81      | 5,226.06            | -982.52    | 123.97     | 990.31                | 0.00                  | 0.00                 | 0.00                |
| 5,500.00                                | 20.79           | 172.81      | 5,319.55            | -1,017.74  | 128.41     | 1,025.80              | 0.00                  | 0.00                 | 0.00                |
| 5,600.00                                | 20.79           | 172.81      | 5,413.04            | -1,052.95  | 132.85     | 1,061.29              | 0.00                  | 0.00                 | 0.00                |
| 5,700.00                                | 20.79           | 172.81      | 5,506.53            | -1,088.16  | 137.30     | 1,096.78              | 0.00                  | 0.00                 | 0.00                |
| 5,800.00                                | 20.79           | 172.81      | 5,600.02            | -1,123.37  | 141.74     | 1,132.27              | 0.00                  | 0.00                 | 0.00                |
| 5,900.00                                | 20.79           | 172.81      | 5,693.51            | -1,158.58  | 146.18     | 1,167.77              | 0.00                  | 0.00                 | 0.00                |
| 6,000.00                                | 20.79           | 172.81      | 5,787.00            | -1,193.79  | 150.62     | 1,203.26              | 0.00                  | 0.00                 | 0.00                |
| 6,100.00                                | 20.79           | 172.81      | 5,880.49            | -1,229.00  | 155.07     | 1,238.75              | 0.00                  | 0.00                 | 0.00                |
| 6,200.00                                | 20.79           | 172.81      | 5,973.98            | -1,264.21  | 159.51     | 1,274.24              | 0.00                  | 0.00                 | 0.00                |
| 6,300.00                                | 20.79           | 172.81      | 6,067.47            | -1,299.42  | 163.95     | 1,309.73              | 0.00                  | 0.00                 | 0.00                |
| 6,400.00                                | 20.79           | 172.81      | 6,160.96            | -1,334.63  | 168.39     | 1,345.22              | 0.00                  | 0.00                 | 0.00                |
| <b>Start Drop -2.00</b>                 |                 |             |                     |            |            |                       |                       |                      |                     |
| 6,436.71                                | 20.79           | 172.81      | 6,195.28            | -1,347.56  | 170.03     | 1,358.24              | 0.00                  | 0.00                 | 0.00                |
| 6,500.00                                | 19.52           | 172.81      | 6,254.70            | -1,369.20  | 172.75     | 1,380.05              | 2.00                  | -2.00                | 0.00                |
| 6,600.00                                | 17.52           | 172.81      | 6,349.51            | -1,400.71  | 176.73     | 1,411.82              | 2.00                  | -2.00                | 0.00                |
| 6,700.00                                | 15.52           | 172.81      | 6,445.38            | -1,428.92  | 180.29     | 1,440.25              | 2.00                  | -2.00                | 0.00                |
| 6,800.00                                | 13.52           | 172.81      | 6,542.18            | -1,453.80  | 183.43     | 1,465.32              | 2.00                  | -2.00                | 0.00                |



|                  |                              |                                     |                                       |
|------------------|------------------------------|-------------------------------------|---------------------------------------|
| <b>Database:</b> | EDM 2003.21 Single User Db   | <b>Local Co-ordinate Reference:</b> | Well NBU 1021-12B3DS                  |
| <b>Company:</b>  | ANADARKO PETROLEUM CORP.     | <b>TVD Reference:</b>               | WELL @ 5235.00ft (Original Well Elev) |
| <b>Project:</b>  | UINTAH COUNTY, UTAH (nad 27) | <b>MD Reference:</b>                | WELL @ 5235.00ft (Original Well Elev) |
| <b>Site:</b>     | NBU 1021-10 Pad              | <b>North Reference:</b>             | True                                  |
| <b>Well:</b>     | NBU 1021-12B3DS              | <b>Survey Calculation Method:</b>   | Minimum Curvature                     |
| <b>Wellbore:</b> | NBU 1021-12B3DS              |                                     |                                       |
| <b>Design:</b>   | PLAN #1 11-19-09 RHS         |                                     |                                       |

**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) |
|--|-----------------|-------------|---------------------|------------|------------|-----------------------|-----------------------|----------------------|---------------------|
| 6,900.00   | 11.52           | 172.81      | 6,639.79            | -1,475.31  | 186.14     | 1,487.00              | 2.00                  | -2.00                | 0.00                |
| 7,000.00   | 9.52            | 172.81      | 6,738.11            | -1,493.42  | 188.43     | 1,505.26              | 2.00                  | -2.00                | 0.00                |
| 7,100.00   | 7.52            | 172.81      | 6,837.00            | -1,508.12  | 190.28     | 1,520.08              | 2.00                  | -2.00                | 0.00                |
| 7,200.00   | 5.52            | 172.81      | 6,936.35            | -1,519.39  | 191.71     | 1,531.44              | 2.00                  | -2.00                | 0.00                |
| 7,300.00   | 3.52            | 172.81      | 7,036.03            | -1,527.21  | 192.69     | 1,539.32              | 2.00                  | -2.00                | 0.00                |
| 7,400.00   | 1.52            | 172.81      | 7,135.93            | -1,531.58  | 193.24     | 1,543.72              | 2.00                  | -2.00                | 0.00                |
| <b>Start 2180.00 hold at 7476.08 MD</b>                  |                 |             |                     |            |            |                       |                       |                      |                     |
| 7,476.08   | 0.00            | 0.00        | 7,212.00            | -1,532.58  | 193.37     | 1,544.73              | 2.00                  | -2.00                | 0.00                |
| 7,500.00   | 0.00            | 0.00        | 7,235.92            | -1,532.58  | 193.37     | 1,544.73              | 0.00                  | 0.00                 | 0.00                |
| 7,600.00   | 0.00            | 0.00        | 7,335.92            | -1,532.58  | 193.37     | 1,544.73              | 0.00                  | 0.00                 | 0.00                |
| 7,700.00   | 0.00            | 0.00        | 7,435.92            | -1,532.58  | 193.37     | 1,544.73              | 0.00                  | 0.00                 | 0.00                |
| 7,800.00   | 0.00            | 0.00        | 7,535.92            | -1,532.58  | 193.37     | 1,544.73              | 0.00                  | 0.00                 | 0.00                |
| 7,900.00   | 0.00            | 0.00        | 7,635.92            | -1,532.58  | 193.37     | 1,544.73              | 0.00                  | 0.00                 | 0.00                |
| 8,000.00   | 0.00            | 0.00        | 7,735.92            | -1,532.58  | 193.37     | 1,544.73              | 0.00                  | 0.00                 | 0.00                |
| 8,100.00   | 0.00            | 0.00        | 7,835.92            | -1,532.58  | 193.37     | 1,544.73              | 0.00                  | 0.00                 | 0.00                |
| 8,200.00   | 0.00            | 0.00        | 7,935.92            | -1,532.58  | 193.37     | 1,544.73              | 0.00                  | 0.00                 | 0.00                |
| 8,300.00   | 0.00            | 0.00        | 8,035.92            | -1,532.58  | 193.37     | 1,544.73              | 0.00                  | 0.00                 | 0.00                |
| <b>MESAVERDE</b>   |                 |             |                     |            |            |                       |                       |                      |                     |
| 8,375.08   | 0.00            | 0.00        | 8,111.00            | -1,532.58  | 193.37     | 1,544.73              | 0.00                  | 0.00                 | 0.00                |
| 8,400.00   | 0.00            | 0.00        | 8,135.92            | -1,532.58  | 193.37     | 1,544.73              | 0.00                  | 0.00                 | 0.00                |
| 8,500.00   | 0.00            | 0.00        | 8,235.92            | -1,532.58  | 193.37     | 1,544.73              | 0.00                  | 0.00                 | 0.00                |
| 8,600.00   | 0.00            | 0.00        | 8,335.92            | -1,532.58  | 193.37     | 1,544.73              | 0.00                  | 0.00                 | 0.00                |
| 8,700.00   | 0.00            | 0.00        | 8,435.92            | -1,532.58  | 193.37     | 1,544.73              | 0.00                  | 0.00                 | 0.00                |
| 8,800.00   | 0.00            | 0.00        | 8,535.92            | -1,532.58  | 193.37     | 1,544.73              | 0.00                  | 0.00                 | 0.00                |
| 8,900.00   | 0.00            | 0.00        | 8,635.92            | -1,532.58  | 193.37     | 1,544.73              | 0.00                  | 0.00                 | 0.00                |
| 9,000.00   | 0.00            | 0.00        | 8,735.92            | -1,532.58  | 193.37     | 1,544.73              | 0.00                  | 0.00                 | 0.00                |
| 9,100.00   | 0.00            | 0.00        | 8,835.92            | -1,532.58  | 193.37     | 1,544.73              | 0.00                  | 0.00                 | 0.00                |
| 9,200.00   | 0.00            | 0.00        | 8,935.92            | -1,532.58  | 193.37     | 1,544.73              | 0.00                  | 0.00                 | 0.00                |
| 9,300.00   | 0.00            | 0.00        | 9,035.92            | -1,532.58  | 193.37     | 1,544.73              | 0.00                  | 0.00                 | 0.00                |
| 9,400.00   | 0.00            | 0.00        | 9,135.92            | -1,532.58  | 193.37     | 1,544.73              | 0.00                  | 0.00                 | 0.00                |
| 9,500.00   | 0.00            | 0.00        | 9,235.92            | -1,532.58  | 193.37     | 1,544.73              | 0.00                  | 0.00                 | 0.00                |
| 9,600.00   | 0.00            | 0.00        | 9,335.92            | -1,532.58  | 193.37     | 1,544.73              | 0.00                  | 0.00                 | 0.00                |
| <b>PBHL_NBU 1021-12B3DS(1160 FNL 2230 FEL)25' TGT RA</b> |                 |             |                     |            |            |                       |                       |                      |                     |
| 9,656.08   | 0.00            | 0.00        | 9,392.00            | -1,532.58  | 193.37     | 1,544.73              | 0.00                  | 0.00                 | 0.00                |

**Design Targets**

| Target Name   | Dip Angle (°) | Dip Dir. (°) | TVD (ft) | +N/-S (ft) | +E/-W (ft) | Northing (ft) | Easting (ft) | Latitude        | Longitude         |
|---|---------------|--------------|----------|------------|------------|---------------|--------------|-----------------|-------------------|
| PBHL_NBU 1021-12E<br>- hit/miss target<br>- Shape<br>- plan hits target center<br>- Circle (radius 25.00) | 0.00          | 0.00         | 9,392.00 | -1,532.58  | 193.37     | 14,517,637.85 | 2,061,322.56 | 39° 58' 1.844 N | 109° 29' 52.177 W |

**Casing Points**

| Measured Depth (ft) | Vertical Depth (ft) | Name   | Casing Diameter (in) | Hole Diameter (in) |
|---------------------|---------------------|--------|----------------------|--------------------|
| 2,167.00            | 2,167.00            | 9 5/8" | 9.62                 | 12.25              |



|                  |                              |                                     |                                       |
|------------------|------------------------------|-------------------------------------|---------------------------------------|
| <b>Database:</b> | EDM 2003.21 Single User Db   | <b>Local Co-ordinate Reference:</b> | Well NBU 1021-12B3DS                  |
| <b>Company:</b>  | ANADARKO PETROLEUM CORP.     | <b>TVD Reference:</b>               | WELL @ 5235.00ft (Original Well Elev) |
| <b>Project:</b>  | UINTAH COUNTY, UTAH (nad 27) | <b>MD Reference:</b>                | WELL @ 5235.00ft (Original Well Elev) |
| <b>Site:</b>     | NBU 1021-10 Pad              | <b>North Reference:</b>             | True                                  |
| <b>Well:</b>     | NBU 1021-12B3DS              | <b>Survey Calculation Method:</b>   | Minimum Curvature                     |
| <b>Wellbore:</b> | NBU 1021-12B3DS              |                                     |                                       |
| <b>Design:</b>   | PLAN #1 11-19-09 RHS         |                                     |                                       |

| Formations          |                     |             |           |         |                   |
|---------------------|---------------------|-------------|-----------|---------|-------------------|
| Measured Depth (ft) | Vertical Depth (ft) | Name        | Lithology | Dip (°) | Dip Direction (°) |
| 1,334.00            | 1,334.00            | GREEN RIVER |           |         |                   |
| 4,708.96            | 4,580.00            | WASATCH     |           |         |                   |
| 8,375.08            | 8,111.00            | MESAVERDE   |           |         |                   |

| Plan Annotations    |                     |                   |            |                                  |  |
|---------------------|---------------------|-------------------|------------|----------------------------------|--|
| Measured Depth (ft) | Vertical Depth (ft) | Local Coordinates |            | Comment                          |  |
|                     |                     | +N/-S (ft)        | +E/-W (ft) |                                  |  |
| 2,267.00            | 2,267.00            | 0.00              | 0.00       | Start Build 3.00                 |  |
| 2,959.91            | 2,944.81            | -123.35           | 15.56      | Start 3476.80 hold at 2959.91 MD |  |
| 6,436.71            | 6,195.28            | -1,347.56         | 170.03     | Start Drop -2.00                 |  |
| 7,476.08            | 7,212.00            | -1,532.58         | 193.37     | Start 2180.00 hold at 7476.08 MD |  |
| 9,656.08            | 9,392.00            | -1,532.58         | 193.37     | TD at 9656.08                    |  |



# **ANADARKO PETROLEUM CORP.**

**UINTAH COUNTY, UTAH (nad 27)  
NBU 1021-10 Pad  
NBU 1021-12B3DS**

**NBU 1021-12B3DS  
PLAN #1 11-19-09 RHS**

## **Anticollision Report**

**19 November, 2009**



**Weatherford®**



|                           |                              |                                     |                                       |
|---------------------------|------------------------------|-------------------------------------|---------------------------------------|
| <b>Company:</b>           | ANADARKO PETROLEUM CORP.     | <b>Local Co-ordinate Reference:</b> | Well NBU 1021-12B3DS                  |
| <b>Project:</b>           | UINTAH COUNTY, UTAH (nad 27) | <b>TVD Reference:</b>               | WELL @ 5235.00ft (Original Well Elev) |
| <b>Reference Site:</b>    | NBU 1021-10 Pad              | <b>MD Reference:</b>                | WELL @ 5235.00ft (Original Well Elev) |
| <b>Site Error:</b>        | 0.00ft                       | <b>North Reference:</b>             | True                                  |
| <b>Reference Well:</b>    | NBU 1021-12B3DS              | <b>Survey Calculation Method:</b>   | Minimum Curvature                     |
| <b>Well Error:</b>        | 0.00ft                       | <b>Output errors are at</b>         | 2.00 sigma                            |
| <b>Reference Wellbore</b> | NBU 1021-12B3DS              | <b>Database:</b>                    | EDM 2003.21 Single User Db            |
| <b>Reference Design:</b>  | PLAN #1 11-19-09 RHS         | <b>Offset TVD Reference:</b>        | Offset Datum                          |

|                                     |   |                       |                     |
|-------------------------------------|---|-----------------------|---------------------|
| <b>Reference</b>                    | PLAN #1 11-19-09 RHS  |                       |                     |
| <b>Filter type:</b>                 | NO GLOBAL FILTER: Using user defined selection & filtering criteria |                       |                     |
| <b>Interpolation Method:</b>        | Stations  | <b>Error Model:</b>   | ISCWSA              |
| <b>Depth Range:</b>                 | 0.00 to 20,000.00ft   | <b>Scan Method:</b>   | Closest Approach 3D |
| <b>Results Limited by:</b>          | Maximum center-center distance of 10,000.00ft                       | <b>Error Surface:</b> | Elliptical Conic    |
| <b>Warning Levels Evaluated at:</b> | 2.00 Sigma  |                       |                     |

|                            |                |                                     |                  |                    |
|----------------------------|----------------|-------------------------------------|------------------|--------------------|
| <b>Survey Tool Program</b> | <b>Date</b>    | 11/19/2009                          |                  |                    |
| <b>From (ft)</b>           | <b>To (ft)</b> | <b>Survey (Wellbore)</b>            | <b>Tool Name</b> | <b>Description</b> |
| 0.00                       | 9,656.08       | PLAN #1 11-19-09 RHS (NBU 1021-12B3 | MWD              | MWD - Standard     |

| Summary  |                               |                            |                               |                                |                   |            |
|--|-------------------------------|----------------------------|-------------------------------|--------------------------------|-------------------|------------|
| Site Name  | Reference Measured Depth (ft) | Offset Measured Depth (ft) | Distance Between Centres (ft) | Distance Between Ellipses (ft) | Separation Factor | Warning    |
| Offset Well - Wellbore - Design                  |                               |                            |                               |                                |                   |            |
| NBU 1021-10 Pad                                  |                               |                            |                               |                                |                   |            |
| NBU 1021-12A2BS - NBU 1021-12A2BS - PLAN #1 11-1 | 300.00                        | 300.00                     | 20.26                         | 19.17                          | 18.550            | CC, ES     |
| NBU 1021-12A2BS - NBU 1021-12A2BS - PLAN #1 11-1 | 500.00                        | 497.81                     | 28.51                         | 26.54                          | 14.476            | SF         |
| NBU 1021-12B4BS - NBU 1021-12B4BS - PLAN #1 11-1 | 2,487.86                      | 2,483.43                   | 39.63                         | 28.98                          | 3.721             | CC         |
| NBU 1021-12B4BS - NBU 1021-12B4BS - PLAN #1 11-1 | 2,500.00                      | 2,495.32                   | 39.63                         | 28.95                          | 3.709             | ES         |
| NBU 1021-12B4BS - NBU 1021-12B4BS - PLAN #1 11-1 | 2,600.00                      | 2,593.13                   | 40.15                         | 29.16                          | 3.654             | SF         |
| NBU 1021-103AS - NBU 1021-103AS - PLAN #1 11-19- | 2,267.00                      | 2,267.00                   | 19.83                         | 9.90                           | 1.996             | CC, ES, SF |

| <b>Offset Design</b>   | NBU 1021-10 Pad - NBU 1021-12A2BS - NBU 1021-12A2BS - PLAN #1 11-19-09 RHS |                     |                     |                |             |                       |                                   |                                   |                               |                                |                         |                   | <b>Offset Site Error:</b> | 0.00 ft |
|------------------------|--|---------------------|---------------------|----------------|-------------|-----------------------|-----------------------------------|-----------------------------------|-------------------------------|--------------------------------|-------------------------|-------------------|---------------------------|---------|
| <b>Survey Program:</b> | 0-MWD  |                     |                     |                |             |                       |                                   |                                   |                               |                                |                         |                   | <b>Offset Well Error:</b> | 0.00 ft |
| Measured Depth (ft)    | Vertical Depth (ft)  | Measured Depth (ft) | Vertical Depth (ft) | Reference (ft) | Offset (ft) | Highside Toolface (°) | Offset Wellbore Centre +N/-S (ft) | Offset Wellbore Centre +E/-W (ft) | Distance Between Centres (ft) | Distance Between Ellipses (ft) | Minimum Separation (ft) | Separation Factor | Warning                   |         |
| 0.00                   | 0.00   | 0.00                | 0.00                | 0.00           | 0.00        | 162.29                | -19.30                            | 6.17                              | 20.26                         |                                |                         |                   |                           |         |
| 100.00                 | 100.00   | 100.00              | 100.00              | 0.10           | 0.10        | 162.29                | -19.30                            | 6.17                              | 20.26                         | 20.07                          | 0.19                    | 104.830           |                           |         |
| 200.00                 | 200.00   | 200.00              | 200.00              | 0.32           | 0.32        | 162.29                | -19.30                            | 6.17                              | 20.26                         | 19.62                          | 0.64                    | 31.522            |                           |         |
| 300.00                 | 300.00   | 300.00              | 300.00              | 0.55           | 0.55        | 162.29                | -19.30                            | 6.17                              | 20.26                         | 19.17                          | 1.09                    | 18.550            | CC, ES                    |         |
| 400.00                 | 400.00   | 399.17              | 399.13              | 0.77           | 0.76        | 157.54                | -20.46                            | 8.46                              | 22.16                         | 20.64                          | 1.53                    | 14.527            |                           |         |
| 500.00                 | 500.00   | 497.81              | 497.46              | 1.00           | 0.97        | 147.40                | -23.92                            | 15.30                             | 28.51                         | 26.54                          | 1.97                    | 14.476            | SF                        |         |
| 600.00                 | 600.00   | 595.41              | 594.23              | 1.22           | 1.24        | 138.15                | -29.59                            | 26.51                             | 40.15                         | 37.71                          | 2.44                    | 16.483            |                           |         |
| 700.00                 | 700.00   | 691.47              | 688.73              | 1.45           | 1.57        | 131.75                | -37.35                            | 41.84                             | 57.21                         | 54.29                          | 2.91                    | 19.640            |                           |         |
| 800.00                 | 800.00   | 785.57              | 780.35              | 1.67           | 1.97        | 127.65                | -47.02                            | 60.95                             | 79.44                         | 76.05                          | 3.40                    | 23.386            |                           |         |
| 900.00                 | 900.00   | 877.32              | 868.56              | 1.89           | 2.44        | 124.99                | -58.39                            | 83.43                             | 106.58                        | 102.69                         | 3.89                    | 27.420            |                           |         |
| 1,000.00               | 1,000.00   | 966.40              | 952.96              | 2.12           | 2.99        | 123.21                | -71.25                            | 108.86                            | 138.35                        | 133.97                         | 4.38                    | 31.577            |                           |         |
| 1,100.00               | 1,100.00   | 1,052.56            | 1,033.24            | 2.34           | 3.61        | 121.97                | -85.37                            | 136.77                            | 174.50                        | 169.62                         | 4.88                    | 35.772            |                           |         |
| 1,200.00               | 1,200.00   | 1,135.61            | 1,109.20            | 2.57           | 4.27        | 121.09                | -100.51                           | 166.70                            | 214.79                        | 209.41                         | 5.38                    | 39.928            |                           |         |
| 1,300.00               | 1,300.00   | 1,224.74            | 1,189.74            | 2.79           | 5.04        | 120.39                | -117.75                           | 200.78                            | 257.55                        | 251.66                         | 5.89                    | 43.722            |                           |         |
| 1,400.00               | 1,400.00   | 1,315.08            | 1,271.35            | 3.02           | 5.85        | 119.88                | -135.23                           | 235.34                            | 300.37                        | 293.98                         | 6.40                    | 46.963            |                           |         |
| 1,500.00               | 1,500.00   | 1,405.42            | 1,352.96            | 3.24           | 6.66        | 119.50                | -152.72                           | 269.91                            | 343.21                        | 336.30                         | 6.91                    | 49.681            |                           |         |
| 1,600.00               | 1,600.00   | 1,495.76            | 1,434.58            | 3.47           | 7.48        | 119.21                | -170.21                           | 304.47                            | 386.06                        | 378.63                         | 7.43                    | 51.984            |                           |         |
| 1,700.00               | 1,700.00   | 1,586.10            | 1,516.19            | 3.69           | 8.30        | 118.97                | -187.69                           | 339.04                            | 428.91                        | 420.96                         | 7.95                    | 53.957            |                           |         |
| 1,800.00               | 1,800.00   | 1,676.44            | 1,597.80            | 3.92           | 9.13        | 118.77                | -205.18                           | 373.61                            | 471.77                        | 463.29                         | 8.47                    | 55.667            |                           |         |
| 1,900.00               | 1,900.00   | 1,766.78            | 1,679.42            | 4.14           | 9.96        | 118.61                | -222.66                           | 408.17                            | 514.63                        | 505.62                         | 9.00                    | 57.161            |                           |         |
| 2,000.00               | 2,000.00   | 1,857.12            | 1,761.03            | 4.37           | 10.79       | 118.48                | -240.15                           | 442.74                            | 557.49                        | 547.96                         | 9.53                    | 58.476            |                           |         |

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



**Weatherford International Ltd.**  
Anticollision Report



|                           |                              |                                     |                                       |
|---------------------------|------------------------------|-------------------------------------|---------------------------------------|
| <b>Company:</b>           | ANADARKO PETROLEUM CORP.     | <b>Local Co-ordinate Reference:</b> | Well NBU 1021-12B3DS                  |
| <b>Project:</b>           | UINTAH COUNTY, UTAH (nad 27) | <b>TVD Reference:</b>               | WELL @ 5235.00ft (Original Well Elev) |
| <b>Reference Site:</b>    | NBU 1021-10 Pad              | <b>MD Reference:</b>                | WELL @ 5235.00ft (Original Well Elev) |
| <b>Site Error:</b>        | 0.00ft                       | <b>North Reference:</b>             | True                                  |
| <b>Reference Well:</b>    | NBU 1021-12B3DS              | <b>Survey Calculation Method:</b>   | Minimum Curvature                     |
| <b>Well Error:</b>        | 0.00ft                       | <b>Output errors are at</b>         | 2.00 sigma                            |
| <b>Reference Wellbore</b> | NBU 1021-12B3DS              | <b>Database:</b>                    | EDM 2003.21 Single User Db            |
| <b>Reference Design:</b>  | PLAN #1 11-19-09 RHS         | <b>Offset TVD Reference:</b>        | Offset Datum                          |

| Offset Design NBU 1021-10 Pad - NBU 1021-12A2BS - NBU 1021-12A2BS - PLAN #1 11-19-09 RHS |                     |                     |                     |                 |             |                       |                                   |                                   |                      |                       |                         |                   | Offset Site Error: | 0.00 ft |
|--|---------------------|---------------------|---------------------|-----------------|-------------|-----------------------|-----------------------------------|-----------------------------------|----------------------|-----------------------|-------------------------|-------------------|--------------------|---------|
| Survey Program: 0-MWD  |                     |                     |                     |                 |             |                       |                                   |                                   |                      |                       |                         |                   | Offset Well Error: | 0.00 ft |
| Reference  |                     | Offset              |                     | Semi Major Axis |             |                       | Distance                          |                                   |                      |                       |                         |                   | Warning            |         |
| Measured Depth (ft)  | Vertical Depth (ft) | Measured Depth (ft) | Vertical Depth (ft) | Reference (ft)  | Offset (ft) | Highside Toolface (°) | Offset Wellbore Centre +N/-S (ft) | Offset Wellbore Centre +E/-W (ft) | Between Centres (ft) | Between Ellipses (ft) | Minimum Separation (ft) | Separation Factor |                    |         |
| 2,100.00   | 2,100.00            | 1,947.46            | 1,842.65            | 4.59            | 11.62       | 118.36                | -257.63                           | 477.31                            | 600.36               | 590.29                | 10.07                   | 59.641            |                    |         |
| 2,200.00   | 2,200.00            | 2,037.80            | 1,924.26            | 4.82            | 12.45       | 118.26                | -275.12                           | 511.87                            | 643.22               | 632.62                | 10.60                   | 60.680            |                    |         |
| 2,267.00   | 2,267.00            | 2,098.33            | 1,978.94            | 4.97            | 13.01       | 118.20                | -286.83                           | 535.03                            | 671.95               | 660.99                | 10.96                   | 61.317            |                    |         |
| 2,300.00   | 2,300.00            | 2,128.21            | 2,005.93            | 5.03            | 13.28       | -54.29                | -292.62                           | 546.46                            | 685.94               | 675.02                | 10.93                   | 62.784            |                    |         |
| 2,400.00   | 2,399.89            | 2,219.50            | 2,088.40            | 5.20            | 14.13       | -53.59                | -310.29                           | 581.39                            | 726.51               | 715.06                | 11.45                   | 63.440            |                    |         |
| 2,500.00   | 2,499.42            | 2,311.71            | 2,171.71            | 5.38            | 14.98       | -53.29                | -328.13                           | 616.68                            | 764.28               | 752.30                | 11.98                   | 63.775            |                    |         |
| 2,600.00   | 2,598.32            | 2,404.59            | 2,255.61            | 5.56            | 15.84       | -53.33                | -346.11                           | 652.21                            | 799.28               | 786.75                | 12.52                   | 63.829            |                    |         |
| 2,700.00   | 2,696.30            | 2,497.89            | 2,339.90            | 5.78            | 16.70       | -53.67                | -364.17                           | 687.91                            | 831.58               | 818.50                | 13.08                   | 63.599            |                    |         |
| 2,800.00   | 2,793.11            | 2,591.35            | 2,424.33            | 6.03            | 17.56       | -54.26                | -382.26                           | 723.67                            | 861.30               | 847.64                | 13.66                   | 63.054            |                    |         |
| 2,900.00   | 2,888.47            | 2,684.71            | 2,508.68            | 6.35            | 18.43       | -55.09                | -400.33                           | 759.40                            | 888.63               | 874.33                | 14.30                   | 62.151            |                    |         |
| 2,959.91   | 2,944.81            | 2,740.49            | 2,559.07            | 6.57            | 18.94       | -55.70                | -411.13                           | 780.74                            | 903.94               | 889.22                | 14.72                   | 61.421            |                    |         |
| 3,000.00   | 2,982.29            | 2,777.77            | 2,592.74            | 6.74            | 19.29       | -56.37                | -418.34                           | 795.00                            | 914.00               | 898.98                | 15.01                   | 60.878            |                    |         |
| 3,100.00   | 3,075.78            | 2,870.74            | 2,676.74            | 7.18            | 20.15       | -58.00                | -436.34                           | 830.57                            | 939.62               | 923.82                | 15.81                   | 59.447            |                    |         |
| 3,200.00   | 3,169.27            | 2,963.71            | 2,760.73            | 7.66            | 21.01       | -59.54                | -454.33                           | 866.15                            | 965.97               | 949.30                | 16.67                   | 57.948            |                    |         |
| 3,300.00   | 3,262.76            | 3,056.69            | 2,844.72            | 8.18            | 21.87       | -61.01                | -472.33                           | 901.72                            | 992.99               | 975.39                | 17.60                   | 56.428            |                    |         |
| 3,400.00   | 3,356.25            | 3,149.66            | 2,928.72            | 8.72            | 22.73       | -62.40                | -490.32                           | 937.30                            | 1,020.62             | 1,002.04              | 18.58                   | 54.922            |                    |         |
| 3,500.00   | 3,449.74            | 3,242.64            | 3,012.71            | 9.29            | 23.60       | -63.73                | -508.32                           | 972.87                            | 1,048.82             | 1,029.20              | 19.62                   | 53.457            |                    |         |
| 3,600.00   | 3,543.23            | 3,335.61            | 3,096.70            | 9.87            | 24.46       | -64.99                | -526.32                           | 1,008.45                          | 1,077.53             | 1,056.83              | 20.70                   | 52.050            |                    |         |
| 3,700.00   | 3,636.72            | 3,428.59            | 3,180.70            | 10.47           | 25.32       | -66.18                | -544.31                           | 1,044.02                          | 1,106.73             | 1,084.91              | 21.82                   | 50.713            |                    |         |
| 3,800.00   | 3,730.21            | 3,521.56            | 3,264.69            | 11.09           | 26.18       | -67.32                | -562.31                           | 1,079.59                          | 1,136.37             | 1,113.39              | 22.98                   | 49.451            |                    |         |
| 3,900.00   | 3,823.70            | 3,614.54            | 3,348.68            | 11.71           | 27.05       | -68.40                | -580.30                           | 1,115.17                          | 1,166.42             | 1,142.25              | 24.17                   | 48.265            |                    |         |
| 4,000.00   | 3,917.19            | 3,758.67            | 3,480.12            | 12.35           | 28.16       | -70.03                | -606.99                           | 1,167.93                          | 1,195.16             | 1,169.50              | 25.66                   | 46.577            |                    |         |
| 4,100.00   | 4,010.68            | 3,915.00            | 3,625.82            | 12.99           | 29.15       | -71.80                | -632.54                           | 1,218.44                          | 1,219.57             | 1,192.35              | 27.22                   | 44.802            |                    |         |
| 4,200.00   | 4,104.17            | 4,073.66            | 3,776.63            | 13.64           | 30.01       | -73.64                | -654.77                           | 1,262.37                          | 1,239.54             | 1,210.73              | 28.81                   | 43.027            |                    |         |
| 4,300.00   | 4,197.66            | 4,233.72            | 3,931.28            | 14.29           | 30.73       | -75.56                | -673.33                           | 1,299.08                          | 1,255.07             | 1,224.65              | 30.41                   | 41.269            |                    |         |
| 4,400.00   | 4,291.15            | 4,394.18            | 4,088.40            | 14.96           | 31.31       | -77.57                | -688.01                           | 1,328.08                          | 1,266.21             | 1,234.19              | 32.02                   | 39.543            |                    |         |
| 4,500.00   | 4,384.64            | 4,554.05            | 4,246.50            | 15.62           | 31.73       | -79.68                | -698.65                           | 1,349.13                          | 1,273.09             | 1,239.48              | 33.62                   | 37.869            |                    |         |
| 4,600.00   | 4,478.13            | 4,712.34            | 4,404.09            | 16.29           | 32.03       | -81.91                | -705.26                           | 1,362.18                          | 1,275.92             | 1,240.71              | 35.20                   | 36.245            |                    |         |
| 4,700.00   | 4,571.63            | 4,868.13            | 4,559.75            | 16.96           | 32.19       | -84.27                | -707.91                           | 1,367.43                          | 1,274.93             | 1,238.17              | 36.76                   | 34.683            |                    |         |
| 4,800.00   | 4,665.12            | 4,973.50            | 4,665.12            | 17.64           | 32.26       | -85.94                | -707.98                           | 1,367.57                          | 1,271.84             | 1,233.81              | 38.03                   | 33.443            |                    |         |
| 4,900.00   | 4,758.61            | 5,066.99            | 4,758.61            | 18.32           | 32.33       | -87.44                | -707.98                           | 1,367.57                          | 1,269.64             | 1,230.41              | 39.23                   | 32.364            |                    |         |
| 5,000.00   | 4,852.10            | 5,160.48            | 4,852.10            | 19.00           | 32.39       | -88.93                | -707.98                           | 1,367.57                          | 1,268.44             | 1,228.02              | 40.43                   | 31.377            |                    |         |
| 5,071.16   | 4,918.62            | 5,227.00            | 4,918.62            | 19.48           | 32.43       | -90.00                | -707.98                           | 1,367.57                          | 1,268.19             | 1,226.92              | 41.27                   | 30.726            |                    |         |
| 5,100.00   | 4,945.59            | 5,253.97            | 4,945.59            | 19.68           | 32.45       | -90.43                | -707.98                           | 1,367.57                          | 1,268.23             | 1,226.62              | 41.62                   | 30.475            |                    |         |
| 5,200.00   | 5,039.08            | 5,347.46            | 5,039.08            | 20.37           | 32.52       | -91.93                | -707.98                           | 1,367.57                          | 1,269.01             | 1,226.22              | 42.80                   | 29.653            |                    |         |
| 5,300.00   | 5,132.57            | 5,440.95            | 5,132.57            | 21.05           | 32.58       | -93.43                | -707.98                           | 1,367.57                          | 1,270.79             | 1,226.82              | 43.96                   | 28.905            |                    |         |
| 5,400.00   | 5,226.06            | 5,534.44            | 5,226.06            | 21.74           | 32.65       | -94.92                | -707.98                           | 1,367.57                          | 1,273.55             | 1,228.43              | 45.12                   | 28.228            |                    |         |
| 5,500.00   | 5,319.55            | 5,627.93            | 5,319.55            | 22.43           | 32.72       | -96.40                | -707.98                           | 1,367.57                          | 1,277.29             | 1,231.04              | 46.25                   | 27.615            |                    |         |
| 5,600.00   | 5,413.04            | 5,721.42            | 5,413.04            | 23.13           | 32.79       | -97.88                | -707.98                           | 1,367.57                          | 1,282.00             | 1,234.63              | 47.37                   | 27.064            |                    |         |
| 5,700.00   | 5,506.53            | 5,814.91            | 5,506.53            | 23.82           | 32.86       | -99.34                | -707.98                           | 1,367.57                          | 1,287.68             | 1,239.21              | 48.46                   | 26.569            |                    |         |
| 5,800.00   | 5,600.02            | 5,908.40            | 5,600.02            | 24.51           | 32.93       | -100.80               | -707.98                           | 1,367.57                          | 1,294.30             | 1,244.76              | 49.54                   | 26.128            |                    |         |
| 5,900.00   | 5,693.51            | 6,001.89            | 5,693.51            | 25.21           | 33.00       | -102.24               | -707.98                           | 1,367.57                          | 1,301.86             | 1,251.27              | 50.58                   | 25.736            |                    |         |
| 6,000.00   | 5,787.00            | 6,095.38            | 5,787.00            | 25.90           | 33.08       | -103.66               | -707.98                           | 1,367.57                          | 1,310.33             | 1,258.73              | 51.61                   | 25.391            |                    |         |
| 6,100.00   | 5,880.49            | 6,188.87            | 5,880.49            | 26.60           | 33.15       | -105.07               | -707.98                           | 1,367.57                          | 1,319.71             | 1,267.11              | 52.60                   | 25.088            |                    |         |
| 6,200.00   | 5,973.98            | 6,282.36            | 5,973.98            | 27.30           | 33.23       | -106.45               | -707.98                           | 1,367.57                          | 1,329.97             | 1,276.40              | 53.57                   | 24.826            |                    |         |
| 6,300.00   | 6,067.47            | 6,375.85            | 6,067.47            | 28.00           | 33.31       | -107.82               | -707.98                           | 1,367.57                          | 1,341.08             | 1,286.57              | 54.51                   | 24.602            |                    |         |
| 6,400.00   | 6,160.96            | 6,469.34            | 6,160.96            | 28.69           | 33.39       | -109.17               | -707.98                           | 1,367.57                          | 1,353.04             | 1,297.62              | 55.42                   | 24.412            |                    |         |
| 6,436.71   | 6,195.28            | 6,503.66            | 6,195.28            | 28.95           | 33.41       | -109.66               | -707.98                           | 1,367.57                          | 1,357.64             | 1,301.89              | 55.75                   | 24.351            |                    |         |
| 6,500.00   | 6,254.70            | 6,563.08            | 6,254.70            | 29.33           | 33.47       | -110.63               | -707.98                           | 1,367.57                          | 1,365.57             | 1,309.24              | 56.34                   | 24.239            |                    |         |
| 6,600.00   | 6,349.51            | 6,657.89            | 6,349.51            | 29.81           | 33.55       | -112.03               | -707.98                           | 1,367.57                          | 1,377.67             | 1,320.55              | 57.12                   | 24.118            |                    |         |
| 6,700.00   | 6,445.38            | 6,753.76            | 6,445.38            | 30.25           | 33.63       | -113.29               | -707.98                           | 1,367.57                          | 1,389.03             | 1,331.18              | 57.84                   | 24.014            |                    |         |
| 6,800.00   | 6,542.18            | 6,850.56            | 6,542.18            | 30.66           | 33.72       | -114.40               | -707.98                           | 1,367.57                          | 1,399.44             | 1,340.95              | 58.50                   | 23.924            |                    |         |

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



**Weatherford International Ltd.**  
Anticollision Report



|                           |                              |                                     |                                       |
|---------------------------|------------------------------|-------------------------------------|---------------------------------------|
| <b>Company:</b>           | ANADARKO PETROLEUM CORP.     | <b>Local Co-ordinate Reference:</b> | Well NBU 1021-12B3DS                  |
| <b>Project:</b>           | UINTAH COUNTY, UTAH (nad 27) | <b>TVD Reference:</b>               | WELL @ 5235.00ft (Original Well Elev) |
| <b>Reference Site:</b>    | NBU 1021-10 Pad              | <b>MD Reference:</b>                | WELL @ 5235.00ft (Original Well Elev) |
| <b>Site Error:</b>        | 0.00ft                       | <b>North Reference:</b>             | True                                  |
| <b>Reference Well:</b>    | NBU 1021-12B3DS              | <b>Survey Calculation Method:</b>   | Minimum Curvature                     |
| <b>Well Error:</b>        | 0.00ft                       | <b>Output errors are at</b>         | 2.00 sigma                            |
| <b>Reference Wellbore</b> | NBU 1021-12B3DS              | <b>Database:</b>                    | EDM 2003.21 Single User Db            |
| <b>Reference Design:</b>  | PLAN #1 11-19-09 RHS         | <b>Offset TVD Reference:</b>        | Offset Datum                          |

| Offset Design         |                     |                     |                     |                |             |                       |                                   |                                   |                      |                       |                         |                   | Offset Site Error: | 0.00 ft |                 |  |          |  |  |  |         |
|-----------------------|---------------------|---------------------|---------------------|----------------|-------------|-----------------------|-----------------------------------|-----------------------------------|----------------------|-----------------------|-------------------------|-------------------|--------------------|---------|-----------------|--|----------|--|--|--|---------|
| Survey Program: 0-MWD |                     |                     |                     |                |             |                       |                                   |                                   |                      |                       |                         |                   | Offset Well Error: |         | 0.00 ft         |  |          |  |  |  |         |
| Reference             |                     |                     |                     |                |             |                       |                                   |                                   |                      |                       |                         |                   | Offset             |         | Semi Major Axis |  | Distance |  |  |  | Warning |
| Measured Depth (ft)   | Vertical Depth (ft) | Measured Depth (ft) | Vertical Depth (ft) | Reference (ft) | Offset (ft) | Highside Toolface (°) | Offset Wellbore Centre +N/-S (ft) | Offset Wellbore Centre +E/-W (ft) | Between Centres (ft) | Between Ellipses (ft) | Minimum Separation (ft) | Separation Factor |                    |         |                 |  |          |  |  |  |         |
| 6,900.00              | 6,639.79            | 6,948.17            | 6,639.79            | 31.02          | 33.81       | -115.36               | -707.98                           | 1,367.57                          | 1,408.75             | 1,349.66              | 59.08                   | 23.843            |                    |         |                 |  |          |  |  |  |         |
| 7,000.00              | 6,738.11            | 7,046.49            | 6,738.11            | 31.34          | 33.90       | -116.16               | -707.98                           | 1,367.57                          | 1,416.79             | 1,357.18              | 59.61                   | 23.769            |                    |         |                 |  |          |  |  |  |         |
| 7,100.00              | 6,837.00            | 7,145.38            | 6,837.00            | 31.62          | 33.99       | -116.81               | -707.98                           | 1,367.57                          | 1,423.46             | 1,363.39              | 60.07                   | 23.698            |                    |         |                 |  |          |  |  |  |         |
| 7,200.00              | 6,936.35            | 7,244.73            | 6,936.35            | 31.86          | 34.08       | -117.31               | -707.98                           | 1,367.57                          | 1,428.65             | 1,368.19              | 60.47                   | 23.627            |                    |         |                 |  |          |  |  |  |         |
| 7,300.00              | 7,036.03            | 7,344.41            | 7,036.03            | 32.05          | 34.18       | -117.65               | -707.98                           | 1,367.57                          | 1,432.30             | 1,371.49              | 60.81                   | 23.556            |                    |         |                 |  |          |  |  |  |         |
| 7,400.00              | 7,135.93            | 7,444.31            | 7,135.93            | 32.19          | 34.27       | -117.84               | -707.98                           | 1,367.57                          | 1,434.35             | 1,373.26              | 61.09                   | 23.481            |                    |         |                 |  |          |  |  |  |         |
| 7,476.08              | 7,212.00            | 7,520.38            | 7,212.00            | 32.28          | 34.35       | 54.92                 | -707.98                           | 1,367.57                          | 1,434.82             | 1,373.56              | 61.26                   | 23.421            |                    |         |                 |  |          |  |  |  |         |
| 7,500.00              | 7,235.92            | 7,544.30            | 7,235.92            | 32.30          | 34.37       | 54.92                 | -707.98                           | 1,367.57                          | 1,434.82             | 1,373.51              | 61.31                   | 23.401            |                    |         |                 |  |          |  |  |  |         |
| 7,600.00              | 7,335.92            | 7,644.30            | 7,335.92            | 32.40          | 34.47       | 54.92                 | -707.98                           | 1,367.57                          | 1,434.82             | 1,373.30              | 61.52                   | 23.323            |                    |         |                 |  |          |  |  |  |         |
| 7,700.00              | 7,435.92            | 7,744.30            | 7,435.92            | 32.49          | 34.57       | 54.92                 | -707.98                           | 1,367.57                          | 1,434.82             | 1,373.09              | 61.73                   | 23.245            |                    |         |                 |  |          |  |  |  |         |
| 7,800.00              | 7,535.92            | 7,844.30            | 7,535.92            | 32.58          | 34.67       | 54.92                 | -707.98                           | 1,367.57                          | 1,434.82             | 1,372.88              | 61.94                   | 23.165            |                    |         |                 |  |          |  |  |  |         |
| 7,900.00              | 7,635.92            | 7,944.30            | 7,635.92            | 32.68          | 34.78       | 54.92                 | -707.98                           | 1,367.57                          | 1,434.82             | 1,372.67              | 62.15                   | 23.086            |                    |         |                 |  |          |  |  |  |         |
| 8,000.00              | 7,735.92            | 8,044.30            | 7,735.92            | 32.78          | 34.88       | 54.92                 | -707.98                           | 1,367.57                          | 1,434.82             | 1,372.45              | 62.37                   | 23.006            |                    |         |                 |  |          |  |  |  |         |
| 8,100.00              | 7,835.92            | 8,144.30            | 7,835.92            | 32.87          | 34.98       | 54.92                 | -707.98                           | 1,367.57                          | 1,434.82             | 1,372.24              | 62.59                   | 22.926            |                    |         |                 |  |          |  |  |  |         |
| 8,200.00              | 7,935.92            | 8,244.30            | 7,935.92            | 32.97          | 35.09       | 54.92                 | -707.98                           | 1,367.57                          | 1,434.82             | 1,372.02              | 62.81                   | 22.845            |                    |         |                 |  |          |  |  |  |         |
| 8,300.00              | 8,035.92            | 8,344.30            | 8,035.92            | 33.07          | 35.20       | 54.92                 | -707.98                           | 1,367.57                          | 1,434.82             | 1,371.79              | 63.03                   | 22.764            |                    |         |                 |  |          |  |  |  |         |
| 8,400.00              | 8,135.92            | 8,444.30            | 8,135.92            | 33.17          | 35.30       | 54.92                 | -707.98                           | 1,367.57                          | 1,434.82             | 1,371.57              | 63.26                   | 22.683            |                    |         |                 |  |          |  |  |  |         |
| 8,500.00              | 8,235.92            | 8,544.30            | 8,235.92            | 33.28          | 35.41       | 54.92                 | -707.98                           | 1,367.57                          | 1,434.82             | 1,371.34              | 63.48                   | 22.601            |                    |         |                 |  |          |  |  |  |         |
| 8,600.00              | 8,335.92            | 8,644.30            | 8,335.92            | 33.38          | 35.52       | 54.92                 | -707.98                           | 1,367.57                          | 1,434.82             | 1,371.11              | 63.71                   | 22.519            |                    |         |                 |  |          |  |  |  |         |
| 8,700.00              | 8,435.92            | 8,744.30            | 8,435.92            | 33.49          | 35.64       | 54.92                 | -707.98                           | 1,367.57                          | 1,434.82             | 1,370.87              | 63.95                   | 22.437            |                    |         |                 |  |          |  |  |  |         |
| 8,800.00              | 8,535.92            | 8,844.30            | 8,535.92            | 33.59          | 35.75       | 54.92                 | -707.98                           | 1,367.57                          | 1,434.82             | 1,370.64              | 64.18                   | 22.355            |                    |         |                 |  |          |  |  |  |         |
| 8,900.00              | 8,635.92            | 8,944.30            | 8,635.92            | 33.70          | 35.86       | 54.92                 | -707.98                           | 1,367.57                          | 1,434.82             | 1,370.40              | 64.42                   | 22.273            |                    |         |                 |  |          |  |  |  |         |
| 9,000.00              | 8,735.92            | 9,044.30            | 8,735.92            | 33.81          | 35.98       | 54.92                 | -707.98                           | 1,367.57                          | 1,434.82             | 1,370.16              | 64.66                   | 22.190            |                    |         |                 |  |          |  |  |  |         |
| 9,100.00              | 8,835.92            | 9,144.30            | 8,835.92            | 33.92          | 36.09       | 54.92                 | -707.98                           | 1,367.57                          | 1,434.82             | 1,369.92              | 64.90                   | 22.108            |                    |         |                 |  |          |  |  |  |         |
| 9,200.00              | 8,935.92            | 9,244.30            | 8,935.92            | 34.03          | 36.21       | 54.92                 | -707.98                           | 1,367.57                          | 1,434.82             | 1,369.68              | 65.15                   | 22.025            |                    |         |                 |  |          |  |  |  |         |
| 9,300.00              | 9,035.92            | 9,344.30            | 9,035.92            | 34.14          | 36.33       | 54.92                 | -707.98                           | 1,367.57                          | 1,434.82             | 1,369.43              | 65.39                   | 21.942            |                    |         |                 |  |          |  |  |  |         |
| 9,400.00              | 9,135.92            | 9,444.30            | 9,135.92            | 34.26          | 36.44       | 54.92                 | -707.98                           | 1,367.57                          | 1,434.82             | 1,369.18              | 65.64                   | 21.859            |                    |         |                 |  |          |  |  |  |         |
| 9,500.00              | 9,235.92            | 9,544.30            | 9,235.92            | 34.37          | 36.56       | 54.92                 | -707.98                           | 1,367.57                          | 1,434.82             | 1,368.93              | 65.89                   | 21.776            |                    |         |                 |  |          |  |  |  |         |
| 9,600.00              | 9,335.92            | 9,644.30            | 9,335.92            | 34.48          | 36.68       | 54.92                 | -707.98                           | 1,367.57                          | 1,434.82             | 1,368.68              | 66.14                   | 21.693            |                    |         |                 |  |          |  |  |  |         |
| 9,631.17              | 9,367.09            | 9,675.47            | 9,367.09            | 34.52          | 36.72       | 54.92                 | -707.98                           | 1,367.57                          | 1,434.82             | 1,368.60              | 66.22                   | 21.667            |                    |         |                 |  |          |  |  |  |         |
| 9,656.08              | 9,392.00            | 9,686.38            | 9,378.00            | 34.55          | 36.74       | 54.92                 | -707.98                           | 1,367.57                          | 1,434.89             | 1,368.62              | 66.27                   | 21.653            |                    |         |                 |  |          |  |  |  |         |



**Weatherford International Ltd.**  
Anticollision Report



|                           |                              |                                     |                                       |
|---------------------------|------------------------------|-------------------------------------|---------------------------------------|
| <b>Company:</b>           | ANADARKO PETROLEUM CORP.     | <b>Local Co-ordinate Reference:</b> | Well NBU 1021-12B3DS                  |
| <b>Project:</b>           | UINTAH COUNTY, UTAH (nad 27) | <b>TVD Reference:</b>               | WELL @ 5235.00ft (Original Well Elev) |
| <b>Reference Site:</b>    | NBU 1021-10 Pad              | <b>MD Reference:</b>                | WELL @ 5235.00ft (Original Well Elev) |
| <b>Site Error:</b>        | 0.00ft                       | <b>North Reference:</b>             | True                                  |
| <b>Reference Well:</b>    | NBU 1021-12B3DS              | <b>Survey Calculation Method:</b>   | Minimum Curvature                     |
| <b>Well Error:</b>        | 0.00ft                       | <b>Output errors are at</b>         | 2.00 sigma                            |
| <b>Reference Wellbore</b> | NBU 1021-12B3DS              | <b>Database:</b>                    | EDM 2003.21 Single User Db            |
| <b>Reference Design:</b>  | PLAN #1 11-19-09 RHS         | <b>Offset TVD Reference:</b>        | Offset Datum                          |

| Offset Design         |                     |                     |                     |                |             |                       |                                   |                                   |                      |                       |                         |                   | Offset Site Error: | 0.00 ft |         |  |
|-----------------------|---------------------|---------------------|---------------------|----------------|-------------|-----------------------|-----------------------------------|-----------------------------------|----------------------|-----------------------|-------------------------|-------------------|--------------------|---------|---------|--|
| Survey Program: 0-MWD |                     |                     |                     |                |             |                       |                                   |                                   |                      |                       |                         |                   | Offset Well Error: | 0.00 ft |         |  |
| Reference             |                     |                     |                     |                |             |                       |                                   |                                   |                      |                       |                         |                   | Distance           |         | Warning |  |
| Measured Depth (ft)   | Vertical Depth (ft) | Measured Depth (ft) | Vertical Depth (ft) | Reference (ft) | Offset (ft) | Highside Toolface (°) | Offset Wellbore Centre +N/-S (ft) | Offset Wellbore Centre +E/-W (ft) | Between Centres (ft) | Between Ellipses (ft) | Minimum Separation (ft) | Separation Factor |                    |         |         |  |
| 0.00                  | 0.00                | 0.00                | 0.00                | 0.00           | 0.00        | 162.13                | -38.24                            | 12.33                             | 40.18                |                       |                         |                   |                    |         |         |  |
| 100.00                | 100.00              | 100.00              | 100.00              | 0.10           | 0.10        | 162.13                | -38.24                            | 12.33                             | 40.18                | 39.99                 | 0.19                    | 207.866           |                    |         |         |  |
| 200.00                | 200.00              | 200.00              | 200.00              | 0.32           | 0.32        | 162.13                | -38.24                            | 12.33                             | 40.18                | 39.54                 | 0.64                    | 62.505            |                    |         |         |  |
| 300.00                | 300.00              | 300.00              | 300.00              | 0.55           | 0.55        | 162.13                | -38.24                            | 12.33                             | 40.18                | 39.09                 | 1.09                    | 36.783            |                    |         |         |  |
| 400.00                | 400.00              | 400.00              | 400.00              | 0.77           | 0.77        | 162.13                | -38.24                            | 12.33                             | 40.18                | 38.64                 | 1.54                    | 26.059            |                    |         |         |  |
| 500.00                | 500.00              | 500.00              | 500.00              | 1.00           | 1.00        | 162.13                | -38.24                            | 12.33                             | 40.18                | 38.19                 | 1.99                    | 20.177            |                    |         |         |  |
| 600.00                | 600.00              | 600.00              | 600.00              | 1.22           | 1.22        | 162.13                | -38.24                            | 12.33                             | 40.18                | 37.74                 | 2.44                    | 16.461            |                    |         |         |  |
| 700.00                | 700.00              | 700.00              | 700.00              | 1.45           | 1.45        | 162.13                | -38.24                            | 12.33                             | 40.18                | 37.29                 | 2.89                    | 13.901            |                    |         |         |  |
| 800.00                | 800.00              | 800.00              | 800.00              | 1.67           | 1.67        | 162.13                | -38.24                            | 12.33                             | 40.18                | 36.84                 | 3.34                    | 12.030            |                    |         |         |  |
| 900.00                | 900.00              | 900.00              | 900.00              | 1.89           | 1.89        | 162.13                | -38.24                            | 12.33                             | 40.18                | 36.39                 | 3.79                    | 10.603            |                    |         |         |  |
| 1,000.00              | 1,000.00            | 1,000.00            | 1,000.00            | 2.12           | 2.12        | 162.13                | -38.24                            | 12.33                             | 40.18                | 35.94                 | 4.24                    | 9.479             |                    |         |         |  |
| 1,100.00              | 1,100.00            | 1,100.00            | 1,100.00            | 2.34           | 2.34        | 162.13                | -38.24                            | 12.33                             | 40.18                | 35.49                 | 4.69                    | 8.570             |                    |         |         |  |
| 1,200.00              | 1,200.00            | 1,200.00            | 1,200.00            | 2.57           | 2.57        | 162.13                | -38.24                            | 12.33                             | 40.18                | 35.04                 | 5.14                    | 7.820             |                    |         |         |  |
| 1,300.00              | 1,300.00            | 1,300.00            | 1,300.00            | 2.79           | 2.79        | 162.13                | -38.24                            | 12.33                             | 40.18                | 34.59                 | 5.59                    | 7.191             |                    |         |         |  |
| 1,400.00              | 1,400.00            | 1,400.00            | 1,400.00            | 3.02           | 3.02        | 162.13                | -38.24                            | 12.33                             | 40.18                | 34.14                 | 6.04                    | 6.655             |                    |         |         |  |
| 1,500.00              | 1,500.00            | 1,500.00            | 1,500.00            | 3.24           | 3.24        | 162.13                | -38.24                            | 12.33                             | 40.18                | 33.69                 | 6.49                    | 6.194             |                    |         |         |  |
| 1,600.00              | 1,600.00            | 1,600.00            | 1,600.00            | 3.47           | 3.47        | 162.13                | -38.24                            | 12.33                             | 40.18                | 33.24                 | 6.94                    | 5.793             |                    |         |         |  |
| 1,700.00              | 1,700.00            | 1,700.00            | 1,700.00            | 3.69           | 3.69        | 162.13                | -38.24                            | 12.33                             | 40.18                | 32.79                 | 7.39                    | 5.440             |                    |         |         |  |
| 1,800.00              | 1,800.00            | 1,800.00            | 1,800.00            | 3.92           | 3.92        | 162.13                | -38.24                            | 12.33                             | 40.18                | 32.35                 | 7.84                    | 5.128             |                    |         |         |  |
| 1,900.00              | 1,900.00            | 1,900.00            | 1,900.00            | 4.14           | 4.14        | 162.13                | -38.24                            | 12.33                             | 40.18                | 31.90                 | 8.28                    | 4.850             |                    |         |         |  |
| 2,000.00              | 2,000.00            | 2,000.00            | 2,000.00            | 4.37           | 4.37        | 162.13                | -38.24                            | 12.33                             | 40.18                | 31.45                 | 8.73                    | 4.600             |                    |         |         |  |
| 2,100.00              | 2,100.00            | 2,100.00            | 2,100.00            | 4.59           | 4.59        | 162.13                | -38.24                            | 12.33                             | 40.18                | 31.00                 | 9.18                    | 4.375             |                    |         |         |  |
| 2,200.00              | 2,200.00            | 2,200.00            | 2,200.00            | 4.82           | 4.82        | 162.13                | -38.24                            | 12.33                             | 40.18                | 30.55                 | 9.63                    | 4.171             |                    |         |         |  |
| 2,267.00              | 2,267.00            | 2,267.00            | 2,267.00            | 4.97           | 4.97        | 162.13                | -38.24                            | 12.33                             | 40.18                | 30.25                 | 9.93                    | 4.044             |                    |         |         |  |
| 2,300.00              | 2,300.00            | 2,299.43            | 2,299.43            | 5.03           | 5.03        | -10.81                | -38.41                            | 12.43                             | 40.10                | 30.03                 | 10.06                   | 3.985             |                    |         |         |  |
| 2,400.00              | 2,399.89            | 2,397.40            | 2,397.31            | 5.20           | 5.20        | -13.04                | -41.84                            | 14.33                             | 39.79                | 29.41                 | 10.38                   | 3.832             |                    |         |         |  |
| 2,487.86              | 2,487.37            | 2,483.43            | 2,483.00            | 5.36           | 5.36        | -17.31                | -48.47                            | 18.00                             | 39.63                | 28.98                 | 10.65                   | 3.721 CC          |                    |         |         |  |
| 2,500.00              | 2,499.42            | 2,495.32            | 2,494.81            | 5.38           | 5.38        | -18.07                | -49.65                            | 18.65                             | 39.63                | 28.95                 | 10.69                   | 3.709 ES          |                    |         |         |  |
| 2,600.00              | 2,598.32            | 2,593.13            | 2,591.61            | 5.56           | 5.57        | -25.77                | -61.80                            | 25.39                             | 40.15                | 29.16                 | 10.99                   | 3.654 SF          |                    |         |         |  |
| 2,700.00              | 2,696.30            | 2,690.78            | 2,687.43            | 5.78           | 5.78        | -35.54                | -78.24                            | 34.50                             | 42.06                | 30.74                 | 11.32                   | 3.717             |                    |         |         |  |
| 2,800.00              | 2,793.11            | 2,788.24            | 2,781.98            | 6.03           | 6.04        | -46.18                | -98.89                            | 45.96                             | 46.10                | 34.37                 | 11.74                   | 3.929             |                    |         |         |  |
| 2,900.00              | 2,888.47            | 2,885.46            | 2,874.96            | 6.35           | 6.35        | -56.28                | -123.67                           | 59.69                             | 52.76                | 40.46                 | 12.30                   | 4.289             |                    |         |         |  |
| 2,959.91              | 2,944.81            | 2,943.69            | 2,929.93            | 6.57           | 6.56        | -61.68                | -140.47                           | 69.01                             | 58.07                | 45.34                 | 12.73                   | 4.563             |                    |         |         |  |
| 3,000.00              | 2,982.29            | 2,983.42            | 2,967.27            | 6.74           | 6.73        | -65.10                | -152.36                           | 75.60                             | 61.98                | 48.92                 | 13.06                   | 4.745             |                    |         |         |  |
| 3,100.00              | 3,075.78            | 3,082.54            | 3,060.41            | 7.18           | 7.16        | -71.95                | -182.01                           | 92.04                             | 72.52                | 58.56                 | 13.96                   | 5.194             |                    |         |         |  |
| 3,200.00              | 3,169.27            | 3,181.66            | 3,153.55            | 7.66           | 7.64        | -77.02                | -211.66                           | 108.48                            | 83.82                | 68.89                 | 14.94                   | 5.612             |                    |         |         |  |
| 3,300.00              | 3,262.76            | 3,280.78            | 3,246.70            | 8.18           | 8.15        | -80.87                | -241.30                           | 124.92                            | 95.62                | 79.65                 | 15.97                   | 5.986             |                    |         |         |  |
| 3,400.00              | 3,356.25            | 3,379.91            | 3,339.84            | 8.72           | 8.68        | -83.86                | -270.95                           | 141.35                            | 107.75               | 90.69                 | 17.06                   | 6.315             |                    |         |         |  |
| 3,500.00              | 3,449.74            | 3,479.03            | 3,432.99            | 9.29           | 9.24        | -86.25                | -300.60                           | 157.79                            | 120.11               | 101.92                | 18.19                   | 6.603             |                    |         |         |  |
| 3,600.00              | 3,543.23            | 3,578.15            | 3,526.13            | 9.87           | 9.82        | -88.18                | -330.25                           | 174.23                            | 132.64               | 113.29                | 19.36                   | 6.853             |                    |         |         |  |
| 3,700.00              | 3,636.72            | 3,677.27            | 3,619.27            | 10.47          | 10.41       | -89.79                | -359.90                           | 190.67                            | 145.30               | 124.75                | 20.55                   | 7.071             |                    |         |         |  |
| 3,800.00              | 3,730.21            | 3,776.39            | 3,712.42            | 11.09          | 11.01       | -91.13                | -389.54                           | 207.11                            | 158.04               | 136.28                | 21.76                   | 7.262             |                    |         |         |  |
| 3,900.00              | 3,823.70            | 3,875.51            | 3,805.56            | 11.71          | 11.63       | -92.28                | -419.19                           | 223.54                            | 170.86               | 147.87                | 23.00                   | 7.430             |                    |         |         |  |
| 4,000.00              | 3,917.19            | 3,974.63            | 3,898.71            | 12.35          | 12.25       | -93.26                | -448.84                           | 239.98                            | 183.74               | 159.49                | 24.25                   | 7.578             |                    |         |         |  |
| 4,100.00              | 4,010.68            | 4,073.76            | 3,991.85            | 12.99          | 12.89       | -94.12                | -478.49                           | 256.42                            | 196.66               | 171.15                | 25.51                   | 7.708             |                    |         |         |  |
| 4,200.00              | 4,104.17            | 4,172.88            | 4,085.00            | 13.64          | 13.53       | -94.87                | -508.14                           | 272.86                            | 209.63               | 182.84                | 26.79                   | 7.825             |                    |         |         |  |
| 4,300.00              | 4,197.66            | 4,272.00            | 4,178.14            | 14.29          | 14.17       | -95.53                | -537.78                           | 289.30                            | 222.62               | 194.54                | 28.08                   | 7.929             |                    |         |         |  |
| 4,400.00              | 4,291.15            | 4,371.12            | 4,271.28            | 14.96          | 14.82       | -96.12                | -567.43                           | 305.73                            | 235.64               | 206.26                | 29.37                   | 8.022             |                    |         |         |  |
| 4,500.00              | 4,384.64            | 4,470.24            | 4,364.43            | 15.62          | 15.48       | -96.64                | -597.08                           | 322.17                            | 248.68               | 218.00                | 30.68                   | 8.106             |                    |         |         |  |
| 4,600.00              | 4,478.13            | 4,569.36            | 4,457.57            | 16.29          | 16.14       | -97.12                | -626.73                           | 338.61                            | 261.74               | 229.75                | 31.99                   | 8.182             |                    |         |         |  |
| 4,700.00              | 4,571.63            | 4,668.48            | 4,550.72            | 16.96          | 16.80       | -97.55                | -656.38                           | 355.05                            | 274.81               | 241.51                | 33.31                   | 8.251             |                    |         |         |  |
| 4,800.00              | 4,665.12            | 4,767.60            | 4,643.86            | 17.64          | 17.47       | -97.94                | -686.02                           | 371.49                            | 287.90               | 253.27                | 34.63                   | 8.314             |                    |         |         |  |

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



**Weatherford International Ltd.**  
Anticollision Report



|                           |                              |                                     |                                       |
|---------------------------|------------------------------|-------------------------------------|---------------------------------------|
| <b>Company:</b>           | ANADARKO PETROLEUM CORP.     | <b>Local Co-ordinate Reference:</b> | Well NBU 1021-12B3DS                  |
| <b>Project:</b>           | UINTAH COUNTY, UTAH (nad 27) | <b>TVD Reference:</b>               | WELL @ 5235.00ft (Original Well Elev) |
| <b>Reference Site:</b>    | NBU 1021-10 Pad              | <b>MD Reference:</b>                | WELL @ 5235.00ft (Original Well Elev) |
| <b>Site Error:</b>        | 0.00ft                       | <b>North Reference:</b>             | True                                  |
| <b>Reference Well:</b>    | NBU 1021-12B3DS              | <b>Survey Calculation Method:</b>   | Minimum Curvature                     |
| <b>Well Error:</b>        | 0.00ft                       | <b>Output errors are at</b>         | 2.00 sigma                            |
| <b>Reference Wellbore</b> | NBU 1021-12B3DS              | <b>Database:</b>                    | EDM 2003.21 Single User Db            |
| <b>Reference Design:</b>  | PLAN #1 11-19-09 RHS         | <b>Offset TVD Reference:</b>        | Offset Datum                          |

| Offset Design         |                     |                     |                     |                |             |                                       |                                   |                                   |                      |                       |                         |                   | Offset Site Error: | 0.00 ft |         |  |
|-----------------------|---------------------|---------------------|---------------------|----------------|-------------|---------------------------------------|-----------------------------------|-----------------------------------|----------------------|-----------------------|-------------------------|-------------------|--------------------|---------|---------|--|
| Survey Program: 0-MWD |                     |                     |                     |                |             |                                       |                                   |                                   |                      |                       |                         |                   | Offset Well Error: | 0.00 ft |         |  |
| Reference             |                     |                     |                     |                |             |                                       |                                   |                                   |                      |                       |                         |                   | Distance           |         | Warning |  |
| Measured Depth (ft)   | Vertical Depth (ft) | Measured Depth (ft) | Vertical Depth (ft) | Reference (ft) | Offset (ft) | Semi Major Axis Highside Toolface (°) | Offset Wellbore Centre +N/-S (ft) | Offset Wellbore Centre +E/-W (ft) | Between Centres (ft) | Between Ellipses (ft) | Minimum Separation (ft) | Separation Factor |                    |         |         |  |
| 4,900.00              | 4,758.61            | 4,866.73            | 4,737.00            | 18.32          | 18.14       | -98.30                                | -715.67                           | 387.92                            | 301.01               | 265.05                | 35.96                   | 8.371             |                    |         |         |  |
| 5,000.00              | 4,852.10            | 4,965.85            | 4,830.15            | 19.00          | 18.81       | -98.62                                | -745.32                           | 404.36                            | 314.12               | 276.83                | 37.29                   | 8.424             |                    |         |         |  |
| 5,100.00              | 4,945.59            | 5,064.97            | 4,923.29            | 19.68          | 19.48       | -98.93                                | -774.97                           | 420.80                            | 327.24               | 288.62                | 38.62                   | 8.472             |                    |         |         |  |
| 5,200.00              | 5,039.08            | 5,164.09            | 5,016.44            | 20.37          | 20.16       | -99.20                                | -804.62                           | 437.24                            | 340.37               | 300.41                | 39.96                   | 8.517             |                    |         |         |  |
| 5,300.00              | 5,132.57            | 5,263.21            | 5,109.58            | 21.05          | 20.84       | -99.46                                | -834.26                           | 453.68                            | 353.51               | 312.20                | 41.31                   | 8.558             |                    |         |         |  |
| 5,400.00              | 5,226.06            | 5,362.33            | 5,202.72            | 21.74          | 21.52       | -99.70                                | -863.91                           | 470.12                            | 366.65               | 324.00                | 42.65                   | 8.597             |                    |         |         |  |
| 5,500.00              | 5,319.55            | 5,461.45            | 5,295.87            | 22.43          | 22.20       | -99.92                                | -893.56                           | 486.55                            | 379.80               | 335.80                | 44.00                   | 8.632             |                    |         |         |  |
| 5,600.00              | 5,413.04            | 5,560.58            | 5,389.01            | 23.13          | 22.88       | -100.13                               | -923.21                           | 502.99                            | 392.95               | 347.61                | 45.35                   | 8.665             |                    |         |         |  |
| 5,700.00              | 5,506.53            | 5,659.70            | 5,482.16            | 23.82          | 23.56       | -100.32                               | -952.85                           | 519.43                            | 406.11               | 359.41                | 46.70                   | 8.696             |                    |         |         |  |
| 5,800.00              | 5,600.02            | 5,758.82            | 5,575.30            | 24.51          | 24.25       | -100.50                               | -982.50                           | 535.87                            | 419.28               | 371.22                | 48.05                   | 8.725             |                    |         |         |  |
| 5,900.00              | 5,693.51            | 5,857.94            | 5,668.45            | 25.21          | 24.93       | -100.67                               | -1,012.15                         | 552.31                            | 432.44               | 383.03                | 49.41                   | 8.752             |                    |         |         |  |
| 6,000.00              | 5,787.00            | 5,957.06            | 5,761.59            | 25.90          | 25.62       | -100.83                               | -1,041.80                         | 568.74                            | 445.61               | 394.85                | 50.77                   | 8.778             |                    |         |         |  |
| 6,100.00              | 5,880.49            | 6,056.18            | 5,854.73            | 26.60          | 26.30       | -100.99                               | -1,071.45                         | 585.18                            | 458.79               | 406.66                | 52.12                   | 8.802             |                    |         |         |  |
| 6,200.00              | 5,973.98            | 6,155.30            | 5,947.88            | 27.30          | 26.99       | -101.13                               | -1,101.09                         | 601.62                            | 471.96               | 418.48                | 53.48                   | 8.824             |                    |         |         |  |
| 6,300.00              | 6,067.47            | 6,255.66            | 6,042.30            | 28.00          | 27.64       | -101.31                               | -1,130.81                         | 618.10                            | 485.09               | 430.28                | 54.81                   | 8.851             |                    |         |         |  |
| 6,400.00              | 6,160.96            | 6,357.45            | 6,139.08            | 28.69          | 28.18       | -101.83                               | -1,158.42                         | 633.40                            | 497.76               | 441.75                | 56.01                   | 8.887             |                    |         |         |  |
| 6,436.71              | 6,195.28            | 6,394.76            | 6,174.82            | 28.95          | 28.36       | -102.12                               | -1,167.78                         | 638.59                            | 502.29               | 445.86                | 56.43                   | 8.901             |                    |         |         |  |
| 6,500.00              | 6,254.70            | 6,459.03            | 6,236.70            | 29.33          | 28.64       | -102.80                               | -1,182.96                         | 647.01                            | 509.83               | 452.75                | 57.08                   | 8.932             |                    |         |         |  |
| 6,600.00              | 6,349.51            | 6,560.53            | 6,335.18            | 29.81          | 29.05       | -103.83                               | -1,204.43                         | 658.91                            | 520.80               | 462.86                | 57.94                   | 8.988             |                    |         |         |  |
| 6,700.00              | 6,445.38            | 6,661.95            | 6,434.38            | 30.25          | 29.41       | -104.82                               | -1,222.83                         | 669.12                            | 530.61               | 471.89                | 58.72                   | 9.037             |                    |         |         |  |
| 6,800.00              | 6,542.18            | 6,763.26            | 6,534.16            | 30.66          | 29.73       | -105.76                               | -1,238.13                         | 677.60                            | 539.24               | 479.84                | 59.40                   | 9.078             |                    |         |         |  |
| 6,900.00              | 6,639.79            | 6,864.43            | 6,634.36            | 31.02          | 30.01       | -106.68                               | -1,250.33                         | 684.36                            | 546.69               | 486.70                | 59.98                   | 9.114             |                    |         |         |  |
| 7,000.00              | 6,738.11            | 6,965.44            | 6,734.84            | 31.34          | 30.23       | -107.56                               | -1,259.41                         | 689.39                            | 552.94               | 492.47                | 60.47                   | 9.144             |                    |         |         |  |
| 7,100.00              | 6,837.00            | 7,066.27            | 6,835.43            | 31.62          | 30.41       | -108.43                               | -1,265.37                         | 692.70                            | 557.99               | 497.13                | 60.86                   | 9.169             |                    |         |         |  |
| 7,200.00              | 6,936.35            | 7,166.89            | 6,935.99            | 31.86          | 30.55       | -109.27                               | -1,268.24                         | 694.29                            | 561.85               | 500.69                | 61.15                   | 9.188             |                    |         |         |  |
| 7,300.00              | 7,036.03            | 7,266.93            | 7,036.03            | 32.05          | 30.66       | -110.05                               | -1,268.52                         | 694.45                            | 564.52               | 503.15                | 61.37                   | 9.199             |                    |         |         |  |
| 7,400.00              | 7,135.93            | 7,366.83            | 7,135.93            | 32.19          | 30.76       | -110.49                               | -1,268.52                         | 694.45                            | 566.04               | 504.48                | 61.56                   | 9.195             |                    |         |         |  |
| 7,476.08              | 7,212.00            | 7,442.90            | 7,212.00            | 32.28          | 30.83       | 62.21                                 | -1,268.52                         | 694.45                            | 566.40               | 504.69                | 61.71                   | 9.179             |                    |         |         |  |
| 7,500.00              | 7,235.92            | 7,466.82            | 7,235.92            | 32.30          | 30.86       | 62.21                                 | -1,268.52                         | 694.45                            | 566.40               | 504.64                | 61.75                   | 9.172             |                    |         |         |  |
| 7,600.00              | 7,335.92            | 7,566.82            | 7,335.92            | 32.40          | 30.96       | 62.21                                 | -1,268.52                         | 694.45                            | 566.40               | 504.45                | 61.95                   | 9.143             |                    |         |         |  |
| 7,700.00              | 7,435.92            | 7,666.82            | 7,435.92            | 32.49          | 31.06       | 62.21                                 | -1,268.52                         | 694.45                            | 566.40               | 504.25                | 62.15                   | 9.113             |                    |         |         |  |
| 7,800.00              | 7,535.92            | 7,766.82            | 7,535.92            | 32.58          | 31.16       | 62.21                                 | -1,268.52                         | 694.45                            | 566.40               | 504.05                | 62.35                   | 9.084             |                    |         |         |  |
| 7,900.00              | 7,635.92            | 7,866.82            | 7,635.92            | 32.68          | 31.27       | 62.21                                 | -1,268.52                         | 694.45                            | 566.40               | 503.84                | 62.56                   | 9.054             |                    |         |         |  |
| 8,000.00              | 7,735.92            | 7,966.82            | 7,735.92            | 32.78          | 31.37       | 62.21                                 | -1,268.52                         | 694.45                            | 566.40               | 503.63                | 62.77                   | 9.024             |                    |         |         |  |
| 8,100.00              | 7,835.92            | 8,066.82            | 7,835.92            | 32.87          | 31.48       | 62.21                                 | -1,268.52                         | 694.45                            | 566.40               | 503.42                | 62.98                   | 8.994             |                    |         |         |  |
| 8,200.00              | 7,935.92            | 8,166.82            | 7,935.92            | 32.97          | 31.59       | 62.21                                 | -1,268.52                         | 694.45                            | 566.40               | 503.21                | 63.19                   | 8.964             |                    |         |         |  |
| 8,300.00              | 8,035.92            | 8,266.82            | 8,035.92            | 33.07          | 31.69       | 62.21                                 | -1,268.52                         | 694.45                            | 566.40               | 503.00                | 63.40                   | 8.933             |                    |         |         |  |
| 8,400.00              | 8,135.92            | 8,366.82            | 8,135.92            | 33.17          | 31.81       | 62.21                                 | -1,268.52                         | 694.45                            | 566.40               | 502.78                | 63.62                   | 8.903             |                    |         |         |  |
| 8,500.00              | 8,235.92            | 8,466.82            | 8,235.92            | 33.28          | 31.92       | 62.21                                 | -1,268.52                         | 694.45                            | 566.40               | 502.56                | 63.84                   | 8.872             |                    |         |         |  |
| 8,600.00              | 8,335.92            | 8,566.82            | 8,335.92            | 33.38          | 32.03       | 62.21                                 | -1,268.52                         | 694.45                            | 566.40               | 502.34                | 64.06                   | 8.841             |                    |         |         |  |
| 8,700.00              | 8,435.92            | 8,666.82            | 8,435.92            | 33.49          | 32.14       | 62.21                                 | -1,268.52                         | 694.45                            | 566.40               | 502.11                | 64.29                   | 8.811             |                    |         |         |  |
| 8,800.00              | 8,535.92            | 8,766.82            | 8,535.92            | 33.59          | 32.26       | 62.21                                 | -1,268.52                         | 694.45                            | 566.40               | 501.88                | 64.51                   | 8.780             |                    |         |         |  |
| 8,900.00              | 8,635.92            | 8,866.82            | 8,635.92            | 33.70          | 32.38       | 62.21                                 | -1,268.52                         | 694.45                            | 566.40               | 501.66                | 64.74                   | 8.749             |                    |         |         |  |
| 9,000.00              | 8,735.92            | 8,966.82            | 8,735.92            | 33.81          | 32.49       | 62.21                                 | -1,268.52                         | 694.45                            | 566.40               | 501.42                | 64.97                   | 8.717             |                    |         |         |  |
| 9,100.00              | 8,835.92            | 9,066.82            | 8,835.92            | 33.92          | 32.61       | 62.21                                 | -1,268.52                         | 694.45                            | 566.40               | 501.19                | 65.21                   | 8.686             |                    |         |         |  |
| 9,200.00              | 8,935.92            | 9,166.82            | 8,935.92            | 34.03          | 32.73       | 62.21                                 | -1,268.52                         | 694.45                            | 566.40               | 500.95                | 65.44                   | 8.655             |                    |         |         |  |
| 9,300.00              | 9,035.92            | 9,266.82            | 9,035.92            | 34.14          | 32.85       | 62.21                                 | -1,268.52                         | 694.45                            | 566.40               | 500.72                | 65.68                   | 8.623             |                    |         |         |  |
| 9,400.00              | 9,135.92            | 9,366.82            | 9,135.92            | 34.26          | 32.97       | 62.21                                 | -1,268.52                         | 694.45                            | 566.40               | 500.48                | 65.92                   | 8.592             |                    |         |         |  |
| 9,500.00              | 9,235.92            | 9,466.82            | 9,235.92            | 34.37          | 33.10       | 62.21                                 | -1,268.52                         | 694.45                            | 566.40               | 500.23                | 66.17                   | 8.560             |                    |         |         |  |
| 9,600.00              | 9,335.92            | 9,566.82            | 9,335.92            | 34.48          | 33.22       | 62.21                                 | -1,268.52                         | 694.45                            | 566.40               | 499.99                | 66.41                   | 8.529             |                    |         |         |  |
| 9,634.72              | 9,370.64            | 9,601.54            | 9,370.64            | 34.53          | 33.26       | 62.21                                 | -1,268.52                         | 694.45                            | 566.40               | 499.90                | 66.50                   | 8.518             |                    |         |         |  |
| 9,656.08              | 9,392.00            | 9,615.90            | 9,385.00            | 34.55          | 33.28       | 62.21                                 | -1,268.52                         | 694.45                            | 566.44               | 499.90                | 66.54                   | 8.513             |                    |         |         |  |

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



|                           |                              |                                     |                                       |
|---------------------------|------------------------------|-------------------------------------|---------------------------------------|
| <b>Company:</b>           | ANADARKO PETROLEUM CORP.     | <b>Local Co-ordinate Reference:</b> | Well NBU 1021-12B3DS                  |
| <b>Project:</b>           | UINTAH COUNTY, UTAH (nad 27) | <b>TVD Reference:</b>               | WELL @ 5235.00ft (Original Well Elev) |
| <b>Reference Site:</b>    | NBU 1021-1O Pad              | <b>MD Reference:</b>                | WELL @ 5235.00ft (Original Well Elev) |
| <b>Site Error:</b>        | 0.00ft                       | <b>North Reference:</b>             | True                                  |
| <b>Reference Well:</b>    | NBU 1021-12B3DS              | <b>Survey Calculation Method:</b>   | Minimum Curvature                     |
| <b>Well Error:</b>        | 0.00ft                       | <b>Output errors are at</b>         | 2.00 sigma                            |
| <b>Reference Wellbore</b> | NBU 1021-12B3DS              | <b>Database:</b>                    | EDM 2003.21 Single User Db            |
| <b>Reference Design:</b>  | PLAN #1 11-19-09 RHS         | <b>Offset TVD Reference:</b>        | Offset Datum                          |



**Weatherford International Ltd.**  
Anticollision Report



|                           |                              |                                     |                                       |
|---------------------------|------------------------------|-------------------------------------|---------------------------------------|
| <b>Company:</b>           | ANADARKO PETROLEUM CORP.     | <b>Local Co-ordinate Reference:</b> | Well NBU 1021-12B3DS                  |
| <b>Project:</b>           | UINTAH COUNTY, UTAH (nad 27) | <b>TVD Reference:</b>               | WELL @ 5235.00ft (Original Well Elev) |
| <b>Reference Site:</b>    | NBU 1021-10 Pad              | <b>MD Reference:</b>                | WELL @ 5235.00ft (Original Well Elev) |
| <b>Site Error:</b>        | 0.00ft                       | <b>North Reference:</b>             | True                                  |
| <b>Reference Well:</b>    | NBU 1021-12B3DS              | <b>Survey Calculation Method:</b>   | Minimum Curvature                     |
| <b>Well Error:</b>        | 0.00ft                       | <b>Output errors are at</b>         | 2.00 sigma                            |
| <b>Reference Wellbore</b> | NBU 1021-12B3DS              | <b>Database:</b>                    | EDM 2003.21 Single User Db            |
| <b>Reference Design:</b>  | PLAN #1 11-19-09 RHS         | <b>Offset TVD Reference:</b>        | Offset Datum                          |

| Offset Design         |                     |                     |                     |                |             |                       |                                   |                                   |                      |                       |                         |                   | Offset Site Error: | 0.00 ft |         |  |
|-----------------------|---------------------|---------------------|---------------------|----------------|-------------|-----------------------|-----------------------------------|-----------------------------------|----------------------|-----------------------|-------------------------|-------------------|--------------------|---------|---------|--|
| Survey Program: 0-MWD |                     |                     |                     |                |             |                       |                                   |                                   |                      |                       |                         |                   | Offset Well Error: | 0.00 ft |         |  |
| Reference             |                     |                     |                     |                |             |                       |                                   |                                   |                      |                       |                         |                   | Distance           |         | Warning |  |
| Measured Depth (ft)   | Vertical Depth (ft) | Measured Depth (ft) | Vertical Depth (ft) | Reference (ft) | Offset (ft) | Highside Toolface (°) | Offset Wellbore Centre +N/-S (ft) | Offset Wellbore Centre +E/-W (ft) | Between Centres (ft) | Between Ellipses (ft) | Minimum Separation (ft) | Separation Factor |                    |         |         |  |
| 0.00                  | 0.00                | 0.00                | 0.00                | 0.00           | 0.00        | -17.26                | 18.94                             | -5.88                             | 19.83                |                       |                         |                   |                    |         |         |  |
| 100.00                | 100.00              | 100.00              | 100.00              | 0.10           | 0.10        | -17.26                | 18.94                             | -5.88                             | 19.83                | 19.64                 | 0.19                    | 102.597           |                    |         |         |  |
| 200.00                | 200.00              | 200.00              | 200.00              | 0.32           | 0.32        | -17.26                | 18.94                             | -5.88                             | 19.83                | 19.19                 | 0.64                    | 30.851            |                    |         |         |  |
| 300.00                | 300.00              | 300.00              | 300.00              | 0.55           | 0.55        | -17.26                | 18.94                             | -5.88                             | 19.83                | 18.74                 | 1.09                    | 18.155            |                    |         |         |  |
| 400.00                | 400.00              | 400.00              | 400.00              | 0.77           | 0.77        | -17.26                | 18.94                             | -5.88                             | 19.83                | 18.29                 | 1.54                    | 12.862            |                    |         |         |  |
| 500.00                | 500.00              | 500.00              | 500.00              | 1.00           | 1.00        | -17.26                | 18.94                             | -5.88                             | 19.83                | 17.84                 | 1.99                    | 9.959             |                    |         |         |  |
| 600.00                | 600.00              | 600.00              | 600.00              | 1.22           | 1.22        | -17.26                | 18.94                             | -5.88                             | 19.83                | 17.39                 | 2.44                    | 8.125             |                    |         |         |  |
| 700.00                | 700.00              | 700.00              | 700.00              | 1.45           | 1.45        | -17.26                | 18.94                             | -5.88                             | 19.83                | 16.94                 | 2.89                    | 6.861             |                    |         |         |  |
| 800.00                | 800.00              | 800.00              | 800.00              | 1.67           | 1.67        | -17.26                | 18.94                             | -5.88                             | 19.83                | 16.49                 | 3.34                    | 5.938             |                    |         |         |  |
| 900.00                | 900.00              | 900.00              | 900.00              | 1.89           | 1.89        | -17.26                | 18.94                             | -5.88                             | 19.83                | 16.04                 | 3.79                    | 5.233             |                    |         |         |  |
| 1,000.00              | 1,000.00            | 1,000.00            | 1,000.00            | 2.12           | 2.12        | -17.26                | 18.94                             | -5.88                             | 19.83                | 15.59                 | 4.24                    | 4.678             |                    |         |         |  |
| 1,100.00              | 1,100.00            | 1,100.00            | 1,100.00            | 2.34           | 2.34        | -17.26                | 18.94                             | -5.88                             | 19.83                | 15.14                 | 4.69                    | 4.230             |                    |         |         |  |
| 1,200.00              | 1,200.00            | 1,200.00            | 1,200.00            | 2.57           | 2.57        | -17.26                | 18.94                             | -5.88                             | 19.83                | 14.69                 | 5.14                    | 3.860             |                    |         |         |  |
| 1,300.00              | 1,300.00            | 1,300.00            | 1,300.00            | 2.79           | 2.79        | -17.26                | 18.94                             | -5.88                             | 19.83                | 14.24                 | 5.59                    | 3.549             |                    |         |         |  |
| 1,400.00              | 1,400.00            | 1,400.00            | 1,400.00            | 3.02           | 3.02        | -17.26                | 18.94                             | -5.88                             | 19.83                | 13.79                 | 6.04                    | 3.285             |                    |         |         |  |
| 1,500.00              | 1,500.00            | 1,500.00            | 1,500.00            | 3.24           | 3.24        | -17.26                | 18.94                             | -5.88                             | 19.83                | 13.35                 | 6.49                    | 3.057             |                    |         |         |  |
| 1,600.00              | 1,600.00            | 1,600.00            | 1,600.00            | 3.47           | 3.47        | -17.26                | 18.94                             | -5.88                             | 19.83                | 12.90                 | 6.94                    | 2.859             |                    |         |         |  |
| 1,700.00              | 1,700.00            | 1,700.00            | 1,700.00            | 3.69           | 3.69        | -17.26                | 18.94                             | -5.88                             | 19.83                | 12.45                 | 7.39                    | 2.685             |                    |         |         |  |
| 1,800.00              | 1,800.00            | 1,800.00            | 1,800.00            | 3.92           | 3.92        | -17.26                | 18.94                             | -5.88                             | 19.83                | 12.00                 | 7.84                    | 2.531             |                    |         |         |  |
| 1,900.00              | 1,900.00            | 1,900.00            | 1,900.00            | 4.14           | 4.14        | -17.26                | 18.94                             | -5.88                             | 19.83                | 11.55                 | 8.28                    | 2.394             |                    |         |         |  |
| 2,000.00              | 2,000.00            | 2,000.00            | 2,000.00            | 4.37           | 4.37        | -17.26                | 18.94                             | -5.88                             | 19.83                | 11.10                 | 8.73                    | 2.271             |                    |         |         |  |
| 2,100.00              | 2,100.00            | 2,100.00            | 2,100.00            | 4.59           | 4.59        | -17.26                | 18.94                             | -5.88                             | 19.83                | 10.65                 | 9.18                    | 2.159             |                    |         |         |  |
| 2,200.00              | 2,200.00            | 2,200.00            | 2,200.00            | 4.82           | 4.82        | -17.26                | 18.94                             | -5.88                             | 19.83                | 10.20                 | 9.63                    | 2.059             |                    |         |         |  |
| 2,267.00              | 2,267.00            | 2,267.00            | 2,267.00            | 4.97           | 4.97        | -17.26                | 18.94                             | -5.88                             | 19.83                | 9.90                  | 9.93                    | 1.996             | CC, ES, SF         |         |         |  |
| 2,300.00              | 2,300.00            | 2,300.00            | 2,300.00            | 5.03           | 5.04        | 170.07                | 18.94                             | -5.88                             | 20.11                | 10.04                 | 10.07                   | 1.997             |                    |         |         |  |
| 2,400.00              | 2,399.89            | 2,400.21            | 2,400.17            | 5.20           | 5.25        | 177.61                | 18.79                             | -3.36                             | 23.71                | 13.28                 | 10.43                   | 2.273             |                    |         |         |  |
| 2,500.00              | 2,499.42            | 2,499.71            | 2,499.36            | 5.38           | 5.46        | -168.23               | 18.34                             | 4.32                              | 32.52                | 21.75                 | 10.77                   | 3.020             |                    |         |         |  |
| 2,600.00              | 2,598.32            | 2,597.85            | 2,596.66            | 5.56           | 5.67        | -156.31               | 17.59                             | 16.94                             | 48.23                | 37.12                 | 11.11                   | 4.340             |                    |         |         |  |
| 2,700.00              | 2,696.30            | 2,694.02            | 2,691.27            | 5.78           | 5.90        | -148.37               | 16.58                             | 34.14                             | 71.03                | 59.55                 | 11.48                   | 6.188             |                    |         |         |  |
| 2,800.00              | 2,793.11            | 2,787.70            | 2,782.48            | 6.03           | 6.16        | -143.19               | 15.33                             | 55.44                             | 100.52               | 88.64                 | 11.88                   | 8.461             |                    |         |         |  |
| 2,900.00              | 2,888.47            | 2,878.42            | 2,869.70            | 6.35           | 6.46        | -139.61               | 13.87                             | 80.29                             | 136.26               | 123.93                | 12.33                   | 11.052            |                    |         |         |  |
| 2,959.91              | 2,944.81            | 2,931.19            | 2,919.87            | 6.57           | 6.65        | -137.93               | 12.90                             | 96.65                             | 160.50               | 147.88                | 12.62                   | 12.714            |                    |         |         |  |
| 3,000.00              | 2,982.29            | 2,965.92            | 2,952.63            | 6.74           | 6.79        | -137.24               | 12.23                             | 108.16                            | 177.58               | 164.71                | 12.87                   | 13.797            |                    |         |         |  |
| 3,100.00              | 3,075.78            | 3,055.88            | 3,037.17            | 7.18           | 7.19        | -135.68               | 10.42                             | 138.86                            | 220.73               | 207.18                | 13.55                   | 16.291            |                    |         |         |  |
| 3,200.00              | 3,169.27            | 3,145.96            | 3,121.82            | 7.66           | 7.62        | -134.63               | 8.61                              | 169.61                            | 263.97               | 249.71                | 14.26                   | 18.508            |                    |         |         |  |
| 3,300.00              | 3,262.76            | 3,236.04            | 3,206.46            | 8.18           | 8.09        | -133.88               | 6.80                              | 200.36                            | 307.26               | 292.24                | 15.02                   | 20.454            |                    |         |         |  |
| 3,400.00              | 3,356.25            | 3,327.63            | 3,292.56            | 8.72           | 8.56        | -133.31               | 4.96                              | 231.54                            | 350.54               | 334.73                | 15.81                   | 22.167            |                    |         |         |  |
| 3,500.00              | 3,449.74            | 3,425.22            | 3,385.07            | 9.29           | 9.02        | -133.16               | 3.14                              | 262.55                            | 392.66               | 376.05                | 16.61                   | 23.645            |                    |         |         |  |
| 3,600.00              | 3,543.23            | 3,524.44            | 3,480.16            | 9.87           | 9.44        | -133.45               | 1.47                              | 290.85                            | 433.07               | 415.69                | 17.38                   | 24.922            |                    |         |         |  |
| 3,700.00              | 3,636.72            | 3,625.10            | 3,577.56            | 10.47          | 9.84        | -134.08               | -0.02                             | 316.17                            | 471.78               | 453.63                | 18.15                   | 25.999            |                    |         |         |  |
| 3,800.00              | 3,730.21            | 3,726.97            | 3,676.99            | 11.09          | 10.22       | -134.98               | -1.32                             | 338.30                            | 508.80               | 489.90                | 18.90                   | 26.921            |                    |         |         |  |
| 3,900.00              | 3,823.70            | 3,829.81            | 3,778.09            | 11.71          | 10.57       | -136.11               | -2.42                             | 357.06                            | 544.21               | 524.58                | 19.63                   | 27.724            |                    |         |         |  |
| 4,000.00              | 3,917.19            | 3,933.37            | 3,880.52            | 12.35          | 10.89       | -137.43               | -3.32                             | 372.27                            | 578.09               | 557.77                | 20.33                   | 28.442            |                    |         |         |  |
| 4,100.00              | 4,010.68            | 4,037.39            | 3,983.88            | 12.99          | 11.17       | -138.93               | -4.00                             | 383.81                            | 610.58               | 589.60                | 20.98                   | 29.103            |                    |         |         |  |
| 4,200.00              | 4,104.17            | 4,141.58            | 4,087.78            | 13.64          | 11.41       | -140.57               | -4.46                             | 391.62                            | 641.80               | 620.21                | 21.59                   | 29.733            |                    |         |         |  |
| 4,300.00              | 4,197.66            | 4,245.68            | 4,191.79            | 14.29          | 11.61       | -142.36               | -4.70                             | 395.64                            | 671.92               | 649.79                | 22.13                   | 30.358            |                    |         |         |  |
| 4,400.00              | 4,291.15            | 4,345.05            | 4,291.15            | 14.96          | 11.77       | -144.15               | -4.73                             | 396.25                            | 701.27               | 678.64                | 22.63                   | 30.988            |                    |         |         |  |
| 4,500.00              | 4,384.64            | 4,438.54            | 4,384.64            | 15.62          | 11.93       | -145.75               | -4.73                             | 396.25                            | 730.95               | 707.84                | 23.11                   | 31.624            |                    |         |         |  |
| 4,600.00              | 4,478.13            | 4,532.03            | 4,478.13            | 16.29          | 12.09       | -147.22               | -4.73                             | 396.25                            | 761.13               | 737.53                | 23.60                   | 32.253            |                    |         |         |  |
| 4,700.00              | 4,571.63            | 4,625.52            | 4,571.63            | 16.96          | 12.25       | -148.59               | -4.73                             | 396.25                            | 791.75               | 767.67                | 24.08                   | 32.884            |                    |         |         |  |
| 4,800.00              | 4,665.12            | 4,719.01            | 4,665.12            | 17.64          | 12.42       | -149.86               | -4.73                             | 396.25                            | 822.76               | 798.21                | 24.55                   | 33.513            |                    |         |         |  |
| 4,900.00              | 4,758.61            | 4,812.50            | 4,758.61            | 18.32          | 12.58       | -151.04               | -4.73                             | 396.25                            | 854.11               | 829.09                | 25.02                   | 34.136            |                    |         |         |  |

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



**Weatherford International Ltd.**  
Anticollision Report



|                           |                              |                                     |                                       |
|---------------------------|------------------------------|-------------------------------------|---------------------------------------|
| <b>Company:</b>           | ANADARKO PETROLEUM CORP.     | <b>Local Co-ordinate Reference:</b> | Well NBU 1021-12B3DS                  |
| <b>Project:</b>           | UINTAH COUNTY, UTAH (nad 27) | <b>TVD Reference:</b>               | WELL @ 5235.00ft (Original Well Elev) |
| <b>Reference Site:</b>    | NBU 1021-10 Pad              | <b>MD Reference:</b>                | WELL @ 5235.00ft (Original Well Elev) |
| <b>Site Error:</b>        | 0.00ft                       | <b>North Reference:</b>             | True                                  |
| <b>Reference Well:</b>    | NBU 1021-12B3DS              | <b>Survey Calculation Method:</b>   | Minimum Curvature                     |
| <b>Well Error:</b>        | 0.00ft                       | <b>Output errors are at</b>         | 2.00 sigma                            |
| <b>Reference Wellbore</b> | NBU 1021-12B3DS              | <b>Database:</b>                    | EDM 2003.21 Single User Db            |
| <b>Reference Design:</b>  | PLAN #1 11-19-09 RHS         | <b>Offset TVD Reference:</b>        | Offset Datum                          |

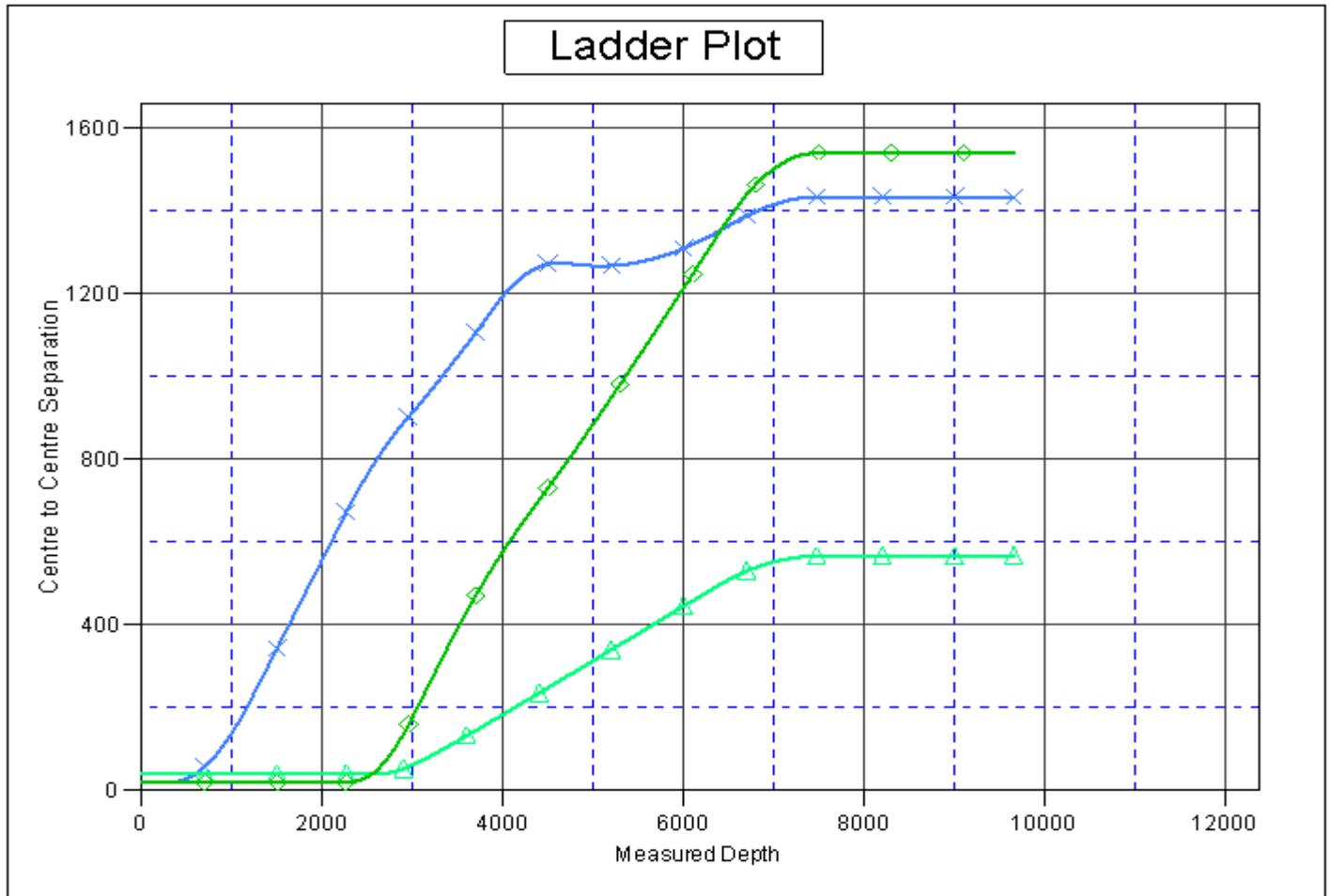
| Offset Design         |                     |                     |                     |                |             |                       |                                   |                                   |                      |                       |                         |                   | Offset Site Error: | 0.00 ft |         |  |
|-----------------------|---------------------|---------------------|---------------------|----------------|-------------|-----------------------|-----------------------------------|-----------------------------------|----------------------|-----------------------|-------------------------|-------------------|--------------------|---------|---------|--|
| Survey Program: 0-MWD |                     |                     |                     |                |             |                       |                                   |                                   |                      |                       |                         |                   | Offset Well Error: | 0.00 ft |         |  |
| Reference             |                     |                     |                     |                |             |                       |                                   |                                   |                      |                       |                         |                   | Distance           |         | Warning |  |
| Measured Depth (ft)   | Vertical Depth (ft) | Measured Depth (ft) | Vertical Depth (ft) | Reference (ft) | Offset (ft) | Highside Toolface (°) | Offset Wellbore Centre +N/-S (ft) | Offset Wellbore Centre +E/-W (ft) | Between Centres (ft) | Between Ellipses (ft) | Minimum Separation (ft) | Separation Factor |                    |         |         |  |
| 5,000.00              | 4,852.10            | 4,905.99            | 4,852.10            | 19.00          | 12.75       | -152.13               | -4.73                             | 396.25                            | 885.78               | 860.30                | 25.49                   | 34.752            |                    |         |         |  |
| 5,100.00              | 4,945.59            | 4,999.48            | 4,945.59            | 19.68          | 12.92       | -153.15               | -4.73                             | 396.25                            | 917.73               | 891.78                | 25.95                   | 35.359            |                    |         |         |  |
| 5,200.00              | 5,039.08            | 5,092.97            | 5,039.08            | 20.37          | 13.09       | -154.11               | -4.73                             | 396.25                            | 949.94               | 923.52                | 26.42                   | 35.955            |                    |         |         |  |
| 5,300.00              | 5,132.57            | 5,186.46            | 5,132.57            | 21.05          | 13.26       | -155.00               | -4.73                             | 396.25                            | 982.36               | 955.48                | 26.88                   | 36.540            |                    |         |         |  |
| 5,400.00              | 5,226.06            | 5,279.95            | 5,226.06            | 21.74          | 13.43       | -155.84               | -4.73                             | 396.25                            | 1,015.00             | 987.65                | 27.35                   | 37.112            |                    |         |         |  |
| 5,500.00              | 5,319.55            | 5,373.44            | 5,319.55            | 22.43          | 13.61       | -156.63               | -4.73                             | 396.25                            | 1,047.81             | 1,020.00              | 27.81                   | 37.672            |                    |         |         |  |
| 5,600.00              | 5,413.04            | 5,466.93            | 5,413.04            | 23.13          | 13.78       | -157.37               | -4.73                             | 396.25                            | 1,080.80             | 1,052.52              | 28.28                   | 38.218            |                    |         |         |  |
| 5,700.00              | 5,506.53            | 5,560.42            | 5,506.53            | 23.82          | 13.96       | -158.06               | -4.73                             | 396.25                            | 1,113.94             | 1,085.20              | 28.75                   | 38.751            |                    |         |         |  |
| 5,800.00              | 5,600.02            | 5,653.91            | 5,600.02            | 24.51          | 14.14       | -158.72               | -4.73                             | 396.25                            | 1,147.22             | 1,118.01              | 29.21                   | 39.270            |                    |         |         |  |
| 5,900.00              | 5,693.51            | 5,747.40            | 5,693.51            | 25.21          | 14.31       | -159.34               | -4.73                             | 396.25                            | 1,180.63             | 1,150.95              | 29.68                   | 39.776            |                    |         |         |  |
| 6,000.00              | 5,787.00            | 5,840.89            | 5,787.00            | 25.90          | 14.49       | -159.93               | -4.73                             | 396.25                            | 1,214.16             | 1,184.01              | 30.15                   | 40.268            |                    |         |         |  |
| 6,100.00              | 5,880.49            | 5,934.38            | 5,880.49            | 26.60          | 14.67       | -160.48               | -4.73                             | 396.25                            | 1,247.80             | 1,217.18              | 30.62                   | 40.747            |                    |         |         |  |
| 6,200.00              | 5,973.98            | 6,027.87            | 5,973.98            | 27.30          | 14.85       | -161.01               | -4.73                             | 396.25                            | 1,281.54             | 1,250.44              | 31.10                   | 41.213            |                    |         |         |  |
| 6,300.00              | 6,067.47            | 6,121.36            | 6,067.47            | 28.00          | 15.03       | -161.51               | -4.73                             | 396.25                            | 1,315.37             | 1,283.80              | 31.57                   | 41.666            |                    |         |         |  |
| 6,400.00              | 6,160.96            | 6,214.85            | 6,160.96            | 28.69          | 15.21       | -161.98               | -4.73                             | 396.25                            | 1,349.28             | 1,317.24              | 32.05                   | 42.106            |                    |         |         |  |
| 6,436.71              | 6,195.28            | 6,249.18            | 6,195.28            | 28.95          | 15.28       | -162.15               | -4.73                             | 396.25                            | 1,361.75             | 1,329.53              | 32.22                   | 42.264            |                    |         |         |  |
| 6,500.00              | 6,254.70            | 6,308.59            | 6,254.70            | 29.33          | 15.39       | -162.56               | -4.73                             | 396.25                            | 1,382.65             | 1,350.05              | 32.60                   | 42.414            |                    |         |         |  |
| 6,600.00              | 6,349.51            | 6,403.40            | 6,349.51            | 29.81          | 15.58       | -163.13               | -4.73                             | 396.25                            | 1,413.13             | 1,379.97              | 33.16                   | 42.616            |                    |         |         |  |
| 6,700.00              | 6,445.38            | 6,499.27            | 6,445.38            | 30.25          | 15.77       | -163.62               | -4.73                             | 396.25                            | 1,440.47             | 1,406.78              | 33.70                   | 42.750            |                    |         |         |  |
| 6,800.00              | 6,542.18            | 6,596.07            | 6,542.18            | 30.66          | 15.96       | -164.03               | -4.73                             | 396.25                            | 1,464.61             | 1,430.41              | 34.20                   | 42.823            |                    |         |         |  |
| 6,900.00              | 6,639.79            | 6,693.69            | 6,639.79            | 31.02          | 16.15       | -164.38               | -4.73                             | 396.25                            | 1,485.51             | 1,450.83              | 34.68                   | 42.839            |                    |         |         |  |
| 7,000.00              | 6,738.11            | 6,792.00            | 6,738.11            | 31.34          | 16.35       | -164.66               | -4.73                             | 396.25                            | 1,503.13             | 1,468.01              | 35.12                   | 42.804            |                    |         |         |  |
| 7,100.00              | 6,837.00            | 6,890.89            | 6,837.00            | 31.62          | 16.54       | -164.88               | -4.73                             | 396.25                            | 1,517.44             | 1,481.91              | 35.52                   | 42.719            |                    |         |         |  |
| 7,200.00              | 6,936.35            | 6,990.24            | 6,936.35            | 31.86          | 16.74       | -165.05               | -4.73                             | 396.25                            | 1,528.41             | 1,492.52              | 35.89                   | 42.588            |                    |         |         |  |
| 7,300.00              | 7,036.03            | 7,089.92            | 7,036.03            | 32.05          | 16.94       | -165.17               | -4.73                             | 396.25                            | 1,536.03             | 1,499.81              | 36.22                   | 42.411            |                    |         |         |  |
| 7,400.00              | 7,135.93            | 7,189.82            | 7,135.93            | 32.19          | 17.14       | -165.23               | -4.73                             | 396.25                            | 1,540.28             | 1,503.78              | 36.51                   | 42.190            |                    |         |         |  |
| 7,476.08              | 7,212.00            | 7,265.89            | 7,212.00            | 32.28          | 17.30       | 7.56                  | -4.73                             | 396.25                            | 1,541.26             | 1,504.56              | 36.70                   | 41.992            |                    |         |         |  |
| 7,500.00              | 7,235.92            | 7,289.81            | 7,235.92            | 32.30          | 17.35       | 7.56                  | -4.73                             | 396.25                            | 1,541.26             | 1,504.47              | 36.79                   | 41.894            |                    |         |         |  |
| 7,600.00              | 7,335.92            | 7,389.81            | 7,335.92            | 32.40          | 17.55       | 7.56                  | -4.73                             | 396.25                            | 1,541.26             | 1,504.11              | 37.15                   | 41.490            |                    |         |         |  |
| 7,700.00              | 7,435.92            | 7,489.81            | 7,435.92            | 32.49          | 17.75       | 7.56                  | -4.73                             | 396.25                            | 1,541.26             | 1,503.75              | 37.51                   | 41.092            |                    |         |         |  |
| 7,800.00              | 7,535.92            | 7,589.81            | 7,535.92            | 32.58          | 17.95       | 7.56                  | -4.73                             | 396.25                            | 1,541.26             | 1,503.39              | 37.87                   | 40.699            |                    |         |         |  |
| 7,900.00              | 7,635.92            | 7,689.81            | 7,635.92            | 32.68          | 18.16       | 7.56                  | -4.73                             | 396.25                            | 1,541.26             | 1,503.03              | 38.23                   | 40.312            |                    |         |         |  |
| 8,000.00              | 7,735.92            | 7,789.81            | 7,735.92            | 32.78          | 18.36       | 7.56                  | -4.73                             | 396.25                            | 1,541.26             | 1,502.66              | 38.60                   | 39.931            |                    |         |         |  |
| 8,100.00              | 7,835.92            | 7,889.81            | 7,835.92            | 32.87          | 18.57       | 7.56                  | -4.73                             | 396.25                            | 1,541.26             | 1,502.29              | 38.96                   | 39.555            |                    |         |         |  |
| 8,200.00              | 7,935.92            | 7,989.81            | 7,935.92            | 32.97          | 18.77       | 7.56                  | -4.73                             | 396.25                            | 1,541.26             | 1,501.93              | 39.33                   | 39.185            |                    |         |         |  |
| 8,300.00              | 8,035.92            | 8,089.81            | 8,035.92            | 33.07          | 18.98       | 7.56                  | -4.73                             | 396.25                            | 1,541.26             | 1,501.56              | 39.70                   | 38.819            |                    |         |         |  |
| 8,400.00              | 8,135.92            | 8,189.81            | 8,135.92            | 33.17          | 19.18       | 7.56                  | -4.73                             | 396.25                            | 1,541.26             | 1,501.18              | 40.08                   | 38.459            |                    |         |         |  |
| 8,500.00              | 8,235.92            | 8,289.81            | 8,235.92            | 33.28          | 19.39       | 7.56                  | -4.73                             | 396.25                            | 1,541.26             | 1,500.81              | 40.45                   | 38.104            |                    |         |         |  |
| 8,600.00              | 8,335.92            | 8,389.81            | 8,335.92            | 33.38          | 19.60       | 7.56                  | -4.73                             | 396.25                            | 1,541.26             | 1,500.44              | 40.82                   | 37.755            |                    |         |         |  |
| 8,700.00              | 8,435.92            | 8,489.81            | 8,435.92            | 33.49          | 19.80       | 7.56                  | -4.73                             | 396.25                            | 1,541.26             | 1,500.06              | 41.20                   | 37.410            |                    |         |         |  |
| 8,800.00              | 8,535.92            | 8,589.81            | 8,535.92            | 33.59          | 20.01       | 7.56                  | -4.73                             | 396.25                            | 1,541.26             | 1,499.68              | 41.58                   | 37.070            |                    |         |         |  |
| 8,900.00              | 8,635.92            | 8,689.81            | 8,635.92            | 33.70          | 20.22       | 7.56                  | -4.73                             | 396.25                            | 1,541.26             | 1,499.30              | 41.96                   | 36.736            |                    |         |         |  |
| 9,000.00              | 8,735.92            | 8,789.81            | 8,735.92            | 33.81          | 20.43       | 7.56                  | -4.73                             | 396.25                            | 1,541.26             | 1,498.92              | 42.34                   | 36.406            |                    |         |         |  |
| 9,100.00              | 8,835.92            | 8,889.81            | 8,835.92            | 33.92          | 20.64       | 7.56                  | -4.73                             | 396.25                            | 1,541.26             | 1,498.54              | 42.72                   | 36.081            |                    |         |         |  |
| 9,200.00              | 8,935.92            | 8,989.81            | 8,935.92            | 34.03          | 20.85       | 7.56                  | -4.73                             | 396.25                            | 1,541.26             | 1,498.16              | 43.10                   | 35.760            |                    |         |         |  |
| 9,300.00              | 9,035.92            | 9,089.81            | 9,035.92            | 34.14          | 21.06       | 7.56                  | -4.73                             | 396.25                            | 1,541.26             | 1,497.78              | 43.48                   | 35.445            |                    |         |         |  |
| 9,400.00              | 9,135.92            | 9,189.81            | 9,135.92            | 34.26          | 21.26       | 7.56                  | -4.73                             | 396.25                            | 1,541.26             | 1,497.39              | 43.87                   | 35.133            |                    |         |         |  |
| 9,500.00              | 9,235.92            | 9,289.81            | 9,235.92            | 34.37          | 21.47       | 7.56                  | -4.73                             | 396.25                            | 1,541.26             | 1,497.00              | 44.26                   | 34.827            |                    |         |         |  |
| 9,600.00              | 9,335.92            | 9,389.81            | 9,335.92            | 34.48          | 21.69       | 7.56                  | -4.73                             | 396.25                            | 1,541.26             | 1,496.62              | 44.64                   | 34.524            |                    |         |         |  |
| 9,656.08              | 9,392.00            | 9,445.89            | 9,392.00            | 34.55          | 21.80       | 7.56                  | -4.73                             | 396.25                            | 1,541.26             | 1,496.40              | 44.86                   | 34.357            |                    |         |         |  |

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



|                           |                              |                                     |                                       |
|---------------------------|------------------------------|-------------------------------------|---------------------------------------|
| <b>Company:</b>           | ANADARKO PETROLEUM CORP.     | <b>Local Co-ordinate Reference:</b> | Well NBU 1021-12B3DS                  |
| <b>Project:</b>           | UINTAH COUNTY, UTAH (nad 27) | <b>TVD Reference:</b>               | WELL @ 5235.00ft (Original Well Elev) |
| <b>Reference Site:</b>    | NBU 1021-10 Pad              | <b>MD Reference:</b>                | WELL @ 5235.00ft (Original Well Elev) |
| <b>Site Error:</b>        | 0.00ft                       | <b>North Reference:</b>             | True                                  |
| <b>Reference Well:</b>    | NBU 1021-12B3DS              | <b>Survey Calculation Method:</b>   | Minimum Curvature                     |
| <b>Well Error:</b>        | 0.00ft                       | <b>Output errors are at</b>         | 2.00 sigma                            |
| <b>Reference Wellbore</b> | NBU 1021-12B3DS              | <b>Database:</b>                    | EDM 2003.21 Single User Db            |
| <b>Reference Design:</b>  | PLAN #1 11-19-09 RHS         | <b>Offset TVD Reference:</b>        | Offset Datum                          |

Reference Depths are relative to WELL @ 5235.00ft (Original Well Elev) Coordinates are relative to: NBU 1021-12B3DS  
 Offset Depths are relative to Offset Datum Coordinate System is Universal Transverse Mercator (US Survey Feet), Zone 12N  
 Central Meridian is 111° 0' 0.000 W ° Grid Convergence at Surface is: 0.96°

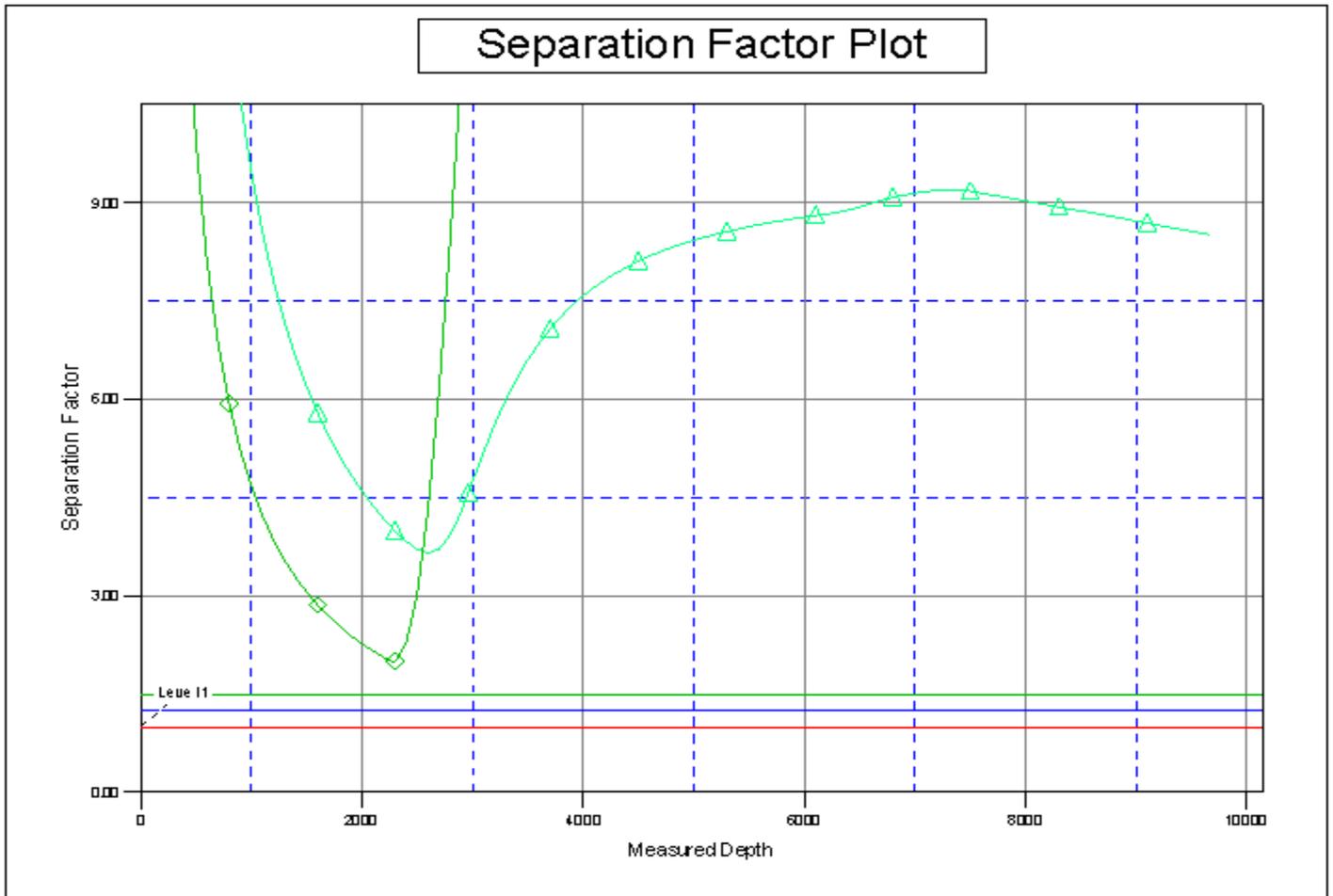


LEGEND

2A2BS, NBU 1021-12A2BS, PLAN #1 11-19-09 RHS \0 ▲ NBU 1021-12B4BS, NBU 1021-12B4BS, PLAN #1 11-19-09 RHS \0 ◆ NBU 1021-103AS, NBU 1021-103AS, PLAN #1

|                           |                              |                                     |                                       |
|---------------------------|------------------------------|-------------------------------------|---------------------------------------|
| <b>Company:</b>           | ANADARKO PETROLEUM CORP.     | <b>Local Co-ordinate Reference:</b> | Well NBU 1021-12B3DS                  |
| <b>Project:</b>           | UINTAH COUNTY, UTAH (nad 27) | <b>TVD Reference:</b>               | WELL @ 5235.00ft (Original Well Elev) |
| <b>Reference Site:</b>    | NBU 1021-10 Pad              | <b>MD Reference:</b>                | WELL @ 5235.00ft (Original Well Elev) |
| <b>Site Error:</b>        | 0.00ft                       | <b>North Reference:</b>             | True                                  |
| <b>Reference Well:</b>    | NBU 1021-12B3DS              | <b>Survey Calculation Method:</b>   | Minimum Curvature                     |
| <b>Well Error:</b>        | 0.00ft                       | <b>Output errors are at</b>         | 2.00 sigma                            |
| <b>Reference Wellbore</b> | NBU 1021-12B3DS              | <b>Database:</b>                    | EDM 2003.21 Single User Db            |
| <b>Reference Design:</b>  | PLAN #1 11-19-09 RHS         | <b>Offset TVD Reference:</b>        | Offset Datum                          |

Reference Depths are relative to WELL @ 5235.00ft (Original Well Elev) Coordinates are relative to: NBU 1021-12B3DS  
 Offset Depths are relative to Offset Datum Coordinate System is Universal Transverse Mercator (US Survey Feet), Zone 12N  
 Central Meridian is 111° 0' 0.000 W ° Grid Convergence at Surface is: 0.96°



LEGEND

2A2BS, NBU 1021-12A2BS, PLAN #1 11-19-09 RHS \0 ▲ NBU 1021-12B4BS, NBU 1021-12B4BS, PLAN #1 11-19-09 RHS \0 ◆ NBU 1021-103AS, NBU 1021-103AS, PLAN #1

**NBU 1021-12B3DS**

Pad: NBU 1021-1O

Surface: 374' FSL 2,433' FEL (SW/4SE/4) Section 1  
BHL: 1,160' FNL 2,250' FEL (NW/4NE/4) Section 12  
T10S R21E

Uintah, Utah  
Mineral Lease: ML 23612

**ONSHORE ORDER NO. 1**

***DRILLING PROGRAM***

**1. – 2. Estimated Tops of Important Geologic Markers:  
Estimated Depths of Anticipated Water, Oil, Gas, or Mineral Formations:**

| <u>Formation</u> | <u>Depth</u> | <u>Resource</u> |
|------------------|--------------|-----------------|
| Uinta            | 0 – Surface  |                 |
| Green River      | 1,334'       |                 |
| Birds Nest       | 1,668'       | Water           |
| Mahogany         | 2,017'       | Water           |
| Wasatch          | 4,580'       | Gas             |
| Mesaverde        | 7,212'       | Gas             |
| MVU2             | 8,111'       | Gas             |
| MVL1             | 8,674'       | Gas             |
| TVD              | 9,392'       |                 |
| TD               | 9,656'       |                 |

**3. Pressure Control Equipment (Schematic Attached)**

*Please refer to the attached Drilling Program.*

**4. Proposed Casing & Cementing Program:**

*Please refer to the attached Drilling Program.*

**5. Drilling Fluids Program:**

*Please refer to the attached Drilling Program.*

**6. Evaluation Program:**

*Please refer to the attached Drilling Program.*

**7. Abnormal Conditions:**

Maximum anticipated bottomhole pressure calculated at 9,392' TVD, approximately equals 5,754 psi (calculated at 0.61 psi/foot).

Maximum anticipated surface pressure equals approximately 3,688 psi (bottomhole pressure minus the pressure of a partially evacuated hole calculated at 0.22 psi/foot).

**8. Anticipated Starting Dates:**

*Drilling is planned to commence immediately upon approval of this application.*

**9. Variances:**

*Please refer to the attached Drilling Program.*

*Onshore Order #2 – Air Drilling Variance*

*Kerr-McGee Oil & Gas Onshore LP (KMG) respectfully requests a variance to several requirements associated with air drilling outlined in Onshore Order 2*

- *Blowout Prevention Equipment (BOPE) requirements;*
- *Mud program requirements; and*
- *Special drilling operation (surface equipment placement) requirements associated with air drilling.*

*This Standard Operating Practices addendum provides supporting information as to why KMG current air drilling practices for constructing the surface casing hole should be granted a variance to Onshore Order 2 air drilling requirements.*

*The reader should note that the air rig is used only to construct a stable surface casing hole through a historically difficult lost circulation zone. A conventional rotary rig follows the air rig, and is used to drill and construct the majority of the wellbore.*

*More notable, KMG has used the air rig layout and procedures outlined below to drill the surface casing hole in approximately 675 wells without incident of blow out or loss of life.*

***Background***

*In a typical well, KMG utilizes an air rig for drilling the surface casing hole, an interval from the surface to surface casing depths, which varies in depth from 1,700 to 2,800 feet. The air rig drilling operation does not drill through productive or over pressured formations in KMG field, but does penetrate the Uinta and Green River Formations. The purpose of the air drilling operation is to overcome the severe loss circulation zone in the Green River known as the Bird's Nest while creating a stable hole for the surface casing. The surface casing hole is generally drilled to approximately 500 feet below the Bird's Nest.*

*Before the surface air rig is mobilized, a rathole rig is utilized to set and cement conductor pipe through a competent surface formation. Generally, the conductor is set at 40 feet. In some cases, conductor may be set deeper in areas that the surface formation is not found competent. This rig also drills the rat and mouse holes in preparation for the surface casing and production string drilling operations.*

*The air rig is then mobilized to drill the surface casing hole by drilling a 12-1/4 inch hole to just above the Bird's Nest interval with an air hammer. The hammer is then tripped and replaced with a 12-1/4 inch tri-cone bit. The tri-cone bit is used to drill to the surface casing point, approximately 500 feet below the loss circulation zone (Bird's Nest). The 9-5/8 inch surface casing is then run and cemented in place, thereby isolating the lost circulation zone.*

*KMG fully appreciates Onshore Order 2 well control and safety requirements associated with a typical air drilling operations. However, the requirements of Onshore Order 2 are excessive with respect to the air rig layout and drilling operation procedures that are currently in practice to drill and control the surface casing hole in KMG Fields.*

***Variance for BOPE Requirements***

*The air rig operation utilizes a properly lubricated and maintained air bowl diverter system which diverts the drilling returns to a six-inch blooie line. The air bowl is the only piece of BOPE equipment which is installed during drilling operations and is sufficient to contain the air returns associated with this drilling operation. As was discussed earlier, the drilling of the surface hole does not encounter any over pressured or productive zones, and as a result standard BOPE equipment should not be required. In addition, standard drilling practices do not support the use of BOPE on 40 feet of conductor pipe.*

***Variance for Mud Material Requirements***

*Onshore Order 2 also states that sufficient quantities of mud materials shall be maintained or readily accessible for the purpose of assuring adequate well control. Once again, the surface hole drilling operations does not encounter over pressured or productive intervals, and as a result there is not a need to control pressure in the surface hole with a mud system. Instead of mud, the air rigs utilize water from the reserve pit for well control, if necessary. A skid pump which is located near the reserve pit (see attachment) will supply the water to the well bore.*

***Variance for Special Drilling Operation (surface equipment placement) Requirements***

*Onshore Order 2 requires specific safety distances or setbacks for the placement of associated standard air drilling equipment, wellbore, and reserve pits. The air rigs used to drill the surface holes are not typical of an air rig used to drill a producing hole in other parts of the US. These are smaller in nature and designed to fit a KMG location. The typical air rig layout for drilling surface hole in the field is attached.*

*Typically the blooie line discharge point is required to be 100 feet from the well bore. In the case of a KMG well, the reserve pit is only 45 feet from the rig and is used for the drill cuttings. The blooie line, which transports the drill cuttings from the well to the reserve pit, subsequently discharges only 45 feet from the well bore.*

*Typically the air rig compressors are required to be located in the opposite direction from the blooie line and a minimum of 100 feet from the well bore. At the KMG locations, the air rig compressors are approximately 40 feet from the well bore and approximately 60 feet from the blooie line discharge due to the unique air rig design. The air compressors (see attachment) are located on the rig (1250 cfm) and on a standby trailer (1170 cfm). A booster sits between the two compressors and boosts the output from 350 psi to 2000 psi. The design does put the booster and standby compressor opposite from the blooie line.*

*Lastly, Onshore Order 2 addresses the need for an automatic igniter or continuous pilot light on the blooie line. The air rig does not utilize an igniter as the surface hole drilling operation does not encounter productive formations.*

***Conclusion***

*The air rig operating procedures and the attached air rig layout have effectively maintained well control while drilling the surface holes in KMG Fields. KMG respectfully requests a variance from Onshore Order 2 with respect to air drilling well control requirements as discussed above.*

**10. Other Information:**

*Please refer to the attached Drilling Program.*





**KERR-McGEE OIL & GAS ONSHORE LP**  
**DRILLING PROGRAM**

**CASING PROGRAM**

|            | SIZE   | INTERVAL   | WT.   | GR.   | CPLG. | DESIGN FACTORS |          |         |
|------------|--------|------------|-------|-------|-------|----------------|----------|---------|
|            |        |            |       |       |       | BURST          | COLLAPSE | TENSION |
| CONDUCTOR  | 14"    | 0-40'      |       |       |       |                |          |         |
|            |        |            |       |       |       | 3,390          | 1,880    | 348,000 |
| SURFACE    | 8-5/8" | 0 to 2,220 | 28.00 | IJ-55 | LTC   | 0.87           | 1.81     | 5.54    |
|            |        |            |       |       |       | 7,780          | 6,350    | 278,000 |
| PRODUCTION | 4-1/2" | 0 to 9,656 | 11.60 | I-80  | BTC   | 2.05           | 1.08     | 2.84    |

\*Burst on surface casing is controlled by fracture gradient as shoe with gas gradient above.

D.F. = 2.42

1) Max Anticipated Surf. Press.(MASP) (Surface Casing) = (Pore Pressure at next csg point-(0.22 psi/ft-partial evac gradient x TVD of next csg point))

2) MASP (Prod Casing) = Pore Pressure at TD - (0.22 psi/ft-partial evac gradient x TD)

(Burst Assumptions: TD = 12.0 ppg)

0.22 psi/ft = gradient for partially evac wellbore

(Collapse Assumption: Fully Evacuated Casing, Max MW)

(Tension Assumptions: Air Weight of Casing\*Buoy.Fact. of water)

**MASP 3,688 psi**

3) Maximum Anticipated Bottom Hole Pressure (MABHP) = Pore Pressure at TD

(Burst Assumptions: TD = 12.0 ppg)

0.61 psi/ft = bottomhole gradient

(Collapse Assumption: Fully Evacuated Casing, Max MW)

(Tension Assumptions: Air Weight of Casing\*Buoy.Fact. of water)

**MABHP 5,754 psi**

**CEMENT PROGRAM**

|            |                      | FT. OF FILL | DESCRIPTION   | SACKS   | EXCESS | WEIGHT | YIELD |
|------------|----------------------|-------------|---|---------|--------|--------|-------|
| SURFACE    | LEAD                 | 500'        | Premium cmt + 2% CaCl   | 215     | 60%    | 15.60  | 1.18  |
|            |                      |             | + 0.25 pps flocele  |         |        |        |       |
| Option 1   |                      |             |   |         |        |        |       |
|            | TOP OUT CMT (6 jobs) | 1,200'      | 20 gals sodium silicate + Premium cmt   | 260     | 0%     | 15.60  | 1.18  |
|            |                      |             | + 2% CaCl + 0.25 pps flocele  |         |        |        |       |
|            |                      |             | Premium cmt + 2% CaCl   |         |        |        |       |
| SURFACE    |                      |             | <b>NOTE: If well will circulate water to surface, option 2 will be utilized</b> |         |        |        |       |
| Option 2   | LEAD                 | 1,720'      | 65/35 Poz + 6% Gel + 10 pps gilsonite   | 330     | 35%    | 12.60  | 1.81  |
|            |                      |             | + 0.25 pps Flocele + 3% salt BWOW   |         |        |        |       |
|            | TAIL                 | 500'        | Premium cmt + 2% CaCl   | 150     | 35%    | 15.60  | 1.18  |
|            |                      |             | + 0.25 pps flocele  |         |        |        |       |
|            | TOP OUT CMT          | as required | Premium cmt + 2% CaCl   | as req. |        | 15.60  | 1.18  |
| PRODUCTION | LEAD                 | 4,076'      | Premium Lite II +0.25 pps   | 330     | 40%    | 11.00  | 3.38  |
|            |                      |             | celloflake + 5 pps gilsonite + 10% gel  |         |        |        |       |
|            |                      |             | + 0.5% extender   |         |        |        |       |
|            | TAIL                 | 5,580'      | 50/50 Poz/G + 10% salt + 2% gel   | 1,370   | 40%    | 14.30  | 1.31  |
|            |                      |             | + 0.1% R-3  |         |        |        |       |

\*Substitute caliper hole volume plus 0% excess for LEAD if accurate caliper is obtained

\*Substitute caliper hole volume plus 10% excess for TAIL if accurate caliper is obtained

**FLOAT EQUIPMENT & CENTRALIZERS**

|            |  |
|------------|--|
| SURFACE    | Guide shoe, 1 jt, insert float. Centralize first 3 joints with bow spring centralizers. Thread lock guide shoe |
| PRODUCTION | Float shoe, 1 jt, float collar. No centralizers will be used.  |

**ADDITIONAL INFORMATION**

Test casing head to 750 psi after installing. Test surface casing to 1,500 psi prior to drilling out.

BOPE: 11" 5M with one annular and 2 rams. The BOPE will be installed before the production hole is drilled and tested to 5,000 psi (annular to 2,500 psi) prior to drilling out the surface casing shoe. Record on chart recorder and tour sheet. Function test rams on each trip. Maintain safety valve and inside BOP on rig floor at all times. Most rigs have top drives; however, if used, the Kelly is to be equipped with upper and lower kelly valves.

Surveys will be taken at 1,000' minimum intervals.

Most rigs have PVT System for mud monitoring. If no PVT is available, visual monitoring will be utilized.

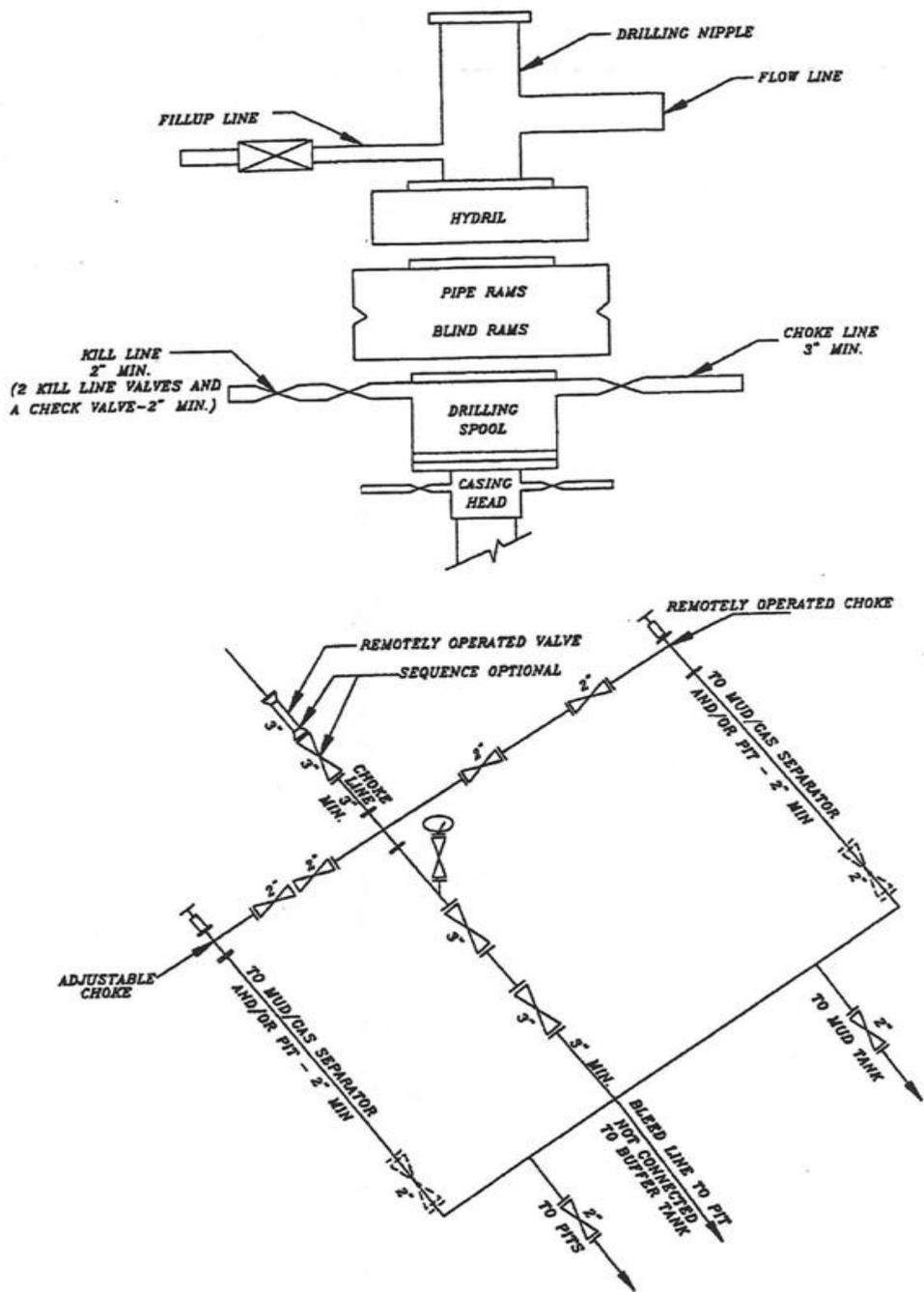
DRILLING ENGINEER: \_\_\_\_\_ DATE: \_\_\_\_\_

John Huycke / Emile Goodwin

DRILLING SUPERINTENDENT: \_\_\_\_\_ DATE: \_\_\_\_\_

John Merkel / Lovel Young

### EXHIBIT A NBU 1021-12B3DS



**SCHEMATIC DIAGRAM OF 5,000 PSI BOP STACK**

| LATITUDE & LONGITUDE<br>Surface Position - (NAD 83) |                             |                               |
|---|-----------------------------|-------------------------------|
| WELL  | N. LATITUDE                 | W. LONGITUDE                  |
| NBU 1021-01O3AS                                     | 39°58'17.054"<br>39.971404° | 109°29'57.208"<br>109.499224° |
| NBU 1021-12B3DS                                     | 39°58'16.866"<br>39.971352° | 109°29'57.131"<br>109.499203° |
| NBU 1021-12A2BS                                     | 39°58'16.678"<br>39.971299° | 109°29'57.051"<br>109.499181° |
| NBU 1021-12B4BS                                     | 39°58'16.491"<br>39.971247° | 109°29'56.973"<br>109.499159° |
| NBU 1021-01O<br>Existing Well                       | 39°58'15.586"<br>39.970996° | 109°29'59.497"<br>109.499860° |

| LATITUDE & LONGITUDE<br>Bottom Hole - (NAD 83) |                             |                               |
|--|-----------------------------|-------------------------------|
| WELL   | N. LATITUDE                 | W. LONGITUDE                  |
| NBU 1021-01O3AS                                | 39°58'16.820"<br>39.971339° | 109°29'52.039"<br>109.497789° |
| NBU 1021-12B3DS                                | 39°58'01.718"<br>39.967144° | 109°29'54.646"<br>109.498513° |
| NBU 1021-12A2BS                                | 39°58'09.870"<br>39.969408° | 109°29'39.560"<br>109.494322° |
| NBU 1021-12B4BS                                | 39°58'04.329"<br>39.967869° | 109°29'48.208"<br>109.496725° |

| RELATIVE COORDINATES<br>From Surface Position to Bottom Hole |         |        |
|--|---------|--------|
| WELL   | NORTH   | EAST   |
| NBU 1021-01O3AS  | -24'    | 403'   |
| NBU 1021-12B3DS  | -1,533' | 193'   |
| NBU 1021-12A2BS  | -690'   | 1,362' |
| NBU 1021-12B4BS  | -1,231' | 682'   |

BASIS OF BEARINGS IS THE WEST LINE OF THE NW 1/4 OF SECTION 7, T10S, R22E, S.L.B.&M. WHICH IS TAKEN FROM GLOBAL POSITIONING SATELLITE OBSERVATIONS TO BEAR N00°20'13"W.

**SURFACE POSITION FOOTAGES:**

- NBU 1021-01O3AS  
393' FSL & 2439' FEL
- NBU 1021-12B3DS  
374' FSL & 2433' FEL
- NBU 1021-12A2BS  
355' FSL & 2427' FEL
- NBU 1021-12B4BS  
336' FSL & 2422' FEL
- NBU 1021-01O EXISTING WELL  
245' FSL & 2619' FEL

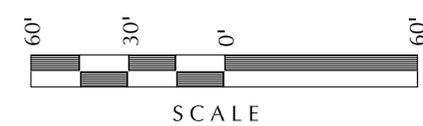
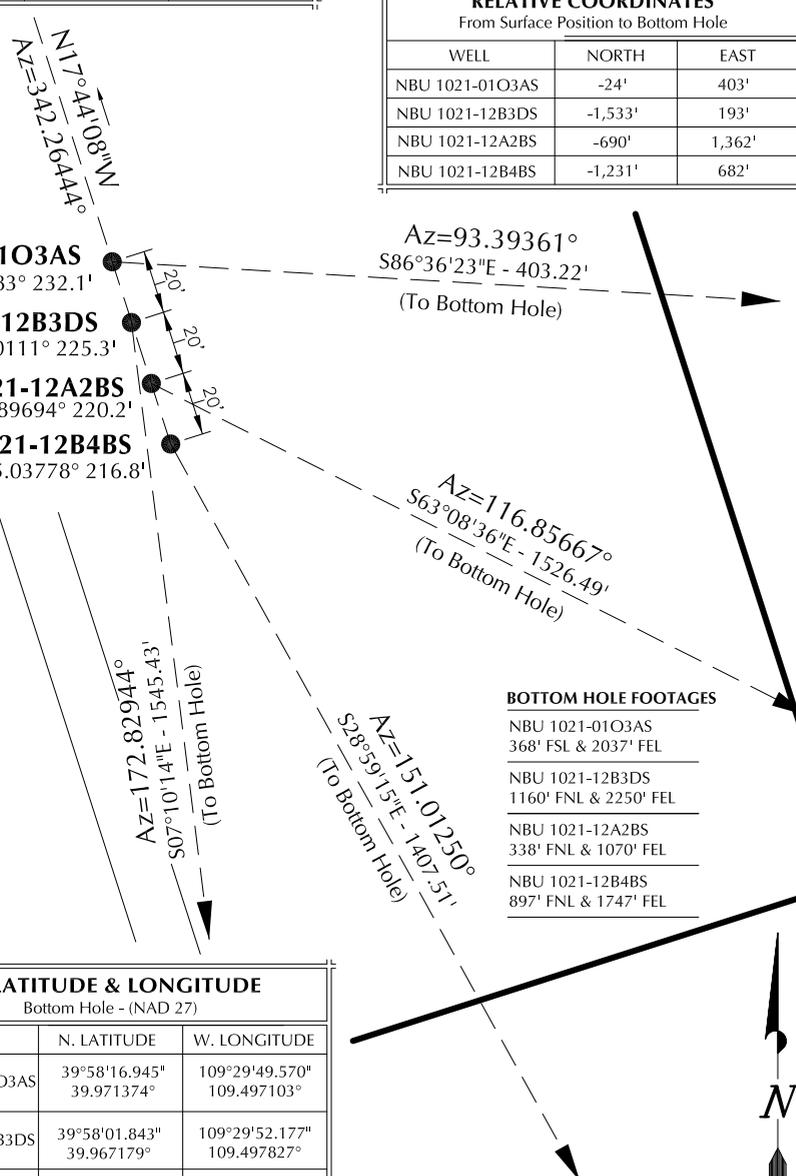
**BOTTOM HOLE FOOTAGES**

- NBU 1021-01O3AS  
368' FSL & 2037' FEL
- NBU 1021-12B3DS  
1160' FNL & 2250' FEL
- NBU 1021-12A2BS  
338' FNL & 1070' FEL
- NBU 1021-12B4BS  
897' FNL & 1747' FEL

● EXISTING WELL: NBU 1021-01O

| LATITUDE & LONGITUDE<br>Surface Position - (NAD 27) |                             |                               |
|---|-----------------------------|-------------------------------|
| WELL  | N. LATITUDE                 | W. LONGITUDE                  |
| NBU 1021-01O3AS                                     | 39°58'17.179"<br>39.971439° | 109°29'54.739"<br>109.498538° |
| NBU 1021-12B3DS                                     | 39°58'16.992"<br>39.971387° | 109°29'54.662"<br>109.498517° |
| NBU 1021-12A2BS                                     | 39°58'16.803"<br>39.971334° | 109°29'54.582"<br>109.498495° |
| NBU 1021-12B4BS                                     | 39°58'16.616"<br>39.971282° | 109°29'54.504"<br>109.498473° |
| NBU 1021-01O<br>Existing Well                       | 39°58'15.711"<br>39.971031° | 109°29'57.027"<br>109.499174° |

| LATITUDE & LONGITUDE<br>Bottom Hole - (NAD 27) |                             |                               |
|--|-----------------------------|-------------------------------|
| WELL   | N. LATITUDE                 | W. LONGITUDE                  |
| NBU 1021-01O3AS                                | 39°58'16.945"<br>39.971374° | 109°29'49.570"<br>109.497103° |
| NBU 1021-12B3DS                                | 39°58'01.843"<br>39.967179° | 109°29'52.177"<br>109.497827° |
| NBU 1021-12A2BS                                | 39°58'09.995"<br>39.969443° | 109°29'37.092"<br>109.493637° |
| NBU 1021-12B4BS                                | 39°58'04.455"<br>39.967904° | 109°29'45.740"<br>109.496039° |



**Kerr-McGee Oil & Gas Onshore, LP**  
1099 18th Street - Denver, Colorado 80202



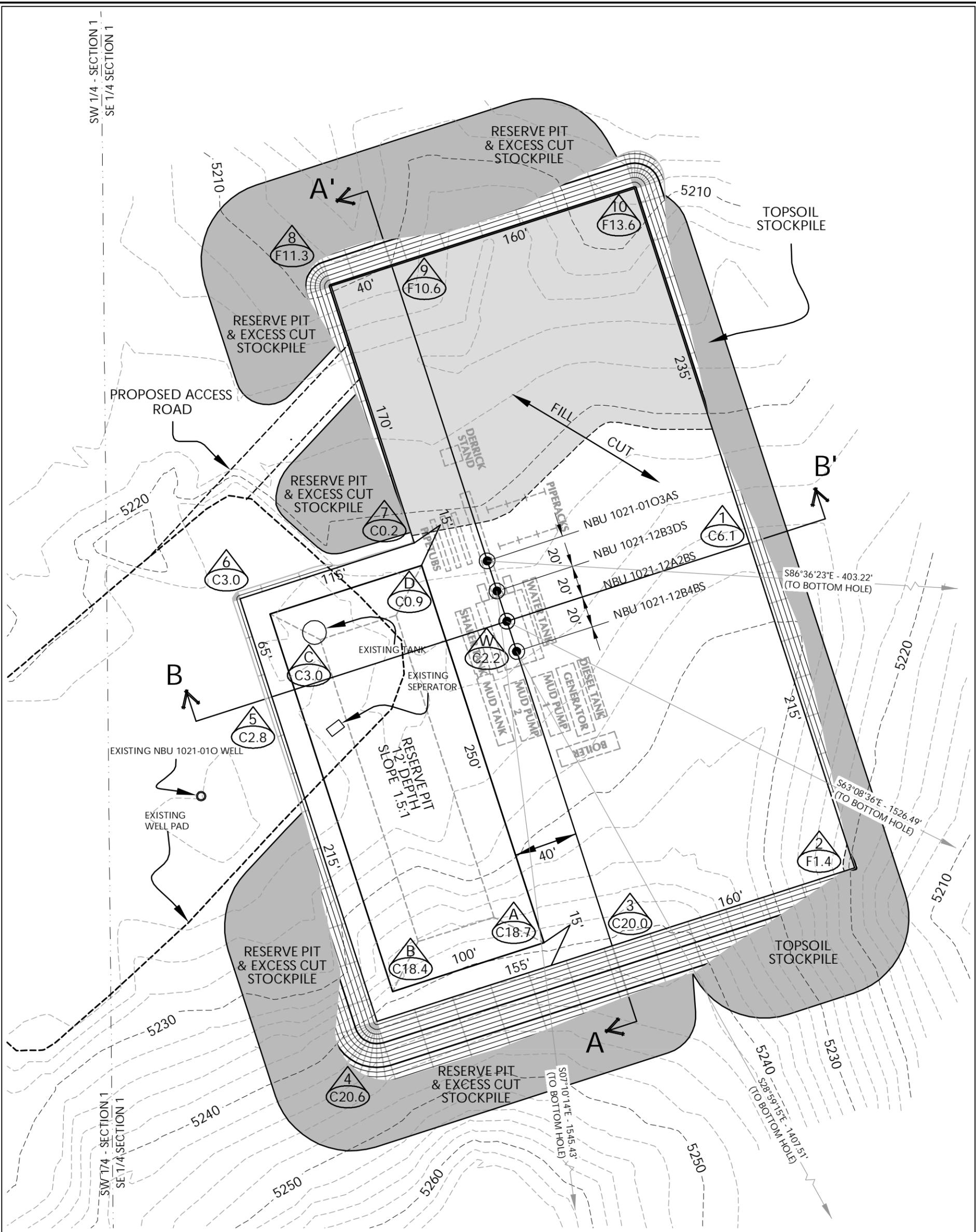
**609 CONSULTING, LLC**  
371 Coffeen Avenue  
Sheridan WY 82801  
Phone 307-674-0609  
Fax 307-674-0182

**TIMBERLINE** (435) 789-1365  
ENGINEERING & LAND SURVEYING, INC.  
209 NORTH 300 WEST - VERNAL, UTAH 84078

|                            |                     |                       |
|----------------------------|---------------------|-----------------------|
| DATE SURVEYED:<br>06-24-09 | SURVEYED BY: D.J.S. | SHEET NO:<br><b>5</b> |
| DATE DRAWN:<br>06-26-09    | DRAWN BY: M.W.W.    |                       |
| SCALE: 1" = 60'            |                     | 5 OF 13               |

**WELL PAD - NBU 1021-01O**  
**WELL PAD INTERFERENCE PLAT**  
**NBU 1021-01O3AS, NBU 1021-12B3DS,**  
**NBU 1021-12A2BS & NBU 1021-12B4BS**  
**LOCATED IN SECTION 1, T10S, R21E,**  
**S.L.B.&M., UTAH COUNTY, UTAH.**

SW 1/4 - SECTION 1  
SE 1/4 SECTION 1



**WELL PAD NBU 1021-010 QUANTITIES**

EXISTING GRADE @ CENTER OF WELL PAD = 5222.9'  
FINISHED GRADE ELEVATION = 5220.7'  
CUT SLOPES = 1.5:1  
FILL SLOPES = 1.5:1

TOTAL CUT FOR WELL PAD = 26,306 C.Y.  
TOTAL FILL FOR WELL PAD = 7,319 C.Y.  
TOPSOIL @ 6" DEPTH = 2,413 C.Y.  
EXCESS MATERIAL = 18,987 C.Y.  
TOTAL DISTURBANCE = 3.28 ACRES  
SHRINKAGE FACTOR = 1.10  
SWELL FACTOR = 1.00  
RESERVE PIT CAPACITY (2' OF FREEBOARD)  
+/- 32,370 BARRELS  
RESERVE PIT VOLUME  
+/- 8,510 CY

**WELL PAD LEGEND**

- EXISTING WELL LOCATION
- PROPOSED WELL LOCATION
- PROPOSED BOTTOM HOLE LOCATION
- EXISTING CONTOURS (2' INTERVAL)
- PROPOSED CONTOURS (2' INTERVAL)



HORIZONTAL 0 30 60 1" = 60'  
2' CONTOURS

**Kerr-McGee Oil & Gas Onshore, LP**  
1099 18th Street - Denver, Colorado 80202



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371 Coffeen Avenue  
Sheridan WY 82801  
Phone 307-674-0609  
Fax 307-674-0182

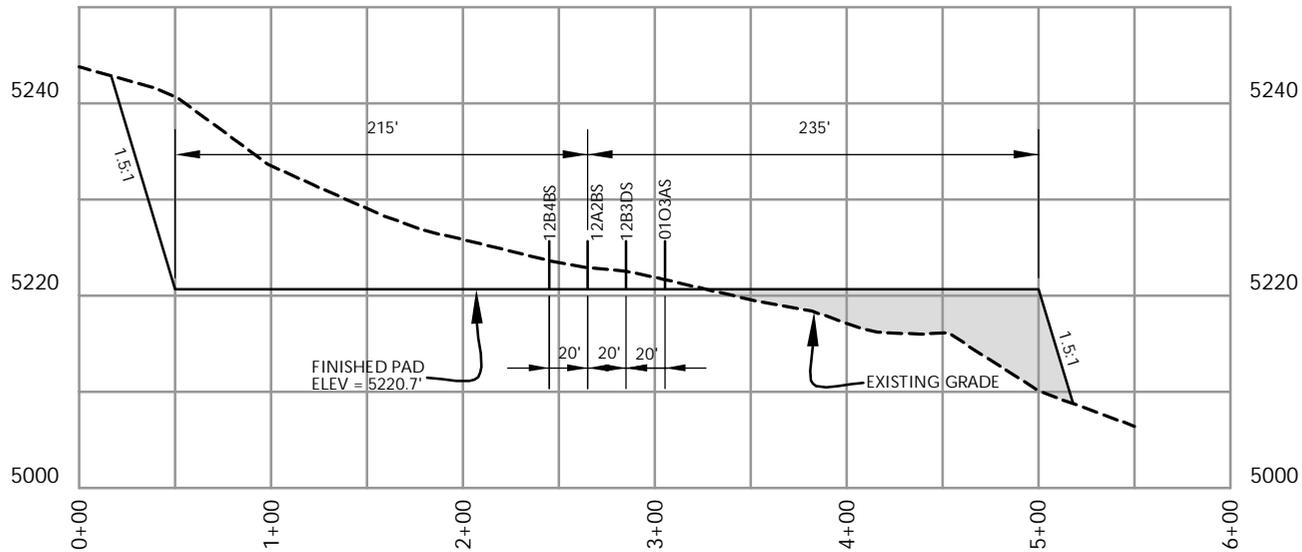
**WELL PAD - NBU 1021-010**

**WELL PAD - LOCATION LAYOUT**  
NBU 1021-0103AS, NBU 1021-12B3DS  
NBU 1021-12A2BS & NBU 1021-12B4BS  
LOCATED IN SECTION 1, T10S, R21E  
S.L.B.&M., UINTAH COUNTY, UTAH

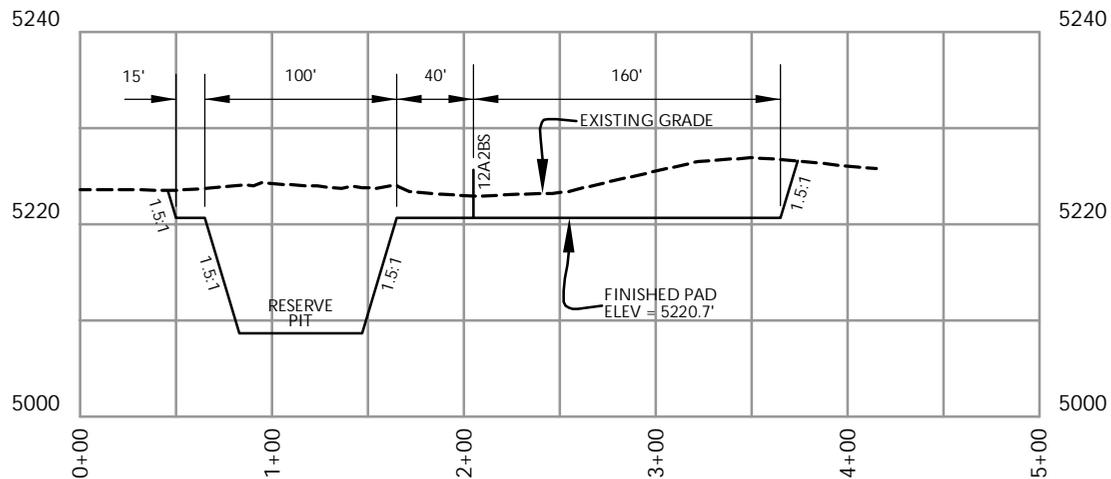
Scale: 1"=60' Date: 6/30/09 SHEET NO:  
**6** 6 OF 13

**TIMBERLINE** (435) 789-1365  
**ENGINEERING & LAND SURVEYING, INC.**  
209 NORTH 300 WEST - VERNAL, UTAH 84078

K:\AWADARKO\009\_11\_NBU\_Directional\_UELS\_Edits\DWGS\NBU\_1021-010\1021-010.dwg, 7/2/2009 9:55:58 AM, PDF-XChange for AcadPlot Pro



**CROSS SECTION A-A'**



**CROSS SECTION B-B'**

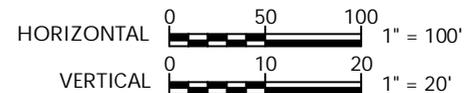
Kerr-McGee Oil & Gas Onshore, LP  
1099 18th Street - Denver, Colorado 80202

WELL PAD - NBU 1021-01O

WELL PAD - CROSS SECTIONS  
NBU 1021-01O3AS, NBU 1021-12B3DS  
NBU 1021-12A2BS & NBU 1021-12B4BS  
LOCATED IN SECTION 1, T10S, R21E  
S.L.B.&M., UINTAH COUNTY, UTAH



CONSULTING, LLC  
371 Coffeen Avenue  
Sheridan WY 82801  
Phone 307-674-0609  
Fax 307-674-0182



Scale: 1"=100'

Date: 6/30/09

SHEET NO:

7

7 OF 13

REVISED:

**TIMBERLINE** (435) 789-1365  
**ENGINEERING & LAND SURVEYING, INC.**  
209 NORTH 300 WEST - VERNAL, UTAH 84078

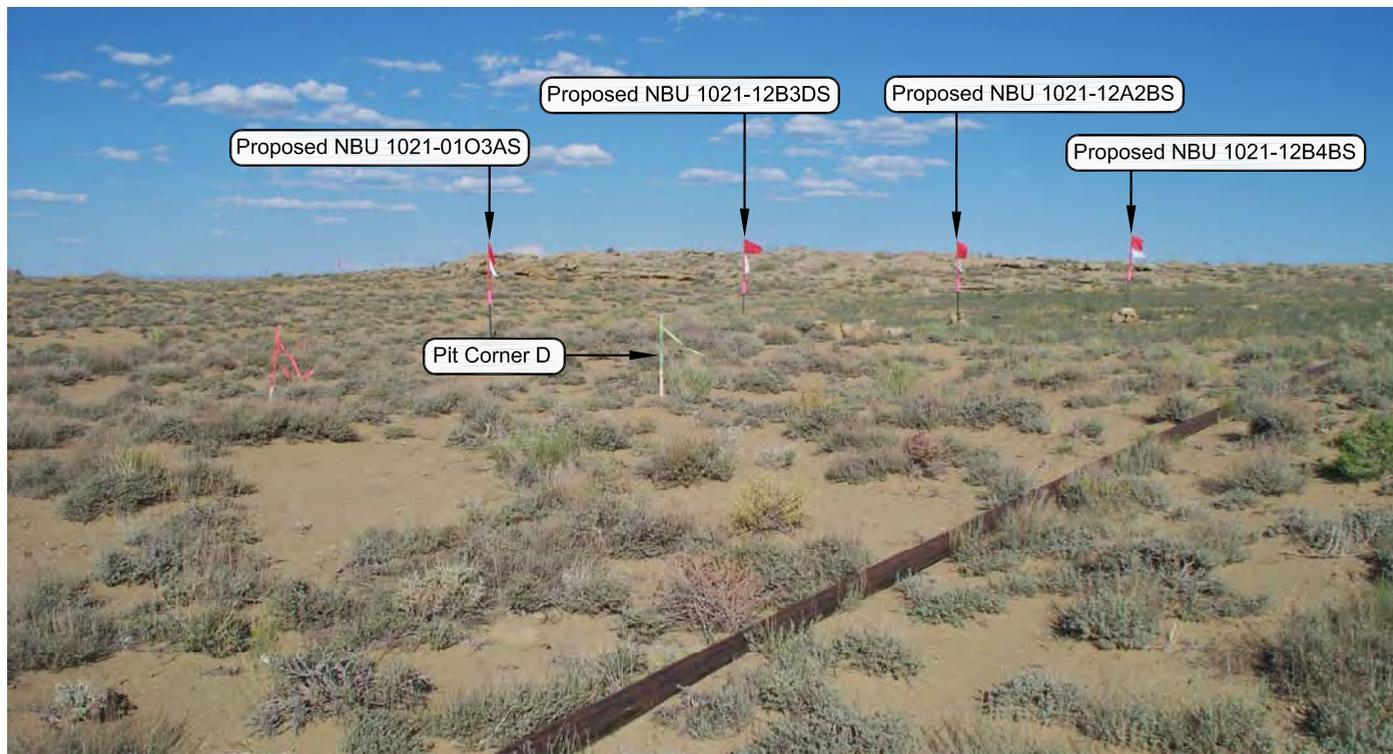


PHOTO VIEW: FROM PIT CORNER D TO LOCATION STAKE

CAMERA ANGLE: SOUTHEASTERLY

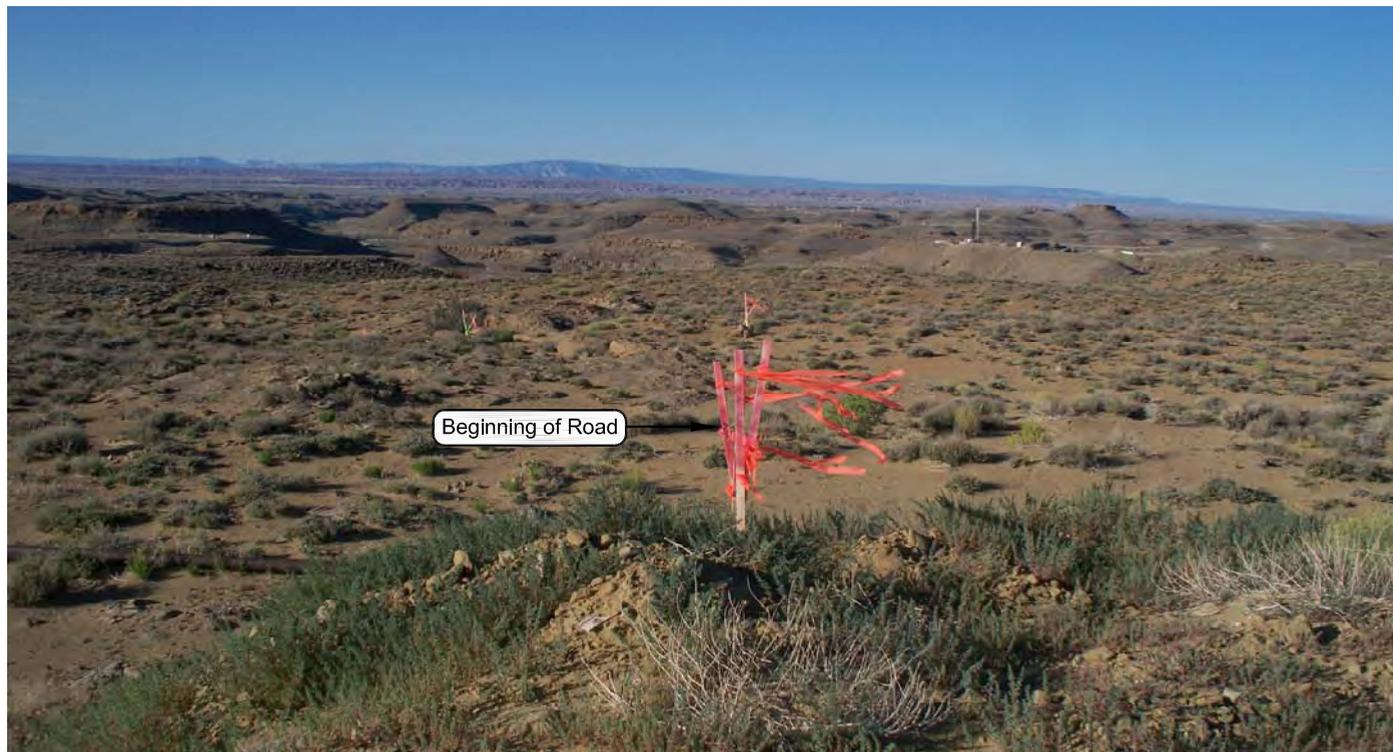


PHOTO VIEW: FROM BEGINNING OF PROPOSED ROAD

CAMERA ANGLE: NORTHEASTERLY

**Kerr-McGee Oil & Gas Onshore, LP**  
 1099 18th Street - Denver, Colorado 80202

**Well Pad - NBU 1021-01O**

**NBU 1021-01O3AS, NBU 1021-12B3DS,  
 NBU 1021-12A2BS & NBU 1021-12B4BS  
 LOCATION PHOTOS  
 LOCATED IN SECTION 1, T10S, R21E,  
 S.L.B.&M., UINTAH COUNTY, UTAH.**



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 371 Coffeen Avenue  
 Sheridan WY 82801  
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 ENGINEERING & LAND SURVEYING, INC.  
 209 NORTH 300 WEST - VERNAL, UTAH 84078

|                                |                         |                                  |
|--------------------------------|-------------------------|----------------------------------|
| DATE PHOTOS TAKEN:<br>06-24-09 | PHOTOS TAKEN BY: D.J.S. | SHEET NO:<br><b>8</b><br>8 OF 13 |
| DATE DRAWN:<br>06-29-09        | DRAWN BY: M.W.W.        |                                  |
| Date Last Revised:             |                         |                                  |









**Kerr-McGee Oil & Gas Onshore, LP**  
**WELL PAD - NBU 1021-010**  
**WELLS – NBU 1021-12B3DS, NBU 1021-12B4BS , NBU 1021-12A2BS**  
**& NBU 1021-0103AS**

**Section 1, T10S, R21E, S.L.B.&M.**

PROCEED IN A WESTERLY DIRECTION FROM VERNAL, UTAH ALONG U.S. HIGHWAY 40 APPROXIMATELY 13.9 MILES TO THE JUNCTION OF STATE HIGHWAY 88. EXIT LEFT AND PROCEED IN A SOUTHERLY DIRECTION ALONG STATE HIGHWAY 88 APPROXIMATELY 16.8 MILES TO OURAY, UTAH. FROM OURAY, PROCEED IN A SOUTHERLY DIRECTION ALONG THE SEEP RIDGE ROAD (COUNTY B ROAD 2810) APPROXIMATELY 11.2 MILES TO THE INTERSECTION OF THE GLEN BENCH ROAD (COUNTY B ROAD 3260). EXIT LEFT AND PROCEED IN AN EASTERLY, THEN SOUTHEASTERLY, THEN NORTHEASTERLY DIRECTION ALONG THE GLEN BENCH ROAD APPROXIMATELY 8.1 MILES TO A CLASS D COUNTY ROAD TO THE SOUTHEAST. EXIT RIGHT AND PROCEED IN A SOUTHEASTERLY DIRECTION 0.6 MILES TO THE WEST SAND WASH ROAD (COUNTY B ROAD 4110). EXIT LEFT AND PROCEED IN AN EASTERLY, THEN SOUTHEASTERLY DIRECTION ALONG THE WEST SAND WASH ROAD APPROXIMATELY 0.9 MILES TO A SERVICE ROAD TO THE SOUTHEAST. EXIT LEFT AND PROCEED IN A SOUTHEASTERLY, THEN NORTHEASTERLY DIRECTION ALONG THE SERVICE ROAD APPROXIMATELY 0.5 MILES TO THE EXISTING ACCESS ROAD FOR THE NBU 1021-010 WELL PAD. EXIT RIGHT AND PROCEED IN AN EASTERLY DIRECTION ALONG THE ACCESS ROAD APPROXIMATELY 0.1 MILES TO THE NBU 1021-010 WELL PAD. PROCEED NORTHEASTERLY APPROXIMATELY 340 FEET CROSSING THE NBU 1021-010 WELL SITE AND TO THE PROPOSED ACCESS ROAD. FOLLOW ROAD FLAGS IN A NORTHEASTERLY DIRECTION APPROXIMATELY 120 FEET TO THE PROPOSED WELL PAD.

TOTAL DISTANCE FROM VERNAL, UTAH TO THE PROPOSED WELL LOCATION IS APPROXIMATELY 52.2 MILES IN A SOUTHERLY DIRECTION.

**NBU 1021-103AS**

Surface: 393' FSL 2,439' FEL (SW/4SE/4) Section 1  
BHL: 368' FSL 2,037' FEL (SW/4SE/4) Section 1

**NBU 1021-12A2BS**

Surface: 355' FSL 2,427' FEL (SW/4SE/4) Section 1  
BHL: 338' FNL 1,070' FEL (NE/4NE/4) Section 12

**NBU 1021-12B3DS**

Surface: 374' FSL 2,433' FEL (SW/4SE/4) Section 1  
BHL: 1,160' FNL 2,250' FEL (NW/4NE/4) Section 12

**NBU 1021-12B4BS**

Surface: 336' FSL 2,422' FEL (SW/4SE/4) Section 1  
BHL: 897' FNL 1,747' FEL (NW/4NE/4) Section 12

Pad: NBU 1021-10  
T10S R21E  
Mineral Lease: ML 23612

Uintah, Utah  
Operator: Kerr-McGee Oil & Gas Onshore LP

**ONSHORE ORDER NO. 1**

***MULTI-POINT SURFACE USE & OPERATIONS PLAN  
SUBMITTED WITH SITE-SPECIFIC INFORMATION***

To schedule an onsite meeting, please contact Sheila Wopsock at 435-781-7024.

**Directional Drilling:**

In accordance with Utah Oil & Gas Conservation Rule R649-3-11 pertaining to Directional Drilling, this well will be directionally drilled in order to access portions of our lease which are otherwise inaccessible due to topography.

**A. Existing Roads:**

- A) Refer to Topo Map A for directions to the location.
- B) Refer to Topo Maps A and B for location of access roads within a 2-mile radius.

**B. Planned Access Roads:**

*See MDP for additional details on road construction.*

Approximately  $\pm 120'$  ( $\pm 0.02$  miles) of new access road is proposed. Please refer to the attached Topo Map B. No pipelines will be crossed with the new construction.

*Existence of pipelines; maximum grade; turnouts; major cut and fills, culverts, or bridges; gates, cattle guards, fence cuts, or modifications to existing facilities were determined at the on-site and are typically shown on the attached Exhibits and Topo maps.*

**C. Location of Existing Wells Within a 1-Mile Radius:**

Please refer to Topo Map C.

**D. Location of Existing and Proposed Facilities:**

*See MDP for additional details on Existing and Proposed Facilities.*

This pad will expand the existing pad for the NBU 1021-10 well, which is a producing well according to Utah Division of Oil, Gas and Mining (UDOGM) records.

*The following guidelines will apply if the well is productive.*

Approximately  $\pm 105'$  ( $\pm 0.02$  miles) of new pipeline is proposed including another approximately  $\pm 660'$  ( $\pm 0.04$  miles) of proposed pipeline around the pad. Another approximately  $\pm 4,665'$  ( $\pm 0.88$  miles) of existing pipeline will be upgraded to accommodate anticipated production from the proposed wells. The upgraded pipeline will follow the same route as the existing pipeline. Please refer to Topo D for the existing pipeline. Pipeline segments will be welded or zaplocked together on disturbed areas in or near the location, whenever possible, and dragged into place.

**E. Location and Type of Water Supply:**

*See MDP for additional details on Location and Type of Water Supply.*

Water for drilling purposes will be obtained from one of the following sources:

- Dalbo Inc.'s underground well located in Ouray, Utah, Sec. 32 T4S R3E, Water User Claim number 43-8496, application number 53617.
- Price Water Pumping Inc. Green River and White River, various sources, Water Right Number 49-1659, application number: a35745.

Water will be hauled to location over the roads marked on Maps A and B.

No water well is to be drilled on this lease.

**F. Source of Construction Materials:**

*See MDP for additional details on Source of Construction Materials.*

**G. Methods of Handling Waste Materials:**

*See MDP for additional details on Methods of Handling Waste Materials.*

Any produced water from the proposed well will be contained in a water tank and will then be hauled by truck to one of the pre-approved disposal sites:

RNI in Sec. 5 T9S R22E  
NBU #159 in Sec. 35 T9S R21E  
Ace Oilfield in Sec. 2 T6S R20E  
MC&MC in Sec. 12 T6S R19E  
Pipeline Facility in Sec. 36 T9S R20E  
Goat Pasture Evaporation Pond in SW/4 Sec. 16 T10S R22E  
Bonanza Evaporation Pond in Sec. 2 T10S R23E

**H. Ancillary Facilities:**

*See MDP for additional details on Ancillary Facilities.*

None are anticipated.

**I. Well Site Layout: (See Location Layout Diagram)**

*See MDP for additional details on Well Site Layout.*

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

- Net wire (39-inch) will be used with at least one strand of barbed wire on top of the net wire. Barbed wire is not necessary if pipe or some type of reinforcement rod is attached to the top of the entire fence.
- The net wire shall be no more than two inches above the ground. The barbed wire shall be three inches over the net wire. Total height of the fence shall be at least 42 inches.
- Corner posts shall be cemented and/or braced in such a manner to keep the fence tight at all times.
- Standard steel, wood, or pipe posts shall be used between the corner braces. Maximum distance between any 2 fence posts shall be no greater than 16 feet.
- All wire shall be stretched, by using a stretching device, before it is attached to corner posts.

**J. Plans for Reclamation of the Surface:**

*See MDP for additional details on Plans for Reclamation of the Surface.*

**K. Surface/Mineral Ownership:**

SITLA  
675 East 500 South, Suite 500  
Salt Lake City, UT 84102

**L. Other Information:**

*See MDP for additional details on Other Information.*

**M. Lessee's or Operators' Representative & Certification:**

Danielle Piernot  
Regulatory Analyst  
Kerr-McGee Oil & Gas Onshore LP  
PO Box 173779  
Denver, CO 80217-3779  
(720) 929-6156

Tommy Thompson  
General Manager, Drilling  
Kerr-McGee Oil & Gas Onshore LP  
PO Box 173779  
Denver, CO 80217-3779  
(720) 929-6724

Certification: All lease and/or unit operations will be conducted in such a manner that full compliance is made with all applicable laws, regulations, Onshore Oil and Gas Orders, the approved Plan of Operations, and any applicable Notice to Lessees.

The Operator will be fully responsible for the actions of its subcontractors. A complete copy of the approved "Application for Permit to Drill" will be furnished to the field representative(s) to ensure compliance and shall be on location during all construction and drilling operations.

Kerr-McGee Oil & Gas Onshore LP is considered to be the operator of the subject well. Kerr-McGee Oil & Gas Onshore LP agrees to be responsible under terms and conditions of the lease for the operations conducted upon leased lands.

Bond coverage pursuant to 43 CFR 3104 for lease activities is being provided by State Surety Bond 22013542.

I hereby certify that I, or persons under my supervision, have inspected the proposed drill site and access route, that I am familiar with the conditions that currently exist; that I have full knowledge of the State and Federal laws applicable to this operation; that the statements made in this plan are, to the best of my knowledge, true and correct; and the work associated with the operations proposed herein will be performed in conformity with this APD package and the terms and conditions under which it is approved. I also certify that I, or the company I represent, am responsible for operations conducted under this application. These statements are subject to the provisions of 18 U.S.C. 1001 for the filing of false statements.

  
Danielle Piernot

December 18, 2009  
Date



Kerr-McGee Oil & Gas Onshore LP  
1999 Broadway, Suite 3700  
Denver, CO 80205

December 16, 2009

Mrs. Diana Mason  
Division of Oil, Gas and Mining  
P.O. Box 145801  
Salt Lake City, UT 84114-6100

Re: Directional Drilling R649-3-11  
NBU 1021-12B3DS  
T10S R21E  
Section 12: SWSE/NWNE  
374' FSL, 2433' FEL (surface)  
1160' FNL, 2250' FEL  
Uintah County, Utah

Dear Mrs. Mason:

Pursuant to the filing of Kerr-McGee Oil & Gas Onshore LP's (Kerr-McGee) Application for Permit to Drill regarding the above referenced well, we are hereby submitting this letter in accordance with Oil & Gas Conservation Rule R649-3-11 pertaining to the Directional Drilling of Wells.

- Kerr-McGee's NBU 1021-12B3DS is located within the Natural Buttes Unit area.
- Kerr-McGee is permitting this well as a directional well in order to minimize surface disturbance. Locating the well at the surface location and directionally drilling from this location, Kerr-McGee will be able to utilize the existing road and pipelines in the area.
- Furthermore, Kerr-McGee certifies that it is the sole working interest owner within 460 feet of the entire directional well bore

Therefore, based on the above stated information Kerr-McGee Oil & Gas Onshore LP requests the permit be granted pursuant to R649-3-11.

Sincerely,

KERR-MCGEE OIL & GAS ONSHORE LP

A handwritten signature in blue ink, appearing to read 'Jason K. Rayburn', written over a light blue circular stamp.

Jason K. Rayburn  
Landman

CLASS I REVIEW OF KERR-MCGEE OIL AND GAS  
ONSHORE LP'S PROPOSED DRILL LOCATIONS:  
NBU 1021-01O3AS, NBU 1021-12A2BS,  
NBU 1021-12B3DS, AND NBU 1021-12B4BS  
(T10S, R21E, SEC. 1)  
UINTAH COUNTY, UTAH

By:

Jacki A. Montgomery

Prepared For:

Bureau of Land Management  
Vernal Field Office  
and  
School and Institutional Trust Lands Administration  
Salt Lake City

Prepared Under Contract With:

Kerr-McGee Oil and Gas Onshore LP  
1368 South 1200 East  
Vernal, Utah 84078

Prepared By:

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

MOAC Report No. 09-125

August 25, 2009

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

Public Lands Policy Coordination Office  
Archaeological Survey Permit No. 117

IPC #09-125

## **Paleontological Reconnaissance Survey Report**

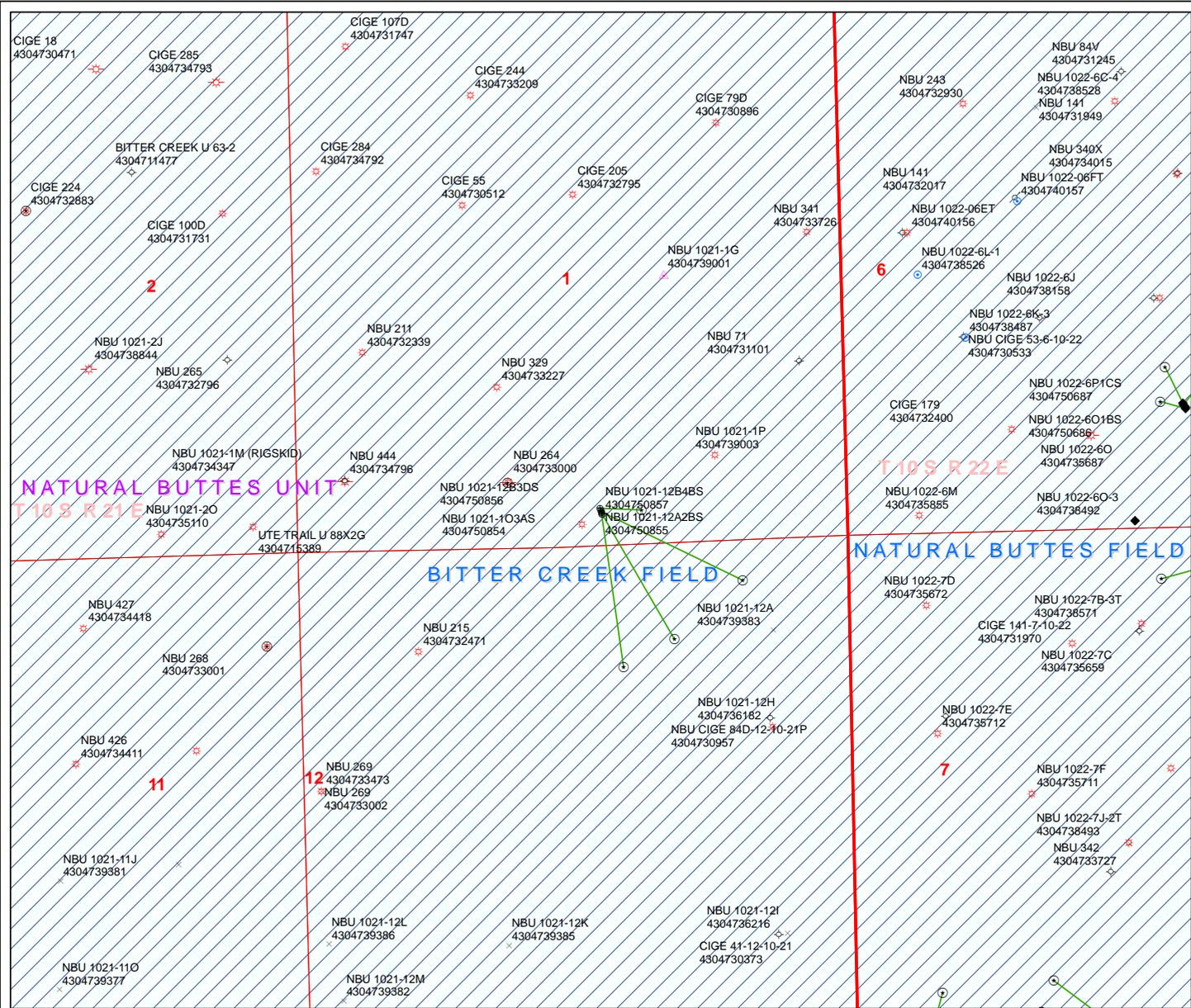
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**Survey of Kerr McGee's Proposed Multi-Well Pad, Access Road,  
Pipeline, and Pipeline Upgrade for "NBU 1021-01O with wells  
NBU #1021-01O3AS, 12B3DS, 12A2BS, & 12B4BS"  
(Sec. 1, 2, 11 & 12, T 10 S, R 21 E)**

Archy Bench & Big Pack Mtn NE  
Topographic Quadrangles  
Uintah County, Utah

August 12, 2009

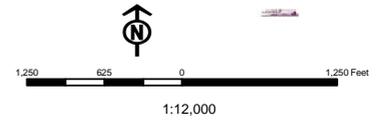
Prepared by Stephen D. Sandau  
Paleontologist for  
Intermountain Paleo-Consulting  
P. O. Box 1125  
Vernal, Utah 84078



**API Number: 4304750856**  
**Well Name: NBU 1021-12B3DS**  
**Township 10.0 S Range 21.0 E Section 1**  
**Meridian: SLBM**  
 Operator: KERR-MCGEE OIL & GAS ONSHORE, L.P.

Map Prepared:  
 Map Produced by Diana Mason

|               |                                    |
|---------------|------------------------------------|
| <b>Units</b>  | <b>Wells Query</b>                 |
| <b>STATUS</b> | <b>Status</b>                      |
| ACTIVE        | APD - Approved Permit              |
| EXPLORATORY   | DRL - Spudded (Drilling Commenced) |
| GAS STORAGE   | GIW - Gas Injection                |
| NF PP OIL     | GS - Gas Storage                   |
| NF SECONDARY  | LA - Location Abandoned            |
| PI OIL        | LOC - New Location                 |
| PP GAS        | OPS - Operation Suspended          |
| PP GEOTHERMAL | PA - Plugged Abandoned             |
| PP OIL        | PGW - Producing Gas Well           |
| SECONDARY     | POW - Producing Oil Well           |
| TERMINATED    | RET - Returned APD                 |
| <b>Fields</b> | SGW - Shut-in Gas Well             |
| <b>STATUS</b> | SOW - Shut-in Oil Well             |
| Unknown       | TA - Temp. Abandoned               |
| ABANDONED     | TW - Test Well                     |
| ACTIVE        | WDW - Water Disposal               |
| COMBINED      | WWI - Water Injection Well         |
| INACTIVE      | WSW - Water Supply Well            |
| STORAGE       |                                    |
| TERMINATED    |                                    |
| Sections      |                                    |
| Township      |                                    |



# 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)

January 11, 2010

Memorandum

To: Assistant District Manager Minerals, Vernal District

From: Michael Coulthard, Petroleum Engineer

Subject: 2010 Plan of Development Natural Buttes Unit  
Uintah County, Utah.

Pursuant to email between Diana Whitney, Division of Oil, Gas and Mining, and Mickey Coulthard, Utah State Office, Bureau of Land Management, the following wells are planned for calendar year 2010 within the Natural Buttes Unit, Uintah County, Utah.

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

(Proposed PZ WASATCH-MESA VERDE)

|              |                 |  |
|--------------|-----------------|--|
| 43-047-50854 | NBU 1021-103AS  | Sec 01 T10S R21E 0393 FSL 2439 FEL<br>BHL Sec 01 T10S R21E 0368 FSL 2037 FEL |
| 43-047-50855 | NBU 1021-12A2BS | Sec 01 T10S R21E 0355 FSL 2427 FEL<br>BHL Sec 12 T10S R21E 0338 FNL 1070 FEL |
| 43-047-50856 | NBU 1021-12B3DS | Sec 01 T10S R21E 0374 FSL 2433 FEL<br>BHL Sec 12 T10S R21E 1160 FNL 2250 FEL |
| 43-047-50857 | NBU 1021-12B4BS | Sec 01 T10S R21E 0336 FSL 2422 FEL<br>BHL Sec 12 T10S R21E 0897 FNL 1747 FEL |
| 43-047-50865 | NBU 921-11L     | Sec 11 T09S R21E 2410 FSL 0358 FWL   |
| 43-047-50866 | NBU 921-11N     | Sec 11 T09S R21E 0322 FSL 2386 FWL   |
| 43-047-50867 | NBU 921-12P     | Sec 12 T09S R21E 1128 FSL 1300 FEL   |
| 43-047-50872 | NBU 921-27D3AS  | Sec 27 T09S R21E 2151 FNL 2041 FWL<br>BHL Sec 27 T09S R21E 0957 FNL 0472 FWL |
| 43-047-50873 | NBU 921-27E2AS  | Sec 27 T09S R21E 2169 FNL 2049 FWL<br>BHL Sec 27 T09S R21E 1443 FNL 0598 FWL |
| 43-047-50874 | NBU 921-27F2BS  | Sec 27 T09S R21E 2132 FNL 2033 FWL<br>BHL Sec 27 T09S R21E 1443 FNL 1570 FWL |

| API #                            | WELL NAME      | LOCATION   |
|----------------------------------|----------------|--|
| (Proposed PZ WASATCH-MESA VERDE) |                |  |
| 43-047-50875                     | NBU 921-27F3CS | Sec 27 T09S R21E 2187 FNL 2057 FWL<br>BHL Sec 27 T09S R21E 2486 FNL 1582 FWL |
| 43-047-50876                     | NBU 921-27F4DS | Sec 27 T09S R21E 2206 FNL 2065 FWL<br>BHL Sec 27 T09S R21E 2467 FNL 2440 FWL |
| 43-047-50877                     | NBU 921-27C1BS | Sec 27 T09S R21E 1710 FNL 2189 FEL<br>BHL Sec 27 T09S R21E 0056 FNL 2238 FWL |
| 43-047-50878                     | NBU 921-27C3BS | Sec 27 T09S R21E 1750 FNL 2184 FEL<br>BHL Sec 27 T09S R21E 0971 FNL 1423 FWL |
| 43-047-50879                     | NBU 921-27C4DS | Sec 27 T09S R21E 1730 FNL 2187 FEL<br>BHL Sec 27 T09S R21E 1191 FNL 2525 FWL |
| 43-047-50880                     | NBU 921-27G2CS | Sec 27 T09S R21E 1770 FNL 2181 FEL<br>BHL Sec 27 T09S R21E 1904 FNL 2565 FEL |

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

/s/ Michael L. Coulthard

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

MCoulthard:mc:1-11-10

|  |  |       |  |
|--|--|-------|--|
| Well Name                                | KERR-MCGEE OIL & GAS ONSHORE, L.P. NBU 1021-12B3DS 4304750856000 |       |  |
| String                                   | Surf   | Prod  |  |
| Casing Size(")                           | 8.625  | 4.500 |  |
| Setting Depth (TVD)                      | 2220   | 9392  |  |
| Previous Shoe Setting Depth (TVD)        | 40   | 2220  |  |
| Max Mud Weight (ppg)                     | 8.4  | 12.0  |  |
| BOPE Proposed (psi)                      | 500  | 5000  |  |
| Casing Internal Yield (psi)              | 3390   | 7780  |  |
| Operators Max Anticipated Pressure (psi) | 5729   | 11.7  |  |

|   |  |       |  |
|---|--|-------|--|
| Calculations                                  | Surf String  | 8.625 | "  |
| Max BHP (psi)                                 | $.052 * \text{Setting Depth} * \text{MW} =$                                    | 970   |  |
|   |  |       | <b>BOPE Adequate For Drilling And Setting Casing at Depth?</b> |
| MASP (Gas) (psi)                              | $\text{Max BHP} - (0.12 * \text{Setting Depth}) =$                             | 704   | NO Air drill   |
| MASP (Gas/Mud) (psi)                          | $\text{Max BHP} - (0.22 * \text{Setting Depth}) =$                             | 482   | YES OK   |
|   |  |       | <b>*Can Full Expected Pressure Be Held At Previous Shoe?</b>   |
| Pressure At Previous Shoe                     | $\text{Max BHP} - .22 * (\text{Setting Depth} - \text{Previous Shoe Depth}) =$ | 490   | NO Reasonable depth for area                                   |
| Required Casing/BOPE Test Pressure=           |  | 2220  | psi  |
| *Max Pressure Allowed @ Previous Casing Shoe= |  | 40    | psi *Assumes 1psi/ft frac gradient                             |

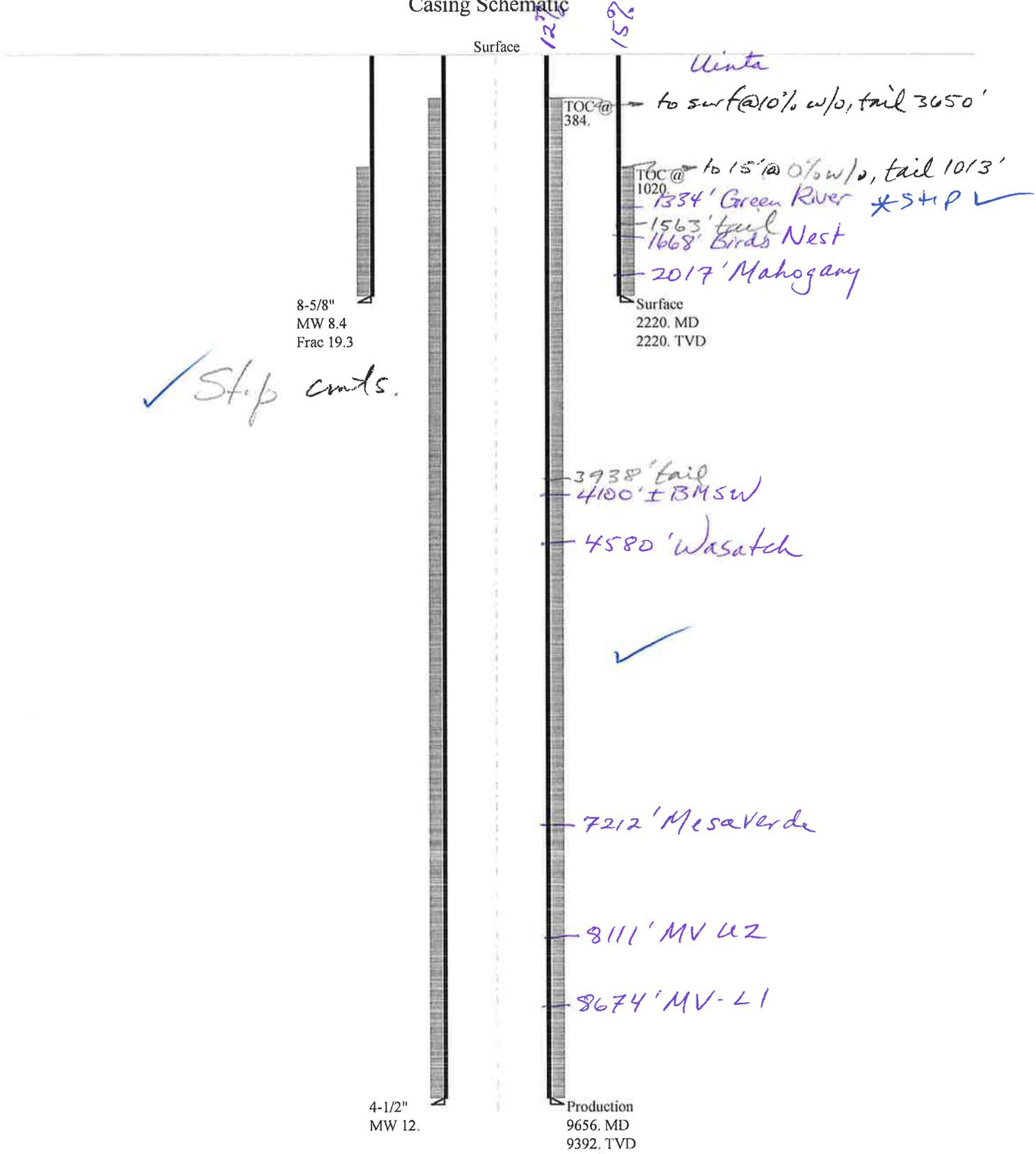
|   |  |       |  |
|---|--|-------|--|
| Calculations                                  | Prod String  | 4.500 | "  |
| Max BHP (psi)                                 | $.052 * \text{Setting Depth} * \text{MW} =$                                    | 5861  |  |
|   |  |       | <b>BOPE Adequate For Drilling And Setting Casing at Depth?</b> |
| MASP (Gas) (psi)                              | $\text{Max BHP} - (0.12 * \text{Setting Depth}) =$                             | 4734  | YES  |
| MASP (Gas/Mud) (psi)                          | $\text{Max BHP} - (0.22 * \text{Setting Depth}) =$                             | 3795  | YES OK   |
|   |  |       | <b>*Can Full Expected Pressure Be Held At Previous Shoe?</b>   |
| Pressure At Previous Shoe                     | $\text{Max BHP} - .22 * (\text{Setting Depth} - \text{Previous Shoe Depth}) =$ | 4283  | NO Reasonable for area   |
| Required Casing/BOPE Test Pressure=           |  | 5000  | psi  |
| *Max Pressure Allowed @ Previous Casing Shoe= |  | 2220  | psi *Assumes 1psi/ft frac gradient                             |

|   |  |  |  |
|---|--|--|--|
| Calculations                                  | String   |  | "  |
| Max BHP (psi)                                 | $.052 * \text{Setting Depth} * \text{MW} =$                                    |  |  |
|   |  |  | <b>BOPE Adequate For Drilling And Setting Casing at Depth?</b> |
| MASP (Gas) (psi)                              | $\text{Max BHP} - (0.12 * \text{Setting Depth}) =$                             |  | NO   |
| MASP (Gas/Mud) (psi)                          | $\text{Max BHP} - (0.22 * \text{Setting Depth}) =$                             |  | NO   |
|   |  |  | <b>*Can Full Expected Pressure Be Held At Previous Shoe?</b>   |
| Pressure At Previous Shoe                     | $\text{Max BHP} - .22 * (\text{Setting Depth} - \text{Previous Shoe Depth}) =$ |  | NO   |
| Required Casing/BOPE Test Pressure=           |  |  | psi  |
| *Max Pressure Allowed @ Previous Casing Shoe= |  |  | psi *Assumes 1psi/ft frac gradient                             |

|   |  |  |  |
|---|--|--|--|
| Calculations                                  | String   |  | "  |
| Max BHP (psi)                                 | $.052 * \text{Setting Depth} * \text{MW} =$                                    |  |  |
|   |  |  | <b>BOPE Adequate For Drilling And Setting Casing at Depth?</b> |
| MASP (Gas) (psi)                              | $\text{Max BHP} - (0.12 * \text{Setting Depth}) =$                             |  | NO   |
| MASP (Gas/Mud) (psi)                          | $\text{Max BHP} - (0.22 * \text{Setting Depth}) =$                             |  | NO   |
|   |  |  | <b>*Can Full Expected Pressure Be Held At Previous Shoe?</b>   |
| Pressure At Previous Shoe                     | $\text{Max BHP} - .22 * (\text{Setting Depth} - \text{Previous Shoe Depth}) =$ |  | NO   |
| Required Casing/BOPE Test Pressure=           |  |  | psi  |
| *Max Pressure Allowed @ Previous Casing Shoe= |  |  | psi *Assumes 1psi/ft frac gradient                             |

# 43047508560000 NBU 1021-12B3DS

## Casing Schematic



|              |   |                             |
|--------------|---|-----------------------------|
| Well name:   | <b>43047508560000 NBU 1021-12B3DS</b>         |                             |
| Operator:    | <b>KERR-MCGEE OIL &amp; GAS ONSHORE, L.P.</b> |                             |
| String type: | Surface                                       | Project ID:<br>43-047-50856 |
| Location:    | UINTAH COUNTY                                 |                             |

**Design parameters:**

**Collapse**

Mud weight: 8.400 ppg  
Design is based on evacuated pipe.

**Burst**

Max anticipated surface pressure: 1,117 psi  
Internal gradient: 0.120 psi/ft  
Calculated BHP: 1,384 psi  
  
No backup mud specified.

**Minimum design factors:**

**Collapse:**

Design factor: 1.125

**Burst:**

Design factor: 1.00

**Tension:**

8 Round STC: 1.80 (J)  
8 Round LTC: 1.70 (J)  
Buttress: 1.60 (J)  
Premium: 1.50 (J)  
Body yield: 1.50 (B)

Tension is based on air weight.  
Neutral point: 1,945 ft

**Environment:**

H2S considered? No  
Surface temperature: 74 °F  
Bottom hole temperature: 105 °F  
Temperature gradient: 1.40 °F/100ft  
Minimum section length: 100 ft

Cement top: 1,020 ft

**Non-directional string.**

**Re subsequent strings:**

Next setting depth: 2,220 ft  
Next mud weight: 12.000 ppg  
Next setting BHP: 1,384 psi  
Fracture mud wt: 19.250 ppg  
Fracture depth: 2,220 ft  
Injection pressure: 2,220 psi

| Run Seq | Segment Length (ft) | Size (in)               | Nominal Weight (lbs/ft) | Grade            | End Finish           | True Vert Depth (ft) | Measured Depth (ft) | Drift Diameter (in)     | Est. Cost (\$)        |
|---------|---------------------|-------------------------|-------------------------|------------------|----------------------|----------------------|---------------------|-------------------------|-----------------------|
| 1       | 2220                | 8.625                   | 28.00                   | I-55             | LT&C                 | 2220                 | 2220                | 7.892                   | 87912                 |
| Run Seq | Collapse Load (psi) | Collapse Strength (psi) | Collapse Design Factor  | Burst Load (psi) | Burst Strength (psi) | Burst Design Factor  | Tension Load (kips) | Tension Strength (kips) | Tension Design Factor |
| 1       | 969                 | 1880                    | 1.941                   | 1384             | 3390                 | 2.45                 | 62.2                | 348                     | 5.60 J                |

Prepared by: Helen Sadik-Macdonald  
Div of Oil, Gas & Mining

Phone: 801 538-5357  
FAX: 801-359-3940

Date: February 4, 2010  
Salt Lake City, Utah

**Remarks:**

Collapse is based on a vertical depth of 2220 ft, a mud weight of 8.4 ppg. The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

|              |   |             |              |
|--------------|---|-------------|--------------|
| Well name:   | <b>43047508560000 NBU 1021-12B3DS</b>         |             |              |
| Operator:    | <b>KERR-MCGEE OIL &amp; GAS ONSHORE, L.P.</b> |             |              |
| String type: | Production                                    | Project ID: | 43-047-50856 |
| Location:    | UINTAH  | COUNTY      |              |

**Design parameters:**

**Collapse**

Mud weight: 12.000 ppg  
 Internal fluid density: 1.000 ppg

**Minimum design factors:**

**Collapse:**

Design factor 1.125

**Burst:**

Design factor 1.00

**Environment:**

H2S considered? No  
 Surface temperature: 74 °F  
 Bottom hole temperature: 205 °F  
 Temperature gradient: 1.40 °F/100ft  
 Minimum section length: 100 ft  
 Cement top: 384 ft

**Burst**

Max anticipated surface pressure: 3,788 psi  
 Internal gradient: 0.220 psi/ft  
 Calculated BHP 5,855 psi

No backup mud specified.

**Tension:**

8 Round STC: 1.80 (J)  
 8 Round LTC: 1.80 (J)  
 Buttress: 1.60 (J)  
 Premium: 1.50 (J)  
 Body yield: 1.60 (B)

**Directional Info - Build & Drop**

Kick-off point 2267 ft  
 Departure at shoe: 1545 ft  
 Maximum dogleg: 3 °/100ft  
 Inclination at shoe: 0 °

Tension is based on air weight.  
 Neutral point: 7,971 ft

| Run Seq | Segment Length (ft) | Size (in) | Nominal Weight (lbs/ft) | Grade | End Finish | True Vert Depth (ft) | Measured Depth (ft) | Drift Diameter (in) | Est. Cost (\$) |
|---------|---------------------|-----------|-------------------------|-------|------------|----------------------|---------------------|---------------------|----------------|
| 1       | 9656                | 4.5       | 11.60                   | I-80  | LT&C       | 9392                 | 9656                | 3.875               | 127459         |

| Run Seq | Collapse Load (psi) | Collapse Strength (psi) | Collapse Design Factor | Burst Load (psi) | Burst Strength (psi) | Burst Design Factor | Tension Load (kips) | Tension Strength (kips) | Tension Design Factor |
|---------|---------------------|-------------------------|------------------------|------------------|----------------------|---------------------|---------------------|-------------------------|-----------------------|
| 1       | 5367                | 6360                    | 1.185                  | 5855             | 7780                 | 1.33                | 108.9               | 212                     | 1.95 J                |

Prepared by: Helen Sadik-Macdonald  
 Div of Oil, Gas & Mining

Phone: 801 538-5357  
 FAX: 801-359-3940

Date: February 4, 2010  
 Salt Lake City, Utah

**Remarks:**

Collapse is based on a vertical depth of 9392 ft, a mud weight of 12 ppg. An internal gradient of .052 psi/ft was used for collapse from TD to TD. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

Collapse strength is (biaxially) derated for doglegs in directional wells by multiplying the tensile stress by the cross section area to calculate a

**From:** Jim Davis  
**To:** Bonner, Ed; Hill, Brad; Mason, Diana  
**CC:** Danielle Piernot; Garrison, LaVonne; Hayden, Martha; kathy.schneebeck...  
**Date:** 2/8/2010 12:29 PM  
**Subject:** Kerr McGee APD approvals and Paleo stipulations (13)

The following APDs have been approved by SITLA including arch and paleo clearance- with the following stipulations.

The paleo report for these wells recommends that spot monitoring should be done if the pipelines attending these wells are going to be buried. That recommendation is being made a condition of SITLA's approval of these APDs.

4304750854 NBU 1021-1O3AS  
4304750855 NBU 1021-12A2BS  
4304750856 NBU 1021-12B3DS  
4304750857 NBU 1021-12B4BS

The paleo report for these wells recommends that paleo monitoring be conducted during construction. That recommendation is being made a condition of SITLA's approval of these APDs.

4304750872 NBU 921-27D3AS  
4304750873 NBU 921-27E2AS  
4304750874 NBU 921-27F2BS  
4304750875 NBU 921-27F3CS  
4304750876 NBU 921-27F4DS  
4304750877 NBU 921-27C1BS  
4304750878 NBU 921-27C3BS  
4304750879 NBU 921-27C4DS  
4304750880 NBU 921-27G2CS

Thanks.  
-Jim

Jim Davis  
Utah Trust Lands Administration  
jimdavis1@utah.gov  
Phone: (801) 538-5156

# ON-SITE PREDRILL EVALUATION

## Utah Division of Oil, Gas and Mining

**Operator** KERR-MCGEE OIL & GAS ONSHORE, L.P.  
**Well Name** NBU 1021-12B3DS  
**API Number** 43047508560000      **APD No** 2234      **Field/Unit** NATURAL BUTTES  
**Location: 1/4,1/4** SWSE      **Sec 1 Tw** 10.0S      **Rng** 21.0E      374 FSL 2433 FEL  
**GPS Coord (UTM)** 628221 4425456      **Surface Owner**

**Participants**

Floyd Bartlett (DOGM), Sheila Wopsock, Clay Einerson, Tony Kazeck, Ramie Hoopes, Joe Bowden, Jeff Samuels (Kerr McGee), Mitch.Batty, John Slaugh, (Timberline Engineering and Land Surveying), Jim Davis (SITLA), Ben Williams, Alex Hansen (UDWR).

**Regional/Local Setting & Topography**

This location is in the Natural Buttes Unit approximately 21.5 road miles southeast of Ouray, Utah. It is accessed by the Seep Ridge Road to the Uintah County Middle Road then by existing oil field development roads to within 120 feet which will require new construction

The general area is a sub-drainage of Sand Wash. This drainage enters the White River approximately five miles to the north. The area is characterized by rolling hills, which are frequently divided by somewhat gentle draws that drain northerly. All drainages are ephemeral. No springs, seeps or streams exist in the area. An occasional pond constructed to supply water for cattle and antelope exists. Tributaries are sometimes rimed with steep side hills, which have exposed sand stone bedrock cliffs along the rims.

Four gas wells are proposed to be directionally drilled from this pad which partially overlaps the existing pad of the NBU 1021-01O producing gas well. The new wells are the NBU 1021-01O3AS, NBU 1021-12B3DS, NBU 1021-12A2BS and NBU 1021-12B4BS. The pad will be constructed on the west slope of a rolling to moderately steep sidehill. A rise to the south will be cut and moved to the north. To the east the slope breaks off into rougher terrain that drains northerly toward Sand Wash. The reserve pit will be reduced in length from 250 feet as shown to 200 feet with the reduction to occur on the north end. The selected site is the best location in the immediate area and should be suitable for drilling and operating the proposed wells.

Both the surface and minerals are owned by SITLA.

**Surface Use Plan**

**Current Surface Use**

- Grazing
- Wildlife Habitat
- Existing Well Pad

|                       |                                    |                           |                          |
|-----------------------|------------------------------------|---------------------------|--------------------------|
| <b>New Road Miles</b> | <b>Well Pad</b>                    | <b>Src Const Material</b> | <b>Surface Formation</b> |
| 0.03                  | <b>Width</b> 315 <b>Length</b> 450 | Onsite                    | UNTA                     |

**Ancillary Facilities** N

**Waste Management Plan Adequate?**

**Environmental Parameters**

**Affected Floodplains and/or Wetlands** N

**Flora / Fauna**

Vegetation is a salt desert shrub type. About 8 inches of snow covered the area. Principal species identified were Indian rice grass, cheatgrass, halogeton, pepper grass, annuals and curly mesquite grass.

Cattle, antelope and small mammals and birds.

**Soil Type and Characteristics**

Soils are a shallow rocky sandy loam.

**Erosion Issues** N

**Sedimentation Issues** N

**Site Stability Issues** N

**Drainage Diverson Required?** N

**Berm Required?** N

**Erosion Sedimentation Control Required?** N

**Paleo Survey Run?** Y **Paleo Potential Observed?** N **Cultural Survey Run?** Y **Cultural Resources?**

**Reserve Pit**

**Site-Specific Factors**

**Site Ranking**

|  |                    |    |                     |
|--|--------------------|----|---------------------|
| <b>Distance to Groundwater (feet)</b>    | 100 to 200         | 5  |                     |
| <b>Distance to Surface Water (feet)</b>  | >1000              | 0  |                     |
| <b>Dist. Nearest Municipal Well (ft)</b> | >5280              | 0  |                     |
| <b>Distance to Other Wells (feet)</b>    |                    | 20 |                     |
| <b>Native Soil Type</b>                  | Mod permeability   | 10 |                     |
| <b>Fluid Type</b>                        | Fresh Water        | 5  |                     |
| <b>Drill Cuttings</b>                    | Normal Rock        | 0  |                     |
| <b>Annual Precipitation (inches)</b>     |                    | 0  |                     |
| <b>Affected Populations</b>              |                    |    |                     |
| <b>Presence Nearby Utility Conduits</b>  | Not Present        | 0  |                     |
|  | <b>Final Score</b> | 40 | 1 Sensitivity Level |

**Characteristics / Requirements**

The reserve pit is planned in an area of cut in the southwest corner of the location. Dimensions are 100' x 200' x 12' deep with 2' of freeboard. Kerr McGee proposed to line the pit with a 30-mil liner and 2 layers of felt. It will be reduced in length from 250 feet as shown to 200 feet with the reduction to occur on the north end.

**Closed Loop Mud Required?** N **Liner Required?** Y **Liner Thickness** 30 **Pit Underlayment Required?** Y

**Other Observations / Comments**

Floyd Bartlett

1/12/2010

**Evaluator**

**Date / Time**

# Application for Permit to Drill Statement of Basis

2/11/2010

**Utah Division of Oil, Gas and Mining**

Page 1

|                  |  |                     |                          |                   |            |
|------------------|--|---------------------|--------------------------|-------------------|------------|
| <b>APD No</b>    | <b>API WellNo</b>  | <b>Status</b>       | <b>Well Type</b>         | <b>Surf Owner</b> | <b>CBM</b> |
| 2234             | 43047508560000   | SITLA               | GW                       | S                 | No         |
| <b>Operator</b>  | KERR-MCGEE OIL & GAS ONSHORE, L.P.                                 |                     | <b>Surface Owner-APD</b> |                   |            |
| <b>Well Name</b> | NBU 1021-12B3DS  | <b>Unit</b>         |                          | NATURAL BUTTES    |            |
| <b>Field</b>     | NATURAL BUTTES   | <b>Type of Work</b> |                          | DRILL             |            |
| <b>Location</b>  | SWSE 1 10S 21E S 374 FSL 2433 FEL GPS Coord (UTM) 628239E 4425450N |                     |                          |                   |            |

**Geologic Statement of Basis**

Kerr McGee proposes to set 2,220 of surface casing at this location. The depth to the base of the moderately saline water at this location is estimated to be at a depth of 4,100'. A search of Division of Water Rights records shows one water well within a 10,000 foot radius of the center of Section 1. The well has a depth of 2,640 feet, and its listed use is for oilfield drilling. The surface formation at this site is the Uinta Formation. The Uinta Formation is made up of interbedded shales and sandstones. The sandstones are mostly lenticular and discontinuous and should not be a significant source of useable ground water. Production casing cement should be brought up above the base of the moderately saline ground water to isolate it from fresher waters uphole.

Brad Hill  
**APD Evaluator**

1/20/2010  
**Date / Time**

**Surface Statement of Basis**

This location is in the Natural Buttes Unit approximately 21.5 road miles southeast of Ouray, Utah. It is accessed by the Seep Ridge Road to the Uintah County Middle Road then by existing oil field development roads to within 120 feet which will require new construction

The general area is a sub-drainage of Sand Wash. This drainage enters the White River approximately five miles to the north. The area is characterized by rolling hills, which are frequently divided by somewhat gentle draws that drain northerly. All drainages are ephemeral. No springs, seeps or streams exist in the area. An occasional pond constructed to supply water for cattle and antelope exists. Tributaries are sometimes rimmed with steep side hills, which have exposed sand stone bedrock cliffs along the rims.

Four gas wells are proposed to be directionally drilled from this pad which partially over laps the existing pad of the NBU 1021-01O producing gas well. The new wells are the NBU 1021-01O3AS, NBU 1021-12B3DS, NBU 1021-12A2BS and NBU 1021-12B4BS. The pad will be constructed on the west slope of a rolling to moderately steep sidehill. A rise to the south will be cut and moved to the north. To the east the slope breaks off into rougher terrain that drains northerly toward Sand Wash. The reserve pit will be reduced in length from 250 feet as shown to 200 feet with the reduction to occur on the north end. The selected site is the best location in the immediate area and should be suitable for drilling and operating the proposed wells.

Both the surface and minerals are owned by SITLA. Jim Davis of SITLA attended the site evaluation and had no concerns with the proposal. Kerr McGee was told to consult with SITLA for reclamation standards including seeding mixes to be used.

Alex Hansen and Ben Williams of the Utah Division of Wildlife Resources attended. It was stated that the area was yearlong antelope habitat but no stipulations for this species was recommended. No other wildlife is expected to be significantly affected.

Floyd Bartlett  
**Onsite Evaluator**

1/12/2010  
**Date / Time**

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# Application for Permit to Drill

## Statement of Basis

2/11/2010

Utah Division of Oil, Gas and Mining

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### Conditions of Approval / Application for Permit to Drill

| <b>Category</b> | <b>Condition</b>   |
|-----------------|--|
| Pits            | A synthetic liner with a minimum thickness of 30 mils with a double felt subliner shall be properly installed and maintained in the reserve pit. |
| Surface         | The reserve pit shall be fenced upon completion of drilling operations.  |

# WORKSHEET APPLICATION FOR PERMIT TO DRILL

**APD RECEIVED:** 12/18/2009

**API NO. ASSIGNED:** 43047508560000

**WELL NAME:** NBU 1021-12B3DS

**OPERATOR:** KERR-MCGEE OIL & GAS ONSHORE, L.P. (N2995)

**PHONE NUMBER:** 720 929-6156

**CONTACT:** Danielle Piernot

**PROPOSED LOCATION:** SWSE 1 100S 210E

**Permit Tech Review:**

**SURFACE:** 0374 FSL 2433 FEL

**Engineering Review:**

**BOTTOM:** 1160 FNL 2250 FEL

**Geology Review:**

**COUNTY:** UINTAH

**LATITUDE:** 39.97138

**LONGITUDE:** -109.49837

**UTM SURF EASTINGS:** 628239.00

**NORTHINGS:** 4425450.00

**FIELD NAME:** NATURAL BUTTES

**LEASE TYPE:** 3 - State

**LEASE NUMBER:** ML 23612

**PROPOSED PRODUCING FORMATION(S):** WASATCH-MESA VERDE

**SURFACE OWNER:** 3 - State

**COALBED METHANE:** NO

## RECEIVED AND/OR REVIEWED:

- PLAT**
- Bond:** STATE/FEE - 22013542
- Potash**
- Oil Shale 190-5**
- Oil Shale 190-3**
- Oil Shale 190-13**
- Water Permit:** Permit #43-8496
- RDCC Review:**
- Fee Surface Agreement**
- Intent to Commingle**

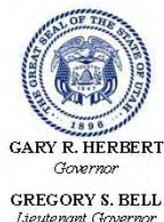
**Commingle Approved**

## LOCATION AND SITING:

- R649-2-3.**  
**Unit:** NATURAL BUTTES
- R649-3-2. General**
- R649-3-3. Exception**
- Drilling Unit**  
**Board Cause No:** Cause 173-14  
**Effective Date:** 12/2/1999  
**Siting:** 460' fr u boundary and uncommitted tract
- R649-3-11. Directional Drill**

**Comments:** Presite Completed

**Stipulations:**  
3 - Commingle - ddoucet  
5 - Statement of Basis - bhill  
15 - Directional - dmason  
17 - Oil Shale 190-5(b) - dmason  
25 - Surface Casing - ddoucet



# 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:** NBU 1021-12B3DS  
**API Well Number:** 43047508560000  
**Lease Number:** ML 23612  
**Surface Owner:** STATE  
**Approval Date:** 2/16/2010

**Issued to:**

KERR-MCGEE OIL & GAS ONSHORE, L.P., P.O. Box 173779, Denver, CO 80217

**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 173-14. The expected producing formation or pool is the WASATCH-MESA VERDE 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

**Commingle:**

In accordance with Board Cause No. 173-14, commingling of the production from the Wasatch formation and the Mesaverde formation in this well is allowed.

**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:**

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.

In accordance with the Order in Cause No. 190-5(b) dated October 28, 1982, the operator shall comply with the requirements of Rules R649-3-31 and R649-3-27 pertaining to Designated Oil Shale Areas. Additionally, the operators shall ensure that the surface and or production casing is properly cemented over the entire oil shale section as defined by Rule R649-3-31. The Operator shall report the actual depth the oil shale is encountered to the division.

Compliance with the Conditions of Approval/Application for Permit to Drill outlined in the Statement of Basis (copy attached).

Surface casing shall be cemented to the surface.

**Additional Approvals:**

The operator is required to obtain approval from the Division of Oil, Gas and mining before performing any of the following actions during the drilling of this well:

- Any changes to the approved drilling plan – contact Dustin Doucet
- Significant plug back of the well – contact Dustin Doucet
- Plug and abandonment of the well – contact Dustin Doucet

**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  
OR  
submit an electronic sundry notice (pre-registration required) via the Utah Oil & Gas website at <https://oilgas.ogm.utah.gov>
- 24 hours prior to testing blowout prevention equipment - contact Dan Jarvis
- 24 hours prior to cementing or testing casing – contact Dan Jarvis
- Within 24 hours of making any emergency changes to the approved drilling program – contact Dustin Doucet
- 24 hours prior to commencing operations to plug and abandon the well – contact Dan Jarvis

**Contact Information:**

The following are Division of Oil, Gas and Mining contacts and their telephone numbers (please leave a voicemail message if the person is not available to take the call):

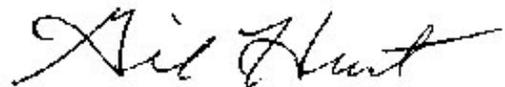
- Carol Daniels 801-538-5284 - office
- Dustin Doucet 801-538-5281 - office  
801-733-0983 - after office hours
- Dan Jarvis 801-538-5338 - office  
801-231-8956 - after office hours

**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:**



Gil Hunt  
Associate Director, Oil & Gas

|  |   |
|--|---|
| <b>STATE OF UTAH</b><br>DEPARTMENT OF NATURAL RESOURCES<br>DIVISION OF OIL, GAS, AND MINING  | <b>FORM 9</b><br><br><b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b><br>ML 23612                                     |
| <b>SUNDRY NOTICES AND REPORTS ON WELLS</b><br><br>Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals. | <b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b><br><br><b>7. UNIT or CA AGREEMENT NAME:</b><br>NATURAL BUTTES          |
| <b>1. TYPE OF WELL</b><br>Gas Well   | <b>8. WELL NAME and NUMBER:</b><br>NBU 1021-12B3DS  |
| <b>2. NAME OF OPERATOR:</b><br>KERR-MCGEE OIL & GAS ONSHORE, L.P.  | <b>9. API NUMBER:</b><br>43047508560000   |
| <b>3. ADDRESS OF OPERATOR:</b><br>P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779  | <b>PHONE NUMBER:</b><br>720 929-6007 Ext  |
| <b>4. LOCATION OF WELL</b><br><b>FOOTAGES AT SURFACE:</b><br>0374 FSL 2433 FEL<br><b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b><br>Qtr/Qtr: SWSE Section: 1 Township: 10.0S Range: 21.0E Meridian: S   | <b>9. FIELD and POOL or WILDCAT:</b><br>NATURAL BUTTES<br><br><b>COUNTY:</b><br>Uintah<br><br><b>STATE:</b><br>UTAH |

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

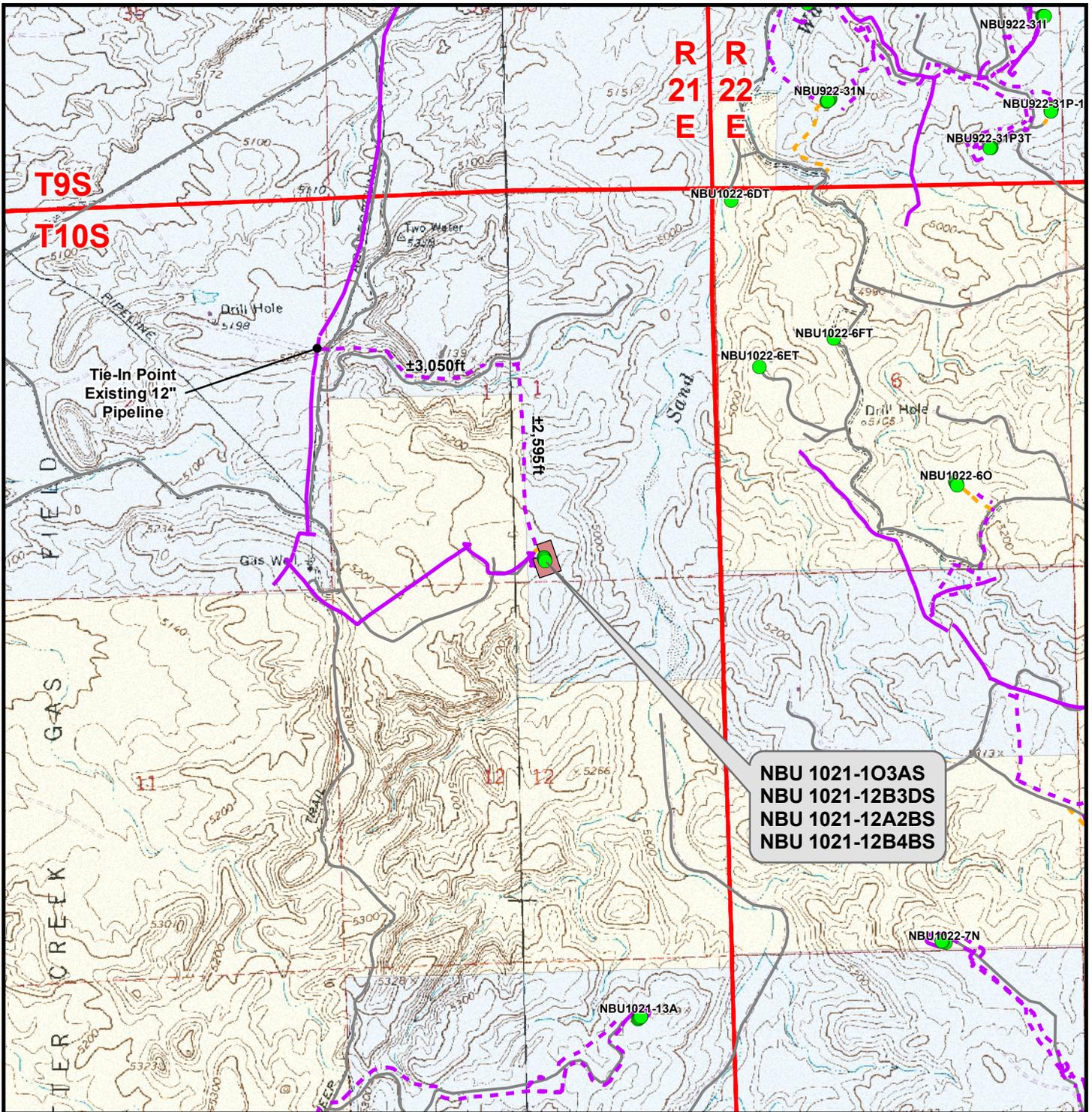
| TYPE OF SUBMISSION  | TYPE OF ACTION  |   |  |
|---|---|---|--|
| <input checked="" type="checkbox"/> <b>NOTICE OF INTENT</b><br>Approximate date work will start:<br>4/12/2010<br><br><input type="checkbox"/> <b>SUBSEQUENT REPORT</b><br>Date of Work Completion:<br><br><input type="checkbox"/> <b>SPUD REPORT</b><br>Date of Spud:<br><br><input type="checkbox"/> <b>DRILLING REPORT</b><br>Report Date: | <input type="checkbox"/> ACIDIZE<br><input checked="" type="checkbox"/> <b>CHANGE TO PREVIOUS PLANS</b><br><input type="checkbox"/> CHANGE WELL STATUS<br><input type="checkbox"/> DEEPEN<br><input type="checkbox"/> OPERATOR CHANGE<br><input type="checkbox"/> PRODUCTION START OR RESUME<br><input type="checkbox"/> REPERFORATE CURRENT FORMATION<br><input type="checkbox"/> TUBING REPAIR<br><input type="checkbox"/> WATER SHUTOFF<br><input type="checkbox"/> WILDCAT WELL DETERMINATION | <input type="checkbox"/> ALTER CASING<br><input type="checkbox"/> CHANGE TUBING<br><input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS<br><input type="checkbox"/> FRACTURE TREAT<br><input type="checkbox"/> PLUG AND ABANDON<br><input type="checkbox"/> RECLAMATION OF WELL SITE<br><input type="checkbox"/> SIDETRACK TO REPAIR WELL<br><input type="checkbox"/> VENT OR FLARE<br><input type="checkbox"/> SI TA STATUS EXTENSION<br><input type="checkbox"/> OTHER | <input type="checkbox"/> CASING REPAIR<br><input type="checkbox"/> CHANGE WELL NAME<br><input type="checkbox"/> CONVERT WELL TYPE<br><input type="checkbox"/> NEW CONSTRUCTION<br><input type="checkbox"/> PLUG BACK<br><input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION<br><input type="checkbox"/> TEMPORARY ABANDON<br><input type="checkbox"/> WATER DISPOSAL<br><input type="checkbox"/> APD EXTENSION<br>OTHER: |

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

Kerr-McGee Oil & Gas Onshore LP (Kerr-McGee) respectfully requests to change the size of the pipeline for this location. The ±2,595' portion of pipeline that is traveling northerly from the well pad will be a buried 6" pipeline and the ±3,050' portion of pipeline traveling westerly to the tie in point will be a buried 10" pipeline. The pipeline will follow the same route as detailed in the sundry notice accepted for record on March 23, 2010. Please see the attached pipeline plat for additional details. Please contact the undersigned with any questions and/or comments. Thank you.

**Accepted by the**  
**Utah Division of**  
**Oil, Gas and Mining**  
**FOR RECORD ONLY**  
 April 08, 2010

|  |                                     |                                    |
|--|-------------------------------------|------------------------------------|
| <b>NAME (PLEASE PRINT)</b><br>Danielle Piernot | <b>PHONE NUMBER</b><br>720 929-6156 | <b>TITLE</b><br>Regulatory Analyst |
| <b>SIGNATURE</b><br>N/A                        | <b>DATE</b><br>4/8/2010             |                                    |



**Legend**

- Well - Proposed
- Well Pad
- - - Road - Proposed
- - - Pipeline - Proposed
- Bureau of Land Management
- State
- Road - Existing
- Pipeline - Existing
- Indian Reservation
- Private

Proposed Pipeline Length From Tie-In Point To Edge Of Pad: ±5,645ft  
 Proposed Pipeline Length Around Pad: ±660ft

**Kerr-McGee Oil & Gas Onshore, LP**  
 1099 18th Street, Denver, Colorado 80202

**Well Pad - NBU 1021-10**

**NBU 1021-103AS, NBU 1021-12B3DS,  
 NBU 1021-12A2BS & NBU 1021-12B4BS**

**Topo D**

**Located In Section 1, T10S, R21E  
 S.L.B.&M., Uintah County, Utah**

**609**  
 CONSULTING, LLC  
 371 Coffeen Avenue  
 Sheridan, WY 82801  
 Phone (307) 674-0609  
 Fax (307) 674-0182



|                     |                    |           |
|---------------------|--------------------|-----------|
| Scale: 1" = 2,000ft | NAD83 USP Central  | Sheet No: |
| Drawn: JELo         | Date: 30 June 2009 | <b>12</b> |
| Revised: JELo       | Date: 12 Feb 2010  |           |

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|  |  |
|--|--|
| <b>STATE OF UTAH</b><br>DEPARTMENT OF NATURAL RESOURCES<br>DIVISION OF OIL, GAS, AND MINING  | <b>FORM 9</b>  |
| <b>SUNDRY NOTICES AND REPORTS ON WELLS</b><br><br>Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals. | <b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b><br>ML 23612 |
|  | <b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b><br><br>_____  |
|  | <b>7. UNIT or CA AGREEMENT NAME:</b><br>NATURAL BUTTES     |
| <b>1. TYPE OF WELL</b><br>Gas Well   | <b>8. WELL NAME and NUMBER:</b><br>NBU 1021-12B3DS         |
| <b>2. NAME OF OPERATOR:</b><br>KERR-MCGEE OIL & GAS ONSHORE, L.P.  | <b>9. API NUMBER:</b><br>43047508560000                    |
| <b>3. ADDRESS OF OPERATOR:</b><br>P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779  | <b>PHONE NUMBER:</b><br>720 929-6007 Ext                   |
| <b>4. LOCATION OF WELL</b><br><b>FOOTAGES AT SURFACE:</b><br>0374 FSL 2433 FEL<br><b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b><br>Qtr/Qtr: SWSE Section: 1 Township: 10.0S Range: 21.0E Meridian: S   | <b>9. FIELD and POOL or WILDCAT:</b><br>NATURAL BUTTES     |
|  | <b>COUNTY:</b><br>Uintah                                   |
|  | <b>STATE:</b><br>UTAH                                      |

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

| TYPE OF SUBMISSION  | TYPE OF ACTION   |   |   |
|---|--|---|---|
| <input type="checkbox"/> <b>NOTICE OF INTENT</b><br>Approximate date work will start:   | <input type="checkbox"/> ACIDIZE                       | <input type="checkbox"/> ALTER CASING                   | <input type="checkbox"/> CASING REPAIR                  |
| <input type="checkbox"/> <b>SUBSEQUENT REPORT</b><br>Date of Work Completion:           | <input type="checkbox"/> CHANGE TO PREVIOUS PLANS      | <input type="checkbox"/> CHANGE TUBING                  | <input type="checkbox"/> CHANGE WELL NAME               |
| <input type="checkbox"/> <b>SPUD REPORT</b><br>Date of Spud:                            | <input type="checkbox"/> CHANGE WELL STATUS            | <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS | <input type="checkbox"/> CONVERT WELL TYPE              |
| <input checked="" type="checkbox"/> <b>DRILLING REPORT</b><br>Report Date:<br>5/10/2010 | <input type="checkbox"/> DEEPEN                        | <input type="checkbox"/> FRACTURE TREAT                 | <input type="checkbox"/> NEW CONSTRUCTION               |
|   | <input type="checkbox"/> OPERATOR CHANGE               | <input type="checkbox"/> PLUG AND ABANDON               | <input type="checkbox"/> PLUG BACK                      |
|   | <input type="checkbox"/> PRODUCTION START OR RESUME    | <input type="checkbox"/> RECLAMATION OF WELL SITE       | <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION |
|   | <input type="checkbox"/> REPERFORATE CURRENT FORMATION | <input type="checkbox"/> SIDETRACK TO REPAIR WELL       | <input type="checkbox"/> TEMPORARY ABANDON              |
|   | <input type="checkbox"/> TUBING REPAIR                 | <input type="checkbox"/> VENT OR FLARE                  | <input type="checkbox"/> WATER DISPOSAL                 |
|   | <input type="checkbox"/> WATER SHUTOFF                 | <input type="checkbox"/> SI TA STATUS EXTENSION         | <input type="checkbox"/> APD EXTENSION                  |
|   | <input type="checkbox"/> WILDCAT WELL DETERMINATION    | <input type="checkbox"/> OTHER                          | OTHER:  |

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

MIRU PETE MARTIN BUCKET RIG. DRILLED 20" CONDUCTOR HOLE TO 40'.  
 RAN 14" 36.7# SCHEDULE 10 CONDUCTOR PIPE. CMT W/28 SX READY MIX  
 SPUD WELL LOCATION ON 5/10/2010 AT 12:00 HRS.

**Accepted by the**  
**Utah Division of**  
**Oil, Gas and Mining**  
**FOR RECORD ONLY**  
 May 12, 2010

|  |                                     |                                    |
|--|-------------------------------------|------------------------------------|
| <b>NAME (PLEASE PRINT)</b><br>Andy Lytle | <b>PHONE NUMBER</b><br>720 929-6100 | <b>TITLE</b><br>Regulatory Analyst |
| <b>SIGNATURE</b><br>N/A                  | <b>DATE</b><br>5/11/2010            |                                    |

|  |   |
|--|---|
| <b>STATE OF UTAH</b><br>DEPARTMENT OF NATURAL RESOURCES<br>DIVISION OF OIL, GAS, AND MINING  | <b>FORM 9</b><br><br><b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b><br>ML 23612                                     |
| <b>SUNDRY NOTICES AND REPORTS ON WELLS</b><br><br>Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals. | <b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b><br><br><b>7. UNIT or CA AGREEMENT NAME:</b><br>NATURAL BUTTES          |
| <b>1. TYPE OF WELL</b><br>Gas Well   | <b>8. WELL NAME and NUMBER:</b><br>NBU 1021-12B3DS  |
| <b>2. NAME OF OPERATOR:</b><br>KERR-MCGEE OIL & GAS ONSHORE, L.P.  | <b>9. API NUMBER:</b><br>43047508560000   |
| <b>3. ADDRESS OF OPERATOR:</b><br>P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779  | <b>PHONE NUMBER:</b><br>720 929-6007 Ext  |
| <b>4. LOCATION OF WELL</b><br><b>FOOTAGES AT SURFACE:</b><br>0374 FSL 2433 FEL<br><b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b><br>Qtr/Qtr: SWSE Section: 1 Township: 10.0S Range: 21.0E Meridian: S   | <b>9. FIELD and POOL or WILDCAT:</b><br>NATURAL BUTTES<br><br><b>COUNTY:</b><br>Uintah<br><br><b>STATE:</b><br>UTAH |

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| TYPE OF SUBMISSION  | TYPE OF ACTION   |   |   |
|---|--|---|---|
| <input type="checkbox"/> <b>NOTICE OF INTENT</b><br>Approximate date work will start:   | <input type="checkbox"/> ACIDIZE                       | <input type="checkbox"/> ALTER CASING                   | <input type="checkbox"/> CASING REPAIR                  |
| <input type="checkbox"/> <b>SUBSEQUENT REPORT</b><br>Date of Work Completion:           | <input type="checkbox"/> CHANGE TO PREVIOUS PLANS      | <input type="checkbox"/> CHANGE TUBING                  | <input type="checkbox"/> CHANGE WELL NAME               |
| <input type="checkbox"/> <b>SPUD REPORT</b><br>Date of Spud:                            | <input type="checkbox"/> CHANGE WELL STATUS            | <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS | <input type="checkbox"/> CONVERT WELL TYPE              |
| <input checked="" type="checkbox"/> <b>DRILLING REPORT</b><br>Report Date:<br>5/10/2010 | <input type="checkbox"/> DEEPEN                        | <input type="checkbox"/> FRACTURE TREAT                 | <input type="checkbox"/> NEW CONSTRUCTION               |
|   | <input type="checkbox"/> OPERATOR CHANGE               | <input type="checkbox"/> PLUG AND ABANDON               | <input type="checkbox"/> PLUG BACK                      |
|   | <input type="checkbox"/> PRODUCTION START OR RESUME    | <input type="checkbox"/> RECLAMATION OF WELL SITE       | <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION |
|   | <input type="checkbox"/> REPERFORATE CURRENT FORMATION | <input type="checkbox"/> SIDETRACK TO REPAIR WELL       | <input type="checkbox"/> TEMPORARY ABANDON              |
|   | <input type="checkbox"/> TUBING REPAIR                 | <input type="checkbox"/> VENT OR FLARE                  | <input type="checkbox"/> WATER DISPOSAL                 |
|   | <input type="checkbox"/> WATER SHUTOFF                 | <input type="checkbox"/> SI TA STATUS EXTENSION         | <input type="checkbox"/> APD EXTENSION                  |
|   | <input type="checkbox"/> WILDCAT WELL DETERMINATION    | <input type="checkbox"/> OTHER                          | OTHER:  |

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

MIRU PETE MARTIN BUCKET RIG. DRILLED 20" CONDUCTOR HOLE TO 40'.  
 RAN 14" 36.7# SCHEDULE 10 CONDUCTOR PIPE. CMT W/28 SX READY MIX  
 SPUD WELL LOCATION ON 5/10/2010 AT 12:00 HRS.

**Accepted by the**  
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**FOR RECORD ONLY**  
 May 12, 2010

|  |                                     |                                    |
|--|-------------------------------------|------------------------------------|
| <b>NAME (PLEASE PRINT)</b><br>Andy Lytle | <b>PHONE NUMBER</b><br>720 929-6100 | <b>TITLE</b><br>Regulatory Analyst |
| <b>SIGNATURE</b><br>N/A                  | <b>DATE</b><br>5/11/2010            |                                    |

|  |   |  |
|--|---|--|
| <b>STATE OF UTAH</b><br>DEPARTMENT OF NATURAL RESOURCES<br>DIVISION OF OIL, GAS, AND MINING  |   | <b>FORM 9</b><br><br><b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b><br>ML 23612                            |
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| <b>2. NAME OF OPERATOR:</b><br>KERR-MCGEE OIL & GAS ONSHORE, L.P.  | <b>9. API NUMBER:</b><br>43047508560000               |  |
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| <b>4. LOCATION OF WELL</b><br><b>FOOTAGES AT SURFACE:</b><br>0374 FSL 2433 FEL<br><b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b><br>Qtr/Qtr: SWSE Section: 1 Township: 10.0S Range: 21.0E Meridian: S   | <b>COUNTY:</b><br>UINTAH<br><br><b>STATE:</b><br>UTAH |  |

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

| TYPE OF SUBMISSION  | TYPE OF ACTION  |   |   |
|---|---|---|---|
| <input checked="" type="checkbox"/> <b>NOTICE OF INTENT</b><br>Approximate date work will start:<br>3/25/2010 | <input type="checkbox"/> ACIDIZE                                    | <input type="checkbox"/> ALTER CASING                   | <input type="checkbox"/> CASING REPAIR                  |
| <input type="checkbox"/> <b>SUBSEQUENT REPORT</b><br>Date of Work Completion:                                 | <input checked="" type="checkbox"/> <b>CHANGE TO PREVIOUS PLANS</b> | <input type="checkbox"/> CHANGE TUBING                  | <input type="checkbox"/> CHANGE WELL NAME               |
| <input type="checkbox"/> <b>SPUD REPORT</b><br>Date of Spud:  | <input type="checkbox"/> CHANGE WELL STATUS                         | <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS | <input type="checkbox"/> CONVERT WELL TYPE              |
| <input type="checkbox"/> <b>DRILLING REPORT</b><br>Report Date:   | <input type="checkbox"/> DEEPEN                                     | <input type="checkbox"/> FRACTURE TREAT                 | <input type="checkbox"/> NEW CONSTRUCTION               |
|   | <input type="checkbox"/> OPERATOR CHANGE                            | <input type="checkbox"/> PLUG AND ABANDON               | <input type="checkbox"/> PLUG BACK                      |
|   | <input type="checkbox"/> PRODUCTION START OR RESUME                 | <input type="checkbox"/> RECLAMATION OF WELL SITE       | <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION |
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|   | <input type="checkbox"/> TUBING REPAIR                              | <input type="checkbox"/> VENT OR FLARE                  | <input type="checkbox"/> WATER DISPOSAL                 |
|   | <input type="checkbox"/> WATER SHUTOFF                              | <input type="checkbox"/> SI TA STATUS EXTENSION         | <input type="checkbox"/> APD EXTENSION                  |
|   | <input type="checkbox"/> WILDCAT WELL DETERMINATION                 | <input checked="" type="checkbox"/> <b>OTHER</b>        | OTHER: Pipeline re-route                                |

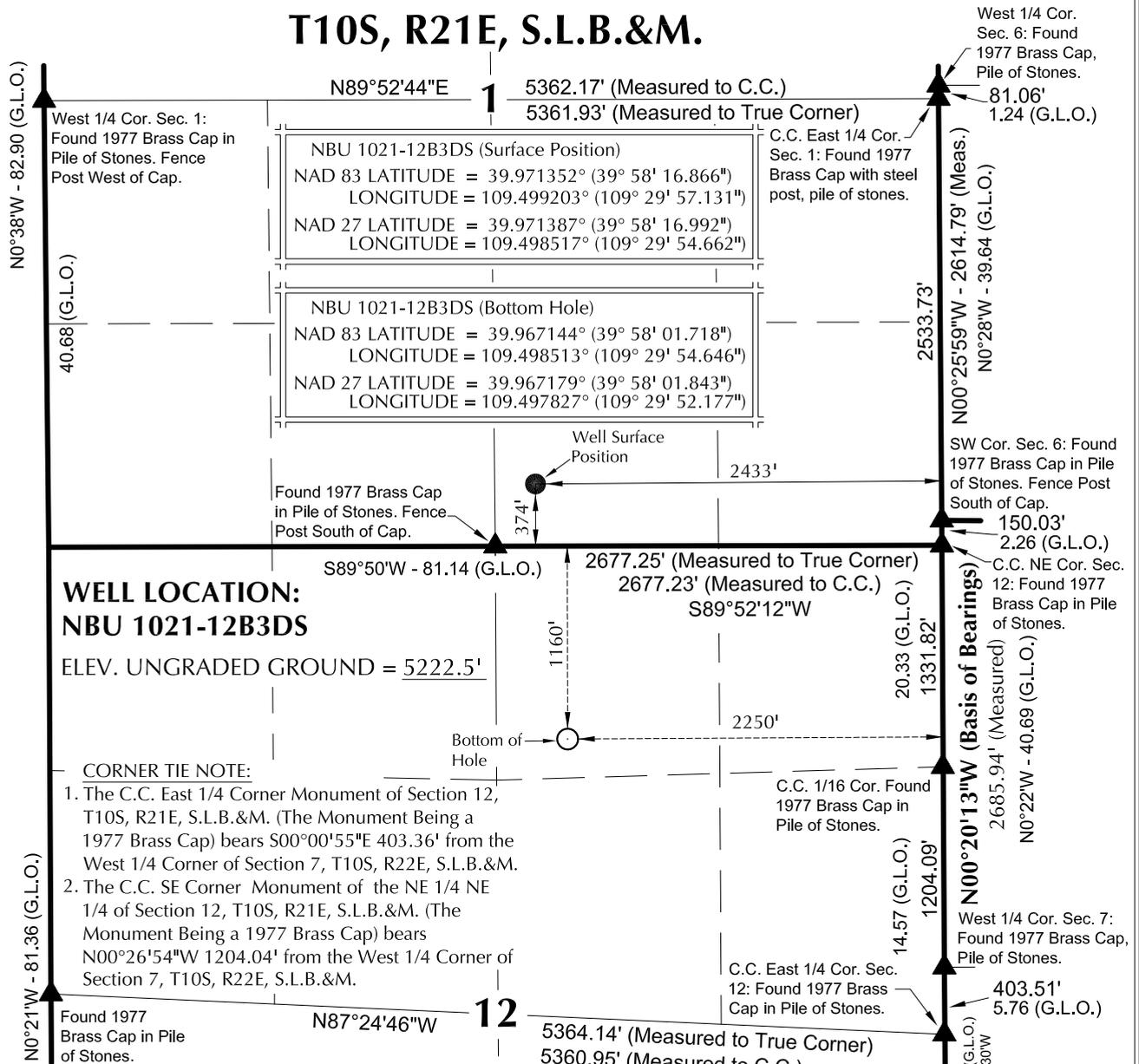
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.  
 Kerr-McGee Oil & Gas Onshore LP (KMG) respectfully requests to re-route the proposed pipeline for this well in order to remain on state land. Please see **Accepted by the** the attached revised survey plats and SUPO for additional details. All other **Utah Division of** information remains the same. Please contact the undersigned with any **Oil, Gas and Mining** questions and/or comments. Thank you.

FOR RECORD ONLY

March 23, 2010

|  |                                     |                                    |
|--|-------------------------------------|------------------------------------|
| <b>NAME (PLEASE PRINT)</b><br>Danielle Piernot | <b>PHONE NUMBER</b><br>720 929-6156 | <b>TITLE</b><br>Regulatory Analyst |
| <b>SIGNATURE</b><br>N/A                        | <b>DATE</b><br>3/22/2010            |                                    |

# T10S, R21E, S.L.B.&M.



## WELL LOCATION: NBU 1021-12B3DS

ELEV. UNGRADED GROUND = 5222.5'

### CORNER TIE NOTE:

1. The C.C. East 1/4 Corner Monument of Section 12, T10S, R21E, S.L.B.&M. (The Monument Being a 1977 Brass Cap) bears S00°00'55"E 403.36' from the West 1/4 Corner of Section 7, T10S, R22E, S.L.B.&M.
2. The C.C. SE Corner Monument of the NE 1/4 NE 1/4 of Section 12, T10S, R21E, S.L.B.&M. (The Monument Being a 1977 Brass Cap) bears N00°26'54"W 1204.04' from the West 1/4 Corner of Section 7, T10S, R22E, S.L.B.&M.

### NOTES:

- ▲ = Section Corners Located
- 1. Well footages are measured at right angles to the Section Lines.
- 2. G.L.O. distances are shown in feet or chains. 1 chain = 66 feet.
- 3. The Bottom of hole bears S07°10'14"E 1545.43' from the Surface Position.
- 4. Bearings are based on Global Positioning Satellite observations.
- 5. Basis of elevation is Tri-Sta "Two Water" located in the NW 1/4 of Section 1, T10S, R21E, S.L.B.&M. The elevation of this Tri-Sta is shown on the Big Pack Mtn NE 7.5 Min. Quadrangle as being 5238'.

**Kerr-McGee Oil & Gas Onshore, LP**  
1099 18th Street - Denver, Colorado 80202

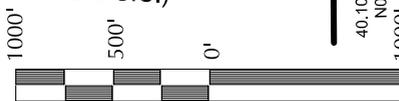
**WELL PAD - NBU 1021-10**

**NBU 1021-12B3DS  
WELL PLAT**

**1160' FNL, 2250' FEL (Bottom Hole)  
NW 1/4 NE 1/4 OF SECTION 12, T10S, R21E,  
S.L.B.&M., UTAH COUNTY, UTAH.**



**CONSULTING, LLC**  
371 Coffeen Avenue  
Sheridan WY 82801  
Phone 307-674-0609  
Fax 307-674-0182



SCALE  
SURVEYOR'S CERTIFICATE

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.

*John R. Schlauch*  
No. 6028691  
JOHN R. SCLAUCH  
REGISTERED LAND SURVEYOR  
REGISTRATION No. 6028691  
STATE OF UTAH

**TIMBERLINE** (435) 789-1365  
ENGINEERING & LAND SURVEYING, INC.  
209 NORTH 300 WEST - VERNAL, UTAH 84078

|                            |                     |                       |
|----------------------------|---------------------|-----------------------|
| DATE SURVEYED:<br>06-24-09 | SURVEYED BY: D.J.S. | SHEET NO:<br><b>2</b> |
| DATE DRAWN:<br>06-25-09    | DRAWN BY: M.W.W.    |                       |
| SCALE: 1" = 1000'          |                     | 2 OF 13               |

**RECEIVED** March 22, 2010

| LATITUDE & LONGITUDE<br>Surface Position - (NAD 83) |                             |                               |
|---|-----------------------------|-------------------------------|
| WELL  | N. LATITUDE                 | W. LONGITUDE                  |
| NBU 1021-1O3AS                                      | 39°58'17.054"<br>39.971404° | 109°29'57.208"<br>109.499224° |
| NBU 1021-12B3DS                                     | 39°58'16.866"<br>39.971352° | 109°29'57.131"<br>109.499203° |
| NBU 1021-12A2BS                                     | 39°58'16.678"<br>39.971299° | 109°29'57.051"<br>109.499181° |
| NBU 1021-12B4BS                                     | 39°58'16.491"<br>39.971247° | 109°29'56.973"<br>109.499159° |
| NBU 1021-1O<br>Existing Well                        | 39°58'15.586"<br>39.970996° | 109°29'59.497"<br>109.499860° |

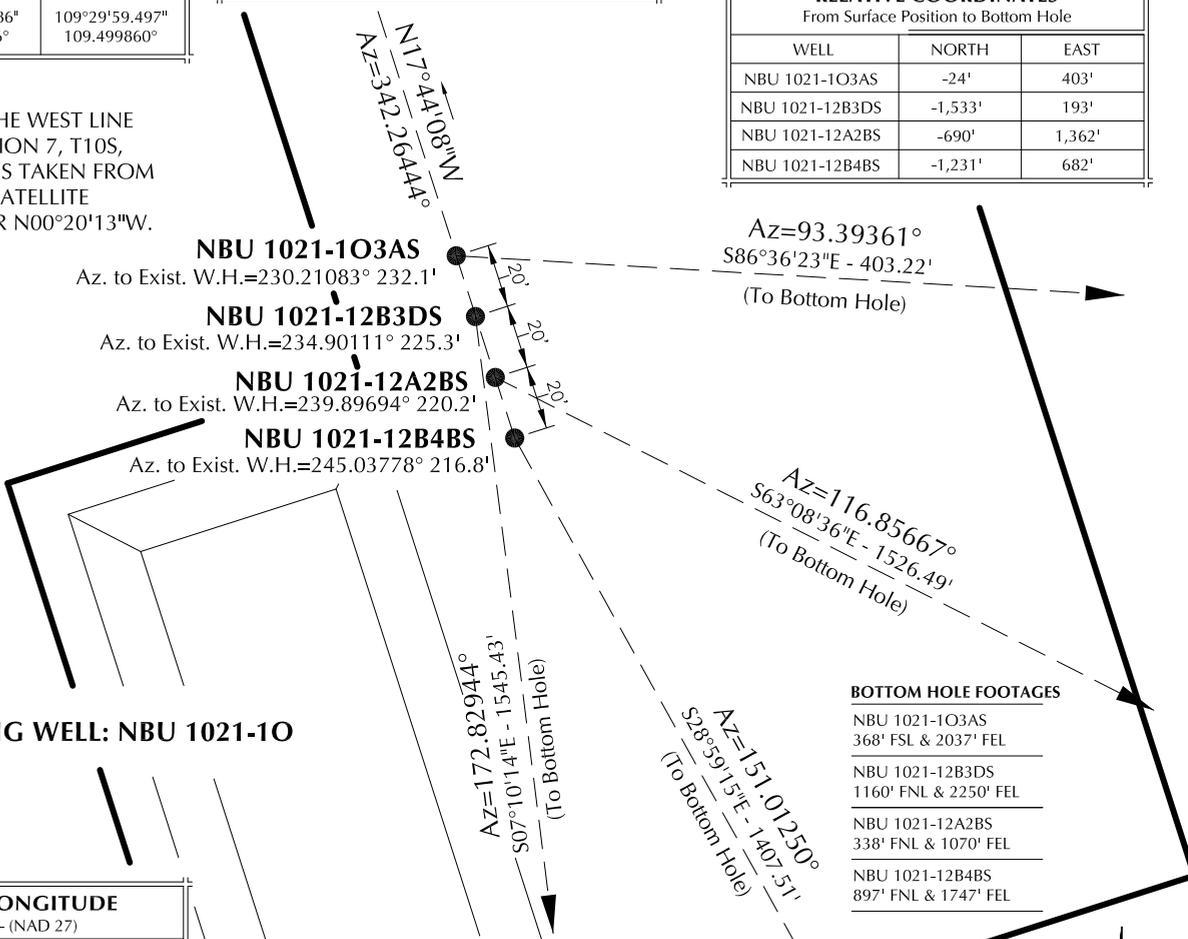
| LATITUDE & LONGITUDE<br>Bottom Hole - (NAD 83) |                             |                               |
|--|-----------------------------|-------------------------------|
| WELL   | N. LATITUDE                 | W. LONGITUDE                  |
| NBU 1021-1O3AS                                 | 39°58'16.820"<br>39.971339° | 109°29'52.039"<br>109.497789° |
| NBU 1021-12B3DS                                | 39°58'01.718"<br>39.967144° | 109°29'54.646"<br>109.498513° |
| NBU 1021-12A2BS                                | 39°58'09.870"<br>39.969408° | 109°29'39.560"<br>109.494322° |
| NBU 1021-12B4BS                                | 39°58'04.329"<br>39.967869° | 109°29'48.208"<br>109.496725° |

| RELATIVE COORDINATES<br>From Surface Position to Bottom Hole |         |        |
|--|---------|--------|
| WELL   | NORTH   | EAST   |
| NBU 1021-1O3AS   | -24'    | 403'   |
| NBU 1021-12B3DS  | -1,533' | 193'   |
| NBU 1021-12A2BS  | -690'   | 1,362' |
| NBU 1021-12B4BS  | -1,231' | 682'   |

BASIS OF BEARINGS IS THE WEST LINE OF THE NW 1/4 OF SECTION 7, T10S, R22E, S.L.B.&M. WHICH IS TAKEN FROM GLOBAL POSITIONING SATELLITE OBSERVATIONS TO BEAR N00°20'13"W.

**SURFACE POSITION FOOTAGES:**

- NBU 1021-1O3AS  
393' FSL & 2439' FEL
- NBU 1021-12B3DS  
374' FSL & 2433' FEL
- NBU 1021-12A2BS  
355' FSL & 2427' FEL
- NBU 1021-12B4BS  
336' FSL & 2422' FEL
- NBU 1021-1O EXISTING WELL  
245' FSL & 2619' FEL



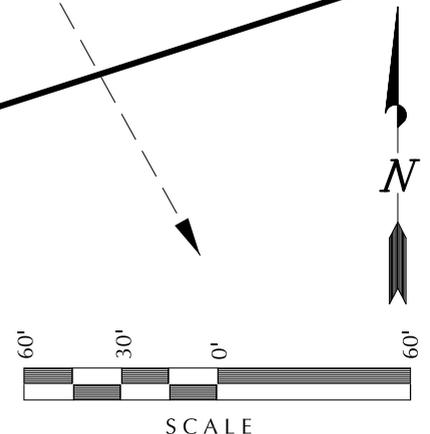
**BOTTOM HOLE FOOTAGES**

- NBU 1021-1O3AS  
368' FSL & 2037' FEL
- NBU 1021-12B3DS  
1160' FNL & 2250' FEL
- NBU 1021-12A2BS  
338' FNL & 1070' FEL
- NBU 1021-12B4BS  
897' FNL & 1747' FEL

● EXISTING WELL: NBU 1021-1O

| LATITUDE & LONGITUDE<br>Surface Position - (NAD 27) |                             |                               |
|---|-----------------------------|-------------------------------|
| WELL  | N. LATITUDE                 | W. LONGITUDE                  |
| NBU 1021-1O3AS                                      | 39°58'17.179"<br>39.971439° | 109°29'54.739"<br>109.498538° |
| NBU 1021-12B3DS                                     | 39°58'16.992"<br>39.971387° | 109°29'54.662"<br>109.498517° |
| NBU 1021-12A2BS                                     | 39°58'16.803"<br>39.971334° | 109°29'54.582"<br>109.498495° |
| NBU 1021-12B4BS                                     | 39°58'16.616"<br>39.971282° | 109°29'54.504"<br>109.498473° |
| NBU 1021-1O<br>Existing Well                        | 39°58'15.711"<br>39.971031° | 109°29'57.027"<br>109.499174° |

| LATITUDE & LONGITUDE<br>Bottom Hole - (NAD 27) |                             |                               |
|--|-----------------------------|-------------------------------|
| WELL   | N. LATITUDE                 | W. LONGITUDE                  |
| NBU 1021-1O3AS                                 | 39°58'16.945"<br>39.971374° | 109°29'49.570"<br>109.497103° |
| NBU 1021-12B3DS                                | 39°58'01.843"<br>39.967179° | 109°29'52.177"<br>109.497827° |
| NBU 1021-12A2BS                                | 39°58'09.995"<br>39.969443° | 109°29'37.092"<br>109.493637° |
| NBU 1021-12B4BS                                | 39°58'04.455"<br>39.967904° | 109°29'45.740"<br>109.496039° |



**Kerr-McGee Oil & Gas Onshore, LP**  
1099 18th Street - Denver, Colorado 80202

**WELL PAD - NBU 1021-1O**

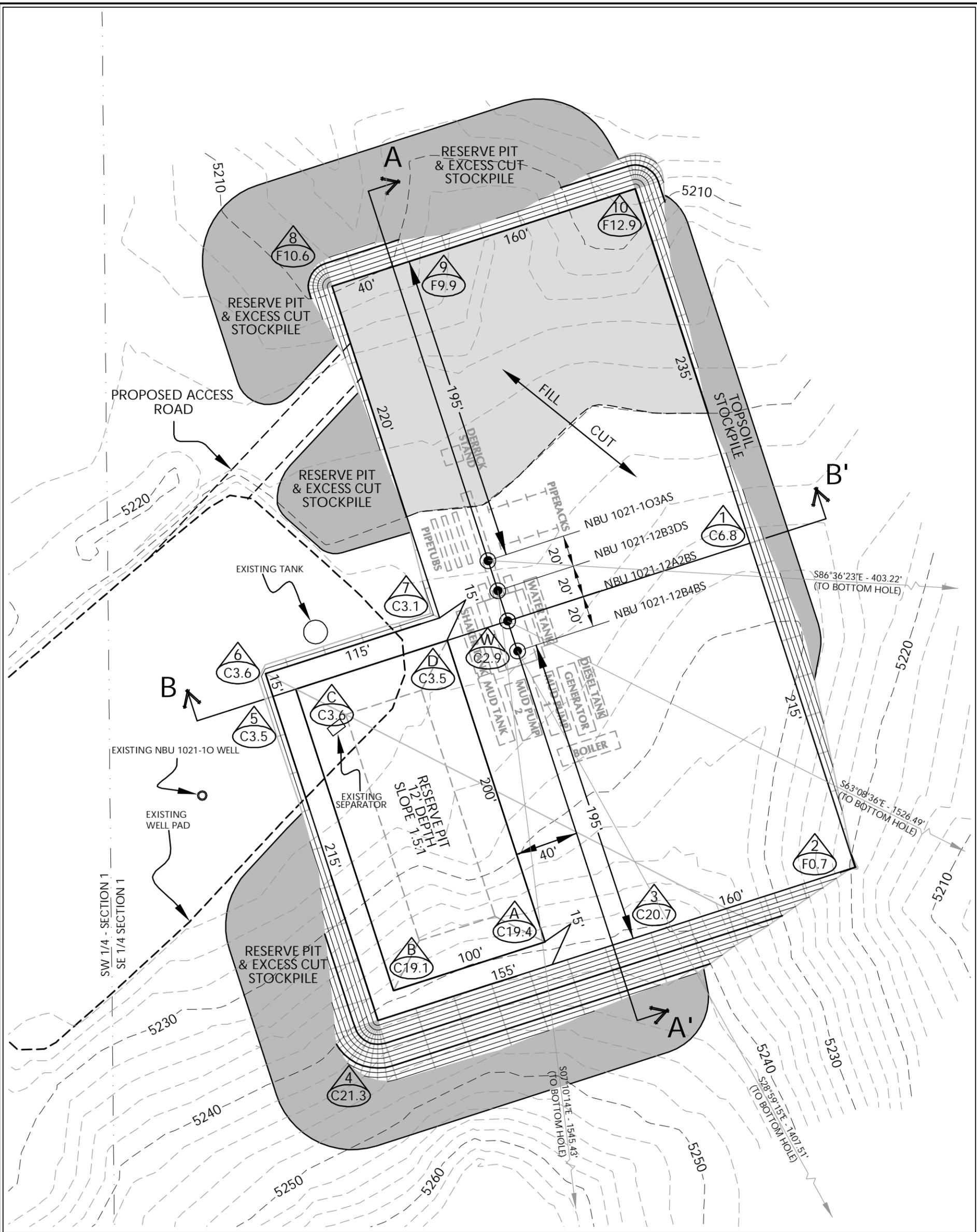
**WELL PAD INTERFERENCE PLAT**  
NBU 1021-1O3AS, NBU 1021-12B3DS,  
NBU 1021-12A2BS & NBU 1021-12B4BS  
LOCATED IN SECTION 1, T10S, R21E,  
S.L.B.&M., UTAH COUNTY, UTAH.



**609 CONSULTING, LLC**  
371 Coffeen Avenue  
Sheridan WY 82801  
Phone 307-674-0609  
Fax 307-674-0182

**TIMBERLINE** (435) 789-1365  
ENGINEERING & LAND SURVEYING, INC.  
209 NORTH 300 WEST - VERNAL, UTAH 84078

|                            |                                       |                       |
|----------------------------|---------------------------------------|-----------------------|
| DATE SURVEYED:<br>06-24-09 | SURVEYED BY: D.J.S.                   | SHEET NO:<br><b>5</b> |
| DATE DRAWN:<br>06-26-09    | DRAWN BY: M.W.W.                      |                       |
| SCALE: 1" = 60'            | Date Last Revised:<br>02-12-10 M.W.W. | 5 OF 13               |



**WELL PAD - NBU 1021-10 DESIGN SUMMARY**

EXISTING GRADE @ CENTER OF WELL PAD = 5222.9'  
 FINISHED GRADE ELEVATION = 5220.0'  
 CUT SLOPES = 1.5:1  
 FILL SLOPES = 1.5:1  
 TOTAL WELL PAD AREA = 3.16 ACRES  
 TOTAL DAMAGE AREA = 5.72 ACRES  
 SHRINKAGE FACTOR = 1.10  
 SWELL FACTOR = 1.00

**WELL PAD QUANTITIES**

TOTAL CUT FOR WELL PAD = 27,799 C.Y.  
 TOTAL FILL FOR WELL PAD = 5,780 C.Y.  
 TOPSOIL @ 6" DEPTH = 2,441 C.Y.  
 EXCESS MATERIAL = 22,019 C.Y.

**RESERVE PIT QUANTITIES**

TOTAL CUT FOR RESERVE PIT +/- 6,680 CY  
 RESERVE PIT CAPACITY (2' OF FREEBOARD) +/- 25,330 BARRELS

Kerr-McGee Oil & Gas Onshore, LP  
 1099 18th Street - Denver, Colorado 80202



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 209 NORTH 300 WEST - VERNAL, UTAH 84078

**WELL PAD LEGEND**

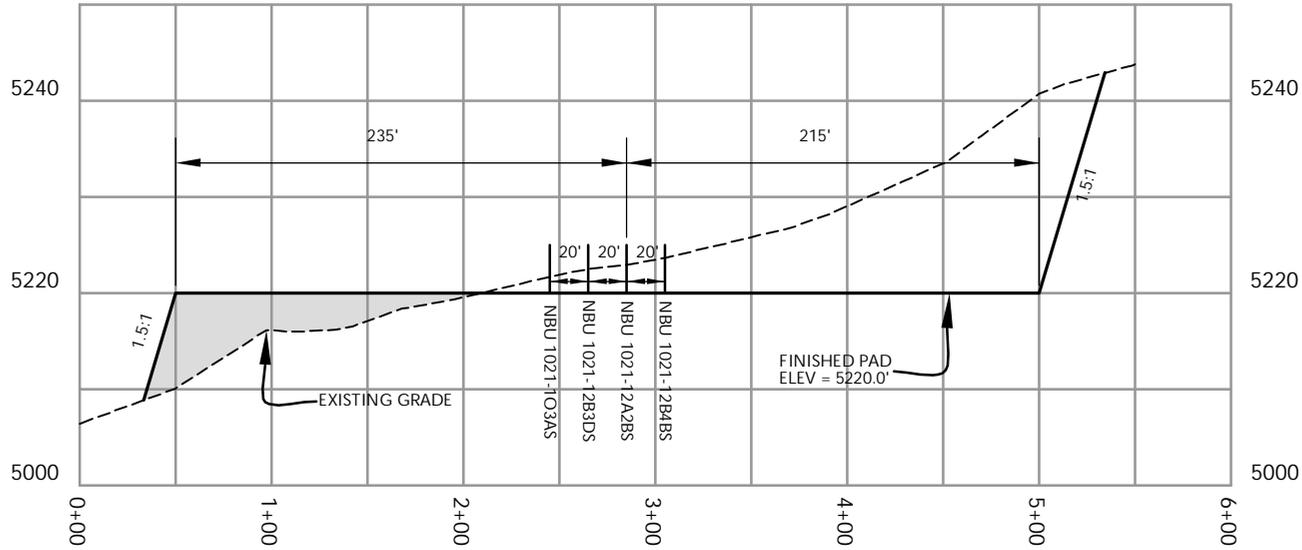
- EXISTING WELL LOCATION
- PROPOSED WELL LOCATION
- PROPOSED BOTTOM HOLE LOCATION
- EXISTING CONTOURS (2' INTERVAL)
- PROPOSED CONTOURS (2' INTERVAL)



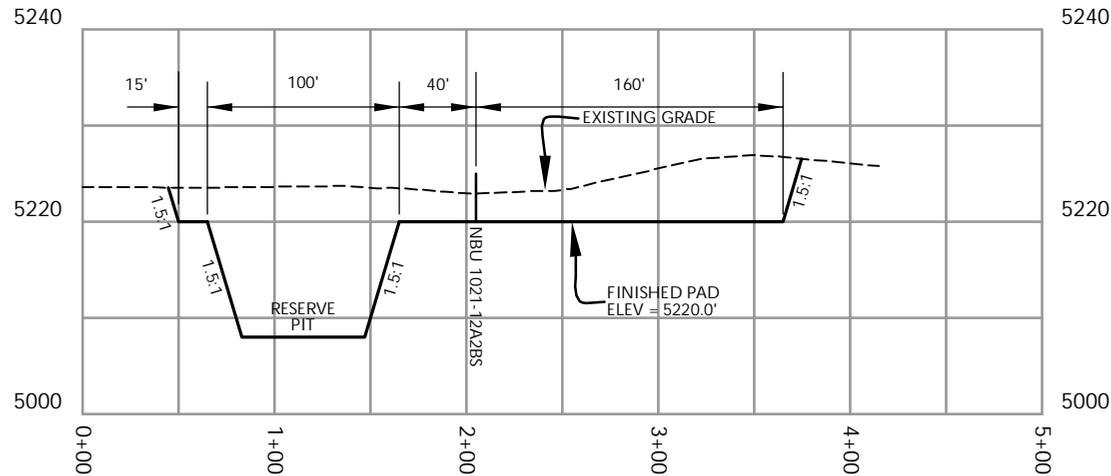
HORIZONTAL 0 30 60 1" = 60'  
 2' CONTOURS

**WELL PAD - NBU 1021-10**  
 WELL PAD - LOCATION LAYOUT  
 NBU 1021-103AS, NBU 1021-12B3DS  
 NBU 1021-12A2BS & NBU 1021-12B4BS  
 LOCATED IN SECTION 1, T10S, R21E  
 S.L.B.&M., Uintah County, UTAH

Scale: 1"=60' Date: 6/30/09 SHEET NO:  
 REVISED: SEA 2/12/10 **6** 6 OF 13



**CROSS SECTION A-A'**



**CROSS SECTION B-B'**

NOTE: CROSS SECTION B-B' DEPICTS MAXIMUM RESERVE PIT DEPTH.

Kerr-McGee Oil & Gas Onshore, LP  
1099 18th Street - Denver, Colorado 80202

WELL PAD - NBU 1021-1O

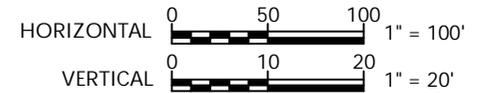
WELL PAD - CROSS SECTIONS  
NBU 1021-1O3AS, NBU 1021-12B3DS  
NBU 1021-12A2BS & NBU 1021-12B4BS  
LOCATED IN SECTION 1, T10S, R21E  
S.L.B.&M., Uintah County, Utah



CONSULTING, LLC  
371 Coffeen Avenue  
Sheridan, WY 82801  
Phone 307-674-0609  
Fax 307-674-0182

**TIMBERLINE**  
ENGINEERING & LAND SURVEYING, INC.  
209 NORTH 300 WEST - VERNAL, UTAH 84078

(435) 789-1365



|                |                |                     |
|----------------|----------------|---------------------|
| Scale: 1"=100' | Date: 6/30/09  | SHEET NO:           |
| REVISED:       | SEA<br>2/12/10 | <b>7</b><br>7 OF 13 |

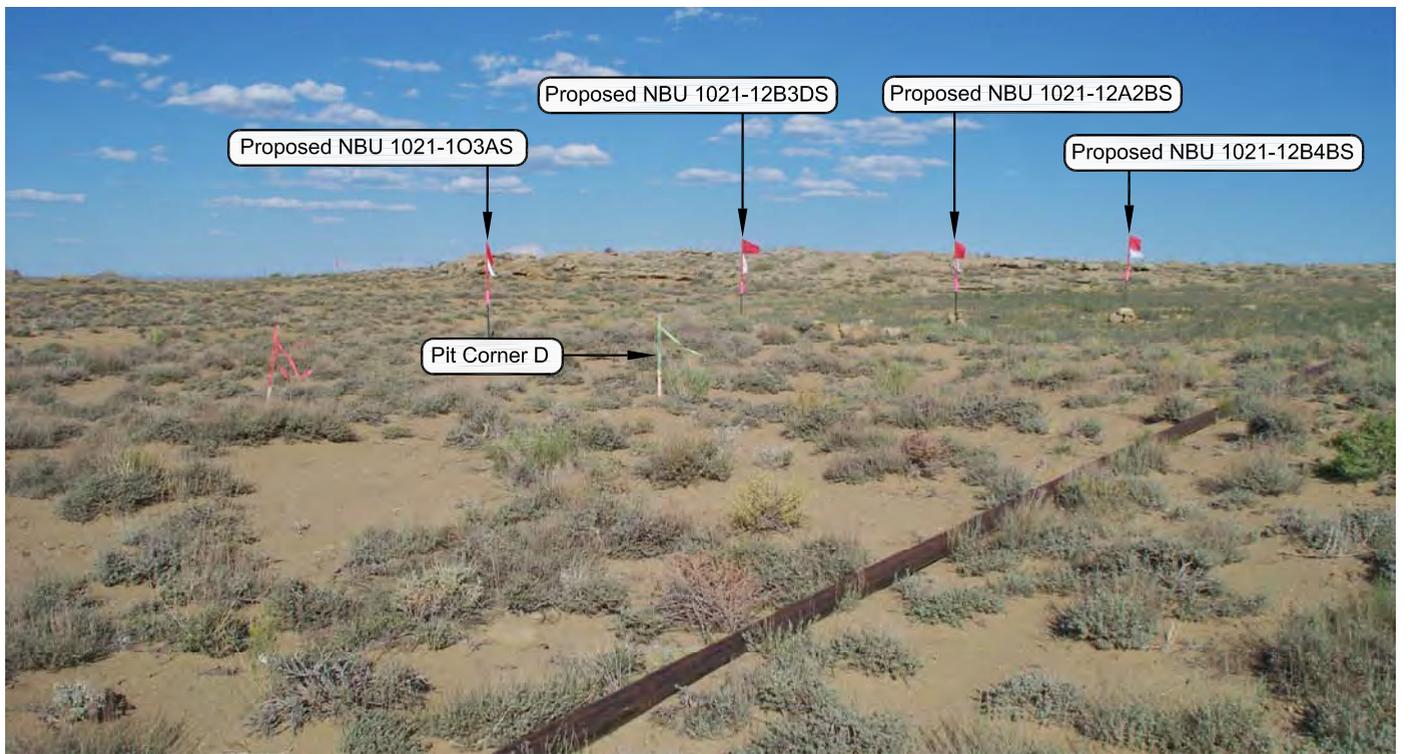


PHOTO VIEW: FROM PIT CORNER D TO LOCATION STAKE

CAMERA ANGLE: SOUTHEASTERLY



PHOTO VIEW: FROM BEGINNING OF PROPOSED ROAD

CAMERA ANGLE: NORTHEASTERLY

**Kerr-McGee Oil & Gas Onshore, LP**  
1099 18th Street - Denver, Colorado 80202

**Well Pad - NBU 1021-10**

**NBU 1021-103AS, NBU 1021-12B3DS,  
NBU 1021-12A2BS & NBU 1021-12B4BS  
LOCATION PHOTOS  
LOCATED IN SECTION 1, T10S, R21E,  
S.L.B.&M., UINTAH COUNTY, UTAH.**



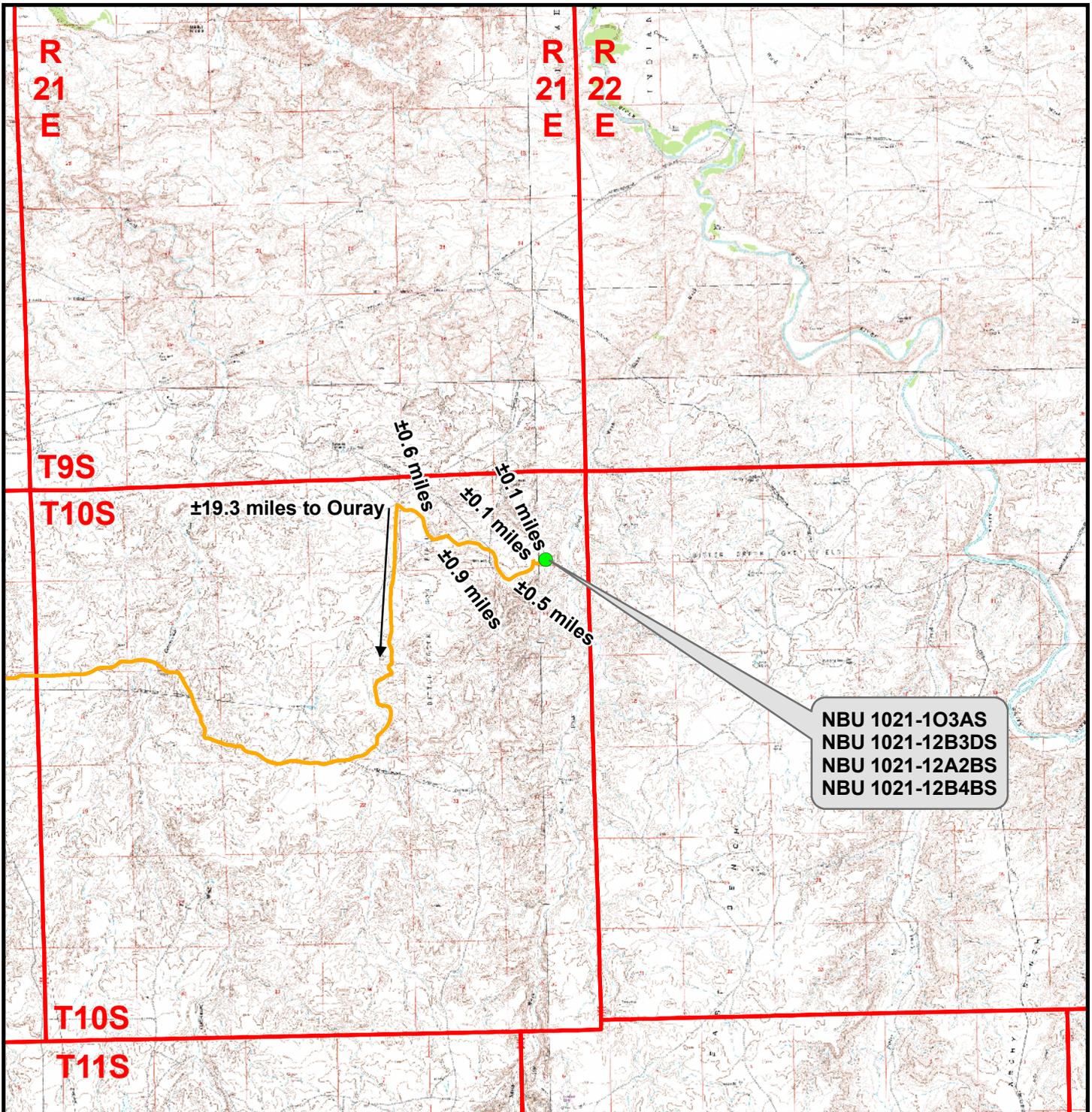
**CONSULTING, LLC**  
371 Coffeen Avenue  
Sheridan WY 82801  
Phone 307-674-0609  
Fax 307-674-0182

**TIMBERLINE**

(435) 789-1365

**ENGINEERING & LAND SURVEYING, INC.**  
209 NORTH 300 WEST - VERNAL, UTAH 84078

|                                   |                         |                       |
|-----------------------------------|-------------------------|-----------------------|
| DATE PHOTOS TAKEN:<br>06-24-09    | PHOTOS TAKEN BY: D.J.S. | SHEET NO:<br><b>8</b> |
| DATE DRAWN:<br>06-29-09           | DRAWN BY: M.W.W.        |                       |
| Date Last Revised: 2-12-10 M.W.W. |                         | 8 OF 13               |



NBU 1021-103AS  
 NBU 1021-12B3DS  
 NBU 1021-12A2BS  
 NBU 1021-12B4BS

**Legend**

- Proposed Well Location
- Access Route - Proposed

**Kerr-McGee Oil & Gas Onshore, LP**  
 1099 18th Street, Denver, Colorado 80202

**Well Pad - NBU 1021-10**

**NBU 1021-103AS, NBU 1021-12B3DS,  
 NBU 1021-12A2BS & NBU 1021-12B4BS**

**Topo A**

**Located In Section 1, T10S, R21E  
 S.L.B.&M., Uintah County, Utah**

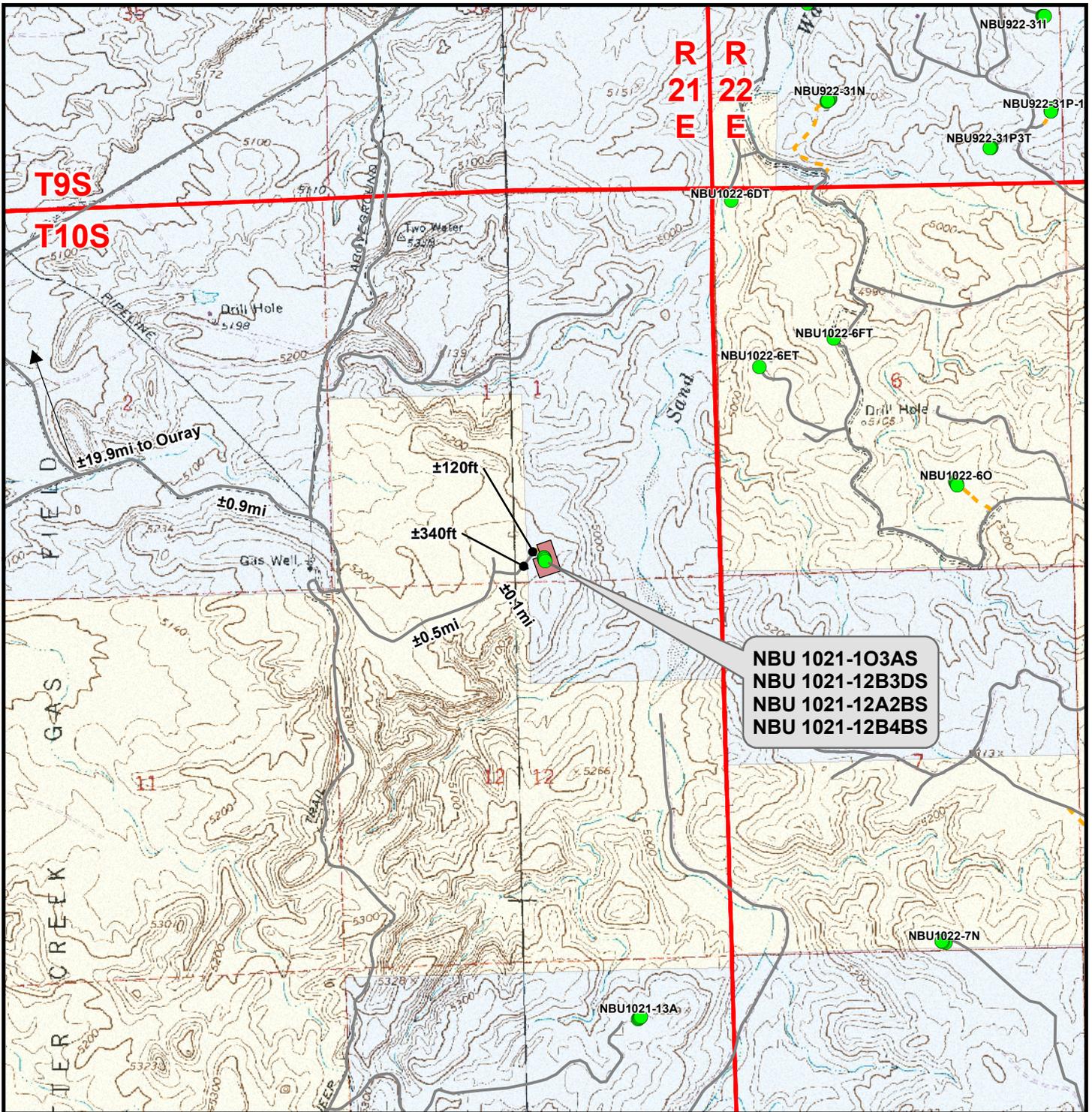


**CONSULTING, LLC**  
 371 Coffeen Avenue  
 Sheridan, WY 82801  
 Phone (307) 674-0609  
 Fax (307) 674-0182



|                  |                    |
|------------------|--------------------|
| Scale: 1:100,000 | NAD83 USP Central  |
| Drawn: JELo      | Date: 30 June 2009 |
| Revised: JELo    | Date: 12 Feb 2010  |

|                       |         |
|-----------------------|---------|
| Sheet No:<br><b>9</b> | 9 of 13 |
|-----------------------|---------|



**Legend**

- Well - Proposed
- Well Pad
- Road - Proposed
- Bureau of Land Management
- State
- Road - Existing
- Indian Reservation
- Private

Total Proposed Road Length: ±120ft

**Kerr-McGee Oil & Gas Onshore, LP**  
 1099 18th Street, Denver, Colorado 80202

**Well Pad - NBU 1021-10**

**NBU 1021-103AS, NBU 1021-12B3DS,  
 NBU 1021-12A2BS & NBU 1021-12B4BS**

**Topo B**

**Located In Section 1, T10S, R21E  
 S.L.B.&M., Uintah County, Utah**

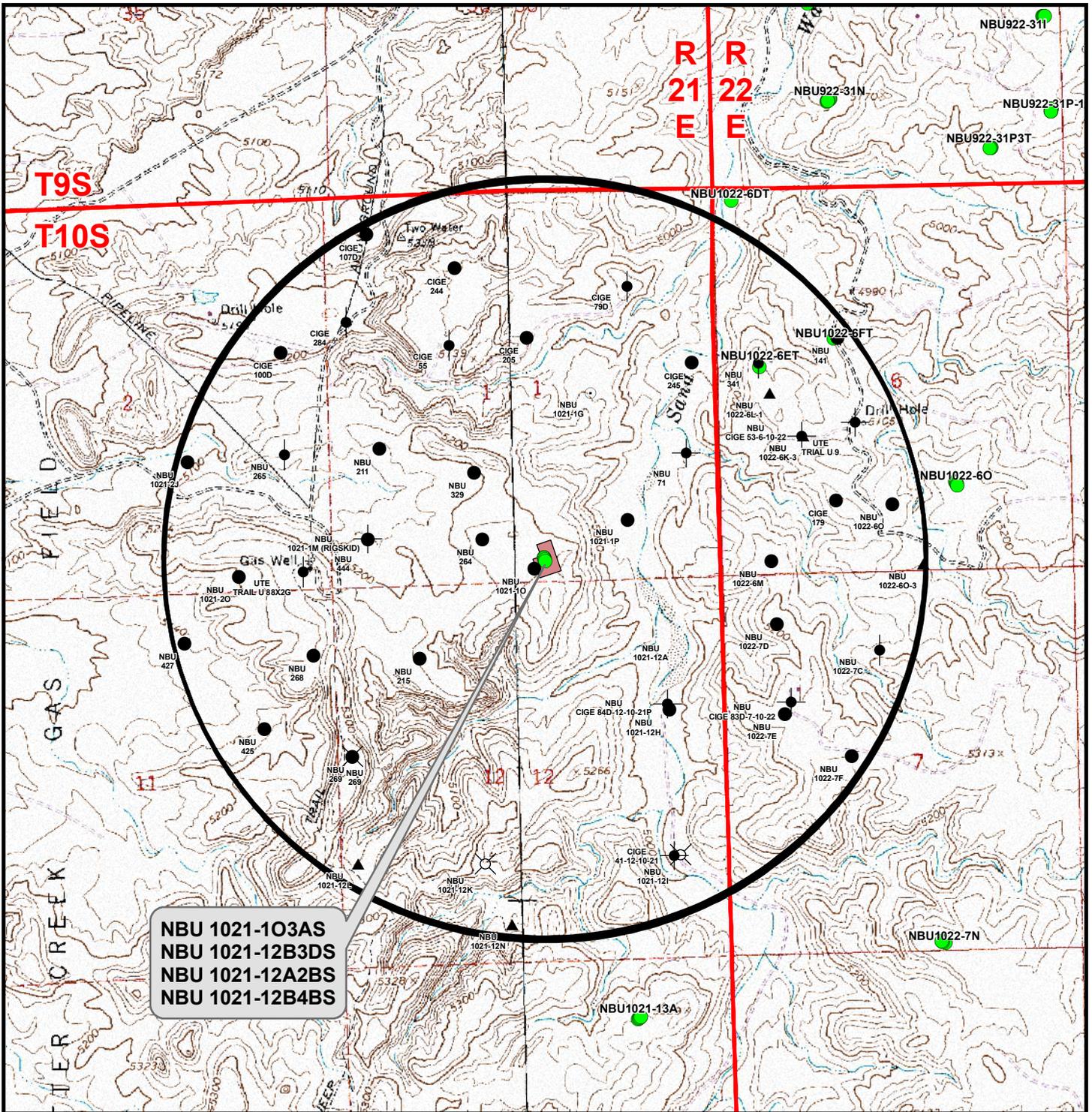


**CONSULTING, LLC**  
 371 Coffeen Avenue  
 Sheridan, WY 82801  
 Phone (307) 674-0609  
 Fax (307) 674-0182



|                     |                    |
|---------------------|--------------------|
| Scale: 1" = 2,000ft | NAD83 USP Central  |
| Drawn: JELO         | Date: 30 June 2009 |
| Revised: JELO       | Date: 12 Feb 2010  |

Sheet No:  
10 10 of 13



**NBU 1021-103AS**  
**NBU 1021-12B3DS**  
**NBU 1021-12A2BS**  
**NBU 1021-12B4BS**

**Legend**

- Well - Proposed
- Well - 1 Mile Radius
- Producing
- ▲ Approved permit (APD); not yet spudded
- Spudded (Drilling commenced: Not yet complete)
- ⊗ Location Abandoned
- Temporarily-Abandoned
- ⊕ Plugged and Abandoned
- ⊙ Shut-In

**Kerr-McGee Oil & Gas Onshore, LP**  
 1099 18th Street, Denver, Colorado 80202

**Well Pad - NBU 1021-10**

**NBU 1021-103AS, NBU 1021-12B3DS,  
 NBU 1021-12A2BS & NBU 1021-12B4BS**

**Topo C**

**Located In Section 1, T10S, R21E  
 S.L.B.&M., Uintah County, Utah**

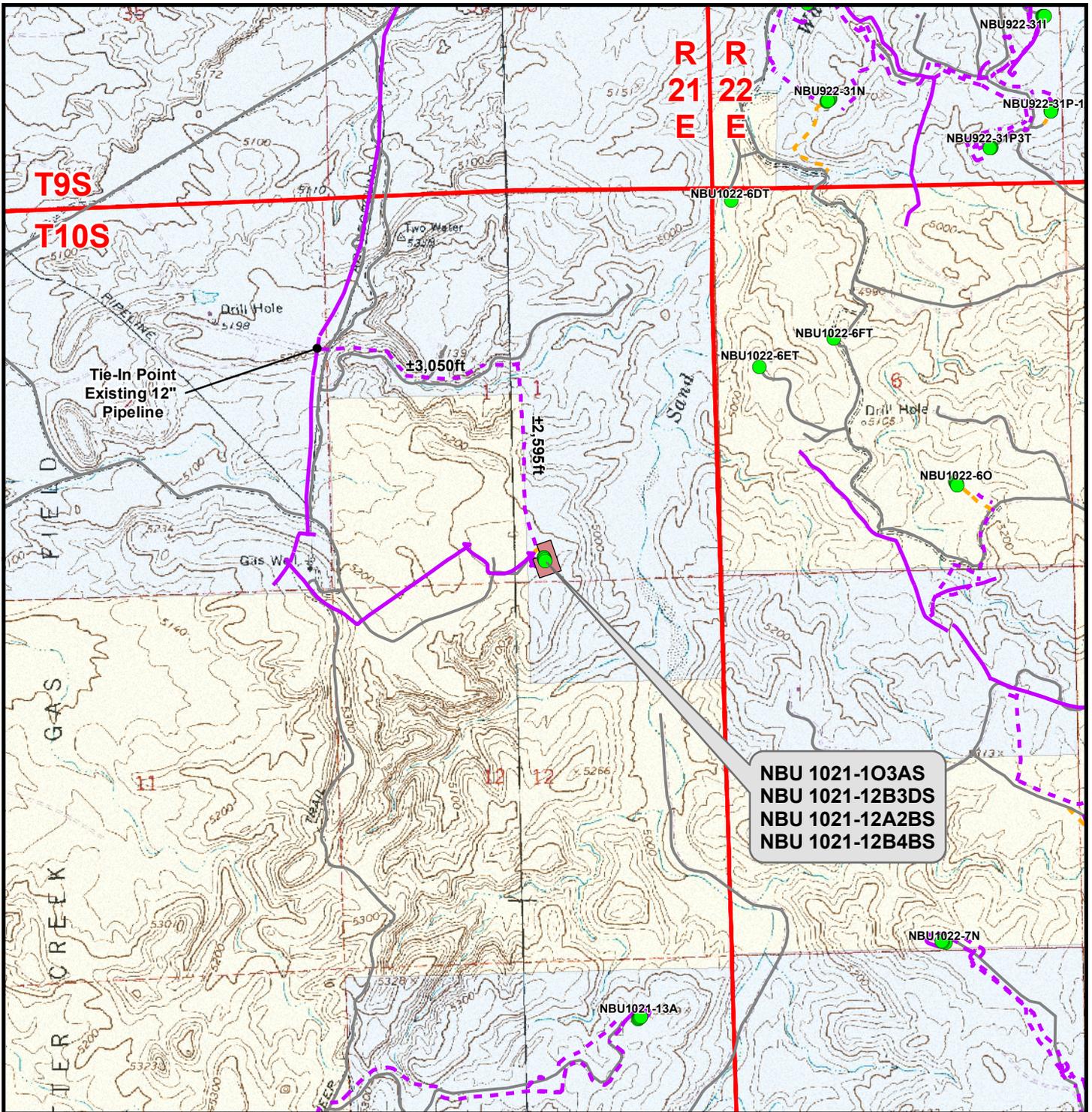


**609 CONSULTING, LLC**  
 371 Coffeen Avenue  
 Sheridan, WY 82801  
 Phone (307) 674-0609  
 Fax (307) 674-0182



|                     |                    |           |
|---------------------|--------------------|-----------|
| Scale: 1" = 2,000ft | NAD83 USP Central  | Sheet No: |
| Drawn: JELO         | Date: 30 June 2009 | 11        |
| Revised: JELO       | Date: 12 Feb 2010  |           |

11 of 13



**Legend**

- Well - Proposed
- Well Pad
- Road - Proposed
- Pipeline - Proposed
- Bureau of Land Management
- State
- Road - Existing
- Pipeline - Existing
- Indian Reservation
- Private

Proposed Pipeline Length From Tie-In Point To Edge Of Pad: ±5,645ft  
 Proposed Pipeline Length Around Pad: ±660ft

**Kerr-McGee Oil & Gas Onshore, LP**  
 1099 18th Street, Denver, Colorado 80202

**Well Pad - NBU 1021-10**

**NBU 1021-103AS, NBU 1021-12B3DS,  
 NBU 1021-12A2BS & NBU 1021-12B4BS**

**Topo D**

**Located In Section 1, T10S, R21E  
 S.L.B.&M., Uintah County, Utah**



**609 CONSULTING, LLC**  
 371 Coffeen Avenue  
 Sheridan, WY 82801  
 Phone (307) 674-0609  
 Fax (307) 674-0182



Scale: 1" = 2,000ft | NAD83 USP Central  
 Drawn: JELo | Date: 30 June 2009  
 Revised: JELo | Date: 12 Feb 2010

Sheet No:  
**12** 12 of 13

**Kerr-McGee Oil & Gas Onshore, LP**  
**WELL PAD - NBU 1021-10**  
**WELLS – NBU 1021-12B3DS, NBU 1021-12B4BS , NBU 1021-12A2BS**  
**& NBU 1021-103AS**  
**Section 1, T10S, R21E, S.L.B.&M.**

PROCEED IN A WESTERLY DIRECTION FROM VERNAL, UTAH ALONG U.S. HIGHWAY 40 APPROXIMATELY 13.9 MILES TO THE JUNCTION OF STATE HIGHWAY 88. EXIT LEFT AND PROCEED IN A SOUTHERLY DIRECTION ALONG STATE HIGHWAY 88 APPROXIMATELY 16.8 MILES TO OURAY, UTAH. FROM OURAY, PROCEED IN A SOUTHERLY DIRECTION ALONG THE SEEP RIDGE ROAD (COUNTY B ROAD 2810) APPROXIMATELY 11.2 MILES TO THE INTERSECTION OF THE GLEN BENCH ROAD (COUNTY B ROAD 3260). EXIT LEFT AND PROCEED IN AN EASTERLY, THEN SOUTHEASTERLY, THEN NORTHEASTERLY DIRECTION ALONG THE GLEN BENCH ROAD APPROXIMATELY 8.1 MILES TO A CLASS D COUNTY ROAD TO THE SOUTHEAST. EXIT RIGHT AND PROCEED IN A SOUTHEASTERLY DIRECTION 0.6 MILES TO THE WEST SAND WASH ROAD (COUNTY B ROAD 4110). EXIT LEFT AND PROCEED IN AN EASTERLY, THEN SOUTHEASTERLY DIRECTION ALONG THE WEST SAND WASH ROAD APPROXIMATELY 0.9 MILES TO A SERVICE ROAD TO THE SOUTHEAST. EXIT LEFT AND PROCEED IN A SOUTHEASTERLY, THEN NORTHEASTERLY DIRECTION ALONG THE SERVICE ROAD APPROXIMATELY 0.5 MILES TO THE EXISTING ACCESS ROAD FOR THE NBU 1021-10 WELL PAD. EXIT RIGHT AND PROCEED IN AN EASTERLY DIRECTION ALONG THE ACCESS ROAD APPROXIMATELY 0.1 MILES TO THE NBU 1021-10 WELL PAD. PROCEED NORTHEASTERLY APPROXIMATELY 340 FEET CROSSING THE NBU 1021-10 WELL SITE AND TO THE PROPOSED ACCESS ROAD. FOLLOW ROAD FLAGS IN A NORTHEASTERLY DIRECTION APPROXIMATELY 120 FEET TO THE PROPOSED WELL PAD.

TOTAL DISTANCE FROM VERNAL, UTAH TO THE PROPOSED WELL LOCATION IS APPROXIMATELY 52.2 MILES IN A SOUTHERLY DIRECTION.

**NBU 1021-1O3AS**

Surface: 393' FSL 2,439' FEL (SW/4SE/4) Section 1  
BHL: 368' FSL 2,037' FEL (SW/4SE/4) Section 1

**NBU 1021-12A2BS**

Surface: 355' FSL 2,427' FEL (SW/4SE/4) Section 1  
BHL: 338' FNL 1,070' FEL (NE/4NE/4) Section 12

**NBU 1021-12B3DS**

Surface: 374' FSL 2,433' FEL (SW/4SE/4) Section 1  
BHL: 1,160' FNL 2,250' FEL (NW/4NE/4) Section 12

**NBU 1021-12B4BS**

Surface: 336' FSL 2,422' FEL (SW/4SE/4) Section 1  
BHL: 897' FNL 1,747' FEL (NW/4NE/4) Section 12

Pad: NBU 1021-1O  
T10S R21E  
Mineral Lease: ML 23612

Uintah, Utah  
Operator: Kerr-McGee Oil & Gas Onshore LP

**ONSHORE ORDER NO. 1**

***MULTI-POINT SURFACE USE & OPERATIONS PLAN  
SUBMITTED WITH SITE-SPECIFIC INFORMATION***

An on-site meeting was held on January 12, 2010. Present were:

- Floyd Bartlett – UDOGM
- Jim Davis - SITLA
- Alex Hansen, Ben Williams – Division of Wildlife Resources (DWR)
- John Slauch, Mitch Batty – 609 Consulting, LLC
- Clay Einerson, Tony Kazeck, Sheila Wopsock, Raamey Hoopes, Dave Daniels – Kerr- McGee Oil & Gas Onshore LP. (Kerr-McGee)

**Directional Drilling:**

In accordance with Utah Oil & Gas Conservation Rule R649-3-11 pertaining to Directional Drilling, this well will be directionally drilled in order to access portions of our lease which are otherwise inaccessible due to topography.

**A. Existing Roads:**

- A) Refer to Topo Map A for directions to the location.
- B) Refer to Topo Maps A and B for location of access roads within a 2-mile radius.

**B. Planned Access Roads:**

*See MDP for additional details on road construction.*

Approximately ±120' (±0.02 miles) of new access road is proposed. Please refer to the attached Topo Map B. No pipelines will be crossed with the new construction.

*Existence of pipelines; maximum grade; turnouts; major cut and fills, culverts, or bridges; gates, cattle guards, fence cuts, or modifications to existing facilities were determined at the on-site and are typically shown on the attached Exhibits and Topo maps.*

**C. Location of Existing Wells Within a 1-Mile Radius:**

Please refer to Topo Map C.

**D. Location of Existing and Proposed Facilities:**

*See MDP for additional details on Existing and Proposed Facilities.*

This pad will expand the existing pad for the NBU 1021-10 well, which is a producing well according to Utah Division of Oil, Gas and Mining (UDOGM) records.

*The following guidelines will apply if the well is productive.*

Approximately ±5,645' (±1.07 miles) of new 6" buried pipeline is proposed from the tie in point to the edge of the pad. Another approximately ±660' (±0.13 miles) of proposed 6" buried pipeline is proposed around the pad. Please refer to Topo D for the existing pipeline. Pipeline segments will be welded or zaplocked together on disturbed areas in or near the location, whenever possible, and dragged into place.

**E. Location and Type of Water Supply:**

*See MDP for additional details on Location and Type of Water Supply.*

Water for drilling purposes will be obtained from the following sources:

|         |                      |                             |
|---------|----------------------|-----------------------------|
| 49-2243 | Target Trucking Inc. | Green River- Various points |
| 49-2300 | R.N. Industries      | White River- Various points |
| 49-2298 | RNI Trucking         | White River- Various points |
| 49-2231 | Nile Chapman         | Green River- Various points |
| 49-2299 | R.N. Industries      | Green River- Various points |
| 49-2306 | R.N. Industries      | White River- Various points |

Water will be hauled to location over the roads marked on Maps A and B.

No water well is to be drilled on this lease.

**F. Source of Construction Materials:**

*See MDP for additional details on Source of Construction Materials.*

**G. Methods of Handling Waste Materials:**

*See MDP for additional details on Methods of Handling Waste Materials.*

Any produced water from the proposed well will be contained in a water tank and will then be hauled by truck to one of the pre-approved disposal sites:

RNI in Sec. 5 T9S R22E  
NBU #159 in Sec. 35 T9S R21E  
Ace Oilfield in Sec. 2 T6S R20E  
MC&MC in Sec. 12 T6S R19E  
Pipeline Facility in Sec. 36 T9S R20E  
Goat Pasture Evaporation Pond in SW/4 Sec. 16 T10S R22E  
Bonanza Evaporation Pond in Sec. 2 T10S R23E

**H. Ancillary Facilities:**

*See MDP for additional details on Ancillary Facilities.*

None are anticipated.

**I. Well Site Layout:** (See Location Layout Diagram)

*See MDP for additional details on Well Site Layout.*

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

- Net wire (39-inch) will be used with at least one strand of barbed wire on top of the net wire. Barbed wire is not necessary if pipe or some type of reinforcement rod is attached to the top of the entire fence.
- The net wire shall be no more than two inches above the ground. The barbed wire shall be three inches over the net wire. Total height of the fence shall be at least 42 inches.
- Corner posts shall be cemented and/or braced in such a manner to keep the fence tight at all times.
- Standard steel, wood, or pipe posts shall be used between the corner braces. Maximum distance between any 2 fence posts shall be no greater than 16 feet.
- All wire shall be stretched, by using a stretching device, before it is attached to corner posts.

**J. Plans for Reclamation of the Surface:**

*See MDP for additional details on Plans for Reclamation of the Surface.*

**K. Surface/Mineral Ownership:**

SITLA  
675 East 500 South, Suite 500  
Salt Lake City, UT 84102

**L. Other Information:**

*See MDP for additional details on Other Information.*

**M. Lessee's or Operators' Representative & Certification:**

Danielle Piernot  
Regulatory Analyst  
Kerr-McGee Oil & Gas Onshore LP  
PO Box 173779  
Denver, CO 80217-3779  
(720) 929-6156

Tommy Thompson  
General Manager, Drilling  
Kerr-McGee Oil & Gas Onshore LP  
PO Box 173779  
Denver, CO 80217-3779  
(720) 929-6724

Certification: All lease and/or unit operations will be conducted in such a manner that full compliance is made with all applicable laws, regulations, Onshore Oil and Gas Orders, the approved Plan of Operations, and any applicable Notice to Lessees.

The Operator will be fully responsible for the actions of its subcontractors. A complete copy of the approved "Application for Permit to Drill" will be furnished to the field representative(s) to ensure compliance and shall be on location during all construction and drilling operations.

Kerr-McGee Oil & Gas Onshore LP is considered to be the operator of the subject well. Kerr-McGee Oil & Gas Onshore LP agrees to be responsible under terms and conditions of the lease for the operations conducted upon leased lands.

Bond coverage pursuant to 43 CFR 3104 for lease activities is being provided by State Surety Bond 22013542.

I hereby certify that I, or persons under my supervision, have inspected the proposed drill site and access route, that I am familiar with the conditions that currently exist; that I have full knowledge of the State and Federal laws applicable to this operation; that the statements made in this plan are, to the best of my knowledge, true and correct; and the work associated with the operations proposed herein will be performed in conformity with this APD package and the terms and conditions under which it is approved. I also certify that I, or the company I represent, am responsible for operations conducted under this application. These statements are subject to the provisions of 18 U.S.C. 1001 for the filing of false statements.

  
Danielle Piernot

December 18, 2009  
Date

|  |   |
|--|---|
| <b>STATE OF UTAH</b><br>DEPARTMENT OF NATURAL RESOURCES<br>DIVISION OF OIL, GAS, AND MINING  | <b>FORM 9</b><br><br><b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b><br>ML 23612                                     |
| <b>SUNDRY NOTICES AND REPORTS ON WELLS</b><br><br>Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals. | <b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b><br><br><b>7. UNIT or CA AGREEMENT NAME:</b><br>NATURAL BUTTES          |
| <b>1. TYPE OF WELL</b><br>Gas Well   | <b>8. WELL NAME and NUMBER:</b><br>NBU 1021-12B3DS  |
| <b>2. NAME OF OPERATOR:</b><br>KERR-MCGEE OIL & GAS ONSHORE, L.P.  | <b>9. API NUMBER:</b><br>43047508560000   |
| <b>3. ADDRESS OF OPERATOR:</b><br>P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779  | <b>PHONE NUMBER:</b><br>720 929-6007 Ext  |
| <b>4. LOCATION OF WELL</b><br><b>FOOTAGES AT SURFACE:</b><br>0374 FSL 2433 FEL<br><b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b><br>Qtr/Qtr: SWSE Section: 1 Township: 10.0S Range: 21.0E Meridian: S   | <b>9. FIELD and POOL or WILDCAT:</b><br>NATURAL BUTTES<br><br><b>COUNTY:</b><br>UINTAH<br><br><b>STATE:</b><br>UTAH |

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

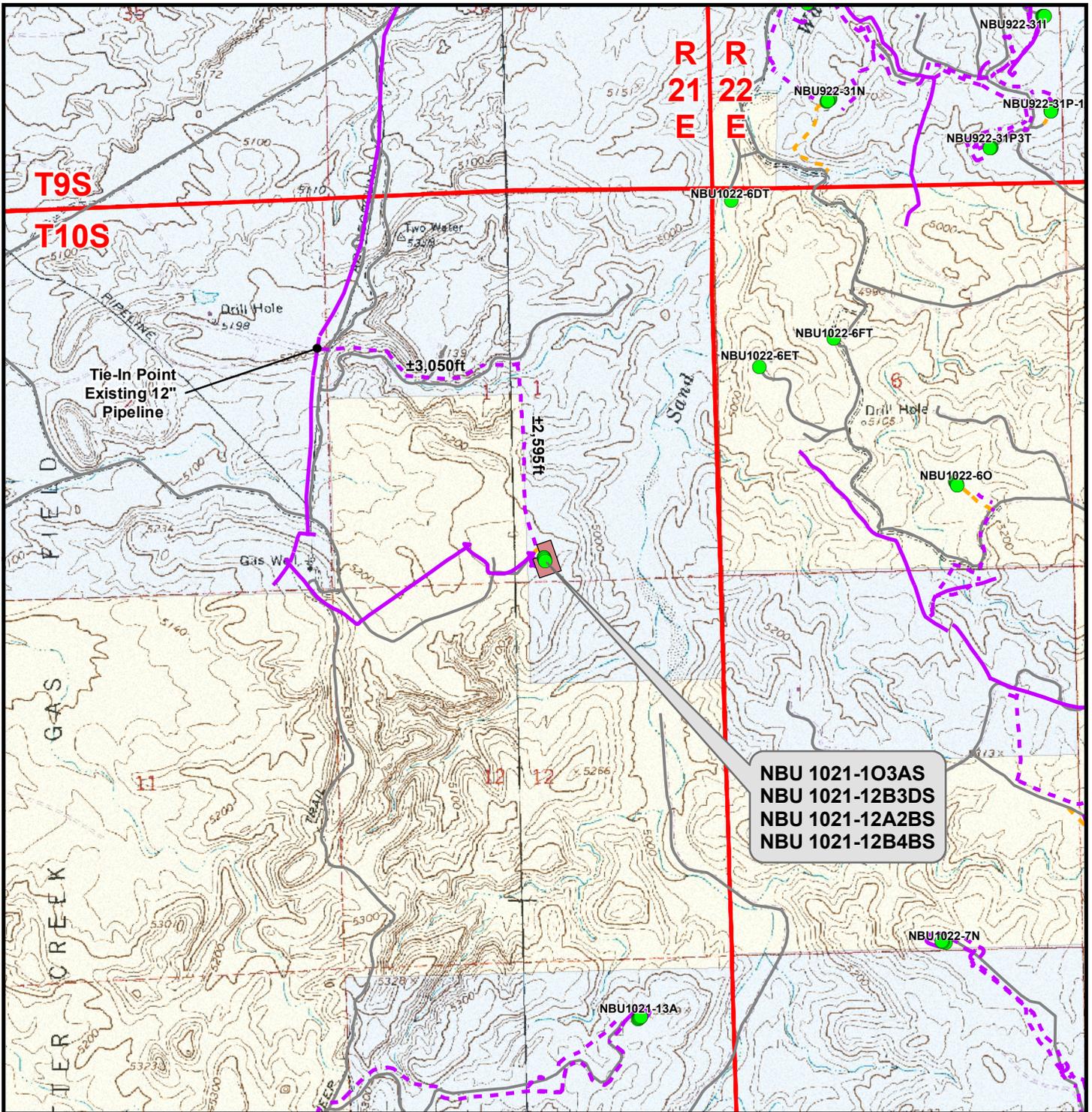
| TYPE OF SUBMISSION  | TYPE OF ACTION  |   |  |
|---|---|---|--|
| <input checked="" type="checkbox"/> <b>NOTICE OF INTENT</b><br>Approximate date work will start:<br>4/12/2010<br><br><input type="checkbox"/> <b>SUBSEQUENT REPORT</b><br>Date of Work Completion:<br><br><input type="checkbox"/> <b>SPUD REPORT</b><br>Date of Spud:<br><br><input type="checkbox"/> <b>DRILLING REPORT</b><br>Report Date: | <input type="checkbox"/> ACIDIZE<br><input checked="" type="checkbox"/> <b>CHANGE TO PREVIOUS PLANS</b><br><input type="checkbox"/> CHANGE WELL STATUS<br><input type="checkbox"/> DEEPEN<br><input type="checkbox"/> OPERATOR CHANGE<br><input type="checkbox"/> PRODUCTION START OR RESUME<br><input type="checkbox"/> REPERFORATE CURRENT FORMATION<br><input type="checkbox"/> TUBING REPAIR<br><input type="checkbox"/> WATER SHUTOFF<br><input type="checkbox"/> WILDCAT WELL DETERMINATION | <input type="checkbox"/> ALTER CASING<br><input type="checkbox"/> CHANGE TUBING<br><input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS<br><input type="checkbox"/> FRACTURE TREAT<br><input type="checkbox"/> PLUG AND ABANDON<br><input type="checkbox"/> RECLAMATION OF WELL SITE<br><input type="checkbox"/> SIDETRACK TO REPAIR WELL<br><input type="checkbox"/> VENT OR FLARE<br><input type="checkbox"/> SI TA STATUS EXTENSION<br><input type="checkbox"/> OTHER | <input type="checkbox"/> CASING REPAIR<br><input type="checkbox"/> CHANGE WELL NAME<br><input type="checkbox"/> CONVERT WELL TYPE<br><input type="checkbox"/> NEW CONSTRUCTION<br><input type="checkbox"/> PLUG BACK<br><input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION<br><input type="checkbox"/> TEMPORARY ABANDON<br><input type="checkbox"/> WATER DISPOSAL<br><input type="checkbox"/> APD EXTENSION<br>OTHER: |

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

Kerr-McGee Oil & Gas Onshore LP (Kerr-McGee) respectfully requests to change the size of the pipeline for this location. The ±2,595' portion of pipeline that is traveling northerly from the well pad will be a buried 6" pipeline and the ±3,050' portion of pipeline traveling westerly to the tie in point will be a buried 10" pipeline. The pipeline will follow the same route as detailed in the sundry notice accepted for record on March 23, 2010. Please see the attached pipeline plat for additional details. Please contact the undersigned with any questions and/or comments. Thank you.

**Accepted by the**  
**Utah Division of**  
**Oil, Gas and Mining**  
**FOR RECORD ONLY**  
 April 08, 2010

|  |                                     |                                    |
|--|-------------------------------------|------------------------------------|
| <b>NAME (PLEASE PRINT)</b><br>Danielle Piernot | <b>PHONE NUMBER</b><br>720 929-6156 | <b>TITLE</b><br>Regulatory Analyst |
| <b>SIGNATURE</b><br>N/A                        | <b>DATE</b><br>4/8/2010             |                                    |



**Legend**

- Well - Proposed
- Well Pad
- Road - Proposed
- Pipeline - Proposed
- Bureau of Land Management
- State
- Road - Existing
- Pipeline - Existing
- Indian Reservation
- Private

Proposed Pipeline Length From Tie-In Point To Edge Of Pad: ±5,645ft  
 Proposed Pipeline Length Around Pad: ±660ft

**Kerr-McGee Oil & Gas Onshore, LP**  
 1099 18th Street, Denver, Colorado 80202

**Well Pad - NBU 1021-10**

**NBU 1021-103AS, NBU 1021-12B3DS,  
 NBU 1021-12A2BS & NBU 1021-12B4BS**

**Topo D**

**Located In Section 1, T10S, R21E  
 S.L.B.&M., Uintah County, Utah**



**609 CONSULTING, LLC**  
 371 Coffeen Avenue  
 Sheridan, WY 82801  
 Phone (307) 674-0609  
 Fax (307) 674-0182



Scale: 1" = 2,000ft | NAD83 USP Central  
 Drawn: JELo | Date: 30 June 2009  
 Revised: JELo | Date: 12 Feb 2010

Sheet No:  
**12** 12 of 13

ENTITY ACTION FORM

Operator: KERR McGEE OIL & GAS ONSHORE LP Operator Account Number: N 2995  
 Address: P.O. Box 173779  
city DENVER  
state CO zip 80217 Phone Number: (720) 929-6100

Well 1

| API Number   | Well Name             |                   | QQ        | Sec | Twp | Rng                              | County |
|--|-----------------------|-------------------|-----------|-----|-----|----------------------------------|--------|
| 4304750856   | NBU 1021-12B3DS       |                   | SWSE      | 1   | 10S | 21E                              | UINTAH |
| Action Code  | Current Entity Number | New Entity Number | Spud Date |     |     | Entity Assignment Effective Date |        |
| B  | 99999                 | 2900              | 5/10/2010 |     |     | 5/18/10                          |        |
| <b>Comments:</b> MIRU PETE MARTIN BUCKET RIG. <i>WSMVD</i><br>SPUD WELL LOCATION ON 5/10/2010 AT 12:00 HRS. <i>BHL = Sec 12 NWNE</i> |                       |                   |           |     |     |                                  |        |

Well 2

| API Number   | Well Name             |                   | QQ        | Sec | Twp | Rng                              | County |
|--|-----------------------|-------------------|-----------|-----|-----|----------------------------------|--------|
| 4304750855   | NBU 1021-12A2BS       |                   | SWSE      | 1   | 10S | 21E                              | UINTA  |
| Action Code  | Current Entity Number | New Entity Number | Spud Date |     |     | Entity Assignment Effective Date |        |
| B  | 99999                 | 2900              | 5/10/2010 |     |     | 5/18/10                          |        |
| <b>Comments:</b> MIRU PETE MARTIN BUCKET RIG. <i>WSMVD</i><br>SPUD WELL LOCATION ON 5/10/2010 AT 14:00 HRS. <i>BHL = Sec 12 NENE</i> |                       |                   |           |     |     |                                  |        |

Well 3

| API Number   | Well Name             |                   | QQ        | Sec | Twp | Rng                              | County |
|--|-----------------------|-------------------|-----------|-----|-----|----------------------------------|--------|
| 4304750857   | NBU 1021-12B4BS       |                   | SWSE      | 1   | 10S | 21E                              | UINTAH |
| Action Code  | Current Entity Number | New Entity Number | Spud Date |     |     | Entity Assignment Effective Date |        |
| B  | 99999                 | 2900              | 5/10/2010 |     |     | 5/18/10                          |        |
| <b>Comments:</b> MIRU PETE MARTIN BUCKET RIG. <i>WSMVD</i><br>SPUD WELL LOCATION ON 5/10/2010 AT 16:00 HRS. <i>BHL = Sec 12 NWNE</i> |                       |                   |           |     |     |                                  |        |

ACTION CODES:

- A - Establish new entity for new well (single well only)
- B - Add new well to existing entity (group or unit well)
- C - Re-assign well from one existing entity to another existing entity
- D - Re-assign well from one existing entity to a new entity
- E - Other (Explain in 'comments' section)

RECEIVED

MAY 11 2010

DIV. OF OIL, GAS & MINING

ANDY LYTLE

Name (Please Print)

Signature  
REGULATORY ANALYST

Title

5/11/2010

Date

|  |   |
|--|---|
| <b>STATE OF UTAH</b><br>DEPARTMENT OF NATURAL RESOURCES<br>DIVISION OF OIL, GAS, AND MINING  | <b>FORM 9</b><br><br><b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b><br>ML 23612                                     |
| <b>SUNDRY NOTICES AND REPORTS ON WELLS</b><br><br>Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals. | <b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b><br><br><b>7. UNIT or CA AGREEMENT NAME:</b><br>NATURAL BUTTES          |
| <b>1. TYPE OF WELL</b><br>Gas Well   | <b>8. WELL NAME and NUMBER:</b><br>NBU 1021-12B3DS  |
| <b>2. NAME OF OPERATOR:</b><br>KERR-MCGEE OIL & GAS ONSHORE, L.P.  | <b>9. API NUMBER:</b><br>43047508560000   |
| <b>3. ADDRESS OF OPERATOR:</b><br>P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779  | <b>PHONE NUMBER:</b><br>720 929-6007 Ext  |
| <b>4. LOCATION OF WELL</b><br><b>FOOTAGES AT SURFACE:</b><br>0374 FSL 2433 FEL<br><b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b><br>Qtr/Qtr: SWSE Section: 1 Township: 10.0S Range: 21.0E Meridian: S   | <b>9. FIELD and POOL or WILDCAT:</b><br>NATURAL BUTTES<br><br><b>COUNTY:</b><br>Uintah<br><br><b>STATE:</b><br>UTAH |

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

| TYPE OF SUBMISSION  | TYPE OF ACTION   |   |   |
|---|--|---|---|
| <input type="checkbox"/> <b>NOTICE OF INTENT</b><br>Approximate date work will start:   | <input type="checkbox"/> ACIDIZE                       | <input type="checkbox"/> ALTER CASING                   | <input type="checkbox"/> CASING REPAIR                  |
| <input type="checkbox"/> <b>SUBSEQUENT REPORT</b><br>Date of Work Completion:           | <input type="checkbox"/> CHANGE TO PREVIOUS PLANS      | <input type="checkbox"/> CHANGE TUBING                  | <input type="checkbox"/> CHANGE WELL NAME               |
| <input type="checkbox"/> <b>SPUD REPORT</b><br>Date of Spud:                            | <input type="checkbox"/> CHANGE WELL STATUS            | <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS | <input type="checkbox"/> CONVERT WELL TYPE              |
| <input checked="" type="checkbox"/> <b>DRILLING REPORT</b><br>Report Date:<br>5/21/2010 | <input type="checkbox"/> DEEPEN                        | <input type="checkbox"/> FRACTURE TREAT                 | <input type="checkbox"/> NEW CONSTRUCTION               |
|   | <input type="checkbox"/> OPERATOR CHANGE               | <input type="checkbox"/> PLUG AND ABANDON               | <input type="checkbox"/> PLUG BACK                      |
|   | <input type="checkbox"/> PRODUCTION START OR RESUME    | <input type="checkbox"/> RECLAMATION OF WELL SITE       | <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION |
|   | <input type="checkbox"/> REPERFORATE CURRENT FORMATION | <input type="checkbox"/> SIDETRACK TO REPAIR WELL       | <input type="checkbox"/> TEMPORARY ABANDON              |
|   | <input type="checkbox"/> TUBING REPAIR                 | <input type="checkbox"/> VENT OR FLARE                  | <input type="checkbox"/> WATER DISPOSAL                 |
|   | <input type="checkbox"/> WATER SHUTOFF                 | <input type="checkbox"/> SI TA STATUS EXTENSION         | <input type="checkbox"/> APD EXTENSION                  |
|   | <input type="checkbox"/> WILDCAT WELL DETERMINATION    | <input type="checkbox"/> OTHER                          | OTHER:  |

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

MIRU CAPSTAR AIR RIG ON MAY 19, 2010. DRILLED 11" SURFACE HOLE TO 2254'. RAN 8 5/8" 28# J-55 SURFACE CSG. PUMP 120 BBLS FRESH WATER. PUMP 20 BBLS GEL WATER. PUMP 225 SX CLASS G PREM LITE @ 15.8 PPG, 1.15 YD. DISPLACED W/ 135.5 BBLS WATER, BUMP PLUG, FLOATS HELD. CIRC THROUGHOUT JOB. TOP OUT W/ 100 SK CLASS G PREMIUM LITE @ 15.8 PPG, 1.15 YD. TOP OUT #2 W/ 100 SX SAME CEMENT. NO CEMENT TO SURFACE. TOP OUT #3 W/ 415 SX SAME CEMENT. CEMENT TO SURFACE. WORT.

Accepted by the  
 Utah Division of  
 Oil, Gas and Mining  
**FOR RECORD ONLY**  
 June 01, 2010

|  |                                     |                                    |
|--|-------------------------------------|------------------------------------|
| <b>NAME (PLEASE PRINT)</b><br>Andy Lytle | <b>PHONE NUMBER</b><br>720 929-6100 | <b>TITLE</b><br>Regulatory Analyst |
| <b>SIGNATURE</b><br>N/A                  | <b>DATE</b><br>5/25/2010            |                                    |

|  |   |
|--|---|
| <b>STATE OF UTAH</b><br>DEPARTMENT OF NATURAL RESOURCES<br>DIVISION OF OIL, GAS, AND MINING  | <b>FORM 9</b><br><br><b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b><br>ML 23612                                     |
| <b>SUNDRY NOTICES AND REPORTS ON WELLS</b><br><br>Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals. | <b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b><br><br><b>7. UNIT or CA AGREEMENT NAME:</b><br>NATURAL BUTTES          |
| <b>1. TYPE OF WELL</b><br>Gas Well   | <b>8. WELL NAME and NUMBER:</b><br>NBU 1021-12B3DS  |
| <b>2. NAME OF OPERATOR:</b><br>KERR-MCGEE OIL & GAS ONSHORE, L.P.  | <b>9. API NUMBER:</b><br>43047508560000   |
| <b>3. ADDRESS OF OPERATOR:</b><br>P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779  | <b>PHONE NUMBER:</b><br>720 929-6007 Ext  |
| <b>4. LOCATION OF WELL</b><br><b>FOOTAGES AT SURFACE:</b><br>0374 FSL 2433 FEL<br><b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b><br>Qtr/Qtr: SWSE Section: 1 Township: 10.0S Range: 21.0E Meridian: S   | <b>9. FIELD and POOL or WILDCAT:</b><br>NATURAL BUTTES<br><br><b>COUNTY:</b><br>UINTAH<br><br><b>STATE:</b><br>UTAH |

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

| TYPE OF SUBMISSION  | TYPE OF ACTION   |   |   |
|---|--|---|---|
| <input type="checkbox"/> <b>NOTICE OF INTENT</b><br>Approximate date work will start:   | <input type="checkbox"/> ACIDIZE                       | <input type="checkbox"/> ALTER CASING                   | <input type="checkbox"/> CASING REPAIR                  |
| <input type="checkbox"/> <b>SUBSEQUENT REPORT</b><br>Date of Work Completion:           | <input type="checkbox"/> CHANGE TO PREVIOUS PLANS      | <input type="checkbox"/> CHANGE TUBING                  | <input type="checkbox"/> CHANGE WELL NAME               |
| <input type="checkbox"/> <b>SPUD REPORT</b><br>Date of Spud:                            | <input type="checkbox"/> CHANGE WELL STATUS            | <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS | <input type="checkbox"/> CONVERT WELL TYPE              |
| <input checked="" type="checkbox"/> <b>DRILLING REPORT</b><br>Report Date:<br>6/20/2010 | <input type="checkbox"/> DEEPEN                        | <input type="checkbox"/> FRACTURE TREAT                 | <input type="checkbox"/> NEW CONSTRUCTION               |
|   | <input type="checkbox"/> OPERATOR CHANGE               | <input type="checkbox"/> PLUG AND ABANDON               | <input type="checkbox"/> PLUG BACK                      |
|   | <input type="checkbox"/> PRODUCTION START OR RESUME    | <input type="checkbox"/> RECLAMATION OF WELL SITE       | <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION |
|   | <input type="checkbox"/> REPERFORATE CURRENT FORMATION | <input type="checkbox"/> SIDETRACK TO REPAIR WELL       | <input type="checkbox"/> TEMPORARY ABANDON              |
|   | <input type="checkbox"/> TUBING REPAIR                 | <input type="checkbox"/> VENT OR FLARE                  | <input type="checkbox"/> WATER DISPOSAL                 |
|   | <input type="checkbox"/> WATER SHUTOFF                 | <input type="checkbox"/> SI TA STATUS EXTENSION         | <input type="checkbox"/> APD EXTENSION                  |
|   | <input type="checkbox"/> WILDCAT WELL DETERMINATION    | <input type="checkbox"/> OTHER                          | OTHER:  |

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

FINISHED DRILLING FROM 2254' TO ON JUNE 17, 2010. RAN 4 1/2" 11.6# I-80 PRODUCTION CSG. PUMP 40 BBLs SPACER, LEAD CEMENT W/ 493 SX CLASS G PREM LITE @ 12.4 PPG, 2.03 YD. TAILED CEMENT W/ 1091 SX CLASS G 50/50 POZ MIX @ 14.3 PPG, 1.31 YD. DISPLACED W/ 147 BBLs WATER, 2 BBLs SHY OF CALC. DISPLACEMENT TO STAY ABOVE PERFS APPROX TOP OF CMT @ 9476'. FINAL LIFT PSI 2800 - HAD 25 BBLs SPACER TO PITS, DID NOT BUMP PLUG, SHUT CMT HEAD IN W/ 2800 PSI. WOC. SLIP & CUT DRILL LINE, SERVICE TOP DRIVE, CLEAN MUD TANKS. OPENED @ 16:00 HRS - HAD TO WAIT 1 MORE HR. STILL BLED BACK - WAIT 3 HRS. TOTAL OF 8 HRS WOC. RIG DOWN CMT HEAD, LD LANDING JT. NIPPLE DOWN BOP, & HANG FOR SKID. RELEASED ENSIGN RIG #146 ON JUNE 20, 2010 @ 21:00 HRS.

Accepted by the  
 Utah Division of  
 Oil, Gas and Mining  
**FOR RECORD ONLY**  
 June 21, 2010

|  |                                     |                                    |
|--|-------------------------------------|------------------------------------|
| <b>NAME (PLEASE PRINT)</b><br>Andy Lytle | <b>PHONE NUMBER</b><br>720 929-6100 | <b>TITLE</b><br>Regulatory Analyst |
| <b>SIGNATURE</b><br>N/A                  | <b>DATE</b><br>6/21/2010            |                                    |

|   |   |
|---|---|
| <b>STATE OF UTAH</b><br>DEPARTMENT OF NATURAL RESOURCES<br>DIVISION OF OIL, GAS, AND MINING | <b>FORM 9</b><br><br><b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b><br>ML 23612 |
|---|---|

|  |  |
|--|--|
| <b>SUNDRY NOTICES AND REPORTS ON WELLS</b><br><br>Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals. | <b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b><br><br><b>7. UNIT or CA AGREEMENT NAME:</b><br>NATURAL BUTTES |
|--|--|

|                                    |  |
|------------------------------------|--|
| <b>1. TYPE OF WELL</b><br>Gas Well | <b>8. WELL NAME and NUMBER:</b><br>NBU 1021-12B3DS |
|------------------------------------|--|

|   |   |
|---|---|
| <b>2. NAME OF OPERATOR:</b><br>KERR-MCGEE OIL & GAS ONSHORE, L.P. | <b>9. API NUMBER:</b><br>43047508560000 |
|---|---|

|   |  |  |
|---|--|--|
| <b>3. ADDRESS OF OPERATOR:</b><br>P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779 | <b>PHONE NUMBER:</b><br>720 929-6007 Ext | <b>9. FIELD and POOL or WILDCAT:</b><br>NATURAL BUTTES |
|---|--|--|

|   |   |
|---|---|
| <b>4. LOCATION OF WELL</b><br><b>FOOTAGES AT SURFACE:</b><br>0374 FSL 2433 FEL<br><b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b><br>Qtr/Qtr: SWSE Section: 01 Township: 10.0S Range: 21.0E Meridian: S | <b>COUNTY:</b><br>UINTAH<br><br><b>STATE:</b><br>UTAH |
|---|---|

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

| TYPE OF SUBMISSION  | TYPE OF ACTION  |   |   |
|---|---|---|---|
| <input type="checkbox"/> <b>NOTICE OF INTENT</b><br>Approximate date work will start:   | <input type="checkbox"/> ACIDIZE                                      | <input type="checkbox"/> ALTER CASING                   | <input type="checkbox"/> CASING REPAIR                  |
| <input type="checkbox"/> <b>SUBSEQUENT REPORT</b><br>Date of Work Completion:           | <input type="checkbox"/> CHANGE TO PREVIOUS PLANS                     | <input type="checkbox"/> CHANGE TUBING                  | <input type="checkbox"/> CHANGE WELL NAME               |
| <input type="checkbox"/> <b>SPUD REPORT</b><br>Date of Spud:                            | <input type="checkbox"/> CHANGE WELL STATUS                           | <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS | <input type="checkbox"/> CONVERT WELL TYPE              |
| <input checked="" type="checkbox"/> <b>DRILLING REPORT</b><br>Report Date:<br>8/25/2010 | <input type="checkbox"/> DEEPEN                                       | <input type="checkbox"/> FRACTURE TREAT                 | <input type="checkbox"/> NEW CONSTRUCTION               |
|   | <input type="checkbox"/> OPERATOR CHANGE                              | <input type="checkbox"/> PLUG AND ABANDON               | <input type="checkbox"/> PLUG BACK                      |
|   | <input checked="" type="checkbox"/> <b>PRODUCTION START OR RESUME</b> | <input type="checkbox"/> RECLAMATION OF WELL SITE       | <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION |
|   | <input type="checkbox"/> REPERFORATE CURRENT FORMATION                | <input type="checkbox"/> SIDETRACK TO REPAIR WELL       | <input type="checkbox"/> TEMPORARY ABANDON              |
|   | <input type="checkbox"/> TUBING REPAIR                                | <input type="checkbox"/> VENT OR FLARE                  | <input type="checkbox"/> WATER DISPOSAL                 |
|   | <input type="checkbox"/> WATER SHUTOFF                                | <input type="checkbox"/> SI TA STATUS EXTENSION         | <input type="checkbox"/> APD EXTENSION                  |
|   | <input type="checkbox"/> WILDCAT WELL DETERMINATION                   | <input type="checkbox"/> OTHER                          | OTHER: <input style="width: 100px;" type="text"/>       |

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

THE SUBJECT WELL WAS PLACED ON PRODUCTION ON AUGUST 25, 2010 AT 10:00 A.M. THE CHRONOLOGICAL WELL HISTORY WILL BE SUBMITTED WITH THE WELL COMPLETION REPORT.

**Accepted by the**  
**Utah Division of**  
**Oil, Gas and Mining**  
**FOR RECORD ONLY**  
 August 26, 2010

|  |                                     |                                    |
|--|-------------------------------------|------------------------------------|
| <b>NAME (PLEASE PRINT)</b><br>Andy Lytle | <b>PHONE NUMBER</b><br>720 929-6100 | <b>TITLE</b><br>Regulatory Analyst |
| <b>SIGNATURE</b><br>N/A                  | <b>DATE</b><br>8/26/2010            |                                    |

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

AMENDED REPORT  FORM 8  
(highlight changes)

**WELL COMPLETION OR RECOMPLETION REPORT AND LOG**

|   |  |   |                          |
|---|--|---|--------------------------|
| 1a. TYPE OF WELL:<br>OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> DRY <input type="checkbox"/> OTHER _____  |  | 7. UNIT or CA AGREEMENT NAME<br><b>UTU63047A</b>                            |                          |
| b. TYPE OF WORK:<br>NEW WELL <input checked="" type="checkbox"/> HORIZ. LATS. <input type="checkbox"/> DEEP-EN <input type="checkbox"/> RE-ENTRY <input type="checkbox"/> DIFF. RESVR. <input type="checkbox"/> OTHER _____   |  | 8. WELL NAME and NUMBER:<br><b>NBU 1021-12B3DS</b>                          |                          |
| 2. NAME OF OPERATOR:<br><b>KERR MCGEE OIL &amp; GAS ONSHORE, L.P.</b>   |  | 9. API NUMBER:<br><b>4304750856</b>   |                          |
| 3. ADDRESS OF OPERATOR:<br><b>P.O.BOX 173779</b> CITY <b>DENVER</b> STATE <b>CO</b> ZIP <b>80217</b>  |  | 10. FIELD AND POOL, OR WILDCAT<br><b>NATURAL BUTTES</b>                     |                          |
| 4. LOCATION OF WELL (FOOTAGES)<br>AT SURFACE: <b>SWSE 374 FSL 2433 FEL S1, T10S, R21E</b><br>AT TOP PRODUCING INTERVAL REPORTED BELOW: <b>NWNE 753 FNL 2275 FEL S12, T10S, R21E</b><br>AT TOTAL DEPTH: <b>NWNE 114<sup>6</sup> FNL 225<sup>49</sup> FEL S12, T10S, R21E</b> |  | 11. QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:<br><b>SWSE 1 10S 21E S</b> |                          |
|   |  | 12. COUNTY<br><b>UINTAH</b>   | 13. STATE<br><b>UTAH</b> |

|  |   |  |  |   |
|--|---|--|--|---|
| 14. DATE SPUDDED:<br><b>5/10/2010</b>  | 15. DATE T.D. REACHED:<br><b>6/17/2010</b>                | 16. DATE COMPLETED:<br><b>8/25/2010</b>  | ABANDONED <input type="checkbox"/> READY TO PRODUCE <input checked="" type="checkbox"/>  | 17. ELEVATIONS (DF, RKB, RT, GL):<br><b>5221 GL</b> |
| 18. TOTAL DEPTH: MD <b>9,636</b><br>TVD <b>9,403</b>   | 19. PLUG BACK T.D.: MD <b>9,601</b><br>TVD <b>9,368 9</b> | 20. IF MULTIPLE COMPLETIONS, HOW MANY? * |  | 21. DEPTH BRIDGE MD<br>PLUG SET: TVD                |
| 22. TYPE ELECTRIC AND OTHER MECHANICAL LOGS RUN (Submit copy of each)<br><b>HDIL/ZDL/CN/GR-CBL</b> |   |  | 23. WAS WELL CORED? NO <input checked="" type="checkbox"/> YES <input type="checkbox"/> (Submit analysis)<br>WAS DST RUN? NO <input checked="" type="checkbox"/> YES <input type="checkbox"/> (Submit report)<br>DIRECTIONAL SURVEY? NO <input type="checkbox"/> YES <input checked="" type="checkbox"/> (Submit copy) |   |

24. CASING AND LINER RECORD (Report all strings set in well)

| HOLE SIZE | SIZE/GRADE  | WEIGHT (#/ft.) | TOP (MD) | BOTTOM (MD) | STAGE CEMENTER DEPTH | CEMENT TYPE & NO. OF SACKS | SLURRY VOLUME (BBL) | CEMENT TOP ** | AMOUNT PULLED |
|-----------|-------------|----------------|----------|-------------|----------------------|----------------------------|---------------------|---------------|---------------|
| 20"       | 14" STL     | 36.7#          |          | 40          |                      | 28                         |                     |               |               |
| 11"       | 8 5/8" J-55 | 28#            |          | 2,230       |                      | 840                        |                     |               |               |
| 7 7/8"    | 4 1/2" I-80 | 11.6#          |          | 9,624       |                      | 1,584                      |                     |               |               |
|           |             |                |          |             |                      |                            |                     |               |               |
|           |             |                |          |             |                      |                            |                     |               |               |

25. TUBING RECORD

| SIZE   | DEPTH SET (MD) | PACKER SET (MD) | SIZE | DEPTH SET (MD) | PACKER SET (MD) | SIZE | DEPTH SET (MD) | PACKER SET (MD) |
|--------|----------------|-----------------|------|----------------|-----------------|------|----------------|-----------------|
| 2 3/8" | 8,902          |                 |      |                |                 |      |                |                 |

| 26. PRODUCING INTERVALS |          |             |           |              | 27. PERFORATION RECORD  |      |           |  |                                   |
|-------------------------|----------|-------------|-----------|--------------|-------------------------|------|-----------|--|-----------------------------------|
| FORMATION NAME          | TOP (MD) | BOTTOM (MD) | TOP (TVD) | BOTTOM (TVD) | INTERVAL (Top/Bot - MD) | SIZE | NO. HOLES | PERFORATION STATUS                       |                                   |
| (A) WASATCH             | 5,792    | 6,808       |           |              | 5,792 6,808             | 0.36 | 64        | Open <input checked="" type="checkbox"/> | Squeezed <input type="checkbox"/> |
| (B) MESAVERDE           | 7,587    | 9,452       |           |              | 7,587 9,452             | 0.36 | 240       | Open <input checked="" type="checkbox"/> | Squeezed <input type="checkbox"/> |
| (C)                     |          |             |           |              |                         |      |           | Open <input type="checkbox"/>            | Squeezed <input type="checkbox"/> |
| (D)                     |          |             |           |              |                         |      |           | Open <input type="checkbox"/>            | Squeezed <input type="checkbox"/> |

28. ACID, FRACTURE, TREATMENT, CEMENT SQUEEZE, ETC.

| DEPTH INTERVAL | AMOUNT AND TYPE OF MATERIAL                        |
|----------------|--|
| 5792 - 9452    | PUMP 9,111 BBLs SLICK H2O & 336,728 LBS 30/50 SAND |

|   |                                 |
|---|---------------------------------|
| 29. ENCLOSED ATTACHMENTS:<br><input type="checkbox"/> ELECTRICAL/MECHANICAL LOGS<br><input type="checkbox"/> GEOLOGIC REPORT<br><input type="checkbox"/> DST REPORT<br><input type="checkbox"/> SUNDRY NOTICE FOR PLUGGING AND CEMENT VERIFICATION<br><input type="checkbox"/> CORE ANALYSIS<br><input type="checkbox"/> OTHER: _____ | 30. WELL STATUS:<br><b>PROD</b> |
|---|---------------------------------|

**RECEIVED**

31. INITIAL PRODUCTION

INTERVAL A (As shown in Item #26)

|                                   |                      |                         |             |                     |               |                           |                 |                     |                     |                          |
|-----------------------------------|----------------------|-------------------------|-------------|---------------------|---------------|---------------------------|-----------------|---------------------|---------------------|--------------------------|
| DATE FIRST PRODUCED:<br>8/25/2010 |                      | TEST DATE:<br>8/27/2010 |             | HOURS TESTED:<br>24 |               | TEST PRODUCTION RATES: →  | OIL - BBL:<br>0 | GAS - MCF:<br>1,647 | WATER - BBL:<br>648 | PROD. METHOD:<br>FLOWING |
| CHOKE SIZE:<br>20/64              | TBG. PRESS.<br>1,650 | CSG. PRESS.<br>2,500    | API GRAVITY | BTU - GAS           | GAS/OIL RATIO | 24 HR PRODUCTION RATES: → | OIL - BBL:<br>0 | GAS - MCF:<br>1,647 | WATER - BBL:<br>648 | INTERVAL STATUS:<br>PROD |

INTERVAL B (As shown in item #26)

|                      |             |             |             |               |               |                           |            |            |              |                  |
|----------------------|-------------|-------------|-------------|---------------|---------------|---------------------------|------------|------------|--------------|------------------|
| DATE FIRST PRODUCED: |             | TEST DATE:  |             | HOURS TESTED: |               | TEST PRODUCTION RATES: →  | OIL - BBL: | GAS - MCF: | WATER - BBL: | PROD. METHOD:    |
| CHOKE SIZE:          | TBG. PRESS. | CSG. PRESS. | API GRAVITY | BTU - GAS     | GAS/OIL RATIO | 24 HR PRODUCTION RATES: → | OIL - BBL: | GAS - MCF: | WATER - BBL: | INTERVAL STATUS: |

INTERVAL C (As shown in item #26)

|                      |             |             |             |               |               |                           |            |            |              |                  |
|----------------------|-------------|-------------|-------------|---------------|---------------|---------------------------|------------|------------|--------------|------------------|
| DATE FIRST PRODUCED: |             | TEST DATE:  |             | HOURS TESTED: |               | TEST PRODUCTION RATES: →  | OIL - BBL: | GAS - MCF: | WATER - BBL: | PROD. METHOD:    |
| CHOKE SIZE:          | TBG. PRESS. | CSG. PRESS. | API GRAVITY | BTU - GAS     | GAS/OIL RATIO | 24 HR PRODUCTION RATES: → | OIL - BBL: | GAS - MCF: | WATER - BBL: | INTERVAL STATUS: |

INTERVAL D (As shown in item #26)

|                      |             |             |             |               |               |                           |            |            |              |                  |
|----------------------|-------------|-------------|-------------|---------------|---------------|---------------------------|------------|------------|--------------|------------------|
| DATE FIRST PRODUCED: |             | TEST DATE:  |             | HOURS TESTED: |               | TEST PRODUCTION RATES: →  | OIL - BBL: | GAS - MCF: | WATER - BBL: | PROD. METHOD:    |
| CHOKE SIZE:          | TBG. PRESS. | CSG. PRESS. | API GRAVITY | BTU - GAS     | GAS/OIL RATIO | 24 HR PRODUCTION RATES: → | OIL - BBL: | GAS - MCF: | WATER - BBL: | INTERVAL STATUS: |

32. DISPOSITION OF GAS (Sold, Used for Fuel, Vented, Etc.)

33. 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.

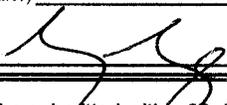
| Formation   | Top (MD) | Bottom (MD) | Descriptions, Contents, etc. | Name | Top (Measured Depth) |
|-------------|----------|-------------|------------------------------|------|----------------------|
| GREEN RIVER | 1,434    |             |                              |      |                      |
| BIRD'S NEST | 1,703    |             |                              |      |                      |
| MAHOGANY    | 2,181    |             |                              |      |                      |
| WASATCH     | 4,711    | 7,356       |                              |      |                      |
| MESAVERDE   | 7,356    | 9,636       | TD                           |      |                      |

34. FORMATION (Log) MARKERS:

35. ADDITIONAL REMARKS (Include plugging procedure)

Attached is the chronological well history and final survey. Completion chrono details individual frac stages.

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

NAME (PLEASE PRINT) ANDREW LYTLE TITLE REGULATORY ANALYST  
 SIGNATURE  DATE 9/23/10

This report must be submitted within 30 days of

- completing or plugging a new well
- drilling horizontal laterals from an existing well bore
- recompleting to a different producing formation
- reentering a previously plugged and abandoned well
- significantly deepening an existing well bore below the previous bottom-hole depth
- drilling hydrocarbon exploratory holes, such as core samples and stratigraphic tests

\* ITEM 20: Show the number of completions if production is measured separately from two or more formations.

\*\* ITEM 24: Cement Top - Show how reported top(s) of cement were determined (circulated (CIR), calculated (CAL), cement bond log (CBL), temperature survey (TS)).

Send to: Utah Division of Oil, Gas and Mining  
 1594 West North Temple, Suite 1210  
 Box 145801  
 Salt Lake City, Utah 84114-5801  
 Phone: 801-538-5340  
 Fax: 801-359-3940

**US ROCKIES REGION  
Operation Summary Report**

Well: NBU 1021-12B3DS [B.LUE] Spud Conductor: 5/10/2010 Spud Date: 5/19/2010  
 Project: UTAH-UINTAH Site: NBU 1021-10 PAD Rig Name No: ENSIGN 146/146, CAPSTAR 310/310  
 Event: DRILLING Start Date: 4/29/2010 End Date: 6/20/2010  
 Active Datum: RKB @5,235.01ft (above Mean Sea Level) UWI: SW/SE/0/10/S/21/E/1/0/0/6/PM/S/374.00/E/0/2,433.00/0/0

| Date         | Time Start-End | Duration (hr) | Phase  | Code | Sub Code | P/U | MD From (ft)   | Operation  |
|--------------|----------------|---------------|--------|------|----------|-----|--|--|
| 5/19/2010    | 8:00 - 9:00    | 1.00          | RDMO   | 01   | E        | P   |  | RIG DOWN RIG, READY TO SKID FOWARD TO WELL #3 OF 4   |
|              | 9:00 - 11:00   | 2.00          | MIRU   | 01   | A        | P   |  | MOVE RIG OVER WELL #3 OF 4, MOVE PITS, DOG HOUSE, GENERATOR AND PUMP.  |
|              | 11:00 - 12:00  | 1.00          | MIRU   | 01   | B        | P   |  | RAISE DERIICK, RIG UP PITS, PUMPS, GENERATOR, AND DOG HOUSE.   |
|              | 12:00 - 16:30  | 4.50          | MAINT  | 08   | B        | Z   |  | CHANGE OUT TOP DRIVE AND WORK ON BRAKES.   |
|              | 16:30 - 22:00  | 5.50          | MIRU   | 01   | B        | P   |  | INSTALL RISER, FILL PITS, BUILD BOWIE LINE. PRIME PUMPS, P/U 1.5 BENT HOUSE MOTOR .16 RPG SN 8059, M/U 11" Q507 SN 7019595 W/ 7-16'S.  |
|              | 22:00 - 23:00  | 1.00          | DRLSUR | 02   | B        | P   |  | DRILL 49'-96'. SPUD 5/19/2010 22:00  |
|              | 23:00 - 0:00   | 1.00          | MAINT  | 08   | B        | Z   |  | COMPRESSION SUB LEAKING. TAKE OFF COMPRESSION SUB. TAKE SUB TO TOWN TO BE MACHINED.  |
| 5/20/2010    | 0:00 - 1:00    | 1.00          | MAINT  | 08   | B        | Z   |  | WAIT FOR COMPRESSION SUB FROM TOWN.  |
|              | 1:00 - 2:00    | 1.00          | DRLSUR | 02   | B        | P   |  | DRILL 96'-184'.  |
|              | 2:00 - 3:00    | 1.00          | DRLSUR | 06   | A        | P   |  | LDDS.  |
|              | 3:00 - 4:30    | 1.50          | DRLSUR | 09   | A        | P   |  | SLIP AND CUT DRILL LINE.   |
|              | 4:30 - 7:00    | 2.50          | DRLSUR | 06   | A        | P   |  | INSTALL BACK BREAK TO POWER HEAD AND P/U DIRECTIONAL TOOLS. INSTALL ROT HEAD RUBBER.   |
|              | 7:00 - 8:30    | 1.50          | DRLSUR | 02   | D        | P   |  | DRILL W /MWD 184'-346' (162, 108'/HR) WOB 13K, ROT 50, DH RPM 88, GPM 550, ON/OFF PSI 750/550, UP/ DOWN/ ROT 29/27/27.   |
|              | 8:30 - 15:00   | 6.50          | DRLSUR | 08   | A        | P   |  | DRIVE LINE TWISTED OFF AT BOLTS. WAIT FOR MECHANIC AND REPAIR DRIVE LINE   |
| 15:00 - 0:00 | 9.00           | DRLSUR        | 02     | D    | P        |     | DRILL W/ MWD 346'-1305' (959', 107'/HR) WOB 13K, ROT 50, DH RPM 88, GPM 550, ON/OFF PSI 950/800, UP/ DOWN/ ROT 47/38/41. LOST CIRC 1464'. DRILL W/ AERATED WATER TO MAINTAIN PIT VOLUME. |  |
| 5/21/2010    | 0:00 - 13:00   | 13.00         | DRLSUR | 02   | D        | P   |  | DRILL 1304'-2254' (950', 73'/HR) TD 5/21/2010 13:00 WOB 10-17K, ROT 50, DH RPM 88, GPM 550, ON/OFF PSI 950/800, UP/ DOWN/ ROT 65/58/60. LOST CIRC 1464'. DRILL W/ AERATED WATER TO MAINTAIN PIT VOLUME.  |
|              | 13:00 - 14:30  | 1.50          | CSG    | 05   | F        | P   |  | CIRC AND COND HOLE. CLEAN HOLE W/ AERATED WATER AND POLYMER SWEEPS.  |
|              | 14:30 - 17:30  | 3.00          | CSG    | 06   | D        | P   |  | LDDS, LD DIRECTIONAL TOOLS, BREAK BIT FROM MOTOR AND LD MOTOR.   |
|              | 17:30 - 21:00  | 3.50          | CSG    | 12   | C        | P   |  | HOLD SAFETY MEETING RUN 50 JTS OF 8-5/8 28# IJ-55 CSG W/ 8RD LTC THREADS AND LAND FLOAT SHOE 2225'KB, RUN BAFFLE PLATE IN TOP OF SHOE JT LANDED @ 2179' KB. FILL CSG 200', 1200', 2225'.   |
|              | 21:00 - 22:30  | 1.50          | CSG    | 12   | E        | P   |  | PUMP 120 BBLs AHEAD, PUMP 20 BBLs OF GEL WATER FOR SPACER, PUMP 225 SX (46 BBLs) OF 15.8#, 1.15 YD 5 GAL/SK CLASS G 2% CALC + .25 LB/SKS SUPER FLAKES CEMENT. DISPLACE W/ 135.5 BBLs OF H2O W/ 60 PSI LIFT @ 2.5 BBLs A MINUTE. BUMP PLUG 420 PSI. FLOAT HELD. NO CIRC THROUGH OUT JOB. TOP OUT W/ 100 SX (20.2 BBLs) 15.8#, 1.15 YD, 5 GAL/ SK 2% CALC CEMENT. RIG DOWN HEAD. |

**US ROCKIES REGION**  
**Operation Summary Report**

|  |  |   |  |
|--|--|---|--|
| Well: NBU 1021-12B3DS [B.LUE]                        |  | Spud Conductor: 5/10/2010                                   | Spud Date: 5/19/2010                         |
| Project: UTAH-UINTAH                                 |  | Site: NBU 1021-10 PAD                                       | Rig Name No: ENSIGN 146/146, CAPSTAR 310/310 |
| Event: DRILLING                                      |  | Start Date: 4/29/2010                                       | End Date: 6/20/2010                          |
| Active Datum: RKB @5,235.01ft (above Mean Sea Level) |  | UWI: SW/SE/0/10/S/21/E/1/0/0/6/PM/S/374.00/E/0/2,433.00/0/0 |  |

| Date      | Time Start-End | Duration (hr) | Phase  | Code | Sub Code | P/U | MD From (ft) | Operation   |
|-----------|----------------|---------------|--------|------|----------|-----|--------------|---|
|           | 22:30 - 23:30  | 1.00          | RDMO   | 14   | A        | P   |              | CUT OFF AND HANG RISER AND AND ROT HEAD. INSTALL HANG OFF BAR. LAND CSG AND BREAK OFF LANDING JT. CUT OFF CSG COLLAR AND TACK CAP ON TOP OF CSG. BREAK DOWN BOWIE LINE.   |
|           | 23:30 - 0:00   | 0.50          | CSG    | 12   | B        | P   |              | TOP OUT 100 SX (20.4BBL)S OF 15.8#, 1.15 YD. 5 GAL SK 4% CALC. NO CEMENT TO SURFACE. WILL TOP OUT ON NEXT JOB. RELEASE RIG 5/22/2010 00:00. CEMENT ON NEXT W/ JOB 415 SX OF 15.8# CEMENT. CEMENT TO SURFACE. CEMENT WAS CROSS COMMUNICATING W/ WELL #4. |
| 6/11/2010 | 0:00 - 1:00    | 1.00          | MIRU   | 01   | C        | P   |              | SKID RIG OVER WELL  |
|           | 1:00 - 2:00    | 1.00          | MIRU   | 14   | A        | P   |              | NIPPLE UP BOP   |
|           | 2:00 - 6:30    | 4.50          | MIRU   | 15   | A        | P   |              | TEST BOP RAMS, CHOKE, KILLLINE, HCR TO 250 LOW, 5000 HIGH, ANNULAR 250 LOW, 2500 HIGH, CASING 1500 PSI, HAD TROUBLE WITH WELLHEAD ADAPTOR LEAKING CHANGED OUT SEALS & TESTED OK   |
|           | 6:30 - 7:00    | 0.50          | DRLPRO | 06   | J        | P   |              | INSTALL WEAR BUSHING  |
|           | 7:00 - 10:00   | 3.00          | DRLPRO | 06   | A        | P   |              | P/U BHA R.I. H, TAG CEMENT @ 2145 FT.   |
|           | 10:00 - 10:30  | 0.50          | DRLPRO | 07   | B        | P   |              | INSTALL ROTATING HEAD, LEVEL DERRICK  |
|           | 10:30 - 12:00  | 1.50          | DRLPRO | 02   | F        | P   |              | DRILL CEMENT, FLOAT & SHOE  |
|           | 12:00 - 0:00   | 12.00         | DRLPRO | 02   | D        | P   |              | DRILL & SLIDE F/ 2259 TO 3649 - 1390 FT. 116 FT. PER/HR - WATER, WOB 20, RPM 40, MMRPM 143, GPM 510, PSI ON/OFF 1527/1100, SLIDING 44% ROT. 56%   |
| 6/12/2010 | 0:00 - 10:00   | 10.00         | DRLPRO | 02   | D        | P   |              | DRILL & SLIDE F/ 3649 TO 4641 - 992 FT.- 99 FT. PER/HR. MW 9.4, VIS 31, WOB 20, RPM 40, MMRPM 143, GPM 510, PSI ON/OFF BTM. 1750/1200   |
|           | 10:00 - 10:30  | 0.50          | DRLPRO | 07   | A        | P   |              | RIG SERVICE   |
|           | 10:30 - 16:30  | 6.00          | DRLPRO | 02   | D        | P   |              | DRILL & SLIDE F/ 4641 TO 5273 - 632 FT. 105 FT. PER/HR. MW 9.7, VIS 33, WOB 20, RPM 40, MMRPM 143, GPM 510, PSI ON/OFF BTM. 1950/1450   |
|           | 16:30 - 17:30  | 1.00          | DRLPRO | 22   | L        | Z   |              | RAIN & HAIL KNOCKED OUT COMMUNICATION FOR MWD TOOLS - TROUBLE SHOT, REBOOTED & RETURNED TO SERVICE  |
|           | 17:30 - 19:30  | 2.00          | DRLPRO | 02   | D        | P   |              | DRILL & SLIDE F/ 5273 TO 5474 - 201 FT. 100 FT. PER/HR. MW 10.4, VIS 36, WOB 20, RPM 40, MMRPM 143, GPM 510, PSI ON/OFF BTM. 2050/1600  |
|           | 19:30 - 21:30  | 2.00          | DRLPRO | 22   | G        | X   |              | LOST RETURNS, P/U BACKED OFF PUMPS TO 40-60 SPM, MIXED LCM TO REGAIN RETURNS, LOST APPROX. 700 BBL. TOTAL - HAULED IN 220 BBL. F/ H&P 298   |
|           | 21:30 - 0:00   | 2.50          | DRLPRO | 02   | A        | P   |              | DRILL & SLIDE F/ 5474 TO 5722 - 248 FT. 99 FT. PER/HR. MW 9.7, VIS 36, LCM 20% WOB 18, RPM 40, MMRPM 137, GPM 490, PSI ON/OFF BTM. 2300/1850  |
| 6/13/2010 | 0:00 - 13:00   | 13.00         | DRLPRO | 02   | D        | P   |              | DRILL & SLIDE F/ 5722 TO 6544 - 822 FT. 63 FT. PER/HR. MW 10.2, VIS 41, LCM 25%, WOB 20, RPM 35, MMRPM 131, GPM 470, PSI ON/OFF BTM. 2250/1900  |
|           | 13:00 - 13:30  | 0.50          | DRLPRO | 07   | A        | P   |              | RIG SERVICE   |
|           | 13:30 - 0:00   | 10.50         | DRLPRO | 02   | D        | P   |              | DRILL & SLIDE F/ 6544 TO 7010 - 466 FT. 44 FT. PER/HR MW 10.3, VIS 40, LCM 25%, WOB 20, RPM 35, MMRPM 128, GPM 442, PSI ON/OFF BTM. 1650/1400   |

**US ROCKIES REGION**  
**Operation Summary Report**

|  |                           |   |
|--|---------------------------|---|
| Well: NBU 1021-12B3DS [B.LUE]                        | Spud Conductor: 5/10/2010 | Spud Date: 5/19/2010  |
| Project: UTAH-UINTAH                                 | Site: NBU 1021-10 PAD     | Rig Name No: ENSIGN 146/146, CAPSTAR 310/310                |
| Event: DRILLING                                      | Start Date: 4/29/2010     | End Date: 6/20/2010   |
| Active Datum: RKB @5,235.01ft (above Mean Sea Level) |                           | UWI: SW/SE/0/10/S/21/E/1/0/0/6/PM/S/374.00/E/0/2,433.00/0/0 |

| Date      | Time Start-End | Duration (hr) | Phase  | Code | Sub Code | P/U | MD From (ft) | Operation   |
|-----------|----------------|---------------|--------|------|----------|-----|--------------|---|
| 6/14/2010 | 0:00 - 12:30   | 12.50         | DRLPRO | 02   | D        | P   |              | DRILL & SLIDE F/ 7010 TO 7452 - 442 FT. 35 FT. PER/HR, MW 10.4, VIS 41, LCM 17%, WOB 21, RPM 35, MMRPM 128, GPM 442, PSI ON/OFF BTM. 1600/1200 - SLIDE 3.25 HRS, ROTATE 9.25 HRS. RIG SERVICE |
|           | 12:30 - 13:00  | 0.50          | DRLPRO | 07   | A        | P   |              |   |
|           | 13:00 - 20:30  | 7.50          | DRLPRO | 06   | A        | P   |              | TRIP FOR BIT DO TO PR. PUMPED OUT 7 STDS. L/D MOTOR & BIT - GRADED BIT @ A 2/2  |
|           | 20:30 - 0:00   | 3.50          | DRLPRO | 06   | A        | P   |              | P/U NEW BIT & .16 RPG MOTOR, BENT MOTOR TO 1.76 DEG, P/U NEW MWD TOOL, R.I.H TO SHOE FILL PIPE, R.I.H TO BTM.   |
| 6/15/2010 | 0:00 - 2:30    | 2.50          | DRLPRO | 06   | A        | P   |              | FINISH TRIPPING IN, WASH & FAN NEW BIT TO BTM.  |
|           | 2:30 - 10:30   | 8.00          | DRLPRO | 02   | D        | P   |              | DRILL & SLIDE F/ 7452 TO 7720 - 268 FT. 34 F. PER/HR, MW 10.8, VIS 38, LCM 19% WOB 20, RPM 35, MMRPM 75, GPM 467, PSI ON/OFF BTM. 2300/1700 - LOST 150 BBLs.                                  |
|           | 10:30 - 11:00  | 0.50          | DRLPRO | 05   | A        | X   |              | P/U OFF BTM, SLOW PUMP RATE, INCREASE LCM TO 25% - PUMPED A 30% SWEEP   |
|           | 11:00 - 0:00   | 13.00         | DRLPRO | 02   | D        | P   |              | DRILL & SLIDE F/ 7720 TO 8469 - 749 FT. 58 FT. PER/HR. MW 11.2, VIS 39, LCM 30%, WOB 18, RPM 35, MMRPM 70, GPM 441, PSI ON/OFF BTM. 1900/1550   |
| 6/16/2010 | 0:00 - 11:00   | 11.00         | DRLPRO | 02   | D        | P   |              | DRILL F/ 8469 TO 8995 - 526 FT. 48 FT. PER/HR MW 11.9, VIS 41, LCM 42% WOB 20, RPM 35. MMRPM 67, GPM 421, PSI ON /OFF BTM. 2000/1650 - 100% ROT.  |
|           | 11:00 - 12:00  | 1.00          | DRLPRO | 05   | A        | P   |              | TRANSFER MUD AROUND ON MUD TANKS - MUD NOT TRANSFERING INTO SUCTION TANK, EQUILIZERS PLUGGED - LOST 200 BBLs  |
|           | 12:00 - 14:00  | 2.00          | DRLPRO | 02   | D        | P   |              | DRILL F/ 8995 TO 9065 - 70 FT. 35 FT. PER/HR MW 11.8, VIS 44, LCM 40%, WOB 20, RPM 35, MMRPM 67, GPM 421, PSI ON/OFF BTM. 2000/1650 - 100% ROT.   |
|           | 14:00 - 15:00  | 1.00          | DRLPRO | 05   | A        | P   |              | TRANSFER MUD LOST 200 BBLs, SUCKED AIR W/ PUMPS   |
|           | 15:00 - 0:00   | 9.00          | DRLPRO | 02   | D        | P   |              | DRILL F/ 9065 TO 9370 - 305 FT. 34 FT. PER/HR. MW 11.9, VIS 43, LCM 35%, WOB 20, RPM 35, MMRPM 67, GPM 421, PSI ON/OFF BTM. 1950/1650 - 100 % ROT.  |
| 6/17/2010 | 0:00 - 6:30    | 6.50          | DRLPRO | 02   | D        | P   |              | DRILL F/ 9370 TO 9636 T.D 6/18/2010 06:30 HRS. - 266 FT. 41 FT. PER/HR. MW 12.1, VIS 46, LCM 32% WOB 20, RPM 35, MMRPM 67, GPM 421, PSI ON/OFF BTM. 1950/1650 - 100% ROT.                     |
|           | 6:30 - 11:00   | 4.50          | DRLPRO | 05   | C        | P   |              | CIRC. 2 BTMS. UP - FLOW CHECK, FLOWING RAISE MW TO 12.4 - CHECK FLOW - FLOWING, RAISED MUD TO 12.6, CHECK FLOW - NO FLOW WIPER TRIP 25 STDS. TO 7300 FT.                                      |
|           | 11:00 - 15:30  | 4.50          | DRLPRO | 06   | E        | P   |              | WORK ON POWER SHOE ON IRON DERRICKHAND - NOT OPENING  |
|           | 15:30 - 17:00  | 1.50          | DRLPRO | 08   | A        | Z   |              | FINISH TRIPPING IN, WASH 90 FT. TO BTM. NO FLARE @ BTMS. UP   |
|           | 17:00 - 18:30  | 1.50          | DRLPRO | 06   | E        | P   |              | CIRC. 2 BTMS UP - TRANSFER 80 BBLs OF MUD TO ACTIVE SYSTEM, FLOW CHECK NO FLOW - MW 12.4, VIS 42, LCM 32%   |
|           | 18:30 - 21:00  | 2.50          | DRLPRO | 05   | A        | P   |              | FLOW CHECK, NO FLOW - PUMP 12 STDS. OUT MAIN TILT CYLINDER ON IRON DERRICKHAND FELL APART   |
|           | 21:00 - 23:00  | 2.00          | DRLPRO | 06   | B        | P   |              |   |
|           | 23:00 - 0:00   | 1.00          | DRLPRO | 08   | A        | Z   |              |   |

**US ROCKIES REGION**  
**Operation Summary Report**

|  |  |                           |   |                      |  |
|--|--|---------------------------|---|----------------------|--|
| Well: NBU 1021-12B3DS [B.LUE]                        |  | Spud Conductor: 5/10/2010 |   | Spud Date: 5/19/2010 |  |
| Project: UTAH-UINTAH                                 |  |                           | Site: NBU 1021-10 PAD                                       |                      | Rig Name No: ENSIGN 146/146, CAPSTAR 310/310 |
| Event: DRILLING                                      |  |                           | Start Date: 4/29/2010                                       |                      | End Date: 6/20/2010                          |
| Active Datum: RKB @5,235.01ft (above Mean Sea Level) |  |                           | UWI: SW/SE/0/10/S/21/E/1/0/0/6/PM/S/374.00/E/0/2,433.00/0/0 |                      |  |

| Date      | Time Start-End | Duration (hr) | Phase  | Code | Sub Code | P/U | MD From (ft) | Operation   |
|-----------|----------------|---------------|--------|------|----------|-----|--------------|---|
| 6/18/2010 | 0:00 - 15:30   | 15.50         | DRLPRO | 08   | A        | Z   |              | INSTALLED NEW CYLINDER FOR IRON DERRICKMAN, NOW NOTHING MOVES, NO COMMUNICATION - REPROGRAMED DERRICKMAN, BUILT 100 BBLs. MUD WHILE WAITING   |
|           | 15:30 - 16:30  | 1.00          | DRLPRO | 06   | E        | P   |              | TRIP BACK IN & WASH TO BTM. @ 9636 FT.  |
|           | 16:30 - 18:00  | 1.50          | DRLPRO | 05   | C        | P   |              | CIRC. BTMS. UP - NO FLARE   |
|           | 18:00 - 21:00  | 3.00          | DRLPRO | 06   | B        | P   |              | FLOW CHECK - NO FLOW, TRIP OUT FOR LOGS   |
|           | 21:00 - 23:00  | 2.00          | DRLPRO | 08   | A        | Z   |              | REPAIR IRON DERRCKMAN ENCODER CABLE   |
| 6/19/2010 | 23:00 - 0:00   | 1.00          | DRLPRO | 06   | B        | P   |              | TRIP OUT FOR LOGS   |
|           | 0:00 - 1:00    | 1.00          | DRLPRO | 08   | A        | Z   |              | REPAIR GRIPPER RAM ON IRON DERRICKMAN   |
|           | 1:00 - 1:30    | 0.50          | DRLPRO | 06   | B        | P   |              | TRIP OUT FOR LOGS   |
|           | 1:30 - 2:00    | 0.50          | DRLPRO | 08   | A        | Z   |              | POWER SHOE WOULD NOT RELEASE - MANUALLY OPEN  |
|           | 2:00 - 3:00    | 1.00          | DRLPRO | 06   | B        | P   |              | TRIP OUT FOR LOGS   |
|           | 3:00 - 3:30    | 0.50          | DRLPRO | 08   | A        | Z   |              | POWER SHOE WOULD NOT RELEASE - MANUALLY OPEN  |
|           | 3:30 - 10:00   | 6.50          | DRLPRO | 06   | B        | P   |              | TRIP OUT FOR LOGS - L/D MOTOR & BIT   |
|           | 10:00 - 10:30  | 0.50          | DRLPRO | 06   | J        | P   |              | RETRIEVE WEAR BUSHING   |
|           | 10:30 - 16:00  | 5.50          | DRLPRO | 11   | D        | P   |              | RIG UP & RUN OPEN HOLE LOGS - LOGGERS TD 9636 FT.   |
|           | 16:00 - 0:00   | 8.00          | DRLPRO | 12   | C        | P   |              | HELD SAFETY MEETING W/ FRANKS, RIG UP & RUN 229 JTS. 11.6, I-80, BTC, CASING SHOE LANDED @ 9624, FLOAT @ 9600 FT.   |
| 6/20/2010 | 0:00 - 1:30    | 1.50          | CSG    | 12   | C        | P   |              | FINISH RUNNING 229 JTS. 4 1/2, 11.6# I-80, BTC CASING, LANDED SHOE @ 9624 FT. FLOAT COLLAR @ 9600 FT.   |
|           | 1:30 - 2:00    | 0.50          | CSG    | 22   | O        | X   |              | ATTEMPT TO CIRC. THROUGH CASING, CASING PLUGGED, TRIED TO P/U STRING WAS STUCK, CALL OUT WIRELINE PERFORATORS   |
|           | 2:00 - 6:00    | 4.00          | CSG    | 21   | E        | X   |              | WAIT ON WIRELINE TRUCK  |
|           | 6:00 - 7:00    | 1.00          | CSG    | 22   | O        | X   |              | RIG UP & RUN WIRELINE DOWN CASING, PERFORATED 4 SHOT, TOP SHOT @ 9605 FT. PULL OUT OF CASING & RIG DOWN   |
|           | 7:00 - 9:00    | 2.00          | CSG    | 05   | D        | P   |              | CIRC. DOWN CASING THROUGH PERFS. CIRC. BTMS. UP, ATTEMPT TO BREAK OFF, CASING U-TUBING  |
|           | 9:00 - 10:00   | 1.00          | CSG    | 05   | B        | P   |              | CIRC. DOWN CASING & MIX UP HEAVY SLUG, PUMP 40 BBL. SLUG  |
|           | 10:00 - 12:00  | 2.00          | CSG    | 12   | E        | P   |              | RIG UP BJ SERVICES & PUMP 40 BBL. SPACER, LEAD W/ 493 SKS. 178 BBLs, 12.4#, 2.03 YIELD, TAIL W/ 1091 SKS. 255 BBLs. 14.3#, 1.31 YIELD, DISPLACE W/ 147 BBLs. WATER. 2 BBLs. SHY OF CALCULATED DISPLACEMENT TO STAY ABOVE PERFS - APPROX. TOP OF CMT. 9476 FT. FINAL LIFT PSI. 2800 - HAD 25 BBLs SPACER TO PITS, DID NOT BUMP PLUG, SHUT CMT. HEAD IN W/ 2800 PSI |
|           | 12:00 - 20:00  | 8.00          | CSG    | 13   | A        | P   |              | WAIT ON CEMENT - SLIP & CUT DRILL LINE, SERVICE TOP DRIVE, CLEAN MUD TANKS - PREPAIR FOR SKID, OPENED @ 16:00 HRS. HAD TO WAIT 1 MORE HR. STILL BLEED BACK - WAIT 3 HRS. TOTAL OF 8 HRS., W.O.C   |
|           | 20:00 - 21:00  | 1.00          | CSG    | 14   | A        | P   |              | RIG DOWN CMT. HEAD, L/D LANDING JT. NIPPLE DOWN BOP, & HANG FOR SKID, RELEASED RIG @ 21:00 HRS 6/20/2010  |

**US ROCKIES REGION**  
**Operation Summary Report**

|  |                           |   |
|--|---------------------------|---|
| Well: NBU 1021-12B3DS [B.LUE]                        | Spud Conductor: 5/10/2010 | Spud Date: 5/19/2010  |
| Project: UTAH-UINTAH                                 | Site: NBU 1021-1O PAD     | Rig Name No: ENSIGN 146/146, CAPSTAR 310/310                |
| Event: DRILLING                                      | Start Date: 4/29/2010     | End Date: 6/20/2010   |
| Active Datum: RKB @5,235.01ft (above Mean Sea Level) |                           | UWI: SW/SE/0/10/S/21/E/1/0/0/6/PM/S/374.00/E/0/2,433.00/0/0 |

| Date | Time Start-End | Duration (hr) | Phase | Code | Sub Code | P/U | MD From (ft) | Operation   |
|------|----------------|---------------|-------|------|----------|-----|--------------|---|
|      | 21:00 - 21:00  | 0.00          | CSG   |      |          |     |              | <p>CONDUCTOR CASING:<br/>Cond. Depth set: 44<br/>Cement sx used:</p> <p>SPUD DATE/TIME: 5/19/2010 22:00</p> <p>SURFACE HOLE:<br/>Surface From depth: 44<br/>Surface To depth: 2,254<br/>Total SURFACE hours: 23.50<br/>Surface Casing size: 8 5/8<br/># of casing joints ran: 50<br/>Casing set MD: 2,225.0<br/># sx of cement: 425<br/>Cement blend (ppg): 15.8<br/>Cement yield (ft3/sk): 1.15<br/># of bbls to surface: 0<br/>Describe cement issues: 2 TOP JOBS 100 SXS<br/>EACH TIME NO CMT.<br/>Describe hole issues:</p> <p>PRODUCTION:<br/>Rig Move/Skid start date/time: 6/11/2010 0:01<br/>Rig Move/Skid finish date/time: 6/11/2010 1:00<br/>Total MOVE hours: 1.0<br/>Prod Rig Spud date/time: 6/11/2010 10:30<br/>Rig Release date/time: 6/20/2010 21:00<br/>Total SPUD to RR hours: 226.5<br/>Planned depth MD 9,629<br/>Planned depth TVD 9,392<br/>Actual MD: 9,636<br/>Actual TVD: 9,404<br/>Open Wells \$: \$835,648<br/>AFE \$: \$751,584<br/>Open wells \$/ft: \$86.72</p> <p>PRODUCTION HOLE:<br/>Prod. From depth: 2,259<br/>Prod. To depth: 9,636<br/>Total PROD hours: 118<br/>Log Depth: 9636<br/>Production Casing size: 4 1/2<br/># of casing joints ran: 229<br/>Casing set MD: 9,624.0<br/># sx of cement: L 493 T 1091<br/>Cement blend (ppg): L 12.4 T 14.3<br/>Cement yield (ft3/sk): L 2.03 T 1.31<br/>Est. TOC (Lead &amp; Tail) or 2 Stage : T 4100 FT.<br/>Describe cement issues: HAD TO WAIT ON CMT.<br/>DO TO PERFORATING CASING<br/>Describe hole issues:</p> <p>DIRECTIONAL INFO:<br/>KOP: 150<br/>Max angle: 22.25<br/>Departure: 1549.37<br/>Max dogleg MD: 3.32</p> |

**US ROCKIES REGION  
Operation Summary Report**

|  |  |   |                             |
|--|--|---|-----------------------------|
| Well: NBU 1021-12B3DS [B.LUE]                        |  | Spud Conductor: 5/10/2010                                   | Spud Date: 5/19/2010        |
| Project: UTAH-UINTAH                                 |  | Site: NBU 1021-10 PAD                                       | Rig Name No: MILES-GRAY 1/1 |
| Event: COMPLETION                                    |  | Start Date: 8/13/2010                                       | End Date: 8/24/2010         |
| Active Datum: RKB @5,235.01ft (above Mean Sea Level) |  | UWI: SW/SE/0/10/S/21/E/1/0/0/6/PM/S/374.00/E/0/2,433.00/0/0 |                             |

| Date      | Time Start-End | Duration (hr) | Phase | Code | Sub Code | P/U | MD From (ft) | Operation   |
|-----------|----------------|---------------|-------|------|----------|-----|--------------|---|
| 8/16/2010 | 7:00 - 7:15    | 0.25          | COMP  | 48   |          | P   |              | HSM.  |
|           | 7:15 - 18:00   | 10.75         | COMP  | 36   | E        | P   |              | <p>STG #1] MIRU, CASED HOLE SOLUTIONS &amp; FRAC TECH, 1ST SHOOT MESAVERDE USING 3-3/8 EXPEND, 23 GRM, 0.36" HOLE.<br/>           9448'-9452' 4 SPF, 90* PH, 16 HOLES.<br/>           9408'-9410' 4 SPF, 90* PH, 8 HOLES.<br/>           9305'-9307' 4 SPF, 90* PH, 8 HOLES.<br/>           9209'-9211' 4 SPF, 90* PH, 8 HOLES. [40 HOLES]</p> <p>BRK DN BOTTOM PERF STG #1] WHP=#,<br/>           BRK=3727#,4.6 BPM=, ISIP=2242#, FG=67</p> <p>STG #1] WHP=2428#, BRK DN PERFS=#, INJ RT=, INJ PSI=#, ISIP=#, FG=, PUMP'D 840 BBLS SLK WTR W/ 16631# 30/50 MESH W/ 5000# RESIN COAT IN TAIL, ISIP=2654#, FG=72, AR=50.5, AP=4300#, MR=52.2, MP=6504#, NPI=#, 40/40 CALC PERFS OPEN.</p> <p>STG #2] P/U RIH W/ HALIBURTON 8K CBP &amp; PERF GUN, SET CBP @ 9087' PERF MESAVERDE USING 3-3/8 EXPEND, 23 GRM, 0.36" HOLE.<br/>           9055'-9057' 4 SPF, 90* PH, 8 HOLES.<br/>           9025'-9027' 4 SPF, 90* PH, 8 HOLES.<br/>           9011'-9012' 4 SPF, 90* PH 4 HOLES.<br/>           8986'-8987' 4 SPF, 90* PH, 4 HOLES.<br/>           8972'-8974' 4 SPF, 90* PH, 8 HOLES.<br/>           8960'-8961' 4 SPF, 90* PH, 4 HOLES.<br/>           8937'-8938' 4 SPF, 90* PH, 4 HOLES. [40 HOLES]</p> <p>BRK DN BOTTOM PERFS STG #2]WHP=#,<br/>           BRK=3747#,4 BPM, ISIP=2442#, FG=70</p> <p>STG #2] WHP=1709#, BRK DN PERFS=3105#, INJ RT=50.1, INJ PSI=4637#, ISIP=2255#, FG=.68, PUMP'D 1488 BBLS SLK WTR W/ 58275# 30/50 MESH W/ 5000# RESIN COAT IN TAIL, ISIP=2299#, FG=.69, AR=50, AP=3800#, MR=51.5, MP=4967#, NPI=44#, 40/40 CALC PERFS OPEN.</p> <p>STG #3] P/U RIH W/ HALIBURTON 8K CBP &amp; PERF GUN, SET CBP @ 8925' PERF MESAVERDE USING 3-3/8 EXPEND, 23 GRM, 0.36" HOLE.<br/>           8892'-8895' 4 SPF, 90* PH, 12 HOLES.<br/>           8825'-8828' 4 SPF, 90* PH, 12 HOLES.<br/>           8800'-8802' 4 SPF, 90* PH, 8 HOLES.<br/>           8758'-8760' 4 SPF, 90* PH, 8 HOLES. [40 HOLES]</p> <p>BRK DN BOTTOM PERFS STG #3]WHP=#,<br/>           BRK=2781#,4.9 BPM, ISIP=2266#, FG=.68 SWIFN.</p> |

**US ROCKIES REGION**  
**Operation Summary Report**

|  |  |   |                             |
|--|--|---|-----------------------------|
| Well: NBU 1021-12B3DS [B.LUE]                        |  | Spud Conductor: 5/10/2010                                   | Spud Date: 5/19/2010        |
| Project: UTAH-UINTAH                                 |  | Site: NBU 1021-10 PAD                                       | Rig Name No: MILES-GRAY 1/1 |
| Event: COMPLETION                                    |  | Start Date: 8/13/2010                                       | End Date: 8/24/2010         |
| Active Datum: RKB @5,235.01ft (above Mean Sea Level) |  | UWI: SW/SE/0/10/S/21/E/1/0/0/6/PM/S/374.00/E/0/2,433.00/0/0 |                             |

| Date      | Time Start-End | Duration (hr) | Phase | Code | Sub Code | P/U | MD From (ft) | Operation  |
|-----------|----------------|---------------|-------|------|----------|-----|--------------|--|
| 8/17/2010 | -              |               |       |      |          |     |              | <p>FRAC STG #3 MESAVERDE 7858'-8895' [40 HOLES]</p> <p>STG #3] WHP=1826#, BRK DN PERFS=2740#, INJ RT=50.1 , INJ PSI=4495#, ISIP=2148#, FG=.68, PUMP'D 1751 BBLS SLK WTR W/ 69440# 30/50 MESH W/ 5000# RESIN COAT IN TAIL, ISIP=2817#, FG=.75, AR=50, AP=4100#, MR=51, MP=5680#, NPI=669#, 40/40 CALC PERFS OPEN.</p> <p>STG #4] P/U RIH W/ HALIBURTON 8K CBP &amp; PERF GUN, SET CBP @8517' PERF MESAVERDE USING 3-3/8 EXPEND, 23 GRM, 0.36" HOLE 8483'-8487' 4 SPF, 90* PH, 16 HOLES. 8424'-8426' 4 SPF, 90* PH, 8 HOLES. 8236'-8238' 4 SPF, 90* PH, 8 HOLES. 8216'-8218' 4 SPF, 90* PH, 8 HOLES [40 HOLES]</p> <p>BRK DN BOTTOM PERFS STG #4]WHP=#, BRK=2508#,3.1 BPM, ISIP=1840#, FG=.65</p> <p>STG #4] WHP=1579#, BRK DN PERFS=2610#, INJ RT=51.4, INJ PSI=4165#, ISIP=1973#, FG=.67, PUMP'D 827 BBLS SLK WTR W/ 25300# 30/50 MESH W/ 5000# RESIN COAT IN TAIL, ISIP=2541#, FG=.74, AR=51, AP=4000#, MR=51.9, MP=5002#, NPI=568#, 40/40 CALC PERFS OPEN.</p> <p>STG #5] P/U RIH W/ HALIBURTON 8K CBP &amp; PERF GUN, SET CBP @ 8150' PERF MESAVERDE USING 3-3/8 EXPEND, 23 GRM, 0.36" HOLE 8118'-8120' 4 SPF, 90* PH, 8 HOLES. 8089'-8091' 4 SPF, 90* PH, 8 HOLES 7958'-7960' 4 SPF, 90* PH, 8 HOLES 7923'-7924' 4 SPF, 90* PH, 4 HOLES. 7887'-7890' 4 SPF, 90* PH, 12 HOLES [40 HOLES]</p> <p>BRK DN BOTTOM PERFS STG #5]WHP=#, BRK=2945#,3 BPM, ISIP=2347#, FG=.72</p> <p>STG #5] WHP=1974#, BRK DN PERFS=3081#, INJ RT=47.5 , INJ PSI=4236#, ISIP=2232#, FG=.71, PUMP'D 762 BBLS SLK WTR W/ 27267# 30/50 MESH W/ 5000# RESIN COAT IN TAIL, ISIP=2283#, FG=.72, AR=50.7, AP=3600#, MR=51.5, MP=4654#, NPI=51#, 40/40 CALC PERFS OPEN.</p> <p>STG #6] P/U RIH W/ HALIBURTON 8K CBP &amp; PERF GUN, SET CBP @ 7847' PERF MESAVERDE USING 3-3/8 EXPEND, 23 GRM, 0.36" HOLE. 7816'-7817' 4 SPF, 90* PH, 4 HOLES. 7776'-7778' 4 SPF, 90* PH, 8 HOLES. 7710'-7712' 4 SPF, 90* PH, 8 HOLES. 7648'7650' 4 SPF, 90* PH, 8 HOLES. 7612'-7614' 4 SPF, 90* PH, 8 HOLES. 7587'-7588' 4 SPF, 90* PH, 4 HOLES. [40 HOLES]</p> <p>BRK DN BOTTOM PERFS STG #6]WHP=#, BRK=5890#,3.5 BPM, ISIP=1956#, FG=.68</p> <p>STG #6] WHP=1337#, BRK DN PERFS=2852#, INJ RT=50.5, INJ PSI=4307#, ISIP=1883#, FG=.68, PUMP'D 2168 BBLS SLK WTR W/ 85845# 30/50 MESH W/ 5000# RESIN COAT IN TAIL, ISIP=2170#, FG=.71, AR=50.7, AP=3300#, MR=51.4, MP=4319#,</p> |

**US ROCKIES REGION**  
**Operation Summary Report**

|  |  |  |                             |
|--|--|--|-----------------------------|
| Well: NBU 1021-12B3DS [B.LUE]                        |  | Spud Conductor: 5/10/2010                                    | Spud Date: 5/19/2010        |
| Project: UTAH-UINTAH                                 |  | Site: NBU 1021-10 PAD  | Rig Name No: MILES-GRAY 1/1 |
| Event: COMPLETION                                    |  | Start Date: 8/13/2010  | End Date: 8/24/2010         |
| Active Datum: RKB @5,235.01ft (above Mean Sea Level) |  | UWI: SW/SE/0/10/S/21/E/1/10/0/6/PM/S/374.00/E/0/2,433.00/0/0 |                             |

| Date      | Time Start-End | Duration (hr) | Phase | Code | Sub Code | P/U | MD From (ft) | Operation  |
|-----------|----------------|---------------|-------|------|----------|-----|--------------|--|
|           |                |               |       |      |          |     |              | NPI=287#, 40/40 CALC PERFS OPEN.   |
|           |                |               |       |      |          |     |              | STG #7] P/U RIH W/ HALIBURTON 8K CBP & PERF GUN, SET CBP @ 6838' PERF MESAVERDE USING 3-3/8 EXPEND, 23 GRM, 0.36" HOLE. 6800'-6808' 4 SPF, 90* PH, 32 HOLES. 6532'-6534' 4 SPF, 90* PH. 8 HOLES. [40 HOLES]  |
| 8/18/2010 | 6:45 - 7:00    | 0.25          | COMP  | 48   |          | P   |              | BRK DN BOTTOM PERFS STG #7]WHP=#, BRK=4072#,3.4 BPM, ISIP=1265#, FG=.62 SWIFN. HSM   |
|           | 7:00 - 7:00    | 0.00          | COMP  | 36   | E        | P   |              | 71FRAC STG #6 MESAVERDE 7587'-7818' [40 HOLES]   |
|           |                |               |       |      |          |     |              | STG #6] WHP=1337#, BRK DN PERFS=2852#, INJ RT=50.5, INJ PSI=4307#, ISIP=1883#, FG=.68, PUMP'D 2168 BBLS SLK WTR W/ 85845# 30/50 MESH W/ 5000# RESIN COAT IN TAIL, ISIP=2170#, FG=.71, AR=50.7, AP=3300#, MR=51.4, MP=4319#, NPI=287#, 40/40 CALC PERFS OPEN. |
|           |                |               |       |      |          |     |              | STG #7] P/U RIH W/ HALIBURTON 8K CBP & PERF GUN, SET CBP @ 6838' PERF MESAVERDE USING 3-3/8 EXPEND, 23 GRM, 0.36" HOLE. 6800'-6808' 4 SPF, 90* PH, 32 HOLES. 6532'-6532' 4 SPF, 90* PH, 8 HOLES. [40 HOLES]  |
|           |                |               |       |      |          |     |              | BRK DN BOTTOM PERFS STG #7]WHP=#, BRK=4072#, 3.4 BPM, ISIP=1265#, FG=.62   |
|           |                |               |       |      |          |     |              | STG #7] WHP=924#, BRK DN PERFS=2239#, INJ RT=51, INJ PSI=3304#, ISIP=1737#, FG=.69, PUMP'D 686 BBLS SLK WTR W/ 29491# 30/50 MESH W/ 5000# RESIN COAT IN TAIL, ISIP=2125#, FG=.75, AR=51, AP=3500#, MR=52.8, MP=4660#, NPI=388#, 40/40 CALC PERFS OPEN.       |
|           |                |               |       |      |          |     |              | STG #8] P/U RIH W/ HALIBURTON 8K CBP & PERF GUN, SET CBP @ 5828 PERF MESAVERDE USING 3-3/8 EXPEND, 23 GRM, 0.36" HOLE. 5792'-5798' 4 SPF, 90* PH, 24 HOLES. [24 HOLES]   |
|           |                |               |       |      |          |     |              | BRK DN BOTTOM PERFS STG #8]WHP=#, BRK=#, BPM, ISIP=#, FG=.   |
|           |                |               |       |      |          |     |              | STG #8] WHP=159#, BRK DN PERFS=3134#, INJ RT=50, INJ PSI=3100#, ISIP=663#, FG=.55, PUMP'D 589 BBLS SLK WTR W/ 24479# 30/50 MESH W/ 5000# RESIN COAT IN TAIL, ISIP=1827#, FG=.75, AR=51.6, AP=2800#, MR=52.6, MP=3288#, NPI=1164#, 40/40 CALC PERFS OPEN.     |
|           |                |               |       |      |          |     |              | P/U RIH W/ HALIBURTON 8K CBP & SET @ 5742' FOR TOP KILL<br>SWI WAIT FOR RIG TO DRL OUT   |
| 8/23/2010 | 7:00 - 7:30    | 0.50          | COMP  | 48   |          | P   |              | TOTAL SAND=33,6716#<br>TOTAL WTR=9,111 BBLS<br>HSM, PICKING UP TBG OFF FLOAT.  |

**US ROCKIES REGION**  
**Operation Summary Report**

|  |  |   |                             |
|--|--|---|-----------------------------|
| Well: NBU 1021-12B3DS [B.LUE]                        |  | Spud Conductor: 5/10/2010                                   | Spud Date: 5/19/2010        |
| Project: UTAH-UINTAH                                 |  | Site: NBU 1021-1O PAD                                       | Rig Name No: MILES-GRAY 1/1 |
| Event: COMPLETION                                    |  | Start Date: 8/13/2010                                       | End Date: 8/24/2010         |
| Active Datum: RKB @5,235.01ft (above Mean Sea Level) |  | UWI: SW/SE/0/10/S/21/E/1/0/0/6/PM/S/374.00/E/0/2,433.00/0/0 |                             |

| Date      | Time Start-End | Duration (hr) | Phase | Code | Sub Code | P/U | MD From (ft) | Operation   |
|-----------|----------------|---------------|-------|------|----------|-----|--------------|---|
|           | 7:30 - 15:00   | 7.50          | COMP  | 31   | I        | P   |              | RD OFF NBU 1021-1O3AS, MOVE OVER & RIG UP, ND FRAC VALVES, NU BOPS, RU FLOOR & EQUIP. TALLY & PU 37/8 BIT, POBS, 1.875 X/N & 181 JTS 23/8 L-80 OFF FLOAT. TAG UP @ 5730' RU DRLG EQUIP EOT @ 5703' PREP TO D/O IN AM, SWI SDFN. |
| 8/24/2010 | 7:00 - 7:30    | 0.50          | COMP  | 48   |          | P   |              | HSM, WORKING W/ POWER SWIVEL DRILLING CBPS.   |
|           | 7:30 - 18:00   | 10.50         | COMP  | 44   | C        | P   |              | BROKE CIRC CONVENTIONAL, TEST BOPS TO 3,000# RIH.   |
|           |                |               |       |      |          |     |              | C/O 15' SAND TAG 1ST PLUG @ 5752' DRL PLG IN 5 MIN 100# PSI INCREASE RIH.   |
|           |                |               |       |      |          |     |              | C/O 30' SAND TAG 2ND PLUG @ 5828' DRL PLG IN 6 MIN 200# PSI INCREASE RIH.   |
|           |                |               |       |      |          |     |              | C/O 30' SAND TAG 3RD PLUG @ 6838' DRL PLG IN 4 MIN 400# PSI INCREASE RIH.   |
|           |                |               |       |      |          |     |              | C/O 90' SAND TAG 4TH PLUG @ 7847' DRL PLG IN 4 MIN 200# PSI INCREASE RIH.   |
|           |                |               |       |      |          |     |              | C/O 30' SAND TAG 5TH PLUG @ 8150' DRL PLG IN 7 MIN 200# PSI INCREASE RIH.   |
|           |                |               |       |      |          |     |              | C/O 30' SAND TAG 6TH PLUG @ 8517' DRL PLG IN 4 MIN 500# PSI INCREASE RIH.   |
|           |                |               |       |      |          |     |              | C/O 30' SAND TAG 7TH PLUG @ 8925' DRL PLG IN 4 MIN 300# PSI INCREASE RIH.   |
|           |                |               |       |      |          |     |              | C/O 30' SAND TAG 8TH PLUG @ 9087' DRL PLG IN 6 MIN 300# PSI INCREASE RIH.   |
|           |                |               |       |      |          |     |              | C/O TO PBTD @ 9600' CIRC WELL CLEAN, RD SWIVEL, L/D 21 JTS LAND TBG ON 281 JTS. ND BOPS NU WH, PMP OFF BIT LET WELL SET FOR 30 MIN FOR BIT TO FALL. TURN WELL OVER TO FB CREW. RIG DWN MOVE OVER & RU ON NBU 1021-12A2BS. SDFN. |
|           |                |               |       |      |          |     |              | KB = 15'<br>71/16 WEATHERFORD HANGER = .83'<br>281 JTS 23/8 L-80 = 8884.41'<br>POBS & 1.875 X/N = 2.20'<br>EOT @ 8902.44'   |
|           |                |               |       |      |          |     |              | 315 JTS HAULED OUT<br>281 LANDED<br>34 TO RETURN  |
|           |                |               |       |      |          |     |              | TWTR = 9361 BBLS<br>TWR = 1200 BBLS<br>TWLTR = 8161 BBLS  |
| 8/25/2010 | 7:00 -         |               |       | 33   | A        |     |              | 7 AM FLBK REPORT: CP 2600#, TP 1900#, 20/64" CK, 60 BWPH, TRACE SAND, LIGHT GAS<br>TTL BBLS RECOVERED: 2260<br>BBLS LEFT TO RECOVER: 7101   |
|           | 10:00 -        |               | PROD  | 50   |          |     |              | WELL TURNED TO SALES @ 1000 HR ON 8/25/10 - 1300 MCFD, 1440 BWPD, CP 2650#, FTP 1900#, CK 20/64"  |

**US ROCKIES REGION**  
**Operation Summary Report**

|  |                           |   |
|--|---------------------------|---|
| Well: NBU 1021-12B3DS [B.LUE]                        | Spud Conductor: 5/10/2010 | Spud Date: 5/19/2010  |
| Project: UTAH-UINTAH                                 | Site: NBU 1021-10 PAD     | Rig Name No: MILES-GRAY 1/1                                 |
| Event: COMPLETION                                    | Start Date: 8/13/2010     | End Date: 8/24/2010   |
| Active Datum: RKB @5,235.01ft (above Mean Sea Level) |                           | UWI: SW/SE/0/10/S/21/E/1/0/0/6/PM/S/374.00/E/0/2,433.00/0/0 |

| Date      | Time Start-End | Duration (hr) | Phase | Code | Sub Code | P/U | MD From (ft) | Operation   |
|-----------|----------------|---------------|-------|------|----------|-----|--------------|---|
| 8/26/2010 | 7:00 -         |               |       | 33   | A        |     |              | 7 AM FLBK REPORT: CP 2450#, TP 1850#, 20/64" CK, 50 BWPH, TRACE SAND, - GAS<br>TTL BBLS RECOVERED: 3566<br>BBLS LEFT TO RECOVER: 5795 |
| 8/27/2010 | 7:00 -         |               |       | 33   | A        |     |              | 7 AM FLBK REPORT: CP 2500#, TP 1775#, 20/64" CK, 41 BWPH, TRACE SAND, - GAS<br>TTL BBLS RECOVERED: 4662<br>BBLS LEFT TO RECOVER: 4699 |
| 8/28/2010 | 7:00 -         |               |       | 33   | A        |     |              | 7 AM FLBK REPORT: CP 2500#, TP 1650#, 20/64" CK, 27 BWPH, TRACE SAND, - GAS<br>TTL BBLS RECOVERED: 5475<br>BBLS LEFT TO RECOVER: 3886 |

1 General

1.1 Customer Information

|                |                   |
|----------------|-------------------|
| Company        | US ROCKIES REGION |
| Representative |                   |
| Address        |                   |

1.2 Well Information

|                          |  |                 |   |
|--------------------------|--|-----------------|---|
| Well                     | NBU 1021-12B3DS [B.LUE]                | Wellbore No.    | OH  |
| Well Name                | NBU 1021-12B3DS                        | Common Name     | NBU 1021-12B3DS   |
| Project                  | UTAH-UINTAH                            | Site            | NBU 1021-1O PAD   |
| Vertical Section Azimuth | 173.11 (°)                             | North Reference | True  |
| Origin N/S               | 0.0 (ft)                               | Origin E/W      | 0.0 (ft)  |
| Spud Date                | 5/19/2010                              | UWI             | SW/SE/0/10/S/21/E/1/0/0/6/PM/S/374.00/E/0/2,4 33.00/0/0 |
| Active Datum             | RKB @5,235.01ft (above Mean Sea Level) |                 |   |

2 Survey Name

2.1 Survey Name: Survey #1

|             |           |          |                  |
|-------------|-----------|----------|------------------|
| Survey Name | Survey #1 | Company  | WEATHERFORD      |
| Started     | 5/20/2010 | Ended    |                  |
| Tool Name   | MWD       | Engineer | CHARLIE BILLINGS |

2.1.1 Tie On Point

| MD (ft) | Inc (°) | Azi (°) | TVD (ft) | N/S (ft) | E/W (ft) |
|---------|---------|---------|----------|----------|----------|
| 5.00    | 0.00    | 0.00    | 5.00     | 0.00     | 0.00     |

2.1.2 Survey Stations

| Date      | Type   | MD (ft)  | Inc (°) | Azi (°) | TVD (ft) | N/S (ft) | E/W (ft) | V. Sec (ft) | DLeg (°/100ft) | Build (°/100ft) | Turn (°/100ft) | TFace (°) |
|-----------|--------|----------|---------|---------|----------|----------|----------|-------------|----------------|-----------------|----------------|-----------|
| 5/20/2010 | Tie On | 5.00     | 0.00    | 0.00    | 5.00     | 0.00     | 0.00     | 0.00        | 0.00           | 0.00            | 0.00           | 0.00      |
| 5/20/2010 | NORMAL | 268.00   | 0.94    | 147.93  | 267.99   | -1.83    | 1.15     | 1.95        | 0.36           | 0.36            | 0.00           | 147.93    |
|           | NORMAL | 364.00   | 2.19    | 173.12  | 363.95   | -4.32    | 1.78     | 4.50        | 1.46           | 1.30            | 26.24          | 41.81     |
|           | NORMAL | 459.00   | 2.63    | 178.37  | 458.87   | -8.30    | 2.06     | 8.48        | 0.52           | 0.46            | 5.53           | 29.28     |
|           | NORMAL | 554.00   | 2.75    | 175.37  | 553.76   | -12.75   | 2.31     | 12.93       | 0.19           | 0.13            | -3.16          | -51.06    |
|           | NORMAL | 650.00   | 2.81    | 184.37  | 649.65   | -17.39   | 2.32     | 17.54       | 0.46           | 0.06            | 9.37           | 86.68     |
|           | NORMAL | 746.00   | 2.94    | 177.37  | 745.53   | -22.20   | 2.25     | 22.30       | 0.39           | 0.14            | -7.29          | -73.20    |
|           | NORMAL | 841.00   | 3.00    | 176.12  | 840.40   | -27.11   | 2.53     | 27.22       | 0.09           | 0.06            | -1.32          | -47.81    |
|           | NORMAL | 937.00   | 2.38    | 183.49  | 936.30   | -31.61   | 2.58     | 31.69       | 0.74           | -0.65           | 7.68           | 154.49    |
|           | NORMAL | 1,032.00 | 2.25    | 172.49  | 1,031.22 | -35.42   | 2.70     | 35.49       | 0.49           | -0.14           | -11.58         | -111.76   |
|           | NORMAL | 1,128.00 | 2.56    | 167.62  | 1,127.14 | -39.39   | 3.41     | 39.51       | 0.39           | 0.32            | -5.07          | -35.84    |
|           | NORMAL | 1,224.00 | 2.44    | 168.62  | 1,223.05 | -43.48   | 4.27     | 43.68       | 0.13           | -0.12           | 1.04           | 160.52    |
| 5/21/2010 | NORMAL | 1,320.00 | 2.38    | 166.99  | 1,318.96 | -47.43   | 5.12     | 47.70       | 0.09           | -0.06           | -1.70          | -132.01   |
|           | NORMAL | 1,415.00 | 2.19    | 159.87  | 1,413.89 | -51.05   | 6.19     | 51.43       | 0.36           | -0.20           | -7.49          | -127.32   |
|           | NORMAL | 1,511.00 | 2.31    | 164.87  | 1,509.81 | -54.64   | 7.33     | 55.13       | 0.24           | 0.12            | 5.21           | 61.08     |
|           | NORMAL | 1,606.00 | 2.81    | 172.99  | 1,604.72 | -58.80   | 8.11     | 59.35       | 0.65           | 0.53            | 8.55           | 40.06     |
|           | NORMAL | 1,702.00 | 2.81    | 176.87  | 1,700.60 | -63.49   | 8.53     | 64.05       | 0.20           | 0.00            | 4.04           | 91.94     |
|           | NORMAL | 1,797.00 | 2.69    | 175.12  | 1,795.49 | -68.04   | 8.84     | 68.60       | 0.15           | -0.13           | -1.84          | -145.89   |
|           | NORMAL | 1,892.00 | 2.25    | 171.87  | 1,890.40 | -72.10   | 9.30     | 72.70       | 0.49           | -0.46           | -3.42          | -163.96   |
|           | NORMAL | 1,985.00 | 2.38    | 172.99  | 1,983.33 | -75.83   | 9.79     | 76.45       | 0.15           | 0.14            | 1.20           | 19.75     |
|           | NORMAL | 2,080.00 | 2.44    | 173.37  | 2,078.25 | -79.79   | 10.26    | 80.45       | 0.07           | 0.06            | 0.40           | 15.10     |

2.1.2 Survey Stations (Continued)

| Date      | Type   | MD (ft)  | Inc (°) | Azi (°) | TVD (ft) | N/S (ft)  | E/W (ft) | V. Sec (ft) | DLeg (°/100ft) | Build (°/100ft) | Turn (°/100ft) | TFace (°) |
|-----------|--------|----------|---------|---------|----------|-----------|----------|-------------|----------------|-----------------|----------------|-----------|
| 5/21/2010 | NORMAL | 2,205.00 | 2.77    | 173.98  | 2,203.12 | -85.44    | 10.89    | 86.13       | 0.26           | 0.26            | 0.49           | 5.11      |
| 6/11/2010 | NORMAL | 2,322.00 | 2.89    | 176.34  | 2,319.97 | -91.19    | 11.37    | 91.90       | 0.14           | 0.10            | 2.02           | 45.34     |
|           | NORMAL | 2,412.00 | 4.52    | 171.70  | 2,409.78 | -96.97    | 12.03    | 97.71       | 1.84           | 1.81            | -5.16          | -12.74    |
|           | NORMAL | 2,503.01 | 6.07    | 167.76  | 2,500.39 | -105.22   | 13.57    | 106.09      | 1.75           | 1.70            | -4.33          | -15.17    |
|           | NORMAL | 2,593.01 | 8.44    | 169.72  | 2,589.67 | -116.37   | 15.76    | 117.42      | 2.65           | 2.63            | 2.18           | 6.94      |
|           | NORMAL | 2,684.01 | 10.06   | 173.23  | 2,679.48 | -130.83   | 17.88    | 132.04      | 1.88           | 1.78            | 3.86           | 20.94     |
|           | NORMAL | 2,775.01 | 12.00   | 174.61  | 2,768.80 | -148.15   | 19.71    | 149.44      | 2.15           | 2.13            | 1.52           | 8.43      |
|           | NORMAL | 2,866.01 | 13.75   | 171.23  | 2,857.51 | -168.26   | 22.25    | 169.71      | 2.09           | 1.92            | -3.71          | -24.94    |
|           | NORMAL | 2,956.01 | 16.69   | 169.36  | 2,944.34 | -191.53   | 26.27    | 193.30      | 3.31           | 3.27            | -2.08          | -10.38    |
|           | NORMAL | 3,047.01 | 19.44   | 168.36  | 3,030.85 | -219.21   | 31.74    | 221.44      | 3.04           | 3.02            | -1.10          | -6.91     |
|           | NORMAL | 3,138.01 | 21.25   | 168.98  | 3,116.17 | -250.23   | 37.94    | 252.98      | 2.00           | 1.99            | 0.68           | 7.08      |
|           | NORMAL | 3,228.01 | 19.38   | 171.36  | 3,200.57 | -281.01   | 43.30    | 284.17      | 2.27           | -2.08           | 2.64           | 157.27    |
|           | NORMAL | 3,319.01 | 19.00   | 168.48  | 3,286.51 | -310.45   | 48.53    | 314.03      | 1.12           | -0.42           | -3.16          | -113.23   |
|           | NORMAL | 3,410.01 | 17.19   | 167.98  | 3,373.01 | -338.12   | 54.29    | 342.19      | 2.00           | -1.99           | -0.55          | -175.33   |
|           | NORMAL | 3,500.01 | 18.06   | 171.98  | 3,458.78 | -364.95   | 59.01    | 369.39      | 1.66           | 0.97            | 4.44           | 56.23     |
|           | NORMAL | 3,591.01 | 18.44   | 178.36  | 3,545.22 | -393.30   | 61.39    | 397.83      | 2.23           | 0.42            | 7.01           | 82.27     |
|           | NORMAL | 3,682.01 | 17.69   | 171.98  | 3,631.74 | -421.38   | 63.73    | 425.98      | 2.32           | -0.82           | -7.01          | -113.77   |
|           | NORMAL | 3,772.01 | 18.63   | 171.43  | 3,717.25 | -449.14   | 67.78    | 454.03      | 1.06           | 1.04            | -0.61          | -10.60    |
|           | NORMAL | 3,863.01 | 17.44   | 169.98  | 3,803.78 | -476.94   | 72.32    | 482.17      | 1.40           | -1.31           | -1.59          | -160.02   |
|           | NORMAL | 3,954.01 | 18.38   | 170.48  | 3,890.37 | -504.52   | 77.06    | 510.12      | 1.05           | 1.03            | 0.55           | 9.53      |
|           | NORMAL | 4,044.01 | 18.69   | 171.73  | 3,975.70 | -532.78   | 81.48    | 538.71      | 0.56           | 0.34            | 1.39           | 52.63     |
| 6/12/2010 | NORMAL | 4,135.01 | 20.44   | 170.73  | 4,061.45 | -562.90   | 86.14    | 569.17      | 1.96           | 1.92            | -1.10          | -11.30    |
|           | NORMAL | 4,226.01 | 18.56   | 168.73  | 4,147.23 | -592.79   | 91.53    | 599.49      | 2.19           | -2.07           | -2.20          | -161.39   |
|           | NORMAL | 4,316.01 | 19.56   | 168.36  | 4,232.29 | -621.59   | 97.37    | 628.78      | 1.12           | 1.11            | -0.41          | -7.06     |
|           | NORMAL | 4,407.01 | 22.25   | 172.23  | 4,317.30 | -653.59   | 102.77   | 661.20      | 3.32           | 2.96            | 4.25           | 28.99     |
|           | NORMAL | 4,498.01 | 21.75   | 171.73  | 4,401.67 | -687.34   | 107.53   | 695.28      | 0.59           | -0.55           | -0.55          | -159.70   |
|           | NORMAL | 4,588.01 | 20.25   | 173.36  | 4,485.69 | -719.32   | 111.73   | 727.53      | 1.79           | -1.67           | 1.81           | 159.48    |
|           | NORMAL | 4,679.01 | 20.38   | 173.98  | 4,571.03 | -750.72   | 115.21   | 759.12      | 0.28           | 0.14            | 0.68           | 59.16     |
|           | NORMAL | 4,770.01 | 21.81   | 174.61  | 4,655.93 | -783.31   | 118.46   | 791.86      | 1.59           | 1.57            | 0.69           | 9.30      |
|           | NORMAL | 4,860.01 | 22.06   | 174.48  | 4,739.42 | -816.78   | 121.66   | 825.47      | 0.28           | 0.28            | -0.14          | -11.05    |
|           | NORMAL | 4,951.01 | 21.81   | 172.11  | 4,823.83 | -850.53   | 125.62   | 859.46      | 1.01           | -0.27           | -2.60          | -106.87   |
|           | NORMAL | 5,042.01 | 22.25   | 171.11  | 4,908.19 | -884.30   | 130.61   | 893.58      | 0.64           | 0.48            | -1.10          | -40.91    |
|           | NORMAL | 5,132.01 | 21.00   | 172.73  | 4,991.85 | -917.13   | 135.28   | 926.73      | 1.54           | -1.39           | 1.80           | 155.22    |
|           | NORMAL | 5,223.01 | 19.25   | 173.73  | 5,077.29 | -948.22   | 138.98   | 958.04      | 1.96           | -1.92           | 1.10           | 169.35    |
|           | NORMAL | 5,313.01 | 19.88   | 174.48  | 5,162.09 | -978.20   | 142.07   | 988.18      | 0.75           | 0.70            | 0.83           | 22.09     |
|           | NORMAL | 5,404.01 | 20.06   | 173.86  | 5,247.62 | -1,009.12 | 145.23   | 1,019.25    | 0.31           | 0.20            | -0.68          | -49.92    |
|           | NORMAL | 5,495.01 | 18.81   | 172.86  | 5,333.44 | -1,039.19 | 148.72   | 1,049.53    | 1.42           | -1.37           | -1.10          | -165.56   |
|           | NORMAL | 5,585.01 | 19.81   | 174.11  | 5,418.37 | -1,068.76 | 152.09   | 1,079.29    | 1.20           | 1.11            | 1.39           | 23.05     |
|           | NORMAL | 5,676.01 | 18.38   | 173.48  | 5,504.36 | -1,098.35 | 155.30   | 1,109.05    | 1.59           | -1.57           | -0.69          | -172.10   |
|           | NORMAL | 5,767.01 | 19.27   | 173.82  | 5,590.50 | -1,127.54 | 158.55   | 1,138.41    | 0.99           | 0.98            | 0.37           | 7.19      |
|           | NORMAL | 5,857.01 | 19.06   | 172.86  | 5,675.51 | -1,156.88 | 161.98   | 1,167.96    | 0.42           | -0.23           | -1.07          | -124.13   |
|           | NORMAL | 5,948.01 | 19.31   | 172.73  | 5,761.45 | -1,186.55 | 165.73   | 1,197.86    | 0.28           | 0.27            | -0.14          | -9.76     |
|           | NORMAL | 6,039.01 | 18.81   | 171.11  | 5,847.47 | -1,215.97 | 169.90   | 1,227.57    | 0.80           | -0.55           | -1.78          | -134.15   |
| 6/13/2010 | NORMAL | 6,120.01 | 18.75   | 173.23  | 5,924.15 | -1,241.80 | 173.45   | 1,253.64    | 0.85           | -0.07           | 2.62           | 96.03     |
|           | NORMAL | 6,220.01 | 19.75   | 172.23  | 6,018.56 | -1,274.50 | 177.63   | 1,286.61    | 1.05           | 1.00            | -1.00          | -18.72    |
|           | NORMAL | 6,311.01 | 18.25   | 172.98  | 6,104.60 | -1,303.88 | 181.45   | 1,316.23    | 1.67           | -1.65           | 0.82           | 171.11    |
|           | NORMAL | 6,401.01 | 16.94   | 171.86  | 6,190.39 | -1,330.85 | 185.03   | 1,343.43    | 1.50           | -1.46           | -1.24          | -166.04   |
|           | NORMAL | 6,492.01 | 15.94   | 177.36  | 6,277.67 | -1,356.46 | 187.48   | 1,369.15    | 2.03           | -1.10           | 6.04           | 125.34    |
|           | NORMAL | 6,583.01 | 15.19   | 175.98  | 6,365.34 | -1,380.83 | 188.89   | 1,393.52    | 0.92           | -0.82           | -1.52          | -154.39   |
|           | NORMAL | 6,673.01 | 13.56   | 180.36  | 6,452.52 | -1,403.15 | 189.65   | 1,415.76    | 2.18           | -1.81           | 4.87           | 148.40    |
|           | NORMAL | 6,764.01 | 12.63   | 179.48  | 6,541.15 | -1,423.76 | 189.68   | 1,436.23    | 1.05           | -1.02           | -0.97          | -168.33   |
|           | NORMAL | 6,855.01 | 12.13   | 178.86  | 6,630.04 | -1,443.27 | 189.96   | 1,455.64    | 0.57           | -0.55           | -0.68          | -165.41   |
|           | NORMAL | 6,945.01 | 11.13   | 178.98  | 6,718.19 | -1,461.41 | 190.30   | 1,473.68    | 1.11           | -1.11           | 0.13           | 178.67    |
|           | NORMAL | 7,036.01 | 10.13   | 176.98  | 6,807.63 | -1,478.18 | 190.88   | 1,490.41    | 1.17           | -1.10           | -2.20          | -160.73   |
|           | NORMAL | 7,127.01 | 9.44    | 176.36  | 6,897.30 | -1,493.62 | 191.77   | 1,505.84    | 0.77           | -0.76           | -0.68          | -171.62   |
|           | NORMAL | 7,217.01 | 8.31    | 182.11  | 6,986.22 | -1,507.49 | 192.00   | 1,519.64    | 1.59           | -1.26           | 6.39           | 144.68    |
| 6/14/2010 | NORMAL | 7,308.01 | 6.21    | 186.39  | 7,076.49 | -1,518.95 | 191.21   | 1,530.92    | 2.38           | -2.31           | 4.70           | 167.67    |

2.1.2 Survey Stations (Continued)

| Date      | Type   | MD (ft)  | Inc (°) | Azi (°) | TVD (ft) | N/S (ft)  | E/W (ft) | V. Sec (ft) | DLeg (°/100ft) | Build (°/100ft) | Turn (°/100ft) | TFace (°) |
|-----------|--------|----------|---------|---------|----------|-----------|----------|-------------|----------------|-----------------|----------------|-----------|
| 6/14/2010 | NORMAL | 7,399.01 | 3.44    | 191.61  | 7,167.16 | -1,526.52 | 190.12   | 1,538.30    | 3.08           | -3.04           | 5.74           | 173.59    |
|           | NORMAL | 7,493.02 | 3.25    | 208.98  | 7,261.00 | -1,531.61 | 188.26   | 1,543.14    | 1.09           | -0.20           | 18.48          | 109.21    |
| 6/15/2010 | NORMAL | 7,584.02 | 2.38    | 220.23  | 7,351.89 | -1,535.31 | 185.79   | 1,546.51    | 1.13           | -0.96           | 12.36          | 153.12    |
|           | NORMAL | 7,674.02 | 1.96    | 232.22  | 7,441.83 | -1,537.68 | 183.36   | 1,548.58    | 0.68           | -0.47           | 13.32          | 138.66    |
|           | NORMAL | 7,765.02 | 0.19    | 246.23  | 7,532.81 | -1,538.70 | 181.99   | 1,549.42    | 1.95           | -1.95           | 15.40          | 178.52    |
|           | NORMAL | 7,856.02 | 0.94    | 288.66  | 7,623.80 | -1,538.52 | 181.15   | 1,549.14    | 0.89           | 0.82            | 46.63          | 51.54     |
|           | NORMAL | 7,946.02 | 1.81    | 342.73  | 7,713.78 | -1,536.93 | 180.03   | 1,547.42    | 1.63           | 0.97            | 60.08          | 85.23     |
|           | NORMAL | 8,037.02 | 1.81    | 357.23  | 7,804.74 | -1,534.12 | 179.53   | 1,544.58    | 0.50           | 0.00            | 15.93          | 97.25     |
|           | NORMAL | 8,128.02 | 1.63    | 373     | 7,895.70 | -1,531.39 | 179.55   | 1,541.87    | 0.29           | -0.20           | 7.14           | 135.91    |
|           | NORMAL | 8,219.02 | 1.38    | 8.86    | 7,986.66 | -1,529.02 | 179.80   | 1,539.54    | 0.31           | -0.27           | 5.64           | 154.23    |
|           | NORMAL | 8,309.02 | 1.25    | 10.48   | 8,076.64 | -1,526.98 | 180.15   | 1,537.56    | 0.15           | -0.14           | 1.80           | 164.85    |
|           | NORMAL | 8,400.02 | 1.01    | 18.38   | 8,167.62 | -1,525.24 | 180.58   | 1,535.89    | 0.31           | -0.26           | 8.68           | 150.92    |
|           | NORMAL | 8,490.02 | 0.75    | 8.73    | 8,257.61 | -1,523.91 | 180.92   | 1,534.61    | 0.33           | -0.29           | -10.72         | -155.08   |
|           | NORMAL | 8,581.02 | 0.63    | 23.36   | 8,348.61 | -1,522.86 | 181.21   | 1,533.60    | 0.23           | -0.13           | 16.08          | 131.43    |
|           | NORMAL | 8,672.02 | 0.69    | 12.11   | 8,439.60 | -1,521.87 | 181.52   | 1,532.65    | 0.16           | 0.07            | -12.36         | -70.85    |
| 6/16/2010 | NORMAL | 8,763.02 | 0.63    | 15.36   | 8,530.59 | -1,520.85 | 181.77   | 1,531.67    | 0.08           | -0.07           | 3.57           | 149.66    |
|           | NORMAL | 8,853.02 | 0.19    | 48.48   | 8,620.59 | -1,520.27 | 182.01   | 1,531.13    | 0.54           | -0.49           | 36.80          | 167.57    |
|           | NORMAL | 8,944.02 | 0.31    | 349.11  | 8,711.59 | -1,519.93 | 182.08   | 1,530.80    | 0.30           | 0.13            | -65.24         | -96.85    |
|           | NORMAL | 9,035.02 | 0.31    | 263.90  | 8,802.59 | -1,519.71 | 181.79   | 1,530.55    | 0.46           | 0.00            | -93.64         | -132.60   |
|           | NORMAL | 9,125.02 | 0.38    | 228.36  | 8,892.59 | -1,519.94 | 181.32   | 1,530.71    | 0.25           | 0.08            | -39.49         | -90.20    |
|           | NORMAL | 9,216.02 | 0.38    | 204.23  | 8,983.59 | -1,520.41 | 180.97   | 1,531.14    | 0.17           | 0.00            | -26.52         | -102.06   |
|           | NORMAL | 9,307.02 | 0.25    | 98.98   | 9,074.59 | -1,520.72 | 181.04   | 1,531.46    | 0.56           | -0.14           | -115.66        | -151.58   |
|           | NORMAL | 9,397.02 | 0.25    | 45.86   | 9,164.59 | -1,520.61 | 181.38   | 1,531.39    | 0.25           | 0.00            | -59.02         | -116.56   |
|           | NORMAL | 9,488.02 | 0.56    | 54.48   | 9,255.58 | -1,520.22 | 181.88   | 1,531.06    | 0.35           | 0.34            | 9.47           | 15.45     |
| 6/17/2010 | NORMAL | 9,579.02 | 0.78    | 70.68   | 9,346.58 | -1,519.75 | 182.83   | 1,530.71    | 0.32           | 0.24            | 17.80          | 49.02     |
|           | NORMAL | 9,636.02 | 0.78    | 70.68   | 9,403.57 | -1,519.50 | 183.56   | 1,530.54    | 0.00           | 0.00            | 0.00           | 0.00      |

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| <b>STATE OF UTAH</b><br>DEPARTMENT OF NATURAL RESOURCES<br>DIVISION OF OIL, GAS, AND MINING  | <b>FORM 9</b><br><br><b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b><br>ML 23612                                     |
| <b>SUNDRY NOTICES AND REPORTS ON WELLS</b><br><br>Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals. | <b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b><br><br><b>7. UNIT or CA AGREEMENT NAME:</b><br>NATURAL BUTTES          |
| <b>1. TYPE OF WELL</b><br>Gas Well   | <b>8. WELL NAME and NUMBER:</b><br>NBU 1021-12B3DS  |
| <b>2. NAME OF OPERATOR:</b><br>KERR-MCGEE OIL & GAS ONSHORE, L.P.  | <b>9. API NUMBER:</b><br>43047508560000   |
| <b>3. ADDRESS OF OPERATOR:</b><br>P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779  | <b>PHONE NUMBER:</b><br>720 929-6007 Ext  |
| <b>4. LOCATION OF WELL</b><br><b>FOOTAGES AT SURFACE:</b><br>0374 FSL 2433 FEL<br><b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b><br>Qtr/Qtr: SWSE Section: 01 Township: 10.0S Range: 21.0E Meridian: S  | <b>9. FIELD and POOL or WILDCAT:</b><br>NATURAL BUTTES<br><br><b>COUNTY:</b><br>UINTAH<br><br><b>STATE:</b><br>UTAH |

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

| TYPE OF SUBMISSION   | TYPE OF ACTION  |   |   |
|--|---|---|---|
| <input checked="" type="checkbox"/> <b>NOTICE OF INTENT</b><br>Approximate date work will start:<br>12/10/2010<br><br><input type="checkbox"/> <b>SUBSEQUENT REPORT</b><br>Date of Work Completion:<br><br><input type="checkbox"/> <b>SPUD REPORT</b><br>Date of Spud:<br><br><input type="checkbox"/> <b>DRILLING REPORT</b><br>Report Date: | <input type="checkbox"/> ACIDIZE<br><br><input type="checkbox"/> CHANGE TO PREVIOUS PLANS<br><br><input type="checkbox"/> CHANGE WELL STATUS<br><br><input type="checkbox"/> DEEPEN<br><br><input type="checkbox"/> OPERATOR CHANGE<br><br><input type="checkbox"/> PRODUCTION START OR RESUME<br><br><input type="checkbox"/> REPERFORATE CURRENT FORMATION<br><br><input type="checkbox"/> TUBING REPAIR<br><br><input type="checkbox"/> WATER SHUTOFF<br><br><input type="checkbox"/> WILDCAT WELL DETERMINATION | <input type="checkbox"/> ALTER CASING<br><br><input type="checkbox"/> CHANGE TUBING<br><br><input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS<br><br><input type="checkbox"/> FRACTURE TREAT<br><br><input type="checkbox"/> PLUG AND ABANDON<br><br><input type="checkbox"/> RECLAMATION OF WELL SITE<br><br><input type="checkbox"/> SIDETRACK TO REPAIR WELL<br><br><input type="checkbox"/> VENT OR FLARE<br><br><input type="checkbox"/> SI TA STATUS EXTENSION | <input checked="" type="checkbox"/> CASING REPAIR<br><br><input type="checkbox"/> CHANGE WELL NAME<br><br><input type="checkbox"/> CONVERT WELL TYPE<br><br><input type="checkbox"/> NEW CONSTRUCTION<br><br><input type="checkbox"/> PLUG BACK<br><br><input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION<br><br><input type="checkbox"/> TEMPORARY ABANDON<br><br><input type="checkbox"/> WATER DISPOSAL<br><br><input type="checkbox"/> APD EXTENSION<br><br>OTHER: <input type="text" value="Wellhead"/> |

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

The operator requests approval to conduct wellhead/casing repair operations on the subject well location. This well is a producing gas well. Please find the attached procedure for the proposed repair work on the subject well location.

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

**Date:** 12/14/2010

**By:** *Derek Duff*

|  |                                     |                                    |
|--|-------------------------------------|------------------------------------|
| <b>NAME (PLEASE PRINT)</b><br>Andy Lytle | <b>PHONE NUMBER</b><br>720 929-6100 | <b>TITLE</b><br>Regulatory Analyst |
| <b>SIGNATURE</b><br>N/A                  |                                     | <b>DATE</b><br>12/9/2010           |

**WORKORDER #:** 88104325

**Name:** NBU 1021-12B3DS  
**Location:** SWSE SEC.12, T10S, R21E  
Uintah County, UT

12/9/10

**ELEVATIONS:** 5221' GL 5236' KB

**TOTAL DEPTH:** 9636' **PBD:** 9600'

**SURFACE CASING:** 8 5/8", 28# IJ-55 ST&C @ 2230'

**PRODUCTION CASING:** 4 1/2", 11.6#, I-80 LT&C @ 9624'  
Marker Joint 4598'-4620'  
T.O.C.@ ~2000'

**PERFORATIONS:** Mesaverde 7587' - 9452'  
Wasatch 5792' - 6808'

|                                  | BURST<br>(psi) | COLLAPSE<br>(psi) | DRIFT DIA.<br>(in.) | CAPACITIES |          |
|----------------------------------|----------------|-------------------|---------------------|------------|----------|
|                                  |                |                   |                     | (bbl/ft)   | (gal/ft) |
| 2 3/8" 4.7# J-55<br>tbg          | 7,700          | 8,100             | 1.901"              | 0.00387    | 0.1624   |
| 4 1/2" 11.6# I-80<br>(See above) | 7780           | 6350              | 3.875"              | 0.0155     | 0.6528   |
| 2 3/8" by 4 1/2"<br>Annulus      |                |                   |                     | 0.0101     | 0.4227   |

**GEOLOGICAL TOPS:**

1434' Green River  
1703' Bird's Nest  
2181' Mahogany  
4711' Wasatch  
7356' Mesaverde  
9636' Bottom of Mesaverde (TD)

**Completion Information:**

- 8/18/10 - Perf and frac gross MV/Was interval f/ 5792' - 9452' in 8 stages using 336,716# sand & 9111 bbls slickwater
- Well IP'd on 8/28/10 - 1647 MCFD, 0 BOPD, 648 BWPD, CP 2500#, FTP 1650#, CK 20/64", LP 121#, 24 HRS

## **NBU 1021-12B3DS - WELLHEAD REPLACEMENT PROCEDURE**

**Prior to initiating back-off or casing cutting activities the UDOGM will be notified. Specifically, Mr. Dave Hackford (435-722-7589) will be called, and if not available, Dan Jarvis (801-538-5338) and or Dustin Doucet (801-538-5281) will be notified. No work will be accomplished prior to notifying the appropriate UDOGM representative.**

### **PREP-WORK PRIOR TO MIRU:**

1. Dig out down to the 2" surface casing valve or to the valve on the riser off the surface casing.
2. Install a tee with 2 valves, with a pressure gauge and sensor on one valve.
3. Open casing valve and record pressures.
4. Install nipple and steel hose on the other valve, the relief valve,. Do not use hammer unions. No impact equipment or tools to be used for any of this installation. Extend hose and hard piping to a downwind location at least 100' from the wellhead. Consider installing a manifold so that vent area could be in two locations approx. 90 degrees apart from the wellhead.
5. Open the relief valve and blow well down to the atmosphere.
6. Make a determination of amount of gas flow, either by installation of a choke nipple, bucket test or other.
7. Shut well in. Observe for rate of build-up by utilizing sensor data. Do not build-up for more than 24 hours. Vent gas through the vent line and leave open to the atmosphere.

### **WORKOVER PROCEDURE:**

1. MIRU workover rig.
2. Kill well with 10# brine / KCL (dictated by well pressure ).
3. Remove tree, install double BOP with blind and 2 3/8" pipe rams, with accumulator closing unit and manual back-ups. Function test BOP system.
4. Pooh w/ tubing.
5. Rig up wireline service. RIH and set CBP @ ~5742'. Dump bail 4 sx cement on top of plug. POOH and RD wireline service.
6. Remove BOP and ND WH.
7. Depending on conditions at wellsite, continue with either CUT/PATCH Procedure or BACK-OFF Procedure.

**CUT/PATCH PROCEDURE:**

1. PU internal casing cutters and RIH. Cut casing at +/- 30' from surface.
2. Pooh, LD cutters and casing.
3. PU & RIH w/ 4 1/2" 10k external casing patch on 4 1/2" I-80 or P-110 casing.
4. Latch fish, PU to 100,000# tension. RU B&C. Cycle pressure test to 7,000# / 9,000# psi.
5. Install C-22 slips. Land casing w/ 80,000# tension.
6. Cut-off and dress 4 1/2" casing stub.
7. NUWH. PU 3 7/8" bit, POBS and RIH. D/O cement and plug ~5742'. Clean out to PBSD (9600').
8. POOH, land tbg and pump off POBS.
9. NUWH, RDMO. Turn well over to production ops.

**BACK-OFF PROCEDURE:**

1. PU internal casing cutters and RIH. Cut casing at +/- 6' from surface.
2. POOH, LD cutters and casing.
3. PU 4 1/2" overshot. RIH, latch fish. Pick string weight to neutral.
4. MIRU wireline services. RIH and shoot string shot at casing collar @ 46'.
5. MIRU casing crew.
6. Back-off casing, Pooh.
7. PU new casing joint w/ entry guide and RIH. Tag casing top. Thread into casing and torque up to +/- 6000#.
8. PU 100,000# tension string weight. RU B&C. Cycle pressure test to 7,000# / 9,000# psi.
9. Install C-22 slips. Land casing w/ 80,000# tension.
10. Cut-off and dress 4 1/2" casing stub.
11. NUWH. PU 3 7/8" bit, POBS and RIH. D/O cement and plug ~5742'. Clean out to PBSD (9600').

12. POOH, land tbg and pump off POBS.
13. NUWH, RDMO. Turn well over to production ops.



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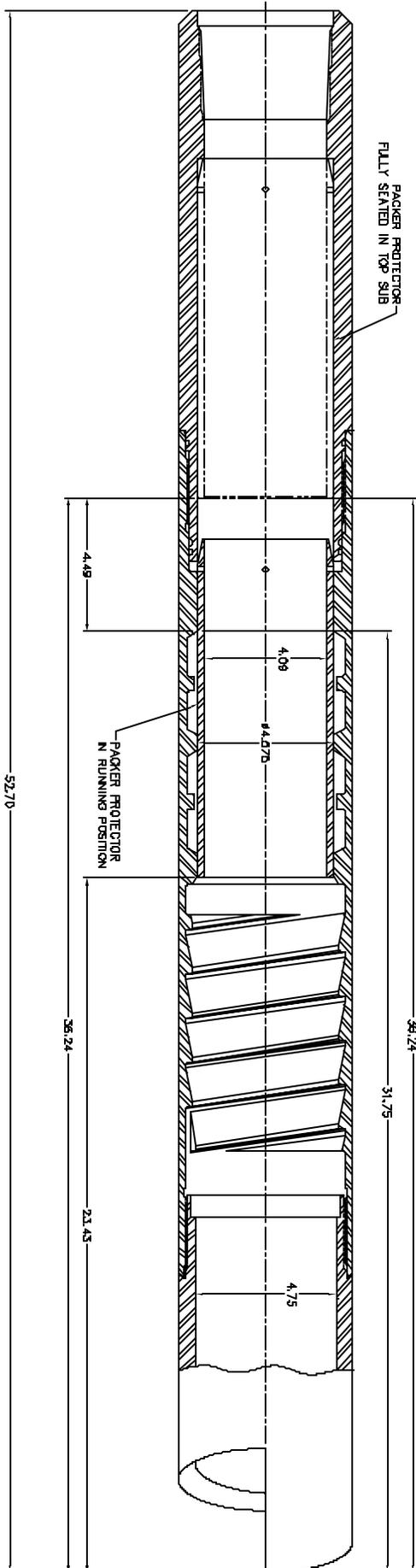
## **Logan High Pressure Casing Patches Assembly Procedure**

All parts should be thoroughly greased before being assembled.

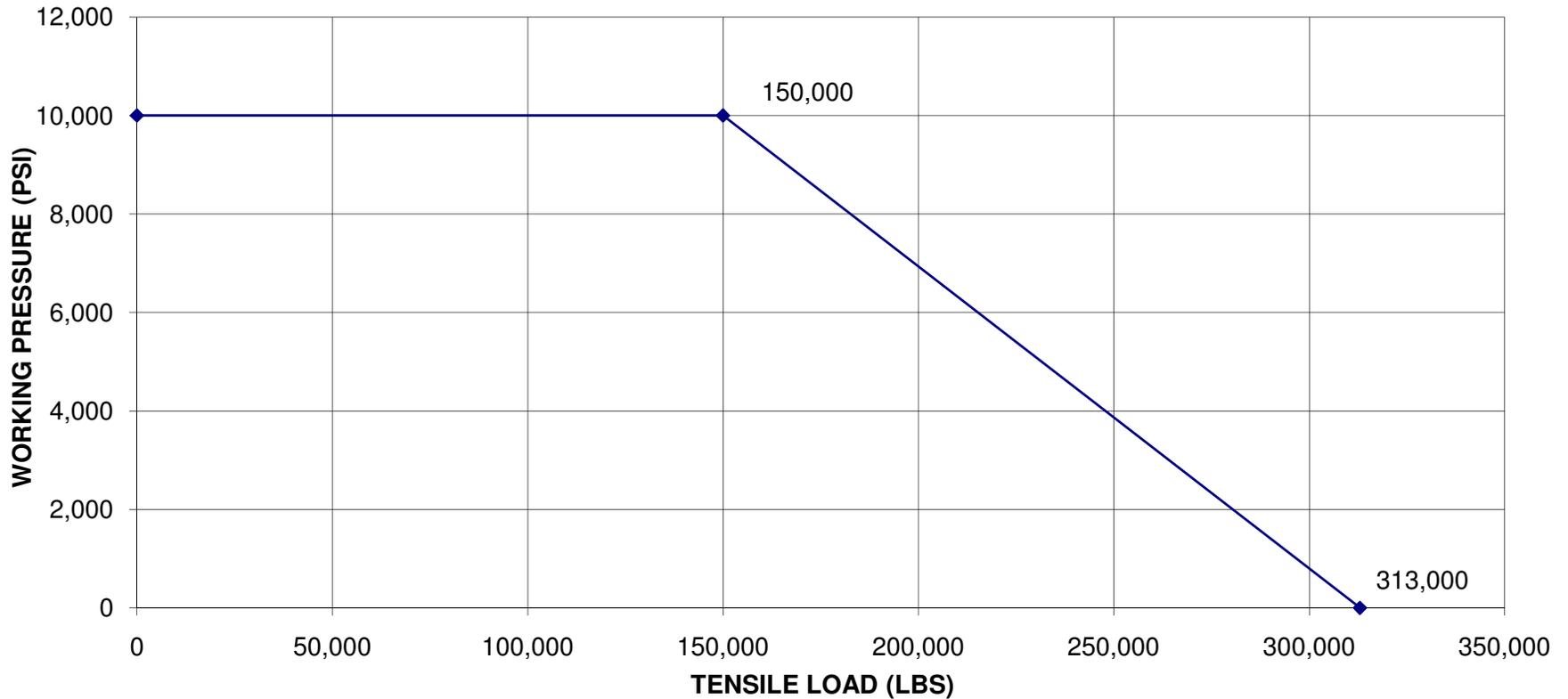
1. Install all four Logan Type "L" Packers in the spaces provided in the Casing Patch Bowl. Refer to diagram provided for proper installation.
2. Install Packer Protector from the Basket Grapple end of the Bowl. The beveled end of the Packer Protector goes in first. Carefully push the Packer Protector through the four Type "L" Packers.
3. Align Shear Pin Holes in Packer Protector so that the holes have just passed into the counter bore at the Top Sub end, refer to diagram. The Packer Protector is provided with four Shear Pin Holes. Use only two holes, 180 degrees apart and install the pins.
4. Screw the Basket Grapple in from the lower end of the Bowl, using left-hand rotation. The Tang Slot in the Basket Grapple must land in line with the slot in the Bowl.
5. Insert the Basket Grapple Control into the end of the Bowl. Align Tang on the Basket Grapple Control with the Tang Slot of the Bowl and Basket Grapple. This secures the Bowl and the Basket Grapple together.
6. Install the Cutlipped Guide into the lower end of the Bowl.
7. Install O-Rings on the two five-foot long Extensions. Screw the first Extension into the top end of the Bowl. Screw the second Extension into the top end of the first Extension.
8. Install O-Ring on Top Sub. Screw Top Sub into top end of second Extension.

Follow recommended Make-Up Torque as provided in chart.

510L-005-001 4-1/2" LOGAN HP CASING PATCH



**STRENGTH DATA FOR LOGAN 5.88" OD "L" TYPE CSG PATCH  
4-1/2 CASING, 10K PSI MAX WP 125K YIELD MAT'L  
LOGAN ASSEMBLY NO. 510L-005 -000**



COLLAPSE PRESSURE:  
11,222 PSI @ 0 TENSILE  
8,634 PSI @ 220K TENSILE

Tensile Strength @ Yield:  
Tensile Strength w/ 0 Int. Press.= 472,791lbs.  
Tensile Strength w/ 10K Int. Press.= 313,748lbs.

DATA BY SLS 11/16/2009

RECEIVED December 09, 2010

|   |  |  |
|---|--|--|
| <b>STATE OF UTAH</b><br>DEPARTMENT OF NATURAL RESOURCES<br>DIVISION OF OIL, GAS, AND MINING   |  | <b>FORM 9</b>  |
| <b>SUNDRY NOTICES AND REPORTS ON WELLS</b><br><br>Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.                |  | <b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b><br>ML 23612<br><br><b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b><br><br><b>7. UNIT or CA AGREEMENT NAME:</b><br>NATURAL BUTTES |
| <b>1. TYPE OF WELL</b><br>Gas Well  | <b>8. WELL NAME and NUMBER:</b><br>NBU 1021-12B3DS   |  |
| <b>2. NAME OF OPERATOR:</b><br>KERR-MCGEE OIL & GAS ONSHORE, L.P.   | <b>9. API NUMBER:</b><br>43047508560000  |  |
| <b>3. ADDRESS OF OPERATOR:</b><br>P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779   | <b>PHONE NUMBER:</b><br>720 929-6515 Ext   | <b>9. FIELD and POOL or WILDCAT:</b><br>NATURAL BUTTES   |
| <b>4. LOCATION OF WELL</b><br><b>FOOTAGES AT SURFACE:</b><br>0374 FSL 2433 FEL<br><b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b><br>Qtr/Qtr: SWSE Section: 01 Township: 10.0S Range: 21.0E Meridian: S   | <b>COUNTY:</b><br>UINTAH<br><br><b>STATE:</b><br>UTAH  |  |
| 11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA   |  |  |
| <b>TYPE OF SUBMISSION</b>   | <b>TYPE OF ACTION</b>  |  |
| <input type="checkbox"/> NOTICE OF INTENT<br>Approximate date work will start:<br><br><input checked="" type="checkbox"/> SUBSEQUENT REPORT<br>Date of Work Completion:<br>3/25/2011<br><br><input type="checkbox"/> SPUD REPORT<br>Date of Spud:<br><br><input type="checkbox"/> DRILLING REPORT<br>Report Date: | <input type="checkbox"/> ACIDIZE<br><br><input type="checkbox"/> CHANGE TO PREVIOUS PLANS<br><br><input type="checkbox"/> CHANGE WELL STATUS<br><br><input type="checkbox"/> DEEPEN<br><br><input type="checkbox"/> OPERATOR CHANGE<br><br><input type="checkbox"/> PRODUCTION START OR RESUME<br><br><input type="checkbox"/> REPERFORATE CURRENT FORMATION<br><br><input type="checkbox"/> TUBING REPAIR<br><br><input type="checkbox"/> WATER SHUTOFF<br><br><input type="checkbox"/> WILDCAT WELL DETERMINATION<br><br><input checked="" type="checkbox"/> ALTER CASING<br><br><input type="checkbox"/> CHANGE TUBING<br><br><input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS<br><br><input type="checkbox"/> FRACTURE TREAT<br><br><input type="checkbox"/> PLUG AND ABANDON<br><br><input type="checkbox"/> RECLAMATION OF WELL SITE<br><br><input type="checkbox"/> SIDETRACK TO REPAIR WELL<br><br><input type="checkbox"/> VENT OR FLARE<br><br><input type="checkbox"/> SI TA STATUS EXTENSION<br><br><input checked="" type="checkbox"/> OTHER |  |
| 12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.<br>The operator has concluded wellhead/casing repair operations on the subject well. Please see the attached chronological well history.   |  |  |
| <b>Accepted by the<br/>Utah Division of<br/>Oil, Gas and Mining<br/>FOR RECORD ONLY</b>   |  |  |
| <b>NAME (PLEASE PRINT)</b><br>Andy Lytle  | <b>PHONE NUMBER</b><br>720 929-6100  | <b>TITLE</b><br>Regulatory Analyst   |
| <b>SIGNATURE</b><br>N/A   | <b>DATE</b><br>4/5/2011  |  |

**US ROCKIES REGION**  
**Operation Summary Report**

| Well: NBU 1021-12B3DS [B.LUE]                        |                | Spud Conductor: 5/10/2010                                   |       | Spud Date: 5/19/2010   |          |     |              |  |
|--|----------------|---|-------|------------------------|----------|-----|--------------|--|
| Project: UTAH-UINTAH                                 |                | Site: NBU 1021-10 PAD                                       |       | Rig Name No: MILES 2/2 |          |     |              |  |
| Event: WELL WORK EXPENSE                             |                | Start Date: 3/23/2011                                       |       | End Date: 3/25/2011    |          |     |              |  |
| Active Datum: RKB @5,235.00ft (above Mean Sea Level) |                | UWI: SW/SE/0/10/S/21/E/1/0/0/6/PM/S/374.00/E/0/2,433.00/0/0 |       |                        |          |     |              |  |
| Date   | Time Start-End | Duration (hr)   | Phase | Code                   | Sub Code | P/U | MD From (ft) | Operation  |
| 3/17/2011  | 7:00 -         |   | PROD  | 35                     | G        | P   |              | <p>Travel to location rig up run in hole to pull spring jar d c spring for a hour could not get it to come out had to sheer off pooh rig down move to next well</p> <p>FLUID LEVEL 6000SEAT NIPPLE DEPTH 8911</p> <p>SN TYPE X TD (Max Depth)</p> <p>JOB DETAILS<br/>SPRING AND/OR PRODUCTION TOOL DETAIL</p> <p>Spring Out Used-StandardSpring In Drop Down Menu<br/>Stuck Spring Drop Down Menu Corrosion on Spring Drop Down Menu<br/>Bailed Acid Drop Down Menu<br/>Broken Spring Drop Down Menu Scale on Spring Drop Down Menu<br/>Production Tools Drop Down Menu Depth of Tool</p> <p>Other Hardware Drop Down Menu</p> <p>PLUNGER DETAIL<br/>Stuck Plunger Drop Down Menu Corrosion on Plunger Drop Down Menu<br/>Broken PlungerDrop Down Menu Scale on Plunger Drop Down Menu</p> <p>SOLIDS DETAIL<br/>Tight Spots Drop Down Menu Severity of Trash Medium<br/>Solid sample to turn in Drop Down Menu Solid Sample SourceDrop Down Menu<br/>Speculated Type of Solid Iron Sulfide Speculated Depth of Solid</p> <p>LOST SLICKLINE TOOLS<br/>Slickline Tools Lost Drop Down Menu Depth of Tool</p> |
| 3/23/2011  | 7:00 - 7:30    | 0.50  | MAINT | 48                     |          | P   |              | RDRU,RU, PULL TBG  |
|  | 7:30 - 17:00   | 9.50  | MAINT | 31                     |          | P   |              | <p>150# TBG, 150# CSG, BLOW DWN WELL, PUMP 30 BBLs TBG, 30 BBLs CSG, NDWH, NU BOP'S, TEST BOP'S TO 3000#, UNLAND TBG, STD BACK 140 STDS &amp; 1 SINGLE . RU CUTTERS, PU 10K CBP, TIH SET AT 5742', POOH, PU BAILER, BAIL 4 SX CEMENT ON TOP OF 10K PLUG, POOH, RD CUTTERS, FILL CSG WITH T-MAC, PRESSURE TEST TO 1500# 10 MIN., BLEED OFF PRESSURE, SWIFN</p>  |
| 3/24/2011  | 7:00 - 7:30    | 0.50  | MAINT | 48                     |          | P   |              | REPAIR CSG   |

**US ROCKIES REGION**  
**Operation Summary Report**

|   |                           |                        |
|---|---------------------------|------------------------|
| Well: NBU 1021-12B3DS [B.LUE]                               | Spud Conductor: 5/10/2010 | Spud Date: 5/19/2010   |
| Project: UTAH-UINTAH  | Site: NBU 1021-1O PAD     | Rig Name No: MILES 2/2 |
| Event: WELL WORK EXPENSE                                    | Start Date: 3/23/2011     | End Date: 3/25/2011    |
| Active Datum: RKB @5,235.00ft (above Mean Sea Leve          |                           |                        |
| UWI: SW/SE/0/10/S/21/E/1/0/0/6/PM/S/374.00/E/0/2,433.00/0/0 |                           |                        |

| Date      | Time Start-End | Duration (hr) | Phase | Code | Sub Code | P/U | MD From (ft) | Operation   |
|-----------|----------------|---------------|-------|------|----------|-----|--------------|---|
|           | 7:30 - 17:30   | 10.00         | MAINT | 33   |          | P   |              | ND BOP'S, RU WEATHERFORD, CUT CSG AT 7', PU OVERSHOT, RU CUTTERS, RUN STRING SHOT, RU CSG CREW, BACK OFF CSG AT 3500#, BACK OFF 3 JTS DWN, ND OVERSHOT, LD CUT OFF CSG, PU CSG WITH SKIRT, TORQUE UP, TIH STING INTO CSG, RU WEATHERFORD CSG CREW, MAKE UP CSG, 18 1/2 TURNS, 7000#, TORQUE TO NUTRAL,<br>RU B&C TEST CSG, PULL UP TP 100,000#, TEST 1000# 15 MIN, 3500# 15 MIN, 7,000# 30 MIN, TESTED OK, INSTALL C-21 DYES, NOT ENOUGH STRETCH TO USE C-22. TEST SURFACE TO 200# 15 MIN, HELD, ND B&C, WEATHERFORD NU TBG HEAD, NU BOP'S, PU POBS, SN, TIH WITH 90 STDS TBG, TAG CEMENT<br>TEST 4 1/2" CSG<br>1000# 15 MIN<br>3500# 15 MIN<br>7000# 30 MIN<br>TEST GOOD<br>TEST SURFACE CSG<br>200# 10 MIN<br>TEST HELD NO COMMUNICATION<br>SWIFN |
| 3/25/2011 | 7:00 - 7:30    | 0.50          | MAINT | 48   |          | P   |              | DRILLING PLUGS  |
|           | 7:30 - 7:30    | 0.00          | MAINT | 44   |          | P   |              | DRILL CEMENT, CBP, TIH C/O 209' SAND, 301 JTS, 9523' TO PBTD, POOH LAY DWN 20 JTS TO 8899.24', 281 JTS, LAND TBG, ND BOP'S, NU WH, POBS, RDMO TO NBU 1021012A2TBG RAN<br>281 JTS 8881.21'<br>KB 15.00'<br>HANGER .83<br>XNSN 1.875' 2.20'<br>EOT 8899.24'<br>WTR PUMPED 330 BBLS<br>WTR RCVD 260 BBLS<br>NOTIFY CDC WELL IS RTP JR PEREZ  |

**DIVISION OF OIL, GAS AND MINING**

**SPUDDING INFORMATION**

Name of Company: KERR-McGEE OIL & GAS ONSHORE, L. P.

Well Name: NBU 1021-12B3DS

Api No: 43-047-50856 Lease Type: STATE

Section 01 Township 10S Range 21E County UINTAH

Drilling Contractor PETE MARTIN DRLG RIG # BUCKET

**SPUDDED:**

Date 05/10/2010

Time 12:00PM

How DRY

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

Reported by GARRETT EATON

Telephone # (435) 219-1439

Date 05/11/2010 Signed CHD

**DIVISION OF OIL, GAS AND MINING**

**SPUDDING INFORMATION**

Name of Company: KERR-McGEE OIL & GAS ONSHORE, L. P.

Well Name: NBU 1021-12B3DS

Api No: 43-047-50856 Lease Type: STATE

Section 01 Township 10S Range 21E County UINTAH

Drilling Contractor PETE MARTIN DRLG RIG # BUCKET

**SPUDDED:**

Date 05/10/2010

Time 12:00PM

How DRY

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

Reported by GARRETT EATON

Telephone # (435) 219-1439

Date 05/11/2010 Signed CHD