

**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 922-3103AS                                                                                                                        |                 |              |
| <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>UO 1207A ST                                                                                  |  | <b>11. MINERAL OWNERSHIP</b><br>FEDERAL <input type="checkbox"/> INDIAN <input type="checkbox"/> STATE <input checked="" type="checkbox"/> FEE <input type="checkbox"/>    |                | <b>9. OPERATOR E-MAIL</b><br>Laura.Gianakos@anadarko.com                                                                                                                |                 |              |
| <b>13. NAME OF SURFACE OWNER (if box 12 = 'fee')</b>                                                                                                        |  |                                                                                                                                                                            |                | <b>12. SURFACE OWNERSHIP</b><br>FEDERAL <input type="checkbox"/> INDIAN <input type="checkbox"/> STATE <input checked="" type="checkbox"/> FEE <input type="checkbox"/> |                 |              |
| <b>15. ADDRESS OF SURFACE OWNER (if box 12 = 'fee')</b>                                                                                                     |  |                                                                                                                                                                            |                | <b>14. SURFACE OWNER PHONE (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>16. SURFACE OWNER E-MAIL (if box 12 = 'fee')</b>                                                                                                                     |                 |              |
| <b>20. LOCATION OF WELL</b>                                                                                                                                 |  | <b>FOOTAGES</b>                                                                                                                                                            | <b>QTR-QTR</b> | <b>SECTION</b>                                                                                                                                                          | <b>TOWNSHIP</b> | <b>RANGE</b> |
| <b>LOCATION AT SURFACE</b>                                                                                                                                  |  | 496 FSL 965 FEL                                                                                                                                                            | SESE           | 31                                                                                                                                                                      | 9.0 S           | 22.0 E       |
| <b>Top of Uppermost Producing Zone</b>                                                                                                                      |  | 502 FSL 2098 FEL                                                                                                                                                           | SWSE           | 31                                                                                                                                                                      | 9.0 S           | 22.0 E       |
| <b>At Total Depth</b>                                                                                                                                       |  | 502 FSL 2098 FEL                                                                                                                                                           | SWSE           | 31                                                                                                                                                                      | 9.0 S           | 22.0 E       |
| <b>21. COUNTY</b><br>UINTAH                                                                                                                                 |  | <b>22. DISTANCE TO NEAREST LEASE LINE (Feet)</b><br>502                                                                                                                    |                | <b>23. NUMBER OF ACRES IN DRILLING UNIT</b><br>80                                                                                                                       |                 |              |
|                                                                                                                                                             |  | <b>25. DISTANCE TO NEAREST WELL IN SAME POOL (Applied For Drilling or Completed)</b><br>613                                                                                |                | <b>26. PROPOSED DEPTH</b><br>MD: 9493 TVD: 9321                                                                                                                         |                 |              |
| <b>27. ELEVATION - GROUND LEVEL</b><br>5064                                                                                                                 |  | <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>SIGNATURE</b>                                                                                       | <b>PHONE</b> 720 929-6156                                                  |
| <b>API NUMBER ASSIGNED</b><br>43047510440000                                                           | <b>DATE</b> 03/31/2010                                                     |
| <b>APPROVAL</b>                                                                                        | <b>EMAIL</b> gnbregulatory@anadarko.com                                    |
| <br>Permit Manager |                                                                            |

| Proposed Hole, Casing, and Cement |                      |             |          |             |  |  |
|-----------------------------------|----------------------|-------------|----------|-------------|--|--|
| String                            | Hole Size            | Casing Size | Top (MD) | Bottom (MD) |  |  |
| Prod                              | 7.875                | 4.5         | 0        | 9493        |  |  |
| Pipe                              | Grade                | Length      | Weight   |             |  |  |
|                                   | Grade I-80 Buttreass | 9493        | 11.6     |             |  |  |
|                                   |                      |             |          |             |  |  |

| Proposed Hole, Casing, and Cement |                 |             |          |             |  |  |
|-----------------------------------|-----------------|-------------|----------|-------------|--|--|
| String                            | Hole Size       | Casing Size | Top (MD) | Bottom (MD) |  |  |
| Surf                              | 11              | 8.625       | 0        | 2130        |  |  |
| Pipe                              | Grade           | Length      | Weight   |             |  |  |
|                                   | Grade I-80 LT&C | 2130        | 28.0     |             |  |  |
|                                   |                 |             |          |             |  |  |







# **ANADARKO PETROLEUM CORP.**

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

**NBU 922-31P3 PAD**

**NBU 922-31O3AS**

**NBU 922-31O3AS**

**Plan: PLAN #1 3-23-10 RHS**

## **Standard Planning Report**

**23 March, 2010**



'APIWellNo:43047510440000'



Project: UINTAH COUNTY, UTAH (nad 27)  
 Site: NBU 922-31P3 PAD  
 Well: NBU 922-31O3AS  
 Wellbore: NBU 922-31O3AS  
 Section: SECTION 31 T9S R22E  
 SHL: 496 FSL 965 FEL  
 Design: PLAN #1 3-23-10 RHS  
 Latitude: 39° 59' 11.951 N  
 Longitude: 109° 28' 33.744 W  
 GL: 5063.00  
 KB: WELL @ 5077.00ft (Original Well Elev)



**Weatherford®**



Azimuths to True North  
 Magnetic North: 11.24°

Magnetic Field  
 Strength: 52460.6snT  
 Dip Angle: 65.91°  
 Date: 3/23/2010  
 Model: BGGM2009

#### FORMATION TOP DETAILS

| TVDPath | MDPath  | Formation   |
|---------|---------|-------------|
| 1323.00 | 1323.58 | GREEN RIVER |
| 4521.00 | 4645.11 | WASATCH     |
| 8030.00 | 8202.31 | MESAVERDE   |

#### CASING DETAILS

| TVD     | MD      | Name   | Size |
|---------|---------|--------|------|
| 2130.00 | 2131.07 | 8 5/8" | 8.62 |

#### SECTION DETAILS

| MD      | Inc   | Azi    | TVD     | +N/-S | +E/-W    | DLeg | TFace  | VSec    | Annotation                       |
|---------|-------|--------|---------|-------|----------|------|--------|---------|----------------------------------|
| 0.00    | 0.00  | 0.00   | 0.00    | 0.00  | 0.00     | 0.00 | 0.00   | 0.00    |                                  |
| 300.00  | 0.00  | 0.00   | 300.00  | 0.00  | 0.00     | 0.00 | 0.00   | 0.00    | Start Build 2.00                 |
| 400.00  | 2.00  | 270.41 | 399.98  | 0.01  | -1.75    | 2.00 | 270.41 | 1.75    | Start 1830.00 hold at 400.00 MD  |
| 2230.00 | 2.00  | 270.41 | 2228.86 | 0.47  | -65.61   | 0.00 | 0.00   | 65.61   | Start DLS 3.00 TFO 0.00          |
| 2830.21 | 20.01 | 270.41 | 2815.62 | 1.28  | -179.69  | 3.00 | 0.00   | 179.70  | Start 2278.78 hold at 2830.21 MD |
| 5108.99 | 20.01 | 270.41 | 4956.89 | 6.81  | -959.30  | 0.00 | 0.00   | 959.32  | Start Drop -2.00                 |
| 6109.31 | 0.00  | 0.00   | 5937.00 | 8.04  | -1132.17 | 2.00 | 180.00 | 1132.20 | Start 3384.00 hold at 6109.31 MD |
| 9493.31 | 0.00  | 0.00   | 9321.00 | 8.04  | -1132.17 | 0.00 | 0.00   | 1132.20 | TD at 9493.31                    |

#### WELLBORE TARGET DETAILS (MAP CO-ORDINATES AND LAT/LONG)

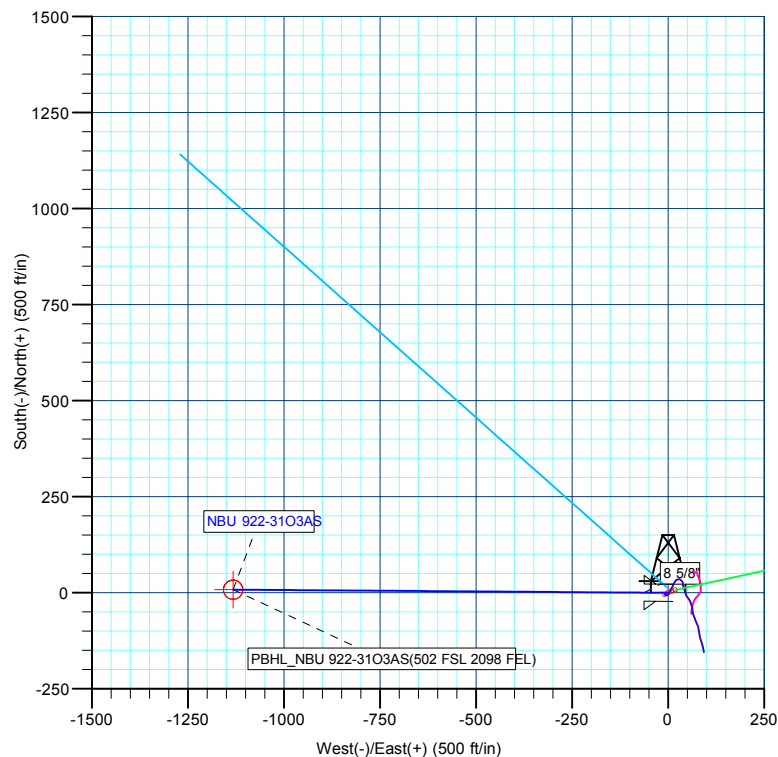
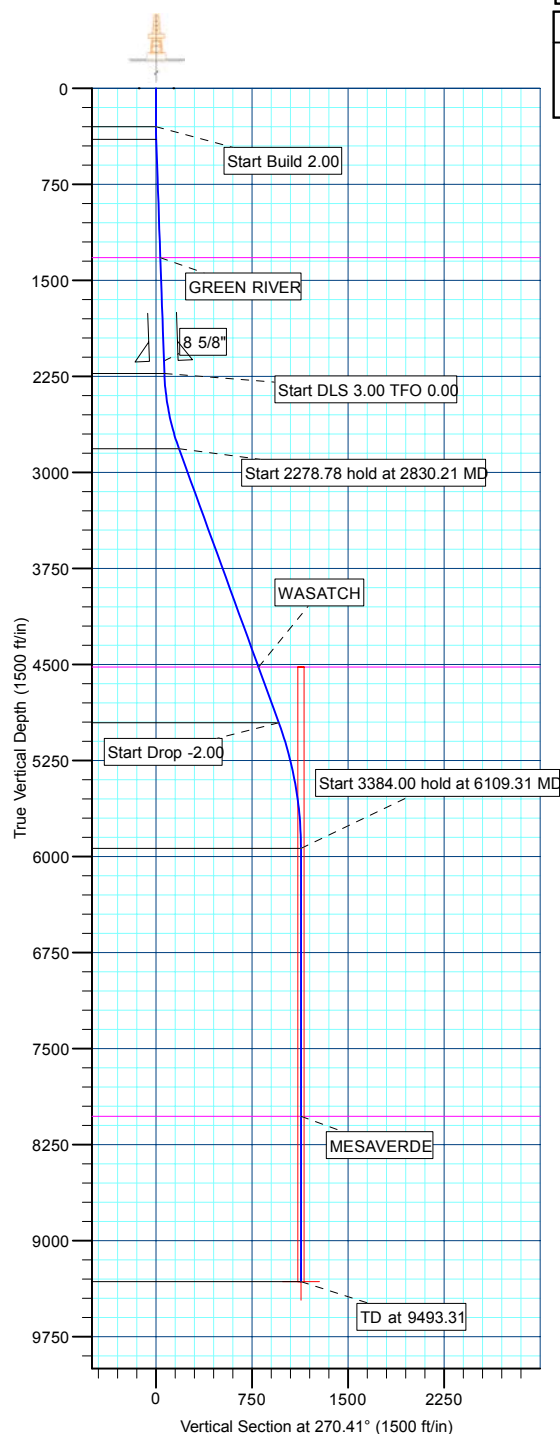
| Name | TVD     | +N/-S | +E/-W    | Latitude         | Longitude         | Shape                  |
|------|---------|-------|----------|------------------|-------------------|------------------------|
| PBHL | 9321.00 | 8.04  | -1132.17 | 39° 59' 12.030 N | 109° 28' 48.292 W | Circle (Radius: 25.00) |

#### WELL DETAILS: NBU 922-31O3AS

| +N/-S | +E/-W | Northing    | Ground Level:<br>Easting | 5063.00<br>Latitude | Longitude         | Slot |
|-------|-------|-------------|--------------------------|---------------------|-------------------|------|
| 0.00  | 0.00  | 14524833.00 | 2067306.28               | 39° 59' 11.951 N    | 109° 28' 33.744 W |      |

#### LEGEND

- CIGE 97D EXISTING, CIGE 97D EXISTING, CIGE 97D EXISTING V0
- NBU 922-31J3DS, NBU 922-31J3DS, PLAN #1 3-23-10 RHS V0
- NBU 922-31P-3T EXISTING, NBU 922-31P-3T EXISTING, NBU 922-31P-3T EXISTING V0
- NBU 922-31P4BS, NBU 922-31P4BS, PLAN #1 3-23-10 RHS V0
- PLAN #1 3-23-10 RHS



Plan: PLAN #1 3-23-10 RHS (NBU 922-31O3AS/NBU 922-31O3AS)

Created By: Robert H. Scott Date: 13:55, March 23 2010

|                  |                              |                                     |                                       |
|------------------|------------------------------|-------------------------------------|---------------------------------------|
| <b>Database:</b> | EDM 2003.21 Single User Db   | <b>Local Co-ordinate Reference:</b> | Well NBU 922-31O3AS                   |
| <b>Company:</b>  | ANADARKO PETROLEUM CORP.     | <b>TVD Reference:</b>               | WELL @ 5077.00ft (Original Well Elev) |
| <b>Project:</b>  | UINTAH COUNTY, UTAH (nad 27) | <b>MD Reference:</b>                | WELL @ 5077.00ft (Original Well Elev) |
| <b>Site:</b>     | NBU 922-31P3 PAD             | <b>North Reference:</b>             | True                                  |
| <b>Well:</b>     | NBU 922-31O3AS               | <b>Survey Calculation Method:</b>   | Minimum Curvature                     |
| <b>Wellbore:</b> | NBU 922-31O3AS               |                                     |                                       |
| <b>Design:</b>   | PLAN #1 3-23-10 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)                    |                      |                |

|                       |          |                                       |                  |                   |                   |
|-----------------------|----------|---------------------------------------|------------------|-------------------|-------------------|
| Site                  |          | NBU 922-31P3 PAD, SECTION 31 T9S R22E |                  |                   |                   |
| Site Position:        |          | Northing:                             | 14,524,840.60 ft | Latitude:         | 39° 59' 12.023 N  |
| From:                 | Lat/Long | Easting:                              | 2,067,324.92 ft  | Longitude:        | 109° 28' 33.503 W |
| Position Uncertainty: | 0.00 ft  | Slot Radius:                          | in               | Grid Convergence: | 0.98 °            |

|                      |                |           |                     |                  |               |                   |
|----------------------|----------------|-----------|---------------------|------------------|---------------|-------------------|
| Well                 | NBU 922-31O3AS |           |                     |                  |               |                   |
| Well Position        | +N/-S          | -7.28 ft  | Northing:           | 14,524,833.00 ft | Latitude:     | 39° 59' 11.951 N  |
|                      | +E/-W          | -18.77 ft | Easting:            | 2,067,306.28 ft  | Longitude:    | 109° 28' 33.744 W |
| Position Uncertainty |                | 0.00 ft   | Wellhead Elevation: | ft               | Ground Level: | 5,063.00 ft       |

|                  |                   |                    |                        |                      |                            |
|------------------|-------------------|--------------------|------------------------|----------------------|----------------------------|
| <b>Wellbore</b>  | NBU 922-31O3AS    |                    |                        |                      |                            |
| <b>Magnetics</b> | <b>Model Name</b> | <b>Sample Date</b> | <b>Declination (°)</b> | <b>Dip Angle (°)</b> | <b>Field Strength (nT)</b> |
|                  | BGGM2009          | 3/23/2010          | 11.24                  | 65.91                | 52,461                     |

|                          |                              |                   |                      |                      |
|--------------------------|------------------------------|-------------------|----------------------|----------------------|
| <b>Design</b>            | PLAN #1 3-23-10 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                 | 270.41               |

| <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    |                 |
| 300.00               | 0.00            | 0.00        | 300.00              | 0.00       | 0.00       | 0.00                  | 0.00                 | 0.00                | 0.00    |                 |
| 400.00               | 2.00            | 270.41      | 399.98              | 0.01       | -1.75      | 2.00                  | 2.00                 | 0.00                | 270.41  |                 |
| 2,230.00             | 2.00            | 270.41      | 2,228.86            | 0.47       | -65.61     | 0.00                  | 0.00                 | 0.00                | 0.00    |                 |
| 2,830.21             | 20.01           | 270.41      | 2,815.62            | 1.28       | -179.69    | 3.00                  | 3.00                 | 0.00                | 0.00    |                 |
| 5,108.99             | 20.01           | 270.41      | 4,956.89            | 6.81       | -959.30    | 0.00                  | 0.00                 | 0.00                | 0.00    |                 |
| 6,109.31             | 0.00            | 0.00        | 5,937.00            | 8.04       | -1,132.17  | 2.00                  | -2.00                | 0.00                | 180.00  |                 |
| 9,493.31             | 0.00            | 0.00        | 9,321.00            | 8.04       | -1,132.17  | 0.00                  | 0.00                 | 0.00                | 0.00    | PBHL_NBU 922-31 |



|                  |                              |                                     |                                       |
|------------------|------------------------------|-------------------------------------|---------------------------------------|
| <b>Database:</b> | EDM 2003.21 Single User Db   | <b>Local Co-ordinate Reference:</b> | Well NBU 922-31O3AS                   |
| <b>Company:</b>  | ANADARKO PETROLEUM CORP.     | <b>TVD Reference:</b>               | WELL @ 5077.00ft (Original Well Elev) |
| <b>Project:</b>  | UINTAH COUNTY, UTAH (nad 27) | <b>MD Reference:</b>                | WELL @ 5077.00ft (Original Well Elev) |
| <b>Site:</b>     | NBU 922-31P3 PAD             | <b>North Reference:</b>             | True                                  |
| <b>Well:</b>     | NBU 922-31O3AS               | <b>Survey Calculation Method:</b>   | Minimum Curvature                     |
| <b>Wellbore:</b> | NBU 922-31O3AS               |                                     |                                       |
| <b>Design:</b>   | PLAN #1 3-23-10 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 2.00</b>                 |                 |             |                     |            |            |                       |                       |                      |                     |
| 300.00                                  | 0.00            | 0.00        | 300.00              | 0.00       | 0.00       | 0.00                  | 0.00                  | 0.00                 | 0.00                |
| <b>Start 1830.00 hold at 400.00 MD</b>  |                 |             |                     |            |            |                       |                       |                      |                     |
| 400.00                                  | 2.00            | 270.41      | 399.98              | 0.01       | -1.75      | 1.75                  | 2.00                  | 2.00                 | 0.00                |
| 500.00                                  | 2.00            | 270.41      | 499.92              | 0.04       | -5.23      | 5.24                  | 0.00                  | 0.00                 | 0.00                |
| 600.00                                  | 2.00            | 270.41      | 599.86              | 0.06       | -8.72      | 8.73                  | 0.00                  | 0.00                 | 0.00                |
| 700.00                                  | 2.00            | 270.41      | 699.80              | 0.09       | -12.21     | 12.22                 | 0.00                  | 0.00                 | 0.00                |
| 800.00                                  | 2.00            | 270.41      | 799.74              | 0.11       | -15.70     | 15.70                 | 0.00                  | 0.00                 | 0.00                |
| 900.00                                  | 2.00            | 270.41      | 899.68              | 0.14       | -19.19     | 19.19                 | 0.00                  | 0.00                 | 0.00                |
| 1,000.00                                | 2.00            | 270.41      | 999.61              | 0.16       | -22.68     | 22.68                 | 0.00                  | 0.00                 | 0.00                |
| 1,100.00                                | 2.00            | 270.41      | 1,099.55            | 0.19       | -26.17     | 26.17                 | 0.00                  | 0.00                 | 0.00                |
| 1,200.00                                | 2.00            | 270.41      | 1,199.49            | 0.21       | -29.66     | 29.66                 | 0.00                  | 0.00                 | 0.00                |
| 1,300.00                                | 2.00            | 270.41      | 1,299.43            | 0.24       | -33.15     | 33.15                 | 0.00                  | 0.00                 | 0.00                |
| <b>GREEN RIVER</b>                      |                 |             |                     |            |            |                       |                       |                      |                     |
| 1,323.58                                | 2.00            | 270.41      | 1,323.00            | 0.24       | -33.98     | 33.98                 | 0.00                  | 0.00                 | 0.00                |
| 1,400.00                                | 2.00            | 270.41      | 1,399.37            | 0.26       | -36.64     | 36.64                 | 0.00                  | 0.00                 | 0.00                |
| 1,500.00                                | 2.00            | 270.41      | 1,499.31            | 0.29       | -40.13     | 40.13                 | 0.00                  | 0.00                 | 0.00                |
| 1,600.00                                | 2.00            | 270.41      | 1,599.25            | 0.31       | -43.62     | 43.62                 | 0.00                  | 0.00                 | 0.00                |
| 1,700.00                                | 2.00            | 270.41      | 1,699.19            | 0.34       | -47.11     | 47.11                 | 0.00                  | 0.00                 | 0.00                |
| 1,800.00                                | 2.00            | 270.41      | 1,799.13            | 0.36       | -50.60     | 50.60                 | 0.00                  | 0.00                 | 0.00                |
| 1,900.00                                | 2.00            | 270.41      | 1,899.07            | 0.39       | -54.09     | 54.09                 | 0.00                  | 0.00                 | 0.00                |
| 2,000.00                                | 2.00            | 270.41      | 1,999.01            | 0.41       | -57.58     | 57.58                 | 0.00                  | 0.00                 | 0.00                |
| 2,100.00                                | 2.00            | 270.41      | 2,098.94            | 0.44       | -61.07     | 61.07                 | 0.00                  | 0.00                 | 0.00                |
| <b>8 5/8"</b>                           |                 |             |                     |            |            |                       |                       |                      |                     |
| 2,131.07                                | 2.00            | 270.41      | 2,130.00            | 0.44       | -62.16     | 62.16                 | 0.00                  | 0.00                 | 0.00                |
| 2,200.00                                | 2.00            | 270.41      | 2,198.88            | 0.46       | -64.56     | 64.56                 | 0.00                  | 0.00                 | 0.00                |
| <b>Start DLS 3.00 TFO 0.00</b>          |                 |             |                     |            |            |                       |                       |                      |                     |
| 2,230.00                                | 2.00            | 270.41      | 2,228.86            | 0.47       | -65.61     | 65.61                 | 0.00                  | 0.00                 | 0.00                |
| 2,300.00                                | 4.10            | 270.41      | 2,298.76            | 0.50       | -69.33     | 69.34                 | 3.00                  | 3.00                 | 0.00                |
| 2,400.00                                | 7.10            | 270.41      | 2,398.27            | 0.57       | -79.09     | 79.09                 | 3.00                  | 3.00                 | 0.00                |
| 2,500.00                                | 10.10           | 270.41      | 2,497.14            | 0.67       | -94.04     | 94.04                 | 3.00                  | 3.00                 | 0.00                |
| 2,600.00                                | 13.10           | 270.41      | 2,595.08            | 0.81       | -114.15    | 114.15                | 3.00                  | 3.00                 | 0.00                |
| 2,700.00                                | 16.10           | 270.41      | 2,691.84            | 0.99       | -139.35    | 139.35                | 3.00                  | 3.00                 | 0.00                |
| 2,800.00                                | 19.10           | 270.41      | 2,787.15            | 1.21       | -169.58    | 169.59                | 3.00                  | 3.00                 | 0.00                |
| <b>Start 2278.78 hold at 2830.21 MD</b> |                 |             |                     |            |            |                       |                       |                      |                     |
| 2,830.21                                | 20.01           | 270.41      | 2,815.62            | 1.28       | -179.69    | 179.70                | 3.00                  | 3.00                 | 0.00                |
| 2,900.00                                | 20.01           | 270.41      | 2,881.20            | 1.45       | -203.57    | 203.58                | 0.00                  | 0.00                 | 0.00                |
| 3,000.00                                | 20.01           | 270.41      | 2,975.16            | 1.69       | -237.78    | 237.79                | 0.00                  | 0.00                 | 0.00                |
| 3,100.00                                | 20.01           | 270.41      | 3,069.13            | 1.93       | -271.99    | 272.00                | 0.00                  | 0.00                 | 0.00                |
| 3,200.00                                | 20.01           | 270.41      | 3,163.09            | 2.18       | -306.20    | 306.21                | 0.00                  | 0.00                 | 0.00                |
| 3,300.00                                | 20.01           | 270.41      | 3,257.06            | 2.42       | -340.42    | 340.42                | 0.00                  | 0.00                 | 0.00                |
| 3,400.00                                | 20.01           | 270.41      | 3,351.03            | 2.66       | -374.63    | 374.64                | 0.00                  | 0.00                 | 0.00                |
| 3,500.00                                | 20.01           | 270.41      | 3,444.99            | 2.91       | -408.84    | 408.85                | 0.00                  | 0.00                 | 0.00                |
| 3,600.00                                | 20.01           | 270.41      | 3,538.96            | 3.15       | -443.05    | 443.06                | 0.00                  | 0.00                 | 0.00                |
| 3,700.00                                | 20.01           | 270.41      | 3,632.92            | 3.39       | -477.26    | 477.27                | 0.00                  | 0.00                 | 0.00                |
| 3,800.00                                | 20.01           | 270.41      | 3,726.89            | 3.63       | -511.47    | 511.49                | 0.00                  | 0.00                 | 0.00                |
| 3,900.00                                | 20.01           | 270.41      | 3,820.85            | 3.88       | -545.69    | 545.70                | 0.00                  | 0.00                 | 0.00                |
| 4,000.00                                | 20.01           | 270.41      | 3,914.82            | 4.12       | -579.90    | 579.91                | 0.00                  | 0.00                 | 0.00                |
| 4,100.00                                | 20.01           | 270.41      | 4,008.78            | 4.36       | -614.11    | 614.12                | 0.00                  | 0.00                 | 0.00                |
| 4,200.00                                | 20.01           | 270.41      | 4,102.75            | 4.61       | -648.32    | 648.34                | 0.00                  | 0.00                 | 0.00                |
| 4,300.00                                | 20.01           | 270.41      | 4,196.71            | 4.85       | -682.53    | 682.55                | 0.00                  | 0.00                 | 0.00                |
| 4,400.00                                | 20.01           | 270.41      | 4,290.68            | 5.09       | -716.74    | 716.76                | 0.00                  | 0.00                 | 0.00                |
| 4,500.00                                | 20.01           | 270.41      | 4,384.65            | 5.33       | -750.96    | 750.97                | 0.00                  | 0.00                 | 0.00                |



|                  |                              |                                     |                                       |
|------------------|------------------------------|-------------------------------------|---------------------------------------|
| <b>Database:</b> | EDM 2003.21 Single User Db   | <b>Local Co-ordinate Reference:</b> | Well NBU 922-31O3AS                   |
| <b>Company:</b>  | ANADARKO PETROLEUM CORP.     | <b>TVD Reference:</b>               | WELL @ 5077.00ft (Original Well Elev) |
| <b>Project:</b>  | UINTAH COUNTY, UTAH (nad 27) | <b>MD Reference:</b>                | WELL @ 5077.00ft (Original Well Elev) |
| <b>Site:</b>     | NBU 922-31P3 PAD             | <b>North Reference:</b>             | True                                  |
| <b>Well:</b>     | NBU 922-31O3AS               | <b>Survey Calculation Method:</b>   | Minimum Curvature                     |
| <b>Wellbore:</b> | NBU 922-31O3AS               |                                     |                                       |
| <b>Design:</b>   | PLAN #1 3-23-10 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) |
|-----------------------------------------|-----------------|-------------|---------------------|------------|------------|-----------------------|-----------------------|----------------------|---------------------|
| 4,600.00                                | 20.01           | 270.41      | 4,478.61            | 5.58       | -785.17    | 785.19                | 0.00                  | 0.00                 | 0.00                |
| <b>WASATCH</b>                          |                 |             |                     |            |            |                       |                       |                      |                     |
| 4,645.11                                | 20.01           | 270.41      | 4,521.00            | 5.69       | -800.60    | 800.62                | 0.00                  | 0.00                 | 0.00                |
| 4,700.00                                | 20.01           | 270.41      | 4,572.58            | 5.82       | -819.38    | 819.40                | 0.00                  | 0.00                 | 0.00                |
| 4,800.00                                | 20.01           | 270.41      | 4,666.54            | 6.06       | -853.59    | 853.61                | 0.00                  | 0.00                 | 0.00                |
| 4,900.00                                | 20.01           | 270.41      | 4,760.51            | 6.31       | -887.80    | 887.82                | 0.00                  | 0.00                 | 0.00                |
| 5,000.00                                | 20.01           | 270.41      | 4,854.47            | 6.55       | -922.01    | 922.04                | 0.00                  | 0.00                 | 0.00                |
| 5,100.00                                | 20.01           | 270.41      | 4,948.44            | 6.79       | -956.23    | 956.25                | 0.00                  | 0.00                 | 0.00                |
| <b>Start Drop -2.00</b>                 |                 |             |                     |            |            |                       |                       |                      |                     |
| 5,108.99                                | 20.01           | 270.41      | 4,956.89            | 6.81       | -959.30    | 959.32                | 0.00                  | 0.00                 | 0.00                |
| 5,200.00                                | 18.19           | 270.41      | 5,042.88            | 7.02       | -989.07    | 989.10                | 2.00                  | -2.00                | 0.00                |
| 5,300.00                                | 16.19           | 270.41      | 5,138.41            | 7.23       | -1,018.62  | 1,018.64              | 2.00                  | -2.00                | 0.00                |
| 5,400.00                                | 14.19           | 270.41      | 5,234.92            | 7.42       | -1,044.81  | 1,044.84              | 2.00                  | -2.00                | 0.00                |
| 5,500.00                                | 12.19           | 270.41      | 5,332.28            | 7.58       | -1,067.62  | 1,067.65              | 2.00                  | -2.00                | 0.00                |
| 5,600.00                                | 10.19           | 270.41      | 5,430.37            | 7.72       | -1,087.02  | 1,087.05              | 2.00                  | -2.00                | 0.00                |
| 5,700.00                                | 8.19            | 270.41      | 5,529.08            | 7.83       | -1,102.98  | 1,103.01              | 2.00                  | -2.00                | 0.00                |
| 5,800.00                                | 6.19            | 270.41      | 5,628.29            | 7.92       | -1,115.49  | 1,115.52              | 2.00                  | -2.00                | 0.00                |
| 5,900.00                                | 4.19            | 270.41      | 5,727.88            | 7.99       | -1,124.53  | 1,124.56              | 2.00                  | -2.00                | 0.00                |
| 6,000.00                                | 2.19            | 270.41      | 5,827.72            | 8.02       | -1,130.09  | 1,130.12              | 2.00                  | -2.00                | 0.00                |
| 6,100.00                                | 0.19            | 270.41      | 5,927.69            | 8.04       | -1,132.16  | 1,132.19              | 2.00                  | -2.00                | 0.00                |
| <b>Start 3384.00 hold at 6109.31 MD</b> |                 |             |                     |            |            |                       |                       |                      |                     |
| 6,109.31                                | 0.00            | 0.00        | 5,937.00            | 8.04       | -1,132.17  | 1,132.20              | 2.00                  | -2.00                | 0.00                |
| 6,200.00                                | 0.00            | 0.00        | 6,027.69            | 8.04       | -1,132.17  | 1,132.20              | 0.00                  | 0.00                 | 0.00                |
| 6,300.00                                | 0.00            | 0.00        | 6,127.69            | 8.04       | -1,132.17  | 1,132.20              | 0.00                  | 0.00                 | 0.00                |
| 6,400.00                                | 0.00            | 0.00        | 6,227.69            | 8.04       | -1,132.17  | 1,132.20              | 0.00                  | 0.00                 | 0.00                |
| 6,500.00                                | 0.00            | 0.00        | 6,327.69            | 8.04       | -1,132.17  | 1,132.20              | 0.00                  | 0.00                 | 0.00                |
| 6,600.00                                | 0.00            | 0.00        | 6,427.69            | 8.04       | -1,132.17  | 1,132.20              | 0.00                  | 0.00                 | 0.00                |
| 6,700.00                                | 0.00            | 0.00        | 6,527.69            | 8.04       | -1,132.17  | 1,132.20              | 0.00                  | 0.00                 | 0.00                |
| 6,800.00                                | 0.00            | 0.00        | 6,627.69            | 8.04       | -1,132.17  | 1,132.20              | 0.00                  | 0.00                 | 0.00                |
| 6,900.00                                | 0.00            | 0.00        | 6,727.69            | 8.04       | -1,132.17  | 1,132.20              | 0.00                  | 0.00                 | 0.00                |
| 7,000.00                                | 0.00            | 0.00        | 6,827.69            | 8.04       | -1,132.17  | 1,132.20              | 0.00                  | 0.00                 | 0.00                |
| 7,100.00                                | 0.00            | 0.00        | 6,927.69            | 8.04       | -1,132.17  | 1,132.20              | 0.00                  | 0.00                 | 0.00                |
| 7,200.00                                | 0.00            | 0.00        | 7,027.69            | 8.04       | -1,132.17  | 1,132.20              | 0.00                  | 0.00                 | 0.00                |
| 7,300.00                                | 0.00            | 0.00        | 7,127.69            | 8.04       | -1,132.17  | 1,132.20              | 0.00                  | 0.00                 | 0.00                |
| 7,400.00                                | 0.00            | 0.00        | 7,227.69            | 8.04       | -1,132.17  | 1,132.20              | 0.00                  | 0.00                 | 0.00                |
| 7,500.00                                | 0.00            | 0.00        | 7,327.69            | 8.04       | -1,132.17  | 1,132.20              | 0.00                  | 0.00                 | 0.00                |
| 7,600.00                                | 0.00            | 0.00        | 7,427.69            | 8.04       | -1,132.17  | 1,132.20              | 0.00                  | 0.00                 | 0.00                |
| 7,700.00                                | 0.00            | 0.00        | 7,527.69            | 8.04       | -1,132.17  | 1,132.20              | 0.00                  | 0.00                 | 0.00                |
| 7,800.00                                | 0.00            | 0.00        | 7,627.69            | 8.04       | -1,132.17  | 1,132.20              | 0.00                  | 0.00                 | 0.00                |
| 7,900.00                                | 0.00            | 0.00        | 7,727.69            | 8.04       | -1,132.17  | 1,132.20              | 0.00                  | 0.00                 | 0.00                |
| 8,000.00                                | 0.00            | 0.00        | 7,827.69            | 8.04       | -1,132.17  | 1,132.20              | 0.00                  | 0.00                 | 0.00                |
| 8,100.00                                | 0.00            | 0.00        | 7,927.69            | 8.04       | -1,132.17  | 1,132.20              | 0.00                  | 0.00                 | 0.00                |
| 8,200.00                                | 0.00            | 0.00        | 8,027.69            | 8.04       | -1,132.17  | 1,132.20              | 0.00                  | 0.00                 | 0.00                |
| <b>MESAVERDE</b>                        |                 |             |                     |            |            |                       |                       |                      |                     |
| 8,202.31                                | 0.00            | 0.00        | 8,030.00            | 8.04       | -1,132.17  | 1,132.20              | 0.00                  | 0.00                 | 0.00                |
| 8,300.00                                | 0.00            | 0.00        | 8,127.69            | 8.04       | -1,132.17  | 1,132.20              | 0.00                  | 0.00                 | 0.00                |
| 8,400.00                                | 0.00            | 0.00        | 8,227.69            | 8.04       | -1,132.17  | 1,132.20              | 0.00                  | 0.00                 | 0.00                |
| 8,500.00                                | 0.00            | 0.00        | 8,327.69            | 8.04       | -1,132.17  | 1,132.20              | 0.00                  | 0.00                 | 0.00                |
| 8,600.00                                | 0.00            | 0.00        | 8,427.69            | 8.04       | -1,132.17  | 1,132.20              | 0.00                  | 0.00                 | 0.00                |
| 8,700.00                                | 0.00            | 0.00        | 8,527.69            | 8.04       | -1,132.17  | 1,132.20              | 0.00                  | 0.00                 | 0.00                |
| 8,800.00                                | 0.00            | 0.00        | 8,627.69            | 8.04       | -1,132.17  | 1,132.20              | 0.00                  | 0.00                 | 0.00                |
| 8,900.00                                | 0.00            | 0.00        | 8,727.69            | 8.04       | -1,132.17  | 1,132.20              | 0.00                  | 0.00                 | 0.00                |
| 9,000.00                                | 0.00            | 0.00        | 8,827.69            | 8.04       | -1,132.17  | 1,132.20              | 0.00                  | 0.00                 | 0.00                |
| 9,100.00                                | 0.00            | 0.00        | 8,927.69            | 8.04       | -1,132.17  | 1,132.20              | 0.00                  | 0.00                 | 0.00                |



|                  |                              |                                     |                                       |
|------------------|------------------------------|-------------------------------------|---------------------------------------|
| <b>Database:</b> | EDM 2003.21 Single User Db   | <b>Local Co-ordinate Reference:</b> | Well NBU 922-31O3AS                   |
| <b>Company:</b>  | ANADARKO PETROLEUM CORP.     | <b>TVD Reference:</b>               | WELL @ 5077.00ft (Original Well Elev) |
| <b>Project:</b>  | UINTAH COUNTY, UTAH (nad 27) | <b>MD Reference:</b>                | WELL @ 5077.00ft (Original Well Elev) |
| <b>Site:</b>     | NBU 922-31P3 PAD             | <b>North Reference:</b>             | True                                  |
| <b>Well:</b>     | NBU 922-31O3AS               | <b>Survey Calculation Method:</b>   | Minimum Curvature                     |
| <b>Wellbore:</b> | NBU 922-31O3AS               |                                     |                                       |
| <b>Design:</b>   | PLAN #1 3-23-10 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) |
|--------------------------------------------------------------|-----------------|-------------|---------------------|------------|------------|-----------------------|-----------------------|----------------------|---------------------|
| 9,200.00                                                     | 0.00            | 0.00        | 9,027.69            | 8.04       | -1,132.17  | 1,132.20              | 0.00                  | 0.00                 | 0.00                |
| 9,300.00                                                     | 0.00            | 0.00        | 9,127.69            | 8.04       | -1,132.17  | 1,132.20              | 0.00                  | 0.00                 | 0.00                |
| 9,400.00                                                     | 0.00            | 0.00        | 9,227.69            | 8.04       | -1,132.17  | 1,132.20              | 0.00                  | 0.00                 | 0.00                |
| <b>TD at 9493.31 - PBHL_NBU 922-31O3AS(502 FSL 2098 FEL)</b> |                 |             |                     |            |            |                       |                       |                      |                     |
| 9,493.31                                                     | 0.00            | 0.00        | 9,321.00            | 8.04       | -1,132.17  | 1,132.20              | 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         |
|---------------------------|---------------|--------------|----------|------------|------------|---------------|--------------|------------------|-------------------|
| - hit/miss target         |               |              |          |            |            |               |              |                  |                   |
| - Shape                   |               |              |          |            |            |               |              |                  |                   |
| PBHL_NBU 922-31O3AS       | 0.00          | 0.00         | 9,321.00 | 8.04       | -1,132.17  | 14,524,821.68 | 2,066,174.13 | 39° 59' 12.030 N | 109° 28' 48.292 W |
| - plan hits target center |               |              |          |            |            |               |              |                  |                   |
| - Circle (radius 25.00)   |               |              |          |            |            |               |              |                  |                   |
|                           | 2,131.07      | 2,130.00     | 8 5/8"   |            |            |               |              | 8.62             | 11.00             |

## Formations

| Measured Depth (ft) | Vertical Depth (ft) | Name        | Lithology | Dip (°) | Dip Direction (°) |
|---------------------|---------------------|-------------|-----------|---------|-------------------|
| 1,323.58            | 1,323.00            | GREEN RIVER |           |         |                   |
| 4,645.11            | 4,521.00            | WASATCH     |           |         |                   |
| 8,202.31            | 8,030.00            | MESAVERDE   |           |         |                   |

## Plan Annotations

| Measured Depth (ft) | Vertical Depth (ft) | +N/-S (ft) | +E/-W (ft) | Comment                          |
|---------------------|---------------------|------------|------------|----------------------------------|
| 300.00              | 300.00              | 0.00       | 0.00       | Start Build 2.00                 |
| 400.00              | 399.98              | 0.01       | -1.75      | Start 1830.00 hold at 400.00 MD  |
| 2,230.00            | 2,228.86            | 0.47       | -65.61     | Start DLS 3.00 TFO 0.00          |
| 2,830.21            | 2,815.62            | 1.28       | -179.69    | Start 2278.78 hold at 2830.21 MD |
| 5,108.99            | 4,956.89            | 6.81       | -959.30    | Start Drop -2.00                 |
| 6,109.31            | 5,937.00            | 8.04       | -1,132.17  | Start 3384.00 hold at 6109.31 MD |
| 9,493.31            | 9,321.00            | 8.04       | -1,132.17  | TD at 9493.31                    |



# **ANADARKO PETROLEUM CORP.**

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

**NBU 922-31P3 PAD**

**NBU 922-31O3AS**

**NBU 922-31O3AS**

**PLAN #1 3-23-10 RHS**

## **Anticollision Report**

**23 March, 2010**



**Weatherford®**



# Weatherford International Ltd.

## Anticollision Report



|                           |                              |                                     |                                       |
|---------------------------|------------------------------|-------------------------------------|---------------------------------------|
| <b>Company:</b>           | ANADARKO PETROLEUM CORP.     | <b>Local Co-ordinate Reference:</b> | Well NBU 922-3103AS                   |
| <b>Project:</b>           | UINTAH COUNTY, UTAH (nad 27) | <b>TVD Reference:</b>               | WELL @ 5077.00ft (Original Well Elev) |
| <b>Reference Site:</b>    | NBU 922-31P3 PAD             | <b>MD Reference:</b>                | WELL @ 5077.00ft (Original Well Elev) |
| <b>Site Error:</b>        | 0.00ft                       | <b>North Reference:</b>             | True                                  |
| <b>Reference Well:</b>    | NBU 922-3103AS               | <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 922-3103AS               | <b>Database:</b>                    | EDM 2003.21 Single User Db            |
| <b>Reference Design:</b>  | PLAN #1 3-23-10 RHS          | <b>Offset TVD Reference:</b>        | Offset Datum                          |

|                                     |                                                                     |                       |                     |
|-------------------------------------|---------------------------------------------------------------------|-----------------------|---------------------|
| <b>Reference</b>                    | PLAN #1 3-23-10 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> 3/23/2010 |                                      |                  |                    |
| <b>From (ft)</b>           | <b>To (ft)</b>        | <b>Survey (Wellbore)</b>             | <b>Tool Name</b> | <b>Description</b> |
| 0.00                       | 9,493.31              | PLAN #1 3-23-10 RHS (NBU 922-3103AS) | MWD              | MWD - Standard     |

|                                                   |                                      |                                   |                                      |                                       |                          |                |
|---------------------------------------------------|--------------------------------------|-----------------------------------|--------------------------------------|---------------------------------------|--------------------------|----------------|
| <b>Summary</b>                                    |                                      |                                   |                                      |                                       |                          |                |
| <b>Site Name</b>                                  | <b>Reference Measured Depth (ft)</b> | <b>Offset Measured Depth (ft)</b> | <b>Distance Between Centres (ft)</b> | <b>Distance Between Ellipses (ft)</b> | <b>Separation Factor</b> | <b>Warning</b> |
| <b>Offset Well - Wellbore - Design</b>            |                                      |                                   |                                      |                                       |                          |                |
| NBU 922-31P3 PAD                                  |                                      |                                   |                                      |                                       |                          |                |
| CIGE 97D EXISTING - CIGE 97D EXISTING - CIGE 97D  | 100.00                               | 85.07                             | 84.37                                | 84.16                                 | 402.369                  | CC, ES         |
| CIGE 97D EXISTING - CIGE 97D EXISTING - CIGE 97D  | 2,300.00                             | 2,284.64                          | 154.07                               | 143.92                                | 15.175                   | SF             |
| NBU 922-31J3DS - NBU 922-31J3DS - PLAN #1 3-23-10 | 300.00                               | 300.00                            | 9.94                                 | 8.84                                  | 9.097                    | CC, ES         |
| NBU 922-31J3DS - NBU 922-31J3DS - PLAN #1 3-23-10 | 2,230.00                             | 2,229.59                          | 53.42                                | 43.50                                 | 5.384                    | SF             |
| NBU 922-31P-3T EXISTING - NBU 922-31P-3T EXISTING | 581.38                               | 567.25                            | 4.43                                 | 2.22                                  | 2.007                    | CC             |
| NBU 922-31P-3T EXISTING - NBU 922-31P-3T EXISTING | 600.00                               | 585.86                            | 4.48                                 | 2.19                                  | 1.960                    | ES, SF         |
| NBU 922-31P4BS - NBU 922-31P4BS - PLAN #1 3-23-10 | 300.00                               | 300.00                            | 20.14                                | 19.04                                 | 18.433                   | CC, ES         |
| NBU 922-31P4BS - NBU 922-31P4BS - PLAN #1 3-23-10 | 400.00                               | 398.77                            | 24.33                                | 22.80                                 | 15.884                   | SF             |

|                            |                                                                              |                            |                            |                       |                    |                              |                                          |                   |                             |                              |                                |                           |                |
|----------------------------|------------------------------------------------------------------------------|----------------------------|----------------------------|-----------------------|--------------------|------------------------------|------------------------------------------|-------------------|-----------------------------|------------------------------|--------------------------------|---------------------------|----------------|
| <b>Offset Design</b>       | NBU 922-31P3 PAD - CIGE 97D EXISTING - CIGE 97D EXISTING - CIGE 97D EXISTING |                            |                            |                       |                    |                              |                                          |                   |                             |                              |                                | <b>Offset Site Error:</b> | 0.00 ft        |
| <b>Survey Program:</b>     | 100-NS-GYRO-MS                                                               |                            |                            |                       |                    |                              |                                          |                   |                             |                              |                                | <b>Offset Well Error:</b> | 0.00 ft        |
| <b>Reference</b>           | <b>Offset</b>                                                                | <b>Semi Major Axis</b>     |                            | <b>Distance</b>       |                    | <b>Minimum Separation</b>    |                                          | <b>Warning</b>    |                             |                              |                                |                           |                |
| <b>Measured Depth (ft)</b> | <b>Vertical Depth (ft)</b>                                                   | <b>Measured Depth (ft)</b> | <b>Vertical Depth (ft)</b> | <b>Reference (ft)</b> | <b>Offset (ft)</b> | <b>Highside Toolface (°)</b> | <b>Offset Wellbore Centre +N/-S (ft)</b> | <b>+E/-W (ft)</b> | <b>Between Centres (ft)</b> | <b>Between Ellipses (ft)</b> | <b>Minimum Separation (ft)</b> | <b>Separation Factor</b>  | <b>Warning</b> |
| 0.00                       | 0.00                                                                         | 0.00                       | 0.00                       | 0.00                  | 0.00               | 48.71                        | 55.36                                    | 63.04             | 85.06                       |                              |                                |                           |                |
| 100.00                     | 100.00                                                                       | 85.07                      | 85.07                      | 0.10                  | 0.11               | 48.75                        | 55.62                                    | 63.43             | 84.37                       | 84.16                        | 0.21                           | 402.369                   | CC, ES         |
| 200.00                     | 200.00                                                                       | 185.79                     | 185.78                     | 0.32                  | 0.32               | 49.15                        | 55.74                                    | 64.45             | 85.21                       | 84.57                        | 0.65                           | 132.064                   |                |
| 300.00                     | 300.00                                                                       | 285.10                     | 285.08                     | 0.55                  | 0.56               | 49.80                        | 55.34                                    | 65.48             | 85.73                       | 84.63                        | 1.10                           | 77.720                    |                |
| 400.00                     | 399.98                                                                       | 385.84                     | 385.82                     | 0.76                  | 0.79               | 140.60                       | 55.26                                    | 66.56             | 87.85                       | 86.29                        | 1.55                           | 56.508                    |                |
| 500.00                     | 499.92                                                                       | 485.88                     | 485.85                     | 0.97                  | 1.03               | 142.83                       | 54.26                                    | 67.40             | 90.64                       | 88.64                        | 2.00                           | 45.412                    |                |
| 600.00                     | 599.86                                                                       | 585.83                     | 585.79                     | 1.19                  | 1.27               | 144.82                       | 53.38                                    | 68.13             | 93.54                       | 91.08                        | 2.45                           | 38.111                    |                |
| 700.00                     | 699.80                                                                       | 685.59                     | 685.55                     | 1.42                  | 1.52               | 146.52                       | 52.75                                    | 68.73             | 96.57                       | 93.64                        | 2.93                           | 32.995                    |                |
| 800.00                     | 799.74                                                                       | 785.22                     | 785.17                     | 1.65                  | 1.78               | 148.06                       | 52.33                                    | 69.47             | 99.91                       | 96.50                        | 3.41                           | 29.320                    |                |
| 900.00                     | 899.68                                                                       | 884.48                     | 884.43                     | 1.88                  | 2.01               | 149.27                       | 52.46                                    | 70.38             | 103.75                      | 99.89                        | 3.86                           | 26.871                    |                |
| 1,000.00                   | 999.61                                                                       | 984.28                     | 984.23                     | 2.11                  | 2.22               | 150.12                       | 53.26                                    | 71.41             | 108.05                      | 103.76                       | 4.29                           | 25.196                    |                |
| 1,100.00                   | 1,099.55                                                                     | 1,084.73                   | 1,084.66                   | 2.34                  | 2.45               | 151.13                       | 53.59                                    | 72.45             | 112.16                      | 107.42                       | 4.74                           | 23.664                    |                |
| 1,200.00                   | 1,199.49                                                                     | 1,184.58                   | 1,184.51                   | 2.57                  | 2.69               | 152.33                       | 53.31                                    | 73.48             | 116.01                      | 110.80                       | 5.21                           | 22.267                    |                |
| 1,300.00                   | 1,299.43                                                                     | 1,284.35                   | 1,284.28                   | 2.81                  | 2.94               | 153.28                       | 53.38                                    | 74.45             | 120.02                      | 114.33                       | 5.69                           | 21.108                    |                |
| 1,400.00                   | 1,399.37                                                                     | 1,384.65                   | 1,384.56                   | 3.04                  | 3.20               | 154.54                       | 52.72                                    | 75.70             | 123.99                      | 117.83                       | 6.16                           | 20.117                    |                |
| 1,500.00                   | 1,499.31                                                                     | 1,485.83                   | 1,485.73                   | 3.27                  | 3.42               | 155.97                       | 51.30                                    | 76.58             | 127.37                      | 120.76                       | 6.61                           | 19.274                    |                |
| 1,600.00                   | 1,599.25                                                                     | 1,586.23                   | 1,586.12                   | 3.50                  | 3.60               | 157.33                       | 49.56                                    | 76.71             | 130.03                      | 123.01                       | 7.02                           | 18.530                    |                |
| 1,700.00                   | 1,699.19                                                                     | 1,686.52                   | 1,686.39                   | 3.74                  | 3.77               | 158.58                       | 47.82                                    | 76.55             | 132.48                      | 125.07                       | 7.41                           | 17.873                    |                |
| 1,800.00                   | 1,799.13                                                                     | 1,785.65                   | 1,785.51                   | 3.97                  | 3.96               | 159.71                       | 46.29                                    | 76.44             | 135.09                      | 127.26                       | 7.82                           | 17.266                    |                |
| 1,900.00                   | 1,899.07                                                                     | 1,884.60                   | 1,884.45                   | 4.20                  | 4.19               | 160.72                       | 45.14                                    | 76.93             | 138.46                      | 130.18                       | 8.28                           | 16.725                    |                |

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 922-3103AS                   |
| <b>Project:</b>           | UINTAH COUNTY, UTAH (nad 27) | <b>TVD Reference:</b>               | WELL @ 5077.00ft (Original Well Elev) |
| <b>Reference Site:</b>    | NBU 922-31P3 PAD             | <b>MD Reference:</b>                | WELL @ 5077.00ft (Original Well Elev) |
| <b>Site Error:</b>        | 0.00ft                       | <b>North Reference:</b>             | True                                  |
| <b>Reference Well:</b>    | NBU 922-3103AS               | <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 922-3103AS               | <b>Database:</b>                    | EDM 2003.21 Single User Db            |
| <b>Reference Design:</b>  | PLAN #1 3-23-10 RHS          | <b>Offset TVD Reference:</b>        | Offset Datum                          |

| Offset Design NBU 922-31P3 PAD - CIGE 97D EXISTING - CIGE 97D EXISTING - CIGE 97D EXISTING |                     |                     |                     |           |        |                 |                       |                                   |                                   |                      |                       |                         | Offset Site Error: | 0.00 ft |
|--------------------------------------------------------------------------------------------|---------------------|---------------------|---------------------|-----------|--------|-----------------|-----------------------|-----------------------------------|-----------------------------------|----------------------|-----------------------|-------------------------|--------------------|---------|
| Survey Program: 100-NS-GYRO-MS                                                             |                     |                     |                     |           |        |                 |                       |                                   |                                   |                      |                       |                         | Offset Well Error: | 0.00 ft |
| Measured Depth (ft)                                                                        | Vertical Depth (ft) | Measured Depth (ft) | Vertical Depth (ft) | Reference | Offset | 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  | Warning |
| 2,000.00                                                                                   | 1,999.01            | 1,984.66            | 1,984.50            | 4.44      | 4.44   | 161.68          |                       | 44.13                             | 77.76                             | 142.23               | 133.47                | 8.76                    | 16.245             |         |
| 2,100.00                                                                                   | 2,098.94            | 2,084.73            | 2,084.57            | 4.67      | 4.69   | 162.61          |                       | 43.00                             | 78.42                             | 145.85               | 136.62                | 9.23                    | 15.801             |         |
| 2,200.00                                                                                   | 2,198.88            | 2,184.94            | 2,184.76            | 4.91      | 4.94   | 163.57          |                       | 41.66                             | 79.00                             | 149.36               | 139.66                | 9.70                    | 15.400             |         |
| 2,230.00                                                                                   | 2,228.86            | 2,214.93            | 2,214.75            | 4.98      | 5.01   | 163.88          |                       | 41.17                             | 79.16                             | 150.39               | 140.55                | 9.84                    | 15.285             |         |
| 2,300.00                                                                                   | 2,298.76            | 2,284.64            | 2,284.44            | 5.15      | 5.18   | 164.69          |                       | 40.03                             | 79.58                             | 154.07               | 143.92                | 10.15                   | 15.175 SF          |         |
| 2,400.00                                                                                   | 2,398.27            | 2,383.96            | 2,383.75            | 5.41      | 5.43   | 166.12          |                       | 38.43                             | 80.26                             | 163.78               | 153.20                | 10.59                   | 15.471             |         |
| 2,500.00                                                                                   | 2,497.14            | 2,483.69            | 2,483.46            | 5.71      | 5.66   | 167.74          |                       | 36.79                             | 80.74                             | 178.48               | 167.49                | 10.99                   | 16.246             |         |
| 2,600.00                                                                                   | 2,595.08            | 2,580.84            | 2,580.60            | 6.05      | 5.89   | 169.34          |                       | 35.14                             | 81.00                             | 198.14               | 186.79                | 11.35                   | 17.457             |         |
| 2,700.00                                                                                   | 2,691.84            | 2,677.15            | 2,676.90            | 6.44      | 6.13   | 170.84          |                       | 33.58                             | 81.62                             | 223.36               | 211.67                | 11.70                   | 19.098             |         |
| 2,800.00                                                                                   | 2,787.15            | 2,772.09            | 2,771.82            | 6.90      | 6.37   | 172.20          |                       | 31.94                             | 82.29                             | 253.75               | 241.74                | 12.01                   | 21.126             |         |
| 2,830.21                                                                                   | 2,815.62            | 2,800.42            | 2,800.14            | 7.05      | 6.45   | 172.59          |                       | 31.38                             | 82.51                             | 263.93               | 251.83                | 12.10                   | 21.813             |         |
| 2,900.00                                                                                   | 2,881.20            | 2,865.94            | 2,865.65            | 7.42      | 6.61   | 173.49          |                       | 30.04                             | 83.02                             | 288.02               | 275.58                | 12.43                   | 23.162             |         |
| 3,000.00                                                                                   | 2,975.16            | 2,959.35            | 2,959.04            | 7.98      | 6.85   | 174.57          |                       | 28.05                             | 83.73                             | 322.60               | 309.68                | 12.92                   | 24.968             |         |
| 3,100.00                                                                                   | 3,069.13            | 3,053.58            | 3,053.24            | 8.57      | 7.08   | 175.49          |                       | 25.77                             | 84.53                             | 357.33               | 343.92                | 13.41                   | 26.646             |         |
| 3,200.00                                                                                   | 3,163.09            | 3,148.97            | 3,148.60            | 9.18      | 7.31   | 176.27          |                       | 23.35                             | 84.99                             | 391.77               | 377.87                | 13.90                   | 28.177             |         |
| 3,300.00                                                                                   | 3,257.06            | 3,244.07            | 3,243.66            | 9.80      | 7.54   | 176.93          |                       | 20.88                             | 85.07                             | 425.89               | 411.49                | 14.40                   | 29.581             |         |
| 3,400.00                                                                                   | 3,351.03            | 3,338.62            | 3,338.17            | 10.44     | 7.76   | 177.48          |                       | 18.41                             | 84.98                             | 459.88               | 445.00                | 14.89                   | 30.890             |         |
| 3,500.00                                                                                   | 3,444.99            | 3,432.67            | 3,432.19            | 11.08     | 7.98   | 177.96          |                       | 15.96                             | 84.79                             | 493.80               | 478.42                | 15.38                   | 32.100             |         |
| 3,600.00                                                                                   | 3,538.96            | 3,525.56            | 3,525.05            | 11.74     | 8.20   | 178.37          |                       | 13.53                             | 84.72                             | 527.88               | 511.99                | 15.88                   | 33.234             |         |
| 3,700.00                                                                                   | 3,632.92            | 3,618.64            | 3,618.10            | 12.41     | 8.42   | 178.73          |                       | 11.10                             | 84.85                             | 562.16               | 545.77                | 16.39                   | 34.302             |         |
| 3,800.00                                                                                   | 3,726.89            | 3,713.06            | 3,712.48            | 13.08     | 8.65   | 179.07          |                       | 8.50                              | 84.98                             | 596.47               | 579.57                | 16.90                   | 35.285             |         |
| 3,900.00                                                                                   | 3,820.85            | 3,807.90            | 3,807.29            | 13.76     | 8.88   | 179.39          |                       | 5.69                              | 85.02                             | 630.71               | 613.28                | 17.42                   | 36.203             |         |
| 4,000.00                                                                                   | 3,914.82            | 3,901.53            | 3,901.87            | 14.44     | 9.10   | 179.69          |                       | 2.79                              | 84.53                             | 664.46               | 646.53                | 17.93                   | 37.063             |         |
| 4,100.00                                                                                   | 4,008.78            | 4,007.32            | 4,006.61            | 15.13     | 9.31   | 179.94          |                       | 0.16                              | 83.19                             | 697.41               | 678.98                | 18.43                   | 37.832             |         |
| 4,200.00                                                                                   | 4,102.75            | 4,101.86            | 4,101.11            | 15.82     | 9.49   | -179.86         |                       | -2.23                             | 81.57                             | 730.03               | 711.11                | 18.91                   | 38.596             |         |
| 4,300.00                                                                                   | 4,196.71            | 4,196.41            | 4,195.62            | 16.51     | 9.67   | -179.68         |                       | -4.62                             | 79.94                             | 762.64               | 743.25                | 19.40                   | 39.320             |         |
| 4,400.00                                                                                   | 4,290.68            | 4,296.21            | 4,295.36            | 17.21     | 9.86   | -179.49         |                       | -7.26                             | 77.90                             | 794.96               | 775.08                | 19.88                   | 39.978             |         |
| 4,500.00                                                                                   | 4,384.65            | 4,396.66            | 4,395.73            | 17.91     | 10.05  | -179.30         |                       | -10.18                            | 75.15                             | 826.63               | 806.25                | 20.38                   | 40.568             |         |
| 4,600.00                                                                                   | 4,478.61            | 4,486.87            | 4,485.87            | 18.61     | 10.22  | -179.13         |                       | -12.83                            | 72.59                             | 858.22               | 837.36                | 20.86                   | 41.150             |         |
| 4,700.00                                                                                   | 4,572.58            | 4,576.39            | 4,575.33            | 19.32     | 10.40  | -179.00         |                       | -15.22                            | 70.59                             | 890.37               | 869.04                | 21.34                   | 41.732             |         |
| 4,800.00                                                                                   | 4,666.54            | 4,666.40            | 4,665.30            | 20.02     | 10.59  | -178.88         |                       | -17.46                            | 69.07                             | 923.05               | 901.22                | 21.84                   | 42.273             |         |
| 4,900.00                                                                                   | 4,760.51            | 4,756.42            | 4,755.29            | 20.73     | 10.79  | -178.78         |                       | -19.71                            | 67.98                             | 956.17               | 933.83                | 22.34                   | 42.795             |         |
| 5,000.00                                                                                   | 4,854.47            | 4,849.03            | 4,847.87            | 21.44     | 11.00  | -178.68         |                       | -22.02                            | 67.21                             | 989.66               | 966.80                | 22.86                   | 43.285             |         |
| 5,108.99                                                                                   | 4,956.89            | 4,952.92            | 4,951.72            | 22.21     | 11.25  | -178.57         |                       | -24.58                            | 66.30                             | 1,026.12             | 1,002.67              | 23.44                   | 43.767             |         |
| 5,200.00                                                                                   | 5,042.88            | 5,039.32            | 5,038.09            | 22.77     | 11.46  | -178.50         |                       | -26.70                            | 65.46                             | 1,055.11             | 1,031.05              | 24.06                   | 43.854             |         |
| 5,300.00                                                                                   | 5,138.41            | 5,134.09            | 5,132.82            | 23.25     | 11.69  | -178.42         |                       | -29.21                            | 64.60                             | 1,083.86             | 1,059.18              | 24.68                   | 43.911             |         |
| 5,400.00                                                                                   | 5,234.92            | 5,229.74            | 5,228.42            | 23.70     | 11.92  | -178.32         |                       | -31.97                            | 63.81                             | 1,109.35             | 1,084.07              | 25.28                   | 43.888             |         |
| 5,500.00                                                                                   | 5,332.28            | 5,326.14            | 5,324.79            | 24.09     | 12.16  | -178.22         |                       | -34.83                            | 63.10                             | 1,131.54             | 1,105.69              | 25.84                   | 43.787             |         |
| 5,600.00                                                                                   | 5,430.37            | 5,423.28            | 5,421.88            | 24.43     | 12.40  | -178.11         |                       | -37.73                            | 62.48                             | 1,150.41             | 1,124.04              | 26.37                   | 43.622             |         |
| 5,700.00                                                                                   | 5,529.08            | 5,521.20            | 5,519.75            | 24.73     | 12.65  | -178.00         |                       | -40.66                            | 61.93                             | 1,165.93             | 1,139.06              | 26.87                   | 43.393             |         |
| 5,800.00                                                                                   | 5,628.29            | 5,619.39            | 5,617.90            | 24.98     | 12.90  | -177.89         |                       | -43.62                            | 61.45                             | 1,178.07             | 1,150.75              | 27.33                   | 43.109             |         |
| 5,900.00                                                                                   | 5,727.88            | 5,717.18            | 5,715.64            | 25.18     | 13.15  | -177.77         |                       | -46.58                            | 61.09                             | 1,186.88             | 1,159.13              | 27.75                   | 42.773             |         |
| 6,000.00                                                                                   | 5,827.72            | 5,815.14            | 5,813.56            | 25.34     | 13.40  | -177.64         |                       | -49.57                            | 60.88                             | 1,192.36             | 1,164.24              | 28.13                   | 42.391             |         |
| 6,109.31                                                                                   | 5,937.00            | 5,922.07            | 5,920.44            | 25.47     | 13.68  | 92.92           |                       | -52.83                            | 60.84                             | 1,194.57             | 1,166.07              | 28.51                   | 41.905             |         |
| 6,200.00                                                                                   | 6,027.69            | 6,000.00            | 5,998.33            | 25.56     | 13.89  | 93.03           |                       | -55.20                            | 60.95                             | 1,194.89             | 1,166.02              | 28.87                   | 41.392             |         |
| 6,300.00                                                                                   | 6,127.69            | 6,000.00            | 5,998.33            | 25.67     | 13.89  | 93.03           |                       | -55.20                            | 60.95                             | 1,200.35             | 1,171.31              | 29.04                   | 41.335             |         |
| 6,400.00                                                                                   | 6,227.69            | 6,000.00            | 5,998.33            | 25.78     | 13.89  | 93.03           |                       | -55.20                            | 60.95                             | 1,214.05             | 1,184.83              | 29.21                   | 41.558             |         |
| 6,500.00                                                                                   | 6,327.69            | 6,000.00            | 5,998.33            | 25.89     | 13.89  | 93.03           |                       | -55.20                            | 60.95                             | 1,235.71             | 1,206.32              | 29.39                   | 42.049             |         |
| 6,600.00                                                                                   | 6,427.69            | 6,000.00            | 5,998.33            | 26.00     | 13.89  | 93.03           |                       | -55.20                            | 60.95                             | 1,264.93             | 1,235.37              | 29.56                   | 42.787             |         |
| 6,700.00                                                                                   | 6,527.69            | 6,000.00            | 5,998.33            | 26.12     | 13.89  | 93.03           |                       | -55.20                            | 60.95                             | 1,301.20             | 1,271.46              | 29.74                   | 43.752             |         |
| 6,800.00                                                                                   | 6,627.69            | 6,000.00            | 5,998.33            | 26.23     | 13.89  | 93.03           |                       | -55.20                            | 60.95                             | 1,343.95             | 1,314.03              | 29.92                   | 44.920             |         |
| 6,900.00                                                                                   | 6,727.69            | 6,000.00            | 5,998.33            | 26.35     | 13.89  | 93.03           |                       | -55.20                            | 60.95                             | 1,392.58             | 1,362.48              | 30.10                   | 46.268             |         |

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 922-3103AS                   |
| <b>Project:</b>           | UINTAH COUNTY, UTAH (nad 27) | <b>TVD Reference:</b>               | WELL @ 5077.00ft (Original Well Elev) |
| <b>Reference Site:</b>    | NBU 922-31P3 PAD             | <b>MD Reference:</b>                | WELL @ 5077.00ft (Original Well Elev) |
| <b>Site Error:</b>        | 0.00ft                       | <b>North Reference:</b>             | True                                  |
| <b>Reference Well:</b>    | NBU 922-3103AS               | <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 922-3103AS               | <b>Database:</b>                    | EDM 2003.21 Single User Db            |
| <b>Reference Design:</b>  | PLAN #1 3-23-10 RHS          | <b>Offset TVD Reference:</b>        | Offset Datum                          |

| Offset Design NBU 922-31P3 PAD - CIGE 97D EXISTING - CIGE 97D EXISTING - CIGE 97D EXISTING |                |                |                |                 |        |                   |                        |            |                 |                  |                    |                   | Offset Site Error: | 0.00 ft |
|--------------------------------------------------------------------------------------------|----------------|----------------|----------------|-----------------|--------|-------------------|------------------------|------------|-----------------|------------------|--------------------|-------------------|--------------------|---------|
| Survey Program: 100-NS-GYRO-MS                                                             |                |                |                |                 |        |                   |                        |            |                 |                  |                    |                   | Offset Well Error: | 0.00 ft |
| Reference                                                                                  |                | Offset         |                | Semi Major Axis |        |                   | Distance               |            |                 |                  |                    |                   |                    | Warning |
| Measured Depth                                                                             | Vertical Depth | Measured Depth | Vertical Depth | Reference       | Offset | Highside Toolface | Offset Wellbore Centre |            | Between Centres | Between Ellipses | Minimum Separation | Separation Factor |                    |         |
| (ft)                                                                                       | (ft)           | (ft)           | (ft)           | (ft)            | (ft)   | (°)               | +N/-S (ft)             | +E/-W (ft) | (ft)            | (ft)             | (ft)               |                   |                    |         |
| 7,000.00                                                                                   | 6,827.69       | 6,000.00       | 5,998.33       | 26.47           | 13.89  | 93.03             | -55.20                 | 60.95      | 1,446.49        | 1,416.22         | 30.28              | 47.772            |                    |         |
| 7,100.00                                                                                   | 6,927.69       | 6,000.00       | 5,998.33       | 26.59           | 13.89  | 93.03             | -55.20                 | 60.95      | 1,505.13        | 1,474.67         | 30.46              | 49.413            |                    |         |
| 7,200.00                                                                                   | 7,027.69       | 6,000.00       | 5,998.33       | 26.71           | 13.89  | 93.03             | -55.20                 | 60.95      | 1,567.96        | 1,537.31         | 30.64              | 51.168            |                    |         |
| 7,300.00                                                                                   | 7,127.69       | 6,000.00       | 5,998.33       | 26.83           | 13.89  | 93.03             | -55.20                 | 60.95      | 1,634.49        | 1,603.67         | 30.83              | 53.022            |                    |         |
| 7,400.00                                                                                   | 7,227.69       | 6,000.00       | 5,998.33       | 26.95           | 13.89  | 93.03             | -55.20                 | 60.95      | 1,704.30        | 1,673.29         | 31.01              | 54.957            |                    |         |
| 7,500.00                                                                                   | 7,327.69       | 6,000.00       | 5,998.33       | 27.08           | 13.89  | 93.03             | -55.20                 | 60.95      | 1,776.99        | 1,745.80         | 31.20              | 56.960            |                    |         |
| 7,600.00                                                                                   | 7,427.69       | 6,000.00       | 5,998.33       | 27.21           | 13.89  | 93.03             | -55.20                 | 60.95      | 1,852.24        | 1,820.85         | 31.38              | 59.019            |                    |         |
| 7,700.00                                                                                   | 7,527.69       | 6,000.00       | 5,998.33       | 27.33           | 13.89  | 93.03             | -55.20                 | 60.95      | 1,929.73        | 1,898.16         | 31.57              | 61.123            |                    |         |
| 7,800.00                                                                                   | 7,627.69       | 6,000.00       | 5,998.33       | 27.46           | 13.89  | 93.03             | -55.20                 | 60.95      | 2,009.21        | 1,977.45         | 31.76              | 63.264            |                    |         |
| 7,900.00                                                                                   | 7,727.69       | 6,000.00       | 5,998.33       | 27.59           | 13.89  | 93.03             | -55.20                 | 60.95      | 2,090.45        | 2,058.51         | 31.95              | 65.432            |                    |         |
| 8,000.00                                                                                   | 7,827.69       | 6,000.00       | 5,998.33       | 27.72           | 13.89  | 93.03             | -55.20                 | 60.95      | 2,173.26        | 2,141.12         | 32.14              | 67.622            |                    |         |
| 8,100.00                                                                                   | 7,927.69       | 6,000.00       | 5,998.33       | 27.86           | 13.89  | 93.03             | -55.20                 | 60.95      | 2,257.46        | 2,225.13         | 32.33              | 69.828            |                    |         |
| 8,200.00                                                                                   | 8,027.69       | 6,000.00       | 5,998.33       | 27.99           | 13.89  | 93.03             | -55.20                 | 60.95      | 2,342.91        | 2,310.39         | 32.52              | 72.044            |                    |         |
| 8,300.00                                                                                   | 8,127.69       | 6,000.00       | 5,998.33       | 28.12           | 13.89  | 93.03             | -55.20                 | 60.95      | 2,429.46        | 2,396.75         | 32.71              | 74.266            |                    |         |
| 8,400.00                                                                                   | 8,227.69       | 6,000.00       | 5,998.33       | 28.26           | 13.89  | 93.03             | -55.20                 | 60.95      | 2,517.01        | 2,484.11         | 32.91              | 76.492            |                    |         |
| 8,500.00                                                                                   | 8,327.69       | 6,000.00       | 5,998.33       | 28.40           | 13.89  | 93.03             | -55.20                 | 60.95      | 2,605.46        | 2,572.36         | 33.10              | 78.716            |                    |         |
| 8,600.00                                                                                   | 8,427.69       | 6,000.00       | 5,998.33       | 28.54           | 13.89  | 93.03             | -55.20                 | 60.95      | 2,694.72        | 2,661.42         | 33.29              | 80.938            |                    |         |
| 8,700.00                                                                                   | 8,527.69       | 6,000.00       | 5,998.33       | 28.68           | 13.89  | 93.03             | -55.20                 | 60.95      | 2,784.70        | 2,751.22         | 33.49              | 83.154            |                    |         |
| 8,800.00                                                                                   | 8,627.69       | 6,000.00       | 5,998.33       | 28.82           | 13.89  | 93.03             | -55.20                 | 60.95      | 2,875.35        | 2,841.67         | 33.68              | 85.362            |                    |         |
| 8,900.00                                                                                   | 8,727.69       | 6,000.00       | 5,998.33       | 28.96           | 13.89  | 93.03             | -55.20                 | 60.95      | 2,966.60        | 2,932.72         | 33.88              | 87.561            |                    |         |
| 9,000.00                                                                                   | 8,827.69       | 6,000.00       | 5,998.33       | 29.10           | 13.89  | 93.03             | -55.20                 | 60.95      | 3,058.40        | 3,024.32         | 34.08              | 89.749            |                    |         |
| 9,100.00                                                                                   | 8,927.69       | 6,000.00       | 5,998.33       | 29.24           | 13.89  | 93.03             | -55.20                 | 60.95      | 3,150.69        | 3,116.42         | 34.27              | 91.925            |                    |         |
| 9,200.00                                                                                   | 9,027.69       | 6,000.00       | 5,998.33       | 29.39           | 13.89  | 93.03             | -55.20                 | 60.95      | 3,243.45        | 3,208.97         | 34.47              | 94.088            |                    |         |
| 9,300.00                                                                                   | 9,127.69       | 6,000.00       | 5,998.33       | 29.53           | 13.89  | 93.03             | -55.20                 | 60.95      | 3,336.62        | 3,301.95         | 34.67              | 96.237            |                    |         |
| 9,400.00                                                                                   | 9,227.69       | 6,000.00       | 5,998.33       | 29.68           | 13.89  | 93.03             | -55.20                 | 60.95      | 3,430.17        | 3,395.30         | 34.87              | 98.371            |                    |         |
| 9,493.31                                                                                   | 9,321.00       | 6,000.00       | 5,998.33       | 29.82           | 13.89  | 93.03             | -55.20                 | 60.95      | 3,517.79        | 3,482.73         | 35.06              | 100.348           |                    |         |

|                           |                              |                                     |                                       |
|---------------------------|------------------------------|-------------------------------------|---------------------------------------|
| <b>Company:</b>           | ANADARKO PETROLEUM CORP.     | <b>Local Co-ordinate Reference:</b> | Well NBU 922-3103AS                   |
| <b>Project:</b>           | UINTAH COUNTY, UTAH (nad 27) | <b>TVD Reference:</b>               | WELL @ 5077.00ft (Original Well Elev) |
| <b>Reference Site:</b>    | NBU 922-31P3 PAD             | <b>MD Reference:</b>                | WELL @ 5077.00ft (Original Well Elev) |
| <b>Site Error:</b>        | 0.00ft                       | <b>North Reference:</b>             | True                                  |
| <b>Reference Well:</b>    | NBU 922-3103AS               | <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 922-3103AS               | <b>Database:</b>                    | EDM 2003.21 Single User Db            |
| <b>Reference Design:</b>  | PLAN #1 3-23-10 RHS          | <b>Offset TVD Reference:</b>        | Offset Datum                          |

| Offset Design NBU 922-31P3 PAD - NBU 922-31J3DS - NBU 922-31J3DS - PLAN #1 3-23-10 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) | +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        | 68.50                 | 3.64                              | 9.25       | 9.94                 |                       |                         |                    |         |
| 100.00                                                                                 | 100.00              | 100.00              | 100.00              | 0.10            | 0.10        | 68.50                 | 3.64                              | 9.25       | 9.94                 | 9.74                  | 0.19                    | 51.408             |         |
| 200.00                                                                                 | 200.00              | 200.00              | 200.00              | 0.32            | 0.32        | 68.50                 | 3.64                              | 9.25       | 9.94                 | 9.29                  | 0.64                    | 15.458             |         |
| 300.00                                                                                 | 300.00              | 300.00              | 300.00              | 0.55            | 0.55        | 68.50                 | 3.64                              | 9.25       | 9.94                 | 8.84                  | 1.09                    | 9.097 CC, ES       |         |
| 400.00                                                                                 | 399.98              | 400.14              | 400.12              | 0.76            | 0.77        | 153.26                | 4.80                              | 7.94       | 10.80                | 9.28                  | 1.53                    | 7.065              |         |
| 500.00                                                                                 | 499.92              | 500.11              | 500.03              | 0.97            | 0.99        | 145.74                | 7.12                              | 5.33       | 12.72                | 10.76                 | 1.96                    | 6.491              |         |
| 600.00                                                                                 | 599.86              | 600.08              | 599.94              | 1.19            | 1.22        | 140.25                | 9.44                              | 2.72       | 14.80                | 12.40                 | 2.40                    | 6.157              |         |
| 700.00                                                                                 | 699.80              | 700.05              | 699.85              | 1.42            | 1.45        | 136.15                | 11.76                             | 0.12       | 16.98                | 14.12                 | 2.85                    | 5.948              |         |
| 800.00                                                                                 | 799.74              | 800.02              | 799.76              | 1.65            | 1.68        | 132.99                | 14.08                             | -2.49      | 19.23                | 15.92                 | 3.31                    | 5.810              |         |
| 900.00                                                                                 | 899.68              | 899.99              | 899.67              | 1.88            | 1.91        | 130.50                | 16.40                             | -5.10      | 21.52                | 17.75                 | 3.77                    | 5.713              |         |
| 1,000.00                                                                               | 999.61              | 999.96              | 999.57              | 2.11            | 2.14        | 128.49                | 18.71                             | -7.71      | 23.84                | 19.62                 | 4.23                    | 5.642              |         |
| 1,100.00                                                                               | 1,099.55            | 1,099.93            | 1,099.48            | 2.34            | 2.37        | 126.84                | 21.03                             | -10.31     | 26.19                | 21.51                 | 4.69                    | 5.589              |         |
| 1,200.00                                                                               | 1,199.49            | 1,199.90            | 1,199.39            | 2.57            | 2.60        | 125.46                | 23.35                             | -12.92     | 28.56                | 23.41                 | 5.15                    | 5.548              |         |
| 1,300.00                                                                               | 1,299.43            | 1,299.87            | 1,299.30            | 2.81            | 2.83        | 124.29                | 25.67                             | -15.53     | 30.94                | 25.33                 | 5.61                    | 5.516              |         |
| 1,400.00                                                                               | 1,399.37            | 1,399.84            | 1,399.21            | 3.04            | 3.07        | 123.29                | 27.99                             | -18.14     | 33.33                | 27.26                 | 6.07                    | 5.489              |         |
| 1,500.00                                                                               | 1,499.31            | 1,499.81            | 1,499.12            | 3.27            | 3.30        | 122.43                | 30.31                             | -20.74     | 35.74                | 29.20                 | 6.54                    | 5.468              |         |
| 1,600.00                                                                               | 1,599.25            | 1,599.78            | 1,599.03            | 3.50            | 3.53        | 121.67                | 32.62                             | -23.35     | 38.14                | 31.15                 | 7.00                    | 5.450              |         |
| 1,700.00                                                                               | 1,699.19            | 1,699.75            | 1,698.94            | 3.74            | 3.76        | 121.00                | 34.94                             | -25.96     | 40.56                | 33.10                 | 7.46                    | 5.435              |         |
| 1,800.00                                                                               | 1,799.13            | 1,799.72            | 1,798.85            | 3.97            | 4.00        | 120.41                | 37.26                             | -28.57     | 42.98                | 35.05                 | 7.93                    | 5.422              |         |
| 1,900.00                                                                               | 1,899.07            | 1,899.69            | 1,898.75            | 4.20            | 4.23        | 119.88                | 39.58                             | -31.17     | 45.40                | 37.01                 | 8.39                    | 5.411              |         |
| 2,000.00                                                                               | 1,999.01            | 1,999.66            | 1,998.66            | 4.44            | 4.46        | 119.41                | 41.90                             | -33.78     | 47.83                | 38.97                 | 8.85                    | 5.402              |         |
| 2,100.00                                                                               | 2,098.94            | 2,099.63            | 2,098.57            | 4.67            | 4.69        | 118.98                | 44.21                             | -36.39     | 50.26                | 40.94                 | 9.32                    | 5.393              |         |
| 2,200.00                                                                               | 2,198.88            | 2,199.60            | 2,198.48            | 4.91            | 4.93        | 118.59                | 46.53                             | -38.99     | 52.69                | 42.91                 | 9.78                    | 5.386              |         |
| 2,230.00                                                                               | 2,228.86            | 2,229.59            | 2,228.45            | 4.98            | 5.00        | 118.48                | 47.23                             | -39.78     | 53.42                | 43.50                 | 9.92                    | 5.384 SF           |         |
| 2,300.00                                                                               | 2,298.76            | 2,299.31            | 2,298.11            | 5.15            | 5.16        | 118.95                | 49.10                             | -41.88     | 55.82                | 45.57                 | 10.25                   | 5.447              |         |
| 2,400.00                                                                               | 2,398.27            | 2,398.47            | 2,396.94            | 5.41            | 5.41        | 119.38                | 54.42                             | -47.86     | 62.27                | 51.52                 | 10.74                   | 5.795              |         |
| 2,500.00                                                                               | 2,497.14            | 2,497.26            | 2,494.86            | 5.71            | 5.69        | 119.18                | 63.10                             | -57.63     | 72.31                | 61.02                 | 11.29                   | 6.407              |         |
| 2,600.00                                                                               | 2,595.08            | 2,595.51            | 2,591.43            | 6.05            | 6.00        | 118.58                | 75.06                             | -71.08     | 85.91                | 74.02                 | 11.89                   | 7.228              |         |
| 2,700.00                                                                               | 2,691.84            | 2,693.03            | 2,686.25            | 6.44            | 6.35        | 117.74                | 90.18                             | -88.08     | 103.02               | 90.46                 | 12.57                   | 8.198              |         |
| 2,800.00                                                                               | 2,787.15            | 2,789.66            | 2,778.94            | 6.90            | 6.75        | 116.81                | 108.31                            | -108.48    | 123.58               | 110.24                | 13.35                   | 9.258              |         |
| 2,830.21                                                                               | 2,815.62            | 2,818.66            | 2,806.47            | 7.05            | 6.89        | 116.52                | 114.36                            | -115.28    | 130.46               | 116.85                | 13.61                   | 9.586              |         |
| 2,900.00                                                                               | 2,881.20            | 2,885.37            | 2,869.26            | 7.42            | 7.21        | 115.86                | 129.32                            | -132.10    | 146.97               | 132.70                | 14.27                   | 10.299             |         |
| 3,000.00                                                                               | 2,975.16            | 2,981.28            | 2,958.31            | 7.98            | 7.74        | 113.98                | 152.98                            | -158.70    | 171.53               | 156.22                | 15.31                   | 11.202             |         |
| 3,100.00                                                                               | 3,069.13            | 3,078.01            | 3,047.92            | 8.57            | 8.32        | 112.39                | 177.19                            | -185.94    | 196.39               | 179.98                | 16.42                   | 11.963             |         |
| 3,200.00                                                                               | 3,163.09            | 3,174.75            | 3,137.53            | 9.18            | 8.92        | 111.15                | 201.41                            | -213.17    | 221.36               | 203.80                | 17.56                   | 12.606             |         |
| 3,300.00                                                                               | 3,257.06            | 3,271.48            | 3,227.14            | 9.80            | 9.55        | 110.17                | 225.62                            | -240.40    | 246.41               | 227.67                | 18.74                   | 13.152             |         |
| 3,400.00                                                                               | 3,351.03            | 3,368.22            | 3,316.74            | 10.44           | 10.19       | 109.37                | 249.84                            | -267.64    | 271.51               | 251.57                | 19.94                   | 13.618             |         |
| 3,500.00                                                                               | 3,444.99            | 3,464.95            | 3,406.35            | 11.08           | 10.85       | 108.70                | 274.06                            | -294.87    | 296.65               | 275.49                | 21.16                   | 14.018             |         |
| 3,600.00                                                                               | 3,538.96            | 3,561.69            | 3,495.96            | 11.74           | 11.52       | 108.14                | 298.27                            | -322.10    | 321.83               | 299.42                | 22.41                   | 14.363             |         |
| 3,700.00                                                                               | 3,632.92            | 3,658.42            | 3,585.57            | 12.41           | 12.20       | 107.66                | 322.49                            | -349.34    | 347.03               | 323.36                | 23.67                   | 14.663             |         |
| 3,800.00                                                                               | 3,726.89            | 3,755.16            | 3,675.17            | 13.08           | 12.89       | 107.24                | 346.70                            | -376.57    | 372.25               | 347.31                | 24.94                   | 14.925             |         |
| 3,900.00                                                                               | 3,820.85            | 3,851.89            | 3,764.78            | 13.76           | 13.59       | 106.88                | 370.92                            | -403.80    | 397.48               | 371.26                | 26.23                   | 15.156             |         |
| 4,000.00                                                                               | 3,914.82            | 3,948.63            | 3,854.39            | 14.44           | 14.29       | 106.56                | 395.13                            | -431.04    | 422.73               | 395.21                | 27.52                   | 15.360             |         |
| 4,100.00                                                                               | 4,008.78            | 4,045.36            | 3,944.00            | 15.13           | 15.00       | 106.28                | 419.35                            | -458.27    | 447.99               | 419.17                | 28.83                   | 15.541             |         |
| 4,200.00                                                                               | 4,102.75            | 4,142.09            | 4,033.61            | 15.82           | 15.72       | 106.02                | 443.57                            | -485.50    | 473.26               | 443.12                | 30.14                   | 15.703             |         |
| 4,300.00                                                                               | 4,196.71            | 4,238.83            | 4,123.21            | 16.51           | 16.43       | 105.80                | 467.78                            | -512.74    | 498.54               | 467.08                | 31.46                   | 15.849             |         |
| 4,400.00                                                                               | 4,290.68            | 4,335.56            | 4,212.82            | 17.21           | 17.16       | 105.59                | 492.00                            | -539.97    | 523.82               | 491.04                | 32.78                   | 15.980             |         |
| 4,500.00                                                                               | 4,384.65            | 4,432.30            | 4,302.43            | 17.91           | 17.88       | 105.40                | 516.21                            | -567.20    | 549.11               | 515.00                | 34.11                   | 16.098             |         |
| 4,600.00                                                                               | 4,478.61            | 4,529.03            | 4,392.04            | 18.61           | 18.61       | 105.23                | 540.43                            | -594.44    | 574.40               | 538.96                | 35.44                   | 16.206             |         |
| 4,700.00                                                                               | 4,572.58            | 4,625.77            | 4,481.64            | 19.32           | 19.34       | 105.08                | 564.65                            | -621.67    | 599.70               | 562.92                | 36.78                   | 16.304             |         |
| 4,800.00                                                                               | 4,666.54            | 4,722.50            | 4,571.25            | 20.02           | 20.07       | 104.94                | 588.86                            | -648.91    | 625.01               | 586.88                | 38.12                   | 16.394             |         |
| 4,900.00                                                                               | 4,760.51            | 4,819.24            | 4,660.86            | 20.73           | 20.80       | 104.80                | 613.08                            | -676.14    | 650.31               | 610.84                | 39.47                   | 16.476             |         |

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 922-3103AS                   |
| <b>Project:</b>           | UINTAH COUNTY, UTAH (nad 27) | <b>TVD Reference:</b>               | WELL @ 5077.00ft (Original Well Elev) |
| <b>Reference Site:</b>    | NBU 922-31P3 PAD             | <b>MD Reference:</b>                | WELL @ 5077.00ft (Original Well Elev) |
| <b>Site Error:</b>        | 0.00ft                       | <b>North Reference:</b>             | True                                  |
| <b>Reference Well:</b>    | NBU 922-3103AS               | <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 922-3103AS               | <b>Database:</b>                    | EDM 2003.21 Single User Db            |
| <b>Reference Design:</b>  | PLAN #1 3-23-10 RHS          | <b>Offset TVD Reference:</b>        | Offset Datum                          |

| Offset Design NBU 922-31P3 PAD - NBU 922-31J3DS - NBU 922-31J3DS - PLAN #1 3-23-10 RHS |                     |                     |                     |                |             |                      |                       |                                   |                                   |                               |                                |                         | Offset Site Error: | 0.00 ft |
|----------------------------------------------------------------------------------------|---------------------|---------------------|---------------------|----------------|-------------|----------------------|-----------------------|-----------------------------------|-----------------------------------|-------------------------------|--------------------------------|-------------------------|--------------------|---------|
| Survey Program: 0-MWD                                                                  |                     |                     |                     |                |             |                      |                       |                                   |                                   |                               |                                |                         | Offset Well Error: | 0.00 ft |
| Measured Depth (ft)                                                                    | Vertical Depth (ft) | Measured Depth (ft) | Vertical Depth (ft) | Reference (ft) | Offset (ft) | Semi Major Axis (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 |
| 5,000.00                                                                               | 4,854.47            | 4,915.97            | 4,750.47            | 21.44          | 21.54       | 104.68               |                       | 637.29                            | -703.37                           | 675.62                        | 634.80                         | 40.82                   | 16.552             |         |
| 5,108.99                                                                               | 4,956.89            | 5,021.40            | 4,848.13            | 22.21          | 22.34       | 104.56               |                       | 663.69                            | -733.05                           | 703.21                        | 660.92                         | 42.29                   | 16.628             |         |
| 5,200.00                                                                               | 5,042.88            | 5,109.50            | 4,929.74            | 22.77          | 23.01       | 104.80               |                       | 685.74                            | -757.86                           | 725.89                        | 682.41                         | 43.48                   | 16.694             |         |
| 5,300.00                                                                               | 5,138.41            | 5,206.36            | 5,019.46            | 23.25          | 23.75       | 104.81               |                       | 709.99                            | -785.12                           | 750.02                        | 705.35                         | 44.67                   | 16.789             |         |
| 5,400.00                                                                               | 5,234.92            | 5,303.18            | 5,109.14            | 23.70          | 24.49       | 104.58               |                       | 734.22                            | -812.38                           | 773.36                        | 727.55                         | 45.81                   | 16.882             |         |
| 5,500.00                                                                               | 5,332.28            | 5,399.82            | 5,198.67            | 24.09          | 25.24       | 104.13               |                       | 758.42                            | -839.59                           | 795.99                        | 749.11                         | 46.88                   | 16.979             |         |
| 5,600.00                                                                               | 5,430.37            | 5,496.19            | 5,287.93            | 24.43          | 25.98       | 103.49               |                       | 782.54                            | -866.72                           | 818.03                        | 770.14                         | 47.88                   | 17.084             |         |
| 5,700.00                                                                               | 5,529.08            | 5,592.15            | 5,376.83            | 24.73          | 26.71       | 102.67               |                       | 806.56                            | -893.73                           | 839.61                        | 790.80                         | 48.81                   | 17.201             |         |
| 5,800.00                                                                               | 5,628.29            | 5,687.59            | 5,465.24            | 24.98          | 27.45       | 101.68               |                       | 830.46                            | -920.60                           | 860.89                        | 811.24                         | 49.65                   | 17.338             |         |
| 5,900.00                                                                               | 5,727.88            | 5,782.40            | 5,553.06            | 25.18          | 28.18       | 100.56               |                       | 854.19                            | -947.30                           | 882.06                        | 831.65                         | 50.41                   | 17.497             |         |
| 6,000.00                                                                               | 5,827.72            | 5,876.46            | 5,640.19            | 25.34          | 28.90       | 99.32                |                       | 877.74                            | -973.78                           | 903.33                        | 852.25                         | 51.08                   | 17.686             |         |
| 6,109.31                                                                               | 5,937.00            | 5,978.28            | 5,734.51            | 25.47          | 29.69       | 8.25                 |                       | 903.23                            | -1,002.44                         | 926.93                        | 875.23                         | 51.70                   | 17.930             |         |
| 6,200.00                                                                               | 6,027.69            | 6,062.29            | 5,812.33            | 25.56          | 30.34       | 6.60                 |                       | 924.26                            | -1,026.09                         | 947.15                        | 895.06                         | 52.09                   | 18.183             |         |
| 6,300.00                                                                               | 6,127.69            | 6,154.92            | 5,898.14            | 25.67          | 31.05       | 4.87                 |                       | 947.45                            | -1,052.17                         | 970.35                        | 917.85                         | 52.50                   | 18.484             |         |
| 6,400.00                                                                               | 6,227.69            | 6,247.56            | 5,983.94            | 25.78          | 31.77       | 3.21                 |                       | 970.63                            | -1,078.25                         | 994.44                        | 941.57                         | 52.87                   | 18.809             |         |
| 6,500.00                                                                               | 6,327.69            | 6,340.19            | 6,069.75            | 25.89          | 32.49       | 1.62                 |                       | 993.82                            | -1,104.33                         | 1,019.35                      | 966.14                         | 53.22                   | 19.155             |         |
| 6,600.00                                                                               | 6,427.69            | 6,454.56            | 6,176.18            | 26.00          | 33.24       | -0.20                |                       | 1,021.65                          | -1,135.62                         | 1,044.36                      | 990.87                         | 53.49                   | 19.524             |         |
| 6,700.00                                                                               | 6,527.69            | 6,581.82            | 6,296.40            | 26.12          | 33.94       | -1.90                |                       | 1,049.36                          | -1,166.79                         | 1,067.26                      | 1,013.56                       | 53.70                   | 19.873             |         |
| 6,800.00                                                                               | 6,627.69            | 6,712.83            | 6,421.96            | 26.23          | 34.58       | -3.36                |                       | 1,074.16                          | -1,194.67                         | 1,087.59                      | 1,033.68                       | 53.91                   | 20.176             |         |
| 6,900.00                                                                               | 6,727.69            | 6,847.18            | 6,552.37            | 26.35          | 35.13       | -4.55                |                       | 1,095.60                          | -1,218.78                         | 1,105.00                      | 1,050.90                       | 54.10                   | 20.424             |         |
| 7,000.00                                                                               | 6,827.69            | 6,984.39            | 6,686.96            | 26.47          | 35.61       | -5.50                |                       | 1,113.28                          | -1,238.67                         | 1,119.24                      | 1,064.93                       | 54.31                   | 20.608             |         |
| 7,100.00                                                                               | 6,927.69            | 7,123.91            | 6,824.97            | 26.59          | 35.99       | -6.21                |                       | 1,126.84                          | -1,253.92                         | 1,130.08                      | 1,075.56                       | 54.52                   | 20.726             |         |
| 7,200.00                                                                               | 7,027.69            | 7,265.12            | 6,965.49            | 26.71          | 36.29       | -6.68                |                       | 1,136.00                          | -1,264.23                         | 1,137.37                      | 1,082.62                       | 54.75                   | 20.773             |         |
| 7,300.00                                                                               | 7,127.69            | 7,407.37            | 7,107.56            | 26.83          | 36.49       | -6.91                |                       | 1,140.57                          | -1,269.37                         | 1,140.99                      | 1,085.99                       | 55.00                   | 20.746             |         |
| 7,400.00                                                                               | 7,227.69            | 7,527.51            | 7,227.69            | 26.95          | 36.60       | -6.93                |                       | 1,141.10                          | -1,269.96                         | 1,141.41                      | 1,086.16                       | 55.25                   | 20.660             |         |
| 7,500.00                                                                               | 7,327.69            | 7,627.51            | 7,327.69            | 27.08          | 36.70       | -6.93                |                       | 1,141.10                          | -1,269.96                         | 1,141.41                      | 1,085.92                       | 55.49                   | 20.569             |         |
| 7,600.00                                                                               | 7,427.69            | 7,727.51            | 7,427.69            | 27.21          | 36.79       | -6.93                |                       | 1,141.10                          | -1,269.96                         | 1,141.41                      | 1,085.67                       | 55.74                   | 20.477             |         |
| 7,700.00                                                                               | 7,527.69            | 7,827.51            | 7,527.69            | 27.33          | 36.89       | -6.93                |                       | 1,141.10                          | -1,269.96                         | 1,141.41                      | 1,085.42                       | 55.99                   | 20.385             |         |
| 7,800.00                                                                               | 7,627.69            | 7,927.51            | 7,627.69            | 27.46          | 36.99       | -6.93                |                       | 1,141.10                          | -1,269.96                         | 1,141.41                      | 1,085.16                       | 56.25                   | 20.293             |         |
| 7,900.00                                                                               | 7,727.69            | 8,027.51            | 7,727.69            | 27.59          | 37.09       | -6.93                |                       | 1,141.10                          | -1,269.96                         | 1,141.41                      | 1,084.91                       | 56.50                   | 20.202             |         |
| 8,000.00                                                                               | 7,827.69            | 8,127.51            | 7,827.69            | 27.72          | 37.19       | -6.93                |                       | 1,141.10                          | -1,269.96                         | 1,141.41                      | 1,084.65                       | 56.76                   | 20.110             |         |
| 8,100.00                                                                               | 7,927.69            | 8,227.51            | 7,927.69            | 27.86          | 37.29       | -6.93                |                       | 1,141.10                          | -1,269.96                         | 1,141.41                      | 1,084.39                       | 57.02                   | 20.018             |         |
| 8,200.00                                                                               | 8,027.69            | 8,327.51            | 8,027.69            | 27.99          | 37.39       | -6.93                |                       | 1,141.10                          | -1,269.96                         | 1,141.41                      | 1,084.13                       | 57.28                   | 19.926             |         |
| 8,300.00                                                                               | 8,127.69            | 8,427.51            | 8,127.69            | 28.12          | 37.49       | -6.93                |                       | 1,141.10                          | -1,269.96                         | 1,141.41                      | 1,083.86                       | 57.55                   | 19.834             |         |
| 8,400.00                                                                               | 8,227.69            | 8,527.51            | 8,227.69            | 28.26          | 37.60       | -6.93                |                       | 1,141.10                          | -1,269.96                         | 1,141.41                      | 1,083.59                       | 57.82                   | 19.742             |         |
| 8,500.00                                                                               | 8,327.69            | 8,627.51            | 8,327.69            | 28.40          | 37.70       | -6.93                |                       | 1,141.10                          | -1,269.96                         | 1,141.41                      | 1,083.32                       | 58.09                   | 19.651             |         |
| 8,600.00                                                                               | 8,427.69            | 8,727.51            | 8,427.69            | 28.54          | 37.81       | -6.93                |                       | 1,141.10                          | -1,269.96                         | 1,141.41                      | 1,083.05                       | 58.36                   | 19.559             |         |
| 8,700.00                                                                               | 8,527.69            | 8,827.51            | 8,527.69            | 28.68          | 37.91       | -6.93                |                       | 1,141.10                          | -1,269.96                         | 1,141.41                      | 1,082.78                       | 58.63                   | 19.468             |         |
| 8,800.00                                                                               | 8,627.69            | 8,927.51            | 8,627.69            | 28.82          | 38.02       | -6.93                |                       | 1,141.10                          | -1,269.96                         | 1,141.41                      | 1,082.50                       | 58.91                   | 19.376             |         |
| 8,900.00                                                                               | 8,727.69            | 9,027.51            | 8,727.69            | 28.96          | 38.13       | -6.93                |                       | 1,141.10                          | -1,269.96                         | 1,141.41                      | 1,082.22                       | 59.19                   | 19.285             |         |
| 9,000.00                                                                               | 8,827.69            | 9,127.51            | 8,827.69            | 29.10          | 38.24       | -6.93                |                       | 1,141.10                          | -1,269.96                         | 1,141.41                      | 1,081.94                       | 59.47                   | 19.194             |         |
| 9,100.00                                                                               | 8,927.69            | 9,227.51            | 8,927.69            | 29.24          | 38.35       | -6.93                |                       | 1,141.10                          | -1,269.96                         | 1,141.41                      | 1,081.66                       | 59.75                   | 19.103             |         |
| 9,200.00                                                                               | 9,027.69            | 9,327.51            | 9,027.69            | 29.39          | 38.47       | -6.93                |                       | 1,141.10                          | -1,269.96                         | 1,141.41                      | 1,081.38                       | 60.03                   | 19.013             |         |
| 9,300.00                                                                               | 9,127.69            | 9,427.51            | 9,127.69            | 29.53          | 38.58       | -6.93                |                       | 1,141.10                          | -1,269.96                         | 1,141.41                      | 1,081.09                       | 60.32                   | 18.922             |         |
| 9,400.00                                                                               | 9,227.69            | 9,527.51            | 9,227.69            | 29.68          | 38.69       | -6.93                |                       | 1,141.10                          | -1,269.96                         | 1,141.41                      | 1,080.80                       | 60.61                   | 18.832             |         |
| 9,493.31                                                                               | 9,321.00            | 9,620.82            | 9,321.00            | 29.82          | 38.80       | -6.93                |                       | 1,141.10                          | -1,269.96                         | 1,141.41                      | 1,080.53                       | 60.88                   | 18.749             |         |



# Weatherford International Ltd.

## Anticollision Report



|                           |                              |                                     |                                       |
|---------------------------|------------------------------|-------------------------------------|---------------------------------------|
| <b>Company:</b>           | ANADARKO PETROLEUM CORP.     | <b>Local Co-ordinate Reference:</b> | Well NBU 922-3103AS                   |
| <b>Project:</b>           | UINTAH COUNTY, UTAH (nad 27) | <b>TVD Reference:</b>               | WELL @ 5077.00ft (Original Well Elev) |
| <b>Reference Site:</b>    | NBU 922-31P3 PAD             | <b>MD Reference:</b>                | WELL @ 5077.00ft (Original Well Elev) |
| <b>Site Error:</b>        | 0.00ft                       | <b>North Reference:</b>             | True                                  |
| <b>Reference Well:</b>    | NBU 922-3103AS               | <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 922-3103AS               | <b>Database:</b>                    | EDM 2003.21 Single User Db            |
| <b>Reference Design:</b>  | PLAN #1 3-23-10 RHS          | <b>Offset TVD Reference:</b>        | Offset Datum                          |

| Offset Design NBU 922-31P3 PAD - NBU 922-31P-3T EXISTING - NBU 922-31P-3T EXISTING - NBU 922-31P-3T EX |                     |                     |                     |                |             |                                       |                                   |            |                      |                       |                         |                   | Offset Site Error: | 0.00 ft |
|--------------------------------------------------------------------------------------------------------|---------------------|---------------------|---------------------|----------------|-------------|---------------------------------------|-----------------------------------|------------|----------------------|-----------------------|-------------------------|-------------------|--------------------|---------|
| Survey Program: 100-NS-GYRO-MS                                                                         |                     |                     |                     |                |             |                                       |                                   |            |                      |                       |                         |                   | Offset Well Error: | 0.00 ft |
| 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) | +E/-W (ft) | Between Centres (ft) | Between Ellipses (ft) | Minimum Separation (ft) | Separation Factor | Warning            |         |
| 0.00                                                                                                   | 0.00                | 0.00                | 0.00                | 0.00           | 0.00        | -113.43                               | -4.01                             | -9.25      | 17.25                |                       |                         |                   |                    |         |
| 100.00                                                                                                 | 100.00              | 86.04               | 86.03               | 0.10           | 0.11        | -113.10                               | -3.89                             | -9.13      | 9.93                 | 9.71                  | 0.21                    | 47.067            |                    |         |
| 200.00                                                                                                 | 200.00              | 186.04              | 186.04              | 0.32           | 0.36        | -112.21                               | -3.60                             | -8.81      | 9.52                 | 8.84                  | 0.68                    | 13.949            |                    |         |
| 300.00                                                                                                 | 300.00              | 286.03              | 286.03              | 0.55           | 0.59        | -112.36                               | -3.48                             | -8.46      | 9.15                 | 8.01                  | 1.14                    | 8.022             |                    |         |
| 400.00                                                                                                 | 399.98              | 385.98              | 385.97              | 0.76           | 0.77        | -30.73                                | -3.74                             | -8.17      | 7.45                 | 5.92                  | 1.53                    | 4.863             |                    |         |
| 500.00                                                                                                 | 499.92              | 485.90              | 485.90              | 0.97           | 0.91        | -55.46                                | -4.16                             | -8.17      | 5.12                 | 3.24                  | 1.88                    | 2.724             |                    |         |
| 581.38                                                                                                 | 581.25              | 567.25              | 567.24              | 1.15           | 1.05        | -89.23                                | -4.37                             | -8.17      | 4.43                 | 2.22                  | 2.21                    | 2.007 CC          |                    |         |
| 600.00                                                                                                 | 599.86              | 585.86              | 585.86              | 1.19           | 1.09        | -98.26                                | -4.37                             | -8.11      | 4.48                 | 2.19                  | 2.28                    | 1.960 ES, SF      |                    |         |
| 700.00                                                                                                 | 699.80              | 685.78              | 685.77              | 1.42           | 1.31        | -134.87                               | -4.44                             | -7.77      | 6.34                 | 3.62                  | 2.73                    | 2.326             |                    |         |
| 800.00                                                                                                 | 799.74              | 785.71              | 785.71              | 1.65           | 1.55        | -150.47                               | -4.63                             | -7.47      | 9.50                 | 6.33                  | 3.18                    | 2.990             |                    |         |
| 900.00                                                                                                 | 899.68              | 885.53              | 885.52              | 1.88           | 1.79        | -159.56                               | -4.61                             | -6.73      | 13.34                | 9.70                  | 3.64                    | 3.662             |                    |         |
| 1,000.00                                                                                               | 999.61              | 985.52              | 985.51              | 2.11           | 2.03        | -163.44                               | -4.98                             | -5.81      | 17.64                | 13.54                 | 4.10                    | 4.303             |                    |         |
| 1,100.00                                                                                               | 1,099.55            | 1,085.47            | 1,085.45            | 2.34           | 2.24        | -164.18                               | -5.81                             | -5.55      | 21.48                | 16.94                 | 4.54                    | 4.733             |                    |         |
| 1,200.00                                                                                               | 1,199.49            | 1,185.14            | 1,185.12            | 2.57           | 2.47        | -165.77                               | -6.28                             | -4.78      | 25.72                | 20.73                 | 4.99                    | 5.157             |                    |         |
| 1,300.00                                                                                               | 1,299.43            | 1,284.94            | 1,284.90            | 2.81           | 2.72        | -167.96                               | -6.39                             | -3.09      | 30.79                | 25.33                 | 5.46                    | 5.639             |                    |         |
| 1,400.00                                                                                               | 1,399.37            | 1,385.10            | 1,385.05            | 3.04           | 2.94        | -169.86                               | -6.25                             | -1.67      | 35.58                | 29.67                 | 5.90                    | 6.027             |                    |         |
| 1,500.00                                                                                               | 1,499.31            | 1,484.67            | 1,484.58            | 3.27           | 3.12        | -174.45                               | -3.88                             | -0.14      | 40.22                | 33.91                 | 6.30                    | 6.381             |                    |         |
| 1,600.00                                                                                               | 1,599.25            | 1,584.28            | 1,584.07            | 3.50           | 3.29        | 179.54                                | 0.35                              | 2.32       | 45.95                | 39.25                 | 6.70                    | 6.857             |                    |         |
| 1,700.00                                                                                               | 1,699.19            | 1,683.72            | 1,683.37            | 3.74           | 3.49        | 174.78                                | 4.72                              | 5.11       | 52.44                | 45.32                 | 7.12                    | 7.367             |                    |         |
| 1,800.00                                                                                               | 1,799.13            | 1,783.80            | 1,783.31            | 3.97           | 3.69        | 171.13                                | 9.06                              | 7.99       | 59.27                | 51.72                 | 7.54                    | 7.856             |                    |         |
| 1,900.00                                                                                               | 1,899.07            | 1,883.98            | 1,883.38            | 4.20           | 3.89        | 167.99                                | 13.54                             | 10.07      | 65.51                | 57.55                 | 7.97                    | 8.222             |                    |         |
| 2,000.00                                                                                               | 1,999.01            | 1,983.92            | 1,983.22            | 4.44           | 4.09        | 165.81                                | 17.40                             | 11.76      | 71.42                | 63.02                 | 8.40                    | 8.504             |                    |         |
| 2,100.00                                                                                               | 2,098.94            | 2,083.88            | 2,083.11            | 4.67           | 4.31        | 164.27                                | 20.80                             | 13.40      | 77.22                | 68.39                 | 8.84                    | 8.739             |                    |         |
| 2,200.00                                                                                               | 2,198.88            | 2,183.41            | 2,182.58            | 4.91           | 4.53        | 163.10                                | 24.01                             | 15.09      | 83.10                | 73.81                 | 9.28                    | 8.951             |                    |         |
| 2,230.00                                                                                               | 2,228.86            | 2,213.35            | 2,212.50            | 4.98           | 4.60        | 162.76                                | 25.02                             | 15.67      | 84.94                | 75.52                 | 9.42                    | 9.018             |                    |         |
| 2,300.00                                                                                               | 2,298.76            | 2,283.50            | 2,282.61            | 5.15           | 4.76        | 162.36                                | 27.13                             | 16.93      | 90.30                | 80.58                 | 9.73                    | 9.285             |                    |         |
| 2,400.00                                                                                               | 2,398.27            | 2,383.05            | 2,382.10            | 5.41           | 4.99        | 162.75                                | 29.78                             | 18.44      | 101.84               | 91.69                 | 10.15                   | 10.037            |                    |         |
| 2,500.00                                                                                               | 2,497.14            | 2,480.48            | 2,479.48            | 5.71           | 5.23        | 163.87                                | 32.16                             | 20.29      | 118.65               | 108.10                | 10.55                   | 11.247            |                    |         |
| 2,600.00                                                                                               | 2,595.08            | 2,578.29            | 2,577.24            | 6.05           | 5.48        | 165.62                                | 33.79                             | 22.96      | 141.07               | 130.13                | 10.94                   | 12.898            |                    |         |
| 2,700.00                                                                                               | 2,691.84            | 2,674.01            | 2,672.93            | 6.44           | 5.73        | 167.44                                | 34.74                             | 25.41      | 168.25               | 156.96                | 11.29                   | 14.899            |                    |         |
| 2,800.00                                                                                               | 2,787.15            | 2,769.61            | 2,768.49            | 6.90           | 5.97        | 169.19                                | 35.12                             | 28.03      | 200.55               | 188.94                | 11.61                   | 17.273            |                    |         |
| 2,830.21                                                                                               | 2,815.62            | 2,798.46            | 2,797.33            | 7.05           | 6.04        | 169.71                                | 35.03                             | 28.68      | 211.13               | 199.43                | 11.70                   | 18.045            |                    |         |
| 2,900.00                                                                                               | 2,881.20            | 2,864.06            | 2,862.92            | 7.42           | 6.20        | 170.88                                | 34.76                             | 29.99      | 235.96               | 223.94                | 12.03                   | 19.620            |                    |         |
| 3,000.00                                                                                               | 2,975.16            | 2,957.65            | 2,956.49            | 7.98           | 6.41        | 172.18                                | 34.30                             | 31.68      | 271.47               | 258.98                | 12.49                   | 21.736            |                    |         |
| 3,100.00                                                                                               | 3,069.13            | 3,051.12            | 3,049.93            | 8.57           | 6.61        | 173.38                                | 32.83                             | 33.47      | 307.06               | 294.12                | 12.94                   | 23.728            |                    |         |
| 3,200.00                                                                                               | 3,163.09            | 3,144.94            | 3,143.73            | 9.18           | 6.80        | 174.34                                | 31.33                             | 35.14      | 342.63               | 329.24                | 13.39                   | 25.586            |                    |         |
| 3,300.00                                                                                               | 3,257.06            | 3,239.64            | 3,238.40            | 9.80           | 6.97        | 175.12                                | 29.85                             | 36.64      | 378.08               | 364.25                | 13.84                   | 27.325            |                    |         |
| 3,400.00                                                                                               | 3,351.03            | 3,335.71            | 3,334.44            | 10.44          | 7.14        | 175.85                                | 27.77                             | 37.67      | 413.07               | 398.80                | 14.27                   | 28.944            |                    |         |
| 3,500.00                                                                                               | 3,444.99            | 3,431.12            | 3,429.82            | 11.08          | 7.29        | 176.55                                | 25.03                             | 38.17      | 447.56               | 432.86                | 14.70                   | 30.442            |                    |         |
| 3,600.00                                                                                               | 3,538.96            | 3,524.54            | 3,523.19            | 11.74          | 7.42        | 177.17                                | 22.05                             | 38.60      | 482.02               | 466.91                | 15.12                   | 31.881            |                    |         |
| 3,700.00                                                                                               | 3,632.92            | 3,617.70            | 3,616.30            | 12.41          | 7.56        | 177.73                                | 18.90                             | 39.10      | 516.60               | 501.06                | 15.54                   | 33.236            |                    |         |
| 3,800.00                                                                                               | 3,726.89            | 3,709.89            | 3,708.42            | 13.08          | 7.71        | 178.23                                | 15.64                             | 39.79      | 551.42               | 535.43                | 15.98                   | 34.497            |                    |         |
| 3,900.00                                                                                               | 3,820.85            | 3,801.89            | 3,800.35            | 13.76          | 7.87        | 178.69                                | 12.25                             | 40.74      | 586.52               | 570.09                | 16.43                   | 35.701            |                    |         |
| 4,000.00                                                                                               | 3,914.82            | 3,894.00            | 3,892.39            | 14.44          | 8.04        | 179.11                                | 8.73                              | 41.91      | 621.88               | 604.99                | 16.89                   | 36.811            |                    |         |
| 4,100.00                                                                                               | 4,008.78            | 3,985.95            | 3,984.26            | 15.13          | 8.21        | 179.50                                | 5.09                              | 43.28      | 657.48               | 640.11                | 17.36                   | 37.870            |                    |         |
| 4,200.00                                                                                               | 4,102.75            | 4,081.81            | 4,080.03            | 15.82          | 8.40        | 179.86                                | 1.32                              | 44.69      | 693.07               | 675.23                | 17.84                   | 38.848            |                    |         |
| 4,300.00                                                                                               | 4,196.71            | 4,178.72            | 4,176.87            | 16.51          | 8.58        | -179.84                               | -2.21                             | 45.66      | 728.25               | 709.92                | 18.32                   | 39.744            |                    |         |
| 4,400.00                                                                                               | 4,290.68            | 4,270.63            | 4,268.73            | 17.21          | 8.77        | -179.60                               | -5.26                             | 46.40      | 763.25               | 744.44                | 18.81                   | 40.579            |                    |         |
| 4,500.00                                                                                               | 4,384.65            | 4,360.83            | 4,358.88            | 17.91          | 8.95        | -179.42                               | -7.92                             | 47.49      | 798.64               | 779.35                | 19.30                   | 41.390            |                    |         |
| 4,600.00                                                                                               | 4,478.61            | 4,451.16            | 4,449.17            | 18.61          | 9.15        | -179.27                               | -10.29                            | 48.96      | 834.42               | 814.63                | 19.80                   | 42.150            |                    |         |
| 4,700.00                                                                                               | 4,572.58            | 4,541.55            | 4,539.51            | 19.32          | 9.37        | -179.13                               | -12.63                            | 50.74      | 870.52               | 850.21                | 20.31                   | 42.866            |                    |         |
| 4,800.00                                                                                               | 4,666.54            | 4,633.82            | 4,631.73            | 20.02          | 9.58        | -179.01                               | -15.03                            | 52.83      | 906.90               | 886.07                | 20.83                   | 43.547            |                    |         |

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 922-3103AS                   |
| <b>Project:</b>           | UINTAH COUNTY, UTAH (nad 27) | <b>TVD Reference:</b>               | WELL @ 5077.00ft (Original Well Elev) |
| <b>Reference Site:</b>    | NBU 922-31P3 PAD             | <b>MD Reference:</b>                | WELL @ 5077.00ft (Original Well Elev) |
| <b>Site Error:</b>        | 0.00ft                       | <b>North Reference:</b>             | True                                  |
| <b>Reference Well:</b>    | NBU 922-3103AS               | <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 922-3103AS               | <b>Database:</b>                    | EDM 2003.21 Single User Db            |
| <b>Reference Design:</b>  | PLAN #1 3-23-10 RHS          | <b>Offset TVD Reference:</b>        | Offset Datum                          |

| Offset Design NBU 922-31P3 PAD - NBU 922-31P-3T EXISTING - NBU 922-31P-3T EXISTING - NBU 922-31P-3T EX |                        |                        |                        |           |        |                                                |                                         |                                         |                            |                             |                               |                      | Offset Site Error: | 0.00 ft |
|--------------------------------------------------------------------------------------------------------|------------------------|------------------------|------------------------|-----------|--------|------------------------------------------------|-----------------------------------------|-----------------------------------------|----------------------------|-----------------------------|-------------------------------|----------------------|--------------------|---------|
| Survey Program: 100-NS-GYRO-MS                                                                         |                        |                        |                        |           |        |                                                |                                         |                                         |                            |                             |                               |                      | Offset Well Error: | 0.00 ft |
| Measured Depth<br>(ft)                                                                                 | Vertical Depth<br>(ft) | Measured Depth<br>(ft) | Vertical Depth<br>(ft) | Reference | Offset | Semi Major Axis<br>Highside<br>Toolface<br>(°) | Offset Wellbore Centre<br>+N/-S<br>(ft) | Offset Wellbore Centre<br>+E/-W<br>(ft) | Between<br>Centres<br>(ft) | Between<br>Ellipses<br>(ft) | Minimum<br>Separation<br>(ft) | Separation<br>Factor | Warning            |         |
| 4,900.00                                                                                               | 4,760.51               | 4,730.07               | 4,727.92               | 20.73     | 9.81   | -178.87                                        | -17.70                                  | 54.81                                   | 943.10                     | 921.75                      | 21.35                         | 44.167               |                    |         |
| 5,000.00                                                                                               | 4,854.47               | 4,826.32               | 4,824.11               | 21.44     | 10.03  | -178.73                                        | -20.60                                  | 56.48                                   | 979.01                     | 957.13                      | 21.88                         | 44.744               |                    |         |
| 5,108.99                                                                                               | 4,956.89               | 4,930.77               | 4,928.50               | 22.21     | 10.27  | -178.60                                        | -23.71                                  | 58.00                                   | 1,017.86                   | 995.41                      | 22.45                         | 45.341               |                    |         |
| 5,200.00                                                                                               | 5,042.88               | 5,018.32               | 5,016.02               | 22.77     | 10.46  | -178.51                                        | -26.22                                  | 59.07                                   | 1,048.75                   | 1,025.70                    | 23.05                         | 45.503               |                    |         |
| 5,300.00                                                                                               | 5,138.41               | 5,114.33               | 5,111.98               | 23.25     | 10.67  | -178.41                                        | -29.10                                  | 60.12                                   | 1,079.42                   | 1,055.77                    | 23.65                         | 45.642               |                    |         |
| 5,400.00                                                                                               | 5,234.92               | 5,211.54               | 5,209.13               | 23.70     | 10.89  | -178.30                                        | -32.26                                  | 61.09                                   | 1,106.68                   | 1,082.46                    | 24.22                         | 45.690               |                    |         |
| 5,500.00                                                                                               | 5,332.28               | 5,310.86               | 5,308.39               | 24.09     | 11.11  | -178.18                                        | -35.48                                  | 61.93                                   | 1,130.42                   | 1,105.66                    | 24.76                         | 45.656               |                    |         |
| 5,600.00                                                                                               | 5,430.37               | 5,410.80               | 5,408.28               | 24.43     | 11.32  | -178.07                                        | -38.55                                  | 62.59                                   | 1,150.57                   | 1,125.31                    | 25.26                         | 45.543               |                    |         |
| 5,700.00                                                                                               | 5,529.08               | 5,509.47               | 5,506.91               | 24.73     | 11.54  | -177.97                                        | -41.37                                  | 63.17                                   | 1,167.22                   | 1,141.49                    | 25.73                         | 45.367               |                    |         |
| 5,800.00                                                                                               | 5,628.29               | 5,608.92               | 5,606.32               | 24.98     | 11.76  | -177.87                                        | -44.01                                  | 63.75                                   | 1,180.41                   | 1,154.26                    | 26.16                         | 45.130               |                    |         |
| 5,900.00                                                                                               | 5,727.88               | 5,711.41               | 5,708.77               | 25.18     | 11.98  | -177.76                                        | -46.91                                  | 64.19                                   | 1,189.99                   | 1,163.45                    | 26.55                         | 44.825               |                    |         |
| 6,000.00                                                                                               | 5,827.72               | 5,812.70               | 5,810.00               | 25.34     | 12.20  | -177.61                                        | -50.26                                  | 64.35                                   | 1,195.86                   | 1,168.96                    | 26.90                         | 44.458               |                    |         |
| 6,109.31                                                                                               | 5,937.00               | 5,913.40               | 5,910.64               | 25.47     | 12.42  | 92.96                                          | -53.82                                  | 64.84                                   | 1,198.68                   | 1,171.45                    | 27.23                         | 44.019               |                    |         |
| 6,200.00                                                                                               | 6,027.69               | 6,000.00               | 5,997.18               | 25.56     | 12.62  | 93.11                                          | -56.95                                  | 65.84                                   | 1,199.89                   | 1,172.31                    | 27.58                         | 43.501               |                    |         |
| 6,300.00                                                                                               | 6,127.69               | 6,097.03               | 6,094.13               | 25.67     | 12.85  | 93.27                                          | -60.50                                  | 67.24                                   | 1,201.52                   | 1,173.53                    | 27.99                         | 42.922               |                    |         |
| 6,400.00                                                                                               | 6,227.69               | 6,197.36               | 6,194.39               | 25.78     | 13.09  | 93.44                                          | -64.18                                  | 68.64                                   | 1,203.14                   | 1,174.73                    | 28.41                         | 42.345               |                    |         |
| 6,500.00                                                                                               | 6,327.69               | 6,298.05               | 6,295.01               | 25.89     | 13.33  | 93.61                                          | -67.77                                  | 70.01                                   | 1,204.72                   | 1,175.88                    | 28.84                         | 41.777               |                    |         |
| 6,600.00                                                                                               | 6,427.69               | 6,398.77               | 6,395.66               | 26.00     | 13.58  | 93.76                                          | -71.15                                  | 71.33                                   | 1,206.24                   | 1,176.98                    | 29.26                         | 41.223               |                    |         |
| 6,700.00                                                                                               | 6,527.69               | 6,496.57               | 6,493.39               | 26.12     | 13.82  | 93.92                                          | -74.52                                  | 72.66                                   | 1,207.83                   | 1,178.15                    | 29.68                         | 40.691               |                    |         |
| 6,800.00                                                                                               | 6,627.69               | 6,594.29               | 6,591.03               | 26.23     | 14.06  | 94.09                                          | -78.27                                  | 74.14                                   | 1,209.61                   | 1,179.50                    | 30.11                         | 40.179               |                    |         |
| 6,900.00                                                                                               | 6,727.69               | 6,695.04               | 6,691.69               | 26.35     | 14.31  | 94.27                                          | -82.15                                  | 75.72                                   | 1,211.46                   | 1,180.92                    | 30.54                         | 39.667               |                    |         |
| 7,000.00                                                                                               | 6,827.69               | 6,796.01               | 6,792.59               | 26.47     | 14.56  | 94.43                                          | -85.58                                  | 77.26                                   | 1,213.24                   | 1,182.26                    | 30.98                         | 39.166               |                    |         |
| 7,100.00                                                                                               | 6,927.69               | 6,900.59               | 6,897.09               | 26.59     | 14.81  | 94.60                                          | -89.29                                  | 78.60                                   | 1,214.79                   | 1,183.38                    | 31.42                         | 38.667               |                    |         |
| 7,200.00                                                                                               | 7,027.69               | 7,004.79               | 7,001.19               | 26.71     | 15.06  | 94.81                                          | -93.85                                  | 79.46                                   | 1,215.97                   | 1,184.11                    | 31.86                         | 38.168               |                    |         |
| 7,300.00                                                                                               | 7,127.69               | 7,100.10               | 7,096.37               | 26.83     | 15.29  | 95.04                                          | -98.91                                  | 80.19                                   | 1,217.20                   | 1,184.92                    | 32.28                         | 37.713               |                    |         |
| 7,400.00                                                                                               | 7,227.69               | 7,195.30               | 7,191.37               | 26.95     | 15.51  | 95.32                                          | -104.93                                 | 81.20                                   | 1,218.82                   | 1,186.13                    | 32.70                         | 37.278               |                    |         |
| 7,500.00                                                                                               | 7,327.69               | 7,293.81               | 7,289.64               | 27.08     | 15.75  | 95.62                                          | -111.59                                 | 82.44                                   | 1,220.73                   | 1,187.60                    | 33.13                         | 36.845               |                    |         |
| 7,600.00                                                                                               | 7,427.69               | 7,392.52               | 7,388.14               | 27.21     | 15.99  | 95.92                                          | -118.02                                 | 83.80                                   | 1,222.76                   | 1,189.19                    | 33.57                         | 36.426               |                    |         |
| 7,700.00                                                                                               | 7,527.69               | 7,487.91               | 7,483.33               | 27.33     | 16.23  | 96.19                                          | -123.96                                 | 85.35                                   | 1,225.04                   | 1,191.03                    | 34.00                         | 36.026               |                    |         |
| 7,800.00                                                                                               | 7,627.69               | 7,583.05               | 7,578.29               | 27.46     | 16.46  | 96.44                                          | -129.56                                 | 87.30                                   | 1,227.72                   | 1,193.28                    | 34.44                         | 35.648               |                    |         |
| 7,900.00                                                                                               | 7,727.69               | 7,690.63               | 7,685.68               | 27.59     | 16.73  | 96.70                                          | -135.54                                 | 89.49                                   | 1,230.39                   | 1,195.48                    | 34.91                         | 35.247               |                    |         |
| 8,000.00                                                                                               | 7,827.69               | 7,800.00               | 7,794.88               | 27.72     | 17.00  | 96.96                                          | -141.33                                 | 90.85                                   | 1,232.25                   | 1,196.87                    | 35.38                         | 34.829               |                    |         |
| 8,100.00                                                                                               | 7,927.69               | 7,899.56               | 7,894.30               | 27.86     | 17.25  | 97.20                                          | -146.58                                 | 91.71                                   | 1,233.77                   | 1,197.94                    | 35.82                         | 34.440               |                    |         |
| 8,200.00                                                                                               | 8,027.69               | 7,998.24               | 7,992.83               | 27.99     | 17.49  | 97.44                                          | -151.98                                 | 92.64                                   | 1,235.40                   | 1,199.13                    | 36.27                         | 34.064               |                    |         |
| 8,300.00                                                                                               | 8,127.69               | 8,050.00               | 8,044.52               | 28.12     | 17.62  | 97.56                                          | -154.57                                 | 93.40                                   | 1,238.24                   | 1,201.65                    | 36.59                         | 33.838               |                    |         |
| 8,400.00                                                                                               | 8,227.69               | 8,050.00               | 8,044.52               | 28.26     | 17.62  | 97.56                                          | -154.57                                 | 93.40                                   | 1,247.83                   | 1,211.05                    | 36.78                         | 33.923               |                    |         |
| 8,500.00                                                                                               | 8,327.69               | 8,050.00               | 8,044.52               | 28.40     | 17.62  | 97.56                                          | -154.57                                 | 93.40                                   | 1,265.27                   | 1,228.30                    | 36.98                         | 34.219               |                    |         |
| 8,600.00                                                                                               | 8,427.69               | 8,050.00               | 8,044.52               | 28.54     | 17.62  | 97.56                                          | -154.57                                 | 93.40                                   | 1,290.25                   | 1,253.08                    | 37.17                         | 34.714               |                    |         |
| 8,700.00                                                                                               | 8,527.69               | 8,050.00               | 8,044.52               | 28.68     | 17.62  | 97.56                                          | -154.57                                 | 93.40                                   | 1,322.34                   | 1,284.98                    | 37.36                         | 35.393               |                    |         |
| 8,800.00                                                                                               | 8,627.69               | 8,050.00               | 8,044.52               | 28.82     | 17.62  | 97.56                                          | -154.57                                 | 93.40                                   | 1,361.04                   | 1,323.48                    | 37.56                         | 36.241               |                    |         |
| 8,900.00                                                                                               | 8,727.69               | 8,050.00               | 8,044.52               | 28.96     | 17.62  | 97.56                                          | -154.57                                 | 93.40                                   | 1,405.79                   | 1,368.04                    | 37.75                         | 37.239               |                    |         |
| 9,000.00                                                                                               | 8,827.69               | 8,050.00               | 8,044.52               | 29.10     | 17.62  | 97.56                                          | -154.57                                 | 93.40                                   | 1,456.05                   | 1,418.11                    | 37.95                         | 38.372               |                    |         |
| 9,100.00                                                                                               | 8,927.69               | 8,050.00               | 8,044.52               | 29.24     | 17.62  | 97.56                                          | -154.57                                 | 93.40                                   | 1,511.27                   | 1,473.13                    | 38.14                         | 39.623               |                    |         |
| 9,200.00                                                                                               | 9,027.69               | 8,050.00               | 8,044.52               | 29.39     | 17.62  | 97.56                                          | -154.57                                 | 93.40                                   | 1,570.91                   | 1,532.57                    | 38.34                         | 40.976               |                    |         |
| 9,300.00                                                                                               | 9,127.69               | 8,050.00               | 8,044.52               | 29.53     | 17.62  | 97.56                                          | -154.57                                 | 93.40                                   | 1,634.50                   | 1,595.97                    | 38.53                         | 42.417               |                    |         |
| 9,400.00                                                                                               | 9,227.69               | 8,050.00               | 8,044.52               | 29.68     | 17.62  | 97.56                                          | -154.57                                 | 93.40                                   | 1,701.60                   | 1,662.87                    | 38.73                         | 43.933               |                    |         |
| 9,493.31                                                                                               | 9,321.00               | 8,050.00               | 8,044.52               | 29.82     | 17.62  | 97.56                                          | -154.57                                 | 93.40                                   | 1,767.01                   | 1,728.09                    | 38.92                         | 45.405               |                    |         |





# Weatherford International Ltd.

## Anticollision Report



|                           |                              |                                     |                                       |
|---------------------------|------------------------------|-------------------------------------|---------------------------------------|
| <b>Company:</b>           | ANADARKO PETROLEUM CORP.     | <b>Local Co-ordinate Reference:</b> | Well NBU 922-3103AS                   |
| <b>Project:</b>           | UINTAH COUNTY, UTAH (nad 27) | <b>TVD Reference:</b>               | WELL @ 5077.00ft (Original Well Elev) |
| <b>Reference Site:</b>    | NBU 922-31P3 PAD             | <b>MD Reference:</b>                | WELL @ 5077.00ft (Original Well Elev) |
| <b>Site Error:</b>        | 0.00ft                       | <b>North Reference:</b>             | True                                  |
| <b>Reference Well:</b>    | NBU 922-3103AS               | <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 922-3103AS               | <b>Database:</b>                    | EDM 2003.21 Single User Db            |
| <b>Reference Design:</b>  | PLAN #1 3-23-10 RHS          | <b>Offset TVD Reference:</b>        | Offset Datum                          |

| Offset Design NBU 922-31P3 PAD - NBU 922-31P4BS - NBU 922-31P4BS - PLAN #1 3-23-10 RHS |                     |                     |                     |                |             |                       |                                   |            |                      |                       |                         | Offset Site Error: | 0.00 ft |
|----------------------------------------------------------------------------------------|---------------------|---------------------|---------------------|----------------|-------------|-----------------------|-----------------------------------|------------|----------------------|-----------------------|-------------------------|--------------------|---------|
| Survey Program: 0-MWD                                                                  |                     |                     |                     |                |             |                       |                                   |            |                      |                       |                         | Offset Well Error: | 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) | +E/-W (ft) | Between Centres (ft) | Between Ellipses (ft) | Minimum Separation (ft) | Separation Factor  | Warning |
| 0.00                                                                                   | 0.00                | 0.00                | 0.00                | 0.00           | 0.00        | 68.79                 | 7.28                              | 18.77      | 20.14                |                       |                         |                    |         |
| 100.00                                                                                 | 100.00              | 100.00              | 100.00              | 0.10           | 0.10        | 68.79                 | 7.28                              | 18.77      | 20.14                | 19.94                 | 0.19                    | 104.166            |         |
| 200.00                                                                                 | 200.00              | 200.00              | 200.00              | 0.32           | 0.32        | 68.79                 | 7.28                              | 18.77      | 20.14                | 19.49                 | 0.64                    | 31.323             |         |
| 300.00                                                                                 | 300.00              | 300.00              | 300.00              | 0.55           | 0.55        | 68.79                 | 7.28                              | 18.77      | 20.14                | 19.04                 | 1.09                    | 18.433 CC, ES      |         |
| 400.00                                                                                 | 399.98              | 398.77              | 398.73              | 0.76           | 0.76        | 160.79                | 7.82                              | 21.27      | 24.33                | 22.80                 | 1.53                    | 15.884 SF          |         |
| 500.00                                                                                 | 499.92              | 496.64              | 496.29              | 0.97           | 0.99        | 164.04                | 9.42                              | 28.66      | 35.35                | 33.38                 | 1.97                    | 17.901             |         |
| 600.00                                                                                 | 599.86              | 593.14              | 591.99              | 1.19           | 1.25        | 165.89                | 12.04                             | 40.72      | 51.47                | 49.04                 | 2.43                    | 21.182             |         |
| 700.00                                                                                 | 699.80              | 687.83              | 685.17              | 1.42           | 1.57        | 166.89                | 15.59                             | 57.12      | 72.54                | 69.65                 | 2.89                    | 25.073             |         |
| 800.00                                                                                 | 799.74              | 783.57              | 778.68              | 1.65           | 1.95        | 167.44                | 19.93                             | 77.17      | 97.27                | 93.91                 | 3.36                    | 28.956             |         |
| 900.00                                                                                 | 899.68              | 880.40              | 873.22              | 1.88           | 2.37        | 167.78                | 24.36                             | 97.65      | 122.23               | 118.42                | 3.81                    | 32.115             |         |
| 1,000.00                                                                               | 999.61              | 977.23              | 967.76              | 2.11           | 2.79        | 168.00                | 28.80                             | 118.14     | 147.19               | 142.93                | 4.26                    | 34.555             |         |
| 1,100.00                                                                               | 1,099.55            | 1,074.07            | 1,062.30            | 2.34           | 3.23        | 168.15                | 33.24                             | 138.62     | 172.16               | 167.44                | 4.72                    | 36.481             |         |
| 1,200.00                                                                               | 1,199.49            | 1,170.90            | 1,156.83            | 2.57           | 3.66        | 168.27                | 37.67                             | 159.10     | 197.12               | 191.94                | 5.18                    | 38.036             |         |
| 1,300.00                                                                               | 1,299.43            | 1,267.73            | 1,251.37            | 2.81           | 4.11        | 168.36                | 42.11                             | 179.59     | 222.09               | 216.44                | 5.65                    | 39.311             |         |
| 1,400.00                                                                               | 1,399.37            | 1,364.56            | 1,345.91            | 3.04           | 4.55        | 168.43                | 46.54                             | 200.07     | 247.05               | 240.93                | 6.12                    | 40.379             |         |
| 1,500.00                                                                               | 1,499.31            | 1,461.40            | 1,440.45            | 3.27           | 5.00        | 168.49                | 50.98                             | 220.56     | 272.02               | 265.43                | 6.59                    | 41.283             |         |
| 1,600.00                                                                               | 1,599.25            | 1,558.23            | 1,534.98            | 3.50           | 5.44        | 168.54                | 55.41                             | 241.04     | 296.98               | 289.92                | 7.06                    | 42.057             |         |
| 1,700.00                                                                               | 1,699.19            | 1,655.06            | 1,629.52            | 3.74           | 5.89        | 168.58                | 59.85                             | 261.52     | 321.95               | 314.41                | 7.54                    | 42.727             |         |
| 1,800.00                                                                               | 1,799.13            | 1,751.90            | 1,724.06            | 3.97           | 6.34        | 168.62                | 64.28                             | 282.01     | 346.92               | 338.91                | 8.01                    | 43.312             |         |
| 1,900.00                                                                               | 1,899.07            | 1,848.73            | 1,818.60            | 4.20           | 6.79        | 168.65                | 68.72                             | 302.49     | 371.88               | 363.40                | 8.49                    | 43.827             |         |
| 2,000.00                                                                               | 1,999.01            | 1,945.56            | 1,913.14            | 4.44           | 7.24        | 168.67                | 73.15                             | 322.97     | 396.85               | 387.89                | 8.96                    | 44.284             |         |
| 2,100.00                                                                               | 2,098.94            | 2,042.40            | 2,007.67            | 4.67           | 7.69        | 168.70                | 77.59                             | 343.46     | 421.82               | 412.38                | 9.44                    | 44.693             |         |
| 2,200.00                                                                               | 2,198.88            | 2,139.23            | 2,102.21            | 4.91           | 8.15        | 168.72                | 82.02                             | 363.94     | 446.78               | 436.87                | 9.92                    | 45.059             |         |
| 2,230.00                                                                               | 2,228.86            | 2,168.28            | 2,130.57            | 4.98           | 8.28        | 168.73                | 83.36                             | 370.09     | 454.27               | 444.21                | 10.06                   | 45.162             |         |
| 2,300.00                                                                               | 2,298.76            | 2,235.73            | 2,196.43            | 5.15           | 8.60        | 168.66                | 86.45                             | 384.36     | 472.96               | 462.61                | 10.36                   | 45.671             |         |
| 2,400.00                                                                               | 2,398.27            | 2,341.50            | 2,299.84            | 5.41           | 9.02        | 168.65                | 91.14                             | 406.03     | 503.22               | 492.47                | 10.75                   | 46.797             |         |
| 2,500.00                                                                               | 2,497.14            | 2,454.00            | 2,410.53            | 5.71           | 9.38        | 168.77                | 95.39                             | 425.69     | 535.34               | 524.24                | 11.11                   | 48.203             |         |
| 2,600.00                                                                               | 2,595.08            | 2,567.15            | 2,522.48            | 6.05           | 9.70        | 168.99                | 98.86                             | 441.70     | 569.08               | 557.65                | 11.42                   | 49.818             |         |
| 2,700.00                                                                               | 2,691.84            | 2,680.99            | 2,635.62            | 6.44           | 9.98        | 169.29                | 101.52                            | 453.98     | 604.41               | 592.70                | 11.71                   | 51.627             |         |
| 2,800.00                                                                               | 2,787.15            | 2,795.57            | 2,749.86            | 6.90           | 10.21       | 169.66                | 103.36                            | 462.46     | 641.33               | 629.37                | 11.96                   | 53.626             |         |
| 2,830.21                                                                               | 2,815.62            | 2,830.34            | 2,784.58            | 7.05           | 10.27       | 169.78                | 103.75                            | 464.25     | 652.79               | 640.76                | 12.03                   | 54.268             |         |
| 2,900.00                                                                               | 2,881.20            | 2,911.54            | 2,865.73            | 7.42           | 10.40       | 170.21                | 104.35                            | 467.05     | 678.65               | 666.30                | 12.34                   | 54.980             |         |
| 3,000.00                                                                               | 2,975.16            | 3,020.98            | 2,975.16            | 7.98           | 10.54       | 170.75                | 104.53                            | 467.89     | 713.12               | 700.33                | 12.79                   | 55.756             |         |
| 3,100.00                                                                               | 3,069.13            | 3,114.95            | 3,069.13            | 8.57           | 10.66       | 171.17                | 104.53                            | 467.89     | 746.96               | 733.72                | 13.24                   | 56.437             |         |
| 3,200.00                                                                               | 3,163.09            | 3,208.91            | 3,163.09            | 9.18           | 10.78       | 171.56                | 104.53                            | 467.89     | 780.83               | 767.14                | 13.69                   | 57.049             |         |
| 3,300.00                                                                               | 3,257.06            | 3,302.88            | 3,257.06            | 9.80           | 10.91       | 171.91                | 104.53                            | 467.89     | 814.73               | 800.58                | 14.14                   | 57.598             |         |
| 3,400.00                                                                               | 3,351.03            | 3,396.84            | 3,351.03            | 10.44          | 11.04       | 172.24                | 104.53                            | 467.89     | 848.65               | 834.04                | 14.61                   | 58.094             |         |
| 3,500.00                                                                               | 3,444.99            | 3,490.81            | 3,444.99            | 11.08          | 11.17       | 172.54                | 104.53                            | 467.89     | 882.60               | 867.52                | 15.08                   | 58.542             |         |
| 3,600.00                                                                               | 3,538.96            | 3,584.77            | 3,538.96            | 11.74          | 11.31       | 172.81                | 104.53                            | 467.89     | 916.56               | 901.01                | 15.55                   | 58.949             |         |
| 3,700.00                                                                               | 3,632.92            | 3,678.74            | 3,632.92            | 12.41          | 11.44       | 173.07                | 104.53                            | 467.89     | 950.54               | 934.52                | 16.02                   | 59.318             |         |
| 3,800.00                                                                               | 3,726.89            | 3,772.71            | 3,726.89            | 13.08          | 11.58       | 173.31                | 104.53                            | 467.89     | 984.54               | 968.04                | 16.50                   | 59.655             |         |
| 3,900.00                                                                               | 3,820.85            | 3,866.67            | 3,820.85            | 13.76          | 11.73       | 173.53                | 104.53                            | 467.89     | 1,018.56             | 1,001.57              | 16.99                   | 59.963             |         |
| 4,000.00                                                                               | 3,914.82            | 3,960.64            | 3,914.82            | 14.44          | 11.87       | 173.74                | 104.53                            | 467.89     | 1,052.58             | 1,035.11              | 17.47                   | 60.244             |         |
| 4,100.00                                                                               | 4,008.78            | 4,054.60            | 4,008.78            | 15.13          | 12.02       | 173.94                | 104.53                            | 467.89     | 1,086.62             | 1,068.66              | 17.96                   | 60.502             |         |
| 4,200.00                                                                               | 4,102.75            | 4,148.57            | 4,102.75            | 15.82          | 12.16       | 174.13                | 104.53                            | 467.89     | 1,120.67             | 1,102.22              | 18.45                   | 60.739             |         |
| 4,300.00                                                                               | 4,196.71            | 4,242.53            | 4,196.71            | 16.51          | 12.31       | 174.30                | 104.53                            | 467.89     | 1,154.73             | 1,135.78              | 18.94                   | 60.957             |         |
| 4,400.00                                                                               | 4,290.68            | 4,336.50            | 4,290.68            | 17.21          | 12.46       | 174.46                | 104.53                            | 467.89     | 1,188.80             | 1,169.36              | 19.44                   | 61.158             |         |
| 4,500.00                                                                               | 4,384.65            | 4,430.46            | 4,384.65            | 17.91          | 12.62       | 174.62                | 104.53                            | 467.89     | 1,222.87             | 1,202.94              | 19.93                   | 61.343             |         |
| 4,600.00                                                                               | 4,478.61            | 4,524.43            | 4,478.61            | 18.61          | 12.77       | 174.76                | 104.53                            | 467.89     | 1,256.95             | 1,236.52              | 20.43                   | 61.514             |         |
| 4,700.00                                                                               | 4,572.58            | 4,618.39            | 4,572.58            | 19.32          | 12.93       | 174.90                | 104.53                            | 467.89     | 1,291.04             | 1,270.11              | 20.93                   | 61.673             |         |
| 4,800.00                                                                               | 4,666.54            | 4,712.36            | 4,666.54            | 20.02          | 13.08       | 175.03                | 104.53                            | 467.89     | 1,325.14             | 1,303.70              | 21.44                   | 61.819             |         |
| 4,900.00                                                                               | 4,760.51            | 4,806.33            | 4,760.51            | 20.73          | 13.24       | 175.16                | 104.53                            | 467.89     | 1,359.24             | 1,337.30              | 21.94                   | 61.955             |         |

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



# Weatherford International Ltd.

## Anticollision Report



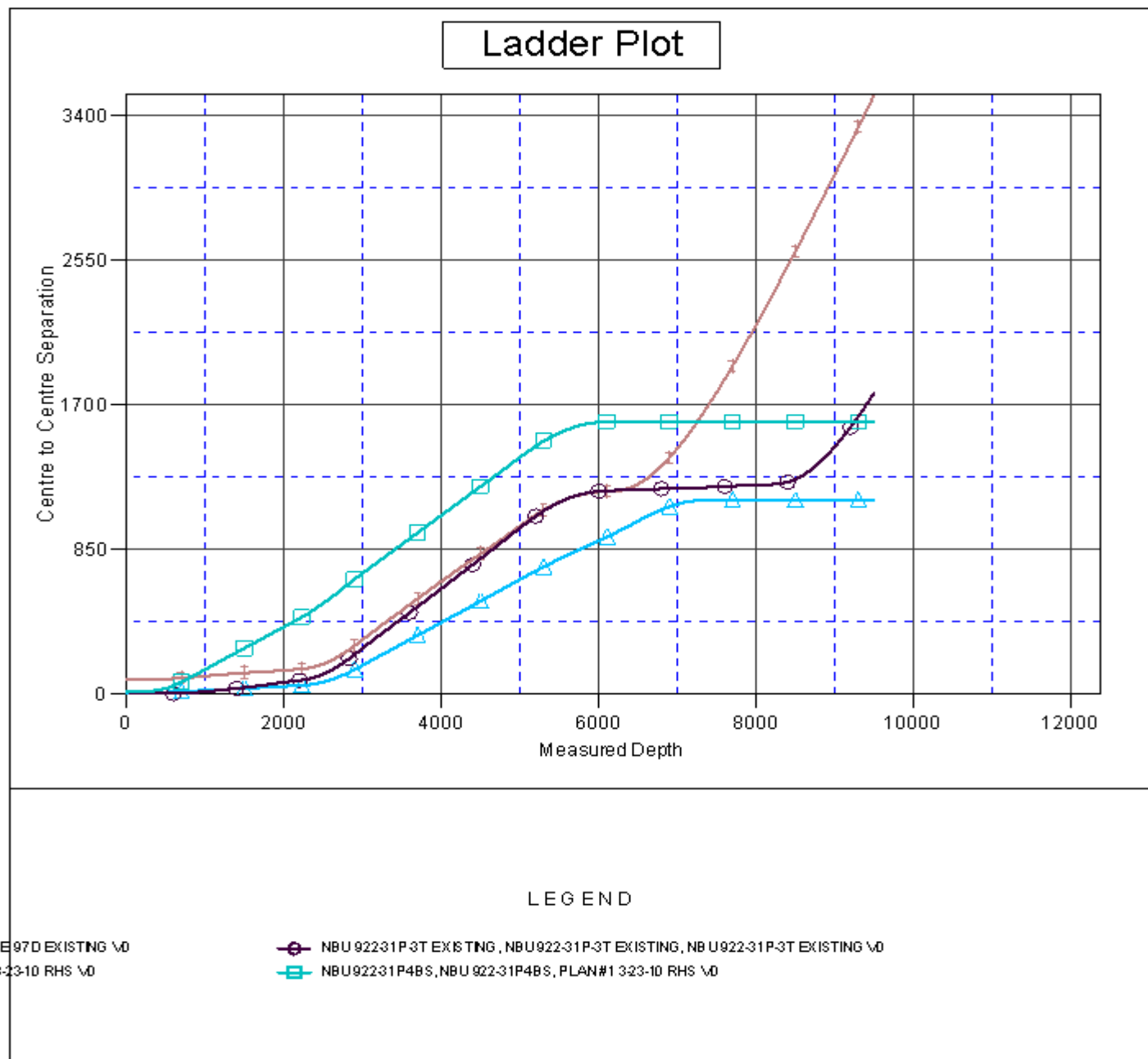
|                           |                              |                                     |                                       |
|---------------------------|------------------------------|-------------------------------------|---------------------------------------|
| <b>Company:</b>           | ANADARKO PETROLEUM CORP.     | <b>Local Co-ordinate Reference:</b> | Well NBU 922-3103AS                   |
| <b>Project:</b>           | UINTAH COUNTY, UTAH (nad 27) | <b>TVD Reference:</b>               | WELL @ 5077.00ft (Original Well Elev) |
| <b>Reference Site:</b>    | NBU 922-31P3 PAD             | <b>MD Reference:</b>                | WELL @ 5077.00ft (Original Well Elev) |
| <b>Site Error:</b>        | 0.00ft                       | <b>North Reference:</b>             | True                                  |
| <b>Reference Well:</b>    | NBU 922-3103AS               | <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 922-3103AS               | <b>Database:</b>                    | EDM 2003.21 Single User Db            |
| <b>Reference Design:</b>  | PLAN #1 3-23-10 RHS          | <b>Offset TVD Reference:</b>        | Offset Datum                          |

| Offset Design NBU 922-31P3 PAD - NBU 922-31P4BS - NBU 922-31P4BS - PLAN #1 3-23-10 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  |         |
| 5,000.00                                                                               | 4,854.47            | 4,900.29            | 4,854.47            | 21.44           | 13.40       | 175.28                | 104.53                            | 467.89                            | 1,393.35             | 1,370.90              | 22.44                   | 62.082             |         |
| 5,108.99                                                                               | 4,956.89            | 5,002.70            | 4,956.89            | 22.21           | 13.58       | 175.40                | 104.53                            | 467.89                            | 1,430.53             | 1,407.53              | 23.00                   | 62.209             |         |
| 5,200.00                                                                               | 5,042.88            | 5,088.70            | 5,042.88            | 22.77           | 13.73       | 175.54                | 104.53                            | 467.89                            | 1,460.22             | 1,436.62              | 23.59                   | 61.888             |         |
| 5,300.00                                                                               | 5,138.41            | 5,184.23            | 5,138.41            | 23.25           | 13.90       | 175.68                | 104.53                            | 467.89                            | 1,489.68             | 1,465.48              | 24.20                   | 61.546             |         |
| 5,400.00                                                                               | 5,234.92            | 5,280.74            | 5,234.92            | 23.70           | 14.07       | 175.79                | 104.53                            | 467.89                            | 1,515.81             | 1,491.03              | 24.78                   | 61.162             |         |
| 5,500.00                                                                               | 5,332.28            | 5,378.09            | 5,332.28            | 24.09           | 14.24       | 175.89                | 104.53                            | 467.89                            | 1,538.57             | 1,513.23              | 25.33                   | 60.740             |         |
| 5,600.00                                                                               | 5,430.37            | 5,476.19            | 5,430.37            | 24.43           | 14.42       | 175.97                | 104.53                            | 467.89                            | 1,557.92             | 1,532.07              | 25.84                   | 60.284             |         |
| 5,700.00                                                                               | 5,529.08            | 5,574.90            | 5,529.08            | 24.73           | 14.60       | 176.03                | 104.53                            | 467.89                            | 1,573.84             | 1,547.52              | 26.32                   | 59.797             |         |
| 5,800.00                                                                               | 5,628.29            | 5,674.11            | 5,628.29            | 24.98           | 14.78       | 176.08                | 104.53                            | 467.89                            | 1,586.32             | 1,559.56              | 26.76                   | 59.280             |         |
| 5,900.00                                                                               | 5,727.88            | 5,773.70            | 5,727.88            | 25.18           | 14.96       | 176.11                | 104.53                            | 467.89                            | 1,595.34             | 1,568.18              | 27.16                   | 58.733             |         |
| 6,000.00                                                                               | 5,827.72            | 5,873.54            | 5,827.72            | 25.34           | 15.14       | 176.13                | 104.53                            | 467.89                            | 1,600.88             | 1,573.36              | 27.53                   | 58.158             |         |
| 6,109.31                                                                               | 5,937.00            | 5,982.82            | 5,937.00            | 25.47           | 15.34       | 86.55                 | 104.53                            | 467.89                            | 1,602.97             | 1,575.08              | 27.89                   | 57.479             |         |
| 6,200.00                                                                               | 6,027.69            | 6,073.51            | 6,027.69            | 25.56           | 15.51       | 86.55                 | 104.53                            | 467.89                            | 1,602.97             | 1,574.73              | 28.24                   | 56.771             |         |
| 6,300.00                                                                               | 6,127.69            | 6,173.51            | 6,127.69            | 25.67           | 15.70       | 86.55                 | 104.53                            | 467.89                            | 1,602.97             | 1,574.34              | 28.62                   | 56.005             |         |
| 6,400.00                                                                               | 6,227.69            | 6,273.51            | 6,227.69            | 25.78           | 15.89       | 86.55                 | 104.53                            | 467.89                            | 1,602.97             | 1,573.96              | 29.01                   | 55.257             |         |
| 6,500.00                                                                               | 6,327.69            | 6,373.51            | 6,327.69            | 25.89           | 16.08       | 86.55                 | 104.53                            | 467.89                            | 1,602.97             | 1,573.57              | 29.40                   | 54.525             |         |
| 6,600.00                                                                               | 6,427.69            | 6,473.51            | 6,427.69            | 26.00           | 16.27       | 86.55                 | 104.53                            | 467.89                            | 1,602.97             | 1,573.18              | 29.79                   | 53.809             |         |
| 6,700.00                                                                               | 6,527.69            | 6,573.51            | 6,527.69            | 26.12           | 16.46       | 86.55                 | 104.53                            | 467.89                            | 1,602.97             | 1,572.78              | 30.18                   | 53.109             |         |
| 6,800.00                                                                               | 6,627.69            | 6,673.51            | 6,627.69            | 26.23           | 16.65       | 86.55                 | 104.53                            | 467.89                            | 1,602.97             | 1,572.39              | 30.58                   | 52.424             |         |
| 6,900.00                                                                               | 6,727.69            | 6,773.51            | 6,727.69            | 26.35           | 16.84       | 86.55                 | 104.53                            | 467.89                            | 1,602.97             | 1,571.99              | 30.97                   | 51.755             |         |
| 7,000.00                                                                               | 6,827.69            | 6,873.51            | 6,827.69            | 26.47           | 17.04       | 86.55                 | 104.53                            | 467.89                            | 1,602.97             | 1,571.60              | 31.37                   | 51.100             |         |
| 7,100.00                                                                               | 6,927.69            | 6,973.51            | 6,927.69            | 26.59           | 17.23       | 86.55                 | 104.53                            | 467.89                            | 1,602.97             | 1,571.20              | 31.77                   | 50.460             |         |
| 7,200.00                                                                               | 7,027.69            | 7,073.51            | 7,027.69            | 26.71           | 17.42       | 86.55                 | 104.53                            | 467.89                            | 1,602.97             | 1,570.80              | 32.17                   | 49.833             |         |
| 7,300.00                                                                               | 7,127.69            | 7,173.51            | 7,127.69            | 26.83           | 17.62       | 86.55                 | 104.53                            | 467.89                            | 1,602.97             | 1,570.40              | 32.57                   | 49.220             |         |
| 7,400.00                                                                               | 7,227.69            | 7,273.51            | 7,227.69            | 26.95           | 17.82       | 86.55                 | 104.53                            | 467.89                            | 1,602.97             | 1,570.00              | 32.97                   | 48.620             |         |
| 7,500.00                                                                               | 7,327.69            | 7,373.51            | 7,327.69            | 27.08           | 18.01       | 86.55                 | 104.53                            | 467.89                            | 1,602.97             | 1,569.59              | 33.37                   | 48.032             |         |
| 7,600.00                                                                               | 7,427.69            | 7,473.51            | 7,427.69            | 27.21           | 18.21       | 86.55                 | 104.53                            | 467.89                            | 1,602.97             | 1,569.19              | 33.78                   | 47.458             |         |
| 7,700.00                                                                               | 7,527.69            | 7,573.51            | 7,527.69            | 27.33           | 18.41       | 86.55                 | 104.53                            | 467.89                            | 1,602.97             | 1,568.78              | 34.18                   | 46.895             |         |
| 7,800.00                                                                               | 7,627.69            | 7,673.51            | 7,627.69            | 27.46           | 18.61       | 86.55                 | 104.53                            | 467.89                            | 1,602.97             | 1,568.38              | 34.59                   | 46.344             |         |
| 7,900.00                                                                               | 7,727.69            | 7,773.51            | 7,727.69            | 27.59           | 18.81       | 86.55                 | 104.53                            | 467.89                            | 1,602.97             | 1,567.97              | 35.00                   | 45.804             |         |
| 8,000.00                                                                               | 7,827.69            | 7,873.51            | 7,827.69            | 27.72           | 19.01       | 86.55                 | 104.53                            | 467.89                            | 1,602.97             | 1,567.56              | 35.40                   | 45.276             |         |
| 8,100.00                                                                               | 7,927.69            | 7,973.51            | 7,927.69            | 27.86           | 19.21       | 86.55                 | 104.53                            | 467.89                            | 1,602.97             | 1,567.15              | 35.81                   | 44.759             |         |
| 8,200.00                                                                               | 8,027.69            | 8,073.51            | 8,027.69            | 27.99           | 19.41       | 86.55                 | 104.53                            | 467.89                            | 1,602.97             | 1,566.74              | 36.22                   | 44.252             |         |
| 8,300.00                                                                               | 8,127.69            | 8,173.51            | 8,127.69            | 28.12           | 19.61       | 86.55                 | 104.53                            | 467.89                            | 1,602.97             | 1,566.33              | 36.63                   | 43.755             |         |
| 8,400.00                                                                               | 8,227.69            | 8,273.51            | 8,227.69            | 28.26           | 19.81       | 86.55                 | 104.53                            | 467.89                            | 1,602.97             | 1,565.92              | 37.05                   | 43.269             |         |
| 8,500.00                                                                               | 8,327.69            | 8,373.51            | 8,327.69            | 28.40           | 20.01       | 86.55                 | 104.53                            | 467.89                            | 1,602.97             | 1,565.51              | 37.46                   | 42.792             |         |
| 8,600.00                                                                               | 8,427.69            | 8,473.51            | 8,427.69            | 28.54           | 20.22       | 86.55                 | 104.53                            | 467.89                            | 1,602.97             | 1,565.09              | 37.87                   | 42.325             |         |
| 8,700.00                                                                               | 8,527.69            | 8,573.51            | 8,527.69            | 28.68           | 20.42       | 86.55                 | 104.53                            | 467.89                            | 1,602.97             | 1,564.68              | 38.29                   | 41.867             |         |
| 8,800.00                                                                               | 8,627.69            | 8,673.51            | 8,627.69            | 28.82           | 20.62       | 86.55                 | 104.53                            | 467.89                            | 1,602.97             | 1,564.26              | 38.70                   | 41.418             |         |
| 8,900.00                                                                               | 8,727.69            | 8,773.51            | 8,727.69            | 28.96           | 20.83       | 86.55                 | 104.53                            | 467.89                            | 1,602.97             | 1,563.85              | 39.12                   | 40.977             |         |
| 9,000.00                                                                               | 8,827.69            | 8,873.51            | 8,827.69            | 29.10           | 21.03       | 86.55                 | 104.53                            | 467.89                            | 1,602.97             | 1,563.43              | 39.53                   | 40.546             |         |
| 9,100.00                                                                               | 8,927.69            | 8,973.51            | 8,927.69            | 29.24           | 21.24       | 86.55                 | 104.53                            | 467.89                            | 1,602.97             | 1,563.01              | 39.95                   | 40.122             |         |
| 9,200.00                                                                               | 9,027.69            | 9,073.51            | 9,027.69            | 29.39           | 21.44       | 86.55                 | 104.53                            | 467.89                            | 1,602.97             | 1,562.60              | 40.37                   | 39.707             |         |
| 9,300.00                                                                               | 9,127.69            | 9,173.51            | 9,127.69            | 29.53           | 21.65       | 86.55                 | 104.53                            | 467.89                            | 1,602.97             | 1,562.18              | 40.79                   | 39.299             |         |
| 9,400.00                                                                               | 9,227.69            | 9,273.51            | 9,227.69            | 29.68           | 21.86       | 86.55                 | 104.53                            | 467.89                            | 1,602.97             | 1,561.76              | 41.21                   | 38.899             |         |
| 9,441.77                                                                               | 9,269.46            | 9,315.28            | 9,269.46            | 29.74           | 21.94       | 86.55                 | 104.53                            | 467.89                            | 1,602.97             | 1,561.58              | 41.38                   | 38.735             |         |
| 9,493.31                                                                               | 9,321.00            | 9,329.82            | 9,284.00            | 29.82           | 21.97       | 86.55                 | 104.53                            | 467.89                            | 1,603.39             | 1,561.87              | 41.52                   | 38.619             |         |



|                           |                              |                                     |                                       |
|---------------------------|------------------------------|-------------------------------------|---------------------------------------|
| <b>Company:</b>           | ANADARKO PETROLEUM CORP.     | <b>Local Co-ordinate Reference:</b> | Well NBU 922-3103AS                   |
| <b>Project:</b>           | UINTAH COUNTY, UTAH (nad 27) | <b>TVD Reference:</b>               | WELL @ 5077.00ft (Original Well Elev) |
| <b>Reference Site:</b>    | NBU 922-31P3 PAD             | <b>MD Reference:</b>                | WELL @ 5077.00ft (Original Well Elev) |
| <b>Site Error:</b>        | 0.00ft                       | <b>North Reference:</b>             | True                                  |
| <b>Reference Well:</b>    | NBU 922-3103AS               | <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 922-3103AS               | <b>Database:</b>                    | EDM 2003.21 Single User Db            |
| <b>Reference Design:</b>  | PLAN #1 3-23-10 RHS          | <b>Offset TVD Reference:</b>        | Offset Datum                          |

Reference Depths are relative to WELL @ 5077.00ft (Original Well Elev) Coordinates are relative to: NBU 922-3103AS  
 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: 0.98°



|                           |                              |                                     |                                       |
|---------------------------|------------------------------|-------------------------------------|---------------------------------------|
| <b>Company:</b>           | ANADARKO PETROLEUM CORP.     | <b>Local Co-ordinate Reference:</b> | Well NBU 922-3103AS                   |
| <b>Project:</b>           | UINTAH COUNTY, UTAH (nad 27) | <b>TVD Reference:</b>               | WELL @ 5077.00ft (Original Well Elev) |
| <b>Reference Site:</b>    | NBU 922-31P3 PAD             | <b>MD Reference:</b>                | WELL @ 5077.00ft (Original Well Elev) |
| <b>Site Error:</b>        | 0.00ft                       | <b>North Reference:</b>             | True                                  |
| <b>Reference Well:</b>    | NBU 922-3103AS               | <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 922-3103AS               | <b>Database:</b>                    | EDM 2003.21 Single User Db            |
| <b>Reference Design:</b>  | PLAN #1 3-23-10 RHS          | <b>Offset TVD Reference:</b>        | Offset Datum                          |

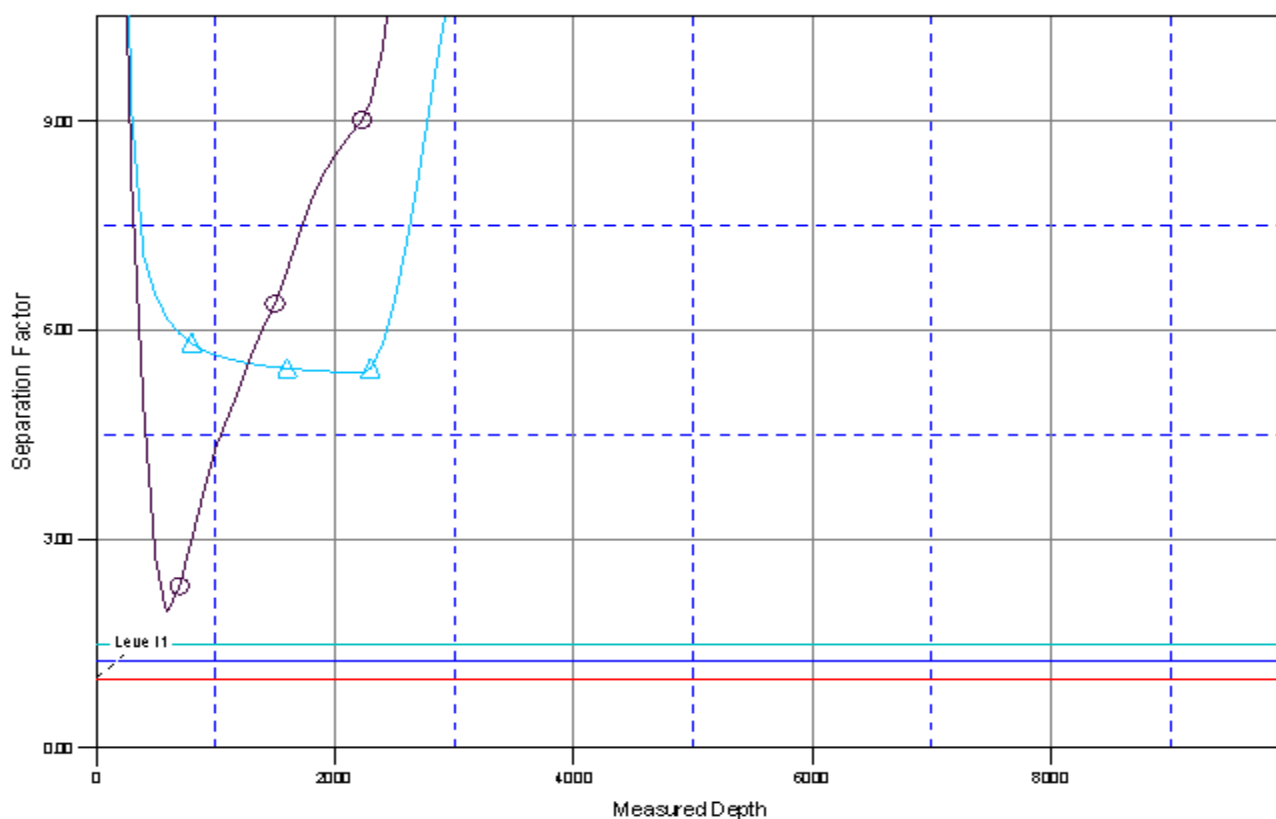
Reference Depths are relative to WELL @ 5077.00ft (Original Well Elev)Coordinates are relative to: NBU 922-3103AS

Offset Depths are relative to Offset Datum

Coordinate System is Universal Transverse Mercator (US Survey Feet), Zone 12N

Grid Convergence at Surface is: 0.98°

## Separation Factor Plot



## LEGEND

SE 97D EXISTING \0  
3-23-10 RHS \0

—●— NBU 922-31P-3T EXISTING, NBU 922-31P-3T EXISTING, NBU 922-31P-3T EXISTING \0  
—△— NBU 922-31P-4BS, NBU 922-31P-4BS, PLAN#1 3-23-10 RHS \0

**NBU 922-31O3AS**

Pad: NBU 922-31P3

Surface: 496' FSL 965' FEL (SE/4SE/4)

BHL: 502' FSL 2,098' FEL (SW/4SE/4)

Sec. 31 T9S R22E

Uintah, Utah

Mineral Lease: UO 1207A ST

**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      | 1,323'       |                 |
| Birds Nest       | 1,618'       | Water           |
| Mahogany         | 1,982'       | Water           |
| Wasatch          | 4,521'       | Gas             |
| Mesaverde        | 7,133'       | Gas             |
| MVU2             | 8,030'       | Gas             |
| MVL1             | 8,660'       | Gas             |
| TVD              | 9,321'       |                 |
| TD               | 9,493'       |                 |

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 9,321' TVD, approximately equals 5,710 psi (calculated at 0.61 psi/foot).

Maximum anticipated surface pressure equals approximately 3,660 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.*

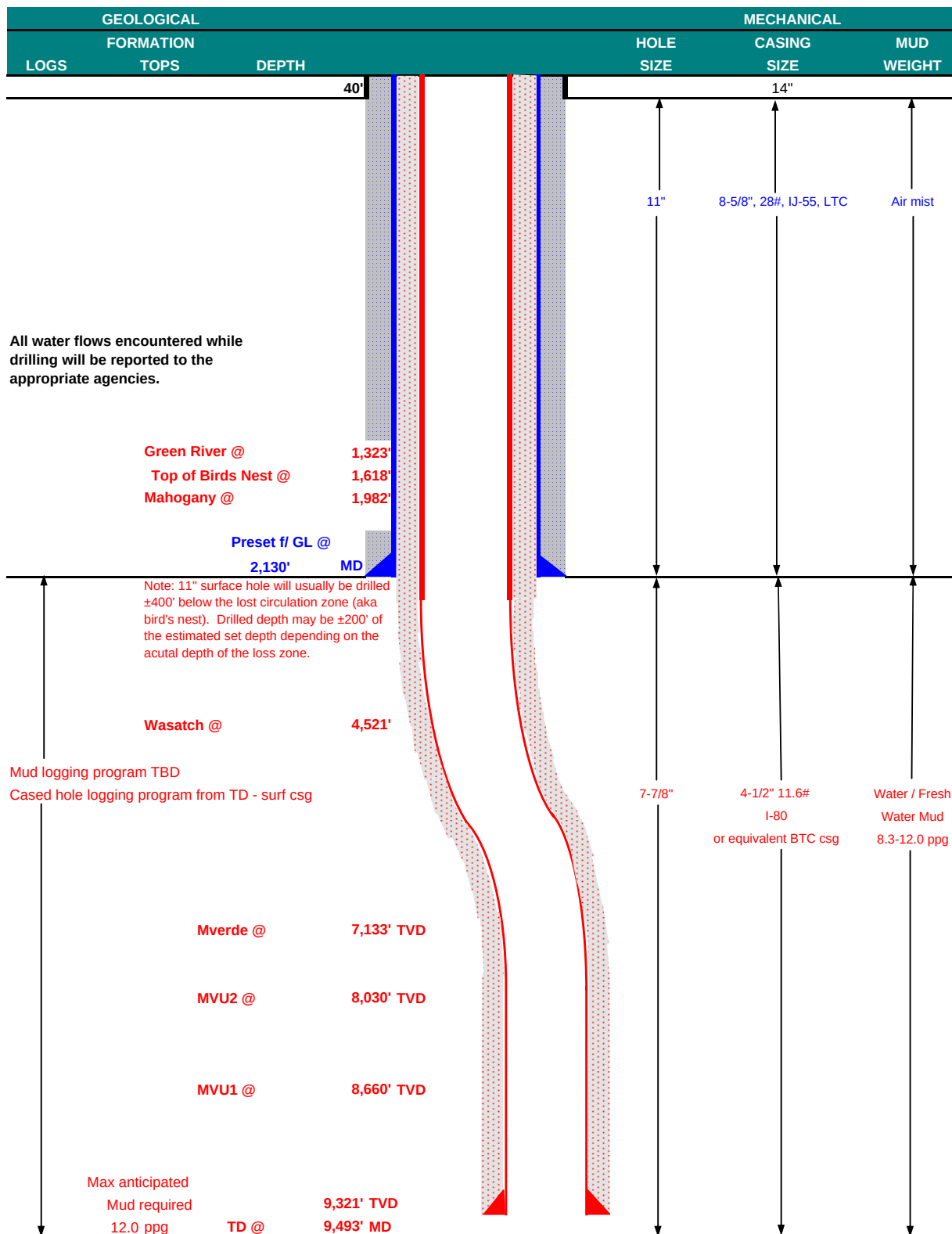
**10. Other Information:**

*Please refer to the attached Drilling Program.*



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

|                                                   |                                                                                       |          |            |                   |                           |
|---------------------------------------------------|---------------------------------------------------------------------------------------|----------|------------|-------------------|---------------------------|
| COMPANY NAME                                      | KERR-McGEE OIL & GAS ONSHORE LP                                                       |          | DATE       | March 31, 2010    |                           |
| WELL NAME                                         | <b>NBU 922-3103AS</b>                                                                 |          | TD         | 9,321'            | 9,493' MD                 |
| FIELD                                             | Natural Buttes                                                                        | COUNTY   | Uintah     | STATE             | Utah                      |
| SURFACE LOCATION                                  | SE/4 SE/4                                                                             | 496' FSL | 965' FEL   | Sec 31 T 9S R 22E | FINISHED ELEVATION 5,063' |
| Latitude: 39.986618 Longitude: -109.476725 NAD 27 |                                                                                       |          |            |                   |                           |
| BTM HOLE LOCATION                                 | SW/4 SE/4                                                                             | 502' FSL | 2,098' FEL | Sec 31 T 9S R 22E |                           |
| Latitude: 39.986641 Longitude: -109.480767 NAD 27 |                                                                                       |          |            |                   |                           |
| OBJECTIVE ZONE(S)                                 | Wasatch/Mesaverde                                                                     |          |            |                   |                           |
| ADDITIONAL INFO                                   | Regulatory Agencies: SITLA (Minerals), UDOGM (Surface), UDOGM Tri-County Health Dept. |          |            |                   |                           |





# 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 2,130 | 28.00 | IJ-55 | LTC   | 0.88           | 1.89     | 5.78    |
|            |        |            |       |       |       | 7,780          | 6,350    | 278,000 |
| PRODUCTION | 4-1/2" | 0 to 9,493 | 11.60 | I-80  | BTC   | 2.07           | 1.09     | 2.89    |
|            |        |            |       |       |       |                |          |         |

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

D.F. = 2.53

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\*Buoys.Fact. of water)

**MASP 3,660 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\*Buoys.Fact. of water)

**MABHP 5,710 psi**

### CEMENT PROGRAM

|            |                      | FT. OF FILL                                                              | DESCRIPTION                            | SACKS   | EXCESS | WEIGHT | YIELD |
|------------|----------------------|--------------------------------------------------------------------------|----------------------------------------|---------|--------|--------|-------|
| SURFACE    | LEAD                 | 500'                                                                     | Premium cmt + 2% CaCl                  | 180     | 60%    | 15.80  | 1.15  |
| Option 1   |                      |                                                                          | + 0.25 pps flocele                     |         |        |        |       |
|            | TOP OUT CMT (6 jobs) | 1,200'                                                                   | 20 gals sodium silicate + Premium cmt  | 270     | 0%     | 15.80  | 1.15  |
|            |                      |                                                                          | + 2% CaCl + 0.25 pps flocele           |         |        |        |       |
| SURFACE    |                      | NOTE: If well will circulate water to surface, option 2 will be utilized |                                        |         |        |        |       |
| Option 2   | LEAD                 | 1,630'                                                                   | 65/35 Poz + 6% Gel + 10 pps gilsonite  | 150     | 35%    | 11.00  | 3.82  |
|            |                      |                                                                          | + 0.25 pps Flocele + 3% salt BWOW      |         |        |        |       |
|            | TAIL                 | 500'                                                                     | Premium cmt + 2% CaCl                  | 150     | 35%    | 15.80  | 1.15  |
|            |                      |                                                                          | + 0.25 pps flocele                     |         |        |        |       |
|            | TOP OUT CMT          | as required                                                              | Premium cmt + 2% CaCl                  | as req. |        | 15.80  | 1.15  |
| PRODUCTION | LEAD                 | 4,013'                                                                   | Premium Lite II +0.25 pps              | 330     | 40%    | 11.00  | 3.38  |
|            |                      |                                                                          | celloflake + 5 pps gilsonite + 10% gel |         |        |        |       |
|            |                      |                                                                          | + 0.5% extender                        |         |        |        |       |
|            | TAIL                 | 5,480'                                                                   | 50/50 Poz/G + 10% salt + 2% gel        | 1,150   | 20%    | 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:

John Huycke / Emile Goodwin

DATE:

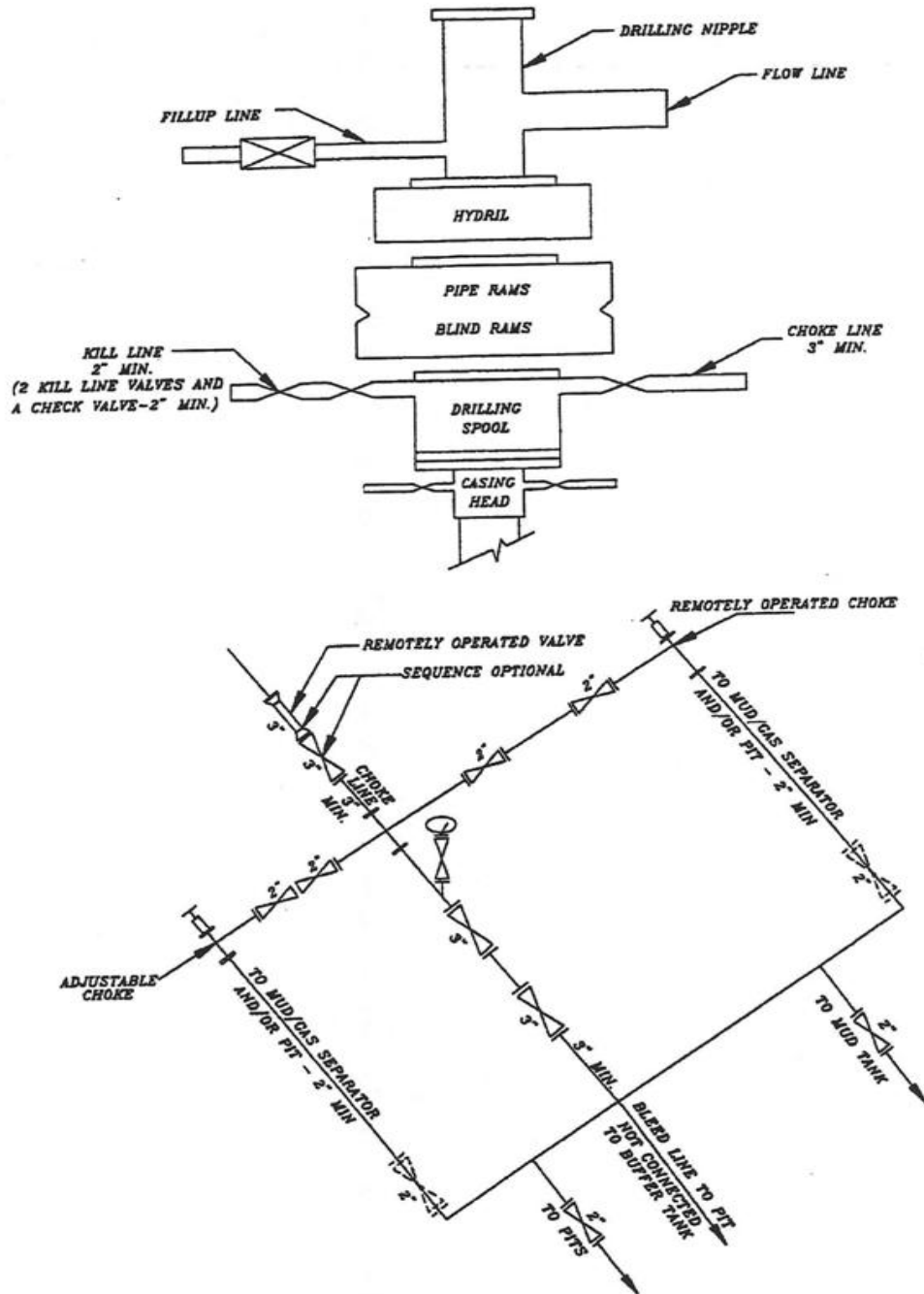
DRILLING SUPERINTENDENT:

John Merkel / Lovel Young

DATE:



# EXHIBIT A NBU 922-3103AS



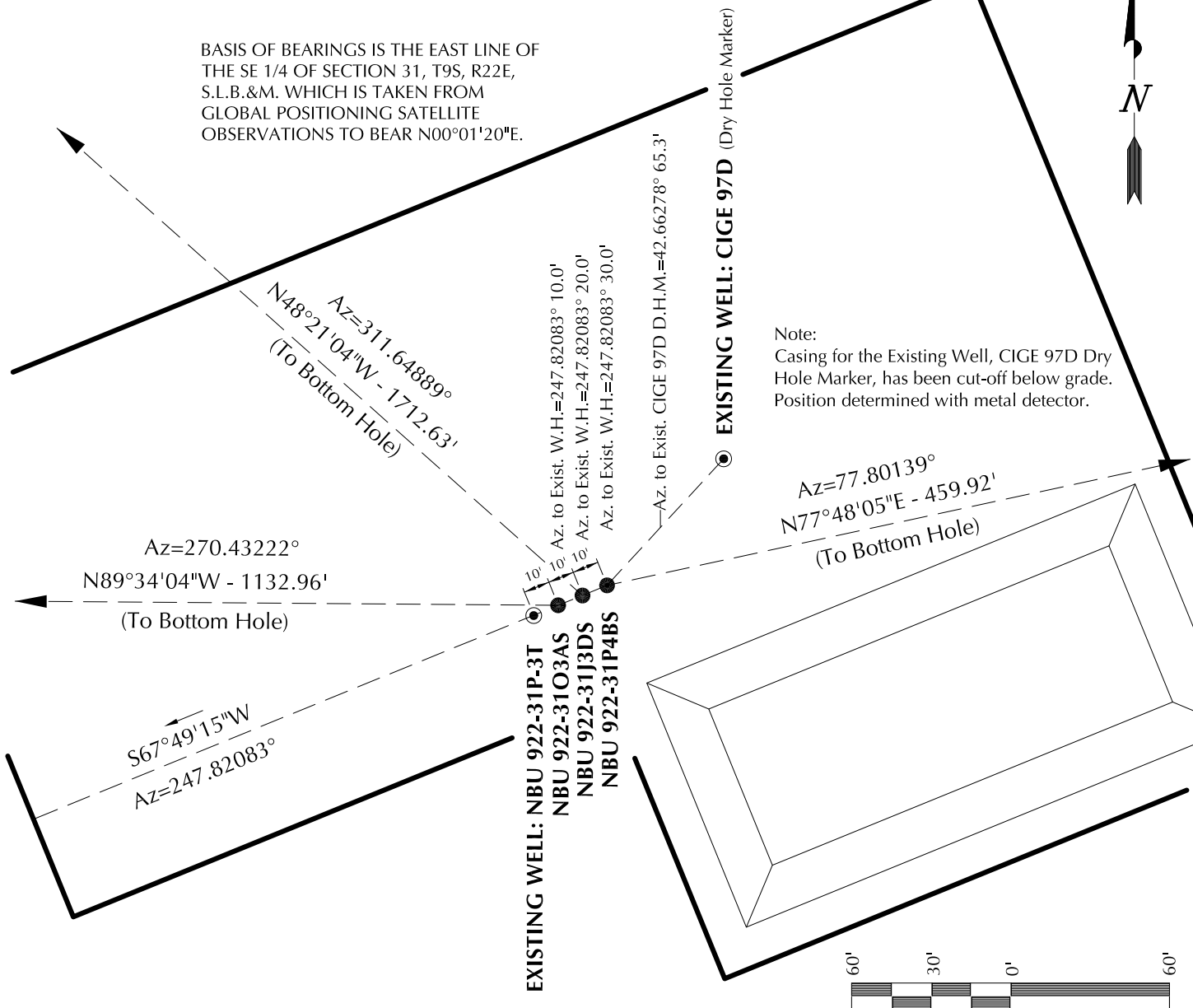
SCHEMATIC DIAGRAM OF 5,000 PSI BOP STACK

| WELL NAME      | SURFACE POSITION |                |               |                |          | BOTTOM HOLE   |                |               |                |           |
|----------------|------------------|----------------|---------------|----------------|----------|---------------|----------------|---------------|----------------|-----------|
|                | NAD83            |                | NAD27         |                | FOOTAGES | NAD83         |                | NAD27         |                | FOOTAGES  |
|                | LATITUDE         | LONGITUDE      | LATITUDE      | LONGITUDE      |          | LATITUDE      | LONGITUDE      | LATITUDE      | LONGITUDE      |           |
| NBU 922-31O3AS | 39°59'11.824"    | 109°28'36.209" | 39°59'11.949" | 109°28'33.742" | 496' FSL | 39°59'11.906" | 109°28'50.760" | 39°59'12.032" | 109°28'48.293" | 502' FSL  |
|                | 39.986618°       | 109.476725°    | 39.986653°    | 109.476040°    | 965' FEL | 39.986641°    | 109.480767°    | 39.986675°    | 109.480081°    | 2098' FEL |
| NBU 922-31J3DS | 39°59'11.861"    | 109°28'36.090" | 39°59'11.986" | 109°28'33.624" | 500' FSL | 39°59'23.103" | 109°28'52.530" | 39°59'23.229" | 109°28'50.062" | 1635' FSL |
|                | 39.986628°       | 109.476692°    | 39.986663°    | 109.476007°    | 956' FEL | 39.989751°    | 109.481258°    | 39.989786°    | 109.480573°    | 2236' FEL |
| NBU 922-31P4BS | 39°59'11.898"    | 109°28'35.970" | 39°59'12.024" | 109°28'33.504" | 504' FSL | 39°59'12.859" | 109°28'30.197" | 39°59'12.985" | 109°28'27.730" | 602' FSL  |
|                | 39.986638°       | 109.476658°    | 39.986673°    | 109.475973°    | 946' FEL | 39.986905°    | 109.475055°    | 39.986940°    | 109.474370°    | 497' FEL  |
| NBU 922-31P-3T | 39°59'11.785"    | 109°28'36.328" | 39°59'11.911" | 109°28'33.861" | 492' FSL |               |                |               |                |           |
|                | 39.986607°       | 109.476758°    | 39.986642°    | 109.476073°    | 974' FEL |               |                |               |                |           |
| CIGE 97D       | 39°59'12.373"    | 109°28'35.402" | 39°59'12.498" | 109°28'32.936" | 552' FSL |               |                |               |                |           |
| D.H.M.         | 39.986770°       | 109.476501°    | 39.986805°    | 109.475815°    | 902' FEL |               |                |               |                |           |

## RELATIVE COORDINATES - From Surface Position to Bottom Hole

| WELL NAME      | NORTH | EAST     | WELL NAME      | NORTH   | EAST     | WELL NAME      | NORTH | EAST   |
|----------------|-------|----------|----------------|---------|----------|----------------|-------|--------|
| NBU 922-31O3AS | 8.5'  | -1132.9' | NBU 922-31J3DS | 1138.2' | -1279.7' | NBU 922-31P4BS | 97.2' | 449.5' |

BASIS OF BEARINGS IS THE EAST LINE OF THE SE 1/4 OF SECTION 31, T9S, R22E, S.L.B.&M. WHICH IS TAKEN FROM GLOBAL POSITIONING SATELLITE OBSERVATIONS TO BEAR N00°01'20"E.



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

**WELL PAD - NBU 922-31P3**

**WELL PAD INTERFERENCE PLAT**  
**WELLS - NBU 922-31O3AS,**  
**NBU 922-31J3DS & NBU 922-31P4BS**  
**LOCATED IN SECTION 31, T9S, R22E,**  
**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 SURVEYED:

12-11-09

SURVEYED BY: M.S.B.

SHEET NO:

DATE DRAWN:

12-15-09

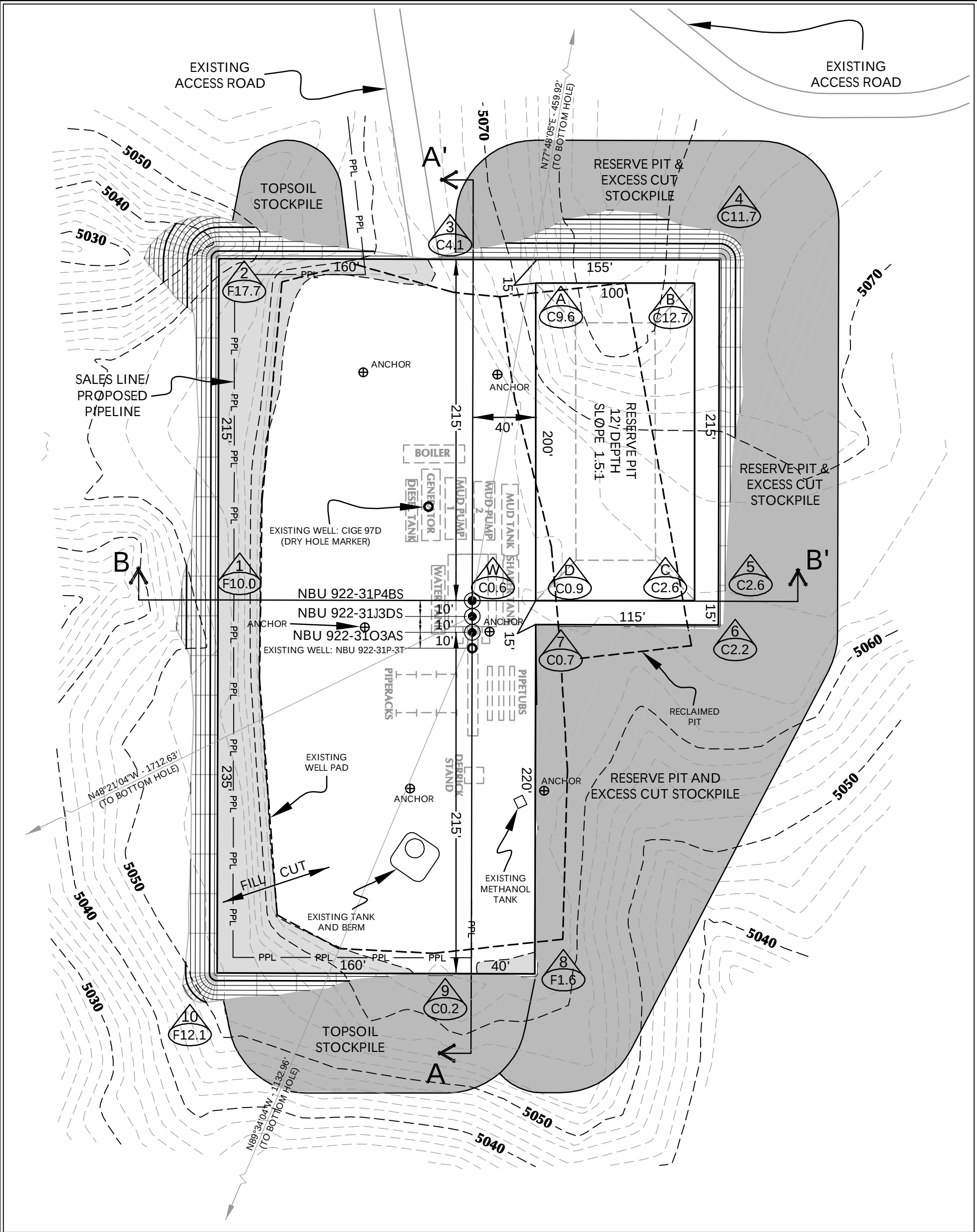
DRAWN BY: E.M.S.

SCALE: 1" = 60'

Date Last Revised:

**4**

4 OF 14



WELL PAD - NBU 922-31P3 DESIGN SUMMARY

EXISTING GRADE @ CENTER OF WELL PAD = 5063.8'  
FINISHED GRADE ELEVATION = 5063.2'  
CUT SLOPES = 1.5:1  
FILL SLOPES = 1.5:1  
TOTAL WELL PAD AREA = 3.10 ACRES  
TOTAL DAMAGE AREA = 5.72 ACRES  
SHRINKAGE FACTOR = 1.10  
SWELL FACTOR = 1.00

WELL PAD QUANTITIES  
TOTAL CUT FOR WELL PAD = 9,472 C.Y.  
TOTAL FILL FOR WELL PAD = 7,311 C.Y.  
TOPSOIL @ 6" DEPTH = 1,143 C.Y.  
EXCESS MATERIAL = 2,161 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

WELL PAD - NBU 922-31P3

WELL PAD - LOCATION LAYOUT  
NBU 922-31O3AS,  
NBU 922-31J3DS & NBU 922-31P4BS  
LOCATED IN SECTION 31, T9S, R22E,  
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

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

Scale: 1"=60'

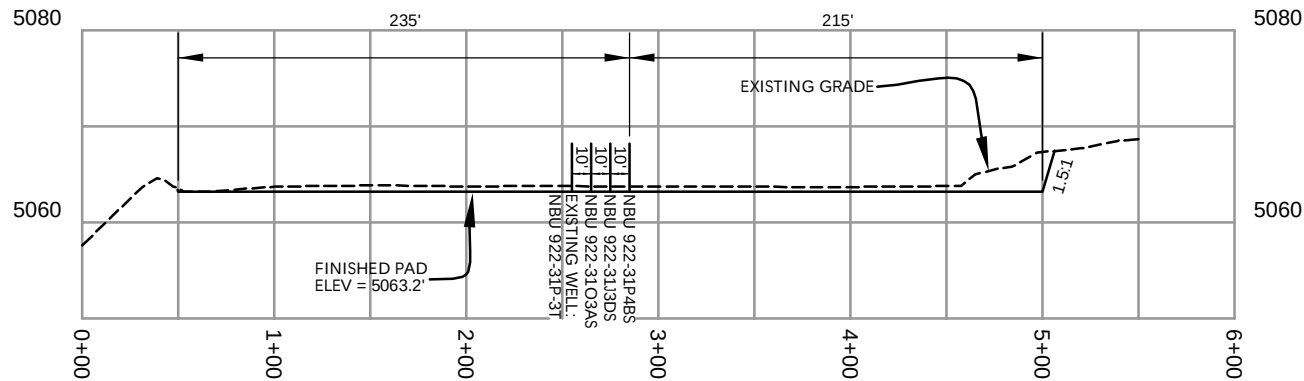
Date: 3/9/10

SHEET NO:

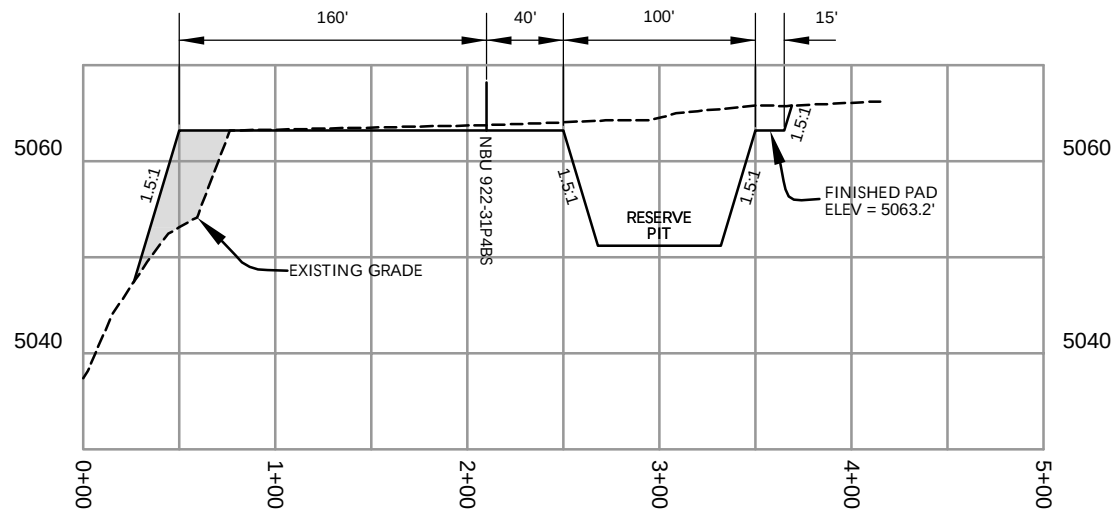
REVISED:

5

5 OF 14



**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 922-31P3**

**WELL PAD - CROSS SECTIONS**

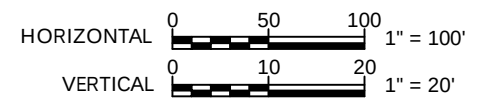
**NBU 922-31O3AS,  
NBU 922-31J3DS & NBU 922-31P4BS  
LOCATED IN SECTION 31, T9S, R22E,  
S.L.B.&M., UINTAH COUNTY, UTAH**



**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'

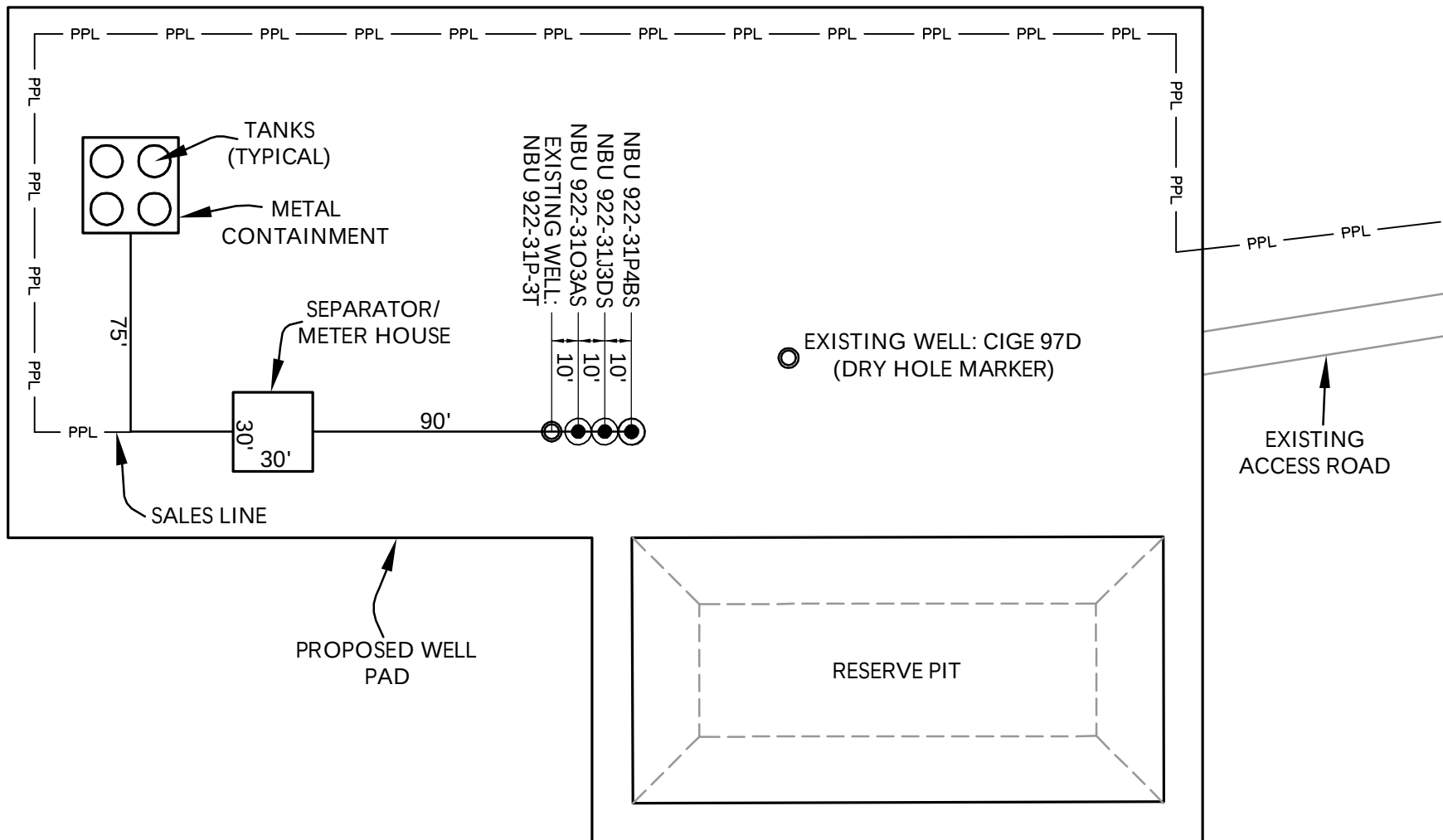
Date: 3/9/10

SHEET NO:

**6**

6 OF 14

REVISED:



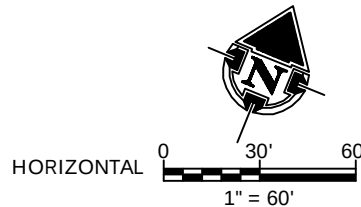
Kerr-McGee Oil & Gas Onshore, LP  
1099 18th Street - Denver, Colorado 80202

WELL PAD - NBU 922-31P3

WELL PAD - FACILITIES DIAGRAM  
NBU 922-31O3AS,  
NBU 922-31J3DS & NBU 922-31P4BS  
LOCATED IN SECTION 31, T9S, R22E,  
S.L.B.&M., UTAH 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

#### WELL PAD LEGEND

- EXISTING WELL LOCATION
- PROPOSED WELL LOCATION
- PROPOSED SALES LINE

|               |              |           |
|---------------|--------------|-----------|
| Scale: 1"=60' | Date: 3/9/10 | SHEET NO: |
| REVISED:      |              | 7 7 OF 14 |



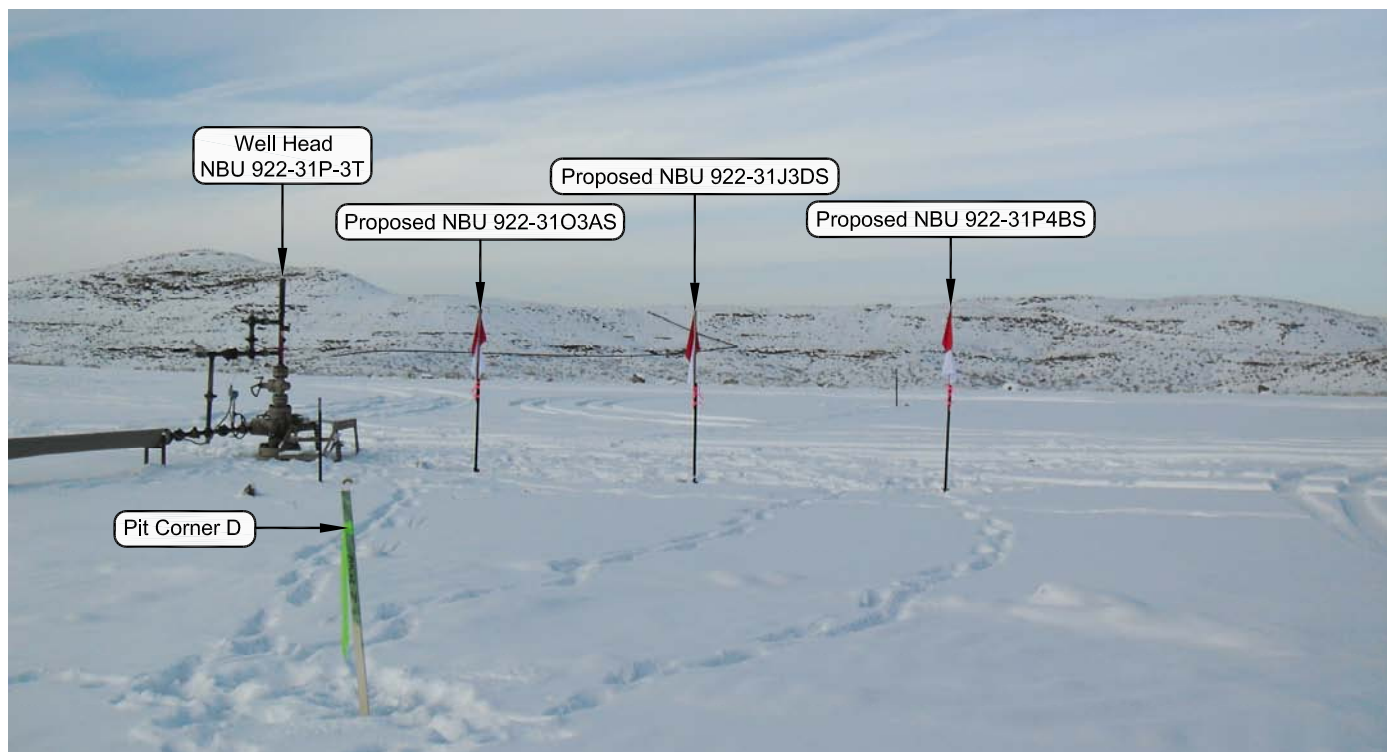


PHOTO VIEW: FROM PIT CORNER D TO LOCATION STAKE

CAMERA ANGLE: NORTHWESTERLY



PHOTO VIEW: FROM EXISTING ACCESS ROAD

CAMERA ANGLE: SOUTHWESTERLY

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

**Well Pad - NBU 922-31P3**

**NBU 922-31O3AS, NBU 922-31J3DS  
& NBU 922-31P4BS  
LOCATION PHOTOS  
LOCATED IN SECTION 31, T9S, R22E,  
S.L.B.&M., UINTAH COUNTY, UTAH.**



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

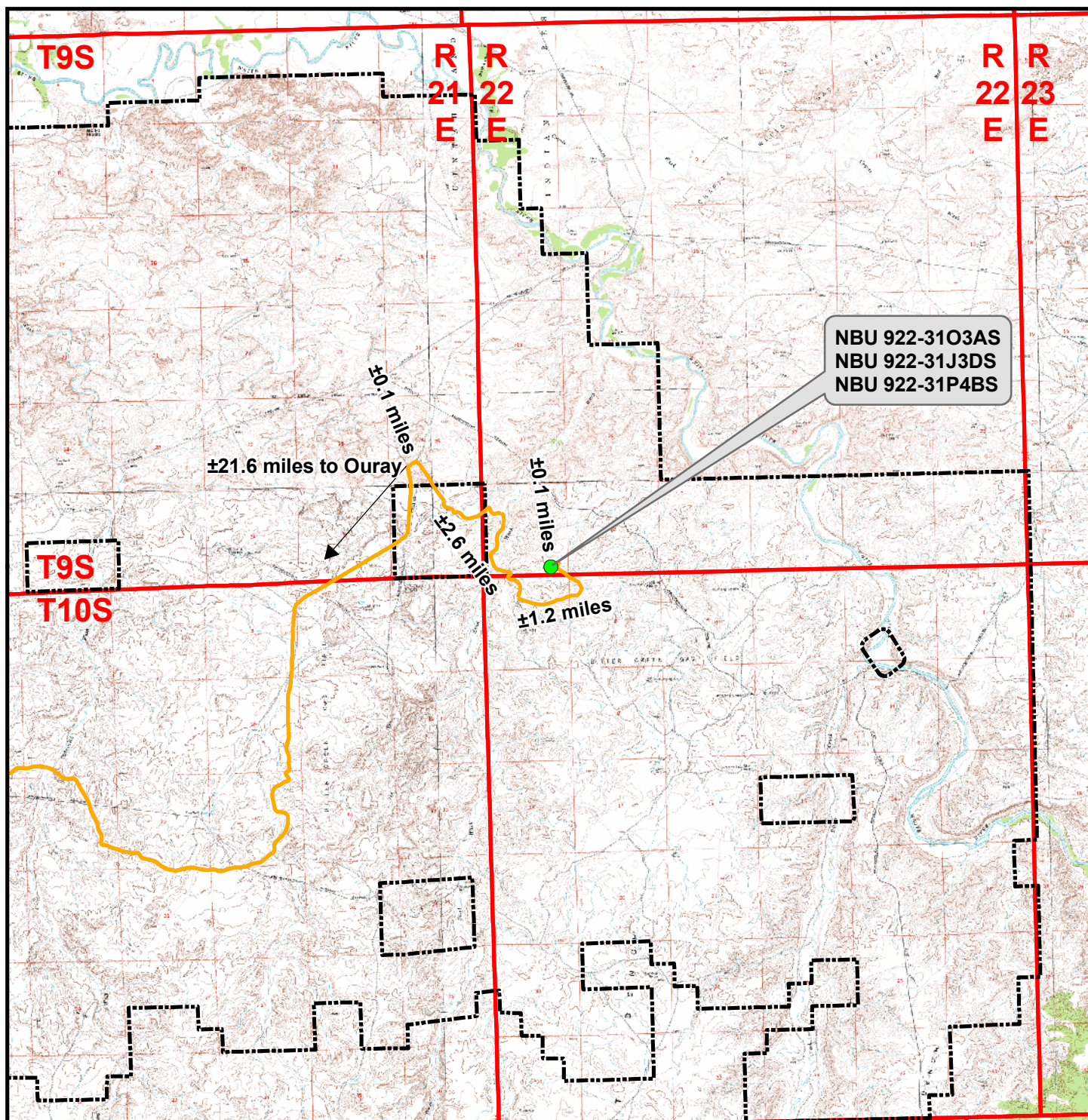
**TIMBERLINE**

(435) 789-1365

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

|                                |                         |                                          |
|--------------------------------|-------------------------|------------------------------------------|
| DATE PHOTOS TAKEN:<br>12-11-09 | PHOTOS TAKEN BY: M.S.B. | SHEET NO:<br><br><b>8</b><br><br>8 OF 14 |
| DATE DRAWN:<br>12-15-09        | DRAWN BY: E.M.S.        |                                          |
| Date Last Revised:             |                         |                                          |





### Legend

- Proposed Well Location
- Natural Buttes Unit Boundary
- Access Route - Proposed

Distance From Well Pad - NBU 922-31P3 To Unit Boundary: ±3,698ft

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

### WELL PAD - NBU 922-31P3

NBU 922-31O3AS,  
NBU 922-31J3DS & NBU 922-31P4BS  
TOPO A  
LOCATED IN SECTION 31, T9S, R22E  
S.L.B.&M., UTAH COUNTY, UTAH



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



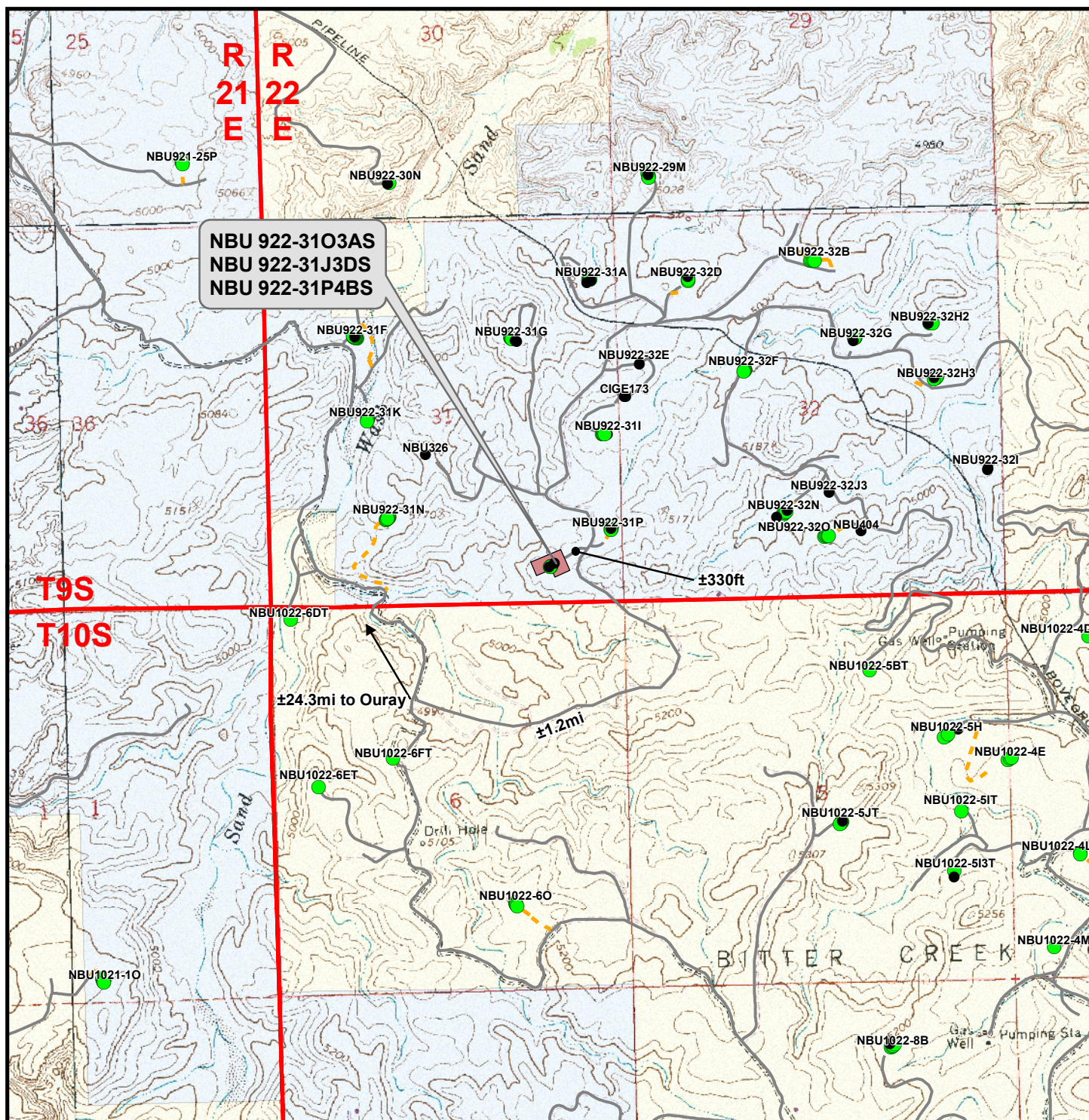
|                  |                   |
|------------------|-------------------|
| Scale: 1:100,000 | NAD83 USP Central |
| Drawn: JELO      | Date: 26 Jan 2010 |
| Revised:         | Date:             |

Sheet No:

**9**

9 of 14





## Legend

Total Proposed Road Length: ±0ft

- |                   |            |                       |                             |           |
|-------------------|------------|-----------------------|-----------------------------|-----------|
| ● Well - Proposed | ■ Well Pad | - - - Road - Proposed | ■ Bureau of Land Management | ■ State   |
| ● Well - Existing |            | — Road - Existing     | ■ Indian Reservation        | ■ Private |

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

### WELL PAD - NBU 922-31P3

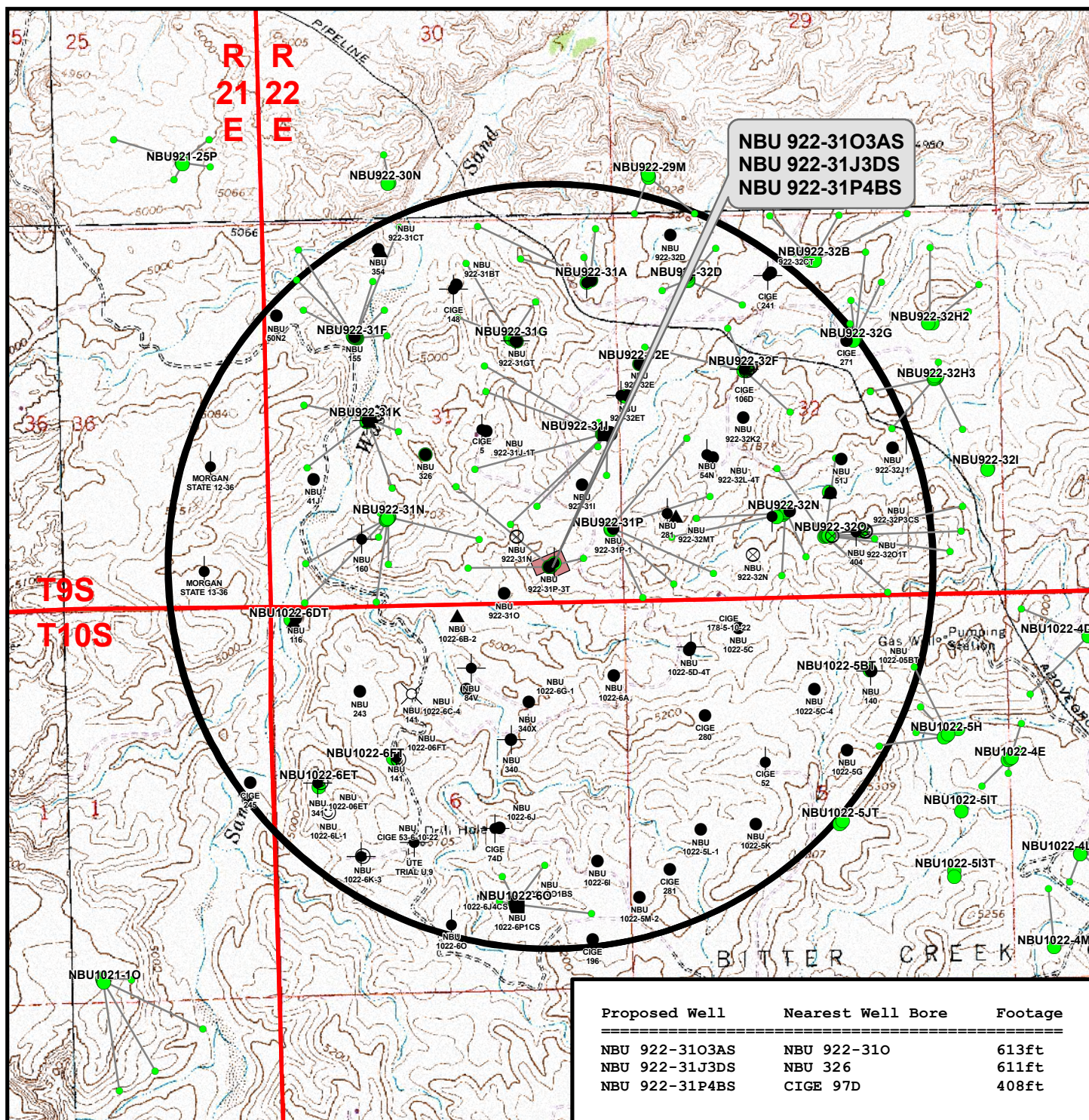
NBU 922-31O3AS,  
NBU 922-31J3DS & NBU 922-31P4BS  
TOPO B  
LOCATED IN SECTION 31, T9S, R22E  
S.L.B.&M., UTAH COUNTY, UTAH



Scale: 1" = 2,000ft NAD83 USP Central  
Drawn: TL Date: 8 Mar 2010  
Revised: Date:

Sheet No:  
**10** 10 of 14





### Legend

- Well - Proposed
- Bottom Hole - Proposed
- Well Path
- Well Pad
- Well - 1 Mile Radius

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

### WELL PAD - NBU 922-31P3

NBU 922-3103AS,  
NBU 922-31J3DS & NBU 922-31P4BS  
TOPO C  
LOCATED IN SECTION 31, T9S, R22E  
S.L.B.&M., UTAH COUNTY, UTAH

Well locations derived from State of Utah, Dept. of Natural Resources, Division of Oil, Gas and Mining

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



- Producing
- Temporarily-Abandoned
- Shut-In
- Plugged and Abandoned
- Location Abandoned
- Dry hole marker, buried
- Returned APD (Unapproved)
- Active
- Spudded (Drilling commenced; Not yet completed)
- Approved permit (APD); not yet spudded
- New Permit (Not yet approved or drilled)
- Inactive
- Drilling Operations Suspended

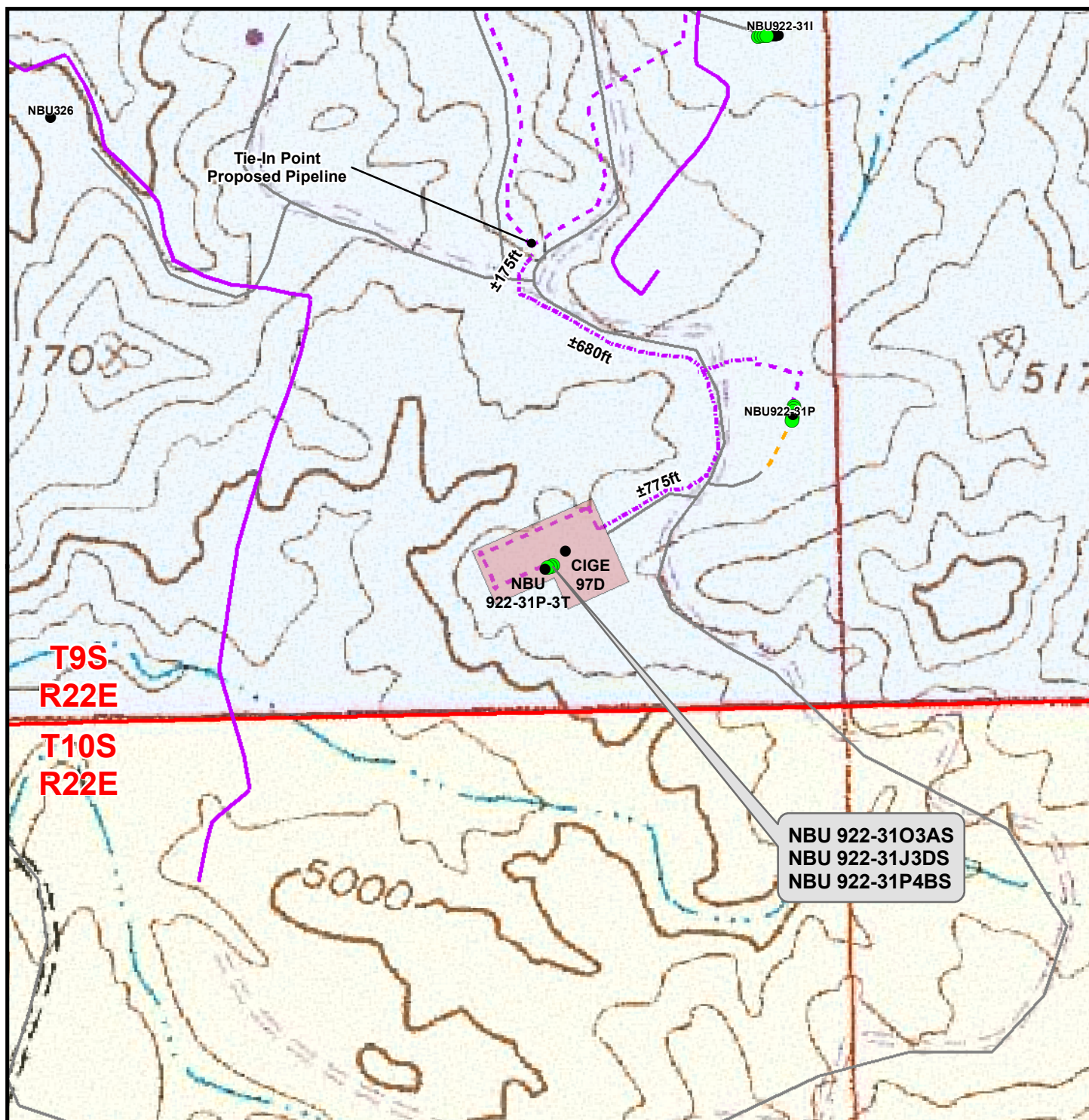
Scale: 1" = 2,000ft | NAD83 USP Central  
Drawn: TL | Date: 8 Mar 2010  
Revised: | Date:

Sheet No:  
**11** 11 of 14



Sheet No:  
**12** 12 of 14





### Legend

- |                                                      |                                                                                                                                      |                                                             |                                                                                                                                             |                                                                                                                                                      |                                                                                                                                     |
|------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|
| <span style="color: green;">●</span> Well - Proposed | <span style="background-color: #f08080; border: 1px solid black; display: inline-block; width: 20px; height: 10px;"></span> Well Pad | <span style="color: purple;">---</span> Pipeline - Proposed | <span style="color: orange;">---</span> Road - Proposed                                                                                     | <span style="background-color: yellow; border: 1px solid black; display: inline-block; width: 20px; height: 10px;"></span> Bureau of Land Management | <span style="background-color: lightblue; border: 1px solid black; display: inline-block; width: 20px; height: 10px;"></span> State |
| <span style="color: black;">●</span> Well - Existing | <span style="color: purple;">---</span> Pipeline - To Be Upgraded                                                                    | <span style="color: grey;">---</span> Road - Existing       | <span style="background-color: pink; border: 1px solid black; display: inline-block; width: 20px; height: 10px;"></span> Indian Reservation | <span style="border: 1px solid black; display: inline-block; width: 20px; height: 10px;"></span> Private                                             |                                                                                                                                     |
|                                                      | <span style="color: purple;">---</span> Pipeline - Existing                                                                          |                                                             |                                                                                                                                             |                                                                                                                                                      |                                                                                                                                     |

Proposed Pipeline Length From Tie-In Point To Edge Of Pad: ±1,630ft  
 Proposed Pipeline Length From Edge Of Pad To Meter House: ±765ft

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

**WELL PAD - NBU 922-31P3**

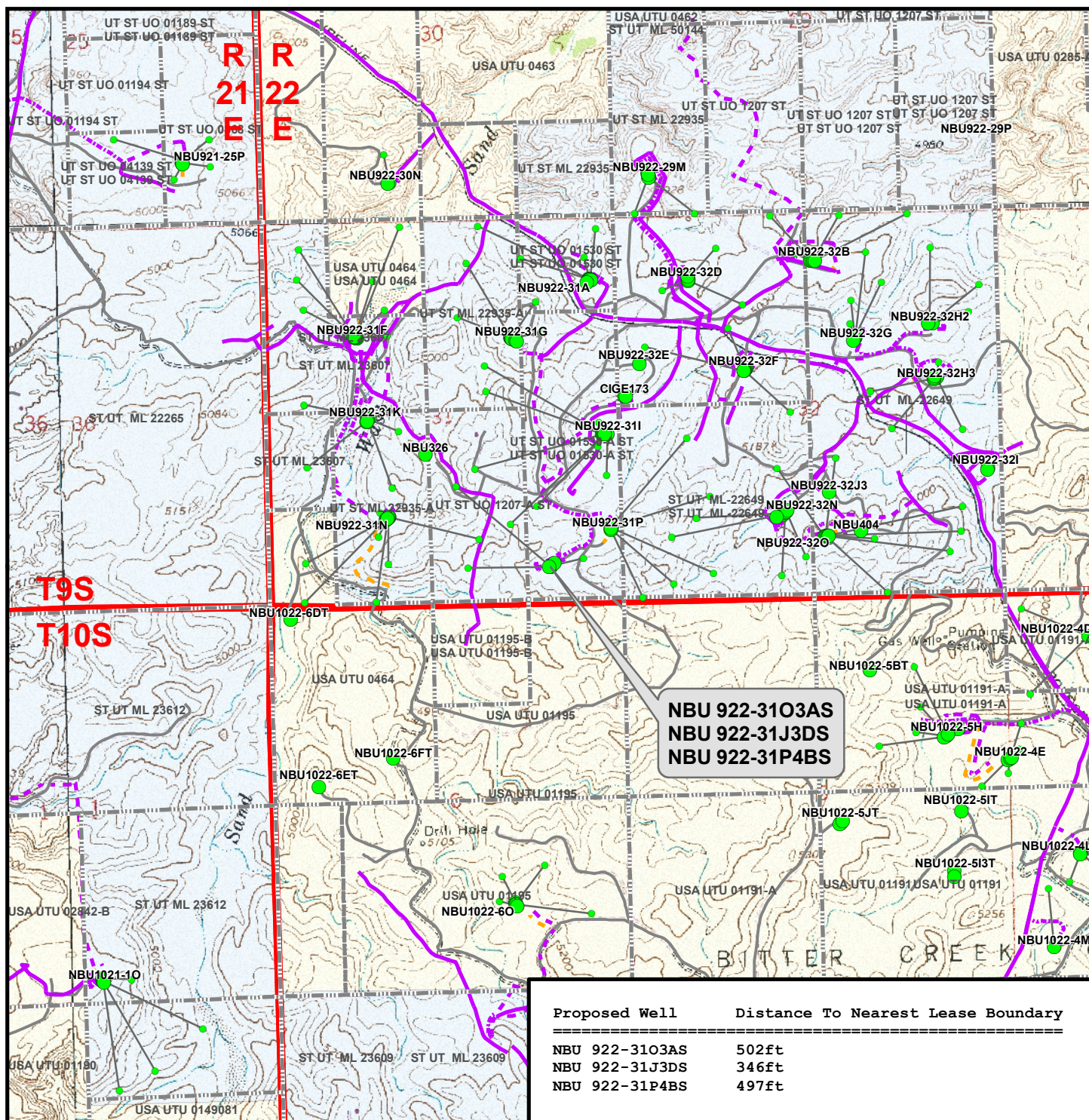
NBU 922-31O3AS,  
 NBU 922-31J3DS & NBU 922-31P4BS  
 TOPO D (PAD & PIPELINE DETAIL)  
 LOCATED IN SECTION 31, T9S, R22E  
 S.L.B.&M., UTAH COUNTY, UTAH



|                   |                   |
|-------------------|-------------------|
| Scale: 1" = 500ft | NAD83 USP Central |
| Drawn: TL         | Date: 8 Mar 2010  |
| Revised:          | Date:             |

Sheet No:  
**12A**  
 12A of 14





### Legend

- Well - Proposed
- Bottom Hole - Proposed
- Well Path
- Well Pad
- Lease Boundary
- Pipeline - Proposed
- Pipeline - To Be Upgraded
- Pipeline - Existing
- Road - Proposed
- Road - Existing
- Bureau of Land Management
- Indian Reservation
- State
- Private

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

### WELL PAD - NBU 922-31P3

**NBU 922-31O3AS,  
NBU 922-31J3DS & NBU 922-31P4BS  
TOPO E  
LOCATED IN SECTION 31, T9S, R22E  
S.L.B.&M., UTAH 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:** TL      **Date:** 8 Mar 2010

**Revised:**      **Date:**

**Sheet No:**  
**13** 13 of 14

**Kerr-McGee Oil & Gas Onshore, LP**  
**WELL PAD - NBU 922-31P3**  
**WELLS – NBU 922-31O3AS, NBU 922-31J3DS & NBU 922-31P4BS**  
**Section 31, T9S, R22E, 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 10.4 MILES TO A CLASS D COUNTY ROAD TO THE NORTHEAST. EXIT RIGHT AND PROCEED IN A NORTHEASTERLY DIRECTION ALONG THE CLASS D COUNTY ROAD APPROXIMATELY 0.1 MILES TO A SECOND CLASS D COUNTY ROAD TO THE SOUTHEAST. EXIT RIGHT AND PROCEED IN A SOUTHEASTERLY DIRECTION ALONG THE SECOND CLASS D COUNTY ROAD APPROXIMATELY 2.6 MILES TO A THIRD CLASS D COUNTY ROAD TO THE EAST. EXIT LEFT AND PROCEED IN AN EASTERLY, THEN NORTHWESTERLY DIRECTION ALONG THE THIRD CLASS D COUNTY ROAD APPROXIMATELY 1.2 MILES TO A SERVICE ROAD TO THE SOUTHWEST. EXIT LEFT AND PROCEED IN AN SOUTHWESTERLY DIRECTION ALONG THE SERVICE ROAD APPROXIMATELY 330 FEET TO THE PROPOSED WELL LOCATION

TOTAL DISTANCE FROM VERNAL, UTAH TO THE PROPOSED WELL LOCATION IS APPROXIMATELY 56.3 MILES IN A SOUTHERLY DIRECTION.



**NBU 922-31J3DS**

Surface: 500' FSL 956' FEL (SE/4SE/4)  
BHL: 1,635' FSL 2,236' FEL (NW/4SE/4)  
Mineral Lease: UO 1207A ST

**NBU 922-31O3AS**

Surface: 496' FSL 965' FEL (SE/4SE/4)  
BHL: 502' FSL 2,098' FEL (SW/4SE/4)  
Mineral Lease: UO 1207A ST

**NBU 922-31P4BS**

Surface: 504' FSL 946' FEL (SE/4SE/4)  
BHL: 602' FSL 497' FEL (SE/4SE/4)  
Mineral Lease: UO 01530A ST

Pad: NBU 922-31P3  
Section 31 T9S R22E

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 March 16, 2010. Present were:

- Floyd Bartlett – UDOGM
- Ed Bonner - SITLA
- Alex Hansen, Ben Williams – Division of Wildlife Resources (DWR)
- John Slaugh, Mitch Batty – 609 Consulting, LLC
- Clay Einerson, Charles Chase, Sheila Wopsock, Roger Perry, Grizz Oleen – 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.*

No 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 922-31P-3T, which is a producing well and the CIGE 97D, which is a plugged and abandoned well according to Utah Division of Oil, Gas and Mining (UDOGM) records.

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

Approximately 765' ( $\pm 0.1$  miles) of buried 6" pipeline is proposed from the edge of the pad to the meter house. Another approximately  $\pm 1,630'$  ( $\pm 0.3$  miles) of buried 8" pipeline will be upgraded from the tie in point to the edge of the pad. The pipeline will then tie into an existing 4" pipeline that will be upgraded and buried. 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 I  
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

March 31, 2010  
Date





1099 18<sup>th</sup> Street  
Denver, CO 80202  
303-296-3600 (main)  
303-296-3601 (fax)

ANNA C. CAVALERI  
(Direct) 720-929-6029  
(Direct Fax) 720-929-7029

March 31, 2010

Ms. 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 922-31O3AS  
T9S R22E  
Section 31: SESE (Surface) / SWSE (Bottom Hole)  
496' FSL, 965' FEL  
502' FSL, 2098' FEL  
Uintah County, Utah

Dear Ms. 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 922-31O3AS 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 'Cavaleri', written over a circular blue ink stamp.

Anna C. Cavaleri  
Landman

IPC #09-232

## **Paleontological Reconnaissance Survey Report**

---

# **Preliminary Paleontological Report**

**Block Section Survey of the SE Quarter of Section 31, Including  
Kerr McGee's Proposed "NBU #922-31P, M3CS, M4CS,  
M4AS, L4DS, & L1CS & NBU #922-31P3, O3AS,  
J3DS, & P4BS" (Sec. 31, T 9 S, R 22 E)**

Archy Bench  
Topographic Quadrangle  
Uintah County, Utah

February 25, 2010

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

API Number: 4304751044

Well Name: NBU 922-3103AS

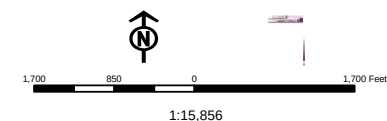
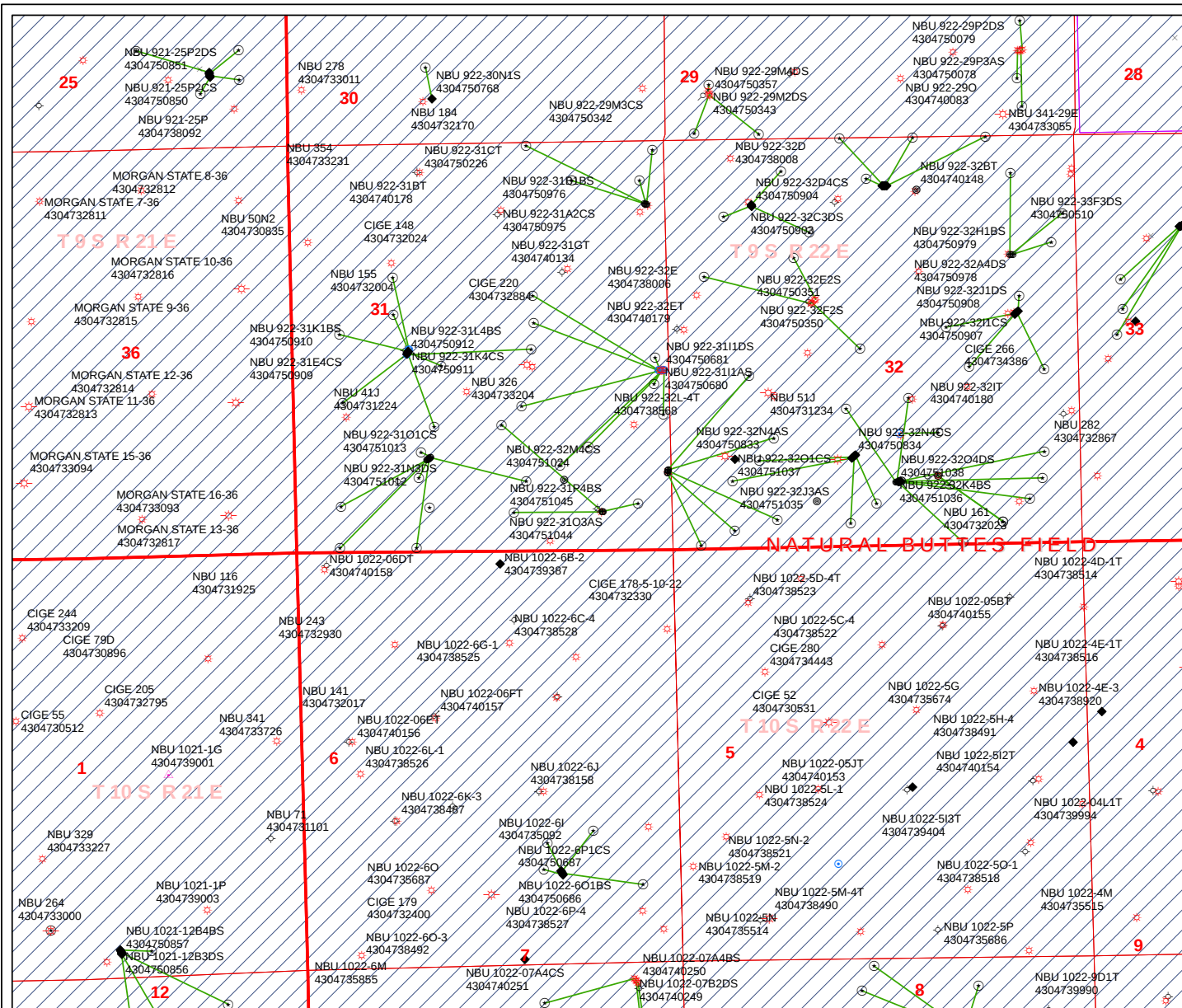
Township 09.0 S Range 22.0 E Section 31

Meridian: SLBM

Operator: KERR-MCGEE OIL &amp; GAS ONSHORE, L.P.

Map Prepared:

Map Produced by Diana Mason



# United States Department of the Interior

## BUREAU OF LAND MANAGEMENT

Utah State Office

P.O. Box 45155

Salt Lake City, Utah 84145-0155

IN REPLY REFER TO:

3160

(UT-922)

April 12, 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)

|              |                |                                    |
|--------------|----------------|------------------------------------|
| 43-047-51040 | NBU 920-22L4CS | Sec 22 T09S R20E 1222 FSL 2422 FWL |
|              | BHL            | Sec 22 T09S R20E 1534 FSL 0908 FWL |

|              |                |                                    |
|--------------|----------------|------------------------------------|
| 43-047-51041 | NBU 920-22M1BS | Sec 22 T09S R20E 1189 FSL 2399 FWL |
|              | BHL            | Sec 22 T09S R20E 1050 FSL 0900 FWL |

|              |                |                                    |
|--------------|----------------|------------------------------------|
| 43-047-51043 | NBU 922-31J3DS | Sec 31 T09S R22E 0500 FSL 0956 FEL |
|              | BHL            | Sec 31 T09S R22E 1635 FSL 2236 FEL |

|              |                |                                    |
|--------------|----------------|------------------------------------|
| 43-047-51044 | NBU 922-3103AS | Sec 31 T09S R22E 0496 FSL 0965 FEL |
|              | BHL            | Sec 31 T09S R22E 0502 FSL 2098 FEL |

|              |                |                                    |
|--------------|----------------|------------------------------------|
| 43-047-51045 | NBU 922-31P4BS | Sec 31 T09S R22E 0504 FSL 0946 FEL |
|              | BHL            | Sec 31 T09S R22E 0602 FSL 0497 FEL |

|              |                |                                    |
|--------------|----------------|------------------------------------|
| 43-047-51050 | NBU 920-23L1BS | Sec 23 T09S R20E 1494 FSL 0527 FWL |
|              | BHL            | Sec 23 T09S R20E 2320 FSL 0670 FWL |

|              |                |                                    |
|--------------|----------------|------------------------------------|
| 43-047-51051 | NBU 920-23L2DS | Sec 23 T09S R20E 1491 FSL 0517 FWL |
|              | BHL            | Sec 23 T09S R20E 2155 FSL 0335 FWL |

|              |                |                                    |
|--------------|----------------|------------------------------------|
| 43-047-51052 | NBU 920-23L4BS | Sec 23 T09S R20E 1497 FSL 0537 FWL |
|              | BHL            | Sec 23 T09S R20E 1660 FSL 0670 FWL |

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:4-12-10

|                                          |                                                              |       |  |  |
|------------------------------------------|--------------------------------------------------------------|-------|--|--|
| Well Name                                | KERR-MCGEE OIL & GAS ONSHORE, L.P. NBU 922-3103AS 4304751044 |       |  |  |
| String                                   | Surf                                                         | Prod  |  |  |
| Casing Size(in)                          | 8.625                                                        | 4.500 |  |  |
| Setting Depth (TVD)                      | 2130                                                         | 9321  |  |  |
| Previous Shoe Setting Depth (TVD)        | 40                                                           | 2130  |  |  |
| Max Mud Weight (ppg)                     | 8.3                                                          | 12.0  |  |  |
| BOPE Proposed (psi)                      | 500                                                          | 5000  |  |  |
| Casing Internal Yield (psi)              | 3390                                                         | 7780  |  |  |
| Operators Max Anticipated Pressure (psi) | 5686                                                         | 11.7  |  |  |

|                                               |                                                    |       |                                                         |
|-----------------------------------------------|----------------------------------------------------|-------|---------------------------------------------------------|
| Calculations                                  | Surf String                                        | 8.625 | "                                                       |
| Max BHP (psi)                                 | .052*Setting Depth*MW=                             | 923   |                                                         |
|                                               |                                                    |       | BOPE Adequate For Drilling And Setting Casing at Depth? |
| MASP (Gas) (psi)                              | Max BHP-(0.12*Setting Depth)=                      | 667   | NO air drill                                            |
| MASP (Gas/Mud) (psi)                          | Max BHP-(0.22*Setting Depth)=                      | 454   | YES OK                                                  |
|                                               |                                                    |       | *Can Full Expected Pressure Be Held At Previous Shoe?   |
| Pressure At Previous Shoe                     | Max BHP-.22*(Setting Depth - Previous Shoe Depth)= | 463   | NO Reasonable depth in area                             |
| Required Casing/BOPE Test Pressure=           |                                                    | 2130  | psi                                                     |
| *Max Pressure Allowed @ Previous Casing Shoe= |                                                    | 40    | psi *Assumes 1psi/ft frac gradient                      |

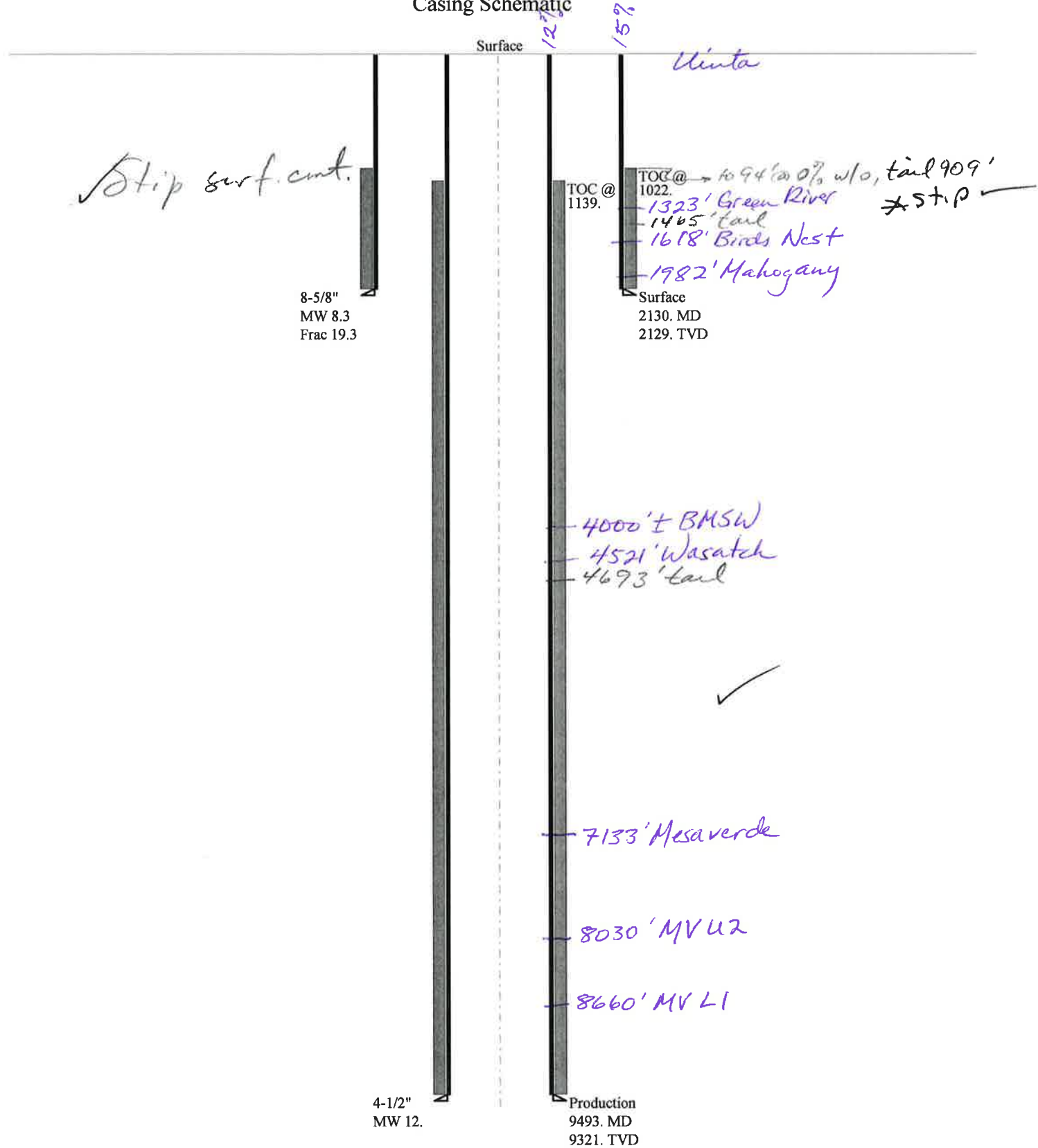
|                                               |                                                    |       |                                                         |
|-----------------------------------------------|----------------------------------------------------|-------|---------------------------------------------------------|
| Calculations                                  | Prod String                                        | 4.500 | "                                                       |
| Max BHP (psi)                                 | .052*Setting Depth*MW=                             | 5816  |                                                         |
|                                               |                                                    |       | BOPE Adequate For Drilling And Setting Casing at Depth? |
| MASP (Gas) (psi)                              | Max BHP-(0.12*Setting Depth)=                      | 4697  | YES                                                     |
| MASP (Gas/Mud) (psi)                          | Max BHP-(0.22*Setting Depth)=                      | 3765  | YES OK                                                  |
|                                               |                                                    |       | *Can Full Expected Pressure Be Held At Previous Shoe?   |
| Pressure At Previous Shoe                     | Max BHP-.22*(Setting Depth - Previous Shoe Depth)= | 4234  | NO Reasonable                                           |
| Required Casing/BOPE Test Pressure=           |                                                    | 5000  | psi                                                     |
| *Max Pressure Allowed @ Previous Casing Shoe= |                                                    | 2130  | psi *Assumes 1psi/ft frac gradient                      |

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

43047510440000 NBU 922-31O3AS

Casing Schematic



|              |                                               |               |                     |
|--------------|-----------------------------------------------|---------------|---------------------|
| Well name:   | <b>43047510440000 NBU 922-3103AS</b>          |               |                     |
| Operator:    | <b>KERR-MCGEE OIL &amp; GAS ONSHORE, L.P.</b> |               |                     |
| String type: | <b>Surface</b>                                | Project ID:   | <b>43-047-51044</b> |
| Location:    | <b>UINTAH</b>                                 | <b>COUNTY</b> |                     |

**Design parameters:****Collapse**

Mud weight: 8.330 ppg  
Design is based on evacuated pipe.

**Minimum design factors:****Collapse:**

Design factor 1.125

**Burst:**

Design factor 1.00

**Environment:**

H2S considered? No  
Surface temperature: 74 °F  
Bottom hole temperature: 104 °F  
Temperature gradient: 1.40 °F/100ft  
Minimum section length: 100 ft

Cement top: 1,022 ft

**Burst**

Max anticipated surface pressure: 1,874 psi  
Internal gradient: 0.120 psi/ft  
Calculated BHP 2,130 psi

No backup mud specified.

**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: 1,868 ft

**Directional Info - Build & Drop**

Kick-off point 300 ft  
Departure at shoe: 62 ft  
Maximum dogleg: 2 °/100ft  
Inclination at shoe: 2 °

**Re subsequent strings:**

Next setting depth: 9,321 ft  
Next mud weight: 12.000 ppg  
Next setting BHP: 5,810 psi  
Fracture mud wt: 19.250 ppg  
Fracture depth: 2,130 ft  
Injection pressure: 2,130 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       | 2130                | 8.625                   | 28.00                   | I-55             | LT&C                 | 2129                 | 2130                | 7.892                   | 84348                 |
| 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       | 921                 | 1880                    | 2.041                   | 2130             | 3390                 | 1.59                 | 59.6                | 348                     | 5.84 J                |

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

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

Date: April 29, 2010  
Salt Lake City, Utah

**Remarks:**

Collapse is based on a vertical depth of 2129 ft, a mud weight of 8.33 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.

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

*Engineering responsibility for use of this design will be that of the purchaser.*



|              |                                               |             |              |
|--------------|-----------------------------------------------|-------------|--------------|
| Well name:   | <b>43047510440000 NBU 922-3103AS</b>          |             |              |
| Operator:    | <b>KERR-MCGEE OIL &amp; GAS ONSHORE, L.P.</b> |             |              |
| String type: | Production                                    | Project ID: | 43-047-51044 |
| 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: 204 °F  
Temperature gradient: 1.40 °F/100ft  
Minimum section length: 100 ft

Cement top: 1,139 ft

**Burst**

Max anticipated surface pressure: 3,760 psi  
Internal gradient: 0.220 psi/ft  
Calculated BHP 5,810 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 300 ft  
Departure at shoe: 1132 ft  
Maximum dogleg: 3 °/100ft  
Inclination at shoe: 0 °

Tension is based on air weight.

Neutral point: 7,821 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       | 9493                | 4.5       | 11.60                   | I-80  | LT&C       | 9321                 | 9493                | 3.875               | 125308         |

| 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       | 5326                | 6360                    | 1.194                  | 5810             | 7780                 | 1.34                | 108.1               | 212                     | 1.96 J                |

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

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

Date: April 29, 2010  
Salt Lake City, Utah

**Remarks:**

Collapse is based on a vertical depth of 9321 ft, a mud weight of 12 ppg. An internal gradient of .052 psi/ft was used for collapse from TD to 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

*Engineering responsibility for use of this design will be that of the purchaser.*

**From:** Jim Davis  
**To:** Bonner, Ed; Hill, Brad; Mason, Diana  
**CC:** Danielle Piernot; Garrison, LaVonne; kathy.schneebeckdulnoan@anadarko.com  
**Date:** 5/17/2010 8:00 AM  
**Subject:** Kerr McGee APD approvals

The following APDs have been approved by SITLA including arch and paleo clearance. As a condition of this approval, spot monitoring of construction must be conducted by a permitted paleontologist, as recommended in the paleo report IPC 09-232.

Kerr-McGee's NBU 922-31J3DS [API #4304751043]

Kerr-McGee's NBU 922-31O3AS [API #4304751044]

Kerr-McGee's NBU 922-31P4BS [API #4304751045]

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**

|                          |                                    |               |                      |                   |                |
|--------------------------|------------------------------------|---------------|----------------------|-------------------|----------------|
| <b>Operator</b>          | KERR-MCGEE OIL & GAS ONSHORE, L.P. |               |                      |                   |                |
| <b>Well Name</b>         | NBU 922-31O3AS                     |               |                      |                   |                |
| <b>API Number</b>        | 43047510440000                     | <b>APD No</b> | 2534                 | <b>Field/Unit</b> | NATURAL BUTTES |
| <b>Location: 1/4,1/4</b> | SESE                               | <b>Sec</b>    | 31                   | <b>Tw</b>         | 9.0S           |
|                          |                                    | <b>Rng</b>    | 22.0E                | 496               | FSL 965 FEL    |
| <b>GPS Coord (UTM)</b>   | 630117                             | 4427181       | <b>Surface Owner</b> |                   |                |

**Participants**

Floyd Bartlett (DOGM), Clay Einerson, Grizz Oleen, Charles Chase, Roger Perry and Shelia Wopsock (Kerr McGee), Alex Hansen and Ben Williams (UDWR) and Mitch Batty and John Slaugh, (Timberline Engineering and Land Surveying).

**Regional/Local Setting & Topography**

The general area is the Natural Buttes Unit in a major un-named drainage east of the lower portion of the Sand Wash drainage of Uintah, County, approximately 32 air miles and 56.3 road miles south of Vernal, Utah. Access is by State of Utah Highways, Uintah County and existing oilfield development roads. Topography of the general area is characterized by open flats bordered or dissected by numerous sub-drainages, which often become steep with ridges and draws with exposed sandstone layers. No perennial streams occur in the area. Individual draws or washes are ephemeral with spring runoff or flows from sometimes-intense summer rainstorms. Also, no springs exist in the area. An occasional constructed pond occurs furnishing water for antelope or livestock.

The existing pad of the producing NBU 922-31P-3T gas well will be enlarged to add three wells that will be directionally drilled. They are the NBU 922-31O3AS, NBU 922-31J3DS and NBU 922-31P4BS. Kerr McGee representatives at the pre-site did not know the future of the existing well but expect it will be temporarily abandoned. The site is in broken and uneven topography. The existing pad will be slightly enlarged in all directions except to the south. Material for this fill will come from light cutting of the terrain near the pad as well as lowering the surface of the existing pad 0.6 feet. No drainages intersect the area and no diversions are needed. The White River is approximately 1 1/2 mile down drainage. The selected site appears to be a good site for drilling and operating the additional 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                     | <b>Width</b> 315 <b>Length</b> 450 | Onsite                    | UNTA                     |

**Ancillary Facilities** N

**Waste Management Plan Adequate?****Environmental Parameters**

**Affected Floodplains and/or Wetlands** Y

**Flora / Fauna**

Vegetation is a salt desert shrub type. Principal species present are cheatgrass, prickly pear, wild onion, shadscale, halogeton, pepper grass, annuals and curly mesquite grass.

Cattle, antelope and small mammals and birds.

**Soil Type and Characteristics**

Surface soils are a shallow rocky loam.

**Erosion Issues** N

**Sedimentation Issues** N

**Site Stability Issues** N

**Drainage Diversion 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 will be on the southeast corner of the location. Kerr McGee plans to use a 30-mil liner and a double layer of felt for cushion. Dimensions are 100' x 200' x 12' deep with 2' of freeboard.

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

**Other Observations / Comments**

Floyd Bartlett  
Evaluator

3/16/2010  
Date / Time



# Application for Permit to Drill

## Statement of Basis

5/17/2010

### 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> |
| 2534             | 43047510440000                                                    | SITLA         | GW                       | S                 | No         |
| <b>Operator</b>  | KERR-MCGEE OIL & GAS ONSHORE, L.P.                                |               | <b>Surface Owner-APD</b> |                   |            |
| <b>Well Name</b> | NBU 922-31O3AS                                                    |               | <b>Unit</b>              | NATURAL BUTTES    |            |
| <b>Field</b>     | NATURAL BUTTES                                                    |               | <b>Type of Work</b>      | DRILL             |            |
| <b>Location</b>  | SESE 31 9S 22E S 496 FSL 965 FEL GPS Coord (UTM) 630127E 4427179N |               |                          |                   |            |

#### Geologic Statement of Basis

Kerr McGee proposes to set 2,130' 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 4,000'. A search of Division of Water Rights records shows no water wells within a 10,000 foot radius of the center of section 31. 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 to above the base of the moderately saline groundwater in order to isolate it from fresher waters uphole.

Brad Hill  
**APD Evaluator**

4/22/2010  
**Date / Time**

#### Surface Statement of Basis

The general area is the Natural Buttes Unit in a major un-named drainage east of the lower portion of the Sand Wash drainage of Uintah, County, approximately 32 air miles and 56.3 road miles south of Vernal, Utah. Access is by State of Utah Highways, Uintah County and existing oilfield development roads. Topography of the general area is characterized by open flats bordered or dissected by numerous sub-drainages, which often become steep with ridges and draws with exposed sandstone layers. No perennial streams occur in the area. Individual draws or washes are ephemeral with spring runoff or flows from sometimes-intense summer rainstorms. Also, no springs exist in the area. An occasional constructed pond occurs furnishing water for antelope or livestock.

The existing pad of the producing NBU 922-31P-3T gas well will be enlarged to add three wells that will be directionally drilled. They are the NBU 922-31O3AS, NBU 922-31J3DS and NBU 922-31P4BS. Kerr McGee representatives at the pre-site did not know the future of the existing well but expect it will be temporarily abandoned. The site is in broken and uneven topography. The existing pad will be slightly enlarged in all directions except to the south. Material for this fill will come from light cutting of the terrain near the pad as well as lowering the surface of the existing pad 0.6 feet. No drainages intersect the area and no diversions are needed. The White River is approximately 1 1/2 mile down drainage. The selected site appears to be a good site for drilling and operating the additional wells.

Both the surface and minerals are owned by SITLA. Ed Bonner and Jim Davis of SITLA were invited by phone and email to the pre-site evaluation. Mr. Bonner attended and had no concerns regarding the proposal except as discussed above. Mr. Charles Chase of the Kerr McGee will provide a site restoration plan to SITLA for their concurrence.

Alex Hansen of the Utah Division of Wildlife Resources also attended. He stated that the area was yearlong antelope habitat but recommended no stipulations. No other wildlife is expected to be significantly affected.

Floyd Bartlett  
**Onsite Evaluator**

3/16/2010  
**Date / Time**

---

# Application for Permit to Drill Statement of Basis

5/17/2010

Utah Division of Oil, Gas and Mining

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Page 2

## Conditions of Approval / Application for Permit to Drill

| Category | Condition                                                                                                                                        |
|----------|--------------------------------------------------------------------------------------------------------------------------------------------------|
| 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:** 3/31/2010

**API NO. ASSIGNED:** 43047510440000

**WELL NAME:** NBU 922-31O3AS

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

**PHONE NUMBER:** 720 929-6156

**CONTACT:** Danielle Piernot

**PROPOSED LOCATION:** SESE 31 090S 220E

**Permit Tech Review:** ☒

**SURFACE:** 0496 FSL 0965 FEL

**Engineering Review:** ☒

**BOTTOM:** 0502 FSL 2098 FEL

**Geology Review:** ☒

**COUNTY:** UINTAH

**LATITUDE:** 39.98666

**LONGITUDE:** -109.47591

**UTM SURF EASTINGS:** 630127.00

**NORTHINGS:** 4427179.00

**FIELD NAME:** NATURAL BUTTES

**LEASE TYPE:** 3 - State

**LEASE NUMBER:** UO 1207A ST

**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 Bdry & Uncommitted Tracts

☒ **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 - hmadonald



# 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 922-31O3AS  
**API Well Number:** 43047510440000  
**Lease Number:** UO 1207A ST  
**Surface Owner:** STATE  
**Approval Date:** 5/18/2010

### 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):

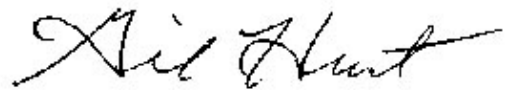
- Carol Daniels 801-538-5284 - office
- Dustin Doucet 801-538-5281 - office  
801-733-0983 - after office hours
- Dan Jarvis 801-538-5338 - office  
801-231-8956 - after office hours

**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



## BLM - Vernal Field Office - Notification Form

Operator KERR-McGEE OIL & GAS Rig Name/# BUCKET RIG  
Submitted By ANDY LYTLE Phone Number 720.929.6100  
Well Name/Number NBU 922-31O3AS  
Qtr/Qtr SESE Section 31 Township 9S Range 22E  
Lease Serial Number UO 1207A ST  
API Number 43047510444

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

Date/Time 10/02/2010 13:00 HRS AM ☐ PM ☐

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

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

DIV. OF OIL, GAS & MINING

Date/Time 10/18/2010 14:00 HRS AM ☐ PM ☐

BOPE

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

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SEP 30 2010

DIV. OF OIL, GAS & MINING

Date/Time \_\_\_\_\_ AM ☐ PM ☐

Remarks ESTIMATED DATE AND TIME. PLEASE CONTACT KENNY GATHINGS AT

435.781.7048 OR LOVEL YOUNG AT 435.828.0986

|                                                                                                                                                                                                                                                                                                                               |                                                                                                                                          |                                                               |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------|
| <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>UO 1207A ST |
| <b>1. TYPE OF WELL</b><br>Gas Well                                                                                                                                                                                                                                                                                            |                                                                                                                                          | <b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b>                  |
| <b>2. NAME OF OPERATOR:</b><br>KERR-MCGEE OIL & GAS ONSHORE, L.P.                                                                                                                                                                                                                                                             |                                                                                                                                          | <b>7. UNIT or CA AGREEMENT NAME:</b><br>NATURAL BUTTES        |
| <b>3. ADDRESS OF OPERATOR:</b><br>P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779                                                                                                                                                                                                                         |                                                                                                                                          | <b>8. WELL NAME and NUMBER:</b><br>NBU 922-3103AS             |
| <b>4. LOCATION OF WELL</b><br><b>FOOTAGES AT SURFACE:</b><br>0496 FSL 0965 FEL<br><b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b><br>Qtr/Qtr: SESE Section: 31 Township: 09.0S Range: 22.0E Meridian: S                                                                                                                   |                                                                                                                                          | <b>9. API NUMBER:</b><br>43047510440000                       |
| <b>PHONE NUMBER:</b><br>720 929-6007 Ext                                                                                                                                                                                                                                                                                      |                                                                                                                                          | <b>9. FIELD and POOL or WILDCAT:</b><br>NATURAL BUTTES        |
| <b>COUNTY:</b><br>UTAH                                                                                                                                                                                                                                                                                                        |                                                                                                                                          | <b>STATE:</b><br>UTAH                                         |
| <b>11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA</b>                                                                                                                                                                                                                                        |                                                                                                                                          |                                                               |
| <b>TYPE OF SUBMISSION</b>                                                                                                                                                                                                                                                                                                     | <b>TYPE OF ACTION</b>                                                                                                                    |                                                               |
| <input type="checkbox"/> <b>NOTICE OF INTENT</b><br>Approximate date work will start:                                                                                                                                                                                                                                         | <input type="checkbox"/> <b>ACIDIZE</b>                                                                                                  |                                                               |
| <input type="checkbox"/> <b>SUBSEQUENT REPORT</b><br>Date of Work Completion:                                                                                                                                                                                                                                                 | <input type="checkbox"/> <b>ALTER CASING</b>                                                                                             |                                                               |
| <input checked="" type="checkbox"/> <b>SPUD REPORT</b><br>Date of Spud:<br>10/3/2010                                                                                                                                                                                                                                          | <input type="checkbox"/> <b>CASING REPAIR</b>                                                                                            |                                                               |
| <input type="checkbox"/> <b>DRILLING REPORT</b><br>Report Date:                                                                                                                                                                                                                                                               | <input type="checkbox"/> <b>CHANGE TO PREVIOUS PLANS</b>                                                                                 |                                                               |
|                                                                                                                                                                                                                                                                                                                               | <input type="checkbox"/> <b>CHANGE WELL STATUS</b>                                                                                       |                                                               |
|                                                                                                                                                                                                                                                                                                                               | <input type="checkbox"/> <b>CHANGE TUBING</b>                                                                                            |                                                               |
|                                                                                                                                                                                                                                                                                                                               | <input type="checkbox"/> <b>COMMINGLE PRODUCING FORMATIONS</b>                                                                           |                                                               |
|                                                                                                                                                                                                                                                                                                                               | <input type="checkbox"/> <b>DEEPEN</b>                                                                                                   |                                                               |
|                                                                                                                                                                                                                                                                                                                               | <input type="checkbox"/> <b>FRACTURE TREAT</b>                                                                                           |                                                               |
|                                                                                                                                                                                                                                                                                                                               | <input type="checkbox"/> <b>NEW CONSTRUCTION</b>                                                                                         |                                                               |
|                                                                                                                                                                                                                                                                                                                               | <input type="checkbox"/> <b>OPERATOR CHANGE</b>                                                                                          |                                                               |
|                                                                                                                                                                                                                                                                                                                               | <input type="checkbox"/> <b>PLUG AND ABANDON</b>                                                                                         |                                                               |
|                                                                                                                                                                                                                                                                                                                               | <input type="checkbox"/> <b>PLUG BACK</b>                                                                                                |                                                               |
|                                                                                                                                                                                                                                                                                                                               | <input type="checkbox"/> <b>PRODUCTION START OR RESUME</b>                                                                               |                                                               |
|                                                                                                                                                                                                                                                                                                                               | <input type="checkbox"/> <b>RECLAMATION OF WELL SITE</b>                                                                                 |                                                               |
|                                                                                                                                                                                                                                                                                                                               | <input type="checkbox"/> <b>RECOMPLETE DIFFERENT FORMATION</b>                                                                           |                                                               |
|                                                                                                                                                                                                                                                                                                                               | <input type="checkbox"/> <b>REPERFORATE CURRENT FORMATION</b>                                                                            |                                                               |
|                                                                                                                                                                                                                                                                                                                               | <input type="checkbox"/> <b>SIDETRACK TO REPAIR WELL</b>                                                                                 |                                                               |
|                                                                                                                                                                                                                                                                                                                               | <input type="checkbox"/> <b>TEMPORARY ABANDON</b>                                                                                        |                                                               |
|                                                                                                                                                                                                                                                                                                                               | <input type="checkbox"/> <b>TUBING REPAIR</b>                                                                                            |                                                               |
|                                                                                                                                                                                                                                                                                                                               | <input type="checkbox"/> <b>VENT OR FLARE</b>                                                                                            |                                                               |
|                                                                                                                                                                                                                                                                                                                               | <input type="checkbox"/> <b>WATER DISPOSAL</b>                                                                                           |                                                               |
|                                                                                                                                                                                                                                                                                                                               | <input type="checkbox"/> <b>WATER SHUTOFF</b>                                                                                            |                                                               |
|                                                                                                                                                                                                                                                                                                                               | <input type="checkbox"/> <b>SI TA STATUS EXTENSION</b>                                                                                   |                                                               |
|                                                                                                                                                                                                                                                                                                                               | <input type="checkbox"/> <b>WILDCAT WELL DETERMINATION</b>                                                                               |                                                               |
|                                                                                                                                                                                                                                                                                                                               | <input type="checkbox"/> <b>OTHER:</b> <span style="border: 1px solid black; display: inline-block; width: 100px; height: 15px;"></span> |                                                               |
| <b>12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.</b><br>MIRU PETE MARTIN BUCKET RIG. DRILLED 20" CONDUCTOR HOLE TO 40'.<br>RAN 14" 36.7# SCHEDULE 10 CONDUCTOR PIPE. CMT W/ 28 SX READY MIX<br>SPUD WELL LOCATION ON OCTOBER 3, 2010 AT 14:00 HRS. |                                                                                                                                          |                                                               |
| <b>Accepted by the</b><br><b>Utah Division of</b><br><b>Oil, Gas and Mining</b><br><b>FOR RECORD ONLY</b><br>October 06, 2010                                                                                                                                                                                                 |                                                                                                                                          |                                                               |
| <b>NAME (PLEASE PRINT)</b><br>Gina Becker                                                                                                                                                                                                                                                                                     | <b>PHONE NUMBER</b><br>720 929-6086                                                                                                      | <b>TITLE</b><br>Regulatory Analyst II                         |
| <b>SIGNATURE</b><br>N/A                                                                                                                                                                                                                                                                                                       | <b>DATE</b><br>10/4/2010                                                                                                                 |                                                               |

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

FORM 6

**ENTITY ACTION FORM**

Operator: KERR McGEE OIL & GAS ONSHORE LP  
Address: P.O. Box 173779  
city DENVER  
state CO zip 80217

Operator Account Number: N 2995

Phone Number: (720) 929-6100

**Well 1**

| API Number                                                                                                                    | Well Name             |                   | QQ        | Sec | Twp                              | Rng | County |
|-------------------------------------------------------------------------------------------------------------------------------|-----------------------|-------------------|-----------|-----|----------------------------------|-----|--------|
| 4304751043                                                                                                                    | NBU 922-31J3DS        |                   | SESE      | 31  | 9S                               | 22E | UINTAH |
| Action Code                                                                                                                   | Current Entity Number | New Entity Number | Spud Date |     | Entity Assignment Effective Date |     |        |
| <u>B</u>                                                                                                                      | 99999                 | <u>2900</u>       | 10/3/2010 |     | <u>10/11/10</u>                  |     |        |
| <b>Comments:</b> MIRU PETE MARTIN BUCKET RIG. <u>WSMVD</u><br>SPUD WELL LOCATION ON 10/3/2010 AT 10:00 HRS. <u>BHL = NWSE</u> |                       |                   |           |     |                                  |     |        |

**Well 2**

| API Number                                                                                                                    | Well Name             |                   | QQ        | Sec | Twp                              | Rng | County |
|-------------------------------------------------------------------------------------------------------------------------------|-----------------------|-------------------|-----------|-----|----------------------------------|-----|--------|
| 4304751045                                                                                                                    | NBU 922-31P4BS        |                   | SESE      | 31  | 9S                               | 22E | UINTAH |
| Action Code                                                                                                                   | Current Entity Number | New Entity Number | Spud Date |     | Entity Assignment Effective Date |     |        |
| <u>B</u>                                                                                                                      | 99999                 | <u>2900</u>       | 10/3/2010 |     | <u>10/11/10</u>                  |     |        |
| <b>Comments:</b> MIRU PETE MARTIN BUCKET RIG. <u>WSMVD</u><br>SPUD WELL LOCATION ON 10/3/2010 AT 12:00 HRS. <u>BHL = SESE</u> |                       |                   |           |     |                                  |     |        |

**Well 3**

| API Number                                                                                                                    | Well Name             |                   | QQ        | Sec | Twp                              | Rng | County |
|-------------------------------------------------------------------------------------------------------------------------------|-----------------------|-------------------|-----------|-----|----------------------------------|-----|--------|
| 4304751044                                                                                                                    | NBU 922-31O3AS        |                   | SESE      | 31  | 9S                               | 22E | UINTAH |
| Action Code                                                                                                                   | Current Entity Number | New Entity Number | Spud Date |     | Entity Assignment Effective Date |     |        |
| <u>B</u>                                                                                                                      | 99999                 | <u>2900</u>       | 10/3/2010 |     | <u>10/11/10</u>                  |     |        |
| <b>Comments:</b> MIRU PETE MARTIN BUCKET RIG. <u>WSMVD</u><br>SPUD WELL LOCATION ON 10/3/2010 AT 14:00 HRS. <u>BHL = SWSE</u> |                       |                   |           |     |                                  |     |        |

**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)

GINA BECKER

Name (Please Print)

Signature

REGULATORY ANALYST

10/4/2010

Title

Date

**RECEIVED**

OCT 05 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>UO 1207A ST |
| <b>1. TYPE OF WELL</b><br>Gas Well                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                   | <b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b>                  |
| <b>2. NAME OF OPERATOR:</b><br>KERR-MCGEE OIL & GAS ONSHORE, L.P.                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                   | <b>7. UNIT or CA AGREEMENT NAME:</b><br>NATURAL BUTTES        |
| <b>3. ADDRESS OF OPERATOR:</b><br>P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779                                                                                                                                                                                                                                                                                                                                                         |                                                                                   | <b>8. WELL NAME and NUMBER:</b><br>NBU 922-3103AS             |
| <b>PHONE NUMBER:</b><br>720 929-6007 Ext                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                   | <b>9. API NUMBER:</b><br>43047510440000                       |
| <b>4. LOCATION OF WELL</b><br><b>FOOTAGES AT SURFACE:</b><br>0496 FSL 0965 FEL<br><b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b><br>Qtr/Qtr: SESE Section: 31 Township: 09.0S Range: 22.0E Meridian: S                                                                                                                                                                                                                                                   |                                                                                   | <b>9. FIELD and POOL or WILDCAT:</b><br>NATURAL BUTTES        |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                   | <b>COUNTY:</b><br>UTAH                                        |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                   | <b>STATE:</b><br>UTAH                                         |
| <b>11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA</b>                                                                                                                                                                                                                                                                                                                                                                        |                                                                                   |                                                               |
| <b>TYPE OF SUBMISSION</b>                                                                                                                                                                                                                                                                                                                                                                                                                                     | <b>TYPE OF ACTION</b>                                                             |                                                               |
| <input type="checkbox"/> <b>NOTICE OF INTENT</b><br>Approximate date work will start:                                                                                                                                                                                                                                                                                                                                                                         | <input type="checkbox"/> <b>ACIDIZE</b>                                           |                                                               |
| <input type="checkbox"/> <b>SUBSEQUENT REPORT</b><br>Date of Work Completion:                                                                                                                                                                                                                                                                                                                                                                                 | <input type="checkbox"/> <b>ALTER CASING</b>                                      |                                                               |
| <input type="checkbox"/> <b>SPUD REPORT</b><br>Date of Spud:                                                                                                                                                                                                                                                                                                                                                                                                  | <input type="checkbox"/> <b>CASING REPAIR</b>                                     |                                                               |
| <input checked="" type="checkbox"/> <b>DRILLING REPORT</b><br>Report Date:<br>10/28/2010                                                                                                                                                                                                                                                                                                                                                                      | <input type="checkbox"/> <b>CHANGE TO PREVIOUS PLANS</b>                          |                                                               |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                               | <input type="checkbox"/> <b>CHANGE TUBING</b>                                     |                                                               |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                               | <input type="checkbox"/> <b>CHANGE WELL STATUS</b>                                |                                                               |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                               | <input type="checkbox"/> <b>COMMINGLE PRODUCING FORMATIONS</b>                    |                                                               |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                               | <input type="checkbox"/> <b>DEEPEN</b>                                            |                                                               |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                               | <input type="checkbox"/> <b>FRACTURE TREAT</b>                                    |                                                               |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                               | <input type="checkbox"/> <b>OPERATOR CHANGE</b>                                   |                                                               |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                               | <input type="checkbox"/> <b>PLUG AND ABANDON</b>                                  |                                                               |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                               | <input type="checkbox"/> <b>PRODUCTION START OR RESUME</b>                        |                                                               |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                               | <input type="checkbox"/> <b>RECLAMATION OF WELL SITE</b>                          |                                                               |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                               | <input type="checkbox"/> <b>REPERFORATE CURRENT FORMATION</b>                     |                                                               |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                               | <input type="checkbox"/> <b>SIDETRACK TO REPAIR WELL</b>                          |                                                               |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                               | <input type="checkbox"/> <b>TUBING REPAIR</b>                                     |                                                               |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                               | <input type="checkbox"/> <b>VENT OR FLARE</b>                                     |                                                               |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                               | <input type="checkbox"/> <b>WATER SHUTOFF</b>                                     |                                                               |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                               | <input type="checkbox"/> <b>SI TA STATUS EXTENSION</b>                            |                                                               |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                               | <input type="checkbox"/> <b>WILDCAT WELL DETERMINATION</b>                        |                                                               |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                               | <input type="checkbox"/> <b>OTHER:</b> <input style="width: 100px;" type="text"/> |                                                               |
| <b>12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.</b>                                                                                                                                                                                                                                                                                                                               |                                                                                   |                                                               |
| MIRU PROPETRO AIR RIG ON OCTOBER 26, 2010. DRILLED 11" SURFACE HOLE TO 2470'. RAN 8 5/8" 28# IJ-55 SURFACE CSG. PUMP 20 BBLS FRESH WATER. PUMP 20 BBLS GEL WATER. PUMP 225 SX CLASS G PREM @ 15.8 PPG, 1.15 YD. NO CIRC. DROP PLUG ON THE FLY, DISPLACED W/ 141.75 BBLS WATER. NO RETURNS. LIFT PRESSURE 100 PSI, BUMP PLUG & HOLD 700 PSI FOR 5 MIN. FLOAT HELD. EST. TOC OF TAIL @ 1490'. TOP OUT #1 W/ 225 SX SAME CEMENT. CEMENT STAYED AT SURFACE. WORT. |                                                                                   |                                                               |
| <div style="text-align: right;"> <b>Accepted by the</b><br/> <b>Utah Division of</b><br/> <b>Oil, Gas and Mining</b><br/> <b>FOR RECORD ONLY</b><br/>         November 01, 2010       </div>                                                                                                                                                                                                                                                                  |                                                                                   |                                                               |
| <b>NAME (PLEASE PRINT)</b><br>Gina Becker                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                   | <b>PHONE NUMBER</b><br>720 929-6086                           |
| <b>SIGNATURE</b><br>N/A                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                   | <b>TITLE</b><br>Regulatory Analyst II                         |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                   | <b>DATE</b><br>10/29/2010                                     |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                               |                                  |                                       |                                        |                                                   |                                        |                                           |                                             |                                                         |                                            |                                 |                                         |                                           |                                          |                                           |                                    |                                                     |                                                   |                                                         |                                                        |                                                   |                                            |                                        |                                        |                                         |                                        |                                                 |                                        |                                                     |                                |                                                   |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------|----------------------------------|---------------------------------------|----------------------------------------|---------------------------------------------------|----------------------------------------|-------------------------------------------|---------------------------------------------|---------------------------------------------------------|--------------------------------------------|---------------------------------|-----------------------------------------|-------------------------------------------|------------------------------------------|-------------------------------------------|------------------------------------|-----------------------------------------------------|---------------------------------------------------|---------------------------------------------------------|--------------------------------------------------------|---------------------------------------------------|--------------------------------------------|----------------------------------------|----------------------------------------|-----------------------------------------|----------------------------------------|-------------------------------------------------|----------------------------------------|-----------------------------------------------------|--------------------------------|---------------------------------------------------|
| <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>UO 1207A ST |                                  |                                       |                                        |                                                   |                                        |                                           |                                             |                                                         |                                            |                                 |                                         |                                           |                                          |                                           |                                    |                                                     |                                                   |                                                         |                                                        |                                                   |                                            |                                        |                                        |                                         |                                        |                                                 |                                        |                                                     |                                |                                                   |
| <b>1. TYPE OF WELL</b><br>Gas Well                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | <b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b>                  |                                  |                                       |                                        |                                                   |                                        |                                           |                                             |                                                         |                                            |                                 |                                         |                                           |                                          |                                           |                                    |                                                     |                                                   |                                                         |                                                        |                                                   |                                            |                                        |                                        |                                         |                                        |                                                 |                                        |                                                     |                                |                                                   |
| <b>2. NAME OF OPERATOR:</b><br>KERR-MCGEE OIL & GAS ONSHORE, L.P.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | <b>7. UNIT or CA AGREEMENT NAME:</b><br>NATURAL BUTTES        |                                  |                                       |                                        |                                                   |                                        |                                           |                                             |                                                         |                                            |                                 |                                         |                                           |                                          |                                           |                                    |                                                     |                                                   |                                                         |                                                        |                                                   |                                            |                                        |                                        |                                         |                                        |                                                 |                                        |                                                     |                                |                                                   |
| <b>3. ADDRESS OF OPERATOR:</b><br>P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | <b>8. WELL NAME and NUMBER:</b><br>NBU 922-3103AS             |                                  |                                       |                                        |                                                   |                                        |                                           |                                             |                                                         |                                            |                                 |                                         |                                           |                                          |                                           |                                    |                                                     |                                                   |                                                         |                                                        |                                                   |                                            |                                        |                                        |                                         |                                        |                                                 |                                        |                                                     |                                |                                                   |
| <b>4. LOCATION OF WELL</b><br><b>FOOTAGES AT SURFACE:</b><br>0496 FSL 0965 FEL<br><b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b><br>Qtr/Qtr: SESE Section: 31 Township: 09.0S Range: 22.0E Meridian: S                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | <b>9. API NUMBER:</b><br>43047510440000                       |                                  |                                       |                                        |                                                   |                                        |                                           |                                             |                                                         |                                            |                                 |                                         |                                           |                                          |                                           |                                    |                                                     |                                                   |                                                         |                                                        |                                                   |                                            |                                        |                                        |                                         |                                        |                                                 |                                        |                                                     |                                |                                                   |
| <b>PHONE NUMBER:</b><br>720 929-6007 Ext                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | <b>9. FIELD and POOL or WILDCAT:</b><br>NATURAL BUTTES        |                                  |                                       |                                        |                                                   |                                        |                                           |                                             |                                                         |                                            |                                 |                                         |                                           |                                          |                                           |                                    |                                                     |                                                   |                                                         |                                                        |                                                   |                                            |                                        |                                        |                                         |                                        |                                                 |                                        |                                                     |                                |                                                   |
| <b>COUNTY:</b><br>UINTAH                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | <b>STATE:</b><br>UTAH                                         |                                  |                                       |                                        |                                                   |                                        |                                           |                                             |                                                         |                                            |                                 |                                         |                                           |                                          |                                           |                                    |                                                     |                                                   |                                                         |                                                        |                                                   |                                            |                                        |                                        |                                         |                                        |                                                 |                                        |                                                     |                                |                                                   |
| <b>11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                               |                                  |                                       |                                        |                                                   |                                        |                                           |                                             |                                                         |                                            |                                 |                                         |                                           |                                          |                                           |                                    |                                                     |                                                   |                                                         |                                                        |                                                   |                                            |                                        |                                        |                                         |                                        |                                                 |                                        |                                                     |                                |                                                   |
| <b>TYPE OF SUBMISSION</b><br><br><input type="checkbox"/> <b>NOTICE OF INTENT</b><br>Approximate date work will start:<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 checked="" type="checkbox"/> <b>DRILLING REPORT</b><br>Report Date:<br>12/7/2010                                                                                                                                                                                                                | <b>TYPE OF ACTION</b><br><br><table style="width: 100%; border: none;"> <tr> <td><input type="checkbox"/> ACIDIZE</td> <td><input type="checkbox"/> ALTER CASING</td> <td><input type="checkbox"/> CASING REPAIR</td> </tr> <tr> <td><input type="checkbox"/> CHANGE TO PREVIOUS PLANS</td> <td><input type="checkbox"/> CHANGE TUBING</td> <td><input type="checkbox"/> CHANGE WELL NAME</td> </tr> <tr> <td><input type="checkbox"/> CHANGE WELL STATUS</td> <td><input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS</td> <td><input type="checkbox"/> CONVERT WELL TYPE</td> </tr> <tr> <td><input type="checkbox"/> DEEPEN</td> <td><input type="checkbox"/> FRACTURE TREAT</td> <td><input type="checkbox"/> NEW CONSTRUCTION</td> </tr> <tr> <td><input type="checkbox"/> OPERATOR CHANGE</td> <td><input type="checkbox"/> PLUG AND ABANDON</td> <td><input type="checkbox"/> PLUG BACK</td> </tr> <tr> <td><input type="checkbox"/> PRODUCTION START OR RESUME</td> <td><input type="checkbox"/> RECLAMATION OF WELL SITE</td> <td><input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION</td> </tr> <tr> <td><input type="checkbox"/> REPERFORATE CURRENT FORMATION</td> <td><input type="checkbox"/> SIDETRACK TO REPAIR WELL</td> <td><input type="checkbox"/> TEMPORARY ABANDON</td> </tr> <tr> <td><input type="checkbox"/> TUBING REPAIR</td> <td><input type="checkbox"/> VENT OR FLARE</td> <td><input type="checkbox"/> WATER DISPOSAL</td> </tr> <tr> <td><input type="checkbox"/> WATER SHUTOFF</td> <td><input type="checkbox"/> SI TA STATUS EXTENSION</td> <td><input type="checkbox"/> APD EXTENSION</td> </tr> <tr> <td><input type="checkbox"/> WILDCAT WELL DETERMINATION</td> <td><input type="checkbox"/> OTHER</td> <td>OTHER: <input style="width: 100px;" type="text"/></td> </tr> </table> |                                                               | <input type="checkbox"/> ACIDIZE | <input type="checkbox"/> ALTER CASING | <input type="checkbox"/> CASING REPAIR | <input type="checkbox"/> CHANGE TO PREVIOUS PLANS | <input type="checkbox"/> CHANGE TUBING | <input type="checkbox"/> CHANGE WELL NAME | <input type="checkbox"/> CHANGE WELL STATUS | <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS | <input type="checkbox"/> CONVERT WELL TYPE | <input type="checkbox"/> DEEPEN | <input type="checkbox"/> FRACTURE TREAT | <input type="checkbox"/> NEW CONSTRUCTION | <input type="checkbox"/> OPERATOR CHANGE | <input type="checkbox"/> PLUG AND ABANDON | <input type="checkbox"/> PLUG BACK | <input type="checkbox"/> PRODUCTION START OR RESUME | <input type="checkbox"/> RECLAMATION OF WELL SITE | <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION | <input type="checkbox"/> REPERFORATE CURRENT FORMATION | <input type="checkbox"/> SIDETRACK TO REPAIR WELL | <input type="checkbox"/> TEMPORARY ABANDON | <input type="checkbox"/> TUBING REPAIR | <input type="checkbox"/> VENT OR FLARE | <input type="checkbox"/> WATER DISPOSAL | <input type="checkbox"/> WATER SHUTOFF | <input type="checkbox"/> SI TA STATUS EXTENSION | <input type="checkbox"/> APD EXTENSION | <input type="checkbox"/> WILDCAT WELL DETERMINATION | <input type="checkbox"/> OTHER | OTHER: <input style="width: 100px;" type="text"/> |
| <input type="checkbox"/> ACIDIZE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | <input type="checkbox"/> ALTER CASING                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | <input type="checkbox"/> CASING REPAIR                        |                                  |                                       |                                        |                                                   |                                        |                                           |                                             |                                                         |                                            |                                 |                                         |                                           |                                          |                                           |                                    |                                                     |                                                   |                                                         |                                                        |                                                   |                                            |                                        |                                        |                                         |                                        |                                                 |                                        |                                                     |                                |                                                   |
| <input type="checkbox"/> CHANGE TO PREVIOUS PLANS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | <input type="checkbox"/> CHANGE TUBING                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | <input type="checkbox"/> CHANGE WELL NAME                     |                                  |                                       |                                        |                                                   |                                        |                                           |                                             |                                                         |                                            |                                 |                                         |                                           |                                          |                                           |                                    |                                                     |                                                   |                                                         |                                                        |                                                   |                                            |                                        |                                        |                                         |                                        |                                                 |                                        |                                                     |                                |                                                   |
| <input type="checkbox"/> CHANGE WELL STATUS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | <input type="checkbox"/> CONVERT WELL TYPE                    |                                  |                                       |                                        |                                                   |                                        |                                           |                                             |                                                         |                                            |                                 |                                         |                                           |                                          |                                           |                                    |                                                     |                                                   |                                                         |                                                        |                                                   |                                            |                                        |                                        |                                         |                                        |                                                 |                                        |                                                     |                                |                                                   |
| <input type="checkbox"/> DEEPEN                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | <input type="checkbox"/> FRACTURE TREAT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | <input type="checkbox"/> NEW CONSTRUCTION                     |                                  |                                       |                                        |                                                   |                                        |                                           |                                             |                                                         |                                            |                                 |                                         |                                           |                                          |                                           |                                    |                                                     |                                                   |                                                         |                                                        |                                                   |                                            |                                        |                                        |                                         |                                        |                                                 |                                        |                                                     |                                |                                                   |
| <input type="checkbox"/> OPERATOR CHANGE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | <input type="checkbox"/> PLUG AND ABANDON                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | <input type="checkbox"/> PLUG BACK                            |                                  |                                       |                                        |                                                   |                                        |                                           |                                             |                                                         |                                            |                                 |                                         |                                           |                                          |                                           |                                    |                                                     |                                                   |                                                         |                                                        |                                                   |                                            |                                        |                                        |                                         |                                        |                                                 |                                        |                                                     |                                |                                                   |
| <input type="checkbox"/> PRODUCTION START OR RESUME                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | <input type="checkbox"/> RECLAMATION OF WELL SITE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION       |                                  |                                       |                                        |                                                   |                                        |                                           |                                             |                                                         |                                            |                                 |                                         |                                           |                                          |                                           |                                    |                                                     |                                                   |                                                         |                                                        |                                                   |                                            |                                        |                                        |                                         |                                        |                                                 |                                        |                                                     |                                |                                                   |
| <input type="checkbox"/> REPERFORATE CURRENT FORMATION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | <input type="checkbox"/> SIDETRACK TO REPAIR WELL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | <input type="checkbox"/> TEMPORARY ABANDON                    |                                  |                                       |                                        |                                                   |                                        |                                           |                                             |                                                         |                                            |                                 |                                         |                                           |                                          |                                           |                                    |                                                     |                                                   |                                                         |                                                        |                                                   |                                            |                                        |                                        |                                         |                                        |                                                 |                                        |                                                     |                                |                                                   |
| <input type="checkbox"/> TUBING REPAIR                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | <input type="checkbox"/> VENT OR FLARE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | <input type="checkbox"/> WATER DISPOSAL                       |                                  |                                       |                                        |                                                   |                                        |                                           |                                             |                                                         |                                            |                                 |                                         |                                           |                                          |                                           |                                    |                                                     |                                                   |                                                         |                                                        |                                                   |                                            |                                        |                                        |                                         |                                        |                                                 |                                        |                                                     |                                |                                                   |
| <input type="checkbox"/> WATER SHUTOFF                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | <input type="checkbox"/> SI TA STATUS EXTENSION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | <input type="checkbox"/> APD EXTENSION                        |                                  |                                       |                                        |                                                   |                                        |                                           |                                             |                                                         |                                            |                                 |                                         |                                           |                                          |                                           |                                    |                                                     |                                                   |                                                         |                                                        |                                                   |                                            |                                        |                                        |                                         |                                        |                                                 |                                        |                                                     |                                |                                                   |
| <input type="checkbox"/> WILDCAT WELL DETERMINATION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | <input type="checkbox"/> OTHER                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | OTHER: <input style="width: 100px;" type="text"/>             |                                  |                                       |                                        |                                                   |                                        |                                           |                                             |                                                         |                                            |                                 |                                         |                                           |                                          |                                           |                                    |                                                     |                                                   |                                                         |                                                        |                                                   |                                            |                                        |                                        |                                         |                                        |                                                 |                                        |                                                     |                                |                                                   |
| <b>12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.</b><br>FINISHED DRILLING FROM 2470' TO 9545' ON DECEMBER 6, 2010. RAN 4 1/2"<br>11.6# I-80 PRODUCTION CSG. LEAD CEMENT W/ 540 SX CLASS G PREM LITE<br>@ 12.4 PPG, 2.03 YD. TAILED CEMENT W/ 1260 SX CLASS G 50/50 POZ MIX<br>@ 14.0 PPG, 1.25 YD. SET SLIPS 100K. ND BOP. RD CEMENTERS AND<br>CLEANED PITS. RELEASED PIONEER RIG #54 ON DECEMBER 7, 2010 @ 18:00<br>HRS. THE PIT ON THIS LOCATION WILL BE REFURBISHED AND UTILIZED AS<br>PART OF THE ACTS SYSTEM. |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                               |                                  |                                       |                                        |                                                   |                                        |                                           |                                             |                                                         |                                            |                                 |                                         |                                           |                                          |                                           |                                    |                                                     |                                                   |                                                         |                                                        |                                                   |                                            |                                        |                                        |                                         |                                        |                                                 |                                        |                                                     |                                |                                                   |
| <b>NAME (PLEASE PRINT)</b><br>Gina Becker                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | <b>PHONE NUMBER</b><br>720 929-6086                           |                                  |                                       |                                        |                                                   |                                        |                                           |                                             |                                                         |                                            |                                 |                                         |                                           |                                          |                                           |                                    |                                                     |                                                   |                                                         |                                                        |                                                   |                                            |                                        |                                        |                                         |                                        |                                                 |                                        |                                                     |                                |                                                   |
| <b>SIGNATURE</b><br>N/A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | <b>TITLE</b><br>Regulatory Analyst II                         |                                  |                                       |                                        |                                                   |                                        |                                           |                                             |                                                         |                                            |                                 |                                         |                                           |                                          |                                           |                                    |                                                     |                                                   |                                                         |                                                        |                                                   |                                            |                                        |                                        |                                         |                                        |                                                 |                                        |                                                     |                                |                                                   |
| <b>DATE</b><br>12/8/2010                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | <b>FOR RECORD ONLY</b><br>12/8/2010                           |                                  |                                       |                                        |                                                   |                                        |                                           |                                             |                                                         |                                            |                                 |                                         |                                           |                                          |                                           |                                    |                                                     |                                                   |                                                         |                                                        |                                                   |                                            |                                        |                                        |                                         |                                        |                                                 |                                        |                                                     |                                |                                                   |



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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>UO 1207A ST |
| <b>1. TYPE OF WELL</b><br>Gas Well                                                                                                                                                                                                                                                                 |  | <b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b>                  |
| <b>2. NAME OF OPERATOR:</b><br>KERR-MCGEE OIL & GAS ONSHORE, L.P.                                                                                                                                                                                                                                  |  | <b>7. UNIT or CA AGREEMENT NAME:</b><br>NATURAL BUTTES        |
| <b>3. ADDRESS OF OPERATOR:</b><br>P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779                                                                                                                                                                                              |  | <b>8. WELL NAME and NUMBER:</b><br>NBU 922-3103AS             |
| <b>4. LOCATION OF WELL</b><br><b>FOOTAGES AT SURFACE:</b><br>0496 FSL 0965 FEL<br><b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b><br>Qtr/Qtr: SESE Section: 31 Township: 09.0S Range: 22.0E Meridian: S                                                                                        |  | <b>9. API NUMBER:</b><br>43047510440000                       |
| <b>PHONE NUMBER:</b><br>720 929-6515 Ext                                                                                                                                                                                                                                                           |  | <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<br><input type="checkbox"/> CHANGE TO PREVIOUS PLANS<br><input type="checkbox"/> CHANGE WELL STATUS<br><input type="checkbox"/> DEEPEN<br><input type="checkbox"/> OPERATOR CHANGE<br><input checked="" 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: <input style="width: 100px;" type="text"/> |
| <input type="checkbox"/> <b>SUBSEQUENT REPORT</b><br>Date of Work Completion:          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <input type="checkbox"/> <b>SPUD REPORT</b><br>Date of Spud:                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <input checked="" type="checkbox"/> <b>DRILLING REPORT</b><br>Report Date:<br>2/1/2011 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.  
 THE SUBJECT WELL WAS PLACED ON PRODUCTION ON FEBUARY 01, 2011 AT 4:00 P.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**  
 02/04/2011

|                                           |                                     |                                       |
|-------------------------------------------|-------------------------------------|---------------------------------------|
| <b>NAME (PLEASE PRINT)</b><br>Gina Becker | <b>PHONE NUMBER</b><br>720 929-6086 | <b>TITLE</b><br>Regulatory Analyst II |
| <b>SIGNATURE</b><br>N/A                   | <b>DATE</b><br>2/4/2011             |                                       |

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:                                                                                                                                                                                                           |  | OIL WELL <input type="checkbox"/>            | GAS WELL <input checked="" type="checkbox"/> | DRY <input type="checkbox"/>     | OTHER <input type="checkbox"/>    |                                                                      |                                |
| b. TYPE OF WORK:                                                                                                                                                                                                            |  | 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 <input type="checkbox"/> |
| 2. NAME OF OPERATOR:<br>KERR MCGEE OIL & GAS ONSHORE, L.P.                                                                                                                                                                  |  |                                              |                                              |                                  |                                   | 7. UNIT or CA AGREEMENT NAME<br>UTU63047A                            |                                |
| 3. ADDRESS OF OPERATOR:<br>P.O. BOX 173779 CITY DENVER STATE CO ZIP 80217                                                                                                                                                   |  |                                              |                                              |                                  |                                   | 8. WELL NAME and NUMBER:<br>NBU 922-3103AS                           |                                |
| 4. LOCATION OF WELL (FOOTAGES)<br>AT SURFACE: SESE 496 FSL 965 FEL S31, T9S, R22E<br>AT TOP PRODUCING INTERVAL REPORTED BELOW: SWSE 506 FSL 2104 FEL S31, T9S, R22E<br>AT TOTAL DEPTH: SWSE 500 FSL 2073 FEL S31, T9S, R22E |  |                                              |                                              |                                  |                                   | 9. API NUMBER:<br>4304751044                                         |                                |
| 10. FIELD AND POOL, OR WILDCAT<br>NATURAL BUTTES                                                                                                                                                                            |  |                                              |                                              |                                  |                                   | 11. QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:<br>SESE 31 9S 22E S |                                |
| 12. COUNTY<br>UINTAH                                                                                                                                                                                                        |  |                                              |                                              |                                  |                                   | 13. STATE<br>UTAH                                                    |                                |

|                                                                                                |                                           |                                          |                                    |                                                                                                                                                                                                                                                                                                                           |                                              |
|------------------------------------------------------------------------------------------------|-------------------------------------------|------------------------------------------|------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------|
| 14. DATE SPUDDED:<br>10/3/2010                                                                 | 15. DATE T.D. REACHED:<br>12/6/2010       | 16. DATE COMPLETED:<br>2/1/2011          | ABANDONED <input type="checkbox"/> | READY TO PRODUCE <input checked="" type="checkbox"/>                                                                                                                                                                                                                                                                      | 17. ELEVATIONS (DF, RKB, RT, GL):<br>5063 GL |
| 18. TOTAL DEPTH: MD 9,545<br>TVD 9,365                                                         | 19. PLUG BACK T.D.: MD 9,490<br>TVD 9,310 | 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>CHI TRIPLE COMBO-RMTE |                                           |                                          |                                    | 23.<br>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" IJ-55 | 28#            |          | 2,452       |                      | 450                        |                     |               |               |
| 7 7/8"    | 4 1/2" I-80  | 11.6#          |          | 9,533       |                      | 1,800                      |                     |               |               |
|           |              |                |          |             |                      |                            |                     |               |               |
|           |              |                |          |             |                      |                            |                     |               |               |
|           |              |                |          |             |                      |                            |                     |               |               |
|           |              |                |          |             |                      |                            |                     |               |               |

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" | 8,728          |                 |      |                |                 |      |                |                 |

26. PRODUCING INTERVALS

| FORMATION NAME | TOP (MD) | BOTTOM (MD) | TOP (TVD) | BOTTOM (TVD) | INTERVAL (Top/Bot - MD) | SIZE | NO. HOLES | PERFORATION STATUS                                                         |
|----------------|----------|-------------|-----------|--------------|-------------------------|------|-----------|----------------------------------------------------------------------------|
| (A) MESAVERDE  | 7,320    | 9,358       |           |              | 7,320 9,358             | 0.36 | 153       | Open <input checked="" type="checkbox"/> Squeezed <input type="checkbox"/> |
| (B) WSMUD      |          |             |           |              |                         |      |           | Open <input type="checkbox"/> Squeezed <input type="checkbox"/>            |
| (C)            |          |             |           |              |                         |      |           | Open <input type="checkbox"/> Squeezed <input type="checkbox"/>            |
| (D)            |          |             |           |              |                         |      |           | Open <input type="checkbox"/> Squeezed <input type="checkbox"/>            |

27. PERFORATION RECORD

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

| DEPTH INTERVAL | AMOUNT AND TYPE OF MATERIAL                        |
|----------------|----------------------------------------------------|
| 7320 - 9358    | PUMP 8,746 BBLs SLICK H2O & 324,722 LBS 30/50 SAND |
|                |                                                    |
|                |                                                    |

29. ENCLOSED ATTACHMENTS:

- |                                                                             |                                          |                                     |                                                        |
|-----------------------------------------------------------------------------|------------------------------------------|-------------------------------------|--------------------------------------------------------|
| <input type="checkbox"/> ELECTRICAL/MECHANICAL LOGS                         | <input type="checkbox"/> GEOLOGIC REPORT | <input type="checkbox"/> DST REPORT | <input checked="" type="checkbox"/> DIRECTIONAL SURVEY |
| <input type="checkbox"/> SUNDRY NOTICE FOR PLUGGING AND CEMENT VERIFICATION | <input type="checkbox"/> CORE ANALYSIS   | <input type="checkbox"/> OTHER:     |                                                        |

30. WELL STATUS:

PROD  
RECEIVED

MAR 22 2011

DIV. OF OIL, GAS & MINING

## 31. INITIAL PRODUCTION

## INTERVAL A (As shown in Item #26)

|                                  |                        |                      |                             |                 |                     |                              |                          |
|----------------------------------|------------------------|----------------------|-----------------------------|-----------------|---------------------|------------------------------|--------------------------|
| DATE FIRST PRODUCED:<br>2/1/2011 | TEST DATE:<br>2/6/2011 | HOURS TESTED:<br>24  | TEST PRODUCTION<br>RATES: → | OIL – BBL:<br>0 | GAS – MCF:<br>2,300 | WATER – BBL:<br>552          | PROD. METHOD:<br>FLOWING |
| CHOKE SIZE:<br>20/64             | TBG. PRESS.<br>1,825   | CSG. PRESS.<br>2,550 | API GRAVITY                 | BTU – GAS       | GAS/OIL RATIO       | 24 HR PRODUCTION<br>RATES: → | INTERVAL STATUS:<br>PROD |

## INTERVAL B (As shown in Item #26)

|                      |             |               |                             |            |               |                              |                  |
|----------------------|-------------|---------------|-----------------------------|------------|---------------|------------------------------|------------------|
| DATE FIRST PRODUCED: | TEST DATE:  | HOURS TESTED: | TEST PRODUCTION<br>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<br>RATES: → | INTERVAL STATUS: |

## INTERVAL C (As shown in Item #26)

|                      |             |               |                             |            |               |                              |                  |
|----------------------|-------------|---------------|-----------------------------|------------|---------------|------------------------------|------------------|
| DATE FIRST PRODUCED: | TEST DATE:  | HOURS TESTED: | TEST PRODUCTION<br>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<br>RATES: → | INTERVAL STATUS: |

## INTERVAL D (As shown in Item #26)

|                      |             |               |                             |            |               |                              |                  |
|----------------------|-------------|---------------|-----------------------------|------------|---------------|------------------------------|------------------|
| DATE FIRST PRODUCED: | TEST DATE:  | HOURS TESTED: | TEST PRODUCTION<br>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<br>RATES: → | 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.

## 34. FORMATION (Log) MARKERS:

| Formation   | Top<br>(MD) | Bottom<br>(MD) | Descriptions, Contents, etc. | Name | Top<br>(Measured Depth) |
|-------------|-------------|----------------|------------------------------|------|-------------------------|
| GREEN RIVER | 1,343       |                |                              |      |                         |
| BIRD'S NEST | 1,638       |                |                              |      |                         |
| MAHOGANY    | 1,996       |                |                              |      |                         |
| WASATCH     | 4,694       | 7,278          |                              |      |                         |
| MESAVERDE   | 7,278       | 9,545          | TD                           |      |                         |

## 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) GINA BECKER

TITLE REGULATORY ANALYST

SIGNATURE

DATE 3/3/2011

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 922-3103AS YELLOW                          |                |               | Spud Conductor: 10/3/2010                                 |      |          | Spud Date: 10/26/2010 |                                       |                                                                                                                                                                                                                                           |  |
|------------------------------------------------------|----------------|---------------|-----------------------------------------------------------|------|----------|-----------------------|---------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| Project: UTAH-UINTAH                                 |                |               | Site: NBU 922-31P3 PAD                                    |      |          |                       | Rig Name No: PROPETRO/, PIONEER 54/54 |                                                                                                                                                                                                                                           |  |
| Event: DRILLING                                      |                |               | Start Date: 12/1/2010                                     |      |          |                       | End Date: 12/7/2010                   |                                                                                                                                                                                                                                           |  |
| Active Datum: RKB @5,082.00ft (above Mean Sea Level) |                |               | UWI: SE/SE/0/9/S/22/E/31/0/0/6/PM/S/496.00/E/0/965.00/0/0 |      |          |                       |                                       |                                                                                                                                                                                                                                           |  |
| Date                                                 | Time Start-End | Duration (hr) | Phase                                                     | Code | Sub Code | P/U                   | MD From (ft)                          | Operation                                                                                                                                                                                                                                 |  |
| 10/26/2010                                           | 12:00 - 15:30  | 3.50          | MIRU                                                      | 01   | B        | P                     |                                       | MOVE RIG ONTO LOCATION, DRESS TOP OF CONDUCTOR. INSTALL DIVERTER HEAD AND BOWIE LINE. BUILD DITCH. MOVE RIG OVER HOLE AND RIG UP.. SET CATWALK AND PIPE RACKS. RIG UP AND PRIME PIT PUMP AND MUD PUMP.                                    |  |
|                                                      | 15:30 - 16:00  | 0.50          | PRSPD                                                     | 01   | B        | P                     |                                       | P/U 1.1.83 DEG BENT HOUSING HUNTING MTR SN 8080 . 7/8 LOBE .16 RPM. M/U Q506 SN 7023548 2ND RUN, W/ 6-18'S. INSTALL RUBBER.                                                                                                               |  |
|                                                      | 16:00 - 17:30  | 1.50          | DRLSUR                                                    | 02   | A        | P                     |                                       | SPUD SURFACE 10-26-2010 @ 16:30. DRILL 11" SURFACE HOLE F/40'-200' (180' @ 180'/HR) PSI ON/ OFF 900/660, UP/ DOWN/ ROT 25/20/23.                                                                                                          |  |
|                                                      | 17:30 - 19:30  | 2.00          | DRLSUR                                                    | 06   | A        | P                     |                                       | TOOH, PU DIR BHA, TIH TO BOTTOM                                                                                                                                                                                                           |  |
|                                                      | 19:30 - 23:00  | 3.50          | MAINT                                                     | 08   | A        | X                     |                                       | REPAIR HYDRAULIC TONGS AND HOSES.                                                                                                                                                                                                         |  |
|                                                      | 23:00 - 0:00   | 1.00          | DRLSUR                                                    | 02   | C        | P                     |                                       | DRILL 11" SURFACE HOLE F/200'-290' (90' 90'/HR) PSI ON/ OFF 900/660, UP/ DOWN/ ROT 27/22/25, 45-50 RPM ON TOP DROVE, 18-20K WOB, 550 GPM. DRLG WITH H2O, CIRC RESERVE PIT                                                                 |  |
| 10/27/2010                                           | 0:00 - 15:00   | 15.00         | DRLSUR                                                    | 02   | C        | P                     |                                       | DRILL/ SLIDE 11" SURFACE HOLE F/290'-1450' (1160' 77'/HR) PSI ON/ OFF 1380/1270, UP/ DOWN/ ROT 72/74/68. 500 GPM WHEN DRLG W/ AIR, 550 GPM WO AIR. 18-20K WOB, 45 RPM ON TOP DRIVE                                                        |  |
|                                                      | 15:00 - 15:30  | 0.50          | MAINT                                                     | 07   | A        | P                     |                                       | LOST TOTAL CIRC @ 1680', DRLG WITH AIREATED H2O                                                                                                                                                                                           |  |
|                                                      | 15:30 - 0:00   | 8.50          | DRLSUR                                                    | 02   | C        | P                     |                                       | LUBRICATE RIG AND TOP DRIVE                                                                                                                                                                                                               |  |
| 10/28/2010                                           | 0:00 - 1:00    | 1.00          | DRLSUR                                                    | 02   | C        | P                     |                                       | DRILL/ SLIDE 11" SURFACE HOLE F/1450'-2410' (960' 112'/HR) PSI ON/ OFF 1430/1280, UP/ DOWN/ ROT 77/66/70. 500 GPM WHEN DRLG W/ AIR, 550 GPM WO AIR. 18-20K WOB, 45 RPM ON TOP DRIVE                                                       |  |
|                                                      | 1:00 - 2:30    | 1.50          | DRLSUR                                                    | 05   | A        | P                     |                                       | LOST TOTAL CIRC @ 1680', DRLG WITH AIREATED H2O                                                                                                                                                                                           |  |
|                                                      | 2:30 - 7:00    | 4.50          | DRLSUR                                                    | 06   | A        | P                     |                                       | CIRC AND COND HOLE CLEAN                                                                                                                                                                                                                  |  |
|                                                      | 7:00 - 8:00    | 1.00          | CSG                                                       | 12   | A        | P                     |                                       | TOOH, LDDS AND DIR BHA                                                                                                                                                                                                                    |  |
|                                                      | 8:00 - 11:00   | 3.00          | CSG                                                       | 12   | C        | P                     |                                       | MOVE CATWALK AND PIPE RACKS, MOVE CSG OVER TO WORK AREA. RU TO RUN SURFACE CSG                                                                                                                                                            |  |
|                                                      | 11:00 - 11:30  | 0.50          | RDMO                                                      | 01   | E        | P                     |                                       | HELD SAFETY MEETING, RUN CSG. RAN 56JTS OF 8-5/8", 28#, J-55, 8 RND CSG W/ LTC THREADS. LANDED FLOAT SHOE @ 2433.40' KB. RAN BAFFLE PLATE IN TOP OF SHOE JT LANDED 2388.50' KB. FILL CSG @ 500', 1500', AND 2400'. RIG DOWN RIG, MOVE OUT |  |
| RELEASE RIG 10/28/2010 @ 11:30                       |                |               |                                                           |      |          |                       |                                       |                                                                                                                                                                                                                                           |  |

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

|                                                      |  |                                                           |                                       |
|------------------------------------------------------|--|-----------------------------------------------------------|---------------------------------------|
| Well: NBU 922-31O3AS YELLOW                          |  | Spud Conductor: 10/3/2010                                 | Spud Date: 10/26/2010                 |
| Project: UTAH-UINTAH                                 |  | Site: NBU 922-31P3 PAD                                    | Rig Name No: PROPETRO/, PIONEER 54/54 |
| Event: DRILLING                                      |  | Start Date: 12/1/2010                                     | End Date: 12/7/2010                   |
| Active Datum: RKB @5,082.00ft (above Mean Sea Level) |  | UWI: SE/SE/0/9/S/22/E/31/0/0/6/PM/S/496.00/E/0/965.00/0/0 |                                       |

| Date      | Time Start-End | Duration (hr) | Phase  | Code | Sub Code | P/U | MD From (ft) | Operation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|-----------|----------------|---------------|--------|------|----------|-----|--------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|           | 11:30 - 13:30  | 2.00          | CSG    | 12   | E        | P   |              | <p>HOLD SAFETY MEETING. INSTALL CEMENT HEAD. PSI TEST TO 2000 PSI. PUMP 20 BBLS OF 8.3# H2O AHEAD. NO CIRC. PUMP 20 BBLS OF 8.4# GEL WATER AHEAD. NO CIRC. PUMP 225 SX (46 BBLS) OF 15.8# 1.15 YIELD TAIL(2% CALC, 1/4# /SK OF FLOCELE). NO CIRC. DROP PLUG ON FLY AND DISPLACE W/141.75 BBLS OF 8.3# H2O. NO RETURNS. LIFT PRESSURE WAS 100 PSI, BUMP PLUG AND HOLD 700 PSI FOR 5 MIN. FLOAT HELD. EST TOC OF TAIL 1490'</p> <p>TOP OUT #1 PUMP 225 SX (46 BBLS) OF 15.8# 1.15 YIELD TAIL(4 % CALC, 1/4# /SK OF FLOCELE). CMT STAYED AT SURFACE. RIG DOWN CEMENTERS AND RELEASE CEMENTERS 12:30 HRS.</p> <p>CONDUCTOR CASING:<br/>Cond. Depth set: 40'<br/>Cement sx used: 28</p> <p>SPUD DATE/TIME: 10/26/2010 @ 16:30</p> <p>SURFACE HOLE:<br/>Surface From depth: 40'<br/>Surface To depth: 2,470<br/>Total SURFACE hours:<br/>urface Casing size: 8.625"<br/># of casing joints ran: 55<br/>Casing set MD: 2,433.40<br/># sx of cement: 225 SKS TAIL, 225 SKS TOP OUT #1<br/>Cement blend (ppg): 15.8# ON BOTH CMTS<br/>Cement yield (ft3/sk): 1.15 YIELD ON BOTH CMTS<br/># of bbls to surface:2BBL<br/>Describe cement issues: NO CIRC DURING CMT JOB<br/>Describe hole issues: LOST CIRC @ 1680' PUT AIR ON HOLE 1700' TO TD<br/>SKID RIG<br/>NU BOP<br/>TEST BOP 200-5000 GOOD TEST<br/>RUN WEAR BUSHING<br/>SLIP AND CUT DRLG LINE<br/>PICK UP TOOLS RIH TAG CMT @ 2363'<br/>DIR DRLG F/ 2363 TO 2448' CMT FC-SHOE WOB/5<br/>PSION/OFF= 700/600 TRQ=2-3<br/>ROT= 1.5HRS-85' @ 56.6 PH<br/>DIR DRLG F/ 2448'-TO-2695' - 247' @ 123.5 PH<br/>WOB/15-RPM50-MM104-SPM120-GPM=454<br/>PSION/OFF= 1300/1100 TRQ=5-3<br/>PU/SO/RT=105/85/96<br/>ROT= 1.25 HRS 186' @ 148.8' PH<br/>SLIDE=.75 HRS 61' @ 81.3' PH</p> |
| 12/1/2010 | 12:00 - 13:00  | 1.00          | DRLPRO | 01   | C        | P   |              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|           | 13:00 - 14:00  | 1.00          | DRLPRO | 14   | A        | P   |              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|           | 14:00 - 16:00  | 2.00          | DRLPRO | 15   | A        | P   |              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|           | 16:00 - 16:30  | 0.50          | DRLPRO | 06   | A        | P   |              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|           | 16:30 - 18:30  | 2.00          | DRLPRO | 09   | A        | P   |              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|           | 18:30 - 20:30  | 2.00          | DRLPRO | 06   | J        | P   |              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|           | 20:30 - 22:00  | 1.50          | DRLPRO | 02   | F        | P   |              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|           | 22:00 - 0:00   | 2.00          | DRLPRO | 02   | D        | P   |              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |



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

|                                                      |  |                                                           |  |                                       |  |
|------------------------------------------------------|--|-----------------------------------------------------------|--|---------------------------------------|--|
| Well: NBU 922-3103AS YELLOW                          |  | Spud Conductor: 10/3/2010                                 |  | Spud Date: 10/26/2010                 |  |
| Project: UTAH-UINTAH                                 |  | Site: NBU 922-31P3 PAD                                    |  | Rig Name No: PROPETRO/, PIONEER 54/54 |  |
| Event: DRILLING                                      |  | Start Date: 12/1/2010                                     |  | End Date: 12/7/2010                   |  |
| Active Datum: RKB @5,082.00ft (above Mean Sea Level) |  | UWI: SE/SE/0/9/S/22/E/31/0/0/6/PM/S/496.00/E/0/965.00/0/0 |  |                                       |  |

| Date      | Time Start-End | Duration (hr) | Phase  | Code | Sub Code | P/U | MD From (ft) | Operation                                                                                                                                                                                                                 |
|-----------|----------------|---------------|--------|------|----------|-----|--------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 12/2/2010 | 0:00 - 13:30   | 13.50         | DRLPRO | 02   | D        | P   |              | DIR DRLG F/ 2695'-TO-4353'-1658' @ 122.8PH<br>WOB/18-RPM50-MM104-SPM120-GPM=454<br>PSION/OFF= 1300/1100 TRQ=5-3<br>PU/SO/RT=105/85/96<br>ROT= 9.59 HRS 1541' @ 160.6' PH<br>SLIDE=3.91 HRS 117' @ 29.9' PH<br>RIG SERVICE |
|           | 13:30 - 14:00  | 0.50          | DRLPRO | 02   | D        | P   |              |                                                                                                                                                                                                                           |
|           | 14:00 - 0:00   | 10.00         | DRLPRO | 02   | D        | P   |              | DIR DRLG F/ 4353'-TO5490'-1137' @ 113.7PH<br>WOB/18-RPM50-MM104-SPM120-GPM=454<br>PSION/OFF= 1350/1100 TRQ=8-6<br>PU/SO/RT=170/115/136<br>ROT= 6.67 HRS 986' @ 149.3' PH<br>SLIDE=3.33 HRS 151' @ 45.34' PH               |
| 12/3/2010 | 0:00 - 15:00   | 15.00         | DRLPRO | 02   | D        | P   |              | DIR DRLG F/ 5490'-TO-6819' 1329' @ 88.6' PH<br>WOB/22-RPM50-MM104-SPM120-GPM=454<br>PSION/OFF= 2000/1800 TRQ=8-6<br>PU/SO/RT=196/135/153<br>ROT= 13.67 HRS 1300' @ 95 PH<br>SLIDE=1.33 HRS 29' @ 21.8 PH<br>RIG SERVICE   |
|           | 15:00 - 15:30  | 0.50          | DRLPRO | 07   | A        | P   |              |                                                                                                                                                                                                                           |
|           | 15:30 - 0:00   | 8.50          | DRLPRO | 02   | D        | P   |              | DIR DRLG F/ 6819'-TO 7325' 506' @ 59.5' PH<br>WOB/22-RPM50-MM104-SPM120-GPM=454<br>PSION/OFF= 2100/1900 TRQ=8-6<br>PU/SO/RT=205/135/161<br>ROT= 7.75 HRS 493' @ 63.61' PH<br>SLIDE=.75 HRS 13' @ 17.3' PH                 |
| 12/4/2010 | 0:00 - 17:30   | 17.50         | DRLPRO | 02   | D        | P   |              | DIR DRLG F/ 7325' TO 8242' 917' @ 52.4' PH<br>WOB/22-RPM50-MM104-SPM120-GPM=454<br>PSION/OFF= 2200/2000 TRQ=10-8<br>PU/SO/RT=205/135/161<br>ROT= 13.5 HRS 830' @ 61.48' PH<br>SLIDE=4 HRS 87' @ 21.75' PH<br>RIG SERVICE  |
|           | 17:30 - 18:00  | 0.50          | DRLPRO | 07   | A        | P   |              |                                                                                                                                                                                                                           |
|           | 18:00 - 0:00   | 6.00          | DRLPRO | 02   | D        | P   |              | DIR DRLG F/ 8242' TO 8594' 1269' @ 54' PH<br>WOB/22-RPM50-MM104-SPM120-GPM=454<br>PSION/OFF= 2400/2200 TRQ=10-8<br>PU/SO/RT=240/140/178<br>ROT= 6 HRS 352' @ 58.6' PH<br>SLIDE=0 HRS                                      |
| 12/5/2010 | 0:00 - 15:00   | 15.00         | DRLPRO | 02   | D        | P   |              | DIR DRLG F/ 8594' TO 9147' 553' @ 36.8' PH<br>WOB/22-RPM50-MM104-SPM120-GPM=454<br>PSION/OFF= 2400/2200 TRQ=10-8<br>PU/SO/RT=250/150/180<br>ROT= 15 HRS 553' @ 36.8' PH<br>SLIDE=0 HRS                                    |
|           | 15:00 - 16:00  | 1.00          | DRLPRO | 05   | C        | P   |              | CIRC CLEAN FOR TRIP                                                                                                                                                                                                       |
|           | 16:00 - 22:00  | 6.00          | DRLPRO | 06   | H        | S   |              | POOH TO CHANGE MOTOR AND BIT                                                                                                                                                                                              |
| 12/6/2010 | 22:00 - 0:00   | 2.00          | DRLPRO | 06   | H        | S   |              | RIH NEW BIT AND MOTOR REAM F/4600'-4800'                                                                                                                                                                                  |
|           | 0:00 - 3:00    | 3.00          | DRLPRO | 06   | A        | P   |              | RIH TO 9147'                                                                                                                                                                                                              |
|           | 3:00 - 8:30    | 5.50          | DRLPRO | 02   | D        | P   |              | DIR DRLG F/ 9147' TO 9545' 398' @ 72.36' PH<br>WOB/22-RPM50-MM104-SPM120-GPM=454<br>PSION/OFF= 2800/2600 TRQ=12-10<br>PU/SO/RT=250/150/180<br>ROT= 5.5 HRS 398' @ 72.36' PH<br>SLIDE=0 HRS                                |
|           | 8:30 - 10:30   | 2.00          | DRLPRO | 05   | F        | P   |              | PUMP HIGH VISC 30BBL CIRC HOLE CLEAN                                                                                                                                                                                      |
|           | 10:30 - 15:30  | 5.00          | DRLPRO | 06   | E        | P   |              | WIPER TRIP UP TO 4400' BACK TO TD @ 9545'                                                                                                                                                                                 |
|           | 15:30 - 17:30  | 2.00          | DRLPRO | 05   | F        | P   |              | PUMP HIGH VISC CIRC HOLE CLEAN                                                                                                                                                                                            |
|           | 17:30 - 0:00   | 6.50          | DRLPRO | 06   | D        | P   |              | LD DRILL PIPE                                                                                                                                                                                                             |
| 12/7/2010 | 0:00 - 3:30    | 3.50          | DRLPRO | 06   | D        | P   |              | L/D DP & BHA                                                                                                                                                                                                              |

US ROCKIES REGION  
**Operation Summary Report**

|                                                      |  |                                                           |                                       |
|------------------------------------------------------|--|-----------------------------------------------------------|---------------------------------------|
| Well: NBU 922-3103AS YELLOW                          |  | Spud Conductor: 10/3/2010                                 | Spud Date: 10/26/2010                 |
| Project: UTAH-UINTAH                                 |  | Site: NBU 922-31P3 PAD                                    | Rig Name No: PROPETRO/, PIONEER 54/54 |
| Event: DRILLING                                      |  | Start Date: 12/1/2010                                     | End Date: 12/7/2010                   |
| Active Datum: RKB @5,082.00ft (above Mean Sea Level) |  | UWI: SE/SE/0/9/S/22/E/31/0/0/6/PM/S/496.00/E/0/965.00/0/0 |                                       |

| Date | Time Start-End | Duration (hr) | Phase  | Code | Sub Code | P/U | MD From (ft) | Operation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|------|----------------|---------------|--------|------|----------|-----|--------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|      | 3:30 - 4:00    | 0.50          | DRLPRO | 12   | C        | P   |              | PULL W/BUSHING                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|      | 4:00 - 13:00   | 9.00          | DRLPRO | 12   | C        |     |              | RUN 226 JTS 4.5" CSG 1 MARKER @ 4699'<br>SHOE @ 9528' FC @ 9484'                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|      | 13:00 - 15:00  | 2.00          | DRLPRO | 12   | E        | P   |              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|      | 15:00 - 18:00  | 3.00          | DRLPRO | 14   | A        | P   |              | SET SLIPS 100K N/D BOP CLEAN PITS<br>RELEASE RIG @ 1800 12/7/2010                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|      | 18:00 - 18:00  | 0.00          | DRLPRO | 01   | E        | P   |              | PREPAIR TO MOVE RIG TO NBU 921-16P<br>Rig Move/Skid start date/time: 12/1/2010 12:00<br>Rig Move/Skid finish date/time: 12/1/2010 13:00<br>Total MOVE hours: 1.0<br>Prod Rig Spud date/time: 12/1/2010 22:00<br>Rig Release date/time: 12/7/2010 18:00<br>Total SPUD to RR hours: 140.0<br>Planned depth MD 9,512<br>Planned depth TVD 9,512<br>Actual MD: 9,545<br>Actual TVD: 9,365<br>Open Wells \$: \$683,728<br>AFE \$: \$727,024<br>Open wells \$/ft: \$71.63<br><br>PRODUCTION HOLE:<br>Prod. From depth: 2,542<br>Prod. To depth: 9,545<br>Total PROD hours: 93<br>Log Depth:<br>Float Collar Top Depth: 9484<br>Production Casing size: 4.5"<br># of casing joints ran: 227<br>Casing set MD: 9,528.0<br>Stage 1<br># sx of cement: 1,260<br>Cement density (ppg:) 14<br>Cement yield (ft3/sk): 1.25<br>Stage 2<br># sx of cement:<br>Cement density (ppg):<br>Cement yield (ft3/sk):<br>Top Out Cmt<br># sx of cement:<br>Cement density (ppg):<br>Cement yield (ft3/sk):<br>Est. TOC (Lead & Tail) or 2 Stage : SURFACE&4200'<br>Describe cement issues:<br>Describe hole issues:<br><br>DIRECTIONAL INFO:<br>KOP: 161'<br>Max angle: 21.63<br>Departure: 19.05<br>Max dogleg MD: 3.25@1412' |

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

| Well: NBU 922-3103AS YELLOW                          |                   |                  | Spud Conductor: 10/3/2010                                 |      |             | Spud Date: 10/26/2010 |                      |                                                                                                                                                                                                                                                                 |
|------------------------------------------------------|-------------------|------------------|-----------------------------------------------------------|------|-------------|-----------------------|----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Project: UTAH-UINTAH                                 |                   |                  | Site: NBU 922-31P3 PAD                                    |      |             |                       | Rig Name No: GWS 1/1 |                                                                                                                                                                                                                                                                 |
| Event: COMPLETION                                    |                   |                  | Start Date: 1/17/2011                                     |      |             |                       | End Date: 2/1/2011   |                                                                                                                                                                                                                                                                 |
| Active Datum: RKB @5,082.00ft (above Mean Sea Level) |                   |                  | UWI: SE/SE/0/9/S/22/E/31/0/0/6/PM/S/496.00/E/0/965.00/0/0 |      |             |                       |                      |                                                                                                                                                                                                                                                                 |
| Date                                                 | Time<br>Start-End | Duration<br>(hr) | Phase                                                     | Code | Sub<br>Code | P/U                   | MD From<br>(ft)      | Operation                                                                                                                                                                                                                                                       |
| 1/17/2011                                            | 7:00 - 10:00      | 3.00             | COMP                                                      | 48   |             | P                     |                      | HSM, MIRU CUTTERS WIRE LINE & SUPERIOR FRAC, T/ SURFACE LINES TO 8000#                                                                                                                                                                                          |
|                                                      | 10:00 - 17:30     | 7.50             | COMP                                                      | 36   | E           | P                     |                      | STG #1]P/U RIH PERF MESAVERDE USING 3-3/8 EXPEND, 23 GRM, 0.36" HOLE.<br>9,356'-9,358' 3 SPF, 120* PH, 6 HOLES.<br>9,209'-9,211' 3 SPF, 120* PH, 6 HOLES.<br>9,071'-9,073' 3 SPF, 120* PH, 6 HOLES.<br>9,051'-9,052' 3 SPF, 120* PH, 3 HOLES. [21 HOLES] SWIFN. |
| 1/18/2011                                            | 7:00 - 7:15       | 0.25             | COMP                                                      | 48   |             | P                     |                      | HSM, PERF & FRAC                                                                                                                                                                                                                                                |

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

| Well: NBU 922-31O3AS YELLOW                          |                |               | Spud Conductor: 10/3/2010 |                                                           |          | Spud Date: 10/26/2010 |                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |  |  |
|------------------------------------------------------|----------------|---------------|---------------------------|-----------------------------------------------------------|----------|-----------------------|----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|
| Project: UTAH-UINTAH                                 |                |               | Site: NBU 922-31P3 PAD    |                                                           |          |                       | Rig Name No: GWS 1/1 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |  |  |
| Event: COMPLETION                                    |                |               | Start Date: 1/17/2011     |                                                           |          |                       |                      | End Date: 2/1/2011                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  |  |
| Active Datum: RKB @5,082.00ft (above Mean Sea Level) |                |               |                           | UWI: SE/SE/0/9/S/22/E/31/0/0/6/PM/S/496.00/E/0/965.00/0/0 |          |                       |                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |  |  |
| Date                                                 | Time Start-End | Duration (hr) | Phase                     | Code                                                      | Sub Code | P/U                   | MD From (ft)         | Operation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |  |  |
|                                                      | 7:15 - 7:15    | 0.00          | COMP                      | 36                                                        | E        | P                     |                      | FRAC STG #1] MESAVERDE 9,051'-9,358' [21 HOLES]<br><br>STG #1] WHP=750#, BRK DN=3,130#, @=4.7 BPM, INJ RT=46.3, INJ PSI=5,144#, ISIP=2,664#, FG=.73, PUMP'D 768 BBLS SLK WTR W/ 21,592# 30/50 MESH W/ 5000# RESIN COAT IN TAIL, ISIP=2,833#, FG=.75, AR=45.2, AP=5,189#, MR=48.2, MP=6,722#, NPI=169#, 18/21 CALC PERFS OPEN.<br><br>STG #2] P/U RIH W/ HALIBURTON 10K CBP, SET CBP @=9,000', PERF MESAVERDE USING 3-3/8 EXPEND, 23 GRM, 0.36" HOLE.<br>8,958'-8,960' 3 SPF, 120* PH, 6 HOLES.<br>8,874'-8,876' 3 SPF, 120* PH, 6 HOLES.<br>8,804'-8,805' 3 SPF, 120* PH, 3 HOLES.<br>8,758'-8,760' 3 SPF, 120* PH, 6 HOLES. [21 HOLES]<br><br>STG #2] WHP=1,170#, BRK DN=2,715#, @=4.7 BPM, INJ RT=47.8, INJ PSI=6,045#, ISIP=2,396#, FG=.71, PUMP'D 1,062 BBLS SLK WTR W/ 41,825# 30/50 MESH W/ 5000# RESIN COAT IN TAIL, ISIP=2,908#, FG=.77, AR=45.5, AP=6,073#, MR=49.6, MP=5,787#, NPI=512#, 18/21 CALC PERFS OPEN.<br><br>STG #3] P/U RIH W/ HALIBURTON 10K CBP, SET CBP @=8,704', PERF MESAVERDE USING 3-3/8 EXPEND, 23 GRM, 0.36" HOLE.<br>8,665'-8,666' 3 SPF, 120* PH, 3 HOLES.<br>8,623'-8,624' 3 SPF, 120* PH, 3 HOLES.<br>8,572'-8,573' 3 SPF, 120* PH, 3 HOLES.<br>8,522'-8,524' 3 SPF, 120* PH, 6 HOLES.<br>8,441'-8,443' 3 SPF, 120* PH, 6 HOLES. [21 HOLES]<br><br>STG #3] WHP=1,805#, BRK DN=2,857#, @=4.3 BPM, INJ RT=50.1, INJ PSI=5,534#, ISIP=2,108#, FG=.69, PUMP'D 1,401 BBLS SLK WTR W/ 56,897# 30/50 MESH W/ 5000# RESIN COAT I N TAIL, ISIP=2,232#, FG=.70, AR=49, AP=5,546#, MR=50.6, MP=6,779#, NPI=124#, 20/21 CALC PERFS OPEN.<br><br>STG #4] P/U RIH W/ HALIBURTON 10K CBP, SET CBP @=8,399', PERF MESAVERDE USING 3-3/8 EXPEND, 23 GRM, 0.36" HOLE.<br>8,368'-8,369' 3 SPF, 120* PH, 3 HOLES.<br>8,344'-8,345' 3 SPF, 120* PH, 3 HOLES.<br>8,288'-8,289' 3 SPF, 120* PH, 3 HOLES.<br>8,238'-8,240' 3 SPF, 120* PH, 6 HOLES.<br>8,175'-8,176' 3 SPF, 120* PH, 3 HOLES.<br>8,141'-8,142' 3 SPF, 120* PH, 3 HOLES. [21 HOLES] SWIFN.<br><br>1/19/2011 5:45 - 6:00 0.25 COMP 48 P HSM, PEF & FRAC |  |  |

US ROCKIES REGION  
**Operation Summary Report**

|                                                      |  |                           |                                                           |                       |                      |
|------------------------------------------------------|--|---------------------------|-----------------------------------------------------------|-----------------------|----------------------|
| Well: NBU 922-31O3AS YELLOW                          |  | Spud Conductor: 10/3/2010 |                                                           | Spud Date: 10/26/2010 |                      |
| Project: UTAH-UINTAH                                 |  | Site: NBU 922-31P3 PAD    |                                                           |                       | Rig Name No: GWS 1/1 |
| Event: COMPLETION                                    |  | Start Date: 1/17/2011     |                                                           | End Date: 2/1/2011    |                      |
| Active Datum: RKB @5,082.00ft (above Mean Sea Level) |  |                           | UWI: SE/SE/0/9/S/22/E/31/0/0/6/PM/S/496.00/E/0/965.00/0/0 |                       |                      |

| Date      | Time Start-End | Duration (hr) | Phase | Code | Sub Code | P/U | MD From (ft) | Operation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|-----------|----------------|---------------|-------|------|----------|-----|--------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|           | 6:00 - 6:00    | 0.00          | COMP  | 36   | E        | P   |              | FRAC STG #4] MESAVERDE 8,141'-8,369' [21 HOLES]<br><br>STG #4] WHP=1,790#, BRK DN=2,793#, @=4.5 BPM, INJ RT=49.6, INJ PSI=5,096#, ISIP=2,092#, FG=.69, PUMP'D 1,256 BBLS SLK WTR W/ 51,515# 30/50 MESH W/ 5000# RESIN COAT IN TAIL, ISIP=2,421#, FG=.73, AR=49.1, AP=5,048#, MR=49.8, MP=5,754#, NPI=329#, 21/21 CALC PERFS OPEN.<br><br>STG #5] P/U RIH W/ HALIBURTON 10K CBP, SET CBP @=8,094', PERF MESAVERDE USING 3-3/8 EXPEND, 23 GRM, 0.36" HOLE.<br>8,062'-8,064' 3 SPF, 120* PH, 6 HOLES.<br>8,014'-8,016' 3 SPF, 120* PH, 6 HOLES.<br>7,919'-7,922' 3 SPF, 120* PH, 9 HOLES.<br>7,853'-7,854' 3 SPF, 120* PH, 3 HOLES. [24 HOLES]<br><br>STG #5] WHP=715#, BRK DN=2,689#, @=4.5 BPM, INJ RT=49.7, INJ PSI=5,351#, ISIP=1,771#, FG=.66, PUMP'D 1,194 BBLS SLK WTR W/ 47,996# 30/50 MESH W/ 5000# RESIN COAT IN TAIL, ISIP=2,478#, FG=.75, AR=49.2, AP=5,117#, MR=49.9, MP=5,840#, NPI=707#, 18/24 CALC PERFS OPEN.<br><br>STG #6] P/U RIH W/ HALIBURTON 10K CBP, SET CBP @=7,727', PERF MESAVERDE USING 3-3/8 EXPEND, 23 GRM, 0.36" HOLE.<br>7,695'-7,697' 3 SPF, 120* PH, 6 HOLES.<br>7,607'-7,608' 3 SPF, 120* PH, 3 HOLES.<br>7,582'-7,584' 3 SPF, 120* PH, 6 HOLES.<br>7,560'-7,562' 3 SPF, 120* PH, 6 HOLES. [21 HOLES]<br>SWIFN. [HAVING COMPUTER ISSUES IN FRAC VAN]<br>WAITING ON SUPERIOR HAVING COMPUTER PROBLEMS<br>FRAC STG #6] MESAVERDE 7,560'-7,697' [21 HOLES]<br><br>STG #6] WHP=650#, BRK DN=2,344#, @=4.1 BPM, INJ RT=49.7, INJ PSI=5,584#, ISIP=1,683#, FG=.65, PUMP'D 1,230 BBLS SLK WTR W/ 49,455# 30/50 MESH W/ 5000# RESIN COAT IN TAIL, ISIP=2,400#, FG=.75, AR=49.6, AP=4,883#, MR=50.6, MP=5,996#, NPI=762#, 17/21 CALC PERFS OPEN.<br><br>STG #7] P/U RIH W/ HALIBURTON 10K CBP, SET CBP @=7,512', PERF MESAVERDE USING 3-3/8 EXPEND, 23 GRM, 0.36" HOLE.<br>7,480'-7,482' 3 SPF, 120* PH, 6 HOLES.<br>7,450'-7,452' 3 SPF, 120* PG, 6 HOLES.<br>7,366'-7,368' 3 SPF, 120* PH, 6 HOLES.<br>7,320'-7,322' 3 SPF, 120* PH, 6 HOLES. [24 HOLES]<br><br>STG #7] WHP=#, BRK DN=#, @= BPM, INJ RT=, INJ PSI=, ISIP=#, FG=., PUMP'D BBLS SLK WTR W/ # 30/50 MESH W/ 5000# RESIN COAT IN TAIL, ISIP=#, FG=., AR=, AP=#, MR=, MP=#, NPI=#, CALC PERFS OPEN. |
| 1/20/2011 | 7:00 - 9:30    | 2.50          | COMP  |      |          | Z   |              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|           | 9:30 - 9:30    | 0.00          | COMP  | 36   | E        | P   |              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |



US ROCKIES REGION  
**Operation Summary Report**

|                                                      |                        |                                                           |                       |
|------------------------------------------------------|------------------------|-----------------------------------------------------------|-----------------------|
| Well: NBU 922-31O3AS YELLOW                          |                        | Spud Conductor: 10/3/2010                                 | Spud Date: 10/26/2010 |
| Project: UTAH-UINTAH                                 | Site: NBU 922-31P3 PAD |                                                           | Rig Name No: GWS 1/1  |
| Event: COMPLETION                                    | Start Date: 1/17/2011  | End Date: 2/1/2011                                        |                       |
| Active Datum: RKB @5,082.00ft (above Mean Sea Level) |                        | UWI: SE/SE/0/9/S/22/E/31/0/0/6/PM/S/496.00/E/0/965.00/0/0 |                       |

| Date      | Time<br>Start-End | Duration<br>(hr) | Phase | Code | Sub<br>Code | P/U | MD From<br>(ft) | Operation                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|-----------|-------------------|------------------|-------|------|-------------|-----|-----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1/21/2011 | 7:00 - 8:00       | 1.00             | COMP  | 36   | E           | P   |                 | FRA STG #7] MESAVERDE 7,320'-7,482' [24 HOLES]<br><br>STG #7] WHP=212#, BRK DN=2,960#, @=4.1 BPM, INJ RT=49.6, INJ PSI=4,292#, ISIP=1,779#, FG=.65, PUMP'D 1835 BBLS SLK WTR W/ 55,442# 30/50 MESH W/ NO RESIN COAT IN TAIL, ISIP=2,315#, FG=.75, AR=48, AP=4,646#, MR=48.6, MP=5,975#, NPI=536#, 24/24 CALC PERFS OPEN.<br><br>P/U RIH W/ HALIBURTON 8K CBP, SET CBP FOR TOP KILL @=7,270'.<br><br>8,746 TOTAL WTR<br>324,722# TOTAL SAND<br><br>816 GALS SCALE INHIB<br>148 GALS BIO |
| 1/31/2011 | 7:00 - 7:15       | 0.25             | COMP  | 48   |             | P   |                 | HSM, SLIPS, TRIPS & FALLS, PU TBG.                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|           | 7:15 - 16:00      | 8.75             | COMP  | 31   | I           | P   |                 | MIRU, ND WH FROZE HAD TO PUT HEATER ON WH TO THAW OUT, NU BOP, RU FLOOR & TBG EQUIP, TALLY & PU TBG TO 7,200' FOR D/O IN AM, RU POWER SWIVEL, SWI, SDFN.                                                                                                                                                                                                                                                                                                                               |
| 2/1/2011  | 7:00 - 7:15       | 0.25             | COMP  | 48   |             | P   |                 | HSM, SLIPS, TRIPS & FALLS,                                                                                                                                                                                                                                                                                                                                                                                                                                                             |

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

|                                                      |  |                                                           |                       |
|------------------------------------------------------|--|-----------------------------------------------------------|-----------------------|
| Well: NBU 922-3103AS YELLOW                          |  | Spud Conductor: 10/3/2010                                 | Spud Date: 10/26/2010 |
| Project: UTAH-UINTAH                                 |  | Site: NBU 922-31P3 PAD                                    | Rig Name No: GWS 1/1  |
| Event: COMPLETION                                    |  | Start Date: 1/17/2011                                     | End Date: 2/1/2011    |
| Active Datum: RKB @5,082.00ft (above Mean Sea Level) |  | UWI: SE/SE/0/9/S/22/E/31/0/0/6/PM/S/496.00/E/0/965.00/0/0 |                       |

| Date     | Time Start-End | Duration (hr) | Phase | Code | Sub Code | P/U | MD From (ft) | Operation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|----------|----------------|---------------|-------|------|----------|-----|--------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|          | 7:15 - 17:30   | 10.25         | COMP  | 44   | C        | P   |              | <p>HOOK UP PUMPING LINE, BREAK CIRC, TEST BOP TO 3,000 PSI, START DRLG PLUGS.</p> <p>C/O 10' SAND, TAG 1ST PLUG @ 7,284' DRL PLUG IN 6 MIN. 250 PSI INCREASE RIH.</p> <p>C/O 30' SAND, TAG 2ND PLUG @ 7,512' DRL PLUG IN 5 MIN. 300 PSI INCREASE RIH.</p> <p>C/O 25' SAND, TAG 3RD PLUG @ 7,720' DRL PLUG IN 5 MIN. 600 PSI INCREASE RIH.</p> <p>C/O 20' SAND, TAG 4TH PLUG @ 8,094' DRL PLUG IN 6 MIN. 300 PSI INCREASE RIH.</p> <p>C/O 30' SAND, TAG 5TH PLUG @ 8,399' DRL PLUG IN 5 MIN. 450 PSI INCREASE RIH.</p> <p>C/O 30' SAND, TAG 6TH PLUG @ 8,690' DRL PLUG IN 6 MIN. 250 PSI INCREASE RIH.</p> <p>C/O 30' SAND, TAG 7TH PLUG @ 9,000' DRL PLUG IN 5 MIN. 400 PSI INCREASE RIH.</p> <p>PBTD 9,488', BTM PERF @ 9,358', RIH TAGGED @ 9,395', C/O TO 9,482' W/ 301 JTS 2 3/8" L-80 TBG, CIRC 15 MIN, RD POWER SWIVEL, LD 24 JTS, P/U HANGER &amp; LAND TBG W/ 277 JTS 2 3/8" L-80, EOT 8,727.94', SN @ 8,725.74'</p> <p>RD FLOOR &amp; TBG EQUIP, ND BOPS, NU WH, DROP BALL TO SHEAR OFF BIT PUMPED 40 BBLS NEVER SEEN BIT GO.</p> <p>TURN OVER TO FLOW BACK CREW. RD, SDFN.</p> <p>KB= 19'</p> <p>4 1/16" WEATHERFORD HANGER= .83'</p> <p>TBG DELIVERED 316 JTS</p> <p>277 JTS 2 3/8" L-80 = 8,705.91' <span style="float: right;">TBG</span></p> <p>USED 277 JTS</p> <p>POBS= 2.20' <span style="float: right;">TBG</span></p> <p>RETURNED 39 JTS</p> <p>EOT @ 8,727.94'</p> <p>SN @ 8,725.74'</p> <p>TWTR= 8,746 BBLS</p> <p>TWR= 1,200 BBLS</p> <p>TWLTR= 7,546 BBLS</p> <p>WELL TURNED TO SALES @ 1600 HR ON 2/1/2011 - 2000 MCFD, 1920 BWPD, CP 2200#, FTP 1800#, CK 20/64"</p> |
| 2/2/2011 | 7:00 -         |               |       | 33   | A        |     |              | <p>7 AM FLBK REPORT: CP 2650#, TP 2050#, 20/64" CK, 51 BWPH, MED SAND, - GAS</p> <p>TTL BBLS RECOVERED: 2014</p> <p>BBLS LEFT TO RECOVER: 6732</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| 2/3/2011 | 7:00 -         |               |       | 33   | A        |     |              | <p>7 AM FLBK REPORT: CP 2650#, TP 2050#, 20/64" CK, 51 BWPH, MED SAND, - GAS</p> <p>TTL BBLS RECOVERED: 2014</p> <p>BBLS LEFT TO RECOVER: 6732</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| 2/4/2011 | 7:00 -         |               |       | 33   | A        |     |              | <p>7 AM FLBK REPORT: CP 2725#, TP 1900#, 20/64" CK, 30 BWPH, LIGHT SAND, - GAS</p> <p>TTL BBLS RECOVERED: 3887</p> <p>BBLS LEFT TO RECOVER: 4859</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |

US ROCKIES REGION  
**Operation Summary Report**

|                                                      |                |               |       |                                                           |          |     |              |                                                                                                                                       |  |                      |  |  |  |
|------------------------------------------------------|----------------|---------------|-------|-----------------------------------------------------------|----------|-----|--------------|---------------------------------------------------------------------------------------------------------------------------------------|--|----------------------|--|--|--|
| Well: NBU 922-31O3AS YELLOW                          |                |               |       | Spud Conductor: 10/3/2010                                 |          |     |              | Spud Date: 10/26/2010                                                                                                                 |  |                      |  |  |  |
| Project: UTAH-UINTAH                                 |                |               |       | Site: NBU 922-31P3 PAD                                    |          |     |              |                                                                                                                                       |  | Rig Name No: GWS 1/1 |  |  |  |
| Event: COMPLETION                                    |                |               |       | Start Date: 1/17/2011                                     |          |     |              | End Date: 2/1/2011                                                                                                                    |  |                      |  |  |  |
| Active Datum: RKB @5,082.00ft (above Mean Sea Level) |                |               |       | UWI: SE/SE/0/9/S/22/E/31/0/0/6/PM/S/496.00/E/0/965.00/0/0 |          |     |              |                                                                                                                                       |  |                      |  |  |  |
| Date                                                 | Time Start-End | Duration (hr) | Phase | Code                                                      | Sub Code | P/U | MD From (ft) | Operation                                                                                                                             |  |                      |  |  |  |
| 2/5/2011                                             | 7:00 -         |               |       | 33                                                        | A        |     |              | 7 AM FLBK REPORT: CP 2550#, TP 1825#, 20/64" CK, 25 BWPH, LIGHT SAND, - GAS<br>TTL BBLS RECOVERED: 4514<br>BBLS LEFT TO RECOVER: 4232 |  |                      |  |  |  |
| 2/6/2011                                             | 7:00 -         |               |       | 50                                                        |          |     |              | WELL IP'D ON 2/6/11 - 2300 MCFD, 0 BOPD, 552 BWPD, CP 2550#, FTP 1825#, CK 20/64", LP 102#, 24 HRS                                    |  |                      |  |  |  |

WELL DETAILS: P\_NBU 922-31O3AS

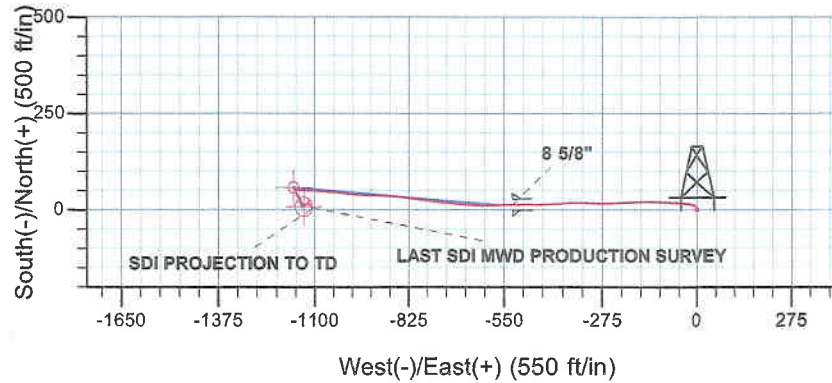
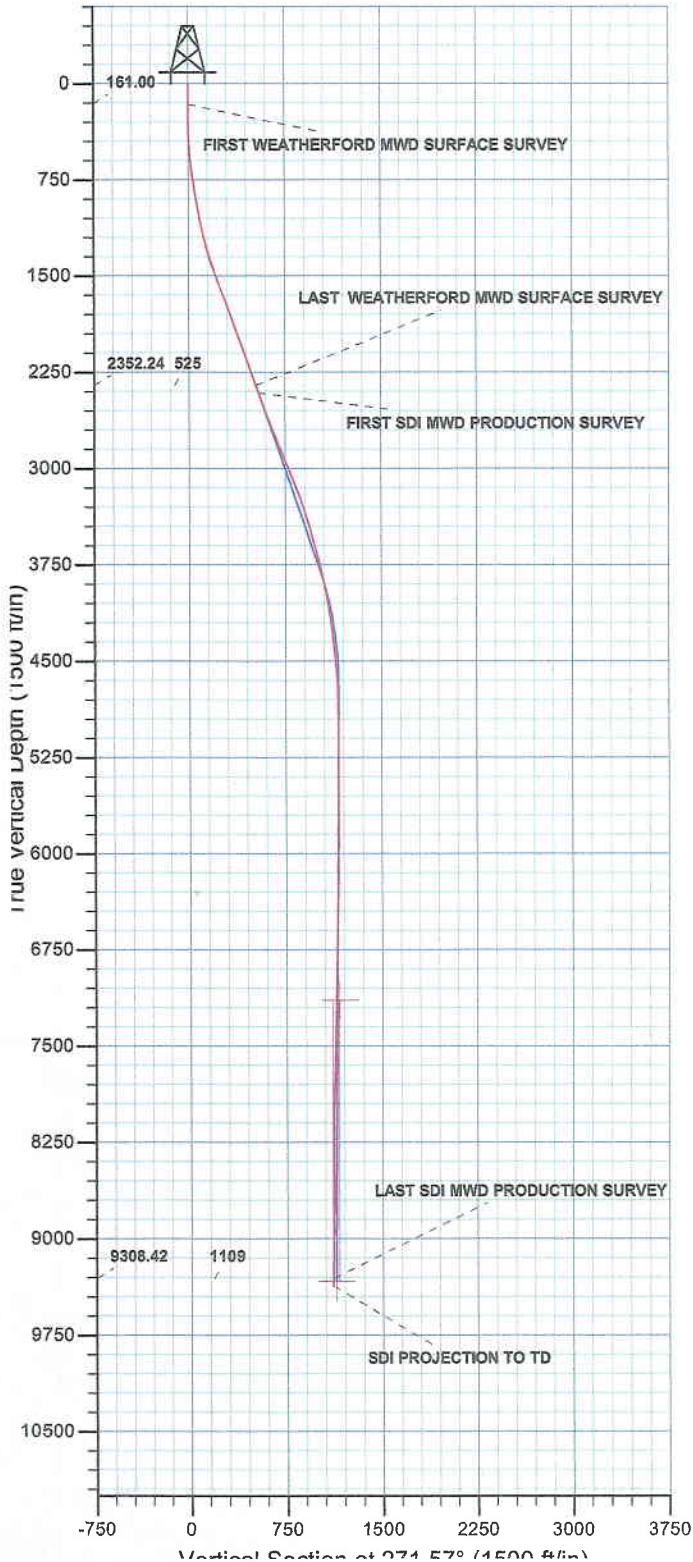
GL 5063' & KB 19' @ 5082.00ft (PIONEER 54)

| +N/-S | +E/-W | Northing    | Easting    | Latitude         | Longitude         |
|-------|-------|-------------|------------|------------------|-------------------|
| 0.00  | 0.00  | 14524832.82 | 2067306.44 | 39° 59' 11.949 N | 109° 28' 33.742 W |



Azimuths to True North  
Magnetic North: 11.14°

Magnetic Field  
Strength: 52385.1snT  
Dip Angle: 65.88°  
Date: 11/04/2010  
Model: IGRF2010



PROJECT DETAILS: UTAH - UTM (feet), NAD27, Zone 12N

Geodetic System: Universal Transverse Mercator (US Survey Feet)  
Datum: NAD 1927 (NADCON CONUS)  
Ellipsoid: Clarke 1866  
Zone: Zone 12N (114 W to 108 W)  
Location: SECTION 31 T9S R22E  
System Datum: Mean Sea Level



**Scientific Drilling**  
Rocky Mountain Operations

## **US ROCKIES REGION PLANNING**

**UTAH - UTM (feet), NAD27, Zone 12N**

**UINTAH\_NBU 922-31P3 PAD**

**P\_NBU 922-31O3AS**

**P\_NBU 922-31O3AS**

**Design: P\_NBU 922-31O3AS**

## **Standard Survey Report**

**07 December, 2010**

**Anadarko**  
E&P Company LP

**Company:** US ROCKIES REGION PLANNING  
**Project:** UTAH - UTM (feet), NAD27, Zone 12N  
**Site:** UINTAH\_NBU 922-31P3 PAD  
**Well:** P\_NBU 922-31O3AS  
**Wellbore:** P\_NBU 922-31O3AS  
**Design:** P\_NBU 922-31O3AS

**Local Co-ordinate Reference:** Well P\_NBU 922-31O3AS  
**TVD Reference:** GL 5063' & KB 19' @ 5082.00ft (PIONEER 54)  
**MD Reference:** GL 5063' & KB 19' @ 5082.00ft (PIONEER 54)  
**North Reference:** True  
**Survey Calculation Method:** Minimum Curvature  
**Database:** EDM5000-RobertS-Local

**Project** UTAH - UTM (feet), NAD27, Zone 12N  
**Map System:** Universal Transverse Mercator (US Survey Feet) **System Datum:** Mean Sea Level  
**Geo Datum:** NAD 1927 (NADCON CONUS)  
**Map Zone:** Zone 12N (114 W to 108 W)

**Site** UINTAH\_NBU 922-31P3 PAD, SECTION 31 T9S R22E  
**Site Position:** **Northing:** 14,524,840.71 usft **Latitude:** 39° 59' 12.024 N  
**From:** Lat/Long **Easting:** 2,067,324.83 usft **Longitude:** 109° 28' 33.504 W  
**Position Uncertainty:** 0.00 ft **Slot Radius:** 13.200 in **Grid Convergence:** 0.98 °

**Well** P\_NBU 922-31O3AS, 496' FSL, 965 FEL  
**Well Position** **+N/-S** 0.00 ft **Northing:** 14,524,832.82 usft **Latitude:** 39° 59' 11.949 N  
**+E/-W** 0.00 ft **Easting:** 2,067,306.43 usft **Longitude:** 109° 28' 33.742 W  
**Position Uncertainty** 0.00 ft **Wellhead Elevation:** ft **Ground Level:** 5,063.00 ft

**Wellbore** P\_NBU 922-31O3AS  
**Magnetics** **Model Name** **Sample Date** **Declination** **Dip Angle** **Field Strength**  
(°) (°) (nT)  
IGRF2010 11/04/2010 11.14 65.88 52,385

**Design** P\_NBU 922-31O3AS  
**Audit Notes:**  
**Version:** 1.0 **Phase:** ACTUAL **Tie On Depth:** 0.00  
**Vertical Section:** **Depth From (TVD)** **+N/-S** **+E/-W** **Direction**  
(ft) (ft) (ft) (°)  
0.00 0.00 0.00 271.57

**Survey Program** **Date** 12/07/2010  
**From** **To**  
(ft) (ft)  
15.00 2,432.00 Survey #1 Weatherford MWD Surface (P\_  
2,493.00 9,545.00 Survey #3 (P\_NBU 922-31O3AS)  
**Tool Name** **Description**  
MWD MWD - Standard  
SDI MWD SDI MWD - Standard ver 1.0.1

**Survey**

| Measured Depth (ft)                         | Inclination (°) | Azimuth (°) | Vertical Depth (ft) | +N/-S (ft) | +E/-W (ft) | Vertical Section (ft) | Dogleg Rate (°/100ft) | Build Rate (°/100ft) | Turn Rate (°/100ft) |
|---------------------------------------------|-----------------|-------------|---------------------|------------|------------|-----------------------|-----------------------|----------------------|---------------------|
| 0.00                                        | 0.00            | 0.00        | 0.00                | 0.00       | 0.00       | 0.00                  | 0.00                  | 0.00                 | 0.00                |
| 15.00                                       | 0.00            | 0.00        | 15.00               | 0.00       | 0.00       | 0.00                  | 0.00                  | 0.00                 | 0.00                |
| 161.00                                      | 0.16            | 316.61      | 161.00              | 0.15       | -0.14      | 0.14                  | 0.11                  | 0.11                 | 0.00                |
| <b>FIRST WEATHERFORD MWD SURFACE SURVEY</b> |                 |             |                     |            |            |                       |                       |                      |                     |
| 247.00                                      | 1.37            | 347.90      | 246.99              | 1.24       | -0.44      | 0.47                  | 1.44                  | 1.41                 | 36.38               |
| 332.00                                      | 1.59            | 352.71      | 331.96              | 3.40       | -0.80      | 0.89                  | 0.30                  | 0.26                 | 5.66                |
| 422.00                                      | 3.25            | 321.06      | 421.88              | 6.63       | -2.56      | 2.74                  | 2.30                  | 1.84                 | -35.17              |
| 512.00                                      | 5.00            | 303.31      | 511.65              | 10.77      | -7.44      | 7.74                  | 2.38                  | 1.94                 | -19.72              |
| 602.00                                      | 6.00            | 282.56      | 601.24              | 13.94      | -15.31     | 15.69                 | 2.45                  | 1.11                 | -23.06              |
| 692.00                                      | 7.88            | 275.56      | 690.58              | 15.56      | -26.05     | 26.46                 | 2.29                  | 2.09                 | -7.78               |



Company: US ROCKIES REGION PLANNING  
Project: UTAH - UTM (feet), NAD27, Zone 12N  
Site: UINTAH\_NBU 922-31P3 PAD  
Well: P\_NBU 922-31O3AS  
Wellbore: P\_NBU 922-31O3AS  
Design: P\_NBU 922-31O3AS

Local Co-ordinate Reference: Well P\_NBU 922-31O3AS  
TVD Reference: GL 5063' & KB 19' @ 5082.00ft (PIONEER 54)  
MD Reference: GL 5063' & KB 19' @ 5082.00ft (PIONEER 54)  
North Reference: True  
Survey Calculation Method: Minimum Curvature  
Database: EDM5000-RobertS-Local

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) |
|--------------------------------------------|-----------------|-------------|---------------------|------------|------------|-----------------------|-----------------------|----------------------|---------------------|
| 782.00                                     | 8.38            | 275.18      | 779.68              | 16.75      | -38.72     | 39.16                 | 0.56                  | 0.56                 | -0.42               |
| 872.00                                     | 10.19           | 273.56      | 868.49              | 17.84      | -53.20     | 53.67                 | 2.03                  | 2.01                 | -1.80               |
| 962.00                                     | 10.88           | 274.31      | 956.98              | 18.97      | -69.61     | 70.11                 | 0.78                  | 0.77                 | 0.83                |
| 1,052.00                                   | 11.81           | 270.56      | 1,045.22            | 19.70      | -87.29     | 87.80                 | 1.32                  | 1.03                 | -4.17               |
| 1,142.00                                   | 12.17           | 270.67      | 1,133.25            | 19.90      | -105.99    | 106.49                | 0.40                  | 0.40                 | 0.12                |
| 1,232.00                                   | 13.50           | 271.18      | 1,221.00            | 20.23      | -125.98    | 126.48                | 1.48                  | 1.48                 | 0.57                |
| 1,322.00                                   | 15.63           | 270.56      | 1,308.11            | 20.56      | -148.61    | 149.11                | 2.37                  | 2.37                 | -0.69               |
| 1,412.00                                   | 18.50           | 268.68      | 1,394.14            | 20.35      | -175.01    | 175.50                | 3.25                  | 3.19                 | -2.09               |
| 1,502.00                                   | 19.69           | 267.18      | 1,479.18            | 19.28      | -204.43    | 204.88                | 1.43                  | 1.32                 | -1.67               |
| 1,592.00                                   | 20.63           | 267.18      | 1,563.67            | 17.75      | -235.41    | 235.81                | 1.04                  | 1.04                 | 0.00                |
| 1,682.00                                   | 21.63           | 269.64      | 1,647.62            | 16.87      | -267.84    | 268.20                | 1.48                  | 1.11                 | 2.73                |
| 1,772.00                                   | 19.69           | 273.06      | 1,731.83            | 17.57      | -299.57    | 299.94                | 2.54                  | -2.16                | 3.80                |
| 1,862.00                                   | 20.50           | 273.06      | 1,816.35            | 19.22      | -330.44    | 330.85                | 0.90                  | 0.90                 | 0.00                |
| 1,952.00                                   | 20.81           | 266.81      | 1,900.57            | 19.18      | -362.15    | 362.54                | 2.47                  | 0.34                 | -6.94               |
| 2,042.00                                   | 20.56           | 264.81      | 1,984.77            | 16.86      | -393.85    | 394.16                | 0.83                  | -0.28                | -2.22               |
| 2,132.00                                   | 20.19           | 266.72      | 2,069.14            | 14.54      | -425.09    | 425.33                | 0.85                  | -0.41                | 2.12                |
| 2,222.00                                   | 19.00           | 271.56      | 2,153.93            | 14.05      | -455.25    | 455.46                | 2.24                  | -1.32                | 5.38                |
| 2,312.00                                   | 19.44           | 270.31      | 2,238.92            | 14.53      | -484.87    | 485.09                | 0.67                  | 0.49                 | -1.39               |
| 2,402.00                                   | 19.06           | 269.56      | 2,323.89            | 14.50      | -514.54    | 514.75                | 0.50                  | -0.42                | -0.83               |
| 2,432.00                                   | 19.05           | 268.54      | 2,352.24            | 14.33      | -524.33    | 524.53                | 1.11                  | -0.03                | -3.40               |
| <b>LAST WEATHERFORD MWD SURFACE SURVEY</b> |                 |             |                     |            |            |                       |                       |                      |                     |
| 2,493.00                                   | 18.95           | 267.84      | 2,409.92            | 13.71      | -544.18    | 544.36                | 0.41                  | -0.16                | -1.15               |
| <b>FIRST SDI MWD PRODUCTION SURVEY</b>     |                 |             |                     |            |            |                       |                       |                      |                     |
| 2,588.00                                   | 19.77           | 267.52      | 2,499.55            | 12.43      | -575.65    | 575.77                | 0.87                  | 0.86                 | -0.34               |
| 2,684.00                                   | 21.28           | 270.05      | 2,589.45            | 11.74      | -609.29    | 609.39                | 1.82                  | 1.57                 | 2.64                |
| 2,778.00                                   | 21.87           | 273.68      | 2,676.87            | 12.88      | -643.82    | 643.94                | 1.55                  | 0.63                 | 3.86                |
| 2,873.00                                   | 21.75           | 274.22      | 2,765.07            | 15.31      | -679.04    | 679.20                | 0.25                  | -0.13                | 0.57                |
| 2,968.00                                   | 21.96           | 274.95      | 2,853.24            | 18.14      | -714.29    | 714.52                | 0.36                  | 0.22                 | 0.77                |
| 3,063.00                                   | 22.78           | 277.48      | 2,941.09            | 22.07      | -750.22    | 750.54                | 1.33                  | 0.86                 | 2.66                |
| 3,158.00                                   | 22.61           | 276.20      | 3,028.74            | 26.43      | -786.61    | 787.04                | 0.55                  | -0.18                | -1.35               |
| 3,252.00                                   | 21.55           | 276.06      | 3,115.84            | 30.21      | -821.74    | 822.26                | 1.13                  | -1.13                | -0.15               |
| 3,347.00                                   | 20.46           | 275.36      | 3,204.53            | 33.60      | -855.62    | 856.22                | 1.18                  | -1.15                | -0.74               |
| 3,442.00                                   | 18.25           | 273.09      | 3,294.16            | 35.96      | -887.01    | 887.66                | 2.46                  | -2.33                | -2.39               |
| 3,537.00                                   | 17.69           | 270.66      | 3,384.52            | 36.92      | -916.30    | 916.97                | 0.98                  | -0.59                | -2.56               |
| 3,632.00                                   | 16.04           | 270.64      | 3,475.43            | 37.24      | -943.86    | 944.52                | 1.74                  | -1.74                | -0.02               |
| 3,727.00                                   | 15.83           | 273.65      | 3,566.78            | 38.21      | -969.91    | 970.60                | 0.90                  | -0.22                | 3.17                |
| 3,822.00                                   | 15.24           | 276.38      | 3,658.32            | 40.42      | -995.25    | 995.99                | 0.99                  | -0.62                | 2.87                |
| 3,917.00                                   | 13.63           | 277.84      | 3,750.31            | 43.33      | -1,018.75  | 1,019.56              | 1.74                  | -1.69                | 1.54                |
| 4,012.00                                   | 12.38           | 272.71      | 3,842.88            | 45.34      | -1,040.02  | 1,040.87              | 1.79                  | -1.32                | -5.40               |
| 4,107.00                                   | 11.78           | 275.62      | 3,935.77            | 46.77      | -1,059.84  | 1,060.72              | 0.90                  | -0.63                | 3.06                |
| 4,201.00                                   | 10.11           | 275.46      | 4,028.06            | 48.50      | -1,077.60  | 1,078.53              | 1.78                  | -1.78                | -0.17               |
| 4,296.00                                   | 8.65            | 267.67      | 4,121.79            | 49.00      | -1,093.04  | 1,093.97              | 2.03                  | -1.54                | -8.20               |
| 4,391.00                                   | 8.61            | 274.74      | 4,215.72            | 49.30      | -1,107.27  | 1,108.20              | 1.12                  | -0.04                | 7.44                |

**Company:** US ROCKIES REGION PLANNING  
**Project:** UTAH - UTM (feet), NAD27, Zone 12N  
**Site:** UINTAH\_NBU 922-31P3 PAD  
**Well:** P\_NBU 922-31O3AS  
**Wellbore:** P\_NBU 922-31O3AS  
**Design:** P\_NBU 922-31O3AS

**Local Co-ordinate Reference:** Well P\_NBU 922-31O3AS  
**TVD Reference:** GL 5063' & KB 19' @ 5082.00ft (PIONEER 54)  
**MD Reference:** GL 5063' & KB 19' @ 5082.00ft (PIONEER 54)  
**North Reference:** True  
**Survey Calculation Method:** Minimum Curvature  
**Database:** EDM5000-RobertS-Local

**Survey**

| Measured Depth (ft) | Inclination (°) | Azimuth (°) | Vertical Depth (ft) | +N/-S (ft) | +E/-W (ft) | Vertical Section (ft) | Dogleg Rate (°/100ft) | Build Rate (°/100ft) | Turn Rate (°/100ft) |
|---------------------|-----------------|-------------|---------------------|------------|------------|-----------------------|-----------------------|----------------------|---------------------|
| 4,486.00            | 7.26            | 276.15      | 4,309.81            | 50.53      | -1,120.32  | 1,121.29              | 1.44                  | -1.42                | 1.48                |
| 4,581.00            | 6.42            | 273.69      | 4,404.13            | 51.51      | -1,131.59  | 1,132.58              | 0.94                  | -0.88                | -2.59               |
| 4,676.00            | 4.62            | 271.50      | 4,498.69            | 51.96      | -1,140.72  | 1,141.71              | 1.91                  | -1.89                | -2.31               |
| 4,770.00            | 4.25            | 282.33      | 4,592.41            | 52.80      | -1,147.91  | 1,148.92              | 0.97                  | -0.39                | 11.52               |
| 4,865.00            | 2.65            | 278.95      | 4,687.23            | 53.89      | -1,153.51  | 1,154.56              | 1.70                  | -1.68                | -3.56               |
| 4,960.00            | 1.28            | 280.15      | 4,782.17            | 54.42      | -1,156.73  | 1,157.78              | 1.44                  | -1.44                | 1.26                |
| 5,055.00            | 0.59            | 287.78      | 4,877.16            | 54.76      | -1,158.24  | 1,159.30              | 0.74                  | -0.73                | 8.03                |
| 5,150.00            | 0.83            | 291.47      | 4,972.15            | 55.16      | -1,159.34  | 1,160.42              | 0.26                  | 0.25                 | 3.88                |
| 5,245.00            | 0.47            | 280.98      | 5,067.15            | 55.49      | -1,160.37  | 1,161.45              | 0.40                  | -0.38                | -11.04              |
| 5,340.00            | 0.69            | 292.15      | 5,162.14            | 55.78      | -1,161.28  | 1,162.37              | 0.26                  | 0.23                 | 11.76               |
| 5,435.00            | 0.35            | 250.27      | 5,257.14            | 55.89      | -1,162.08  | 1,163.18              | 0.51                  | -0.36                | -44.08              |
| 5,529.00            | 0.13            | 9.61        | 5,351.14            | 55.90      | -1,162.33  | 1,163.43              | 0.46                  | -0.23                | 126.96              |
| 5,625.00            | 0.24            | 97.44       | 5,447.14            | 55.98      | -1,162.12  | 1,163.21              | 0.28                  | 0.11                 | 91.49               |
| 5,719.00            | 0.38            | 142.97      | 5,541.14            | 55.71      | -1,161.73  | 1,162.82              | 0.29                  | 0.15                 | 48.44               |
| 5,814.00            | 0.35            | 79.82       | 5,636.13            | 55.51      | -1,161.26  | 1,162.34              | 0.40                  | -0.03                | -66.47              |
| 5,909.00            | 0.42            | 124.25      | 5,731.13            | 55.36      | -1,160.69  | 1,161.76              | 0.31                  | 0.07                 | 46.77               |
| 6,004.00            | 0.64            | 103.90      | 5,826.13            | 55.04      | -1,159.88  | 1,160.95              | 0.30                  | 0.23                 | -21.42              |
| 6,098.00            | 0.79            | 132.71      | 5,920.12            | 54.47      | -1,158.90  | 1,159.95              | 0.41                  | 0.16                 | 30.65               |
| 6,193.00            | 1.18            | 164.24      | 6,015.11            | 53.09      | -1,158.15  | 1,159.17              | 0.69                  | 0.41                 | 33.19               |
| 6,288.00            | 1.36            | 168.12      | 6,110.08            | 51.04      | -1,157.65  | 1,158.61              | 0.21                  | 0.19                 | 4.08                |
| 6,383.00            | 1.45            | 161.57      | 6,205.06            | 48.80      | -1,157.04  | 1,157.94              | 0.19                  | 0.09                 | -6.89               |
| 6,478.00            | 2.45            | 147.77      | 6,300.00            | 45.94      | -1,155.58  | 1,156.40              | 1.16                  | 1.05                 | -14.53              |
| 6,573.00            | 2.77            | 151.48      | 6,394.90            | 42.21      | -1,153.40  | 1,154.12              | 0.38                  | 0.34                 | 3.91                |
| 6,668.00            | 2.84            | 150.73      | 6,489.79            | 38.14      | -1,151.15  | 1,151.76              | 0.08                  | 0.07                 | -0.79               |
| 6,762.00            | 2.74            | 156.35      | 6,583.68            | 34.05      | -1,149.11  | 1,149.61              | 0.31                  | -0.11                | 5.98                |
| 6,857.00            | 2.82            | 159.43      | 6,678.56            | 29.78      | -1,147.38  | 1,147.76              | 0.18                  | 0.08                 | 3.24                |
| 6,952.00            | 2.75            | 160.13      | 6,773.45            | 25.45      | -1,145.78  | 1,146.05              | 0.08                  | -0.07                | 0.74                |
| 7,047.00            | 2.49            | 161.22      | 6,868.35            | 21.35      | -1,144.35  | 1,144.50              | 0.28                  | -0.27                | 1.15                |
| 7,142.00            | 2.58            | 157.74      | 6,963.26            | 17.42      | -1,142.87  | 1,142.92              | 0.19                  | 0.09                 | -3.66               |
| 7,237.00            | 2.65            | 150.03      | 7,058.16            | 13.54      | -1,140.96  | 1,140.91              | 0.38                  | 0.07                 | -8.12               |
| 7,331.00            | 2.35            | 142.65      | 7,152.07            | 10.12      | -1,138.71  | 1,138.56              | 0.47                  | -0.32                | -7.85               |
| 7,426.00            | 1.31            | 95.31       | 7,247.03            | 8.47       | -1,136.45  | 1,136.25              | 1.84                  | -1.09                | -49.83              |
| 7,521.00            | 1.51            | 93.47       | 7,342.00            | 8.30       | -1,134.12  | 1,133.92              | 0.22                  | 0.21                 | -1.94               |
| 7,616.00            | 1.67            | 43.65       | 7,436.97            | 9.22       | -1,131.91  | 1,131.74              | 1.42                  | 0.17                 | -52.44              |
| 7,711.00            | 1.98            | 47.72       | 7,531.92            | 11.33      | -1,129.74  | 1,129.63              | 0.35                  | 0.33                 | 4.28                |
| 7,805.00            | 1.68            | 51.66       | 7,625.87            | 13.28      | -1,127.46  | 1,127.40              | 0.35                  | -0.32                | 4.19                |
| 7,900.00            | 1.55            | 65.50       | 7,720.83            | 14.67      | -1,125.20  | 1,125.18              | 0.43                  | -0.14                | 14.57               |
| 7,995.00            | 1.41            | 69.66       | 7,815.80            | 15.61      | -1,122.93  | 1,122.94              | 0.19                  | -0.15                | 4.38                |
| 8,090.00            | 1.32            | 80.62       | 7,910.77            | 16.20      | -1,120.76  | 1,120.78              | 0.29                  | -0.09                | 11.54               |
| 8,185.00            | 0.95            | 18.61       | 8,005.76            | 17.12      | -1,119.43  | 1,119.48              | 1.28                  | -0.39                | -65.27              |
| 8,280.00            | 1.22            | 1.26        | 8,100.74            | 18.88      | -1,119.15  | 1,119.25              | 0.44                  | 0.28                 | -18.26              |
| 8,376.00            | 0.91            | 1.33        | 8,196.72            | 20.66      | -1,119.11  | 1,119.26              | 0.32                  | -0.32                | 0.07                |
| 8,471.00            | 0.53            | 325.02      | 8,291.72            | 21.78      | -1,119.35  | 1,119.52              | 0.61                  | -0.40                | -38.22              |
| 8,566.00            | 0.58            | 298.74      | 8,386.71            | 22.37      | -1,120.02  | 1,120.21              | 0.27                  | 0.05                 | -27.66              |

**Company:** US ROCKIES REGION PLANNING  
**Project:** UTAH - UTM (feet), NAD27, Zone 12N  
**Site:** UINTAH\_NBU 922-31P3 PAD  
**Well:** P\_NBU 922-31O3AS  
**Wellbore:** P\_NBU 922-31O3AS  
**Design:** P\_NBU 922-31O3AS

**Local Co-ordinate Reference:** Well P\_NBU 922-31O3AS  
**TVD Reference:** GL 5063' & KB 19' @ 5082.00ft (PIONEER 54)  
**MD Reference:** GL 5063' & KB 19' @ 5082.00ft (PIONEER 54)  
**North Reference:** True  
**Survey Calculation Method:** Minimum Curvature  
**Database:** EDM5000-RobertS-Local

**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) |
|---------------------------------------|-----------------|-------------|---------------------|------------|------------|-----------------------|-----------------------|----------------------|---------------------|
| 8,661.00                              | 0.11            | 147.95      | 8,481.71            | 22.52      | -1,120.39  | 1,120.59              | 0.71                  | -0.49                | -158.73             |
| 8,756.00                              | 0.53            | 110.08      | 8,576.71            | 22.30      | -1,119.93  | 1,120.12              | 0.47                  | 0.44                 | -39.86              |
| 8,852.00                              | 0.68            | 125.48      | 8,672.71            | 21.81      | -1,119.05  | 1,119.23              | 0.23                  | 0.16                 | 16.04               |
| 8,947.00                              | 1.14            | 158.27      | 8,767.69            | 20.61      | -1,118.24  | 1,118.39              | 0.71                  | 0.48                 | 34.52               |
| 9,042.00                              | 1.68            | 150.82      | 8,862.66            | 18.51      | -1,117.21  | 1,117.30              | 0.60                  | 0.57                 | -7.84               |
| 9,138.00                              | 1.85            | 146.92      | 8,958.62            | 15.99      | -1,115.68  | 1,115.70              | 0.22                  | 0.18                 | -4.06               |
| 9,233.00                              | 1.82            | 149.82      | 9,053.57            | 13.40      | -1,114.09  | 1,114.04              | 0.10                  | -0.03                | 3.05                |
| 9,328.00                              | 1.76            | 156.25      | 9,148.52            | 10.76      | -1,112.74  | 1,112.62              | 0.22                  | -0.06                | 6.77                |
| 9,423.00                              | 2.03            | 143.08      | 9,243.47            | 8.08       | -1,111.14  | 1,110.95              | 0.54                  | 0.28                 | -13.86              |
| 9,488.00                              | 2.35            | 143.46      | 9,308.42            | 6.09       | -1,109.66  | 1,109.41              | 0.49                  | 0.49                 | 0.58                |
| <b>LAST SDI MWD PRODUCTION SURVEY</b> |                 |             |                     |            |            |                       |                       |                      |                     |
| 9,545.00                              | 2.35            | 143.46      | 9,365.38            | 4.21       | -1,108.26  | 1,107.97              | 0.00                  | 0.00                 | 0.00                |
| <b>SDI PROJECTION TO TD</b>           |                 |             |                     |            |            |                       |                       |                      |                     |

**Design Annotations**

| Measured Depth (ft) | Vertical Depth (ft) | Local Coordinates |            | Comment                              |
|---------------------|---------------------|-------------------|------------|--------------------------------------|
|                     |                     | +N/-S (ft)        | +E/-W (ft) |                                      |
| 161.00              | 161.00              | 0.15              | -0.14      | FIRST WEATHERFORD MWD SURFACE SURVEY |
| 2,432.00            | 2,352.24            | 14.33             | -524.33    | LAST WEATHERFORD MWD SURFACE SURVEY  |

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



**Scientific Drilling**  
Rocky Mountain Operations

## **US ROCKIES REGION PLANNING**

**UTAH - UTM (feet), NAD27, Zone 12N**

**UINTAH\_NBU 922-31P3 PAD**

**P\_NBU 922-31O3AS**

**P\_NBU 922-31O3AS**

**Design: P\_NBU 922-31O3AS**

## **Survey Report - Geographic**

**07 December, 2010**

**Anadarko**  
E&P Company LP

|                  |                                    |                                     |                                            |
|------------------|------------------------------------|-------------------------------------|--------------------------------------------|
| <b>Company:</b>  | US ROCKIES REGION PLANNING         | <b>Local Co-ordinate Reference:</b> | Well P_NBU 922-3103AS                      |
| <b>Project:</b>  | UTAH - UTM (feet), NAD27, Zone 12N | <b>TVD Reference:</b>               | GL 5063' & KB 19' @ 5082.00ft (PIONEER 54) |
| <b>Site:</b>     | UINTAH_NBU 922-31P3 PAD            | <b>MD Reference:</b>                | GL 5063' & KB 19' @ 5082.00ft (PIONEER 54) |
| <b>Well:</b>     | P_NBU 922-3103AS                   | <b>North Reference:</b>             | True                                       |
| <b>Wellbore:</b> | P_NBU 922-3103AS                   | <b>Survey Calculation Method:</b>   | Minimum Curvature                          |
| <b>Design:</b>   | P_NBU 922-3103AS                   | <b>Database:</b>                    | EDM5000-RobertS-Local                      |

|                    |                                                |                      |                |
|--------------------|------------------------------------------------|----------------------|----------------|
| <b>Project</b>     | UTAH - UTM (feet), NAD27, Zone 12N             |                      |                |
| <b>Map System:</b> | Universal Transverse Mercator (US Survey Feet) | <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>                  | UINTAH_NBU 922-31P3 PAD, SECTION 31 T9S R22E |                     |                    |                          |                   |
| <b>Site Position:</b>        |                                              | <b>Northing:</b>    | 14,524,840.71 usft | <b>Latitude:</b>         | 39° 59' 12.024 N  |
| <b>From:</b>                 | Lat/Long                                     | <b>Easting:</b>     | 2,067,324.83 usft  | <b>Longitude:</b>        | 109° 28' 33.504 W |
| <b>Position Uncertainty:</b> | 0.00 ft                                      | <b>Slot Radius:</b> | 13.200 in          | <b>Grid Convergence:</b> | 0.98 °            |

|                             |                                     |         |                            |                    |                      |                   |
|-----------------------------|-------------------------------------|---------|----------------------------|--------------------|----------------------|-------------------|
| <b>Well</b>                 | P_NBU 922-3103AS, 496' FSL, 965 FEL |         |                            |                    |                      |                   |
| <b>Well Position</b>        | +N-S                                | 0.00 ft | <b>Northing:</b>           | 14,524,832.82 usft | <b>Latitude:</b>     | 39° 59' 11.949 N  |
|                             | +E-W                                | 0.00 ft | <b>Easting:</b>            | 2,067,306.43 usft  | <b>Longitude:</b>    | 109° 28' 33.742 W |
| <b>Position Uncertainty</b> |                                     | 0.00 ft | <b>Wellhead Elevation:</b> | ft                 | <b>Ground Level:</b> | 5,063.00 ft       |

|                  |                   |                    |                    |                  |                       |
|------------------|-------------------|--------------------|--------------------|------------------|-----------------------|
| <b>Wellbore</b>  | P_NBU 922-3103AS  |                    |                    |                  |                       |
| <b>Magnetics</b> | <b>Model Name</b> | <b>Sample Date</b> | <b>Declination</b> | <b>Dip Angle</b> | <b>Field Strength</b> |
|                  | IGRF2010          | 11/04/2010         | (°)                | (°)              | (nT)                  |
|                  |                   |                    | 11.14              | 65.88            | 52,385                |

|                          |                         |               |              |                      |      |
|--------------------------|-------------------------|---------------|--------------|----------------------|------|
| <b>Design</b>            | P_NBU 922-3103AS        |               |              |                      |      |
| <b>Audit Notes:</b>      |                         |               |              |                      |      |
| <b>Version:</b>          | 1.0                     | <b>Phase:</b> | ACTUAL       | <b>Tie On Depth:</b> | 0.00 |
| <b>Vertical Section:</b> | <b>Depth From (TVD)</b> | <b>+N/-S</b>  | <b>+E/-W</b> | <b>Direction</b>     |      |
|                          | (ft)                    | (ft)          | (ft)         | (°)                  |      |
|                          | 0.00                    | 0.00          | 0.00         | 271.57               |      |

|                       |             |                                       |                  |                              |  |
|-----------------------|-------------|---------------------------------------|------------------|------------------------------|--|
| <b>Survey Program</b> | <b>Date</b> | 12/07/2010                            |                  |                              |  |
| <b>From</b>           | <b>To</b>   | <b>Survey (Wellbore)</b>              | <b>Tool Name</b> | <b>Description</b>           |  |
| (ft)                  | (ft)        |                                       |                  |                              |  |
| 15.00                 | 2,432.00    | Survey #1 Weatherford MWD Surface (P_ | MWD              | MWD - Standard               |  |
| 2,493.00              | 9,545.00    | Survey #3 (P_NBU 922-3103AS)          | SDI MWD          | SDI MWD - Standard ver 1.0.1 |  |

|                                             |                    |                |                 |              |              |                 |                |                  |                   |
|---------------------------------------------|--------------------|----------------|-----------------|--------------|--------------|-----------------|----------------|------------------|-------------------|
| <b>Survey</b>                               |                    |                |                 |              |              |                 |                |                  |                   |
| <b>Measured</b>                             |                    |                | <b>Vertical</b> |              |              | <b>Map</b>      | <b>Map</b>     |                  |                   |
| <b>Depth</b>                                | <b>Inclination</b> | <b>Azimuth</b> | <b>Depth</b>    | <b>+N/-S</b> | <b>+E/-W</b> | <b>Northing</b> | <b>Easting</b> | <b>Latitude</b>  | <b>Longitude</b>  |
| (ft)                                        | (°)                | (°)            | (ft)            | (ft)         | (ft)         | (usft)          | (usft)         |                  |                   |
| 0.00                                        | 0.00               | 0.00           | 0.00            | 0.00         | 0.00         | 14,524,832.82   | 2,067,306.43   | 39° 59' 11.949 N | 109° 28' 33.742 W |
| 15.00                                       | 0.00               | 0.00           | 15.00           | 0.00         | 0.00         | 14,524,832.82   | 2,067,306.43   | 39° 59' 11.949 N | 109° 28' 33.742 W |
| 161.00                                      | 0.16               | 316.61         | 161.00          | 0.15         | -0.14        | 14,524,832.97   | 2,067,306.29   | 39° 59' 11.950 N | 109° 28' 33.744 W |
| <b>FIRST WEATHERFORD MWD SURFACE SURVEY</b> |                    |                |                 |              |              |                 |                |                  |                   |
| 247.00                                      | 1.37               | 347.90         | 246.99          | 1.24         | -0.44        | 14,524,834.05   | 2,067,305.97   | 39° 59' 11.961 N | 109° 28' 33.748 W |
| 332.00                                      | 1.59               | 352.71         | 331.96          | 3.40         | -0.80        | 14,524,836.21   | 2,067,305.57   | 39° 59' 11.983 N | 109° 28' 33.752 W |
| 422.00                                      | 3.25               | 321.06         | 421.88          | 6.63         | -2.56        | 14,524,839.40   | 2,067,303.76   | 39° 59' 12.015 N | 109° 28' 33.775 W |
| 512.00                                      | 5.00               | 303.31         | 511.65          | 10.77        | -7.44        | 14,524,843.46   | 2,067,298.81   | 39° 59' 12.055 N | 109° 28' 33.838 W |
| 602.00                                      | 6.00               | 282.56         | 601.24          | 13.94        | -15.31       | 14,524,846.50   | 2,067,290.88   | 39° 59' 12.087 N | 109° 28' 33.939 W |
| 692.00                                      | 7.88               | 275.56         | 690.58          | 15.56        | -26.05       | 14,524,847.94   | 2,067,280.12   | 39° 59' 12.103 N | 109° 28' 34.077 W |
| 782.00                                      | 8.38               | 275.18         | 779.68          | 16.75        | -38.72       | 14,524,848.91   | 2,067,267.43   | 39° 59' 12.115 N | 109° 28' 34.240 W |

**Company:** US ROCKIES REGION PLANNING  
**Project:** UTAH - UTM (feet), NAD27, Zone 12N  
**Site:** UINTAH\_NBU 922-31P3 PAD  
**Well:** P\_NBU 922-31O3AS  
**Wellbore:** P\_NBU 922-31O3AS  
**Design:** P\_NBU 922-31O3AS

**Local Co-ordinate Reference:** Well P\_NBU 922-31O3AS  
**TVD Reference:** GL 5063' & KB 19' @ 5082.00ft (PIONEER 54)  
**MD Reference:** GL 5063' & KB 19' @ 5082.00ft (PIONEER 54)  
**North Reference:** True  
**Survey Calculation Method:** Minimum Curvature  
**Database:** EDM5000-RobertS-Local

**Survey**

| Measured<br>Depth<br>(ft)                  | Inclination<br>(°) | Azimuth<br>(°) | Vertical<br>Depth<br>(ft) | +N/-S<br>(ft) | +E/-W<br>(ft) | Map<br>Northing<br>(usft) | Map<br>Easting<br>(usft) | Latitude         | Longitude         |
|--------------------------------------------|--------------------|----------------|---------------------------|---------------|---------------|---------------------------|--------------------------|------------------|-------------------|
| 872.00                                     | 10.19              | 273.56         | 868.49                    | 17.84         | -53.20        | 14,524,849.75             | 2,067,252.94             | 39° 59' 12.125 N | 109° 28' 34.426 W |
| 962.00                                     | 10.88              | 274.31         | 956.98                    | 18.97         | -69.61        | 14,524,850.60             | 2,067,236.51             | 39° 59' 12.137 N | 109° 28' 34.636 W |
| 1,052.00                                   | 11.81              | 270.56         | 1,045.22                  | 19.70         | -87.29        | 14,524,851.03             | 2,067,218.82             | 39° 59' 12.144 N | 109° 28' 34.864 W |
| 1,142.00                                   | 12.17              | 270.67         | 1,133.25                  | 19.90         | -105.99       | 14,524,850.91             | 2,067,200.12             | 39° 59' 12.146 N | 109° 28' 35.104 W |
| 1,232.00                                   | 13.50              | 271.18         | 1,221.00                  | 20.23         | -125.98       | 14,524,850.89             | 2,067,180.13             | 39° 59' 12.149 N | 109° 28' 35.361 W |
| 1,322.00                                   | 15.63              | 270.56         | 1,308.11                  | 20.56         | -148.61       | 14,524,850.84             | 2,067,157.50             | 39° 59' 12.152 N | 109° 28' 35.651 W |
| 1,412.00                                   | 18.50              | 268.68         | 1,394.14                  | 20.35         | -175.01       | 14,524,850.18             | 2,067,131.10             | 39° 59' 12.150 N | 109° 28' 35.991 W |
| 1,502.00                                   | 19.69              | 267.18         | 1,479.18                  | 19.28         | -204.43       | 14,524,848.60             | 2,067,101.70             | 39° 59' 12.140 N | 109° 28' 36.369 W |
| 1,592.00                                   | 20.63              | 267.18         | 1,563.67                  | 17.75         | -235.41       | 14,524,846.55             | 2,067,070.75             | 39° 59' 12.124 N | 109° 28' 36.767 W |
| 1,682.00                                   | 21.63              | 269.64         | 1,647.62                  | 16.87         | -267.84       | 14,524,845.11             | 2,067,038.35             | 39° 59' 12.116 N | 109° 28' 37.183 W |
| 1,772.00                                   | 19.69              | 273.06         | 1,731.83                  | 17.57         | -299.57       | 14,524,845.27             | 2,067,006.61             | 39° 59' 12.123 N | 109° 28' 37.591 W |
| 1,862.00                                   | 20.50              | 273.06         | 1,816.35                  | 19.22         | -330.44       | 14,524,846.39             | 2,066,975.71             | 39° 59' 12.139 N | 109° 28' 37.988 W |
| 1,952.00                                   | 20.81              | 268.81         | 1,900.57                  | 19.18         | -362.15       | 14,524,845.80             | 2,066,944.01             | 39° 59' 12.139 N | 109° 28' 38.395 W |
| 2,042.00                                   | 20.56              | 264.81         | 1,984.77                  | 16.86         | -393.85       | 14,524,842.94             | 2,066,912.35             | 39° 59' 12.116 N | 109° 28' 38.803 W |
| 2,132.00                                   | 20.19              | 266.72         | 2,069.14                  | 14.54         | -425.09       | 14,524,840.09             | 2,066,881.15             | 39° 59' 12.093 N | 109° 28' 39.204 W |
| 2,222.00                                   | 19.00              | 271.56         | 2,153.93                  | 14.05         | -455.25       | 14,524,839.09             | 2,066,851.01             | 39° 59' 12.088 N | 109° 28' 39.592 W |
| 2,312.00                                   | 19.44              | 270.31         | 2,238.92                  | 14.53         | -484.87       | 14,524,839.06             | 2,066,821.39             | 39° 59' 12.093 N | 109° 28' 39.972 W |
| 2,402.00                                   | 19.06              | 269.56         | 2,323.89                  | 14.50         | -514.54       | 14,524,838.52             | 2,066,791.72             | 39° 59' 12.092 N | 109° 28' 40.353 W |
| 2,432.00                                   | 19.05              | 268.54         | 2,352.24                  | 14.33         | -524.33       | 14,524,838.19             | 2,066,781.93             | 39° 59' 12.091 N | 109° 28' 40.479 W |
| <b>LAST WEATHERFORD MWD SURFACE SURVEY</b> |                    |                |                           |               |               |                           |                          |                  |                   |
| 2,493.00                                   | 18.95              | 267.84         | 2,409.92                  | 13.71         | -544.18       | 14,524,837.22             | 2,066,762.10             | 39° 59' 12.084 N | 109° 28' 40.734 W |
| <b>FIRST SDI MWD PRODUCTION SURVEY</b>     |                    |                |                           |               |               |                           |                          |                  |                   |
| 2,588.00                                   | 19.77              | 267.52         | 2,499.55                  | 12.43         | -575.65       | 14,524,835.41             | 2,066,730.66             | 39° 59' 12.072 N | 109° 28' 41.139 W |
| 2,684.00                                   | 21.28              | 270.05         | 2,589.45                  | 11.74         | -609.29       | 14,524,834.15             | 2,066,697.03             | 39° 59' 12.065 N | 109° 28' 41.571 W |
| 2,778.00                                   | 21.87              | 273.68         | 2,676.87                  | 12.88         | -643.82       | 14,524,834.70             | 2,066,662.48             | 39° 59' 12.076 N | 109° 28' 42.015 W |
| 2,873.00                                   | 21.75              | 274.22         | 2,765.07                  | 15.31         | -679.04       | 14,524,836.52             | 2,066,627.24             | 39° 59' 12.100 N | 109° 28' 42.467 W |
| 2,968.00                                   | 21.96              | 274.95         | 2,853.24                  | 18.14         | -714.29       | 14,524,838.75             | 2,066,591.94             | 39° 59' 12.128 N | 109° 28' 42.920 W |
| 3,063.00                                   | 22.78              | 277.48         | 2,941.09                  | 22.07         | -750.22       | 14,524,842.06             | 2,066,555.95             | 39° 59' 12.167 N | 109° 28' 43.382 W |
| 3,158.00                                   | 22.61              | 276.20         | 3,028.74                  | 26.43         | -786.61       | 14,524,845.80             | 2,066,519.49             | 39° 59' 12.210 N | 109° 28' 43.849 W |
| 3,252.00                                   | 21.55              | 276.06         | 3,115.84                  | 30.21         | -821.74       | 14,524,848.98             | 2,066,484.30             | 39° 59' 12.247 N | 109° 28' 44.301 W |
| 3,347.00                                   | 20.46              | 275.36         | 3,204.53                  | 33.60         | -855.62       | 14,524,851.79             | 2,066,450.36             | 39° 59' 12.281 N | 109° 28' 44.736 W |
| 3,442.00                                   | 18.25              | 273.09         | 3,294.16                  | 35.96         | -887.01       | 14,524,853.61             | 2,066,418.94             | 39° 59' 12.304 N | 109° 28' 45.139 W |
| 3,537.00                                   | 17.69              | 270.66         | 3,384.52                  | 36.92         | -916.30       | 14,524,854.07             | 2,066,389.64             | 39° 59' 12.314 N | 109° 28' 45.516 W |
| 3,632.00                                   | 16.04              | 270.64         | 3,475.43                  | 37.24         | -943.86       | 14,524,853.92             | 2,066,362.08             | 39° 59' 12.317 N | 109° 28' 45.870 W |
| 3,727.00                                   | 15.83              | 273.65         | 3,566.78                  | 38.21         | -969.91       | 14,524,854.44             | 2,066,336.01             | 39° 59' 12.326 N | 109° 28' 46.205 W |
| 3,822.00                                   | 15.24              | 276.38         | 3,658.32                  | 40.42         | -995.25       | 14,524,856.22             | 2,066,310.63             | 39° 59' 12.348 N | 109° 28' 46.530 W |
| 3,917.00                                   | 13.63              | 277.84         | 3,750.31                  | 43.33         | -1,018.75     | 14,524,858.73             | 2,066,287.09             | 39° 59' 12.377 N | 109° 28' 46.832 W |
| 4,012.00                                   | 12.38              | 272.71         | 3,842.88                  | 45.34         | -1,040.02     | 14,524,860.38             | 2,066,265.80             | 39° 59' 12.397 N | 109° 28' 47.105 W |
| 4,107.00                                   | 11.78              | 275.62         | 3,935.77                  | 46.77         | -1,059.84     | 14,524,861.47             | 2,066,245.95             | 39° 59' 12.411 N | 109° 28' 47.360 W |
| 4,201.00                                   | 10.11              | 275.46         | 4,028.06                  | 48.50         | -1,077.60     | 14,524,862.89             | 2,066,228.16             | 39° 59' 12.428 N | 109° 28' 47.588 W |
| 4,296.00                                   | 8.65               | 267.67         | 4,121.79                  | 49.00         | -1,093.04     | 14,524,863.13             | 2,066,212.71             | 39° 59' 12.433 N | 109° 28' 47.787 W |
| 4,391.00                                   | 8.61               | 274.74         | 4,215.72                  | 49.30         | -1,107.27     | 14,524,863.18             | 2,066,198.49             | 39° 59' 12.436 N | 109° 28' 47.970 W |
| 4,486.00                                   | 7.26               | 276.15         | 4,309.81                  | 50.53         | -1,120.32     | 14,524,864.19             | 2,066,185.41             | 39° 59' 12.448 N | 109° 28' 48.137 W |
| 4,581.00                                   | 6.42               | 273.69         | 4,404.13                  | 51.51         | -1,131.59     | 14,524,864.98             | 2,066,174.13             | 39° 59' 12.458 N | 109° 28' 48.282 W |
| 4,676.00                                   | 4.62               | 271.50         | 4,498.69                  | 51.96         | -1,140.72     | 14,524,865.27             | 2,066,165.00             | 39° 59' 12.462 N | 109° 28' 48.399 W |
| 4,770.00                                   | 4.25               | 282.33         | 4,592.41                  | 52.80         | -1,147.91     | 14,524,865.99             | 2,066,157.79             | 39° 59' 12.471 N | 109° 28' 48.492 W |
| 4,865.00                                   | 2.65               | 278.95         | 4,687.23                  | 53.89         | -1,153.51     | 14,524,866.99             | 2,066,152.17             | 39° 59' 12.481 N | 109° 28' 48.564 W |
| 4,960.00                                   | 1.28               | 280.15         | 4,782.17                  | 54.42         | -1,156.73     | 14,524,867.46             | 2,066,148.95             | 39° 59' 12.487 N | 109° 28' 48.605 W |
| 5,055.00                                   | 0.59               | 287.78         | 4,877.16                  | 54.76         | -1,158.24     | 14,524,867.77             | 2,066,147.43             | 39° 59' 12.490 N | 109° 28' 48.625 W |
| 5,150.00                                   | 0.83               | 291.47         | 4,972.15                  | 55.16         | -1,159.34     | 14,524,868.15             | 2,066,146.32             | 39° 59' 12.494 N | 109° 28' 48.639 W |
| 5,245.00                                   | 0.47               | 280.98         | 5,067.15                  | 55.49         | -1,160.37     | 14,524,868.46             | 2,066,145.29             | 39° 59' 12.497 N | 109° 28' 48.652 W |
| 5,340.00                                   | 0.69               | 292.15         | 5,162.14                  | 55.78         | -1,161.28     | 14,524,868.74             | 2,066,144.37             | 39° 59' 12.500 N | 109° 28' 48.664 W |
| 5,435.00                                   | 0.35               | 250.27         | 5,257.14                  | 55.89         | -1,162.08     | 14,524,868.84             | 2,066,143.57             | 39° 59' 12.501 N | 109° 28' 48.674 W |
| 5,529.00                                   | 0.13               | 9.61           | 5,351.14                  | 55.90         | -1,162.33     | 14,524,868.84             | 2,066,143.31             | 39° 59' 12.501 N | 109° 28' 48.677 W |
| 5,625.00                                   | 0.24               | 97.44          | 5,447.14                  | 55.98         | -1,162.12     | 14,524,868.93             | 2,066,143.53             | 39° 59' 12.502 N | 109° 28' 48.674 W |



**Company:** US ROCKIES REGION PLANNING  
**Project:** UTAH - UTM (feet), NAD27, Zone 12N  
**Site:** UINTAH\_NBU 922-31P3 PAD  
**Well:** P\_NBU 922-31O3AS  
**Wellbore:** P\_NBU 922-31O3AS  
**Design:** P\_NBU 922-31O3AS

**Local Co-ordinate Reference:** Well P\_NBU 922-31O3AS  
**TVD Reference:** GL 5063' & KB 19' @ 5082.00ft (PIONEER 54)  
**MD Reference:** GL 5063' & KB 19' @ 5082.00ft (PIONEER 54)  
**North Reference:** True  
**Survey Calculation Method:** Minimum Curvature  
**Database:** EDM5000-RobertS-Local

**Survey**

| Measured<br>Depth<br>(ft)             | Inclination<br>(°) | Azimuth<br>(°) | Vertical<br>Depth<br>(ft) | +N/-S<br>(ft) | +E/-W<br>(ft) | Map<br>Northing<br>(usft) | Map<br>Easting<br>(usft) | Latitude         | Longitude         |
|---------------------------------------|--------------------|----------------|---------------------------|---------------|---------------|---------------------------|--------------------------|------------------|-------------------|
| 5,719.00                              | 0.38               | 142.97         | 5,541.14                  | 55.71         | -1,161.73     | 14,524,868.66             | 2,066,143.92             | 39° 59' 12.499 N | 109° 28' 48.669 W |
| 5,814.00                              | 0.35               | 79.82          | 5,636.13                  | 55.51         | -1,161.26     | 14,524,868.47             | 2,066,144.40             | 39° 59' 12.497 N | 109° 28' 48.663 W |
| 5,909.00                              | 0.42               | 124.25         | 5,731.13                  | 55.36         | -1,160.69     | 14,524,868.33             | 2,066,144.97             | 39° 59' 12.496 N | 109° 28' 48.656 W |
| 6,004.00                              | 0.64               | 103.90         | 5,826.13                  | 55.04         | -1,159.88     | 14,524,868.02             | 2,066,145.78             | 39° 59' 12.493 N | 109° 28' 48.646 W |
| 6,098.00                              | 0.79               | 132.71         | 5,920.12                  | 54.47         | -1,158.90     | 14,524,867.48             | 2,066,146.78             | 39° 59' 12.487 N | 109° 28' 48.633 W |
| 6,193.00                              | 1.18               | 164.24         | 6,015.11                  | 53.09         | -1,158.15     | 14,524,866.10             | 2,066,147.55             | 39° 59' 12.473 N | 109° 28' 48.623 W |
| 6,288.00                              | 1.36               | 168.12         | 6,110.08                  | 51.04         | -1,157.65     | 14,524,864.07             | 2,066,148.08             | 39° 59' 12.453 N | 109° 28' 48.617 W |
| 6,383.00                              | 1.45               | 161.57         | 6,205.06                  | 48.80         | -1,157.04     | 14,524,861.83             | 2,066,148.73             | 39° 59' 12.431 N | 109° 28' 48.609 W |
| 6,478.00                              | 2.45               | 147.77         | 6,300.00                  | 45.94         | -1,155.58     | 14,524,859.00             | 2,066,150.24             | 39° 59' 12.403 N | 109° 28' 48.590 W |
| 6,573.00                              | 2.77               | 151.48         | 6,394.90                  | 42.21         | -1,153.40     | 14,524,855.31             | 2,066,152.48             | 39° 59' 12.366 N | 109° 28' 48.562 W |
| 6,668.00                              | 2.84               | 150.73         | 6,489.79                  | 38.14         | -1,151.15     | 14,524,851.27             | 2,066,154.80             | 39° 59' 12.326 N | 109° 28' 48.533 W |
| 6,762.00                              | 2.74               | 156.35         | 6,583.68                  | 34.05         | -1,149.11     | 14,524,847.22             | 2,066,156.91             | 39° 59' 12.285 N | 109° 28' 48.507 W |
| 6,857.00                              | 2.82               | 159.43         | 6,678.56                  | 29.78         | -1,147.38     | 14,524,842.98             | 2,066,158.71             | 39° 59' 12.243 N | 109° 28' 48.485 W |
| 6,952.00                              | 2.75               | 160.13         | 6,773.45                  | 25.45         | -1,145.78     | 14,524,838.68             | 2,066,160.38             | 39° 59' 12.200 N | 109° 28' 48.464 W |
| 7,047.00                              | 2.49               | 161.22         | 6,868.35                  | 21.35         | -1,144.35     | 14,524,834.61             | 2,066,161.89             | 39° 59' 12.160 N | 109° 28' 48.446 W |
| 7,142.00                              | 2.58               | 157.74         | 6,963.26                  | 17.42         | -1,142.87     | 14,524,830.70             | 2,066,163.43             | 39° 59' 12.121 N | 109° 28' 48.427 W |
| 7,237.00                              | 2.65               | 150.03         | 7,058.16                  | 13.54         | -1,140.96     | 14,524,826.85             | 2,066,165.41             | 39° 59' 12.083 N | 109° 28' 48.403 W |
| 7,331.00                              | 2.35               | 142.65         | 7,152.07                  | 10.12         | -1,138.71     | 14,524,823.48             | 2,066,167.72             | 39° 59' 12.049 N | 109° 28' 48.374 W |
| 7,426.00                              | 1.31               | 95.31          | 7,247.03                  | 8.47          | -1,136.45     | 14,524,821.87             | 2,066,170.01             | 39° 59' 12.033 N | 109° 28' 48.344 W |
| 7,521.00                              | 1.51               | 93.47          | 7,342.00                  | 8.30          | -1,134.12     | 14,524,821.73             | 2,066,172.34             | 39° 59' 12.031 N | 109° 28' 48.315 W |
| 7,616.00                              | 1.67               | 43.65          | 7,436.97                  | 9.22          | -1,131.91     | 14,524,822.69             | 2,066,174.53             | 39° 59' 12.040 N | 109° 28' 48.286 W |
| 7,711.00                              | 1.98               | 47.72          | 7,531.92                  | 11.33         | -1,129.74     | 14,524,824.84             | 2,066,176.67             | 39° 59' 12.061 N | 109° 28' 48.258 W |
| 7,805.00                              | 1.68               | 51.66          | 7,625.87                  | 13.28         | -1,127.46     | 14,524,826.82             | 2,066,178.91             | 39° 59' 12.080 N | 109° 28' 48.229 W |
| 7,900.00                              | 1.55               | 65.50          | 7,720.83                  | 14.67         | -1,125.20     | 14,524,828.26             | 2,066,181.15             | 39° 59' 12.094 N | 109° 28' 48.200 W |
| 7,995.00                              | 1.41               | 69.66          | 7,815.80                  | 15.61         | -1,122.93     | 14,524,829.24             | 2,066,183.40             | 39° 59' 12.103 N | 109° 28' 48.171 W |
| 8,090.00                              | 1.32               | 80.62          | 7,910.77                  | 16.20         | -1,120.76     | 14,524,829.86             | 2,066,185.57             | 39° 59' 12.109 N | 109° 28' 48.143 W |
| 8,185.00                              | 0.95               | 18.61          | 8,005.76                  | 17.12         | -1,119.43     | 14,524,830.80             | 2,066,186.88             | 39° 59' 12.118 N | 109° 28' 48.126 W |
| 8,280.00                              | 1.22               | 1.26           | 8,100.74                  | 18.88         | -1,119.15     | 14,524,832.57             | 2,066,187.12             | 39° 59' 12.135 N | 109° 28' 48.122 W |
| 8,376.00                              | 0.91               | 1.33           | 8,196.72                  | 20.66         | -1,119.11     | 14,524,834.35             | 2,066,187.13             | 39° 59' 12.153 N | 109° 28' 48.122 W |
| 8,471.00                              | 0.53               | 325.02         | 8,291.72                  | 21.78         | -1,119.35     | 14,524,835.46             | 2,066,186.88             | 39° 59' 12.164 N | 109° 28' 48.125 W |
| 8,566.00                              | 0.58               | 298.74         | 8,386.71                  | 22.37         | -1,120.02     | 14,524,836.04             | 2,066,186.20             | 39° 59' 12.170 N | 109° 28' 48.133 W |
| 8,661.00                              | 0.11               | 147.95         | 8,481.71                  | 22.52         | -1,120.39     | 14,524,836.19             | 2,066,185.82             | 39° 59' 12.171 N | 109° 28' 48.138 W |
| 8,756.00                              | 0.53               | 110.08         | 8,576.71                  | 22.30         | -1,119.93     | 14,524,835.97             | 2,066,186.29             | 39° 59' 12.169 N | 109° 28' 48.132 W |
| 8,852.00                              | 0.68               | 125.48         | 8,672.71                  | 21.81         | -1,119.05     | 14,524,835.50             | 2,066,187.17             | 39° 59' 12.164 N | 109° 28' 48.121 W |
| 8,947.00                              | 1.14               | 158.27         | 8,767.69                  | 20.61         | -1,118.24     | 14,524,834.31             | 2,066,188.00             | 39° 59' 12.152 N | 109° 28' 48.111 W |
| 9,042.00                              | 1.68               | 150.82         | 8,862.66                  | 18.51         | -1,117.21     | 14,524,832.23             | 2,066,189.07             | 39° 59' 12.132 N | 109° 28' 48.097 W |
| 9,138.00                              | 1.85               | 146.92         | 8,958.62                  | 15.99         | -1,115.68     | 14,524,829.73             | 2,066,190.64             | 39° 59' 12.107 N | 109° 28' 48.078 W |
| 9,233.00                              | 1.82               | 149.82         | 9,053.57                  | 13.40         | -1,114.09     | 14,524,827.17             | 2,066,192.28             | 39° 59' 12.081 N | 109° 28' 48.057 W |
| 9,328.00                              | 1.76               | 156.25         | 9,148.52                  | 10.76         | -1,112.74     | 14,524,824.55             | 2,066,193.67             | 39° 59' 12.055 N | 109° 28' 48.040 W |
| 9,423.00                              | 2.03               | 143.08         | 9,243.47                  | 8.08          | -1,111.14     | 14,524,821.90             | 2,066,195.32             | 39° 59' 12.029 N | 109° 28' 48.019 W |
| 9,488.00                              | 2.35               | 143.46         | 9,308.42                  | 6.09          | -1,109.66     | 14,524,819.94             | 2,066,196.84             | 39° 59' 12.009 N | 109° 28' 48.000 W |
| <b>LAST SDI MWD PRODUCTION SURVEY</b> |                    |                |                           |               |               |                           |                          |                  |                   |
| 9,545.00                              | 2.35               | 143.46         | 9,365.38                  | 4.21          | -1,108.26     | 14,524,818.08             | 2,066,198.26             | 39° 59' 11.990 N | 109° 28' 47.982 W |
| <b>SDI PROJECTION TO TD</b>           |                    |                |                           |               |               |                           |                          |                  |                   |

**Company:** US ROCKIES REGION PLANNING  
**Project:** UTAH - UTM (feet), NAD27, Zone 12N  
**Site:** UINTAH\_NBU 922-31P3 PAD  
**Well:** P\_NBU 922-31O3AS  
**Wellbore:** P\_NBU 922-31O3AS  
**Design:** P\_NBU 922-31O3AS

**Local Co-ordinate Reference:** Well P\_NBU 922-31O3AS  
**TVD Reference:** GL 5063' & KB 19' @ 5082.00ft (PIONEER 54)  
**MD Reference:** GL 5063' & KB 19' @ 5082.00ft (PIONEER 54)  
**North Reference:** True  
**Survey Calculation Method:** Minimum Curvature  
**Database:** EDM5000-RobertS-Local

**Design Annotations**

| Measured<br>Depth<br>(ft) | Vertical<br>Depth<br>(ft) | Local Coordinates |               | Comment                              |
|---------------------------|---------------------------|-------------------|---------------|--------------------------------------|
|                           |                           | +N/-S<br>(ft)     | +E/-W<br>(ft) |                                      |
| 161.00                    | 161.00                    | 0.15              | -0.14         | FIRST WEATHERFORD MWD SURFACE SURVEY |
| 2,432.00                  | 2,352.24                  | 14.33             | -524.33       | LAST WEATHERFORD MWD SURFACE SURVEY  |
| 2,493.00                  | 2,409.92                  | 13.71             | -544.18       | FIRST SDI MWD PRODUCTION SURVEY      |
| 9,488.00                  | 9,308.42                  | 6.09              | -1,109.66     | LAST SDI MWD PRODUCTION SURVEY       |
| 9,545.00                  | 9,365.38                  | 4.21              | -1,108.26     | SDI PROJECTION TO TD                 |

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

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                               |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------|
| <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>UO 1207A ST |
| <b>1. TYPE OF WELL</b><br>Gas Well                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | <b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b>                  |
| <b>2. NAME OF OPERATOR:</b><br>KERR-MCGEE OIL & GAS ONSHORE, L.P.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | <b>7. UNIT or CA AGREEMENT NAME:</b><br>NATURAL BUTTES        |
| <b>3. ADDRESS OF OPERATOR:</b><br>P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | <b>8. WELL NAME and NUMBER:</b><br>NBU 922-3103AS             |
| <b>4. LOCATION OF WELL</b><br><b>FOOTAGES AT SURFACE:</b><br>0496 FSL 0965 FEL<br><b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b><br>Qtr/Qtr: SESE Section: 31 Township: 09.0S Range: 22.0E Meridian: S                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | <b>9. API NUMBER:</b><br>43047510440000                       |
| <b>PHONE NUMBER:</b><br>720 929-6100                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | <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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                               |
| <b>TYPE OF SUBMISSION</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | <b>TYPE OF ACTION</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                               |
| <input checked="" type="checkbox"/> <b>NOTICE OF INTENT</b><br>Approximate date work will start:<br><b>4/10/2014</b><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:                                                                                                                                                                                                                               | <div style="display: flex; flex-wrap: wrap;"> <div style="width: 33%;"> <input type="checkbox"/> ACIDIZE<br/> <input type="checkbox"/> CHANGE TO PREVIOUS PLANS<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         </div> <div style="width: 33%;"> <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         </div> <div style="width: 33%;"> <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 checked="" 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: <input style="width: 100px;" type="text"/> </div> </div> |                                                               |
| 12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.<br><div style="display: flex; justify-content: space-between;"> <div style="width: 60%;"> <p>The operator wishes to recomplete the referenced well in a different formation. Please see the attached procedure. Thank you.</p> </div> <div style="width: 35%; text-align: right;"> <p><b>Approved by the<br/>Utah Division of<br/>Oil, Gas and Mining</b></p> <p><b>Date:</b> April 21, 2014</p> <p><b>By:</b> <u><i>Derek Duff</i></u></p> </div> </div> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                               |
| <b>NAME (PLEASE PRINT)</b><br>Matthew P Wold                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | <b>PHONE NUMBER</b><br>720 929-6993                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | <b>TITLE</b><br>Regulatory Analyst I                          |
| <b>SIGNATURE</b><br>N/A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | <b>DATE</b><br>4/10/2014                                      |



# Greater Natural Buttes Unit

**NBU 922-3103AS  
RE-COMPLETIONS PROCEDURE  
NBU 922-31P3 PAD  
FIELD ID: YELLOW WELL**

**DATE: 2/13/2014  
AFE#:  
API#: 4304751044  
USER ID: SNT239 (Frac Invoices Only)**

**COMPLETIONS ENGINEER: Ben Smiley, Denver, CO  
(720) 929-6060 (Office)  
(936) 524-4231 (Cell)**

**REMEMBER SAFETY FIRST!**

**Name:** NBU 922-3103AS  
**Location:** NE SW SW SE Sec 31 T9S R22E  
**LAT:** 39.986618 **LONG:** -109.476725 **COORDINATE:** NAD83 (Surface Location)  
**Uintah County, UT**

**ELEVATIONS:** 5,063' GL 5,082' KB *Frac Registry TVD: 9,365'*

**TOTAL DEPTH:** 9,545' **PBTD:** 9,488'  
**SURFACE CASING:** 8 5/8", 28# J-55 LTC @ 2,452'  
**PRODUCTION CASING:** 4 1/2", 11.6#, I-80 BTC @ 9,533'  
 Marker Joint **4,653-4,673'**

**TUBULAR PROPERTIES:**

|                               | BURST<br>(psi) | COLLAPSE<br>(psi) | DRIFT DIA.<br>(in.) | CAPACITIES |           |
|-------------------------------|----------------|-------------------|---------------------|------------|-----------|
|                               |                |                   |                     | (bbl./ft)  | (gal./ft) |
| 2 3/8" 4.7# L-80 tbg          | 11,200         | 11,780            | 1.901"              | 0.00387    | 0.1624    |
| 4 1/2" 11.6# I-80 (See above) | 7780           | 6350              | 3.875"              | 0.0155     | 0.6528    |
| 4 1/2" 11.6# P-110            | 10691          | 7580              | 3.875"              | 0.0155     | 0.6528    |
| 2 3/8" by 4 1/2" Annulus      |                |                   |                     | 0.0101     | 0.4227    |

**TOPS:**

1,344' Green River Top  
 1,657' Bird's Nest Top  
 2,163' Mahogany Top  
 4,689' Wasatch Top  
 7,299' Mesaverde Top  
 \*Based on latest geological interpretation

**BOTTOMS:**

7,299' Wasatch Bottom  
 9,545' Mesaverde Bottom (TD)

**T.O.C. @ 478'**

\*\*Based on latest interpretation of CBL

**GENERAL NOTES:**

- **Please note that:**
  - All stages on this procedure may or may not be completed due to low frac gradients, timing, or other possible reasons. Total stages completed can be found in the post-job-report.
  - CBP depth on this procedure is only to be used as a reference. This depth is subject to change as per field operations and the discretion of the wireline supervisor and field foreman.
- A minimum of 15 tanks (cleaned lined 500 bbl) of recycled water will be required. Note: Use biocide in tanks and the water needs to be at least 45°F at pump time.
- All perforation depths are from Halliburton's GRlog dated 12/22/2010.
- 7 fracturing stages required for coverage.
- Hydraulic isolation estimated at 1676 based upon Halliburton's CBL dated 12/22/2010.
- Procedure calls for 8 CBP's (8000 psi) .
- Calculate open perforations after each breakdown. If less than 60% of the perforations appear to be open, ball out with 15% HCl.
- **Pump scale inhibitor at 0.5 gpt. Remember to pre-load the casing with scale inhibitor.**

- FR will be pumped at 0.3 gpt for this well. This concentration will be raised or lowered on the job at the discretion of the APC foreman per the well's treating pressure.
- 30/50 mesh Ottawa sand, **Slickwater frac.**
- Maximum surface pressure **6200 psi.**
- **If casing pressure test fails (pressure loss of 1.5% psi or more), retest for 15 minutes. If pressure loss of 1.5% more on second test, notify Denver engineers. Record in Openwells. MIRU with tubing and packer. Isolate leak by pressure testing above and below the packer. RIH and set appropriate casing leak remediation. Re-pressure test to 1000 and 3500 psi for 15 minutes each and to 6200 psi for 30 minutes (specific details on remediation should be documented in OpenWells).**
- Flush volumes are the sum of slick water and acid used during displacement (include scale inhibitor as mentioned above). Stage acid and scale inhibitor if necessary to cover the next perforated interval.
- Call flush at 0 PPG @ inline densiometers. Slow to 5 bbl/min over last 10-20 bbls of flush. Flush to top perf.
- Max Sand Concentration: Wasatch 2 ppg;
- If distance between plug and top perf of previous stage is less than 50', it is considered to be tight spacing – design will over flush stage by 5 bbls (from top perf)
- **TIGHT SPACING ON STAGE 3 & 4.**
- **If using any chemicals for pickling tubing or H2S Scavenging, have MSDS for all chemicals prior to starting work**



**Existing Perforations:**

| <u>Formation</u> | <u>Zone</u> | <u>Top</u> | <u>Btm</u> | <u>spf</u> | <u>Shots</u> | <u>Date</u> | <u>Reason</u> |
|------------------|-------------|------------|------------|------------|--------------|-------------|---------------|
| MESAVERDE        |             | 7320       | 7322       | 3          | 6            | 01/20/2011  | PRODUCTION    |
| MESAVERDE        |             | 7366       | 7368       | 3          | 6            | 01/20/2011  | PRODUCTION    |
| MESAVERDE        |             | 7450       | 7452       | 3          | 6            | 01/20/2011  | PRODUCTION    |
| MESAVERDE        |             | 7480       | 7482       | 3          | 6            | 01/20/2011  | PRODUCTION    |
| MESAVERDE        |             | 7560       | 7562       | 3          | 6            | 01/19/2011  | PRODUCTION    |
| MESAVERDE        |             | 7582       | 7584       | 3          | 6            | 01/19/2011  | PRODUCTION    |
| MESAVERDE        |             | 7607       | 7608       | 3          | 3            | 01/19/2011  | PRODUCTION    |
| MESAVERDE        |             | 7695       | 7697       | 3          | 6            | 01/19/2011  | PRODUCTION    |
| MESAVERDE        |             | 7853       | 7854       | 3          | 3            | 01/19/2011  | PRODUCTION    |
| MESAVERDE        |             | 7919       | 7922       | 3          | 9            | 01/19/2011  | PRODUCTION    |
| MESAVERDE        |             | 8014       | 8016       | 3          | 6            | 01/19/2011  | PRODUCTION    |
| MESAVERDE        |             | 8062       | 8064       | 3          | 6            | 01/19/2011  | PRODUCTION    |
| MESAVERDE        |             | 8141       | 8142       | 3          | 3            | 01/18/2011  | PRODUCTION    |
| MESAVERDE        |             | 8175       | 8176       | 3          | 3            | 01/18/2011  | PRODUCTION    |
| MESAVERDE        |             | 8238       | 8240       | 3          | 6            | 01/18/2011  | PRODUCTION    |
| MESAVERDE        |             | 8288       | 8289       | 3          | 3            | 01/18/2011  | PRODUCTION    |
| MESAVERDE        |             | 8344       | 8345       | 3          | 3            | 01/18/2011  | PRODUCTION    |
| MESAVERDE        |             | 8368       | 8369       | 3          | 3            | 01/18/2011  | PRODUCTION    |
| MESAVERDE        |             | 8441       | 8443       | 3          | 6            | 01/18/2011  | PRODUCTION    |
| MESAVERDE        |             | 8522       | 8524       | 3          | 6            | 01/18/2011  | PRODUCTION    |
| MESAVERDE        |             | 8572       | 8573       | 3          | 3            | 01/18/2011  | PRODUCTION    |
| MESAVERDE        |             | 8623       | 8624       | 3          | 3            | 01/18/2011  | PRODUCTION    |
| MESAVERDE        |             | 8665       | 8666       | 3          | 3            | 01/18/2011  | PRODUCTION    |
| MESAVERDE        |             | 8758       | 8760       | 3          | 6            | 01/18/2011  | PRODUCTION    |
| MESAVERDE        |             | 8804       | 8805       | 3          | 3            | 01/18/2011  | PRODUCTION    |
| MESAVERDE        |             | 8874       | 8876       | 3          | 6            | 01/18/2011  | PRODUCTION    |
| MESAVERDE        |             | 8958       | 8960       | 3          | 6            | 01/18/2011  | PRODUCTION    |
| MESAVERDE        |             | 9051       | 9052       | 3          | 3            | 01/17/2011  | PRODUCTION    |
| MESAVERDE        |             | 9071       | 9073       | 3          | 6            | 01/17/2011  | PRODUCTION    |
| MESAVERDE        |             | 9209       | 9211       | 3          | 6            | 01/17/2011  | PRODUCTION    |
| MESAVERDE        |             | 9356       | 9358       | 3          | 6            | 01/17/2011  | PRODUCTION    |

**Relevant History:**

1//18/2011: Originally completed in Mesaverde formation (7 stages) with ~ 367,776 gallons of Slickwater, 297,162 lbs of 30/50 Ottawa Sand sand and 27,560 of 20/40 TLC Sand.

10/22/2013: Last slickline report:  
 Traveled to location rigged up ran jdc set down @ 8720 came out with a viper plunger ran jdc set down @ 8720 came out with nothing ran scratcher set down @ 8720 beat down came out flowed tubing ran jdc set down @ 8720 jarred on spring for a while nothing beat down jarred out for a while came out with a stainless steal spring ran td set down @ 9468 came out ran scratcher set down 2 8720 beat scratcher out the tubing came out flowed tubing ran 1.9 broach set down @ 8720 came out tubing was clean there was a lot of heavy scale on the spring plunger looks good clean spring chance cups drop and chase stainless steal spring and viper plunger to btm came out rigged down traveled to the next location

4/7/2014: Tubing Currently Landed @~8728'

**H2S History:**

| Location Name  | WINS No. (wel... | Location Ident | Timetag                | Separator H2S (p... | Tank H2S (ppm) | API No. (wells... |
|----------------|------------------|----------------|------------------------|---------------------|----------------|-------------------|
| NBU 922-31O3AS | C7388            | 172804         | 3/11/2011 11:59:59 PM  | 0                   | 0              | 4304751044        |
| NBU 922-31O3AS | C7388            | 172804         | 4/7/2011 11:59:59 PM   | 0                   | 0              | 4304751044        |
| NBU 922-31O3AS | C7388            | 172804         | 5/6/2011 11:59:59 PM   | 0                   | 0              | 4304751044        |
| NBU 922-31O3AS | C7388            | 172804         | 6/15/2011 11:59:59 PM  | 0                   | 0              | 4304751044        |
| NBU 922-31O3AS | C7388            | 172804         | 7/13/2011 11:59:59 PM  | 9                   | 0              | 4304751044        |
| NBU 922-31O3AS | C7388            | 172804         | 9/28/2012 11:59:59 PM  | 0                   | 0              | 4304751044        |
| NBU 922-31O3AS | C7388            | 172804         | 10/3/2012 11:59:59 PM  | 0                   | 0              | 4304751044        |
| NBU 922-31O3AS | C7388            | 172804         | 10/4/2012 11:59:59 PM  | 0                   | 0              | 4304751044        |
| NBU 922-31O3AS | C7388            | 172804         | 10/17/2012 11:59:59 PM | 0                   | 0              | 4304751044        |
| NBU 922-31O3AS | C7388            | 172804         | 10/18/2012 11:59:59 PM | 0                   | 0              | 4304751044        |
| NBU 922-31O3AS | C7388            | 172804         | 10/19/2012 11:59:59 PM | 0                   | 0              | 4304751044        |
| NBU 922-31O3AS | C7388            | 172804         | 10/20/2012 11:59:59 PM | 0                   | 0              | 4304751044        |
| NBU 922-31O3AS | C7388            | 172804         | 10/21/2012 11:59:59 PM | 0                   | 0              | 4304751044        |
| NBU 922-31O3AS | C7388            | 172804         | 10/23/2012 11:59:59 PM | 0                   | 0              | 4304751044        |
| NBU 922-31O3AS | C7388            | 172804         | 10/24/2012 11:59:59 PM | 0                   | 0              | 4304751044        |
| NBU 922-31O3AS | C7388            | 172804         | 10/25/2012 11:59:59 PM | 0                   | 0              | 4304751044        |
| NBU 922-31O3AS | C7388            | 172804         | 10/26/2012 11:59:59 PM | 0                   | 0              | 4304751044        |
| NBU 922-31O3AS | C7388            | 172804         | 10/30/2012 11:59:59 PM | 0                   | 0              | 4304751044        |
| NBU 922-31O3AS | C7388            | 172804         | 10/31/2012 11:59:59 PM | 0                   | 0              | 4304751044        |
| NBU 922-31O3AS | C7388            | 172804         | 11/13/2012 11:59:59 PM | 12                  | 0              | 4304751044        |
| NBU 922-31O3AS | C7388            | 172804         | 2/10/2013 11:59:59 PM  | 4                   | 0              | 4304751044        |
| NBU 922-31O3AS | C7388            | 172804         | 5/6/2013 11:59:59 PM   | 28                  | 0              | 4304751044        |
| NBU 922-31O3AS | C7388            | 172804         | 8/7/2013 11:59:59 PM   | 33                  | 0              | 4304751044        |
| NBU 922-31O3AS | C7388            | 172804         | 11/5/2013 11:59:59 PM  | 33                  | 19             | 4304751044        |

**PROCEDURE: (If using any chemicals for pickling tubing or H2S Scavenging, have MSDS for all chemicals prior to starting work.)**

1. MIRU. Control well with recycled water and biocide as required. ND WH, NU BOP's and test.
2. The tubing is below the proposed CBP depth. TOO H with 2-3/8", 4.7#, L-80 tubing. Visually inspect for scale and consider replacing if needed.
3. If tbg looks ok consider running a gauge ring to 7311 (30' below proposed CBP). Otherwise P/U a mill and C/O to 7321 (40' below proposed CBP).
4. Set 8000 psi CBP at ~ 7281'. ND BOPs and NU frac valves Test frac valves and casing to to **6200 psi** for 15 minutes; if pressure test fails contact Denver engineer and see notes above. **Lock OPEN the Braden head valve.** Flow from annulus will be visually monitored throughout stimulation. If release occurs, stimulation will be shut down. Well conditions will be assessed and actions taken as necessary to secure the well. UDOGM will be notified if a release to the annulus occurs.
5. Pressure test frac lines to max surface pressure + 1000 psi for 15 minutes. Pressure loss should be less than 10% to be considered acceptable. Check and correct for existing leaks.
6. Perf the following with 3-1/8" gun, 19 gm, 0.40" hole:

|         |      |      |     |            |
|---------|------|------|-----|------------|
| Zone    | From | To   | spf | # of shots |
| WASATCH | 7184 | 7187 | 3   | 9          |
| WASATCH | 7246 | 7251 | 3   | 15         |

7. Breakdown perfs and establish injection rate (include scale inhibitor in fluid). Spot 250 gals of 15% HCL and let soak 5-10 min. Fracture as outlined in Stage 1 on attached listing. Under-displace to ~7184' and trickle 250gal 15%HCL w/ scale inhibitor in flush .

8. Set 8000 psi CBP at ~7098'. Perf the following 3-1/8" gun, 19 gm, 0.40" hole:

| Zone    | From | To   | spf | # of shots |
|---------|------|------|-----|------------|
| WASATCH | 6976 | 6977 | 3   | 3          |
| WASATCH | 6991 | 6992 | 3   | 3          |
| WASATCH | 7006 | 7008 | 3   | 6          |
| WASATCH | 7031 | 7033 | 3   | 6          |
| WASATCH | 7066 | 7068 | 3   | 6          |

9. Breakdown perfs and establish injection rate. Fracture as outlined in Stage 2 on attached listing. Under-displace to ~6976' and trickle 250gal 15%HCL w/ scale inhibitor in flush.

10. Set 8000 psi CBP at ~6924'. Perf the following with 3-1/8" gun, 19 gm, 0.40" hole:

| Zone    | From | To   | spf | # of shots |
|---------|------|------|-----|------------|
| WASATCH | 6768 | 6769 | 3   | 3          |
| WASATCH | 6783 | 6784 | 3   | 3          |
| WASATCH | 6798 | 6799 | 3   | 3          |
| WASATCH | 6830 | 6831 | 3   | 3          |
| WASATCH | 6860 | 6861 | 3   | 3          |
| WASATCH | 6878 | 6879 | 3   | 3          |
| WASATCH | 6898 | 6899 | 3   | 3          |
| WASATCH | 6910 | 6911 | 3   | 3          |

11. Breakdown perfs and establish injection rate. Fracture as outlined in Stage 3 on attached listing. Under-displace to ~6768' and trickle 250gal 15%HCL w/ scale inhibitor in flush.

**NOTE: TIGHT SPACING THIS STAGE, OVERFLUSH BY 5BBLs**

12. Set 8000 psi CBP at ~6754'. Perf the following with 3-1/8" gun, 19 gm, 0.40" hole:

| Zone    | From | To   | spf | # of shots |
|---------|------|------|-----|------------|
| WASATCH | 6558 | 6559 | 3   | 3          |
| WASATCH | 6576 | 6577 | 3   | 3          |
| WASATCH | 6607 | 6608 | 3   | 3          |
| WASATCH | 6636 | 6637 | 3   | 3          |
| WASATCH | 6665 | 6666 | 3   | 3          |
| WASATCH | 6704 | 6705 | 3   | 3          |
| WASATCH | 6736 | 6738 | 3   | 6          |

13. Breakdown perfs and establish injection rate. Fracture as outlined in Stage 4 on attached listing. Under-displace to ~6558' and trickle 250gal 15%HCL w/ scale inhibitor in flush.

**NOTE: TIGHT SPACING THIS STAGE, OVERFLUSH BY 5BBLs**

14. Set 8000 psi CBP at ~6515'. Perf the following with 3-1/8" gun, 19 gm, 0.40" hole:

| Zone    | From | To   | spf | # of shots |
|---------|------|------|-----|------------|
| WASATCH | 6383 | 6384 | 3   | 3          |
| WASATCH | 6400 | 6401 | 3   | 3          |
| WASATCH | 6430 | 6431 | 3   | 3          |
| WASATCH | 6448 | 6449 | 3   | 3          |
| WASATCH | 6458 | 6459 | 3   | 3          |
| WASATCH | 6494 | 6496 | 3   | 6          |

15. Breakdown perfs and establish injection rate. Fracture as outlined in Stage 5 on attached listing. Under-displace to ~6383' and trickle 250gal 15%HCL w/ scale inhibitor in flush.

16. Set 8000 psi CBP at ~6177'. Perf the following with 3-1/8" gun, 19 gm, 0.40" hole:

| Zone    | From | To   | spf | # of shots |
|---------|------|------|-----|------------|
| WASATCH | 5956 | 5957 | 3   | 3          |
| WASATCH | 6014 | 6015 | 3   | 3          |
| WASATCH | 6025 | 6026 | 3   | 3          |
| WASATCH | 6049 | 6051 | 3   | 6          |
| WASATCH | 6144 | 6147 | 3   | 9          |

17. Breakdown perfs and establish injection rate. Fracture as outlined in Stage 6 on attached listing. Under-displace to ~5956' and trickle 250gal 15%HCL w/ scale inhibitor in flush.

18. Set 8000 psi CBP at ~5657'. Perf the following with 3-1/8" gun, 19 gm, 0.40" hole:

| Zone    | From | To   | spf | # of shots |
|---------|------|------|-----|------------|
| WASATCH | 5408 | 5409 | 3   | 3          |
| WASATCH | 5428 | 5429 | 3   | 3          |
| WASATCH | 5439 | 5440 | 3   | 3          |
| WASATCH | 5460 | 5461 | 3   | 3          |
| WASATCH | 5491 | 5492 | 3   | 3          |
| WASATCH | 5597 | 5598 | 3   | 3          |
| WASATCH | 5611 | 5612 | 3   | 3          |
| WASATCH | 5626 | 5627 | 3   | 3          |

19. Breakdown perfs and establish injection rate. Fracture as outlined in Stage 7 on attached listing. Under-displace to ~5408' and flush only with recycled water.

20. Set 8000 psi CBP at ~5358'.

21. ND Frac Valves, NU and Test BOPs.

22. TIH with 3 7/8" bit, pump off sub, SN and tubing.

23. Drill 7 plugs and clean out to a depth of 7271' (~ 20' below bottom perfs). This well WILL be commingled at this time.

24. Shift pump open bit sub and land tubing at 6946'. Flow back completion load. RDMO.

25. MIRU, POOH tbg and POBS. TIH with POBS.

26. Drill last plug @ 7281' clean out to PBTD at 9488'. Shear off bit and land tubing at ±8728'. This well WILL be commingled at this time. **NOTE: If the CBP between the initial completion and the recompleted sands has been in the well for more than 30 calendar days from the beginning of flowback for the recompletion, a sundry will need to be filed with the state. Contact the Regulatory group to file the sundry prior to commencing work.**

27. Clean out well with foam and/or swabbing unit until steady flow has been established from completion.

28. **Leave surface casing valve open.** Monitor and report any flow from surface casing. RDMO

Completion Engineer

Ben Smiley: 936/524-4231, 720/929-6060

Production Engineer

Mickey Doherty: 406/491-7294, 435/781-9740

Ronald Trigo: 352/213-6630, 435/781-7037

Brad Laney: 435/781-7031, 435/828-5469

Heath Pottmeyer: 740/525-3445, 435/781-9789

Anqi Yang: 435/828-6505, 435/781-7015

Completion Supervisor Foreman

Jeff Samuels: 435/828-6515, 435/781-7046

Completion Manager

Jeff Dufresne: 720/929-6281, 303/241-8428

Vernal Main Office

435/789-3342

Emergency Contact Information—Call 911

Vernal Regional Hospital Emergency: 435-789-3342

Police: (435) 789-5835

Fire: 435-789-4222

Service Company Supplied Chemicals - Job Totals

|                              |      |        |     |             |
|------------------------------|------|--------|-----|-------------|
| Friction Reducer             | 77   | gals @ | 0.3 | GPT         |
| Surfactant                   | 256  | gals @ | 1.0 | GPT         |
| Clay Stabilizer              | 0    | gals @ | 0.0 | GPT         |
| 15% Hcl                      | 1750 | gals @ | 250 | gal/stg     |
| Iron Control for acid        | 9    | gals @ | 5.0 | GPT of acid |
| Surfactant for acid          | 4    | gals @ | 2.0 | GPT of acid |
| Corrosion Inhibitor for acid | 11   | gals @ | 6.0 | GPT of acid |

Third Party Supplied Chemicals Job Totals - Include Pumping Charge if Applicable

|                 |     |             |     |             |
|-----------------|-----|-------------|-----|-------------|
| Scale Inhibitor | 128 | gals pumped | 0.5 | GPT (see sc |
| Biocide         | 77  | gals @      | 0.3 | GPT         |

Acid Pickling and H2S Procedures (If Required)

**\*\*PROCEDURE FOR PUMPING ACID DOWN TBG**

WHEN FINDING SCALE IN TUBING THAT IS ACID SOLUBLE, ENSURE THAT PLUNGER EQUIPMENT IS REMOVED AND ABLE TO PUMP DOWN TBG. INSTALL A 'T' IN PUMP LINE W/2" VALVE THAT NALCO CAN TIE INTO. HAVE 60 BBLS 2% KCL MIXED W/ 10-15 GAL H2S SCAVENGER IN RIG FLAT TANK. (WE USED THE RIG FLAT TANK FOR MIXING CHEMICAL SO WE DIDN'T HAVE THE CHEMICAL IN ALL FLUIDS ON LOCATION, ONLY WHAT WE NEEDED TO PUMP DOWN HOLE)

1. PUMP 5-10 BBLS 2% KCL DOWN TBG (NALCO CANNOT PUMP AGAINST PRESSURE)
2. NALCO WILL PUMP 3 DRUMS HCL (31%) INTO PUMP LINE.
3. FLUSH BEHIND ACID WITH 10-15 BBL 2% KCL
4. PUMP 2—30 BBL 2% W/ H2S SCAVENGER DOWN TBG.
5. PUMP REMAINDER OF 2% W/ H2S SCAVENGER DOWN CASING AND SHUT WELL IN FOR MINIMUM OF 2 HRS.
6. OVER DISPLACE DOWN TBG AND CSG TO FLUSH ACID AND SCAVENGER INTO FORMATION
7. MONITOR TUBING FOR FLOW AND CASING FOR H2S NOW AS POOH W/ TUBING.

**\*\* PROCEDURE FOR PUMPING H2S SCAVENGER WITHOUT ACID**

PRIOR TO RIG MOVING ON OR AS RIG PULLS ONTO LOCATION. TEST CASING, TUBING AND SEPARATOR FOR H2S. IF FOUND MAKE SURE THAT PLUNGER SYSTEM IS REMOVED (IT IS POSSIBLE TO PUMP AROUND PLUNGERS BUT SOME WILL HAVE A STANDING VALVE IN SEATING NIPPLE).

1. MIX 10-15 GAL H2S SCAVENGER WITH 60-100 BBL 2% KCL IN RIG FLAT TANK.
2. PUMP 25 BBLS MIXTURE DOWN TUBING AND REST DOWN CASING. SHUT WELL IN FOR 2 HOURS.
3. IF WELL HAS PRESSURE AFTER 2 HOURS – RETEST CASING AND TUBING FOR H2S.
4. FLUSH TUBING AND CASING PUSHING H2S SCAVENGER INTO FORMATION.
5. MONITOR TUBING FOR FLOW AND CASING FOR H2S NOW AS POOH W/ TUBING.

**\*\* As per APC standard operating procedure, APC foreman will verify ALL volumes pumped and record on APC Volume Report Form**



## Fracturing Schedules

NBU 922-3103AS

Slickwater Frac

Copy to new book

|               |     |
|---------------|-----|
| Casing Size   | 4.5 |
| Recompleter?  | Y   |
| Pad?          | Y   |
| ACTS?         | N   |
| Days on Pad?  | 3   |
| Wells on Pad? | 4   |

|                |   |
|----------------|---|
| Swabbing Days  | 3 |
| Production Log | 0 |
| DFIT           | 0 |
| GR only        | Y |
| Low Scale      | Y |
| Clay Stab.     | N |

Enter Number of swabbing days here for recompletes

Enter 1 if running a Production Log

Enter Number of DFITs

Enter Y if only Gamma Ray log was run

Enter Y if a LOW concentration of Scale Inhibitor will be pumped

Enter N if there will be NO Clay stabilizer

| Stage | Zone    | Perfs    |          | Holes | Rate<br>BPM | Fluid<br>Type          | Initial<br>ppg | Final<br>ppg | Fluid             | Volume<br>gals | Cum Vol<br>gals | Volume<br>BBLs | Cum Vol<br>BBLs | Fluid<br>% of frac | Sand<br>% of frac | Sand<br>lbs | Cum. Sand<br>lbs | Footage from<br>CBP to Flush | Scale<br>Inhib.,<br>gal. |
|-------|---------|----------|----------|-------|-------------|------------------------|----------------|--------------|-------------------|----------------|-----------------|----------------|-----------------|--------------------|-------------------|-------------|------------------|------------------------------|--------------------------|
|       |         | Top, ft. | Bot., ft |       |             |                        |                |              |                   |                |                 |                |                 |                    |                   |             |                  |                              |                          |
| 1     | WASATCH | 7184     | 7187     | 3     | 9           | Pre-Pad & Pump-in test |                |              | Slickwater        | 4,690          |                 | 112            |                 |                    |                   |             |                  |                              | 2                        |
|       | WASATCH | 7246     | 7251     | 3     | 15          | 0 ISIP and 5 min ISIP  |                |              | Slickwater        | 3,780          |                 | 90             |                 | 15.0%              | 0.0%              | 0           | 0                |                              | 2                        |
|       | WASATCH |          |          |       | 50          | Slickwater Pad         | 0.25           | 1            | Slickwater        | 12,600         |                 | 300            |                 | 50.0%              | 37.3%             | 7,875       | 7,875            |                              | 6                        |
|       | WASATCH |          |          |       | 50          | Slickwater Ramp        | 1              | 2            | Slickwater        | 8,820          |                 | 210            |                 | 35.0%              | 62.7%             | 13,230      | 21,105           |                              | 4                        |
|       | WASATCH |          |          |       | 50          | Slickwater Ramp        |                |              | Slickwater        | 29,890         |                 | 210            |                 |                    |                   | 21,105      | 21,105           |                              | 2                        |
|       | WASATCH |          |          |       | 50          | Flush (4-1/2)          |                |              | Slickwater        | 4,690          |                 | 112            |                 |                    |                   |             |                  |                              | 0                        |
|       | WASATCH |          |          |       | 50          | ISDP and 5 min ISDP    |                |              | Slickwater        |                |                 |                |                 |                    |                   | 21,105      |                  | 0                            |                          |
|       | WASATCH |          |          |       |             |                        |                |              |                   | 34,579         |                 | 112            |                 | 823                |                   |             |                  | 0                            |                          |
| 2     | WASATCH |          |          |       |             |                        |                |              | Sand laden Volume | 25,200         |                 |                |                 |                    |                   |             | 670 lbs sand/ft  |                              | 17                       |
|       | WASATCH |          |          |       |             |                        |                |              |                   |                |                 |                |                 |                    |                   |             |                  |                              |                          |
|       | WASATCH |          |          |       |             |                        |                |              |                   |                |                 |                |                 |                    |                   |             |                  |                              |                          |
|       | WASATCH |          |          |       |             |                        |                |              |                   |                |                 |                |                 |                    |                   |             |                  |                              |                          |
|       | WASATCH |          |          |       |             |                        |                |              |                   |                |                 |                |                 |                    |                   |             |                  |                              |                          |
|       | WASATCH |          |          |       |             |                        |                |              |                   |                |                 |                |                 |                    |                   |             |                  |                              |                          |
|       | WASATCH |          |          |       |             |                        |                |              |                   |                |                 |                |                 |                    |                   |             |                  |                              |                          |
|       | WASATCH |          |          |       |             |                        |                |              |                   |                |                 |                |                 |                    |                   |             |                  |                              |                          |
| 3     | WASATCH |          |          |       |             |                        |                |              | Sand laden Volume | 24,000         |                 |                |                 |                    |                   |             | 670 lbs sand/ft  |                              | 14                       |
|       | WASATCH |          |          |       |             |                        |                |              |                   |                |                 |                |                 |                    |                   |             |                  |                              |                          |
|       | WASATCH |          |          |       |             |                        |                |              |                   |                |                 |                |                 |                    |                   |             |                  |                              |                          |
|       | WASATCH |          |          |       |             |                        |                |              |                   |                |                 |                |                 |                    |                   |             |                  |                              |                          |
|       | WASATCH |          |          |       |             |                        |                |              |                   |                |                 |                |                 |                    |                   |             |                  |                              |                          |
|       | WASATCH |          |          |       |             |                        |                |              |                   |                |                 |                |                 |                    |                   |             |                  |                              |                          |
|       | WASATCH |          |          |       |             |                        |                |              |                   |                |                 |                |                 |                    |                   |             |                  |                              |                          |
|       | WASATCH |          |          |       |             |                        |                |              |                   |                |                 |                |                 |                    |                   |             |                  |                              |                          |
| 4     | WASATCH |          |          |       |             |                        |                |              | Sand laden Volume | 34,000         |                 |                |                 |                    |                   |             | 670 lbs sand/ft  |                              | 19                       |
|       | WASATCH |          |          |       |             |                        |                |              |                   |                |                 |                |                 |                    |                   |             |                  |                              |                          |
|       | WASATCH |          |          |       |             |                        |                |              |                   |                |                 |                |                 |                    |                   |             |                  |                              |                          |
|       | WASATCH |          |          |       |             |                        |                |              |                   |                |                 |                |                 |                    |                   |             |                  |                              |                          |
|       | WASATCH |          |          |       |             |                        |                |              |                   |                |                 |                |                 |                    |                   |             |                  |                              |                          |
|       | WASATCH |          |          |       |             |                        |                |              |                   |                |                 |                |                 |                    |                   |             |                  |                              |                          |
|       | WASATCH |          |          |       |             |                        |                |              |                   |                |                 |                |                 |                    |                   |             |                  |                              |                          |
|       | WASATCH |          |          |       |             |                        |                |              |                   |                |                 |                |                 |                    |                   |             |                  |                              |                          |

| Stage               | Zone    | Perfs |      | Holes | Rate<br>BPM | Fluid<br>Type            | Initial<br>ppg | Final<br>ppg | Fluid             | Volume<br>gals | Cum Vol<br>gals | Volume<br>BBLs | Cum Vol<br>BBLs | Fluid<br>% of frac | Sand<br>% of frac | Sand<br>lbs      | Cum. Sand<br>lbs   | Footage from<br>CBP to Flush | Scale<br>Inhib.,<br>gal. |
|---------------------|---------|-------|------|-------|-------------|--------------------------|----------------|--------------|-------------------|----------------|-----------------|----------------|-----------------|--------------------|-------------------|------------------|--------------------|------------------------------|--------------------------|
| 4                   | WASATCH | 6558  | 6559 | 3     | Varied      | Pump-in test             |                |              | Slickwater        |                | 0               | 0              | 0               |                    |                   |                  |                    |                              |                          |
|                     | WASATCH | 6576  | 6577 | 3     | 0           | ISIP and 5 min ISIP      |                |              | Slickwater        | 5,520          | 5,520           | 131            | 131             | 15.0%              | 0.0%              | 0                | 0                  |                              | 3                        |
|                     | WASATCH | 6607  | 6608 | 3     | 50          | Slickwater Pad           |                |              | Slickwater        | 18,400         | 23,920          | 438            | 570             | 50.0%              | 37.3%             | 11,500           | 11,500             |                              | 9                        |
|                     | WASATCH | 6636  | 6637 | 3     | 50          | Slickwater Ramp          | 0.25           | 1            | Slickwater        | 12,880         | 36,800          | 307            | 876             | 35.0%              | 62.7%             | 19,320           | 30,820             |                              | 6                        |
|                     | WASATCH | 6665  | 6666 | 3     | 50          | Slickwater Ramp          | 1              | 2            | Slickwater        | 4,281          | 41,081          | 102            | 978             |                    |                   | 30,820           | 30,820             |                              | 2                        |
|                     | WASATCH | 6704  | 6705 | 3     | 50          | Flush (4-1/2)            |                |              | Slickwater        |                |                 |                |                 |                    |                   |                  |                    |                              | 0                        |
|                     | WASATCH | 6736  | 6738 | 3     | 6           | ISDP and 5 min ISDP      |                |              | Slickwater        |                |                 |                |                 |                    |                   |                  |                    |                              | 0                        |
|                     | WASATCH |       |      |       |             |                          |                |              |                   | 41,081         |                 | 102            | 978             |                    |                   | 30,820           | 30,820             |                              | 0                        |
|                     | WASATCH |       |      |       |             |                          |                |              |                   |                |                 |                |                 |                    |                   |                  |                    |                              | 0                        |
|                     | WASATCH |       |      |       |             |                          |                |              | Sand laden Volume | 36,800         |                 |                |                 |                    | gal/ft            | 800<br>CBP depth | 670<br>lbs sand/ft | 43                           | 21                       |
| # of Perfs/Stage 24 |         |       |      |       |             |                          |                |              |                   |                |                 |                |                 |                    |                   |                  |                    |                              |                          |
| 5                   | WASATCH | 6383  | 6384 | 3     | 19.6        | << Above pump time (min) |                |              | Slickwater        |                | 0               | 0              | 0               |                    |                   |                  |                    |                              |                          |
|                     | WASATCH | 6400  | 6401 | 3     | Varied      | Pump-in test             |                |              | Slickwater        | 3,720          | 3,720           | 89             | 89              | 15.0%              | 0.0%              | 0                | 0                  |                              | 2                        |
|                     | WASATCH | 6430  | 6431 | 3     | 0           | ISIP and 5 min ISIP      |                |              | Slickwater        | 12,400         | 16,120          | 295            | 384             | 50.0%              | 37.3%             | 7,750            | 7,750              |                              | 6                        |
|                     | WASATCH | 6448  | 6449 | 3     | 50          | Slickwater Pad           | 0.25           | 1            | Slickwater        | 8,680          | 24,800          | 207            | 590             | 35.0%              | 62.7%             | 13,020           | 20,770             |                              | 4                        |
|                     | WASATCH | 6458  | 6459 | 3     | 50          | Slickwater Ramp          | 1              | 2            | Slickwater        | 4,167          | 28,967          | 99             | 690             |                    |                   | 20,770           | 20,770             |                              | 2                        |
|                     | WASATCH | 6494  | 6496 | 3     | 50          | Flush (4-1/2)            |                |              | Slickwater        |                |                 |                |                 |                    |                   |                  |                    |                              | 0                        |
|                     | WASATCH |       |      |       |             | ISDP and 5 min ISDP      |                |              | Slickwater        |                |                 |                |                 |                    |                   |                  |                    |                              | 0                        |
|                     | WASATCH |       |      |       |             |                          |                |              |                   | 28,967         |                 | 99             | 690             |                    |                   | 20,770           | 20,770             |                              | 0                        |
|                     | WASATCH |       |      |       |             |                          |                |              |                   |                |                 |                |                 |                    |                   |                  |                    |                              | 0                        |
|                     | WASATCH |       |      |       |             |                          |                |              | Sand laden Volume | 24,800         |                 |                |                 |                    | gal/ft            | 800<br>CBP depth | 670<br>lbs sand/ft | 206                          | 14                       |
| # of Perfs/Stage 21 |         |       |      |       |             |                          |                |              |                   |                |                 |                |                 |                    |                   |                  |                    |                              |                          |
| 6                   | WASATCH | 5956  | 5957 | 3     | 13.8        | << Above pump time (min) |                |              | Slickwater        |                | 0               | 0              | 0               |                    |                   |                  |                    |                              |                          |
|                     | WASATCH | 6014  | 6015 | 3     | Varied      | Pump-in test             |                |              | Slickwater        | 3,360          | 3,360           | 80             | 80              | 15.0%              | 0.0%              | 0                | 0                  |                              | 2                        |
|                     | WASATCH | 6025  | 6026 | 3     | 0           | ISIP and 5 min ISIP      |                |              | Slickwater        | 11,200         | 14,560          | 267            | 347             | 50.0%              | 37.3%             | 7,000            | 7,000              |                              | 6                        |
|                     | WASATCH | 6049  | 6051 | 3     | 50          | Slickwater Pad           | 0.25           | 1            | Slickwater        | 7,840          | 22,400          | 187            | 533             | 35.0%              | 62.7%             | 11,760           | 18,760             |                              | 4                        |
|                     | WASATCH | 6144  | 6147 | 3     | 50          | Slickwater Ramp          | 1              | 2            | Slickwater        | 3,888          | 26,288          | 93             | 626             |                    |                   | 18,760           | 18,760             |                              | 2                        |
|                     | WASATCH |       |      |       | 50          | Flush (4-1/2)            |                |              | Slickwater        |                |                 |                |                 |                    |                   |                  |                    |                              | 0                        |
|                     | WASATCH |       |      |       |             | ISDP and 5 min ISDP      |                |              | Slickwater        |                |                 |                |                 |                    |                   |                  |                    |                              | 0                        |
|                     | WASATCH |       |      |       |             |                          |                |              |                   | 26,288         |                 | 93             | 626             |                    |                   | 18,760           | 18,760             |                              | 0                        |
|                     | WASATCH |       |      |       |             |                          |                |              |                   |                |                 |                |                 |                    |                   |                  |                    |                              | 0                        |
|                     | WASATCH |       |      |       |             |                          |                |              | Sand laden Volume | 22,400         |                 |                |                 |                    | gal/ft            | 800<br>CBP depth | 670<br>lbs sand/ft | 299                          | 13                       |
| # of Perfs/Stage 24 |         |       |      |       |             |                          |                |              |                   |                |                 |                |                 |                    |                   |                  |                    |                              |                          |

| Stage  | Zone    | Perfs    |                  | Holes | Rate<br>BPM | Fluid<br>Type       | Initial<br>ppg | Final<br>ppg | Fluid             | Volume<br>gals | Cum Vol<br>gals | Volume<br>BBLs | Cum Vol<br>BBLs | Fluid<br>%of frac | Sand<br>%of frac | Sand<br>lbs | Cum. Sand<br>lbs     | Footage from<br>CBP to Flush | Scale<br>Inhib.,<br>gal.         |                        |
|--------|---------|----------|------------------|-------|-------------|---------------------|----------------|--------------|-------------------|----------------|-----------------|----------------|-----------------|-------------------|------------------|-------------|----------------------|------------------------------|----------------------------------|------------------------|
|        |         | Top, ft. | Bot., ft         |       |             |                     |                |              |                   |                |                 |                |                 |                   |                  |             |                      |                              |                                  |                        |
| 7      | WASATCH | 5408     | 5409             | 3     | Varied      | Pump-in test        |                |              | Slickwater        |                | 0               | 0              | 0               | 0                 |                  |             |                      |                              |                                  |                        |
|        | WASATCH | 5428     | 5429             | 3     | 0           | ISP and 5 min ISP   |                |              |                   |                |                 |                |                 |                   |                  |             |                      |                              |                                  |                        |
|        | WASATCH | 5439     | 5440             | 3     | 50          | Slickwater Pad      |                |              | Slickwater        | 8,760          | 8,760           | 209            | 209             | 15.0%             | 0.0%             | 0           | 0                    |                              | 4                                |                        |
|        | WASATCH | 5460     | 5461             | 3     | 50          | Slickwater Ramp     | 0.25           |              | Slickwater        | 29,200         | 37,960          | 695            | 904             | 50.0%             | 37.3%            | 18,250      | 18,250               |                              | 15                               |                        |
|        | WASATCH | 5491     | 5492             | 3     | 50          | Slickwater Ramp     | 1              |              | Slickwater        | 20,440         | 58,400          | 487            | 1,390           | 35.0%             | 62.7%            | 30,660      | 48,910               |                              | 10                               |                        |
|        | WASATCH | 5597     | 5598             | 3     | 50          | Flush (4-1/2)       |                |              | Slickwater        | 3,530          | 61,930          | 84             | 1,475           |                   |                  |             | 48,910               |                              | 0                                |                        |
|        | WASATCH | 5611     | 5612             | 3     | 3           | ISDP and 5 min ISDP |                |              | Slickwater        |                |                 |                |                 |                   |                  |             |                      |                              | 0                                |                        |
|        | WASATCH | 5626     | 5627             | 3     | 3           |                     |                |              |                   |                | 61,930          | 84             |                 | 1,475             |                  |             | 48,910               |                              | 0                                |                        |
|        | WASATCH |          |                  |       |             |                     |                |              |                   |                |                 |                |                 |                   |                  |             |                      |                              | 0                                |                        |
|        |         |          |                  |       |             |                     |                |              | Sand laden Volume |                | 58,400          |                |                 |                   |                  |             |                      |                              | 29                               |                        |
|        |         |          | # of Perfs/stage | 24    |             |                     |                |              |                   |                |                 |                | Flush depth     | 5,408             | gall/ft          | 800         | 670 lbs sand/ft      | 50                           |                                  |                        |
| Totals |         |          |                  | 165   | 29.5        |                     |                |              |                   | Total Fluid    | 259,818 gals    | 6,186 bbls     |                 |                   |                  | Total Sand  | 188,940              |                              |                                  |                        |
|        |         |          |                  |       | 2.1         |                     |                |              |                   |                |                 |                | 13.7 tanks      |                   |                  |             | Total Scale Inhib. = |                              | 128                              |                        |
|        |         |          |                  |       |             |                     |                |              |                   |                |                 |                |                 |                   |                  |             |                      |                              | Total Stages<br>Last Stage Flush | 7 stages<br>3,530 gals |

NBU 922-3103AS  
Perforation and CBP Summary

| Stage  | Zones            | Perforations |            | SPF | Holes | Fracture Coverage |       |        |
|--------|------------------|--------------|------------|-----|-------|-------------------|-------|--------|
|        |                  | Top, ft      | Bottom, ft |     |       |                   |       |        |
| 1      | WASATCH          | 7184         | 7187       | 3   | 9     | 7184              | to    | 7252.5 |
|        | WASATCH          | 7246         | 7251       | 3   | 15    |                   |       |        |
|        | WASATCH          |              |            |     |       |                   |       |        |
|        | WASATCH          |              |            |     |       |                   |       |        |
|        | WASATCH          |              |            |     |       |                   |       |        |
|        | WASATCH          |              |            |     |       |                   |       |        |
|        | WASATCH          |              |            |     |       |                   |       |        |
|        | WASATCH          |              |            |     |       |                   |       |        |
|        | # of Perfs/stage |              |            |     | 24    | CBP DEPTH         | 7,098 |        |
| 2      | WASATCH          | 6976         | 6977       | 3   | 3     | 6975              | to    | 7070   |
|        | WASATCH          | 6991         | 6992       | 3   | 3     |                   |       |        |
|        | WASATCH          | 7006         | 7008       | 3   | 6     |                   |       |        |
|        | WASATCH          | 7031         | 7033       | 3   | 6     |                   |       |        |
|        | WASATCH          | 7066         | 7068       | 3   | 6     |                   |       |        |
|        | WASATCH          |              |            |     |       |                   |       |        |
|        | WASATCH          |              |            |     |       |                   |       |        |
|        | WASATCH          |              |            |     |       |                   |       |        |
|        | # of Perfs/stage |              |            |     | 24    | CBP DEPTH         | 6,924 |        |
| 3      | WASATCH          | 6768         | 6769       | 3   | 3     | 6766              | to    | 6913   |
|        | WASATCH          | 6783         | 6784       | 3   | 3     |                   |       |        |
|        | WASATCH          | 6798         | 6799       | 3   | 3     |                   |       |        |
|        | WASATCH          | 6830         | 6831       | 3   | 3     |                   |       |        |
|        | WASATCH          | 6860         | 6861       | 3   | 3     |                   |       |        |
|        | WASATCH          | 6878         | 6879       | 3   | 3     |                   |       |        |
|        | WASATCH          | 6898         | 6899       | 3   | 3     |                   |       |        |
|        | WASATCH          | 6910         | 6911       | 3   | 3     |                   |       |        |
|        | # of Perfs/stage |              |            |     | 24    | CBP DEPTH         | 6,754 |        |
| 4      | WASATCH          | 6558         | 6559       | 3   | 3     | 6556              | to    | 6739   |
|        | WASATCH          | 6576         | 6577       | 3   | 3     |                   |       |        |
|        | WASATCH          | 6607         | 6608       | 3   | 3     |                   |       |        |
|        | WASATCH          | 6636         | 6637       | 3   | 3     |                   |       |        |
|        | WASATCH          | 6665         | 6666       | 3   | 3     |                   |       |        |
|        | WASATCH          | 6704         | 6705       | 3   | 3     |                   |       |        |
|        | WASATCH          | 6736         | 6738       | 3   | 6     |                   |       |        |
|        | WASATCH          |              |            |     |       |                   |       |        |
|        | # of Perfs/stage |              |            |     | 24    | CBP DEPTH         | 6,515 |        |
| 5      | WASATCH          | 6383         | 6384       | 3   | 3     | 6382              | to    | 6499   |
|        | WASATCH          | 6400         | 6401       | 3   | 3     |                   |       |        |
|        | WASATCH          | 6430         | 6431       | 3   | 3     |                   |       |        |
|        | WASATCH          | 6448         | 6449       | 3   | 3     |                   |       |        |
|        | WASATCH          | 6458         | 6459       | 3   | 3     |                   |       |        |
|        | WASATCH          | 6494         | 6496       | 3   | 6     |                   |       |        |
|        | WASATCH          |              |            |     |       |                   |       |        |
|        | WASATCH          |              |            |     |       |                   |       |        |
|        | # of Perfs/stage |              |            |     | 21    | CBP DEPTH         | 6,177 |        |
| 6      | WASATCH          | 5956         | 5957       | 3   | 3     | 5955              | to    | 6150   |
|        | WASATCH          | 6014         | 6015       | 3   | 3     |                   |       |        |
|        | WASATCH          | 6025         | 6026       | 3   | 3     |                   |       |        |
|        | WASATCH          | 6049         | 6051       | 3   | 6     |                   |       |        |
|        | WASATCH          | 6144         | 6147       | 3   | 9     |                   |       |        |
|        | WASATCH          |              |            |     |       |                   |       |        |
|        | WASATCH          |              |            |     |       |                   |       |        |
|        | WASATCH          |              |            |     |       |                   |       |        |
|        | # of Perfs/stage |              |            |     | 24    | CBP DEPTH         | 5,657 |        |
| 7      | WASATCH          | 5408         | 5409       | 3   | 3     | 5406              | to    | 5629   |
|        | WASATCH          | 5428         | 5429       | 3   | 3     |                   |       |        |
|        | WASATCH          | 5439         | 5440       | 3   | 3     |                   |       |        |
|        | WASATCH          | 5460         | 5461       | 3   | 3     |                   |       |        |
|        | WASATCH          | 5491         | 5492       | 3   | 3     |                   |       |        |
|        | WASATCH          | 5597         | 5598       | 3   | 3     |                   |       |        |
|        | WASATCH          | 5611         | 5612       | 3   | 3     |                   |       |        |
|        | WASATCH          | 5626         | 5627       | 3   | 3     |                   |       |        |
|        | # of Perfs/stage |              |            |     | 24    | CBP DEPTH         | 5,358 |        |
| Totals |                  |              |            |     | 165   | Total Pay         |       | 282.0  |

|                                                                                                                                                                                                                                                                                                    |                                                                            |                                                               |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------|---------------------------------------------------------------|
| <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>UO 1207A ST |
| <b>1. TYPE OF WELL</b><br>Gas Well                                                                                                                                                                                                                                                                 |                                                                            | <b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b>                  |
| <b>2. NAME OF OPERATOR:</b><br>KERR-MCGEE OIL & GAS ONSHORE, L.P.                                                                                                                                                                                                                                  |                                                                            | <b>7. UNIT or CA AGREEMENT NAME:</b><br>NATURAL BUTTES        |
| <b>3. ADDRESS OF OPERATOR:</b><br>P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779                                                                                                                                                                                              |                                                                            | <b>8. WELL NAME and NUMBER:</b><br>NBU 922-31O3AS             |
| <b>4. LOCATION OF WELL</b><br><b>FOOTAGES AT SURFACE:</b><br>0496 FSL 0965 FEL<br><b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b><br>Qtr/Qtr: SESE Section: 31 Township: 09.0S Range: 22.0E Meridian: S                                                                                        |                                                                            | <b>9. API NUMBER:</b><br>43047510440000                       |
| <b>10. FIELD and POOL or WILDCAT:</b><br>NATURAL BUTTES                                                                                                                                                                                                                                            |                                                                            | <b>9. FIELD and POOL or WILDCAT:</b><br>NATURAL BUTTES        |
| <b>COUNTY:</b><br>UINTAH                                                                                                                                                                                                                                                                           |                                                                            | <b>STATE:</b><br>UTAH                                         |
| <b>11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA</b>                                                                                                                                                                                                             |                                                                            |                                                               |
| <b>TYPE OF SUBMISSION</b>                                                                                                                                                                                                                                                                          | <b>TYPE OF ACTION</b>                                                      |                                                               |
| <input type="checkbox"/> NOTICE OF INTENT<br>Approximate date work will start:                                                                                                                                                                                                                     | <input type="checkbox"/> ACIDIZE                                           |                                                               |
| <input checked="" type="checkbox"/> SUBSEQUENT REPORT<br>Date of Work Completion:<br>6/22/2014                                                                                                                                                                                                     | <input type="checkbox"/> ALTER CASING                                      |                                                               |
| <input type="checkbox"/> SPUD REPORT<br>Date of Spud:                                                                                                                                                                                                                                              | <input type="checkbox"/> CASING REPAIR                                     |                                                               |
| <input type="checkbox"/> DRILLING REPORT<br>Report Date:                                                                                                                                                                                                                                           | <input type="checkbox"/> CHANGE TO PREVIOUS PLANS                          |                                                               |
|                                                                                                                                                                                                                                                                                                    | <input type="checkbox"/> CHANGE WELL STATUS                                |                                                               |
|                                                                                                                                                                                                                                                                                                    | <input type="checkbox"/> CHANGE TUBING                                     |                                                               |
|                                                                                                                                                                                                                                                                                                    | <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS                    |                                                               |
|                                                                                                                                                                                                                                                                                                    | <input type="checkbox"/> CONVERT WELL TYPE                                 |                                                               |
|                                                                                                                                                                                                                                                                                                    | <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"/> 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"/> WILDCAT WELL DETERMINATION                        |                                                               |
|                                                                                                                                                                                                                                                                                                    | <input type="checkbox"/> OTHER: <input style="width: 100px;" type="text"/> |                                                               |
| <b>12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.</b><br>The NBU 922-31O3AS was returned to production 06/22/2014 after a recompleate. Producing from the WASTACH. CBP over MESAVERDE @ 7281'.                           |                                                                            |                                                               |
| <b>Accepted by the<br/>         Utah Division of<br/>         Oil, Gas and Mining<br/>         FOR RECORD ONLY</b><br>July 11, 2014                                                                                                                                                                |                                                                            |                                                               |
| <b>NAME (PLEASE PRINT)</b><br>Doreen Green                                                                                                                                                                                                                                                         | <b>PHONE NUMBER</b><br>435 781-9758                                        | <b>TITLE</b><br>Regulatory Analyst II                         |
| <b>SIGNATURE</b><br>N/A                                                                                                                                                                                                                                                                            | <b>DATE</b><br>6/23/2014                                                   |                                                               |

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

AMENDED REPORT ☐ FORM 8  
(highlight changes)

5. LEASE DESIGNATION AND SERIAL NUMBER:  
UO 1207A ST

**WELL COMPLETION OR RECOMPLETION REPORT AND LOG**

1a. TYPE OF WELL: OIL WELL ☐ GAS WELL ☒ DRY ☐ OTHER \_\_\_\_\_

b. TYPE OF WORK: NEW WELL ☐ HORIZ. LATS. ☐ DEEP-EN ☐ RE-ENTRY ☐ DIFF. RESVR. ☒ OTHER **RECOMPLETION**

2. NAME OF OPERATOR:  
KERR MCGEE OIL & GAS ONSHORE, L.P.

3. ADDRESS OF OPERATOR:  
P.O. BOX 173779 CITY DENVER STATE CO ZIP 80217

PHONE NUMBER:  
(720) 929-6000

4. LOCATION OF WELL (FOOTAGES)

AT SURFACE: SESE 496 FSL 965 FEL

AT TOP PRODUCING INTERVAL REPORTED BELOW: SWSE 552 FSL 2127 FEL

AT TOTAL DEPTH: SWSE 500 FSL 2073 FEL

7. UNIT or CA AGREEMENT NAME  
UTU63047A

8. WELL NAME and NUMBER:  
NBU 922-3103AS

9. API NUMBER:  
4304751044

10 FIELD AND POOL, OR WILDCAT  
NATURAL BUTTES

11. QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:  
SESE 31 9S 22E S

12. COUNTY  
UINTAH

13. STATE  
UTAH

14. DATE SPURRED:  
10/3/2010

15. DATE T.D. REACHED:  
12/6/2010

16. DATE COMPLETED:  
6/22/2014

ABANDONED ☐

READY TO PRODUCE ☒

17. ELEVATIONS (DF, RKB, RT, GL):  
5082 RKB

18. TOTAL DEPTH: MD 9,545  
TVD 9,365

19. PLUG BACK T.D.: MD 9,488  
TVD 9,308

20. IF MULTIPLE COMPLETIONS, HOW MANY? \*

21. DEPTH BRIDGE MD  
PLUG SET: TVD

22. TYPE ELECTRIC AND OTHER MECHANICAL LOGS RUN (Submit copy of each)

CHI TRIPLE COMBO-RMTE

23.

WAS WELL CORED?

NO ☒

YES ☐

(Submit analysis)

WAS DST RUN?

NO ☒

YES ☐

(Submit report)

DIRECTIONAL SURVEY?

NO ☐

YES ☒

(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#            |          | 2,452       |                      | 450                        |                     | 0             |               |
| 7 7/8"    | 4 1/2" I-80 | 11.6#          |          | 9,533       |                      | 1,800                      |                     | 478           |               |
|           |             |                |          |             |                      |                            |                     |               |               |
|           |             |                |          |             |                      |                            |                     |               |               |
|           |             |                |          |             |                      |                            |                     |               |               |

**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" | 8,710          |                 |      |                |                 |      |                |                 |

**26. PRODUCING INTERVALS**

| FORMATION NAME | TOP (MD) | BOTTOM (MD) | TOP (TVD) | BOTTOM (TVD) | INTERVAL (Top/Bot - MD) | SIZE | NO. HOLES | PERFORATION STATUS                                                         |
|----------------|----------|-------------|-----------|--------------|-------------------------|------|-----------|----------------------------------------------------------------------------|
| (A) WASATCH    | 5,408    | 7,251       |           |              | 5,408 7,251             | 0.40 | 165       | Open <input checked="" type="checkbox"/> Squeezed <input type="checkbox"/> |
| (B)            |          |             |           |              |                         |      |           | Open <input type="checkbox"/> Squeezed <input type="checkbox"/>            |
| (C)            |          |             |           |              |                         |      |           | Open <input type="checkbox"/> Squeezed <input type="checkbox"/>            |
| (D)            |          |             |           |              |                         |      |           | Open <input type="checkbox"/> Squeezed <input type="checkbox"/>            |

**27. PERFORATION RECORD**

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

| DEPTH INTERVAL | AMOUNT AND TYPE OF MATERIAL                                                  |
|----------------|------------------------------------------------------------------------------|
| 5408-7251      | PUMP 6521 BBLs SLICK H2O, 42 BBLs 15% HCL ACID & 189,011 LBS 30/50 MESH SAND |
|                |                                                                              |
|                |                                                                              |

**29. ENCLOSED ATTACHMENTS:**

☐ ELECTRICAL/MECHANICAL LOGS

☐ GEOLOGIC REPORT

☐ DST REPORT

☐ DIRECTIONAL SURVEY

☐ SUNDRY NOTICE FOR PLUGGING AND CEMENT VERIFICATION

☐ CORE ANALYSIS

☐ OTHER: \_\_\_\_\_

**30. WELL STATUS:**

**PROD**



## 31. INITIAL PRODUCTION

## INTERVAL A (As shown in item #26)

|                                   |  |                        |  |                     |  |                             |  |                 |  |                   |  |                              |  |                          |  |                   |  |                   |  |                          |  |
|-----------------------------------|--|------------------------|--|---------------------|--|-----------------------------|--|-----------------|--|-------------------|--|------------------------------|--|--------------------------|--|-------------------|--|-------------------|--|--------------------------|--|
| DATE FIRST PRODUCED:<br>6/22/2014 |  | TEST DATE:<br>7/4/2014 |  | HOURS TESTED:<br>24 |  | TEST PRODUCTION<br>RATES: → |  | OIL – BBL:<br>1 |  | GAS – MCF:<br>690 |  | WATER – BBL:<br>0            |  | PROD. METHOD:<br>FLOWING |  |                   |  |                   |  |                          |  |
| CHOKE SIZE:<br>44/64              |  | TBG. PRESS.<br>198     |  | CSG. PRESS.<br>729  |  | API GRAVITY                 |  | BTU – GAS       |  | GAS/OIL RATIO     |  | 24 HR PRODUCTION<br>RATES: → |  | OIL – BBL:<br>1          |  | GAS – MCF:<br>690 |  | WATER – BBL:<br>0 |  | 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.)

SOLD

## 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.

## 34. FORMATION (Log) MARKERS:

| Formation | Top<br>(MD) | Bottom<br>(MD) | Descriptions, Contents, etc. | Name        | Top<br>(Measured Depth) |
|-----------|-------------|----------------|------------------------------|-------------|-------------------------|
|           |             |                |                              | GREEN RIVER | 1,344                   |
|           |             |                |                              | BIRD'S NEST | 1,657                   |
|           |             |                |                              | MAHOGANY    | 2,163                   |
|           |             |                |                              | WASATCH     | 4,689                   |
|           |             |                |                              | MESAVERDE   | 7,299                   |

## 35. ADDITIONAL REMARKS (Include plugging procedure)

Attached is the recompletion history and perforation report. Casing in the well is as previously reported on the original Completion Report. The well was originally completed in the Mesaverde from 7320-9358. The well was recompleted with an iso plug set at 7281 ft.; new perforations in the Wasatch are from 5408-7251. The iso plug was drilled out on 7/1/14 and the well is producing from commingled perforations.

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

NAME (PLEASE PRINT) ILA BEALE

TITLE STAFF REGULATORY SPECIALIST

SIGNATURE

DATE

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 922-3103AS YELLOW                            |                   |                  | Spud Conductor: 10/3/2010                                 |      |             | Spud Date: 10/26/2010 |                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|--------------------------------------------------------|-------------------|------------------|-----------------------------------------------------------|------|-------------|-----------------------|---------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Project: UTAH-UINTAH                                   |                   |                  | Site: NBU 922-31P3 PAD                                    |      |             |                       | Rig Name No:        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Event: RECOMPL/RESEREVEADD                             |                   |                  | Start Date: 4/24/2014                                     |      |             |                       | End Date: 6/20/2014 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Active Datum: RKB @5,082.00usft (above Mean Sea Level) |                   |                  | UWI: SE/SE/0/9/S/22/E/31/0/0/6/PM/S/496.00/E/0/965.00/0/0 |      |             |                       |                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Date                                                   | Time<br>Start-End | Duration<br>(hr) | Phase                                                     | Code | Sub<br>Code | P/U                   | MD From<br>(usft)   | Operation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| 4/29/2014                                              | 10:00 - 12:00     | 2.00             | SUBSPR                                                    | 30   |             | P                     |                     | CP= 80#. TP= 80#. MIRU. BLOW DOWN WELL. CNTRL TBG W/ 30BBLS TMAC. CNTRL CSG W/ 20BBLS TMAC. NDWH. NUBOP. R/U FLOOR & TBG EQUIP. UN-LAND TBG. INSTALL WASHINGTON RUBBER. MIRU SCANNERS.                                                                                                                                                                                                                                                                                                                   |
|                                                        | 12:00 - 17:30     | 5.50             | SUBSPR                                                    | 31   | I           | P                     |                     | POOH WHILE SCANNING 277JTS 2-3/8" L-80 TBNG. L/D ALL TBNG. SCAN RESULTS AS FOLLOWS:<br><br>2-3/8" J-55 Y-BND = 33JTS.<br><br>2-3/8" J-55 R-BND = 244JTS. EXT SCALE MODERATE TO HEAVY ON LAST 37JTS. LIGHT TO NO INTERNAL SCALE THRU ENTIRE STRING. PIPE SCANNED Y-BND THRU 1ST 81JTS BUT HAD BAD PITTING ON PINS FROM JT#37 TO JT#95. JT 96 THRU JT 277 HAD MODERATE PITTING AND WALL LOSS W/ A FEW SCATTERED JTS OVER 50% WALL LOSS. NO HOLES PRESENT.<br><br>RDMO SCANNERS. SWIFN. SDFN. SAFETY = JSA. |
| 4/30/2014                                              | 7:00 - 7:15       | 0.25             | SUBSPR                                                    | 48   |             | P                     |                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|                                                        | 7:15 - 9:00       | 1.75             | SUBSPR                                                    | 34   | I           | P                     |                     | SICP= 700#. BLOW DOWN WELL. CNTRL CSG W/ 30BBLS TMAC. MIRU WIRELINE. P/U & RIH W/ 3.70" GR-JB TO 7311'. POOH. P/U & RIH W/ 4-1/2" HAL 10K CBP. SET @ 7281'. POOH W/ WIRELINE. RDMO WIRELINE.                                                                                                                                                                                                                                                                                                             |
|                                                        | 9:00 - 10:00      | 1.00             | SUBSPR                                                    | 52   | A           | P                     |                     | R/D FLOOR & TBG EQUIP. NDBOP. NUFV. LOAD CSG W/ 90BBLS TMAC. PRESSURE TEST CSG GOOD @ 3000#. NO VISIBLE PRESSURE LOSS. BLEED OFF PRESSURE. SWI. RDMO.                                                                                                                                                                                                                                                                                                                                                    |
| 5/7/2014                                               | 8:00 - 9:00       | 1.00             | SUBSPR                                                    | 52   | B           | P                     |                     | FILL SURFACE CSG. MIRU CAMERON QUICK TEST. PRESSURE TEST CSG & FRAC VALVES 1ST PSI TEST T/ 6200 PSI. HELD FOR 15 MIN LOST -50 PSI.<br>NO COMMUNICATION OR MIGRATION WITH SURFACE CSG<br>BLEED OFF PSI.<br><br>PRESSURE TEST 8 5/8 X 4 1/2 TO 535 PSI HELD FOR 5 MIN<br>LOST -453 PSI, BLED PSI OFF, REINSTALLED POP OFF SWIFN<br>NO PRESSURE ON SURFACE CASING<br>FILLED SURFACE WITH 0 BBL H2O                                                                                                          |
| 6/6/2014                                               | 7:45 - 8:00       | 0.25             | SUBSPR                                                    | 48   |             | P                     |                     | HSM, OPENING VALVES                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| 6/9/2014                                               | 6:45 - 7:00       | 0.25             | FRAC                                                      | 48   |             | P                     |                     | HSM, PRE JOB INSTRUCTIONS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |

## Operation Summary Report

|                                                        |  |                                                           |  |                       |              |
|--------------------------------------------------------|--|-----------------------------------------------------------|--|-----------------------|--------------|
| Well: NBU 922-3103AS YELLOW                            |  | Spud Conductor: 10/3/2010                                 |  | Spud Date: 10/26/2010 |              |
| Project: UTAH-UINTAH                                   |  | Site: NBU 922-31P3 PAD                                    |  |                       | Rig Name No: |
| Event: RECOMPL/RESEREVEADD                             |  | Start Date: 4/24/2014                                     |  | End Date: 6/20/2014   |              |
| Active Datum: RKB @5,082.00usft (above Mean Sea Level) |  | UWI: SE/SE/0/9/S/22/E/31/0/0/6/PM/S/496.00/E/0/965.00/0/0 |  |                       |              |

| Date      | Time<br>Start-End | Duration<br>(hr) | Phase  | Code | Sub<br>Code | P/U | MD From<br>(usft) | Operation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|-----------|-------------------|------------------|--------|------|-------------|-----|-------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|           | 7:00 - 17:30      | 10.50            | FRAC   | 36   | B           | P   |                   | REFER TO STIMULATION PJR FOR FLUID, SAND AND CHEMICAL VOLUMES, ALL STAGES WERE PERFORATED ACCORDING TO PERF RECORD IN OPEN WELLS, ALL STAGES WERE STIMULATED TO VENDOR POST JOB REPORT. ALL PLUGS ARE HALIBURTON 8K CBPS<br><br>FRAC STG #1] WHP=228#, BRK DN PERFS=4,277#, @=5.0 BPM, INTIAL ISIP=1,877#, FG=.67, FINAL ISIP=1,630#, FG=.66,<br><br>SET PLUG & PERFORATE STG #2<br><br>FRAC STG #2] WHP=103#, BRK DN PERFS=5,707#, @=3.9 BPM, INTIAL ISIP=1,384#, FG=.63, FINAL ISIP=1,571#, FG=.69,<br><br>SET PLUG & PERFORATE STG #3<br><br>FRAC STG #3] WHP=610#, BRK DN PERFS=2,117#, @=3.5 BPM, INTIAL ISIP=1,674#, FG=.68, FINAL ISIP=1,953#, FG=.72,<br><br>SET PLUG & PERFORATE STG #4<br><br>FRAC STG #4] WHP=221#, BRK DN PERFS=2,493#, @=3.9 BPM, INTIAL ISIP=1,961#, FG=.73, FINAL ISIP=1,923#, FG=.72,<br><br>SET PLUG PERFORATE STG #5<br>SWIFN |
| 6/10/2014 | 6:30 - 6:45       | 0.25             | FRAC   | 48   |             | P   |                   | HSM, RED ZONE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|           | 6:45 - 15:00      | 8.25             | FRAC   | 36   | B           | P   |                   | FRAC STG #5] WHP=1,312#, BRK DN PERFS=2,677#, @=3.3 BPM, INTIAL ISIP=1,737#, FG=.70, FINAL ISIP=1,782#, FG=.71,<br><br>SET PLUG AND PERFORATE STG #6<br><br>FRAC STG #6] WHP=1,015#, BRK DN PERFS=2,020#, @=3.7 BPM, INTIAL ISIP=1,301#, FG=.65, FINAL ISIP=1,323#, FG=.65,<br><br>SET PLUG AND PERFORATE STG #7<br><br>FRAC STG #7] WHP=382#, BRK DN PERFS=1,732#, @=3.1 BPM, INTIAL ISIP=342#, FG=.49, FINAL ISIP=1,822#, FG=.76,<br><br>SET TOP KILL<br><br>TOTAL BBLS=6,562<br>TOTAL SAND=189,011#                                                                                                                                                                                                                                                                                                                                                          |
| 6/19/2014 | 13:00 - 17:00     | 4.00             | DRLOUT | 31   | I           | P   |                   | 3 OF 4, MIRU, ND WH, NU BOP, RU FLOOR & TBG EQUIP, PU 3 7/8" BIT, PUMP OPEN SUB, 1.875" S/N, TALLY & PU TBG, SWI, SDFN.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |

## Operation Summary Report

|                                                        |  |                                                           |  |                       |              |
|--------------------------------------------------------|--|-----------------------------------------------------------|--|-----------------------|--------------|
| Well: NBU 922-3103AS YELLOW                            |  | Spud Conductor: 10/3/2010                                 |  | Spud Date: 10/26/2010 |              |
| Project: UTAH-UINTAH                                   |  | Site: NBU 922-31P3 PAD                                    |  |                       | Rig Name No: |
| Event: RECOMPL/RESEREVEADD                             |  | Start Date: 4/24/2014                                     |  | End Date: 6/20/2014   |              |
| Active Datum: RKB @5,082.00usft (above Mean Sea Level) |  | UWI: SE/SE/0/9/S/22/E/31/0/0/6/PM/S/496.00/E/0/965.00/0/0 |  |                       |              |

| Date      | Time<br>Start-End | Duration<br>(hr) | Phase  | Code | Sub<br>Code | P/U | MD From<br>(usft) | Operation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|-----------|-------------------|------------------|--------|------|-------------|-----|-------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 6/20/2014 | 7:00 - 7:15       | 0.25             | DRLOUT | 48   |             | P   |                   | HSM, SLIPS, TRIPS & FALLS, PU TBG, D/O CBP'S, A/F UNIT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|           | 7:15 - 13:00      | 5.75             | DRLOUT | 44   | C           | P   |                   | 3 OF 4, PU TBG, RU P/S, INSTAL W/R, FILL TBG & BRK CIRC, P/T BOP TO 3000 PSI GOOD, SURFACE CSG VALVE OPEN & LOCKED, D/O 7 CBP'S<br><br>C/O 15' SAND, TAG 1ST PLUG @ 5358', KICK 0 PSI, CSG PRESS 0 PSI, RIH, NO FLOW W/O PUMP<br><br>C/O 30' SAND, TAG 2ND PLUG @ 5657', KICK 100 PSI, CSG PRESS 0 PSI, RIH, WELL FLOWING<br><br>C/O 30' SAND, TAG 3RD PLUG @ 6177', KICK 200 PSI, CSG PRESS 50 PSI, RIH, WELL FLOWING<br><br>C/O 25' SAND, TAG 4TH PLUG @ 6515', KICK 100 PSI, CSG PRESS 50 PSI, RIH, WELL FLOWING<br><br>C/O 30' SAND, TAG 5TH PLUG @ 6754', KICK 100 PSI, CSG PRESS 50 PSI, RIH, WELL FLOWING<br><br>C/O 30' SAND, TAG 6TH PLUG @ 6924', KICK 0 PSI, CSG PRESS 50 PSI, RIH, WELL FLOWING<br><br>C/O 35' SAND, TAG 7TH PLUG @ 7098', KICK 0 PSI, CSG PRESS 50 PSI,<br><br>ISOLATION PLUG @ 7281', BTM PERF @ 7251', RIH TAGGED @ 7260', INSTAL S/F & BRK CIRC W/ A/F UNIT TO UNLOAD & C/O TO ISO PLUG @ 7281', 30' PAST BTM PERF W/ 228 JTS 2 3/8" J-55 TBG, KILL A/F UNIT LET WELL FLOW, TOP KILL TBG TO REMOVE S/F, LD 9 JTS GOT STUCK 15' OUT ON 10TH JT EOT @ 7015' |
|           | 13:00 - 15:30     | 2.50             | DRLOUT | 31   | B           | P   |                   | WORK STUCK TBG, CIRC W/ A/F UNIT, RU P/S ATTEMPT TO ROTATE & WORK TORQUE DOWN NO LUCK, WORK STUCK TBG FROM 60K TO 10K CAME FREE, BRK CIRC W/ A/F UNIT WORK THRU TITE SPOT, TOP KILL TBG                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |



API Well Number: 43047510440000

US ROCKIES REGION

## Operation Summary Report

|                                                        |  |                                                           |  |                       |              |
|--------------------------------------------------------|--|-----------------------------------------------------------|--|-----------------------|--------------|
| Well: NBU 922-3103AS YELLOW                            |  | Spud Conductor: 10/3/2010                                 |  | Spud Date: 10/26/2010 |              |
| Project: UTAH-UINTAH                                   |  | Site: NBU 922-31P3 PAD                                    |  |                       | Rig Name No: |
| Event: RECOMPL/RESEREVEADD                             |  | Start Date: 4/24/2014                                     |  | End Date: 6/20/2014   |              |
| Active Datum: RKB @5,082.00usft (above Mean Sea Level) |  | UWI: SE/SE/0/9/S/22/E/31/0/0/6/PM/S/496.00/E/0/965.00/0/0 |  |                       |              |

| Date | Time<br>Start-End | Duration<br>(hr) | Phase  | Code | Sub<br>Code | P/U | MD From<br>(usft) | Operation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|------|-------------------|------------------|--------|------|-------------|-----|-------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|      | 15:30 - 18:00     | 2.50             | DRLOUT | 31   | I           | P   |                   | <p>SET P/S BACK, L/D 2 JTS, PU &amp; STRIP IN TBG HANGER &amp; LAND TBG W/ 217 JTS 2 3/8" TBG, EOT 6939.93'.</p> <p>RD P/S, FLOOR &amp; TBG EQUIP, ND BOPS, NU WH, DROP BALL &amp; PUMP OPEN BIT SUB W/ A/F UNIT, P/T LINE FROM WH TO HAL 9000 TO 2,000 PSI, NO VISIBLE LEAKS.</p> <p>TURN OVER TO FLOW BACK CREW &amp; SALES, SDFWE</p> <p>KB= 19'</p> <p>4 1/16" WEATHERFORD HANGER= .83' TBG</p> <p>DELIVERED 91 JTS L-80 SAMUELS YARD</p> <p>67 JTS 2 3/8" L-80= 2118.33' TBG</p> <p>DELIVERED 150 JTS J-55</p> <p>1 - 6' PUP JT L-80= 6.11'</p> <p>TOTAL TBG= 241 JTS J-55 &amp; L-80</p> <p>150 JTS 2 3/8" J-55 = 4,791.71'</p> <p>TBG USED 217 JTS</p> <p>PUMP OPEN SUB= 3.95' TBG</p> <p>RETURNED 24 JTS L-80</p> <p>EOT @ 6939.93'</p> <p>TWTR= 6562 BBLS</p> <p>TWR= 800 BBLS</p> <p>TWLTR= 5762 BBLS</p> |

US ROCKIES REGION  
Operation Summary Report

| Well: NBU 922-3103AS YELLOW                            |                   |                  | Spud Conductor: 10/3/2010                                 |      |             | Spud Date: 10/26/2010 |                    |                                                                                                                                                                                                                                                                                      |
|--------------------------------------------------------|-------------------|------------------|-----------------------------------------------------------|------|-------------|-----------------------|--------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Project: UTAH-UINTAH                                   |                   |                  | Site: NBU 922-31P3 PAD                                    |      |             |                       | Rig Name No:       |                                                                                                                                                                                                                                                                                      |
| Event: RECOMPL/RESEREVEADD                             |                   |                  | Start Date: 6/24/2014                                     |      |             |                       | End Date: 7/1/2014 |                                                                                                                                                                                                                                                                                      |
| Active Datum: RKB @5,082.00usft (above Mean Sea Level) |                   |                  | UWI: SE/SE/0/9/S/22/E/31/0/0/6/PM/S/496.00/E/0/965.00/0/0 |      |             |                       |                    |                                                                                                                                                                                                                                                                                      |
| Date                                                   | Time<br>Start-End | Duration<br>(hr) | Phase                                                     | Code | Sub<br>Code | P/U                   | MD From<br>(usft)  | Operation                                                                                                                                                                                                                                                                            |
| 6/30/2014                                              | 7:00 - 7:15       | 0.25             | DRLOUT                                                    | 48   |             | P                     |                    | HSM, SLIPS, TRIPS & FALLS, RD, RU, TRIPPING TBG, RU P/S                                                                                                                                                                                                                              |
|                                                        | 7:15 - 17:00      | 9.75             | DRLOUT                                                    | 31   | I           | P                     |                    | 3 OF 4, RD OFF NBU 922-31J3DS, MIRU, CONTROL WELL W/ TMAC, ND WH, NU BOP, RU FLOOR & TBG EQUIP, UNLAND TBG, POOH L/D PUMP OPEN SUB & BIT, PU 3 7/8" MILL, POBS, S/N, RIH (L/D 1JT J-55 SMASHED W/ BLIND RAMS), RU P/S, SHUT RAMS & PUT WELL TO SALES, D/O ISOLATION PLUG IN AM, SDFN |
| 7/1/2014                                               | 7:00 - 7:15       | 0.25             | DRLOUT                                                    | 48   |             | P                     |                    | HSM, SLIPS, TRIPS & FALLS, D/O ISO PLUG, PU TBG, LAND TBG, PUMP OFF BIT                                                                                                                                                                                                              |
|                                                        | 7:15 - 9:00       | 1.75             | DRLOUT                                                    | 44   | C           | P                     |                    | 3 OF 4, CP 210 PSI, OPEN WELL, INSTAL S/F & BRK CIRC W/ A/F UNIT, D/O ISO PLUG @ 7281' (100 PSI INCREASE), TOP KILL TBG REMOVE S/F, SET P/S BACK                                                                                                                                     |
|                                                        | 9:00 - 13:00      | 4.00             | DRLOUT                                                    | 31   | I           | P                     |                    | TALLY & PU TBG TAG @ 9460' WELL FLOWING GOOD, BTM PERF @ 9358', PBTD @ 9488', 102' PAST BTM PERF W/ 297 JTS 2 3/8" J-55 & L-80 TBG, LD 24 JTS, PU & STRIP IN TBG HANGER & LAND TBG W/ 273 JTS 2 3/8" TBG, EOT 8709.99'                                                               |
|                                                        |                   |                  |                                                           |      |             |                       |                    | RD P/S, FLOOR & TBG EQUIP, ND BOPS, NU WH, DROP BALL & SHEAR OFF BIT, SWI @ WH                                                                                                                                                                                                       |
|                                                        |                   |                  |                                                           |      |             |                       |                    | TURN OVER TO PRODUCTION, RD TO MOVE TO NEXT WELL ON PAD                                                                                                                                                                                                                              |
|                                                        |                   |                  |                                                           |      |             |                       |                    | KB= 19'                                                                                                                                                                                                                                                                              |
|                                                        |                   |                  |                                                           |      |             |                       |                    | 4 1/16" WEATHERFORD HANGER= .83' TBG                                                                                                                                                                                                                                                 |
|                                                        |                   |                  |                                                           |      |             |                       |                    | 106 JTS L-80 ON LOCATION                                                                                                                                                                                                                                                             |
|                                                        |                   |                  |                                                           |      |             |                       |                    | 123 JTS 2 3/8" L-80= 3922.14'                                                                                                                                                                                                                                                        |
|                                                        |                   |                  |                                                           |      |             |                       |                    | TBG USED 56 JTS L-80                                                                                                                                                                                                                                                                 |
|                                                        |                   |                  |                                                           |      |             |                       |                    | 1 - 6' PUP JT L-80= 6.11'                                                                                                                                                                                                                                                            |
|                                                        |                   |                  |                                                           |      |             |                       |                    | SENT 50 JTS L-80 TO SAMUELS YARD                                                                                                                                                                                                                                                     |
|                                                        |                   |                  |                                                           |      |             |                       |                    | 149 JTS 2 3/8" J-55 = 4,759.71' 1JT                                                                                                                                                                                                                                                  |
|                                                        |                   |                  |                                                           |      |             |                       |                    | L-80 W/ BAD THREADS                                                                                                                                                                                                                                                                  |
|                                                        |                   |                  |                                                           |      |             |                       |                    | POBS & 1.875" S/N= 2.20' 1JT                                                                                                                                                                                                                                                         |
|                                                        |                   |                  |                                                           |      |             |                       |                    | J-55 SMASHED                                                                                                                                                                                                                                                                         |
|                                                        |                   |                  |                                                           |      |             |                       |                    | EOT @ 8709.99'                                                                                                                                                                                                                                                                       |



US ROCKIES REGION

1 General

1.1 Customer Information

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

1.2 Well/Wellbore Information

|              |                                                     |               |                                          |
|--------------|-----------------------------------------------------|---------------|------------------------------------------|
| Well         | NBU 922-3103AS YELLOW                               | Wellbore No.  | 00                                       |
| Well Name    | NBU 922-3103AS                                      | Wellbore Name | NBU 922-3103AS                           |
| Report No.   | 1                                                   | Report Date   | 6/9/2014                                 |
| Project      | UTAH-JUNTAH                                         | Site          | NBU 922-31P3 PAD                         |
| Rig Name/No. |                                                     | Event         | RECOMPL/RESEERVEADD                      |
| Start Date   | 4/24/2014                                           | End Date      | 6/20/2014                                |
| Spud Date    | 10/26/2010                                          | Active Datum  | RKB @5,082.00usft (above Mean Sea Level) |
| UWI          | SE/SE/09/S/22/E/31/0/0/6/PM/S/496.00/E/0/965.00/0/0 |               |                                          |

1.3 General

|                     |  |                 |  |            |  |
|---------------------|--|-----------------|--|------------|--|
| Contractor          |  | Job Method      |  | Supervisor |  |
| Perforated Assembly |  | Conveyed Method |  |            |  |

1.4 Initial Conditions

|                   |         |                    |  |                  |                               |                          |                  |
|-------------------|---------|--------------------|--|------------------|-------------------------------|--------------------------|------------------|
| Fluid Type        |         | Fluid Density      |  | Gross Interval   | 5,408.0 (usft)-7,251.0 (usft) | Start Date/Time          | 6/9/2014 12:00AM |
| Surface Press     |         | Estimate Res Press |  | No. of Intervals | 41                            | End Date/Time            | 6/9/2014 12:00AM |
| TVD Fluid Top     |         | Fluid Head         |  | Total Shots      | 165                           | Net Perforation Interval | 55.00 (usft)     |
| Hydrostatic Press |         | Press Difference   |  | Avg Shot Density | 3.00 (shot/ft)                | Final Surface Pressure   |                  |
| Balance Cond      | NEUTRAL |                    |  |                  |                               | Final Press Date         |                  |

1.5 Summary

Intervals

-2.1 Perforated Interval

| Date             | Formation/Reservoir | CCL@ (usft) | CCL-T S (usft) | MD Top (usft) | MD Base (usft) | Shot Density (shot/ft) | Misfires/ Add. Shot | Diameter (in) | Carr Type /Stage No | Carr Size (in) | Phasing (°) | Charge Desc /Charge Manufacturer | Charge Weight (gram) | Reason    | Misrun |
|------------------|---------------------|-------------|----------------|---------------|----------------|------------------------|---------------------|---------------|---------------------|----------------|-------------|----------------------------------|----------------------|-----------|--------|
| 6/9/2014 12:00AM | WASATCH/            |             |                | 5,408.0       | 5,409.0        | 3.00                   |                     | 0.410         | EXP/                | 3.125          | 120.00      |                                  | 19.00                | PRODUCTIO | N      |

US ROCKIES REGION

2.1 Perforated Interval (Continued)

| Date                | Formation/<br>Reservoir | CCL@<br>(usft) | CCL-T<br>S<br>(usft) | MD Top<br>(usft) | MD Base<br>(usft) | Shot<br>Density<br>(shot/ft) | Misfires/<br>Add. Shot | Diamete<br>r<br>(in) | Carr Type /Stage No | Carr<br>Size<br>(in) | Phasing<br>(°) | Charge Desc /Charge<br>Manufacturer | Charge<br>Weight<br>(gram) | Reason    | Misrun |
|---------------------|-------------------------|----------------|----------------------|------------------|-------------------|------------------------------|------------------------|----------------------|---------------------|----------------------|----------------|-------------------------------------|----------------------------|-----------|--------|
| 6/9/2014<br>12:00AM | WASATCH/                |                |                      | 5,428.0          | 5,429.0           | 3.00                         |                        | 0.410                | EXP/                | 3.125                | 120.00         |                                     | 19.00                      | PRODUCTIO | N      |
| 6/9/2014<br>12:00AM | WASATCH/                |                |                      | 5,439.0          | 5,440.0           | 3.00                         |                        | 0.410                | EXP/                | 3.125                | 120.00         |                                     | 19.00                      | PRODUCTIO | N      |
| 6/9/2014<br>12:00AM | WASATCH/                |                |                      | 5,460.0          | 5,461.0           | 3.00                         |                        | 0.410                | EXP/                | 3.125                | 120.00         |                                     | 19.00                      | PRODUCTIO | N      |
| 6/9/2014<br>12:00AM | WASATCH/                |                |                      | 5,491.0          | 5,492.0           | 3.00                         |                        | 0.410                | EXP/                | 3.125                | 120.00         |                                     | 19.00                      | PRODUCTIO | N      |
| 6/9/2014<br>12:00AM | WASATCH/                |                |                      | 5,597.0          | 5,598.0           | 3.00                         |                        | 0.410                | EXP/                | 3.125                | 120.00         |                                     | 19.00                      | PRODUCTIO | N      |
| 6/9/2014<br>12:00AM | WASATCH/                |                |                      | 5,611.0          | 5,612.0           | 3.00                         |                        | 0.410                | EXP/                | 3.125                | 120.00         |                                     | 19.00                      | PRODUCTIO | N      |
| 6/9/2014<br>12:00AM | WASATCH/                |                |                      | 5,626.0          | 5,627.0           | 3.00                         |                        | 0.410                | EXP/                | 3.125                | 120.00         |                                     | 19.00                      | PRODUCTIO | N      |
| 6/9/2014<br>12:00AM | WASATCH/                |                |                      | 5,956.0          | 5,957.0           | 3.00                         |                        | 0.410                | EXP/                | 3.125                | 120.00         |                                     | 19.00                      | PRODUCTIO | N      |
| 6/9/2014<br>12:00AM | WASATCH/                |                |                      | 6,014.0          | 6,015.0           | 3.00                         |                        | 0.410                | EXP/                | 3.125                | 120.00         |                                     | 19.00                      | PRODUCTIO | N      |
| 6/9/2014<br>12:00AM | WASATCH/                |                |                      | 6,025.0          | 6,026.0           | 3.00                         |                        | 0.410                | EXP/                | 3.125                | 120.00         |                                     | 19.00                      | PRODUCTIO | N      |
| 6/9/2014<br>12:00AM | WASATCH/                |                |                      | 6,049.0          | 6,051.0           | 3.00                         |                        | 0.410                | EXP/                | 3.125                | 120.00         |                                     | 19.00                      | PRODUCTIO | N      |
| 6/9/2014<br>12:00AM | WASATCH/                |                |                      | 6,144.0          | 6,147.0           | 3.00                         |                        | 0.410                | EXP/                | 3.125                | 120.00         |                                     | 19.00                      | PRODUCTIO | N      |
| 6/9/2014<br>12:00AM | WASATCH/                |                |                      | 6,383.0          | 6,384.0           | 3.00                         |                        | 0.410                | EXP/                | 3.125                | 120.00         |                                     | 19.00                      | PRODUCTIO | N      |
| 6/9/2014<br>12:00AM | WASATCH/                |                |                      | 6,400.0          | 6,401.0           | 3.00                         |                        | 0.410                | EXP/                | 3.125                | 120.00         |                                     | 19.00                      | PRODUCTIO | N      |
| 6/9/2014<br>12:00AM | WASATCH/                |                |                      | 6,430.0          | 6,431.0           | 3.00                         |                        | 0.410                | EXP/                | 3.125                | 120.00         |                                     | 19.00                      | PRODUCTIO | N      |
| 6/9/2014<br>12:00AM | WASATCH/                |                |                      | 6,448.0          | 6,449.0           | 3.00                         |                        | 0.410                | EXP/                | 3.125                | 120.00         |                                     | 19.00                      | PRODUCTIO | N      |
| 6/9/2014<br>12:00AM | WASATCH/                |                |                      | 6,458.0          | 6,459.0           | 3.00                         |                        | 0.410                | EXP/                | 3.125                | 120.00         |                                     | 19.00                      | PRODUCTIO | N      |
| 6/9/2014<br>12:00AM | WASATCH/                |                |                      | 6,494.0          | 6,496.0           | 3.00                         |                        | 0.410                | EXP/                | 3.125                | 120.00         |                                     | 19.00                      | PRODUCTIO | N      |
| 6/9/2014<br>12:00AM | WASATCH/                |                |                      | 6,558.0          | 6,559.0           | 3.00                         |                        | 0.410                | EXP/                | 3.125                | 120.00         |                                     | 19.00                      | PRODUCTIO | N      |
| 6/9/2014<br>12:00AM | WASATCH/                |                |                      | 6,576.0          | 6,577.0           | 3.00                         |                        | 0.410                | EXP/                | 3.125                | 120.00         |                                     | 19.00                      | PRODUCTIO | N      |
| 6/9/2014<br>12:00AM | WASATCH/                |                |                      | 6,607.0          | 6,608.0           | 3.00                         |                        | 0.410                | EXP/                | 3.125                | 120.00         |                                     | 19.00                      | PRODUCTIO | N      |

US ROCKIES REGION

2.1 Perforated Interval (Continued)

| Date                | Formation/<br>Reservoir | CCL@<br>(usft) | CCL-T<br>S<br>(usft) | MD Top<br>(usft) | MD Base<br>(usft) | Shot<br>Density<br>(shot/ft) | Misfires/<br>Add. Shot | Diamete<br>r<br>(in) | Carr Type /Stage No | Carr<br>Size<br>(in) | Phasing<br>(°) | Charge Desc /Charge<br>Manufacturer | Charge<br>Weight<br>(gram) | Reason    | Misrun |
|---------------------|-------------------------|----------------|----------------------|------------------|-------------------|------------------------------|------------------------|----------------------|---------------------|----------------------|----------------|-------------------------------------|----------------------------|-----------|--------|
| 6/9/2014<br>12:00AM | WASATCH/                |                |                      | 6,636.0          | 6,637.0           | 3.00                         |                        | 0.410                | EXP/                | 3.125                | 120.00         |                                     | 19.00                      | PRODUCTIO | N      |
| 6/9/2014<br>12:00AM | WASATCH/                |                |                      | 6,665.0          | 6,666.0           | 3.00                         |                        | 0.410                | EXP/                | 3.125                | 120.00         |                                     | 19.00                      | PRODUCTIO | N      |
| 6/9/2014<br>12:00AM | WASATCH/                |                |                      | 6,704.0          | 6,705.0           | 3.00                         |                        | 0.410                | EXP/                | 3.125                | 120.00         |                                     | 19.00                      | PRODUCTIO | N      |
| 6/9/2014<br>12:00AM | WASATCH/                |                |                      | 6,736.0          | 6,738.0           | 3.00                         |                        | 0.410                | EXP/                | 3.125                | 120.00         |                                     | 19.00                      | PRODUCTIO | N      |
| 6/9/2014<br>12:00AM | WASATCH/                |                |                      | 6,768.0          | 6,769.0           | 3.00                         |                        | 0.410                | EXP/                | 3.125                | 120.00         |                                     | 19.00                      | PRODUCTIO | N      |
| 6/9/2014<br>12:00AM | WASATCH/                |                |                      | 6,783.0          | 6,784.0           | 3.00                         |                        | 0.410                | EXP/                | 3.125                | 120.00         |                                     | 19.00                      | PRODUCTIO | N      |
| 6/9/2014<br>12:00AM | WASATCH/                |                |                      | 6,798.0          | 6,799.0           | 3.00                         |                        | 0.410                | EXP/                | 3.125                | 120.00         |                                     | 19.00                      | PRODUCTIO | N      |
| 6/9/2014<br>12:00AM | WASATCH/                |                |                      | 6,830.0          | 6,831.0           | 3.00                         |                        | 0.410                | EXP/                | 3.125                | 120.00         |                                     | 19.00                      | PRODUCTIO | N      |
| 6/9/2014<br>12:00AM | WASATCH/                |                |                      | 6,860.0          | 6,861.0           | 3.00                         |                        | 0.410                | EXP/                | 3.125                | 120.00         |                                     | 19.00                      | PRODUCTIO | N      |
| 6/9/2014<br>12:00AM | WASATCH/                |                |                      | 6,878.0          | 6,879.0           | 3.00                         |                        | 0.410                | EXP/                | 3.125                | 120.00         |                                     | 19.00                      | PRODUCTIO | N      |
| 6/9/2014<br>12:00AM | WASATCH/                |                |                      | 6,898.0          | 6,899.0           | 3.00                         |                        | 0.410                | EXP/                | 3.125                | 120.00         |                                     | 19.00                      | PRODUCTIO | N      |
| 6/9/2014<br>12:00AM | WASATCH/                |                |                      | 6,910.0          | 6,911.0           | 3.00                         |                        | 0.410                | EXP/                | 3.125                | 120.00         |                                     | 19.00                      | PRODUCTIO | N      |
| 6/9/2014<br>12:00AM | WASATCH/                |                |                      | 6,976.0          | 6,977.0           | 3.00                         |                        | 0.410                | EXP/                | 3.125                | 120.00         |                                     | 19.00                      | PRODUCTIO | N      |
| 6/9/2014<br>12:00AM | WASATCH/                |                |                      | 6,991.0          | 6,992.0           | 3.00                         |                        | 0.410                | EXP/                | 3.125                | 120.00         |                                     | 19.00                      | PRODUCTIO | N      |
| 6/9/2014<br>12:00AM | WASATCH/                |                |                      | 7,006.0          | 7,008.0           | 3.00                         |                        | 0.410                | EXP/                | 3.125                | 120.00         |                                     | 19.00                      | PRODUCTIO | N      |
| 6/9/2014<br>12:00AM | WASATCH/                |                |                      | 7,031.0          | 7,033.0           | 3.00                         |                        | 0.410                | EXP/                | 3.125                | 120.00         |                                     | 19.00                      | PRODUCTIO | N      |
| 6/9/2014<br>12:00AM | WASATCH/                |                |                      | 7,066.0          | 7,068.0           | 3.00                         |                        | 0.410                | EXP/                | 3.125                | 120.00         |                                     | 19.00                      | PRODUCTIO | N      |
| 6/9/2014<br>12:00AM | WASATCH/                |                |                      | 7,184.0          | 7,187.0           | 3.00                         |                        | 0.410                | EXP/                | 3.125                | 120.00         |                                     | 19.00                      | PRODUCTIO | N      |
| 6/9/2014<br>12:00AM | WASATCH/                |                |                      | 7,246.0          | 7,251.0           | 3.00                         |                        | 0.410                | EXP/                | 3.125                | 120.00         |                                     | 19.00                      | PRODUCTIO | N      |

Plots

Effective Date: 6/30/2020

| FORMER OPERATOR:                                    | NEW OPERATOR:     |
|-----------------------------------------------------|-------------------|
| Kerr-McGee Oil and Gas Onshore, L.P.                | Caerus Uinta, LLC |
| Groups: 10/9/2020 sent list to operators to review. |                   |

WELL INFORMATION:

| Well Name         | API Number | Town | Dir | Range | Dir | Sec | Entity Number | Type | Status |
|-------------------|------------|------|-----|-------|-----|-----|---------------|------|--------|
| See Attached list |            |      |     |       |     |     |               |      |        |

Total Well Count: 3508  
Pre-Notice Completed: 11/10/2020

OPERATOR CHANGES DOCUMENTATION:

- Sundry or legal documentation was received from the **FORMER** operator on: 8/11/2020
- Sundry or legal documentation was received from the **NEW** operator on: 8/11/2020
- New operator Division of Corporations Business Number: 11801118-0161

REVIEW:

Receipt of Acceptance of Drilling Procedures for APD on: 10/16/2020  
Reports current for Production/Disposition & Sundries: 11/10/2020  
OPS/SI/TA well(s) reviewed for full cost bonding: Approved by Dustin 11/9/2020  
UIC5 on all disposal/injection/storage well(s) Approved on: Approved by Dayne 10/16/2020  
Surface Facility(s) included in operator change:

East Bench  
Archie Bench  
Bonanza  
Bridge  
Goat Pasture  
Goat Pasture Manifold  
Morgan State 921-36P  
Morgan States  
NBU 1022-14B  
NBU 921-25A  
NBU 922-29J  
NBU 922-32N  
Pipeline  
Sage Grouse  
Sand Wash

NEW OPERATOR BOND VERIFICATION:

State/fee well(s) covered by Bond Number(s): 6135000111  
LPM9344488-Shut-In Bond

DATA ENTRY:

Well(s) update in the RBDMS on: 11/19/2020  
Group(s) update in RDBMS on: 11/19/2020  
Surface Facilities update in RBDMS on: 11/19/2020  
Entities Updated in RBDMS on: 11/19/2020

COMMENTS: Shut-In Wells that were reviewed.

CIGE 236 4304732861  
CIGE 42 4304730492  
CIGE 55 4304730512  
Love 1121-16N 4304736256  
Morgan State 16-36 4304733093  
NBU 341-29E 4304733055  
NBU 691-29E 4304750027  
NBU 921-33F 4304736391  
NBU 99 4304731745  
Ouray SWD 1 4304733449  
State 1022-32O 4304735315  
State 921-32M 4304734872



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

FORM 9

**SUNDRY NOTICES AND REPORTS ON WELLS**

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

1. TYPE OF WELL OIL WELL ☐ GAS WELL ☒ OTHER \_\_\_\_\_

2. NAME OF OPERATOR:  
CAERUS UINTA LLC

3. ADDRESS OF OPERATOR:  
1001 17TH ST. STE 1600 CITY DENVER STATE CO ZIP 80202

PHONE NUMBER:  
303-565-4600

4. LOCATION OF WELL

FOOTAGES AT SURFACE: 1162 FSL 1365 FWL

COUNTY: UTAH

QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: SESW 20 10S 21E S

STATE: UTAH

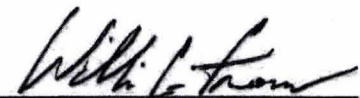
11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

| TYPE OF SUBMISSION                                                                                                               | TYPE OF ACTION                                          |                                                           |                                                                             |
|----------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------|-----------------------------------------------------------|-----------------------------------------------------------------------------|
| <input checked="" type="checkbox"/> NOTICE OF INTENT<br>(Submit in Duplicate)<br>Approximate date work will start:<br>06/30/2020 | <input type="checkbox"/> ACIDIZE                        | <input type="checkbox"/> DEEPEN                           | <input type="checkbox"/> REPERFORATE CURRENT FORMATION                      |
| <input type="checkbox"/> SUBSEQUENT REPORT<br>(Submit Original Form Only)<br>Date of work completion:                            | <input type="checkbox"/> ALTER CASING                   | <input type="checkbox"/> FRACTURE TREAT                   | <input type="checkbox"/> SIDETRACK TO REPAIR WELL                           |
|                                                                                                                                  | <input type="checkbox"/> CASING REPAIR                  | <input type="checkbox"/> NEW CONSTRUCTION                 | <input type="checkbox"/> TEMPORARILY ABANDON                                |
|                                                                                                                                  | <input type="checkbox"/> CHANGE TO PREVIOUS PLANS       | <input checked="" type="checkbox"/> OPERATOR CHANGE       | <input type="checkbox"/> TUBING REPAIR                                      |
|                                                                                                                                  | <input type="checkbox"/> CHANGE TUBING                  | <input type="checkbox"/> PLUG AND ABANDON                 | <input type="checkbox"/> VENT OR FLARE                                      |
|                                                                                                                                  | <input type="checkbox"/> CHANGE WELL NAME               | <input type="checkbox"/> PLUG BACK                        | <input type="checkbox"/> WATER DISPOSAL                                     |
|                                                                                                                                  | <input type="checkbox"/> CHANGE WELL STATUS             | <input type="checkbox"/> PRODUCTION (START/RESUME)        | <input type="checkbox"/> WATER SHUT-OFF                                     |
|                                                                                                                                  | <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS | <input type="checkbox"/> RECLAMATION OF WELL SITE         | <input checked="" type="checkbox"/> OTHER: Transfer remediation liabilities |
|                                                                                                                                  | <input type="checkbox"/> CONVERT WELL TYPE              | <input type="checkbox"/> RECOMPLETE - DIFFERENT FORMATION |                                                                             |

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

Effective June 30, 2020, operation of the following wells was taken over by:  
Caerus Uinta LLC  
1001 17th Street, Suite 1600  
Denver, CO 80202  
303-565-4600

The previous Operator was Kerr-McGee Oil & Gas Onshore LP  
PO Box 173779  
Denver, CO 80217-3779

  
William C. Irons  
Attorney-in-Fact

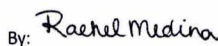
Please see the attached wells for a complete list that will be transferred upon approval. As the Attorney-in-Fact for Kerr-McGee Oil & Gas Onshore LP I ask that you accept this letter as Kerr-McGee's official resignation and request to transfer operating rights to Caerus Uinta LLC, whose operator number is 105039. UDOGM Bond# 6135000111 and BLM Bond# COB000387.

Kerr-McGee will be transferring cleanup/soils remediation to Caerus Uinta LLC for Incident #5772. The new contact for Caerus is Grizz Oleen, EHS Field Lead (435) 790-9669.

NAME (PLEASE PRINT) Aubree Besant TITLE Director of Land  
SIGNATURE \_\_\_\_\_ DATE \_\_\_\_\_

(This space for State use only)

**APPROVED**

By:   
Utah Division of  
Oil, Gas, and Mining

(5/2000)

(See Instructions on Reverse Side)

RECEIVED

AUG 11 2020

DIV OF OIL, GAS & MINING

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

FORM 9

**SUNDRY NOTICES AND REPORTS ON WELLS**

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

5. LEASE DESIGNATION AND SERIAL NUMBER:  
U-02278-ST

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7. UNIT or CA AGREEMENT NAME:  
NATURAL BUTTES

1. TYPE OF WELL  
OIL WELL ☐ GAS WELL ☒ OTHER \_\_\_\_\_

8. WELL NAME and NUMBER:  
CIGE 20

2. NAME OF OPERATOR:  
CAERUS UINTA LLC

9. API NUMBER:  
43047304850000

3. ADDRESS OF OPERATOR:  
1001 17TH ST. STE 1600 CITY DENVER STATE CO ZIP 80202

PHONE NUMBER:  
303-565-4600

10. FIELD AND POOL, OR WILDCAT:

4. LOCATION OF WELL

FOOTAGES AT SURFACE: 1162 FSL 1365 FWL

COUNTY: UINTAH

QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: SESW 20 10S 21E S

STATE: UTAH

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

| TYPE OF SUBMISSION                                                                                                                      | TYPE OF ACTION                                          |                                                           |                                                                                    |
|-----------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------|-----------------------------------------------------------|------------------------------------------------------------------------------------|
| <input checked="" type="checkbox"/> NOTICE OF INTENT<br>(Submit in Duplicate)<br>Approximate date work will start:<br><u>06/30/2020</u> | <input type="checkbox"/> ACIDIZE                        | <input type="checkbox"/> DEEPEN                           | <input type="checkbox"/> REPERFORATE CURRENT FORMATION                             |
|                                                                                                                                         | <input type="checkbox"/> ALTER CASING                   | <input type="checkbox"/> FRACTURE TREAT                   | <input type="checkbox"/> SIDETRACK TO REPAIR WELL                                  |
|                                                                                                                                         | <input type="checkbox"/> CASING REPAIR                  | <input type="checkbox"/> NEW CONSTRUCTION                 | <input type="checkbox"/> TEMPORARILY ABANDON                                       |
|                                                                                                                                         | <input type="checkbox"/> CHANGE TO PREVIOUS PLANS       | <input checked="" type="checkbox"/> OPERATOR CHANGE       | <input type="checkbox"/> TUBING REPAIR                                             |
|                                                                                                                                         | <input type="checkbox"/> CHANGE TUBING                  | <input type="checkbox"/> PLUG AND ABANDON                 | <input type="checkbox"/> VENT OR FLARE                                             |
| <input type="checkbox"/> SUBSEQUENT REPORT<br>(Submit Original Form Only)<br>Date of work completion:                                   | <input type="checkbox"/> CHANGE WELL NAME               | <input type="checkbox"/> PLUG BACK                        | <input type="checkbox"/> WATER DISPOSAL                                            |
|                                                                                                                                         | <input type="checkbox"/> CHANGE WELL STATUS             | <input type="checkbox"/> PRODUCTION (START/RESUME)        | <input type="checkbox"/> WATER SHUT-OFF                                            |
|                                                                                                                                         | <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS | <input type="checkbox"/> RECLAMATION OF WELL SITE         | <input checked="" type="checkbox"/> OTHER: <u>Transfer remediation liabilities</u> |
|                                                                                                                                         | <input type="checkbox"/> CONVERT WELL TYPE              | <input type="checkbox"/> RECOMPLETE - DIFFERENT FORMATION |                                                                                    |

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

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Denver, CO 80202  
303-565-4600

The previous Operator was Kerr-McGee Oil & Gas Onshore LP  
PO Box 173779  
Denver, CO 80217-3779

William C. Irons  
Attorney-in-Fact

Please see the attached wells for a complete list that will be transferred upon approval. As the Attorney-in-Fact for Kerr-McGee Oil & Gas Onshore LP I ask that you accept this letter as Kerr-McGee's official resignation and request to transfer operating rights to Caerus Uinta LLC, whose operator number is 105039. UDOGM Bond# 6135000111 and BLM Bond# COB000387.

Kerr-McGee will be transferring cleanup/soils remediation to Caerus Uinta LLC for Incident #5772. The new contact for Caerus is Grizz Oleen, EHS Field Lead (435) 790-9669.

NAME (PLEASE PRINT) Aubree Besant

TITLE Director of Land

SIGNATURE [Signature]

DATE July 17, 2020

RECEIVED

(This space for State use only)

**APPROVED**

By: Rachel Medina  
Utah Division of  
Oil, Gas, and Mining

AUG 11 2020

DIV OF OIL, GAS & MINING





October 2, 2025

Utah Department of Natural Resources  
Division of Oil, Gas and Mining  
1594 West North Temple  
Suite 1210  
Salt Lake City, UT 84116  
Attn: MykelLynn Bryson

RE: Notice of Name Change – Caerus Uinta, LLC

To Whom It May Concern:

Effective September 1, 2025, Caerus Uinta, LLC has changed its name to **KODA GNB, LLC**. KODA Uinta, LLC remains a wholly owned subsidiary of KODA Holdings, LLC.

This is a name change only; there is no change to addresses, tax identification numbers, or bank accounts.

Enclosed for your processing and records are the following:

1. Delaware Secretary of State Name Change Certificate
2. Updated W9 showing name change
3. Name Change Rider B014249 - Blanket Bond
4. Name Change Rider 612418229 - Blanket Idle well Bond
5. Name Change Rider B013581 – Pipeline Pit 1 & 2
6. Name Change Rider B013582 – Bonanza Pit 1 & 2
7. Name Change Rider B013583 – Goat Pasture Pit 1 & 2

Please feel free to contact me at [aly.schuster@kodaresources.com](mailto:aly.schuster@kodaresources.com) or 720-500-0140 should you have any questions or need any additional information.

Sincerely,  
KODA GNB, LLC

A handwritten signature in blue ink, appearing to read "Aly Schuster". The signature is fluid and cursive, with a long horizontal stroke at the end.

Aly Schuster  
Senior Landman

Enclosure

1401 Wynkoop St, Suite 300  
Denver, CO 80202

[owners@kodaresources.com](mailto:owners@kodaresources.com) | [www.kodaresources.com](http://www.kodaresources.com)

# Delaware

The First State

Page 1

I, CHARUNI PATIBANDA-SANCHEZ, SECRETARY OF STATE OF THE  
STATE OF DELAWARE, DO HEREBY CERTIFY THE ATTACHED IS A TRUE AND  
CORRECT COPY OF THE CERTIFICATE OF AMENDMENT OF "CAERUS UINTA  
LLC", CHANGING ITS NAME FROM "CAERUS UINTA LLC" TO "KODA GNB,  
LLC", FILED IN THIS OFFICE ON THE TWENTY-NINTH DAY OF AUGUST,  
A.D. 2025, AT 9:14 O'CLOCK P.M.



7877090 8100  
SR# 20253839085

You may verify this certificate online at [corp.delaware.gov/authver.shtml](http://corp.delaware.gov/authver.shtml)

A handwritten signature in cursive script, reading "C. B. Sanchez".

Charuni Patibanda-Sanchez, Secretary of State

Authentication: 204623735  
Date: 09-02-25

State of Delaware  
Secretary of State  
Division of Corporations  
Delivered 09:11 PM 08/29/2025  
FILED 09:14 PM 08/29/2025  
SR 20253839085 - File Number 7877090

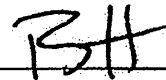
## STATE OF DELAWARE CERTIFICATE OF AMENDMENT

1. Name of Limited Liability Company: Caerus Uinta LLC
2. The Certificate of Formation of the limited liability company is hereby amended as follows:

The name of the limited liability company is: KODA  
GNB, LLC.

IN WITNESS WHEREOF, the undersigned have executed this Certificate on  
the 29th day of August, A.D. 2025.

By: \_\_\_\_\_



Authorized Person(s)

Name: Ryan Midgett

Print or Type