| | | ST DEPARTMENT DIVISION O | | RAL RES | | | | FOR | | | |
|---|-----------------|--|-------------------|---|-------|-----------------|---|-------------------------------|-------------|--|--|
| APPLI | CATION FOR | PERMIT TO DRILL | - | | | | 1. WELL NAME and NUMBER NBU 921-25N3AS | | | | |
| 2. TYPE OF WORK DRILL NEW WELL REENTER P&A WELL DEEPEN WELL | | | | | | | 3. FIELD OR WILDCAT NATURAL BUTTES | | | | |
| 4. TYPE OF WELL Gas Well Coalbed Methane Well: NO | | | | | | | 5. UNIT or COMM | UNITIZATION AGRE | EMENT NAME | | |
| 6. NAME OF OPERATOR KERR-MCGEE OIL & GAS ONSHORE, L.P. | | | | | | | 7. OPERATOR PHO | | | | |
| 8. ADDRESS OF OPERATOR | | | | | | | 9. OPERATOR E-M | AIL | dayle com | | |
| 10. MINERAL LEASE NUMBER | . BOX 1/3//9, L | Denver, CO, 80217 11. MINERAL OWNE | RSHIP | | | | 12. SURFACE OWI | ieebeckDulnoan@ana NERSHIP | иагко.сот | | |
| (FEDERAL, INDIAN, OR STATE) UO 1194 ST | | FEDERAL IND | IAN 🔵 | STATE (|) | FEE 🔵 | FEDERAL [] I | NDIAN STATE | FEE 💮 | | |
| 13. NAME OF SURFACE OWNER (if box 12 | = 'fee') | | | | | | 14. SURFACE OWI | NER PHONE (if box | 12 = 'fee') | | |
| 15. ADDRESS OF SURFACE OWNER (if box | 12 = 'fee') | | | | | | 16. SURFACE OWI | NER E-MAIL (if box | 12 = 'fee') | | |
| 17. INDIAN ALLOTTEE OR TRIBE NAME (if box 12 = 'INDIAN') | | 18. INTEND TO COM MULTIPLE FORMATI YES (Submit C | | | | ROM NO | 19. SLANT VERTICAL D | IRECTIONAL 📵 H | ORIZONTAL (| | |
| 20. LOCATION OF WELL | FC | OOTAGES | QTR-Q | TR | 5 | ECTION | TOWNSHIP | RANGE | MERIDIAN | | |
| LOCATION AT SURFACE | 1158 F | SL 2575 FWL | SESW | v | | 25 | 9.0 S | 21.0 E | S | | |
| Top of Uppermost Producing Zone | 508 FS | SL 1729 FWL | SESW | v | | 25 | 9.0 S | 21.0 E | S | | |
| At Total Depth | 508 FS | SL 1729 FWL | SESW | v | | 25 | 9.0 S | 21.0 E | S | | |
| 21. COUNTY UINTAH | | 22. DISTANCE TO N | EAREST LEA 508 | | | | | | | | |
| 24,77. | | 25. DISTANCE TO NI (Applied For Drilling | EAREST WE | T WELL IN SAME POOL proposed DEPTH mpleted) 26. PROPOSED DEPTH MD: 9730 TVD: 9563 | | | | | 3 | | |
| 27. ELEVATION - GROUND LEVEL | | 28. BOND NUMBER | | 29. SOURCE OF DRILLING WATER / WATER RIGHTS APPROVAL NUMBER IF APPLIC | | | | IF APPLICABLE | | | |
| 4956 | | | 22013542 | 013542 Permit #43-8496 | | | | | | | |
| | | A1 | ГТАСНМЕІ | NTS | | | | | | | |
| VERIFY THE FOLLOWING | ARE ATTACH | HED IN ACCORDAN | CE WITH | THE UT | AH (| OIL AND (| GAS CONSERVAT | TON GENERAL R | ULES | | |
| WELL PLAT OR MAP PREPARED BY | LICENSED SUF | RVEYOR OR ENGINEER | ₹ 📝 | СОМ | PLETI | E DRILLING | PLAN | | | | |
| AFFIDAVIT OF STATUS OF SURFACE | OWNER AGRE | EEMENT (IF FEE SURF | ACE) | FORM | 5. II | F OPERATO | R IS OTHER THAN | THE LEASE OWNER | | | |
| DIRECTIONAL SURVEY PLAN (IF DIRECTIONALLY OR HORIZONTALLY TO DRILLED) | | | | | | PHICAL MAI | • | | | | |
| NAME Danielle Piernot | 1 | FITLE Regulatory Analys | st | | | PHONE 72 | 20 929-6156 | | | | |
| SIGNATURE | - | DATE 08/13/2010 | | | | EMAIL gn | bregulatory@anadar | ko.com | | | |
| API NUMBER ASSIGNED 43047512630000 | F | APPROVAL | | | | Both | 20.64ISI | | | | |
| Pe | | | | | | Pern | ermit Manager | | | | |

API Well No: 43047512630000 Received: 8/13/2010

| | Proposed Hole, Casing, and Cement | | | | | | | | | | |
|--------|-----------------------------------|-------------|--------|------|--|--|--|--|--|--|--|
| String | Hole Size | Bottom (MD) | | | | | | | | | |
| Prod | 7.875 | 4.5 | 0 | 9730 | | | | | | | |
| Pipe | Grade | Length | Weight | | | | | | | | |
| | Grade I-80 Buttress | 9730 | 11.6 | | | | | | | | |
| | | | | | | | | | | | |

API Well No: 43047512630000 Received: 8/13/2010

| | Proposed Hole, Casing, and Cement | | | | | | | | | | |
|--------|-----------------------------------|-------------|----------|-------------|--|---|--|--|--|--|--|
| String | Hole Size | Casing Size | Top (MD) | Bottom (MD) | | | | | | | |
| Surf | 11 | 8.625 | 0 | 2310 | | Γ | | | | | |
| Pipe | Grade | Length | Weight | | | | | | | | |
| | Grade I-80 LT&C | 2310 | 28.0 | | | Γ | | | | | |
| | | | | | | Т | | | | | |

NBU 921-25N3AS

Pad: NBU 921-25N Surface: 1,158' FSL 2,575' FWL (SE/4SW/4) BHL: 508' FSL 1,729' FWL (SE/4SW/4)

Section 25 T9S R21E

Uintah County, Utah Mineral Lease: UO 1194 ST

ONSHORE ORDER NO. 1

DRILLING PROGRAM

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

| <u>Formation</u> | <u>Depth</u> | Resource |
|------------------|--------------|----------|
| Uinta | 0 – Surface | |
| Green River | 1,377' | |
| Birds Nest | 1,684' | Water |
| Mahogany | 2,063' | Water |
| Wasatch | 4,644' | Gas |
| Mesaverde | 7,340' | Gas |
| MVU2 | 8,241' | Gas |
| MVL1 | 8,815' | Gas |
| TVD | 9,563' | |
| TD | 9.730' | |

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.

Evaluation Program:

Please refer to the attached Drilling Program.

7. Abnormal Conditions:

Maximum anticipated bottomhole pressure calculated at 9,563' TVD, approximately equals 6,057 psi (calculated at 0.63 psi/foot).

Maximum anticipated surface pressure equals approximately 3,953 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. <u>Variances:</u>

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.

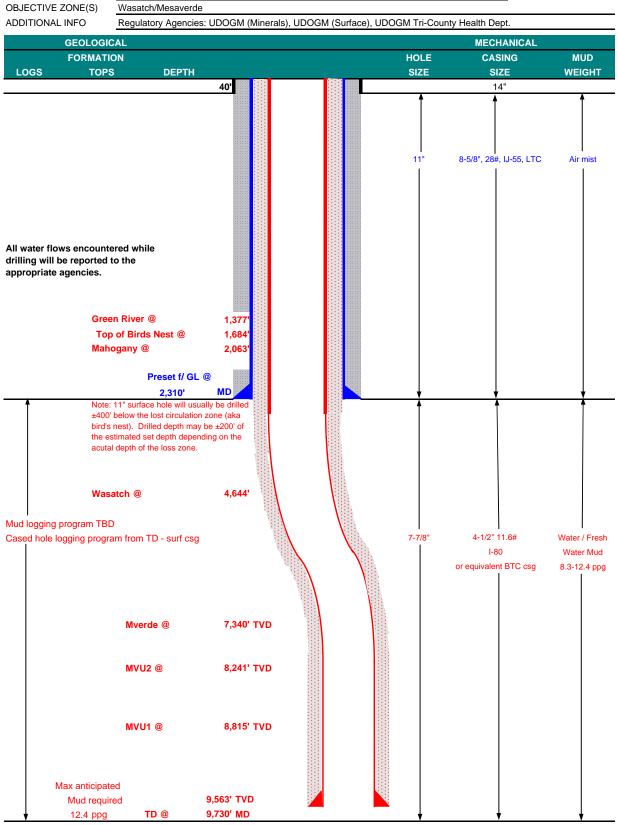
10. Other Information:

Please refer to the attached Drilling Program.



KERR-McGEE OIL & GAS ONSHORE LP DRILLING PROGRAM

COMPANY NAME KERR-McGEE OIL & GAS ONSHORE LP August 12, 2010 NBU 921-25N3AS WELL NAME TD 9,563' 9,730' MD **FIELD** Natural Buttes **COUNTY Uintah** STATE Utah FINISHED ELEVATION 4,955' SURFACE LOCATION SE/4 SW/4 1,158' FSL T 9S Sec 25 R 21E 40.002916 -109.499616 NAD 27 Latitude: Longitude: BTM HOLE LOCATION SE/4 SW/4 508' FSL 1,729' FWL Sec 25 R 21E T 9S Latitude: 40.001170 Longitude: -109.502632 NAD 27 Wasatch/Mesaverde





KERR-McGEE OIL & GAS ONSHORE LP

DRILLING PROGRAM

CASING PROGRAM

| | | | | | | | | | DESIGN FACT | ORS |
|------------|--------|-----|-------|-------|-------|-------|-------|-------|-------------|---------|
| | SIZE | INT | ERVAL | | WT. | GR. | CPLG. | BURST | COLLAPSE | TENSION |
| CONDUCTOR | 14" | (|)-40' | | | | | | | |
| | | | | | | | | 3,390 | 1,880 | 348,000 |
| SURFACE | 8-5/8" | 0 | to | 2,310 | 28.00 | IJ-55 | LTC | 0.82 | 1.74 | 5.33 |
| | | | | | | | | 7,780 | 6,350 | 278,000 |
| PRODUCTION | 4-1/2" | 0 | to | 9,730 | 11.60 | I-80 | BTC | 1.92 | 1.03 | 2.82 |
| | | | | | | | | | | |

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

D.F. = 2.33

- 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 = 12.4 ppg) 0.22 psi/ft = gradient for partially evac wellbore (Collapse Assumption: Fully Evacuated Casing, Max MW) (Tension Assumptions: Air Weight of Casing*Buoy.Fact. of water)

MASP 3,953 psi

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

(Burst Assumptions: TD = 12.4 ppg) 0.63 psi/ft = bottomhole gradient

(Collapse Assumption: Fully Evacuated Casing, Max MW) (Tension Assumptions: Air Weight of Casing*Buoy.Fact. of water)

MABHP 6,057 psi

CEMENT PROGRAM

| | FT. OF FILL | DESCRIPTION | SACKS | EXCESS | WEIGHT | YIELD |
|----------------------|-------------|---|-------------|---------------|----------|-------|
| SURFACE TAIL | 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 sur | face, optio | n 2 will be ເ | ıtilized | |
| Option 2 LEAD | 1,810' | 65/35 Poz + 6% Gel + 10 pps gilsonite | 170 | 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 | 4,140' | Premium Lite II +0.25 pps | 300 | 10% | 11.00 | 3.38 |
| | | celloflake + 5 pps gilsonite + 10% gel | | | | |
| | | + 0.5% extender | | | | |
| TAIL | 5,590' | 50/50 Poz/G + 10% salt + 2% gel | 1,080 | 10% | 14.30 | 1.31 |
| | | + 0.1% R-3 | | | | |

^{*}Substitute caliper hole volume plus 0% excess for LEAD if accurate caliper is obtained

FLOAT EQUIPMENT & CENTRALIZERS

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

ADDITIONAL INFORMATION

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

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

| | Surveys will be taken at 1,000' minimum intervals. | |
|----------|---|-------|
| | Most rigs have PVT System for mud monitoring. If no PVT is available, visual monitoring will be utilized. | |
| DRILLING | ENGINEER: | DATE: |

John Huycke / Emile Goodwin

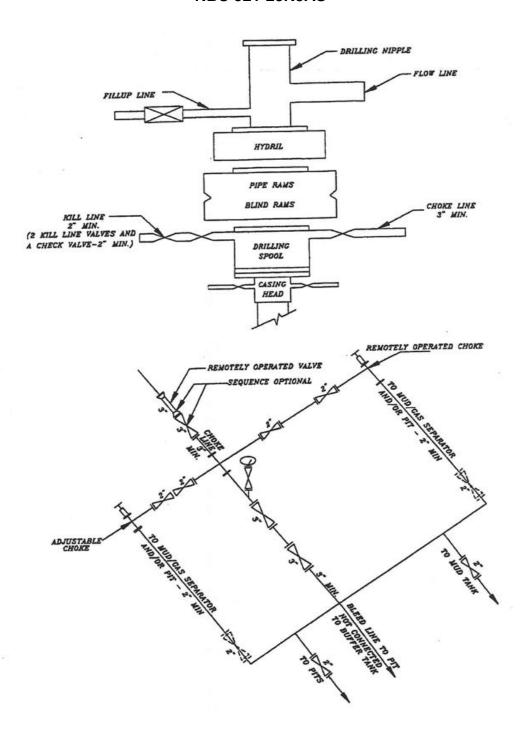
DRILLING SUPERINTENDENT:

John Merkel / Lovel Young

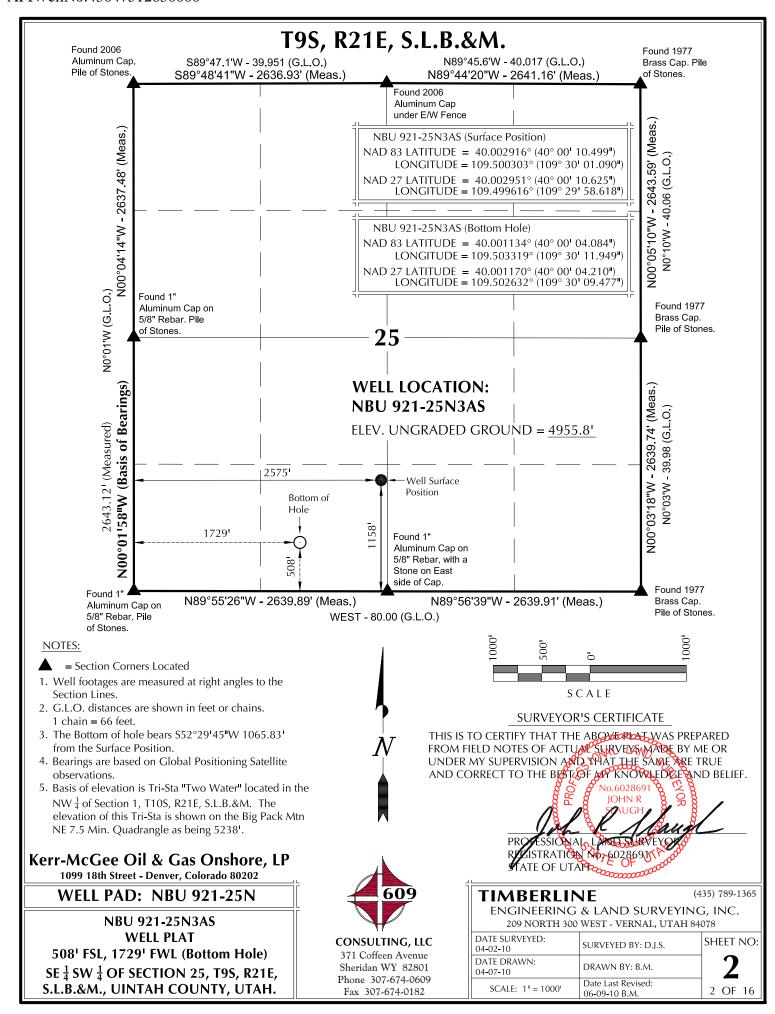
DATE:

^{*}Substitute caliper hole volume plus 10% excess for TAIL if accurate caliper is obtained

EXHIBIT A NBU 921-25N3AS



SCHEMATIC DIAGRAM OF 5,000 PSI BOP STACK



| WELL NAME NAD83 | | | | SURFACE POSITION | | | | | | | BOTTOM HOLE NAD83 NAD27 | | | | | | | |
|------------------------------------|--|--|--|---|--------|----------------------|-----------------------------|--|-------------------|-----------------|-------------------------|-------------------------|--|--------------------|-----------------------|----------------|-----------------------|--|
| f | | | | | | | T LONGITUDE FOOTAGES | | | NAL TUDE | | GITUDE | NAD27 LATITUDE LONGITUDE | | | [UDF | FOOTAGES | |
| NBU | 40°00'10.507" | | | 40°00'10. | | 109°29'5 | | 1159' FSL | | 06.967" | | 09.807 | _ | | 109°30'07 | | 800' FS | |
| 21-25N2DS | 40.002919° | 109.50033 | _ | 40.00295 | | 109.4996 | | 2565' FWL | 40.001 | | 109.50 | | 40.00 | | 109.5020 | | 1896' FV | |
| IBU 21-25N3AS | 40°00'10.499" 40.002916° | 109°30'01. | | 40°00'10. 40.00295 | | 109°29'5 109.4996 | | 1158' FSL 2575' FWL | 40°00'0 40.001 | 04.084" 134° | 109°30 109.50 | '11.949" 3319° | 40°00 40.00 | | 109°30'09 109.5026 | | 508' FS 1729' FV | |
| BU | 40°00'10.490" | | .961" | 40°00'10. | 616" 1 | 109°29'5 | | | 40°00' | 13.388" | 109°30 | 07.901 | 40°00 | '13.514" | 109°30'05 | 5.430" | 1450' FS | |
| 21-25K4CS | 40.002914° | 109.50026 | | 40.002949 | | 09.499580° | | 2585 FWL | 40.003 | | 109.50 | | 40.003 | | 109.5015 | | 2045 FV | |
| BU 21-2504BS | 40°00'10.484" 40.002912° | 109°30'00. | | 40°00'10. 40.00294 | 1. | 109°29'5 109.4995 | | 1156' FSL 2595' FWL | 40.001 | 03.844" 068° | 109°29 109.49 | '48.701" 6861° | 40.00 | | 109°29'46 109.4961 | | 485' FS 1741' FE | |
| BU | 40°00'10.475" | | | 40°00'10. | _ | 109°29'5 | | | | | 105.15 | 0001 | 10100 | | 103.1301 | 7.5 | ., | |
| 21-25NT | 40.002910° | 109.50019 | 6° | 40.00294 | | 109.4995 | | 2605' FWL | | | | | | | | | | |
| | | | | | | | | - From Surface | | | | | | | | | | |
| WELL NAME | NORTH | EAST | | L NAME | NOI | RTH | EAS | | NAME | NOR | TH | EAST | _ | ELL NAM | E NOR | RTH | EAST | |
| 21-25N2DS | -358.0' | -668.8' | NBU 921-2 | 25N3AS | -64 | 18.9' | -845. | .5' NBU 921-2 | 5K4CS | 293 | .6' | -540.1 | NB 921 | 1-25O4B9 | s -672 | 2.5' | 944.1 | |
| | GLOBAL POS OBSERVATION No. | ONS TO BE | AR N | 00°01'58 | ™W. | |)S Az. to Exist. W H | Az. to E Az. to E Az. to E | 7 | | | | | | | | | |
| - — — – | | N85°3 | 36'26 | 6"W | | | NBU 921 | | ı | | .09 | | 30, | N | | | , ⁰⁹ | |
| AZ-2 S61°50 | - — — – | N85°3 Az=274 | 36'26 4.392 | 6"W | | | NBU 921 | | ı | | | C | | SCALE | | | ,09 | |
| Cerr-McC 1099 18 WEL WELL | Gee Oil & Bith Street - De PAD INTE BU 921-25N | N85°3 Az=272 Az= | 93) 4.392 93) 93) 93) 93) 93) 93) 93) 93) 93) 93) | nore, L 0202 5N | | | NBU 921 | 609 000 000 000 000 000 000 000 | | E | IMB ENGIN 2091 | ERL NEERIN NORTH | °32/22 30/160m 25.460 INE IG & I | SCALE SCALE ST-VER | SURVENNAL, UTA | YING AH 840 | 35) 789-1: 5, INC. | |
| WELL WELLS - NI NBU 9 | Gee Oil & Bith Street - De L PAD - NEBU 921-25N 21-25K4CS | N85°3 Az=272 Az= | Onsh (21-2 (CE P) 921- 1-250 | nore, L 0202 5N PLAT -25N3AS | | | CONSI | 080 921- 009 000 000 000 000 000 000 000 000 000 | C | E | IMB ENGIN 2091 | ERL NEERIN NORTH | °32/22 30/160m 25.460 INE IG & I | S C A L E | SURVENNAL, UTA | YING AH 840 | 35) 789-1: 5, INC. | |
| WELL WELLS - NI NBU 9: LOCAT | A1.84278° A1.842 | N85°3 Az=272 Az= | Onsh (21-2 (CE P) 921- 1-250 (795, R | nore, L 0202 5N PLAT -25N3AS 04BS 821E, | | | CONSI 371 CG | 609 000 000 000 000 000 000 000 | C | DAT 04-0 | E SURVE | ERL NEERIN NORTH: | 32,32 30/10/m 35.46/ 10 & 1 300 WE | SCALE SCALE ST-VER | SURVEYNAL, UTA | YING AH 840 | 35) 789-13 5, INC. | |

FINISHED GRADE ELEVATION = 4955.1' CUT SLOPES = 1.5:1 FILL SLOPES = 1.5:1 TOTAL WELL PAD AREA = 3.00 ACRES TOTAL DAMAGE AREA = 5.79 ACRES SHRINKAGE FACTOR = 1.10 SWELL FACTOR = 1.00

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

WELL PAD - NBU 921-25N

WELL PAD - LOCATION LAYOUT NBU 921-25N2DS, NBU 921-25N3AS, NBU 921-25K4CS & NBU 921-25O4BS LOCATED IN SECTION 25, T9S, R21E, S.L.B.&M., UINTAH COUNTY, UTAH



CONSULTING, LLC

371 Coffeen Avenue

Sheridan, WY 82801

Phone 307-674-0609

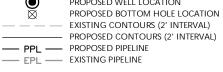
Fax 307-674-0182

TOTAL CUT FOR WELL PAD = 6,067 C.Y. TOTAL FILL FOR WELL PAD = 4,172 C.Y.TOPSOIL @ 6" DEPTH = 1,260 C.Y. EXCESS MATERIAL = 1,895 C.Y.

RESERVE PIT QUANTITIES

TOTAL CUT FOR RESERVE PIT +/- 7,410 CY RESERVE PIT CAPACITY (2' OF FREEBOARD) +/- 28,150 BARRELS

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

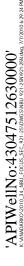


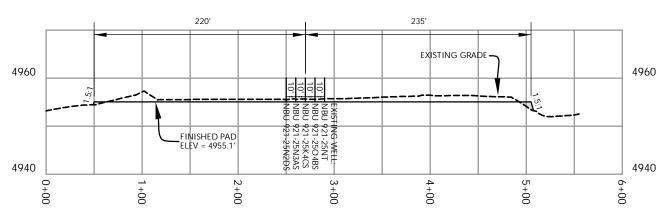


HORIZONTAL 0 2' CONTOURS

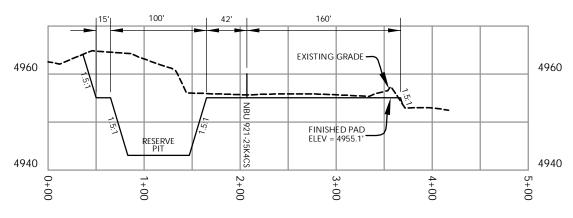
Scale: 1"=60' Date: 5/13/10 TAR 8/31/10 REVISED:

SHEET NO: 0 6 OF 16





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 921-25N

WELL PAD - CROSS SECTIONS
NBU 921-25N2DS, NBU 921-25N3AS,
NBU 921-25K4CS &NBU 921-25O4BS
LOCATED IN SECTION 25, T9S, R21E,
S.L.B.&M., UINTAH COUNTY, UTAH



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

| HORIZONTAL | | 50 | 100 1" = 100' |
|------------|---|----|------------------|
| VERTICAL | 0 | 10 | 20 1" = 20' |

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

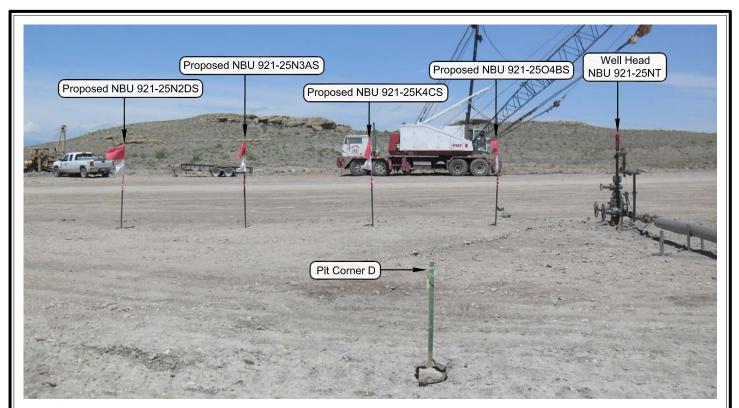


PHOTO VIEW: FROM PIT CORNER D TO LOCATION STAKE





PHOTO VIEW: FROM EXISTING ACCESS ROAD

CAMERA ANGLE: SOUTHEASTERLY

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

WELL PAD - NBU 921-25N

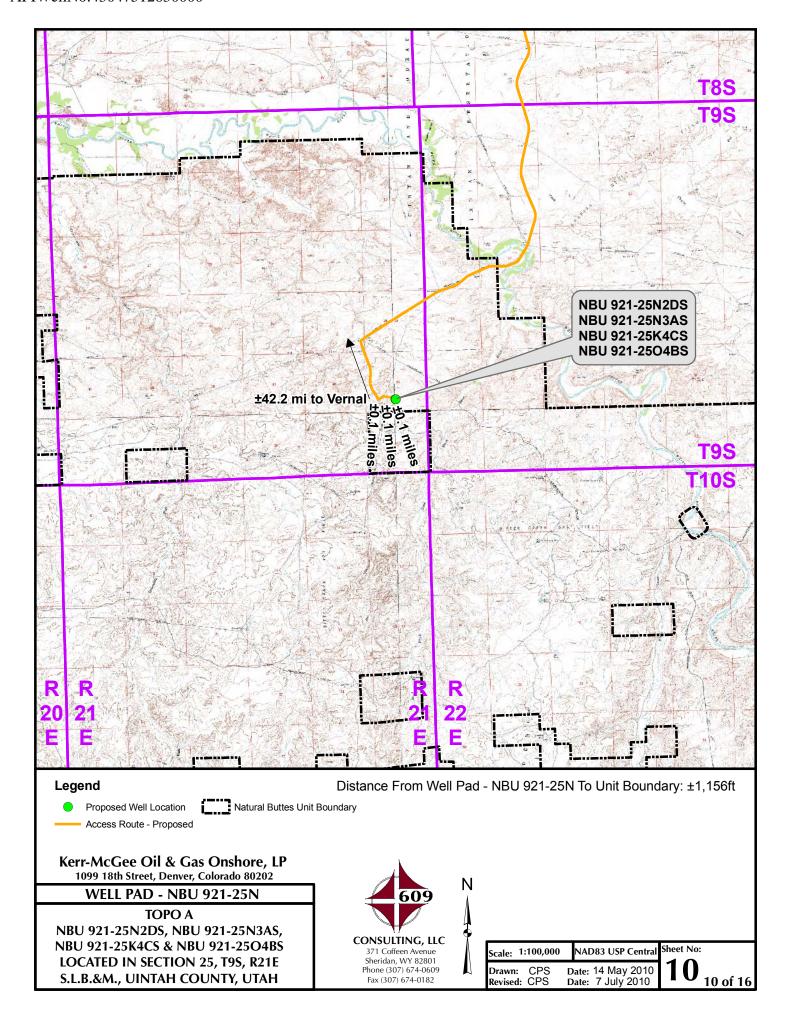
LOCATION PHOTOS NBU 921-25N2DS, NBU 921-25N3AS, NBU 921-25K4CS & NBU 921-25O4BS LOCATED IN SECTION 25, T9S, R21E, S.L.B.&M., UINTAH COUNTY, UTAH.

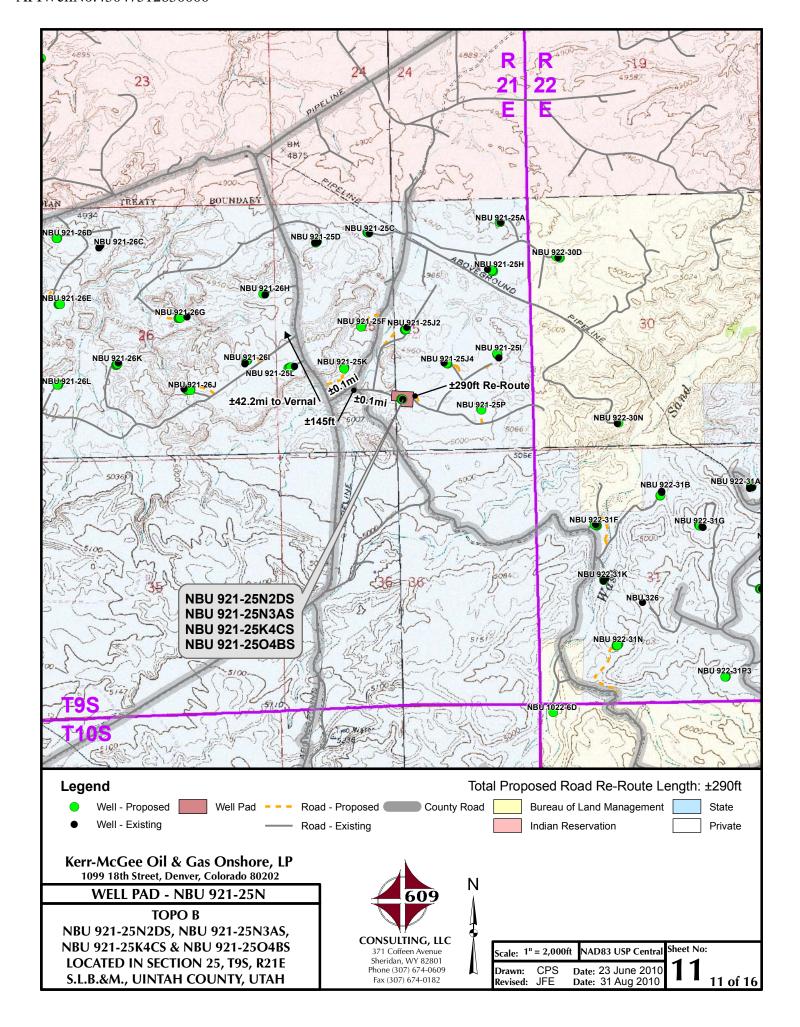


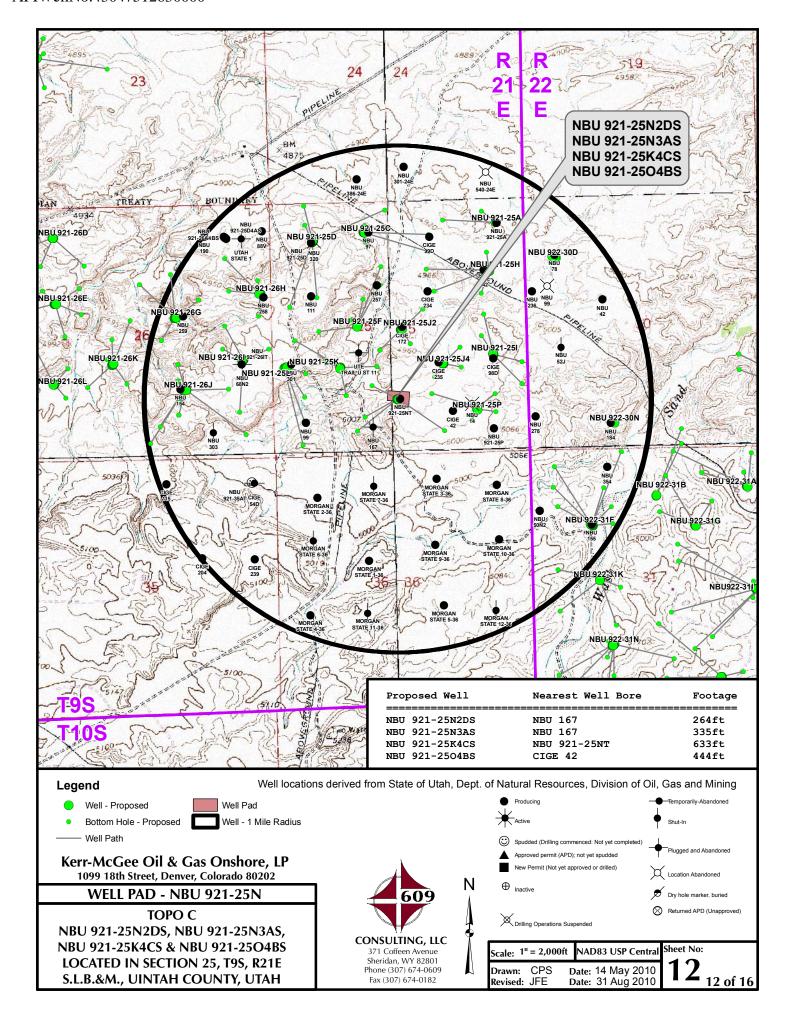
CONSULTING, LLC 371 Coffeen Avenue Sheridan WY 82801 Phone 307-674-0609 Fax 307-674-0182

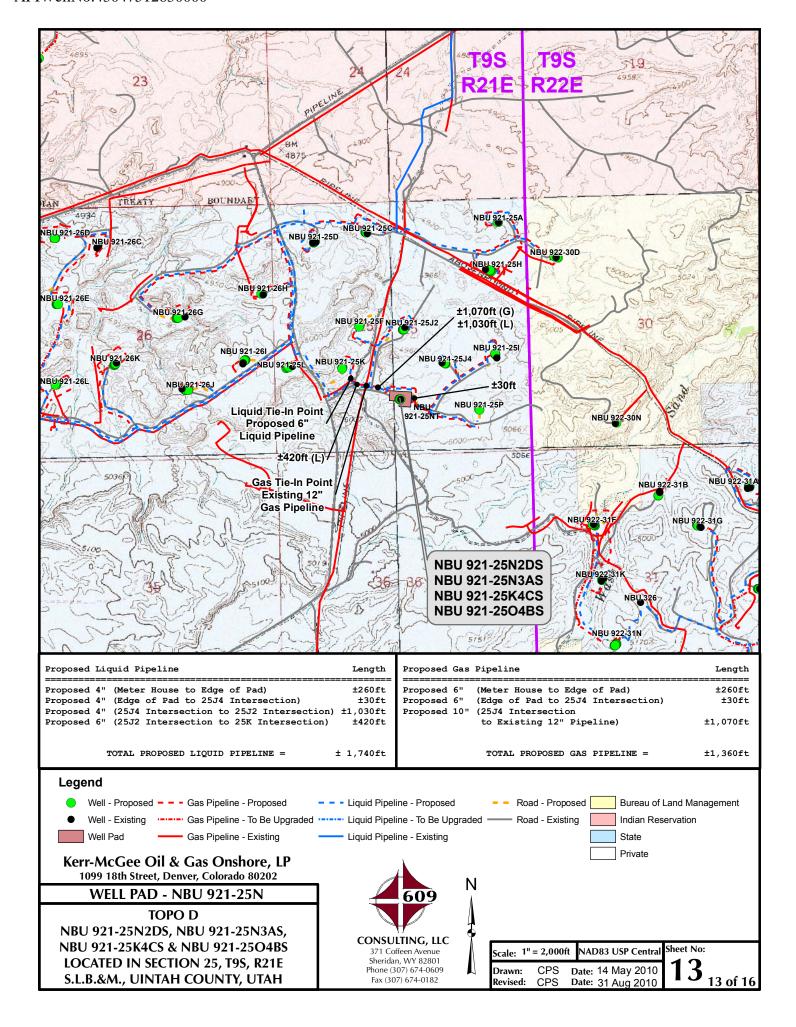
| TIMBERLIN | 1E (4 | 135) 789-13 |
|--------------------|------------------------|-------------|
| engineering | & LAND SURVEYING | G, INC. |
| 209 NORTH 300 | WEST - VERNAL, UTAH 84 | 078 |
| DATE PHOTOS TAKEN: | BUIGTOS TAKENI BY BUS | CHEET N |

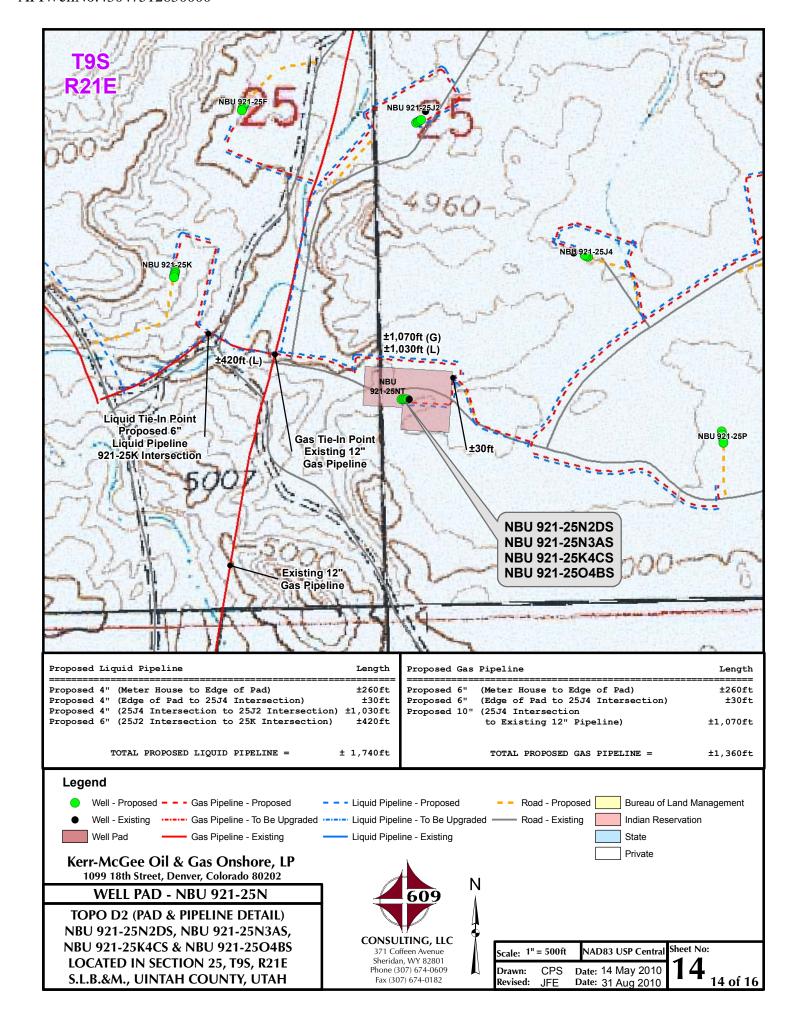
| - 1 | | | |
|-----|--------------------------------|-------------------------|-----------|
| | DATE PHOTOS TAKEN: 04-02-10 | PHOTOS TAKEN BY: D.J.S. | SHEET NO: |
| | DATE DRAWN: 04-07-10 | DRAWN BY: B.M. | 9 |
| | Date Last Revised: | | 9 OF 16 |

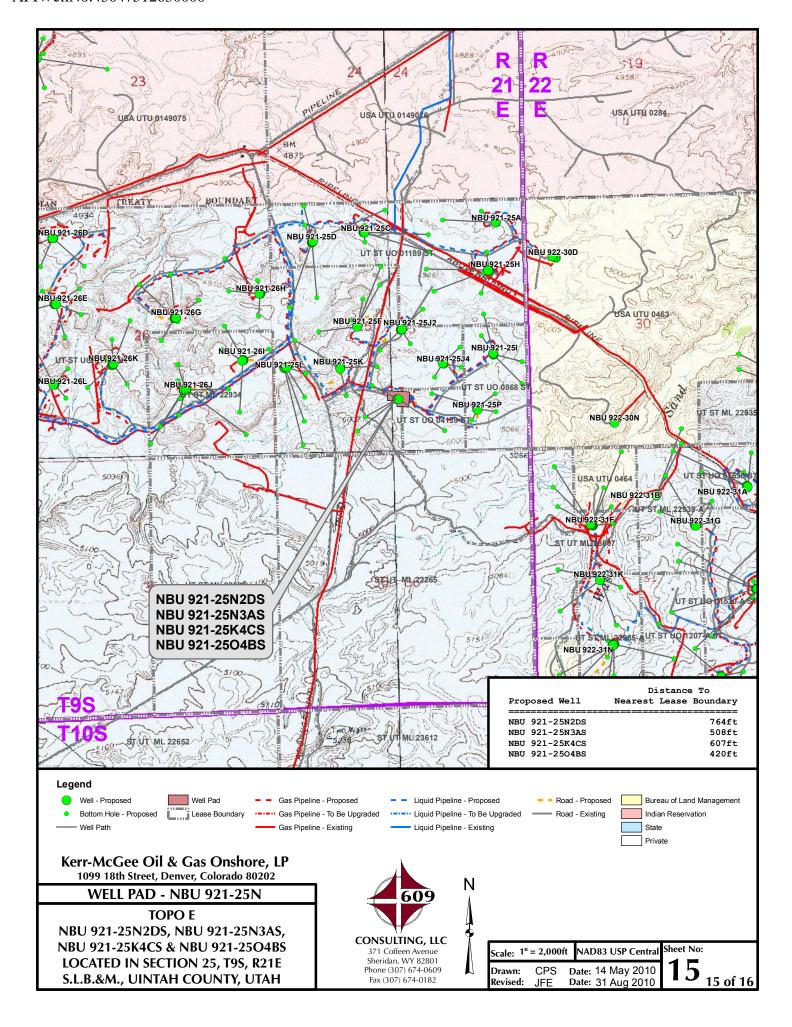












Kerr-McGee Oil & Gas Onshore, LP WELL PAD – NBU 921-25N WELLS – NBU 921-25N2DS, NBU 921-25N3AS, NBU 921-25K4CS & NBU 921-25O4BS Section 25, T9S, R21E, S.L.B.&M.

From the intersection of U.S. Highway 40 and 500 East Street in Vernal, Utah proceed in an easterly then southerly direction along U.S. Highway 40 approximately 3.3 miles to the junction of State Highway 45; exit right and proceed in a southerly direction along State Highway 45 approximately 20.2 miles to the junction of the Glen Bench Road (County B Road 3260). Exit right and proceed in a southwesterly direction along the Glen Bench Road approximately 18.7 miles to a Class D County Road to the northeast. Exit left and proceed in a northeasterly direction along Class D County Road to the southeast. Exit right and proceed in a southeasterly direction along second Class D County road approximately 145 feet to a service road to the east. Exit left and proceed in an easterly then southeasterly direction along service road approximately 0.1 miles to the proposed well location.

Total distance from Vernal, Utah to the proposed well location is approximately 42.4 miles in a southerly direction.

'APIWellNo:43047512630000' Project: Uintah County, UT UTM12 Site: NBU 921-25N Pad Well: NBU 921-25N3AS Scientific Drilling Wellbore: OH Design: Plan #1 Rocky Mountain Operations Kerr McGee Oil and Gas Onshore LP WELL DETAILS: Azimuths to True North VELL DETAILS: GL 4955' & RKB 14'921-25N3AS @ 4969.00ft (ASSUMED) Magnetic North: 11.19° 4955.00 Easting Latitude +N/-S +F/-W Northing Longitude Magnetic Field 40° 0' 10.624 N 109° 29' 58.618 W 0.00 0.00 14530655.97 2060602.02 Strength: 52417.8snT -600 Dip Angle: 65.89° Date: 07/31/2010 Model: IGRF2010 0 WELLBORE TARGET DETAILS (MAP CO-ORDINATES AND LAT/LONG) 300.00 Start Build 2.00 +N/-S Name TVD Northing Easting Latitude Longitude Shape 9563.00 648.64 -844.8114529993.20 2059768.25 40° 0' 4.212 N 109° 30' 9.475 W Circle (Radius: 25.0 600 Start 2103.87 hold at 1300.00 MD 1279.82 150 1200 GREEN RIVER 1800 8 5/8" South(-)/North(+) (300 ft/in) -150 8 5/8' 2400 Start Drop -2.00 3256.81 8 5/8' 3600 True Vertical Depth (1200 ft/in) Start 5326.37 hold at 4403.87 MD 4236.63 -600 WASATCH -750 NBU 921-25N3AS PBH -900 -750 -300 150 300 -900 -600 -450 -150 West(-)/East(+) (300 ft/in) 6000 SECTION DETAILS +E/-W VSect Target MD Inc Azi TVD +N/-S Dleg **TFace** 6600 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 172.77 300.00 0.00 0.00 300.00 0.00 -105.21 0.00 0.00 0.00 -137.04 1300.00 20.00 232.48 1279.82 2.00 232.48 0.00 3403.87 20.00 232.48 3256.81 -543.43 -707.78 0.00 892.34 7200 4403.87 -648.64 -844.81 180.00 1065.10 0.00 0.00 4236.63 2.00 -844.81 6 9730.25 9563.00 -648.64 0.00 0.001065.10 NBU 921-25N3AS PBHL PROJECT DETAILS: Uintah County, UT UTM12 FORMATION TOP DETAILS 7800 MESAVERDE **TVDPath** MDPath Geodetic System: Universal Transverse Mercator (US Survey Feet) Datum: NAD 1927 - Western US 1377.00 1403.42 GREEN RIVER 4811.25 WASATCH Ellipsoid: Clarke 1866 8408.25 MESAVERDE Zone: Zone 12N (114 W to 108 W) 8400 Location: SEC 25 T9S R21E System Datum: Mean Sea Level Local North: True 9000 TD at 9730.25 9563.00 9600 Plan: Plan #1 (NBU 921-25N3AS/OH) 1800 2400 600 1200 Created By: Robert H. Scott Date: 11:52, July 31 2010 Vertical Section at 232.48° (1200 ft/in)



Kerr McGee Oil and Gas Onshore LP

Uintah County, UT UTM12 NBU 921-25N Pad NBU 921-25N3AS

OH

Plan: Plan #1

Standard Planning Report

31 July, 2010





SDIPlanning Report

TVD Reference:



Database: EDM5000-RobertS-Local

Kerr McGee Oil and Gas Onshore LP

Uintah County, UT UTM12

NBU 921-25N Pad

NBU 921-25N3AS

MD Reference:

Well NBU 921-25N3AS GL 4955' & RKB 14'

@ 4969.00ft (ASSUMED) GL 4955' & RKB 14' @ 4969.00ft (ASSUMED)

North Reference: True

Local Co-ordinate Reference:

Survey Calculation Method: Minimum Curvature

Site: Well:

Company:

Project:

Wellbore: OH
Design: Plan #1

Project Uintah County, UT UTM12

Map System: Universal Transverse Mercator (US Survey Feet)

NAD 1927 - Western US

t) System Datum:

Mean Sea Level

Geo Datum: NAD 1927 - Western US

Map Zone: Zone 12N (114 W to 108 W)

Site NBU 921-25N Pad, SEC 25 T9S R21E

 Site Position:
 Northing:
 14,530,655.41 usft
 Latitude:
 40° 0' 10.616 N

 From:
 Lat/Long
 Easting:
 2,060,612.11 usft
 Longitude:
 109° 29' 58.488 W

Position Uncertainty: 0.00 ft Slot Radius: 13.200 in Grid Convergence: 0.96 st

Well NBU 921-25N3AS, 1158' FSL 2575' FWL

Well Position +N/-S 0.73 ft Northing: 14,530,655.97 usft Latitude: 40° 0' 10.624 N

+E/-W -10.08 ft **Easting:** 2,060,602.02 usft **Longitude:** 109° 29' 58.618 W

Position Uncertainty 0.00 ft Wellhead Elevation: Ground Level: 4,955.00 ft

ОН Wellbore Magnetics **Model Name** Sample Date Declination Dip Angle Field Strength (°) (°) (nT) IGRF2010 07/31/2010 11.19 65.89 52.418

Design Plan #1 Audit Notes: Version: Phase: PLAN Tie On Depth: 0.00 Depth From (TVD) +N/-S +E/-W Vertical Section: Direction (ft) (ft) (ft) (°) 232.48 0.00 0.00 0.00

| Plan Sections | | | | | | | | | | |
|---------------------------|--------------------|----------------|---------------------------|---------------|---------------|-----------------------------|----------------------------|---------------------------|------------|-------------------|
| Measured Depth (ft) | Inclination (°) | Azimuth (°) | Vertical Depth (ft) | +N/-S (ft) | +E/-W (ft) | Dogleg Rate (°/100ft) | Build Rate (°/100ft) | Turn Rate (°/100ft) | TFO (°) | Target |
| 0.00 | 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 | |
| 1,300.00 | 20.00 | 232.48 | 1,279.82 | -105.21 | -137.04 | 2.00 | 2.00 | 0.00 | 232.48 | |
| 3,403.87 | 20.00 | 232.48 | 3,256.81 | -543.43 | -707.78 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 4,403.87 | 0.00 | 0.00 | 4,236.63 | -648.64 | -844.81 | 2.00 | -2.00 | 0.00 | 180.00 | |
| 9,730.25 | 0.00 | 0.00 | 9,563.00 | -648.64 | -844.81 | 0.00 | 0.00 | 0.00 | 0.00 | NBU 921-25N3AS PE |



SDI Planning Report



Database: EDM5000-RobertS-Local

Kerr McGee Oil and Gas Onshore LP

Uintah County, UT UTM12 Project:

NBU 921-25N Pad Site: NBU 921-25N3AS Well:

ОН Wellbore: Plan #1 Design:

Local Co-ordinate Reference:

TVD Reference:

MD Reference:

North Reference:

Survey Calculation Method:

Well NBU 921-25N3AS

GL 4955' & RKB 14' @ 4969.00ft (ASSUMED)

GL 4955' & RKB 14' @ 4969.00ft (ASSUMED)

True

|)···· | | | | | | | | | |
|---------------------------|--------------------|----------------|---------------------------|---------------|---------------|-----------------------------|-----------------------------|----------------------------|---------------------------|
| ned 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 |
| 100.00 | 0.00 | 0.00 | 100.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 200.00 | 0.00 | 0.00 | 200.00 | 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 |
| | | 0.00 | 300.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Start Build | | | | | | | | | |
| 400.00 | 2.00 | 232.48 | 399.98 | -1.06 | -1.38 | 1.75 | 2.00 | 2.00 | 0.00 |
| 500.00 | 4.00 | 232.48 | 499.84 | -4.25 | -5.54 | 6.98 | 2.00 | 2.00 | 0.00 |
| 600.00 | 6.00 | 232.48 | 599.45 | -9.56 | -12.45 | 15.69 | 2.00 | 2.00 | 0.00 |
| 700.00 | 8.00 | 232.48 | 698.70 | -16.98 | -22.11 | 27.88 | 2.00 | 2.00 | 0.00 |
| 800.00 | 10.00 | 232.48 | 797.47 | | -34.52 | 43.52 | 2.00 | 2.00 | 0.00 |
| | | | | -26.50 | | | | | |
| 900.00 | 12.00 | 232.48 | 895.62 | -38.12 | -49.65 | 62.60 | 2.00 | 2.00 | 0.00 |
| 1,000.00 | 14.00 | 232.48 | 993.06 | -51.82 | -67.50 | 85.10 | 2.00 | 2.00 | 0.00 |
| 1,100.00 | 16.00 | 232.48 | 1,089.64 | -67.58 | -88.02 | 110.98 | 2.00 | 2.00 | 0.00 |
| 1,200.00 | 18.00 | 232.48 | 1,185.27 | -85.39 | -111.21 | 140.21 | 2.00 | 2.00 | 0.00 |
| 1,300.00 | 20.00 | 232.48 | 1,279.82 | -105.21 | -137.04 | 172.77 | 2.00 | 2.00 | 0.00 |
| | 7 hold at 1300.0 | | .,2.0.02 | .00.2 | | | 2.00 | 2.00 | 0.00 |
| 1,400.00 | 20.00 | 232.48 | 1,373.78 | -126.04 | -164.16 | 206.97 | 0.00 | 0.00 | 0.00 |
| 1,403.42 | 20.00 | 232.48 | 1,377.00 | -126.76 | -165.09 | 208.14 | 0.00 | 0.00 | 0.00 |
| GREEN RIV | | 2020 | .,0 | | | 200 | 0.00 | 0.00 | 0.00 |
| 1,500.00 | 20.00 | 232.48 | 1,467.75 | -146.87 | -191.29 | 241.17 | 0.00 | 0.00 | 0.00 |
| 1,600.00 | 20.00 | 232.48 | 1,561.72 | -167.70 | -218.42 | 275.37 | 0.00 | 0.00 | 0.00 |
| | | | | | | | | | |
| 1,700.00 | 20.00 | 232.48 | 1,655.69 | -188.53 | -245.55 | 309.58 | 0.00 | 0.00 | 0.00 |
| 1,800.00 | 20.00 | 232.48 | 1,749.66 | -209.36 | -272.68 | 343.78 | 0.00 | 0.00 | 0.00 |
| 1,900.00 | 20.00 | 232.48 | 1,843.63 | -230.19 | -299.80 | 377.98 | 0.00 | 0.00 | 0.00 |
| 2,000.00 | 20.00 | 232.48 | 1,937.60 | -251.02 | -326.93 | 412.18 | 0.00 | 0.00 | 0.00 |
| 2,100.00 | 20.00 | 232.48 | 2,031.57 | -271.84 | -354.06 | 446.38 | 0.00 | 0.00 | 0.00 |
| 2,200.00 | 20.00 | 232.48 | 2,125.54 | -292.67 | -381.19 | 480.59 | 0.00 | 0.00 | 0.00 |
| 2,300.00 | 20.00 | 232.48 | 2,219.51 | -313.50 | -408.32 | 514.79 | 0.00 | 0.00 | 0.00 |
| 2,300.00 | | | | | | | | | |
| 2,396.30 | 20.00 | 232.48 | 2,310.00 | -333.56 | -434.44 | 547.72 | 0.00 | 0.00 | 0.00 |
| 8 5/8" | | | | | | | | | |
| 2,400.00 | 20.00 | 232.48 | 2,313.48 | -334.33 | -435.45 | 548.99 | 0.00 | 0.00 | 0.00 |
| 2,500.00 | 20.00 | 232.48 | 2,407.45 | -355.16 | -462.57 | 583.19 | 0.00 | 0.00 | 0.00 |
| 2,600.00 | 20.00 | 232.48 | 2,501.42 | -375.99 | -489.70 | 617.39 | 0.00 | 0.00 | 0.00 |
| 2,700.00 | 20.00 | 232.48 | 2,595.39 | -396.82 | -516.83 | 651.60 | 0.00 | 0.00 | 0.00 |
| 2,800.00 | 20.00 | 232.48 | 2,689.35 | -417.65 | -543.96 | 685.80 | 0.00 | 0.00 | 0.00 |
| 2,900.00 | 20.00 | 232.48 | 2,783.32 | | | 720.00 | | 0.00 | |
| | | | | -438.47 | -571.09 | | 0.00 | | 0.00 |
| 3,000.00 | 20.00 | 232.48 | 2,877.29 | -459.30 | -598.22 | 754.20 | 0.00 | 0.00 | 0.00 |
| 3,100.00 | 20.00 | 232.48 | 2,971.26 | -480.13 | -625.34 | 788.40 | 0.00 | 0.00 | 0.00 |
| 3,200.00 | 20.00 | 232.48 | 3,065.23 | -500.96 | -652.47 | 822.61 | 0.00 | 0.00 | 0.00 |
| 3,300.00 | 20.00 | 232.48 | 3,159.20 | -521.79 | -679.60 | 856.81 | 0.00 | 0.00 | 0.00 |
| 3,400.00 | 20.00 | 232.48 | 3,253.17 | -542.62 | -706.73 | 891.01 | 0.00 | 0.00 | 0.00 |
| 3,403.87 | 20.00 | 232.48 | 3,256.81 | -543.43 | -707.78 | 892.34 | 0.00 | 0.00 | 0.00 |
| Start Drop - | | 202.70 | 0,200.01 | 0-1010 | 707.70 | 002.04 | 0.00 | 0.00 | 0.00 |
| 3,500.00 | 18.08 | 232.48 | 3.347.67 | -562.52 | -732.65 | 923.69 | 2.00 | -2.00 | 0.00 |
| , | | | -,- | | | | | | |
| 3,600.00 | 16.08 | 232.48 | 3,443.26 | -580.40 | -755.94 | 953.06 | 2.00 | -2.00 | 0.00 |
| 3,700.00 | 14.08 | 232.48 | 3,539.81 | -596.24 | -776.57 | 979.07 | 2.00 | -2.00 | 0.00 |
| 3,800.00 | 12.08 | 232.48 | 3,637.21 | -610.02 | -794.52 | 1,001.69 | 2.00 | -2.00 | 0.00 |
| 3,900.00 | 10.08 | 232.48 | 3,735.35 | -621.72 | -809.76 | 1,020.91 | 2.00 | -2.00 | 0.00 |
| 4,000.00 | 8.08 | 232.48 | 3,834.09 | -631.33 | -822.27 | 1,020.91 | 2.00 | -2.00 | 0.00 |
| | | | | | | | | | |
| 4,100.00 | 6.08 | 232.48 | 3,933.32 | -638.83 | -832.04 | 1,049.00 | 2.00 | -2.00 | 0.00 |
| | | | | | | | | | |



SDIPlanning Report



Database: EDM5000-RobertS-Local

Kerr McGee Oil and Gas Onshore LP

Project: Uintah County, UT UTM12

 Site:
 NBU 921-25N Pad

 Well:
 NBU 921-25N3AS

Wellbore: OH
Design: Plan #1

Local Co-ordinate Reference:

TVD Reference:

MD Reference:

North Reference: Survey Calculation Method: Well NBU 921-25N3AS

GL 4955' & RKB 14' @ 4969.00ft (ASSUMED)

GL 4955' & RKB 14' @ 4969.00ft (ASSUMED)

True

| ign: | riaii#i | | | | | | | | |
|---------------------------|--------------------|----------------|---------------------------|--------------------|-----------------------|-----------------------------|-----------------------------|----------------------------|---------------------------|
| nned 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) |
| 4,300.00 | 2.08 | 232.48 | 4,132.77 | -647.49 | -843.32 | 1,063.22 | 2.00 | -2.00 | 0.00 |
| 4,400.00 | 0.08 | 232.48 | 4,232.75 | -648.64 | -844.81 | 1,065.10 | 2.00 | -2.00 | 0.00 |
| 4,403.87 | 0.00 | 0.00 | 4,236.63 | -648.64 | -844.81 | 1,065.10 | 2.00 | -2.00 | 0.00 |
| | 37 hold at 4403.87 | | | | | | | | |
| 4,500.00 | 0.00 | 0.00 | 4,332.75 | -648.64 | -844.81 | 1,065.10 | 0.00 | 0.00 | 0.00 |
| 4,600.00 | 0.00 | 0.00 | 4,432.75 | -648.64 | -844.81 | 1,065.10 | 0.00 | 0.00 | 0.00 |
| 4,700.00 | 0.00 | 0.00 | 4,532.75 | -648.64 | -844.81 | 1,065.10 | 0.00 | 0.00 | 0.00 |
| 4,800.00 | 0.00 | 0.00 | 4,632.75 | -648.64 | -844.81 | 1,065.10 | 0.00 | 0.00 | 0.00 |
| 4,811.25 | 0.00 | 0.00 | 4,644.00 | -648.64 | -844.81 | 1,065.10 | 0.00 | 0.00 | 0.00 |
| WASATCH | | 2.22 | 4 700 75 | 0.40.04 | 044.04 | 4 005 40 | 2.22 | 0.00 | 2.22 |
| 4,900.00 | 0.00 | 0.00 | 4,732.75 | -648.64 | -844.81 | 1,065.10 | 0.00 | 0.00 | 0.00 |
| 5,000.00 | 0.00 | 0.00 | 4,832.75 | -648.64 | -844.81 | 1,065.10 | 0.00 | 0.00 | 0.00 |
| 5,100.00 | 0.00 | 0.00 | 4,932.75 | -648.64 | -844.81 | 1,065.10 | 0.00 | 0.00 | 0.00 |
| 5,200.00 | 0.00 | 0.00 | 5,032.75 | -648.64 | -844.81 | 1,065.10 | 0.00 | 0.00 | 0.00 |
| 5,300.00 | 0.00 | 0.00 | 5,132.75 | -648.64 | -844.81 | 1,065.10 | 0.00 | 0.00 | 0.00 |
| 5,400.00 | 0.00 | 0.00 | 5,232.75 | -648.64 | -844.81 | 1,065.10 | 0.00 | 0.00 | 0.00 |
| 5,500.00 | 0.00 | 0.00 | 5,332.75 | -648.64 | -844.81 | 1,065.10 | 0.00 | 0.00 | 0.00 |
| 5,600.00 | 0.00 | 0.00 | 5,432.75 | -648.64 | -844.81 | 1,065.10 | 0.00 | 0.00 | 0.00 |
| 5,700.00 | 0.00 | 0.00 | 5,532.75 | -648.64 | -844.81 | 1,065.10 | 0.00 | 0.00 | 0.00 |
| 5,800.00 | 0.00 | 0.00 | 5,632.75 | -648.64 | -844.81 | 1,065.10 | 0.00 | 0.00 | 0.00 |
| 5,900.00 | 0.00 | 0.00 | 5,732.75 | -648.64 | -844.81 | 1,065.10 | 0.00 | 0.00 | 0.00 |
| 6,000.00 | 0.00 | 0.00 | 5,832.75 | -648.64 | -844.81 | 1,065.10 | 0.00 | 0.00 | 0.00 |
| 6,100.00 | 0.00 | 0.00 | 5,932.75 | -648.64 | -844.81 | 1,065.10 | 0.00 | 0.00 | 0.00 |
| 6,200.00 | 0.00 | 0.00 | 6,032.75 | -648.64 | -844.81 | 1,065.10 | 0.00 | 0.00 | 0.00 |
| 6,300.00 | 0.00 | 0.00 | 6,132.75 | -648.64 | -844.81 | 1,065.10 | 0.00 | 0.00 | 0.00 |
| 6,400.00 | 0.00 | 0.00 | 6,232.75 | -648.64 | -844.81 | 1,065.10 | 0.00 | 0.00 | 0.00 |
| 6,500.00 | 0.00 | 0.00 | 6,332.75 | -648.64 | -844.81 | 1,065.10 | 0.00 | 0.00 | 0.00 |
| 6,600.00 | 0.00 | 0.00 | 6,432.75 | -648.64 | -844.81 | 1,065.10 | 0.00 | 0.00 | 0.00 |
| 6,700.00 6,800.00 | 0.00 0.00 | 0.00 0.00 | 6,532.75 6,632.75 | -648.64 -648.64 | -844.81 -844.81 | 1,065.10 1,065.10 | 0.00 0.00 | 0.00 0.00 | 0.00 0.00 |
| 6,900.00 | | 0.00 | 6,732.75 | -648.64 | -844.81 | 1,065.10 | 0.00 | 0.00 | 0.00 |
| | | | | | | | | | |
| 7,000.00 | 0.00 | 0.00 | 6,832.75 | -648.64 | -844.81 | 1,065.10 | 0.00 | 0.00 | 0.00 |
| 7,100.00 | 0.00 | 0.00 0.00 | 6,932.75 7,032.75 | -648.64 -648.64 | -844.81 -844.81 | 1,065.10 | 0.00 0.00 | 0.00 0.00 | 0.00 |
| 7,200.00 7,300.00 | 0.00 0.00 | 0.00 | 7,032.75 7,132.75 | -648.64 -648.64 | -844.81 -844.81 | 1,065.10 1,065.10 | 0.00 | 0.00 | 0.00 0.00 |
| 7,400.00 | 0.00 | 0.00 | 7,132.75 | -648.64 | -844.81 | 1,065.10 | 0.00 | 0.00 | 0.00 |
| | | | | | | | | | |
| 7,500.00 7,600.00 | 0.00 0.00 | 0.00 0.00 | 7,332.75 7,432.75 | -648.64 -648.64 | -844.81 -844.81 | 1,065.10 1,065.10 | 0.00 0.00 | 0.00 0.00 | 0.00 0.00 |
| 7,700.00 | | 0.00 | 7,432.75 7,532.75 | -648.64 | -044.61 -844.81 | 1,065.10 | 0.00 | 0.00 | 0.00 |
| 7,800.00 | | 0.00 | 7,632.75 | -648.64 | -844.81 | 1,065.10 | 0.00 | 0.00 | 0.00 |
| 7,900.00 | | 0.00 | 7,732.75 | -648.64 | -844.81 | 1,065.10 | 0.00 | 0.00 | 0.00 |
| 8,000.00 | 0.00 | 0.00 | 7,832.75 | -648.64 | -844.81 | 1,065.10 | 0.00 | 0.00 | 0.00 |
| 8,100.00 | | 0.00 | 7,832.75 7,932.75 | -648.64 -648.64 | -844.81 -844.81 | 1,065.10 | 0.00 | 0.00 | 0.00 |
| 8,200.00 | | 0.00 | 8,032.75 | -648.64 | -844.81 | 1,065.10 | 0.00 | 0.00 | 0.00 |
| 8,300.00 | | 0.00 | 8,132.75 | -648.64 | -844.81 | 1,065.10 | 0.00 | 0.00 | 0.00 |
| 8,400.00 | 0.00 | 0.00 | 8,232.75 | -648.64 | -844.81 | 1,065.10 | 0.00 | 0.00 | 0.00 |
| 8,408.25 | 0.00 | 0.00 | 8,241.00 | -648.64 | -844.81 | 1,065.10 | 0.00 | 0.00 | 0.00 |
| MESAVERI | | 0.00 | 5,271.00 | 0-0.04 | -U -1. U I | 1,000.10 | 0.00 | 0.00 | 0.00 |
| 8,500.00 | 0.00 | 0.00 | 8,332.75 | -648.64 | -844.81 | 1,065.10 | 0.00 | 0.00 | 0.00 |
| 8,600.00 | | 0.00 | 8,432.75 | -648.64 | -844.81 | 1,065.10 | 0.00 | 0.00 | 0.00 |
| 8,700.00 | | 0.00 | 8,532.75 | -648.64 | -844.81 | 1,065.10 | 0.00 | 0.00 | 0.00 |
| 8,800.00 | | 0.00 | 8,632.75 | -648.64 | -844.81 | 1,065.10 | 0.00 | 0.00 | 0.00 |



SDI Planning Report



Database: EDM5000-RobertS-Local

Kerr McGee Oil and Gas Onshore LP

Uintah County, UT UTM12 Project:

Site: NBU 921-25N Pad NBU 921-25N3AS Well:

Wellbore: ОН Plan #1 Design:

Local Co-ordinate Reference:

TVD Reference:

MD Reference:

North Reference:

Survey Calculation Method:

Well NBU 921-25N3AS

GL 4955' & RKB 14'

@ 4969.00ft (ASSUMED)

GL 4955' & RKB 14' @ 4969.00ft (ASSUMED)

True

| ed 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) |
| 8,900.00 | 0.00 | 0.00 | 8,732.75 | -648.64 | -844.81 | 1,065.10 | 0.00 | 0.00 | 0.00 |
| 9,000.00 | 0.00 | 0.00 | 8,832.75 | -648.64 | -844.81 | 1,065.10 | 0.00 | 0.00 | 0.00 |
| 9,100.00 | 0.00 | 0.00 | 8,932.75 | -648.64 | -844.81 | 1,065.10 | 0.00 | 0.00 | 0.00 |
| 9,200.00 | 0.00 | 0.00 | 9,032.75 | -648.64 | -844.81 | 1,065.10 | 0.00 | 0.00 | 0.00 |
| 9,300.00 | 0.00 | 0.00 | 9,132.75 | -648.64 | -844.81 | 1,065.10 | 0.00 | 0.00 | 0.00 |
| 9,400.00 | 0.00 | 0.00 | 9,232.75 | -648.64 | -844.81 | 1,065.10 | 0.00 | 0.00 | 0.00 |
| 9,500.00 | 0.00 | 0.00 | 9,332.75 | -648.64 | -844.81 | 1,065.10 | 0.00 | 0.00 | 0.00 |
| 9,600.00 | 0.00 | 0.00 | 9,432.75 | -648.64 | -844.81 | 1,065.10 | 0.00 | 0.00 | 0.00 |
| 9,700.00 | 0.00 | 0.00 | 9,532.75 | -648.64 | -844.81 | 1,065.10 | 0.00 | 0.00 | 0.00 |
| 9,730.25 | 0.00 | 0.00 | 9,563.00 | -648.64 | -844.81 | 1,065.10 | 0.00 | 0.00 | 0.00 |
| TD at 9730.2 | 5 - NBU 921-25N | 3AS PBHL | | | | | | | |

| Design Targets | | | | | | | | | |
|--|------------------|-----------------|-------------|---------------|---------------|--------------------|-------------------|----------------|------------------|
| Target Name - hit/miss target - Shape | Dip Angle (°) | Dip Dir. (°) | TVD (ft) | +N/-S (ft) | +E/-W (ft) | Northing (usft) | Easting (usft) | Latitude | Longitude |
| NBU 921-25N3AS PBHL - plan hits target cent - Circle (radius 25.00 | | 0.00 | 9,563.00 | -648.64 | -844.81 | 14,529,993.20 | 2,059,768.24 | 40° 0' 4.212 N | 109° 30' 9.475 W |

| Casing Points | | | | | |
|---------------|----------|-----------------|------|----------|----------|
| | Measured | Vertical | | Casing | Hole |
| | Depth | Depth | | Diameter | Diameter |
| | (ft) | (ft) | Name | (in) | (in) |
| | 2,396.30 | 2,310.00 8 5/8" | | 8.625 | 11.000 |

| Formations | | | | | | | |
|------------|----------------------------------|---------------------------|-------------------------------------|-----------|------------|-------------------------|--|
| | Measured Depth (ft) | Vertical Depth (ft) | Name | Lithology | Dip (°) | Dip Direction (°) | |
| | 1,403.42 4,811.25 8,408.25 | 4,644.00 | GREEN RIVER WASATCH MESAVERDE | | | | |

| Plan Annotatio | ns | | | | |
|----------------|----------|----------|------------|---------|----------------------------------|
| | Measured | Vertical | Local Coor | dinates | |
| | Depth | Depth | +N/-S | +E/-W | |
| | (ft) | (ft) | (ft) | (ft) | Comment |
| | 300.00 | 300.00 | 0.00 | 0.00 | Start Build 2.00 |
| | 1,300.00 | 1,279.82 | -105.21 | -137.04 | Start 2103.87 hold at 1300.00 MD |
| | 3,403.87 | 3,256.81 | -543.43 | -707.78 | Start Drop -2.00 |
| | 4,403.87 | 4,236.63 | -648.64 | -844.81 | Start 5326.37 hold at 4403.87 MD |
| | 9,730.25 | 9,563.00 | -648.64 | -844.81 | TD at 9730.25 |



Kerr McGee Oil and Gas Onshore LP

Uintah County, UT UTM12 NBU 921-25N Pad NBU 921-25N3AS

OH

Plan: Plan #1

Standard Planning Report - Geographic

31 July, 2010





SDI Planning Report - Geographic



Database: EDM5000-RobertS-Local

Kerr McGee Oil and Gas Onshore LP

TVD Reference: MD Reference:

Local Co-ordinate Reference:

Survey Calculation Method:

Well NBU 921-25N3AS

GL 4955' & RKB 14'

Uintah County, UT UTM12 Project:

@ 4969.00ft (ASSUMED) GL 4955' & RKB 14'

North Reference:

@ 4969.00ft (ASSUMED)

NBU 921-25N Pad Site: NBU 921-25N3AS Well:

True Minimum Curvature

ОН Wellbore: Plan #1 Design:

Uintah County, UT UTM12 Project

Universal Transverse Mercator (US Survey Feet) Map System:

System Datum: Mean Sea Level

Geo Datum: NAD 1927 - Western US Map Zone: Zone 12N (114 W to 108 W)

Site NBU 921-25N Pad, SEC 25 T9S R21E

Northing: 14,530,655.41 usft 40° 0' 10.616 N Site Position: Latitude: Easting: From: Lat/Long 2,060,612.11 usft Longitude: 109° 29' 58.488 W

Position Uncertainty: 0.00 ft Slot Radius: 13.200 in **Grid Convergence:** 0.96

NBU 921-25N3AS, 1158' FSL 2575' FWL Well

Well Position 14,530,655.97 usft 40° 0' 10.624 N +N/-S 0.00 ft Northing: Latitude:

> +E/-W 0.00 ft Easting: 2,060,602.02 usft Longitude: 109° 29' 58.618 W

Position Uncertainty Wellhead Elevation: 0.00 ft **Ground Level:** 4,955.00 ft

ОН Wellbore Magnetics **Model Name** Sample Date Declination Dip Angle Field Strength (°) (°) (nT) IGRF2010 07/31/2010 11.19 65.89 52,418

Design Plan #1 Audit Notes: Version: Phase: PLAN Tie On Depth: 0.00 Depth From (TVD) +N/-S +E/-W Vertical Section: Direction (ft) (ft) (ft) (°) 232.48 0.00 0.00 0.00

| Plan Sections | | | | | | | | | | |
|---------------------------|--------------------|----------------|---------------------------|---------------|---------------|-----------------------------|----------------------------|---------------------------|------------|------------------|
| Measured Depth (ft) | Inclination (°) | Azimuth (°) | Vertical Depth (ft) | +N/-S (ft) | +E/-W (ft) | Dogleg Rate (°/100ft) | Build Rate (°/100ft) | Turn Rate (°/100ft) | TFO (°) | Target |
| 0.00 | 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 | |
| 1,300.00 | 20.00 | 232.48 | 1,279.82 | -105.21 | -137.04 | 2.00 | 2.00 | 0.00 | 232.48 | |
| 3,403.87 | 20.00 | 232.48 | 3,256.81 | -543.43 | -707.78 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 4,403.87 | 0.00 | 0.00 | 4,236.63 | -648.64 | -844.81 | 2.00 | -2.00 | 0.00 | 180.00 | |
| 9,730.25 | 0.00 | 0.00 | 9,563.00 | -648.64 | -844.81 | 0.00 | 0.00 | 0.00 | 0.00 | NBU 921-25N3AS P |



SDIPlanning Report - Geographic



Database: EDM5000-RobertS-Local

Kerr McGee Oil and Gas Onshore LP

Project: Uintah County, UT UTM12

 Site:
 NBU 921-25N Pad

 Well:
 NBU 921-25N3AS

Wellbore: OH
Design: Plan #1

Local Co-ordinate Reference:

TVD Reference:

MD Reference:

North Reference:

Survey Calculation Method:

Well NBU 921-25N3AS

GL 4955' & RKB 14'

@ 4969.00ft (ASSUMED) GL 4955' & RKB 14' @ 4969.00ft (ASSUMED)

True

| Design: | Plan | #1 | | | | | | | |
|---------------------------|--------------------|----------------|---------------------------|--------------------|--------------------|---------------------------|--------------------------|-----------------|-------------------|
| Planned Survey | | | | | | | | | |
| Measured Depth (ft) | Inclination (°) | Azimuth (°) | Vertical Depth (ft) | +N/-S (ft) | +E/-W (ft) | Map Northing (usft) | Map Easting (usft) | Latitude | Longitude |
| 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 14,530,655.97 | 2,060,602.02 | 40° 0' 10.624 N | 109° 29' 58.618 W |
| 100.00 | 0.00 | 0.00 | 100.00 | 0.00 | 0.00 | 14,530,655.97 | 2,060,602.02 | 40° 0' 10.624 N | 109° 29' 58.618 W |
| 200.00 | 0.00 | 0.00 | 200.00 | 0.00 | 0.00 | 14,530,655.97 | 2,060,602.02 | 40° 0' 10.624 N | 109° 29' 58.618 W |
| 300.00 | 0.00 | 0.00 | 300.00 | 0.00 | 0.00 | 14,530,655.97 | 2,060,602.02 | 40° 0' 10.624 N | 109° 29' 58.618 W |
| Start Bui | ld 2.00 | | | | | | | | |
| 400.00 | 2.00 | 232.48 | 399.98 | -1.06 | -1.38 | 14,530,654.89 | 2,060,600.65 | 40° 0' 10.613 N | 109° 29' 58.635 W |
| 500.00 | 4.00 | 232.48 | 499.84 | -4.25 | -5.54 | 14,530,651.63 | 2,060,596.55 | 40° 0' 10.582 N | 109° 29' 58.689 W |
| 600.00 | 6.00 | 232.48 | 599.45 | -9.56 | -12.45 | 14,530,646.21 | 2,060,589.73 | 40° 0' 10.529 N | 109° 29' 58.778 W |
| 700.00 | 8.00 | 232.48 | 698.70 | -16.98 | -22.11 | 14,530,638.62 | 2,060,580.19 | 40° 0' 10.456 N | 109° 29' 58.902 W |
| 800.00 | 10.00 | 232.48 | 797.47 | -26.50 | -34.52 | 14,530,628.89 | 2,060,567.95 | 40° 0' 10.362 N | 109° 29' 59.061 W |
| 900.00 | 12.00 | 232.48 | 895.62 | -38.12 | -49.65 | 14,530,617.02 | 2,060,553.01 | 40° 0' 10.247 N | 109° 29' 59.256 W |
| 1,000.00 | 14.00 | 232.48 | 993.06 | -51.82 | -67.50 | 14,530,603.02 | 2,060,535.40 | 40° 0' 10.111 N | 109° 29' 59.485 W |
| 1,100.00 | 16.00 | 232.48 | 1,089.64 | -67.58 | -88.02 | 14,530,586.92 | 2,060,515.14 | 40° 0' 9.956 N | 109° 29' 59.749 W |
| 1,200.00 | 18.00 | 232.48 | 1,185.27 | -85.39 | -111.21 | 14,530,568.72 | 2,060,492.26 | 40° 0' 9.780 N | 109° 30' 0.047 W |
| 1,300.00 | 20.00 | 232.48 | 1,279.82 | -105.21 | -137.04 | 14,530,548.47 | 2,060,466.77 | 40° 0' 9.584 N | 109° 30' 0.379 W |
| Start 210 | 3.87 hold at 1 | 300.00 MD | | | | | | | |
| 1,400.00 | 20.00 | 232.48 | 1,373.78 | -126.04 | -164.16 | 14,530,527.18 | 2,060,440.00 | 40° 0' 9.378 N | 109° 30' 0.727 W |
| 1,403.42 | 20.00 | 232.48 | 1,377.00 | -126.76 | -165.09 | 14,530,526.46 | 2,060,439.08 | 40° 0' 9.371 N | 109° 30' 0.739 W |
| GREEN F | RIVER | | | | | | | | |
| 1,500.00 | 20.00 | 232.48 | 1,467.75 | -146.87 | -191.29 | 14,530,505.90 | 2,060,413.22 | 40° 0' 9.172 N | 109° 30' 1.076 W |
| 1,600.00 | 20.00 | 232.48 | 1,561.72 | -167.70 | -218.42 | 14,530,484.62 | 2,060,386.45 | 40° 0' 8.966 N | 109° 30' 1.425 W |
| 1,700.00 | 20.00 | 232.48 | 1,655.69 | -188.53 | -245.55 | 14,530,463.34 | 2,060,359.68 | 40° 0' 8.760 N | 109° 30' 1.773 W |
| 1,800.00 | 20.00 | 232.48 | 1,749.66 | -209.36 | -272.68 | 14,530,442.05 | 2,060,332.90 | 40° 0' 8.554 N | 109° 30' 2.122 W |
| 1,900.00 | 20.00 | 232.48 | 1,843.63 | -230.19 | -299.80 | 14,530,420.77 | 2,060,306.13 | 40° 0' 8.348 N | 109° 30' 2.471 W |
| 2,000.00 | 20.00 | 232.48 | 1,937.60 | -251.02 | -326.93 | 14,530,399.49 | 2,060,279.36 | 40° 0' 8.142 N | 109° 30' 2.819 W |
| 2,100.00 | 20.00 | 232.48 | 2,031.57 | -271.84 | -354.06 | 14,530,378.21 | 2,060,252.58 | 40° 0' 7.937 N | 109° 30' 3.168 W |
| 2,200.00 | 20.00 | 232.48 | 2,125.54 | -292.67 | -381.19 | 14,530,356.92 | 2,060,225.81 | 40° 0' 7.731 N | 109° 30' 3.517 W |
| 2,300.00 | 20.00 | 232.48 | 2,219.51 | -313.50 | -408.32 | 14,530,335.64 | 2,060,199.03 | 40° 0' 7.525 N | 109° 30' 3.865 W |
| 2,396.30 | 20.00 | 232.48 | 2,310.00 | -333.56 | -434.44 | 14,530,315.15 | 2,060,173.25 | 40° 0' 7.327 N | 109° 30' 4.201 W |
| 8 5/8" | 20.00 | 202.10 | _,0.0.00 | 000.00 | | ,000,0 .00 | 2,000,0.20 | | |
| 2,400.00 | 20.00 | 232.48 | 2,313.48 | -334.33 | -435.45 | 14,530,314.36 | 2,060,172.26 | 40° 0' 7.319 N | 109° 30' 4.214 W |
| 2,500.00 | 20.00 | 232.48 | 2,407.45 | -355.16 | -462.57 | 14,530,293.08 | 2,060,145.49 | 40° 0' 7.113 N | 109° 30' 4.563 W |
| 2,600.00 | 20.00 | 232.48 | 2,501.42 | -375.99 | -489.70 | 14,530,293.00 | 2,060,118.71 | 40° 0' 6.907 N | 109° 30' 4.911 W |
| 2,700.00 | 20.00 | 232.48 | 2,595.39 | -396.82 | -516.83 | 14,530,250.51 | 2,060,091.94 | 40° 0' 6.701 N | 109° 30' 5.260 W |
| 2,800.00 | 20.00 | 232.48 | 2,689.35 | -417.65 | -543.96 | 14,530,229.23 | 2,060,065.17 | 40° 0' 6.495 N | 109° 30' 5.609 W |
| 2,900.00 | 20.00 | 232.48 | 2,783.32 | -438.47 | -571.09 | 14,530,229.25 | 2,060,038.39 | 40° 0' 6.289 N | 109° 30' 5.957 W |
| 3,000.00 | 20.00 | 232.48 | 2,763.32 | -459.30 | -598.22 | 14,530,186.66 | 2,060,011.62 | 40° 0' 6.084 N | 109° 30' 6.306 W |
| 3,100.00 | 20.00 | 232.48 | 2,971.29 | -480.13 | -625.34 | 14,530,165.38 | 2,059,984.85 | 40° 0' 5.878 N | 109° 30' 6.655 W |
| 3,200.00 | 20.00 | 232.48 | 3,065.23 | -500.13 | -652.47 | 14,530,144.10 | 2,059,958.07 | 40° 0' 5.672 N | 109° 30' 7.003 W |
| 3,300.00 | 20.00 | 232.48 | 3,159.20 | -521.79 | -679.60 | 14,530,122.82 | 2,059,931.30 | 40° 0' 5.466 N | 109° 30' 7.352 W |
| 3,400.00 | 20.00 | 232.48 | 3,253.17 | -542.62 | -706.73 | 14,530,101.53 | 2,059,904.52 | 40° 0' 5.260 N | 109° 30' 7.701 W |
| 3,403.87 | 20.00 | 232.48 | 3,256.81 | -543.43 | -707.78 | 14,530,100.71 | 2,059,903.49 | 40° 0' 5.252 N | 109° 30' 7.714 W |
| | | 202.40 | 0,200.01 | 040.40 | 707.70 | 14,000,100.71 | 2,000,000.40 | 40 0 0.20214 | 100 00 7.714 W |
| 3,500.00 | 18.08 | 232.48 | 3,347.67 | -562.52 | -732.65 | 14,530,081.20 | 2,059,878.94 | 40° 0' 5.063 N | 109° 30' 8.034 W |
| 3,600.00 | 16.08 | 232.48 | 3,443.26 | -502.52 -580.40 | -732.65 -755.94 | 14,530,061.20 | 2,059,876.94 | 40° 0' 4.887 N | 109° 30' 8.333 W |
| 3,700.00 | | 232.48 | | -560.40 -596.24 | -755.94 -776.57 | | 2,059,835.59 | 40° 0' 4.730 N | 109° 30' 8.598 W |
| | 14.08 | | 3,539.81 | | | 14,530,046.74 | | | |
| 3,800.00 | 12.08 | 232.48 | 3,637.21 | -610.02 | -794.52 | 14,530,032.66 | 2,059,817.88 | 40° 0' 4.594 N | 109° 30' 8.829 W |
| 3,900.00 | 10.08 | 232.48 | 3,735.35 | -621.72 | -809.76 | 14,530,020.71 | 2,059,802.84 | 40° 0' 4.478 N | 109° 30' 9.025 W |
| 4,000.00 | 8.08 | 232.48 | 3,834.09 | -631.33 | -822.27 | 14,530,010.89 | 2,059,790.49 | 40° 0' 4.383 N | 109° 30' 9.185 W |
| 4,100.00 | 6.08 | 232.48 | 3,933.32 | -638.83 | -832.04 | 14,530,003.22 | 2,059,780.85 | 40° 0' 4.309 N | 109° 30' 9.311 W |
| 4,200.00 | 4.08 | 232.48 | 4,032.92 | -644.22 647.40 | -839.06 | 14,529,997.72 | 2,059,773.92 | 40° 0' 4.256 N | 109° 30' 9.401 W |
| 4,300.00 | 2.08 | 232.48 | 4,132.77 | -647.49 | -843.32 | 14,529,994.37 | 2,059,769.72 | 40° 0' 4.223 N | 109° 30' 9.456 W |



SDIPlanning Report - Geographic



Database: EDM5000-RobertS-Local

Kerr McGee Oil and Gas Onshore LP

Project: Uintah County, UT UTM12

 Site:
 NBU 921-25N Pad

 Well:
 NBU 921-25N3AS

Wellbore: OH
Design: Plan #1

Local Co-ordinate Reference:

TVD Reference:

MD Reference:

North Reference:

Survey Calculation Method:

Well NBU 921-25N3AS

GL 4955' & RKB 14'

@ 4969.00ft (ASSUMED) GL 4955' & RKB 14' @ 4969.00ft (ASSUMED)

True

| nned Survey | | | | | | | | | |
|---------------------|------------------------|----------------|---------------------------|---------------|--------------------|--------------------------------|------------------------------|----------------------------------|--------------------------------|
| Measured Depth (ft) | Inclination (°) | Azimuth (°) | Vertical Depth (ft) | +N/-S (ft) | +E/-W (ft) | Map Northing (usft) | Map Easting (usft) | Latitude | Longitude |
| 4,400.00 | 0.08 | 232.48 | | -648.64 | -844.81 | | | 40° 0' 4.212 N | 109° 30' 9.475 |
| 4,400.00 | 0.08 | 0.00 | 4,232.75 4,236.63 | -648.64 | -844.81 -844.81 | 14,529,993.20 14,529,993.20 | 2,059,768.25 2,059,768.24 | 40° 0' 4.212 N 40° 0' 4.212 N | 109 30 9.475 109° 30' 9.475 |
| | | | 4,230.03 | -046.04 | -044.01 | 14,529,995.20 | 2,059,700.24 | 40 0 4.212 N | 109 30 9.473 |
| 4,500.00 | 6.37 hold at 4 0.00 | 0.00 | 4,332.75 | -648.64 | -844.81 | 14,529,993.20 | 2,059,768.24 | 40° 0' 4.212 N | 109° 30' 9.475 |
| 4,600.00 | 0.00 | 0.00 | 4,332.75 | -648.64 | -844.81 | 14,529,993.20 | 2,059,768.24 | 40° 0' 4.212 N | 109° 30′ 9.475 |
| 4,700.00 | 0.00 | 0.00 | 4,532.75 | -648.64 | -844.81 | 14,529,993.20 | 2,059,768.24 | 40° 0' 4.212 N | 109° 30' 9.475 |
| 4,800.00 | 0.00 | 0.00 | 4,632.75 | -648.64 | -844.81 | 14,529,993.20 | 2,059,768.24 | 40° 0' 4.212 N | 109° 30' 9.475 |
| 4,811.25 | 0.00 | 0.00 | 4,644.00 | -648.64 | -844.81 | 14,529,993.20 | 2,059,768.24 | 40° 0' 4.212 N | 109° 30' 9.475 |
| WASATC | | 0.00 | 1,011.00 | 0 10.0 1 | 011.01 | 11,020,000.20 | 2,000,100.21 | 10 0 1.21211 | 100 00 0.110 |
| 4,900.00 | 0.00 | 0.00 | 4,732.75 | -648.64 | -844.81 | 14,529,993.20 | 2,059,768.24 | 40° 0' 4.212 N | 109° 30' 9.475 |
| 5,000.00 | 0.00 | 0.00 | 4,832.75 | -648.64 | -844.81 | 14,529,993.20 | 2,059,768.24 | 40° 0' 4.212 N | 109° 30' 9.47 |
| 5,100.00 | 0.00 | 0.00 | 4,932.75 | -648.64 | -844.81 | 14,529,993.20 | 2,059,768.24 | 40° 0' 4.212 N | 109° 30' 9.475 |
| 5,200.00 | 0.00 | 0.00 | 5,032.75 | -648.64 | -844.81 | 14,529,993.20 | 2,059,768.24 | 40° 0' 4.212 N | 109° 30' 9.47 |
| 5,300.00 | 0.00 | 0.00 | 5,132.75 | -648.64 | -844.81 | 14,529,993.20 | 2,059,768.24 | 40° 0' 4.212 N | 109° 30' 9.47 |
| 5,400.00 | 0.00 | 0.00 | 5,232.75 | -648.64 | -844.81 | 14,529,993.20 | 2,059,768.24 | 40° 0' 4.212 N | 109° 30' 9.47 |
| 5,500.00 | 0.00 | 0.00 | 5,332.75 | -648.64 | -844.81 | 14,529,993.20 | 2,059,768.24 | 40° 0' 4.212 N | 109° 30' 9.47! |
| 5,600.00 | 0.00 | 0.00 | 5,432.75 | -648.64 | -844.81 | 14,529,993.20 | 2,059,768.24 | 40° 0' 4.212 N | 109° 30' 9.47 |
| 5,700.00 | 0.00 | 0.00 | 5,532.75 | -648.64 | -844.81 | 14,529,993.20 | 2,059,768.24 | 40° 0' 4.212 N | 109° 30' 9.47 |
| 5,800.00 | 0.00 | 0.00 | 5,632.75 | -648.64 | -844.81 | 14,529,993.20 | 2,059,768.24 | 40° 0' 4.212 N | 109° 30' 9.47 |
| 5,900.00 | 0.00 | 0.00 | 5,732.75 | -648.64 | -844.81 | 14,529,993.20 | 2,059,768.24 | 40° 0' 4.212 N | 109° 30' 9.47 |
| 6,000.00 | 0.00 | 0.00 | 5,832.75 | -648.64 | -844.81 | 14,529,993.20 | 2,059,768.24 | 40° 0' 4.212 N | 109° 30' 9.47 |
| 6,100.00 | 0.00 | 0.00 | 5,932.75 | -648.64 | -844.81 | 14,529,993.20 | 2,059,768.24 | 40° 0' 4.212 N | 109° 30' 9.47 |
| 6,200.00 | 0.00 | 0.00 | 6,032.75 | -648.64 | -844.81 | 14,529,993.20 | 2,059,768.24 | 40° 0' 4.212 N | 109° 30' 9.47 |
| 6,300.00 | 0.00 | 0.00 | 6,132.75 | -648.64 | -844.81 | 14,529,993.20 | 2,059,768.24 | 40° 0' 4.212 N | 109° 30' 9.47 |
| 6,400.00 | 0.00 | 0.00 | 6,232.75 | -648.64 | -844.81 | 14,529,993.20 | 2,059,768.24 | 40° 0' 4.212 N | 109° 30' 9.47 |
| 6,500.00 | 0.00 | 0.00 | 6,332.75 | -648.64 | -844.81 | 14,529,993.20 | 2,059,768.24 | 40° 0' 4.212 N | 109° 30' 9.47 |
| 6,600.00 | 0.00 | 0.00 | 6,432.75 | -648.64 | -844.81 | 14,529,993.20 | 2,059,768.24 | 40° 0' 4.212 N | 109° 30' 9.47 |
| 6,700.00 | 0.00 | 0.00 | 6,532.75 | -648.64 | -844.81 | 14,529,993.20 | 2,059,768.24 | 40° 0' 4.212 N | 109° 30' 9.47 |
| 6,800.00 | 0.00 | 0.00 | 6,632.75 | -648.64 | -844.81 | 14,529,993.20 | 2,059,768.24 | 40° 0' 4.212 N | 109° 30' 9.47 |
| 6,900.00 | 0.00 | 0.00 | 6,732.75 | -648.64 | -844.81 | 14,529,993.20 | 2,059,768.24 | 40° 0' 4.212 N | 109° 30' 9.47 |
| 7,000.00 | 0.00 | 0.00 | 6,832.75 | -648.64 | -844.81 | 14,529,993.20 | 2,059,768.24 | 40° 0' 4.212 N | 109° 30' 9.47 |
| 7,100.00 | 0.00 | 0.00 | 6,932.75 | -648.64 | -844.81 | 14,529,993.20 | 2,059,768.24 | 40° 0' 4.212 N | 109° 30' 9.47 |
| 7,200.00 | 0.00 | 0.00 | 7,032.75 | -648.64 | -844.81 | 14,529,993.20 | 2,059,768.24 | 40° 0' 4.212 N | 109° 30' 9.47 |
| 7,300.00 | 0.00 | 0.00 | 7,132.75 | -648.64 | -844.81 | 14,529,993.20 | 2,059,768.24 | 40° 0' 4.212 N | 109° 30' 9.47 |
| 7,400.00 | 0.00 | 0.00 | 7,132.75 | -648.64 | -844.81 | 14,529,993.20 | 2,059,768.24 | 40° 0' 4.212 N | 109° 30' 9.47 |
| 7,500.00 | 0.00 | 0.00 | 7,332.75 | -648.64 | -844.81 | 14,529,993.20 | 2,059,768.24 | 40° 0' 4.212 N | 109° 30' 9.47 |
| 7,600.00 | 0.00 | 0.00 | 7,432.75 | -648.64 | -844.81 | 14,529,993.20 | 2,059,768.24 | 40° 0' 4.212 N | 109° 30' 9.47 |
| 7,700.00 | 0.00 | 0.00 | 7,532.75 | -648.64 | -844.81 | 14,529,993.20 | 2,059,768.24 | 40° 0' 4.212 N | 109° 30' 9.47 |
| 7,800.00 | 0.00 | 0.00 | 7,632.75 | -648.64 | -844.81 | 14,529,993.20 | 2,059,768.24 | 40° 0' 4.212 N | 109° 30' 9.47 |
| 7,900.00 | 0.00 | 0.00 | 7,732.75 | -648.64 | -844.81 | 14,529,993.20 | 2,059,768.24 | 40° 0' 4.212 N | 109° 30' 9.47 |
| 8,000.00 | 0.00 | 0.00 | 7,832.75 | -648.64 | -844.81 | 14,529,993.20 | 2,059,768.24 | 40° 0' 4.212 N | 109° 30' 9.47 |
| 8,100.00 | 0.00 | 0.00 | 7,932.75 | -648.64 | -844.81 | 14,529,993.20 | 2,059,768.24 | 40° 0' 4.212 N | 109° 30' 9.47 |
| 8,200.00 | 0.00 | 0.00 | 8,032.75 | -648.64 | -844.81 | 14,529,993.20 | 2,059,768.24 | 40° 0' 4.212 N | 109° 30' 9.47 |
| 8,300.00 | 0.00 | 0.00 | 8,132.75 | -648.64 | -844.81 | 14,529,993.20 | 2,059,768.24 | 40° 0' 4.212 N | 109° 30' 9.47 |
| 8,400.00 | 0.00 | 0.00 | 8,232.75 | -648.64 | -844.81 | 14,529,993.20 | 2,059,768.24 | 40° 0' 4.212 N | 109° 30' 9.47 |
| 8,408.25 | 0.00 | 0.00 | 8,241.00 | -648.64 | -844.81 | 14,529,993.20 | 2,059,768.24 | 40° 0' 4.212 N | 109° 30' 9.47 |
| MESAVE | | | | | | , , | | | |
| 8,500.00 | 0.00 | 0.00 | 8,332.75 | -648.64 | -844.81 | 14,529,993.20 | 2,059,768.24 | 40° 0' 4.212 N | 109° 30' 9.47 |
| 8,600.00 | 0.00 | 0.00 | 8,432.75 | -648.64 | -844.81 | 14,529,993.20 | 2,059,768.24 | 40° 0' 4.212 N | 109° 30' 9.47 |
| 8,700.00 | 0.00 | 0.00 | 8,532.75 | -648.64 | -844.81 | 14,529,993.20 | 2,059,768.24 | 40° 0' 4.212 N | 109° 30' 9.47 |
| 8,800.00 | 0.00 | 0.00 | 8,632.75 | -648.64 | -844.81 | 14,529,993.20 | 2,059,768.24 | 40° 0' 4.212 N | 109° 30' 9.47 |
| 8,900.00 | 0.00 | 0.00 | 8,732.75 | -648.64 | -844.81 | 14,529,993.20 | 2,059,768.24 | 40° 0' 4.212 N | 109° 30' 9.47 |



SDIPlanning Report - Geographic



Database: EDM5000-RobertS-Local

Company: Kerr McGee Oil and Gas Onshore LP

Project: Uintah County, UT UTM12

 Site:
 NBU 921-25N Pad

 Well:
 NBU 921-25N3AS

Wellbore: OH
Design: Plan #1

Local Co-ordinate Reference:

TVD Reference:

MD Reference:

North Reference:

Survey Calculation Method:

Well NBU 921-25N3AS

GL 4955' & RKB 14'

@ 4969.00ft (ASSUMED)

GL 4955' & RKB 14' @ 4969.00ft (ASSUMED)

True

| Measured Depth (ft) | Inclination (°) | Azimuth (°) | Vertical Depth (ft) | +N/-S (ft) | +E/-W (ft) | Map Northing (usft) | Map Easting (usft) | Latitude | Longitude |
|---------------------------|-----------------|----------------|---------------------------|---------------|---------------|---------------------------|--------------------------|----------------|------------------|
| 9,000.00 | 0.00 | 0.00 | 8,832.75 | -648.64 | -844.81 | 14,529,993.20 | 2,059,768.24 | 40° 0' 4.212 N | 109° 30' 9.475 W |
| 9,100.00 | 0.00 | 0.00 | 8,932.75 | -648.64 | -844.81 | 14,529,993.20 | 2,059,768.24 | 40° 0' 4.212 N | 109° 30' 9.475 W |
| 9,200.00 | 0.00 | 0.00 | 9,032.75 | -648.64 | -844.81 | 14,529,993.20 | 2,059,768.24 | 40° 0' 4.212 N | 109° 30' 9.475 V |
| 9,300.00 | 0.00 | 0.00 | 9,132.75 | -648.64 | -844.81 | 14,529,993.20 | 2,059,768.24 | 40° 0' 4.212 N | 109° 30' 9.475 V |
| 9,400.00 | 0.00 | 0.00 | 9,232.75 | -648.64 | -844.81 | 14,529,993.20 | 2,059,768.24 | 40° 0' 4.212 N | 109° 30' 9.475 V |
| 9,500.00 | 0.00 | 0.00 | 9,332.75 | -648.64 | -844.81 | 14,529,993.20 | 2,059,768.24 | 40° 0' 4.212 N | 109° 30' 9.475 V |
| 9,600.00 | 0.00 | 0.00 | 9,432.75 | -648.64 | -844.81 | 14,529,993.20 | 2,059,768.24 | 40° 0' 4.212 N | 109° 30' 9.475 V |
| 9,700.00 | 0.00 | 0.00 | 9,532.75 | -648.64 | -844.81 | 14,529,993.20 | 2,059,768.24 | 40° 0' 4.212 N | 109° 30' 9.475 V |
| 9,730.25 | 0.00 | 0.00 | 9,563.00 | -648.64 | -844.81 | 14,529,993.20 | 2,059,768.24 | 40° 0' 4.212 N | 109° 30' 9.475 V |

| Design Targets | | | | | | | | | |
|--|------------------|-----------------|-------------|---------------|---------------|--------------------|-------------------|----------------|------------------|
| Target Name - hit/miss target - Shape | Dip Angle (°) | Dip Dir. (°) | TVD (ft) | +N/-S (ft) | +E/-W (ft) | Northing (usft) | Easting (usft) | Latitude | Longitude |
| NBU 921-25N3AS PBHL - plan hits target cent - Circle (radius 25.00 | | 0.00 | 9,563.00 | -648.64 | -844.81 | 14,529,993.20 | 2,059,768.24 | 40° 0' 4.212 N | 109° 30' 9.475 W |

| Casing Points | | | | | |
|---------------|-------------------|-------------------|------|--------------------|------------------|
| | Measured Depth | Vertical Depth | | Casing Diameter | Hole Diameter |
| | (ft) | (ft) | Name | (in) | (in) |
| | 2,396.30 | 2,310.00 8 5/8" | | 8.625 | 11.000 |

| Formations | | | | | | | |
|------------|---------------------------|---------------------------|-------------|-----------|------------|-------------------------|--|
| | Measured Depth (ft) | Vertical Depth (ft) | Name | Lithology | Dip (°) | Dip Direction (°) | |
| | 1,403.42 | 1,377.00 | GREEN RIVER | | | | |
| | 4,811.25 | 4,644.00 | WASATCH | | | | |
| | 8,408.25 | 8,241.00 | MESAVERDE | | | | |

| Plan Annotations | | | | |
|------------------|-------------|---------------------------|---------|----------------------------------|
| Measure | d Vertical | ertical Local Coordinates | | |
| Depth | Depth | +N/-S | +E/-W | |
| (ft) | (ft) | (ft) | (ft) | Comment |
| 300. | 00 300.00 | 0.00 | 0.00 | Start Build 2.00 |
| 1,300. | 00 1,279.82 | -105.21 | -137.04 | Start 2103.87 hold at 1300.00 MD |
| 3,403. | 87 3,256.81 | -543.43 | -707.78 | Start Drop -2.00 |
| 4,403. | 87 4,236.63 | -648.64 | -844.81 | Start 5326.37 hold at 4403.87 MD |
| 9,730. | 25 9,563.00 | -648.64 | -844.81 | TD at 9730.25 |

NBU 921-25K4CS

Surface: 1,157' FSL 2,585' FWL (SE/4SW/4) BHL: 1,450' FSL 2,045' FWL (NE/4SW/4) Mineral Lease: UO 1194 ST

NBU 921-25N2DS

Surface: 1,159' FSL 2,565' FWL (SE/4SW/4) BHL: 800' FSL 1,896' FWL (SE/4SW/4) Mineral Lease: UO 1194 ST

NBU 921-25N3AS

Surface: 1,158' FSL 2,575' FWL (SE/4SW/4) BHL: 508' FSL 1,729' FWL (SE/4SW/4) Mineral Lease: UO 1194 ST

NBU 921-2504BS

Surface: 1,156' FSL 2,595' FWL (SE/4SW/4) BHL: 485' FSL 1,741' FEL (SW/4SE/4) Mineral Lease: UO 4139 ST

> Pad: NBU 921-25N Section 25 T9S R21E

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

MULTI-POINT SURFACE USE PLAN of OPERATIONS (SUPO)

This SUPO contains surface operating procedures for Kerr-McGee Oil & Gas Onshore LP (KMG), a wholly owned subsidiary of Anadarko Petroleum Corporation (APC) pertaining to actions that involve the State of Utah School and Institutional Trust Lands Administration (SITLA) in the development of minerals leased to APC/KMG (including, but not limited to, APDs/SULAs/ROEs/ROWs and/or easements).

See associated Utah Division of Oil, Gas, and Mining (UDOGM) Form 3(s), plats, maps, and other attachments for site-specific information on projects represented herein.

In accordance with Utah Oil & Gas Conservation Rule R649-3-11 pertaining to Directional Drilling, these wells will be directionally drilled. Refer to Topo Map A for directions to the location and Topo Maps A and B for location of access roads within a 2-mile radius.

A. Existing Roads:

Existing roads consist of county roads and improved/unimproved lease roads. APC/KMG will maintain existing roads in a condition that is the same as or better than before operations began and in a safe and usable condition. Maintenance of existing roads will continue until final abandonment and reclamation of well pads and/or other facilities. The road maintenance may include, but is not limited to, blading, ditching, culvert installation/cleanout, surfacing, and dust control.

NBU 921-25K4CS / 25N2DS/ 25N3AS/ 25O4BS

Typically, roads, gathering lines and electrical distribution lines will occupy common disturbance corridors and roadways will be used as working space. All disturbances located in the same corridor will overlap each other to the maximum extent possible; in no case will the maximum disturbance width of the access road and utility corridors exceed 50', unless otherwise approved.

B. Planned Access Roads:

Approximately ±290' (0.1 miles) of new road re-route to this pad location is proposed (see Topo Map B). Applicable Uintah County encroachment and/or pipeline crossing permits will be obtained prior to construction/development. No other pipelines will be crossed at this location.

Where roads are new or to be reconstructed, they will be located, designed, and maintained to meet the standards of SITLA and other commonly accepted Best Management Practices (BMPs). If a new road/corridor were to cross a water of the United States, KMG will adhere to the requirements of applicable Nationwide or Individual Permits of the Department of Army Corps of Engineers.

Turnouts; major cut and fills; culverts; bridges; gates; cattle guards; low water crossings; or modifications needed to existing infrastructure/facilities were determined at the on-site and, as applicable, are typically shown on attached Exhibits and Topo maps.

C. Location of Existing and Proposed Facilities:

This pad will expand the existing pad for the NBU 921-25NT, which is a vertical producing well according to Utah Division of Oil, Gas and Mining (UDOGM) records as of August 12, 2010.

Production facilities (see Well Pad Design Summary and Facilities Diagram):

Production facilities will be installed on the disturbed portion of each well pad and may include bermed components (typically excluding dehy's and/or separators) that contain fluids (i.e. production tanks, produced liquids tanks). The berms will be constructed of compacted subsoil or corrugated metal, impervious, designed to hold 110% of the capacity of the largest tank, and be independent of the back cut. All permanent (on-site six months or longer) aboveground structures constructed or installed, including pumping units, will be painted a flat, non-reflective, earth-tone color chosen at the onsite in coordination with SITLA.

Production tanks will be constructed, maintained, and operated to prevent unauthorized surface or subsurface discharges of liquids and to prevent livestock or wildlife entry. The tanks are not to be used for disposal of liquids from additional sources without prior approval of UDOGM. Gathering facilities:

The following pipeline transmission facilities will apply if the well is productive (see Topo D):

The total gas gathering (steel line pipe with fusion bond epoxy coating) pipeline distances from the meter to the tie in point is $\pm 1,210$ ' and the individual segments are broken up as follows:

±250' (0.1 miles) –New 6" buried gas pipeline from the meter to the NBU 921-25J pad intersection.

- ±490' (0.1 miles) –New 10" buried gas pipeline from the NBU 921-25J pad intersection to the edge of the pad.
- ±470' (0.1 miles) –New 10" buried gas pipeline from the edge of the pad to the existing 12' gas pipeline tie in point.

The total liquid gathering pipeline distance from the meter to the tie in point is $\pm 1,590$ ' and the individual segments are broken up as follows:

- ±250' (0.1 miles) –New 4" buried liquid pipeline from the meter to the NBU 921-25J pad intersection.
- ±490' (0.1 miles) –New 4" buried liquid pipeline from the NBU 921-25J pad intersection to the edge of the pad.
- ±430' (0.1 miles) –New 4" buried liquid pipeline from the edge of the pad to the NBU 921-25J2 pad intersection.
- ±420' (0.1 miles) –New 6" buried liquid pipeline from the NBU 921-25J2 pad intersection to the NBU 921-25K pad intersection.

The liquid gathering lines will be made of polyethylene or a composite polyethylene/steel or polyethylene/fiberglass that is not subject to internal or external pipe corrosion. The content of the produced fluids to be transferred by the liquid gathering system will be approximately 92% produced water and 8% condensate. Trunk line valve connections for the water gathering system will be below ground but accessible from the surface in order to prevent freezing during winter time.

The proposed pipelines will be buried and will include gas gathering and liquid gathering pipelines in the same trench. Where the pipeline is adjacent to the road or well pad, the road and/or well pad will be utilized for construction activities and staging. Kerr-McGee requests a permanent 30' right-of-way adjacent to the road for life-of-project for maintenance, repairs, and/or upgrades, no additional right-of-way will be needed beyond the 30'. Where the pipeline is not adjacent to the road or well pad, Kerr-McGee requests a temporary 45' construction right-of-way and 30' permanent right-of-way.

The proposed trench width for the pipeline would range from 18-48 inches and will be excavated to a depth of 48 to 60 inches of normal soil cover or 24 inches of cover in consolidated rock. During construction blasting may occur along the proposed right-of-way where trenching equipment cannot cut into the bedrock. Large debris and rocks removed from the earth during trenching and blasting that could not be returned to the trench would be distributed evenly and naturally in the project area. The proposed pipelines will be pressure tested pneumatically (depending on size) or with fluids (either fresh or produced). If fluids are used, there will be no discharge to the surface.

Pipeline signs will be installed along the right-of-way to indicate the pipeline proximity, ownership, and to provide emergency contact phone numbers. Above ground valves, T's, and/or cathodic protection will be installed at various locations for connection, corrosion prevention and/or for safety purposes.

D. <u>Location and Type of Water Supply:</u>

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

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

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

No water well is to be drilled on this lease.

E. Source of Construction Materials:

Construction operations will typically be completed with native materials found on location. If needed, construction materials that must be imported to the site (mineral material aggregate, soils or materials suitable for fill/surfacing) will be obtained from a nearby permitted source and described in subsequent Sundry requests. No construction materials will be removed from State lands without prior approval from SITLA.

F. Methods of Handling Waste Materials:

Should the well be productive, produced water will be contained in a water tank and will be transported by pipeline and/or truck to an approved disposal sites facilities and/or Salt Water Disposal (SWD) injection well. Currently, those facilities are:

RNI in Sec. 5 T9S R22E

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

Ouray #1 SWD in Sec. 1 T9S R21E NBU 159 SWD in Sec. 35 T9S R21E CIGE 112D SWD in Sec. 19 T9S R21E CIGE 114 SWD in Sec. 34 T9S R21E NBU 921-34K SWD in Sec. 34 T9S R21E NBU 921-33F SWD in Sec. 33 T9S R21E

NBU 921-34L SWD in Sec. 34 T9S R21E

Drill cuttings and/or fluids will be contained in the reserve/frac pit. Cuttings will be buried in pit(s) upon closure. Unless otherwise approved, no oil or other oil-based drilling additives, chromium/metals-based, or saline muds will be used during drilling. Only fresh water (as specified above), biodegradable polymer soap, bentonite clay, and/or non-toxic additives will be used in the mud system.

Pits will be constructed to minimize the accumulation of surface runoff. Should fluid hydrocarbons be encountered during drilling, completions or well testing, product will either be contained in test tanks on the well site or evacuated by vacuum trucks and transported to an approved disposal/sales facility. Should petroleum hydrocarbons unexpectedly be released into a pit, they will be removed as soon as practical but in no case will they remain longer than 72 hours unless an alternate is approved by SITLA. Should timely removal prove infeasible, the pit will be netted with mesh no larger than 1 inch until such time as hydrocarbons can be removed. Hydrocarbon removal will also take place prior to the closure of the pit, unless authorization is provided for disposal via alternative pit closure methods (e.g. solidification).

The reserve and/or fracture stimulation pit will be lined with a synthetic material 20-mil or thicker, The liner will be installed over smooth fill subgrade that is free of pockets, loose rocks, or other materials (i.e. sand, sifted dirt, bentonite, straw, etc.) that could damage the liner. Any additional pits necessary to subsequent operations, such as temporary flare or workover pits, will be contained within the originally approved well pad and disturbance boundaries. Such temporary pits will be backfilled and reclaimed within 180 days of completion of work at a well location.

For the protection of livestock and wildlife, all open pits and cellars will be fenced/covered to prevent wildlife or livestock entry. Total height of pit fencing will be at least 42 inches and corner posts will be cemented and/or braced in such a manner as 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.

Pits containing drilling cuttings, mud, and/or completions fluids will be allowed to dry. Any free fluids remaining after six (6) months from reaching total depth, date of completion, and/or determination of inactivity will be removed (as weather conditions allow) to an approved site and the pit reclaimed. Additional drying methods may include fly-ash solidification or sprinkler evaporation. Installation and operation of any sprinklers, pumps, and equipment will ensure that water spray or mist does not drift. Reserve pit liners will be cut off or folded as near to the mud surface as possible and as safety considerations allow and buried on location.

No garbage or non-exempt substances as defined by Resource Conservation and Recovery Act (RCRA) subtitle C will be placed in the reserve pit. All refuse generated during construction, drilling, completion, and well testing activities will be contained in an enclosed receptacle, removed from the drill locations promptly, and transported to an approved disposal facility.

Portable, self-contained chemical toilets and/or sewage processing facilities will be provided for human waste disposal. Upon completion of operations, or as required, the toilet holding tanks will be pumped and the contents disposed of in an approved sewage disposal facility. All applicable regulations pertaining to disposal of human and solid waste will be observed.

Any undesirable event, accidental release, or in excess of reportable quantities will be managed according to the notification requirements of UDOGMs "Reporting Oil and Gas Undesirable Events" rule, and, where State wells are participatory to a Federal agreement, according to NTL-3A.

Materials Management

Hazardous materials above reportable quantities will not be produced by drilling or completing proposed wells or constructing the pipelines/facilities. The term "hazardous materials" as used here means: (1) any substance, pollutant, or containment listed as hazardous under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980, as amended 42 U.S.C. 9601 et seq., and the regulations issued under CERCLA; and (2) any hazardous waste as defined in RCRA of 1976, as amended. In addition, no extremely hazardous substance, as defined in 40 CFR 355, in threshold planning quantities, would be used, produced, stored, transported, or disposed of while producing any well.

Chemicals subject to reporting under Title III of the Superfund Amendments and Reauthorization Act (SARA) in quantities of 10,000 pounds or more may be produced and/or stored at production facilities and may be kept in limited quantities on drilling sites and well locations for short periods of time during drilling or completion activities.

G. Ancillary Facilities:

None are anticipated.

H. Well Site Layout (see Well Pad Design Summary):

The location, orientation and aerial extent of each drill pad; reserve/completion/flare pit; access road ingress/egress points, drilling rig, dikes/ditches, existing wells/infrastructure; proposed cuts and fills; and topsoil and spoil material stockpile locations are depicted on the exhibits for each project, where applicable. Site-specific conditions may require slight deviation in actual equipment and facility layout; however, the area of disturbance, as described in the survey, will not be exceeded.

Coordinates are provided in the National Spatial Reference System, North American Datum, 1983 (NAD83) or latest edition. Distances are depicted on each plat to the nearest two adjacent section lines.

I. Plans for Reclamation of the Surface:

Surface reclamation will be undertaken in two phases: interim and final. Interim reclamation is conducted following well completion and extends through the period of production. This reclamation is for the area of the well pad that is not required for production activities. Final reclamation is conducted following well plugging/conversion and/or facility abandonment processes.

Reclamation activities in both phases may include but are not limited to: re-contouring or re-configuration of topographic surfaces, restoration of drainage systems, segregation of spoils materials, minimizing surface disturbance, re-evaluating backfill requirements, pit closure, topsoil redistribution, soil treatments, seeding and weed control.

Interim Reclamation

Interim reclamation includes pit closure, re-contouring (where possible), soil bed preparation, topsoil placement, seeding, and/or weed control.

Interim re-contouring involves bringing all construction material from cuts and fills back onto the well pad and site and reestablishing the natural contours where desirable and practical. Fill and stockpiled spoils no longer necessary to the operation will be spread on the cut slopes and covered with stockpiled topsoil. All stockpiled top soils will be used for interim reclamation where practical to maintain soil viability. Where possible, the land surface will be left "rough" after re-contouring to ensure that the maximum surface area will be available to support the reestablishment of vegetative cover.

A reserve pit, upon being allowed to dry, will be backfilled and compacted with cover materials that are void of any topsoil, vegetation, large stones, rocks or foreign objects. Soils that are moisture laden, saturated, or partially/completely frozen will not be used for backfill or cover. The pit area will be mounded to allow for settling and to promote positive surface drainage away from the pit.

Final Reclamation

Final reclamation will be performed for newly drilled unproductive wells and/or at the end of the life of a productive well. As soon as practical after the conclusion of drilling and testing operations, unproductive drill holes will be plugged and abandoned (P&A). Site and road reclamation will commence following plugging. In no case will reclamation at non-producing locations be initiated later than six (6) months from the date a well is plugged. A joint inspection of the disturbed area to be reclaimed may be requested by APC/KMG. The primary purpose of this inspection will be to review the existing conditions, or agree upon a revised final reclamation and abandonment plan. A Notice of Intent to Abandon will be filed for final recommendations regarding surface reclamation.

After plugging, all wellhead equipment that is no longer needed will be removed, and the well site will be reclaimed. Final contouring will blend with and follow as closely as practical the natural terrain and contours of the original site and surrounding areas. After re-contouring, final grading will be conducted over the entire surface of the well site and access road. Where practical, the area will be ripped to a depth of 18 to 24 inches on 18 to 24-inch centers and surface materials will be pitted with small depressions to form longitudinal depressions 12 to 18 inches deep perpendicular to the natural flow of water.

All unnecessary surface equipment and structures (e.g. cattle guards) and water control structures (e.g. culverts, drainage pipes) not needed to facilitate successful reclamation will be removed during final reclamation. Roads that will be reclaimed will be ripped to a depth of 18 inches where practical, re-contoured to approximate the original contour of the ground and seeded.

Upon successfully completing reclamation of a P&A location, a Final Abandonment Notice will be submitted to UDOGM.

Seeding and Measures Common to Interim and Final Reclamation

Reclaimed areas may be fenced to exclude grazing and encourage re-vegetation.

On slopes where severe erosion can become a problem and the use of machinery is not practical, seed will be hand broadcast and raked with twice the specified amount of seed. The slope will be stabilized using materials specifically designed to prevent erosion on steep slopes and hold seed in place so vegetation can become permanently established. These materials will include, but are not limited to, erosion control blankets and bonded fiber matrix at a rate to achieve a minimum of 80 percent soil coverage.

Seeding will occur year-round as conditions allow. Seed mixes appropriate to the native plant community as determined and specified for each project location based on the site specific soils will be used for revegetation. The site specific seed mix will be provided by SITLA.

J. Surface/Mineral Ownership:

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

K. Other Information:

A Class I literature survey has been conducted by Montgomery Archaeological Consultants, Inc. (MOAC). For additional details please refer to report MOAC 10-125.

A paleontological reconnaissance has been completed by Intermountain Paleo-Consulting (IPC) and a report will be provided under separate cover.

A biological field survey was completed by Grasslands Consulting, Inc. on July 13, 2010. For additional details please refer to report GCI-294.

'APIWellNo:43047512630000'

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 for State lease activities is provided by State Surety Bond 22013542, and for applicable Federal lease activities and pursuant to 43 CFR 3104, by Bureau of Land Management Nationwide Bond WYB000291.

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

August 13, 2010

Date

CLASS I REVIEW OF KERR-MCGEE OIL AND GAS ONSHORE LP'S 36 PROPOSED WELL LOCATIONS IN T9S, R21E, SECTION 25 (MOAC Report No. 10-125) UINTAH COUNTY, UTAH

By:

Nicole Shelnut

Prepared For:

State of Utah
School and Institutional Trust Lands Administration

Prepared Under Contract With:

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

Prepared By:

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

MOAC Report No. 10-125

July 26, 2010

State of Utah Public Lands Policy Coordination Office Permit No. 117

United States Department of Interior (FLPMA)
Permit No. 10-UT-60122



Grasslands Consulting, Inc.

4800 Happy Canyon Road, Suite 110, Denver, CO 80237 (303) 759-5377 Office (303) 759-5324 Fax

SPECIAL STATUS PLANT AND WILDLIFE SPECIES REPORT

Report Number: GCI #294

Report Date: August 03, 2010

Operator: Kerr-McGee Oil & Gas Onshore LP

Well: NBU 921-25N well pad (Bores: NBU 921-25K4CS, NBU 921-25N2DS, NBU 921-

25N3AS, & NBU 921-25O4BS)

Pipeline: Associated pipeline leading to proposed well pad

Access Road: Associated road leading to proposed well pad

Location: Section 25, Township 9 South, Range 21 East; Uintah County, Utah

Survey-Species: Uinta Basin Hookless Cactus (*Sclerocactus wetlandicus*)

Survey Date: July 13, 2010

Observers: Grasslands Consulting, Inc. Biologists: Brad Snopek, Jennie Sinclair, Jonathan

Sexauer, Adrienne Cunningham, Garrett Peterson and field technicians.





Kerr-McGee Oil & Gas Onshore LP PO Box 173779 DENVER, CO 80217-3779

July 15, 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 921-25N3AS

T9S-R21E

Section 25: SESW surface and bottom hole

Surface: 1158' FSL, 2575' FWL Bottom Hole: 508' FSL, 1729' FWL

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 Directional Drilling.

- Kerr-McGee's NBU 921-25N3AS 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.

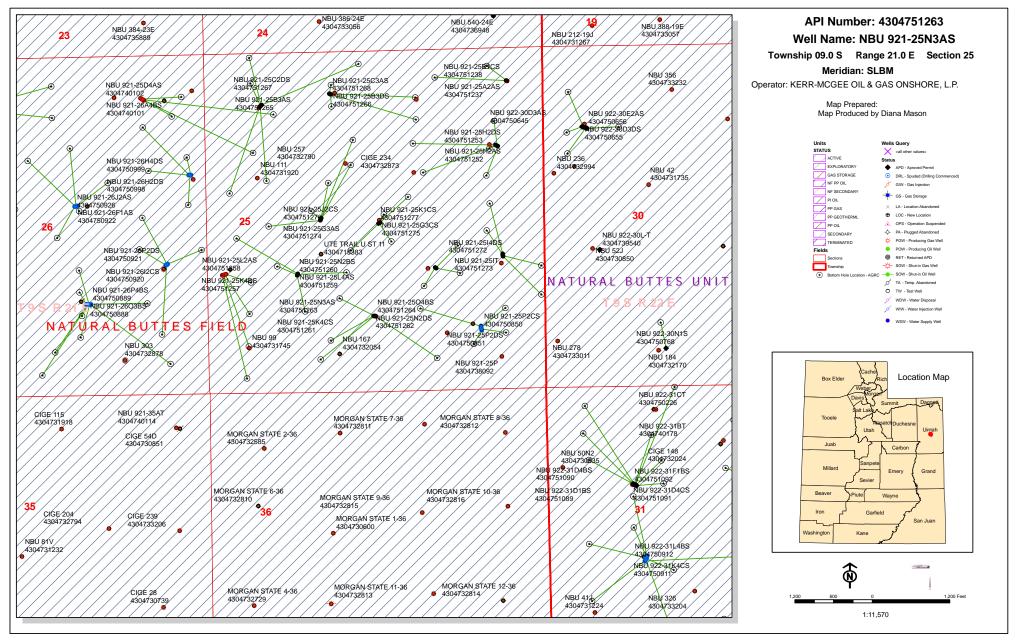
Sincerely,

KERR-MCGEE OIL & GAS ONSHORE LP

Joe Matney

Sr. Staff Landman

at Marky



From: Jim Davis

To: Bonner, Ed; Garrison, LaVonne; Hill, Brad; Mason, Diana

CC: Bartlett, Floyd; Laura.Gianakos@anadarko.com; Piernot, Danielle; Upch...

Date: 9/2/2010 9:13 AM

Subject: SITLA approval of Kerr McGee wells **Attachments:** KMG approvals and paleo 9.1.2010.xlsx

The following wells have been approved by SITLA including arch clearance. Paleo clearance is also granted with stipulations as noted.

Full Paleo monitoring: All ground-disturbing activities must be monitored by a permitted paleontologist.

```
NBU 922-29F4DS [API #4304751207] Full Monitoring IPC 10-08
 NBU 922-29G4CS [API #4304751208] Full Monitoring
                                                  IPC 10-08
 NBU 922-29J4BS [API #4304751209] Full Monitoring
                                                  IPC 10-08
 NBU 922-29K1DS [API #4304751210] Full Monitoring
                                                   IPC 10-08
 NBU 922-29G1AS [API #4304751194] Full Monitoring
                                                  IPC 10-06
 NBU 922-29G1DS [API #4304751195] Full Monitoring
                                                   IPC 10-06
 NBU 922-29G2BS [API #4304751196] Full Monitoring
                                                  IPC 10-06
 NBU 922-29G3BS [API #4304751197] Full Monitoring
                                                  IPC 10-06
NBU 921-25A3DS [API 4304751248]
                                                  IPC 10-21
                                    Full Monitoring
NBU 921-25G1CS [API 4304751249]
                                                  IPC 10-21
                                    Full Monitoring
NBU 921-25G2AS [API 4304751250]
                                                  IPC 10-21
                                    Full Monitoring
NBU 921-25H2AS [API 4304751252]
                                    Full Monitoring
                                                  IPC 10-21
NBU 921-25H2DS [API 4304751253]
                                    Full Monitoring
                                                  IPC 10-21
NBU 921-25G3AS [API 4304751274]
                                    Full Monitoring
                                                  IPC 10-23
NBU 921-25G3CS [API 4304751275]
                                                  IPC 10-23
                                    Full Monitoring
NBU 921-25J2CS [API 4304751276]
                                                  IPC 10-23
                                    Full Monitoring
NBU 921-25K1CS [API 4304751277]
                                                  IPC 10-23
                                    Full Monitoring
NBU 921-25A2AS [API 4304751237]
                                    Full Monitoring IPC 10-21
NBU 921-25B1CS [API 4304751238]
                                    Full Monitoring IPC 10-21
```

Spot Paleo Monitoring: All ground-disturbing activities must be monitored by a permitted paleontologist at the beginning of construction and thereafter spot-monitored as paleontological conditions merit.

```
Spot Monitoring IPC 10-20
NBU 921-25C1AS [API 4304751239]
NBU 921-25D1BS [API 4304751240]
                                    Spot Monitoring IPC 10-20
                                    Spot Monitoring IPC 10-20
NBU 921-25D1CS [API 4304751251]
NBU 921-25E1CS [API 4304751241]
                                    Spot Monitoring IPC 10-20
                                    Spot Monitoring IPC 10-20
NBU 921-25E3AS [API 4304751242]
NBU 921-25F1BS [API 4304751243]
                                    Spot Monitoring IPC 10-21
NBU 921-25F1CS [API 4304751244]
                                    Spot Monitoring IPC 10-21
NBU 921-25F3AS [API 4304751245]
                                    Spot Monitoring IPC 10-21
NBU 921-25F3CS [API 4304751246]
                                    Spot Monitoring IPC 10-21
NBU 921-25L1BS [API 4304751247]
                                    Spot Monitoring IPC 10-21
NBU 921-25J1DS [API 4304751256]
                                    Spot Monitoring IPC 10-23
NBU 921-25J4AS [API 4304751254]
                                    Spot Monitoring IPC 10-23
NBU 921-25J4CS [API 4304751255]
                                    Spot Monitoring IPC 10-23
NBU 921-25K4BS [API 4304751257]
                                    Spot Monitoring IPC 10-22
NBU 921-25L2AS [API 4304751258]
                                    Spot Monitoring IPC 10-22
NBU 921-25L4AS [API 4304751259]
                                    Spot Monitoring IPC 10-22
                                    Spot Monitoring IPC 10-22
NBU 921-25N2BS [API 4304751260]
NBU 921-25K4CS [API 4304751261]
                                    Spot Monitoring IPC 10-23
NBU 921-25N2DS [API 4304751262]
                                    Spot Monitoring IPC 10-23
NBU 921-25N3AS [API 4304751263]
                                    Spot Monitoring IPC 10-23
```

```
NBU 921-25O4BS [API 4304751264]
                                    Spot Monitoring IPC 10-23
                                    Spot Monitoring IPC 10-20
NBU 921-25B3AS [API 4304751265]
NBU 921-25B3DS [API 4304751266]
                                    Spot Monitoring IPC 10-20
NBU 921-25C2DS [API 4304751267]
                                    Spot Monitoring IPC 10-20
                                    Spot Monitoring IPC 10-20
NBU 921-25C3AS [API 4304751268]
NBU 921-25IT [API 4304751273]
                                    Spot Monitoring IPC 10-23
NBU 921-25H3DS [API 4304751269]
                                    Spot Monitoring IPC 10-23
NBU 921-25I2AS [API 4304751270]
                                    Spot Monitoring IPC 10-23
NBU 921-25I4AS [API 4304751271]
                                    Spot Monitoring IPC 10-23
NBU 921-25I4DS [API 4304751272]
                                    Spot Monitoring IPC 10-23
NBU 922-29A1BS [API #4304751183]
                                    Spot Monitoring IPC 10-06
 NBU 922-29A1CS [API #4304751184] Spot Monitoring IPC 10-06
 NBU 922-29A4CS [API #4304751185] Spot Monitoring IPC 10-06
 NBU 922-29H1BS [API #4304751186] Spot Monitoring IPC 10-06
 NBU 922-29B2CS [API #4304751187] Spot Monitoring IPC 10-06
 NBU 922-29B4AS [API #4304751188] Spot Monitoring IPC 10-06
                                                             (SITLA surf/ Fed Min)
 NBU 922-29C2AS [API #4304751189] Spot Monitoring IPC 10-06
                                                             (SITLA surf/ Fed Min)
 NBU 922-29C4AS [API #4304751190] Spot Monitoring IPC 10-06
 NBU 922-29B1AS [API #4304751191] Spot Monitoring IPC 10-06
 NBU 922-29B1DS [API #4304751192] Spot Monitoring IPC 10-06
 NBU 922-29B2BS [API #4304751193] Spot Monitoring IPC 10-06
 NBU 922-29D4DS [API #4304751198] Spot Monitoring IPC 10-05
 NBU 922-29E3BS [API #4304751199] Spot Monitoring IPC 10-05
 NBU 922-29F3AS [API #4304751200] Spot Monitoring IPC 10-05
 NBU 922-29F3BS [API #4304751201] Spot Monitoring IPC 10-05
 NBU 922-29G4AS [API #4304751202] Spot Monitoring IPC 10-06
 NBU 922-29H1CS [API #4304751203] Spot Monitoring IPC 10-06
 NBU 922-29H4CS [API #4304751204] Spot Monitoring IPC 10-06
 NBU 922-2911BS [API #4304751205] Spot Monitoring IPC 10-06
 NBU 922-29I1CS [API #4304751206] Spot Monitoring IPC 10-06
 NBU 922-29K2CS [API #4304751211] Spot Monitoring IPC 10-07
 NBU 922-29K4AS [API #4304751212] Spot Monitoring IPC 10-07
 NBU 922-29L1AS [API #4304751213] Spot Monitoring IPC 10-07
 NBU 922-29L2BS [API #4304751214] Spot Monitoring IPC 10-07
 NBU 922-29L2CS [API #4304751215] Spot Monitoring IPC 10-07
 NBU 922-29L3CS [API #4304751216] Spot Monitoring IPC 10-07
 NBU 922-29M2AS [API #4304751217] Spot Monitoring IPC 10-07
 NBU 922-29N2BS [API #4304751218] Spot Monitoring IPC 10-07
 NBU 922-29N3BS [API #4304751219] Spot Monitoring IPC 10-07
 NBU 922-30I4BS [API #4304751220] Spot Monitoring IPC 10-07 (SITLA surf/ Fed Min)
 NBU 922-30I4CS [API #4304751221] Spot Monitoring IPC 10-07 (SITLA surf/Fed Min)
 NBU 922-29J4CS [API #4304751222] Spot Monitoring IPC 10-08
 NBU 922-29N1BS [API #4304751223] Spot Monitoring IPC 10-08
 NBU 922-29O1CS [API #4304751224] Spot Monitoring IPC 10-08
```

That's quite a list, so I'm attaching a quick-and-dirty spreadsheet of the same data. This may be helpful to some of you.

Thanks.

-Jim

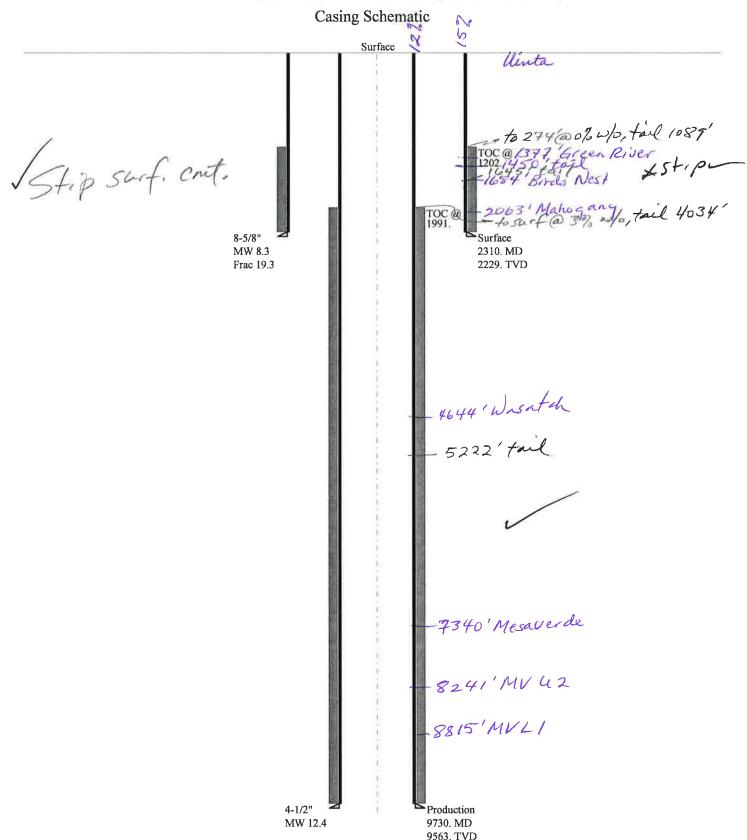
'APIWellNo:43047512630000'

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

BOPE REVIEW KERR-MCGEE OIL & GAS ONSHORE, L.P. NBU 921-25N3AS 43047512630000

| Well Name | | KERR-MCGEE C | OIL 8 | & GAS ONSH | ORI | E, L.P. NBU 921 | -25N3 | I3AS 430475128 |
|-----------------------------|------------------------|----------------|----------------|------------|----------|---------------------|-------|--|
| String | | Surf | T _P | Prod | ī | | i II. | |
| Casing Size(") | | 8.625 | 4 | 1.500 | ī | | īĪ | |
| Setting Depth (TVD) | | 2310 | 9 | 9563 | | | Ī | |
| Previous Shoe Setting Dept | th (TVD) | 40 | 2 | 2310 | | | Ĭ | |
| Max Mud Weight (ppg) | | 8.3 | 1 | 12.4 | | | Ť | |
| BOPE Proposed (psi) | | 500 | H | 5000 | | | i | ' |
| Casing Internal Yield (psi) | | 3390 | H | 7780 | | | | ' |
| Operators Max Anticipate | | 6025 | H | 12.1 | | , | | <u></u> |
| 1 | u / | 10020 | L | | ш | <u> </u> | 1 []. | <u></u> 1 |
| Calculations | Sui | rf String | | | | 8. | .625 | 5 " |
| Max BHP (psi) | | .052*Sett | ting | g Depth*N | ΛV | V= 1001 | | Ī |
| | | | | | | | | BOPE Adequate For Drilling And Setting Casing at Depth? |
| MASP (Gas) (psi) | Ma | ax BHP-(0.12 | *Se | etting Dep | oth | 1)= 724 | | NO air drill |
| MASP (Gas/Mud) (psi) | Ma | ax BHP-(0.22 | *Se | etting Dep | oth | 1)= 493 | | YES OK |
| | | | | | _ | | | *Can Full Expected Pressure Be Held At Previous Shoe? |
| Pressure At Previous Shoe | Max BHP22*(Setting I | Depth - Previo | ous | Shoe Dep | oth | i)= ₅₀₂ | | NO Reasonable depth in area |
| Required Casing/BOPE To | | | | | | 2310 | | psi |
| *Max Pressure Allowed @ | Previous Casing Shoe= | | | | | 40 | | psi *Assumes 1psi/ft frac gradient |
| Calculations | Duc | od String | | | _ | 1 | .500 | 0 " |
| Max BHP (psi) | 110 | .052*Sett | tino | n Denth*N | /\v | _ | .500 | |
| (psi) | | .032 3011 | unig | g Deptil N | /1 V | V 0166 | | BOPE Adequate For Drilling And Setting Casing at Depth? |
| MASP (Gas) (psi) | Ma | ax BHP-(0.12 | *Se | etting Der | oth | i)= ₅₀₁₈ | _ | NO NO |
| MASP (Gas/Mud) (psi) | | ax BHP-(0.22 | | | _ | - | = | YES OK |
| (Gas/Muu) (psi) | 1410 | ax BIII (0.22 | | etting Dep | , tii | 4062 | | *Can Full Expected Pressure Be Held At Previous Shoe? |
| Pressure At Previous Shoe | Max BHP- 22*(Setting I | Denth - Previo | ous | Shoe Der | oth | 1)= 4570 | _ | NO Reasonable |
| Required Casing/BOPE Te | | | | | | 5000 | = | psi |
| *Max Pressure Allowed @ | | | _ | | | 2310 | = | psi *Assumes 1psi/ft frac gradient |
| 17144 T T ESSUITE TINOWEU W | Trevious cusing snoc | | | | _ | 2310 | _ | por resources restrict trac gradient |
| Calculations | : | String | | | | | | " |
| Max BHP (psi) | | .052*Sett | ting | g Depth*N | ΛV | V= | | Ī |
| | | | | | | | | BOPE Adequate For Drilling And Setting Casing at Depth? |
| MASP (Gas) (psi) | Ma | ax BHP-(0.12° | *Se | etting Dep | oth | ı)= | | NO |
| MASP (Gas/Mud) (psi) | Ma | ax BHP-(0.22 | *Se | etting Dep | oth | 1)= | | NO |
| | | | | | | | | *Can Full Expected Pressure Be Held At Previous Shoe? |
| Pressure At Previous Shoe | | Depth - Previo | ous | Shoe Dep | oth | 1)= | | NO |
| Required Casing/BOPE To | est Pressure= | | | | | | | psi |
| *Max Pressure Allowed @ | Previous Casing Shoe= | | | | | | | psi *Assumes 1psi/ft frac gradient |
| Calculations | | String | _ | | _ | | _ | lu . |
| Max BHP (psi) | , | .052*Sett | tino | n Denth*N | /\tag{V} | V= | _ | 7 |
| (psi) | | .032 5011 | 31112 | 5 Deptil 1 | | <u> </u> | | BOPE Adequate For Drilling And Setting Casing at Depth? |
| MASP (Gas) (psi) | Ma | ax BHP-(0.12° | *Se | etting Der | oth |)= | _ | NO NO |
| MASP (Gas/Mud) (psi) | | ax BHP-(0.22° | | | _ | 1 | _ | I NO I |
| (Suovizua) (Por) | 1410 | (0.22 | | 5 20 | | <u> </u> | _ | *Can Full Expected Pressure Be Held At Previous Shoe? |
| Pressure At Previous Shoe | Max BHP22*(Setting I | Depth - Previo | ous | Shoe Der | oth | 1)= | | NO |
| Required Casing/BOPE Te | ` • | • | | 1 | | | | psi |
| *Max Pressure Allowed @ | | | | | _ | | | psi *Assumes 1psi/ft frac gradient |
| | 0 | | | | | 11. | | |

43047512630000 NBU 921-25N3AS



43047512630000 NBU 921-25N3AS Well name:

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

Surface Project ID: String type:

43-047-51263

UINTAH COUNTY Location:

Design parameters: Minimum design factors: **Environment:**

Collapse Collapse: H2S considered? No Mud weight: 8,330 ppg 1.125 Surface temperature:

74 °F Design factor Bottom hole temperature: 105 °F Design is based on evacuated pipe.

1.40 °F/100ft Temperature gradient: Minimum section length: 100 ft

Burst:

Design factor 1.00 Cement top: 1,202 ft

Burst Max anticipated surface

pressure: 2,033 psi

Internal gradient: 0.120 psi/ft Directional Info - Build & Drop Tension: Calculated BHP 8 Round STC: 1.80 (J) Kick-off point 300 ft 2,300 psi 8 Round LTC: 1.70 (J) Departure at shoe: 518 ft

1.60 (J) Maximum dogleg: No backup mud specified. Buttress: 2 °/100ft 20° Premium: 1.50 (J) Inclination at shoe:

Body yield: 1.50 (B) Re subsequent strings: Next setting depth: 9,563 ft

Next mud weight: Tension is based on air weight. 12.400 ppg Neutral point: 2,019 ft Next setting BHP: 6,160 psi Fracture mud wt: 19.250 ppg

Fracture depth: 2,310 ft Injection pressure: 2,310 psi

62.4

348

5.58 J

End True Vert Measured Est. Run Segment Nominal Drift Size Grade **Finish** Depth Depth Diameter Cost Seq Length Weight (ft) (in) (lbs/ft) (ft) (ft) (in) (\$) 1 2310 8.625 28.00 I-55 LT&C 2229 2310 7.892 91476 **Tension Tension** Run Collapse Collapse Collapse Burst Burst Burst **Tension** Load Strength Design Load Strength Design Load Strength Design Seq **Factor Factor** (kips) **Factor** (psi) (psi) (psi) (psi) (kips)

3390

1.47

2300

Phone: 801 538-5357 Date: October 7,2010 Prepared Helen Sadik-Macdonald FAX: 801-359-3940 Div of Oil, Gas & Mining Salt Lake City, Utah

Remarks:

1

965

1880

1.949

Collapse is based on a vertical depth of 2229 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 & Kernler 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

43047512630000 NBU 921-25N3AS Well name:

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

String type: Production

Project ID: 43-047-51263

UINTAH COUNTY Location:

> Minimum design factors: **Environment:**

Collapse Collapse: Mud weight: 12.400 ppg

Internal fluid density: 2.330 ppg Design factor 1.125 H2S considered? No Surface temperature: 74 °F Bottom hole temperature: 208 °F

Temperature gradient: 1.40 °F/100ft

Minimum section length: 100 ft

Burst:

Design factor 1.00 Cement top:

1,991 ft

Burst

Max anticipated surface

Design parameters:

pressure: 4,056 psi Internal gradient: 0.220 psi/ft

Calculated BHP 6,160 psi

No backup mud specified.

Tension:

8 Round STC: 1.80 (J) 1.80 (J) 8 Round LTC: 1.60 (J) Buttress:

1.50 (J) Premium: 1.60 (B) Body yield:

Tension is based on air weight. Neutral point: 7,957 ft Directional Info - Build & Drop

Kick-off point 300 ft Departure at shoe: 1065 ft 2 °/100ft Maximum dogleg:

Inclination at shoe: 0 °

| 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 | 9730 | 4.5 | 11.60 | I-80 | LT&C | 9563 | 9730 | 3.875 | 128436 |
| 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 | 5002 | 6360 | 1.271 | 6160 | `7780 | 1.26 | 110.9 | 212 | 1.91 J |

Prepared

by:

Helen Sadik-Macdonald Div of Oil, Gas & Mining

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

Date: October 7,2010 Salt Lake City, Utah

Remarks:

Collapse is based on a vertical depth of 9563 ft, a mud weight of 12.4 ppg. An internal gradient of .121 psi/ft was used for collapse from TD Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

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

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)

August 17, 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)

NBU 921-25A Pad

43-047-51237 NBU 921-25A2AS Sec 25 T09S R21E 0489 FNL 0565 FEL BHL Sec 25 T09S R21E 0252 FNL 0865 FEL

43-047-51238 NBU 921-25B1CS Sec 25 T09S R21E 0489 FNL 0575 FEL BHL Sec 25 T09S R21E 0416 FNL 1676 FEL

NBU 921-25D Pad

43-047-51239 NBU 921-25C1AS Sec 25 T09S R21E 0800 FNL 0893 FWL

BHL Sec 25 T09S R21E 0190 FNL 2405 FWL

43-047-51240 NBU 921-25D1BS Sec 25 T09S R21E 0807 FNL 0885 FWL

BHL Sec 25 T09S R21E 0060 FNL 0716 FWL

43-047-51241 NBU 921-25E1CS Sec 25 T09S R21E 0821 FNL 0871 FWL

BHL Sec 25 T09S R21E 1976 FNL 0947 FWL

43-047-51242 NBU 921-25E3AS Sec 25 T09S R21E 0828 FNL 0864 FWL

BHL Sec 25 T09S R21E 2162 FNL 0371 FWL

 $43-047-51251\ \text{NBU}\ 921-25\text{D1CS}\ \text{Sec}\ 25\ \text{T09S}\ \text{R21E}\ 0814\ \text{FNL}\ 0878\ \text{FWL}$

BHL Sec 25 T09S R21E 0460 FNL 0726 FWL

API # WELL NAME LOCATION

(Proposed PZ WASATCH-MESA VERDE)

NBU 921-25F Pad

43-047-51243 NBU 921-25F1BS Sec 25 T09S R21E 2580 FNL 1780 FWL BHL Sec 25 T09S R21E 1366 FNL 2296 FWL 43-047-51244 NBU 921-25F1CS Sec 25 T09S R21E 2571 FNL 1784 FWL BHL Sec 25 T09S R21E 1754 FNL 2259 FWL 43-047-51245 NBU 921-25F3AS Sec 25 T09S R21E 2589 FNL 1776 FWL BHL Sec 25 T09S R21E 2034 FNL 1905 FWL BHL Sec 25 T09S R21E 2034 FNL 1905 FWL BHL Sec 25 T09S R21E 2461 FNL 1628 FWL

43-047-51247 NBU 921-25L1BS Sec 25 T09S R21E 2607 FNL 1768 FWL BHL Sec 25 T09S R21E 2597 FSL 0969 FWL

NBU 921-25H Pad

43-047-51248 NBU 921-25A3DS Sec 25 T09S R21E 1498 FNL 0736 FEL BHL Sec 25 T09S R21E 1110 FNL 0776 FEL 43-047-51249 NBU 921-25G1CS Sec 25 T09S R21E 1489 FNL 0754 FEL BHL Sec 25 T09S R21E 1489 FNL 1893 FEL 43-047-51250 NBU 921-25G2AS Sec 25 T09S R21E 1484 FNL 0763 FEL BHL Sec 25 T09S R21E 1439 FNL 2042 FEL BHL Sec 25 T09S R21E 1439 FNL 2042 FEL BHL Sec 25 T09S R21E 1439 FNL 0745 FEL BHL Sec 25 T09S R21E 1538 FNL 0857 FEL BHL Sec 25 T09S R21E 1538 FNL 0857 FEL BHL Sec 25 T09S R21E 1538 FNL 0857 FEL BHL Sec 25 T09S R21E 1502 FNL 0727 FEL BHL Sec 25 T09S R21E 1958 FNL 0913 FEL

NBU 921-25J Pad

43-047-51254 NBU 921-25J4AS Sec 25 T09S R21E 1878 FSL 1725 FEL BHL Sec 25 T09S R21E 1795 FSL 1360 FEL 43-047-51255 NBU 921-25J4CS Sec 25 T09S R21E 1886 FSL 1743 FEL BHL Sec 25 T09S R21E 1604 FSL 1920 FEL 43-047-51256 NBU 921-25J1DS Sec 25 T09S R21E 1882 FSL 1734 FEL BHL Sec 25 T09S R21E 2218 FSL 1381 FEL

NBU 921-25K Pad

43-047-51257 NBU 921-25K4BS Sec 25 T09S R21E 1838 FSL 1400 FWL BHL Sec 25 T09S R21E 1848 FSL 2161 FWL 43-047-51258 NBU 921-25L2AS Sec 25 T09S R21E 1848 FSL 1402 FWL BHL Sec 25 T09S R21E 2423 FSL 0465 FWL

| API # | WE | LL NAME | | | | LOCA' | TION | | | |
|---------------|------|--------------|-------|----|------|--------------|------|---|------|-------|
| (Proposed PZ | WASA | ATCH-MESA VI | ERDE) |) | | | | | | |
| 43-047-51259 | NBU | | | | | R21E R21E | | | | |
| 43-047-51260 | NBU | | | | | R21E R21E | | | | |
| NBU 921-25N 1 | Pad | | DCC | 23 | 1035 | 1(211 | 1200 | | 1000 | T W L |
| 43-047-51261 | NBU | | | | | R21E R21E | | | | |
| 43-047-51262 | NBU | | | | | R21E R21E | | | | |
| 43-047-51263 | NBU | | | | | R21E R21E | | _ | | |
| 43-047-51264 | NBU | | | | | R21E R21E | | _ | | |
| NBU 921-25C I | Pad | | | | | | | | | |
| 43-047-51265 | NBU | | | | | R21E R21E | | | | |
| 43-047-51266 | NBU | | | | | R21E R21E | | | | |
| 43-047-51267 | NBU | | | | | R21E R21E | | | | |
| 43-047-51268 | NBU | | | | | R21E R21E | | | | |
| NBU 921-25I I | Pad | | | | | | | | | |
| 43-047-51269 | NBU | | | | | R21E R21E | | | | |
| 43-047-51270 | NBU | | | | | R21E R21E | | | | |
| 43-047-51271 | NBU | | | | | R21E R21E | | | | |
| 43-047-51272 | NBU | | | | | R21E R21E | | | | |
| 43-047-51273 | NBU | | | | | R21E R21E | | | | |

Page 4

API # WELL NAME

LOCATION

(Proposed PZ WASATCH-MESA VERDE)

NBU 921-25J2 Pad

43-047-51274 NBU 921-25G3AS Sec 25 T09S R21E 2611 FSL 2578 FEL BHL Sec 25 T09S R21E 2265 FNL 2136 FEL 43-047-51275 NBU 921-25G3CS Sec 25 T09S R21E 2606 FSL 2587 FEL BHL Sec 25 T09S R21E 2530 FNL 2518 FEL BHL Sec 25 T09S R21E 2530 FNL 2518 FEL BHL Sec 25 T09S R21E 2601 FSL 2596 FEL BHL Sec 25 T09S R21E 2310 FSL 2410 FEL BHL Sec 25 T09S R21E 2596 FSL 2410 FEL BHL Sec 25 T09S R21E 2596 FSL 2605 FEL BHL Sec 25 T09S R21E 2596 FSL 2631 FWL

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

Michael L. Coulthard

Digitally signed by Michael L. Coulthard
DN: cn-Michael L. Coulthard, o-Bureau of Land Management, ou-Branch of Minerals,
amail-Michael Coulthard; o-Bureau of Land Management, ou-Branch of Minerals,
pare-2010 Rg 17 J 145-546, no.

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

MCoulthard:mc:8-17-10

ON-SITE PREDRILL EVALUATION

Utah Division of Oil, Gas and Mining

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

Well Name NBU 921-25N3AS

API Number 43047512630000 APD No 2948 Field/Unit NATURAL BUTTES

Location: 1/4,1/4 SESW Sec 25 Tw 9.0S Rng 21.0E 1158 FSL 2575 FWL

GPS Coord (UTM) 628082 4428953 Surface Owner

Participants

Floyd Bartlett (DOGM), Sheila Wopsock, Clay Einerson, Roger Perry, Laura Gianokas, Lovel Young, Grizz Oleen, (Kerr McGee), Mitch.Batty, John Slaugh, (Timberline Engineering and Land Surveying), Ed Bonner (SITLA), Ben Williams (UDWR).

Regional/Local Setting & Topography

The general area is the Natural Buttes Unit in a major un-named drainage west of the lower portion of the Sand Wash drainage of Uintah, County, approximately 34 air miles and 42.4 road miles south of Vernal, Utah. Access is by State of Utah Highways, Uintah County and existing oilfield development roads. Topography of the 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 drainage. Individual draws or washes are ephemeral with spring runoff or flows from sometimes-intense summer rainstorms. No springs exist in the area. An occasional constructed pond occurs furnishing water for antelope or livestock.

The NBU 921-25N pad will be created by enlarging the existing pad of the NBU 921-25NT gas well. Four gas wells, to be directionally drilled, will be added. They are the NBU 921-25N2DS, 921-25N3AS, 921-25K4CS and 921-25O4BS. The existing pad will be extended in all directions. The site is oriented in a west to east direction on the north slope of a ridge which continues to the south to a ridge-top. The excess spoils from the pad will block some side-slope overland flow from the south. A shallow drainage on the north will be missed. The White River is approximately 3 1/2 miles down drainage. The selected site appears to be suitable for enlarging a pad, drilling and operating the proposed wells and is the best site in the immediate area.

Both the surface and minerals are owned by SITLA.

Surface Use Plan

Current Surface Use

Grazing Wildlfe Habitat

Existing Well Pad

New Road Miles Well Pad Src Const Material Surface Formation

0 Width 420 Length 455 Onsite UNTA

Ancillary Facilities N

Waste Management Plan Adequate?

Environmental Parameters

Affected Floodplains and/or Wetlands N

Flora / Fauna

10/13/2010 Page 1

Vegetation is a poor desert shrub type, which includes shadscale, curly mesquite, broom snakeweed and halogeton..

Antelope, sheep during the winter, rabbits, coyotes, and small mammals, birds and raptors.

Soil Type and Characteristics

Surface soils are a moderately deep rocky loam.

Erosion Issues N

Sedimentation Issues Y

Site Stability Issues N

Drainage Diverson Required? N

Berm Required? N

Erosion Sedimentation Control Required? Y

The excess spoils from the pad will block some side-slope overland flow from the south.

Paleo Survey Run? Y Paleo Potental Observed? N Cultural Survey Run? Y Cultural Resources? N

Reserve Pit

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

Characteristics / Requirements

The proposed reserve pit is 100' x 220' x 12' deep located in a cut on the southeast side of the location. Kerr McGee plans a 30-mil liner with a double felt sub-liner.

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

Other Observations / Comments

| Evaluator | Date / Time |
|----------------|-------------|
| Floyd Bartlett | 8/26/2010 |

10/13/2010 Page 2

10/13/2010

Application for Permit to Drill Statement of Basis

Utah Division of Oil, Gas and Mining

Page 1

| APD No | API WellNo | Status | Well Type | Surf Owner | CBM |
|-----------|-------------------------|----------------|--------------------------|-------------|------------|
| 2948 | 43047512630000 | LOCKED | GW | S | No |
| Operator | KERR-MCGEE OIL & GAS OF | NSHORE, L.P. | Surface Owner-APD | | |
| Well Name | NBU 921-25N3AS | | Unit | NATURAL B | UTTES |
| Field | NATURAL BUTTES | | Type of Work | DRILL | |
| Location | SESW 25 9S 21E S 11 | 58 FSL 2575 FW | L GPS Coord (UTM) | 628080E 442 | 8956N |

Geologic Statement of Basis

Kerr McGee proposes to set 2,310' 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 1,450'. A search of Division of Water Rights records shows no water wells within a 10,000 foot radius of the center of Section 25. 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. The proposed casing and cement should adequately protect any usable ground water.

Brad Hill 9/28/2010 **APD Evaluator Date / Time**

Surface Statement of Basis

The general area is the Natural Buttes Unit in a major un-named drainage west of the lower portion of the Sand Wash drainage of Uintah, County, approximately 34 air miles and 42.4 road miles south of Vernal, Utah. Access is by State of Utah Highways, Uintah County and existing oilfield development roads. Topography of the 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 drainage. Individual draws or washes are ephemeral with spring runoff or flows from sometimes-intense summer rainstorms. No springs exist in the area. An occasional constructed pond occurs furnishing water for antelope or livestock.

The NBU 921-25N pad will be created by enlarging the existing pad of the NBU 921-25NT gas well. Four gas wells, to be directionally drilled, will be added. They are the NBU 921-25N2DS, 921-25N3AS, 921-25K4CS and 921-25O4BS. The existing pad will be extended in all directions. The site is oriented in a west to east direction on the north slope of a ridge which continues to the south to a ridge-top. The excess spoils from the pad will block some side-slope overland flow from the south. A shallow drainage on the north will be missed. The White River is approximately 3 1/2 miles down drainage. The selected site appears to be suitable for enlarging a pad, drilling and operating the proposed wells and is the best site in the immediate area.

Both the surface and minerals are owned by SITLA. Ed Bonner represented SITLA at the pre-site investigation. Mr. Bonner had no concerns pertaining to this location. SITLA will provide site reclamation standards and a seed mix.

Ben Williams represented the Utah Division of Wildlife Resources. Mr. Williams stated the area is classified as crucial yearlong antelope habitat but recommended no restrictions for this species. No other wildlife will be significantly affected.

Floyd Bartlett
Onsite Evaluator

8/26/2010 **Date / Time**

'APIWellNo:43047512630000'

10/13/2010

Application for Permit to Drill Statement of Basis

Utah Division of Oil, Gas and Mining

Page 2

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: 8/13/2010 **API NO. ASSIGNED:** 43047512630000

WELL NAME: NBU 921-25N3AS

OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P. (N2995) **PHONE NUMBER:** 720 929-6156

CONTACT: Danielle Piernot

PROPOSED LOCATION: SESW 25 090S 210E **Permit Tech Review:**

> SURFACE: 1158 FSL 2575 FWL **Engineering Review:**

> **BOTTOM:** 0508 FSL 1729 FWL Geology Review:

COUNTY: UINTAH

LATITUDE: 40.00298 **LONGITUDE:** -109.49953 **UTM SURF EASTINGS: 628080.00** NORTHINGS: 4428956.00

FIELD NAME: NATURAL BUTTES

LEASE TYPE: 3 - State

PROPOSED PRODUCING FORMATION(S): WASATCH-MESA VERDE LEASE NUMBER: UO 1194 ST

SURFACE OWNER: 3 - State COALBED METHANE: NO

RECEIVED AND/OR REVIEWED: LOCATION AND SITING:

✓ PLAT R649-2-3.

Unit: NATURAL BUTTES Bond: STATE/FEE - 22013542

Potash R649-3-2. General

Oil Shale 190-5

Oil Shale 190-3 R649-3-3. Exception

Oil Shale 190-13 ✓ Drilling Unit

Board Cause No: Cause 173-14 Water Permit: Permit #43-8496

Effective Date: 12/2/1999 **RDCC Review:**

Siting: Suspends General Siting **Fee Surface Agreement**

R649-3-11. Directional Drill ✓ Intent to Commingle

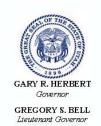
Commingling Approved

Comments: Presite Completed

3 - Commingling - ddoucet 5 - Statement of Basis - bhill Stipulations:

15 - Directional - dmason 17 - Oil Shale 190-5(b) - dmason 25 - Surface Casing - hmacdonald

API Well No: 43047512630000



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 921-25N3AS API Well Number: 43047512630000 Lease Number: UO 1194 ST

Surface Owner: STATE **Approval Date:** 10/13/2010

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.

API Well No: 43047512630000

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:

For John Rogers Associate Director, Oil & Gas

Print Form

BLM - Vernal Field Office - Notification Form

| Opei | rator <u>KERR-McGEE OIL & GA</u> | <u>\S</u> Rig Name/# <u>BUC</u> | KET RIG |
|----------------------|---|---------------------------------|----------------------------|
| Subr | nitted By ANDY LYTLE | Phone Number 720 | .929.6100 |
| | Name/Number NBU 921-25N | | |
| | Qtr SESW Section 25 | | Range 21E |
| | se Serial Number UO 1194 ST | | <u> </u> |
| API | Number <u>4304751263</u> | | |
| • | d Notice – Spud is the initial pelow a casing string. | y per operator | , 3 |
| | Date/Time <u>12/31/2010</u> | 12:00 HRS AM | РМ [] |
| <u>Casii</u> time | <u>ng</u> – Please report time cas s. | ing run starts, not c | ementing |
| 7 | Surface Casing | | RECEIVED |
| | Intermediate Casing | | JAN 03 2011 |
| | Production Casing | | DIV. OF OIL, GAS & MINING |
| | Liner | | DIV. OF OIL, GAS & WINNING |
| | Other | | |
| | Date/Time <u>01/26/2011</u> | 08:00 HRS AM | РМ |
| BOP | E | | |
| | | e casing point | |
| | BOPE test at intermediate | casing point | |
| | 30 day BOPE test | | |
| | Other | | |
| | Date/Time | AM [| РМ 🗌 |
| Rem | arks ESTIMATED DATE AND TIME. PLEA | ASE CONTACT KENNY GATHINGS | AT |
| 435.82 | 8.0986 OR LOVEL YOUNG AT 435.781.70 | 51 | · · |

Carol Daniels - RE: Conductor Spuds on the NBU 921-25N PAD

From:

"Lytle, Andrew"

To:

, "Carol Daniels", "Rachel Medina"

Date:

1/3/2011 8:05 AM

Subject: RE: Conductor Spuds on the NBU 921-25N PAD

CC:

"Beale, Ila", "Noonan, Ashley", "Gathings, Kenny"

All,

Correction. Spuds should be completed by late morning tomorrow.

Thanks.

Andy Lytle Anadarko E&P Company, LP Direct: 720-929-6100 Fax: 720-929-7100

andrew.lytle@anadarko.com

From: Lytle, Andrew

Sent: Monday, January 03, 2011 8:00 AM

'ut_vn_opreport@blm.gov'; 'Carol Daniels'; Rachel Medina

Cc: Beale, Ila; Noonan, Ashley; Gathings, Kenny

Subject:

FW: Conductor Spuds on the NBU 921-25N PAD

All,

Please see email below. This State pad was supposed to have spud late last week, however, due to rig problems will not spud until today. Spuds should finish up by late morning. We will submit actual spud paperwork upon completion of conductor spud.

Thanks. Andy

Andy Lytle Anadarko E&P Company, LP Direct: 720-929-6100 Fax: 720-929-7100

andrew.lytle@anadarko.com

RECEIVED JAN 03 2011

DIV. OF OIL, GAS & MINING

From: Gathings, Kenny

Sent: Monday, January 03, 2011 7:56 AM

To: Lytle, Andrew; Beale, Ila

Subject: Conductor Spuds

Conductor Spuds on the NBU 921-25N PAD

All, we did not get started on the NBU 921-25N PAD last week due to problems with the rig. We will start that pad today and should have it completed by early morning at the latest. Below is a list of the wells on that pad

NBU 921-25O4BS / API #43-047-51264 NBU 921-25K4CS / API #43-047-51261 NBU 921-25N3AS / API #43-047-51263 NBU 921-25N2DS / API #43-047-51262

Kenneth Gathings
Drilling Foreman
Anadarko Petroleum Corporation
1368 South 1200 East
Vernal Utah 84078
Office 435-781-7048
Cell 435-790-4138
Fax 435-781-7019

Anadarko Confidentiality Notice: This electronic transmission and any attached documents or other writings are intended only for the person or entity to which it is addressed and may contain information that is privileged, confidential or otherwise protected from disclosure. If you have received this communication in error, please immediately notify sender by return e-mail and destroy the communication. Any disclosure, copying, distribution or the taking of any action concerning the contents of this communication or any attachments by anyone other than the named recipient is strictly prohibited.

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

ENTITY ACTION FORM

Operator:

KERR McGEE OIL & GAS ONSHORE LP

Operator Account Number: N 2995

Address:

P.O. Box 173779

city DENVER

state CO

Phone Number: (720) 929-6100

Well 1

| API Number | Well | Name | QQ | Sec | Twp | Rng | 0 |
|----------------|--|----------------------|------|---------|-----|------|---|
| 4304751264 | NBU 921-2504BS | | SESW | 25 | 98 | 21E | County |
| Action Code | Current Entity Number | New Entity Number | | pud Da | | Enti | UINTAH ity Assignment ffective Date |
| Comments: MISI | 99999 | 2900 | | 1/4/201 | | 7 | 13/2011 |
| MIRU | J PETE MARTIN BUCKE D WELL I OCATION ON | TRIG. WSMI | /D | | | ·/ | 10/2011 |

zip 80217

L LOCATION ON 01/04/2011 AT 9:00 HRS.

BHL SWSE

Well 2

| API Number | Well | Name | QQ | Sec | Twp | B I | | | |
|------------------------|---------------------------------------|---------------------------------|------|----------|--|-------|------------------------------|--|--|
| 4304751261 | NBU 921-25K4CS | | | | | Rng | County | | |
| Action Code | Current Entity | | SESW | 25 | 98 | 21E | UINTAH | | |
| | Number | New Entity Number | S | pud Da | te | Entit | y Assignment fective Date | | |
| B | 99999 | 2900 | | 1/3/2011 | | | | | |
| Comments: MIRU SPUE | PETE MARTIN BUCKE WELL LOCATION ON | TRIG. WSM 01/03/2011 AT 9:00 | - | ili | NES | / | <u>13 3011</u> | | |

Well 3

| API Number | Well | lam. | | | | | | |
|---------------------------|---------------------------------------|-----------------------------------|------|----------|-----|------|-------------------------------|--|
| 4304751263 | | vame | QQ | Sec | Twp | Rng | County | |
| 4304751263 | NBU 921-25N3AS | | SESW | 25 | 98 | 21E | | |
| Action Code | Current Entity | New Page | | | | ZIE | UINTAH | |
| | Number | New Entity Number | S | pud Da | te | Enti | ty Assignment fective Date | |
| R | 99999 | 2900 | | 1/3/2011 | | | 1 1 | |
| Comments: MIRU SPUE | PETE MARTIN BUCKE WELL LOCATION ON | TRIG. WS71 01/03/2011 AT 15:00 | VD | | | SW | 3/2011 | |

ACTION CODES:

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

RECEIVED

JAN 1 0 2011

Name (Please Print) Signature REGULATORY ANALYST 1/7/2011

ANDY LYTLE

Date

(5/2000)

| | STATE OF UTAH | | | | |
|---|--|------------------------------------|--|--|--|
| | DEPARTMENT OF NATURAL RESOURCE DIVISION OF OIL, GAS, AND MIN | | 5.LEASE DESIGNATION AND SERIAL NUMBER: UO 1194 ST | | |
| | RY NOTICES AND REPORTS | | 6. IF INDIAN, ALLOTTEE OR TRIBE NAME: | | |
| | sals to drill new wells, significantly deepen ıgged wells, or to drill horizontal laterals. L | | 7.UNIT or CA AGREEMENT NAME: NATURAL BUTTES | | |
| 1. TYPE OF WELL Gas Well | | | 8. WELL NAME and NUMBER: NBU 921-25N3AS | | |
| 2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONS | HORE, L.P. | | 9. API NUMBER: 43047512630000 | | |
| 3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th S | PHO treet, Suite 600, Denver, CO, 80217 3779 | NE NUMBER: 720 929-6515 Ext | 9. FIELD and POOL or WILDCAT: NATURAL BUTTES | | |
| 4. LOCATION OF WELL FOOTAGES AT SURFACE: 1158 FSL 2575 FWL | | | COUNTY: UINTAH | | |
| QTR/QTR, SECTION, TOWNSHI Qtr/Qtr: SESW Section: 25 | Township: 09.0S Range: 21.0E Meridian: | S | STATE: UTAH | | |
| 11. CHE | CK APPROPRIATE BOXES TO INDICA | TE NATURE OF NOTICE, REPORT, | OR OTHER DATA | | |
| TYPE OF SUBMISSION | | TYPE OF ACTION | | | |
| | ☐ ACIDIZE | ☐ ALTER CASING | ☐ CASING REPAIR | | |
| NOTICE OF INTENT Approximate date work will start: | CHANGE TO PREVIOUS PLANS | CHANGE TUBING | CHANGE WELL NAME | | |
| | CHANGE WELL STATUS | COMMINGLE PRODUCING FORMATIONS | CONVERT WELL TYPE | | |
| ☐ SUBSEQUENT REPORT Date of Work Completion: | ☐ DEEPEN | ☐ FRACTURE TREAT | ☐ NEW CONSTRUCTION | | |
| | ☐ OPERATOR CHANGE | PLUG AND ABANDON | ☐ PLUG BACK | | |
| SPUD REPORT Date of Spud: | ☐ PRODUCTION START OR RESUME | RECLAMATION OF WELL SITE | ☐ RECOMPLETE DIFFERENT FORMATION | | |
| | ☐ REPERFORATE CURRENT FORMATION | SIDETRACK TO REPAIR WELL | ☐ TEMPORARY ABANDON | | |
| ✓ DRILLING REPORT | ☐ TUBING REPAIR | VENT OR FLARE | WATER DISPOSAL | | |
| Report Date: 1/19/2011 | ☐ WATER SHUTOFF | SI TA STATUS EXTENSION | APD EXTENSION | | |
| , , | | ☐ OTHER | OTHER: | | |
| 12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc. MIRU CAPSTAR 310 AIR RIG ON JANUARY 17, 2011. DRILLED 11" SURFACE HOLE TO 2610'. RAN 8 5/8" 28# IJ-55 SURFACE CSG. LEAD CEMENT W/ 20Accepted by the SX CLASS G PREM @ 11.0 PPG, 3.82 YD. TAILED CEMENT W/ 225 SX CLASS Gah Division of PREM LITE @ 15.8 PPG, 1.15 YD. DROP PLUG ON THE FLY, DISPLACED Wil, Gas and Mining 153 BBLS WATER. LOST RETURNS 135 BBLS INTO DISPLACEMENT. PLANT RECORD ON LY PLUG @ 530 PSI - FINAL LIFT 220 PSI. FLOATS HELD W/ 1 BBL BACK OR RECORD ON LY TRUCK. NO CEMENT TO SURFACE. PUMP 1" TOP OUT W/ 65 SX SAME CEMENT. CEMENT TO SURFACE. WORT. | | | | | |
| Andy Lytle | 720 929-6100 | TITLE Regulatory Analyst | | | |
| SIGNATURE N/A | | DATE 1/20/2011 | | | |

BLM - Vernal Field Office - Notification Form

| Operator <u>KERR MCGEE</u> Rig Name/ | # <u>H&P 311</u> |
|---|------------------------------|
| Submitted By PAT CAIN Phone Number | er 435-790-1884 |
| Well Name/Number NBU 921-25N3AS | |
| Qtr/Qtr SE/SW Section 25 Town | nship 9S Range 21F |
| Lease Serial Number <u>UO 1194 ST</u> | p <u></u> |
| API Number43-047-51263 | |
| 711 Trainber 15 0 17 51205 | |
| Spud Notice – Spud is the initial spuddir | na of the well, not drilling |
| out below a casing string. | ig or and many mor arming |
| out below a casing ourng. | |
| Date/Time | AM PM |
| | |
| Casing – Please report time casing run s | starts, not cementing |
| times. | |
| Surface Casing | |
| Intermediate Casing | |
| Production Casing | RECEIVED |
| Liner | |
| Other | MAR 0 7 2011 |
| Other | DIV. OF OIL, GAS & MINING |
| Date/Time AM PM | |
| | |
| BOPE | |
| Initial BOPE test at surface casing | noint |
| | |
| BOPE test at intermediate casing p | OITIC |
| 30 day BOPE test | |
| Other | |
| Data /Time 2 /F /2011 | |
| Date/Time <u>3/5/2011</u> <u>03:00</u> | AM PM 🖂 |
| | |
| Remarks | |
| | |

BLM - Vernal Field Office - Notification Form

| Operator <u>KERR MCGEE</u> Rig Na | me/# <u>H&P 311</u> |
|---|---------------------------------|
| Submitted By PAT CAIN Phone Nu | |
| Well Name/Number NBU 921-25N3 | |
| Qtr/Qtr <u>SE/SW</u> Section <u>25</u> T | |
| Lease Serial Number <u>UO 1194 ST</u> | |
| API Number 43-047-51263 | |
| 7.1 1 1 1 1 1 1 1 1 2 1 2 1 2 1 2 1 2 1 2 | |
| Spud Notice – Spud is the initial spu | ddina of the well, not drilling |
| out below a casing string. | |
| 3 | |
| Date/Time | AM 🗌 PM 🗌 |
| | |
| Casing - Please report time casing r | un starts, not cementing |
| times. | |
| Surface Casing | |
| Intermediate Casing | RECEIVED |
| Production Casing | MAR 1 4 2011 |
| Liner | DIV. OF OIL, GAS & MINING |
| Other | <u></u> |
| | |
| Date/Time <u>3/12/2011</u> | <u>1:00</u> AM ☐ PM ⊠ |
| | |
| <u>BOPE</u> | |
| Initial BOPE test at surface casing point | |
| BOPE test at intermediate casir | ng point |
| 30 day BOPE test | |
| Other | |
| | |
| Date/Time AM | PM |
| | |
| Remarks | |
| | |

API Well No: 43047512630000

| | STATE OF UTAH | | FORM 9 | | | | | | |
|--|---|--------------------------------|--|--|--|--|--|--|--|
| | DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING | 3 | 5.LEASE DESIGNATION AND SERIAL NUMBER: UO 1194 ST | | | | | | |
| SUNDF | RY NOTICES AND REPORTS ON | I WELLS | 6. IF INDIAN, ALLOTTEE OR TRIBE NAME: | | | | | | |
| | sals to drill new wells, significantly deepen exist gged wells, or to drill horizontal laterals. Use A | | 7.UNIT or CA AGREEMENT NAME: NATURAL BUTTES | | | | | | |
| 1. TYPE OF WELL Gas Well | | | 8. WELL NAME and NUMBER: NBU 921-25N3AS | | | | | | |
| 2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONS | HORE, L.P. | | 9. API NUMBER: 43047512630000 | | | | | | |
| 3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th S | PHONE N treet, Suite 600, Denver, CO, 80217 3779 | UMBER: 720 929-6515 Ext | 9. FIELD and POOL or WILDCAT: NATURAL BUTTES | | | | | | |
| 4. LOCATION OF WELL FOOTAGES AT SURFACE: 1158 FSL 2575 FWL | | | COUNTY: UINTAH | | | | | | |
| QTR/QTR, SECTION, TOWNSHI Qtr/Qtr: SESW Section: 25 | P, RANGE, MERIDIAN: Township: 09.0S Range: 21.0E Meridian: S | | STATE: UTAH | | | | | | |
| 11. CHE | CK APPROPRIATE BOXES TO INDICATE N | ATURE OF NOTICE, REPORT, | OR OTHER DATA | | | | | | |
| TYPE OF SUBMISSION | | TYPE OF ACTION | | | | | | | |
| | ACIDIZE | ALTER CASING | CASING REPAIR | | | | | | |
| NOTICE OF INTENT | ☐ CHANGE TO PREVIOUS PLANS | CHANGE TUBING | ☐ CHANGE WELL NAME | | | | | | |
| Approximate date work will start: | ☐ CHANGE WELL STATUS | COMMINGLE PRODUCING FORMATIONS | CONVERT WELL TYPE | | | | | | |
| SUBSEQUENT REPORT Date of Work Completion: | DEEPEN | FRACTURE TREAT | ☐ NEW CONSTRUCTION | | | | | | |
| 3/13/2011 | ☐ OPERATOR CHANGE | PLUG AND ABANDON | ☐ PLUG BACK | | | | | | |
| | ☐ PRODUCTION START OR RESUME ☐ | RECLAMATION OF WELL SITE | RECOMPLETE DIFFERENT FORMATION | | | | | | |
| SPUD REPORT Date of Spud: | | SIDETRACK TO REPAIR WELL | ☐ TEMPORARY ABANDON | | | | | | |
| | | VENT OR FLARE | WATER DISPOSAL | | | | | | |
| DRILLING REPORT | | SI TA STATUS EXTENSION | APD EXTENSION | | | | | | |
| Report Date: | | | | | | | | | |
| | | | <u></u> | | | | | | |
| 12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc. FINISHED DRILLING FROM 2610' TO 9730' ON MARCH 11, 2011. RAN 4 ½" 11.6 # I-80 PRODUCTION CSG. PUMP 40 BBLS SPACER, LEAD CEMENT W/ 535 SX CLASS G ECONOCEM @ 12.7 PPG, 1.89 YD. TAILED CEMENT W/ 1120 SX CLASS G 50/50 POZ MIX @ 14.3 PPG, 1.25 YD. DISPLACED W/ 151 BBLS WATER TREATED W/ BIOCIDE & CLAY INHIBITOR. BUMPED PLUG @ 2564 PSI, PRESSURED UP CSG TO 3224 PSI & HELD FOR 5 MIN. RELEASED PRESSURE;FLOATS FLOWED PENCIL STREAM; REPRESSURED UP TO 3835 PSI & FLOATS DID'T HOLD. STILL A PENCIL STREAM, FLOWED BACK 2.00 BBL PRESSURE UP TO 3320 PSI & SHUT CEMENT HEAD IN. EST TOC TAIL @ 4200', LEAD @ 900'. HAD 100% RETURNS UNTIL THE LAST 25 BBLS - THEN HAD 25% RETURNS; LOST ALL RETURNS THE FINAL 18 BBLS. +/- 20 BBLS SPACER TO SURFACE. RD CEMENTERS AND CLEANED PITS. RELEASED H&P RIG #311 ON 3/13/11 @ 11:30 HRS.THE PIT ON THIS LOCATION WILL BE REFURBISHED AND UTILIZED AS PART OF THE ACTS SYSTEM. | | | | | | | | | |
| NAME (PLEASE PRINT) Andy Lytle | PHONE NUMBER 720 929-6100 | TITLE Regulatory Analyst | | | | | | | |
| SIGNATURE | | DATE 3/14/2011 | | | | | | | |



The Utah Division of Oil, Gas, and Mining

- State of Utah
- Department of Natural Resources

Electronic Permitting System - Sundry Notices

Sundry Conditions of Approval Well Number 43047512630000

A synthetic liner with a minimum thickness of 30 mils with a felt subliner shall be properly installed and maintained in the pit.

Sundry Number: 14993 API Well Number: 43047512630000

| | | | FORM O |
|--|---|--|---|
| | STATE OF UTAH | | FORM 9 |
| | DEPARTMENT OF NATURAL RESOURCE DIVISION OF OIL, GAS, AND MIN | | 5.LEASE DESIGNATION AND SERIAL NUMBER: UO 1194 ST |
| SUNDF | RY NOTICES AND REPORTS | ON WELLS | 6. IF INDIAN, ALLOTTEE OR TRIBE NAME: |
| | sals to drill new wells, significantly deepen igged wells, or to drill horizontal laterals. U | | 7.UNIT or CA AGREEMENT NAME: NATURAL BUTTES |
| 1. TYPE OF WELL Gas Well | | 8. WELL NAME and NUMBER: NBU 921-25N3AS | |
| 2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONS | | 9. API NUMBER: 43047512630000 | |
| 3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th S | PHOI treet, Suite 600, Denver, CO, 80217 3779 | NE NUMBER: 720 929-6515 Ext | 9. FIELD and POOL or WILDCAT: NATURAL BUTTES |
| 4. LOCATION OF WELL FOOTAGES AT SURFACE: 1158 FSL 2575 FWL | | COUNTY: UINTAH | |
| QTR/QTR, SECTION, TOWNSHI Qtr/Qtr: SESW Section: 25 | (P, RANGE, MERIDIAN: Township: 09.0S Range: 21.0E Meridian: S | 5 | STATE: UTAH |
| 11. CHE | CK APPROPRIATE BOXES TO INDICAT | E NATURE OF NOTICE, REPORT, | OR OTHER DATA |
| TYPE OF SUBMISSION | | TYPE OF ACTION | |
| | ACIDIZE | ☐ ALTER CASING | CASING REPAIR |
| ☐ NOTICE OF INTENT | ☐ CHANGE TO PREVIOUS PLANS | ☐ CHANGE TUBING | ☐ CHANGE WELL NAME |
| Approximate date work will start: | ☐ CHANGE WELL STATUS | ☐ COMMINGLE PRODUCING FORMATIONS | CONVERT WELL TYPE |
| ☐ SUBSEQUENT REPORT | DEEPEN | FRACTURE TREAT | □ NEW CONSTRUCTION |
| Date of Work Completion: | OPERATOR CHANGE | ☐ PLUG AND ABANDON | □ PLUG BACK |
| | | | |
| SPUD REPORT Date of Spud: | ✓ PRODUCTION START OR RESUME | RECLAMATION OF WELL SITE | ☐ RECOMPLETE DIFFERENT FORMATION |
| | ☐ REPERFORATE CURRENT FORMATION | SIDETRACK TO REPAIR WELL | ☐ TEMPORARY ABANDON |
| ✓ DRILLING REPORT | TUBING REPAIR | | WATER DISPOSAL |
| Report Date: | ☐ WATER SHUTOFF | ☐ SI TA STATUS EXTENSION | APD EXTENSION |
| 5/9/2011 | ☐ WILDCAT WELL DETERMINATION | OTHER | OTHER: |
| THE SUBJECT WELL | MPLETED OPERATIONS. Clearly show all peri WAS PLACED ON PRODUCTION ONOLOGICAL WELL HISTORY W THE WELL COMPLETION REF | N ON 05/09/2011 AT 1:45 VILL BE SUBMITTED WITH PORT. Oil FOR | |
| NAME (PLEASE PRINT) Sheila Wopsock | PHONE NUMBER 435 781-7024 | TITLE Regulatory Analyst | |
| SIGNATURE N/A | | DATE 5/10/2011 | |

STATE OF UTAH AMENDED REPORT FORM 8 **DEPARTMENT OF NATURAL RESOURCES** (highlight changes) DIVISION OF OIL, GAS AND MINING 5. LEASE DESIGNATION AND SERIAL NUMBER: UO 1194 ST 6. IF INDIAN, ALLOTTEE OR TRIBE NAME WELL COMPLETION OR RECOMPLETION REPORT AND LOG 1a. TYPE OF WELL: 7. UNIT or CA AGREEMENT NAME OIL GAS WELL DRY OTHER UTU63047A b. TYPE OF WORK: 8. WELL NAME and NUMBER: DIFF. RESVR. WELL Z RE-ENTRY NBU 921-25N3AS OTHER 2. NAME OF OPERATOR: 9. API NUMBER: KERR MCGEE OIL & GAS ONSHORE, L.P. 4304751263 3. ADDRESS OF OPERATOR: PHONE NUMBER: 10 FIELD AND POOL, OR WILDCAT STATE CO ZIP 80217 P.O.BOX 173779 CITY DENVER (720) 929-6100 NATURAL BUTTES 4. LOCATION OF WELL (FOOTAGES) BHL reviewed by HSM 11. QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: AT SURFACE: SESW 1158 FSL 2575 FWL S25, T9S, R21E SESW 25 9S 21E S AT TOP PRODUCING INTERVAL REPORTED BELOW: SESW 523 FSL 1718 FWL S25, T9S, R21E 12. COUNTY 13. STATE AT TOTAL DEPTH: SESW 49% FSL 1721 FWL S25, T9S, R21E **UTAH** UINTAH 14. DATE SPUDDED: 15. DATE T.D. REACHED: 16. DATE COMPLETED: 17. ELEVATIONS (DF, RKB, RT, GL): ABANDONED READY TO PRODUCE V 1/3/2011 3/11/2011 5/9/2011 4955 GL 18. TOTAL DEPTH: MD 9.730 19. PLUG BACK T.D.: MD 9,674 21. DEPTH BRIDGE 20. IF MULTIPLE COMPLETIONS, HOW MANY? PLUG SET: TVD 9,582 TVD 9,526 TVD 22. TYPE ELECTRIC AND OTHER MECHANICAL LOGS RUN (Submit copy of each) WAS WELL CORED? NO 🔽 YES (Submit analysis) ACBL-RMT-CHI TRIPLE COMBO WAS DST RUN? NO 🗸 YES [(Submit report) DIRECTIONAL SURVEY? NO YES 🗸 (Submit copy) 24. CASING AND LINER RECORD (Report all strings set in well) STAGE CEMENTER CEMENT TYPE & SLURRY HOLE SIZE SIZE/GRADE WEIGHT (#/ft.) TOP (MD) BOTTOM (MD) CEMENT TOP ** AMOUNT PULLED DEPTH NO. OF SACKS VOLUME (BBL) 20" STL 36.7# 40 28 28# 8 5/8" **IJ-55** 2,602 490 0 7/8" 4 1/2" **I-80** 11.6# 9,716 970 1.655 25. TUBING RECORD SIZE DEPTH SET (MD) PACKER SET (MD) SIZE DEPTH SET (MD) PACKER SET (MD) PACKER SET (MD) SIZE DEPTH SET (MD) 2 3/8" 9.041 26. PRODUCING INTERVALS 27. PERFORATION RECORD FORMATION NAME TOP (MD) BOTTOM (MD) BOTTOM (TVD) TOP (TVD) INTERVAL (Top/Bot - MD) SIZE NO. HOLES PERFORATION STATUS 7,460 (A) WASATCH 7,458 7,458 7 7,460 0.36 6 Open Saueezed **MESAVERDE** (B) 7.524 9.514 7.524 9.514 0.36 210 Open Squeezed (C) Open Squeezed (D) queezed 28. ACID, FRACTURE, TREATMENT, CEMENT SQUEEZE, ETC. 1 6 2011 DEPTH INTERVAL AMOUNT AND TYPE OF MATERIAL 7458 - 9514 PUMP 13,107 BBLS SLICK H2O & 284,220 LBS SAND DIV. OF OIL, GAS & MINING 29. ENCLOSED ATTACHMENTS: 30. WELL STATUS: ELECTRICAL/MECHANICAL LOGS GEOLOGIC REPORT ✓ DIRECTIONAL SURVEY DST REPORT PROD SUNDRY NOTICE FOR PLUGGING AND CEMENT VERIFICATION **CORE ANALYSIS** OTHER:

| 31. INITIAL PRO | DDUCTION | | | | | INT | ERVAL A (As sho | wn in item #26) | | | | | | |
|--|--------------------------------|---|-----------------|--------------|--------------------------|--------------|--------------------------|------------------------------|----------|-------------|---------------------|------------------|---------------|--------------------------|
| DATE FIRST PR 5/9/2011 | | 1 | DATE: 0/2011 | 1 | | HOURS TESTED | | TEST PRODUCTION RATES: → | NC | OIL – BBL: | GAS - MCF: 3,043 | WATER - E | | PROD. METHOD: FLOWING |
| сноке size: 22/64 | TBG. PRES | | RESS. 357 | API GR | AVITY | BTU - GAS | GAS/OIL RATIO | 24 HR PRODUCTION RATES: → | ON | OIL – BBL: | GAS - MCF: 3,043 | WATER - E 390 | | INTERVAL STATUS |
| | | | | | | int | ERVAL B (As sho | wn in item #26) | | | | | | |
| DATE FIRST PR | ATE FIRST PRODUCED: TEST DATE: | | | HOURS TESTED | TEST PRODUCTION RATES: → | | OIL – BBL: | GAS - MCF: | WATER E | BL: | PROD. METHOD: | | | |
| CHOKE SIZE: | TBG. PRES | ss. Csg. | PRESS. | API GR | AVITY | BTU – GAS | GAS/OIL RATIO | 24 HR PRODUCTION RATES: → | | OIL BBL: | GAS MCF: | WATER - E | BBL: | INTERVAL STATUS |
| | | | | | | INT | ERVAL C (As sho | wn in item #26) | | <u> </u> | | | | |
| DATE FIRST PR | ODUCED: | TEST | DATE: | HOURS TESTE | | |); | TEST PRODUCTION RATES: → | ON | OIL – BBL: | GAS - MCF: | WATER E | BL: | PROD. METHOD: |
| CHOKE SIZE: | TBG. PRES | ss. csg. | PRESS. | API GR | AVITY | BTU – GAS | GAS/OIL RATIO | 24 HR PRODUCTION RATES: → | | OIL BBL: | GAS MCF: | WATER - BBL: | | INTERVAL STATU |
| | | | | | ***** | INT | ERVAL D (As sho | wn in item #26) | | I | | | | . |
| DATE FIRST PR | ODUCED: | TEST | TEST DATE: | | v (• • . | HOURS TESTED | TEST PRODUCTION RATES: → | ON | OIL BBL: | GAS MCF: | WATER - E | BBL: | PROD. METHOD: | |
| CHOKE SIZE: | TBG. PRES | ss. csg. | PRESS. | API GR | AVITY | BTU - GAS | GAS/OIL RATIO | 24 HR PRODUCTION RATES: → | ON | OIL BBL: | GAS - MCF: | WATER - BBL: | | INTERVAL STATU |
| 32. DISPOSITIO | ON OF GAS (| Soid, Used fo | r Fuel, Ve | nted, Etc | .) | | | | | <u> </u> | | | | |
| 33. SUMMARY | OF POROUS | ZONES (Inc | ude Aqui | fers): | | | | | 34 | . FORMATION | (Log) MARKERS: | | | |
| Show all importa tested, cushion u | | | | | | | n tests, including de | epth interval | | | | | | |
| Formation | on | Top (MD) | | ottom MD) | | Descrip | tions, Contents, etc | . | | | Name | | (1 | Top Measured Depth) |
| GREEN R BIRD'S NE MAHOGA WASATCH MESAVER | EST NY - | 1,418 1,796 2,129 4,809 7,509 | | 509 730 | TD | | | | | | | | | |

35. ADDITIONAL REMARKS (Include plugging procedure)

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

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

NAME (PLEASE PRINT) ANDREW LYTLE

TITLE REGULATORY ANALYST

IGNATURE A

DATE 6/6/2011

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 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

JUN 16 2011

RECEIVED

DIV. OF OIL, GAS & MINING

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

Operation Summary Report

| Well: NBU 921-25N3AS YELLOW | Spud Conductor: 1/3/2011 | Spud Date: 1/17/2011 |
|-----------------------------|--------------------------|---|
| Project: UTAH-UINTAH | Site: NBU 921-25N PAD | Rig Name No: H&P 311/311, CAPSTAR 310/310 |
| Event: DRILLING | Start Date: 1/2/2011 | End Date: 1/19/2011 |

| ctive Datum: I evel) | | | | | | | |
|-------------------------|-------------------|------------------|---------|---------|-------------|------|---|
| Date | Time Start-End | Duration (hr) | Phase | Code | Sub Code | P/U | MD From Operation (ft) |
| 1/17/2011 | 5:00 - 7:00 | 2.00 | DRLPRO | 01 | Е | Р | RIG DOWN |
| | 7:00 - 10:30 | 3.50 | DRLPRO | 01 | С | Р | SKID RIG TO NBU 921-25N3AS WELL 3/4 |
| | 10:30 - 12:30 | 2.00 | DRLPRO | 14 | Α | Р | WELD ON CONDUCTOR AND RIG UP FLOW LINE |
| | 12:30 - 14:00 | 1.50 | DRLPRO | 09 | Α | P | SLIP AND CUT 75' DRILL LINE |
| | 14:00 - 14:30 | 0.50 | DRLPRO | 06 | Α | Р | PICK UP MUD MOTOR AND BIT |
| | 14:30 - 16:30 | 2.00 | DRLPRO | 02 | С | P | DRILL F/ 40' - 223' SPUD WELL |
| | 16:30 - 18:30 | 2.00 | DRLPRO | 06 | Α | P | TOOH INSTALL DIRECTIONAL TOOLS AND ORIENT MWD TO MUD MOTOR TIH |
| | 18:30 - 0:00 | 5.50 | DRLPRO | 02 | С | P | DRILL F/ 223' - 1048' AVE ROP 150' FT HR NO LOSSES WOB 18-22 ROT 45-65 DHR 96 GPM 600 LAST SURVEY 13.88 DEG 237.29 AZI |
| 1/18/2011 | 0:00 - 1:00 | 1.00 | DRLSUR | 02 | С | P | DRILL F/ 1048' - 1206' AVE ROP 158 FT HR WOB 18-22 ROT 55-65 DHR 96 GPM 600 OBP 1250 OFBP 975 NO LOSSES LAST SURVEY 14.63 DEG 236.66 AZI |
| | 1:00 - 2:30 | 1.50 | DRLSUR | 80 | В | Z | CHANGE OUT HYDRAULOC HOSE IN DERRICK |
| | 2:30 - 3:00 | 0.50 | DRLSUR | 02 | D | Р | DRILL F/ 1206' - 1249' WOB 18-22 ROT 55-65 DH 96 GPM 600 OBP 1250 OFBP 975 NO LOSSES LAST SURVEY 14.63 DEG 236.66 AZI |
| | 3:00 - 4:00 | 1.00 | DRLSUR | 80 | В | Z | TOOH TO 600' & CIRC. |
| | 4:00 - 9:30 | 5.50 | DRLSUR | 80 | В | Z | REPAIR HYDRAULIC STANDPIPE IN DERRICK |
| | 9:30 - 10:00 | 0.50 | DRLSUR | 80 | В | Z | TIH |
| | 10:00 - 13:30 | 3.50 | DRLSUR | 02 | D | Р | DIR DRLG 11" SURFACE HOLE F/ 1249'-1554' // ROP= 87 FPH // WOB=18-22K // SPP=1300/1050 / NO LOSSES // LAST SURVEY @1431'=16.56 DEG 234.16 AZ |
| | 13:30 - 14:00 | 0.50 | DRLSUR | 07 | Α | Р | SERVICE RIG & EQUIPMENT |
| | 14:00 - 18:00 | 4.00 | DRLSUR | 02 | D | Р | DIR DRLG 11" SURFACE HOLE F/ 1554'-1980' // ROP= 106 FPH // WOB=18-22K // SPP=1300/1050 NO LOSSES // LAST SURVEY @1905'=18.38 DEG-236.29 AZ |
| | 18:00 - 0:00 | 6.00 | DRLSUR | 02 | D | P | DIR DRLG 11" SURFACE HOLE F/ 1980'-2503' // ROP=87 FPH // WOB=18-22K // SPP=1300/1050 SOME SEEPAGE 90-95% RETURNS// LAST SURVEY @2379'-17.0 DEG-234.04 AZ |
| 1/19/2011 | - | | RDMO | | | | CONDUCTOR CASING: Cond. Depth set: 40 Cement sx used: 28 |
| | | | | | | | SPUD DATE/TIME: 1/19/2011 14:30 |
| | | | | | | | SURFACE HOLE: Surface From depth: 40 Surface To depth: 2,610 Total SURFACE hours: 24.00 |
| | | | RE | ECE | VEC |) | Surface Casing size: 8 5/8 # of casing joints ran: 58 Casing set MD: 2,585.0 |
| | | | | JN 18 | 2011 | | # sx of cement: 200/225/65 Cement blend (ppg:) 11.0/15.8/15.8 |
| | | | DIV. OF | OIL, GA | S & M!I | VING | Cement yield (ft3/sk): 3.82/1.15/1.15 # of bbls to surface: 0 Describe cement issues: LOST RETURNS 135 BBL'S INTO DISP. |

| Well: NBU 921 | -25N3AS | YELLOW | | Spud Co | nductor | 1/3/201 | 1 | Spud Date: 1/17/2011 | | | | |
|--|---------|------------|------------------|-----------|--|-------------|-----|---|--|--|--|--|
| Project: UTAH | -UINTAH | | | Site: NB | J 921-2 | 5N PAD | | Rig Name No: H&P 311/311, CAPSTAR 310/310 | | | | |
| Event: DRILLING Start Da | | | | Start Dat | e: 1/2/2 | 011 | | End Date: 1/19/2011 | | | | |
| Active Datum: RKB @4,980.00ft (above Mean Sea Level) | | | | | UWI: SE/SW/0/9/S/21/E/25/0/0/26/PM/S/1158/W/0/2575/0/0 | | | | | | | |
| Date | Start | me -End | Duration (hr) | Phase | Code | Sub Code | P/U | MD From Operation (ft) | | | | |
| | 0:00 - | | 1.50 | DRLSUR | 02 | D | P | DIR DRLG 11" SURFACE HOLE F/ 2503'-2610' // ROP=71 FPH // WOB=18-22K // SPP=1300/1050 // SOME SEEPAGE 90-95% RETURNS// LAST SURVEY @ 2550= 16.85 DEG- 233.48 AZ // 87% ROTATE- 13% SLIDE | | | | |
| | 1:30 - | | 0.50 | DRLSUR | 05 | Α | Р | CIRC & COND HOLE FOR 8.625" CSG | | | | |
| | 2:00 - | | 6.00 | DRLSUR | 06 | Α | P | LAY DN DRILL STRING & DIR. TOOLS | | | | |
| | 8:00 - | | 3.50 | CSG | 12 | С | Р | PJSM // RUN 58 JT'S, 8.625", 28#, J-55, LT&C CSG // FLOAT SHOE SET @ 2585', BAFFLE @ 2538' | | | | |
| | 11:30 - | | 0.50 | CSG | 05 | Α | Р | CIRC 8.625" CSG @ 2585' | | | | |
| | 12:00 - | | 2.00 | CSG | 12 | E | Р | PJSM // TEST LINES to 2500 psi // PUMP 25 BBL'S SPACER // LEAD= 200 SX CLASS G (YIELD=3.82 CUFT/SK, WT= 11.0 PPG) // TAIL=225 SX CLASS G +2% CACL2 +25#/SK SUPERFLAKE (YIELD= 1.15 CUFT/SK, WT= 15.8 PPG) // DROP PLUG & DISPLACE W/ 153 BBL,S WATER (LOST RETURNS 135 BBL'S INTO DISP) // PLUG DN @ 13:40 1/19/2011 // BUMP PLUG @ 530 PSI // FINAL LIFT= 220 PSI // CHECK FLOATS- HELD W/ 1 BBL BACK TO TRUCK // NO CMT TO SURFACE | | | | |
| | 14:00 - | | 0.50 | CSG | 14 | Α | Р | CUT OFF CONDUCTOR & HANG 8-5/8" CSG | | | | |
| | 14:30 - | 15:00 | 0.50 | CSG | 12 | E | P | PUMP 1" TOP OUT W/ 65 SX CLASS G +2% CACL +25#/SK SUPERFLAKE (YIELD= 1.15 CUFT/SK, WT= 15.8 PPG) CMT TO SURFACE | | | | |
| | 15:00 - | 16:00 | 1.00 | RDMO | 01 | Е | Р | RIG DN & PREP RIG TO SKID // RELEASE RIG @ 16:00 1/19/2011 | | | | |
| 3/5/2011 | 10:30 - | | 2.00 | MIRU | 01 | С | Ρ | SKIDDED RIG FROM NBU 921-25N2DS. VERIFIE THAT RIG WAS CENTERED OVER THE HOLE. | | | | |
| | 12:30 - | | 2.00 | PRPSPD | 14 | Α | Р | NU BOPE | | | | |
| | 14:30 - | · 18:30 | 4.00 | PRPSPD | 15 | A | P | TESTED BOPE. PRESSURE TEST PIPE RAMS, BLIND RAMS, IBOP, FLOOR VALVE, KILL LINE, & KILL LINE VALVES, BOP WING VALVES, HCR VALVE, CHOKE LINE INNER & OUTER CHOKE | | | | |

Ρ

Ρ

RECEIVED

TAGGED CEMENT AT 2485'. WASHED THRU AND TAGGED BAFFLE PLATE AT 2547'. DRILLED

DRILLED 2626'-2735', 109' IN 1 HOUR, 109 FPH.

VALVES, & MANIFOLD 250 PSI LOW/ 5 MINUTES, 5K HIGH FOR 10 MINUTES, TEST ANNULAR 250 LOW/5 MINUTES, 2500 HIGH/10 MINUTES, TEST SUPER CHOKE. FUNCTION TEST CLOSING UNIT.

TESTED SURFACE CASING TO 1500 PSI FOR 30

MADE UP HUGHES Q506F, SERIAL #7128320 WITH 6-15S ON TO A SDI .23 REV/GAL, 1.5 DEGREE BEND, 7:8 LOBE, 5.0, 6.5" MUD MOTOR. PICKED UP/MADE UP DIRECTIONAL TOOLS, INSTALLED AND TESTED E-FIELD TOOL.

INSTALLED NEW 8" WEAR BUSHING.

SCRIBED MUD MOTOR.

TRIPPED IN THE HOLE.

SHOE TRACK AND SHOE.

MINUTES.

JUN 16 2011

DIV. OF OIL, GAS & MINING

18:30 - 19:00

19:00 - 19:30

19:30 - 21:00

21:00 - 22:00

22:00 - 23:00

23:00 - 0:00

0.50

0.50

1.50

1.00

1.00

1.00

PRPSPD

PRPSPD

DRLPRO

DRLPRO

DRLPRO

DRLPRO

15

14

06

06

02

02

В

F

D

| Well: NBU 921 | 1-25N3AS YELLOV | / | Spud Co | onductor | : 1/3/201 | 11 | Spud Date: 1/17/2011 |
|-------------------------|-------------------------------|---------------|----------|-----------|-------------|-----------|--|
| Project: UTAH | -UINTAH | | Site: NB | U 921-2 | 5N PAD | | Rig Name No: H&P 311/311, CAPSTAR 310/310 |
| Event: DRILLI | NG | | Start Da | te: 1/2/2 | 011 | | End Date: 1/19/2011 |
| Active Datum: _evel) | RKB @4,980.00ft (| above Mear | Sea | | E/SW/0 | /9/S/21/E | E/25/0/0/26/PM/S/1158/W/0/2575/0/0 |
| Date | Time Start-End | Duration (hr) | Phase | Code | Sub Code | P/U | MD From Operation (ft) |
| 3/6/2011 | 0:00 - 6:00 | 6.00 | DRLPRO | 02 | D | P | DRILLED 2735'-3270', 535' IN 6 HRS, 89.2 FPH. MADE 14 SLIDES OR AT LEAST 1 SLIDE EVERY STD. SLIDE A TOTAL OF 199' IN 1.75 HRS. WOB WAS 18-20K, PUMP #1 AT 110 SPM, 495 GPM, MOTOR TURNING AT 114 RPM WITH TOP DRIVE AT 45 RPM FOR A TOTAL OF 159 RPM AT THE BIT. DIFFERENTIAL PRESSURE WAS 350-500 PSI. ON/OFF BOTTOM PUMP PRESSURE WAS 1500/1200 PSI. ON/OFF BOTTOM TORQUE WAS 4/4K. PU/SO/ROT WAS 114/91/100. CIRCULATING THE RESERVE PIT. |
| | 6:00 - 17:30 17:30 - 18:00 | 0.50 | DRLPRO | 02 07 | D | P | DRILLED 3270'-4434', 1164' IN 11.5 HRS, 101.2 FPH. MADE 14 SLIDES OR AT LEAST 1 SLIDE EVERY STD. SLIDE A TOTAL OF 190' IN 2.75 HRS WOB WAS 18-20K, PUMP #1 AT 110 SPM, 495 GPM, MOTOR TURNING AT 114 RPM WITH TOP DRIVE AT 45 RPM FOR A TOTAL OF 159 RPM AT THE BIT. DIFFERENTIAL PRESSURE WAS 350-500 PSI. ON/OFF BOTTOM PUMP PRESSURE WAS 1950/1450 PSI. ON/OFF BOTTOM TORQUE WAS 10/5K. PU/SO/ROT WAS 140/110/122. CIRCULATING THE RESERVE PIT. RIG SERVICE |
| | 18:00 - 0:00 | 6.00 | DRLPRO | 02 | D | P | DRILLED 4434'-5189', 755' IN 6 HRS, 125.8 FPH. MADE 3 SLIDES. SLIDE A TOTAL OF 60' IN 0.75 HRS. WOB WAS 18-22K, PUMP #1 AT 110 SPM, 495 GPM, MOTOR TURNING AT 114 RPM WITH TOP DRIVE AT 45 RPM FOR A TOTAL OF 159 RPM AT THE BIT. DIFFERENTIAL PRESSURE WAS 350-500 PSI. ON/OFF BOTTOM PUMP PRESSURE WAS 2130/1580 PSI. ON/OFF BOTTOM TORQUE WAS 10/5K. PU/SO/ROT WAS 168/108/133. CIRCULATING THE RESERVE PIT. |
| 3/7/2011 | 0:00 - 6:00 | 6.00 | DRLPRO | 02 | D | P | DRILLED 5189'-5944', 755' IN 6 HRS, 125.8 FPH. MADE 2 SLIDES. SLIDE A TOTAL OF 18' IN 0.25 HRS. WOB WAS 18-22K, PUMP #1 AT 110 SPM, 495 GPM, MOTOR TURNING AT 114 RPM WITH TOP DRIVE AT 45 RPM FOR A TOTAL OF 159 RPM AT THE BIT. DIFFERENTIAL PRESSURE WAS 350-500 PSI. ON/OFF BOTTOM PUMP PRESSURE WAS 2170/1620 PSI. ON/OFF BOTTOM TORQUE WAS 10/8K. PU/SO/ROT WAS 178/118/143. CIRCULATING THE RESERVE PIT. |
| | 6:00 - 17:30 | 11.50 | DRLPRO | 02 | D | P | DRILLED 5944'-6983', 1039' IN 11.5 HRS, 90.3 FPH MADE 2 SLIDES. SLIDE A TOTAL OF 32' IN 1.25 HRS. WOB WAS 18-23K, PUMP #1 AT 110 SPM, 495 GPM, MOTOR TURNING AT 114 RPM WITH TOP DRIVE AT 45 RPM FOR A TOTAL OF 159 RPM AT THE BIT. DIFFERENTIAL PRESSURE WAS 350-500 PSI. ON/OFF BOTTOM PUMP PRESSURE WAS 2300/1700 PSI. ON/OFF BOTTOM TORQUE WAS 12/10K. PU/SO/ROT WAS 200/125/157. 9.7 PPG, 34 VIS WITH 0% LCM. |

RECEIVED

RIG SERVICE.

JUN 16 2011

DIV. OF OIL, GAS & MINING

17:30 - 18:00

0.50 DRLPRO 07 A P

Operation Summary Report

| Well: NBU 921- | -25N3AS YELLOW | S | pud Cond | uctor: | 1/3/2011 | Spud Date: 1/1 | 7/2011 | | | |
|---------------------------|-----------------------------|---------------|------------|---------|-------------|-------------------------|---|--|--|--|
| Project: UTAH- | UINTAH | s | ite: NBU 9 | 21-251 | N PAD | | Rig Name No: H&P 311/311, CAPSTAR 310/310 | | | |
| Event: DRILLIN | IG | s | tart Date: | 1/2/201 | 11 | | End Date: 1/19/2011 | | | |
| Active Datum: F Level) | RKB @4,980.00ft (a | bove Mean Sea | a U\ | WI: SE | /SW/0/9/ | 'S/21/E/25/0/0/26/PM/S/ | 'S/1158/W/0/2575/0/0 | | | |
| Date | Time Start-End | (hr) | | - 1 | Sub Code | P/U MD From (ft) | Operation | | | |
| 3/8/2011 | 18:00 - 0:00 0:00 - 6:00 | | | 02 | D | | DRILLED 6983'-7390', 407' IN 6 HRS, 67.8 FPH. MADE 1 SLIDES. SLIDE A TOTAL OF 18' IN 1.0 HRS. WOB WAS 18-23K, PUMP #1 AT 110 SPM, 495 GPM, MOTOR TURNING AT 114 RPM WITH TOP DRIVE AT 45 RPM FOR A TOTAL OF 159 RPM AT THE BIT. DIFFERENTIAL PRESSURE WAS 350-500 PSI. ON/OFF BOTTOM PUMP PRESSURE WAS 2030/1730 PSI. ON/OFF BOTTOM TORQUE WAS 11/10K. PU/SO/ROT WAS 208/135/195. 10.1 PPG, 34 VIS WITH 0% LCM. JUST HAVING SEEPAGE LOSSES. DRILLED 7390'-7643', 253' IN 6 HRS, 42.2 FPH. | | | |
| 3/0/2011 | | 6.00 DK | LFRO | 02 | | | MADE 1 SLIDE. SLIDE A TOTAL OF 6' IN 0.5 HRS. WOB WAS 18-23K, PUMP #1 AT 110 SPM, 405 GPM, MOTOR TURNING AT 93 RPM WITH TOP DRIVE AT 45 RPM FOR A TOTAL OF 138 RPM AT THE BIT. DIFFERENTIAL PRESSURE WAS 350-500 PSI. ON/OFF BOTTOM PUMP PRESSURE WAS 2080/1790 PSI. ON/OFF BOTTOM TORQUE WAS 11/10K. PU/SO/ROT WAS 212/135/197. 10.4 PPG, 34 VIS WITH 0% LCM. JUST HAVING SEEPAGE LOSSES. | | | |
| | 6:00 - 14:30 | 8.50 DR | LPRO | 02 | D | P | DRILLED 7643'-8017', 374' IN 8.5 HRS, 44 FPH. MADE 1 SLIDE. SLIDE A TOTAL OF 20' IN 1.5 HRS. WOB WAS 18-23K, PUMP #1 AT 90 SPM, GPM, MOTOR TURNING AT 93 RPM WITH TOP DRIVE AT 45 RPM FOR A TOTAL OF 138 RPM AT THE BIT. DIFFERENTIAL PRESSURE WAS 350-500 PSI. ON/OFF BOTTOM PUMP PRESSURE WAS 2000/1600 PSI. ON/OFF BOTTOM TORQUE WAS 10/10K. PU/SO/ROT WAS 230/135/169. 11.0 PPG, 36 VIS WITH 0% LCM. JUST HAVING SEEPAGE LOSSES. | | | |
| | 14:30 - 15:00 | 0.50 DR | LPRO | 05 | В | P | LOST RETURNS, PUMPED LCM SWEEP AND ADDED 5% LCM TO MUD SYSTEM. LOST 100 BBLS. | | | |
| | 15:00 - 17:30 | 2.50 DR | LPRO | 02 | D | P | DRILLED 8017'-8115', 98' IN 2.5 HRS, 39.2 FPH. 100% ROTATING. WOB WAS 18-23K, PUMP #1 AT 90 SPM, GPM, MOTOR TURNING AT 93 RPM WITH TOP DRIVE AT 45 RPM FOR A TOTAL OF 138 RPM AT THE BIT. DIFFERENTIAL PRESSURE WAS 350-500 PSI. ON/OFF BOTTOM PUMP PRESSURE WAS 2000/1600 PSI. ON/OFF BOTTOM TORQUE WAS 10/10K. PU/SO/ROT WAS 230/135/169. 11.0 PPG, 36 VIS WITH 5% LCM. SEEMS TO BE HOLDING. | | | |
| | 17:30 - 18:00 | 0.50 DR | LPRO | 07 | Α | Р | RIG SERVICE. | | | |
| | 18:00 - 0:00 | 6.00 DR | LPRO | 02 | D | Р | DRILLED 8115'-8335', 220' IN 6 HRS, 36.6 FPH. MADE ONE BRUTAL SLIDE OF 25' IN 2.5 HRS. WOB WAS 22-25K, PUMP #1 AT 90 SPM, GPM, MOTOR TURNING AT 93 RPM WITH TOP DRIVE AT 45 RPM FOR A TOTAL OF 138 RPM AT THE BIT. DIFFERENTIAL PRESSURE WAS 350-500 PSI. ON/OFF BOTTOM PUMP PRESSURE WAS 2325/1825 PSI. ON/OFF BOTTOM TORQUE WAS 11/11K. PU/SO/ROT WAS 230/145/175. 11.2 PPG, 36 VIS WITH 5% LCM. SEEMS TO BE HOLDING. | | | |

RECEIVED

JUN 16 2011

Operation Summary Report

| Well: NBU 921 | -25N3AS YELLOW | | Spud Co | nductor | : 1/3/201 | 1 | Spud Date: 1/17/2011 |
|-------------------------|--------------------|------------------|-----------|-----------|-----------|---------|--|
| Project: UTAH- | -UINTAH | | Site: NB | U 921-2 | 5N PAD | | Rig Name No: H&P 311/311, CAPSTAR 310/310 |
| Event: DRILLIN | NG | | Start Da | te: 1/2/2 | 011 | | End Date: 1/19/2011 |
| Active Datum: Level) | RKB @4,980.00ft (a | bove Meai | n Sea | UWI: S | E/SW/0/ | 9/S/21/ | E/25/0/0/26/PM/S/1158/W/0/2575/0/0 |
| Date | Time Start-End | Duration (hr) | Phase | Code | Code | P/U | MD From Operation (ft) |
| 3/9/2011 | 0:00 - 6:00 | 6.00 | DRLPRO | 02 | D | P | DRILLED 8335'-8618', 283' IN 6 HRS, 47.2 FPH. 100% ROTATING. WOB WAS 22-25K, PUMP #1 AT 90 SPM, GPM, MOTOR TURNING AT 93 RPM WITH TOP DRIVE AT 45 RPM FOR A TOTAL OF 138 RPM AT THE BIT. DIFFERENTIAL PRESSURE WAS 350-500 PSI. ON/OFF BOTTOM PUMP PRESSURE WAS 2100/1850 PSI. ON/OFF BOTTOM TORQUE WAS 12/11K. PU/SO/ROT WAS 235/145/175. 11.5 PPG, 39 VIS WITH 5% LCM. SEEMS TO BE HOLDING. |
| | 6:00 - 13:00 | 7.00 | DRLPRO | 02 | D | P | DRILLED 8618'-8908', 290' IN 7 HRS, 41.4 FPH. 100% ROTATING. WOB WAS 22-25K, PUMP #1 AT 90 SPM, GPM, MOTOR TURNING AT 93 RPM WITH TOP DRIVE AT 45 RPM FOR A TOTAL OF 138 RPM AT THE BIT. DIFFERENTIAL PRESSURE WAS 350-500 PSI. ON/OFF BOTTOM PUMP PRESSURE WAS 2200/1900 PSI. ON/OFF BOTTOM TORQUE WAS 14/12K. PU/SO/ROT WAS 255/142/180. 11.7 PPG, 41 VIS WITH 5% LCM. SEEMS TO BE HOLDING. |
| | 13:00 - 14:00 | 1.00 | DRLPRO | 05 | С | Р | CIRCULATED BOTTOMS UP, NO GAS. 11.8 PPG IN AND 11.7 PPG OUT, 41 VIS WITH 5% LCM. |
| | 14:00 - 14:30 | 0.50 | DRLPRO | 07 | Α | Р | RIG SERVICE WHILE WE FLOW CHECKED WELL, NO FLOW. |
| | 14:30 - 20:00 | 5.50 | DRLPRO | 06 | Α | Р | STRAIGHT PULLED 3 STDS OFF BOTTOM WITH +, - 20,000 LBS OVERPULL. PUMPED SLUG AND BLEW DOWN TOPDRIVE. TRIPPED OUT OF THE HOLE, SAW A LITTLE OVERPULL AT 6850'. FLOW CHECKED WELL AT SHOE, NO FLOW. |
| | 20:00 - 22:00 | 2.00 | DRLPRO | 06 | A | P | LAID DOWN DIRECTIONAL TOOLS, BROKE BIT OFF AND LAID DOWN MUD MOTOR. |
| | 22:00 - 22:30 | 0.50 | DRLPRO | 06 | Α | Р | RIGGED UP PLUMB, DRAINED STACKED AND CHECKED ALIGNMENT OF RIG, GOOD, WILL NOT HAVE TO SKID. |
| | 22:30 - 23:30 | 1.00 | DRLPRO | 06 | Α | Р | MADE UP HUGHES Q506F SERIAL #7131035, W/6-16S WITH SDI .14 REV/GAL STRAIGHT MUD MOTOR AND NMDC. |
| | 23:30 - 0:00 | 0.50 | DRLPRO | 06 | Α | P | TRIPPED IN THE HOLE. |
| 3/10/2011 | 0:00 - 4:30 | 4.50 | DRLPRO | 06 | Α | P | CONTINUED TO TRIP IN THE HOLE. |
| | 4:30 - 17:30 | 13.00 | DRLPRO | 02 | D | Р | DRILL 8908'-9420', 512' IN 13 HRS, 39.4 FPH. 100% ROTATING. WOB WAS 22-25K, PUMP #1 AT 110 SPM, 495 GPM, MOTOR TURNING AT 69 RPM WITH TOP DRIVE AT 45 RPM FOR A TOTAL OF 114 RPM AT THE BIT. DIFFERENTIAL PRESSURE WAS 250-350 PSI. ON/OFF BOTTOM PUMP PRESSURE WAS 2950/2650 PSI. ON/OFF BOTTOM TORQUE WAS 14/8K. PU/SO/ROT WAS 245/140/184. 12.2 PPG IN/12.1 PPG OUT, 41 VIS WITH 12% LCM. SLOWLY BRING UP LCM CONTENT DUE TO CONSTANT SEEPING, PUMPING LCM SWEEPS. LOST +/- 120 BBLS. |
| | 17:30 - 18:00 | 0.50 | DRLPRO | 07 | Α | P | RIG SERVICE. |
| | 18:00 - 0:00 | 6.00 | DRLPRO | 02 | D | Ρ | DRILLED 9420'-9580', 160' IN 6 HRS, 26.7 FPH. WOB WAS 22-26K, PUMP #1 AT 110 SPM, 495 GPM, MOTOR TURNING AT 69 RPM WITH TOP |
| | | | RE | CEI | VED | | DRIVE AT 45 RPM FOR A TOTAL OF 114 RPM AT THE BIT. DIFFERENTIAL PRESSURE WAS 250-300 PSI. ON/OFF BOTTOM PUMP PRESSURE |
| | | | JU | N 16 | 2011 | | WAS 2950/2650 PSI. ON/OFF BOTTOM TORQUE WAS 12/12K. PU/SO/ROT WAS 253/186/150. 12.3 PPG IN/12.2 PPG OUT, 41 VIS WITH 12% LCM. |
| | | | DIV. OF C | IL, GAS | & MINI | NG | HOLDING STEADY AT 13% LCM, LOST 25 BBLS. |

6/3/2011 10:13:41AM

Operation Summary Report

Spud Conductor: 1/3/2011 Spud Date: 1/17/2011 Well: NBU 921-25N3AS YELLOW Project: UTAH-UINTAH Site: NBU 921-25N PAD Rig Name No: H&P 311/311, CAPSTAR 310/310 Event: DRILLING Start Date: 1/2/2011 End Date: 1/19/2011 Active Datum: RKB @4.980.00ft (above Mean Sea UWI: SE/SW/0/9/S/21/E/25/0/0/26/PM/S/1158/W/0/2575/0/0

| Active Datum: Level) | RKB @4,980.00ft (| above Meai | n Sea | UWI: S | E/SW/0/ | 9/S/21/E | :/25/0/0/26/PM/S | S/1158/W/0/2575/0/0 | | |
|-------------------------|--------------------------------|--------------|---------|----------|---------|--|------------------|---|--|--|
| Date | Time | Duration | Phase | Code | | P/U | MD From | Operation | | |
| 3/11/2011 | 0:00 - 6:00 | (hr) 6.00 | DRLPRO | 02 | Code D | Р | (ft) | DRILLED 9580'-9730', 150' IN 6 HRS, 25 FPH. | | |
| 3/11/2011 | 0.00 - 6.00 | 6.00 | DRLPRO | 02 | U | ۲ | | 100% ROTATING. WOB WAS 22-26K, PUMP #1 AT 110 SPM, 495 GPM, MOTOR TURNING AT 69 RPM WITH TOP DRIVE AT 45 RPM FOR A TOTAL OF 114 RPM AT THE BIT. DIFFERENTIAL PRESSURE WAS 250-300 PSI. ON/OFF BOTTOM PUMP PRESSURE WAS 3000/2700 PSI. ON/OFF BOTTOM TORQUE WAS 12/12K. PU/SO/ROT WAS 255/188/155. 12.3 PPG IN/12.2 PPG OUT, 41 VIS WITH 12% LCM. HOLDING STEADY AT 12% LCM, LOST 20 BBLS. | | |
| | 6:00 - 7:30 | 1.50 | DRLPRO | 05 | С | Р | | CIRC/COND FOR WIPER TRIP. FINAL MW WAS 12.3 PPG, 41 VIS WITH 12% LCM. | | |
| | 7:30 - 8:00 | 0.50 | DRLPRO | 05 | J | P | | FLOW CHECK WELL, NO FLOW. | | |
| | 8:00 - 13:30 | 5.50 | DRLPRO | 06 | E | Р | | PUMPED SLUG AND BLEW DOWN TOPDRIVE. STRAIGHT PULLED OFF BOTTOM, NO OVERPULI OR TIGHT SPOTS, TRIPPED OUT TO THE SHOE, FLOW CHECKED. TIH TO 4500'. | | |
| | 13:30 - 14:00 14:00 - 14:30 | 0.50 0.50 | DRLPRO | 07 08 | A A | P P | | RIG SERVICE | | |
| | 14:30 - 17:00 | 2.50 | DRLPRO | 06 | E | P | | DOWN TIME, ST-80 REPAIR. CONTINUED TO TIH, WASHED AND REAMED | | |
| | 17:00 - 18:30 | 1.50 | DRLPRO | 05 | C | r P | | LAST 2 STDS TO BOTTOM, NO FILL. CIRCULATE BOTTOMS UP, NO GAS, NO FLARE. | | |
| | 18:30 - 19:00 | 0.50 | DRLPRO | 10 | В | Ρ | | 12.3 PPG, 41 VIS WITH 10% LCM. FLOW CHECKED WHILE WE DROPPED A SURVEY. | | |
| | 19:00 - 0:00 | 5.00 | DRLPRO | 06 | D | P | | PUMPED SLUG, BLEW DOWN TOPDRIVE AND STARTED LAYING DOWN DRILLPIPE. NO TITE SPOTS OR OVERPULLS. | | |
| 3/12/2011 | 0:00 - 6:00 | 6.00 | DRLPRO | 06 | Α | P | | CONTINUED LDDP. SHAKING OUT THE LCM OU OF THE MUD IN THE TANKS. STOPPED AT THE SURFACE CASING SHOE AND CIRCULATED HOLE CLEAN OF LCM. RETRIEVED SURVEY TOOL, LD MUD MOTOR AND BROKE BIT OFF. | | |
| | 6:00 - 7:30 | 1.50 | DRLPRO | 06 | Α | Р | | PULLED WEAR BUSHING AND INSTALLED LOGGING ADAPTER IN ROTATING HEAD. | | |
| | 7:30 - 8:00 | 0.50 | DRLPRO | 21 | E | Z | | WAITED ON HALLIBURTON LOGGING, BAD DIRECTIONS. | | |
| | 8:00 - 13:30 | 5.50 | DRLPRO | 11 | E | P | | RIGGED UP HALLIBURTON, AND SST LUBRICATOR. RAN FAST CAST CASING EVALUATION LOG FROM THE BASE OF THE SURFACE CASING TO SURFACE. RIGGED UP PRESSURE PUMP TO THE LUBRICATOR AND TRIED TO PRESSURE UP LUBRICATOR/WELL WHEN THE LOGS WERE AT 200'. COULD NOT PRESSURE UP SO JUST KEPT PUMPING FLUID WHILE LOGGING, RECORDED GOOD DATA WHILE PUMPING. | | |
| | 13:30 - 15:30 | 2.00 | CSG | 12 | Α | Р | | RIGGED UP CASING CREW AND EQUIPMENT. CHANGED OUT BALES AND ELEVATORS. | | |
| | 15:30 - 0:00 | 8.50 | CSG | 12 | С | Р | | PICKED UP SHOE TRACK WITH SHOE WELDED ON AND CENTRALIZER ALREADY INSTALLED, MADE UP FLOAT COLLAR WITH THREAD LOCK. STARTED RUNNING 4.5", BTC, 11.6#, I80, R3 PRODUCTION CASING. WE ARE APPLING | | |
| | | | ** * | | IVE | | | BESTOLIFE 2000 ARTIC GRADE PIPE DOPE TO BOTH THE BOX AND USING A MOUSTACHE BRUSH TO APPLY IT TO THE PIN END. WE ARE MAKING UP EACH CONNECTION TO THE MIDDL | | |
| | | | j | UN 1 | 6 201 | Constitution of the Consti | | OF THE "DIAMOND". CURRENTLY AT 8150'. FILLED AND CIRCULATE CASING AT 2590', 4300' | | |
| | | | DIV OF | OIL G | AS & MI | NUNG | | AND 7255'. | | |

| | | | | onductor | : 1/3/201 | 1 | Spud Date: 1/1 | 7/2011 | | |
|-------------------------|-------------------|------------------|----------|-----------|-------------|---------|-------------------|---|--|--|
| Project: UTAH | Site: N | | | BU 921-2 | 5N PAD | | | Rig Name No: H&P 311/311, CAPSTAR 310/310 | | |
| Event: DRILLII | NG | | Start Da | te: 1/2/2 | 011 | | | End Date: 1/19/2011 | | |
| Active Datum: Level) | RKB @4,980.00ft (| above Mean | Sea | UWI: S | E/SW/0/ | 9/S/21/ | E/25/0/0/26/PM/S/ | S/1158/W/0/2575/0/0 | | |
| Date | Time Start-End | Duration (hr) | Phase | Code | Sub Code | P/U | MD From (ft) | Operation | | |
| 3/13/2011 | 0:00 - 1:00 | 1.00 | CSG | 12 | С | P | | PICKED UP SHOE TRACK WITH SHOE WELDED ON AND CENTRALIZER ALREADY INSTALLED, MADE UP FLOAT COLLAR WITH THREAD LOCK. STARTED RUNNING 4.5", BTC, 11.6#, I80, R3 PRODUCTION CASING. WE ARE APPLING BESTOLIFE 2000 ARTIC GRADE PIPE DOPE TO BOTH THE BOX AND USING A MOUSTACHE BRUSH TO APPLY IT TO THE PIN END. WE ARE MAKING UP EACH CONNECTION TO THE MIDDL OF THE "DIAMOND". CURRENTLY AT 8150'. FILLED AND CIRCULATE CASING AT 2590', 4300' AND 7255'. RAN 232 JTS, SET CASING AT 9716' WITH FLOAT COLLAR AT 9676', SET MARKER JT AT 7442' AND 4854'. | | |
| | 1:00 - 3:30 | 1.50 | CSG | 05 | D | P | | FILLED PIPE AND STARTED CIRCULATING WEL RD CASING CREW AND EQUIPMENT, RIGGING UP CEMENTERS. CIRCULATING WITH FULL RETURNS AT 360 GPM (8 BPM) AT 1040 PSI. NEVER SAW ANY BOTTOMS UP GAS, MW IS 12. PPG, 41 VIS WITH 0% LCM (SHOOK OUT). | | |
| | 3:30 - 6:30 | 3.00 | CSG | 12 | E | P | | PRESSURE TESTED LINES TO 5000 PSI. PUMPE 40 BBLS OF H20 SPACER AHEAD, PUMPED 180 BBLS (535 SX OF 12.7#, 1.89 CFT/SX, 9.68 GAL/SK) LEAD ECONO CEMENT. PUMPED 249 BBLS (1120 SX OF 14.3#, 1.25 YD, 5.41 GAL/SK) POZ PREMIUM 50/50 TAIL CEMENT. SHUT DOWI AND WASHED LINES, DROP 4.5" TOP PLUG, PUMP 151 BBLS OF H20 TREATED WITH BIOCID AND CLAY INHIBITOR. BUMPED PLUG AT 2564 PSI, PRESSURED UP CSG TO 3224 PSI AND HELD FOR 5 MIN. RELEASED PRESSURE AND FLOATS FLOWED A PENCIL STREAM SO REPRESSURED UP ON CASING TO 3835 PSI AN CHECKED FLOATS AGAIN, FLOATS DID NOT HOLD, STILL FLOWING A PENCIL STREAM, FLOWED BACK 2.00 BBLS. PRESSURE CASING UP TO 3320 PSI AND SHUT CEMENT HEAD IN. | | |

RECEIVED

EST TOC TAIL @ 4200', LEAD @ 900'. HAD 100% RETURNS UNTIL THE LAST 25 BBLS THEN HAD 25% RETURNS AND LOST ALL RETURNS THE FINAL 18 BBLS. HAD +/- 20 BBLS SPACER

CEMENTERS, CLEANING PITS, PREPARING TO

ND BOPE, PICK UP BOP STACK AND SET C22

SLIPS WITH 135K. CUT OFF CASING AND LD JOINT. RELEASED RIG AT 1130 HRS ON SUNDAY

WATER BACK TO SURFACE.

MARCH 13TH.

WAIT ON CEMENT, RIGGING DOWN

SKID. CHECKED FLOATS, HELD.

JUN 16 2011

DIV. OF OIL, GAS & MINNING

6:30 - 9:00

9:00 - 11:30

2.50

2.50

CSG

CSG

13

14

| Vell: NBU 921-25N3AS YELLOW | Spud Co | onductor: 1/3/2011 Spud Date | : 1/17/2011 | | |
|---|----------|-----------------------------------|--|--|--|
| Project: UTAH-UINTAH | Site: NB | BU 921-25N PAD | Rig Name No: H&P 311/311, CAPSTAR 310/310 | | |
| event: DRILLING | Start Da | ate: 1/2/2011 | End Date: 1/19/2011 | | |
| Active Datum: RKB @4,980.00ft (above Mean .evel) | Sea | UWI: SE/SW/0/9/S/21/E/25/0/0/26/P | M/S/1158/W/0/2575/0/0 | | |
| Date Time Duration Start-End (hr) | Phase | Code Sub P/U MD From Code (ft) | n Operation | | |
| 11:30 - 11:30 0.00 | CSG | | CONDUCTOR CASING: Cond. Depth set: 40 Cement sx used: 28 SPUD DATE/TIME: 1/19/2011 14:30 | | |
| | | | SURFACE HOLE: 11 Surface From depth: 40 Surface To depth: 2,610 Total SURFACE hours: 24.00 Surface Casing size: 8.625" # of casing joints ran: 58 Casing set MD: 2,585.0 # sx of cement: 225/200/65 Cement blend (ppg:) 15.8/15.8/11.8 Cement yield (ft3/sk): 1.15/1.15/3.82 # of bbls to surface: 0 Describe cement issues: LOST RETURNS 135 BBL INTO DISPLACEMENT Describe hole issues: NONE PRODUCTION: Rig Move/Skid start date/time: 3/5/2011 10:30 Rig Move/Skid finish date/time: 3/5/2011 11:30 Total MOVE hours: 1.0 Prod Rig Spud date/time: 3/13/2011 11:30 Total SPUD to RR hours: 181.5 Planned depth MD 9,746 Planned depth TVD 9,579 Actual MD: 9,730 Actual TVD: 9,582 Open Wells \$: AFE \$: Open wells \$/ft: | | |
| | | | PRODUCTION HOLE: 7.875 Prod. From depth: 2,626 Prod. To depth: 9,730 Total PROD hours: 109 Log Depth: N/A Production Casing size: 4 1/2 # of casing joints ran: 232 Casing set MD: 9,716.0 # sx of cement: 535 LEAD, 1120 TAIL Cement blend (ppg:) 12.7/14.3 Cement yield (ft3/sk): 1.89/1.25 Est. TOC (Lead & Tail) or 2 Stage: LEAD 900', TAII 4200' Describe cement issues: FLOATS DID NOT HOLD, WAITED ON CEMENT 2.5 HRS. Describe hole issues: NONE DIRECTIONAL INFO: KOP: 199' Max angle: 19.03@3245' | | |

RECEIVED

JUN 16 2011



1 General

1.1 Customer Information

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

1.2 Well Information

| Well | NBU 921-25N3AS YELLOW | | | |
|--------------|--|--------------|--|--|
| Common Name | NBU 921-25N3AS | | | |
| Well Name | NBU 921-25N3AS | Wellbore No. | ОН | |
| Report No. | 1 | Report Date | 4/25/2011 | |
| Project | UTAH-UINTAH | Site | NBU 921-25N PAD | |
| Rig Name/No. | | Event | COMPLETION | |
| Start Date | 4/25/2011 | End Date | 5/9/2011 | |
| Spud Date | 1/17/2011 | Active Datum | RKB @4,980.00ft (above Mean Sea Level) | |
| UWI | SE/SW/0/9/S/21/E/25/0/0/26/PM/S/1158/W/0/2 | 575/0/0 | | |

1.3 General

| Contractor | CASEDHOLE SOLUTIONS | Job Method | PERFORATE | Supervisor | DAVE DANIELS |
|---------------------|---------------------|-----------------|-----------|------------|--------------|
| Perforated Assembly | PRODUCTION CASING | Conveyed Method | WIRELINE | | |

1.4 Initial Conditions

1.5 Summary

| Fluid Type | , | Fluid Density | Gross Interval | 7,458.0 (ft)-9,514.0 (ft) | Start Date/Time | 4/25/2011 | 12:00AM |
|-------------------|---------|--------------------|------------------|---------------------------|--------------------------|-----------|------------|
| Surface Press | | Estimate Res Press | No. of Intervals | 38 | End Date/Time | 4/25/2011 | 12:00AM |
| TVD Fluid Top | | Fluid Head | Total Shots | 216 | Net Perforation Interval | | 66.00 (ft) |
| Hydrostatic Press | | Press Difference | Avg Shot Density | 3.27 (shot/ft) | Final Surface Pressure | | |
| Balance Cond | NEUTRAL | | | | Final Press Date | | |

2 Intervals

2.1 Perforated Interval

| Date Formation/ | CCL@ | CCL-T | MD Top | MD Base | Shot | Misfires/ | Diamete | Carr Type /Carr Manuf | Carr | Phasing | Charge Desc /Charge | Charge | Reason | Misrun |
|-----------------|------|-------|---------|---------|-----------|-----------|--|-----------------------|-------|---------|---------------------|--------|-----------|--------|
| Reservoir | (ft) | S | (ft) | (ft) | Density | Add. Shot | r | | Size | (°) | Manufacturer | Weight | | |
| | | (ft) | | | (shot/ft) | | (in) | | (in) | | | (gram) | | |
| 12:00AMWASATCH/ | | | 7,458.0 | 7,460.0 | 3.00 | | 0.360 | EXP/ | 3.375 | 120.00 | | 23.00 | PRODUCTIO | |
| | | | - | | | | and the second s | Total Paris | | | | | N | |

RECEIVED

JUN 16 2011

US ROCKIES REGION

DIV. OF OIL, GAS & MINING

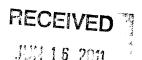
2.1 Perforated Interval (Continued)

| Date | Formation/ Reservoir | CCL@ (ft) | CCL-T S (ft) | MD Top (ft) | | | Misfires/ Add. Shot | Diamete r (in) | Carr Type /Carr Manuf | Carr Size (in) | Phasing (°) | Charge Desc /Charge Manufacturer | Charge Weight (gram) | Reason | Misrun |
|---------|-------------------------|---------------------------------------|--|----------------|---------|------|------------------------|----------------------|-----------------------|----------------------|----------------|--|----------------------------|---------------------|--|
| 12:00AN | MESAVERDE/ | 10 mm | Constant of | 7,524.0 | 7,526.0 | 3.00 | | 0.360 | EXP/ | 3.375 | 120.00 | | 23.00 | PRODUCTIO | and a state of the |
| 12:00AN | MESAVERDE/ | and the constant of | | 7,570.0 | 7,572.0 | 3.00 | | 0.360 | EXP/ | 3.375 | 120.00 | er enem | 23.00 | PRODUCTIO | |
| 12:00AN | MESAVERDE/ | | Processing to the second | 7,592.0 | 7,594.0 | 3.00 | | 0.360 | EXP/ | 3.375 | 120.00 | and the second of the second o | 23.00 | N PRODUCTIO | |
| 12:00AM | MESAVERDE/ | | of the second se | 7,668.0 | 7,670.0 | 4.00 | | 0.360 | EXP/ | 3.375 | 90.00 | | 23.00 | N PRODUCTIO | **** |
| 12:00AN | MESAVERDE/ | | | 7,734.0 | 7,736.0 | 4.00 | | 0.360 | EXP/ | 3.375 | 90.00 | | 23.00 | N PRODUCTIO | The state of the s |
| 12:00AM | MESAVERDE/ | | eren | 7,760.0 | 7,762.0 | 4.00 | | 0.360 | EXP/ | 3.375 | 90.00 | | 23.00 | N PRODUCTIO | on the Company |
| 12:00AM | MESAVERDE/ | | tors conserve. | 7,852.0 | 7,854.0 | 3.00 | | 0.360 | EXP/ | 3.375 | 120.00 | | | N PRODUCTIO | 1,000,000,000 |
| 12:00AM | MESAVERDE/ | | St. or | 7,904.0 | 7,906.0 | 3.00 | | 0.360 | EXP/ | 3.375 | 120.00 | | | N PRODUCTIO | - PC CReeds |
| 12:00AM | IMESAVERDE/ | | | 7,938.0 | 7,940.0 | 3.00 | | 0.360 | EXP/ | 3.375 | 120.00 | | 23.00 | N PRODUCTIO | Transfer of the second of the |
| 12:00AM | IMESAVERDE/ | | and the same of th | 7,976.0 | 7,978.0 | 3.00 | | 0.360 | EXP/ | 3.375 | 120.00 | | 23.00 | N PRODUCTIO | |
| 12:00AM | IMESAVERDE/ | | | 8,081.0 | 8,082.0 | 4.00 | | 0.360 | EXP/ | 3.375 | 90.00 | | 23.00 | N PRODUCTIO | |
| 12:00AM | IMESAVERDE/ | | | 8,099.0 | 8,101.0 | 3.00 | | 0.360 | EXP/ | 3.375 | 120.00 | | 23.00 | N PRODUCTIO | |
| 12:00AM | IMESAVERDE/ | | | 8,158.0 | 8,159.0 | 4.00 | | 0.360 | EXP/ | 3.375 | 90.00 | | 23.00 | N PRODUCTIO | |
| 12:00AM | IMESAVERDE/ | | | 8,188.0 | 8,190.0 | 3.00 | | 0.360 | EXP/ | 3.375 | 120.00 | | 23.00 | PRODUCTIO | |
| 12:00AM | IMESAVERDE/ | | - | 8,203.0 | 8,204.0 | 4.00 | | 0.360 | EXP/ | 3.375 | 90.00 | | | N PRODUCTIO | |
| 12:00AM | IMESAVERDE/ | | | 8,382.0 | 8,383.0 | 4.00 | | 0.360 | EXP/ | 3.375 | 90.00 | | | N PRODUCTIO | |
| 12:00AM | MESAVERDE/ | | de la companya de la | 8,402.0 | 8,403.0 | 4.00 | e de la companya | 0.360 | EXP/ | 3.375 | 90.00 | | 23.00 | N PRODUCTIO | |
| 12:00AM | IMESAVERDE/ | | \$ | 8,435.0 | 8,437.0 | 3.00 | | 0.360 | EXP/ | 3.375 | 120.00 | | | PRODUCTIO | |
| 12:00AM | IMESAVERDE/ | ** | | 8,454.0 | 8,456.0 | 3.00 | | 0.360 | EXP/ | 3.375 | 120.00 | | 23.00 | N PRODUCTIO | |
| 12:00AM | IMESAVERDE/ | | | 8,477.0 | 8,478.0 | 4.00 | | 0.360 | EXP/ | 3.375 | 90.00 | | | N PRODUCTIO N | |
| 12:00AM | MESAVERDE/ | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | | 8,523.0 | 8,524.0 | 4.00 | | 0.360 | EXP/ | 3.375 | 90.00 | | | PRODUCTIO N | |

2.1 Perforated Interval (Continued)

| Date | Formation/ Reservoir | CCL@ (ft) | CCL-T S (ft) | MD Top (ft) | MD Base (ft) | Density (shot/ft) | Misfires/ Add. Shot | r (in) | Carr Type /Carr Manuf | Carr Size (in) | (°) | Charge Desc /Charge Manufacturer | Charge Weight (gram) | Reason | Misrun |
|---------|-------------------------|--|--|----------------|-----------------|----------------------|------------------------|-----------|-----------------------|----------------------|--------|---------------------------------------|----------------------------|----------------|---|
| 12:00AM | MESAVERDE/ | Construence | | 8,548.0 | 8,550.0 | 3.00 | | 0.360 | EXP/ | 3.375 | 120.00 | | 23.00 | PRODUCTIO N | |
| 12:00AM | MESAVERDE/ | de | and the second | 8,598.0 | 8,600.0 | 3.00 | | 0.360 | EXP/ | 3.375 | 120.00 | | 23.00 | PRODUCTIO N | 7 |
| 12:00AM | MESAVERDE/ | | The statement of the st | 8,672.0 | 8,674.0 | 4.00 | 2 - V1 - 11 - 11 - | 0.360 | EXP/ | 3.375 | 90.00 | | 23.00 | PRODUCTIO N | de control |
| 12:00AM | MESAVERDE/ | | | 8,806.0 | 8,808.0 | 3.00 | | 0.360 | EXP/ | 3.375 | 120.00 | | 23.00 | PRODUCTIO N | |
| 12:00AM | MESAVERDE/ | | The second second | 8,884.0 | 8,886.0 | 3.00 | t tyre t | 0.360 | EXP/ | 3.375 | 120.00 | | 23.00 | PRODUCTIO N | |
| 12:00AM | MESAVERDE/ | S Standard Color | to prefer the street | 8,918.0 | 8,920.0 | 3.00 | | 0.360 | EXP/ | 3.375 | 120.00 | | 23.00 | PRODUCTIO N | |
| 12:00AM | MESAVERDE/ | | en | 8,994.0 | 8,996.0 | 3.00 | | 0.360 | EXP/ | 3.375 | 120.00 | | 23.00 | PRODUCTIO N | |
| 12:00AM | MESAVERDE/ | | er dispripmenter | 9,084.0 | 9,086.0 | 3.00 | | 0.360 | EXP/ | 3.375 | 120.00 | · · · · · · · · · · · · · · · · · · · | 23.00 | PRODUCTIO N | |
| 12:00AM | MESAVERDE/ | The state of the s | a department of the second | 9,118.0 | 9,120.0 | 3.00 | | 0.360 | EXP/ | 3.375 | 120.00 | | 23.00 | PRODUCTIO N | |
| 12:00AM | MESAVERDE/ | | The state of the s | 9,182.0 | 9,184.0 | 3.00 | | 0.360 | EXP/ | 3.375 | 120.00 | | 23.00 | PRODUCTIO N | |
| 12:00AM | MESAVERDE/ | | | 9,205.0 | 9,207.0 | 3.00 | • | 0.360 | EXP/ | 3.375 | 120.00 | | 23.00 | PRODUCTIO N | , |
| 12:00AM | MESAVERDE/ | 1 | or and the same of | 9,370.0 | 9,371.0 | 4.00 | | 0.360 | EXP/ | 3.375 | 90.00 | | 23.00 | PRODUCTIO N | ***** |
| 12:00AM | MESAVERDE/ | | and another and | 9,448.0 | 9,450.0 | 3.00 | | 0.360 | EXP/ | 3.375 | 120.00 | | 23.00 | PRODUCTIO N | |
| 12:00AM | MESAVERDE/ | | T. Date of the second | 9,468.0 | 9,469.0 | 3.00 | | 0.360 | EXP/ | 3.375 | 120.00 | | 23.00 | PRODUCTIO N | |
| 12:00AM | MESAVERDE/ | The state of the s | | 9,494.0 | 9,496.0 | 4.00 | | 0.360 | EXP/ | 3.375 | 90.00 | | 23.00 | PRODUCTIO N | |
| 12:00AM | MESAVERDE/ | | of the forest and the same | 9,513.0 | 9,514.0 | 3.00 | | 0.360 | EXP/ | 3.375 | 120.00 | | 23.00 | PRODUCTIO N | |

3 Plots



DIE OF OIL, CAS & MINING

3.1 Wellbore Schematic



JUN 16 2011

DIV. OF OIL, GAS & MINING

US ROCKIES REGION Operation Summary Report Spud Date: 1/17/2011 Well: NBU 921-25N3AS YELLOW Spud Conductor: 1/3/2011 Project: UTAH-UINTAH Site: NBU 921-25N PAD Rig Name No: SWABBCO 8/8 **Event: COMPLETION** Start Date: 4/25/2011 End Date: 5/9/2011 Active Datum: RKB @4,980.00ft (above Mean Sea UWI: SE/SW/0/9/S/21/E/25/0/0/26/PM/S/1158/W/0/2575/0/0 Level) P/U MD From Date Time Duration Phase Code Sub Operation Start-End Code (hr) (ft) 4/21/2011 7:00 - 18:00 11.00 COMP 33 P PSI TEST CSG & BOTH FRAC VALVE T/ 1000 PSI FOR 15 MIN. LOST 00 PSI. PSI TEST T/ 3500 PSI FOR 15 MIN. LOST 00 PSI. PSI TEST T/ 7000 PSI FOR 30 MIN. LOST 00 PSI. 4/25/2011 7:00 - 18:00 11.00 Ρ PERF STG 1)PU 3 1/8 EXP GUN, 23 GM, .36 HOLE COMP 37 В SIZE, 90 & 120 DEG PHASING, RIH PERF AS PER STG 2 PERF DESIGN. FRAC STG 1)WHP 1441 PSI, BRK 2987 PSI @ 4.8 BPM. ISIP 2724 PSI, FG .73. PUMP 100 BBLS @ 52.2 BPM @ 6330 PSI = 86% HOLES OPEN. ISIP 2989 PSI, FG .76, NPI 265 PSI. MP 6684 PSI, MR 52.1 BPM, AP 5690 PSI, AR 48.1 PMP 1057 BBLS SW & 12,612 LBS OF 30/50 SND & 5412 LBS OF 20/40 SLC SND. TOTAL PROP 18,024 LBS. SWI, X-OVER FOR WL. PERF STG 2)PU 4 1/2 8K HAL CBP & 3 1/8 EXP GUN, 23 GM, .36 HOLE SIZE. 120 DEG PHASING. RIH SET CBP @ 9257' P/U PERF AS PER STG 2

DESIGN.

RECEIVED

JUN 16 2011

DIV. OF OIL, GAS & MINING

| Vell: NBU 921- | -25N3AS YELLOW | • | Spud Co | onductor: | : 1/3/201 | 1 | Spud Date: 1/17 | 7/2011 |
|-------------------------|--------------------|------------------|----------|------------|-------------|-----------|-----------------|---|
| roject: UTAH- | UINTAH | | Site: NB | U 921-28 | 5N PAD | | | Rig Name No: SWABBCO 8/8 |
| vent: COMPL | ETION | | Start Da | te: 4/25/2 | 2011 | | | End Date: 5/9/2011 |
| ctive Datum: I evel) | RKB @4,980.00ft (a | bove Mean | Sea | UWI: S | E/SW/0/ | 9/S/21/E/ | 25/0/0/26/PM/S/ | 1158/W/0/2575/0/0 |
| Date | Time Start-End | Duration (hr) | Phase | Code | Sub Code | P/U | MD From (ft) | Operation |
| 4/26/2011 | 8:00 - 18:00 | 10.00 | COMP | 36 | В | P | | FRAC STG 2)WHP 2043 PSI, BRK 3461 PSI @ 4.2 BPM. ISIP 2715 PSI, FG .74. PUMP 100 BBLS @ 48.9 BPM @ 6120 PSI = 81% HOLES OPEN. ISIP 2838 PSI, FG .75, NPI 123 PSI. MP 6670 PSI, MR 49.7 BPM, AP 5325 PSI, AR 47.7 BPM, PMP 809 BBLS SW & 7963 LBS OF 30/50 SND & 2298 LBS OF 20/40 SLC SND. TOTAL PROP 10,261 LBS. WHILE PUMPING RESIN, MIDDLE SCREW ON BLENDER SHUT DOWN BY ITSELF. ONLY GOT 2298 # RESIN IN FORMATIONS. SWI, X-OVER FOR WL. PERF STG 3)PU 4 1/2 8K HAL CBP & 3 1/8 EXP GUN, 23 GM, .36 HOLE SIZE. 120 DEG PHASING. RIH SET CBP @ 9026' P/U PERF AS PER STG 3 PERF DESIGN. POOH. FRAC STG 3)BEFORE PUMPING THIS STG, HOO UP PUMP 6. (DOWN FOR 41 MIN. HOOK UP PUMP & REPLACE GROUND VALVE.) WHP 1766 PSI, BRK 2470 PSI @ 4.3 BPM. ISIP 2062 PSI, FG .67. PUMP 100 BBLS @ 49.7 BPM @ 5523 PSI = 81% HOLES OPEN. ISIP 2601 PSI, FG .73, NPI 539 PSI. MP 6631 PSI, MR 52 BPM, AP 4925 PSI, AR 50.2 BPM, PMP 2715 BBLS SW & 54,341 LBS OF 30/50 SND 4552 LBS OF 20/40 SLC SND. TOTAL PROP 58,893 LBS. SWI, X-OVER FOR WL. PERF STG 4)PU 4 1/2 8K HAL CBP & 3 1/8 EXP GUN, 23 GM, .36 HOLE SIZE. 90 & 120 DEG PHASING. RIH SET CBP @ 8724' P/U PERF AS |
| | 6:30 - 6:45 | 0.25 | COMP | 48 | | Þ | | PER STG 4 PERF DESIGN. POOH, SWIFN. HSM. HIGH PSI LINES & WL SAFETY |

RECEIVED

JUN 16 2011

DIV. OF OIL, GAS & MINING

US ROCKIES REGION Operation Summary Report Well: NBU 921-25N3AS YELLOW Spud Conductor: 1/3/2011 Spud Date: 1/17/2011 Project: UTAH-UINTAH Site: NBU 921-25N PAD Rig Name No: SWABBCO 8/8 **Event: COMPLETION** Start Date: 4/25/2011 End Date: 5/9/2011 Active Datum: RKB @4,980.00ft (above Mean Sea UWI: SE/SW/0/9/S/21/E/25/0/0/26/PM/S/1158/W/0/2575/0/0 Level) Date Time Duration Phase Sub P/U MD From Operation Start-End Code (hr) (ft) 6:45 - 18:00 11.25 COMP 36 В Ρ FRAC STG 4)WHP 1635 PSI, BRK 2525 PSI @ 4.6 BPM. ISIP 1986 PSI, FG .67. PUMP 100 BBLS @ 44.3 BPM @ 5472 PSI = 67% HOLES OPEN. ISIP 2446 PSI, FG .72, NPI 460 PSI. MP 6522 PSI, MR 51.8 BPM, AP 5317 PSI, AR 50.2 BPM. PMP 933 BBLS SW & 13,723 LBS OF 30/50 SND & 5035 LBS OF 20/40 SLC SND. TOTAL PROP 18,758 LBS. SWI, X-OVER FOR WL. PERF STG 5)PU 4 1/2 8K HAL CBP & 3 1/8 EXP GUN, 23 GM, .36 HOLE SIZE. 90 & 120 DEG PHASING. RIH SET CBP @ 8508', PERF AS PERF STG 5 PERF DESIGN. POOH. FRAC STG 5)WHP 1860 PSI, BRK 2483 PSI @ 4.3 BPM. ISIP 2040 PSI, FG .00. PUMP 100 BBLS @ 50.8 BPM @ 5683 PSI = 80% HOLES OPEN. PUMPED 1810 LBS OF SAND, HAD TO SHUT DOWN BECAUSE GROUND VALVES ON 25K4CS WELL WERE LEAKING. SHUT DOWN FOR 2 HRS TO GREASE & CHANGE OUT GROUND VALVE. (START THIS STG OVER.) STARTED PUMPING AGAIN, GROUND VALVE ATARED LEAKING OUT OF GREASE ZERT ON VALVE. CHANGE OUT GREASE ZERT. ISIP 2513 PSI, FG .74, NPI 373 PSI. MP 6590 PSI, MR 49.1 BPM, AP 6315 PSI, AR 47.1 BPM. PMP 799 BBLS SW & 9205 LBS OF 30/50 SND & 5326 LBS OF 20/40 SLC SND. TOTAL PROP 14,531 LBS. SWI, X-OVER WL ((THE WHITE SAND TOTAL INCLUDE THE 1810 LBS WE PUMPED BEFORE WE SHUT DOWN THE 1ST TIME.)) PERF STG 6)PU 4 1/2 8K HAL CBP & 3 1/8 EXP GUN, 23 GM, .36 HOLE SIZE. 90 & 120 DEG. RIH SET CBP @ 8254'. PERF AS PER STG 6 PERF DESIGN. POOH. FRAC STG 6)WHP 1568 PSI, BRK 2298 PSI @ 2.7 BPM. ISIP 1813 PSI, FG .66. PUMP 100 BBLS @ 48 BPM @ 5456 PSI = 72% HOLES OPEN. ISIP 2609 PSI, FG .76, NPI 796 PSI. MP 5895 PSI, MR 51.6 BPM, AP 4808 PSI, AR 50.6 BPM.

RECEIVED

DESIGN, POOH,

PMP 902 BBLS SW & 12,927 LBS OF 30/50 SND & 5062 LBS OF 20/40 SLC SND. TOTAL PROP 17,989 LBS. SWI. X-OVER FOR WL.

PERF STG 7)PU 4 1/2 8K HAL CBP & 3 1/8 EXP GUN, 23 GM, .36 HOLE SIZE. 120 DEG PHASING. RIH SET CBP @ 8028'. PERF AS PER STG 7 PERF

HSM. STAND CLEAR OF POP-OFFS WHILE PUMPING. DONT WALK UNDER WL.

JUN 16 2011

4/28/2011

6:30 - 6:45

0.25

COMP

48

Р

Operation Summary Report

| | -25N3AS YELLOW | <i>,</i> | Spud C | Onductor | : 1/3/201 | 1 | Spud Date: 1/17/2011 |
|---------------------------|--------------------|------------------|----------|-----------|-------------|----------|---|
| Project: UTAH- | -UINTAH | | Site: NE | U 921-2 | 5N PAD | | Rig Name No: SWABBCO 8/8 |
| Event: COMPL | ETION | | Start Da | te: 4/25/ | 2011 | | End Date: 5/9/2011 |
| Active Datum: Level) | RKB @4,980.00ft (a | above Mean | Sea | UWI: S | E/SW/0/ | 9/S/21/E | /25/0/0/26/PM/S/1158/W/0/2575/0/0 |
| Date | Time Start-End | Duration (hr) | Phase | Code | Sub Code | P/U | MD From Operation (ft) |
| | 6:45 - 18:00 | 11.25 | COMP | 36 | В | P | FRAC STG 7)WHP 1370 PSI, BRK 2865 PSI @ 4.0 BPM. ISIP 1851 PSI, FG. 67. PUMP 100 BBLS @ 51.4 BPM @ 5740 PSI = 74% HOLES OPEN. ISIP 2600 PSI, FG. 77, NPI 749 PSI. MP 6702 PSI, MR 52 BPM, AP 4682 PSI, AR 51.4 BPM, PMP 1816 BBLS SW & 28,422 LBS OF 30/50 SND 8 5801 LBS OF 20/40 SLC SND. TOTAL PROP 34,223 LBS. SWI, X-OVER FOR WL. PERF STG 8)PU 4 1/2 8K HAL CBP & 3 1/8 EXP GUN, 23 GM, 36 HOLE SIZE. 90 DEG PHASING. RIH SET CBP @ 7802'. PERF AS PER STG 8 PERF DESIGN. POOH. FRAC STG 8)WHP 1082 PSI, BRK 1810 PSI @ 3.6 BPM. ISIP 1370 PSI, FG. 62. PUMP 100 BBLS @ 49.7 BPM @ 5070 PSI = 73% HOLES OPEN. ISIP 2073 PSI, FG. 71, NPI 703 PSI. MP 6368 PSI, MR 50.2 BPM, AP 4769 PSI, AR 49.5 BPM, PMP 2099 BBLS SW & 38,495 LBS OF 30/50 SND 8 4937 LBS OF 20/40 SLC SND. TOTAL PROP 43,432 LBS. SWI, X-OVER FOR WL. PERF STG 9)PU 4 1/2 8K HAL CBP & 3 1/8 EXP GUN, 23 GM, 36 HOLE SIZE. 120 DEG PHASING. RIH SET CBP @ 7624'. PERF AS PER STG 9 PERF DESIGN. POOH. FRAC STG 9)WHP 1308 PSI, BRK 1950 PSI @ 4.4 BPM. ISIP 1605 PSI, FG. 65. PUMP 100 BBLS @ 49.7 BPM @ 4604 PSI = 86% HOLES OPEN. ISIP 2325 PSI, FG. 75, NPI 720 PSI. MP 4804 PSI, MR 49.6 BPM, AP 4222 PSI, AR 49.2 BPM, PMP 1973 BBLS SW & 57,832 LBS OF 30/50 SND 8 10,277 LBS OF 20/40 SLC SND. TOTAL PROP 68,109 LBS. SWI, X-OVER FOR WL. |
| | | | | | | | PU 4 1/2 8K HAL CBP. RIH SET CBP @ 7400'. POOH, SWI. DONE FRACING THIS WELL. TOTAL SAND = 284,220 LBS |
| 51010011 | 7.00 0.0 | 0.50 | | 4- | | _ | TOTAL CLFL = 13,107 BBLS TOTAL SCALE = 1071 GAL TOTAL BIO = 287 GAL |
| 5/6/2011 | 7:00 - 7:30 | 0.50 | COMP | 48 | | P | HSM, PICKING UP TBG OFF FLOAT |
| | 7:30 - 15:00 | 7.50 | COMP | 31 | l | Р | TALLY & PU 37/8 BIT, POBS & 233 JTS 23/8 L-80 OFF FLOAT. EOT @ 7387' RU DRLG EQUIP, PREF NTO D/O 5/9/11. SWI SDFWE |
| 5/9/2011 | 7:00 - 7:30 | 0.50 | COMP | 48 | | Р | HSM, DRILLING CBPS |

RECEIVED

JUN 16 2011

US ROCKIES REGION **Operation Summary Report**

| Well: NBU 921- | -25N3AS YELLOV | V | Spud Co | onductor | : 1/3/201 | 11 | Spud Date: 1/1 | 7/2011 |
|---------------------------|-------------------|------------------|----------|-----------|-------------|-----------|-----------------|--|
| Project: UTAH- | UINTAH | | Site: NB | U 921-2 | 5N PAD | | | Rig Name No: SWABBCO 8/8 |
| Event: COMPL | ETION | | Start Da | te: 4/25/ | 2011 | | | End Date: 5/9/2011 |
| Active Datum: F Level) | RKB @4,980.00ft (| above Mean | Sea | UWI: S | E/SW/0. | /9/S/21/E | /25/0/0/26/PM/S | /1158/W/0/2575/0/0 |
| Date | Time Start-End | Duration (hr) | Phase | Code | Sub Code | P/U | MD From (ft) | Operation |
| | 7:30 - 14:00 | 6.50 | COMP | 44 | С | Р | | BROKE CIRC CONVENTINAL, TEST BOPS TO 3,000# FOR 15 MIN LOST 0# PSI. RIH. |
| | | | | | | | | C/O 5' SAND TAG 1ST PLUG @ 7400' DRL PLG IN 4 MIN 500# PSI INCREASE RIH. |
| | | | | | | | | C/O 30' SAND TAG 2ND PLUG @ 7624' DRL PLG IN 5 MIN 400# PSI INCREASE RIH |
| | | | | | | | | C/O 30' SAND TAG 3RD PLUG @ 7792' DRL PLG IN 5 MIN 200# PSI INCREASE RIH |
| | | | | | | | | C/O 30' SAND TAG 4TH PLUG @ 8008' DRL PLG IN 5 MIN 400# PSI INCREASE RIH |
| | | | | | | | | C/O 30' SAND TAG 5TH PLUG @ 8244' DRL PLG IN 5 MIN 500# PSI INCREASE RIH |
| | | | | | | | | C/O 30' SAND TAG 6TH PLUG @ 8508' DRL PLG IN 6 MIN 500# PSI INCREASE RIH |
| | | | | | | | | C/O 30' SAND TAG 7TH PLUG @ 8710' DRL PLG IN 6 MIN 500# PSI INCREASE. RIH |
| | | | | | | | | C/O 60' SAND TAG 8TH PLUG @ 9026' DRL PLG IN 6 MIN 500# PSI INCREASE. RIH |
| | | | | | | | | C/O 30' SAND TAG 9TH PLUG @ 9237' DRL PLG IN 6 MIN 600# PSI INCREASE. RIH |
| | | | | REC |)EIV | ΈD | | C/O TO PBTD @ 9673' CIRC CLEAN, RACK OUT SWIVEL. L/D 19 JTS, LAND TBG ON 285 JTS 23/8 L-80. RD FLOOR, ND BOPS NU WH. PUMP OFF BIT, LET WELL SET FOR 30 MIN FOR BIT TO FALL. TURN WELL OVER TO FB CREW. RIG DOWN. |
| | | | | JI.N | 16 | 2011 | | FINAL SICP = 2000 FTP = 100 |
| | | | DN | A OF O | L, CAR | & WHAT | Ĝ | KB = 25' HANGER 41/16 = .83' 285 JTS 23/8 L-80 = 9012.68' (SURFAC VALVE LOCKED OPEN W/ POPOFF ASSEMBLY) 1.875 X/N & POBS = 2.20' EOT @ 9040.71' |
| | | | | | | | | TWTR = 13,407 BBLS TWR = 1300 BBLS TWLTR = 12,107 BBLS |
| | | | | | | | | 315 JTS HAULED OUT 285 LANDED 30 TO RETURN |
| | 13:45 - 13:45 | 0.00 | PROD | 50 | | | | WELL TURNED TO SALES @ 1345 HR ON 5/9/11 - 1400 MCFD, 1920 BWPD, CP 2000#, FTP 100#, CK 20/64" |
| 5/30/2011 | 7:00 - | | | 50 | | | | WELL IP'D ON 5/30/11 - 3043 MCFD, 0 BOPD, 390 BWPD, CP 1357#, FTP 1070#, CK 22/64", LP 143#, 24 HRS |

6/3/2011 10:15:14AM 5



Site: NBU 921-25N Pad

Well: NBU 921-25N Pad

Wellbore: OH Design: OH



WELL DETAILS: NBU 921-25N3AS

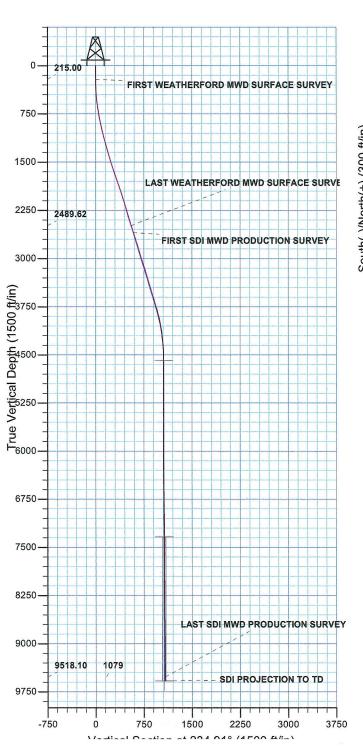
GL 4955' & RKB 25' @ 4980.00ft (H&P 311)

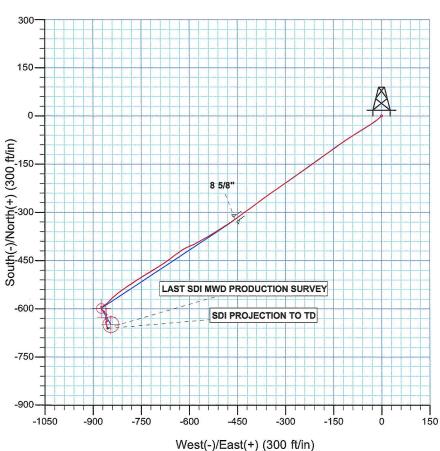
+N/-S +E/-W Northing Easting Latitude Longitude
0.00 0.00 14530655.97 2060602.02 40° 0' 10.624 N 109° 29' 58.618 W



Azimuths to True North Magnetic North: 11.13°

Magnetic Field Strength: 52374.6snT Dip Angle: 65.88° Date: 01/05/2011 Model: IGRF2010





PROJECT DETAILS: Uintah County, UT UTM12

Geodetic System: Universal Transverse Mercator (US Survey Feet)
Datum: NAD 1927 - Western US

Ellipsoid: Clarke 1866
Zone: Zone 12N (114 W to 108 W)

Location: SEC 25 T9S R21E System Datum: Mean Sea Level

RECEIVED

JUN 16 2011

DIV. OF OIL, GAS & MINING



Kerr McGee Oil and Gas Onshore LP

Uintah County, UT UTM12 NBU 921-25N Pad NBU 921-25N3AS

OH

Design: OH

Standard Survey Report

23 March, 2011

RECEIVED

JUN 16 2011

DIV OF OIL, GAS & MINING







Company:

Kerr McGee Oil and Gas Onshore LP

Project:

Uintah County, UT UTM12

Site: Well: NBU 921-25N Pad NBU 921-25N3AS

Wellbore: Design:

ОН ОН Local Co-ordinate Reference:

Well NBU 921-25N3AS

GL 4955' & RKB 25' @ 4980.00ft (H&P 311) GL 4955' & RKB 25' @ 4980.00ft (H&P 311)

TVD Reference: MD Reference:

North Reference: **Survey Calculation Method:**

Minimum Curvature

Database:

EDM5000-RobertS-Local

Project

Uintah County, UT UTM12

Map System:

Universal Transverse Mercator (US Survey Feet)

Geo Datum: Map Zone:

NAD 1927 - Western US

Zone 12N (114 W to 108 W)

System Datum:

Mean Sea Level

Site

NBU 921-25N Pad, SEC 25 T9S R21E

0.00 ft

Site Position:

Northing:

14,530,655.41 usft

Latitude:

40° 0' 10.616 N

From: **Position Uncertainty:** Lat/Long

Easting: Slot Radius: 2,060,612.11 usft 13.200 in

Longitude: **Grid Convergence:** 109° 29' 58.488 W

0.96°

Well NBU 921-25N3AS, 1158' FSL 2575' FWL

Well Position

+N/-S +E/-W 0.00 ft

Northing:

14,530,655.97 usft

Latitude:

40° 0' 10.624 N

0.00 ft

Easting:

2,060,602.02 usft

Longitude:

109° 29' 58.618 W

Position Uncertainty

0.00 ft

Wellhead Elevation:

Ground Level:

4,955.00 ft

Wellbore

ОН

Magnetics

Model Name

Sample Date

Declination (°)

Dip Angle (°)

Field Strength

(nT)

234.91

IGRF2010

01/05/2011

11.13

65.88

52,375

COMPASS 5000.1 Build 40

Design

ОН

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

(°)

Survey Program

03/23/2011 Date

From (ft)

03/23/2011 2:40:35PM

To

(ft)

Survey (Wellbore)

Tool Name

Description

16.00 2,679.00 2,566.00 Survey #1 WEATHERFORD MWD SURFA 9,730.00 Survey #2 SDI MWD PRODUCTION (OH)

MWD MWD SDI MWD - Standard MWD - Standard ver 1.0.1

Survey

| Measured | | | Vertical | | | Vertical | Dogleg | Build | Turn |
|------------|--------------|-------------|----------|--------|--------|----------|-----------|-----------|-----------|
| Depth | Inclination | Azimuth | Depth | +N/-S | +E/-W | Section | Rate | Rate | Rate |
| (ft) | (°) | (°) | (ft) | (ft) | (ft) | (ft) | (°/100ft) | (°/100ft) | (°/100ft) |
| 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 16.00 | 0.00 | 0.00 | 16.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 215.00 | 0.23 | 305.76 | 215.00 | 0.23 | -0.32 | 0.13 | 0.12 | 0.12 | 0.00 |
| FIRST WEAT | THERFORD MWD | SURFACE SUI | RVEY | | | | | | |
| 308.00 | 1.56 | 214.60 | 307.99 | -0.70 | -1.19 | 1.38 | 1.70 | 1.43 | -98.02 |
| 401.00 | 3.34 | 226.10 | 400.90 | -3.62 | -3.87 | 5.24 | 1.98 | 1.91 | 12.37 |
| 496.00 | 5.19 | 228.66 | 495.63 | -8.38 | -9.09 | 12.25 | 1.96 | 1.95 | 2.69 |
| 591.00 | 7.19 | 233.16 | 590.07 | -14.78 | -17.07 | 22.47 | 2.16 | 2.11 | 4.74 |
| 687.00 | 9.13 | 234.54 | 685.10 | -22.80 | -28.08 | 736.09 | 2.03 | 2.02 | 1.44 |
| 782.00 | 10.38 | 238.04 | 778.72 | -31.71 | -41.48 | 52.17 | 1.46 | 1.32 | 3.68 |





Company:

Kerr McGee Oil and Gas Onshore LP

Project:

Uintah County, UT UTM12

Site: Well: NBU 921-25N Pad NBU 921-25N3AS

Wellbore:

ОН

Local Co-ordinate Reference:

TVD Reference:

Well NBU 921-25N3AS

GL 4955' & RKB 25' @ 4980.00ft (H&P 311)

MD Reference:

GL 4955' & RKB 25' @ 4980.00ft (H&P 311)

North Reference:

Minimum Curvature

Survey Calculation Method:

| Wellbore: OH Design: OH | | | | Database: | iculation Metho | | EDM5000-Robe | | |
|-------------------------|---------------|------------------|----------|----------------------|---------------------|----------|--------------|-----------|-----------|
| Survey | | | | | | | | | |
| Measured | | | Vertical | | | Vertical | Dogleg | Build | Turn |
| Depth | Inclination | Azimuth | Depth | +N/-S | +E/-W | Section | Rate | Rate | Rate |
| (ft) | (°) | (°) | (ft) | (ft) | (ft) | (ft) | (°/100ft) | (°/100ft) | (°/100ft) |
| 878.00 | 11.75 | 238.66 | 872.94 | -41.37 | -57.17 | 70.56 | 1.43 | 1.43 | 0.65 |
| 0,0.00 | 11.70 | 200.00 | 0,2.01 | | 2 | , | | | |
| 972.00 | 13.25 | 238.16 | 964.71 | -52.03 | -74.50 | 90.87 | 1.60 | 1.60 | -0.53 |
| 1,067.00 | 13.88 | 237.29 | 1,057.06 | -63.93 | -93.34 | 113.12 | 0.70 | 0.66 | -0.92 |
| 1,162.00 | 14.63 | 236.66 | 1,149.13 | -76.68 | -112.95 | 136.50 | 0.81 | 0.79 | -0.66 |
| 1,257.00 | 15.04 | 234.83 | 1,240.96 | -90.38 | -133.05 | 160.82 | 0.66 | 0.43 | -1.93 |
| 1,352.00 | 15.56 | 234.54 | 1,332.60 | -104.87 | -153.50 | 185.89 | 0.55 | 0.55 | -0.31 |
| 1,447.00 | 16.56 | 234.16 | 1,423.89 | -120.19 | -174.85 | 212.17 | 1.06 | 1.05 | -0.40 |
| 1,542.00 | 17.31 | 233.66 | 1,514.77 | -136.49 | -197.21 | 239.83 | 0.80 | 0.79 | -0.53 |
| 1,635.00 | 18.94 | 235.04 | 1,603.15 | -153.34 | -220.73 | 268.76 | 1.81 | 1.75 | 1.48 |
| 1,731.00 | 19.38 | 234.41 | 1,693.83 | -171.54 | -246.45 | 300.27 | 0.51 | 0.46 | -0.66 |
| 1,826.00 | 18.75 | 234.54 | 1,783.62 | -189.57 | -271.70 | 331.30 | 0.66 | -0.66 | 0.14 |
| 1,921.00 | 18.38 | 236.29 | 1,873.68 | -206.7 4 | -296.60 | 361.54 | 0.70 | -0.39 | 1.84 |
| 2,016.00 | 19.00 | 235.54 | 1,963.67 | -223.80 | -321.81 | 391.98 | 0.70 | 0.65 | -0.79 |
| 2,111.00 | 16.81 | 234.91 | 2,054.06 | -240.45 | -345.80 | 421.18 | 2.31 | -2.31 | -0.66 |
| | | | • | | -368.00 | 448.59 | 0.69 | -0.45 | -1.82 |
| 2,207.00 | 16.38 | 233.16 | 2,146.06 | -256.54 | | | 0.09 | 0.27 | 0.40 |
| 2,301.00 | 16.63 | 233.54 | 2,236.19 | -272.49 | -389.42 | 475.29 | 0.29 | 0.27 | 0.40 |
| 2,395.00 | 17.00 | 234.04 | 2,326.17 | -288.55 | -4 11.36 | 502.47 | 0.42 | 0.39 | 0.53 |
| 2,491.00 | 17.25 | 235.16 | 2,417.91 | -304.92 | -434.41 | 530.74 | 0.43 | 0.26 | 1.17 |
| 2,566.00 | 16.85 | 233.48 | 2,489.62 | -317.74 | -452.27 | 552.73 | 0.85 | -0.53 | -2.24 |
| LAST WEAT | HERFORD MWD | SURFACE SUR | VEY | | | | | | |
| 2,679.00 | 17.15 | 236.21 | 2,597.68 | -336.75 | -479.28 | 585.76 | 0.75 | 0.27 | 2.42 |
| FIRST SDI M | WD PRODUCTION | ON SURVEY | | | | | | | |
| 2,773.00 | 17.94 | 239.02 | 2,687.31 | -351.92 | -503.21 | 614.05 | 1.23 | 0.84 | 2.99 |
| 2,868.00 | 16.97 | 237.17 | 2,777.94 | -366.96 | -527.40 | 642.50 | 1.18 | -1.02 | -1.95 |
| 2,962.00 | 17.77 | 242.03 | 2,867.65 | -381.13 | -551.60 | 670.44 | 1.76 | 0.85 | 5.17 |
| 3,057.00 | 15.48 | 240.51 | 2,958.68 | -394.17 | -575.44 | 697.45 | 2.45 | -2.41 | -1.60 |
| 3,151.00 | 18.91 | 248.25 | 3,048.47 | -406.00 | -600.52 | 724.77 | 4.38 | 3.65 | 8.23 |
| 3,245.00 | 19.03 | 235.34 | 3,137.41 | -420.36 | -627.28 | 754.92 | 4.46 | 0.13 | -13.73 |
| 3,340.00 | 16.71 | 231.81 | 3,227.82 | -437.62 | -650.76 | 784.05 | 2.69 | -2.44 | -3.72 |
| · · | 17.15 | 235.59 | 3,317.75 | -453.80 | -672.82 | 811.41 | 1.26 | 0.47 | 4.02 |
| 3,434.00 | | | | | | 837.93 | | -1.95 | 2.32 |
| 3,529.00 | 15.30 | 237.79 | 3,408.96 | -468.40 404.00 | -694.98 | | 2.05 | 0.84 | 0.74 |
| 3,623.00 | 16.09 | 238.49 | 3,499.46 | - 4 81.82 | -716.58 | 863.32 | 0.86 | | |
| 3,718.00 | 17.85 | 239.11 | 3,590.32 | -496.18 | -740.30 | 890.98 | 1.86 | 1.85 | 0.65 |
| 3,812.00 | 16.27 | 236.38 | 3,680.18 | -510.86 | -763.63 | 918.52 | 1.88 | -1.68 | -2.90 |
| 3,907.00 | 16.80 | 236.03 | 3,771.25 | -525.90 | -786.10 | 945.55 | 0.57 | 0.56 | -0.37 |
| 4,001.00 | 15.30 | 236.91 | 3,861.58 | -540.27 | -807.76 | 971.52 | 1.62 | -1.60 | 0.94 |
| 4,095.00 | 12.22 | 229.79 | 3,952.88 | -553.46 | -825.75 | 993.84 | 3.73 | -3.28 | -7.57 |
| 4,190.00 | 11.17 | 228.30 | 4,045.91 | -566.08 | -840.30 | 1,012.99 | 1.15 | -1.11 | -1.57 |
| 4,284.00 | 8.38 | 221.96 | 4,138.54 | -577.23 | -851.68 | 1,028.71 | 3.18 | -2.97 | -6.74 |
| 4,379.00 | 6.07 | 230.67 | 4,232.78 | -585.56 | -860.19 | 1,040.47 | 2.68 | -2.43 | 9.17 |
| 4,473.00 | 4.92 | 242.36 | 4,326.35 | -590.58 | -867.61 | 1,049.42 | 1.70 | -1.22 | 12.44 |
| 4,567.00 | 2.99 | 242.30 245.17 | 4,420.12 | -593.48 | -873.41 | 1,055.83 | 2.06 | -2.05 | 2.99 |
| 4,662.00 | 0.98 | 351.94 | 4,515.08 | -593.72 | -875.77 | | 2.50 | -2.12 | 112.39 |
| 4,002.00 | 0.80 | 301.04 | 7,010.00 | 550.12 | 3,3.77 | 1 1 2 | ZVZD | 4.14 | 1.2.00 |





Company:

Kerr McGee Oil and Gas Onshore LP

Project: Site: Uintah County, UT UTM12

Well:

NBU 921-25N Pad NBU 921-25N3AS

Wellbore:

ОН

1

Local Co-ordinate Reference:

TVD Reference:

MD Reference:

North Reference:

Survey Calculation Method:

Well NBU 921-25N3AS

GL 4955' & RKB 25' @ 4980.00ft (H&P 311)

GL 4955' & RKB 25' @ 4980.00ft (H&P 311)

True

Minimum Curvature

| Design: OH | | | | Database: | | E | DM5000-Robert | S-Local | |
|-------------------|-------------|-----------------|-------------------|-----------|---------|---------------------|----------------|---------------|--------------|
| Survey | | | | | | | | | |
| Measured Depth | Inclination | Azimuth | Vertical Depth | +N/-S | +E/-W | Vertical Section | Dogleg Rate | Build Rate | Turn Rate |
| (ft) | (°) | (°) | (ft) | (ft) | (ft) | (ft) | (°/100ft) | (°/100ft) | (°/100ft) |
| 4,756.00 | 0.35 | 336.66 | 4,609.07 | -592.66 | -876.00 | 1,057.48 | 0.69 | -0.67 | -16.26 |
| 4,851.00 | 0.26 | 166.51 | 4,704.07 | -592.60 | -876.06 | 1,057.50 | 0.64 | -0.09 | -179.11 |
| 4,945.00 | 0.53 | 204.83 | 4,798.07 | -593.20 | -876.19 | 1,057.96 | 0.39 | 0.29 | 40.77 |
| 5,039.00 | 1.96 | 158.18 | 4,892.04 | -595.09 | -875.78 | 1,058.70 | 1.75 | 1.52 | -49.63 |
| 5,134.00 | 1.76 | 146.47 | 4,986.99 | -597.82 | -874.37 | 1,059.11 | 0.45 | -0.21 | -12.33 |
| 5,228.00 | 2.07 | 158.80 | 5,080.94 | -600.60 | -872.96 | 1,059.56 | 0.55 | 0.33 | 13.12 |
| 5,322.00 | 1.76 | 159.23 | 5,174.89 | -603.53 | -871.83 | 1,060.32 | 0.33 | -0.33 | 0.46 |
| 5,417.00 | 0.70 | 101.12 | 5,269.87 | -605.01 | -870.74 | 1,060.28 | 1.59 | -1.12 | -61.17 |
| 5,511.00 | 0.86 | 107.15 | 5,363.86 | -605.33 | -869.51 | 1,059.45 | 0.19 | 0.17 | 6.41 |
| 5,605.00 | 0.88 | 99.19 | 5,457.85 | -605.65 | -868.12 | 1,058.51 | 0.13 | 0.02 | -8.47 |
| 5,700.00 | 0.53 | 117.18 | 5,552.84 | -605.97 | -867.01 | 1,057.78 | 0.43 | -0.37 | 18.94 |
| 5,794.00 | 1.49 | 143.31 | 5,646.83 | -607.15 | -865.89 | 1,057.54 | 1.11 | 1.02 | 27.80 |
| 5,889.00 | 1.67 | 1 4 5.77 | 5,741.79 | -609.28 | -864.38 | 1,057.53 | 0.20 | 0.19 | 2.59 |
| 5,983.00 | 1.76 | 148.84 | 5,835.75 | -611.65 | -862.86 | 1,057.65 | 0.14 | 0.10 | 3.27 |
| 6,077.00 | 1.93 | 147.61 | 5,929.70 | -614.22 | -861.26 | 1,057.82 | 0.19 | 0.18 | -1.31 |
| 6,172.00 | 1.23 | 124.32 | 6,024.66 | -616.15 | -859.56 | 1,057.54 | 0.99 | -0.74 | -24.52 |
| 6,266.00 | 0.79 | 99,45 | 6,118.65 | -616.82 | -858.09 | 1,056.72 | 0.65 | -0.47 | -26.46 |
| 6,361.00 | 0.53 | 62.01 | 6,213.64 | -616.72 | -857.06 | 1,055.82 | 0.52 | -0.27 | -39,41 |
| 6,455.00 | 1.14 | 212.56 | 6,307.64 | -617.31 | -857.18 | 1,056.25 | 1.73 | 0.65 | 160.16 |
| 6,549.00 | 1.14 | 202.02 | 6,401.62 | -618.96 | -858.03 | 1,057.90 | 0.22 | 0.00 | -11.21 |
| 6,644.00 | 1.23 | 207.11 | 6,496.60 | -620.75 | -858.85 | 1,059.60 | 0.15 | 0.09 | 5.36 |
| 6,738.00 | 1.32 | 200.79 | 6,590.58 | -622.66 | -859.69 | 1,061.39 | 0.18 | 0.10 | -6.72 |
| 6,832.00 | 1.49 | 203.42 | 6,684.55 | -624.79 | -860.56 | 1,063.33 | 0.19 | 0.18 | 2.80 |
| 6,927.00 | 1.58 | 206.50 | 6,779.52 | -627.10 | -861.64 | 1,065.53 | 0.13 | 0.09 | 3.24 |
| 7,021.00 | 1.06 | 163.08 | 6,873.49 | -629.09 | -861.96 | 1,066.94 | 1.16 | -0.55 | -46.19 |
| 7,115.00 | 1.32 | 151.57 | 6,967.47 | -630.87 | -861.20 | 1,067.34 | 0.37 | 0.28 | -12.24 |
| 7,210.00 | 1.41 | 149.02 | 7,062.44 | -632.84 | -860.07 | 1,067.55 | 0.11 | 0.09 | -2.68 |
| 7,304.00 | 1.58 | 147.44 | 7,156.41 | -634.92 | -858.78 | 1,067.69 | 0.19 | 0.18 | -1.68 |
| 7,399.00 | 0.53 | 40.12 | 7,251.40 | -635.69 | -857.79 | 1,067.32 | 1.91 | -1.11 | -112.97 |
| 7,493.00 | 0.35 | 78.44 | 7,345.40 | -635.30 | -857.23 | 1,066.64 | 0.36 | -0.19 | 40.77 |
| 7,587.00 | 0.44 | 128.45 | 7,439.40 | -635.47 | -856.67 | 1,066.27 | 0.37 | 0.10 | 53.20 |
| 7,682.00 | 0.70 | 169.06 | 7,534.39 | -636.26 | -856.27 | 1,066.41 | 0.49 | 0.27 | 42.75 |
| 7,776.00 | 0.53 | 182.86 | 7,628.39 | -637.26 | -856.18 | 1,066.91 | 0.24 | -0.18 | 14.68 |
| 7,870.00 | 0.97 | 171.52 | 7,722.38 | -638.48 | -856.09 | 1,067.53 | 0.49 | 0.47 | -12.06 |
| 7,964.00 | 0.70 | 266.44 | 7,816.37 | -639.30 | -856.54 | 1,068.38 | 1.32 | -0.29 | 100.98 |
| 8,059.00 | 0.62 | 232.16 | 7,911.37 | -639.66 | -857.53 | 1,069.39 | 0.42 | -0.08 | -36.08 |
| 8,153.00 | 0.79 | 205.53 | 8,005.36 | -640.55 | -858.21 | 1,070.46 | 0.39 | 0.18 | -28.33 |
| 8,247.00 | 0.98 | 325.71 | 8,099.35 | -640.47 | -858.94 | 1,071.01 | 1.64 | 0.20 | 127.85 |
| 8,342.00 | 0.62 | 312.76 | 8,194.34 | -639.45 | -859.78 | 1,071.11 | 0.42 | -0.38 | -13.63 |
| 8,436.00 | 0.44 | 311.62 | 8,288.34 | -638.87 | -860.42 | 1,071.30 | 0.19 | -0.19 | -1.21 |
| 8,530.00 | 0.26 | 161.85 | 8,382.34 | -638.83 | -860.62 | 1,071.45 | 0.72 | -0.19 | -159.33 |
| 8,625.00 | 0.62 | 176.53 | 8,477.34 | -639.55 | -860.53 | 1,071.78 | 0.39 | 0.38 | 15.45 |
| 8,719.00 | 1.14 | 188.48 | 8,571.32 | -640.98 | -860.63 | 1,072.69 | 0.58 | 0.55 | 12.71 |
| 8,814.00 | 1.41 | 193.93 | 8,666.30 | -643.05 | -861.05 | | CIPATI | | 5.74 |





Company:

Kerr McGee Oil and Gas Onshore LP

Project:

Uintah County, UT UTM12

Site: Well: NBU 921-25N Pad NBU 921-25N3AS

Wellbore: Design:

OH OH

Local Co-ordinate Reference:

TVD Reference:

Well NBU 921-25N3AS

GL 4955' & RKB 25' @ 4980.00ft (H&P 311)

MD Reference:

GL 4955' & RKB 25' @ 4980.00ft (H&P 311)

North Reference:

rue

Survey Calculation Method:

Minimum Curvature

Database:

EDM5000-RobertS-Local

| Surv | ey |
|------|----|
| | |

| 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) |
|---------------------------|----------------------|---------------------|---------------------------|---------------|---------------|-----------------------------|-----------------------------|----------------------------|---------------------------|
| 9,666.00 LAST SDI M | 1.40 WD PRODUCTIO | 128.00 ON SURVEY | 9,518.10 | -659.63 | -855.38 | 1,079.11 | 0.18 | 0.00 | -7.74 |
| 9,730.00 SDI PROJEC | 1.40 | 128.00 | 9,582.08 | -660.60 | -854.14 | 1,078.65 | 0.00 | 0.00 | 0.00 |

| Design Annotations | | | | |
|--------------------|-------------------|---------------|---------------|--------------------------------------|
| Measured Depth | Vertical Depth | Local Coor | | |
| дериі (ft) | (ft) | +N/-S (ft) | +E/-W (ft) | Comment |
| 215.00 | 215.00 | 0.23 | -0.32 | FIRST WEATHERFORD MWD SURFACE SURVEY |
| 2,566.00 | 2,489.62 | -317.74 | -452.27 | LAST WEATHERFORD MWD SURFACE SURVEY |
| 2,679.00 | 2,597.68 | -336.75 | -479.28 | FIRST SDI MWD PRODUCTION SURVEY |
| 9,666.00 | 9,518.10 | -659.63 | -855.38 | LAST SDI MWD PRODUCTION SURVEY |
| 9,730.00 | 9,582.08 | -660.60 | -854.14 | SDI PROJECTION TO TD |

| Checked By: | Approved By: | Date: | |
|-------------|--------------|-------|--|
| | | | |

RECEIVED
JUN 16 Z011

DIV. OF OIL, GAS & WINING



Kerr McGee Oil and Gas Onshore LP

Uintah County, UT UTM12 NBU 921-25N Pad NBU 921-25N3AS

OH

Design: OH

Survey Report - Geographic

23 March, 2011

JUN 16 2011
DIV. OF OIL, GAS & MINING





SDI Survey Report - Geographic



Company: Project:

Kerr McGee Oil and Gas Onshore LP

Uintah County, UT UTM12

Site:

NBU 921-25N Pad NBU 921-25N3AS

Well: Wellbore: Design:

OH ОН Local Co-ordinate Reference:

TVD Reference: MD Reference:

North Reference:

Survey Calculation Method:

Database:

Well NBU 921-25N3AS

GL 4955' & RKB 25' @ 4980.00ft (H&P 311) GL 4955' & RKB 25' @ 4980.00ft (H&P 311)

Minimum Curvature

EDM5000-RobertS-Local

Project

Uintah County, UT UTM12

Map System:

Universal Transverse Mercator (US Survey Feet)

NAD 1927 - Western US

Geo Datum: Map Zone:

Zone 12N (114 W to 108 W)

System Datum:

Mean Sea Level

Site

NBU 921-25N Pad, SEC 25 T9S R21E

Site Position:

From:

Lat/Long

Northing: Easting:

14,530,655.41 usft 2,060,612.11 usft Latitude:

Longitude:

40° 0' 10.616 N

Position Uncertainty:

Slot Radius:

13.200 in

Grid Convergence:

109° 29' 58.488 W

0.96°

Well

NBU 921-25N3AS, 1158' FSL 2575' FWL

0.00 ft

Well Position

+N/-S +E/-W

ОН

0.00 ft 0.00 ft

Northing:

14,530,655,97 usft 2,060,602.02 usft Latitude: Longitude: 40° 0' 10.624 N

Position Uncertainty

0.00 ft

Easting: Wellhead Elevation:

ft

Ground Level:

109° 29' 58.618 W

01/05/2011

0.00

11.13

4,955.00 ft

52,375

Weilbore

Magnetics

Model Name

Sample Date

Declination (°)

Dip Angle (°)

Field Strength

(nT)

IGRF2010

OH

Audit Notes:

Design

Version:

1.0

Phase:

ACTUAL

Tie On Depth:

0.00

Vertical Section:

Depth From (TVD)

+N/-S

+E/-W

Direction

65.88

(ft)

(ft) 0.00

(ft) 0.00 (°)

234.91

Survey Program

Survey

03/23/2011 Date

То From

Survey (Wellbore)

Tool Name

Description

RECEIVED

16.00 2,679.00 2,566.00 Survey #1 WEATHERFORD MWD SURFA 9,730.00 Survey #2 SDI MWD PRODUCTION (OH)

MWD MWD SDI

MWD - Standard MWD - Standard ver 1.0.1 JUN 16 2011

DIV. OF OIL, GAS & MINING

| Measured | | | Vertical | | | Мар | Мар | | |
|---------------|--------------------|----------------|---------------|---------------|---------------|--------------------|-------------------|-----------------|-------------------|
| Depth (ft) | Inclination (°) | Azimuth (°) | Depth (ft) | +N/-S (ft) | +E/-W (ft) | Northing (usft) | Easting (usft) | Latitude | Longitude |
| 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 14,530,655.97 | 2,060,602.02 | 40° 0' 10.624 N | 109° 29' 58.618 V |
| 16.00 | 0.00 | 0.00 | 16.00 | 0.00 | 0.00 | 14,530,655.97 | 2,060,602.02 | 40° 0' 10.624 N | 109° 29' 58.618 V |
| 215.00 | 0.23 | 305.76 | 215.00 | 0.23 | -0.32 | 14,530,656.20 | 2,060,601.69 | 40° 0' 10.626 N | 109° 29' 58.622 V |
| FIRST W | EATHERFOR | D MWD SURI | FACE SURVEY | | | | | | |
| 308.00 | 1.56 | 214.60 | 307.99 | -0.70 | -1.19 | 14,530,655.25 | 2,060,600.83 | 40° 0' 10.617 N | 109° 29' 58.633 V |
| 401.00 | 3.34 | 226.10 | 400.90 | -3.62 | -3.87 | 14,530,652.29 | 2,060,598.21 | 40° 0' 10.588 N | 109° 29' 58,667 V |
| 496.00 | 5.19 | 228.66 | 495.63 | -8.38 | -9.09 | 14,530,647.44 | 2,060,593.07 | 40° 0' 10.541 N | 109° 29' 58.734 V |
| 591.00 | 7.19 | 233.16 | 590.07 | -14.78 | -17.07 | 14,530,640.91 | 2,060,585.20 | 40° 0' 10.477 N | 109° 29' 58.837 V |
| 687.00 | 9.13 | 234.54 | 685.10 | -22.80 | -28.08 | 14,530,632.70 | 2,060,574.32 | 40° 0' 10.398 N | 109° 29' 58.979 \ |
| 782.00 | 10.38 | 238.04 | 778.72 | -31.71 | -41.48 | 14,530,623.57 | 2,060,561.07 | 40° 0' 10.310 N | 109° 29' 59.151 \ |
| 878.00 | 11.75 | 238.66 | 872.94 | -41.37 | -57.17 | 14,530,613.65 | 2,060,545.55 | 40° 0' 10.215 N | 109° 29' 59.352 V |



SDI Survey Report - Geographic



Kerr McGee Oil and Gas Onshore LP Company:

Project: Uintah County, UT UTM12

NBU 921-25N Pad Site:

NBU 921-25N3AS Well:

Wellbore: ОН Design:

ОН

Local Co-ordinate Reference:

GL 4955' & RKB 25' @ 4980.00ft (H&P 311) **TVD Reference:**

MD Reference:

GL 4955' & RKB 25' @ 4980.00ft (H&P 311)

North Reference:

Survey Calculation Method: Minimum Curvature

Database:

EDM5000-RobertS-Local

Well NBU 921-25N3AS

| Survey | | • | | | | , | | | |
|---------------------------------|--------------------|------------------|-------------|--------------------|---------|---------------|------------------------------|-----------------|-------------------|
| | | | | | | | | | |
| Measured | | | Vertical | | | Мар | Map | | |
| Depth | Inclination | Azimuth | Depth | +N/-S | +E/-W | Northing | Easting | | |
| (ft) | (°) | (°) | (ft) | (ft) | (ft) | (usft) | (usft) | Latitude | Longitude |
| 972.0 | 0 13.25 | 238.16 | 964.71 | -52.03 | -74.50 | 14,530,602.70 | 2,060,528.40 | 40° 0' 10.109 N | 109° 29' 59.575 W |
| 1,067.0 | 0 13.88 | 237.29 | 1,057.06 | -63.93 | -93.34 | 14,530,590.48 | 2,060,509.77 | 40° 0' 9.992 N | 109° 29' 59.817 W |
| 1,162.0 | 0 14.63 | 236.66 | 1,149.13 | -76.68 | -112.95 | 14,530,577.40 | 2,060,490.38 | 40° 0' 9.866 N | 109° 30' 0.069 W |
| 1,257.0 | | 234.83 | 1,240.96 | -90.38 | -133.05 | 14,530,563.37 | 2,060,470.51 | 40° 0' 9.730 N | 109° 30' 0.328 W |
| 1,352.0 | 0 15.56 | 234.54 | 1,332.60 | -104.87 | -153.50 | 14,530,548.54 | 2,060,450.30 | 40° 0' 9.587 N | 109° 30' 0.590 W |
| 1,447.0 | 0 16.56 | 234.16 | 1,423.89 | -120.19 | -174.85 | 14,530,532.86 | 2,060,429.21 | 40° 0' 9.436 N | 109° 30' 0.865 W |
| 1,542.0 | 0 17.31 | 233.66 | 1,514.77 | -136.49 | -197.21 | 14,530,516.18 | 2,060,407.13 | 40° 0' 9.274 N | 109° 30' 1.152 W |
| 1,635.0 | 0 18.94 | 235.04 | 1,603.15 | -153.34 | -220.73 | 14,530,498.94 | 2,060,383.90 | 40° 0' 9.108 N | 109° 30' 1.454 W |
| 1,731.0 | 0 19.38 | 234.41 | 1,693.83 | -171.54 | -246.45 | 14,530,480.31 | 2,060,358.49 | 40° 0' 8.928 N | 109° 30' 1.785 W |
| 1,826.0 | 0 18.75 | 234.54 | 1,783.62 | -189.57 | -271.70 | 14,530,461.86 | 2,060,333.54 | 40° 0' 8.750 N | 109° 30' 2.110 W |
| 1,921.0 | | 236.29 | 1,873.68 | -206.74 | -296.60 | 14,530,444.27 | 2,060,308.94 | 40° 0' 8.580 N | 109° 30' 2.430 W |
| 2,016.0 | 0 19.00 | 235.54 | 1,963.67 | -223.80 | -321.81 | 14,530,426.79 | 2,060,284.02 | 40° 0' 8.411 N | 109° 30' 2.754 W |
| 2,111.0 | 0 16.81 | 234.91 | 2,054.06 | -240.45 | -345.80 | 14,530,409.74 | 2,060,260.31 | 40° 0' 8.247 N | 109° 30' 3.062 W |
| 2,207.0 | | 233.16 | 2,146.06 | -256.54 | -368.00 | 14,530,393.27 | 2,060,238.39 | 40° 0' 8.088 N | 109° 30' 3.347 W |
| 2,301.0 | | 233.54 | 2,236.19 | -272.49 | -389.42 | 14,530,376.97 | 2,060,217.24 | 40° 0' 7.930 N | 109° 30' 3.623 W |
| 2,395.0 | | 234.04 | 2,326.17 | -288.55 | -411.36 | 14,530,360.54 | 2,060,195.57 | 40° 0' 7.771 N | 109° 30' 3.905 W |
| 2,491.0 | | 235.16 | 2,417.91 | -304.92 | -434.41 | 14,530,343.78 | 2,060,172.81 | 40° 0' 7.610 N | 109° 30' 4,201 W |
| 2,566.0 | | 233.48 | 2,489.62 | -317.74 | -452.27 | 14,530,330.66 | 2,060,155.16 | 40° 0' 7.483 N | 109° 30' 4.430 W |
| | WEATHERFORD | | | | | , , | | | |
| 2,679.0 | | 236.21 | 2,597.68 | -336.75 | -479.28 | 14,530,311.20 | 2,060,128.48 | 40° 0' 7.295 N | 109° 30' 4.777 W |
| FIRST | SDI MWD PROD | UCTION SUI | RVEY: | | | | | | |
| 2,773.0 | 0 17.94 | 239.02 | 2,687.31 | -351.92 | -503.21 | 14,530,295.64 | 2,060,104.80 | 40° 0' 7.145 N | 109° 30' 5.085 W |
| 2,868.0 | | 237.17 | 2,777.94 | -366.96 | -527.40 | 14,530,280.18 | 2,060,080.87 | 40° 0' 6.996 N | 109° 30' 5.396 W |
| 2,962.0 | | 242.03 | 2,867.65 | -381.13 | -551.60 | 14,530,265.61 | 2,060,056.91 | 40° 0' 6.856 N | 109° 30' 5.707 W |
| 3,057.0 | | 240.51 | 2,958.68 | -394.17 | -575.44 | 14,530,252.17 | 2,060,033.29 | 40° 0' 6.727 N | 109° 30' 6.013 W |
| 3,151.0 | | 248.25 | 3,048.47 | -406.00 | -600.52 | 14,530,239.93 | 2,060,008.42 | 40° 0' 6.610 N | 109° 30' 6.336 W |
| 3,245.0 | | 235.34 | 3,137.41 | -420.36 | -627.28 | 14,530,225.11 | 2,059,981.90 | 40° 0' 6.468 N | 109° 30' 6.680 W |
| 3,340.0 | | 231.81 | 3,227.82 | -437.62 | -650.76 | 14,530,207.46 | 2,059,958.71 | 40° 0' 6.298 N | 109° 30' 6.981 W |
| 3,434.0 | | 235.59 | 3,317.75 | -453.80 | -672.82 | 14,530,190.91 | 2,059,936.93 | 40° 0' 6.138 N | 109° 30' 7.265 W |
| 3,529.0 | | 237.79 | 3,408.96 | -468.40 | -694.98 | 14,530,175.94 | 2,059,915.02 | 40° 0' 5.994 N | 109° 30' 7.550 W |
| 3,623.0 | | 238.49 | 3,499.46 | -481.82 | -716.58 | 14,530,162.16 | 2,059,893.65 | 40° 0' 5.861 N | 109° 30' 7.827 W |
| 3,718.0 | | 239.11 | 3,590.32 | -496.18 | -740.30 | 14,530,147.40 | 2,059,870.18 | 40° 0' 5.719 N | 109° 30' 8.132 W |
| 3,812.0 | | 236.38 | 3,680.18 | -510.86 | -763.63 | 14,530,132.32 | 2,059,847.10 | 40° 0' 5.574 N | 109° 30' 8.432 W |
| 3,907.0 | | 236.03 | 3,771.25 | -525.90 | -786.10 | 14,530,116.91 | 2,059,824.88 | 40° 0' 5.425 N | 109° 30' 8.721 W |
| 4,001.0 | | 236.91 | 3,861.58 | -540.27 | -807.76 | 14,530,102.18 | 2,059,803.47 | 40° 0' 5.283 N | 109° 30' 8.999 W |
| 4,095.0 | | 229.79 | 3,952.88 | -553.46 | -825.75 | 14,530,088.69 | 2,059,785.70 | 40° 0' 5.153 N | 109° 30' 9.230 W |
| 4,190.0 | | 228.30 | 4,045.91 | -566.08 | -840.30 | 14,530,075.83 | 2,059,771.37 | 40° 0' 5.028 N | 109° 30' 9.417 W |
| 4,284.0 | | 221.96 | 4,138.54 | -577.23 | -851.68 | 14,530,064.49 | 2,059,760.18 | 40° 0' 4.918 N | 109° 30' 9.563 W |
| 4,379.0 | | 230.67 | 4,232.78 | -585.56 | -860.19 | 14,530,056.01 | 2,059,751.80 | 40° 0' 4.835 N | 109° 30' 9.673 W |
| 4,473.0 | | 242.36 | 4,326.35 | -590.58 | -867.61 | 14,530,050.87 | 2,059,744.47 | 40° 0' 4.786 N | 109° 30' 9.768 W |
| 4,567.0 | | 245.17 | 4,420.12 | -593.48 | -873.41 | 14,530,030.87 | 2,059,738.73 | 40° 0' 4.757 N | 109° 30' 9.843 W |
| 4,662.0 | | 351.94 | 4,515.08 | -593.72 | -875.77 | 14,530,047.59 | 2,059,736.37 | 40° 0' 4.755 N | 109° 30' 9.873 W |
| 4,756.0 | | 336.66 | 4,609.07 | -592.66 | -876.00 | 14,530,048.65 | 2,059,736.12 | 40° 0' 4.765 N | 109° 30' 9.876 W |
| 4,851.0 | | 166.51 | 4,704.07 | -592.60 | -876.06 | 14,530,048.71 | 2,059,736.06 | 40° 0' 4.766 N | 109° 30' 9.877 W |
| | | 204.83 | 4,798.07 | -593.20 | -876.19 | | 2,059,735.94 | 40° 0' 4.760 N | 109° 30' 9.879 W |
| 4,945.0 | | | 4,798.07 | -595.20 -595.09 | -875.78 | 14,530,048.10 | 2,059,735.94 | 40° 0' 4.741 N | 109° 30' 9.873 W |
| 5,039.0 5,134.0 | | 158.18 146.47 | | | -874.37 | 14,530,046.22 | 2,059,737.84 | 40° 0' 4.714 N | 109° 30' 9.855 W |
| 5,13 4 .0 5,228.0 | | 146.47 158.80 | 4,986.99 | -597.82 -600.60 | -872.96 | 14,530,043.52 | | | 109° 30' 9.837 W |
| · · | | | 5,080.94 | | -871.83 | 14,530,040.76 | 2,059,739.30 2,059,740.47 | 40° 0' 4.687 N | |
| 5,322.0 | | 159.23 | 5,174.89 | -603.53 | | 14,530,037.85 | | 40° 0' 4.658 N | 109° 30' 9.822 W |
| 5,417.0 | | 101.12 | 5,269.87 | -605.01 | -870.74 | 14,530,036.39 | 2,059,741.58 | 40° 0' 4.643 N | 109° 30' 9.808 W |
| 5,511.0 | | 107.15 | 5,363.86 | -605.33 | -869.51 | 14,530,036.09 | 2,059,742.82 | 40° 0' 4.640 N | 109° 30' 9.793 W |
| 5,605.0 | | 99.19 | 5,457.85 | -605.65 | -868.12 | 14,530,035.79 | 2,059,744.22 | 40° 0' 4.637 N | 109° 30' 9.775 W |
| 5,700.0 | | 117.18 | 5,552.84 | -605.97 | -867.01 | 14,530,035.49 | 2,059,745.33 | 40° 0' 4.634 N | 109° 30' 9.760 W |
| 5,794.0 | | 143.31 | 5,646.83 | -607.15 | -865.89 | 14,530,034.33 | | 40° 0' 4.622 N | 109° 30' 9.746 W |
| 5,889.0 | 0 1.67 | 145.77 | 5,741.79 | -609.28 | -864.38 | 14,530,032.22 | 2,059,748.02 | 40° 0' 4.601 N | 109° 30' 9.727 W |



SDISurvey Report - Geographic



Company: Project: Kerr McGee Oil and Gas Onshore LP

Uintah County, UT UTM12

Site: Well: NBU 921-25N Pad NBU 921-25N3AS

Wellbore: Design: OH OH Local Co-ordinate Reference:

TVD Reference:

MD Reference:

North Reference:

Survey Calculation Method: Database:

Well NBU 921-25N3AS

GL 4955' & RKB 25' @ 4980.00ft (H&P 311) GL 4955' & RKB 25' @ 4980.00ft (H&P 311)

True

Minimum Curvature EDM5000-RobertS-Local

| leasured | | | Vertical | | | Мар | Map | | |
|----------|-------------|-----------|----------|---------|---------|---------------|--------------|----------------|----------------|
| Depth | Inclination | Azimuth | Depth | +N/-S | +E/-W | Northing | Easting | | |
| (ft) | (°) | (°) | (ft) | (ft) | (ft) | (usft) | (usft) | Latitude | Longitude |
| 5,983.00 | 1.76 | 148.84 | 5,835.75 | -611.65 | -862.86 | 14,530,029.88 | 2,059,749.58 | 40° 0' 4.578 N | 109° 30' 9.707 |
| 6,077.00 | 1.93 | 147.61 | 5,929.70 | -614.22 | -861.26 | 14,530,027.34 | 2,059,751.22 | 40° 0' 4.552 N | 109° 30' 9.687 |
| 6,172.00 | 1.23 | 124.32 | 6,024.66 | -616.15 | -859.56 | 14,530,025.44 | 2,059,752.95 | 40° 0' 4.533 N | 109° 30' 9.665 |
| 6,266.00 | 0.79 | 99.45 | 6,118.65 | -616.82 | -858.09 | 14,530,024.79 | 2,059,754.43 | 40° 0' 4.526 N | 109° 30' 9.646 |
| 6,361.00 | 0.53 | 62.01 | 6,213.64 | -616.72 | -857.06 | 14,530,024.91 | 2,059,755.46 | 40° 0' 4.527 N | 109° 30′ 9.633 |
| 6,455.00 | 1.14 | 212.56 | 6,307.64 | -617.31 | -857.18 | 14,530,024.32 | 2,059,755.35 | 40° 0' 4.522 N | 109° 30' 9.634 |
| 6,549.00 | 1.14 | 202.02 | 6,401.62 | -618.96 | -858.03 | 14,530,022.65 | 2,059,754.53 | 40° 0' 4.505 N | 109° 30' 9.64 |
| 6,644.00 | 1.23 | 207.11 | 6,496.60 | -620.75 | -858.85 | 14,530,020.85 | 2,059,753.74 | 40° 0' 4.488 N | 109° 30' 9.656 |
| 6,738.00 | 1.32 | 200.79 | 6,590.58 | -622.66 | -859.69 | 14,530,018.93 | 2,059,752.93 | 40° 0' 4.469 N | 109° 30' 9.666 |
| 6,832.00 | 1.49 | 203.42 | 6,684.55 | -624.79 | -860.56 | 14,530,016.78 | 2,059,752.09 | 40° 0' 4.448 N | 109° 30' 9.678 |
| 6,927.00 | 1.58 | 206.50 | 6,779.52 | -627.10 | -861.64 | 14,530,014.46 | 2,059,751.06 | 40° 0' 4.425 N | 109° 30' 9.69 |
| 7,021.00 | 1.06 | 163.08 | 6,873.49 | -629.09 | -861.96 | 14,530,012.46 | 2,059,750.77 | 40° 0' 4.405 N | 109° 30' 9.690 |
| 7,115.00 | 1.32 | 151.57 | 6,967.47 | -630.87 | -861.20 | 14,530,010.69 | 2,059,751.56 | 40° 0' 4.388 N | 109° 30' 9.68 |
| 7,210.00 | 1.41 | 149.02 | 7,062.44 | -632.84 | -860.07 | 14,530,008.75 | 2,059,752.72 | 40° 0' 4.368 N | 109° 30' 9.67 |
| 7,304.00 | 1.58 | 147.44 | 7,156.41 | -634.92 | -858.78 | 14,530,006.68 | 2,059,754.05 | 40° 0' 4.348 N | 109° 30' 9.65 |
| 7,399.00 | 0.53 | 40.12 | 7,251.40 | -635.69 | -857.79 | 14,530,005.93 | 2,059,755.05 | 40° 0' 4.340 N | 109° 30' 9.64 |
| 7,493.00 | 0.35 | 78.44 | 7,345.40 | -635.30 | -857.23 | 14,530,006.33 | 2,059,755.60 | 40° 0' 4.344 N | 109° 30' 9.63 |
| 7,587.00 | 0.44 | 128.45 | 7,439.40 | -635.47 | -856.67 | 14,530,006.18 | 2,059,756.17 | 40° 0' 4.342 N | 109° 30' 9.62 |
| 7,682.00 | 0.70 | 169.06 | 7,534.39 | -636.26 | -856.27 | 14,530,005.39 | 2,059,756.58 | 40° 0' 4.334 N | 109° 30' 9.62 |
| 7,776.00 | 0.53 | 182.86 | 7,628.39 | -637.26 | -856.18 | 14,530,004.39 | 2,059,756.68 | 40° 0' 4.324 N | 109° 30' 9.62 |
| 7,870.00 | 0.97 | 171.52 | 7,722.38 | -638.48 | -856.09 | 14,530,003.17 | 2,059,756.80 | 40° 0' 4.312 N | 109° 30' 9.62 |
| 7,964.00 | 0.70 | 266.44 | 7,816.37 | -639.30 | -856.54 | 14,530,002.34 | 2,059,756.36 | 40° 0' 4.304 N | 109° 30' 9.62 |
| 8,059.00 | 0.62 | 232.16 | 7,911.37 | -639.66 | -857.53 | 14,530,001.97 | 2,059,755.38 | 40° 0' 4.301 N | 109° 30' 9.63 |
| 8,153.00 | 0.79 | 205.53 | 8,005.36 | -640.55 | -858.21 | 14,530,001.06 | 2,059,754.71 | 40° 0' 4.292 N | 109° 30' 9.64' |
| 8,247.00 | 0.98 | 325.71 | 8,099.35 | -640.47 | -858.94 | 14,530,001.13 | 2,059,753.98 | 40° 0' 4.293 N | 109° 30' 9.65 |
| 8,342.00 | 0.62 | 312.76 | 8,194.34 | -639.45 | -859.78 | 14,530,002.14 | 2,059,753.13 | 40° 0' 4.303 N | 109° 30' 9.66 |
| 8,436.00 | 0.44 | 311.62 | 8,288.34 | -638.87 | -860.42 | 14,530,002.71 | 2,059,752.47 | 40° 0' 4.309 N | 109° 30' 9.67 |
| 8,530.00 | 0.26 | 161.85 | 8,382.34 | -638.83 | -860.62 | 14,530,002.74 | 2,059,752.27 | 40° 0' 4.309 N | 109° 30' 9.67 |
| 8,625.00 | 0.62 | 176.53 | 8,477.34 | -639.55 | -860.53 | 14,530,002.03 | 2,059,752.38 | 40° 0' 4.302 N | 109° 30' 9.67 |
| 8,719.00 | 1.14 | 188.48 | 8,571.32 | -640.98 | -860.63 | 14,530,000.59 | 2,059,752.30 | 40° 0' 4.288 N | 109° 30' 9.67 |
| 8,814.00 | 1.41 | 193.93 | 8,666.30 | -643.05 | -861.05 | 14,529,998.52 | 2,059,751.91 | 40° 0' 4.267 N | 109° 30' 9.68 |
| 9,666.00 | 1.40 | 128.00 | 9,518.10 | -659.63 | -855.38 | 14,529,982.03 | 2,059,757.87 | 40° 0' 4.103 N | 109° 30' 9.61 |
| | MWD PROD | UCTION SU | • | | | , , | , | | |
| 9,730.00 | 1.40 | 128.00 | 9,582.08 | -660.60 | -854.14 | 14,529,981.09 | 2,059,759,12 | 40° 0' 4.094 N | 109° 30' 9.59 |

| Design Annotations | | | |
|--------------------------|----------------------------------|--------------------------|--|
| Measurd Depth (ft) | Local Coord +N/-S (ft) | dinates +E/-W (ft) | Comment |
| 215 2.566 | 0.23 -317.7 4 | -0.32 -452.27 | FIRST WEATHERFORD MWD SURFACE SURVEY LAST WEATHERFORD MWD SURFACE SURVEY |

| Checked By: | Approved By: | Date: | |
|-------------|--------------|-------|--|
| 1 | | | |

RECEIVED

JUN 16 2011

| | STATE OF UTAH | | FORM 9 | | |
|--|--|--------------------------------|---|--|--|
| ı | DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MININ | G | 5.LEASE DESIGNATION AND SERIAL NUMBER: UO 1194 ST | | |
| SUNDR | RY NOTICES AND REPORTS ON | I WELLS | 6. IF INDIAN, ALLOTTEE OR TRIBE NAME: | | |
| | posals to drill new wells, significantly dee reenter plugged wells, or to drill horizontal n for such proposals. | | 7.UNIT or CA AGREEMENT NAME: NATURAL BUTTES | | |
| 1. TYPE OF WELL Gas Well | | | 8. WELL NAME and NUMBER: NBU 921-25N3AS | | |
| 2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ON | 9. API NUMBER: 43047512630000 | | | | |
| 3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th | PH n Street, Suite 600, Denver, CO, 80217 37 | IONE NUMBER: 779 720 929-6 | 9. FIELD and POOL or WILDCAT: 5NATERAL BUTTES | | |
| 4. LOCATION OF WELL FOOTAGES AT SURFACE: 1158 FSL 2575 FWL | | | COUNTY: UINTAH | | |
| QTR/QTR, SECTION, TOWNSH | HIP, RANGE, MERIDIAN: 25 Township: 09.0S Range: 21.0E Meridian: | : S | STATE: UTAH | | |
| 11. CHECI | K APPROPRIATE BOXES TO INDICATE I | NATURE OF NOTICE, REPOR | RT, OR OTHER DATA | | |
| TYPE OF SUBMISSION | | TYPE OF ACTION | | | |
| | ACIDIZE | ALTER CASING | CASING REPAIR | | |
| NOTICE OF INTENT Approximate date work will start: | CHANGE TO PREVIOUS PLANS | CHANGE TUBING | CHANGE WELL NAME | | |
| 5/13/2013 | CHANGE WELL STATUS | COMMINGLE PRODUCING FORMATIONS | CONVERT WELL TYPE | | |
| SUBSEQUENT REPORT | DEEPEN | FRACTURE TREAT | NEW CONSTRUCTION | | |
| Date of Work Completion: | OPERATOR CHANGE | PLUG AND ABANDON | PLUG BACK | | |
| _ | PRODUCTION START OR RESUME | RECLAMATION OF WELL SITE | ✓ RECOMPLETE DIFFERENT FORMATION | | |
| SPUD REPORT Date of Spud: | REPERFORATE CURRENT FORMATION | SIDETRACK TO REPAIR WELL | TEMPORARY ABANDON | | |
| | U TUBING REPAIR | VENT OR FLARE | WATER DISPOSAL | | |
| DRILLING REPORT | WATER SHUTOFF | SI TA STATUS EXTENSION | APD EXTENSION | | |
| Report Date: | | OT IN OTHER DESCRIPTION | OTHER. | | |
| | WILDCAT WELL DETERMINATION | OTHER | OTHER: | | |
| | COMPLETED OPERATIONS. Clearly show all pests authorization to recomple | _ | Approved by the | | |
| | I formation. Please see the atta | | Utah Division of | | |
| | | | Oil, Gas and Mining | | |
| | | | Date: May 22, 2013 | | |
| | | | Della + | | |
| | | | By: 134 (14 (2000) | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| NAME (PLEASE PRINT) | PHONE NUMBER | TITLE | | | |
| Teena Paulo | 720 929-6236 | Staff Regulatory Specialist | | | |
| SIGNATURE N/A | | DATE 5/13/2013 | | | |



Greater Natural Buttes Unit

NBU 921-25N3AS
RE-COMPLETIONS PROCEDURE
NBU 921-25N PAD
FIELD ID: GREEN WELL

DATE: 5/8/13

AFE#:

API#: 4304751263

USER ID: VYI537 (Frac Invoices Only)

COMPLETIONS ENGINEER: Paul Ryza, Denver, CO

(720) 929-6915 (Office) (936) 499-6895 (Cell)

REMEMBER SAFETY FIRST!

RECEIVED: May. 13, 2013

Name: NBU 921-25N3AS

Location: NE SW SE SW Sec 25 T9S R21E

LAT: 40.002916 **LONG:** -109.500303 **COORDINATE:** NAD83 (Surface Location)

Uintah County, UT

Date: 5/8/13

ELEVATIONS: 4955' GL 4980' KB Frac Registry TVD: 9582'

TOTAL DEPTH: 9730' **PBTD:** 9673'

SURFACE CASING: 8 5/8", 28# J-55 LTC @ 2602' **PRODUCTION CASING:** 4 1/2". 11.6#. I-80 BTC @ 9716'

Marker Joint 4826-4839', 7409-7426' & 7426-7435'

TUBULAR PROPERTIES:

| | BURST | COLLAPSE | DRIFT DIA. | CAPACIT | TES |
|-----------------------------|--------|----------|------------|-----------|----------|
| | (psi) | (psi) | (in.) | (bbl./ft) | (gal/ft) |
| 2 3/8" 4.7# L-80 tbg | 11,200 | 11,780 | 1.901" | 0.00387 | 0.1624 |
| 4 ½" 11.6# I-80 (See above) | 7780 | 6350 | 3.875" | 0.0155 | 0.6528 |
| 4 ½" 11.6# P-110 | 10691 | 7580 | 3.875" | 0.0155 | 0.6528 |
| 2 3/8" by 4 ½" Annulus | | | | 0.0101 | 0.4227 |

TOPS: BOTTOMS:

1477' Green River Top

1796' Bird's Nest Top

2267' Mahogany Top

4803' Wasatch Top 7508' Wasatch Bottom

T.O.C. @ 970'

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.
 - O 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 13 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 CBL log dated 3/20/11.
- 6 fracturing stages required for coverage.
- Hydraulic isolation estimated at **5117**' based upon Halliburton's CBL dated 3/20/11.
- Procedure calls for 7 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.
- This is a NO Clay stabilizer pilot *** Please Do NOT pump Clay Stabilizer ***

2

^{7508&#}x27; Mesaverde Top 9730' Mesaverde Bottom (TD)

^{*}Based on latest geological interpretation

^{**}Based on latest interpretation of CBL

- This is a Reduced Surfactant pilot *** Please pump Surfactant at 0.75 gpt***
- 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 over flush stage by 5 bbls (from top perf)
- TIGHT SPACING ON STAGE 2,3, 5- OVERFLUSH BY 5 BBLS
- If using any chemicals for pickling tubing or H2S Scavenging, have MSDS for all chemicals prior to starting work

Existing Perforations:

| PERFORATION Formation | Zone | Тор | Btm | spf | Shots | Date |
|--------------------------|------|------|------|-----|-------|------------|
| WASATCH | | 7458 | 7460 | 3 | | 04/25/2011 |
| MESAVERDE | | 7524 | 7526 | 3 | 6 | 04/25/2011 |
| MESAVERDE | | 7570 | 7572 | 3 | 6 | 04/25/2011 |
| MESAVERDE | | 7592 | 7594 | 3 | 6 | 04/25/2011 |
| MESAVERDE | | 7668 | 7670 | 4 | 8 | 04/25/2011 |
| MESAVERDE | | 7734 | 7736 | 4 | 8 | 04/25/2011 |
| MESAVERDE | | 7760 | 7762 | 4 | 8 | 04/25/2011 |
| MESAVERDE | | 7852 | 7854 | 3 | 6 | 04/25/2011 |
| MESAVERDE | | 7904 | 7906 | 3 | 6 | 04/25/201 |
| MESAVERDE | | 7938 | 7940 | 3 | 6 | 04/25/2011 |
| MESAVERDE | | 7976 | 7978 | 3 | 6 | 04/25/201 |
| MESAVERDE | | 8081 | 8082 | 4 | 4 | 04/25/201 |
| MESAVERDE | | 8099 | 8101 | 3 | 6 | 04/25/201 |
| MESAVERDE | | 8158 | 8159 | 4 | 4 | 04/25/201 |
| MESAVERDE | | 8188 | 8190 | 3 | 6 | 04/25/201 |
| MESAVERDE | | 8203 | 8204 | 4 | 4 | 04/25/201 |
| MESAVERDE | | 8382 | 8383 | 4 | 4 | 04/25/201 |
| MESAVERDE | | 8402 | 8403 | 4 | 4 | 04/25/201 |
| MESAVERDE | | 8435 | 8437 | 3 | 6 | 04/25/201 |
| MESAVERDE | | 8454 | 8456 | 3 | 6 | 04/25/201 |
| MESAVERDE | | 8477 | 8478 | 4 | 4 | 04/25/201 |
| MESAVERDE | | 8523 | 8524 | 4 | 4 | 04/25/201 |
| MESAVERDE | | 8548 | 8550 | 3 | 6 | 04/25/201 |
| MESAVERDE | | 8598 | 8600 | 3 | 6 | 04/25/201 |
| MESAVERDE | | 8672 | 8674 | 4 | 8 | 04/25/201 |
| MESAVERDE | | 8806 | 8808 | 3 | 6 | 04/25/201 |
| MESAVERDE | | 8884 | 8886 | 3 | 6 | 04/25/201 |
| MESAVERDE | | 8918 | 8920 | 3 | 6 | 04/25/201 |
| MESAVERDE | | 8994 | 8996 | 3 | 6 | 04/25/201 |
| MESAVERDE | | 9084 | 9086 | 3 | 6 | 04/25/201 |
| MESAVERDE | | 9118 | 9120 | 3 | 6 | 04/25/201 |
| MESAVERDE | | 9182 | 9184 | 3 | 6 | 04/25/201 |
| MESAVERDE | | 9205 | 9207 | 3 | 6 | 04/25/201 |
| MESAVERDE | | 9370 | 9371 | 4 | 4 | 04/25/201 |
| MESAVERDE | | 9448 | 9450 | 3 | 6 | 04/25/201 |
| MESAVERDE | | 9468 | 9469 | 3 | 3 | 04/25/201 |
| MESAVERDE | | 9494 | 9496 | 4 | 8 | 04/25/201 |
| MESAVERDE | | 9513 | 9514 | 3 | 3 | 04/25/201 |

Relevant History:

4/25/11: Originally completed in Mesaverde formation (9 stages) with ~ 549,458 gallons of

Slickwater, 235,520 lbs of 30/50 Ottawa Sand and 48,700 lbs of

20/40 Resin coated sand.

4/2/13: Last slickline report:

Ran jdc set down @ 9035 came out with a cleanup plunger ran g1 tool set down @ 9035 jarred on plunger for a while came out with a bypass plunger ran scratcher set down @ 9035 beat down nothing jarred out came out flowed tubing ran jdc set down @ 9035 beat down came out nothing flowed tubing ran scratcher set down @ 9035 beat down for a while went out the tubing came out flowed tubing ran to td set down @ 9605 came out ran scratcher out the tubing came out flowed tubing ran 1.9 broach set down 9035 came out tubing was clean there was a lot of scale on the nipple plunger looks good drop and chase new stainless steel spring to btm came out left plungers out rigged down.

5/8/13: Tubing Currently Landed @~9041'

H2S History:

| Production Date | Gas (avg mcf/day) | Water (avg bbl/day) | Oil (avg bbl/day) | LGR (bbl/Mmcf) | Max H2S Seperator (ppm) |
|-------------------|----------------------|------------------------|----------------------|-------------------|----------------------------|
| 3/31/2013 | 420.03 | 25.65 | 0.61 | 62.51 | |
| 2/28/2013 | 492.43 | 24.04 | 0.50 | 49.83 | |
| 1/31/2013 | 363.55 | 27.48 | 0.68 | 77.46 | |
| 12/31/2012 | 406.32 | 28.35 | 0.65 | 71.37 | |
| 11/30/2012 | 491.73 | 20.43 | 0.73 | 43.05 | |
| 10/31/2012 | 530.90 | 19.97 | 0.77 | 39.07 | 0.00 |
| 9/30/2012 | 559.43 | 19.87 | 0.90 | 37.12 | 0.00 |
| 8/31/2012 | 546.35 | 18.35 | 0.97 | 35.37 | |
| 7/31/2012 | 560.61 | 19.90 | 1.13 | 37.52 | |
| 6/30/2012 | 611.40 | 35.30 | 2.00 | 61.01 | |
| 5/31/2012 | 642.42 | 34.90 | 2.42 | 58.10 | |
| 4/30/2012 | 675.23 | 35.30 | 2.27 | 55.64 | |
| 3/31/2012 | 708.94 | 34.90 | 2.29 | 52.46 | |
| 2/29/2012 | 729.79 | 34.86 | 1.79 | 50.23 | |
| 1/31/2012 | 805.65 | 79.71 | 4.97 | 105.11 | |
| 12/31/2011 | 837.58 | 118.48 | 2.90 | 144.93 | |
| 11/30/2011 | 929.60 | 124.00 | 3.43 | 137.08 | |
| 10/31/2011 | 1015.90 | 103.84 | 1.87 | 104.05 | 2.00 |
| 9/30/2011 | 1141.47 | 100.00 | 1.47 | 88.89 | 0.00 |
| 8/31/2011 | 1307.35 | 100.00 | 1.65 | 77.75 | 0.00 |
| 7/31/2011 | 1542.16 | 142.77 | 1.06 | 93.27 | 0.00 |
| 6/30/2011 | 2089.27 | 20.30 | 1.00 | 10.19 | 0.00 |
| 5/31/2011 | 1807.58 | 0.13 | 0.74 | 0.48 | |
| 4/30/2011 | 0.00 | 0.00 | 0.00 | #NA | |

<u>PROCEDURE</u>: (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. TOOH with 2-3/8", 4.7#, J-55 tubing. Visually inspect for scale and consider replacing if needed.
- 3. If tbg looks ok consider running a gauge ring to 7051 (50' below proposed CBP). Otherwise P/U a mill and C/O to 7501 (50' below proposed CBP).
- 4. Set 8000 psi CBP at ~ 7448'. 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 3-3/8" gun, 23 gm, 0.36"hole:

| Zone | From | To | spf | # of shots |
|---------|------|------|-----|------------|
| WASATCH | 7262 | 7263 | 4 | 4 |
| WASATCH | 7392 | 7394 | 4 | 8 |
| WASATCH | 7419 | 7421 | 4 | 8 |

- 7. Breakdown perfs and establish injection rate (<u>include scale inhibitor in fluid</u>). Spot 250 gals of 15% HCL and let soak 5-10 min. Fracture as outlined in Stage 1 on attached listing. Under-displace to ~7262' and trickle 250gal 15% HCL w/ scale inhibitor in flush.
- 8. Set 8000 psi CBP at ~7209'. Perf the following 3-3/8" gun, 23 gm, 0.36"hole:

| Zone | From | То | spf | # of shots |
|---------|------|------|-----|------------|
| WASATCH | 7011 | 7012 | 3 | 3 |
| WASATCH | 7066 | 7067 | 3 | 3 |
| WASATCH | 7115 | 7116 | 3 | 3 |
| WASATCH | 7131 | 7132 | 3 | 3 |
| WASATCH | 7155 | 7156 | 3 | 3 |
| WASATCH | 7163 | 7164 | 3 | 3 |
| WASATCH | 7178 | 7179 | 3 | 3 |
| | | | | |

- 9. Breakdown perfs and establish injection rate. Fracture as outlined in Stage 2 on attached listing. Under-displace to ~7011' and trickle 250gal 15%HCL w/ scale inhibitor in flush. NOTE: TIGHT SPACING THIS STAGE, OVERFLUSH BY 5BBLS
- 10. Set 8000 psi CBP at ~6984'. Perf the following with 3-3/8" gun, 23 gm, 0.36" hole:

| Zone | From | То | spf | # of shots |
|---------|------|------|-----|------------|
| WASATCH | 6803 | 6804 | 4 | 4 |
| WASATCH | 6831 | 6832 | 4 | 4 |
| WASATCH | 6886 | 6887 | 4 | 4 |

```
WASATCH 6928 6929 4 4
WASATCH 6953 6954 4 4
```

11. Breakdown perfs and establish injection rate. Fracture as outlined in Stage 3 on attached listing. Under-displace to ~6803' and trickle 250gal 15%HCL w/ scale inhibitor in flush. NOTE: TIGHT SPACING THIS STAGE, OVERFLUSH BY 5BBLS

12. Set 8000 psi CBP at ~6790'. Perf the following with 3-3/8" gun, 23 gm, 0.36" hole:

```
Zone
            From
                   To
                        spf
                              # of shots
WASATCH
            6606
                  6607
                        3
                               3
WASATCH
                         3
                               3
            6618
                  6619
WASATCH
            6627
                  6628
                         3
                               3
WASATCH
                  6638
                               3
            6637
                               3
                         3
WASATCH
            6650
                  6651
                        3
                               3
WASATCH
            6735
                  6736
WASATCH
            6746
                  6747
                         3
                               3
                               3
WASATCH
            6759
                  6760
```

- 13. Breakdown perfs and establish injection rate. Fracture as outlined in Stage 4 on attached listing. Under-displace to ~6606' and trickle 250gal 15% HCL w/ scale inhibitor in flush.
- 14. Set 8000 psi CBP at ~6448'. Perf the following with 3-3/8" gun, 23 gm, 0.36" hole:

| Zone | From | To | spf | # of shots |
|---------|------|------|-----|------------|
| WASATCH | 6259 | 6260 | 3 | 3 |
| WASATCH | 6290 | 6291 | 3 | 3 |
| WASATCH | 6402 | 6404 | 3 | 6 |
| WASATCH | 6416 | 6418 | 3 | 6 |

- 15. Breakdown perfs and establish injection rate. Fracture as outlined in Stage 5 on attached listing. Under-displace to ~6259' and trickle 250gal 15%HCL w/ scale inhibitor in flush. **NOTE: TIGHT SPACING THIS STAGE, OVERFLUSH BY 5BBLS**
- 16. Set 8000 psi CBP at ~6228'. Perf the following with 3-3/8" gun, 23 gm, 0.36" hole:

| Zone | From | To | spf | # of shot |
|---------|------|------|-------------|-----------|
| WASATCH | 6076 | 6077 | $\tilde{4}$ | 4 |
| WASATCH | 6100 | 6102 | 4 | 8 |
| WASATCH | 6190 | 6191 | 4 | 4 |
| WASATCH | 6197 | 6198 | 4 | 4 |

- 17. Breakdown perfs and establish injection rate. Fracture as outlined in Stage 6 on attached listing. Under-displace to ~6076' and flush only with recycled water.
- 18. Set 8000 psi CBP at~6026'.
- 19. ND Frac Valves, NU and Test BOPs.
- 20. TIH with 3 7/8" bit, pump off sub, SN and tubing.
- 21. Drill 6 plugs and clean out to a depth of 7441' (~ 20' below bottom perfs).
- 22. Shear off bit and land tubing at 7232'. Flow back completion load. RDMO.

- 23. MIRU, POOH tbg and POBS. TIH with POBS.
- 24. Drill last plug @ 7448' clean out to PBTD at 9673'. Shear off bit and land tubing at ±9041'. 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 business 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.
- 25. Clean out well with foam and/or swabbing unit until steady flow has been established from completion.
- 26. Leave surface casing valve open. Monitor and report any flow from surface casing. RDMO

Completion Engineer

Kevin Lammers: 713/829-7143, 720/929-6109

Production Engineer

Mickey Doherty: 406/491-7294, 435/781-9740 Ronald Trigo: 352/213-6630, 435/781-7037

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

7

| Service Company St | upplied C | hemicals - Job | Totals | |
|------------------------------|-----------|----------------|--------|-------------|
| Friction Reducer | 65 | gals @ | 0.3 | GPT |
| Surfactant | 162 | gals @ | 0.75 | GPT |
| Clay Stabilizer | 0 | gals @ | 0.0 | GPT |
| 15% Hcl | 1500 | gals @ | 250 | gal/stg |
| Iron Control for acid | 8 | gals @ | 5.0 | GPT of acid |
| Surfactant for acid | 3 | gals @ | 2.0 | GPT of acid |
| Corrosion Inhibitor for acid | 9 | gals @ | 6.0 | GPT of acid |

| Third Party Supplied Chemicals Job | Totals - | Include Pumping | Charge if A | applicable |
|------------------------------------|----------|-----------------|-------------|--------------------|
| Scale Inhibitor | 108 | gals pumped | 0.5 | GPT (see schedule) |
| Biocide | 65 | 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

| | ¥ \$ | \$ \$ \$ \$ \$ \$ | ~ ~ ~ ~ ~ | <u>3</u> 8 8 8 | | \$ \$ | * * * * * | & & : | * * | * * | 2 W. | | 8 8 | 8888 | <u> </u> | × × | <u> </u> | Stage | | | | SlickWater Frac | Name NE |
|--------------------------|-------------------|---|---|--------------------------------------|--------------------------|-------------------|---|---------------------|-----------------|--------------------------------------|-------------------------------------|--------------------------|--------------------|--|--|---|--------------------------|--------------|------------------|---|--|---------------------------------------|-------------------------------------|
| | WASATCH | WASATCH WASATCH WASATCH WASATCH WASATCH | WASATCH WASATCH WASATCH WASATCH | WASATCH WASATCH | | WASATCH | WASATCH WASATCH WASATCH WASATCH WASATCH | WASATCH | WASATCH | WASATCH WASATCH | WASATCH WASATCH | | WASATCH WASATCH | WASATCH WASATCH WASATCH WASATCH | WASATCH WASATCH WASATCH | WASATCH WASATCH | WASATCH WASATCH | Zone | | | | er Frac | Name NBU 921-25N3AS |
| | | | 6928 6953 | 6803 6831 | | | | 7178 | 7155 7163 | 7115 7131 | 7011 7066 | | | | | 7419 | 7262 7392 | Top, ft. E | Perfs | | | | S |
| | # of Perfs/stage | | 6929 6954 | 6804 6832 | # of Perfs/stage | | | 7179 | 7156 7164 | 7116 7132 | 7012 7067 | | # of Perfs/st | | | 7421 | 7263 7394 | Bot., ft S | S | | | | Сору |
| | age | | 144 | 4 4 4 | age | | | ω | ωω | ωω | ωω | | stage | | | 4 | 4 4 | SPF Holes | | | | | Copy to new book |
| 18.4 | 20 | | 144 | Vani | 22.8 | | | ω | ωω | | 3 Varied 3 0 | 14.2 | 20 | | | | 4 Varied | es BPM | Rate | | | | 00k |
| | | | 50 Slickwater Ram 50 Slickwater Ram 50 Flush (4-1/2) ISDP and 5 mir | | | | | ISDP a | 50 Slickwater R | 50 Slickw | ed Pump-in test 0 ISIP and 5 mi | | | | 50 Slickwater Ramp 50 Flush (4-1/2) ISDP and 5 min I | 50 Slickwater Pad 50 Slickwater Ramp | | ž | ਰ | | П | | П |
| << Above pump time (min) | | | 50 Slickwater Ramp 50 Slickwater Ramp 50 Slickwater Ramp 50 Flush (4-1/2) ISDP and 5 min ISDP | d Pump-in test 0 ISIP and 5 min ISIP | << Above pump time (min) | | | ISDP and 5 min ISDP | ater Ramp | 50 Slickwater Pad 50 Slickwater Ramp | Pump-in test ISIP and 5 min ISIP | << Above pump time (min) | | | Slickwater Ramp Flush (4-1/2) ISDP and 5 min ISDP | Slickwater Pad Slickwater Ramp | d Pre-Pad & Pump-in test | Туре | Fluid | Wells on Pad? | Days on Pad? | ACTS? | Recomplete? |
| | | | 0.25 | | ي | | | | _ | 0.25 | | ی | | | | 0.25 | 1 | ppg | Initial | 4 | 2 | z × | < < ; |
| | | | 2 1 | | | | | | 2 | _ | | | | | 2 | _ | | ppg | Final | | | , | <u>-!</u> |
| | Sand laden Volume | | Slickwater Slickwater Slickwater Slickwater | Slickwater | | Sand laden Volume | | Slickwater | Slickwater | Slickwater Slickwater | Slickwater | | Sand laden Volume | | Slickwater Slickwater Slickwater | Slickwater Slickwater | Slickwater | | Fluid | | | | |
| | Volume | | | | | Volume | | | | | | | Volume | | | | П | 9 | <u>vo</u> | | | | Produ |
| | | | 5,119 17,063 11,944 4,441 | 2 | | | | , , | 15,173 | 6,503 21.675 | | | | | 7,088 4,741 | 3,038 10,125 | 4,741 | gals | Volume | Clay Stab. | Low Scale | GR only | Production Log |
| | 34,125 | 38,566 | 3,119 22,181 34,125 38,566 | n 2 | | 43,350 | 47,927 | 47,927 | 43,350 | 6,503 28,178 | 0 | | 20,250 | 29,731 | 24,991 29,731 | 7,778 17,903 | 4,741 | gals | Cum Vol | z | : ~ | ∠ c | |
| | | 106 | 106 106 | . 0 | | | 109 | - | 361 | 155 516 | 0 | | | 113 | 169 113 | 72 241 | 113 | BBLs | Volume | Enter N if the | Enter Y if a L | Enter Yif only Gamma | Enter 1 if rur |
| | Flush depth | 6 | (0, m, (n, | | Flush depth | | 1,14 | 5 | , ,, | • | | | Flush depth | ~1 | ~! (D | | | BBLs | Cum Vol | Enter N if there will be NO Clay stabilizer | Enter Y if a LOW concentration of Scale Inhibitor will be pumped | Enter Y if only Gamma Ray log was run | Enter 1 if running a Production Log |
| | pth 6,803 | 918 | 528 5 813 3 918 | | pth 7,011 | | 141 | 1 | - 10 | 155 1 671 5 | 0 | | oth 7.262 | 708 | | 185 1 426 5 | 113 | + % | | Clay stal | tion of S | vloq wa | tion Log |
| | <u>ස</u> | | 50.0% 35.0% | | | | | | | 15.0% | | | | | | 15.0% 50.0% | н | frac % o | | bilizer | cale Inhi | srun | |
| | gal/ft CB | | 37.3% 62.7% | 0 | | gal/ft | | | 62.7% | 0.0% 37.3% | | | gal/ ft | | 52.7% | 0.0% 37.3% | - | % of frac | Sand | | bitor will | | |
| | t 875 | | 10,664 17,916 | . | CBP depth | 850 | | | 22,759 | 0 13.547 | | | t 900 CBP depth | | 10,631 | 0 6,328 | | lbs | Sand | | be pump | | |
| | 733 6,790 | 28,580 | 10,664 28,580 28,580 | | 6,984 | 712 | 36,306 | 00,00 | 36,306 | | | | 7.209 | 16,959 | | 6,328 | | lbs | Cum. Sand | | 9d | | |
| | 3 lbs sand/ft | 0 | 2400 | <i>.</i> | 27 | 2 lbs sand/ft | 6_ | | <i>,,</i> | 70 | | | 754 lbs sand/ft | 9 | 99 | <u>ж О</u> | | CBP to Flush | d Footage from | | | | |
| | | 0 0 0 | 0 N の 9 0 |) | | | 0 0 24 | 001 | သ ထ | <u>1</u> 3 | | | | 0 0 | 4 4 0 0 | 5 2 | 2 | sh gal. | Scale Inhib., | | | | |

| | _ | Totals | | WASATCH | WASATCH WASATCH | WASATCH | WASATCH | WASATCH | WASAICH | WASATCH | WASATCH | WASATCH | WASATCH | 6 WASATCH | | | WASATCH | WASATCH | WASATCH | WASATCH | WASATCH | WASATCH | WASATCH | WASATCH | WASATCH | WASATCH | WASATCH | T CATO | | | WASATCH | WASATCH | WASATCH | WASATCH | WASATCH | WASATCH | WASATCH | WASATCH | WASATCH | WASATCH | 4 WASATCH | |
|----------------------|-------|--------------|-------------------|-------------------|--------------------|---------|---------|---------------|---------------------|--------------------|--------------------|-------------------|-----------------------|------------|--------------------------|---------------------------|-------------------|---------|---------|---------|---------|---------|---------------------|-----------------|-----------------|-------------------|---------------------|--------------------------|------------------|---------------|--|---------|---------|---------|---------|---------------------|---------------|-----------------|-------------------|---------------------|--------------|---------------|
| | | | * | 1 | 111 | . I | 1 | a: " | . 1 | . 1 | Н 6197 | | | Н 6076 | | # | Ι | I | æ 11 | . 1 | . I | 1 | æ 1 | . 1 | Н 6416 | | H 6290 | | ** | | LI | ľ | _ I | . 1 | | | | 6650 | | | Н 6606 | יים ויסף, ונ. |
| | | | # of Perfs/stage | | | | | | | | 6198 | 6191 | 6102 | 6077 | | # of Perfs/stage | | | | | | | | | 6418 | 6404 | 6291 | 300 | # of Perfs/stage | | | | | | 6760 | 6747 | 6736 | 6651 | 6628 | 6619 | 6607 | יי, וּי |
| | | | stage | | | | | | | | 4 | 4 | 4 | 4 | 9 | s/stage | | | | | | | | | ω | ω | ယပ | . | s/stage | | | | | | ω | | ωι | | | ω | ω | - |
| | | 123 | 20 | | | | | | | | 4 | 4 | œ | 4 | | | | | | | | | | | 6 | 6 | ωι | ٠ | 24 | | | | | | ω | ω | ωι | ں د | ιω | ω | ω | 10163 |
| 1.7 | | 15.6 | | | | | | | 5 | 5 5 | 50 | 50 | 0 | Varied | 11.9 | | | | | | | | ٤ | n 50 | 50 | 50 | Varied 0 | 22.1 | | | | | | | | 9 | 57 C | , c | 50 | 0 | Varied | 3 |
| | | | | | | | | 1 | ISDP and 5 min ISDP | 50 Slickwater Ramp | 50 Slickwater Ramp | 50 Slickwater Pad | 0 ISIP and 5 min ISIP | | << Above pump time (min) | | | | | | | | ISDP and 5 min ISDP | Slickwater Ramp | Slickwater Ramp | 50 Slickwater Pad | ISIP and 5 min ISIP | << Above pump time (min) | | | | | | | | ISDP and 5 min ISDP | Flush (4-1/2) | Slickwater Ramp | 50 Slickwater Pad | ISIP and 5 min ISIP | Pump-in test | - ypa |
| | | | | | | | | | | _ | 0.25 | | | | | | | | | | | | | _ | 0.25 | | | | | | | | | | | | - | 0.25 |) | | | 250 |
| | | | | | | | | | | 2 | _ | | | | | | | | | | | | | 2 | _ | | | | | | | | | | | | ^ | ა _ | | | | 778 |
| | | | | Sand laden Volume | | | | | Slickwater | Slickwater | Slickwater | Slickwater | | Slickwater | | | Sand laden Volume | | | | | | Slickwater | Slickwater | Slickwater | Slickwater | Olickwater | 2 | | | oppd lader | | | | | Slickwater | Slickwater | Slickwater | Slickwater | | Slickwater | |
| | | Total Fluid | | Volume | | | | | 3,966 | 10,080 | 14,400 | 4,320 | | | | | Volume | | | | | | 1,000 | 7,320 | 10,457 | 3,137 | | | | | Volume of the control | | | | | | 4.312 | 21,038 | 6,311 | | | gaio |
| | 5,247 | 220.378 gals | | 28,800 | | 32,766 | | | 32,766 | 28,800 | 18,720 | 4,320 | | 0 | | | 20,914 | | | 25,000 | 0 | | 20,000 | 20,914 | 13,594 | 3,137 | c | , | | 10,07 | 40075 | | 46,387 | | | 0,00 | 46.387 | 27,349 | 6,311 | | 0 | gais |
| | bbls | gals | | | | 94 | | | | | | | | 0 | | | • | | | 97 | | | | 174 | | | c | | | | | | 103 | | | | | 501 | | | 0 | 000 |
| 11.7 | | 5.247 bbls | Flush depth 6,076 | | | 780 | | | | 686 | | | | 0 | | Flush denth 6 259 | | | | 595 | 1 | | C C | 498 | | | c | | Flush depth | | | | 1,104 | | | | 1,104 | 4 651 | 150 | | 0 | 0 |
| 11.7 tanks | | bbls | 6,076 | | | | | | | 35.0% | | | | | i c | 6 250 | | | | | | | | | | | | | 6,606 | | | | | | | | | 35.0% | | | | frac |
| | Г | | gavī | | | | | | | | % 37.3% | | | Ī | | gal/tt | | | | | | | | | % 37.3% | | | | | ga l/ft | | | | | | | | 62.7% | | | Ī | à |
| | | Total Sand | CBP depth 6,026 | | | | | | | | 9,000 | | | | - 00 | t 951 CBP denth 6 228 | | | | | | | | | 6,536 | | | | BP d | 825 | | | | | | | | | | | | 50 |
| Tota | | 158.718 | | | | | 24,120 | | 24,120 | 24,120 | | | | | 0,110 | 6 228 | | | | | 17,516 | | | 17,516 | | | | | 6,448 | 691 | | | | 35,238 | | 1 | | | | | | 100 |
| Total Scale Inhib. = | | | 6/0 lbs sand/ii | , | | | J | | | , 3 | J | J | | | | 6 lbs sand/ft | | | | | U) | | | ,, O | S | J | | | 158 | 1 lbs sand/ft | | | | 3 | | | ں ں | J OC | , 0 | | | 0 |
| 108 | | | | | 4 | 10 | 0 | > 0 | 0 0 | Оп | 7 | 2 | | | | _ | | | 5 | 100 | 0 | 0 | 0 1 | 4 c | 5 | 2 | | | | _ | | 1 | 23 | 0 | 0 | 0 1 | > ~ | 7 11 | . ω | _ | | yai. |

Name NBU 921-25N3AS Perforation and CBP Summary

| | | Perfora | tions | | | | | |
|-------|---|---------|------------|-----|-------|---------------------|-------------|----------|
| Stage | Zones | | Bottom, ft | SPF | Holes | Frac | ture Covera | ae |
| | | | , | | | | | <u> </u> |
| 1 | WASATCH | 7262 | 7263 | 4 | 4 | 7256.5 | to | 7423 |
| | WASATCH | 7392 | 7394 | 4 | 8 | | | |
| | WASATCH | 7419 | 7421 | 4 | 8 | | | |
| | WASATCH | | | | | | | |
| | WASATCH | | | | | | | |
| | WASATCH | | | | | | | |
| | WASATCH | | | | | | | |
| | WASATCH | | | | | | | |
| | | | | | | | | |
| | # of Perfs/stage | | | | 20 | CBP DEPTH | 7,209 | |
| | | | | | | | | |
| 2 | WASATCH | 7011 | 7012 | 3 | 3 | 7007 | to | 7184 |
| | WASATCH | 7066 | 7067 | 3 | 3 | | | |
| | WASATCH | 7115 | 7116 | 3 | 3 | | | |
| | WASATCH | 7131 | 7132 | 3 | 3 | | | |
| | WASATCH | 7155 | 7156 | 3 | 3 | | | |
| | WASATCH | 7163 | 7164 | 3 | 3 | | | |
| | WASATCH | 7178 | 7179 | 3 | 3 | | | |
| | WASATCH | | | | | | | |
| | *************************************** | | | | | | | |
| | # of Perfs/stage | | | | 21 | CBP DEPTH | 6,984 | |
| | " or remarstage | | | | Z 1 | ODF DEFIN | 0,004 | |
| 9 | B WASATCH | 6803 | 6804 | 4 | 4 | 6802 | to | 6957 |
| 3 | | | 6832 | 4 | 4 | 0002 | i.o | 0937 |
| | WASATCH | 6831 | | | | | | |
| | WASATCH | 6886 | 6887 | 4 | 4 | | | |
| | WASATCH | 6928 | 6929 | 4 | 4 | | | |
| | WASATCH | 6953 | 6954 | 4 | 4 | | | |
| | WASATCH | | | | | | | |
| | WASATCH | | | | | | | |
| | WASATCH | | | | | | | |
| | | | | | | | | |
| | # of Perfs/stage | | | | 20 | CBP DEPTH | 6,790 | |
| | | | | | | | | |
| 4 | WASATCH | 6606 | 6607 | 3 | 3 | 6605 | to | 6762 |
| | WASATCH | 6618 | 6619 | 3 | 3 | | | |
| | WASATCH | 6627 | 6628 | 3 | 3 | | | |
| | WASATCH | 6637 | 6638 | 3 | 3 | | | |
| | WASATCH | 6650 | 6651 | 3 | 3 | | | |
| | WASATCH | 6735 | 6736 | 3 | 3 | | | |
| | WASATCH | 6746 | 6747 | 3 | 3 | | | |
| | WASATCH | 6759 | 6760 | 3 | 3 | | | |
| | *************************************** | 0.00 | 0.00 | | | | | |
| | # of Perfs/stage | | | | 24 | CBP DEPTH | 6,448 | |
| | # OF Fells/Stage | | | | 24 | CBF DEF III | 0,440 | |
| - | WASATCH | 6259 | 6260 | 3 | 3 | 6254 | to | 6419 |
| 0 | WASATCH | 6290 | 6291 | 3 | 3 | 0254 | ıo | 0419 |
| | WASATCH | 6402 | 6404 | 3 | 6 | | - | |
| | | | | | | | | |
| | WASATCH | 6416 | 6418 | 3 | 6 | | | |
| | WASATCH | + | | | | | | |
| | WASATCH | + | | | | | | |
| | WASATCH | \bot | | | | | | |
| | WASATCH | | | | | | | |
| | | | | | | | | |
| | # of Perfs/stage | | | | 18 | CBP DEPTH | 6,228 | |
| | | | | | | | | |
| 6 | WASATCH | 6076 | 6077 | 4 | 4 | 6066 | to | 6200 |
| | WASATCH | 6100 | 6102 | 4 | 8 | | I | |
| | WASATCH | 6190 | 6191 | 4 | 4 | | | |
| | WASATCH | 6197 | 6198 | 4 | 4 | | | |
| | WASATCH | | i | | | | | |
| | WASATCH | | | | | | | |
| | | | - | 1 | | | | |
| | WASATCH | | | | - | - 1 | | |
| | WASATCH | | | | | | | |
| | | | | | | | | |
| | WASATCH WASATCH | | | | 20 | CRP DEPTH | 6.026 | |
| | WASATCH | | | | 20 | CBP DEPTH | 6,026 | |
| | WASATCH WASATCH | | | | 20 | CBP DEPTH | 6,026 | |
| _ | WASATCH WASATCH | | | | 20 | CBP DEPTH Total Pay | 6,026 | 221.5 |

| NBU 921-2 MD | TVD | EW | NS | INC | AZI | MD | TVD | EW | NS | INC | AZI |
|-----------------|---------|---------|---------|-------|--------|---------|---------|---------|---------|------|--------|
| 0.00 | 0.00 | | | 0.00 | | 4567.00 | 4420.12 | | -593.48 | 2.99 | 245.17 |
| 16.00 | 16.00 | 0.00 | | 0.00 | | 4662.00 | 4515.08 | -875.77 | -593.72 | 0.98 | 351.94 |
| 215.00 | 215.00 | -0.32 | | 0.23 | | 4756.00 | 4609.07 | -876.00 | -592.66 | 0.35 | 336.66 |
| 308.00 | 307.99 | -1.19 | | 1.56 | | 4851.00 | 4704.07 | -876.06 | -592.60 | 0.26 | 166.51 |
| 401.00 | 400.90 | -3.87 | | 3.34 | | 4945.00 | 4798.07 | -876.19 | -593.20 | 0.53 | 204.83 |
| 496.00 | 495.63 | -9.09 | | 5.19 | | 5039.00 | 4892.04 | | -595.09 | 1.96 | 158.18 |
| 591.00 | 590.07 | -17.07 | | 7.19 | | 5134.00 | 4986.99 | -874.37 | -597.82 | 1.76 | 146.47 |
| 687.00 | 685.10 | -28.08 | | 9.13 | | 5228.00 | 5080.94 | | -600.60 | 2.07 | 158.80 |
| 782.00 | 778.72 | -41.48 | | 10.38 | | 5322.00 | 5174.89 | | -603.53 | 1.76 | 159.23 |
| 878.00 | 872.94 | -57.17 | | 11.75 | 238.66 | 5417.00 | 5269.87 | -870.74 | -605.01 | 0.70 | 101.12 |
| 972.00 | 964.71 | -74.50 | | 13.25 | 238.16 | 5511.00 | 5363.86 | | -605.33 | 0.86 | 107.15 |
| 1067.00 | 1057.06 | -93.34 | | 13.88 | 237.29 | 5605.00 | 5457.85 | -868.12 | -605.65 | 0.88 | 99.19 |
| 1162.00 | 1149.13 | -112.95 | | 14.63 | 236.66 | 5700.00 | 5552.84 | | -605.97 | 0.53 | 117.18 |
| 1257.00 | 1240.96 | -133.05 | | 15.04 | 234.83 | 5794.00 | 5646.83 | -865.89 | -607.15 | 1.49 | 143.31 |
| 1352.00 | 1332.60 | -153.50 | | 15.56 | | 5889.00 | 5741.79 | -864.38 | -609.28 | 1.67 | 145.77 |
| 1447.00 | 1423.89 | -174.85 | | 16.56 | 234.16 | 5983.00 | 5835.75 | -862.86 | -611.65 | 1.76 | 148.84 |
| 1542.00 | 1514.77 | -197.21 | | 17.31 | 233.66 | 6077.00 | 5929.70 | | -614.22 | 1.93 | 147.61 |
| 1635.00 | 1603.15 | -220.73 | | 18.94 | 235.04 | 6172.00 | 6024.66 | | -616.15 | 1.23 | 124.32 |
| 1731.00 | 1693.83 | -246.45 | | 19.38 | 234.41 | 6266.00 | 6118.65 | -858.09 | -616.82 | 0.79 | 99.45 |
| 1826.00 | 1783.62 | -271.70 | | 18.75 | 234.54 | 6361.00 | 6213.64 | | -616.72 | 0.53 | 62.01 |
| 1921.00 | 1873.68 | -296.60 | | 18.38 | 236.29 | 6455.00 | 6307.64 | -857.18 | -617.31 | 1.14 | 212.56 |
| 2016.00 | 1963.67 | -321.81 | | 19.00 | 235.54 | 6549.00 | 6401.62 | -858.03 | -618.96 | 1.14 | 202.02 |
| 2111.00 | 2054.06 | -345.80 | | 16.81 | 234.91 | 6644.00 | 6496.60 | -858.85 | -620.75 | 1.23 | 207.11 |
| 2207.00 | 2146.06 | -368.00 | | 16.38 | 233.16 | 6738.00 | 6590.58 | | -622.66 | 1.32 | 200.79 |
| 2301.00 | 2236.19 | -389.42 | | 16.63 | 233.54 | 6832.00 | 6684.55 | -860.56 | -624.79 | 1.49 | 203.42 |
| 2395.00 | 2326.17 | -411.36 | | 17.00 | | 6927.00 | 6779.51 | -861.64 | -627.10 | 1.58 | 206.50 |
| 2491.00 | 2417.91 | -434.41 | -304.92 | 17.25 | 235.16 | 7021.00 | 6873.49 | -861.96 | -629.09 | 1.06 | 163.08 |
| 2566.00 | 2489.62 | -452.27 | | 16.85 | 233.48 | 7115.00 | 6967.47 | -861.20 | -630.87 | 1.32 | 151.57 |
| 2679.00 | 2597.68 | -479.28 | | 17.15 | 236.21 | 7210.00 | 7062.44 | | -632.84 | 1.41 | 149.02 |
| 2773.00 | 2687.31 | -503.21 | -351.91 | 17.94 | 239.02 | 7304.00 | 7156.41 | -858.78 | -634.92 | 1.58 | 147.4 |
| 2868.00 | 2777.94 | -527.40 | | 16.97 | 237.17 | 7399.00 | 7251.40 | -857.79 | -635.69 | 0.53 | 40.12 |
| 2962.00 | 2867.65 | -551.60 | | 17.77 | 242.03 | 7493.00 | 7345.40 | | -635.30 | 0.35 | 78.44 |
| 3057.00 | 2958.68 | -575.44 | | 15.48 | 240.51 | 7587.00 | 7439.40 | | -635.47 | 0.44 | 128.45 |
| 3151.00 | 3048.47 | -600.52 | | 18.91 | 248.25 | 7682.00 | 7534.39 | | -636.26 | 0.70 | 169.06 |
| 3245.00 | 3137.41 | -627.28 | | 19.03 | 235.34 | 7776.00 | 7628.39 | -856.18 | -637.26 | 0.53 | 182.86 |
| 3340.00 | 3227.82 | -650.76 | | 16.71 | 231.81 | 7870.00 | 7722.38 | | -638.48 | 0.97 | 171.52 |
| 3434.00 | 3317.75 | -672.82 | | 17.15 | 235.59 | 7964.00 | 7816.37 | | -639.30 | 0.70 | 266.44 |
| 3529.00 | 3408.96 | -694.98 | | 15.30 | | 8059.00 | 7911.37 | | -639.66 | 0.62 | 232.16 |
| 3623.00 | 3499.46 | -716.58 | | 16.09 | 238.49 | 8153.00 | 8005.36 | | -640.55 | 0.79 | 205.53 |
| 3718.00 | 3590.32 | -740.30 | | 17.85 | | 8247.00 | 8099.35 | -858.94 | -640.47 | 0.98 | 325.7 |
| 3812.00 | 3680.18 | -763.63 | | 16.27 | | 8342.00 | 8194.34 | | -639.45 | 0.62 | 312.76 |
| 3907.00 | 3771.25 | -786.10 | | 16.80 | | 8436.00 | 8288.34 | | -638.87 | 0.44 | 311.62 |
| 4001.00 | 3861.58 | | | 15.30 | | 8530.00 | 8382.34 | | -638.83 | 0.26 | 161.85 |
| 4095.00 | 3952.88 | -825.75 | | 12.22 | | 8625.00 | 8477.34 | | -639.55 | 0.62 | 176.53 |
| 4190.00 | 4045.91 | -840.30 | | 11.17 | | 8719.00 | 8571.32 | | -640.98 | 1.14 | 188.48 |
| 4284.00 | 4138.54 | -851.68 | | 8.38 | | 8814.00 | 8666.30 | | -643.05 | 1.41 | 193.93 |
| 4379.00 | 4232.78 | -860.19 | | | | 9666.00 | 9518.10 | | -659.63 | 1.41 | 128.00 |
| 4473.00 | 4326.35 | -867.61 | | 4.92 | | 9730.00 | 9582.08 | | -660.60 | 1.40 | 128.00 |

(5/2000)

| | | | | TMEN | T OF NA | OF UT ATURAL GAS | RESO | | | | | (hi | ghlight o | |) | FO | RM 8 ER: |
|--------------------------------|---|----------------------|------------|----------|---------------------|------------------------|--------------------------|-------------------|---------------------|--|----------------------------|-----------|---------------------|-----------------------|----------|------------------------------|-----------------|
| WELI | L COMPI | LETI | ION (| OR F | RECC | MPL | ETIO | N RE | POF | T AND | LOG | 6. 1 | F INDIAN, | ALLOTTE | OR TRI | BE NAME | |
| 1a. TYPE OF WELL: | | OIL WE | \Box | (| GAS VELL | 7 | DRY [| 1 | ОТН | ER | | | | AGREEM | ENT NAM | 1E | |
| | | VVE | | , | VELL W | _ | _ | _ | | | | | | 3047A | IDED | | |
| WELL L | HORIZ. LATS. | DEE | EP- | F | RE- ENTRY [| | DIFF. RESVR. | 7 | ОТН | ER RECO | OMPLETION | _ | NBU 9 | 1E and NUI 321-251 | | OF. | |
| 2. NAME OF OPERA | | k GAS | S ONS | SHOF | RE, L.F | ٥. | | | | | | 5420 0 | ирі NUMBI 43047 | =R: 51263 | | | |
| 3. ADDRESS OF OP P.O.BOX 17 | | CIT | ry DEI | VEF | | STATE | СО | ZIP 802 | 217 | 100000000000000000000000000000000000000 | NUMBER: | | NATU | POOL, OI | UTTE | S | |
| 4. LOCATION OF W | ACTUAL PROPERTY OF A STREET WAS ASSESSED. | CONTRACTOR OF STREET | N 055 | 7 F I A | // COF | TOOL | 7045 | g . | | - | | 11. | QTR/QTR MERIDIAN | , SECTION V: | , TOWN | SHIP, RANGE | ≣, |
| AT SURFACE: | SESW 11: | 08 FS | oL 25/ | 5 FW | /L 525 | , 195,1 | KZ IE | | | | | S | ESW | 25 | 9S | 21E S | |
| AT TOP PRODUC | CING INTERVAL | REPOR [*] | TED BEL | ow: S | SESW | 544 F | SL 17 | 14 FW | L S25 | ,T9S,R2 | ?1E | | | | | | |
| AT TOTAL DEPT | H: SESW | 497 F | SL 17 | 721 F | WL S2 | 25,T9S | ,R21E | | \bigcirc | | | | COUNTY JINTA | | 1 | I3. STATE | UTAH |
| 14. DATE SPUDDED | | DATE T.D | D. REACH | IED: | estreactive despite | E COMPL 3/2013 | | P | BANDON | ED 🗌 | READY TO PRODU | JCE 🗸 | | VATIONS (| | , RT, GL): | |
| 18. TOTAL DEPTH: | | | | 9. PLUG | 107/107/107/00 | D.: MD | CONTRACTOR OF THE PARTY. | | 20. IF I | MULTIPLE CO | OMPLETIONS, HOV | V MANY? * | | TH BRIDG | E MD | | |
| | TVD 9.582 | 2 | | | | | 9,526 | | | | | | PL | .UG SET: | TVE |) | |
| 22. TYPE ELECTRIC | C AND OTHER M | ECHANI | CAL LOG | S RUN (| Submit co | py of each |) | | | 23. | | | | vro [| (O. I- | | |
| ACBL-RMT- | CHI TRIPL | E CC | OMBC |) | | | | | | WAS WELL | L CORED? RUN? | | | YES | 92 | mit analysis) mit report) | |
| | | | | | | | | | | | NAL SURVEY? | NO | · | YES 🔽 | 35 | mit copy) | |
| 24. CASING AND LI | NER RECORD (F | Report a | II strings | set in w | ell) | | | | | | | | | | | | |
| HOLE SIZE | SIZE/GRADE | | WEIGHT | (#/ft.) | TOP | (MD) | вотто | M (MD) | | CEMENTER EPTH | CEMENT TYPE & NO. OF SACKS | | IRRY ME (BBL) | CEMEN | T TOP ** | AMOUNT | PULLED |
| 20" | 14" S | TL | 36. | 7 | | | 4 | 0 | | | 28 | 3 | | | | | |
| 11" | 8 5/8" J- | 55 | 28# | # | | | 2,6 | 02 | | | 49 | 0 | | | 0 | | |
| 7 7/8" | 4 1/2" I- | -80 | 11.6 | 6# | | | 9,7 | '16 | | | 1,65 | 5 | | 9 | 70 | | |
| 1 | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |
| 25. TUBING RECOF | RD | | | | | | | | | | | | | | | | |
| SIZE | DEPTH SET | (MD) | PACKE | R SET (| MD) | SIZE | | DEPTH | SET (MD |) PACKE | R SET (MD) | SIZE | | DEPTH SE | T (MD) | PACKER S | SET (MD) |
| 2 3/8" | 9,05 | 5 | | | | | | | | | | | | | | | |
| 26. PRODUCING IN | | | | | | | | | | | RATION RECORD | OUTE | Tuo uo | | DEDECI | DATION OTA | TUC |
| FORMATION | | TOP (| | | OM (MD) | TOP | (TVD) | BOLLO | M (TVD) | DEPOSITS AND ADDRESS OF THE PARTY OF THE PAR | AL (Top/Bot - MD) | SIZE | NO. HO | | n 🗸 | RATION STA Squeezed | <u> </u> |
| (A) WASATC | | 6,0 | 76 | 7,4 | 421 | - | | | | 6,076 | 7,421 | 0.36 | 123 | Ope | | Squeezed | - |
| (B) | | | | | | ├ | | | | | | | - | | 늗 | Squeezed | |
| (C) | | | | | | - | | | | | - | | _ | Ope | 一一 | Squeezed | |
| (D) | | | | | | | | | | | | | | Оре | *** | Squeezeu | |
| 28. ACID, FRACTUI | | , CEME | NI SQUE | EZE, E I | C. | | | | *** | OLINE AND T | EVDE OF MATERIAL | | | | | | |
| | INTERVAL | | | | | | | | | | TYPE OF MATERIAL | | NID | | | | |
| 6076-7421 | | | | | | LS SL | ICK H | 20 & | 154,63 | 3 LBS . | 30/50 OTTA | WA SA | טאו | | | | |
| | | | 651 | AGE | 5 | | | | | | | | | | | | |
| 29. ENCLOSED AT | TACHMENTS: | | | | | | | | | | | | | | 30. WEL | L STATUS: | |
| | | | | | | | _ | | | | | - | | 7 | | | |
| | RICAL/MECHANI RY NOTICE FOR | | | CEMENT | T VERIFIC | ATION | | GEOLOG CORE AN | IC REPOR IALYSIS | = | OTHER: | DIRE | CTIONAL | SURVEY | - | PROI |) |
| | | | | | | | | | | | | | | | L | | |

(CONTINUED ON BACK)

| 24 | INITIAL PRODUCTION |
|-----|--------------------|
| 31. | INITIAL PRODUCTION |

INTERVAL A (As shown in item #26)

| 8/23/2013 | | TEST DATE: 9/8/2013 | | HOURS TESTED | o: 24 | TEST PRODUCTION RATES: → | OIL – BBL: | GAS – MCF: 1,269 | WATER – BBL: | PROD. METHOD: FLOWING |
|-------------------|-------------|---------------------|-------------|--------------|-----------------|------------------------------|------------|---------------------|--------------|--------------------------|
| CHOKE SIZE: 24/64 | TBG. PRESS. | CSG. PRESS. | API GRAVITY | BTU – GAS | GAS/OIL RATIO | 24 HR PRODUCTION RATES: → | OIL – BBL: | GAS - MCF: 1,269 | WATER – BBL: | INTERVAL STATUS: PROD |
| | | | | INT | ERVAL B (As sho | wn in item #26) | | | | |
| DATE FIRST PR | ODUCED: | 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: |
| | | | | INT | ERVAL C (As sho | wn in item #26) | | | | |
| DATE FIRST PR | ODUCED: | TEST DATE: | | HOURS TESTER |); | 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: |
| 1/ | | | | INT | ERVAL D (As sho | wn in item #26) | | | | |
| DATE FIRST PR | ODUCED: | 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 Bottom (MD) | Descriptions, Contents, etc. | Name | Top (Measured Depth) |
|-----------|-----------------|------------------------------|--|---|
| | | | GREEN RIVER BIRD'S NEST MAHOGANY WASATCH MESAVERDE | 1,477 1,796 2,267 4,803 7,508 |

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. New recompletion perforations are: Wasatch 6076-742; existing perforations: Wasatch 7458-7460 and Mesaverde 7524-9514. An Iso plug separating new perforations from old perforations was set at 7445 and drilled out on 9/5/13 comingling the well.

| 36. | I hereby certify that the foreg | oing and at | tached information i | s complete and correct | as determined | from all | available r | records. |
|-----|---------------------------------|-------------|----------------------|------------------------|---------------|----------|-------------|----------|
|-----|---------------------------------|-------------|----------------------|------------------------|---------------|----------|-------------|----------|

NAME (PLEASE PRINT) TEENA PAULO 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

Utah Division of Oil, Gas and Mining Send to: 1594 West North Temple, Suite 1210

Box 145801 Salt Lake City, Utah 84114-5801 Phone: 801-538-5340

Fax: 801-359-3940

(5/2000)

^{*} 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)).

| | | | | | | KIES RE | | |
|-----------------|----------------------|---------------|------------|------------|-------------|------------|-----------------|--|
| | | | | | | umma | ry Report | 77004 |
| | 25N3AS GREEN | | Spud Cor | | | | Spud Date: 1/ | 9 - 10 - 10 - 10 - 10 - 10 - 10 - 10 - 1 |
| Project: UTAH-U | JINTAH | | Site: NBU | 921-25N | PAD | | | Rig Name No: SWABBCO 6/6 |
| Event: RECOM | PL/RESEREVEADD | | Start Date | e: 7/25/20 | 13 | | 4117 | End Date: 9/5/2013 |
| | RKB @4,980.00usft (a | bove Mean S | ea | UWI: SE | /SW/0/9 | /S/21/E/25 | /0/0/26/PM/S/11 | 58/W/0/2575/0/0 |
| Level) Date | Time Start-End | Duration (hr) | Phase | Code | Sub Code | P/U | MD From (usft) | Operation |
| 7/26/2013 | 6:45 - 7:00 | 0.25 | MIRU | 48 | Code | P | (dott) | HSM. PINTCH POINTS. |
| 772072010 | 7:00 - 18:00 | 11.00 | MIRU | 31 | | P | | |
| | 7:00 - 18:00 | 11.00 | MIRU | 31 | | P | | FWP 100 PSI. BLOW WELL DOWN T/ FBT. PUMP 20 BBL DOWN TBG. ND WH. UNLAND TBG. TBG WAS FREE. RELAND TBG. NUBOP. RU RIG FLOOR & TBG EQUIP. MIRU SCAM TECH. POOH W/ 285 JTS 2 3/8 L-80 TBG. FOUND HEAVY INTERNAL PITTING STARTED JT 6 @ 191' T/ JT 29 @ 920'. HEAVY WALL LOSS STARTED JT 30 @ 951' T/ JT 148 @ 4693'. LITE INTERNAL SCALE JT 161 @ 5105' T/ JT 170 @ 5390'. MEDIUM EXTERNAL SCALE JT 236 @ 7483' T/ JT 260 @ 8245'. ALL TBG IS 2 3/8 L-80 LD 98 JTS YELLOW BAD LD 23 JTS BLUE BAND LD 164 JTS RED BAND RDMO SCAM TECH. MIRU CUTTERS WL. PU GAUGE RING. RIH T/ 7450'. POOH. PU 4 1/2 10K |
| | | | | | | | | CBP. RIH SET CBP @ 7445', POOH. RDMO CUTTERS WL. FILL CSG W/ RIG PUMP. PSI T/ 3000 PSI. |
| 7/31/2013 | 10:00 - 11:00 | 1.00 | SUBSPR | 52 | В | Р | | BLEED PSI OFF. FILL SURFACE CSG. MIRU CAMERON QUICK TEST. PRESSURE TEST CSG & FRAC VALVES 1ST PSI TEST T/ 6200 PSI. HELD FOR 15 MIN LOST 58 PSI. NO COMMUNICATION OR MIGRATION WITH SURFACE CSG BLEED OFF PSI. |
| | | | | | | | | PRESSURE TEST 8 5/8 X 4 1/2 TO 502 PSI HELD FOR 5 MIN LOST -66 PSI,BLED PSI OFF, REINSTALLED POP OFF SWIFN NO PRESSURE ON SURFACE CASING FILLED SURFACE WITH 1/2 BBL H2O |
| 8/16/2013 | 7:00 - 10:00 | 3.00 | SUBSPR | 37 | | Р | | PERF STG 1)PU 3 1/8 EXP GUN, 23 GM, .36 HOLE SIZE. RIH PERFWELL, AS PER PERF DESIGN. POOH. SWIFW |

RECEIVED: Sep. 25, 2013

| | | | | | | KIES RE | | |
|---------------------------|----------------------|---------------|-----------|------------|-------------|-----------|--------------------------|--|
| Mally NIDLL code | SENIOR O ODEEN | | Coud Co | | | umma | ry Report Spud Date: 1/1 | 17/2044 |
| | 25N3AS GREEN | | - | nductor: 1 | | | Spud Date. 17 | Rig Name No: SWABBCO 6/6 |
| Project: UTAH-U | | | Site: NBI | J 921-25N | N PAD | | | |
| Event: RECOMF | PL/RESEREVEADD | | Start Dat | e: 7/25/20 | | | | End Date: 9/5/2013 |
| Active Datum: R Level) | KB @4,980.00usft (al | bove Mean Se | a | UWI: SE | E/SW/0/9/ | S/21/E/25 | /0/0/26/PM/S/11 | 58/W/0/2575/0/0 |
| Date | Time Start-End | Duration (hr) | Phase | Code | Sub Code | P/U | MD From (usft) | Operation |
| 8/19/2013 | 7:00 - 17:00 | 10.00 | FRAC | 36 | B | P | (using | FRAC STG 1)WHP 5 PSI, BRK 3060 PSI @ 4.2 BPM. ISIP 1380 PSI, FG .62. CALC HOLES OPEN @ 35.0 BPM @ 5244 PSI = 50% HOLES OPEN. (10/20 HOLES OPEN) ISIP 2462 PSI, FG .77 NPI 1082 PSI. MP 5808 PSI, MR 47.5 BPM, AP 5171 PSI, AR 39.8 BPM PUMPED 30/50 OTTAWA SAND IN THIS STAGE X-OVER FOR WL PERF STG 2)PU 4 1/2 8K HAL CBP & 3 1/8 EXP GUN, 23 GM, .36 HOLE SIZE. 90 DEG PHASING. RIH SET CBP @ 7,209' P/U PERF AS PER PERF DESIGN. POOH. X-OVER FOR FRAC CREW FRAC STG 2)WHP 906 PSI, BRK 2342 PSI @ 3.8 BPM. ISIP 2082 PSI, FG .72 CALC HOLES OPEN @ 50.1 BPM @ 4246 PSI = 100% HOLES OPEN. (21/21 HOLES OPEN) ISIP 2051 PSI, FG .72, NPI -31 PSI. MP 5095 PSI, MR 49.0 BPM, AP 4285 PSI, AR 50.5 BPM PUMPED 30/50 OTTAWA SAND IN THIS STAGE X-OVER FOR WL PERF STG 3)PU 4 1/2 8K HAL CBP & 3 1/8 EXP GUN, 23 GM, .36 HOLE SIZE. 90 DEG PHASING. RIH SET CBP @ 6984' P/U PERF AS PER PERF DESIGN. POOH. |

| | | | | U | S ROC | KIES RE | EGION | |
|-----------------|-----------------------|--|-----------|-------------|-------------|----------------|-----------------|--|
| | | | | Opera | tion S | Summa | ry Report | |
| Vell: NBU 921-2 | 25N3AS GREEN | - 10 10 10 10 10 10 10 10 10 10 10 10 10 | Spud Co | nductor: 1 | /3/2011 | | Spud Date: 1/ | 17/2011 |
| roject: UTAH-U | JINTAH | | Site: NB | U 921-25N | I PAD | | | Rig Name No: SWABBCO 6/6 |
| vent: RECOME | PL/RESEREVEADD | | Start Dat | te: 7/25/20 | 113 | | | End Date: 9/5/2013 |
| | KB @4,980.00usft (al | hove Mean Se | | 1 | | /S/21/E/25 | /0/0/26/PM/S/11 | 58/W/0/2575/0/0 |
| .evel) | TO (64,900.0003); (a) | DOVE WEAT OF | | | | | | |
| Date | Time Start-End | Duration (hr) | Phase | Code | Sub Code | P/U | MD From (usft) | Operation |
| 8/20/2013 | 7:00 - 17:00 | 10.00 | FRAC | 36 | В | Р | | FRAC STG 3)WHP 1328 PSI, BRK 2364 PSI @ 2,7 BPM. ISIP 1884 PSI, FG .71 CALC HOLES OPEN @ 50.4 BPM @ 4021 PSI = 100% HOLES OPEN. (20/20 HOLES OPEN) ISIP 1985 PSI, FG .72, NPI 101 PSI. MP 4881 PSI, MR 50.4 BPM, AP 4123 PSI, AR 50.0 BPM PUMPED 30/50 OTTAWA SAND IN THIS STAGE X-OVER FOR W L PERF STG 4)PU 4 1/2 8K HAL CBP & 3 1/8 EXP GUN, 23 GM, .36 HOLE SIZE. 120 DEG PHASING. RIH SET CBP @ 6790' P/U PERF AS PER PERF DESIGN. |
| | | | | | | | | POOH. X-OVER FOR FRAC CREW FRAC STG 4)WHP 700 PSI, BRK 2775 PSI @ 3.0 BPM. ISIP 1927 PSI, FG .72. CALC HOLES OPEN @ 50.5 BPM @ 3768 PSI = 100% HOLES OPEN. (24/24 HOLES OPEN) ISIP 1804 PSI, FG .70, NPI -123 PSI. MP 4104 PSI, MR 50.6 BPM, AP 3643 PSI, AR 50.3 BPM PUMPED 30/50 OTTAWA SAND IN THIS STAGE |
| | | | | | | | | X-OVER FOR W |
| | | | | | | | | PERF STG 5)PU 4 1/2 8K HAL CBP & 3 1/8 EXP GUN, 23 GM, .36 HOLE SIZE. 90 DEG PHASING. RIH SET CBP @ 6,448' P/U PERF AS PER PERF DESIGN. POOH. X-OVER FOR FRAC CREW |
| | | | | | | | | FRAC STG 5)WHP 830 PSI, BRK 2393 PSI @ 3.8 BPM. ISIP 1432 PSI, FG .66. CALC HOLES OPEN @ 50.7 BPM @ 4803 PSI = 94% HOLES OPEN. (17/18 HOLES OPEN) ISIP 1440 PSI, FG .66, NPI 8 PSI. MP 5467 PSI, MR 51.9 BPM, AP 5219 PSI, AR 50.4 BPM |
| | | | | | | | | PUMPED 30/50 OTTAWA SAND IN THIS STAGE X-OVER FOR W.L |
| | | | | | | | | PERF STG 6)PU 4 1/2 8K HAL CBP & 3 1/8 EXP GUN, 23 GM, .36 HOLE SIZE. 120 DEG PHASING. RIH SET CBP @ 6,228' P/U PERF AS PER PERF DESIGN. POOH. X-OVER FOR FRAC CREW |
| | | | | | | | | FRAC STG 6)WHP 1233 PSI, BRK 1551 PSI @ 6.0 BPM. ISIP 1222 PSI, FG .63 CALC HOLES OPEN @ 50.3 BPM @ 3084 PSI = 100% HOLES OPEN. (20/20 HOLES OPEN) ISIP 1591 PSI, FG .69, NPI 369 PSI. MP 4141 PSI, MR 50.6 BPM, AP 3928 PSI, AR 50.3 |
| | | | | | | | | BPM PUMPED 30/50 OTTAWA SAND IN THIS STAGE X-OVER FOR W L |
| | | | | | | | | PU HALCO 4 1/2" CBP RIH SET @ 6,026 POOH RD |

| | | | | | | KIES R Summa | EGION ary Report | |
|-----------------|-----------------------------|---------------|------------|------------|-------------|-----------------|---------------------------------------|---|
| Vell: NBU 921-2 | 25N3AS GREEN | | Spud Cor | nductor: 1 | 1/3/2011 | | Spud Date: 1/1 | 17/2011 |
| roject: UTAH-U | | | Site: NBU | | | | \$600 BSDA 500 CT/70 AABO 200 CT/40 S | Rig Name No: SWABBCO 6/6 |
| • | PL/RESEREVEADD | | Start Date | · 7/25/20 | 113 | | | End Date: 9/5/2013 |
| | RKB @4,980.00usft (a | bove Mean S | | 1 | | /S/21/E/2 | 5/0/0/26/PM/S/11 | 158/W/0/2575/0/0 |
| evel) | @ 1,000,000,000 | | | | | | | |
| Date | Time Start-End | Duration (hr) | Phase | Code | Sub Code | P/U | MD From (usft) | Operation |
| 0/00/0040 | 7:00 7:00 | 0.50 | DDI QUIT | 49 | | D | | FRAC & WL CREWS SWIFN TOTAL SAND= 154,633 # 30/50 OTTAWA TOTAL CLFL= 6,351 BBLS H20 MILLING PLUGS |
| 8/23/2013 | 7:00 - 7:30 7:30 - 17:00 | 0.50 9.50 | DRLOUT | 48 44 | C | P P | | MIRU,NDWH, NU BOP'S, TIH TBG, TAG KILL PLUG, RU PWR SWIVEL, BREAK CIRC, TEST BOP'S,MILL 6 PLUGS, 7209', 229 JTS, TIH TO 7441' 238 JTS, C/O 30' SAND, POOH TO 230 JT 7223.15', LAND TBG, ND BOP'S, NUWH, DROP BALL, PUMP OPEN SLIDING SLEEVE,1250# PSI FLOW LINE 3000#, RDMO PLUG# 1 6026' 10' SAND 11 MIN 10# KICK PLUG# 2 6228' 30' SAND 8 MIN 35# KICK PLUG# 3 6448' 25' SAND 8 MIN 30# KICK PLUG# 4 6790' 40' SAND 8 MIN 20# KICK PLUG# 5 6984' 30' SAND 9 MIN 30# KICK PLUG# 6 7209' 25' SAND 10 MIN 0# KICK ISO PLUG 7448' BTM PERF 7421' TBG 150 JTS J-55 4681.32' BTM TBG 80 JTS L-80 2511.60' TOP KB 25.00' HANGER 4.125" .83' SN 1.875" 4.40' EOT 7223.15' NOTE: SHORT JT @ 2535.83'-2541.83' FRAC WTR 6,351 BBLS RCVD 1,500 BBLS |
| | 17:00 - 17:00 | 0.00 | DRLOUT | 50 | | | | LTR 4,851 BBLS WELL TURNED TO SALES @ 1400 HR ON 8/23/2013. 0 MCFD, 0 BWPD, FCP 600#, FTP 40#, |
| | | | | | | | | 20/64" CK. |
| 9/5/2013 | 7:00 - 7:30 | 0.50 | DRLOUT | 48 | | Р | | NDWH |
| | 7:30 - 19:36 | 12.10 | DRLOUT | 44 | C | P | | MIRU, CSG 1500#, TBG 400#, BLOW DWN WELL, KILL WELL 30 BBLS CSG, 20 BBLS TBG, NDWH, NU BOP'S, UNLAND TBG, POOH STD BACK TBG, PU POBS, BIT, TIH, TAG ISO CBP, MILL CBP, RU GROSS FOAM, BREAK CIRC, TIH TO PBTD, CLEAN OUT, PU LAND TBG, POBS, 1300#,RDMO |
| | | | | | | | | TBG 150 JTS J-55 4681.32' BTM TBG 133 JTS L-80 4345.28' TOP KB 25.00' HANGER 4.125" .83' SN 1.875" 2.20' EOT 9054.63' NOTE: SHORT JT @ 4365.11'-4371.11' |

| į | | 0 |
|---|----|---|
| | ٥ | |
| | ā | j |
| (| 1 | |
| | | |
| | | |
| | 28 | |

Customer Information 7:

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

Well/Wellbore Information 1.2

| Well | NBU 921-25N3AS GREEN | Wellbore No. | Ю |
|--------------|---|---------------|--|
| Well Name | NBU 921-25N3AS | Wellbore Name | NBU 921-25N3AS |
| Report No. | _ | Report Date | 8/19/2013 |
| Project | UTAH-UINTAH | Site | NBU 921-25N PAD |
| Rig Name/No. | | Event | RECOMPURESEREVEADD |
| Start Date | 7/25/2013 | End Date | 9/5/2013 |
| Spud Date | 1/17/2011 | Active Datum | RKB @4,980.00usft (above Mean Sea Level) |
| ıwı | SE/SW/i0/9/S/21/E/25/0/0/26/PM/S/1158/N/i0/2575/0/0 | | |

General 1.3

| Contractor | | Job Method | thod | | Supervisor | | |
|---------------------|---------|--------------------|-----------------|------------------|--|---------------------------------------|-------------------|
| Perforated Assembly | | Convey | Conveyed Method | | | | |
| Initial Conditions | | | | 1.5 Summary | | | |
| Fluid Type | | Fluid Density | | Gross Interval | 6,076.0 (usft)-7,421.0 (usft Start Date/Time | Start Date/Time | 8/19/2013 12:00AM |
| Surface Press | | Estimate Res Press | | No. of Intervals | 31 | 31 End Date/Time | 8/19/2013 12:00AM |
| TVD Fluid Top | | Fluid Head | | Total Shots | 123 | 123 Net Perforation Interval | 36.00 (usft) |
| Hydrostatic Press | | Press Difference | | Avg Shot Density | 3.42 (shot/ft) | 3.42 (shot/ft) Final Surface Pressure | |
| Balance Cond | NEUTRAL | | | | | Final Press Date | |

1.4

Intervals 2

Perforated Interval 2.1

| Date | Formation/ Reservoir | (usft) | S (usft) | CCL@ CCL-T MD Top MD Base (usft) S (usft) (usft) (usft) (usft) (usft) | | Shot Density (shot/ft) | Misfires/ Add. Shot | Diamete r (in) | Carr Type /Stage No | Carr Size (in) | Phasing (*) | Charge Desc /Charge Manufacturer | Charge Weight (gram) | Reason | Misrun |
|-------------|-------------------------|--------|----------|---|---------|------------------------------|------------------------|----------------------|---------------------|----------------------|-------------|-------------------------------------|----------------------------|----------------------|---------------------|
| 8/19/2013 W | WASATCH/ | | | 6,076.0 | 6,077.0 | 4.00 | | 0.360 EXP/ | EXP/ | 3.375 | 90.00 | | 23.00 F | 23.00 PRODUCTIO N | ,1 90 , 1911 |

September 06, 2013 at 3:16 pm

OpenWells

Perforated Interval (Continued)

OpenWells

September 06, 2013 at 3:16 pm

| | Formation/ Reservoir | (nsft) | CCL-T | MD Top (usft) | MD Base (usft) | Shot Density (shot/ft) | Misfires/ Add. Shot | Diamete r (in) | Carr Type /Stage No | AZSO ICHIAN TICK | Phasing (*) | Charge Desc /Charge Manufacturer | Charge Ke Weight (gram) | Reason |
|------------------------|-------------------------|--|---------------------------|------------------|-------------------|------------------------------|--|----------------------|---------------------|------------------|-------------|-------------------------------------|-------------------------------|--------|
| 8/19/2013 1 12:00AM | WASATCH/ | | | 6,100.0 | 6,102.0 | 4.00 | | 0.360 EXP/ | EXP/ | 3.375 | 90.00 | | 23.00 PRODUCTIO | UCTIO |
| 8/19/2013 12:00AM | WASATCH/ | | | 6,190.0 | 6,191.0 | 4.00 | | 0.360 EXP | EXP/ | 3.375 | 90.00 | | 23.00 PRODUCTIO | UCTIO |
| 8/19/2013 12:00AM | WASATCH/ | | | 6,197.0 | 6,198.0 | 4.00 | | 0.360 EXP/ | EXP/ | 3.375 | 90.00 | | 23.00 PRODUCTIO | UCTIO |
| 8/19/2013 12:00AM | WASATCH/ | | | 6,259.0 | 6,260.0 | 3.00 | | 0.360 EXP/ | EXP/ | 3.375 | 120.00 | | 23.00 PRODUCTIO | ОСТІО |
| 8/19/2013 12:00AM | WASATCH/ | | | 6,290.0 | 6,291.0 | 3.00 | | 0.360 | EXP/ | 3.375 | 120.00 | | 23.00 PRODUCTIO | UCTIO |
| 6 | WASATCH/ | | | 6,402.0 | 6,404.0 | 3.00 | | 0.360 EXP/ | EXP/ | 3.375 | 120.00 | | 23.00 PRODUCTIO | UCTIO |
| 8/19/2013 12:00AM | WASATCH/ | | | 6,416.0 | 6,418.0 | 3.00 | | 0.360 EXP | EXP/ | 3.375 | 120.00 | | 23.00 PRODUCTIO | UCTIO |
| 8/19/2013 12:00AM | WASATCH/ | | | 6,606.0 | 6,607.0 | 3.00 | | 0.360 EXP/ | EXP/ | 3.375 | 120.00 | | 23.00 PRODUCTIO | UCTIO |
| 6 | WASATCH/ | | \$ 000 TO SEE THE SEE THE | 6,618.0 | 6,619.0 | 3.00 | | 0.360 EXP/ | EXP/ | 3.375 | 120.00 | | 23.00 PRODUCTIO | UCTIO |
| m | WASATCH/ | | | 6,627.0 | 6,628.0 | 3.00 | | 0.360 EXP | EXP/ | 3.375 | 120.00 | | 23.00 PRODUCTIO | UCTIO |
| m | WASATCH/ | | | 6,637.0 | 6,638.0 | 3.00 | | 0.360 EXP/ | EXP/ | 3.375 | 120.00 | | 23.00 PRODUCTIO | UCTIO |
| m | WASATCH/ | | | 6,650.0 | 6,651.0 | 3.00 | | 0.360 EXP/ | EXP/ | 3.375 | 120.00 | | 23.00 PRODUCTIO | UCTIO |
| 6 | WASATCH/ | to de Cita de la constitución de | | 6,735.0 | 6,736.0 | 3.00 | THE PROPERTY CONTRACTOR OF THE PROPERTY CONTRACT | 0.360 EXP/ | EXP/ | 3.375 | 120.00 | | 23.00 PRODUCTIO | UCTIO |
| m | WASATCH/ | | | 6,746.0 | 6,747.0 | 3.00 | A THE RESIDENCE AND A STATE OF THE PARTY OF | 0.360 EXP/ | EXP/ | 3.375 | 120.00 | | 23.00 PRODUCTIO | UCTIO |
| 8/19/2013 12:00AM | WASATCH/ | | | 6,759.0 | 6,760.0 | 3.00 | | 0.360 EXP | EXP/ | 3.375 | 120.00 | | 23.00 PRODUCTIO | UCTIO |
| 8/19/2013 12:00AM | WASATCH/ | | | 6,803.0 | 6,804.0 | 4.00 | | 0.360 EXP/ | EXP/ | 3.375 | 90.00 | | 23.00 PRODUCTIO | UCTIO |
| 8/19/2013 12:00AM | WASATCH/ | | | 6,831.0 | 6,832.0 | 4.00 | | 0.360 | EXP/ | 3.375 | 90.00 | | 23.00 PRODUCTIO | UCTIO |
| 8/19/2013 12:00AM | WASATCH/ | | | 6,886.0 | 6,887.0 | 4.00 | | 0.360 | EXP/ | 3.375 | 90.00 | | 23.00 PRODUCTIO | UCTIO |
| 8/19/2013 12:00AM | WASATCH/ | | | 6,928.0 | 6,929.0 | 4.00 | | 0.360 EXP/ | EXP/ | 3.375 | 90.00 | | 23.00 PRODUCTIO | UCTIO |
| 8/19/2013 12:00AM | WASATCH/ | | | 6,953.0 | 6,954.0 | 4.00 | | 0.360 | EXP/ | 3.375 | 90.00 | | 23.00 PRODUCTIO | UCTIO |
| 8/19/2013 12:00AM | WASATCH/ | | | 7,011.0 | 7,012.0 | 3.00 | | 0.360 | EXP/ | 3.375 | 120.00 | | 23.00 PRODUCTIO | UCTIO |

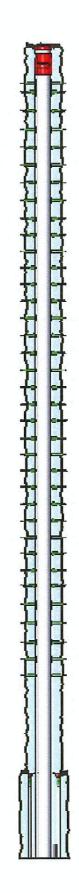
US ROCKIES REGION

| (Continued) | |
|-------------|--|
| Interval | |
| Perforated | |
| 2.1 | |

| (usft) 7 nee n |
|----------------------|
| 0.790,7 |
| 7,115.0 7,116.0 3.00 |
| 7,131.0 7,132.0 3.00 |
| 7,155.0 7,156.0 3.00 |
| 7,163.0 7,164.0 3.00 |
| 7,178.0 7,179.0 3.00 |
| 7,262.0 7,263.0 4.00 |
| 7,392.0 7,394.0 4.00 |
| 7,419.0 7,421.0 4.00 |

Plots

Wellbore Schematic 3.1



September 06, 2013 at 3:16 pm

6/30/2020

| Effective Date. | 0/30/2020 | |
|---|-------------------|--|
| FORMER OPERATOR: | NEW OPERATOR: | |
| Kerr-McGee Oil and Gas Onshore, L.P. | Caerus Uinta, LLC | |
| | | |
| Groups: 10/0/2020 cont list to aparetors to ravis | | |

WELL INFORMATION:

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

See operator file

Total Well Count:

11/10/2020

1. Sundry or legal documentation was received from the FORMER operator on:

8/11/2020 8/11/2020

10/16/2020

2. Sundry or legal documentation was received from the NEW operator on:

11801118-0161

OPS/SI/TA well(s) reviewed for full cost bonding: Approved by Dustin UIC5 on all disposal/injection/storage well(s) Approved on: Approved by Dayne

Surface Facility(s) included in operator change:

11/10/2020 11/9/2020

East Bench

Bonanza Bridge

Morgan State 921-36P **Morgan States**

NBU 1022-14B NBU 921-25A NBU 922-29J NBU 922-32N

Sage Grouse Sand Wash

NEW OPERATOR BOND VERIFICATION:

State/fee well(s) covered by Bond Number(s):

LPM9344488-Shut-In Bond

DATA ENTRY:

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

11/19/2020 11/19/2020 11/19/2020 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

12/3/2020

Pre-Notice Completed: OPERATOR CHANGES DOCUMENTATION:

3. New operator Division of Corporations Business Number:

Receipt of Acceptance of Drilling Procedures for APD on: Reports current for Production/Disposition & Sundries:

10/16/2020

Archie Bench

Goat Pasture

Goat Pasture Manifold

Pipeline

6135000111

STATE OF UTAH

| | DEPARTMENT OF NATURAL RESOURDIVISION OF OIL, GAS AND MI | | ł | 5. LEASE DESIGNATION AND SERIAL NUMBER: |
|---|---|---|-------------------------------|--|
| | | | | U-02278-ST |
| SUNDRY | Y NOTICES AND REPORTS | S ON WELL | .s | 6. IF INDIAN, ALLOTTEE OR TRIBE NAME: |
| Do not use this form for proposals to drill of drill horizontal | new wells, significantly deepen existing wells below cur laterals. Use APPLICATION FOR PERMIT TO DRILL f | rrent boltom-hole depth, form for such proposals | reenter plugged wells, or to | 7. UNIT or CA AGREEMENT NAME: NATURAL BUTTES |
| 1. TYPE OF WELL OIL WELL | 9 9 | | | WELL NAME and NUMBER: CIGE 20 |
| 2. NAME OF OPERATOR: | | | | 9. API NUMBER: |
| CAERUS UINTA LLC | | | | 43047304850000 |
| 3. ADDRESS OF OPERATOR: 1001 17TH ST. STE 1600 | DENVER STATE CO ZIP | | PHONE NUMBER: 303-565-4600 | 10. FIELD AND POOL, OR WILDCAT: |
| 4. LOCATION OF WELL | | | | |
| FOOTAGES AT SURFACE: 1162 FS | SL 1365 FWL | | | COUNTY: UINTAH |
| QTR/QTR, SECTION, TOWNSHIP, RAN | NGE, MERIDIAN: SESW 20 10S | 21E \$ | | STATE: UTAH |
| 11. CHECK APP | ROPRIATE BOXES TO INDICAT | TE NATURE O | F NOTICE, REPOR | RT, OR OTHER DATA |
| TYPE OF SUBMISSION | | TYI | PE OF ACTION | |
| NOTICE OF INTENT | ACIDIZE | DEEPEN | | REPERFORATE CURRENT FORMATION |
| (Submit in Duplicate) | ALTER CASING | FRACTURE T | REAT | SIDETRACK TO REPAIR WELL |
| Approximate date work will start: | CASING REPAIR | ■ NEW CONSTR | RUCTION | TEMPORARILY ABANDON |
| 06/30/2020 | CHANGE TO PREVIOUS PLANS | ✓ OPERATOR C | HANGE | TUBING REPAIR |
| | CHANGE TUBING | PLUG AND AB | ANDON | VENT OR FLARE |
| SUBSEQUENT REPORT | CHANGE WELL NAME | PLUG BACK | | WATER DISPOSAL |
| (Submit Original Form Only) | CHANGE WELL STATUS | PRODUCTION | (START/RESUME) | WATER SHUT-OFF |
| Date of work completion: | COMMINGLE PRODUCING FORMATIONS | RECLAMATIO | N OF WELL SITE | X OTHER: Transfer remediation liabilities |
| | CONVERT WELL TYPE | RECOMPLETE | - DIFFERENT FORMATION | |
| 12. DESCRIBE PROPOSED OR CO | OMPLETED OPERATIONS. Clearly show all p | pertinent details inclu | iding dates, depths, volume | s, etc. |
| Effective June 30, 2020, of Caerus Uinta LLC 1001 17th Street, Suite 16 Denver, CO 80202 303-565-4600 | pperation of the following wells wa | as taken over t | | Sill I from |
| The previous Operator wa | as Kerr-McGee Oil & Gas Onshord PO Box 173779 Denver, CO 80217-3779 | e LP | | William C. Irons Attorney-in-Fact |
| Oil & Gas Onshore LP I as | vells for a complete list that will be sk that you accept this letter as K C, whose operator number is 1050 | err-McGee's o | fficial resignation ar | |
| | erring cleanup/soils remediation t IS Field Lead (435) 790-9669. | to Caerus Uint | a LLC for Incident# | 5772. The new contact for |
| NAME (PLEASE PRINT) Aubree Be | esant | TITLE | Director of Land | |
| | | | | |
| | | | | |
| This space for State use only) | | | | RECEIVED |

(This space for State use only)

APPROVED

By: Raehel Medina

Utah Division of Oil, Gas, and Mining AUG 1 1 2020

DIV OF OIL, GAS & MINING

STATE OF UTAH

| | DEPARTMENT OF NATURAL RESOU | RCES | | | | | | |
|---|---|--|---|--|--|--|--|--|
| C | DIVISION OF OIL, GAS AND MI | NING | 5. LEASE DESIGNATION AND SERIAL NUMBER: U-02278-ST | | | | | |
| SUNDRY | NOTICES AND REPORT | S ON WELLS | 6. IF INDIAN, ALLOTTEE OR TRIBE NAME: | | | | | |
| Do not use this form for proposals to drill ne | aw wells, significantly deepen existing wells below cuterals. Use APPLICATION FOR PERMIT TO DRILL | rrent bottom-hole depth, reenter plugged wells, or to form for such proposals. | 7. UNIT or CA AGREEMENT NAME: NATURAL BUTTES | | | | | |
| 1. TYPE OF WELL OIL WELL | GAS WELL 7 OTHER | | 8. WELL NAME and NUMBER: | | | | | |
| OIL WELL | ☐ GAS WELL ☑ OTHER_ | | CIGE 20 | | | | | |
| 2. NAME OF OPERATOR: | | | 9. API NUMBER: | | | | | |
| CAERUS UINTA LLC | | | 43047304850000 | | | | | |
| 3. ADDRESS OF OPERATOR: 1001 17TH ST. STE 1600 | , DENVER STATE CO ZIE | ,80202 PHONE NUMBER: 303-565-4600 | 10. FIELD AND POOL, OR WILDCAT: | | | | | |
| 4. LOCATION OF WELL | | | | | | | | |
| FOOTAGES AT SURFACE: 1162 FSI | L 1365 FWL | | COUNTY: UINTAH | | | | | |
| QTR/QTR, SECTION, TOWNSHIP, RANG | GE, MERIDIAN: SESW 20 10S | 21E S | STATE: UTAH | | | | | |
| 11. CHECK APPR | ROPRIATE BOXES TO INDICAT | E NATURE OF NOTICE, REPO | RT. OR OTHER DATA | | | | | |
| TYPE OF SUBMISSION | T T | TYPE OF ACTION | , | | | | | |
| | ACIDIZE | DEEPEN | REPERFORATE CURRENT FORMATION | | | | | |
| NOTICE OF INTENT | | | | | | | | |
| (Submit in Duplicate) | ALTER CASING | FRACTURE TREAT | SIDETRACK TO REPAIR WELL | | | | | |
| Approximate date work will start: | CASING REPAIR | NEW CONSTRUCTION | TEMPORARILY ABANDON | | | | | |
| 06/30/2020 | CHANGE TO PREVIOUS PLANS | ✓ OPERATOR CHANGE | TUBING REPAIR | | | | | |
| | CHANGE TUBING | PLUG AND ABANDON | VENT OR FLARE | | | | | |
| SUBSEQUENT REPORT | CHANGE WELL NAME | PLUG BACK | WATER DISPOSAL | | | | | |
| (Submit Original Form Only) | CHANGE WELL STATUS | PRODUCTION (START/RESUME) | WATER SHUT-OFF | | | | | |
| Date of work completion: | COMMINGLE PRODUCING FORMATIONS | RECLAMATION OF WELL SITE | X OTHER: Transfer remediation liabilities | | | | | |
| | CONVERT WELL TYPE | RECOMPLETE - DIFFERENT FORMATION | | | | | | |
| | I GOWERT WEEE THE | TOOM ELVE SIVERENT ON INTO | | | | | | |
| 12. DESCRIBE PROPOSED OR CO | MPLETED OPERATIONS. Clearly show all | pertinent details including dates, depths, volum | nes, etc. | | | | | |
| Effective June 30, 2020, o | peration of the following wells wa | as taken over by: | | | | | | |
| Caerus Uinta LLC | | | | | | | | |
| 1001 17th Street, Suite 16 | 00 | | | | | | | |
| Denver, CO 80202 | | | | | | | | |
| 303-565-4600 | | | | | | | | |
| The provious Operator was | a Karr MaCaa Oil & Caa Onaha | ro I D | | | | | | |
| The previous Operator was | s Kerr-McGee Oil & Gas Onshor | | William C. Irons | | | | | |
| | PO Box 173779 William C. Irons Denver, CO 80217-3779 Attorney-in-Fact | | | | | | | |
| | 26.1.61, 22 30211 3713 | | ,, | | | | | |
| Please see the attached w | ells for a complete list that will b | e transferred upon approval. As | the Attorney-in-Fact for Kerr-McGee | | | | | |
| Oil & Gas Onshore LP I as | k that you accept this letter as k | Kerr-McGee's official resignation a | and request to transfer operating | | | | | |
| rights to Caerus Uinta LLC | , whose operator number is 105 | 6039. UDOGM Bond# 613500011 | 1 and BLM Bond# COB000387. | | | | | |
| W N O W I I I | | 1. O Illiana II O familia di dant | #5770 The result of the | | | | | |
| | | to Caerus Uinta LLC for Incident | #5772. The new contact for | | | | | |
| Caerus is Grizz Oleen, Er | IS Field Lead (435) 790-9669. | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| NAME (PLEASE PRINT) Aubree Be | sant | TITLE Director of Land | | | | | | |
| (4) | I A A A A | | 1000 | | | | | |
| SIGNATURE A A A A A A A A A A A A A A A A A A A | SUL | DATE ()UU 17, | <i>2000</i> | | | | | |
| | | ~ / | RECEIVED | | | | | |
| (This space for State use only) | APPROVED | | AUG 1 1 2020 | | | | | |

By: Raehel Medina Utah Division of

DIV OF OIL, GAS & MINING