

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

FORM 3

AMENDED REPORT

| | | |
|---|--|---|
| APPLICATION FOR PERMIT TO DRILL | | 1. WELL NAME and NUMBER Morgan State 921-36F1CS |
| 2. TYPE OF WORK DRILL NEW WELL <input checked="" type="checkbox"/> REENTER P&A WELL <input type="checkbox"/> DEEPEN WELL <input type="checkbox"/> | | 3. FIELD OR WILDCAT NATURAL BUTTES |
| 4. TYPE OF WELL Gas Well Coalbed Methane Well: NO | | 5. UNIT or COMMUNITIZATION AGREEMENT NAME |
| 6. NAME OF OPERATOR KERR-MCGEE OIL & GAS ONSHORE, L.P. | | 7. OPERATOR PHONE 720 929-6515 |
| 8. ADDRESS OF OPERATOR P.O. Box 173779, Denver, CO, 80217 | | 9. OPERATOR E-MAIL julie.jacobson@anadarko.com |
| 10. MINERAL LEASE NUMBER (FEDERAL, INDIAN, OR STATE) ML 22265 | 11. MINERAL OWNERSHIP FEDERAL <input type="checkbox"/> INDIAN <input type="checkbox"/> STATE <input checked="" type="checkbox"/> FEE <input type="checkbox"/> | 12. SURFACE OWNERSHIP FEDERAL <input type="checkbox"/> INDIAN <input type="checkbox"/> STATE <input checked="" type="checkbox"/> FEE <input type="checkbox"/> |
| 13. NAME OF SURFACE OWNER (if box 12 = 'fee') | | 14. SURFACE OWNER PHONE (if box 12 = 'fee') |
| 15. ADDRESS OF SURFACE OWNER (if box 12 = 'fee') | | 16. SURFACE OWNER E-MAIL (if box 12 = 'fee') |
| 17. INDIAN ALLOTTEE OR TRIBE NAME (if box 12 = 'INDIAN') | 18. INTEND TO COMMINGLE PRODUCTION FROM MULTIPLE FORMATIONS YES <input checked="" type="checkbox"/> (Submit Commingling Application) NO <input type="checkbox"/> | 19. SLANT VERTICAL <input type="checkbox"/> DIRECTIONAL <input checked="" type="checkbox"/> HORIZONTAL <input type="checkbox"/> |

| 20. LOCATION OF WELL | FOOTAGES | QTR-QTR | SECTION | TOWNSHIP | RANGE | MERIDIAN |
|---------------------------------|-------------------|---------|---------|----------|--------|----------|
| LOCATION AT SURFACE | 1539 FNL 1794 FWL | SEnw | 36 | 9.0 S | 21.0 E | S |
| Top of Uppermost Producing Zone | 1740 FNL 2144 FWL | SEnw | 36 | 9.0 S | 21.0 E | S |
| At Total Depth | 1740 FNL 2144 FWL | SEnw | 36 | 9.0 S | 21.0 E | S |

| | | |
|---|---|---|
| 21. COUNTY UINTAH | 22. DISTANCE TO NEAREST LEASE LINE (Feet) 1740 | 23. NUMBER OF ACRES IN DRILLING UNIT 639 |
| 27. ELEVATION - GROUND LEVEL 4997 | 25. DISTANCE TO NEAREST WELL IN SAME POOL (Applied For Drilling or Completed) 540 | 26. PROPOSED DEPTH MD: 10589 TVD: 10559 |
| | 28. BOND NUMBER 22013542 | 29. SOURCE OF DRILLING WATER / WATER RIGHTS APPROVAL NUMBER IF APPLICABLE 43-8496 |

Hole, Casing, and Cement Information

| String | Hole Size | Casing Size | Length | Weight | Grade & Thread | Max Mud Wt. | Cement | Sacks | Yield | Weight |
|--------|-----------|-------------|-----------|--------|----------------|-------------|----------------------------|-------|-------|--------|
| Surf | 12.25 | 8.625 | 0 - 2600 | 28.0 | J-55 LT&C | 0.2 | Type V | 180 | 1.15 | 15.8 |
| | | | | | | | Class G | 270 | 1.15 | 15.8 |
| Prod | 7.875 | 4.5 | 0 - 10589 | 11.6 | HCP-110 LT&C | 13.0 | Premium Lite High Strength | 320 | 3.38 | 12.0 |
| | | | | | | | 50/50 Poz | 1530 | 1.31 | 14.3 |

ATTACHMENTS

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

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

| | | |
|--|---|--|
| NAME Danielle Piernot | TITLE Regulatory Analyst | PHONE 720 929-6156 |
| SIGNATURE | DATE 12/19/2011 | EMAIL danielle.piernot@anadarko.com |
| API NUMBER ASSIGNED 43047522820000 | APPROVAL  Permit Manager | |

Kerr-McGee Oil & Gas Onshore. L.P.**MORGAN STATE 921-36F1CS**

Surface: 1539 FNL / 1794 FWL SENW
 BHL: 1740 FNL / 2144 FWL SENW

Section 36 T9S R21E

Unitah County, Utah
 Mineral Lease: ML-22265

ONSHORE ORDER NO. 1**DRILLING PROGRAM**

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

| <u>Formation</u> | <u>Depth</u> | <u>Resource</u> |
|------------------|--------------|-----------------|
| Uinta | 0 - Surface | |
| Green River | 1,359' | |
| Birds Nest | 1,656' | Water |
| Mahogany | 2,150' | Water |
| Wasatch | 4,607' | Gas |
| Mesaverde | 7,287' | Gas |
| Sego | 9,479' | Gas |
| Castlegate | 9,527' | Gas |
| MN5 | 9,959' | Gas |
| TVD = | 10,559' | |
| TD = | 10,589' | |

- 2.C Kerr McGee Oil & Gas Onshore LP (Kerr McGee) will either drill to the the Blackhawk formation, which is part of the Mesaverde formation, or the Wasatch/Mesaverde formation. If Kerr McGee drills to the Blackhawk formation (part of the Mesaverde formation), please refer to MN5 as the bottom formation. The attached Blackhawk Drilling Program includes Total Vertical Depth, Total Depth, and appropriate casing and cement programs for the deeper formation.

If Kerr McGee drills to the Wasatch/Mesaverde formation please refer to Sego as the bottom formation. The attached Wasatch/Mesaverde Drilling Program includes Total Vertical Depth, Total Depth, and appropriate casing and cement programs for the depths the Wasatch/Mesaverde formations are found.

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

Please refer to the attached Blackhawk Drilling Program and the Wasatch/Mesaverde Drilling Program

4. Proposed Casing & Cementing Program:

Please refer to the attached Blackhawk Drilling Program and the Wasatch/Mesaverde Drilling Program

5. Drilling Fluids Program:

Please refer to the attached Blackhawk Drilling Program and the Wasatch/Mesaverde Drilling Program

6. Evaluation Program:

Please refer to the attached Blackhawk Drilling Program and the Wasatch/Mesaverde Drilling Program

7. Abnormal Conditions:**7.a Blackhawk (Part of Mesaverde Formation) Target Formation**

Maximum anticipated bottom hole pressure calculated at 10559' TVD, approximately equals
6,969 psi (0.66 psi/ft = actual bottomhole gradient)

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

Maximum anticipated surface pressure equals approximately 4,694 psi (bottom hole pressure
minus the pressure of a partially evacuated hole calculated at 0.22 psi/foot, per Onshore Order No. 2).

Per Onshore Order No. 2 - Max Anticipated Surf. Press.(MASP) = (Pore Pressure at next csg point-
(0.22 psi/ft-partial evac gradient x TVD of next csg point))

7.b Wasach/Mesaverde Target Formation

Maximum anticipated bottom hole pressure calculated at 9479' TVD, approximately equals
6,067 psi (0.64 psi/ft = actual bottomhole gradient)

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

Maximum anticipated surface pressure equals approximately 3,968 psi (bottom hole pressure
minus the pressure of a partially evacuated hole calculated at 0.22 psi/foot, per Onshore Order No. 2).

Per Onshore Order No. 2 - Max Anticipated Surf. Press.(MASP) = (Pore Pressure at next csg point-
(0.22 psi/ft-partial evac gradient x TVD of next csg point))

8. Anticipated Starting Dates:

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

9. Variances:

Please refer to the attached Blackhawk Drilling Program and the Wasatch/Mesaverde 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 for the first 200 feet, then will drill a 11 inch hole to just above the Bird's Nest interval with an air hammer. The hammer is then tripped and replaced with a 11 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 8-5/8 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.

Variance for FIT Requirements

KMG also respectfully requests a variance to Onshore Order 2, Section III, Part Bi, for the pressure integrity test (PIT, also known as a formation integrity test (FIT)). This well is not an exploratory well and is being drilled in an area where the formation integrity is well known. Additionally, when an FIT is run with the mud weight as required, the casing shoe frequently breaks down and causes subsequent lost circulation when drilling the entire depth of the well.

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.

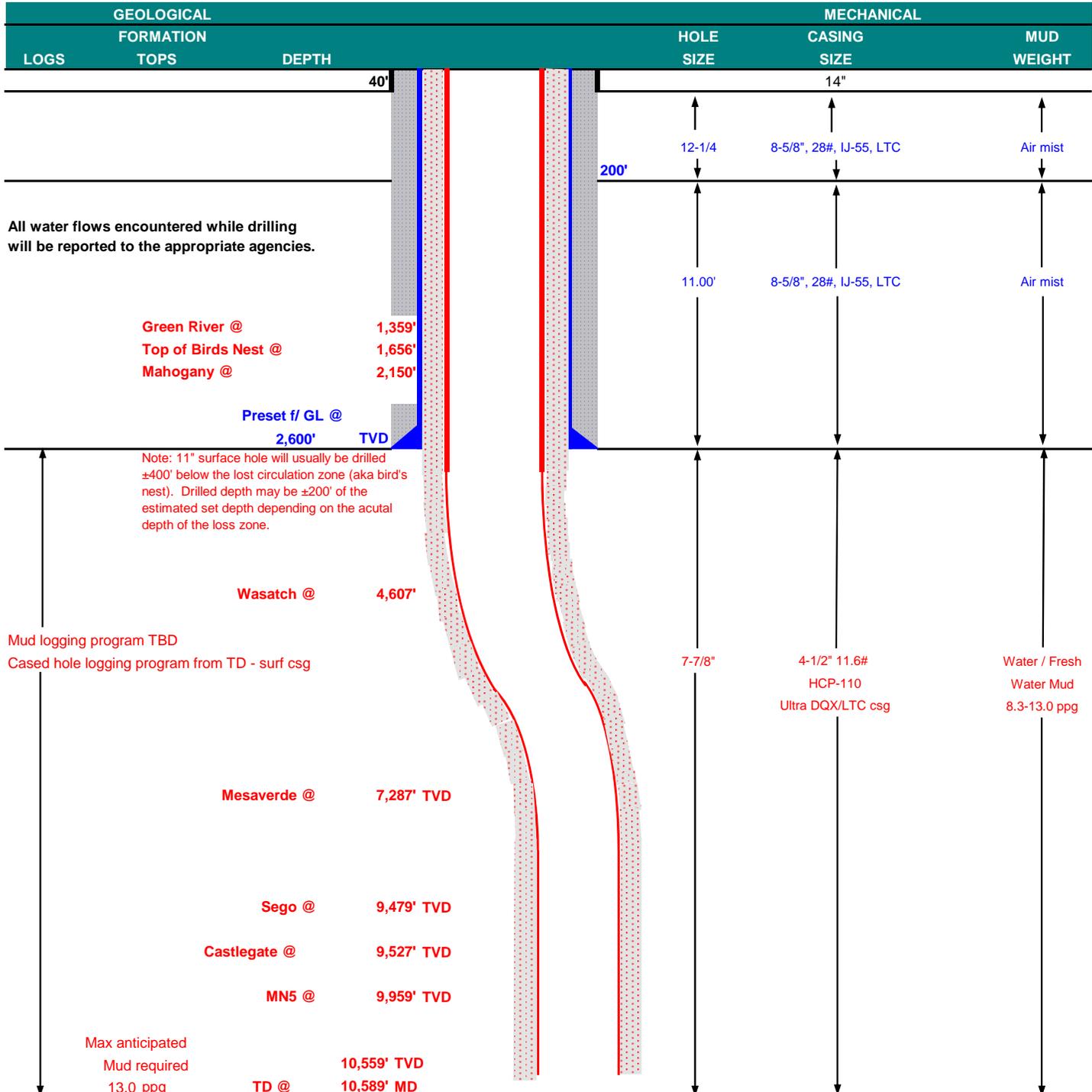
10. **Other Information:**

Please refer to the attached Blackhawk Drilling Program and the Wasatch/Mesaverde Drilling Program



KERR-McGEE OIL & GAS ONSHORE LP BLACKHAWK DRILLING PROGRAM

| | | | | | | | |
|-------------------|---|-----------|------------|-------------------|------|--------------------|--------|
| COMPANY NAME | KERR-McGEE OIL & GAS ONSHORE LP | | DATE | December 19, 2011 | | | |
| WELL NAME | MORGAN STATE 921-36F1CS | | TD | 10,559' | TVD | 10,589' MD | |
| FIELD | Natural Buttes | COUNTY | Uintah | STATE | Utah | FINISHED ELEVATION | 4,994' |
| SURFACE LOCATION | SENW | 1539 FNL | 1794 FWL | Sec 36 | T 9S | R 21E | |
| | Latitude: | 39.995552 | Longitude: | -109.502389 | | | NAD 27 |
| BTM HOLE LOCATION | SENW | 1740 FNL | 2144 FWL | Sec 36 | T 9S | R 21E | |
| | Latitude: | 39.994999 | Longitude: | -109.501141 | | | NAD 27 |
| OBJECTIVE ZONE(S) | BLACKHAWK | | | | | | |
| ADDITIONAL INFO | Regulatory Agencies: UDOGM (Minerals), UDOGM (Surface), UDOGM Tri-County Health Dept. | | | | | | |





KERR-McGEE OIL & GAS ONSHORE LP
BLACKHAWK DRILLING PROGRAM

CASING PROGRAM

| | | | | | | | DESIGN FACTORS | | | |
|------------|--------|----------|------------|-------|---------|-------|----------------|----------|---------|---------|
| | | | | | | | LTC | | DQX | |
| | SIZE | INTERVAL | | WT. | GR. | CPLG. | BURST | COLLAPSE | TENSION | |
| CONDUCTOR | 14" | 0-40' | | | | | 3,390 | 1,880 | 348,000 | N/A |
| SURFACE | 8-5/8" | 0 | to 2,600 | 28.00 | IJ-55 | LTC | 2.07 | 1.55 | 5.46 | N/A |
| PRODUCTION | 4-1/2" | 0 | to 5,000 | 11.60 | HCP-110 | DQX | 1.19 | 1.21 | 279,000 | 367,174 |
| | 4-1/2" | 5,000 | to 10,589' | 11.60 | HCP-110 | LTC | 1.19 | 1.21 | 5.37 | |

Surface Casing:

(Burst Assumptions: TD = 13.0 ppg) 0.73 psi/ft = frac gradient @ surface shoe

Fracture at surface shoe with 0.1 psi/ft gas gradient above

(Collapse Assumption: Fully Evacuated Casing, Max MW)

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

Production casing:

(Burst Assumptions: Pressure test with 8.4ppg @ 9000 psi) 0.66 psi/ft = bottomhole gradient

(Collapse Assumption: Fully Evacuated Casing, Max MW)

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

CEMENT PROGRAM

| | | FT. OF FILL | DESCRIPTION | SACKS | EXCESS | WEIGHT | YIELD |
|---|----------------------|-------------|--|---------|--------|--------|-------|
| SURFACE | LEAD | 500' | Premium cmt + 2% CaCl + 0.25 pps flocele | 180 | 60% | 15.80 | 1.15 |
| Option 1 | TOP OUT CMT (6 jobs) | 1,200' | 20 gals sodium silicate + Premium cmt + 2% CaCl + 0.25 pps flocele | 270 | 0% | 15.80 | 1.15 |
| NOTE: If well will circulate water to surface, option 2 will be utilized | | | | | | | |
| SURFACE | LEAD | 2,100' | 65/35 Poz + 6% Gel + 10 pps gilsonite + 0.25 pps Flocele + 3% salt BWOW | 190 | 35% | 11.00 | 3.82 |
| Option 2 | TAIL | 500' | Premium cmt + 2% CaCl + 0.25 pps flocele | 150 | 35% | 15.80 | 1.15 |
| | TOP OUT CMT | as required | Premium cmt + 2% CaCl | as req. | | 15.80 | 1.15 |
| PRODUCTION | LEAD | 4,099' | Premium Lite II +0.25 pps celloflake + 5 pps gilsonite + 10% gel + 0.5% extender | 320 | 35% | 12.00 | 3.38 |
| | TAIL | 6,490' | 50/50 Poz/G + 10% salt + 2% gel + 0.1% R-3 | 1,530 | 35% | 14.30 | 1.31 |

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

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

FLOAT EQUIPMENT & CENTRALIZERS

| | |
|------------|--|
| SURFACE | Guide shoe, 1 jt, insert float. Centralize first 3 joints with bow spring centralizers. Thread lock guide shoe |
| PRODUCTION | Float shoe, 1 jt, float collar. 15 centralizers for a Mesaverde and 20 for a Blackhawk well. |

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:

Nick Spence / Danny Showers / Chad Loesel

DATE: _____

DRILLING SUPERINTENDENT:

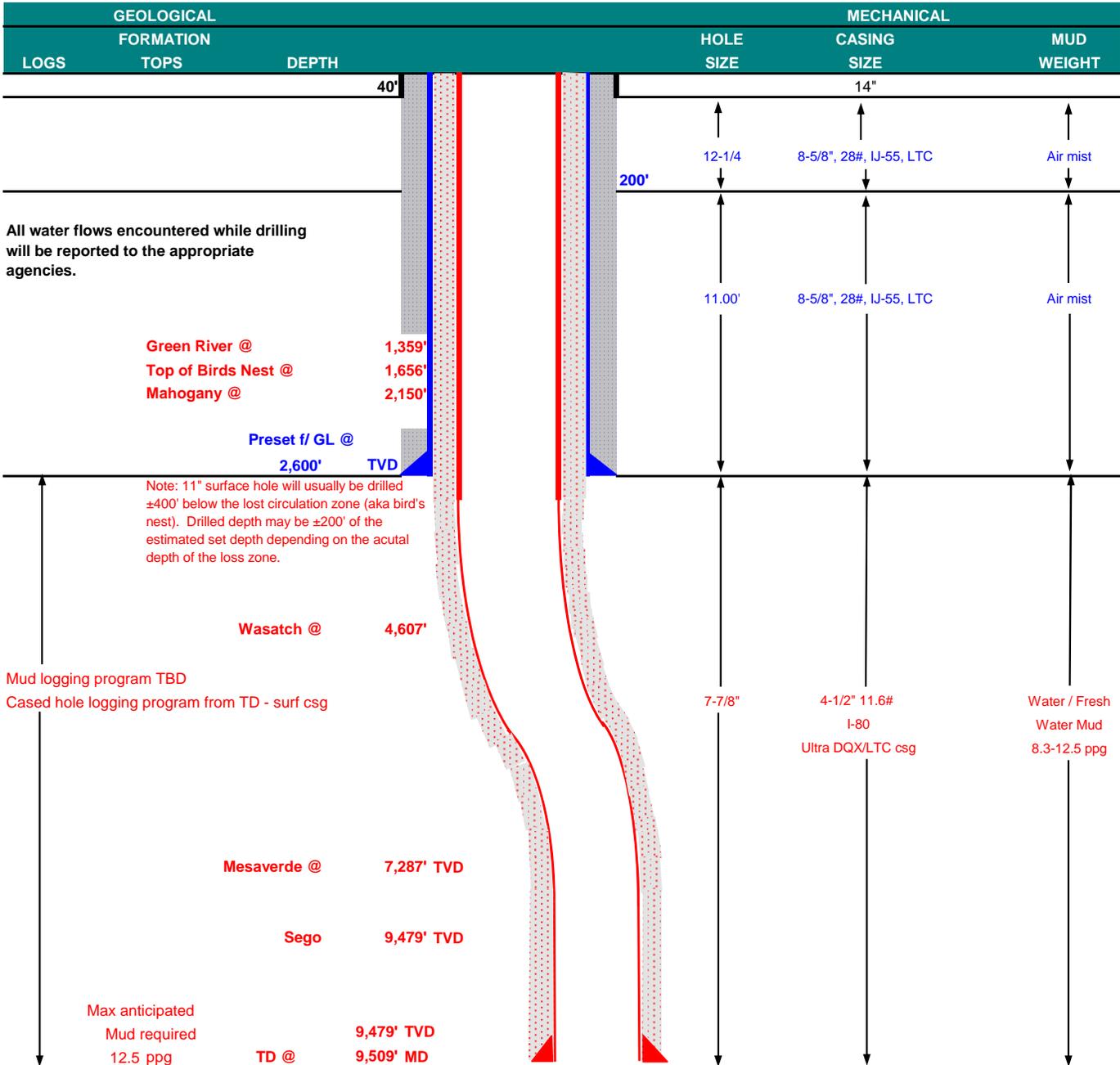
Kenny Gathings / Lovel Young

DATE: _____



KERR-McGEE OIL & GAS ONSHORE LP WASATCH/MESAVERDE DRILLING PROGRAM

| | | | | | |
|-------------------|---|-----------|------------|-------------------|---------------------------|
| COMPANY NAME | KERR-McGEE OIL & GAS ONSHORE LP | | DATE | December 19, 2011 | |
| WELL NAME | MORGAN STATE 921-36F1CS | | TD | 9,479' | 9,509' MD |
| FIELD | Natural Buttes | COUNTY | Uintah | STATE | Utah |
| SURFACE LOCATION | SENW | 1539 FNL | 1794 FWL | Sec 36 T 9S R 21E | FINISHED ELEVATION 4,994' |
| | Latitude: | 39.995552 | Longitude: | -109.502389 | NAD 27 |
| BTM HOLE LOCATION | SENW | 1740 FNL | 2144 FWL | Sec 36 T 9S R 21E | |
| | Latitude: | 39.994999 | Longitude: | -109.501141 | NAD 27 |
| OBJECTIVE ZONE(S) | Wasatch/Mesaverde | | | | |
| ADDITIONAL INFO | Regulatory Agencies: UDOGM (Minerals), UDOGM (Surface), UDOGM Tri-County Health Dept. | | | | |





KERR-McGEE OIL & GAS ONSHORE LP

WASATCH/MESAVERDE DRILLING PROGRAM

CASING PROGRAM

| | | | | | | | DESIGN FACTORS | | | |
|------------|--------|----------|-----------|-------|-------|-------|----------------|----------|---------|---------|
| | | | | | | | LTC | DQX | | |
| | SIZE | INTERVAL | | WT. | GR. | CPLG. | BURST | COLLAPSE | TENSION | |
| CONDUCTOR | 14" | 0-40' | | | | | 3,390 | 1,880 | 348,000 | N/A |
| SURFACE | 8-5/8" | 0 | to 2,600 | 28.00 | IJ-55 | LTC | 2.07 | 1.55 | 5.46 | N/A |
| PRODUCTION | 4-1/2" | 0 | to 5,000 | 11.60 | I-80 | DQX | 7,780 | 6,350 | | 267,035 |
| | | | | | | | 1.11 | 1.03 | 223,000 | 2.99 |
| | | | | | | | 7,780 | 6,350 | 223,000 | |
| | 4-1/2" | 5,000 | to 9,509' | 11.60 | I-80 | LTC | 1.11 | 1.03 | 5.27 | |

Surface Casing:

(Burst Assumptions: TD = 12.5 ppg) 0.73 psi/ft = frac gradient @ surface shoe
Fracture at surface shoe with 0.1 psi/ft gas gradient above

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

Production casing:

(Burst Assumptions: Pressure test with 8.4ppg @ 7000 psi) 0.64 psi/ft = bottomhole gradient

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

CEMENT PROGRAM

| | | FT. OF FILL | DESCRIPTION | SACKS | EXCESS | WEIGHT | | YIELD |
|---|----------------------|-------------|--|---------|--------|--------|--|-------|
| SURFACE Option 1 | LEAD | 500' | Premium cmt + 2% CaCl + 0.25 pps flocele | 180 | 60% | 15.80 | | 1.15 |
| | TOP OUT CMT (6 jobs) | 1,200' | 20 gals sodium silicate + Premium cmt + 2% CaCl + 0.25 pps flocele | 270 | 0% | 15.80 | | 1.15 |
| NOTE: If well will circulate water to surface, option 2 will be utilized | | | | | | | | |
| SURFACE Option 2 | LEAD | 2,100' | 65/35 Poz + 6% Gel + 10 pps gilsonite + 0.25 pps Flocele + 3% salt BWOW | 190 | 35% | 11.00 | | 3.82 |
| | TAIL | 500' | Premium cmt + 2% CaCl + 0.25 pps flocele | 150 | 35% | 15.80 | | 1.15 |
| | TOP OUT CMT | as required | Premium cmt + 2% CaCl | as req. | | 15.80 | | 1.15 |
| PRODUCTION | LEAD | 4,099' | Premium Lite II +0.25 pps celloflake + 5 pps gilsonite + 10% gel + 0.5% extender | 320 | 35% | 12.00 | | 3.38 |
| | TAIL | 5,410' | 50/50 Poz/G + 10% salt + 2% gel + 0.1% R-3 | 1,280 | 35% | 14.30 | | 1.31 |

*Substitute caliper hole volume plus 0% excess for LEAD if accurate caliper is obtained
*Substitute caliper hole volume plus 10% excess for TAIL if accurate caliper is obtained

FLOAT EQUIPMENT & CENTRALIZERS

| | |
|------------|--|
| SURFACE | Guide shoe, 1 jt, insert float. Centralize first 3 joints with bow spring centralizers. Thread lock guide shoe |
| PRODUCTION | Float shoe, 1 jt, float collar. 15 centralizers for a Mesaverde and 20 for a Blackhawk well. |

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.

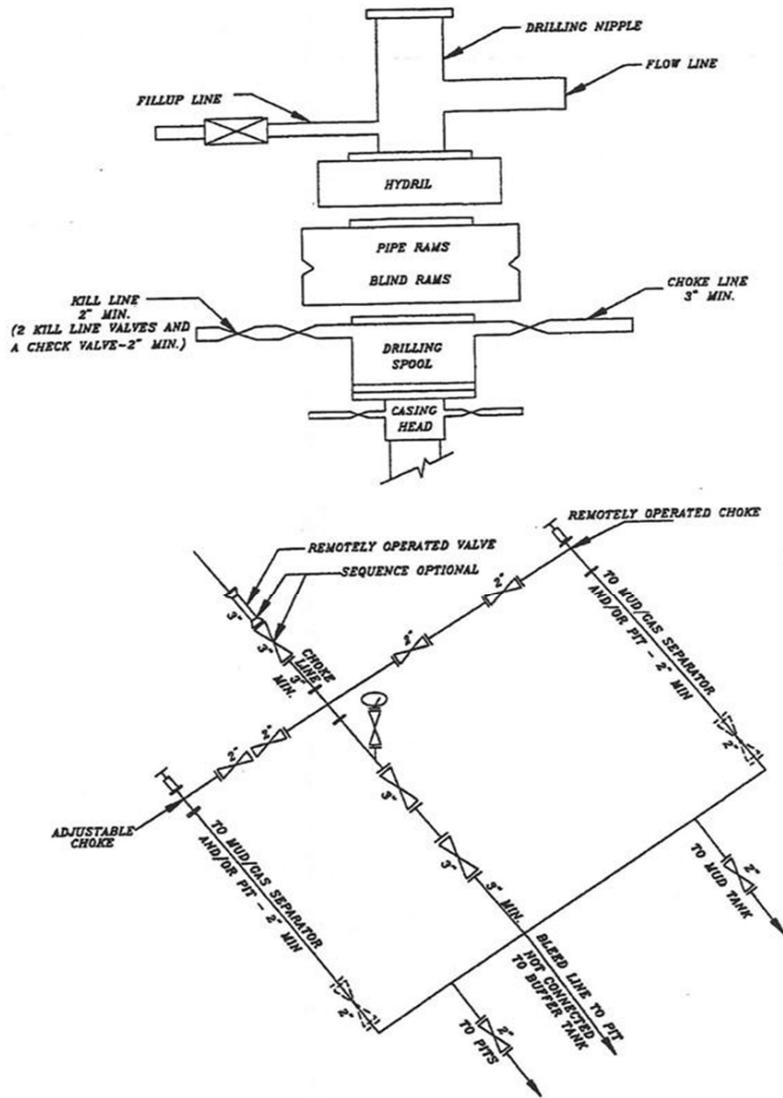
DRILLING ENGINEER: _____
Nick Spence / Danny Showers / Chad Loesel

DATE: _____

DRILLING SUPERINTENDENT: _____
Kenny Gathings / Lovel Young

DATE: _____

EXHIBIT A
MORGAN STATE 921-36F1CS



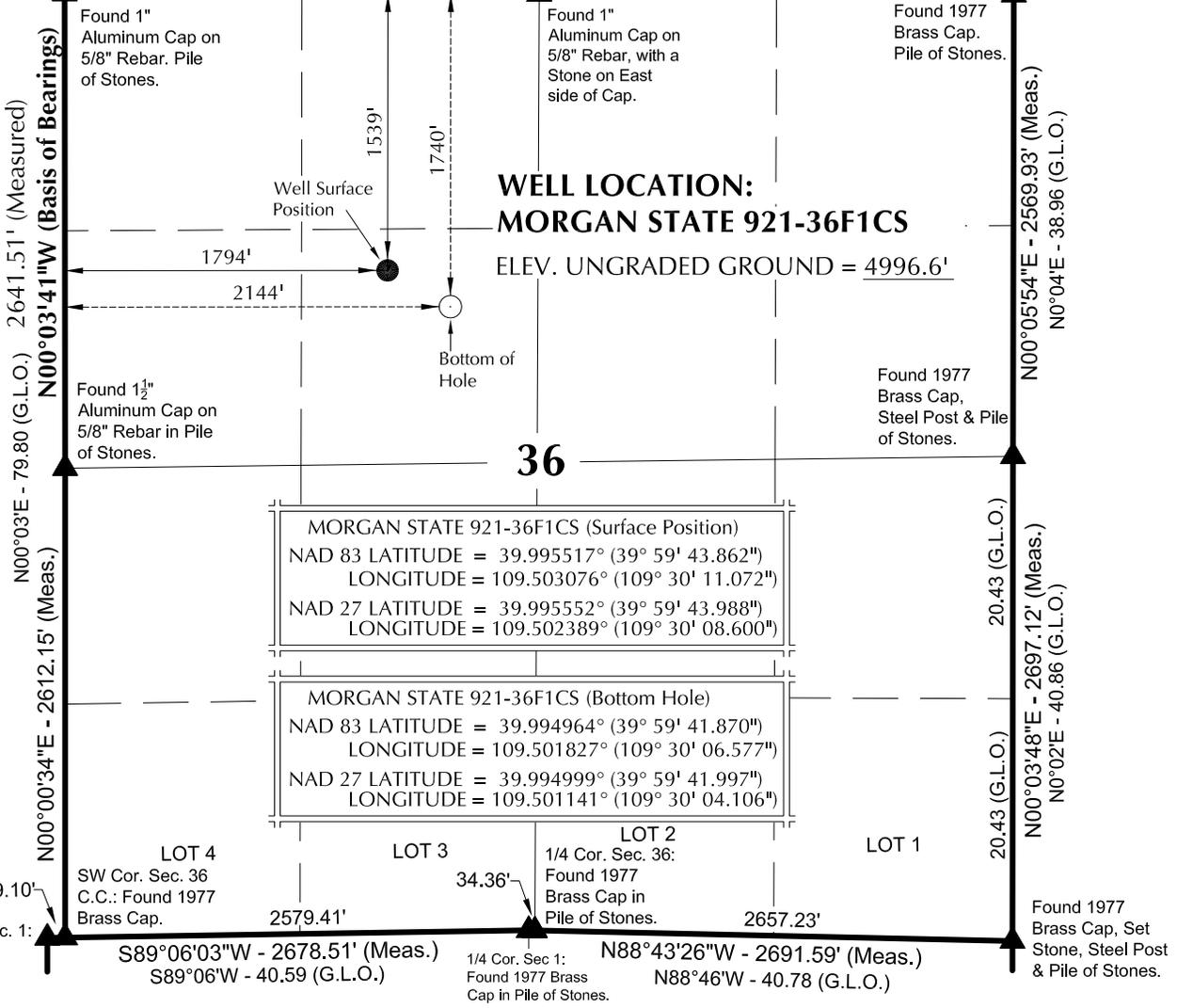
SCHEMATIC DIAGRAM OF 5,000 PSI BOP STACK

T9S, R21E, S.L.B.&M.

WEST - 80.00 (G.L.O.)

N89°55'26"W - 2639.89' (Meas.)

N89°56'39"W - 2639.91' (Meas.)



NOTES:

- ▲ = Section Corners Located
- 1. Well footages are measured at right angles to the Section Lines.
- 2. G.L.O. distances are shown in feet or chains.
1 chain = 66 feet.
- 3. The Bottom of hole bears S60°01'27"E 403.83' from the Surface Position.
- 4. Bearings are based on Global Positioning Satellite observations.
- 5. Basis of elevation is Tri-Sta "Two Water" located in the NW 1/4 of Section 1, T10S, R21E, S.L.B.&M. The elevation of this Tri-Sta is shown on the Big Pack Mtn NE 7.5 Min. Quadrangle as being 5238'.



SURVEYOR'S CERTIFICATE

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

No. 6028691-11-11-11
JOHN R. LAUGH
PROFESSIONAL LAND SURVEYOR
REGISTRATION No. 6028691
STATE OF UTAH

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

WELL PAD: MORGAN STATE 921-36F2

**MORGAN STATE 921-36F1CS
WELL PLAT**
1740' FNL, 2144' FWL (Bottom Hole)
SE 1/4 NW 1/4 OF SECTION 36, T9S, R21E,
S.L.B.&M., UTAH COUNTY, UTAH.

609

CONSULTING, LLC
2155 North Main Street
Sheridan WY 82801
Phone 307-674-0609
Fax 307-674-0182

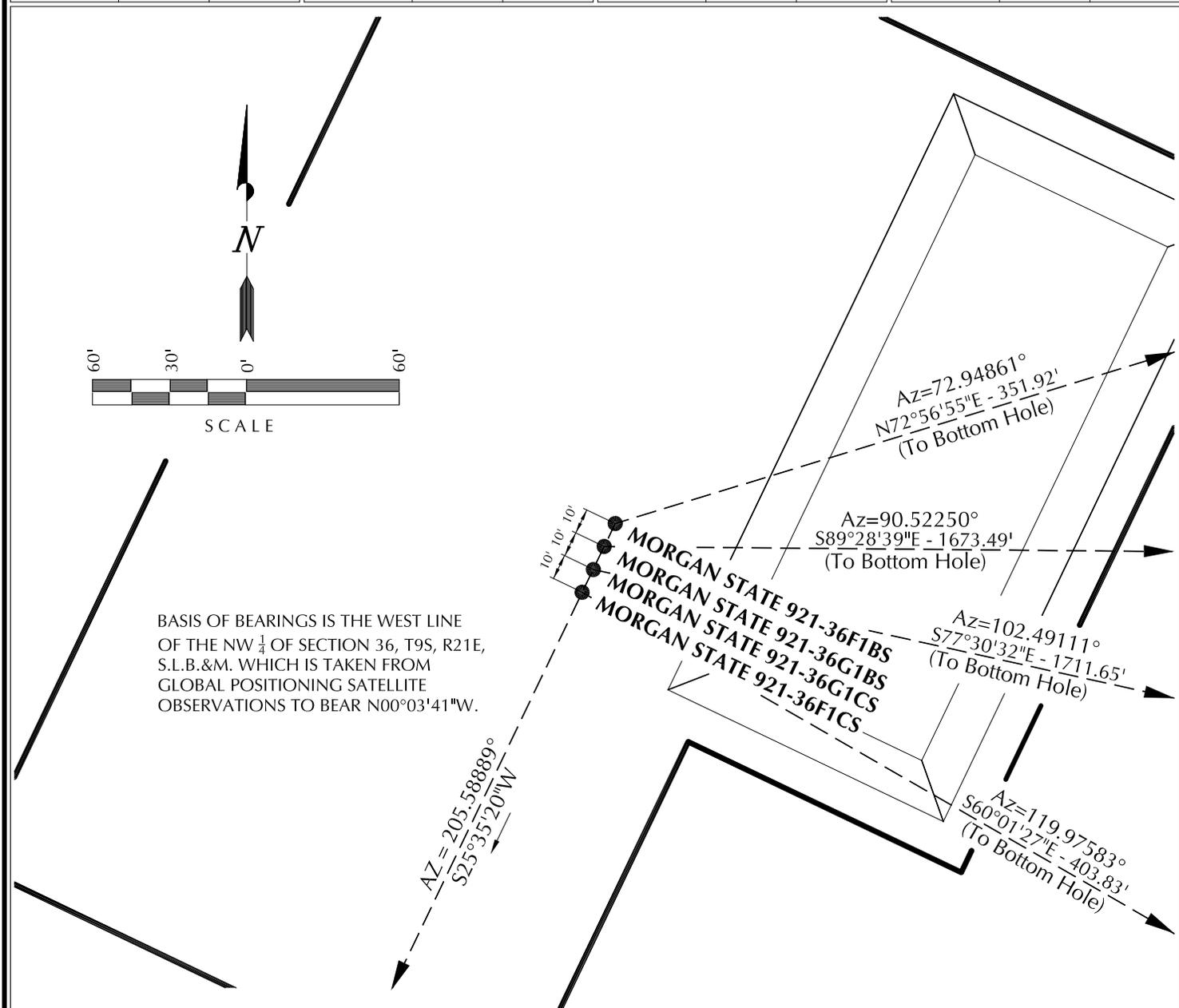
TIMBERLINE (435) 789-1365
ENGINEERING & LAND SURVEYING, INC.
209 NORTH 300 WEST - VERNAL, UTAH 84078

| | | |
|----------------------------|-------------------|-----------------------|
| DATE SURVEYED: 10-11-10 | SURVEYED BY: J.W. | SHEET NO: 4 |
| DATE DRAWN: 10-29-10 | DRAWN BY: T.J.R. | |
| SCALE: 1" = 1000' | | 4 OF 16 |

| WELL NAME | SURFACE POSITION | | | | | BOTTOM HOLE | | | | |
|-------------------------|------------------|----------------|---------------|----------------|------------------------|---------------|----------------|---------------|----------------|------------------------|
| | NAD83 | | NAD27 | | FOOTAGES | NAD83 | | NAD27 | | FOOTAGES |
| | LATITUDE | LONGITUDE | LATITUDE | LONGITUDE | | LATITUDE | LONGITUDE | LATITUDE | LONGITUDE | |
| MORGAN STATE 921-36F1BS | 39°59'44.130" | 109°30'10.905" | 39°59'44.256" | 109°30'08.434" | 1512' FNL 1807' FWL | 39°59'45.151" | 109°30'06.584" | 39°59'45.277" | 109°30'04.112" | 1408' FNL 2144' FWL |
| MORGAN STATE 921-36G1BS | 39°59'44.040" | 109°30'10.961" | 39°59'44.167" | 109°30'08.489" | 1521' FNL 1803' FWL | 39°59'43.896" | 109°29'49.464" | 39°59'44.022" | 109°29'46.994" | 1534' FNL 1799' FEL |
| MORGAN STATE 921-36G1CS | 39°59'43.951" | 109°30'11.016" | 39°59'44.077" | 109°30'08.545" | 1530' FNL 1799' FWL | 39°59'40.300" | 109°29'49.548" | 39°59'40.426" | 109°29'47.077" | 1898' FNL 1805' FEL |
| MORGAN STATE 921-36F1CS | 39°59'43.862" | 109°30'11.072" | 39°59'43.988" | 109°30'08.600" | 1539' FNL 1794' FWL | 39°59'41.870" | 109°30'06.577" | 39°59'41.997" | 109°30'04.106" | 1740' FNL 2144' FWL |

RELATIVE COORDINATES - From Surface Position to Bottom Hole

| WELL NAME | NORTH | EAST | WELL NAME | NORTH | EAST | WELL NAME | NORTH | EAST | WELL NAME | NORTH | EAST |
|-------------------------|--------|--------|-------------------------|--------|---------|-------------------------|---------|---------|-------------------------|---------|--------|
| MORGAN STATE 921-36F1BS | 103.2' | 336.5' | MORGAN STATE 921-36G1BS | -15.3' | 1673.4' | MORGAN STATE 921-36G1CS | -370.2' | 1671.1' | MORGAN STATE 921-36F1CS | -201.8' | 349.8' |



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



CONSULTING, LLC
2155 North Main Street
Sheridan WY 82801
Phone 307-674-0609
Fax 307-674-0182

WELL PAD - MORGAN STATE 921-36F2

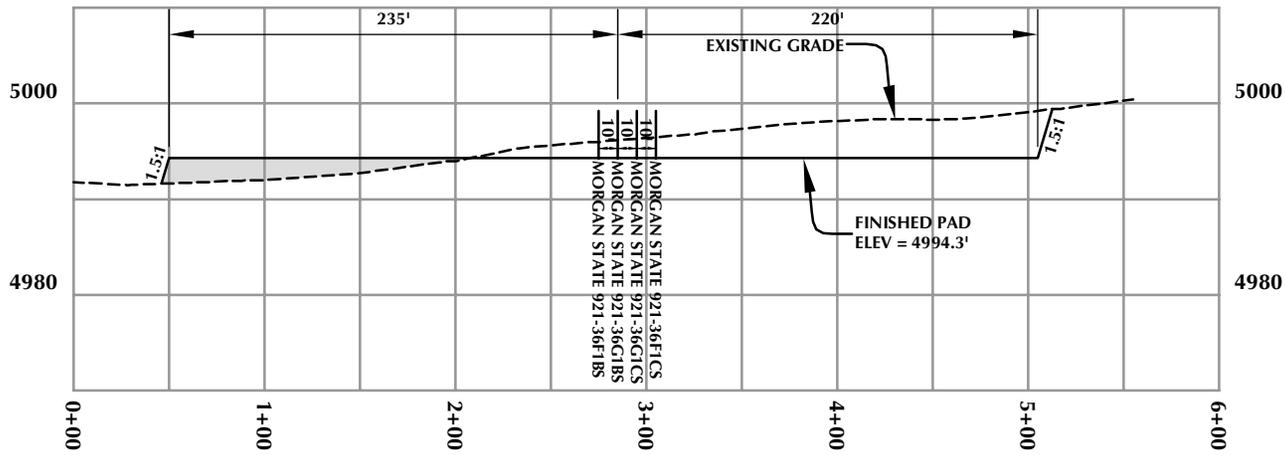
WELL PAD INTERFERENCE PLAT
WELLS - MORGAN STATE 921-36F1BS,
MORGAN STATE 921-36G1BS,
MORGAN STATE 921-36G1CS &
MORGAN STATE 921-36F1CS
LOCATED IN SECTION 36, T9S, R21E,
S.L.B.&M., UINTAH COUNTY, UTAH.

TIMBERLINE

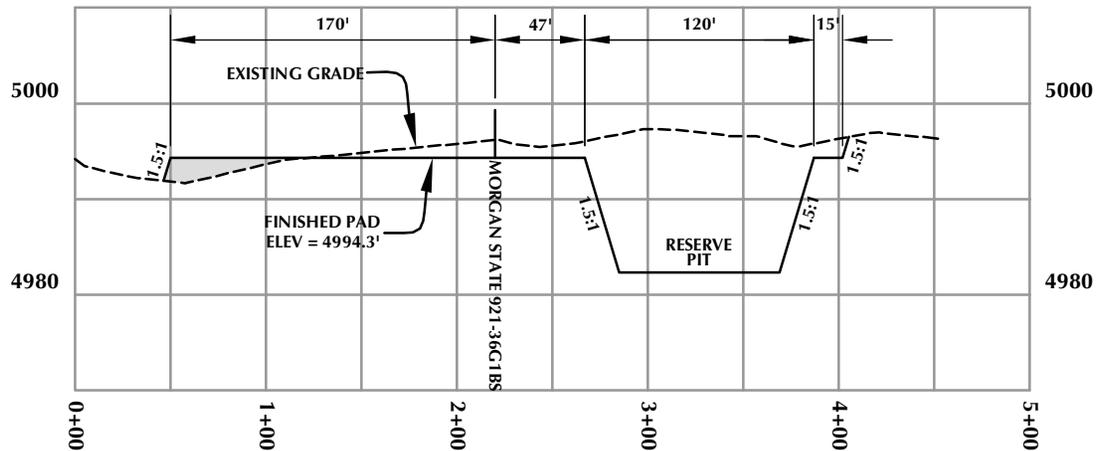
ENGINEERING & LAND SURVEYING, INC.
209 NORTH 300 WEST - VERNAL, UTAH 84078

(435) 789-1365

| | | |
|----------------------------|--------------------|-----------------------|
| DATE SURVEYED: 10-11-10 | SURVEYED BY: J.W. | SHEET NO: 5 |
| DATE DRAWN: 10-29-10 | DRAWN BY: T.J.R. | |
| SCALE: 1" = 60' | Date Last Revised: | 5 OF 16 |



CROSS SECTION A-A'



CROSS SECTION B-B'

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

WELL PAD - MORGAN STATE 921-36F2

WELL PAD - CROSS SECTIONS
MORGAN STATE 921-36F1BS,
MORGAN STATE 921-36G1BS,
MORGAN STATE 921-36G1CS &
MORGAN STATE 921-36F1CS
LOCATED IN SECTION 36, T9S, R21E,
S.L.B.&M., UINTAH COUNTY, UTAH



CONSULTING, LLC
2155 North Main Street
Sheridan, WY 82801
Phone 307-674-0609
Fax 307-674-0182

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

(435) 789-1365



Scale: 1"=100'

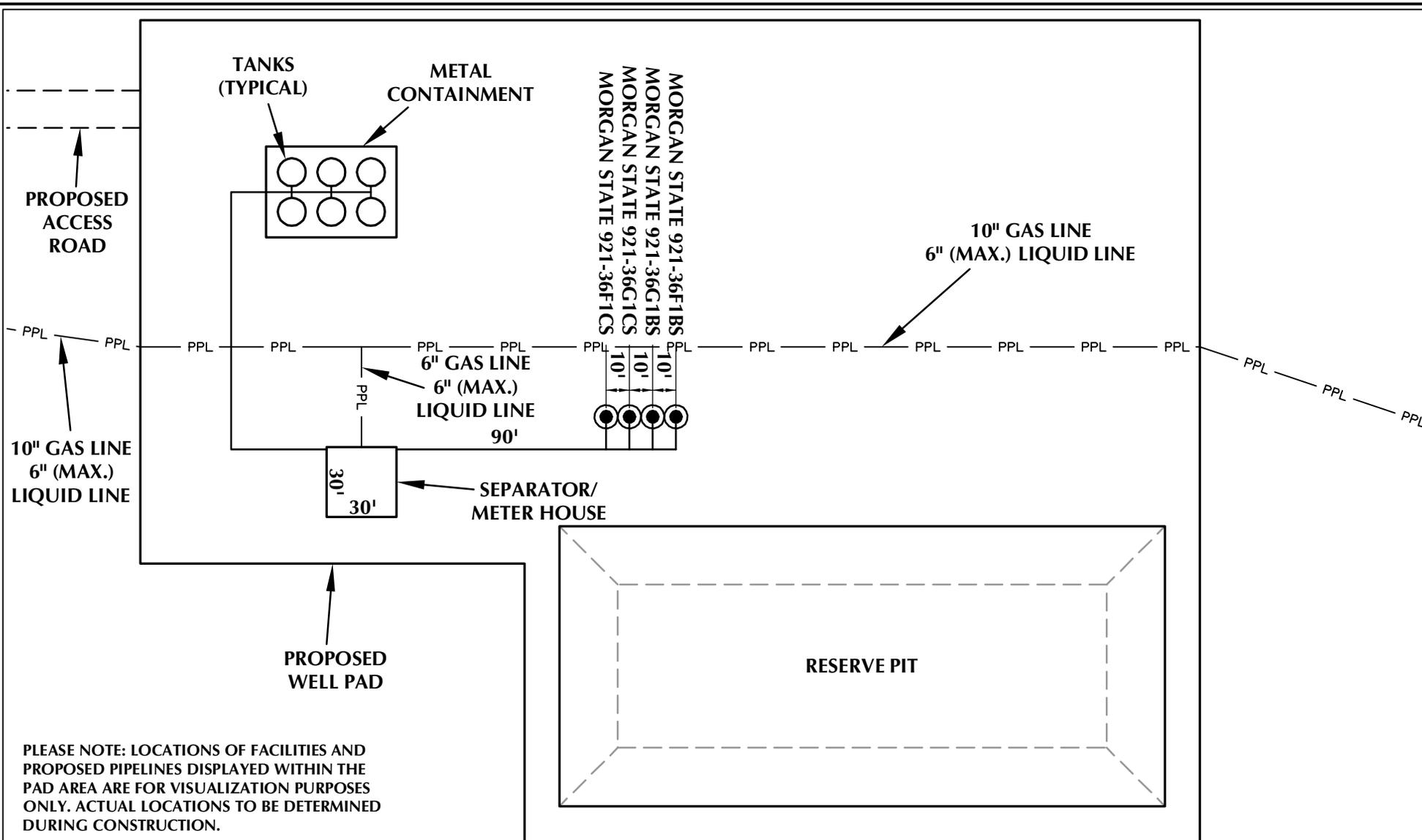
Date: 11/11/11

SHEET NO:

REVISED:

7

7 OF 16



PLEASE NOTE: LOCATIONS OF FACILITIES AND PROPOSED PIPELINES DISPLAYED WITHIN THE PAD AREA ARE FOR VISUALIZATION PURPOSES ONLY. ACTUAL LOCATIONS TO BE DETERMINED DURING CONSTRUCTION.

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

WELL PAD - MORGAN STATE 921-36F2

WELL PAD - FACILITIES DIAGRAM
MORGAN STATE 921-36F1BS,
MORGAN STATE 921-36G1BS,
MORGAN STATE 921-36G1CS &
MORGAN STATE 921-36F1CS
LOCATED IN SECTION 36, T9S, R21E,
S.L.B.&M., UINTAH COUNTY, UTAH



CONSULTING, LLC
2155 North Main Street
Sheridan, WY 82801
Phone 307-674-0609
Fax 307-674-0182

WELL PAD LEGEND

- EXISTING WELL LOCATION
- PROPOSED WELL LOCATION
- PPL — PROPOSED PIPELINE
- EPL — EXISTING PIPELINE



HORIZONTAL 1" = 60'

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

| | | |
|---------------|----------------|-----------------------|
| Scale: 1"=60' | Date: 11/11/11 | SHEET NO: 8 |
| REVISED: | | 8 OF 16 |

K:\MADRID\2011\11\2011_65_NBU_FOCUS_921-36F2\MORGAN STATE 921-36F2\MORGAN STATE 921-36F2\MORGAN STATE 921-36F2.dwg, 11/02/2011 15:41 PM.gnt

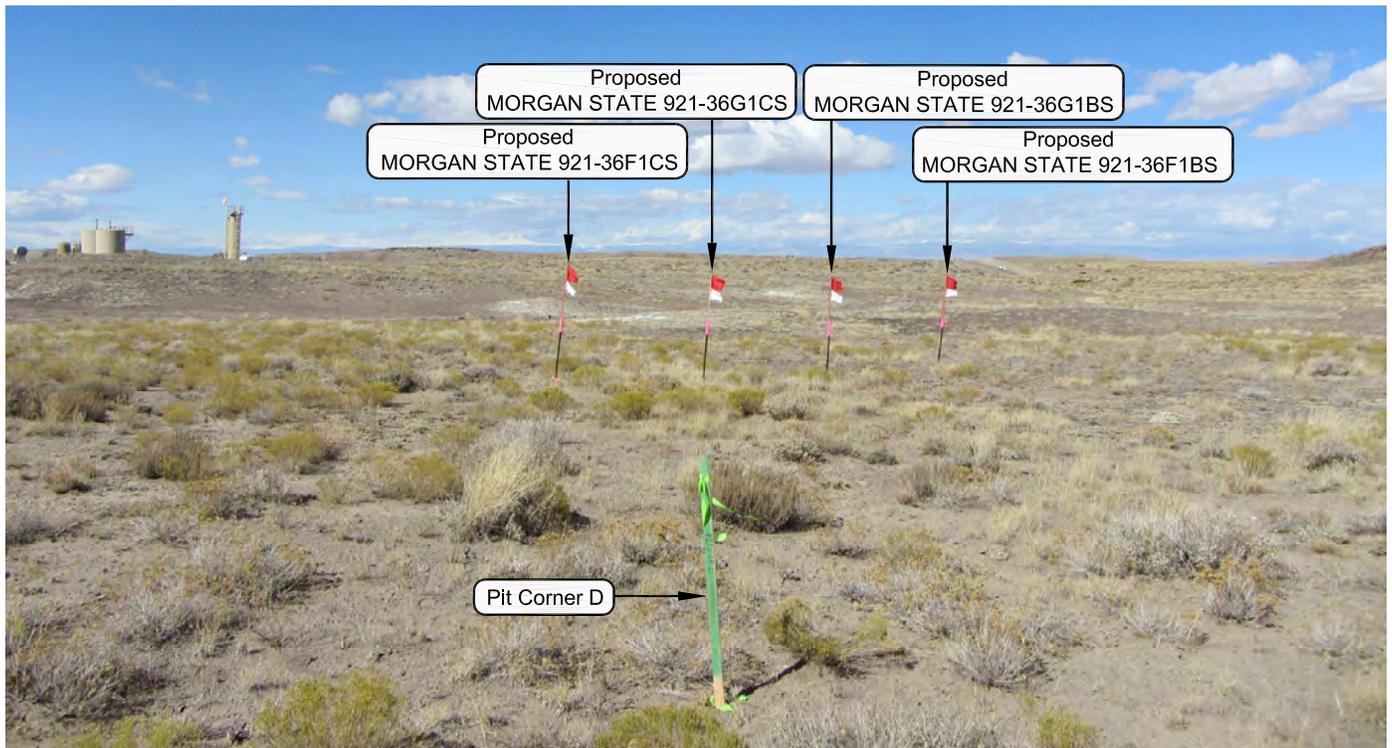


PHOTO VIEW: FROM PIT CORNER D TO LOCATION STAKE

CAMERA ANGLE: NORTHWESTERLY



PHOTO VIEW: FROM BEGINNING OF PROPOSED ROAD

CAMERA ANGLE: NORTHEASTERLY

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

WELL PAD - MORGAN STATE 921-36F2

LOCATION PHOTOS
 MORGAN STATE 921-36F1BS,
 MORGAN STATE 921-36G1BS,
 MORGAN STATE 921-36G1CS &
 MORGAN STATE 921-36F1CS
 LOCATED IN SECTION 36, T9S, R21E,
 S.L.B.&M., UTAH COUNTY, UTAH.



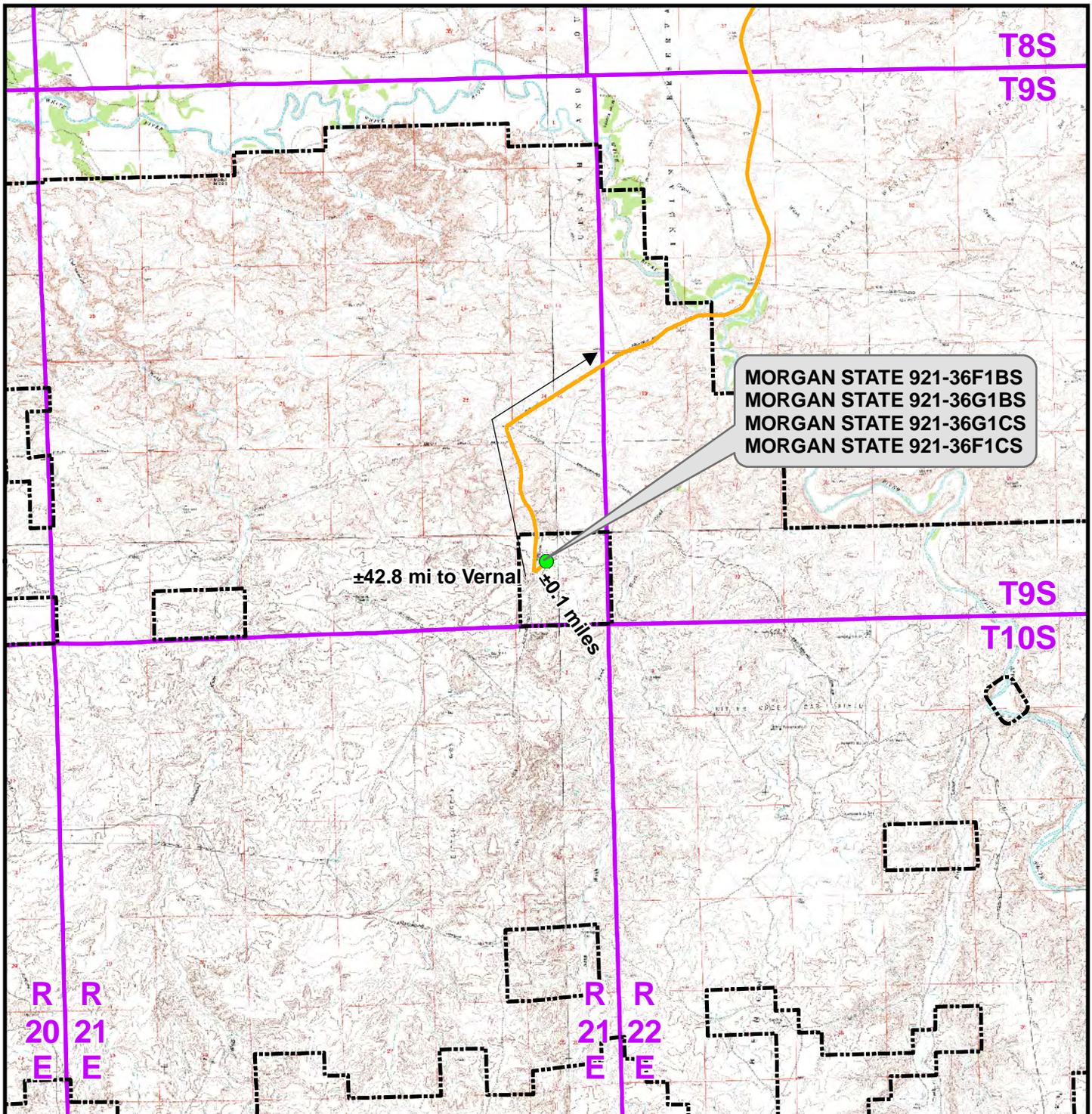
CONSULTING, LLC
 2155 North Main Street
 Sheridan WY 82801
 Phone 307-674-0609
 Fax 307-674-0182

TIMBERLINE

(435) 789-1365

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

| | | |
|--------------------------------|-----------------------|----------------------------------|
| DATE PHOTOS TAKEN: 10-11-10 | PHOTOS TAKEN BY: J.W. | SHEET NO: 9 9 OF 16 |
| DATE DRAWN: 10-29-10 | DRAWN BY: T.J.R. | |
| Date Last Revised: | | |



Legend

Distance From Well Pad - MORGAN STATE 921-36F2 To Unit Boundary: ±1,512ft

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

WELL PAD - MORGAN STATE 921-36F2

TOPO A
 MORGAN STATE 921-36F1BS,
 MORGAN STATE 921-36G1BS,
 MORGAN STATE 921-36G1CS &
 MORGAN STATE 921-36F1CS
 LOCATED IN SECTION 36, T9S, R21E,
 S.L.B.&M., UINTAH COUNTY, UTAH

**Kerr-McGee Oil &
 Gas Onshore L.P.**

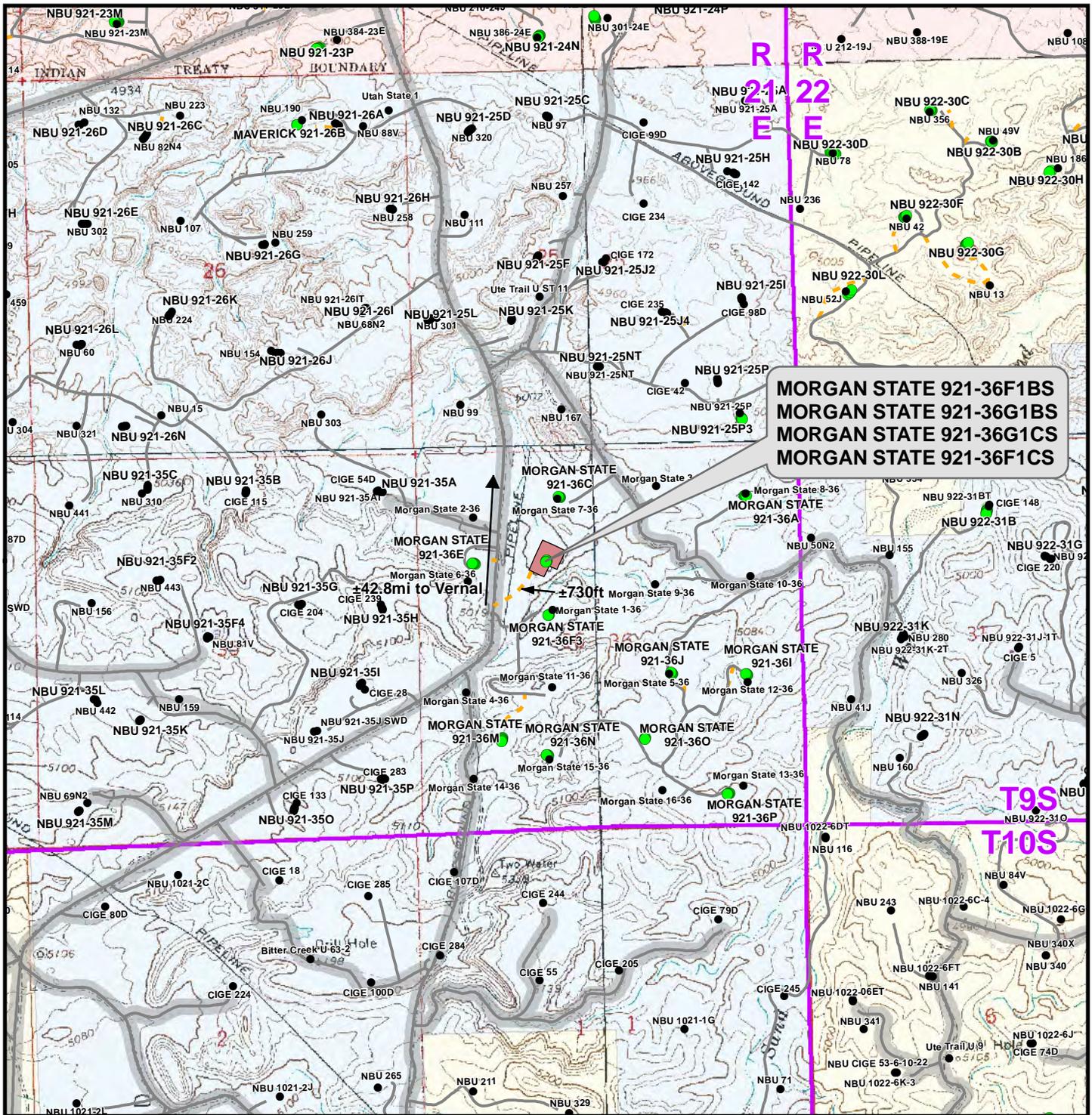
1099 18th Street
 Denver, Colorado 80202



CONSULTING, LLC
 2155 North Main Street
 Sheridan, Wyoming 82801
 Phone 307-674-0609
 Fax 307-674-0182



| | | |
|------------------|-------------------|-----------|
| SCALE: 1:100,000 | NAD83 USP Central | SHEET NO: |
| DRAWN: TL | DATE: 11 Nov 2011 | 10 |
| REVISED: | DATE: | |



**MORGAN STATE 921-36F1BS
MORGAN STATE 921-36G1BS
MORGAN STATE 921-36G1CS
MORGAN STATE 921-36F1CS**

±42.8mi to Vernal

±730ft

Legend

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

Total Proposed Road Length: ±730ft

WELL PAD - MORGAN STATE 921-36F2

TOPO B
MORGAN STATE 921-36F1BS,
MORGAN STATE 921-36G1BS,
MORGAN STATE 921-36G1CS &
MORGAN STATE 921-36F1CS
LOCATED IN SECTION 36, T9S, R21E,
S.L.B.&M., UINTAH COUNTY, UTAH

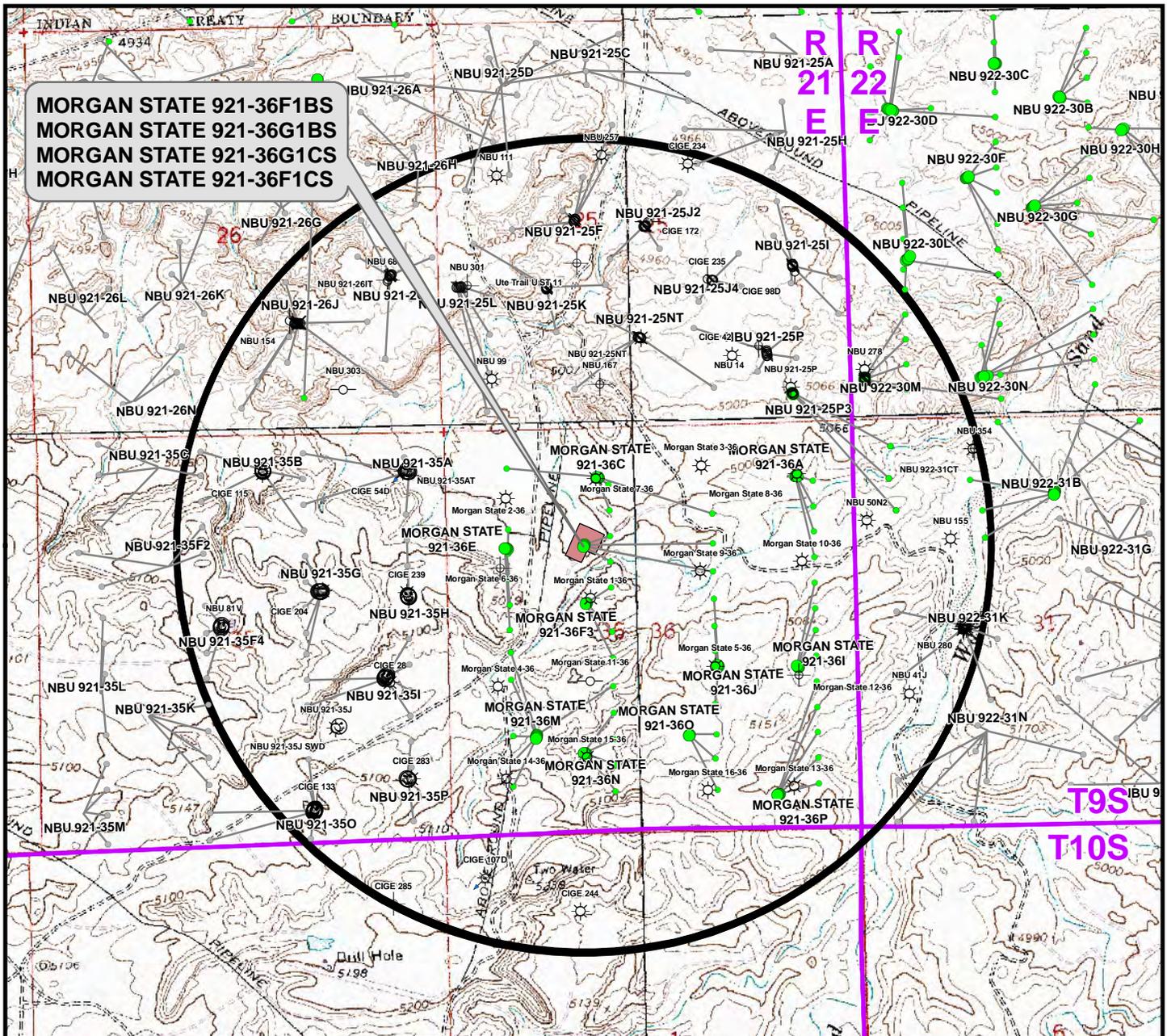
**Kerr-McGee Oil &
Gas Onshore L.P.**

1099 18th Street
Denver, Colorado 80202



CONSULTING, LLC
2155 North Main Street
Sheridan, Wyoming 82801
Phone 307-674-0609
Fax 307-674-0182

| | | | |
|---------------------|-------------------|-----------|-----------|
| SCALE: 1" = 2,000ft | NAD83 USP Central | SHEET NO: | 11 |
| DRAWN: TL | DATE: 11 Nov 2011 | 11 OF 16 | |
| REVISED: | DATE: | | |



**MORGAN STATE 921-36F1BS
MORGAN STATE 921-36G1BS
MORGAN STATE 921-36G1CS
MORGAN STATE 921-36F1CS**

Well locations derived from Utah Division of Oil, Gas and Mining (UDOGM) (oilgas.ogm.utah.gov). The estimated distances from proposed bore locations to the nearest existing bore locations are based on UDOGM data.

| Proposed Well | Nearest Well Bore | Footage |
|-------------------------|-------------------|---------|
| MORGAN STATE 921-36F1BS | Morgan State 7-36 | 766ft |
| MORGAN STATE 921-36G1BS | Morgan State 9-36 | 393ft |
| MORGAN STATE 921-36G1CS | Morgan State 9-36 | 169ft |
| MORGAN STATE 921-36F1CS | Morgan State 1-36 | 540ft |

Legend

- Well - Proposed
- Well Path
- ☀ Producing
- ⊕ Deferred
- Bottom Hole - Proposed
- Well Pad
- ☺ Spudded
- ⊗ Cancelled
- Bottom Hole - Existing
- ◻ Well - 1 Mile Radius
- APD Approved
- ⊖ Temporarily Abandoned
- ☀ Active Injector
- ⊕ Plugged & Abandoned
- ⊗ Preliminary Location
- ⊖ Location Abandoned
- ⊖ Shut-In

WELL PAD - MORGAN STATE 921-36F2

TOPO C
MORGAN STATE 921-36F1BS,
MORGAN STATE 921-36G1BS,
MORGAN STATE 921-36G1CS &
MORGAN STATE 921-36F1CS
LOCATED IN SECTION 36, T9S, R21E,
S.L.B.&M., Uintah County, Utah

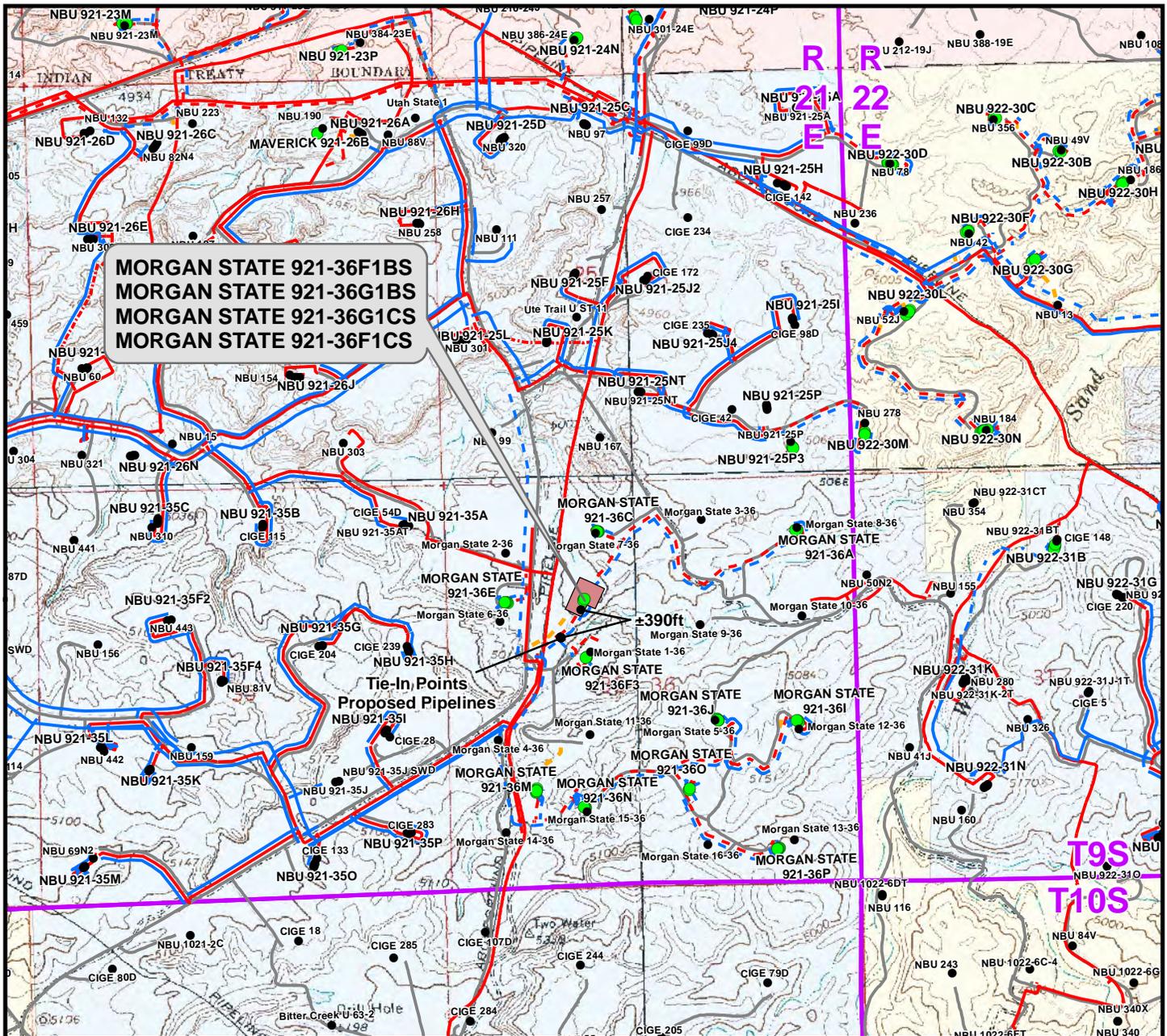
**Kerr-McGee Oil &
Gas Onshore L.P.**

1099 18th Street
Denver, Colorado 80202

CONSULTING, LLC
2155 North Main Street
Sheridan, Wyoming 82801
Phone 307-674-0609
Fax 307-674-0182

| | | |
|---------------------|-------------------|-----------|
| SCALE: 1" = 2,000ft | NAD83 USP Central | 12 |
| DRAWN: TL | DATE: 11 Nov 2011 | |
| REVISED: | DATE: | |

SHEET NO:
12 OF 16



**MORGAN STATE 921-36F1BS
MORGAN STATE 921-36G1BS
MORGAN STATE 921-36G1CS
MORGAN STATE 921-36F1CS**

**Tie-In Points
Proposed Pipelines**

| Proposed Liquid Pipeline | Length | Proposed Gas Pipeline | Length |
|--|---------------|--|---------------|
| Buried 6" (Max.) (Meter House to 36C Intersection) | ±60ft | Buried 6" (Meter House to 36C Intersection) | ±60ft |
| Buried 6" (Max.) (36C Intersection to 36F3 Intersection) | ±390ft | Buried 10" (36C Intersection to 36F3 Intersection) | ±390ft |
| TOTAL PROPOSED BURIED LIQUID PIPELINE = | ±450ft | TOTAL PROPOSED BURIED GAS PIPELINE = | ±450ft |

Legend

| | | | | | |
|-------------------|-------------------------------------|----------------------------------|-----------------------|-----------------------------|-----------|
| ● Well - Proposed | - - - Gas Pipeline - Proposed | - - - Liquid Pipeline - Proposed | - - - Road - Proposed | ■ Bureau of Land Management | ■ State |
| ● Well - Existing | - - - Gas Pipeline - To Be Upgraded | - - - Liquid Pipeline - Existing | - - - Road - Existing | ■ Indian Reservation | ■ Private |
| ■ Well Pad | - - - Gas Pipeline - Existing | | | | |

WELL PAD - MORGAN STATE 921-36F2

TOPO D
MORGAN STATE 921-36F1BS,
MORGAN STATE 921-36G1BS,
MORGAN STATE 921-36G1CS &
MORGAN STATE 921-36F1CS
LOCATED IN SECTION 36, T9S, R21E,
S.L.B.&M., Uintah County, Utah

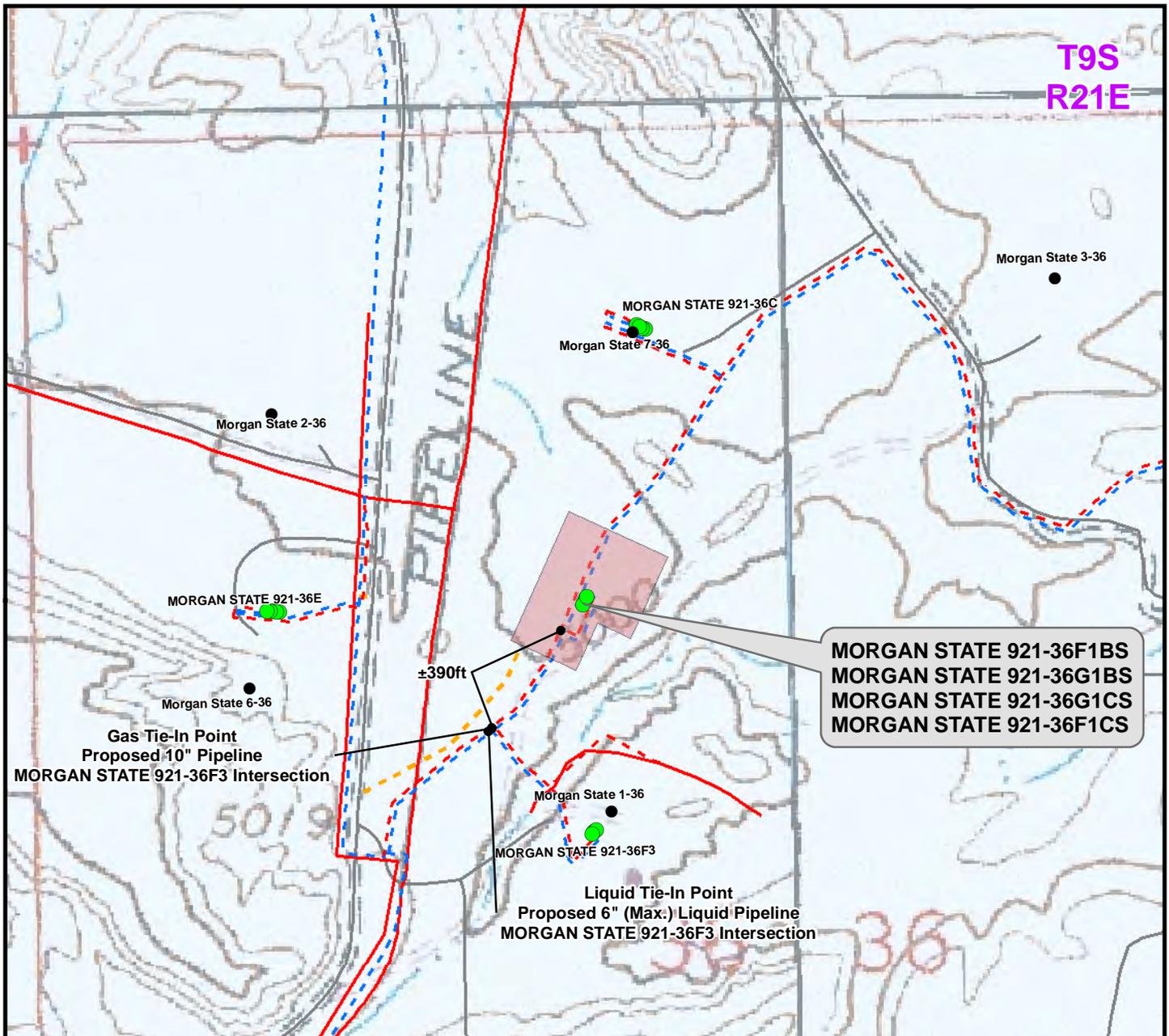
**Kerr-McGee Oil &
Gas Onshore L.P.**

1099 18th Street
Denver, Colorado 80202

609 CONSULTING, LLC
2155 North Main Street
Sheridan, Wyoming 82801
Phone 307-674-0609
Fax 307-674-0182

| | | |
|---------------------|-------------------|-----------|
| SCALE: 1" = 2,000ft | NAD83 USP Central | 13 |
| DRAWN: TL | DATE: 11 Nov 2011 | |
| REVISED: | DATE: | |

SHEET NO:
13 OF 16



| Proposed Liquid Pipeline | Length | Proposed Gas Pipeline | Length |
|--|---------------|--|---------------|
| ----- | ----- | ----- | ----- |
| Buried 6" (Max.) (Meter House to 36C Intersection) | ±60ft | Buried 6" (Meter House to 36C Intersection) | ±60ft |
| Buried 6" (Max.) (36C Intersection to 36F3 Intersection) | ±390ft | Buried 10" (36C Intersection to 36F3 Intersection) | ±390ft |
| TOTAL PROPOSED BURIED LIQUID PIPELINE = | ±450ft | TOTAL PROPOSED BURIED GAS PIPELINE = | ±450ft |

Legend

| | | | | | |
|--|---|---|---|---|---|
| ● Well - Proposed | Well Pad - Proposed | --- Gas Pipeline - Proposed | --- Liquid Pipeline - Proposed | Road - Proposed | Bureau of Land Management |
| ● Well - Existing | Well Pad - Existing | --- Gas Pipeline - To Be Upgraded | --- Liquid Pipeline - Existing | Road - Existing | Indian Reservation |
| | | --- Gas Pipeline - Existing | | State | Private |

WELL PAD - MORGAN STATE 921-36F2

TOPO D2 (PAD & PIPELINE DETAIL)
 MORGAN STATE 921-36F1BS,
 MORGAN STATE 921-36G1BS,
 MORGAN STATE 921-36G1CS &
 MORGAN STATE 921-36F1CS
 LOCATED IN SECTION 36, T9S, R21E,
 S.L.B.&M., Uintah County, Utah

**Kerr-McGee Oil &
 Gas Onshore L.P.**

1099 18th Street
 Denver, Colorado 80202

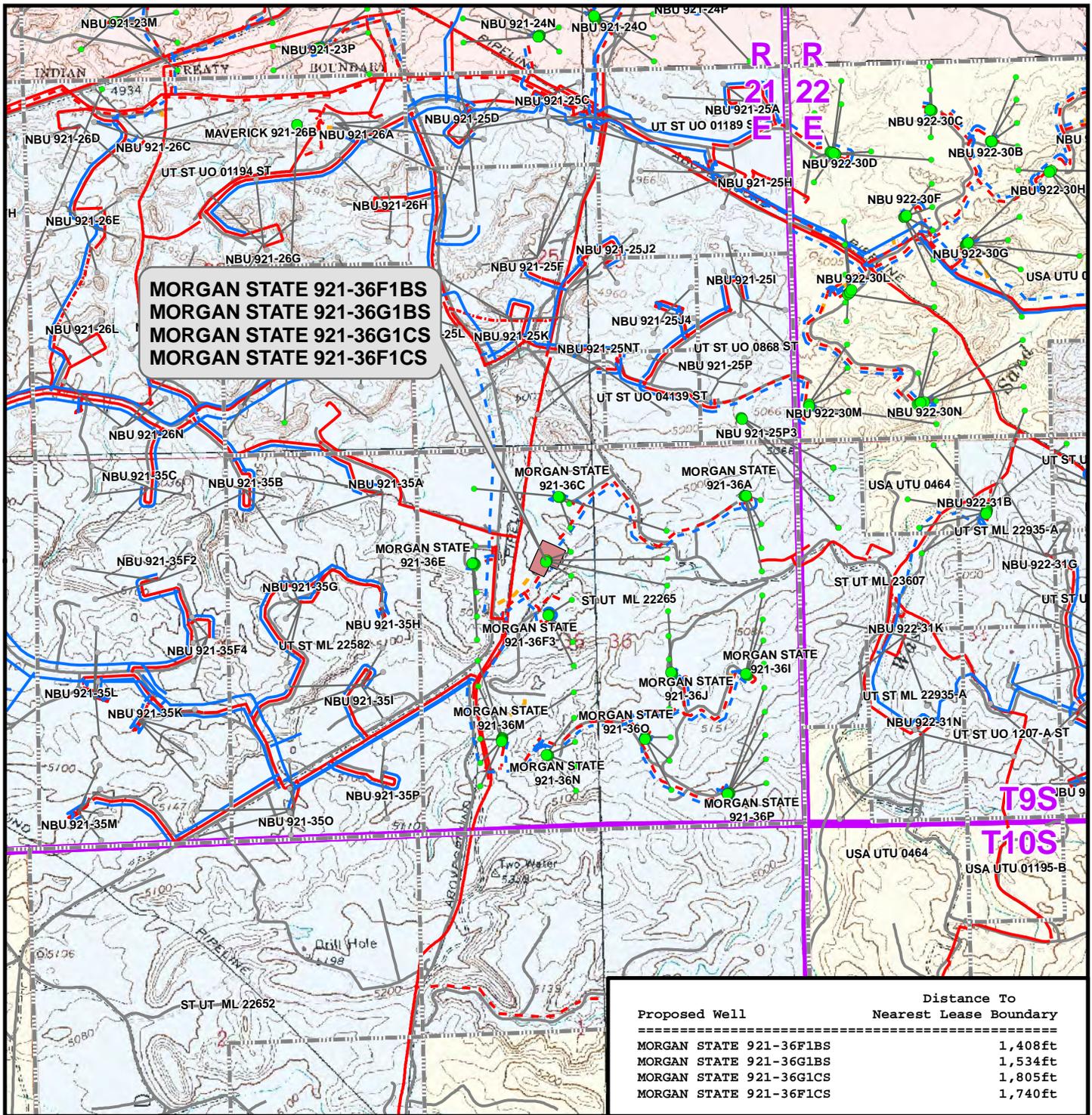


CONSULTING, LLC
 2155 North Main Street
 Sheridan, Wyoming 82801
 Phone 307-674-0609
 Fax 307-674-0182



| | | |
|-------------------|-------------------|-----------|
| SCALE: 1" = 500ft | NAD83 USP Central | 14 |
| DRAWN: TL | DATE: 11 Nov 2011 | |
| REVISED: | DATE: | |

SHEET NO:
14 OF 16



**MORGAN STATE 921-36F1BS
MORGAN STATE 921-36G1BS
MORGAN STATE 921-36G1CS
MORGAN STATE 921-36F1CS**

| Proposed Well | Distance To Nearest Lease Boundary |
|-------------------------|------------------------------------|
| MORGAN STATE 921-36F1BS | 1,408ft |
| MORGAN STATE 921-36G1BS | 1,534ft |
| MORGAN STATE 921-36G1CS | 1,805ft |
| MORGAN STATE 921-36F1CS | 1,740ft |

| Legend | | | | | |
|--------------------------|------------------|-------------------------------------|----------------------------------|-----------------------|-----------------------------|
| ● Well - Proposed | ■ Well Pad | - - - Gas Pipeline - Proposed | - - - Liquid Pipeline - Proposed | - - - Road - Proposed | ■ Bureau of Land Management |
| ● Bottom Hole - Proposed | ▭ Lease Boundary | - - - Gas Pipeline - To Be Upgraded | - - - Liquid Pipeline - Existing | - - - Road - Existing | ■ Indian Reservation |
| ○ Bottom Hole - Existing | — Well Path | - - - Gas Pipeline - Existing | | | ■ State |
| | | | | | □ Private |

WELL PAD - MORGAN STATE 921-36F2

TOPO E
MORGAN STATE 921-36F1BS,
MORGAN STATE 921-36G1BS,
MORGAN STATE 921-36G1CS &
MORGAN STATE 921-36F1CS
LOCATED IN SECTION 36, T9S, R21E,
S.L.B.&M., Uintah County, Utah

**Kerr-McGee Oil &
Gas Onshore L.P.**

1099 18th Street
Denver, Colorado 80202



609 CONSULTING, LLC
2155 North Main Street
Sheridan, Wyoming 82801
Phone 307-674-0609
Fax 307-674-0182

N



| | | |
|---------------------|-------------------|-----------|
| SCALE: 1" = 2,000ft | NAD83 USP Central | 15 |
| DRAWN: TL | DATE: 11 Nov 2011 | |
| REVISED: | DATE: | |

SHEET NO:
15 OF 16

Kerr-McGee Oil & Gas Onshore, LP
WELL PAD – MORGAN STATE 921-36F2
WELLS – MORGAN STATE 921-36F1BS, MORGAN STATE 921-36G1BS,
MORGAN STATE 921-36G1CS & MORGAN STATE 921-36F1CS
Section 36, 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 19.3 miles to the proposed access road to the northeast. Follow road flags in a northeasterly direction approximately 730 feet to the proposed well location.

Total distance from Vernal, Utah to the proposed well location is approximately 42.9 miles in a southerly direction.

WELL DETAILS: MORGAN STATE 921-36F1CS

GL 4994 & KB 4 @ 4998.00ft (ASSUMED)

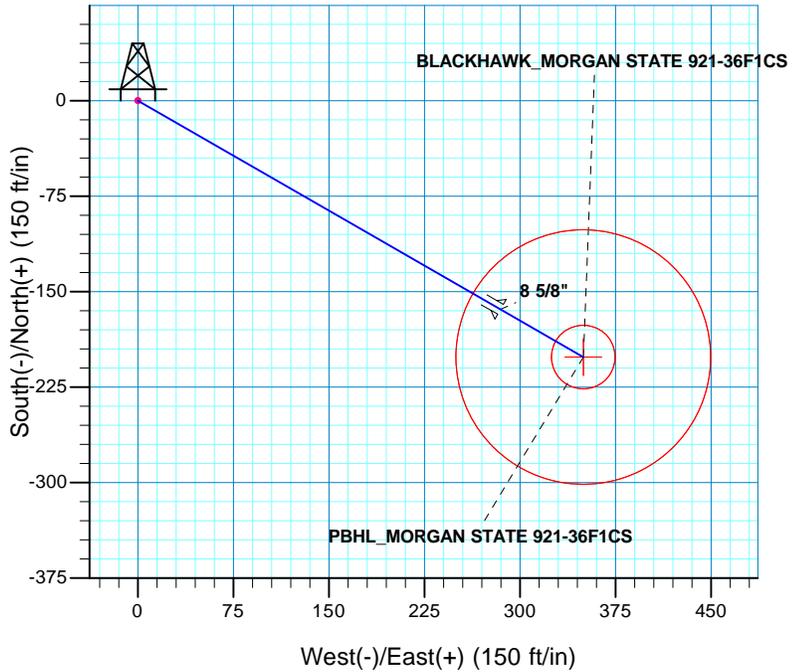
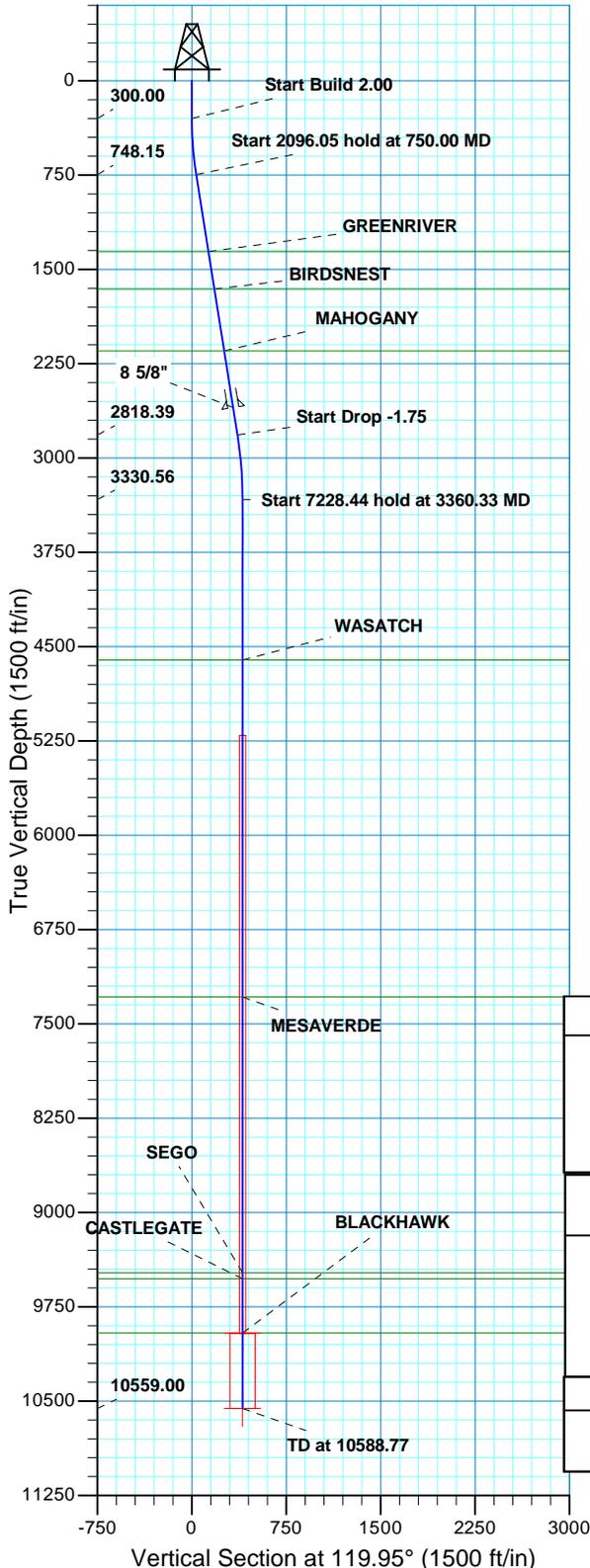
| +N/-S | +E/-W | Northing | Easting | Latitude | Longitude |
|-------|-------|-------------|------------|------------------|------------------|
| 0.00 | 0.00 | 14527948.51 | 2059870.68 | 39° 59' 43.987 N | 109° 30' 8.600 W |

DESIGN TARGET DETAILS

| Name | TVD | +N/-S | +E/-W | Northing | Easting | Latitude | Longitude | Shape |
|---------------------------|----------|---------|--------|-------------|------------|------------------|------------------|-------------------------|
| BLACKHAWK | 9959.00 | -201.40 | 349.61 | 14527753.01 | 2060223.63 | 39° 59' 41.996 N | 109° 30' 4.108 W | Circle (Radius: 25.00) |
| - plan hits target center | | | | | | | | |
| PBHL | 10559.00 | -201.40 | 349.61 | 14527753.01 | 2060223.63 | 39° 59' 41.996 N | 109° 30' 4.108 W | Circle (Radius: 100.00) |
| - plan hits target center | | | | | | | | |

Azimuths to True North
Magnetic North: 11.02°

Magnetic Field
Strength: 52279.8snT
Dip Angle: 65.85°
Date: 2011/12/02
Model: IGRF2010



| SECTION DETAILS | | | | | | | | | |
|-----------------|------|--------|----------|---------|--------|------|--------|--------|------------------------------|
| MD | Inc | Azi | TVD | +N/-S | +E/-W | Dleg | TFace | VSect | Target |
| 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 | |
| 750.00 | 9.00 | 119.95 | 748.15 | -17.61 | 30.56 | 2.00 | 119.95 | 35.27 | |
| 2846.05 | 9.00 | 119.95 | 2818.39 | -181.28 | 314.68 | 0.00 | 0.00 | 363.16 | |
| 3360.33 | 0.00 | 0.00 | 3330.56 | -201.40 | 349.61 | 1.75 | 180.00 | 403.47 | |
| 10588.77 | 0.00 | 0.00 | 10559.00 | -201.40 | 349.61 | 0.00 | 0.00 | 403.47 | PBHL_MORGAN STATE 921-36F1CS |

| PROJECT DETAILS: UTAH - UTM (feet), NAD27, Zone 12N | | FORMATION TOP DETAILS | | |
|---|--|-----------------------|---------|------------|
| Geodetic System: Universal Transverse Mercator (US Survey Feet) | | TVDPath | MDPath | Formation |
| Datum: NAD 1927 (NADCON CONUS) | | 1359.00 | 1368.46 | GREENRIVER |
| Ellipsoid: Clarke 1866 | | 1656.00 | 1669.16 | BIRDSNEST |
| Zone: Zone 12N (114 W to 108 W) | | 2150.00 | 2169.32 | MAHOGANY |
| Location: SECTION 36 T9S R21E | | 4607.00 | 4636.77 | WASATCH |
| System Datum: Mean Sea Level | | 7287.00 | 7316.77 | MESAVERDE |
| | | 9479.00 | 9508.77 | SEGO |
| | | 9527.00 | 9556.77 | CASTLEGATE |
| | | 9959.00 | 9988.77 | BLACKHAWK |

| CASING DETAILS | | | |
|----------------|---------|--------|-------|
| TVD | MD | Name | Size |
| 2600.00 | 2624.93 | 8 5/8" | 8.625 |

RECEIVED :



US ROCKIES REGION PLANNING

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

MORGAN STATE 921-36F2 PAD

MORGAN STATE 921-36F1CS

OH

Plan: PLAN #1 PRELIMINARY

Standard Planning Report

02 December, 2011





SDI
Planning Report



| | | | |
|------------------|------------------------------------|-------------------------------------|--------------------------------------|
| Database: | EDM5000-RobertS-Local | Local Co-ordinate Reference: | Well MORGAN STATE 921-36F1CS |
| Company: | US ROCKIES REGION PLANNING | TVD Reference: | GL 4994 & KB 4 @ 4998.00ft (ASSUMED) |
| Project: | UTAH - UTM (feet), NAD27, Zone 12N | MD Reference: | GL 4994 & KB 4 @ 4998.00ft (ASSUMED) |
| Site: | MORGAN STATE 921-36F2 PAD | North Reference: | True |
| Well: | MORGAN STATE 921-36F1CS | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | OH | | |
| Design: | PLAN #1 PRELIMINARY | | |

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

| | | | | | |
|------------------------------|--|---------------------|-------------------|--------------------------|--------|
| Site | MORGAN STATE 921-36F2 PAD, SECTION 36 T9S R21E | | | | |
| Site Position: | Northing: | 14,527,976.05 usft | Latitude: | 39° 59' 44.257 N | |
| From: Lat/Long | Easting: | 2,059,883.10 usft | Longitude: | 109° 30' 8.435 W | |
| Position Uncertainty: | 0.00 ft | Slot Radius: | 13.200 in | Grid Convergence: | 0.96 ° |

| | | | | | | |
|-----------------------------|--|-----------|----------------------------|--------------------|----------------------|------------------|
| Well | MORGAN STATE 921-36F1CS, 1539 FNL 1794 FWL | | | | | |
| Well Position | +N/-S | -27.32 ft | Northing: | 14,527,948.52 usft | Latitude: | 39° 59' 43.987 N |
| | +E/-W | -12.89 ft | Easting: | 2,059,870.68 usft | Longitude: | 109° 30' 8.600 W |
| Position Uncertainty | | 0.00 ft | Wellhead Elevation: | | Ground Level: | 4,994.00 ft |

| | | | | | |
|------------------|-------------------|--------------------|------------------------|----------------------|----------------------------|
| Wellbore | OH | | | | |
| Magnetics | Model Name | Sample Date | Declination (°) | Dip Angle (°) | Field Strength (nT) |
| | IGRF2010 | 2011/12/02 | 11.02 | 65.85 | 52,280 |

| | | | | |
|--------------------------|------------------------------|-------------------|----------------------|----------------------|
| Design | PLAN #1 PRELIMINARY | | | |
| Audit Notes: | | | | |
| Version: | Phase: | PLAN | Tie On Depth: | 0.00 |
| Vertical Section: | Depth From (TVD) (ft) | +N/-S (ft) | +E/-W (ft) | Direction (°) |
| | 0.00 | 0.00 | 0.00 | 119.95 |

| 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 | |
| 750.00 | 9.00 | 119.95 | 748.15 | -17.61 | 30.56 | 2.00 | 2.00 | 0.00 | 119.95 | |
| 2,846.05 | 9.00 | 119.95 | 2,818.39 | -181.28 | 314.68 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 3,360.33 | 0.00 | 0.00 | 3,330.57 | -201.40 | 349.61 | 1.75 | -1.75 | 0.00 | 180.00 | |
| 10,588.77 | 0.00 | 0.00 | 10,559.00 | -201.40 | 349.61 | 0.00 | 0.00 | 0.00 | 0.00 | PBHL_MORGAN ST/ |



SDI
Planning Report



| | | | |
|------------------|------------------------------------|-------------------------------------|--------------------------------------|
| Database: | EDM5000-RobertS-Local | Local Co-ordinate Reference: | Well MORGAN STATE 921-36F1CS |
| Company: | US ROCKIES REGION PLANNING | TVD Reference: | GL 4994 & KB 4 @ 4998.00ft (ASSUMED) |
| Project: | UTAH - UTM (feet), NAD27, Zone 12N | MD Reference: | GL 4994 & KB 4 @ 4998.00ft (ASSUMED) |
| Site: | MORGAN STATE 921-36F2 PAD | North Reference: | True |
| Well: | MORGAN STATE 921-36F1CS | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | OH | | |
| Design: | PLAN #1 PRELIMINARY | | |

| Planned Survey | | | | | | | | | | |
|---|-----------------|-------------|---------------------|------------|------------|-----------------------|-----------------------|----------------------|---------------------|------|
| Measured Depth (ft) | Inclination (°) | Azimuth (°) | Vertical Depth (ft) | +N/-S (ft) | +E/-W (ft) | Vertical Section (ft) | Dogleg Rate (°/100ft) | Build Rate (°/100ft) | Turn Rate (°/100ft) | |
| 0.00 | 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 | 0.00 |
| 200.00 | 0.00 | 0.00 | 200.00 | 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 | 0.00 |
| Start Build 2.00 | | | | | | | | | | |
| 400.00 | 2.00 | 119.95 | 399.98 | -0.87 | 1.51 | 1.75 | 2.00 | 2.00 | 2.00 | 0.00 |
| 500.00 | 4.00 | 119.95 | 499.84 | -3.48 | 6.05 | 6.98 | 2.00 | 2.00 | 2.00 | 0.00 |
| 600.00 | 6.00 | 119.95 | 599.45 | -7.83 | 13.60 | 15.69 | 2.00 | 2.00 | 2.00 | 0.00 |
| 700.00 | 8.00 | 119.95 | 698.70 | -13.92 | 24.16 | 27.88 | 2.00 | 2.00 | 2.00 | 0.00 |
| 750.00 | 9.00 | 119.95 | 748.15 | -17.61 | 30.56 | 35.27 | 2.00 | 2.00 | 2.00 | 0.00 |
| Start 2096.05 hold at 750.00 MD | | | | | | | | | | |
| 800.00 | 9.00 | 119.95 | 797.54 | -21.51 | 37.34 | 43.09 | 0.00 | 0.00 | 0.00 | 0.00 |
| 900.00 | 9.00 | 119.95 | 896.31 | -29.32 | 50.89 | 58.74 | 0.00 | 0.00 | 0.00 | 0.00 |
| 1,000.00 | 9.00 | 119.95 | 995.07 | -37.13 | 64.45 | 74.38 | 0.00 | 0.00 | 0.00 | 0.00 |
| 1,100.00 | 9.00 | 119.95 | 1,093.84 | -44.94 | 78.00 | 90.02 | 0.00 | 0.00 | 0.00 | 0.00 |
| 1,200.00 | 9.00 | 119.95 | 1,192.61 | -52.75 | 91.56 | 105.67 | 0.00 | 0.00 | 0.00 | 0.00 |
| 1,300.00 | 9.00 | 119.95 | 1,291.38 | -60.55 | 105.11 | 121.31 | 0.00 | 0.00 | 0.00 | 0.00 |
| 1,368.46 | 9.00 | 119.95 | 1,359.00 | -65.90 | 114.39 | 132.02 | 0.00 | 0.00 | 0.00 | 0.00 |
| GREENRIVER | | | | | | | | | | |
| 1,400.00 | 9.00 | 119.95 | 1,390.15 | -68.36 | 118.67 | 136.95 | 0.00 | 0.00 | 0.00 | 0.00 |
| 1,500.00 | 9.00 | 119.95 | 1,488.92 | -76.17 | 132.22 | 152.60 | 0.00 | 0.00 | 0.00 | 0.00 |
| 1,600.00 | 9.00 | 119.95 | 1,587.69 | -83.98 | 145.78 | 168.24 | 0.00 | 0.00 | 0.00 | 0.00 |
| 1,669.16 | 9.00 | 119.95 | 1,656.00 | -89.38 | 155.15 | 179.06 | 0.00 | 0.00 | 0.00 | 0.00 |
| BIRDSNEST | | | | | | | | | | |
| 1,700.00 | 9.00 | 119.95 | 1,686.46 | -91.79 | 159.33 | 183.88 | 0.00 | 0.00 | 0.00 | 0.00 |
| 1,800.00 | 9.00 | 119.95 | 1,785.22 | -99.60 | 172.89 | 199.53 | 0.00 | 0.00 | 0.00 | 0.00 |
| 1,900.00 | 9.00 | 119.95 | 1,883.99 | -107.41 | 186.44 | 215.17 | 0.00 | 0.00 | 0.00 | 0.00 |
| 2,000.00 | 9.00 | 119.95 | 1,982.76 | -115.22 | 200.00 | 230.81 | 0.00 | 0.00 | 0.00 | 0.00 |
| 2,100.00 | 9.00 | 119.95 | 2,081.53 | -123.03 | 213.55 | 246.46 | 0.00 | 0.00 | 0.00 | 0.00 |
| 2,169.32 | 9.00 | 119.95 | 2,150.00 | -128.44 | 222.95 | 257.30 | 0.00 | 0.00 | 0.00 | 0.00 |
| MAHOGANY | | | | | | | | | | |
| 2,200.00 | 9.00 | 119.95 | 2,180.30 | -130.83 | 227.11 | 262.10 | 0.00 | 0.00 | 0.00 | 0.00 |
| 2,300.00 | 9.00 | 119.95 | 2,279.07 | -138.64 | 240.66 | 277.74 | 0.00 | 0.00 | 0.00 | 0.00 |
| 2,400.00 | 9.00 | 119.95 | 2,377.84 | -146.45 | 254.22 | 293.39 | 0.00 | 0.00 | 0.00 | 0.00 |
| 2,500.00 | 9.00 | 119.95 | 2,476.61 | -154.26 | 267.77 | 309.03 | 0.00 | 0.00 | 0.00 | 0.00 |
| 2,600.00 | 9.00 | 119.95 | 2,575.38 | -162.07 | 281.33 | 324.67 | 0.00 | 0.00 | 0.00 | 0.00 |
| 2,624.93 | 9.00 | 119.95 | 2,600.00 | -164.02 | 284.71 | 328.57 | 0.00 | 0.00 | 0.00 | 0.00 |
| 8 5/8" | | | | | | | | | | |
| 2,700.00 | 9.00 | 119.95 | 2,674.14 | -169.88 | 294.88 | 340.32 | 0.00 | 0.00 | 0.00 | 0.00 |
| 2,800.00 | 9.00 | 119.95 | 2,772.91 | -177.69 | 308.44 | 355.96 | 0.00 | 0.00 | 0.00 | 0.00 |
| 2,846.05 | 9.00 | 119.95 | 2,818.39 | -181.28 | 314.68 | 363.16 | 0.00 | 0.00 | 0.00 | 0.00 |
| Start Drop -1.75 | | | | | | | | | | |
| 2,900.00 | 8.06 | 119.95 | 2,871.75 | -185.28 | 321.61 | 371.16 | 1.75 | -1.75 | 0.00 | 0.00 |
| 3,000.00 | 6.31 | 119.95 | 2,970.96 | -191.52 | 332.45 | 383.66 | 1.75 | -1.75 | 0.00 | 0.00 |
| 3,100.00 | 4.56 | 119.95 | 3,070.51 | -196.24 | 340.65 | 393.13 | 1.75 | -1.75 | 0.00 | 0.00 |
| 3,200.00 | 2.81 | 119.95 | 3,170.30 | -199.45 | 346.21 | 399.55 | 1.75 | -1.75 | 0.00 | 0.00 |
| 3,300.00 | 1.06 | 119.95 | 3,270.24 | -201.13 | 349.13 | 402.92 | 1.75 | -1.75 | 0.00 | 0.00 |
| 3,360.33 | 0.00 | 0.00 | 3,330.57 | -201.40 | 349.61 | 403.47 | 1.75 | -1.75 | 0.00 | 0.00 |
| Start 7228.44 hold at 3360.33 MD | | | | | | | | | | |
| 3,400.00 | 0.00 | 0.00 | 3,370.23 | -201.40 | 349.61 | 403.47 | 0.00 | 0.00 | 0.00 | 0.00 |
| 3,500.00 | 0.00 | 0.00 | 3,470.23 | -201.40 | 349.61 | 403.47 | 0.00 | 0.00 | 0.00 | 0.00 |
| 3,600.00 | 0.00 | 0.00 | 3,570.23 | -201.40 | 349.61 | 403.47 | 0.00 | 0.00 | 0.00 | 0.00 |
| 3,700.00 | 0.00 | 0.00 | 3,670.23 | -201.40 | 349.61 | 403.47 | 0.00 | 0.00 | 0.00 | 0.00 |



| | | | |
|------------------|------------------------------------|-------------------------------------|--------------------------------------|
| Database: | EDM5000-RobertS-Local | Local Co-ordinate Reference: | Well MORGAN STATE 921-36F1CS |
| Company: | US ROCKIES REGION PLANNING | TVD Reference: | GL 4994 & KB 4 @ 4998.00ft (ASSUMED) |
| Project: | UTAH - UTM (feet), NAD27, Zone 12N | MD Reference: | GL 4994 & KB 4 @ 4998.00ft (ASSUMED) |
| Site: | MORGAN STATE 921-36F2 PAD | North Reference: | True |
| Well: | MORGAN STATE 921-36F1CS | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | OH | | |
| Design: | PLAN #1 PRELIMINARY | | |

| Planned Survey | | | | | | | | | |
|---------------------|-----------------|-------------|---------------------|------------|------------|-----------------------|-----------------------|----------------------|---------------------|
| Measured Depth (ft) | Inclination (°) | Azimuth (°) | Vertical Depth (ft) | +N/-S (ft) | +E/-W (ft) | Vertical Section (ft) | Dogleg Rate (°/100ft) | Build Rate (°/100ft) | Turn Rate (°/100ft) |
| 3,800.00 | 0.00 | 0.00 | 3,770.23 | -201.40 | 349.61 | 403.47 | 0.00 | 0.00 | 0.00 |
| 3,900.00 | 0.00 | 0.00 | 3,870.23 | -201.40 | 349.61 | 403.47 | 0.00 | 0.00 | 0.00 |
| 4,000.00 | 0.00 | 0.00 | 3,970.23 | -201.40 | 349.61 | 403.47 | 0.00 | 0.00 | 0.00 |
| 4,100.00 | 0.00 | 0.00 | 4,070.23 | -201.40 | 349.61 | 403.47 | 0.00 | 0.00 | 0.00 |
| 4,200.00 | 0.00 | 0.00 | 4,170.23 | -201.40 | 349.61 | 403.47 | 0.00 | 0.00 | 0.00 |
| 4,300.00 | 0.00 | 0.00 | 4,270.23 | -201.40 | 349.61 | 403.47 | 0.00 | 0.00 | 0.00 |
| 4,400.00 | 0.00 | 0.00 | 4,370.23 | -201.40 | 349.61 | 403.47 | 0.00 | 0.00 | 0.00 |
| 4,500.00 | 0.00 | 0.00 | 4,470.23 | -201.40 | 349.61 | 403.47 | 0.00 | 0.00 | 0.00 |
| 4,600.00 | 0.00 | 0.00 | 4,570.23 | -201.40 | 349.61 | 403.47 | 0.00 | 0.00 | 0.00 |
| 4,636.77 | 0.00 | 0.00 | 4,607.00 | -201.40 | 349.61 | 403.47 | 0.00 | 0.00 | 0.00 |
| WASATCH | | | | | | | | | |
| 4,700.00 | 0.00 | 0.00 | 4,670.23 | -201.40 | 349.61 | 403.47 | 0.00 | 0.00 | 0.00 |
| 4,800.00 | 0.00 | 0.00 | 4,770.23 | -201.40 | 349.61 | 403.47 | 0.00 | 0.00 | 0.00 |
| 4,900.00 | 0.00 | 0.00 | 4,870.23 | -201.40 | 349.61 | 403.47 | 0.00 | 0.00 | 0.00 |
| 5,000.00 | 0.00 | 0.00 | 4,970.23 | -201.40 | 349.61 | 403.47 | 0.00 | 0.00 | 0.00 |
| 5,100.00 | 0.00 | 0.00 | 5,070.23 | -201.40 | 349.61 | 403.47 | 0.00 | 0.00 | 0.00 |
| 5,200.00 | 0.00 | 0.00 | 5,170.23 | -201.40 | 349.61 | 403.47 | 0.00 | 0.00 | 0.00 |
| 5,300.00 | 0.00 | 0.00 | 5,270.23 | -201.40 | 349.61 | 403.47 | 0.00 | 0.00 | 0.00 |
| 5,400.00 | 0.00 | 0.00 | 5,370.23 | -201.40 | 349.61 | 403.47 | 0.00 | 0.00 | 0.00 |
| 5,500.00 | 0.00 | 0.00 | 5,470.23 | -201.40 | 349.61 | 403.47 | 0.00 | 0.00 | 0.00 |
| 5,600.00 | 0.00 | 0.00 | 5,570.23 | -201.40 | 349.61 | 403.47 | 0.00 | 0.00 | 0.00 |
| 5,700.00 | 0.00 | 0.00 | 5,670.23 | -201.40 | 349.61 | 403.47 | 0.00 | 0.00 | 0.00 |
| 5,800.00 | 0.00 | 0.00 | 5,770.23 | -201.40 | 349.61 | 403.47 | 0.00 | 0.00 | 0.00 |
| 5,900.00 | 0.00 | 0.00 | 5,870.23 | -201.40 | 349.61 | 403.47 | 0.00 | 0.00 | 0.00 |
| 6,000.00 | 0.00 | 0.00 | 5,970.23 | -201.40 | 349.61 | 403.47 | 0.00 | 0.00 | 0.00 |
| 6,100.00 | 0.00 | 0.00 | 6,070.23 | -201.40 | 349.61 | 403.47 | 0.00 | 0.00 | 0.00 |
| 6,200.00 | 0.00 | 0.00 | 6,170.23 | -201.40 | 349.61 | 403.47 | 0.00 | 0.00 | 0.00 |
| 6,300.00 | 0.00 | 0.00 | 6,270.23 | -201.40 | 349.61 | 403.47 | 0.00 | 0.00 | 0.00 |
| 6,400.00 | 0.00 | 0.00 | 6,370.23 | -201.40 | 349.61 | 403.47 | 0.00 | 0.00 | 0.00 |
| 6,500.00 | 0.00 | 0.00 | 6,470.23 | -201.40 | 349.61 | 403.47 | 0.00 | 0.00 | 0.00 |
| 6,600.00 | 0.00 | 0.00 | 6,570.23 | -201.40 | 349.61 | 403.47 | 0.00 | 0.00 | 0.00 |
| 6,700.00 | 0.00 | 0.00 | 6,670.23 | -201.40 | 349.61 | 403.47 | 0.00 | 0.00 | 0.00 |
| 6,800.00 | 0.00 | 0.00 | 6,770.23 | -201.40 | 349.61 | 403.47 | 0.00 | 0.00 | 0.00 |
| 6,900.00 | 0.00 | 0.00 | 6,870.23 | -201.40 | 349.61 | 403.47 | 0.00 | 0.00 | 0.00 |
| 7,000.00 | 0.00 | 0.00 | 6,970.23 | -201.40 | 349.61 | 403.47 | 0.00 | 0.00 | 0.00 |
| 7,100.00 | 0.00 | 0.00 | 7,070.23 | -201.40 | 349.61 | 403.47 | 0.00 | 0.00 | 0.00 |
| 7,200.00 | 0.00 | 0.00 | 7,170.23 | -201.40 | 349.61 | 403.47 | 0.00 | 0.00 | 0.00 |
| 7,300.00 | 0.00 | 0.00 | 7,270.23 | -201.40 | 349.61 | 403.47 | 0.00 | 0.00 | 0.00 |
| 7,316.77 | 0.00 | 0.00 | 7,287.00 | -201.40 | 349.61 | 403.47 | 0.00 | 0.00 | 0.00 |
| MESAVERDE | | | | | | | | | |
| 7,400.00 | 0.00 | 0.00 | 7,370.23 | -201.40 | 349.61 | 403.47 | 0.00 | 0.00 | 0.00 |
| 7,500.00 | 0.00 | 0.00 | 7,470.23 | -201.40 | 349.61 | 403.47 | 0.00 | 0.00 | 0.00 |
| 7,600.00 | 0.00 | 0.00 | 7,570.23 | -201.40 | 349.61 | 403.47 | 0.00 | 0.00 | 0.00 |
| 7,700.00 | 0.00 | 0.00 | 7,670.23 | -201.40 | 349.61 | 403.47 | 0.00 | 0.00 | 0.00 |
| 7,800.00 | 0.00 | 0.00 | 7,770.23 | -201.40 | 349.61 | 403.47 | 0.00 | 0.00 | 0.00 |
| 7,900.00 | 0.00 | 0.00 | 7,870.23 | -201.40 | 349.61 | 403.47 | 0.00 | 0.00 | 0.00 |
| 8,000.00 | 0.00 | 0.00 | 7,970.23 | -201.40 | 349.61 | 403.47 | 0.00 | 0.00 | 0.00 |
| 8,100.00 | 0.00 | 0.00 | 8,070.23 | -201.40 | 349.61 | 403.47 | 0.00 | 0.00 | 0.00 |
| 8,200.00 | 0.00 | 0.00 | 8,170.23 | -201.40 | 349.61 | 403.47 | 0.00 | 0.00 | 0.00 |
| 8,300.00 | 0.00 | 0.00 | 8,270.23 | -201.40 | 349.61 | 403.47 | 0.00 | 0.00 | 0.00 |
| 8,400.00 | 0.00 | 0.00 | 8,370.23 | -201.40 | 349.61 | 403.47 | 0.00 | 0.00 | 0.00 |
| 8,500.00 | 0.00 | 0.00 | 8,470.23 | -201.40 | 349.61 | 403.47 | 0.00 | 0.00 | 0.00 |
| 8,600.00 | 0.00 | 0.00 | 8,570.23 | -201.40 | 349.61 | 403.47 | 0.00 | 0.00 | 0.00 |
| 8,700.00 | 0.00 | 0.00 | 8,670.23 | -201.40 | 349.61 | 403.47 | 0.00 | 0.00 | 0.00 |



| | | | |
|------------------|------------------------------------|-------------------------------------|--------------------------------------|
| Database: | EDM5000-RobertS-Local | Local Co-ordinate Reference: | Well MORGAN STATE 921-36F1CS |
| Company: | US ROCKIES REGION PLANNING | TVD Reference: | GL 4994 & KB 4 @ 4998.00ft (ASSUMED) |
| Project: | UTAH - UTM (feet), NAD27, Zone 12N | MD Reference: | GL 4994 & KB 4 @ 4998.00ft (ASSUMED) |
| Site: | MORGAN STATE 921-36F2 PAD | North Reference: | True |
| Well: | MORGAN STATE 921-36F1CS | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | OH | | |
| Design: | PLAN #1 PRELIMINARY | | |

| Planned Survey | | | | | | | | | |
|--|-----------------|-------------|---------------------|------------|------------|-----------------------|-----------------------|----------------------|---------------------|
| Measured Depth (ft) | Inclination (°) | Azimuth (°) | Vertical Depth (ft) | +N/-S (ft) | +E/-W (ft) | Vertical Section (ft) | Dogleg Rate (°/100ft) | Build Rate (°/100ft) | Turn Rate (°/100ft) |
| 8,800.00 | 0.00 | 0.00 | 8,770.23 | -201.40 | 349.61 | 403.47 | 0.00 | 0.00 | 0.00 |
| 8,900.00 | 0.00 | 0.00 | 8,870.23 | -201.40 | 349.61 | 403.47 | 0.00 | 0.00 | 0.00 |
| 9,000.00 | 0.00 | 0.00 | 8,970.23 | -201.40 | 349.61 | 403.47 | 0.00 | 0.00 | 0.00 |
| 9,100.00 | 0.00 | 0.00 | 9,070.23 | -201.40 | 349.61 | 403.47 | 0.00 | 0.00 | 0.00 |
| 9,200.00 | 0.00 | 0.00 | 9,170.23 | -201.40 | 349.61 | 403.47 | 0.00 | 0.00 | 0.00 |
| 9,300.00 | 0.00 | 0.00 | 9,270.23 | -201.40 | 349.61 | 403.47 | 0.00 | 0.00 | 0.00 |
| 9,400.00 | 0.00 | 0.00 | 9,370.23 | -201.40 | 349.61 | 403.47 | 0.00 | 0.00 | 0.00 |
| 9,500.00 | 0.00 | 0.00 | 9,470.23 | -201.40 | 349.61 | 403.47 | 0.00 | 0.00 | 0.00 |
| 9,508.77 | 0.00 | 0.00 | 9,479.00 | -201.40 | 349.61 | 403.47 | 0.00 | 0.00 | 0.00 |
| SEGO | | | | | | | | | |
| 9,556.77 | 0.00 | 0.00 | 9,527.00 | -201.40 | 349.61 | 403.47 | 0.00 | 0.00 | 0.00 |
| CASTLEGATE | | | | | | | | | |
| 9,600.00 | 0.00 | 0.00 | 9,570.23 | -201.40 | 349.61 | 403.47 | 0.00 | 0.00 | 0.00 |
| 9,700.00 | 0.00 | 0.00 | 9,670.23 | -201.40 | 349.61 | 403.47 | 0.00 | 0.00 | 0.00 |
| 9,800.00 | 0.00 | 0.00 | 9,770.23 | -201.40 | 349.61 | 403.47 | 0.00 | 0.00 | 0.00 |
| 9,900.00 | 0.00 | 0.00 | 9,870.23 | -201.40 | 349.61 | 403.47 | 0.00 | 0.00 | 0.00 |
| 9,988.77 | 0.00 | 0.00 | 9,959.00 | -201.40 | 349.61 | 403.47 | 0.00 | 0.00 | 0.00 |
| BLACKHAWK - BLACKHAWK_MORGAN STATE 921-36F1CS | | | | | | | | | |
| 10,000.00 | 0.00 | 0.00 | 9,970.23 | -201.40 | 349.61 | 403.47 | 0.00 | 0.00 | 0.00 |
| 10,100.00 | 0.00 | 0.00 | 10,070.23 | -201.40 | 349.61 | 403.47 | 0.00 | 0.00 | 0.00 |
| 10,200.00 | 0.00 | 0.00 | 10,170.23 | -201.40 | 349.61 | 403.47 | 0.00 | 0.00 | 0.00 |
| 10,300.00 | 0.00 | 0.00 | 10,270.23 | -201.40 | 349.61 | 403.47 | 0.00 | 0.00 | 0.00 |
| 10,400.00 | 0.00 | 0.00 | 10,370.23 | -201.40 | 349.61 | 403.47 | 0.00 | 0.00 | 0.00 |
| 10,500.00 | 0.00 | 0.00 | 10,470.23 | -201.40 | 349.61 | 403.47 | 0.00 | 0.00 | 0.00 |
| 10,588.77 | 0.00 | 0.00 | 10,559.00 | -201.40 | 349.61 | 403.47 | 0.00 | 0.00 | 0.00 |
| TD at 10588.77 - PBHL_MORGAN STATE 921-36F1CS | | | | | | | | | |

| Design Targets | | | | | | | | | |
|--|---------------|--------------|-----------|------------|------------|-----------------|----------------|------------------|------------------|
| Target Name | Dip Angle (°) | Dip Dir. (°) | TVD (ft) | +N/-S (ft) | +E/-W (ft) | Northing (usft) | Easting (usft) | Latitude | Longitude |
| BLACKHAWK_MORGAI - hit/miss target - Shape - plan hits target center - Circle (radius 25.00) | 0.00 | 0.00 | 9,959.00 | -201.40 | 349.61 | 14,527,753.02 | 2,060,223.62 | 39° 59' 41.996 N | 109° 30' 4.108 W |
| PBHL_MORGAN STATE - plan hits target center - Circle (radius 100.00) | 0.00 | 0.00 | 10,559.00 | -201.40 | 349.61 | 14,527,753.02 | 2,060,223.62 | 39° 59' 41.996 N | 109° 30' 4.108 W |

| Casing Points | | | | | |
|---------------------|---------------------|--------|----------------------|--------------------|--|
| Measured Depth (ft) | Vertical Depth (ft) | Name | Casing Diameter (in) | Hole Diameter (in) | |
| 2,624.93 | 2,600.00 | 8 5/8" | 8.625 | 11.000 | |



| | | | |
|------------------|------------------------------------|-------------------------------------|--------------------------------------|
| Database: | EDM5000-RobertS-Local | Local Co-ordinate Reference: | Well MORGAN STATE 921-36F1CS |
| Company: | US ROCKIES REGION PLANNING | TVD Reference: | GL 4994 & KB 4 @ 4998.00ft (ASSUMED) |
| Project: | UTAH - UTM (feet), NAD27, Zone 12N | MD Reference: | GL 4994 & KB 4 @ 4998.00ft (ASSUMED) |
| Site: | MORGAN STATE 921-36F2 PAD | North Reference: | True |
| Well: | MORGAN STATE 921-36F1CS | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | OH | | |
| Design: | PLAN #1 PRELIMINARY | | |

| Formations | | | | | | |
|---------------------|---------------------|------------|-----------|---------|-------------------|--|
| Measured Depth (ft) | Vertical Depth (ft) | Name | Lithology | Dip (°) | Dip Direction (°) | |
| 1,368.46 | 1,359.00 | GREENRIVER | | | | |
| 1,669.16 | 1,656.00 | BIRDSNEST | | | | |
| 2,169.32 | 2,150.00 | MAHOGANY | | | | |
| 4,636.77 | 4,607.00 | WASATCH | | | | |
| 7,316.77 | 7,287.00 | MESAVERDE | | | | |
| 9,508.77 | 9,479.00 | SEGO | | | | |
| 9,556.77 | 9,527.00 | CASTLEGATE | | | | |
| 9,988.77 | 9,959.00 | BLACKHAWK | | | | |

| Plan Annotations | | | | | |
|---------------------|---------------------|-------------------|------------|----------------------------------|--|
| Measured Depth (ft) | Vertical Depth (ft) | Local Coordinates | | Comment | |
| | | +N/-S (ft) | +E/-W (ft) | | |
| 300.00 | 300.00 | 0.00 | 0.00 | Start Build 2.00 | |
| 750.00 | 748.15 | -17.61 | 30.56 | Start 2096.05 hold at 750.00 MD | |
| 2,846.05 | 2,818.39 | -181.28 | 314.68 | Start Drop -1.75 | |
| 3,360.33 | 3,330.57 | -201.40 | 349.61 | Start 7228.44 hold at 3360.33 MD | |
| 10,588.77 | 10,559.00 | -201.40 | 349.61 | TD at 10588.77 | |

MORGAN STATE 921-36F1BS

| | | | |
|----------|---------------------|------|-----|
| Surface: | 1512 FNL / 1807 FWL | SENW | Lot |
| BHL: | 1408 FNL / 2144 FWL | SENW | Lot |

MORGAN STATE 921-36F1CS

| | | | |
|----------|---------------------|------|-----|
| Surface: | 1539 FNL / 1794 FWL | SENW | Lot |
| BHL: | 1740 FNL / 2144 FWL | SENW | Lot |

MORGAN STATE 921-36G1BS

| | | | |
|----------|---------------------|------|-----|
| Surface: | 1521 FNL / 1803 FWL | SENW | Lot |
| BHL: | 1534 FNL / 1799 FEL | SWNE | Lot |

MORGAN STATE 921-36G1CS

| | | | |
|----------|---------------------|------|-----|
| Surface: | 1530 FNL / 1799 FWL | SENW | Lot |
| BHL: | 1898 FNL / 1805 FEL | SWNE | Lot |

Pad: MORGAN STATE 921-36F2 PAD

Section 36 T9S R21E
Mineral Lease: ML-22265

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

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 and improved/unimproved lease roads. 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.

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 $\pm 730'$ (0.1 miles) of new access road 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.

If there are roads that 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.

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

C. Location of Existing and Proposed Facilities:

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

Production facilities will be installed on the disturbed portion of the 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) above ground 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.

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 $\pm 450'$ and the individual segments are broken up as follows:

- ±60' (0.01 miles) –New 6” buried gas pipeline from the meter to the 921-36C intersection. Please refer to Topo D2 - Pad and Pipeline Detail.
- ±390' (0.1 miles) –New 10” buried gas pipeline from the 921-36C intersection to the 921-36F3 intersection. Please refer to Topo D2 - Pad and Pipeline Detail.

The total liquid gathering pipeline distance from the separator to the tie in point is ±450’ and the individual segments are broken up as follows:

- ±60' (0.01 miles) –New 6” buried liquid pipeline from the separator to the 921-36C intersection. Please refer to Topo D2 - Pad and Pipeline Detail.
- ±390' (0.1 miles) –New 6” buried liquid pipeline from the 921-36C intersection to the 921-36F3 intersection. Please refer to Topo D2 - Pad and Pipeline Detail.

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. KMG 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, KMG requests a temporary 45' construction right-of-way 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 and ownership, as well as 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. Location and Type of Water Supply:

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

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

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

No water well is to be drilled on this lease.

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 for 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

Kerr-McGee will use either a closed loop drilling system that will require one pit and one cuttings storage area to be constructed on the drilling pad or a traditional drilling operation with one pit used for drilling and completion operations. The cuttings storage area will be used to contain only the de-watered drill cuttings and will be lined and bermed to prevent any liquid runoff. The drill cuttings will be buried in the completion pit once completion operations are completed according to traditional pit closure standards. The pit will be constructed to allow for completion operations. The completion operations pit will be lined with a synthetic material 20 mil or thicker and will be used for the completing of the wells on the pad or used as part of our Aandarko Completions Transportation System (ACTS). Using the closed loop drilling system will allow Kerr-McGee to decrease the amount of disturbance/footprint on location compared to a single large drilling/completions pit.

If Kerr-McGee does not use a closed loop drilling system, it will construct a traditional drilling/completions pit to contain drill cuttings and for use in completion operations. The pit will be lined with a synthetic material 20 mil or thicker. The drill cuttings will be buried in the pit using traditional pit closure standards.

Unless otherwise approved, no oil or other oil based drill additives, chromium/metals-based, or saline muds will be used during drilling. Only fresh water, biodegradable polymer soap, bentonite clay, and /or non-toxic additives will be used in the 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 release into the pit, they will be removed as soon as practical but in no case will they remain longer than 72 hours unless an alternative 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 the 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)

Any additional pits necessary for subsequent operations, such as temporary flare pits, or workover pits, will contained within the originally approved well pad and disturbance boundaries. Such temporary pits will be backfilled and reclaimed within 180 days of completion of the work.

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 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, including accidental release of fluids, or release in excess of reportable quantities, will be managed according to the notification requirements of UDOGMs "Reporting Oil and Gas Undesirable Events" rule. Where State wells are participatory to a Federal agreement, according to NTL-3A, the appropriate Federal agencies will be notified.

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, 1927 (NAD27) 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 is not limited to the 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 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 re-vegetation. 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

L. Other Information:

None

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

Danielle Piernot
Regulatory Analyst II
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

December 19, 2011

Date



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

December 14, 2011

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
Morgan State 921-36F1CS
T9S-R21E
Section 36: SENW (Surface), SENW (Bottom Hole)
Surface: 1539' FNL, 1794' FWL
Bottom Hole: 1740' FNL, 2144' 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 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 roads and pipelines in the area.
- Furthermore, Kerr-McGee certifies that it is the sole working interest owner within 460 feet of the entire directional well bore.

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

Sincerely,

KERR-MCGEE OIL & GAS ONSHORE LP

A handwritten signature in blue ink that reads 'Joe Matney'.

Joe Matney
Sr. Staff Landman

From: Jim Davis
To: APD APPROVAL
CC: Danielle Piernot; Julie Jacobson
Date: 2/23/2012 3:22 PM
Subject: APD Approval: the Kerr McGee Morgan State wells

The following wells have been approved by SITLA including arch and paleo clearance.

4304752246 Morgan State 921-36G4BS
4304752253 Morgan State 921-36G4CS
4304752255 Morgan State 921-36J1CS
4304752256 Morgan State 921-36J4BS
4304752281 Morgan State 921-36F1BS
4304752282 Morgan State 921-36F1CS
4304752283 Morgan State 921-36G1BS
4304752284 Morgan State 921-36G1CS
4304752285 Morgan State 921-36F4BS
4304752286 Morgan State 921-36K1BS
4304752287 Morgan State 921-36K1CS
4304752247 Morgan State 921-36P1BS
4304752248 Morgan State 921-36P1CS
4304752249 Morgan State 921-36I4BS
4304752250 Morgan State 921-36I4CS
4304752252 Morgan State 921-36P4BS
4304752263 Morgan State 921-36K4CS
4304752264 Morgan State 921-36N1BS
4304752265 Morgan State 921-36N1CS
4304752266 Morgan State 921-36N4BS
4304752276 Morgan State 921-36D4CS
4304752277 Morgan State 921-36E1BS
4304752278 Morgan State 921-36E1CS
4304752279 Morgan State 921-36E4BS
4304752280 Morgan State 921-36E4CS
4304752245 Morgan State 921-36O4CS
4304752254 Morgan State 921-36O1CS
4304752267 Morgan State 921-36O1BS
4304752257 Morgan State 921-36K4BS
4304752258 Morgan State 921-36L1BS
4304752259 Morgan State 921-36L1CS
4304752260 Morgan State 921-36M1BS
4304752261 Morgan State 921-36M1CS
4304752262 Morgan State 921-36M4BS
4304752272 Morgan State 921-36B4CS
4304752273 Morgan State 921-36C4BS
4304752274 Morgan State 921-36C4CS
4304752275 Morgan State 921-36D1CS

There are eight more wells on two pads in this section, the 36A pad and the 36I pad, that have not yet been approved. Anadarko is gathering reclamation cost figures on pads similar to those as part of the process of acquiring adequate SITLA bonds.

-Jim

Jim Davis
Utah Trust Lands Administration
jimdavis1@utah.gov

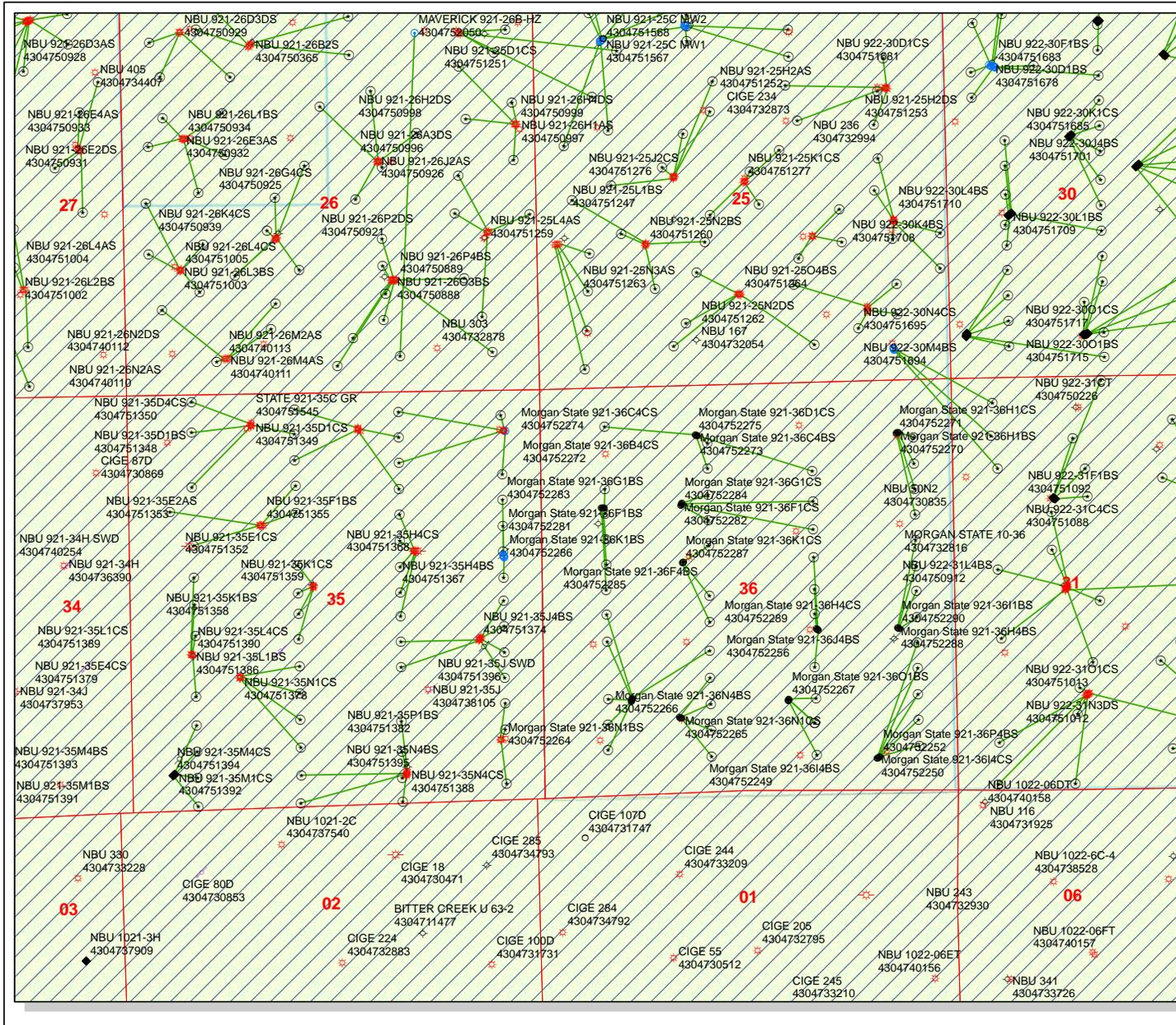
API Well Number: 43047522820000

Phone: (801) 538-5156

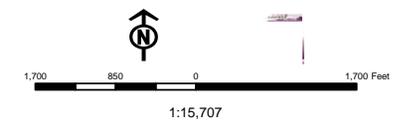
RECEIVED: February 23, 2012

API Number: 4304752282
Well Name: Morgan State 921-36F1CS
Township T0.9 . Range R2.1 . Section 36
Meridian: SLBM
Operator: KERR-MCGEE OIL & GAS ONSHORE, L.P.

Map Prepared:
 Map Produced by Diana Mason



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



| | | | | |
|--|--|-------|--|--|
| Well Name | KERR-MCGEE OIL & GAS ONSHORE, L.P. Morgan State 921-36F1CS | | | |
| String | Surf | Prod | | |
| Casing Size(") | 8.625 | 4.500 | | |
| Setting Depth (TVD) | 2575 | 10559 | | |
| Previous Shoe Setting Depth (TVD) | 0 | 2575 | | |
| Max Mud Weight (ppg) | 8.4 | 13.0 | | |
| BOPE Proposed (psi) | 500 | 5000 | | |
| Casing Internal Yield (psi) | 3390 | 10690 | | |
| Operators Max Anticipated Pressure (psi) | 6969 | 12.7 | | |

| | | | |
|---|--|-------|---|
| Calculations | Surf String | 8.625 | " |
| Max BHP (psi) | .052*Setting Depth*MW= | 1125 | |
| | | | BOPE Adequate For Drilling And Setting Casing at Depth? |
| MASP (Gas) (psi) | Max BHP-(0.12*Setting Depth)= | 816 | NO air drill |
| MASP (Gas/Mud) (psi) | Max BHP-(0.22*Setting Depth)= | 559 | NO Reasonable depth in area |
| | | | *Can Full Expected Pressure Be Held At Previous Shoe? |
| Pressure At Previous Shoe | Max BHP-.22*(Setting Depth - Previous Shoe Depth)= | 559 | NO |
| Required Casing/BOPE Test Pressure= | | 2373 | psi |
| *Max Pressure Allowed @ Previous Casing Shoe= | | 0 | psi *Assumes 1psi/ft frac gradient |

| | | | |
|---|--|-------|---|
| Calculations | Prod String | 4.500 | " |
| Max BHP (psi) | .052*Setting Depth*MW= | 7138 | |
| | | | BOPE Adequate For Drilling And Setting Casing at Depth? |
| MASP (Gas) (psi) | Max BHP-(0.12*Setting Depth)= | 5871 | NO |
| MASP (Gas/Mud) (psi) | Max BHP-(0.22*Setting Depth)= | 4815 | YES OK |
| | | | *Can Full Expected Pressure Be Held At Previous Shoe? |
| Pressure At Previous Shoe | Max BHP-.22*(Setting Depth - Previous Shoe Depth)= | 5382 | NO Reasonable |
| Required Casing/BOPE Test Pressure= | | 5000 | psi |
| *Max Pressure Allowed @ Previous Casing Shoe= | | 2575 | psi *Assumes 1psi/ft frac gradient |

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

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

43047522820000 Morgan State 921-36F1CS

Casing Schematic

Surface

122' 152'

Uinta

160' @ 9% w/o, tail 3711

TOC @ 756.

1359' Green River to 564' @ 0% w/o, tail 1379'

TOC @ 1656 Birds Nest * stop ✓

1935' tail
2000' BMSW
2150' Mahogany

Surface
2600. MD
2575. TVD

✓ Stop surf. amt.

8-5/8"
MW 8.4
Frac 19.3

4203' tail

4607' Wasatch

Cmts proposed to surf.

7287' Mesaverde

9479' Segó

9527' Castlegate

9956' Mn 5

4-1/2"
MW 13.

Production
10589. MD
10559. TVD

1539 NL

1794 WL

-201

350

1740 FNL

2144 FWL ✓

OK

SE NW Sec 36-95-21E

| | | | |
|--------------|---|-------------|--------------|
| Well name: | 43047522820000 Morgan State 921-36F1CS | | |
| Operator: | KERR-MCGEE OIL & GAS ONSHORE, L.P. | | |
| String type: | Surface | Project ID: | 43-047-52282 |
| Location: | UINTAH | COUNTY | |

Design parameters:**Collapse**

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

Burst

Max anticipated surface pressure: 2,266 psi
Internal gradient: 0.120 psi/ft
Calculated BHP: 2,575 psi

No backup mud specified.

Minimum design factors:**Collapse:**

Design factor 1.125

Burst:

Design factor 1.00

Tension:

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

Tension is based on air weight.
Neutral point: 2,277 ft

Environment:

H2S considered? No
Surface temperature: 74 °F
Bottom hole temperature: 110 °F
Temperature gradient: 1.40 °F/100ft
Minimum section length: 100 ft

Cement top: 1,492 ft

Directional Info - Build & Drop

Kick-off point: 300 ft
Departure at shoe: 325 ft
Maximum dogleg: 2 °/100ft
Inclination at shoe: 9 °

Re subsequent strings:

Next setting depth: 10,559 ft
Next mud weight: 13.000 ppg
Next setting BHP: 7,131 psi
Fracture mud wt: 19.250 ppg
Fracture depth: 2,575 ft
Injection pressure: 2,575 psi

| Run Seq | Segment Length (ft) | Size (in) | Nominal Weight (lbs/ft) | Grade | End Finish | True Vert Depth (ft) | Measured Depth (ft) | Drift Diameter (in) | Est. Cost (\$) |
|---------|---------------------|-------------------------|-------------------------|------------------|----------------------|----------------------|---------------------|-------------------------|-----------------------|
| 1 | 2600 | 8.625 | 28.00 | I-55 | LT&C | 2575 | 2600 | 7.892 | 102956 |
| 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 | 1124 | 1880 | 1.673 | 2575 | 3390 | 1.32 | 72.1 | 348 | 4.83 J |

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

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

Date: March 5, 2012
Salt Lake City, Utah

Remarks:

Collapse is based on a vertical depth of 2575 ft, a mud weight of 8.4 ppg. The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

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

| | | | |
|--------------|---|-------------|--------------|
| Well name: | 43047522820000 Morgan State 921-36F1CS | | |
| Operator: | KERR-MCGEE OIL & GAS ONSHORE, L.P. | | |
| String type: | Production | Project ID: | 43-047-52282 |
| Location: | UINTAH COUNTY | | |

Design parameters:**Collapse**

Mud weight: 13.000 ppg
Design is based on evacuated pipe.

Minimum design factors:**Collapse:**

Design factor 1.125

Burst:

Design factor 1.00

Environment:

H2S considered? No
Surface temperature: 74 °F
Bottom hole temperature: 222 °F
Temperature gradient: 1.40 °F/100ft
Minimum section length: 100 ft
Cement top: 756 ft

Burst

Max anticipated surface pressure: 4,808 psi
Internal gradient: 0.220 psi/ft
Calculated BHP 7,131 psi

No backup mud specified.

Tension:

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

Tension is based on air weight.
Neutral point: 8,537 ft

Directional Info - Build & Drop

Kick-off point 300 ft
Departure at shoe: 404 ft
Maximum dogleg: 2 °/100ft
Inclination at shoe: 0 °

Estimated cost: 158,928 (\$)

| 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 (\$) |
|---------|---------------------|-----------|-------------------------|---------|------------|----------------------|---------------------|---------------------|----------------|
| 2 | 5000 | 4.5 | 11.60 | HCP-110 | DQX | 4970 | 5000 | 3.875 | 132000 |
| 1 | 5589 | 4.5 | 11.60 | HCP-110 | LT&C | 10559 | 10589 | 3.875 | 26928 |

| 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 |
|---------|---------------------|-------------------------|------------------------|------------------|----------------------|---------------------|---------------------|-------------------------|-----------------------|
| 2 | 3357 | 8126 | 2.421 | 5901 | 10690 | 1.81 | 122.5 | 367.2 | 3.00 B |
| 1 | 7131 | 8650 | 1.213 | 7131 | 10690 | 1.50 | 64.8 | 279 | 4.30 J |

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

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

Date: March 5, 2012
Salt Lake City, Utah

Remarks:

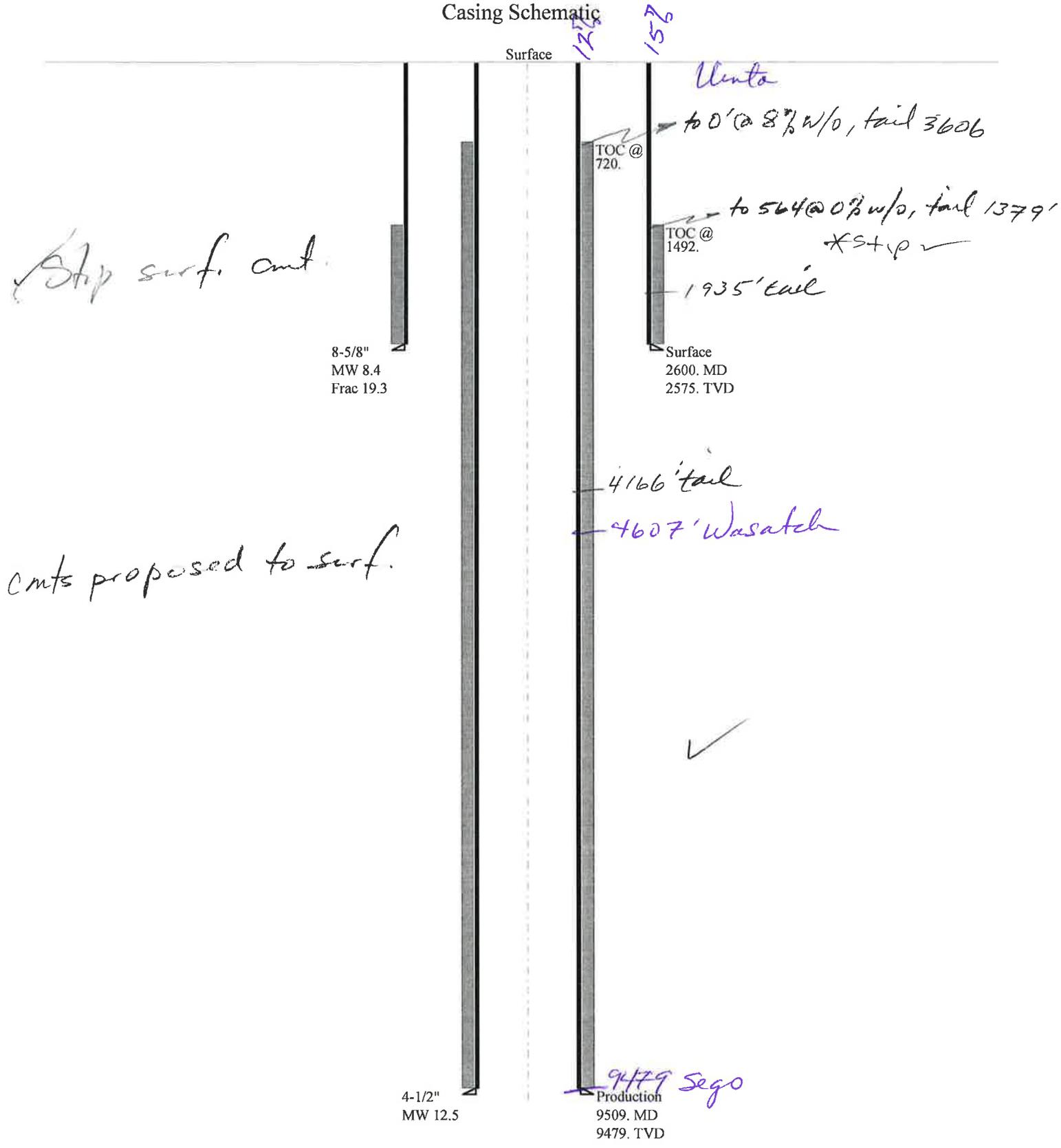
Collapse is based on a vertical depth of 10559 ft, a mud weight of 13 ppg. The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

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

43047522820000 Morgan State 921-36F1CS

Casing Schematic



| | | |
|--------------|---|-----------------------------|
| Well name: | 43047522820000 Morgan State 921-36F1CS | |
| Operator: | KERR-MCGEE OIL & GAS ONSHORE, L.P. | |
| String type: | Surface | Project ID: 43-047-52282 |
| Location: | UINTAH COUNTY | |

Design parameters:**Collapse**

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

Burst

Max anticipated surface pressure: 2,266 psi
Internal gradient: 0.120 psi/ft
Calculated BHP: 2,575 psi

No backup mud specified.

Minimum design factors:**Collapse:**

Design factor: 1.125

Burst:

Design factor: 1.00

Tension:

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

Tension is based on air weight.
Neutral point: 2,277 ft

Environment:

H2S considered? No
Surface temperature: 74 °F
Bottom hole temperature: 110 °F
Temperature gradient: 1.40 °F/100ft
Minimum section length: 100 ft

Cement top: 1,492 ft

Directional Info - Build & Drop

Kick-off point: 300 ft
Departure at shoe: 325 ft
Maximum dogleg: 2 °/100ft
Inclination at shoe: 9 °

Re subsequent strings:

Next setting depth: 9,479 ft
Next mud weight: 12.500 ppg
Next setting BHP: 6,155 psi
Fracture mud wt: 19.250 ppg
Fracture depth: 2,575 ft
Injection pressure: 2,575 psi

| Run Seq | Segment Length (ft) | Size (in) | Nominal Weight (lbs/ft) | Grade | End Finish | True Vert Depth (ft) | Measured Depth (ft) | Drift Diameter (in) | Est. Cost (\$) |
|---------|---------------------|-------------------------|-------------------------|------------------|----------------------|----------------------|---------------------|-------------------------|-----------------------|
| 1 | 2600 | 8.625 | 28.00 | I-55 | LT&C | 2575 | 2600 | 7.892 | 102960 |
| 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 | 1124 | 1880 | 1.673 | 2575 | 3390 | 1.32 | 72.1 | 348 | 4.83 J |

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

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

Date: March 5, 2012
Salt Lake City, Utah

Remarks:

Collapse is based on a vertical depth of 2575 ft, a mud weight of 8.4 ppg. The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

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

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

| | | | |
|--------------|---|-------------|--------------|
| Well name: | 43047522820000 Morgan State 921-36F1CS | | |
| Operator: | KERR-MCGEE OIL & GAS ONSHORE, L.P. | | |
| String type: | Production | Project ID: | 43-047-52282 |
| Location: | UINTAH | COUNTY | |

Design parameters:

Collapse

Mud weight: 12.500 ppg
 Internal fluid density: 1.500 ppg

Minimum design factors:

Collapse:

Design factor 1.125

Burst:

Design factor 1.00

Environment:

H2S considered? No
 Surface temperature: 74 °F
 Bottom hole temperature: 207 °F
 Temperature gradient: 1.40 °F/100ft
 Minimum section length: 100 ft
 Cement top: 720 ft

Burst

Max anticipated surface pressure: 4,070 psi
 Internal gradient: 0.220 psi/ft
 Calculated BHP 6,155 psi

No backup mud specified.

Tension:

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

Directional Info - Build & Drop

Kick-off point 300 ft
 Departure at shoe: 404 ft
 Maximum dogleg: 2 °/100ft
 Inclination at shoe: 0 °

Tension is based on air weight.
 Neutral point: 7,738 ft

Estimated cost: 191,519 (\$)

| 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 (\$) |
|---------|---------------------|-----------|-------------------------|-------|------------|----------------------|---------------------|---------------------|----------------|
| 2 | 5000 | 4.5 | 11.60 | I-80 | DQX | 4970 | 5000 | 3.875 | 132000 |
| 1 | 4509 | 4.5 | 11.60 | I-80 | LT&C | 9479 | 9509 | 3.875 | 59519 |

| 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 |
|---------|---------------------|-------------------------|------------------------|------------------|----------------------|---------------------|---------------------|-------------------------|-----------------------|
| 2 | 2840 | 5912 | 2.082 | 5163 | 7780 | 1.51 | 110 | 267 | 2.43 J |
| 1 | 5417 | 6360 | 1.174 | 6155 | 7780 | 1.26 | 52.3 | 212 | 4.05 J |

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

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

Date: March 5, 2012
 Salt Lake City, Utah

Remarks:

Collapse is based on a vertical depth of 9479 ft, a mud weight of 12.5 ppg. An internal gradient of .078 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

Soil Type and Characteristics

very flaggy loams

Erosion Issues N**Sedimentation Issues** N**Site Stability Issues** N**Drainage Diversion Required?** N**Berm Required?** N**Erosion Sedimentation Control Required?** N**Paleo Survey Run? Paleo Potential Observed? N Cultural Survey Run? Cultural Resources? N****Reserve Pit****Site-Specific Factors****Site Ranking**

| | | |
|--|------------------|----|
| 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) | >1320 | 0 |
| Native Soil Type | Mod permeability | 10 |
| Fluid Type | Fresh Water | 5 |
| Drill Cuttings | Normal Rock | 0 |
| Annual Precipitation (inches) | 10 to 20 | 5 |
| Affected Populations | | |
| Presence Nearby Utility Conduits | Unknown | 10 |
| Final Score | | 35 |

1 Sensitivity Level

Characteristics / Requirements

Pit to be dug to a depth of 12' . Because of the likely hood of disturbance to existing sandstone bedrock and clastic basalt observed on the surface, pit underlayment is to be used to protect the line r from potential puncture. Operators representative was verbally informed of this decision and waas an integral part of the decision making.

Closed Loop Mud Required? N Liner Required? Y Liner Thickness 16 Pit Underlayment Required? Y**Other Observations / Comments**Chris Jensen
Evaluator1/11/2012
Date / Time

Application for Permit to Drill Statement of Basis

3/20/2012

Utah Division of Oil, Gas and Mining

Page 1

| | | | | | |
|------------------|--|---------------|--------------------------|-------------------|------------|
| APD No | API WellNo | Status | Well Type | Surf Owner | CBM |
| 5070 | 43047522820000 | SITLA | GW | S | No |
| Operator | KERR-MCGEE OIL & GAS ONSHORE, L.P. | | Surface Owner-APD | | |
| Well Name | Morgan State 921-36F1CS | | Unit | | |
| Field | NATURAL BUTTES | | Type of Work | DRILL | |
| Location | SENW 36 9S 21E S 1539 FNL 1794 FWL GPS Coord (UTM) 627793E 4428334N | | | | |

Geologic Statement of Basis

Kerr McGee proposes to set 2,600' 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 2,000'. A search of Division of Water Rights records shows one water well within a 10,000 foot radius of the center of Section 36. The well is listed as 2,640 feet deep and used for drilling water. 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
APD Evaluator

2/1/2012
Date / Time

Surface Statement of Basis

Location is an existing well pad in the Morgan State unit which is within the Natural Buttes unit in southern Uintah county. There are deep drainages close to the proposed activities which are eventual tributaries to the White river. Because the soil is erodible and any spills may readily reach the dry wash, pad is to be bermed and stockpiles act as a buffer for these hydrologic features. Due to the rock within the soils and likely hood of disturbance to sandstone bedrock, the pit is to be underlined to prevent puncture. The operators representative was present and an integral part of this decision. This location is very near other disturbances previously permitted for gas recovery.

Chris Jensen
Onsite Evaluator

1/11/2012
Date / Time

Conditions of Approval / Application for Permit to Drill

| Category | Condition |
|-----------------|---|
| Pits | A synthetic liner with a minimum thickness of 16 mils with a felt subliner shall be properly installed and maintained in the reserve pit. |
| Surface | Drainages adjacent to the proposed pad shall be diverted around the location. |
| Surface | The reserve pit shall be fenced upon completion of drilling operations. |

WORKSHEET APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 12/19/2011

API NO. ASSIGNED: 43047522820000

WELL NAME: Morgan State 921-36F1CS

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

PHONE NUMBER: 720 929-6156

CONTACT: Danielle Piernot

PROPOSED LOCATION: SENW 36 090S 210E

Permit Tech Review:

SURFACE: 1539 FNL 1794 FWL

Engineering Review:

BOTTOM: 1740 FNL 2144 FWL

Geology Review:

COUNTY: UINTAH

LATITUDE: 39.99552

LONGITUDE: -109.50301

UTM SURF EASTINGS: 627793.00

NORTHINGS: 4428334.00

FIELD NAME: NATURAL BUTTES

LEASE TYPE: 3 - State

LEASE NUMBER: ML 22265

PROPOSED PRODUCING FORMATION(S): BLACKHAWK

SURFACE OWNER: 3 - State

COALBED METHANE: NO

RECEIVED AND/OR REVIEWED:

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

Commingle Approved

LOCATION AND SITING:

- R649-2-3.
- Unit:
- R649-3-2. General
- R649-3-3. Exception
- Drilling Unit
- Board Cause No: Cause 173-24
- Effective Date: 10/5/2009
- Siting: 460' Fr Exterior Lease Boundary
- R649-3-11. Directional Drill

Comments: Presite Completed

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



GARY R. HERBERT
Governor

GREGORY S. BELL
Lieutenant Governor

State of Utah

DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER
Executive Director

Division of Oil, Gas and Mining

JOHN R. BAZA
Division Director

Permit To Drill

Well Name: Morgan State 921-36F1CS
API Well Number: 43047522820000
Lease Number: ML 22265
Surface Owner: STATE
Approval Date: 3/20/2012

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 173-24. The expected producing formation or pool is the BLACKHAWK 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. 173-24, 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:

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

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.

Surface casing shall be cemented to the surface.

Additional Approvals:

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

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

Notification Requirements:

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

- Within 24 hours following the spudding of the well - contact Carol Daniels
OR
submit an electronic sundry notice (pre-registration required) via the Utah Oil & Gas website
at <http://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:

A handwritten signature in black ink, appearing to read "J. Rogers", written in a cursive style.

For John Rogers
Associate Director, Oil & Gas

| | |
|--|--|
| STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING | FORM 9 |
| SUNDRY NOTICES AND REPORTS ON WELLS Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals. | 5. LEASE DESIGNATION AND SERIAL NUMBER: ML 22265 |
| 1. TYPE OF WELL Gas Well | 6. IF INDIAN, ALLOTTEE OR TRIBE NAME: 7. UNIT or CA AGREEMENT NAME: |
| 2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P. | 8. WELL NAME and NUMBER: Morgan State 921-36F1CS |
| 3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779 | 9. API NUMBER: 43047522820000 |
| 4. LOCATION OF WELL FOOTAGES AT SURFACE: 1539 FNL 1794 FWL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SENW Section: 36 Township: 09.0S Range: 21.0E Meridian: S | 9. FIELD and POOL or WILDCAT: MORGAN STATE LATERAL BUTTES |
| | COUNTY: UINTAH |
| | STATE: UTAH |

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

| TYPE OF SUBMISSION | TYPE OF ACTION | | |
|--|--|---|---|
| <input type="checkbox"/> NOTICE OF INTENT Approximate date work will start: | <input type="checkbox"/> ACIDIZE | <input type="checkbox"/> ALTER CASING | <input type="checkbox"/> CASING REPAIR |
| <input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion: | <input type="checkbox"/> CHANGE TO PREVIOUS PLANS | <input type="checkbox"/> CHANGE TUBING | <input type="checkbox"/> CHANGE WELL NAME |
| <input checked="" type="checkbox"/> SPUD REPORT Date of Spud: 5/26/2012 | <input type="checkbox"/> CHANGE WELL STATUS | <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS | <input type="checkbox"/> CONVERT WELL TYPE |
| <input type="checkbox"/> DRILLING REPORT Report Date: | <input type="checkbox"/> DEEPEN | <input type="checkbox"/> FRACTURE TREAT | <input type="checkbox"/> NEW CONSTRUCTION |
| | <input type="checkbox"/> OPERATOR CHANGE | <input type="checkbox"/> PLUG AND ABANDON | <input type="checkbox"/> PLUG BACK |
| | <input type="checkbox"/> PRODUCTION START OR RESUME | <input type="checkbox"/> RECLAMATION OF WELL SITE | <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION |
| | <input type="checkbox"/> REPERFORATE CURRENT FORMATION | <input type="checkbox"/> SIDETRACK TO REPAIR WELL | <input type="checkbox"/> TEMPORARY ABANDON |
| | <input type="checkbox"/> TUBING REPAIR | <input type="checkbox"/> VENT OR FLARE | <input type="checkbox"/> WATER DISPOSAL |
| | <input type="checkbox"/> WATER SHUTOFF | <input type="checkbox"/> SI TA STATUS EXTENSION | <input type="checkbox"/> APD EXTENSION |
| | <input type="checkbox"/> WILDCAT WELL DETERMINATION | <input type="checkbox"/> OTHER | OTHER: <input style="width: 100px;" type="text"/> |

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

MIRU TRIPPLE A BUCKET RIG. DRILLED 20" CONDUCTOR HOLE TO 40'.
 RAN 14" 36.7# SCHEDULE 10 PIPE. CMT W/28 SX READY MIX. SPUD
 WELL ON 05/26/2012 AT 1500 HRS.

Accepted by the
Utah Division of
Oil, Gas and Mining
FOR RECORD ONLY
 May 30, 2012

| | | |
|--|-------------------------------------|------------------------------------|
| NAME (PLEASE PRINT) Sheila Wopsock | PHONE NUMBER 435 781-7024 | TITLE Regulatory Analyst |
| SIGNATURE N/A | DATE 5/29/2012 | |

BLM - Vernal Field Office - Notification Form

Operator KERR-McGEE OIL & GAS Rig Name/# BUCKET RIG
 Submitted By J. Scharnowske Phone Number 720.929.6304
 Well Name/Number MORGAN STATE 921-36F1CS
 Qtr/Qtr SENW Section 36 Township 9S Range 21E
 Lease Serial Number ML 22265
 API Number 4304752282

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

Date/Time 05/25/2012 07:00 HRS AM PM

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

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

RECEIVED
MAY 24 2012
 DIV. OF OIL, GAS & MINING

Date/Time 06/04/2012 08:00 HRS AM PM

BOPE

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

Date/Time _____ AM PM

Remarks ESTIMATED DATE AND TIME. PLEASE CONTACT KENNY GATHINGS AT
435.828.0986 OR LOVEL YOUNG AT 435.781.7051

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

FORM 6

ENTITY ACTION FORM

Operator: KERR MCGEE OIL & GAS ONSHORE LP Operator Account Number: N 2995
 Address: 1368 SOUTH 1200 EAST
city VERNAL
state UT zip 84078 Phone Number: (435) 781-7024

Well 1

| API Number | Well Name | | QQ | Sec | Twp | Rng | County |
|--|-------------------------|-------------------|-----------|-----|----------------------------------|-----|--------|
| 4304752282 | MORGAN STATE 921-36F1CS | | SEnw | 36 | 9S | 21E | UINTAH |
| Action Code | Current Entity Number | New Entity Number | Spud Date | | Entity Assignment Effective Date | | |
| A | 99999 | 18553 | 5/26/2012 | | 5/30/2012 | | |
| Comments: MIRU TRIPPLE A BUCKET RIG. MVRD SPUD WELL ON 05/26/2012 AT 1500 HRS. BHL: Senw | | | | | | | |

Well 2

| API Number | Well Name | | QQ | Sec | Twp | Rng | County |
|------------------|-----------------------|-------------------|-----------|-----|----------------------------------|-----|--------|
| | | | | | | | |
| Action Code | Current Entity Number | New Entity Number | Spud Date | | Entity Assignment Effective Date | | |
| | | | | | | | |
| Comments: | | | | | | | |

Well 3

| API Number | Well Name | | QQ | Sec | Twp | Rng | County |
|------------------|-----------------------|-------------------|-----------|-----|----------------------------------|-----|--------|
| | | | | | | | |
| Action Code | Current Entity Number | New Entity Number | Spud Date | | Entity Assignment Effective Date | | |
| | | | | | | | |
| Comments: | | | | | | | |

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)

SHEILA WOPSOCK

Name (Please Print)

Signature

REGULATORY ANALYST

5/29/2012

Title

Date

RECEIVED

MAY 30 2012

(5/2000)

Div. of Oil, Gas & Mining

| STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING | | FORM 9 |
|---|--|--|
| | | 5. LEASE DESIGNATION AND SERIAL NUMBER: ML 22265 |
| SUNDRY NOTICES AND REPORTS ON WELLS | | 6. IF INDIAN, ALLOTTEE OR TRIBE NAME: |
| Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals. | | 7. UNIT or CA AGREEMENT NAME: |
| 1. TYPE OF WELL Gas Well | | 8. WELL NAME and NUMBER: Morgan State 921-36F1CS |
| 2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P. | | 9. API NUMBER: 43047522820000 |
| 3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779 | PHONE NUMBER: 720 929-6511 | 9. FIELD and POOL or WILDCAT: MATERIAL BUTTES |
| 4. LOCATION OF WELL FOOTAGES AT SURFACE: 1539 FNL 1794 FWL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SENW Section: 36 Township: 09.0S Range: 21.0E Meridian: S | | COUNTY: UINTAH |
| | | STATE: UTAH |
| 11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA | | |
| TYPE OF SUBMISSION | TYPE OF ACTION | |
| <input type="checkbox"/> NOTICE OF INTENT Approximate date work will start: <input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion: <input type="checkbox"/> SPUD REPORT Date of Spud: <input checked="" type="checkbox"/> DRILLING REPORT Report Date: 6/19/2012 | <input type="checkbox"/> ACIDIZE <input type="checkbox"/> CHANGE TO PREVIOUS PLANS <input type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> DEEPEN <input type="checkbox"/> OPERATOR CHANGE <input type="checkbox"/> PRODUCTION START OR RESUME <input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> WATER SHUTOFF <input type="checkbox"/> WILDCAT WELL DETERMINATION <input type="checkbox"/> ALTER CASING <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input type="checkbox"/> FRACTURE TREAT <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> SI TA STATUS EXTENSION <input type="checkbox"/> OTHER | |
| | <input type="checkbox"/> CASING REPAIR <input type="checkbox"/> CHANGE WELL NAME <input type="checkbox"/> CONVERT WELL TYPE <input type="checkbox"/> NEW CONSTRUCTION <input type="checkbox"/> PLUG BACK <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION <input type="checkbox"/> TEMPORARY ABANDON <input type="checkbox"/> WATER DISPOSAL <input type="checkbox"/> APD EXTENSION OTHER: <input type="text"/> | |
| 12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc. | | |
| MIRU AIR RIG ON 6/17/2012. DRILLED SURFACE HOLE TO 2645'. RAN SURFACE CASING AND CEMENTED. WELL IS WAITING ON ROTARY RIG. DETAILS OF CEMENT JOB WILL BE INCLUDED WITH WELL COMPLETION REPORT. | | |
| Accepted by the Utah Division of Oil, Gas and Mining FOR RECORD ONLY June 21, 2012 | | |
| NAME (PLEASE PRINT) Cara Mahler | PHONE NUMBER 720 929-6029 | TITLE Regulatory Analyst I |
| SIGNATURE N/A | | DATE 6/21/2012 |

| | |
|--|--|
| STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING | FORM 9 5. LEASE DESIGNATION AND SERIAL NUMBER: ML 22265 |
| SUNDRY NOTICES AND REPORTS ON WELLS Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals. | 6. IF INDIAN, ALLOTTEE OR TRIBE NAME: 7. UNIT or CA AGREEMENT NAME: |
| 1. TYPE OF WELL Gas Well | 8. WELL NAME and NUMBER: Morgan State 921-36F1CS |
| 2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P. | 9. API NUMBER: 43047522820000 |
| 3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779 | PHONE NUMBER: 720 929-6511 9. FIELD and POOL or WILDCAT: NATURAL BUTTES |
| 4. LOCATION OF WELL FOOTAGES AT SURFACE: 1539 FNL 1794 FWL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SENW Section: 36 Township: 09.0S Range: 21.0E Meridian: S | COUNTY: UINTAH STATE: UTAH |

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

| TYPE OF SUBMISSION | TYPE OF ACTION | | |
|---|--|---|---|
| <input type="checkbox"/> NOTICE OF INTENT Approximate date work will start: | <input type="checkbox"/> ACIDIZE | <input type="checkbox"/> ALTER CASING | <input type="checkbox"/> CASING REPAIR |
| <input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion: | <input type="checkbox"/> CHANGE TO PREVIOUS PLANS | <input type="checkbox"/> CHANGE TUBING | <input type="checkbox"/> CHANGE WELL NAME |
| <input type="checkbox"/> SPUD REPORT Date of Spud: | <input type="checkbox"/> CHANGE WELL STATUS | <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS | <input type="checkbox"/> CONVERT WELL TYPE |
| <input checked="" type="checkbox"/> DRILLING REPORT Report Date: 8/2/2012 | <input type="checkbox"/> DEEPEN | <input type="checkbox"/> FRACTURE TREAT | <input type="checkbox"/> NEW CONSTRUCTION |
| | <input type="checkbox"/> OPERATOR CHANGE | <input type="checkbox"/> PLUG AND ABANDON | <input type="checkbox"/> PLUG BACK |
| | <input type="checkbox"/> PRODUCTION START OR RESUME | <input type="checkbox"/> RECLAMATION OF WELL SITE | <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION |
| | <input type="checkbox"/> REPERFORATE CURRENT FORMATION | <input type="checkbox"/> SIDETRACK TO REPAIR WELL | <input type="checkbox"/> TEMPORARY ABANDON |
| | <input type="checkbox"/> TUBING REPAIR | <input type="checkbox"/> VENT OR FLARE | <input type="checkbox"/> WATER DISPOSAL |
| | <input type="checkbox"/> WATER SHUTOFF | <input type="checkbox"/> SI TA STATUS EXTENSION | <input type="checkbox"/> APD EXTENSION |
| | <input type="checkbox"/> WILDCAT WELL DETERMINATION | <input type="checkbox"/> OTHER | OTHER: <input style="width: 100px;" type="text"/> |

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

No activity for the month of July 2012. Surface casing set at 2,645'.

Accepted by the
Utah Division of
Oil, Gas and Mining
FOR RECORD ONLY
 August 07, 2012

| | | |
|---|-------------------------------------|--------------------------------------|
| NAME (PLEASE PRINT) Cara Mahler | PHONE NUMBER 720 929-6029 | TITLE Regulatory Analyst I |
| SIGNATURE N/A | DATE 8/2/2012 | |

| | |
|--|---|
| STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING | FORM 9 5. LEASE DESIGNATION AND SERIAL NUMBER: ML 22265 |
| SUNDRY NOTICES AND REPORTS ON WELLS Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals. | 6. IF INDIAN, ALLOTTEE OR TRIBE NAME: 7. UNIT or CA AGREEMENT NAME: |
| 1. TYPE OF WELL Gas Well | 8. WELL NAME and NUMBER: MORGAN STATE 921-36F1CS |
| 2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P. | 9. API NUMBER: 43047522820000 |
| 3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779 | PHONE NUMBER: 720 929-6511 9. FIELD and POOL or WILDCAT: MORGAN STATE BUTTES |
| 4. LOCATION OF WELL FOOTAGES AT SURFACE: 1539 FNL 1794 FWL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SENW Section: 36 Township: 09.0S Range: 21.0E Meridian: S | COUNTY: UINTAH STATE: UTAH |

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

| TYPE OF SUBMISSION | TYPE OF ACTION | | |
|---|--|---|---|
| <input type="checkbox"/> NOTICE OF INTENT Approximate date work will start: | <input type="checkbox"/> ACIDIZE | <input type="checkbox"/> ALTER CASING | <input type="checkbox"/> CASING REPAIR |
| <input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion: | <input type="checkbox"/> CHANGE TO PREVIOUS PLANS | <input type="checkbox"/> CHANGE TUBING | <input type="checkbox"/> CHANGE WELL NAME |
| <input type="checkbox"/> SPUD REPORT Date of Spud: | <input type="checkbox"/> CHANGE WELL STATUS | <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS | <input type="checkbox"/> CONVERT WELL TYPE |
| <input checked="" type="checkbox"/> DRILLING REPORT Report Date: 9/5/2012 | <input type="checkbox"/> DEEPEN | <input type="checkbox"/> FRACTURE TREAT | <input type="checkbox"/> NEW CONSTRUCTION |
| | <input type="checkbox"/> OPERATOR CHANGE | <input type="checkbox"/> PLUG AND ABANDON | <input type="checkbox"/> PLUG BACK |
| | <input type="checkbox"/> PRODUCTION START OR RESUME | <input type="checkbox"/> RECLAMATION OF WELL SITE | <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION |
| | <input type="checkbox"/> REPERFORATE CURRENT FORMATION | <input type="checkbox"/> SIDETRACK TO REPAIR WELL | <input type="checkbox"/> TEMPORARY ABANDON |
| | <input type="checkbox"/> TUBING REPAIR | <input type="checkbox"/> VENT OR FLARE | <input type="checkbox"/> WATER DISPOSAL |
| | <input type="checkbox"/> WATER SHUTOFF | <input type="checkbox"/> SI TA STATUS EXTENSION | <input type="checkbox"/> APD EXTENSION |
| | <input type="checkbox"/> WILDCAT WELL DETERMINATION | <input type="checkbox"/> OTHER | OTHER: <input style="width: 100px;" type="text"/> |

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

No Activity for the month of August 2012. Well TD at 2,660

**Accepted by the
 Utah Division of
 Oil, Gas and Mining
 FOR RECORD ONLY
 September 05, 2012**

| | | |
|--|------------------------------|--------------------------------|
| NAME (PLEASE PRINT) Lindsey Frazier | PHONE NUMBER 720 929-6857 | TITLE Regulatory Analyst II |
| SIGNATURE N/A | DATE 9/5/2012 | |

| | |
|--|---|
| STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING | FORM 9 5. LEASE DESIGNATION AND SERIAL NUMBER: ML 22265 |
| SUNDRY NOTICES AND REPORTS ON WELLS Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals. | 6. IF INDIAN, ALLOTTEE OR TRIBE NAME: 7. UNIT or CA AGREEMENT NAME: |
| 1. TYPE OF WELL Gas Well | 8. WELL NAME and NUMBER: MORGAN STATE 921-36F1CS |
| 2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P. | 9. API NUMBER: 43047522820000 |
| 3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779 | PHONE NUMBER: 720 929-6511 9. FIELD and POOL or WILDCAT: MORGAN STATE BUTTES |
| 4. LOCATION OF WELL FOOTAGES AT SURFACE: 1539 FNL 1794 FWL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SENW Section: 36 Township: 09.0S Range: 21.0E Meridian: S | COUNTY: UINTAH STATE: UTAH |

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

| TYPE OF SUBMISSION | TYPE OF ACTION | | |
|--|--|---|---|
| <input type="checkbox"/> NOTICE OF INTENT Approximate date work will start: | <input type="checkbox"/> ACIDIZE | <input type="checkbox"/> ALTER CASING | <input type="checkbox"/> CASING REPAIR |
| <input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion: | <input type="checkbox"/> CHANGE TO PREVIOUS PLANS | <input type="checkbox"/> CHANGE TUBING | <input type="checkbox"/> CHANGE WELL NAME |
| <input type="checkbox"/> SPUD REPORT Date of Spud: | <input type="checkbox"/> CHANGE WELL STATUS | <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS | <input type="checkbox"/> CONVERT WELL TYPE |
| <input checked="" type="checkbox"/> DRILLING REPORT Report Date: 9/18/2012 | <input type="checkbox"/> DEEPEN | <input type="checkbox"/> FRACTURE TREAT | <input type="checkbox"/> NEW CONSTRUCTION |
| | <input type="checkbox"/> OPERATOR CHANGE | <input type="checkbox"/> PLUG AND ABANDON | <input type="checkbox"/> PLUG BACK |
| | <input type="checkbox"/> PRODUCTION START OR RESUME | <input type="checkbox"/> RECLAMATION OF WELL SITE | <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION |
| | <input type="checkbox"/> REPERFORATE CURRENT FORMATION | <input type="checkbox"/> SIDETRACK TO REPAIR WELL | <input type="checkbox"/> TEMPORARY ABANDON |
| | <input type="checkbox"/> TUBING REPAIR | <input type="checkbox"/> VENT OR FLARE | <input type="checkbox"/> WATER DISPOSAL |
| | <input type="checkbox"/> WATER SHUTOFF | <input type="checkbox"/> SI TA STATUS EXTENSION | <input type="checkbox"/> APD EXTENSION |
| | <input type="checkbox"/> WILDCAT WELL DETERMINATION | <input type="checkbox"/> OTHER | OTHER: <input style="width: 100px;" type="text"/> |

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

FINISHED DRILLING TO 9,505.00' ON 09/17/2012. CEMENTED PRODUCTION CASING. RELEASED H&P 318 RIG ON 09/18/2012. DETAILS OF CASING AND CEMENT WILL BE INCLUDED WITH THE WELL COMPLETION REPORT. WELL IS WAITING ON FINAL COMPLETION ACTIVITIES.

**Accepted by the
 Utah Division of
 Oil, Gas and Mining
 FOR RECORD ONLY
 September 20, 2012**

| | | |
|---|-------------------------------------|---------------------------------------|
| NAME (PLEASE PRINT) Lindsey Frazier | PHONE NUMBER 720 929-6857 | TITLE Regulatory Analyst II |
| SIGNATURE N/A | DATE 9/20/2012 | |

| | | |
|--|--|---|
| STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING | | FORM 9 |
| SUNDRY NOTICES AND REPORTS ON WELLS Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals. | | 5. LEASE DESIGNATION AND SERIAL NUMBER: ML 22265 |
| | | 6. IF INDIAN, ALLOTTEE OR TRIBE NAME: |
| | | 7. UNIT or CA AGREEMENT NAME: |
| 1. TYPE OF WELL Gas Well | 8. WELL NAME and NUMBER: MORGAN STATE 921-36F1CS | |
| 2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P. | 9. API NUMBER: 43047522820000 | |
| 3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779 | PHONE NUMBER: 720 929-6511 | 9. FIELD and POOL or WILDCAT: MORGAN STATE BUTTES |
| 4. LOCATION OF WELL FOOTAGES AT SURFACE: 1539 FNL 1794 FWL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SENW Section: 36 Township: 09.0S Range: 21.0E Meridian: S | COUNTY: UINTAH | |
| | | STATE: UTAH |
| 11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA | | |
| TYPE OF SUBMISSION | TYPE OF ACTION | |
| <input type="checkbox"/> NOTICE OF INTENT Approximate date work will start: | <input type="checkbox"/> ACIDIZE <input type="checkbox"/> ALTER CASING <input type="checkbox"/> CASING REPAIR <input type="checkbox"/> CHANGE TO PREVIOUS PLANS <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> CHANGE WELL NAME <input type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input type="checkbox"/> CONVERT WELL TYPE <input type="checkbox"/> DEEPEN <input type="checkbox"/> FRACTURE TREAT <input type="checkbox"/> NEW CONSTRUCTION <input type="checkbox"/> OPERATOR CHANGE <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> PLUG BACK <input type="checkbox"/> PRODUCTION START OR RESUME <input type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION <input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> TEMPORARY ABANDON <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> WATER DISPOSAL <input type="checkbox"/> WATER SHUTOFF <input type="checkbox"/> SI TA STATUS EXTENSION <input type="checkbox"/> WILDCAT WELL DETERMINATION <input type="checkbox"/> OTHER | |
| <input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion: | | |
| <input type="checkbox"/> SPUD REPORT Date of Spud: | | |
| <input checked="" type="checkbox"/> DRILLING REPORT Report Date: 11/5/2012 | | |
| 12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc. No Activity for the month of October 2012. Well TD at 9,505. | | |
| Accepted by the Utah Division of Oil, Gas and Mining FOR RECORD ONLY November 05, 2012 | | |
| NAME (PLEASE PRINT) Jaime Scharnowske | PHONE NUMBER 720 929-6304 | TITLE Regularatory Analyst |
| SIGNATURE N/A | DATE 11/5/2012 | |

| | |
|--|---|
| STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING | FORM 9 |
| SUNDRY NOTICES AND REPORTS ON WELLS Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals. | 5. LEASE DESIGNATION AND SERIAL NUMBER: ML 22265 |
| 1. TYPE OF WELL Gas Well | 6. IF INDIAN, ALLOTTEE OR TRIBE NAME: 7. UNIT or CA AGREEMENT NAME: |
| 2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P. | 8. WELL NAME and NUMBER: MORGAN STATE 921-36F1CS |
| 3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779 | 9. API NUMBER: 43047522820000 |
| 4. LOCATION OF WELL FOOTAGES AT SURFACE: 1539 FNL 1794 FWL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SENW Section: 36 Township: 09.0S Range: 21.0E Meridian: S | 9. FIELD and POOL or WILDCAT: MORGAN STATE LATERAL BUTTES COUNTY: UINTAH STATE: UTAH |

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

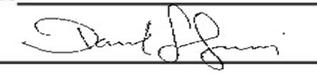
| TYPE OF SUBMISSION | TYPE OF ACTION | | |
|--|--|---|---|
| <input type="checkbox"/> NOTICE OF INTENT Approximate date work will start: | <input type="checkbox"/> ACIDIZE | <input type="checkbox"/> ALTER CASING | <input type="checkbox"/> CASING REPAIR |
| <input checked="" type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion: 11/8/2012 | <input type="checkbox"/> CHANGE TO PREVIOUS PLANS | <input type="checkbox"/> CHANGE TUBING | <input type="checkbox"/> CHANGE WELL NAME |
| <input type="checkbox"/> SPUD REPORT Date of Spud: | <input type="checkbox"/> CHANGE WELL STATUS | <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS | <input type="checkbox"/> CONVERT WELL TYPE |
| <input type="checkbox"/> DRILLING REPORT Report Date: | <input type="checkbox"/> DEEPEN | <input type="checkbox"/> FRACTURE TREAT | <input type="checkbox"/> NEW CONSTRUCTION |
| | <input type="checkbox"/> OPERATOR CHANGE | <input type="checkbox"/> PLUG AND ABANDON | <input type="checkbox"/> PLUG BACK |
| | <input type="checkbox"/> PRODUCTION START OR RESUME | <input type="checkbox"/> RECLAMATION OF WELL SITE | <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION |
| | <input type="checkbox"/> REPERFORATE CURRENT FORMATION | <input type="checkbox"/> SIDETRACK TO REPAIR WELL | <input type="checkbox"/> TEMPORARY ABANDON |
| | <input type="checkbox"/> TUBING REPAIR | <input type="checkbox"/> VENT OR FLARE | <input type="checkbox"/> WATER DISPOSAL |
| | <input type="checkbox"/> WATER SHUTOFF | <input type="checkbox"/> SI TA STATUS EXTENSION | <input type="checkbox"/> APD EXTENSION |
| | <input type="checkbox"/> WILDCAT WELL DETERMINATION | <input checked="" type="checkbox"/> OTHER | OTHER: <input type="text" value="ACTS PIT"/> |

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

THE PIT ON THIS LOCATION WILL BE REFURBISHED AND UTILIZED AS PART OF THE ACTS SYSTEM.

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

Date: November 27, 2012

By: 

| | | |
|---|-------------------------------------|---------------------------------------|
| NAME (PLEASE PRINT) Lindsey Frazier | PHONE NUMBER 720 929-6857 | TITLE Regulatory Analyst II |
| SIGNATURE N/A | DATE 11/8/2012 | |

| | |
|--|--|
| STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING | FORM 9 |
| SUNDRY NOTICES AND REPORTS ON WELLS Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals. | 5. LEASE DESIGNATION AND SERIAL NUMBER: ML 22265 |
| 1. TYPE OF WELL Gas Well | 6. IF INDIAN, ALLOTTEE OR TRIBE NAME: 7. UNIT or CA AGREEMENT NAME: |
| 2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P. | 8. WELL NAME and NUMBER: MORGAN STATE 921-36F1CS |
| 3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779 | PHONE NUMBER: 720 929-6511 |
| 4. LOCATION OF WELL FOOTAGES AT SURFACE: 1539 FNL 1794 FWL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SENW Section: 36 Township: 09.0S Range: 21.0E Meridian: S | 9. FIELD and POOL or WILDCAT: MORGAN STATE BUTTES |
| COUNTY: UINTAH | |
| STATE: UTAH | |

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

| TYPE OF SUBMISSION | TYPE OF ACTION | | |
|--|--|---|---|
| <input type="checkbox"/> NOTICE OF INTENT Approximate date work will start: | <input type="checkbox"/> ACIDIZE | <input type="checkbox"/> ALTER CASING | <input type="checkbox"/> CASING REPAIR |
| <input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion: | <input type="checkbox"/> CHANGE TO PREVIOUS PLANS | <input type="checkbox"/> CHANGE TUBING | <input type="checkbox"/> CHANGE WELL NAME |
| <input type="checkbox"/> SPUD REPORT Date of Spud: | <input type="checkbox"/> CHANGE WELL STATUS | <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS | <input type="checkbox"/> CONVERT WELL TYPE |
| <input checked="" type="checkbox"/> DRILLING REPORT Report Date: 12/3/2012 | <input type="checkbox"/> DEEPEN | <input type="checkbox"/> FRACTURE TREAT | <input type="checkbox"/> NEW CONSTRUCTION |
| | <input type="checkbox"/> OPERATOR CHANGE | <input type="checkbox"/> PLUG AND ABANDON | <input type="checkbox"/> PLUG BACK |
| | <input type="checkbox"/> PRODUCTION START OR RESUME | <input type="checkbox"/> RECLAMATION OF WELL SITE | <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION |
| | <input type="checkbox"/> REPERFORATE CURRENT FORMATION | <input type="checkbox"/> SIDETRACK TO REPAIR WELL | <input type="checkbox"/> TEMPORARY ABANDON |
| | <input type="checkbox"/> TUBING REPAIR | <input type="checkbox"/> VENT OR FLARE | <input type="checkbox"/> WATER DISPOSAL |
| | <input type="checkbox"/> WATER SHUTOFF | <input type="checkbox"/> SI TA STATUS EXTENSION | <input type="checkbox"/> APD EXTENSION |
| | <input type="checkbox"/> WILDCAT WELL DETERMINATION | <input type="checkbox"/> OTHER | OTHER: <input style="width: 100px;" type="text"/> |

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

No Activity for the month of November 2012. Well TD at 9,505.

Accepted by the
Utah Division of
Oil, Gas and Mining
FOR RECORD ONLY
 December 03, 2012

| | | |
|---|-------------------------------------|--------------------------------------|
| NAME (PLEASE PRINT) Jaime Scharnowske | PHONE NUMBER 720 929-6304 | TITLE Regularatory Analyst |
| SIGNATURE N/A | DATE 12/3/2012 | |

| | |
|--|--|
| STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING | FORM 9 |
| SUNDRY NOTICES AND REPORTS ON WELLS Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals. | 5. LEASE DESIGNATION AND SERIAL NUMBER: ML 22265 |
| 1. TYPE OF WELL Gas Well | 6. IF INDIAN, ALLOTTEE OR TRIBE NAME: 7. UNIT or CA AGREEMENT NAME: |
| 2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P. | 8. WELL NAME and NUMBER: MORGAN STATE 921-36F1CS |
| 3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779 | 9. API NUMBER: 43047522820000 |
| 4. LOCATION OF WELL FOOTAGES AT SURFACE: 1539 FNL 1794 FWL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SENW Section: 36 Township: 09.0S Range: 21.0E Meridian: S | 9. FIELD and POOL or WILDCAT: 51416 LATERAL BUTTES COUNTY: UINTAH STATE: UTAH |

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

| TYPE OF SUBMISSION | TYPE OF ACTION | | |
|---|--|---|---|
| <input type="checkbox"/> NOTICE OF INTENT Approximate date work will start: | <input type="checkbox"/> ACIDIZE | <input type="checkbox"/> ALTER CASING | <input type="checkbox"/> CASING REPAIR |
| <input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion: | <input type="checkbox"/> CHANGE TO PREVIOUS PLANS | <input type="checkbox"/> CHANGE TUBING | <input type="checkbox"/> CHANGE WELL NAME |
| <input type="checkbox"/> SPUD REPORT Date of Spud: | <input type="checkbox"/> CHANGE WELL STATUS | <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS | <input type="checkbox"/> CONVERT WELL TYPE |
| <input checked="" type="checkbox"/> DRILLING REPORT Report Date: 1/3/2013 | <input type="checkbox"/> DEEPEN | <input type="checkbox"/> FRACTURE TREAT | <input type="checkbox"/> NEW CONSTRUCTION |
| | <input type="checkbox"/> OPERATOR CHANGE | <input type="checkbox"/> PLUG AND ABANDON | <input type="checkbox"/> PLUG BACK |
| | <input type="checkbox"/> PRODUCTION START OR RESUME | <input type="checkbox"/> RECLAMATION OF WELL SITE | <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION |
| | <input type="checkbox"/> REPERFORATE CURRENT FORMATION | <input type="checkbox"/> SIDETRACK TO REPAIR WELL | <input type="checkbox"/> TEMPORARY ABANDON |
| | <input type="checkbox"/> TUBING REPAIR | <input type="checkbox"/> VENT OR FLARE | <input type="checkbox"/> WATER DISPOSAL |
| | <input type="checkbox"/> WATER SHUTOFF | <input type="checkbox"/> SI TA STATUS EXTENSION | <input type="checkbox"/> APD EXTENSION |
| | <input type="checkbox"/> WILDCAT WELL DETERMINATION | <input type="checkbox"/> OTHER | OTHER: <input style="width: 100px;" type="text"/> |

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

No Activity for the month of December 2012. Well TD at 9,505

**Accepted by the
 Utah Division of
 Oil, Gas and Mining
 FOR RECORD ONLY
 January 07, 2013**

| | | |
|--|-------------------------------------|---------------------------------------|
| NAME (PLEASE PRINT) Laura Abrams | PHONE NUMBER 720 929-6356 | TITLE Regulatory Analyst II |
| SIGNATURE N/A | DATE 1/3/2013 | |

| STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING | | FORM 9 |
|---|---|---|
| SUNDRY NOTICES AND REPORTS ON WELLS | | 5. LEASE DESIGNATION AND SERIAL NUMBER: ML 22265 |
| Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals. | | 6. IF INDIAN, ALLOTTEE OR TRIBE NAME: |
| | | 7. UNIT or CA AGREEMENT NAME: |
| 1. TYPE OF WELL Gas Well | 8. WELL NAME and NUMBER: MORGAN STATE 921-36F1CS | |
| 2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P. | 9. API NUMBER: 43047522820000 | |
| 3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779 | PHONE NUMBER: 720 929-6511 | 9. FIELD and POOL or WILDCAT: MATERIAL BUTTES |
| 4. LOCATION OF WELL FOOTAGES AT SURFACE: 1539 FNL 1794 FWL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SENW Section: 36 Township: 09.0S Range: 21.0E Meridian: S | COUNTY: UINTAH | |
| | STATE: UTAH | |
| 11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA | | |
| TYPE OF SUBMISSION | TYPE OF ACTION | |
| <input type="checkbox"/> NOTICE OF INTENT Approximate date work will start: <input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion: <input type="checkbox"/> SPUD REPORT Date of Spud: <input checked="" type="checkbox"/> DRILLING REPORT Report Date: 1/30/2013 | <input type="checkbox"/> ACIDIZE <input type="checkbox"/> ALTER CASING <input type="checkbox"/> CHANGE TO PREVIOUS PLANS <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input type="checkbox"/> DEEPEN <input type="checkbox"/> FRACTURE TREAT <input type="checkbox"/> OPERATOR CHANGE <input type="checkbox"/> PLUG AND ABANDON <input checked="" type="checkbox"/> PRODUCTION START OR RESUME <input type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> WATER SHUTOFF <input type="checkbox"/> SI TA STATUS EXTENSION <input type="checkbox"/> WILDCAT WELL DETERMINATION <input type="checkbox"/> OTHER | |
| | | <input type="checkbox"/> CASING REPAIR <input type="checkbox"/> CHANGE WELL NAME <input type="checkbox"/> CONVERT WELL TYPE <input type="checkbox"/> NEW CONSTRUCTION <input type="checkbox"/> PLUG BACK <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION <input type="checkbox"/> TEMPORARY ABANDON <input type="checkbox"/> WATER DISPOSAL <input type="checkbox"/> APD EXTENSION OTHER: <input type="text"/> |
| 12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc. | | |
| <p>The subject well was placed on production on 01/30/2013. The Chronological Well History will be submitted with the well completion report.</p> | | |
| <p>Accepted by the Utah Division of Oil, Gas and Mining FOR RECORD ONLY January 31, 2013</p> | | |
| NAME (PLEASE PRINT) Lindsey Frazier | PHONE NUMBER 720 929-6857 | TITLE Regulatory Analyst II |
| SIGNATURE N/A | DATE 1/31/2013 | |

RECEIVED

MAR 05 2013

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

DIV. OF OIL, GAS & MINING

AMENDED REPORT []
(highlight changes)

FORM 8

LEASE DESIGNATION AND SERIAL NUMBER:
ML 22265

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

1a. TYPE OF WELL: OIL WELL [] GAS WELL [x] DRY [] OTHER []
b. TYPE OF WORK: NEW WELL [x] HORIZ. LATS. [] DEEP-EN [] RE-ENTRY [] DIFF. RESVR. [] OTHER []

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT or CA AGREEMENT NAME

8. WELL NAME and NUMBER:
MORGAN STATE 921-36F1CS

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

9. API NUMBER:
4304752282

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

PHONE NUMBER:
(720) 929-6000

10 FIELD AND POOL, OR WILDCAT
NATURAL BUTTES

4. LOCATION OF WELL (FOOTAGES)
AT SURFACE: SENW 1539 FNL 1794 FWL S36,T9S,R21E
AT TOP PRODUCING INTERVAL REPORTED BELOW: SENW 1733 FNL 2129 FWL S36,T9S,R21E
AT TOTAL DEPTH: SENW 1754 FNL 2137 FWL S36,T9S,R21E

11. QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:
SENW 36 9S 21E S

12. COUNTY
UINTAH
13. STATE
UTAH

14. DATE SPURRED: 5/26/2012
15. DATE T.D. REACHED: 9/17/2012
16. DATE COMPLETED: 1/30/2013
ABANDONED [] READY TO PRODUCE [x]

17. ELEVATIONS (DF, RKB, RT, GL):
5018 RKB

18. TOTAL DEPTH: MD 9,505 TVD 9,478
19. PLUG BACK T.D.: MD 9,447 TVD 9,420

20. IF MULTIPLE COMPLETIONS, HOW MANY? *

21. DEPTH BRIDGE MD PLUG SET: TVD

22. TYPE ELECTRIC AND OTHER MECHANICAL LOGS RUN (Submit copy of each)
CBL/GR/CCL/TEMP

23.
WAS WELL CORED? NO [x] YES [] (Submit analysis)
WAS DST RUN? NO [x] YES [] (Submit report)
DIRECTIONAL SURVEY? NO [] YES [x] (Submit copy)

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

Table with 10 columns: HOLE SIZE, SIZE/GRADE, WEIGHT (#/ft.), TOP (MD), BOTTOM (MD), STAGE CEMENTER DEPTH, CEMENT TYPE & NO. OF SACKS, SLURRY VOLUME (BBL), CEMENT TOP **, AMOUNT PULLED. Rows include 20", 11", and 7 7/8" hole sizes.

25. TUBING RECORD

Table with 9 columns: SIZE, DEPTH SET (MD), PACKER SET (MD), SIZE, DEPTH SET (MD), PACKER SET (MD), SIZE, DEPTH SET (MD), PACKER SET (MD). Row shows 2 3/8" size with 8,771 depth set.

26. PRODUCING INTERVALS

Table with 5 columns: FORMATION NAME, TOP (MD), BOTTOM (MD), TOP (TVD), BOTTOM (TVD). Rows include WASATCH and MESAVERDE.

27. PERFORATION RECORD

Table with 9 columns: INTERVAL (Top/Bot - MD), SIZE, NO. HOLES, PERFORATION STATUS. Rows include intervals 6,124-7,279 and 7,348-9,328.

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

Table with 2 columns: DEPTH INTERVAL, AMOUNT AND TYPE OF MATERIAL. Row shows 6124-9328 interval with PUMP 12,541 BBLS SLICK H2O & 302,593 LBS 30/50 OTTAWA SAND.

29. ENCLOSED ATTACHMENTS:

- ELECTRICAL/MECHANICAL LOGS []
GEOLOGIC REPORT []
DST REPORT []
DIRECTIONAL SURVEY [x]
SUNDRY NOTICE FOR PLUGGING AND CEMENT VERIFICATION []
CORE ANALYSIS []
OTHER: []

30. WELL STATUS:

PROD

31. INITIAL PRODUCTION

INTERVAL A (As shown in item #26)

| | | | | | | | | | | | |
|-----------------------------------|----------------------|------------------------|-------------|---------------------|---------------|---------------------------|-----------------|---------------------|---------------------|--------------------------|--------------------------|
| DATE FIRST PRODUCED: 1/30/2013 | | TEST DATE: 2/1/2013 | | HOURS TESTED: 24 | | TEST PRODUCTION RATES: → | | OIL – BBL: 0 | GAS – MCF: 2,854 | WATER – BBL: 0 | PROD. METHOD: FLOWING |
| CHOKE SIZE: 20/64 | TBG. PRESS. 1,250 | CSG. PRESS. 2,538 | API GRAVITY | BTU – GAS | GAS/OIL RATIO | 24 HR PRODUCTION RATES: → | OIL – BBL: 0 | GAS – MCF: 2,854 | WATER – BBL: 0 | INTERVAL STATUS: PROD | |

INTERVAL B (As shown in item #26)

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

INTERVAL C (As shown in item #26)

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

INTERVAL D (As shown in item #26)

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

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

SOLD

33. SUMMARY OF POROUS ZONES (Include Aquifers):

Show all important zones of porosity and contents thereof: Cored intervals and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures and recoveries.

34. FORMATION (Log) MARKERS:

| Formation | Top (MD) | Bottom (MD) | Descriptions, Contents, etc. | Name | Top (Measured Depth) |
|-----------|----------|-------------|------------------------------|-------------|----------------------|
| | | | | GREEN RIVER | 1,359 |
| | | | | BIRD'S NEST | 1,661 |
| | | | | MAHOGANY | 2,150 |
| | | | | WASATCH | 4,658 |
| | | | | MESAVERDE | 7,325 |

35. ADDITIONAL REMARKS (Include plugging procedure)

The first 210' of the surface hole was drilled with a 12 1/4" bit. The remainder of surface hole was drilled with an 11" bit. DQX csg was run from surface to 9447'; LTC csg was run from 9447' to 9494'. Attached is the chronological well history, perforation report & final survey.

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

NAME (PLEASE PRINT) LAURA ABRAMS TITLE REGULATORY ANALYST
 SIGNATURE  DATE 2/28/2013

This report must be submitted within 30 days of

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

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

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

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

**US ROCKIES REGION
Operation Summary Report**

Well: MORGAN STATE 921-36F1CS GREEN

Spud Date: 6/17/2012

Project: UTAH-UINTAH

Site: MORGAN STATE 921-36F2 PAD

Rig Name No: H&P 318/318, CAPSTAR 310/310

Event: DRILLING

Start Date: 5/23/2012

End Date: 9/18/2012

Active Datum: RKB @5,018.00usft (above Mean Sea Level)

UWI: SE/NW09/S21/E36/O0/26/PM/N1539/W0/1794/O/O

| Date | Time Start-End | Duration (hr) | Phase | Code | Sub Code | P/U | MD From (usft) | Operation |
|-----------|----------------|---------------|--------|------|----------|-----|----------------------|--|
| 6/17/2012 | 4:00 - 6:30 | 2.50 | PRSPD | 01 | C | P | | SKID RIG, RUG UP |
| | 6:30 - 8:30 | 2.00 | PRSPD | 01 | B | P | | WELD ON ROTATING HEAD, RIG UP FLOW LINE |
| | 8:30 - 9:30 | 1.00 | PRSPD | 01 | B | P | | SLIP AND CUT DRILL LINE |
| | 9:30 - 10:00 | 0.50 | PRSPD | 01 | B | P | | PUT BHA ON RACKS, PICK UP BHA, AIR OUT PUMPS |
| | 10:00 - 12:00 | 2.00 | DRLSUR | 02 | D | P | | SPUD |
| | | | | | | | | DRILL 12.25" SURFACE HOLE F/ 49'-210' |
| | | | | | | | | ROP= 161' @ 81 FPH |
| | | | | | | | | WOB= 14/22K |
| | | | | | | | | RPM= 55/105 |
| | | | | | | | | SPP=720/500 |
| | | | | | | | GPM= 595 | |
| | | | | | | | TRQ= 2600/1900 | |
| | | | | | | | PU/SO/ROT = 32/28/30 | |
| | | | | | | | NO LOSSES | |
| | | | | | | | HOLE IN GOOD SHAPE | |
| | 12:00 - 0:00 | 12.00 | DRLSUR | 02 | D | P | | DRILL 11.00" SURFACE HOLE F/ 210'-1132' |
| | | | | | | | | ROP= 161' @ 81 FPH |
| | | | | | | | | WOB= 20/30 |
| | | | | | | | | RPM= 55/105 |
| | | | | | | | | SPP=940/700 |
| | | | | | | | | GPM= 595 |
| | | | | | | | | TRQ= 2600/1900 |
| | | | | | | | | PU/SO/ROT = 67/58/62 |
| | | | | | | | | NO LOSSES |
| | | | | | | | | HOLE IN GOOD SHAPE |
| 6/18/2012 | 0:00 - 21:00 | 21.00 | DRLSUR | 02 | D | P | | DRILL 11.00" SURFACE HOLE F/1132'-2245' |
| | | | | | | | | ROP= 1513' @ 72 FPH |
| | | | | | | | | WOB= 20/30 |
| | | | | | | | | RPM= 55/105 |
| | | | | | | | | SPP=1040/850 |
| | | | | | | | | GPM= 595 |
| | | | | | | | | TRQ= 2600/1900 |
| | | | | | | | | PU/SO/ROT = 109/92/97 |
| | | | | | | | | NO LOSSES |
| | | | | | | | | HOLE IN GOOD SHAPE |
| | | | | | | | | ON AIR FROM 1500' 500CFM |
| | 21:00 - 21:30 | 0.50 | DRLSUR | 05 | C | P | | CIRCULATE PRIOR TO TRIP |
| | 21:30 - 0:00 | 2.50 | DRLSUR | 06 | D | P | | TRIP OUT OF THE HOLE, TO LAY DOWN BIT AND DIRECTIONAL TOOLS |
| 6/19/2012 | 0:00 - 2:00 | 2.00 | DRLSUR | 06 | D | P | | TRIP OUT OF THE HOLE. LAY DOWN BIT AND DIRECTIONAL TOOLS. |
| | 2:00 - 4:00 | 2.00 | CSGSUR | 12 | C | P | | RIG UP AND RUN CASING, STOP CASING RUN AT 1500'. RIG AIR COMPRESSOR TROUBLE |
| | 4:00 - 7:00 | 3.00 | CSGSUR | 22 | L | Z | | X/O RIG AIR COMPRESSOR |
| | 7:00 - 8:00 | 1.00 | CSGSUR | 12 | A | P | | FINISH CASING RUN. |
| | | | | | | | | RUN 59 JT'S, 8-5/8", 28#, J-55, LT&C CSG /// SHOE SET @ 2618' /// BAFFLE @ 2572' |

**US ROCKIES REGION
Operation Summary Report**

Well: MORGAN STATE 921-36F1CS GREEN

Spud Date: 6/17/2012

Project: UTAH-UINTAH

Site: MORGAN STATE 921-36F2 PAD

Rig Name No: H&P 318/318, CAPSTAR 310/310

Event: DRILLING

Start Date: 5/23/2012

End Date: 9/18/2012

Active Datum: RKB @5,018.00usft (above Mean Sea Level)

UWI: SE/NW0/9/S/21/E/36/0/0/26/PM/N/1539/W/0/1794/0/0

| Date | Time Start-End | Duration (hr) | Phase | Code | Sub Code | P/U | MD From (usft) | Operation |
|-----------|----------------|---------------|--------|------|----------|-----|----------------|--|
| | 8:00 - 12:00 | 4.00 | CSGSUR | 12 | C | P | | PJSM WITH PRO PETRO CMT CREW /// PUMP 150 BBL'S WATER AHEAD FOLLOWED BY 20 BBL GEL WATER FLUSH /// LEAD = 250sx CLASS G CMT @ 11.0 WT & 3.82 YIELD /// TAIL = 200sx CLASS G CMT @ 15.8 WT & 1.15 YIELD /// DROP PLUG & DISPLACE W/ 10.5 BBL'S WATER /// PLUG DN @ 10:00 06/19/2012 /// BUMP PLUG W/ 670 PSI /// FINAL LIFT = 240 PSI /// CHECK FLOATS FLOAT HELD-NO CMT TO SURFACE TOP OUT W/ 170 sx CLASS G CMT & 15.8 WT & 1.15 YIELD /// NO CMT TO SURFACE |
| 9/13/2012 | 19:00 - 20:00 | 1.00 | MIRU3 | 01 | C | P | | RELEASE RIG AT 1200 |
| | 20:00 - 21:00 | 1.00 | MIRU3 | 01 | C | P | | PREP TO SKID RIG |
| | 21:00 - 22:00 | 1.00 | PRPSPD | 01 | B | P | | SKID RIG |
| | 22:00 - 23:00 | 1.00 | PRPSPD | 14 | A | P | | RIG UP TO SPUD |
| | 23:00 - 0:00 | 1.00 | PRPSPD | 14 | A | Z | | NIPPLE UP BOPS |
| 9/14/2012 | 0:00 - 1:00 | 1.00 | PRPSPD | 14 | A | P | | CHANGED OUT SMITH ROTATING HEAD EQUIPMENT |
| | 1:00 - 2:00 | 1.00 | PRPSPD | 09 | A | P | | CHANGED OUT SMITH ROTATING HEAD BEARING PACK, FUNCTION TEST CLAMP ON HEAD |
| | 2:00 - 7:00 | 5.00 | PRPSPD | 15 | A | P | | SLIP & CUT DRILLING LINE 72' FUNCTIONS TEST CROWN SAVER |
| | 7:00 - 7:30 | 0.50 | PRPSPD | 15 | A | P | | TEST BOPS LOW 250 PSI HIGH 5,000 PSI PIPE, BLINDS, HCR, CHOKE MANFOLD, KILL LINES IBOP FLOOR VAVLES, ANN, 250 LOW 2500 PSI HIGH 8 5/8 CASING 1500 PSI FOR 30 MINS |
| | 7:30 - 8:00 | 0.50 | PRPSPD | 15 | A | P | | TEST SWACO EQUIPMENT TO 1,000 PSI 10 MINS OK |
| | 8:00 - 12:00 | 4.00 | PRPSPD | 06 | A | P | | INSTALLED WEAR BUSHING |
| | 12:00 - 12:30 | 0.50 | DRLPRC | 02 | F | P | | P/U MWD TOOLS SCRIBE IN HOLE TAGED CMT @ 2530 |
| | 12:30 - 17:00 | 4.50 | DRLPRV | 02 | D | P | | DRILL SHOE TRACK 2530 TGO 2630 SHOE |
| | 17:00 - 17:30 | 0.50 | DRLPRC | 02 | D | P | | DRILL SLID 2684 TO 3295 FT 611 ROP 135.7 |
| | 17:30 - 19:30 | 2.00 | DRLPRC | 02 | B | P | | WOB 28 RPM MM 122 TOP DRIVE 48 MW 8.4 VIS 26 TRQ. ON/OFF 10 /4 PUMPM PSI ON / OFF 1850 / 1450 SPM 59/59 GPM 531NOV DEWATERING SWACO OFF LINE |
| | 19:30 - 20:00 | 0.50 | DRLPRC | 08 | B | Z | | RIG SER |
| | 20:00 - 0:00 | 4.00 | DRLPRC | 02 | B | P | | DRILL SLID 3295 TO 3577 FT 282 ROP 141 WOB 28 RPM MM 122 TOP DRIVE 48 MW 8.4 VIS 26 TRQ. ON/OFF 6 /4 PUMPM PSI ON / OFF 1850 / 1450 SPM 59/59 GPM 531NOV DEWATERING SWACO OFF LINE |
| | | | | | | | | ***BLOWED OUT RUBBER GASKET ON MUD LINE . CHANGED OUT RUBBER |
| | | | | | | | | DRILL SLID 3577 TO 4239 FT 662 ROP 165.5 WOB 28 RPM MM 122 TOP DRIVE 48 MW 8.4 VIS 26 TRQ. ON/OFF 8 /4 PUMPM PSI ON / OFF 2000 / 1550 SPM 59/59 GPM 531NOV DEWATERING SWACO OFF LINE |
| | | | | | | | | SLID HRS, 1 FT 105' |

US ROCKIES REGION
Operation Summary Report

Well: MORGAN STATE 921-36F1CS GREEN

Spud Date: 6/17/2012

Project: UTAH-UINTAH

Site: MORGAN STATE 921-36F2 PAD

Rig Name No: H&P 318/318, CAPSTAR 310/310

Event: DRILLING

Start Date: 5/23/2012

End Date: 9/18/2012

Active Datum: RKB @5,018.00usft (above Mean Sea Level)

UWI: SE/NW/0/9/S/21/E/36/0/0/26/PM/N/1539/W/0/1794/0/0

| Date | Time Start-End | Duration (hr) | Phase | Code | Sub Code | P/U | MD From (usft) | Operation |
|-----------|----------------|---------------|--------|------|----------|-----|----------------|---|
| 9/15/2012 | 0:00 - 17:00 | 17.00 | DRLPRV | 02 | B | P | | DRILL SLID 4239 TO 6703 FT 2464 ROP 144.94 WOB 24 RPM MM 122 TOP DRIVE 62 MW 8.4 VIS 26 TRQ. ON/OFF 11 / 7 PUMPM PSI ON / OFF 1800 / 1550 SPM 59/59 GPM 531 NOV DEWATERING SWACO OFF LINE SLID HRS. 1 MINS 45 FT 36' RIG SER. |
| | 17:00 - 17:30 | 0.50 | DRLPRV | 07 | A | P | | |
| | 17:30 - 0:00 | 6.50 | DRLPRV | 02 | B | P | | DRILL SLID 6703 TO 7218 FT 515 ROP 79.23 WOB 24 RPM MM 122 TOP DRIVE 62 MW 8.4 VIS 26 TRQ. ON/OFF 11 / 9 PUMPM PSI ON / OFF 1900 / 1660 SPM 59/59 GPM 531 NOV DEWATERING SWACO OFF LINE SLID HRS 2 MIN 21 FT 28' |
| 9/16/2012 | 0:00 - 0:30 | 0.50 | DRLPRV | 05 | A | X | | LOST CIRC. @ 7218' LOST 200 BBLS PUMP LCM SWEEP REGAIN CIRC. |
| | 0:30 - 6:30 | 6.00 | DRLPRV | 02 | B | P | | DRILL SLID 7218 TO 7548 FT 330 ROP 55.0 WOB 24 RPM MM 122 TOP DRIVE 62 MW 8.9 VIS 26 TRQ. ON/OFF 11 / 9 PUMPM PSI ON / OFF 1900 / 1660 SPM 59/59 GPM 531 NOV DEWATERING SWACO OFF LINE SLID HRS 1 MIN 55 FT 37' ROP 21.14 |
| | 6:30 - 7:00 | 0.50 | DRLPRV | 05 | A | X | | LOST CIRC @ 7548 LOST 120 BBLS PUMP LCM SWEEP REGAINED CIRC. |
| | 7:00 - 17:00 | 10.00 | DRLPRV | 02 | B | P | | DRILL SLID 7548 TO 8300 FT 752 ROP 75.2 WOB 24 RPM MM 111 TOP DRIVE 65 MW 9.0 VIS 26 TRQ. ON/OFF 11 / 9 PUMPM PSI ON / OFF 2150 / 1750 SPM 108 GPM 486 NOV DEWATERING SWACO OFF LINE SLID HRS 1 MIN 20 FT 26' ROP 20.8 RIG SER. |
| | 17:00 - 17:30 | 0.50 | DRLPRV | 07 | A | P | | |
| | 17:30 - 0:00 | 6.50 | DRLPRV | 02 | B | P | | DRILL SLID 8300 TO 8866 FT 566 ROP 87 WOB 24 RPM MM 111 TOP DRIVE 65 MW 9.3 VIS 26 TRQ. ON/OFF 11 / 9 PUMPM PSI ON / OFF 2150 / 1750 SPM 108 GPM 486 NOV DEWATERING SWACO OFF LINE |
| 9/17/2012 | 0:00 - 11:00 | 11.00 | DRLPRV | 02 | B | P | | DRILL SLID 8866 TO 9505 FT 639 ROP 58.0 WOB 24 RPM MM 111 TOP DRIVE 65 MW 9.3 VIS 26 TRQ. ON/OFF 11 / 9 PUMPM PSI ON / OFF 2200 / 1750 SPM 108 GPM 486 NOV DEWATERING SWACO OFF LINE |
| | 11:00 - 17:30 | 6.50 | DRLPRV | 05 | B | P | | DISPLACE DIRTY WATER WITH 12.2 MUD VIS 45 BUILT 150 BBLS VOLUM TO TRIP WITH SHORT TRIP 10 STANDS |
| | 17:30 - 19:00 | 1.50 | DRLPRV | 06 | E | P | | |

US ROCKIES REGION
Operation Summary Report

| | | | |
|--|--|--|---|
| Well: MORGAN STATE 921-36F1CS GREEN | | Spud Date: 6/17/2012 | |
| Project: UTAH-UINTAH | | Site: MORGAN STATE 921-36F2 PAD | Rig Name No: H&P 318/318, CAPSTAR 310/310 |
| Event: DRILLING | | Start Date: 5/23/2012 | End Date: 9/18/2012 |
| Active Datum: RKB @5,018.00usft (above Mean Sea Level) | | UWI: SE/NW/0/9/S/21/E/36/0/0/26/PM/N/1539/W/0/1794/0/0 | |

| Date | Time Start-End | Duration (hr) | Phase | Code | Sub Code | P/U | MD From (usft) | Operation |
|-----------|-------------------|------------------|--------|------|-------------|-----|-------------------|--|
| 9/18/2012 | 19:00 - 21:00 | 2.00 | DRLPRV | 05 | C | P | | CIRC OUT GAS TO LAY DOWN 4.5 DRILL PIPE |
| | 21:00 - 0:00 | 3.00 | DRLPRV | 06 | A | P | | LAY DOWN 4.5 DRILL PIPE |
| | 0:00 - 8:30 | 8.50 | DRLPRV | 06 | A | P | | LAY DOWN 4.5 DRILL PIPE HAD TIGHT SPOT @ 5737 |
| | 8:30 - 9:30 | 1.00 | DRLPRV | 06 | A | P | | LAY DOWN MWD TOOLS MONEL DC, |
| | 9:30 - 10:00 | 0.50 | DRLPRV | 12 | A | P | | PULLED WEAR BUSHING |
| | 10:00 - 11:00 | 1.00 | CSGPRO | 12 | A | P | | RIG UP CASING CREW HELD S/M |
| | 11:00 - 17:00 | 6.00 | CSGPRO | 12 | C | P | | RUN 216 JTS 4.5 # 11.6 I-80 SHOE @ 9494 FC @ 9450 MARKER JTS @ 7339 HAD TIGHT SPOT @ 5750 WASH THROUGH BRIDGE RUN PIPE TO BOTTOM |
| | 17:00 - 19:00 | 2.00 | CSGPRO | 05 | D | P | | CIRC GAS OUT HAD 5' FLAR |
| | 19:00 - 22:30 | 3.50 | CSGPRO | 12 | E | P | | RIG UP CMT CREW HELD SAFETY MEETING LEAD # 13.0 YIELD 1.77 SX CMT 570 TAIL # 14.3 YIELD 1.32 1020 SX CMT DISPLACE WITH 146.5 BBLs BUMPED PLUG FLOATS HELD RETURNED 20 BBL SPACER NO CMT TO SURFACE LIFT PSI 2900 BUMPED PSI 3435 |
| | 22:30 - 23:30 | 1.00 | CSGPRO | 14 | A | P | | BACK FLUSH BOPS , LAY DOWN LAND JTS. SET PACK OFF NIPPLE DOWN BOPS CLEAN PIT , |
| | 23:30 - 23:30 | 0.00 | RDMO | | | | | RIG RELEASED 23:30 9/18/2012 |

1 General

1.1 Customer Information

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

1.2 Well/Wellbore Information

| | | | |
|--------------|---|---------------|--|
| Well | MORGAN STATE 921-36F1CS GREEN | Wellbore No. | OH |
| Well Name | MORGAN STATE 921-36F1CS | Wellbore Name | MORGAN STATE 921-36F1CS |
| Report No. | 1 | Report Date | 6/17/2012 |
| Project | UTAH-UINTAH | Site | MORGAN STATE 921-36F2 PAD |
| Rig Name/No. | | Event | COMPLETION |
| Start Date | 1/8/2013 | End Date | 1/30/2013 |
| Spud Date | 6/17/2012 | Active Datum | RKB @5,018.00usft (above Mean Sea Level) |
| UWI | SE/NW/0/9/S/21/E/36/0/0/26/PM/N/1539/W/0/1794/0/0 | | |

1.3 General

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

1.4 Initial Conditions

| | | | |
|-------------------|---------|--------------------|--|
| Fluid Type | | Fluid Density | |
| Surface Press | | Estimate Res Press | |
| TVD Fluid Top | | Fluid Head | |
| Hydrostatic Press | | Press Difference | |
| Balance Cond | NEUTRAL | | |

1.5 Summary

| | | | |
|------------------|-------------------------------|--------------------------|------------------|
| Gross Interval | 6,124.0 (usft)-9,328.0 (usft) | Start Date/Time | 1/7/2013 12:00AM |
| No. of Intervals | 79 | End Date/Time | 1/7/2013 12:00AM |
| Total Shots | 255 | Net Perforation Interval | 83.00 (usft) |
| Avg Shot Density | 3.07 (shot/ft) | Final Surface Pressure | |
| | | Final Press Date | |

2 Intervals

2.1 Perforated Interval

| Date | Formation/Reservoir | CCL@ (usft) | CCL-T S (usft) | MD Top (usft) | MD Base (usft) | Shot Density (shot/ft) | Misfires/ Add. Shot | Diameter (in) | Carr Type /Stage No | Carr Size (in) | Phasing (°) | Charge Desc /Charge Manufacturer | Charge Weight (gram) | Reason | Misrun |
|------------------|---------------------|-------------|----------------|---------------|----------------|------------------------|---------------------|---------------|---------------------|----------------|-------------|----------------------------------|----------------------|----------------|--------|
| 1/7/2013 12:00AM | WASATCH/ | | | 6,124.0 | 6,125.0 | 4.00 | | 0.360 | EXP/ | 3.375 | 90.00 | | 23.00 | PRODUCTIO N | |

2.1 Perforated Interval (Continued)

| Date | Formation/ Reservoir | CCL@ (usft) | CCL-T S (usft) | MD Top (usft) | MD Base (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 |
|---------------------|-------------------------|----------------|----------------------|------------------|-------------------|------------------------------|------------------------|----------------------|---------------------|----------------------|----------------|-------------------------------------|----------------------------|----------------|--------|
| 1/7/2013 12:00AM | WASATCH/ | | | 6,207.0 | 6,208.0 | 4.00 | | 0.360 | EXP/ | 3.375 | 90.00 | | 23.00 | PRODUCTIO N | |
| 1/7/2013 12:00AM | WASATCH/ | | | 6,305.0 | 6,306.0 | 4.00 | | 0.360 | EXP/ | 3.375 | 90.00 | | 23.00 | PRODUCTIO N | |
| 1/7/2013 12:00AM | WASATCH/ | | | 6,357.0 | 6,358.0 | 4.00 | | 0.360 | EXP/ | 3.375 | 90.00 | | 23.00 | PRODUCTIO N | |
| 1/7/2013 12:00AM | WASATCH/ | | | 6,444.0 | 6,445.0 | 4.00 | | 0.360 | EXP/ | 3.375 | 90.00 | | 23.00 | PRODUCTIO N | |
| 1/7/2013 12:00AM | WASATCH/ | | | 6,484.0 | 6,485.0 | 4.00 | | 0.360 | EXP/ | 3.375 | 90.00 | | 23.00 | PRODUCTIO N | |
| 1/7/2013 12:00AM | WASATCH/ | | | 6,524.0 | 6,525.0 | 3.00 | | 0.360 | EXP/ | 3.375 | 120.00 | | 23.00 | PRODUCTIO N | |
| 1/7/2013 12:00AM | WASATCH/ | | | 6,570.0 | 6,571.0 | 3.00 | | 0.360 | EXP/ | 3.375 | 120.00 | | 23.00 | PRODUCTIO N | |
| 1/7/2013 12:00AM | WASATCH/ | | | 6,586.0 | 6,587.0 | 3.00 | | 0.360 | EXP/ | 3.375 | 120.00 | | 23.00 | PRODUCTIO N | |
| 1/7/2013 12:00AM | WASATCH/ | | | 6,637.0 | 6,638.0 | 3.00 | | 0.360 | EXP/ | 3.375 | 120.00 | | 23.00 | PRODUCTIO N | |
| 1/7/2013 12:00AM | WASATCH/ | | | 6,656.0 | 6,657.0 | 3.00 | | 0.360 | EXP/ | 3.375 | 120.00 | | 23.00 | PRODUCTIO N | |
| 1/7/2013 12:00AM | WASATCH/ | | | 6,693.0 | 6,694.0 | 3.00 | | 0.360 | EXP/ | 3.375 | 120.00 | | 23.00 | PRODUCTIO N | |
| 1/7/2013 12:00AM | WASATCH/ | | | 6,724.0 | 6,725.0 | 3.00 | | 0.360 | EXP/ | 3.375 | 120.00 | | 23.00 | PRODUCTIO N | |
| 1/7/2013 12:00AM | WASATCH/ | | | 6,746.0 | 6,747.0 | 3.00 | | 0.360 | EXP/ | 3.375 | 120.00 | | 23.00 | PRODUCTIO N | |
| 1/7/2013 12:00AM | WASATCH/ | | | 6,865.0 | 6,866.0 | 3.00 | | 0.360 | EXP/ | 3.375 | 120.00 | | 23.00 | PRODUCTIO N | |
| 1/7/2013 12:00AM | WASATCH/ | | | 6,977.0 | 6,978.0 | 3.00 | | 0.360 | EXP/ | 3.375 | 120.00 | | 23.00 | PRODUCTIO N | |
| 1/7/2013 12:00AM | WASATCH/ | | | 6,998.0 | 7,000.0 | 3.00 | | 0.360 | EXP/ | 3.375 | 120.00 | | 23.00 | PRODUCTIO N | |
| 1/7/2013 12:00AM | WASATCH/ | | | 7,033.0 | 7,034.0 | 3.00 | | 0.360 | EXP/ | 3.375 | 120.00 | | 23.00 | PRODUCTIO N | |
| 1/7/2013 12:00AM | WASATCH/ | | | 7,081.0 | 7,082.0 | 3.00 | | 0.360 | EXP/ | 3.375 | 120.00 | | 23.00 | PRODUCTIO N | |
| 1/7/2013 12:00AM | WASATCH/ | | | 7,096.0 | 7,097.0 | 3.00 | | 0.360 | EXP/ | 3.375 | 120.00 | | 23.00 | PRODUCTIO N | |
| 1/7/2013 12:00AM | WASATCH/ | | | 7,153.0 | 7,154.0 | 3.00 | | 0.360 | EXP/ | 3.375 | 120.00 | | 23.00 | PRODUCTIO N | |
| 1/7/2013 12:00AM | WASATCH/ | | | 7,210.0 | 7,211.0 | 3.00 | | 0.360 | EXP/ | 3.375 | 120.00 | | 23.00 | PRODUCTIO N | |

2.1 Perforated Interval (Continued)

| Date | Formation/ Reservoir | CCL@ (usft) | CCL-T S (usft) | MD Top (usft) | MD Base (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 |
|---------------------|-------------------------|----------------|----------------------|------------------|-------------------|------------------------------|------------------------|----------------------|---------------------|----------------------|----------------|-------------------------------------|----------------------------|----------------|--------|
| 1/7/2013 12:00AM | WASATCH/ | | | 7,278.0 | 7,279.0 | 3.00 | | 0.360 | EXP/ | 3.375 | 120.00 | | 23.00 | PRODUCTIO N | |
| 1/7/2013 12:00AM | MESAVERDE/ | | | 7,348.0 | 7,350.0 | 3.00 | | 0.360 | EXP/ | 3.375 | 120.00 | | 23.00 | PRODUCTIO N | |
| 1/7/2013 12:00AM | MESAVERDE/ | | | 7,390.0 | 7,392.0 | 3.00 | | 0.360 | EXP/ | 3.375 | 120.00 | | 23.00 | PRODUCTIO N | |
| 1/7/2013 12:00AM | MESAVERDE/ | | | 7,426.0 | 7,427.0 | 3.00 | | 0.360 | EXP/ | 3.375 | 120.00 | | 23.00 | PRODUCTIO N | |
| 1/7/2013 12:00AM | MESAVERDE/ | | | 7,501.0 | 7,502.0 | 3.00 | | 0.360 | EXP/ | 3.375 | 120.00 | | 23.00 | PRODUCTIO N | |
| 1/7/2013 12:00AM | MESAVERDE/ | | | 7,556.0 | 7,557.0 | 3.00 | | 0.360 | EXP/ | 3.375 | 120.00 | | 23.00 | PRODUCTIO N | |
| 1/7/2013 12:00AM | MESAVERDE/ | | | 7,607.0 | 7,608.0 | 3.00 | | 0.360 | EXP/ | 3.375 | 120.00 | | 23.00 | PRODUCTIO N | |
| 1/7/2013 12:00AM | MESAVERDE/ | | | 7,671.0 | 7,672.0 | 3.00 | | 0.360 | EXP/ | 3.375 | 120.00 | | 23.00 | PRODUCTIO N | |
| 1/7/2013 12:00AM | MESAVERDE/ | | | 7,696.0 | 7,697.0 | 3.00 | | 0.360 | EXP/ | 3.375 | 120.00 | | 23.00 | PRODUCTIO N | |
| 1/7/2013 12:00AM | MESAVERDE/ | | | 7,731.0 | 7,732.0 | 3.00 | | 0.360 | EXP/ | 3.375 | 120.00 | | 23.00 | PRODUCTIO N | |
| 1/7/2013 12:00AM | MESAVERDE/ | | | 7,754.0 | 7,755.0 | 3.00 | | 0.360 | EXP/ | 3.375 | 120.00 | | 23.00 | PRODUCTIO N | |
| 1/7/2013 12:00AM | MESAVERDE/ | | | 7,788.0 | 7,789.0 | 3.00 | | 0.360 | EXP/ | 3.375 | 120.00 | | 23.00 | PRODUCTIO N | |
| 1/7/2013 12:00AM | MESAVERDE/ | | | 7,870.0 | 7,871.0 | 3.00 | | 0.360 | EXP/ | 3.375 | 120.00 | | 23.00 | PRODUCTIO N | |
| 1/7/2013 12:00AM | MESAVERDE/ | | | 8,088.0 | 8,089.0 | 3.00 | | 0.360 | EXP/ | 3.375 | 120.00 | | 23.00 | PRODUCTIO N | |
| 1/7/2013 12:00AM | MESAVERDE/ | | | 8,116.0 | 8,117.0 | 3.00 | | 0.360 | EXP/ | 3.375 | 120.00 | | 23.00 | PRODUCTIO N | |
| 1/7/2013 12:00AM | MESAVERDE/ | | | 8,131.0 | 8,132.0 | 3.00 | | 0.360 | EXP/ | 3.375 | 120.00 | | 23.00 | PRODUCTIO N | |
| 1/7/2013 12:00AM | MESAVERDE/ | | | 8,142.0 | 8,143.0 | 3.00 | | 0.360 | EXP/ | 3.375 | 120.00 | | 23.00 | PRODUCTIO N | |
| 1/7/2013 12:00AM | MESAVERDE/ | | | 8,153.0 | 8,154.0 | 3.00 | | 0.360 | EXP/ | 3.375 | 120.00 | | 23.00 | PRODUCTIO N | |
| 1/7/2013 12:00AM | MESAVERDE/ | | | 8,214.0 | 8,215.0 | 3.00 | | 0.360 | EXP/ | 3.375 | 120.00 | | 23.00 | PRODUCTIO N | |
| 1/7/2013 12:00AM | MESAVERDE/ | | | 8,264.0 | 8,265.0 | 3.00 | | 0.360 | EXP/ | 3.375 | 120.00 | | 23.00 | PRODUCTIO N | |
| 1/7/2013 12:00AM | MESAVERDE/ | | | 8,282.0 | 8,283.0 | 3.00 | | 0.360 | EXP/ | 3.375 | 120.00 | | 23.00 | PRODUCTIO N | |

2.1 Perforated Interval (Continued)

| Date | Formation/ Reservoir | CCL@ (usft) | CCL-T S (usft) | MD Top (usft) | MD Base (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 |
|---------------------|-------------------------|----------------|----------------------|------------------|-------------------|------------------------------|------------------------|----------------------|---------------------|----------------------|----------------|-------------------------------------|----------------------------|----------------|--------|
| 1/7/2013 12:00AM | MESAVERDE/ | | | 8,331.0 | 8,332.0 | 3.00 | | 0.360 | EXP/ | 3.375 | 120.00 | | 23.00 | PRODUCTIO N | |
| 1/7/2013 12:00AM | MESAVERDE/ | | | 8,372.0 | 8,373.0 | 3.00 | | 0.360 | EXP/ | 3.375 | 120.00 | | 23.00 | PRODUCTIO N | |
| 1/7/2013 12:00AM | MESAVERDE/ | | | 8,390.0 | 8,391.0 | 3.00 | | 0.360 | EXP/ | 3.375 | 120.00 | | 23.00 | PRODUCTIO N | |
| 1/7/2013 12:00AM | MESAVERDE/ | | | 8,415.0 | 8,416.0 | 3.00 | | 0.360 | EXP/ | 3.375 | 120.00 | | 23.00 | PRODUCTIO N | |
| 1/7/2013 12:00AM | MESAVERDE/ | | | 8,487.0 | 8,488.0 | 3.00 | | 0.360 | EXP/ | 3.375 | 120.00 | | 23.00 | PRODUCTIO N | |
| 1/7/2013 12:00AM | MESAVERDE/ | | | 8,510.0 | 8,511.0 | 3.00 | | 0.360 | EXP/ | 3.375 | 120.00 | | 23.00 | PRODUCTIO N | |
| 1/7/2013 12:00AM | MESAVERDE/ | | | 8,557.0 | 8,558.0 | 3.00 | | 0.360 | EXP/ | 3.375 | 120.00 | | 23.00 | PRODUCTIO N | |
| 1/7/2013 12:00AM | MESAVERDE/ | | | 8,564.0 | 8,565.0 | 3.00 | | 0.360 | EXP/ | 3.375 | 120.00 | | 23.00 | PRODUCTIO N | |
| 1/7/2013 12:00AM | MESAVERDE/ | | | 8,573.0 | 8,574.0 | 3.00 | | 0.360 | EXP/ | 3.375 | 120.00 | | 23.00 | PRODUCTIO N | |
| 1/7/2013 12:00AM | MESAVERDE/ | | | 8,593.0 | 8,594.0 | 3.00 | | 0.360 | EXP/ | 3.375 | 120.00 | | 23.00 | PRODUCTIO N | |
| 1/7/2013 12:00AM | MESAVERDE/ | | | 8,599.0 | 8,600.0 | 3.00 | | 0.360 | EXP/ | 3.375 | 120.00 | | 23.00 | PRODUCTIO N | |
| 1/7/2013 12:00AM | MESAVERDE/ | | | 8,606.0 | 8,607.0 | 3.00 | | 0.360 | EXP/ | 3.375 | 120.00 | | 23.00 | PRODUCTIO N | |
| 1/7/2013 12:00AM | MESAVERDE/ | | | 8,623.0 | 8,624.0 | 3.00 | | 0.360 | EXP/ | 3.375 | 120.00 | | 23.00 | PRODUCTIO N | |
| 1/7/2013 12:00AM | MESAVERDE/ | | | 8,647.0 | 8,648.0 | 3.00 | | 0.360 | EXP/ | 3.375 | 120.00 | | 23.00 | PRODUCTIO N | |
| 1/7/2013 12:00AM | MESAVERDE/ | | | 8,674.0 | 8,675.0 | 3.00 | | 0.360 | EXP/ | 3.375 | 120.00 | | 23.00 | PRODUCTIO N | |
| 1/7/2013 12:00AM | MESAVERDE/ | | | 8,692.0 | 8,693.0 | 3.00 | | 0.360 | EXP/ | 3.375 | 120.00 | | 23.00 | PRODUCTIO N | |
| 1/7/2013 12:00AM | MESAVERDE/ | | | 8,707.0 | 8,708.0 | 3.00 | | 0.360 | EXP/ | 3.375 | 120.00 | | 23.00 | PRODUCTIO N | |
| 1/7/2013 12:00AM | MESAVERDE/ | | | 8,724.0 | 8,725.0 | 3.00 | | 0.360 | EXP/ | 3.375 | 120.00 | | 23.00 | PRODUCTIO N | |
| 1/7/2013 12:00AM | MESAVERDE/ | | | 8,735.0 | 8,736.0 | 3.00 | | 0.360 | EXP/ | 3.375 | 120.00 | | 23.00 | PRODUCTIO N | |
| 1/7/2013 12:00AM | MESAVERDE/ | | | 8,746.0 | 8,747.0 | 3.00 | | 0.360 | EXP/ | 3.375 | 120.00 | | 23.00 | PRODUCTIO N | |
| 1/7/2013 12:00AM | MESAVERDE/ | | | 8,792.0 | 8,793.0 | 3.00 | | 0.360 | EXP/ | 3.375 | 120.00 | | 23.00 | PRODUCTIO N | |

2.1 Perforated Interval (Continued)

| Date | Formation/ Reservoir | CCL@ (usft) | CCL-T S (usft) | MD Top (usft) | MD Base (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 |
|---------------------|-------------------------|----------------|----------------------|------------------|-------------------|------------------------------|------------------------|----------------------|---------------------|----------------------|----------------|-------------------------------------|----------------------------|----------------|--------|
| 1/7/2013 12:00AM | MESAVERDE/ | | | 8,798.0 | 8,799.0 | 3.00 | | 0.360 | EXP/ | 3.375 | 120.00 | | 23.00 | PRODUCTIO N | |
| 1/7/2013 12:00AM | MESAVERDE/ | | | 8,820.0 | 8,821.0 | 3.00 | | 0.360 | EXP/ | 3.375 | 120.00 | | 23.00 | PRODUCTIO N | |
| 1/7/2013 12:00AM | MESAVERDE/ | | | 8,874.0 | 8,875.0 | 3.00 | | 0.360 | EXP/ | 3.375 | 120.00 | | 23.00 | PRODUCTIO N | |
| 1/7/2013 12:00AM | MESAVERDE/ | | | 8,890.0 | 8,891.0 | 3.00 | | 0.360 | EXP/ | 3.375 | 120.00 | | 23.00 | PRODUCTIO N | |
| 1/7/2013 12:00AM | MESAVERDE/ | | | 8,909.0 | 8,910.0 | 3.00 | | 0.360 | EXP/ | 3.375 | 120.00 | | 23.00 | PRODUCTIO N | |
| 1/7/2013 12:00AM | MESAVERDE/ | | | 8,954.0 | 8,955.0 | 3.00 | | 0.360 | EXP/ | 3.375 | 120.00 | | 23.00 | PRODUCTIO N | |
| 1/7/2013 12:00AM | MESAVERDE/ | | | 8,984.0 | 8,985.0 | 3.00 | | 0.360 | EXP/ | 3.375 | 120.00 | | 23.00 | PRODUCTIO N | |
| 1/7/2013 12:00AM | MESAVERDE/ | | | 9,009.0 | 9,010.0 | 3.00 | | 0.360 | EXP/ | 3.375 | 120.00 | | 23.00 | PRODUCTIO N | |
| 1/7/2013 12:00AM | MESAVERDE/ | | | 9,044.0 | 9,045.0 | 3.00 | | 0.360 | EXP/ | 3.375 | 120.00 | | 23.00 | PRODUCTIO N | |
| 1/7/2013 12:00AM | MESAVERDE/ | | | 9,133.0 | 9,134.0 | 3.00 | | 0.360 | EXP/ | 3.375 | 120.00 | | 23.00 | PRODUCTIO N | |
| 1/7/2013 12:00AM | MESAVERDE/ | | | 9,230.0 | 9,231.0 | 3.00 | | 0.360 | EXP/ | 3.375 | 120.00 | | 23.00 | PRODUCTIO N | |
| 1/7/2013 12:00AM | MESAVERDE/ | | | 9,254.0 | 9,255.0 | 3.00 | | 0.360 | EXP/ | 3.375 | 120.00 | | 23.00 | PRODUCTIO N | |
| 1/7/2013 12:00AM | MESAVERDE/ | | | 9,289.0 | 9,290.0 | 3.00 | | 0.360 | EXP/ | 3.375 | 120.00 | | 23.00 | PRODUCTIO N | |
| 1/7/2013 12:00AM | MESAVERDE/ | | | 9,307.0 | 9,309.0 | 3.00 | | 0.360 | EXP/ | 3.375 | 120.00 | | 23.00 | PRODUCTIO N | |
| 1/7/2013 12:00AM | MESAVERDE/ | | | 9,327.0 | 9,328.0 | 3.00 | | 0.360 | EXP/ | 3.375 | 120.00 | | 23.00 | PRODUCTIO N | |

3 Plots

US ROCKIES REGION
Operation Summary Report

Well: MORGAN STATE 921-36F1CS GREEN

Spud Date: 6/17/2012

Project: UTAH-UINTAH

Site: MORGAN STATE 921-36F2 PAD

Rig Name No: MILES 2/2

Event: COMPLETION

Start Date: 1/8/2013

End Date: 1/30/2013

Active Datum: RKB @5,018.00usft (above Mean Sea Level)

UWI: SE/NW/0/9/S/21/E/36/0/0/26/PM/N/1539/W/0/1794/0/0

| Date | Time Start-End | Duration (hr) | Phase | Code | Sub Code | P/U | MD From (usft) | Operation |
|-----------|----------------|---------------|-------|------|----------|-----|----------------|---|
| 6/17/2012 | - | | | | | | | |
| 6/18/2012 | - | | | | | | | |
| 1/8/2013 | 10:00 - 11:00 | 1.00 | FRAC | 33 | C | P | | FILL SURFACE CSG. MIRU CAMERON QUICK TEST. 1ST PSI TEST T/ 7000 PSI. HELD FOR 15 MIN LOST 31 PSI. NO COMMUNICATION OR MIGRATION WITH SURFACE CSG BLEED OFF PSI. SWIFN |
| 1/9/2013 | 14:00 - 16:30 | 2.50 | FRAC | 33 | C | P | | RU HOT OILER, SURFACE CSG FULL PRESSURED TO 1400 PSI SLIGHT BLEED OFF COULD NOT PUMP INTO 8 5/8 X 4 1/2 ANNULAR, BLED WELL OFF SWI WAIT ON POP OFF TO BE INSTALLED |
| 1/14/2013 | 7:00 - 13:00 | 6.00 | FRAC | 37 | B | P | | HSM, RIGGING UP, MIRU CASED HOLE SOLUTIONS, PERF MESAVERDE USING 3-1/8 EXPEND, 23 GRM, 0.36" HOLE. AS PERSAY IN PROCEDURE, X OVER TO FRAC CREW |
| 1/15/2013 | 6:30 - 6:45 | 0.25 | FRAC | 48 | | P | | HSM, REVIEW FRAC DESIGN, AND COLD WEATHER [-21 DEEGREE] |

US ROCKIES REGION
Operation Summary Report

Well: MORGAN STATE 921-36F1CS GREEN

Spud Date: 6/17/2012

Project: UTAH-UINTAH

Site: MORGAN STATE 921-36F2 PAD

Rig Name No: MILES 2/2

Event: COMPLETION

Start Date: 1/8/2013

End Date: 1/30/2013

Active Datum: RKB @5,018.00usft (above Mean Sea Level)

UWI: SE/NW/09/S/21/E/36/0/0/26/PM/N/1539/W/0/1794/0/0

| Date | Time Start-End | Duration (hr) | Phase | Code | Sub Code | P/U | MD From (usft) | Operation |
|-----------|----------------|---------------|-------|------|----------|-----|----------------|---|
| | 6:45 - 18:30 | 11.75 | FRAC | 36 | B | P | | <p>PERF & FRAC FOLLOWING WELL AS PER DESIGN W/ 30/50 MESH SAND & SLK WTR. ALL CBP'S ARE HALIBURTON 8K CBP'S. REFER TO STIM PJR FOR FLUID, SAND AND CHEMICAL VOLUME PUMP'D</p> <p>FRAC STG #1] WHP=1,608#, BRK DN PERFS=3,362#, @=4.1 BPM, INJ RT=50.1, INJ PSI=4,828#, INITIAL ISIP=2,397#, INITIAL FG=.70, FINAL ISIP=2,837#, FINAL FG=.75, AVERAGE RATE=49.4, AVERAGE PRESSURE=4,958#, MAX RATE=50.9, MAX PRESSURE=5,948#, NET PRESSURE INCREASE=440#, 21/21 100% CALC PERFS OPEN. X OVER TO WIRE LINE</p> <p>PERF STG #2] P/U RIH W/ HALIBURTON 8K CBP & PERF GUN, SET CBP @=9,075', PERF MESAVERDE USING 3-1/8 EXPEND, 23 GRM, 0.36" HOLE. AS PERSAY IN PROCEDURE, X OVER TO FRAC CREW</p> <p>FRAC STG #2] WHP=1,860#, BRK DN PERFS=3,122#, @=4.7 BPM, INJ RT=49.4, INJ PSI=4,668#, INITIAL ISIP=2,660#, INITIAL FG=.74, FINAL ISIP=2,941#, FINAL FG=.77, AVERAGE RATE=48.6, AVERAGE PRESSURE=4,586#, MAX RATE=49.7, MAX PRESSURE=5,606#, NET PRESSURE INCREASE=281#, 24/24 100% CALC PERFS OPEN. X OVER TO WIRE LINE</p> <p>PERF STG #3] P/U RIH W/ HALIBURTON 8K CBP & PERF GUN, SET CBP @=8,809', PERF MESAVERDE USING 3-1/8 EXPEND, 23 GRM, 0.36" HOLE. AS PERSAY IN PROCEDURE, X OVER TO FRAC CREW. SWFVN HSM, REVIEW OPENING & CLOSING VALVES</p> |
| 1/16/2013 | 7:00 - 7:15 | 0.25 | FRAC | 48 | | P | | |

US ROCKIES REGION
Operation Summary Report

Well: MORGAN STATE 921-36F1CS GREEN

Spud Date: 6/17/2012

Project: UTAH-UINTAH

Site: MORGAN STATE 921-36F2 PAD

Rig Name No: MILES 2/2

Event: COMPLETION

Start Date: 1/8/2013

End Date: 1/30/2013

Active Datum: RKB @5,018.00usft (above Mean Sea Level)

UWI: SE/NW0/9/S/21/E/36/0/0/26/PM/N/1539/W/0/1794/0/0

| Date | Time Start-End | Duration (hr) | Phase | Code | Sub Code | P/U | MD From (usft) | Operation |
|-----------|----------------|---------------|-------|------|----------|-----|----------------|--|
| | 7:15 - 17:30 | 10.25 | FRAC | 36 | B | P | | <p>FRAC STG #3] WHP= 2269#, BRK DN PERFS= 4818#, @= 5 BPM, INJ RT= 50.4, INJ PSI= 4981#, INITIAL ISIP= 2936#, INITIAL FG= 0.77, FINAL ISIP= 2447#, FINAL FG= 0.72, AVERAGE RATE= 50.2 BPM, AVERAGE PRESSURE= 4353#, MAX RATE= 50.6 BPM, MAX PRESSURE= 5193#, NET PRESSURE INCREASE= - 489#, CALC 100% PERFS OPEN. X OVER TO WIRE LINE</p> <p>PERF STG #4] P/U RIH W/ HALIBURTON 8K CBP & PERF GUN, SET CBP @= 8658', PERF MESAVERDE USING 3-1/8 EXPEND, 23 GRM, 0.36" HOLE. AS PERSAY IN PROCEDURE, X OVER TO FRAC CREW</p> <p>FRAC STG #4] WHP= 2185#, BRK DN PERFS= 2767#, @= 5.9 BPM, INJ RT= 51.6 BPM, INJ PSI= 4848#, INITIAL ISIP= 2266#, INITIAL FG= 0.70, FINAL ISIP= 2737#, FINAL FG= 0.76, AVERAGE RATE= 51 BPM, AVERAGE PRESSURE= 4839#, MAX RATE= 53.6, MAX PRESSURE= 5907#, NET PRESSURE INCREASE= 471#, CALC 100% PERFS OPEN. (24/24 HOLES), X OVER TO WIRE LINE</p> <p>PERF STG #5] P/U RIH W/ HALIBURTON 8K CBP & PERF GUN, SET CBP @= 8557', PERF MESAVERDE USING 3-1/8 EXPEND, 23 GRM, 0.36" HOLE. AS PERSAY IN PROCEDURE, X OVER TO FRAC CREW</p> <p>FRAC STG #5] WHP= 1298#, BRK DN PERFS= 2573#, @= 4.4 BPM, INJ RT= 53.4 BPM, INJ PSI= 4677#, INITIAL ISIP= 1576#, INITIAL FG= 0.63, FINAL ISIP= 2552#, FINAL FG= 0.74, AVERAGE RATE= 52.4, AVERAGE PRESSURE= 4582#, MAX RATE= 53.5 BPM, MAX PRESSURE= 5687#, NET PRESSURE INCREASE= 976#, CALC 92% PERFS OPEN. (22/24 HOLES), X OVER TO WIRE LINE</p> |
| 1/17/2013 | 6:30 - 7:00 | 0.50 | FRAC | 48 | B | P | | JSA-SAFETY MEETING |

US ROCKIES REGION
Operation Summary Report

Well: MORGAN STATE 921-36F1CS GREEN

Spud Date: 6/17/2012

Project: UTAH-UINTAH

Site: MORGAN STATE 921-36F2 PAD

Rig Name No: MILES 2/2

Event: COMPLETION

Start Date: 1/8/2013

End Date: 1/30/2013

Active Datum: RKB @5,018.00usft (above Mean Sea Level)

UWI: SE/NW0/9/S/21/E/36/0/0/26/PM/N/1539/W/0/1794/0/0

| Date | Time Start-End | Duration (hr) | Phase | Code | Sub Code | P/U | MD From (usft) | Operation |
|-----------|----------------|---------------|-------|------|----------|-----|----------------|---|
| | 7:00 - 17:30 | 10.50 | FRAC | 36 | B | P | | <p>PERF STG #6] P/U RIH W/ HALIBURTON 8K CBP & PERF GUN, SET CBP @= 8245', PERF MESAVERDE USING 3-1/8 EXPEND, 23 GRM, 0.36" HOLE. AS PERSAY IN PROCEDURE, X OVER TO FRAC CREW</p> <p>FRAC STG #6] WHP= 2050#, BRK DN PERFS= 2452#, @= 6.5 BPM, INJ RT= 51.3, INJ PSI= 4803#, INITIAL ISIP= 2108#, INITIAL FG= 0.70, FINAL ISIP= 2621#, FINAL FG= 0.76, AVERAGE RATE= 50.4 BPM, AVERAGE PRESSURE= 4677#, MAX RATE= 51.3 BPM, MAX PRESSURE= 6123#, NET PRESSURE INCREASE= 513#, CALC 100% PERFS OPEN. (21/21 HOLES), X OVER TO WIRE LINE</p> <p>PERF STG #7] P/U RIH W/ HALIBURTON 8K CBP & PERF GUN, SET CBP @= 7819', PERF MESAVERDE USING 3-1/8 EXPEND, 23 GRM, 0.36" HOLE. AS PERSAY IN PROCEDURE, X OVER TO FRAC CREW</p> <p>FRAC STG #7] WHP= 1110#, BRK DN PERFS= 2435#, @= 4.5 BPM, INJ RT= 49.4 BPM, INJ PSI= 3038#, INITIAL ISIP= 1316#, INITIAL FG= 0.61, FINAL ISIP= 2207#, FINAL FG= 0.73, AVERAGE RATE= 49.2, AVERAGE PRESSURE= 3935#, MAX RATE= 50.8 BPM, MAX PRESSURE= 4764#, NET PRESSURE INCREASE= 891#, CALC 88% PERFS OPEN. (21/24 HOLES) X OVER TO WIRE LINE</p> <p>PERF STG #8] P/U RIH W/ HALIBURTON 8K CBP & PERF GUN, SET CBP @= 7457', PERF MESAVERDE USING 3-1/8 EXPEND, 23 GRM, 0.36" HOLE. AS PERSAY IN</p> <p>FRAC STG #8] WHP= 160#, START PUMPING W/ 1000# AT 10 BPM, SHUT DN WELLON VAC AT 2.1 BPM, SHUT DN, CALL DENVER, SKIP ZONE, . X OVER TO WIRE LINE</p> <p>PERF STG #9] P/U RIH W/ HALIBURTON 8K CBP & PERF GUN, SET CBP @= 7184', PERF MESAVERDE USING 3-1/8 EXPEND, 23 GRM, 0.36" HOLE. AS PERSAY IN PROCEDURE, X OVER TO FRAC CREW JSA-SAFETY MEETING</p> |
| 1/18/2013 | 6:30 - 7:00 | 0.50 | FRAC | 48 | | P | | |

US ROCKIES REGION
Operation Summary Report

| | | | |
|--|--|--|------------------------|
| Well: MORGAN STATE 921-36F1CS GREEN | | Spud Date: 6/17/2012 | |
| Project: UTAH-UINTAH | | Site: MORGAN STATE 921-36F2 PAD | Rig Name No: MILES 2/2 |
| Event: COMPLETION | | Start Date: 1/8/2013 | End Date: 1/30/2013 |
| Active Datum: RKB @5,018.00usft (above Mean Sea Level) | | UWI: SE/NW/0/9/S/21/E/36/0/0/26/PM/N/1539/W/0/1794/0/0 | |

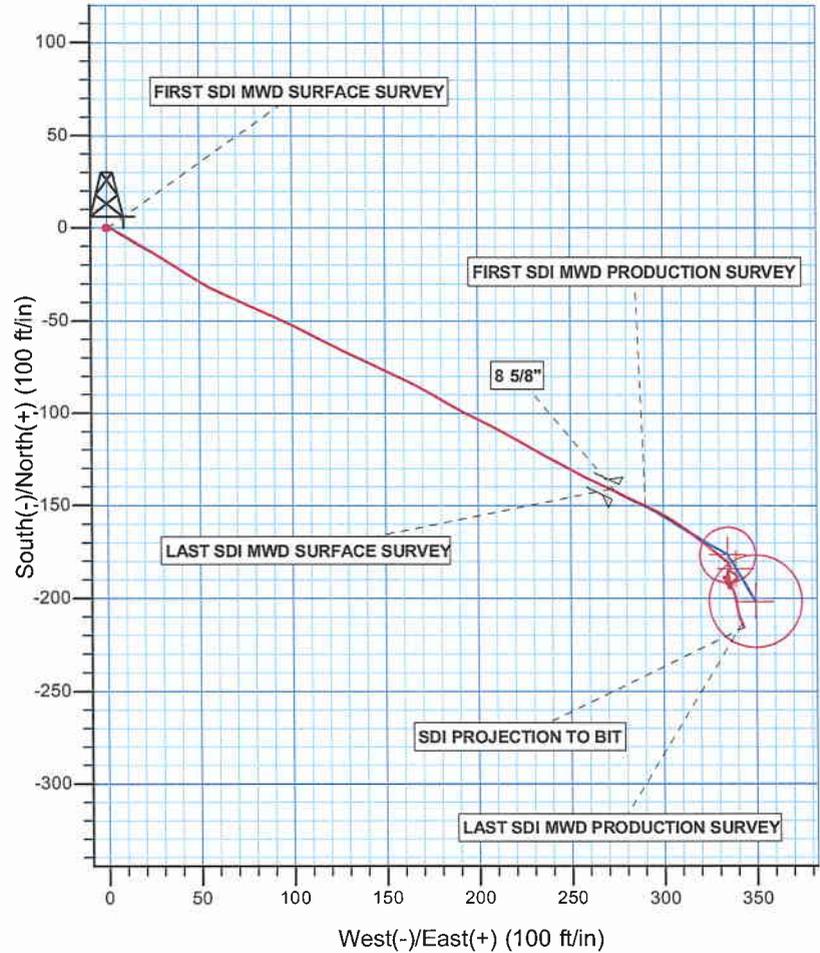
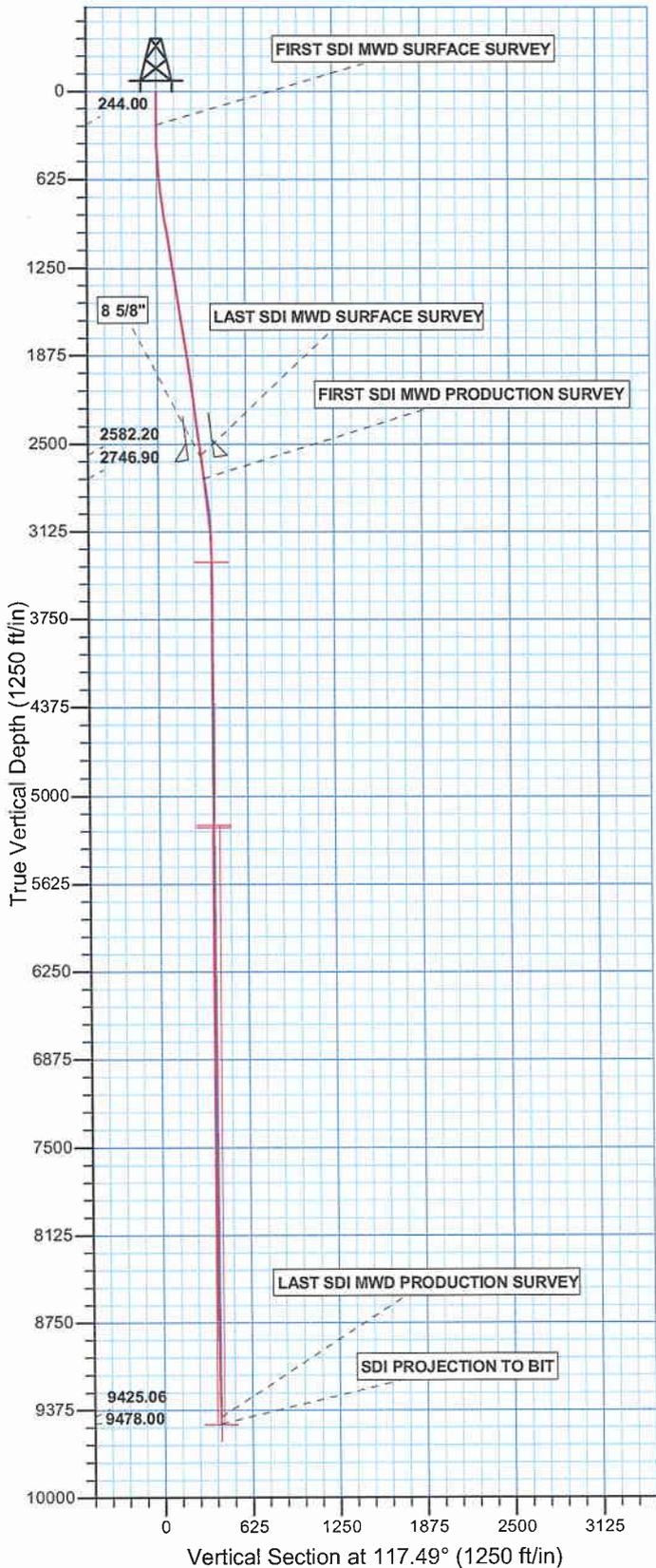
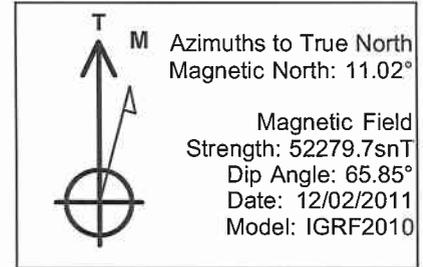
| Date | Time Start-End | Duration (hr) | Phase | Code | Sub Code | P/U | MD From (usft) | Operation |
|-----------|----------------|---------------|--------|------|----------|-----|----------------|--|
| | 7:00 - 17:30 | 10.50 | FRAC | 36 | B | P | | <p>FRAC STG #9] WHP= 588#, BRK DN PERFS= 1439#, @= 9.9 BPM, INJ RT= 49.4 BPM, INJ PSI= 5516#, INITIAL ISIP= 1439#, INITIAL FG= 0.64, FINAL ISIP= 2333#, FINAL FG= 0.77, AVERAGE RATE= 48.5 BPM, AVERAGE PRESSURE= 4215#, MAX RATE= 50.1, MAX PRESSURE= 5930#, NET PRESSURE INCREASE= 894#, CALC 63% PERFS OPEN. (15/24 HOLES) X OVER TO WIRE LINE</p> <p>PERF STG #10] P/U RIH W/ HALIBURTON 8K CBP & PERF GUN, SET CBP @= 6777', PERF MESAVERDE USING 3-1/8 EXPEND, 23 GRM, 0.36" HOLE. AS PERSAY IN PROCEDURE, X OVER TO FRAC CREW</p> <p>FRAC STG #10] WHP= 1035#, BRK DN PERFS= 2465#, @= 3.5 BPM, INJ RT= 49.8 BPM, INJ PSI= 3414#, INITIAL ISIP= 1132#, INITIAL FG= 0.61, FINAL ISIP= 1897#, FINAL FG= 0.72, AVERAGE RATE= 49.6 BPM, AVERAGE PRESSURE= 3443#, MAX RATE= 50.2 BPM, MAX PRESSURE= 2465#, NET PRESSURE INCREASE= 765#, CALC 96% PERFS OPEN. (23/24 HOLES), X OVER TO WIRE LINE</p> <p>PERF STG #11] P/U RIH W/ HALIBURTON 8K CBP & PERF GUN, SET CBP @= 6495', PERF MESAVERDE USING 3-1/8 EXPEND, 23 GRM, 0.36" HOLE. AS PERSAY IN</p> <p>FRAC STG #11) WHP = 940#, BRK DN PERFS = 1635#, @ 4.9 BPM, INJ RT = 47.4 BPM, INT PSI = 3064 #, INITAL ISIP = 1147#, INITAL FG = 0.62 FINAL ISIP = 1491#, FINIAL FG = 0.68 , AVERAGE RATE = 47 BPM, AVERAGE PSI = 2917# , MAX RATE = 47.4 BPM, MAX PSI = 3400 #, NET PRESSURE INCREASE = 344#, CALC 100% PERF OPEN, (24/24 HOLES), X OVER TO WIRELINE</p> <p>KILL PLUG) RIH W/ HALLIBURTON 8K CBP, SET CBP @6074', R/D WIRELINE AND FRAC CREW, SWM,</p> <p>TOTAL WATER = 12541 BBLS, TOTAL SAND = 302593 # WAITING ON WEATHERFORD TO REPLACE PIPE RAMS</p> |
| 1/29/2013 | 7:00 - 9:00 | 2.00 | DRLOUT | 46 | F | Z | | |

US ROCKIES REGION
Operation Summary Report

| | | | |
|--|--|--|------------------------|
| Well: MORGAN STATE 921-36F1CS GREEN | | Spud Date: 6/17/2012 | |
| Project: UTAH-UINTAH | | Site: MORGAN STATE 921-36F2 PAD | Rig Name No: MILES 2/2 |
| Event: COMPLETION | | Start Date: 1/8/2013 | End Date: 1/30/2013 |
| Active Datum: RKB @5,018.00usft (above Mean Sea Level) | | UWI: SE/NW09/S/21/E/36/0/0/26/PM/N/1539/W/0/1794/0/0 | |

| Date | Time Start-End | Duration (hr) | Phase | Code | Sub Code | P/U | MD From (usft) | Operation |
|-----------|----------------|---------------|--------|------|----------|-----|----------------|---|
| | 9:00 - 17:00 | 8.00 | DRLOUT | 44 | C | P | | MIRU, NDWH, NU BOP'S, PU POBS, BIT, SN, TIH TBG, 191 JTS, 6074', TAG KILL PLUG, BREAK CIRC, PRESSURE TEST BOP'S, 3000#, PU PWR SWIVEL, MILL 7 PLUGS, 261 JTS, 8288' SWMFN |
| | | | | | | | | PLUG# 1 6074' 20' SAND 5 MIN 300# KICK PLUG# 2 6495' 30' SAND 5 MIN 300# KICK PLUG# 3 6777' 40' SAND 5 MIN 200# KICK PLUG# 4 7184' 40' SAND 5 MIN 000# KICK PLUG# 5 7457' 10' SAND 5 MIN 400# KICK PLUG# 6 7819' 20' SAND 5 MIN 500# KICK PLUG# 7 8245' 15' SAND 5 MIN 900# KICK LANDING TBG |
| 1/30/2013 | 7:00 - 7:30 | 0.50 | DRLOUT | 48 | | P | | MILL 4 CBP'S, 286 JTS, 9075', C/O 105' SAND, TO PBT, 298 JTS, 9447', POOH TO 8770.67', 276 JTS, LAND TBG, ND BOP'S, NUWH, POBS, 1200#, PRESSURE TEST FLOW LINE 3000#, RDMO TO NBU 1022-11F4AS |
| | 7:30 - 12:00 | 4.50 | DRLOUT | 44 | C | P | | PLUG# 8 8557' 30' SAND 5 MIN 800# KICK PLUG# 9 8658' 10' SAND 5 MIN 1000# KICK PLUG# 10 8809' 30' SAND 5 MIN 1000# KICK PLUG# 11 9075' 30' SAND 5 MIN 1100# KICK |
| | | | | | | | | PBTD 9,639' BTM PERF 9,527' |
| | | | | | | | | TBG 276 JTS 8743.64' KB 24.00' HANGER 4.125" .83' SN 1.875" 2.20' EOT 8770.67' |
| 2/1/2013 | 7:00 - | | | 50 | | | | FRAC WTR 12,541 BBLS RCVD 2,500 BBLS LTR 10,041 BBLS WELL IP'D ON 2/1/13 - 2854 MCFD, 0 BWP, 0 BOPD, CP 2538#, FTP 1250#, LP 115#, 24 HRS, CK 20/64 |

| WELL DETAILS: MORGAN STATE 921-36F1CS | | | | | |
|---------------------------------------|-------|-------------|------------|-----------|-------------|
| GL 4994 & KB 24 @ 5018.00ft (HP 318) | | | | | |
| +N/-S | +E/-W | Northing | Easting | Latitude | Longitude |
| 0.00 | 0.00 | 14527948.51 | 2059870.68 | 39.995552 | -109.502389 |



| PROJECT DETAILS: UTAH - UTM (feet), NAD27, Zone 12N |
|---|
| Geodetic System: Universal Transverse Mercator (US Survey Feet) |
| Datum: NAD 1927 (NADCON CONUS) |
| Ellipsoid: Clarke 1866 |
| Zone: Zone 12N (114 W to 108 W) |
| Location: SECTION 36 T9S R21E |
| System Datum: Mean Sea Level |

| |
|--|
| Design: OH (MORGAN STATE 921-36F1CS/OH) |
| Created By: Gabe Kendall Date: 8:42, September 19 2012 |



Scientific Drilling

US ROCKIES REGION PLANNING

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

MORGAN STATE 921-36F2 PAD

MORGAN STATE 921-36F1CS

OH

Design: OH

Standard Survey Report

19 September, 2012

Anadarko 
Petroleum Corporation

| | | | |
|------------------|------------------------------------|-------------------------------------|--------------------------------------|
| Company: | US ROCKIES REGION PLANNING | Local Co-ordinate Reference: | Well MORGAN STATE 921-36F1CS |
| Project: | UTAH - UTM (feet), NAD27, Zone 12N | TVD Reference: | GL 4994 & KB 24 @ 5018.00ft (HP 318) |
| Site: | MORGAN STATE 921-36F2 PAD | MD Reference: | GL 4994 & KB 24 @ 5018.00ft (HP 318) |
| Well: | MORGAN STATE 921-36F1CS | North Reference: | True |
| Wellbore: | OH | Survey Calculation Method: | Minimum Curvature |
| Design: | OH | Database: | EDM 5000.1 Single User Db |

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

| | | | | | |
|------------------------------|--|---------------------|--------------------|--------------------------|-------------|
| Site | MORGAN STATE 921-36F2 PAD, SECTION 36 T9S R21E | | | | |
| Site Position: | | Northing: | 14,527,976.05 usft | Latitude: | 39.995627 |
| From: | Lat/Long | Easting: | 2,059,883.10 usft | Longitude: | -109.502343 |
| Position Uncertainty: | 0.00 ft | Slot Radius: | 13.200 in | Grid Convergence: | 0.96 ° |

| | | | | | | |
|-----------------------------|--|---------|----------------------------|--------------------|----------------------|-------------|
| Well | MORGAN STATE 921-36F1CS, 1539 FNL 1794 FWL | | | | | |
| Well Position | +N/-S | 0.00 ft | Northing: | 14,527,948.52 usft | Latitude: | 39.995552 |
| | +E/-W | 0.00 ft | Easting: | 2,059,870.68 usft | Longitude: | -109.502389 |
| Position Uncertainty | | 0.00 ft | Wellhead Elevation: | ft | Ground Level: | 4,994.00 ft |

| | | | | | |
|------------------|-------------------|--------------------|------------------------|----------------------|----------------------------|
| Wellbore | OH | | | | |
| Magnetics | Model Name | Sample Date | Declination (°) | Dip Angle (°) | Field Strength (nT) |
| | IGRF2010 | 12/02/11 | 11.02 | 65.85 | 52,280 |

| | | | | | |
|--------------------------|------------------------------|-------------------|-------------------|----------------------|------|
| Design | OH | | | | |
| Audit Notes: | | | | | |
| Version: | 1.0 | Phase: | ACTUAL | Tie On Depth: | 0.00 |
| Vertical Section: | Depth From (TVD) (ft) | +N/-S (ft) | +E/-W (ft) | Direction (°) | |
| | 0.00 | 0.00 | 0.00 | 117.49 | |

| | | | | | |
|-----------------------|----------------|-----------------------------------|------------------|------------------------------|--|
| Survey Program | Date | 09/19/12 | | | |
| From (ft) | To (ft) | Survey (Wellbore) | Tool Name | Description | |
| 15.00 | 2,604.00 | Survey #1 SDI MWD SURFACE (OH) | SDI MWD | SDI MWD - Standard ver 1.0.1 | |
| 2,770.00 | 9,505.00 | Survey #2 SDI MWD PRODUCTION (OH) | SDI MWD | SDI MWD - Standard ver 1.0.1 | |

| | | | | | | | | | | |
|-------------------------------------|------------------------|--------------------|----------------------------|-------------------|-------------------|------------------------------|------------------------------|-----------------------------|----------------------------|------|
| Survey | | | | | | | | | | |
| Measured Depth (ft) | Inclination (°) | Azimuth (°) | Vertical Depth (ft) | +N/-S (ft) | +E/-W (ft) | Vertical Section (ft) | Dogleg Rate (°/100ft) | Build Rate (°/100ft) | Turn Rate (°/100ft) | |
| 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 15.00 | 0.00 | 0.00 | 15.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 244.00 | 0.44 | 90.84 | 244.00 | -0.01 | 0.88 | 0.79 | 0.19 | 0.19 | 0.19 | 0.00 |
| FIRST SDI MWD SURFACE SURVEY | | | | | | | | | | |
| 334.00 | 1.23 | 110.09 | 333.99 | -0.35 | 2.13 | 2.05 | 0.92 | 0.88 | 21.39 | |
| 429.00 | 2.29 | 119.58 | 428.94 | -1.64 | 4.74 | 4.96 | 1.15 | 1.12 | 9.99 | |
| 524.00 | 3.82 | 122.23 | 523.80 | -4.26 | 9.07 | 10.01 | 1.62 | 1.61 | 2.79 | |
| 619.00 | 5.54 | 118.18 | 618.48 | -8.12 | 15.79 | 17.75 | 1.84 | 1.81 | -4.26 | |
| 715.00 | 7.56 | 119.76 | 713.85 | -13.44 | 25.36 | 28.70 | 2.11 | 2.10 | 1.65 | |
| 809.00 | 8.27 | 123.19 | 806.96 | -20.21 | 36.38 | 41.60 | 0.91 | 0.76 | 3.65 | |

| | | | |
|------------------|------------------------------------|-------------------------------------|--------------------------------------|
| Company: | US ROCKIES REGION PLANNING | Local Co-ordinate Reference: | Well MORGAN STATE 921-36F1CS |
| Project: | UTAH - UTM (feet), NAD27, Zone 12N | TVD Reference: | GL 4994 & KB 24 @ 5018.00ft (HP 318) |
| Site: | MORGAN STATE 921-36F2 PAD | MD Reference: | GL 4994 & KB 24 @ 5018.00ft (HP 318) |
| Well: | MORGAN STATE 921-36F1CS | North Reference: | True |
| Wellbore: | OH | Survey Calculation Method: | Minimum Curvature |
| Design: | OH | Database: | EDM 5000.1 Single User Db |

| Survey | | | | | | | | | | |
|--|-----------------|-------------|---------------------|------------|------------|-----------------------|-----------------------|----------------------|---------------------|--|
| Measured Depth (ft) | Inclination (°) | Azimuth (°) | Vertical Depth (ft) | +N/-S (ft) | +E/-W (ft) | Vertical Section (ft) | Dogleg Rate (°/100ft) | Build Rate (°/100ft) | Turn Rate (°/100ft) | |
| 903.00 | 9.32 | 121.52 | 899.85 | -27.89 | 48.53 | 55.92 | 1.15 | 1.12 | -1.78 | |
| 996.00 | 9.50 | 114.14 | 991.60 | -34.97 | 61.95 | 71.10 | 1.31 | 0.19 | -7.94 | |
| 1,091.00 | 9.17 | 113.51 | 1,085.34 | -41.19 | 76.05 | 86.47 | 0.36 | -0.35 | -0.66 | |
| 1,186.00 | 8.62 | 115.54 | 1,179.20 | -47.28 | 89.41 | 101.14 | 0.67 | -0.58 | 2.14 | |
| 1,279.00 | 8.71 | 115.89 | 1,271.14 | -53.36 | 102.04 | 115.15 | 0.11 | 0.10 | 0.38 | |
| 1,373.00 | 9.06 | 116.77 | 1,364.01 | -59.80 | 115.05 | 129.66 | 0.40 | 0.37 | 0.94 | |
| 1,470.00 | 8.79 | 117.30 | 1,459.84 | -66.64 | 128.45 | 144.71 | 0.29 | -0.28 | 0.55 | |
| 1,563.00 | 9.19 | 114.79 | 1,551.70 | -73.01 | 141.51 | 159.23 | 0.60 | 0.43 | -2.70 | |
| 1,659.00 | 9.32 | 114.49 | 1,646.45 | -79.45 | 155.54 | 174.65 | 0.14 | 0.14 | -0.31 | |
| 1,752.00 | 8.35 | 117.74 | 1,738.34 | -85.71 | 168.37 | 188.93 | 1.17 | -1.04 | 3.49 | |
| 1,846.00 | 8.53 | 120.55 | 1,831.32 | -92.44 | 180.42 | 202.71 | 0.48 | 0.19 | 2.99 | |
| 1,940.00 | 8.93 | 118.16 | 1,924.23 | -99.42 | 192.85 | 216.97 | 0.57 | 0.43 | -2.54 | |
| 2,032.00 | 8.09 | 116.42 | 2,015.22 | -105.67 | 204.94 | 230.58 | 0.95 | -0.91 | -1.89 | |
| 2,124.00 | 7.74 | 119.67 | 2,106.35 | -111.62 | 216.13 | 243.25 | 0.62 | -0.38 | 3.53 | |
| 2,215.00 | 7.47 | 120.20 | 2,196.54 | -117.63 | 226.56 | 255.28 | 0.31 | -0.30 | 0.58 | |
| 2,310.00 | 7.74 | 119.06 | 2,290.71 | -123.84 | 237.49 | 267.84 | 0.33 | 0.28 | -1.20 | |
| 2,401.00 | 7.65 | 117.26 | 2,380.89 | -129.59 | 248.23 | 280.02 | 0.28 | -0.10 | -1.98 | |
| 2,495.00 | 7.21 | 117.12 | 2,474.10 | -135.15 | 259.04 | 292.18 | 0.47 | -0.47 | -0.15 | |
| 2,604.00 | 7.56 | 115.45 | 2,582.20 | -141.35 | 271.61 | 306.18 | 0.38 | 0.32 | -1.53 | |
| LAST SDI MWD SURFACE SURVEY | | | | | | | | | | |
| 2,770.00 | 6.74 | 114.88 | 2,746.90 | -150.14 | 290.30 | 326.83 | 0.50 | -0.49 | -0.34 | |
| FIRST SDI MWD PRODUCTION SURVEY | | | | | | | | | | |
| 2,864.00 | 7.15 | 118.83 | 2,840.21 | -155.28 | 300.43 | 338.19 | 0.67 | 0.44 | 4.20 | |
| 2,958.00 | 7.83 | 124.92 | 2,933.41 | -161.77 | 310.81 | 350.39 | 1.11 | 0.72 | 6.48 | |
| 3,053.00 | 6.47 | 129.44 | 3,027.67 | -168.87 | 320.25 | 362.04 | 1.55 | -1.43 | 4.76 | |
| 3,147.00 | 5.36 | 128.78 | 3,121.17 | -174.99 | 327.76 | 371.53 | 1.18 | -1.18 | -0.70 | |
| 3,242.00 | 2.90 | 128.07 | 3,215.92 | -179.25 | 333.11 | 378.24 | 2.59 | -2.59 | -0.75 | |
| 3,336.00 | 1.14 | 155.14 | 3,309.86 | -181.56 | 335.38 | 381.32 | 2.08 | -1.87 | 28.80 | |
| 3,430.00 | 1.58 | 154.70 | 3,403.83 | -183.58 | 336.33 | 383.09 | 0.47 | 0.47 | -0.47 | |
| 3,525.00 | 0.97 | 264.39 | 3,498.82 | -184.84 | 336.09 | 383.46 | 2.23 | -0.64 | 115.46 | |
| 3,619.00 | 0.83 | 213.20 | 3,592.81 | -185.49 | 334.92 | 382.73 | 0.84 | -0.15 | -54.46 | |
| 3,714.00 | 0.79 | 196.63 | 3,687.80 | -186.70 | 334.36 | 382.78 | 0.25 | -0.04 | -17.44 | |
| 3,808.00 | 0.97 | 198.56 | 3,781.79 | -188.07 | 333.92 | 383.03 | 0.19 | 0.19 | 2.05 | |
| 3,903.00 | 1.23 | 195.49 | 3,876.77 | -189.82 | 333.39 | 383.37 | 0.28 | 0.27 | -3.23 | |
| 3,997.00 | 0.84 | 145.26 | 3,970.75 | -191.35 | 333.51 | 384.18 | 1.01 | -0.41 | -53.44 | |
| 4,092.00 | 0.24 | 22.27 | 4,065.75 | -191.74 | 333.98 | 384.78 | 1.04 | -0.63 | -129.46 | |
| 4,186.00 | 0.35 | 158.13 | 4,159.75 | -191.83 | 334.17 | 384.98 | 0.58 | 0.12 | 144.53 | |
| 4,281.00 | 0.70 | 133.70 | 4,254.75 | -192.50 | 334.69 | 385.76 | 0.43 | 0.37 | -25.72 | |
| 4,375.00 | 1.06 | 45.54 | 4,348.74 | -192.28 | 335.73 | 386.58 | 1.33 | 0.38 | -93.79 | |
| 4,470.00 | 0.40 | 101.52 | 4,443.73 | -191.74 | 336.68 | 387.17 | 0.95 | -0.69 | 58.93 | |
| 4,565.00 | 0.98 | 40.69 | 4,538.72 | -191.19 | 337.54 | 387.68 | 0.90 | 0.61 | -64.03 | |
| 4,659.00 | 0.70 | 29.64 | 4,632.71 | -190.08 | 338.34 | 387.88 | 0.34 | -0.30 | -11.76 | |
| 4,753.00 | 0.34 | 60.22 | 4,726.71 | -189.44 | 338.87 | 388.05 | 0.47 | -0.38 | 32.53 | |

| | | | |
|------------------|------------------------------------|-------------------------------------|--------------------------------------|
| Company: | US ROCKIES REGION PLANNING | Local Co-ordinate Reference: | Well MORGAN STATE 921-36F1CS |
| Project: | UTAH - UTM (feet), NAD27, Zone 12N | TVD Reference: | GL 4994 & KB 24 @ 5018.00ft (HP 318) |
| Site: | MORGAN STATE 921-36F2 PAD | MD Reference: | GL 4994 & KB 24 @ 5018.00ft (HP 318) |
| Well: | MORGAN STATE 921-36F1CS | North Reference: | True |
| Wellbore: | OH | Survey Calculation Method: | Minimum Curvature |
| Design: | OH | Database: | EDM 5000.1 Single User Db |

| Survey | | | | | | | | | | |
|---------------------|-----------------|-------------|---------------------|-----------|-----------|-----------------------|-----------------------|----------------------|---------------------|--|
| Measured Depth (ft) | Inclination (°) | Azimuth (°) | Vertical Depth (ft) | +N/S (ft) | +E/W (ft) | Vertical Section (ft) | Dogleg Rate (°/100ft) | Build Rate (°/100ft) | Turn Rate (°/100ft) | |
| 4,848.00 | 0.44 | 63.91 | 4,821.71 | -189.14 | 339.44 | 388.42 | 0.11 | 0.11 | 3.88 | |
| 4,943.00 | 0.62 | 124.29 | 4,916.71 | -189.27 | 340.20 | 389.15 | 0.58 | 0.19 | 63.56 | |
| 5,037.00 | 1.19 | 333.27 | 5,010.70 | -188.68 | 340.18 | 388.86 | 1.87 | 0.61 | -160.66 | |
| 5,131.00 | 1.06 | 314.05 | 5,104.68 | -187.21 | 339.11 | 387.24 | 0.42 | -0.14 | -20.45 | |
| 5,226.00 | 0.78 | 293.38 | 5,199.67 | -186.34 | 337.89 | 385.75 | 0.45 | -0.29 | -21.76 | |
| 5,320.00 | 0.62 | 316.60 | 5,293.66 | -185.72 | 336.95 | 384.63 | 0.34 | -0.17 | 24.70 | |
| 5,415.00 | 0.79 | 286.89 | 5,388.66 | -185.15 | 335.97 | 383.50 | 0.42 | 0.18 | -31.27 | |
| 5,509.00 | 0.70 | 276.52 | 5,482.65 | -184.90 | 334.78 | 382.33 | 0.17 | -0.10 | -11.03 | |
| 5,604.00 | 0.88 | 166.66 | 5,577.64 | -185.54 | 334.37 | 382.26 | 1.37 | 0.19 | -115.64 | |
| 5,698.00 | 1.14 | 155.67 | 5,671.63 | -187.10 | 334.92 | 383.47 | 0.34 | 0.28 | -11.69 | |
| 5,793.00 | 1.14 | 167.80 | 5,766.61 | -188.88 | 335.51 | 384.82 | 0.25 | 0.00 | 12.77 | |
| 5,887.00 | 1.49 | 168.24 | 5,860.58 | -190.99 | 335.96 | 386.19 | 0.37 | 0.37 | 0.47 | |
| 5,982.00 | 1.58 | 180.46 | 5,955.55 | -193.51 | 336.20 | 387.56 | 0.36 | 0.09 | 12.86 | |
| 6,076.00 | 0.53 | 284.17 | 6,049.54 | -194.70 | 335.77 | 387.73 | 1.90 | -1.12 | 110.33 | |
| 6,171.00 | 0.97 | 346.13 | 6,144.53 | -193.81 | 335.15 | 386.77 | 0.90 | 0.46 | 65.22 | |
| 6,265.00 | 1.06 | 3.62 | 6,238.52 | -192.17 | 335.01 | 385.89 | 0.34 | 0.10 | 18.61 | |
| 6,360.00 | 0.35 | 7.14 | 6,333.51 | -191.01 | 335.11 | 385.44 | 0.75 | -0.75 | 3.71 | |
| 6,454.00 | 0.18 | 106.98 | 6,427.51 | -190.76 | 335.28 | 385.48 | 0.45 | -0.18 | 106.21 | |
| 6,548.00 | 0.62 | 130.63 | 6,521.51 | -191.14 | 335.81 | 386.12 | 0.49 | 0.47 | 25.16 | |
| 6,643.00 | 0.79 | 158.75 | 6,616.50 | -192.08 | 336.44 | 387.12 | 0.40 | 0.18 | 29.60 | |
| 6,737.00 | 0.26 | 349.47 | 6,710.50 | -192.48 | 336.63 | 387.47 | 1.11 | -0.56 | -180.09 | |
| 6,832.00 | 0.26 | 33.24 | 6,805.50 | -192.09 | 336.71 | 387.36 | 0.20 | 0.00 | 46.07 | |
| 6,926.00 | 0.62 | 116.91 | 6,899.49 | -192.14 | 337.28 | 387.89 | 0.69 | 0.38 | 89.01 | |
| 7,020.00 | 1.32 | 318.53 | 6,993.49 | -191.56 | 337.02 | 387.39 | 2.03 | 0.74 | -168.49 | |
| 7,115.00 | 1.23 | 310.62 | 7,088.46 | -190.07 | 335.52 | 385.37 | 0.21 | -0.09 | -8.33 | |
| 7,209.00 | 0.88 | 299.55 | 7,182.45 | -189.06 | 334.13 | 383.67 | 0.43 | -0.37 | -11.78 | |
| 7,303.00 | 0.97 | 295.33 | 7,276.44 | -188.36 | 332.78 | 382.15 | 0.12 | 0.10 | -4.49 | |
| 7,398.00 | 0.88 | 156.48 | 7,371.43 | -188.69 | 332.34 | 381.92 | 1.82 | -0.09 | -146.16 | |
| 7,492.00 | 1.06 | 138.62 | 7,465.42 | -190.00 | 333.21 | 383.29 | 0.37 | 0.19 | -19.00 | |
| 7,586.00 | 1.41 | 133.35 | 7,559.40 | -191.45 | 334.62 | 385.21 | 0.39 | 0.37 | -5.61 | |
| 7,680.00 | 0.14 | 291.62 | 7,653.39 | -192.20 | 335.36 | 386.21 | 1.64 | -1.35 | 168.37 | |
| 7,775.00 | 0.18 | 331.36 | 7,748.39 | -192.03 | 335.18 | 385.97 | 0.12 | 0.04 | 41.83 | |
| 7,869.00 | 0.26 | 141.96 | 7,842.39 | -192.07 | 335.24 | 386.04 | 0.47 | 0.09 | 181.49 | |
| 7,964.00 | 0.44 | 128.60 | 7,937.38 | -192.46 | 335.66 | 386.60 | 0.21 | 0.19 | -14.06 | |
| 8,058.00 | 0.35 | 99.77 | 8,031.38 | -192.74 | 336.22 | 387.23 | 0.23 | -0.10 | -30.67 | |
| 8,152.00 | 0.62 | 138.18 | 8,125.38 | -193.16 | 336.84 | 387.97 | 0.43 | 0.29 | 40.86 | |
| 8,247.00 | 0.53 | 326.35 | 8,220.38 | -193.18 | 336.94 | 388.07 | 1.21 | -0.09 | -180.87 | |
| 8,341.00 | 0.62 | 312.29 | 8,314.37 | -192.48 | 336.32 | 387.20 | 0.18 | 0.10 | -14.96 | |
| 8,436.00 | 0.26 | 323.45 | 8,409.37 | -191.96 | 335.82 | 386.51 | 0.39 | -0.38 | 11.75 | |
| 8,530.00 | 0.35 | 160.94 | 8,503.37 | -192.06 | 335.78 | 386.52 | 0.64 | 0.10 | -172.88 | |
| 8,624.00 | 0.88 | 140.73 | 8,597.36 | -192.89 | 336.33 | 387.40 | 0.60 | 0.56 | -21.50 | |
| 8,719.00 | 1.06 | 155.67 | 8,692.35 | -194.25 | 337.16 | 388.76 | 0.33 | 0.19 | 15.73 | |
| 8,813.00 | 1.14 | 157.87 | 8,786.33 | -195.91 | 337.87 | 390.15 | 0.10 | 0.09 | 2.34 | |
| 8,907.00 | 1.14 | 160.68 | 8,880.31 | -197.66 | 338.53 | 391.55 | 0.06 | 0.00 | 2.99 | |

| | | | |
|------------------|------------------------------------|-------------------------------------|--------------------------------------|
| Company: | US ROCKIES REGION PLANNING | Local Co-ordinate Reference: | Well MORGAN STATE 921-36F1CS |
| Project: | UTAH - UTM (feet), NAD27, Zone 12N | TVD Reference: | GL 4994 & KB 24 @ 5018.00ft (HP 318) |
| Site: | MORGAN STATE 921-36F2 PAD | MD Reference: | GL 4994 & KB 24 @ 5018.00ft (HP 318) |
| Well: | MORGAN STATE 921-36F1CS | North Reference: | True |
| Wellbore: | OH | Survey Calculation Method: | Minimum Curvature |
| Design: | OH | Database: | EDM 5000.1 Single User Db |

| Survey | | | | | | | | | | |
|---------------------------------------|-----------------|-------------|---------------------|------------|------------|-----------------------|-----------------------|----------------------|---------------------|--------|
| Measured Depth (ft) | Inclination (°) | Azimuth (°) | Vertical Depth (ft) | +N/-S (ft) | +E/-W (ft) | Vertical Section (ft) | Dogleg Rate (°/100ft) | Build Rate (°/100ft) | Turn Rate (°/100ft) | |
| 9,002.00 | 1.23 | 166.48 | 8,975.29 | -199.54 | 339.08 | 392.91 | 0.16 | 0.09 | | 6.11 |
| 9,096.00 | 1.41 | 177.56 | 9,069.27 | -201.68 | 339.37 | 394.14 | 0.33 | 0.19 | | 11.79 |
| 9,191.00 | 1.58 | 164.81 | 9,164.24 | -204.11 | 339.76 | 395.62 | 0.39 | 0.18 | | -13.42 |
| 9,285.00 | 1.85 | 170.61 | 9,258.19 | -206.86 | 340.35 | 397.40 | 0.34 | 0.29 | | 6.17 |
| 9,379.00 | 2.38 | 164.31 | 9,352.13 | -210.24 | 341.12 | 399.65 | 0.61 | 0.56 | | -6.70 |
| 9,452.00 | 2.73 | 152.59 | 9,425.06 | -213.24 | 342.33 | 402.11 | 0.86 | 0.48 | | -16.05 |
| LAST SDI MWD PRODUCTION SURVEY | | | | | | | | | | |
| 9,505.00 | 2.73 | 152.59 | 9,478.00 | -215.48 | 343.49 | 404.18 | 0.00 | 0.00 | | 0.00 |
| SDI PROJECTION TO BIT | | | | | | | | | | |

| Casing Points | | | | | |
|---------------------|---------------------|--------|----------------------|--------------------|--|
| Measured Depth (ft) | Vertical Depth (ft) | Name | Casing Diameter (in) | Hole Diameter (in) | |
| 2,627.00 | 2,605.00 | 8 5/8" | 8.625 | 11.000 | |

| Design Annotations | | | | | |
|---------------------|---------------------|-------------------|------------|---------------------------------|--|
| Measured Depth (ft) | Vertical Depth (ft) | Local Coordinates | | Comment | |
| | | +N/-S (ft) | +E/-W (ft) | | |
| 244.00 | 244.00 | -0.01 | 0.88 | FIRST SDI MWD SURFACE SURVEY | |
| 2,604.00 | 2,582.20 | -141.35 | 271.61 | LAST SDI MWD SURFACE SURVEY | |
| 2,770.00 | 2,746.90 | -150.14 | 290.30 | FIRST SDI MWD PRODUCTION SURVEY | |
| 9,452.00 | 9,425.06 | -213.24 | 342.33 | LAST SDI MWD PRODUCTION SURVEY | |
| 9,505.00 | 9,478.00 | -215.48 | 343.49 | SDI PROJECTION TO BIT | |

Checked By: _____ Approved By: _____ Date: _____