

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

FORM 3  
AMENDED REPORT

<b>APPLICATION FOR PERMIT TO DRILL</b>		<b>1. WELL NAME and NUMBER</b> NBU 921-25F3AS
<b>2. TYPE OF WORK</b> DRILL NEW WELL <input checked="" type="checkbox"/> REENTER P&A WELL <input type="checkbox"/> DEEPEN WELL <input type="checkbox"/>		<b>3. FIELD OR WILDCAT</b> NATURAL BUTTES
<b>4. TYPE OF WELL</b> Gas Well Coalbed Methane Well: NO		<b>5. UNIT or COMMUNITIZATION AGREEMENT NAME</b> NATURAL BUTTES
<b>6. NAME OF OPERATOR</b> KERR-MCGEE OIL & GAS ONSHORE, L.P.		<b>7. OPERATOR PHONE</b> 720 929-6007
<b>8. ADDRESS OF OPERATOR</b> P.O. Box 173779, Denver, CO, 80217		<b>9. OPERATOR E-MAIL</b> Kathy.SchneebeckDulnoan@anadarko.com
<b>10. MINERAL LEASE NUMBER (FEDERAL, INDIAN, OR STATE)</b> UO 1194 ST	<b>11. MINERAL OWNERSHIP</b> FEDERAL <input type="checkbox"/> INDIAN <input type="checkbox"/> STATE <input checked="" type="checkbox"/> FEE <input type="checkbox"/>	
<b>13. NAME OF SURFACE OWNER (if box 12 = 'fee')</b>		<b>12. SURFACE OWNERSHIP</b> FEDERAL <input type="checkbox"/> INDIAN <input type="checkbox"/> STATE <input checked="" type="checkbox"/> FEE <input type="checkbox"/>
<b>15. ADDRESS OF SURFACE OWNER (if box 12 = 'fee')</b>		<b>14. SURFACE OWNER PHONE (if box 12 = 'fee')</b>
<b>17. INDIAN ALLOTTEE OR TRIBE NAME (if box 12 = 'INDIAN')</b>		<b>16. SURFACE OWNER E-MAIL (if box 12 = 'fee')</b>
<b>18. INTEND TO COMMINGLE PRODUCTION FROM MULTIPLE FORMATIONS</b> YES <input checked="" type="checkbox"/> (Submit Commingling Application) NO <input type="checkbox"/>		<b>19. SLANT</b> VERTICAL <input type="checkbox"/> DIRECTIONAL <input checked="" type="checkbox"/> HORIZONTAL <input type="checkbox"/>

20. LOCATION OF WELL	FOOTAGES	QTR-QTR	SECTION	TOWNSHIP	RANGE	MERIDIAN
<b>LOCATION AT SURFACE</b>	2589 FNL 1776 FWL	SE	25	9.0 S	21.0 E	S
<b>Top of Uppermost Producing Zone</b>	2034 FNL 1905 FWL	SE	25	9.0 S	21.0 E	S
<b>At Total Depth</b>	2034 FNL 1905 FWL	SE	25	9.0 S	21.0 E	S

<b>21. COUNTY</b> UINTAH	<b>22. DISTANCE TO NEAREST LEASE LINE (Feet)</b> 1905	<b>23. NUMBER OF ACRES IN DRILLING UNIT</b> 1083
<b>27. ELEVATION - GROUND LEVEL</b> 4933	<b>25. DISTANCE TO NEAREST WELL IN SAME POOL (Applied For Drilling or Completed)</b> 409	<b>26. PROPOSED DEPTH</b> MD: 9722 TVD: 9660
	<b>28. BOND NUMBER</b> 22013542	<b>29. SOURCE OF DRILLING WATER / WATER RIGHTS APPROVAL NUMBER IF APPLICABLE</b> Permit #43-8496

**ATTACHMENTS**

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

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

<b>NAME</b> Danielle Piernot	<b>TITLE</b> Regulatory Analyst	<b>PHONE</b> 720 929-6156
<b>SIGNATURE</b>	<b>DATE</b> 08/13/2010	<b>EMAIL</b> gnbregulatory@anadarko.com
<b>API NUMBER ASSIGNED</b> 43047512450000	<b>APPROVAL</b>   Permit Manager	

<b>Proposed Hole, Casing, and Cement</b>						
<b>String</b>	<b>Hole Size</b>	<b>Casing Size</b>	<b>Top (MD)</b>	<b>Bottom (MD)</b>		
Prod	7.875	4.5	0	9722		
<b>Pipe</b>	<b>Grade</b>	<b>Length</b>	<b>Weight</b>			
	Grade I-80 Buttress	9722	11.6			

**Proposed Hole, Casing, and Cement**

<b>String</b>	<b>Hole Size</b>	<b>Casing Size</b>	<b>Top (MD)</b>	<b>Bottom (MD)</b>		
Surf	11	8.625	0	2390		
<b>Pipe</b>	<b>Grade</b>	<b>Length</b>	<b>Weight</b>			
	Grade I-80 LT&C	2390	28.0			

**NBU 921-25F3AS**

Pad: NBU 921-25F

Surface: 2,589' FNL 1,776' FWL (SE/4NW/4)

BHL: 2,034' FNL 1,905' FWL (SE/4NW/4)

Section 25 T9S R21E

Uintah County, Utah

Mineral Lease: UO 1194 ST

**ONSHORE ORDER NO. 1**

***DRILLING PROGRAM***

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

<u>Formation</u>	<u>Depth</u>	<u>Resource</u>
Uinta	0 – Surface	
Green River	1,458'	
Birds Nest	1,761'	Water
Mahogany	2,138'	Water
Wasatch	4,727'	Gas
Mesaverde	7,433'	Gas
MVU2	8,342'	Gas
MVL1	8,916'	Gas
TVD	9,660'	
TD	9,722'	

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

*Please refer to the attached Drilling Program.*

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

*Please refer to the attached Drilling Program.*

5. **Drilling Fluids Program:**

*Please refer to the attached Drilling Program.*

6. **Evaluation Program:**

*Please refer to the attached Drilling Program.*

**7. Abnormal Conditions:**

Maximum anticipated bottomhole pressure calculated at 9,660' TVD, approximately equals 6,119 psi (calculated at 0.63 psi/foot).

Maximum anticipated surface pressure equals approximately 3,993 psi (bottomhole pressure minus the pressure of a partially evacuated hole calculated at 0.22 psi/foot).

**8. Anticipated Starting Dates:**

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

**9. Variances:**

*Please refer to the attached Drilling Program.*

*Onshore Order #2 – Air Drilling Variance*

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

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

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

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

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

***Background***

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

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

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

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

#### ***Variance for BOPE Requirements***

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

#### ***Variance for Mud Material Requirements***

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

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

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

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

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

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

***Conclusion***

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

**10. Other Information:**

*Please refer to the attached Drilling Program.*





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

**CASING PROGRAM**

	SIZE	INTERVAL	WT.	GR.	CPLG.	DESIGN FACTORS		
						BURST	COLLAPSE	TENSION
CONDUCTOR	14"	0-40'						
						3,390	1,880	348,000
SURFACE	8-5/8"	0 to 2,390	28.00	IJ-55	LTC	0.82	1.68	5.15
						7,780	6,350	278,000
PRODUCTION	4-1/2"	0 to 9,722	11.60	I-80	BTC	1.90	1.02	2.82

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

D.F. = 2.25

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

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

(Burst Assumptions: TD = 12.4 ppg)

0.22 psi/ft = gradient for partially evac wellbore

(Collapse Assumption: Fully Evacuated Casing, Max MW)

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

**MASP 3,993 psi**

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

(Burst Assumptions: TD = 12.4 ppg)

0.63 psi/ft = bottomhole gradient

(Collapse Assumption: Fully Evacuated Casing, Max MW)

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

**MABHP 6,119 psi**

**CEMENT PROGRAM**

		FT. OF FILL	DESCRIPTION	SACKS	EXCESS	WEIGHT	YIELD	
SURFACE	LEAD	500'	Premium cmt + 2% CaCl	180	60%	15.80	1.15	
	<b>Option 1</b>		+ 0.25 pps flocele					
	TOP OUT CMT (6 jobs)	1,200'	20 gals sodium silicate + Premium cmt	270	0%	15.80	1.15	
			+ 2% CaCl + 0.25 pps flocele					
SURFACE		<b>NOTE: If well will circulate water to surface, option 2 will be utilized</b>						
	<b>Option 2</b>							
	LEAD	1,890'	65/35 Poz + 6% Gel + 10 pps gilsonite	170	35%	11.00	3.82	
			+ 0.25 pps Flocele + 3% salt BWOW					
	TAIL	500'	Premium cmt + 2% CaCl	150	35%	15.80	1.15	
			+ 0.25 pps flocele					
	TOP OUT CMT	as required	Premium cmt + 2% CaCl	as req.		15.80	1.15	
PRODUCTION	LEAD	4,222'	Premium Lite II +0.25 pps	310	10%	11.00	3.38	
			celloflake + 5 pps gilsonite + 10% gel					
			+ 0.5% extender					
	TAIL	5,500'	50/50 Poz/G + 10% salt + 2% gel	1,060	10%	14.30	1.31	
			+ 0.1% R-3					

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

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

**FLOAT EQUIPMENT & CENTRALIZERS**

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

**ADDITIONAL INFORMATION**

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

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

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

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

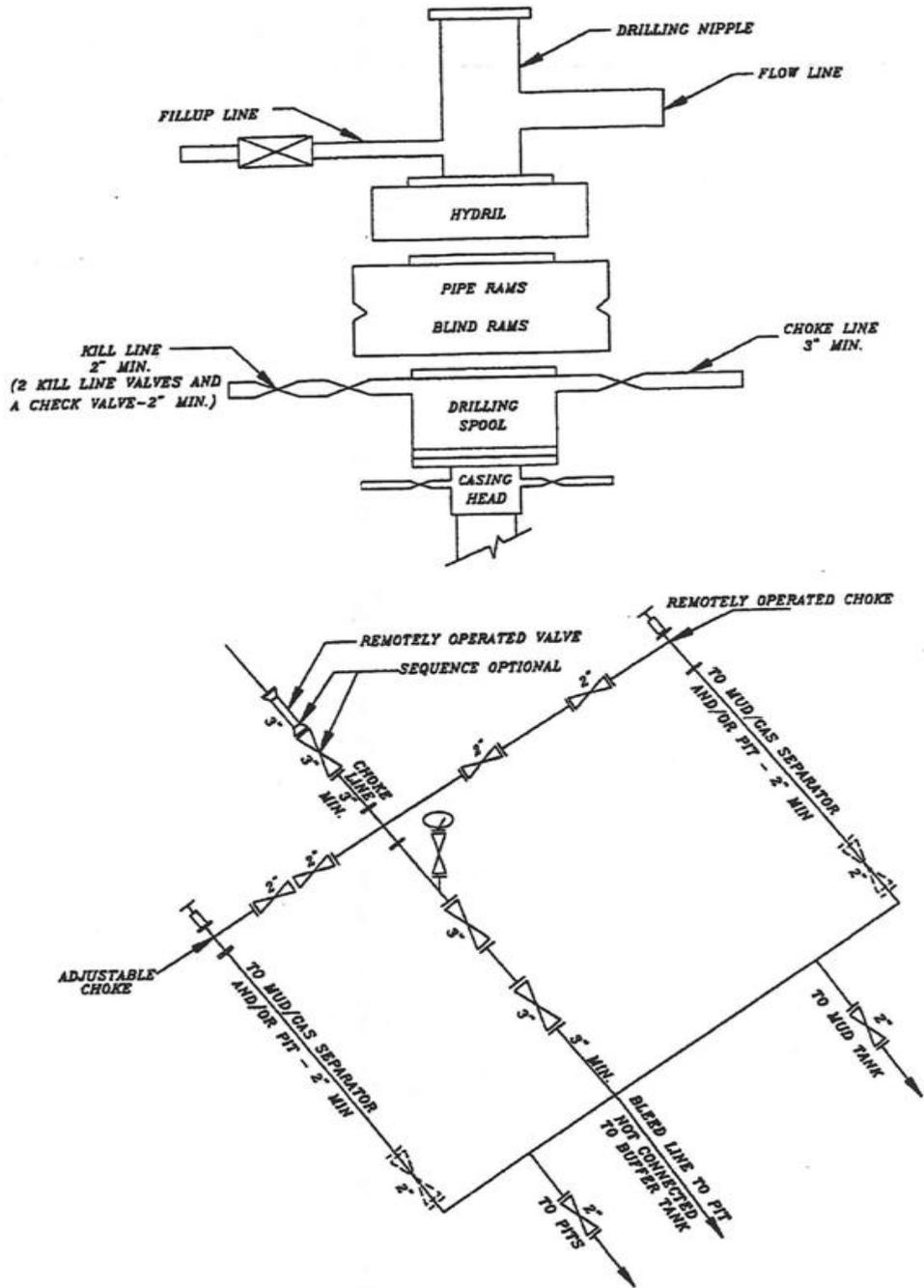
DRILLING ENGINEER: \_\_\_\_\_  
John Huycke / Emile Goodwin

DATE: \_\_\_\_\_

DRILLING SUPERINTENDENT: \_\_\_\_\_  
John Merkel / Lovel Young

DATE: \_\_\_\_\_

### EXHIBIT A NBU 921-25F3AS



SCHMATIC DIAGRAM OF 5,000 PSI BOP STACK

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

Found 2006 Aluminum Cap, Pile of Stones.

S89°47.1'W - 39.951 (G.L.O.)  
S89°48'41"W - 2636.93' (Meas.)

N89°45.6'W - 40.017 (G.L.O.)  
N89°44'20"W - 2641.16' (Meas.)

Found 1977 Brass Cap. Pile of Stones.

N00°04'14"W (Basis of Bearings)  
2637.48' (Measured)  
N0°01'1"W (G.L.O.)

N00°01'58"W - 2643.12' (Meas.)

Found 1" Aluminum Cap on 5/8" Rebar. Pile of Stones.

Found 1" Aluminum Cap on 5/8" Rebar. Pile of Stones.

2589'  
2034'

1905'

1776'

Bottom of Hole

Well Surface Position

**WELL LOCATION:  
NBU 921-25F3AS**

ELEV. UNGRADED GROUND = 4933.1'

**25**

NBU 921-25F3AS (Surface Position)  
NAD 83 LATITUDE = 40.007149° (40° 00' 25.738")  
LONGITUDE = 109.503160° (109° 30' 11.374")  
NAD 27 LATITUDE = 40.007185° (40° 00' 25.864")  
LONGITUDE = 109.502473° (109° 30' 08.902")

NBU 921-25F3AS (Bottom Hole)  
NAD 83 LATITUDE = 40.008674° (40° 00' 31.226")  
LONGITUDE = 109.502702° (109° 30' 09.729")  
NAD 27 LATITUDE = 40.008709° (40° 00' 31.353")  
LONGITUDE = 109.502016° (109° 30' 07.256")

Found 1" Aluminum Cap on 5/8" Rebar, with a Stone on East side of Cap.

Found 1977 Brass Cap. Pile of Stones.

N00°03'18"W - 2639.74' (Meas.)  
N0°03'W - 39.98 (G.L.O.)

N89°55'26"W - 2639.89' (Meas.)

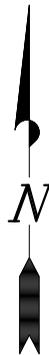
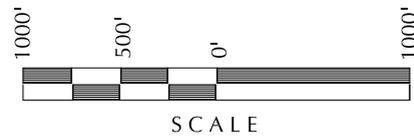
N89°56'39"W - 2639.91' (Meas.)

WEST - 80.00 (G.L.O.)

Found 1977 Brass Cap. Pile of Stones.

**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 N13°00'38"E 570.08' 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 ¼ 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.

PROFESSIONAL LAND SURVEYOR  
No. 6028691  
JOHN R SAUGH  
STATE OF UTAH  
*John R Saugh*  
PROFESSIONAL LAND SURVEYOR  
REGISTRATION No. 6028691  
STATE OF UTAH

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

**WELL PAD: NBU 921-25F**

**NBU 921-25F3AS  
WELL PLAT**

**2034' FNL, 1905' FWL (Bottom Hole)  
SE ¼ NW ¼ OF SECTION 25, T9S, R21E,  
S.L.B.&M., UTAH COUNTY, UTAH.**



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

**TIMBERLINE**

(435) 789-1365

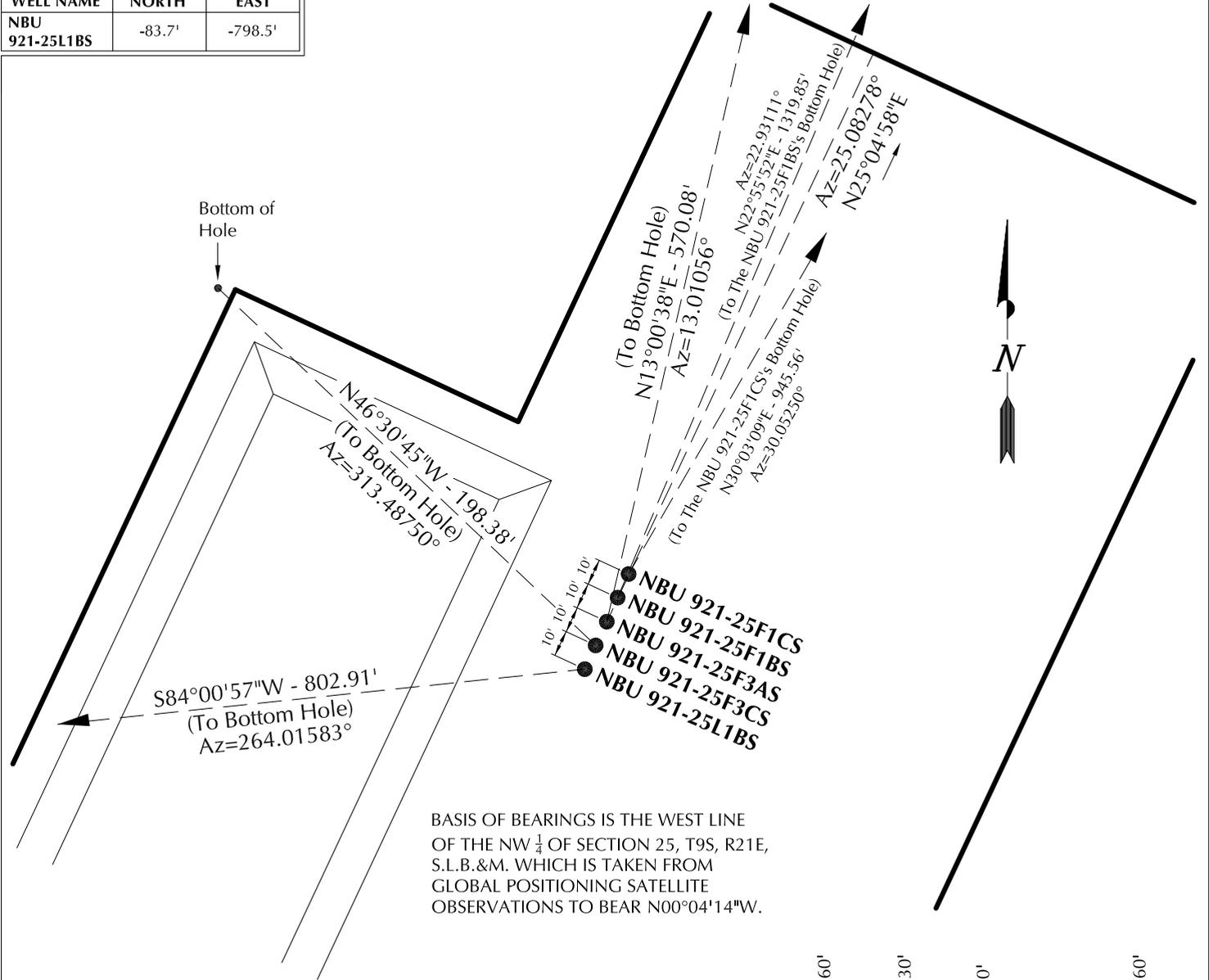
ENGINEERING & LAND SURVEYING, INC.  
209 NORTH 300 WEST - VERNAL, UTAH 84078

DATE SURVEYED: 05-24-10	SURVEYED BY: M.S.B.	SHEET NO: <b>3</b>
DATE DRAWN: 06-08-10	DRAWN BY: B.M.	
SCALE: 1" = 1000'		3 OF 17

WELL NAME	SURFACE POSITION					BOTTOM HOLE				
	NAD83		NAD27		FOOTAGES	NAD83		NAD27		FOOTAGES
	LATITUDE	LONGITUDE	LATITUDE	LONGITUDE		LATITUDE	LONGITUDE	LATITUDE	LONGITUDE	
NBU 921-25F1CS	40°00'25.918"	109°30'11.266"	40°00'26.044"	109°30'08.794"	2571' FNL 1784' FWL	40°00'34.006"	109°30'05.186"	40°00'34.132"	109°30'02.714"	1754' FNL 2259' FWL
NBU 921-25F1BS	40°00'25.829"	109°30'11.320"	40°00'25.955"	109°30'08.847"	2580' FNL 1780' FWL	40°00'37.840"	109°30'04.719"	40°00'37.967"	109°30'02.247"	1366' FNL 2296' FWL
NBU 921-25F3AS	40°00'25.738"	109°30'11.374"	40°00'25.864"	109°30'08.902"	2589' FNL 1776' FWL	40°00'31.226"	109°30'09.729"	40°00'31.353"	109°30'07.256"	2034' FNL 1905' FWL
NBU 921-25F3CS	40°00'25.649"	109°30'11.428"	40°00'25.776"	109°30'08.956"	2598' FNL 1772' FWL	40°00'26.997"	109°30'13.278"	40°00'27.124"	109°30'10.806"	2461' FNL 1628' FWL
NBU 921-25L1BS	40°00'25.560"	109°30'11.482"	40°00'25.687"	109°30'09.009"	2607' FNL 1768' FWL	40°00'24.730"	109°30'21.740"	40°00'24.856"	109°30'19.268"	2597' FSL 969' 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
NBU 921-25F1CS	818.4'	473.5'	NBU 921-25F1BS	1215.5'	514.2'	NBU 921-25F3AS	555.4'	128.3'	NBU 921-25F3CS	136.5'	-143.9'
NBU 921-25L1BS	-83.7'	-798.5'									



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

**WELL PAD - NBU 921-25F**

**WELL PAD INTERFERENCE PLAT**  
WELLS - NBU 921-25F1CS,  
NBU 921-25F1BS, NBU 921-25F3AS,  
NBU 921-25F3CS & NBU 921-25L1BS  
LOCATED IN SECTION 25, T9S, R21E,  
S.L.B.&M., UINTAH COUNTY, UTAH.

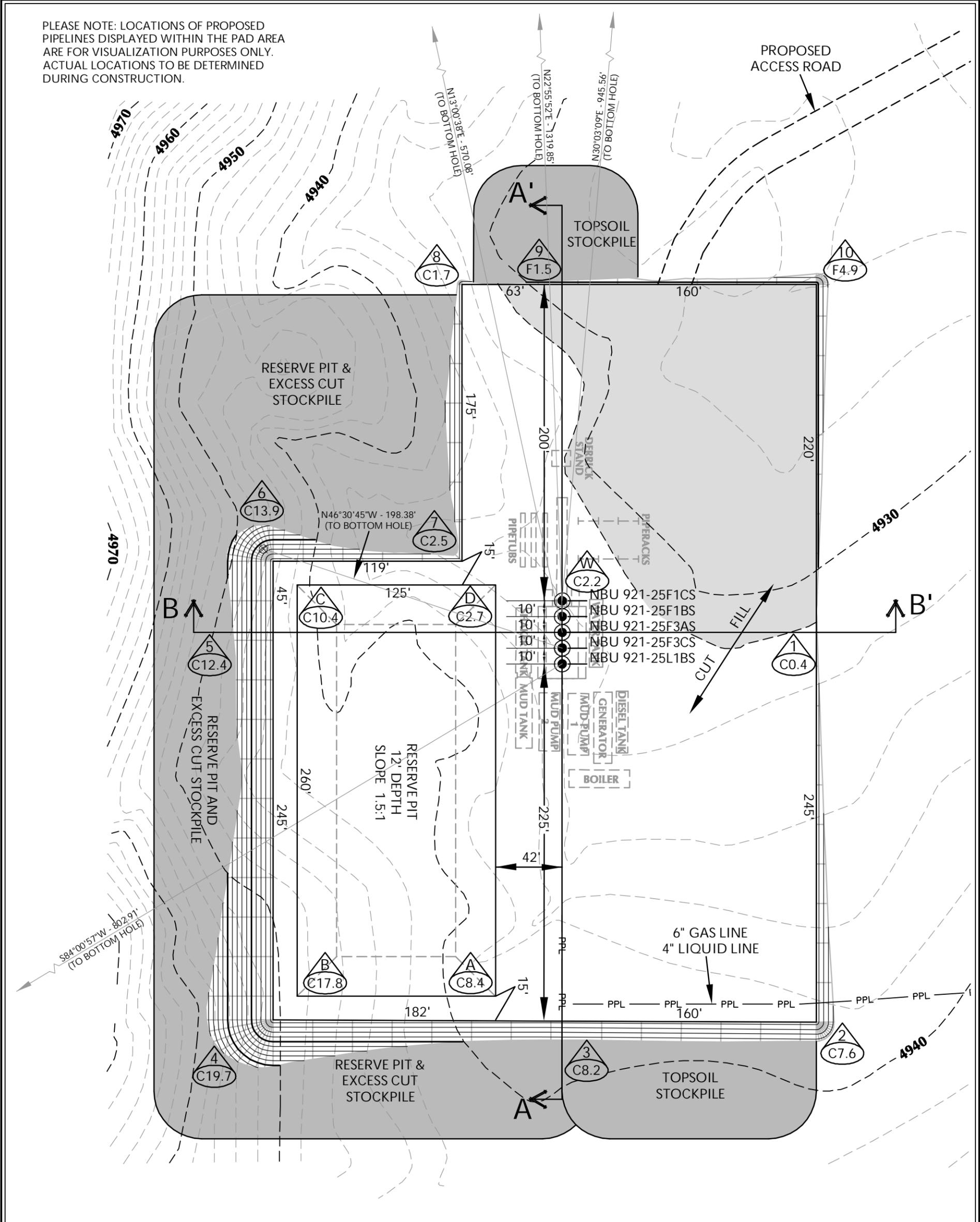


**609**  
**CONSULTING, LLC**  
371 Coffeen Avenue  
Sheridan WY 82801  
Phone 307-674-0609  
Fax 307-674-0182

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

DATE SURVEYED: 05-24-10	SURVEYED BY: M.S.B.	<b>SHEET NO:</b>  <b>6</b>  6 OF 17
DATE DRAWN: 06-08-10	DRAWN BY: B.M.	
SCALE: 1" = 60'	Date Last Revised:	

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



**WELL PAD - NBU 921-25F DESIGN SUMMARY**

EXISTING GRADE @ CENTER OF WELL PAD = 4933.1'  
 FINISHED GRADE ELEVATION = 4930.9'  
 CUT SLOPES = 1.5:1  
 FILL SLOPES = 1.5:1  
 TOTAL WELL PAD AREA = 3.64 ACRES  
 TOTAL DAMAGE AREA = 6.25 ACRES  
 SHRINKAGE FACTOR = 1.10  
 SWELL FACTOR = 1.00

**WELL PAD QUANTITIES**

TOTAL CUT FOR WELL PAD = 25,883 C.Y.  
 TOTAL FILL FOR WELL PAD = 3,310 C.Y.  
 TOPSOIL @ 6" DEPTH = 2,938 C.Y.  
 EXCESS MATERIAL = 22,573 C.Y.

**RESERVE PIT QUANTITIES**

TOTAL CUT FOR RESERVE PIT +/- 11,560 CY  
 RESERVE PIT CAPACITY (2' OF FREEBOARD) +/- 44,420 BARRELS

**WELL PAD LEGEND**

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



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

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



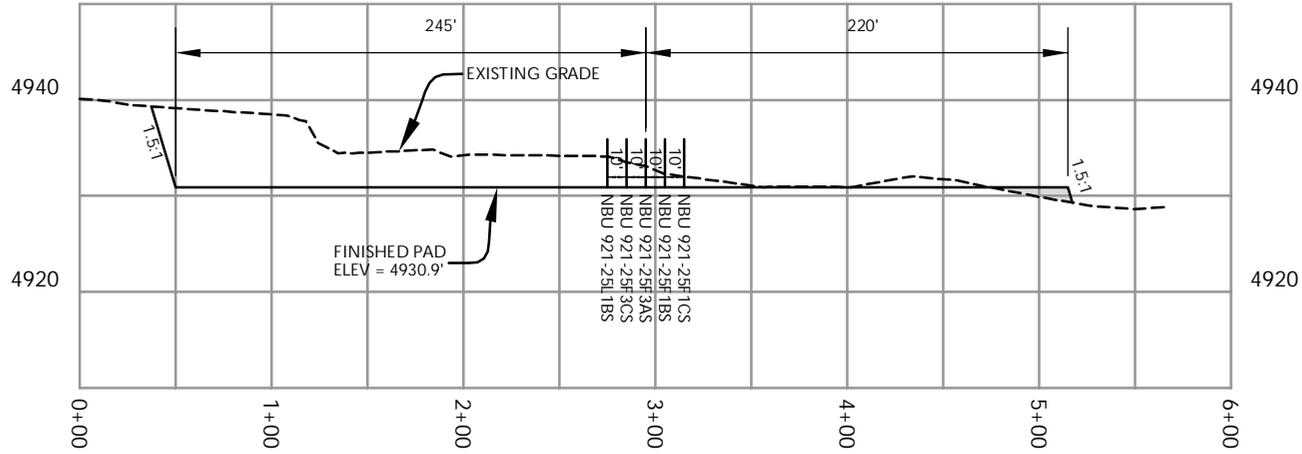
CONSULTING, LLC  
 371 Coffeen Avenue  
 Sheridan, WY 82801  
 Phone 307-674-0609  
 Fax 307-674-0182

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

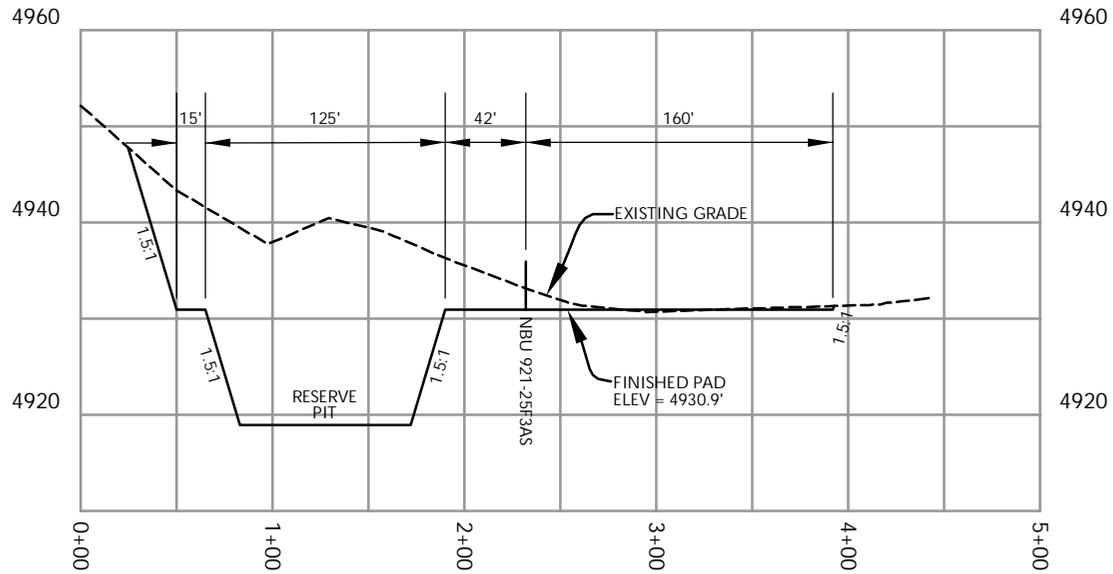
(435) 789-1365

Scale: 1"=60' Date: 7/7/10 SHEET NO: 7 OF 17

REVISED:



**CROSS SECTION A-A'**



**CROSS SECTION B-B'**

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

WELL PAD - NBU 921-25F

WELL PAD - CROSS SECTIONS  
NBU 921-25F1CS,  
NBU 921-25F1BS, NBU 921-25F3AS,  
NBU 921-25F3CS & NBU 921-25L1BS  
LOCATED IN SECTION 25, T9S, R21E  
S.L.B.&M., UINTAH COUNTY, UTAH



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

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

(435) 789-1365

Scale: 1"=100'

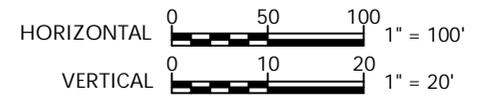
Date: 7/7/10

SHEET NO:

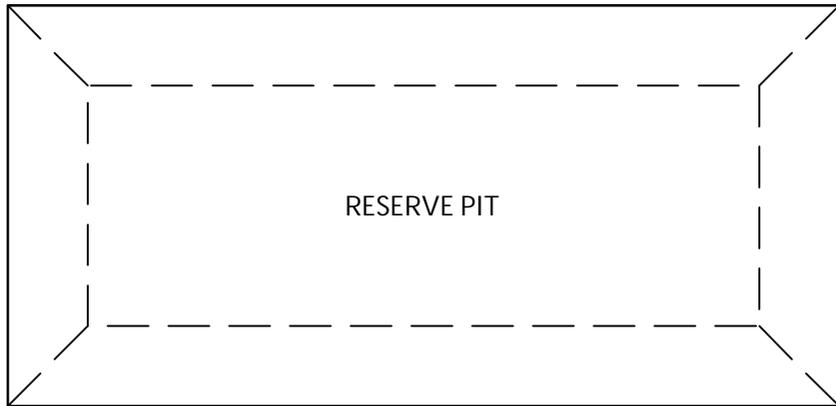
REVISED:

**8**

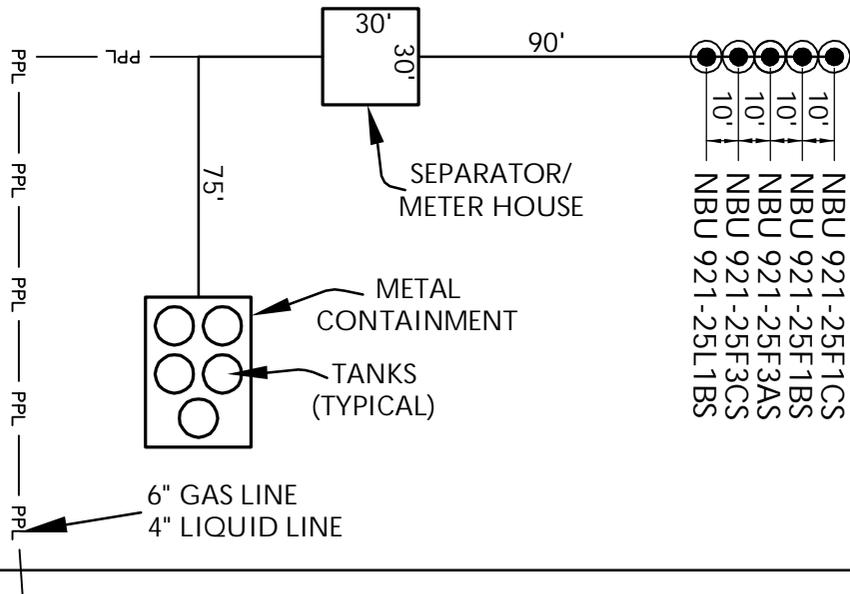
8 OF 17



'APIWELIN'g:43047512450000'  
 K:\ARROW\2010\25F\SEC\_25\NBU-FOELIS\_SEC\_25\DWG\NBU 921-25F.v21-25F.dwg, 7/7/2010 5:46:34 PM



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.



PROPOSED  
WELL PAD

PROPOSED  
ACCESS ROAD

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

WELL PAD - NBU 921-25F

WELL PAD - FACILITIES DIAGRAM

NBU 921-25F1CS,  
NBU 921-25F1BS, NBU 921-25F3AS,  
NBU 921-25F3CS & NBU 921-25L1BS  
LOCATED IN SECTION 25, T9S, R21E  
S.L.B.&M., UINTAH COUNTY, UTAH



CONSULTING, LLC  
371 Coffen Avenue  
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 0 30' 60' 1" = 60'

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

(435) 789-1365

Scale: 1"=60'

Date: 7/7/10

SHEET NO:

REVISED:

9

9 OF 17

APIWellNo:43047512450000  
K:\MADRACO\2010\_34\_NBU\_FOCUS\_SEC\_25\DWG\NBU\_921-25F302\_25F.dwg 7/6/2010 6:16:20 PM

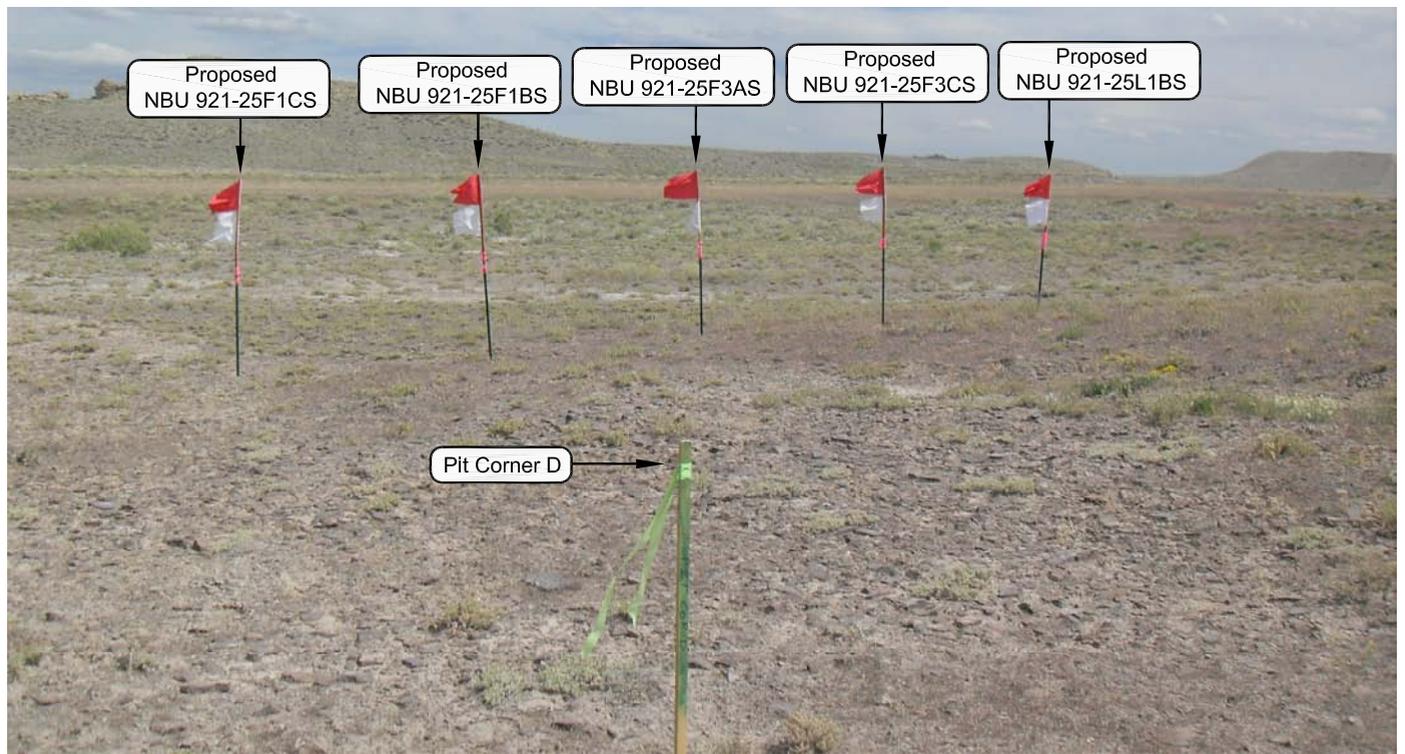


PHOTO VIEW: FROM PIT CORNER D TO LOCATION STAKE

CAMERA ANGLE: SOUTHEASTERLY



PHOTO VIEW: FROM BEGINNING OF PROPOSED ROAD

CAMERA ANGLE: WESTERLY

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

**WELL PAD - NBU 921-25F**

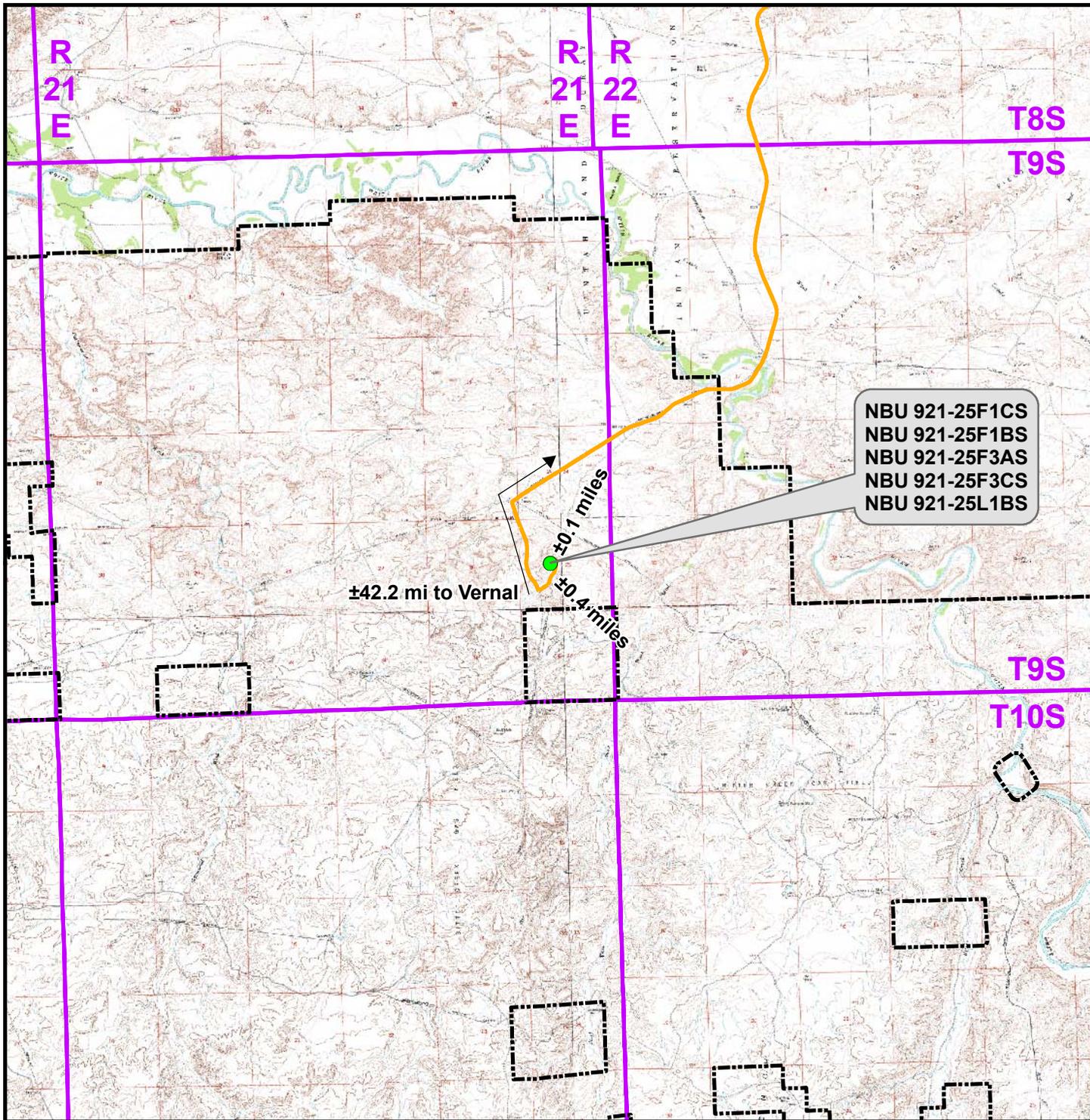
**LOCATION PHOTOS**  
 NBU 921-25F1CS, NBU 921-25F1BS,  
 NBU 921-25F3AS, NBU 921-25F3CS &  
 NBU 921-25L1BS  
 LOCATED IN SECTION 25, T9S, R21E,  
 S.L.B.&M., Uintah County, Utah.



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

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

DATE PHOTOS TAKEN: 05-24-10	PHOTOS TAKEN BY: M.S.B.	SHEET NO: <b>10</b>
DATE DRAWN: 06-09-10	DRAWN BY: B.M.	
Date Last Revised:		10 OF 17



NBU 921-25F1CS  
 NBU 921-25F1BS  
 NBU 921-25F3AS  
 NBU 921-25F3CS  
 NBU 921-25L1BS

±42.2 mi to Vernal

±0.1 miles  
 ±0.4 miles

**Legend**

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

Distance From Well Pad - NBU 921-25F To Unit Boundary: ±2,681ft

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

**WELL PAD - NBU 921-25F**

**TOPO A**  
 NBU 921-25F1CS,  
 NBU 921-25F1BS, NBU 921-25F3AS,  
 NBU 921-25F3CS & NBU 921-25L1BS  
 LOCATED IN SECTION 25, T9S, R21E  
 S.L.B.&M., UTAH COUNTY, UTAH

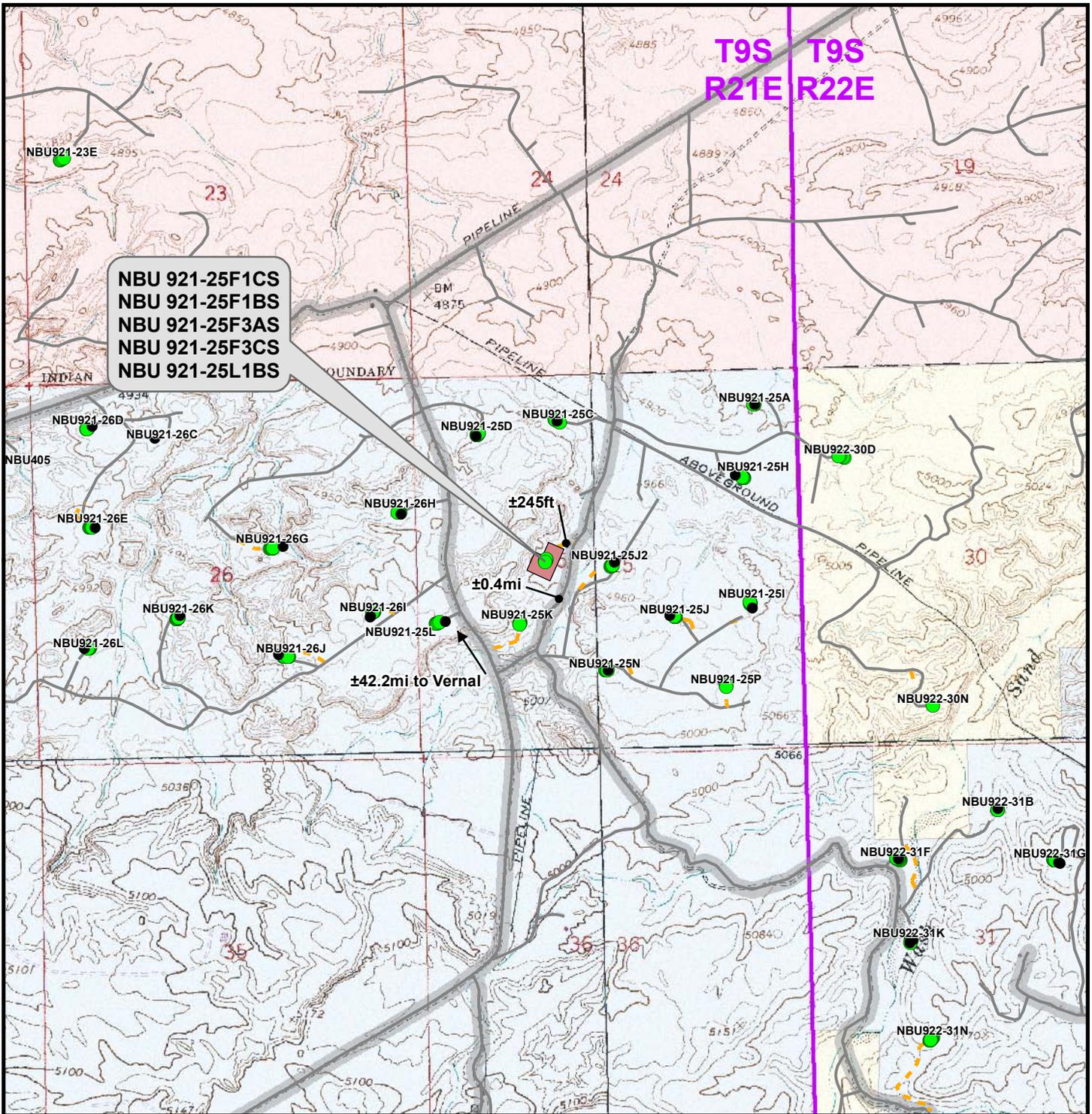


**CONSULTING, LLC**  
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 Sheridan, WY 82801  
 Phone (307) 674-0609  
 Fax (307) 674-0182



Scale: 1:100,000	NAD83 USP Central
Drawn: JFE	Date: 7 July 2010
Revised:	Date:

Sheet No:  
11 11 of 17



T9S T9S  
R21E R22E

NBU 921-25F1CS  
NBU 921-25F1BS  
NBU 921-25F3AS  
NBU 921-25F3CS  
NBU 921-25L1BS

±245ft  
±0.4mi  
±42.2mi to Vernal

**Legend**

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

Total Proposed Road Length: ±245ft

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

**WELL PAD - NBU 921-25F**

TOPO B  
NBU 921-25F1CS,  
NBU 921-25F1BS, NBU 921-25F3AS,  
NBU 921-25F3CS & NBU 921-25L1BS  
LOCATED IN SECTION 25, T9S, R21E  
S.L.B.&M., UTAH COUNTY, UTAH

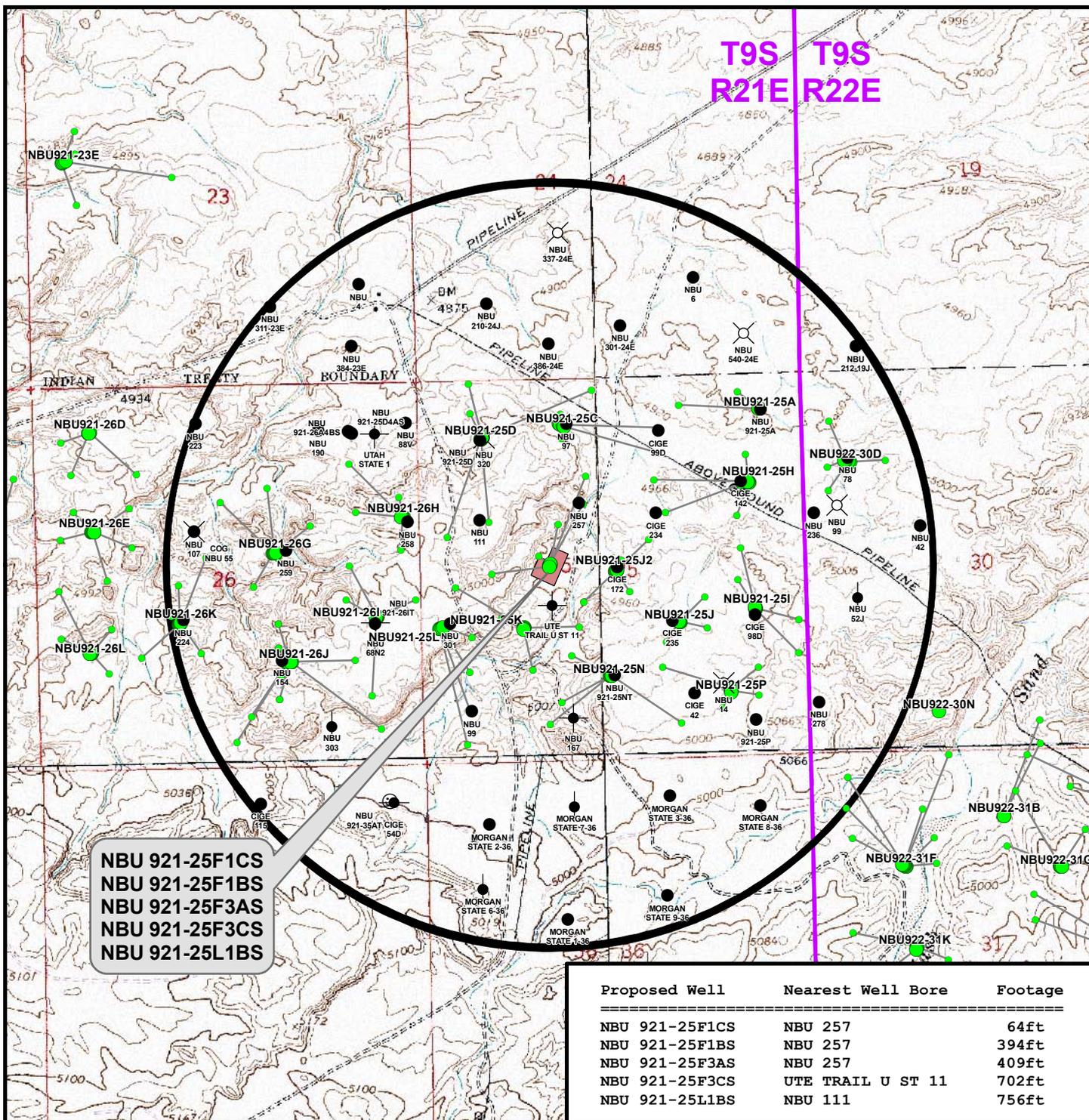


**CONSULTING, LLC**  
371 Coffeen Avenue  
Sheridan, WY 82801  
Phone (307) 674-0609  
Fax (307) 674-0182



Scale: 1" = 2,000ft	NAD83 USP Central
Drawn: JFE	Date: 7 July 2010
Revised:	Date:

Sheet No:  
**12** 12 of 17



**NBU 921-25F1CS**  
**NBU 921-25F1BS**  
**NBU 921-25F3AS**  
**NBU 921-25F3CS**  
**NBU 921-25L1BS**

Proposed Well	Nearest Well Bore	Footage
NBU 921-25F1CS	NBU 257	64ft
NBU 921-25F1BS	NBU 257	394ft
NBU 921-25F3AS	NBU 257	409ft
NBU 921-25F3CS	UTE TRAIL U ST 11	702ft
NBU 921-25L1BS	NBU 111	756ft

**Legend**

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

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

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

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

**WELL PAD - NBU 921-25F**

**TOPO C**  
**NBU 921-25F1CS,**  
**NBU 921-25F1BS, NBU 921-25F3AS,**  
**NBU 921-25F3CS & NBU 921-25L1BS**  
**LOCATED IN SECTION 25, T9S, R21E**  
**S.L.B.&M., UTAH COUNTY, UTAH**

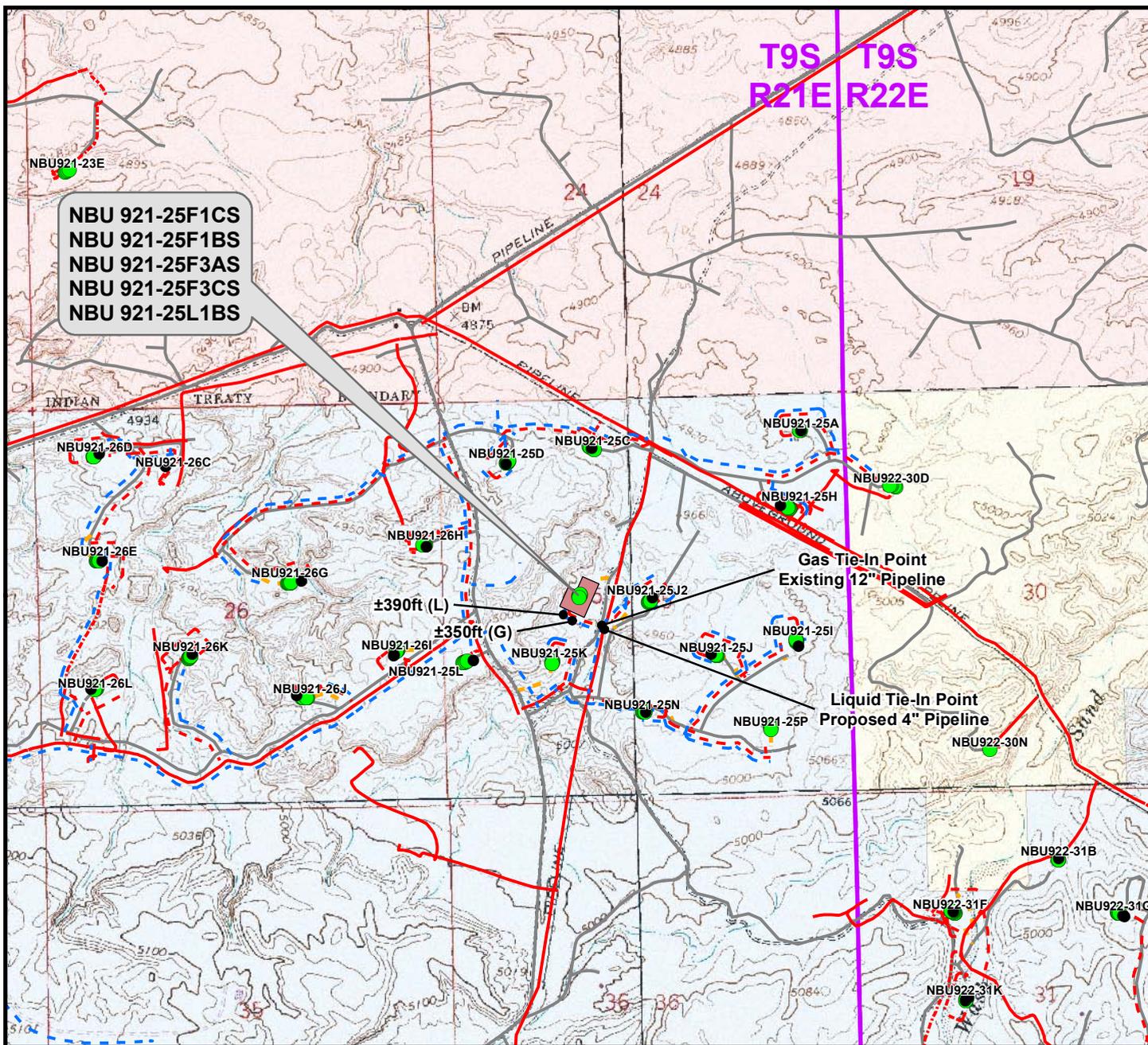


**609 CONSULTING, LLC**  
 371 Coffeen Avenue  
 Sheridan, WY 82801  
 Phone (307) 674-0609  
 Fax (307) 674-0182



Scale: 1" = 2,000ft | NAD83 USP Central  
 Drawn: JFE | Date: 7 July 2010  
 Revised: | Date:

Sheet No:  
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NBU 921-25F1CS  
 NBU 921-25F1BS  
 NBU 921-25F3AS  
 NBU 921-25F3CS  
 NBU 921-25L1BS

T9S T9S  
 R21E R22E

Gas Tie-In Point  
 Existing 12" Pipeline

Liquid Tie-In Point  
 Proposed 4" Pipeline

±390ft (L)  
 ±350ft (G)

Proposed Liquid Pipeline	Length
Proposed 4" (Meter House to Edge of Pad)	±270ft
Proposed 4" (Edge of Pad to 25J2 Intersection)	±390ft
<b>TOTAL PROPOSED LIQUID PIPELINE =</b>	<b>± 660ft</b>

Proposed Gas Pipeline	Length
Proposed 6" (Meter House to Edge of Pad)	±270ft
Proposed 6" (Edge of Pad to Existing 12" Pipeline)	±350ft
<b>TOTAL PROPOSED GAS PIPELINE =</b>	<b>±620ft</b>

**Legend**

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

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

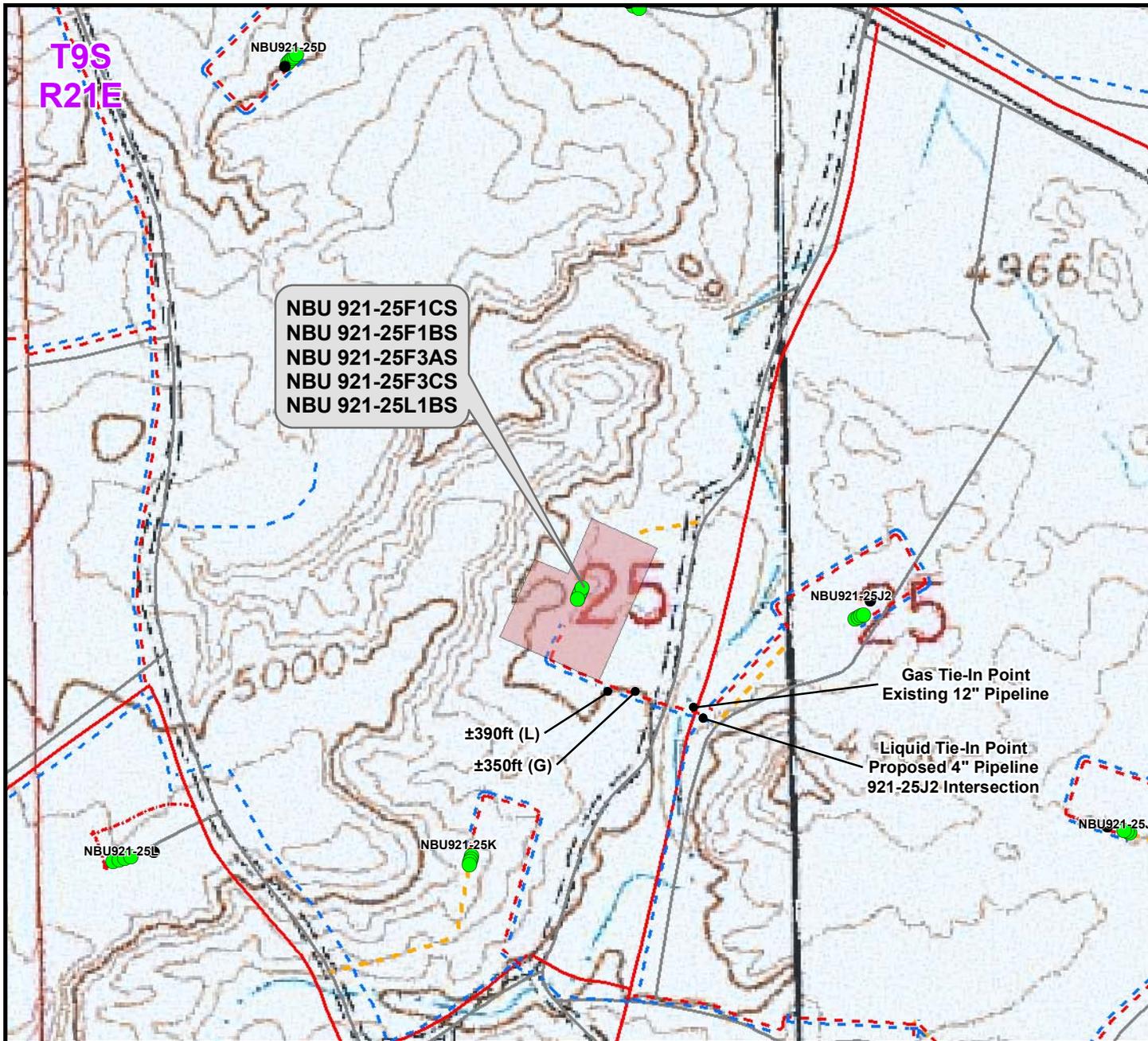
**WELL PAD - NBU 921-25F**

TOPO D  
 NBU 921-25F1CS,  
 NBU 921-25F1BS, NBU 921-25F3AS,  
 NBU 921-25F3CS & NBU 921-25L1BS  
 LOCATED IN SECTION 25, T9S, R21E  
 S.L.B.&M., UINTAH COUNTY, UTAH

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



Scale: 1" = 2,000ft	NAD83 USP Central	Sheet No:
Drawn: TL	Date: 7 July 2010	<b>14</b> 14 of 17
Revised:	Date:	



Proposed Liquid Pipeline	Length	Proposed Gas Pipeline	Length
Proposed 4" (Meter House to Edge of Pad)	±270ft	Proposed 6" (Meter House to Edge of Pad)	±270ft
Proposed 4" (Edge of Pad to 25J2 Intersection)	±390ft	Proposed 6" (Edge of Pad to Existing 12" Pipeline)	±350ft
<b>TOTAL PROPOSED LIQUID PIPELINE =</b>	<b>± 660ft</b>	<b>TOTAL PROPOSED GAS PIPELINE =</b>	<b>±620ft</b>

**Legend**

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

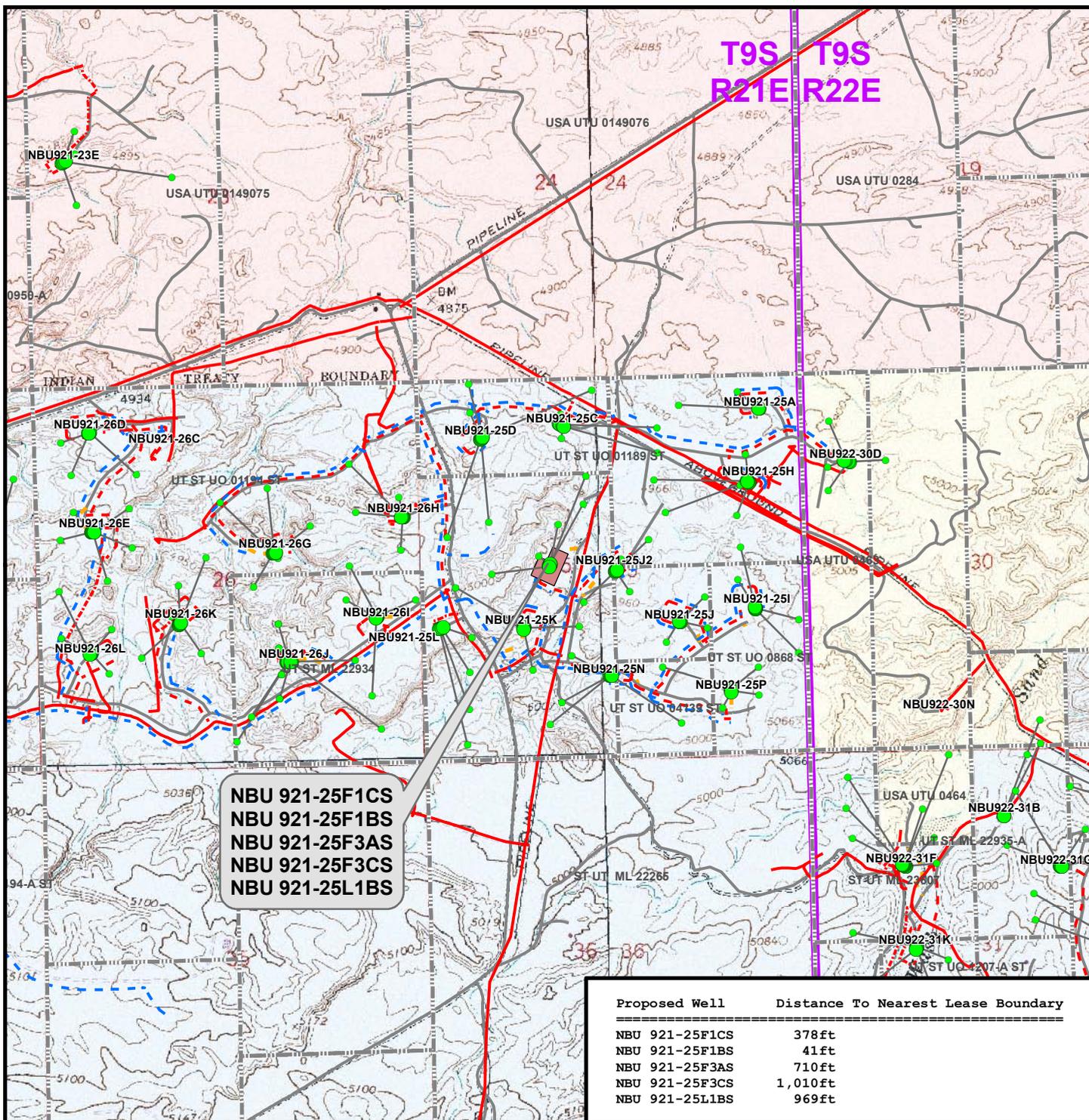
**Kerr-McGee Oil & Gas Onshore, LP**  
 1099 18th Street, Denver, Colorado 80202

**WELL PAD - NBU 921-25F**  
**TOPO D2 (PAD & PIPELINE DETAIL)**  
 NBU 921-25F1CS,  
 NBU 921-25F1BS, NBU 921-25F3AS,  
 NBU 921-25F3CS & NBU 921-25L1BS  
 LOCATED IN SECTION 25, T9S, R21E  
 S.L.B.&M., UTAH COUNTY, UTAH

**609**  
**CONSULTING, LLC**  
 371 Coffeen Avenue  
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 Fax (307) 674-0182



Scale: 1" = 500ft	NAD83 USP Central	Sheet No:
Drawn: TL	Date: 7 July 2010	<b>15</b>
Revised:	Date:	



**Legend**

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

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

**WELL PAD - NBU 921-25F**

**TOPO E**

NBU 921-25F1CS,  
 NBU 921-25F1BS, NBU 921-25F3AS,  
 NBU 921-25F3CS & NBU 921-25L1BS  
 LOCATED IN SECTION 25, T9S, R21E  
 S.L.B.&M., UINTAH COUNTY, UTAH



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



Scale: 1" = 2,000ft  
 Drawn: TL  
 Revised:   
 NAD83 USP Central  
 Date: 7 July 2010

Sheet No:  
**16** 16 of 17

**Kerr-McGee Oil & Gas Onshore, LP**  
**WELL PAD – NBU 921-25F**  
**WELLS – NBU 921-25F1CS, NBU 921-25F1BS, NBU 921-25F3AS,**  
**NBU 921-25F3CS & NBU 921-25L1BS**  
**Section 25, T9S, R21E, S.L.B.&M.**

From the intersection of U.S. Highway 40 and 500 East Street in Vernal, Utah proceed in an easterly then southerly direction along U.S. Highway 40 approximately 3.3 miles to the junction of State Highway 45; exit right and proceed in a southerly direction along State Highway 45 approximately 20.2 miles to the junction of the Glen Bench Road (County B Road 3260). Exit right and proceed in a southwesterly then southeasterly direction along the Glen Bench Road approximately 18.7 miles to a Class D County Road to the northeast. Exit left and proceed in a northeasterly direction along the Class D County Road approximately 0.4 miles to the proposed access road to the west. Exit left and follow the road flags in a southwesterly direction approximately 245 feet to the proposed pad.

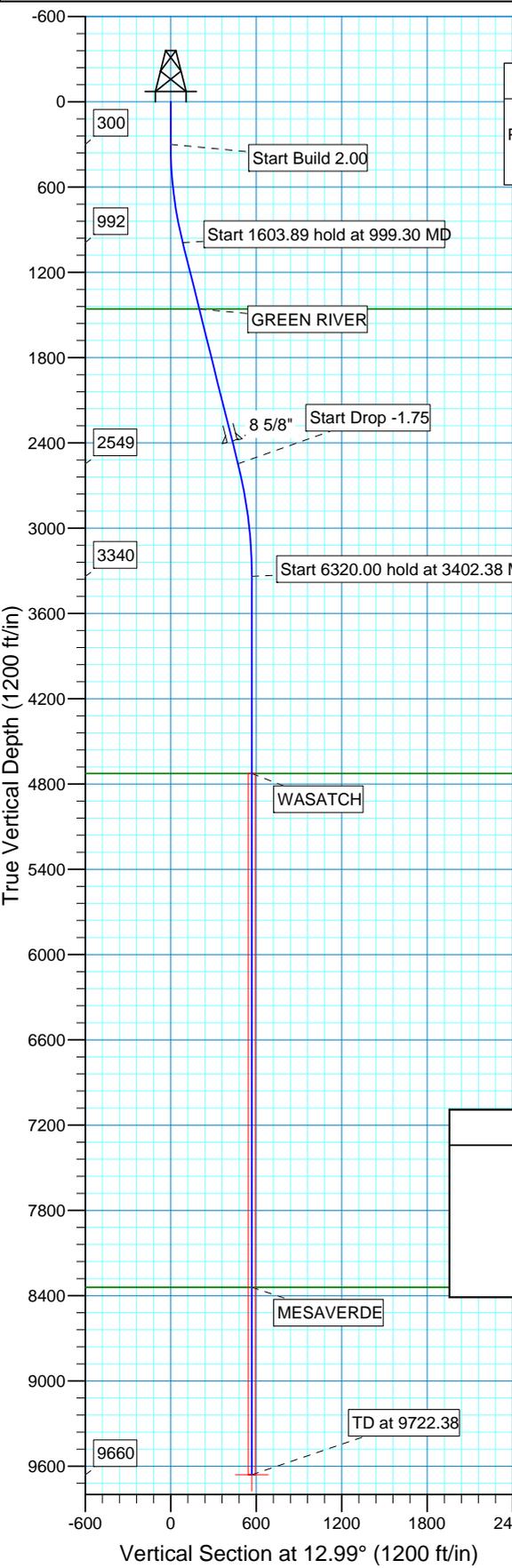
Total distance from Vernal, Utah to the proposed well location is approximately 42.6 miles in a southerly direction.

Kerr McGee Oil and Gas Onshore LP

**T M**  
 Azimuths to True North  
 Magnetic North: 11.19°  
 Magnetic Field  
 Strength: 52420.4snT  
 Dip Angle: 65.90°  
 Date: 07/29/2010  
 Model: IGRF2010

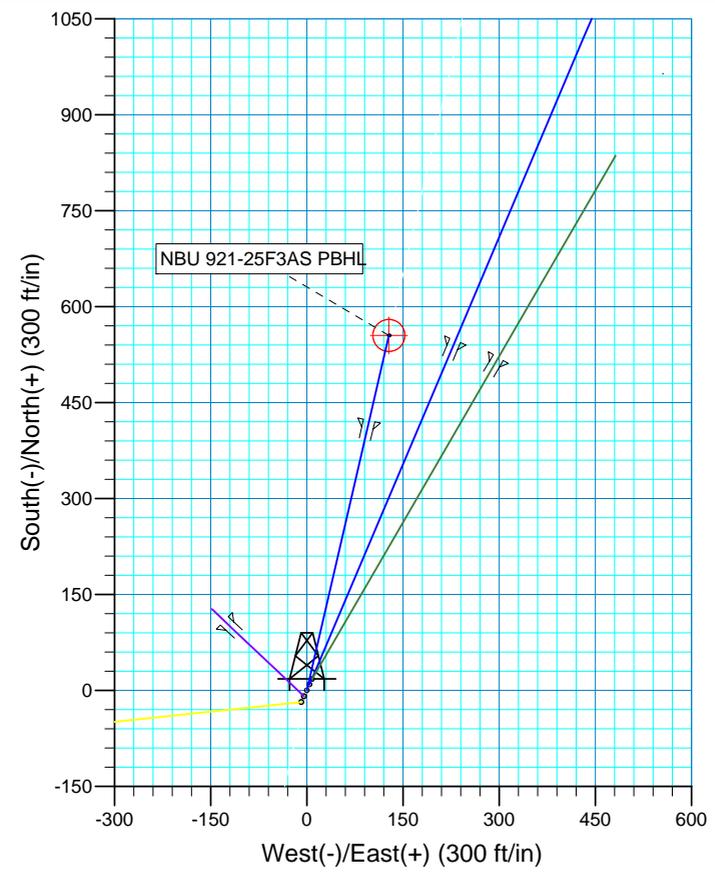
WELL DETAILS: NBU 921-25F3AS

		GL 4931' & RKB 14 @ 4945.00ft (ASSUMED)		4931.00	
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.00	0.00	14532184.35	2059775.97	40° 0' 25.866 N	109° 30' 8.903 W



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

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
PBHL	9660.00	555.05	128.00	14532741.47	2059894.62	40° 0' 31.352 N	09° 30' 7.258 W	Circle (Radius: 25.0)



SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	
3	999.30	13.99	12.99	992.38	82.76	19.08	2.00	12.99	84.93	
4	2603.19	13.99	12.99	2548.71	460.48	106.19	0.00	0.00	472.56	
5	3402.38	0.00	0.00	3340.00	555.05	128.00	1.75	180.00	569.62	
6	9722.38	0.00	0.00	9660.00	555.05	128.00	0.00	0.00	569.62	NBU 921-25F3AS PBHL

FORMATION TOP DETAILS

TVDPPath	MDPath	Formation
1458.00	1479.15	GREEN RIVER
4727.00	4789.38	WASATCH
8342.00	8404.38	MESAVERDE

PROJECT DETAILS: Uintah County, UT UTM12

Geodetic System: Universal Transverse Mercator (US Survey Feet)  
 Datum: NAD 1927 - Western US  
 Ellipsoid: Clarke 1866  
 Zone: Zone 12N (114 W to 108 W)  
 Location: SEC 25 T9S R21E  
 System Datum: Mean Sea Level  
 Local North: No north reference data is available



# **Kerr McGee Oil and Gas Onshore LP**

**Uintah County, UT UTM12  
NBU 921-25F Pad  
NBU 921-25F3AS  
OH**

**Plan: Plan #1**

## **Standard Planning Report**

**29 July, 2010**



**SDI**  
Planning Report



<b>Database:</b>	EDM 2003.16 Single User Db	<b>Local Co-ordinate Reference:</b>	Well NBU 921-25F3AS
<b>Company:</b>	Kerr McGee Oil and Gas Onshore LP	<b>TVD Reference:</b>	GL 4931' & RKB 14 @ 4945.00ft (ASSUMED)
<b>Project:</b>	Uintah County, UT UTM12	<b>MD Reference:</b>	GL 4931' & RKB 14 @ 4945.00ft (ASSUMED)
<b>Site:</b>	NBU 921-25F Pad	<b>North Reference:</b>	True
<b>Well:</b>	NBU 921-25F3AS	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	Plan #1		

<b>Project</b>	Uintah County, UT UTM12		
<b>Map System:</b>	Universal Transverse Mercator (US Survey Fee	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	NAD 1927 - Western US		
<b>Map Zone:</b>	Zone 12N (114 W to 108 W)		

<b>Site</b>	NBU 921-25F Pad, SEC 25 T9S R21E				
<b>Site Position:</b>		<b>Northing:</b>	14,532,166.00 ft	<b>Latitude:</b>	40° 0' 25.686 N
<b>From:</b>	Lat/Long	<b>Easting:</b>	2,059,767.87 ft	<b>Longitude:</b>	109° 30' 9.011 W
<b>Position Uncertainty:</b>	0.00 ft	<b>Slot Radius:</b>	in	<b>Grid Convergence:</b>	0.96 °

<b>Well</b>	NBU 921-25F3AS, 2589' FNL 1776' FWL					
<b>Well Position</b>	<b>+N/-S</b>	0.00 ft	<b>Northing:</b>	14,532,184.35 ft	<b>Latitude:</b>	40° 0' 25.866 N
	<b>+E/-W</b>	0.00 ft	<b>Easting:</b>	2,059,775.97 ft	<b>Longitude:</b>	109° 30' 8.903 W
<b>Position Uncertainty</b>	0.00 ft		<b>Wellhead Elevation:</b>	ft	<b>Ground Level:</b>	4,931.00 ft

<b>Wellbore</b>	OH
-----------------	----

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	07/29/2010	11.19	65.90	52,420

<b>Design</b>	Plan #1
---------------	---------

<b>Audit Notes:</b>	
<b>Version:</b>	<b>Phase:</b> PLAN <b>Tie On Depth:</b> 0.00
<b>Vertical Section:</b>	<b>Depth From (TVD) (ft)</b> <b>+N/-S (ft)</b> <b>+E/-W (ft)</b> <b>Direction (°)</b>
	0.00 0.00 0.00 12.99

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	
999.30	13.99	12.99	992.38	82.76	19.08	2.00	2.00	0.00	12.99	
2,603.19	13.99	12.99	2,548.71	460.48	106.19	0.00	0.00	0.00	0.00	
3,402.38	0.00	0.00	3,340.00	555.05	128.00	1.75	-1.75	0.00	180.00	
9,722.38	0.00	0.00	9,660.00	555.05	128.00	0.00	0.00	0.00	0.00	NBU 921-25F3AS F



<b>Database:</b>	EDM 2003.16 Single User Db	<b>Local Co-ordinate Reference:</b>	Well NBU 921-25F3AS
<b>Company:</b>	Kerr McGee Oil and Gas Onshore LP	<b>TVD Reference:</b>	GL 4931' & RKB 14 @ 4945.00ft (ASSUMED)
<b>Project:</b>	Uintah County, UT UTM12	<b>MD Reference:</b>	GL 4931' & RKB 14 @ 4945.00ft (ASSUMED)
<b>Site:</b>	NBU 921-25F Pad	<b>North Reference:</b>	True
<b>Well:</b>	NBU 921-25F3AS	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	Plan #1		

**Planned Survey**

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Start Build 2.00</b>									
400.00	2.00	12.99	399.98	1.70	0.39	1.75	2.00	2.00	0.00
500.00	4.00	12.99	499.84	6.80	1.57	6.98	2.00	2.00	0.00
600.00	6.00	12.99	599.45	15.29	3.53	15.69	2.00	2.00	0.00
700.00	8.00	12.99	698.70	27.17	6.26	27.88	2.00	2.00	0.00
800.00	10.00	12.99	797.47	42.41	9.78	43.52	2.00	2.00	0.00
900.00	12.00	12.99	895.62	61.00	14.07	62.60	2.00	2.00	0.00
999.30	13.99	12.99	992.38	82.76	19.08	84.93	2.00	2.00	0.00
<b>Start 1603.89 hold at 999.30 MD</b>									
1,000.00	13.99	12.99	993.06	82.92	19.12	85.10	0.00	0.00	0.00
1,100.00	13.99	12.99	1,090.09	106.47	24.55	109.26	0.00	0.00	0.00
1,200.00	13.99	12.99	1,187.13	130.02	29.98	133.43	0.00	0.00	0.00
1,300.00	13.99	12.99	1,284.16	153.57	35.41	157.60	0.00	0.00	0.00
1,400.00	13.99	12.99	1,381.20	177.12	40.84	181.77	0.00	0.00	0.00
1,479.15	13.99	12.99	1,458.00	195.76	45.14	200.90	0.00	0.00	0.00
<b>GREEN RIVER</b>									
1,500.00	13.99	12.99	1,478.23	200.67	46.28	205.94	0.00	0.00	0.00
1,600.00	13.99	12.99	1,575.27	224.22	51.71	230.11	0.00	0.00	0.00
1,700.00	13.99	12.99	1,672.30	247.77	57.14	254.28	0.00	0.00	0.00
1,800.00	13.99	12.99	1,769.34	271.32	62.57	278.44	0.00	0.00	0.00
1,900.00	13.99	12.99	1,866.37	294.87	68.00	302.61	0.00	0.00	0.00
2,000.00	13.99	12.99	1,963.41	318.42	73.43	326.78	0.00	0.00	0.00
2,100.00	13.99	12.99	2,060.45	341.97	78.86	350.95	0.00	0.00	0.00
2,200.00	13.99	12.99	2,157.48	365.52	84.29	375.12	0.00	0.00	0.00
2,300.00	13.99	12.99	2,254.52	389.08	89.72	399.29	0.00	0.00	0.00
2,400.00	13.99	12.99	2,351.55	412.63	95.15	423.45	0.00	0.00	0.00
2,439.62	13.99	12.99	2,390.00	421.96	97.30	433.03	0.00	0.00	0.00
<b>8 5/8"</b>									
2,500.00	13.99	12.99	2,448.59	436.18	100.58	447.62	0.00	0.00	0.00
2,600.00	13.99	12.99	2,545.62	459.73	106.01	471.79	0.00	0.00	0.00
2,603.19	13.99	12.99	2,548.71	460.48	106.19	472.56	0.00	0.00	0.00
<b>Start Drop -1.75</b>									
2,700.00	12.29	12.99	2,642.99	481.92	111.13	494.57	1.75	-1.75	0.00
2,800.00	10.54	12.99	2,741.01	501.21	115.58	514.36	1.75	-1.75	0.00
2,900.00	8.79	12.99	2,839.58	517.57	119.35	531.15	1.75	-1.75	0.00
3,000.00	7.04	12.99	2,938.63	530.99	122.45	544.93	1.75	-1.75	0.00
3,100.00	5.29	12.99	3,038.05	541.46	124.86	555.67	1.75	-1.75	0.00
3,200.00	3.54	12.99	3,137.74	548.96	126.59	563.37	1.75	-1.75	0.00
3,300.00	1.79	12.99	3,237.63	553.49	127.64	568.02	1.75	-1.75	0.00
3,400.00	0.04	12.99	3,337.62	555.05	128.00	569.62	1.75	-1.75	0.00
3,402.38	0.00	0.00	3,340.00	555.05	128.00	569.62	1.75	-1.75	-544.56
<b>Start 6320.00 hold at 3402.38 MD</b>									
3,500.00	0.00	0.00	3,437.62	555.05	128.00	569.62	0.00	0.00	0.00
3,600.00	0.00	0.00	3,537.62	555.05	128.00	569.62	0.00	0.00	0.00
3,700.00	0.00	0.00	3,637.62	555.05	128.00	569.62	0.00	0.00	0.00
3,800.00	0.00	0.00	3,737.62	555.05	128.00	569.62	0.00	0.00	0.00
3,900.00	0.00	0.00	3,837.62	555.05	128.00	569.62	0.00	0.00	0.00
4,000.00	0.00	0.00	3,937.62	555.05	128.00	569.62	0.00	0.00	0.00
4,100.00	0.00	0.00	4,037.62	555.05	128.00	569.62	0.00	0.00	0.00



<b>Database:</b>	EDM 2003.16 Single User Db	<b>Local Co-ordinate Reference:</b>	Well NBU 921-25F3AS
<b>Company:</b>	Kerr McGee Oil and Gas Onshore LP	<b>TVD Reference:</b>	GL 4931' & RKB 14 @ 4945.00ft (ASSUMED)
<b>Project:</b>	Uintah County, UT UTM12	<b>MD Reference:</b>	GL 4931' & RKB 14 @ 4945.00ft (ASSUMED)
<b>Site:</b>	NBU 921-25F Pad	<b>North Reference:</b>	True
<b>Well:</b>	NBU 921-25F3AS	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	Plan #1		

**Planned Survey**

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
4,200.00	0.00	0.00	4,137.62	555.05	128.00	569.62	0.00	0.00	0.00
4,300.00	0.00	0.00	4,237.62	555.05	128.00	569.62	0.00	0.00	0.00
4,400.00	0.00	0.00	4,337.62	555.05	128.00	569.62	0.00	0.00	0.00
4,500.00	0.00	0.00	4,437.62	555.05	128.00	569.62	0.00	0.00	0.00
4,600.00	0.00	0.00	4,537.62	555.05	128.00	569.62	0.00	0.00	0.00
4,700.00	0.00	0.00	4,637.62	555.05	128.00	569.62	0.00	0.00	0.00
4,789.38	0.00	0.00	4,727.00	555.05	128.00	569.62	0.00	0.00	0.00
<b>WASATCH</b>									
4,800.00	0.00	0.00	4,737.62	555.05	128.00	569.62	0.00	0.00	0.00
4,900.00	0.00	0.00	4,837.62	555.05	128.00	569.62	0.00	0.00	0.00
5,000.00	0.00	0.00	4,937.62	555.05	128.00	569.62	0.00	0.00	0.00
5,100.00	0.00	0.00	5,037.62	555.05	128.00	569.62	0.00	0.00	0.00
5,200.00	0.00	0.00	5,137.62	555.05	128.00	569.62	0.00	0.00	0.00
5,300.00	0.00	0.00	5,237.62	555.05	128.00	569.62	0.00	0.00	0.00
5,400.00	0.00	0.00	5,337.62	555.05	128.00	569.62	0.00	0.00	0.00
5,500.00	0.00	0.00	5,437.62	555.05	128.00	569.62	0.00	0.00	0.00
5,600.00	0.00	0.00	5,537.62	555.05	128.00	569.62	0.00	0.00	0.00
5,700.00	0.00	0.00	5,637.62	555.05	128.00	569.62	0.00	0.00	0.00
5,800.00	0.00	0.00	5,737.62	555.05	128.00	569.62	0.00	0.00	0.00
5,900.00	0.00	0.00	5,837.62	555.05	128.00	569.62	0.00	0.00	0.00
6,000.00	0.00	0.00	5,937.62	555.05	128.00	569.62	0.00	0.00	0.00
6,100.00	0.00	0.00	6,037.62	555.05	128.00	569.62	0.00	0.00	0.00
6,200.00	0.00	0.00	6,137.62	555.05	128.00	569.62	0.00	0.00	0.00
6,300.00	0.00	0.00	6,237.62	555.05	128.00	569.62	0.00	0.00	0.00
6,400.00	0.00	0.00	6,337.62	555.05	128.00	569.62	0.00	0.00	0.00
6,500.00	0.00	0.00	6,437.62	555.05	128.00	569.62	0.00	0.00	0.00
6,600.00	0.00	0.00	6,537.62	555.05	128.00	569.62	0.00	0.00	0.00
6,700.00	0.00	0.00	6,637.62	555.05	128.00	569.62	0.00	0.00	0.00
6,800.00	0.00	0.00	6,737.62	555.05	128.00	569.62	0.00	0.00	0.00
6,900.00	0.00	0.00	6,837.62	555.05	128.00	569.62	0.00	0.00	0.00
7,000.00	0.00	0.00	6,937.62	555.05	128.00	569.62	0.00	0.00	0.00
7,100.00	0.00	0.00	7,037.62	555.05	128.00	569.62	0.00	0.00	0.00
7,200.00	0.00	0.00	7,137.62	555.05	128.00	569.62	0.00	0.00	0.00
7,300.00	0.00	0.00	7,237.62	555.05	128.00	569.62	0.00	0.00	0.00
7,400.00	0.00	0.00	7,337.62	555.05	128.00	569.62	0.00	0.00	0.00
7,500.00	0.00	0.00	7,437.62	555.05	128.00	569.62	0.00	0.00	0.00
7,600.00	0.00	0.00	7,537.62	555.05	128.00	569.62	0.00	0.00	0.00
7,700.00	0.00	0.00	7,637.62	555.05	128.00	569.62	0.00	0.00	0.00
7,800.00	0.00	0.00	7,737.62	555.05	128.00	569.62	0.00	0.00	0.00
7,900.00	0.00	0.00	7,837.62	555.05	128.00	569.62	0.00	0.00	0.00
8,000.00	0.00	0.00	7,937.62	555.05	128.00	569.62	0.00	0.00	0.00
8,100.00	0.00	0.00	8,037.62	555.05	128.00	569.62	0.00	0.00	0.00
8,200.00	0.00	0.00	8,137.62	555.05	128.00	569.62	0.00	0.00	0.00
8,300.00	0.00	0.00	8,237.62	555.05	128.00	569.62	0.00	0.00	0.00
8,400.00	0.00	0.00	8,337.62	555.05	128.00	569.62	0.00	0.00	0.00
8,404.38	0.00	0.00	8,342.00	555.05	128.00	569.62	0.00	0.00	0.00
<b>MESAVERDE</b>									
8,500.00	0.00	0.00	8,437.62	555.05	128.00	569.62	0.00	0.00	0.00
8,600.00	0.00	0.00	8,537.62	555.05	128.00	569.62	0.00	0.00	0.00
8,700.00	0.00	0.00	8,637.62	555.05	128.00	569.62	0.00	0.00	0.00
8,800.00	0.00	0.00	8,737.62	555.05	128.00	569.62	0.00	0.00	0.00
8,900.00	0.00	0.00	8,837.62	555.05	128.00	569.62	0.00	0.00	0.00
9,000.00	0.00	0.00	8,937.62	555.05	128.00	569.62	0.00	0.00	0.00



# **Kerr McGee Oil and Gas Onshore LP**

**Uintah County, UT UTM12  
NBU 921-25F Pad  
NBU 921-25F3AS  
OH**

**Plan: Plan #1**

## **Survey Report - Geographic**

**29 July, 2010**



**SDI**  
Survey Report - Geographic



<b>Company:</b>	Kerr McGee Oil and Gas Onshore LP	<b>Local Co-ordinate Reference:</b>	Well NBU 921-25F3AS
<b>Project:</b>	Uintah County, UT UTM12	<b>TVD Reference:</b>	GL 4931' & RKB 14 @ 4945.00ft (ASSUMED)
<b>Site:</b>	NBU 921-25F Pad	<b>MD Reference:</b>	GL 4931' & RKB 14 @ 4945.00ft (ASSUMED)
<b>Well:</b>	NBU 921-25F3AS	<b>North Reference:</b>	True
<b>Wellbore:</b>	OH	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Plan #1	<b>Database:</b>	EDM 2003.16 Single User Db

<b>Project</b>	Uintah County, UT UTM12		
<b>Map System:</b>	Universal Transverse Mercator (US Survey Fee	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	NAD 1927 - Western US		
<b>Map Zone:</b>	Zone 12N (114 W to 108 W)		

<b>Site</b>	NBU 921-25F Pad, SEC 25 T9S R21E				
<b>Site Position:</b>		<b>Northing:</b>	14,532,166.00 ft	<b>Latitude:</b>	40° 0' 25.686 N
<b>From:</b>	Lat/Long	<b>Easting:</b>	2,059,767.87 ft	<b>Longitude:</b>	109° 30' 9.011 W
<b>Position Uncertainty:</b>	0.00 ft	<b>Slot Radius:</b>	in	<b>Grid Convergence:</b>	0.96 °

<b>Well</b>	NBU 921-25F3AS, 2589' FNL 1776' FWL					
<b>Well Position</b>	<b>+N/-S</b>	0.00 ft	<b>Northing:</b>	14,532,184.35 ft	<b>Latitude:</b>	40° 0' 25.866 N
	<b>+E/-W</b>	0.00 ft	<b>Easting:</b>	2,059,775.97 ft	<b>Longitude:</b>	109° 30' 8.903 W
<b>Position Uncertainty</b>		0.00 ft	<b>Wellhead Elevation:</b>	ft	<b>Ground Level:</b>	4,931.00 ft

<b>Wellbore</b>	OH				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	IGRF2010	07/29/2010	11.19	65.90	52,420

<b>Design</b>	Plan #1			
<b>Audit Notes:</b>				
<b>Version:</b>	<b>Phase:</b>	PLAN	<b>Tie On Depth:</b>	0.00
<b>Vertical Section:</b>	<b>Depth From (TVD) (ft)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Direction (°)</b>
	0.00	0.00	0.00	12.99

<b>Survey Tool Program</b>	<b>Date</b>	07/29/2010		
<b>From (ft)</b>	<b>To (ft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Description</b>
0.00	9,722.38	Plan #1 (OH)	MWD SDI	MWD - Standard ver 1.0.1



**SDI**  
Survey Report - Geographic



<b>Company:</b>	Kerr McGee Oil and Gas Onshore LP	<b>Local Co-ordinate Reference:</b>	Well NBU 921-25F3AS
<b>Project:</b>	Uintah County, UT UTM12	<b>TVD Reference:</b>	GL 4931' & RKB 14 @ 4945.00ft (ASSUMED)
<b>Site:</b>	NBU 921-25F Pad	<b>MD Reference:</b>	GL 4931' & RKB 14 @ 4945.00ft (ASSUMED)
<b>Well:</b>	NBU 921-25F3AS	<b>North Reference:</b>	True
<b>Wellbore:</b>	OH	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Plan #1	<b>Database:</b>	EDM 2003.16 Single User Db

Planned Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (ft)	Map Easting (ft)	Latitude	Longitude	
0.00	0.00	0.00	0.00	0.00	0.00	14,532,184.35	2,059,775.97	40° 0' 25.866 N	109° 30' 8.903 W	
100.00	0.00	0.00	100.00	0.00	0.00	14,532,184.35	2,059,775.97	40° 0' 25.866 N	109° 30' 8.903 W	
200.00	0.00	0.00	200.00	0.00	0.00	14,532,184.35	2,059,775.97	40° 0' 25.866 N	109° 30' 8.903 W	
300.00	0.00	0.00	300.00	0.00	0.00	14,532,184.35	2,059,775.97	40° 0' 25.866 N	109° 30' 8.903 W	
<b>Start Build 2.00</b>										
400.00	2.00	12.99	399.98	1.70	0.39	14,532,186.05	2,059,776.33	40° 0' 25.883 N	109° 30' 8.898 W	
500.00	4.00	12.99	499.84	6.80	1.57	14,532,191.17	2,059,777.42	40° 0' 25.933 N	109° 30' 8.883 W	
600.00	6.00	12.99	599.45	15.29	3.53	14,532,199.69	2,059,779.24	40° 0' 26.017 N	109° 30' 8.857 W	
700.00	8.00	12.99	698.70	27.17	6.26	14,532,211.61	2,059,781.77	40° 0' 26.135 N	109° 30' 8.822 W	
800.00	10.00	12.99	797.47	42.41	9.78	14,532,226.91	2,059,785.03	40° 0' 26.285 N	109° 30' 8.777 W	
900.00	12.00	12.99	895.62	61.00	14.07	14,532,245.57	2,059,789.01	40° 0' 26.469 N	109° 30' 8.722 W	
999.30	13.99	12.99	992.38	82.76	19.08	14,532,267.41	2,059,793.66	40° 0' 26.684 N	109° 30' 8.658 W	
<b>Start 1603.89 hold at 999.30 MD</b>										
1,000.00	13.99	12.99	993.06	82.92	19.12	14,532,267.57	2,059,793.69	40° 0' 26.686 N	109° 30' 8.657 W	
1,100.00	13.99	12.99	1,090.09	106.47	24.55	14,532,291.21	2,059,798.73	40° 0' 26.918 N	109° 30' 8.587 W	
1,200.00	13.99	12.99	1,187.13	130.02	29.98	14,532,314.85	2,059,803.76	40° 0' 27.151 N	109° 30' 8.517 W	
1,300.00	13.99	12.99	1,284.16	153.57	35.41	14,532,338.49	2,059,808.79	40° 0' 27.384 N	109° 30' 8.448 W	
1,400.00	13.99	12.99	1,381.20	177.12	40.84	14,532,362.13	2,059,813.83	40° 0' 27.617 N	109° 30' 8.378 W	
1,479.15	13.99	12.99	1,458.00	195.76	45.14	14,532,380.84	2,059,817.81	40° 0' 27.801 N	109° 30' 8.323 W	
<b>GREEN RIVER</b>										
1,500.00	13.99	12.99	1,478.23	200.67	46.28	14,532,385.77	2,059,818.86	40° 0' 27.850 N	109° 30' 8.308 W	
1,600.00	13.99	12.99	1,575.27	224.22	51.71	14,532,409.40	2,059,823.90	40° 0' 28.082 N	109° 30' 8.238 W	
1,700.00	13.99	12.99	1,672.30	247.77	57.14	14,532,433.04	2,059,828.93	40° 0' 28.315 N	109° 30' 8.168 W	
1,800.00	13.99	12.99	1,769.34	271.32	62.57	14,532,456.68	2,059,833.97	40° 0' 28.548 N	109° 30' 8.099 W	
1,900.00	13.99	12.99	1,866.37	294.87	68.00	14,532,480.32	2,059,839.00	40° 0' 28.781 N	109° 30' 8.029 W	
2,000.00	13.99	12.99	1,963.41	318.42	73.43	14,532,503.96	2,059,844.03	40° 0' 29.013 N	109° 30' 7.959 W	
2,100.00	13.99	12.99	2,060.45	341.97	78.86	14,532,527.60	2,059,849.07	40° 0' 29.246 N	109° 30' 7.889 W	
2,200.00	13.99	12.99	2,157.48	365.52	84.29	14,532,551.23	2,059,854.10	40° 0' 29.479 N	109° 30' 7.819 W	
2,300.00	13.99	12.99	2,254.52	389.08	89.72	14,532,574.87	2,059,859.14	40° 0' 29.712 N	109° 30' 7.750 W	
2,400.00	13.99	12.99	2,351.55	412.63	95.15	14,532,598.51	2,059,864.17	40° 0' 29.945 N	109° 30' 7.680 W	
2,439.62	13.99	12.99	2,390.00	421.96	97.30	14,532,607.88	2,059,866.17	40° 0' 30.037 N	109° 30' 7.652 W	
<b>8 5/8"</b>										
2,500.00	13.99	12.99	2,448.59	436.18	100.58	14,532,622.15	2,059,869.21	40° 0' 30.177 N	109° 30' 7.610 W	
2,600.00	13.99	12.99	2,545.62	459.73	106.01	14,532,645.79	2,059,874.24	40° 0' 30.410 N	109° 30' 7.540 W	
2,603.19	13.99	12.99	2,548.71	460.48	106.19	14,532,646.54	2,059,874.40	40° 0' 30.418 N	109° 30' 7.538 W	
<b>Start Drop -1.75</b>										
2,700.00	12.29	12.99	2,642.99	481.92	111.13	14,532,668.06	2,059,878.98	40° 0' 30.630 N	109° 30' 7.474 W	
2,800.00	10.54	12.99	2,741.01	501.21	115.58	14,532,687.42	2,059,883.11	40° 0' 30.820 N	109° 30' 7.417 W	
2,900.00	8.79	12.99	2,839.58	517.57	119.35	14,532,703.85	2,059,886.60	40° 0' 30.982 N	109° 30' 7.369 W	
3,000.00	7.04	12.99	2,938.63	530.99	122.45	14,532,717.32	2,059,889.47	40° 0' 31.115 N	109° 30' 7.329 W	
3,100.00	5.29	12.99	3,038.05	541.46	124.86	14,532,727.82	2,059,891.71	40° 0' 31.218 N	109° 30' 7.298 W	
3,200.00	3.54	12.99	3,137.74	548.96	126.59	14,532,735.35	2,059,893.31	40° 0' 31.292 N	109° 30' 7.276 W	
3,300.00	1.79	12.99	3,237.63	553.49	127.64	14,532,739.91	2,059,894.28	40° 0' 31.337 N	109° 30' 7.262 W	
3,400.00	0.04	12.99	3,337.62	555.05	128.00	14,532,741.47	2,059,894.62	40° 0' 31.352 N	109° 30' 7.258 W	
3,402.38	0.00	0.00	3,340.00	555.05	128.00	14,532,741.47	2,059,894.62	40° 0' 31.352 N	109° 30' 7.258 W	
<b>Start 6320.00 hold at 3402.38 MD</b>										
3,500.00	0.00	0.00	3,437.62	555.05	128.00	14,532,741.47	2,059,894.62	40° 0' 31.352 N	109° 30' 7.258 W	
3,600.00	0.00	0.00	3,537.62	555.05	128.00	14,532,741.47	2,059,894.62	40° 0' 31.352 N	109° 30' 7.258 W	
3,700.00	0.00	0.00	3,637.62	555.05	128.00	14,532,741.47	2,059,894.62	40° 0' 31.352 N	109° 30' 7.258 W	
3,800.00	0.00	0.00	3,737.62	555.05	128.00	14,532,741.47	2,059,894.62	40° 0' 31.352 N	109° 30' 7.258 W	
3,900.00	0.00	0.00	3,837.62	555.05	128.00	14,532,741.47	2,059,894.62	40° 0' 31.352 N	109° 30' 7.258 W	
4,000.00	0.00	0.00	3,937.62	555.05	128.00	14,532,741.47	2,059,894.62	40° 0' 31.352 N	109° 30' 7.258 W	
4,100.00	0.00	0.00	4,037.62	555.05	128.00	14,532,741.47	2,059,894.62	40° 0' 31.352 N	109° 30' 7.258 W	
4,200.00	0.00	0.00	4,137.62	555.05	128.00	14,532,741.47	2,059,894.62	40° 0' 31.352 N	109° 30' 7.258 W	



**SDI**  
Survey Report - Geographic



<b>Company:</b>	Kerr McGee Oil and Gas Onshore LP	<b>Local Co-ordinate Reference:</b>	Well NBU 921-25F3AS
<b>Project:</b>	Uintah County, UT UTM12	<b>TVD Reference:</b>	GL 4931' & RKB 14 @ 4945.00ft (ASSUMED)
<b>Site:</b>	NBU 921-25F Pad	<b>MD Reference:</b>	GL 4931' & RKB 14 @ 4945.00ft (ASSUMED)
<b>Well:</b>	NBU 921-25F3AS	<b>North Reference:</b>	True
<b>Wellbore:</b>	OH	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Plan #1	<b>Database:</b>	EDM 2003.16 Single User Db

**Planned Survey**

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (ft)	Map Easting (ft)	Latitude	Longitude
4,300.00	0.00	0.00	4,237.62	555.05	128.00	14,532,741.47	2,059,894.62	40° 0' 31.352 N	109° 30' 7.258 W
4,400.00	0.00	0.00	4,337.62	555.05	128.00	14,532,741.47	2,059,894.62	40° 0' 31.352 N	109° 30' 7.258 W
4,500.00	0.00	0.00	4,437.62	555.05	128.00	14,532,741.47	2,059,894.62	40° 0' 31.352 N	109° 30' 7.258 W
4,600.00	0.00	0.00	4,537.62	555.05	128.00	14,532,741.47	2,059,894.62	40° 0' 31.352 N	109° 30' 7.258 W
4,700.00	0.00	0.00	4,637.62	555.05	128.00	14,532,741.47	2,059,894.62	40° 0' 31.352 N	109° 30' 7.258 W
4,789.38	0.00	0.00	4,727.00	555.05	128.00	14,532,741.47	2,059,894.62	40° 0' 31.352 N	109° 30' 7.258 W
<b>WASATCH</b>									
4,800.00	0.00	0.00	4,737.62	555.05	128.00	14,532,741.47	2,059,894.62	40° 0' 31.352 N	109° 30' 7.258 W
4,900.00	0.00	0.00	4,837.62	555.05	128.00	14,532,741.47	2,059,894.62	40° 0' 31.352 N	109° 30' 7.258 W
5,000.00	0.00	0.00	4,937.62	555.05	128.00	14,532,741.47	2,059,894.62	40° 0' 31.352 N	109° 30' 7.258 W
5,100.00	0.00	0.00	5,037.62	555.05	128.00	14,532,741.47	2,059,894.62	40° 0' 31.352 N	109° 30' 7.258 W
5,200.00	0.00	0.00	5,137.62	555.05	128.00	14,532,741.47	2,059,894.62	40° 0' 31.352 N	109° 30' 7.258 W
5,300.00	0.00	0.00	5,237.62	555.05	128.00	14,532,741.47	2,059,894.62	40° 0' 31.352 N	109° 30' 7.258 W
5,400.00	0.00	0.00	5,337.62	555.05	128.00	14,532,741.47	2,059,894.62	40° 0' 31.352 N	109° 30' 7.258 W
5,500.00	0.00	0.00	5,437.62	555.05	128.00	14,532,741.47	2,059,894.62	40° 0' 31.352 N	109° 30' 7.258 W
5,600.00	0.00	0.00	5,537.62	555.05	128.00	14,532,741.47	2,059,894.62	40° 0' 31.352 N	109° 30' 7.258 W
5,700.00	0.00	0.00	5,637.62	555.05	128.00	14,532,741.47	2,059,894.62	40° 0' 31.352 N	109° 30' 7.258 W
5,800.00	0.00	0.00	5,737.62	555.05	128.00	14,532,741.47	2,059,894.62	40° 0' 31.352 N	109° 30' 7.258 W
5,900.00	0.00	0.00	5,837.62	555.05	128.00	14,532,741.47	2,059,894.62	40° 0' 31.352 N	109° 30' 7.258 W
6,000.00	0.00	0.00	5,937.62	555.05	128.00	14,532,741.47	2,059,894.62	40° 0' 31.352 N	109° 30' 7.258 W
6,100.00	0.00	0.00	6,037.62	555.05	128.00	14,532,741.47	2,059,894.62	40° 0' 31.352 N	109° 30' 7.258 W
6,200.00	0.00	0.00	6,137.62	555.05	128.00	14,532,741.47	2,059,894.62	40° 0' 31.352 N	109° 30' 7.258 W
6,300.00	0.00	0.00	6,237.62	555.05	128.00	14,532,741.47	2,059,894.62	40° 0' 31.352 N	109° 30' 7.258 W
6,400.00	0.00	0.00	6,337.62	555.05	128.00	14,532,741.47	2,059,894.62	40° 0' 31.352 N	109° 30' 7.258 W
6,500.00	0.00	0.00	6,437.62	555.05	128.00	14,532,741.47	2,059,894.62	40° 0' 31.352 N	109° 30' 7.258 W
6,600.00	0.00	0.00	6,537.62	555.05	128.00	14,532,741.47	2,059,894.62	40° 0' 31.352 N	109° 30' 7.258 W
6,700.00	0.00	0.00	6,637.62	555.05	128.00	14,532,741.47	2,059,894.62	40° 0' 31.352 N	109° 30' 7.258 W
6,800.00	0.00	0.00	6,737.62	555.05	128.00	14,532,741.47	2,059,894.62	40° 0' 31.352 N	109° 30' 7.258 W
6,900.00	0.00	0.00	6,837.62	555.05	128.00	14,532,741.47	2,059,894.62	40° 0' 31.352 N	109° 30' 7.258 W
7,000.00	0.00	0.00	6,937.62	555.05	128.00	14,532,741.47	2,059,894.62	40° 0' 31.352 N	109° 30' 7.258 W
7,100.00	0.00	0.00	7,037.62	555.05	128.00	14,532,741.47	2,059,894.62	40° 0' 31.352 N	109° 30' 7.258 W
7,200.00	0.00	0.00	7,137.62	555.05	128.00	14,532,741.47	2,059,894.62	40° 0' 31.352 N	109° 30' 7.258 W
7,300.00	0.00	0.00	7,237.62	555.05	128.00	14,532,741.47	2,059,894.62	40° 0' 31.352 N	109° 30' 7.258 W
7,400.00	0.00	0.00	7,337.62	555.05	128.00	14,532,741.47	2,059,894.62	40° 0' 31.352 N	109° 30' 7.258 W
7,500.00	0.00	0.00	7,437.62	555.05	128.00	14,532,741.47	2,059,894.62	40° 0' 31.352 N	109° 30' 7.258 W
7,600.00	0.00	0.00	7,537.62	555.05	128.00	14,532,741.47	2,059,894.62	40° 0' 31.352 N	109° 30' 7.258 W
7,700.00	0.00	0.00	7,637.62	555.05	128.00	14,532,741.47	2,059,894.62	40° 0' 31.352 N	109° 30' 7.258 W
7,800.00	0.00	0.00	7,737.62	555.05	128.00	14,532,741.47	2,059,894.62	40° 0' 31.352 N	109° 30' 7.258 W
7,900.00	0.00	0.00	7,837.62	555.05	128.00	14,532,741.47	2,059,894.62	40° 0' 31.352 N	109° 30' 7.258 W
8,000.00	0.00	0.00	7,937.62	555.05	128.00	14,532,741.47	2,059,894.62	40° 0' 31.352 N	109° 30' 7.258 W
8,100.00	0.00	0.00	8,037.62	555.05	128.00	14,532,741.47	2,059,894.62	40° 0' 31.352 N	109° 30' 7.258 W
8,200.00	0.00	0.00	8,137.62	555.05	128.00	14,532,741.47	2,059,894.62	40° 0' 31.352 N	109° 30' 7.258 W
8,300.00	0.00	0.00	8,237.62	555.05	128.00	14,532,741.47	2,059,894.62	40° 0' 31.352 N	109° 30' 7.258 W
8,400.00	0.00	0.00	8,337.62	555.05	128.00	14,532,741.47	2,059,894.62	40° 0' 31.352 N	109° 30' 7.258 W
8,404.38	0.00	0.00	8,342.00	555.05	128.00	14,532,741.47	2,059,894.62	40° 0' 31.352 N	109° 30' 7.258 W
<b>MESAVERDE</b>									
8,500.00	0.00	0.00	8,437.62	555.05	128.00	14,532,741.47	2,059,894.62	40° 0' 31.352 N	109° 30' 7.258 W
8,600.00	0.00	0.00	8,537.62	555.05	128.00	14,532,741.47	2,059,894.62	40° 0' 31.352 N	109° 30' 7.258 W
8,700.00	0.00	0.00	8,637.62	555.05	128.00	14,532,741.47	2,059,894.62	40° 0' 31.352 N	109° 30' 7.258 W
8,800.00	0.00	0.00	8,737.62	555.05	128.00	14,532,741.47	2,059,894.62	40° 0' 31.352 N	109° 30' 7.258 W
8,900.00	0.00	0.00	8,837.62	555.05	128.00	14,532,741.47	2,059,894.62	40° 0' 31.352 N	109° 30' 7.258 W
9,000.00	0.00	0.00	8,937.62	555.05	128.00	14,532,741.47	2,059,894.62	40° 0' 31.352 N	109° 30' 7.258 W
9,100.00	0.00	0.00	9,037.62	555.05	128.00	14,532,741.47	2,059,894.62	40° 0' 31.352 N	109° 30' 7.258 W
9,200.00	0.00	0.00	9,137.62	555.05	128.00	14,532,741.47	2,059,894.62	40° 0' 31.352 N	109° 30' 7.258 W
9,300.00	0.00	0.00	9,237.62	555.05	128.00	14,532,741.47	2,059,894.62	40° 0' 31.352 N	109° 30' 7.258 W



**SDI**  
Survey Report - Geographic



<b>Company:</b>	Kerr McGee Oil and Gas Onshore LP	<b>Local Co-ordinate Reference:</b>	Well NBU 921-25F3AS
<b>Project:</b>	Uintah County, UT UTM12	<b>TVD Reference:</b>	GL 4931' & RKB 14 @ 4945.00ft (ASSUMED)
<b>Site:</b>	NBU 921-25F Pad	<b>MD Reference:</b>	GL 4931' & RKB 14 @ 4945.00ft (ASSUMED)
<b>Well:</b>	NBU 921-25F3AS	<b>North Reference:</b>	True
<b>Wellbore:</b>	OH	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Plan #1	<b>Database:</b>	EDM 2003.16 Single User Db

Planned Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (ft)	Map Easting (ft)	Latitude	Longitude	
9,400.00	0.00	0.00	9,337.62	555.05	128.00	14,532,741.47	2,059,894.62	40° 0' 31.352 N	109° 30' 7.258 W	
9,500.00	0.00	0.00	9,437.62	555.05	128.00	14,532,741.47	2,059,894.62	40° 0' 31.352 N	109° 30' 7.258 W	
9,600.00	0.00	0.00	9,537.62	555.05	128.00	14,532,741.47	2,059,894.62	40° 0' 31.352 N	109° 30' 7.258 W	
9,700.00	0.00	0.00	9,637.62	555.05	128.00	14,532,741.47	2,059,894.62	40° 0' 31.352 N	109° 30' 7.258 W	
9,722.38	0.00	0.00	9,660.00	555.05	128.00	14,532,741.47	2,059,894.62	40° 0' 31.352 N	109° 30' 7.258 W	

**NBU 921-25F3AS PBHL**

Targets										
Target Name	- hit/miss target	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
NBU 921-25F3AS PB	- plan hits target center	0.00	0.00	9,660.00	555.05	128.00	14,532,741.47	2,059,894.62	40° 0' 31.352 N	109° 30' 7.258 W
	- Circle (radius 25.00)									

Casing Points						
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (in)	Hole Diameter (in)		
2,439.62	2,390.00	8 5/8"	8.625	11.000		

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
1,479.15	1,458.00	GREEN RIVER				
4,789.38	4,727.00	WASATCH				
8,404.38	8,342.00	MESAVERDE				

Plan Annotations					
Measured Depth (ft)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Comment	
300.00	300.00	0.00	0.00	Start Build 2.00	
999.30	992.38	82.76	19.08	Start 1603.89 hold at 999.30 MD	
2,603.19	2,548.71	460.48	106.19	Start Drop -1.75	
3,402.38	3,340.00	555.05	128.00	Start 6320.00 hold at 3402.38 MD	
9,722.38	9,660.00	555.05	128.00	TD at 9722.38	

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



**SDI**  
Planning Report



<b>Database:</b>	EDM 2003.16 Single User Db	<b>Local Co-ordinate Reference:</b>	Well NBU 921-25F3AS
<b>Company:</b>	Kerr McGee Oil and Gas Onshore LP	<b>TVD Reference:</b>	GL 4931' & RKB 14 @ 4945.00ft (ASSUMED)
<b>Project:</b>	Uintah County, UT UTM12	<b>MD Reference:</b>	GL 4931' & RKB 14 @ 4945.00ft (ASSUMED)
<b>Site:</b>	NBU 921-25F Pad	<b>North Reference:</b>	True
<b>Well:</b>	NBU 921-25F3AS	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	Plan #1		

**Planned Survey**

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
9,100.00	0.00	0.00	9,037.62	555.05	128.00	569.62	0.00	0.00	0.00
9,200.00	0.00	0.00	9,137.62	555.05	128.00	569.62	0.00	0.00	0.00
9,300.00	0.00	0.00	9,237.62	555.05	128.00	569.62	0.00	0.00	0.00
9,400.00	0.00	0.00	9,337.62	555.05	128.00	569.62	0.00	0.00	0.00
9,500.00	0.00	0.00	9,437.62	555.05	128.00	569.62	0.00	0.00	0.00
9,600.00	0.00	0.00	9,537.62	555.05	128.00	569.62	0.00	0.00	0.00
9,700.00	0.00	0.00	9,637.62	555.05	128.00	569.62	0.00	0.00	0.00
9,722.38	0.00	0.00	9,660.00	555.05	128.00	569.62	0.00	0.00	0.00
<b>NBU 921-25F3AS PBHL</b>									

**Targets**

Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
NBU 921-25F3AS PB - hit/miss target - Shape - plan hits target center - Circle (radius 25.00)	0.00	0.00	9,660.00	555.05	128.00	14,532,741.47	2,059,894.62	40° 0' 31.352 N	109° 30' 7.258 W

**Casing Points**

Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (in)	Hole Diameter (in)
2,439.62	2,390.00	8 5/8"	8.625	11.000

**Formations**

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
1,479.15	1,458.00	GREEN RIVER			
4,789.38	4,727.00	WASATCH			
8,404.38	8,342.00	MESAVERDE			

**Plan Annotations**

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates +N/-S (ft)	+E/-W (ft)	Comment
300.00	300.00	0.00	0.00	Start Build 2.00
999.30	992.38	82.76	19.08	Start 1603.89 hold at 999.30 MD
2,603.19	2,548.71	460.48	106.19	Start Drop -1.75
3,402.38	3,340.00	555.05	128.00	Start 6320.00 hold at 3402.38 MD
9,722.38	9,660.00	555.05	128.00	TD at 9722.38

**NBU 921-25F1BS**

Surface: 2,580' FNL 1,780' FWL (SE/4NW/4)  
BHL: 1,366' FNL 2,296' FWL (SE/4NW/4)

**NBU 921-25F1CS**

Surface: 2,571' FNL 1,784' FWL (SE/4NW/4)  
BHL: 1,754' FNL 2,259' FWL (SE/4NW/4)

**NBU 921-25F3AS**

Surface: 2,589' FNL 1,776' FWL (SE/4NW/4)  
BHL: 2,034' FNL 1,905' FWL (SE/4NW/4)

**NBU 921-25F3CS**

Surface: 2,598' FNL 1,772' FWL (SE/4NW/4)  
BHL: 2,461' FNL 1,628' FWL (SE/4NW/4)

**NBU 921-25L1BS**

Surface: 2,607' FNL 1,768' FWL (SE/4NW/4)  
BHL: 2,597' FSL 969' FWL (NW/4SW/4)

Pad: NBU 921-25F  
Section 25 T9S R21E  
Mineral Lease: UO 1194 ST

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

***MULTI-POINT SURFACE USE PLAN of OPERATIONS (SUPO)***

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

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

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

**A. Existing Roads:**

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

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  $\pm 245'$  (0.1 miles) of new access road to this pad location is proposed (see Topo Map B). Applicable Uintah County encroachment and/or pipeline crossing permits will be obtained prior to construction/development. No other pipelines will be crossed at this location.

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

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

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

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

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

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

Gathering facilities:

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

The total gas gathering (steel line pipe with fusion bond epoxy coating) pipeline distances from the meter to the tie in point is  $\pm 620'$  and the individual segments are broken up as follows:

$\pm 270'$  (0.1 miles) –New 6" buried gas pipeline from the meter to the edge of the pad.

$\pm 350'$  (0.1 miles) –New 6" buried gas pipeline from the edge of pad to the existing 12" pipeline.

The total liquid gathering pipeline distance from the meter to the tie in point is  $\pm 660'$  and the individual segments are broken up as follows:

$\pm 270'$  (0.1 miles) –New 4” buried liquid pipeline from the meter to the edge of the pad.

$\pm 390'$  (0.1 miles) –New 4” buried liquid pipeline from the edge of pad to the NBU 921-25J2 pad intersection.

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

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

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

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

**D. 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 of Handling Waste Materials:**

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

- RNI in Sec. 5 T9S R22E
- Ace Oilfield in Sec. 2 T6S R20E
- MC&MC in Sec. 12 T6S R19E
- Pipeline Facility in Sec. 36 T9S R20E
- Goat Pasture Evaporation Pond in SW/4 Sec. 16 T10S R22E
- Bonanza Evaporation Pond in Sec. 2 T10S R23E
- Ouray #1 SWD in Sec. 1 T9S R21E
- NBU 159 SWD in Sec. 35 T9S R21E
- CIGE 112D SWD in Sec. 19 T9S R21E
- CIGE 114 SWD in Sec. 34 T9S R21E
- NBU 921-34K SWD in Sec. 34 T9S R21E
- NBU 921-33F SWD in Sec. 33 T9S R21E
- NBU 921-34L SWD in Sec. 34 T9S R21E

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

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

The reserve and/or fracture stimulation pit will be lined with a synthetic material 20-mil or thicker, The liner

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

For the protection of livestock and wildlife, all open pits and cellars will be fenced/covered to prevent wildlife or livestock entry. Total height of pit fencing will be at least 42 inches and corner posts will be cemented and/or braced in such a manner as to keep the fence tight at all times. Standard steel, wood, or pipe posts shall be used between the corner braces. Maximum distance between any 2 fence posts shall be no greater than 16 feet.

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

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

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

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

### **Materials Management**

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

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

**G. Ancillary Facilities:**

None are anticipated.

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

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

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

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

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

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

**Interim Reclamation**

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

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

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

### **Final Reclamation**

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

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

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

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

### **Seeding and Measures Common to Interim and Final Reclamation**

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

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

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

**K. Other Information:**

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

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

A biological field survey was completed by Grasslands Consulting, Inc. on July 13, 2010. For additional details please refer to report GCI-297.

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

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

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

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

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

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

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

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

  
\_\_\_\_\_  
Danielle Piernot

August 13, 2010

\_\_\_\_\_  
Date

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

By:

Nicole Shelnut

Prepared For:

State of Utah  
School and Institutional Trust Lands Administration

Prepared Under Contract With:

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

Prepared By:

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

MOAC Report No. 10-125

July 26, 2010

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

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



# Grasslands Consulting, Inc.

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

## **SPECIAL STATUS PLANT AND WILDLIFE SPECIES REPORT**

**Report Number:** GCI #297

**Report Date:** August 03, 2010

**Operator:** Kerr-McGee Oil & Gas Onshore LP

**Well:** NBU 921-25F well pad (Bores: NBU 921-25F1BS, NBU 921-25F1CS, NBU 921-25F3AS, NBU 921-25F3CS, & NBU 921-25L1BS)

**Pipeline:** Associated pipeline leading to proposed well pad

**Access Road:** Associated road leading to proposed well pad

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

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

**Survey Date:** July 13, 2010

**Observers:** Grasslands Consulting, Inc. Biologists: Brad Snopek, Jennie Sinclair, Jonathan Sexauer, Adrienne Cunningham, Garrett Peterson and field technicians.



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

July 15, 2010

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

Re: Directional Drilling R649-3-11  
NBU 921-25F3AS  
T9S-R21E  
Section 25: SENW surface and bottom hole  
Surface: 2589' FNL, 1776' FWL  
Bottom Hole: 2034' FNL, 1905' FWL  
Uintah County, Utah

Dear Ms. Mason:

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

- Kerr-McGee's NBU 921-25F3AS is located within the Natural Buttes Unit area.
- Kerr-McGee is permitting this well as a directional well in order to minimize surface disturbance. Locating the well at the surface location and directionally drilling from this location, Kerr-McGee will be able to utilize the existing road and pipelines in the area.
- Furthermore, Kerr-McGee certifies that it is the sole working interest owner within 460 feet of the entire directional well bore.

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

Sincerely,

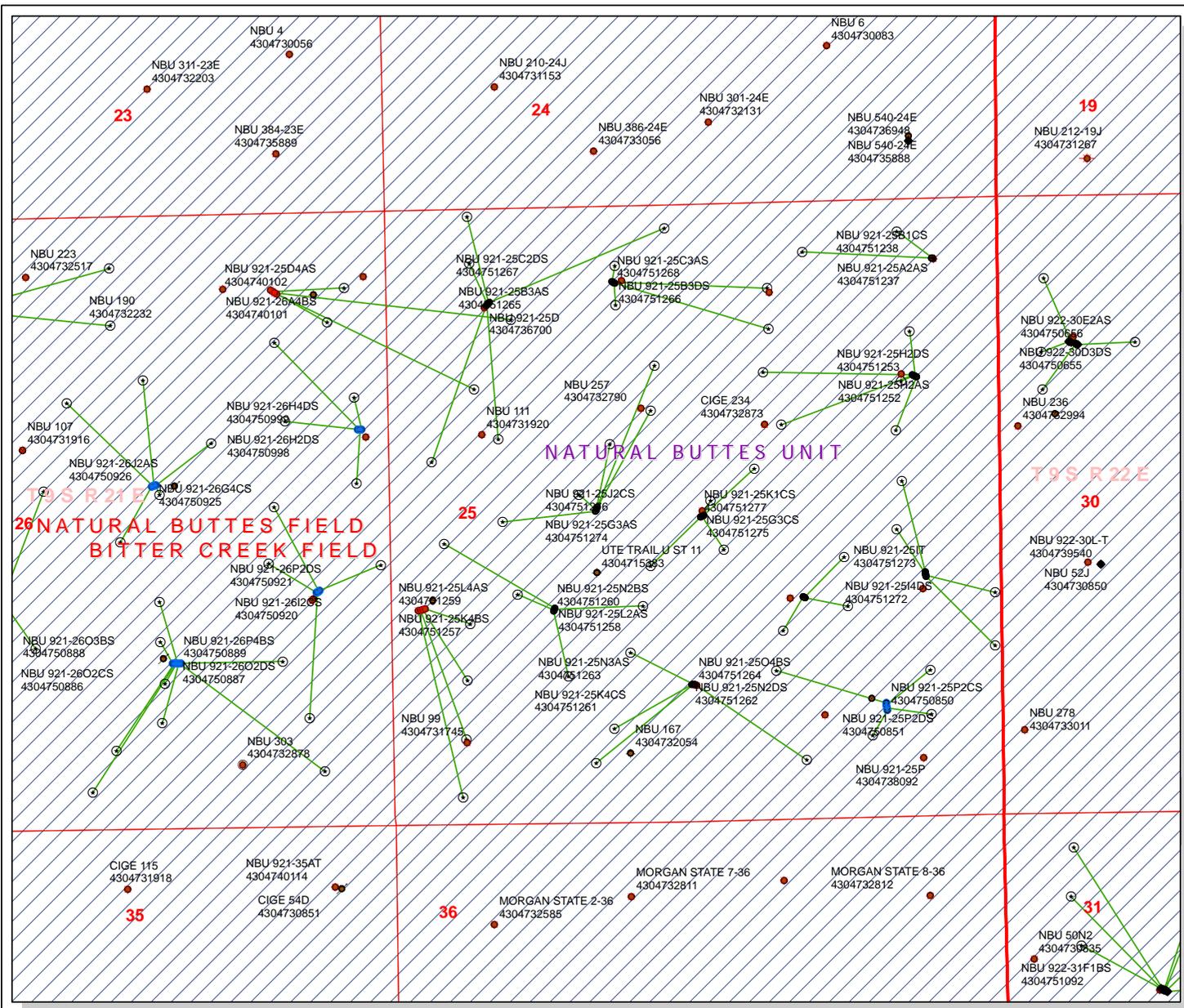
KERR-MCGEE OIL & GAS ONSHORE LP

Joe Matney  
Sr. Staff Landman

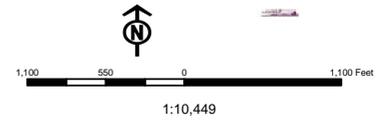
'APIWellNo:43047512450000'

**API Number: 4304751245**  
**Well Name: NBU 921-25F3AS**  
**Township 09.0 S Range 21.0 E Section 25**  
**Meridian: SLBM**  
 Operator: KERR-MCGEE OIL & GAS ONSHORE, L.P.

Map Prepared:  
 Map Produced by Diana Mason



- |                             |                                     |
|-----------------------------|-------------------------------------|
| <b>Units</b>                | <b>Wells Query</b>                  |
| <b>STATUS</b>               | ✕ -all other values-                |
| ACTIVE                      | APD - Approved Permit               |
| EXPLORATORY                 | DRIL - Spudded (Drilling Commenced) |
| GAS STORAGE                 | GIW - Gas Injection                 |
| NF PP OIL                   | GS - Gas Storage                    |
| NF SECONDARY                | LA - Location Abandoned             |
| PI OIL                      | LOC - New Location                  |
| PP GAS                      | OPS - Operation Suspended           |
| PP GEOTHERMAL               | PA - Plugged Abandoned              |
| PP OIL                      | PGW - Producing Gas Well            |
| SECONDARY                   | PDW - Producing Oil Well            |
| TERMINATED                  | RET - Returned APD                  |
| <b>Fields</b>               | SGW - Shut-in Gas Well              |
| Sections                    | SOW - Shut-in Oil Well              |
| Township                    | TA - Temp. Abandoned                |
| Bottom Hole Location - AGRC | TW - Test Well                      |
|                             | WDW - Water Disposal                |
|                             | WW - Water Injection Well           |
|                             | WSW - Water Supply Well             |



# United States Department of the Interior

## BUREAU OF LAND MANAGEMENT

Utah State Office

P.O. Box 45155

Salt Lake City, Utah 84145-0155

IN REPLY REFER TO:

3160

(UT-922)

August 17, 2010

Memorandum

To: Assistant District Manager Minerals, Vernal District

From: Michael Coulthard, Petroleum Engineer

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

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

API #	WELL NAME	LOCATION
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(Proposed PZ WASATCH-MESA VERDE)

### **NBU 921-25A Pad**

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

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

### **NBU 921-25D Pad**

43-047-51239	NBU 921-25C1AS	Sec 25 T09S R21E 0800 FNL 0893 FWL
	BHL	Sec 25 T09S R21E 0190 FNL 2405 FWL

43-047-51240	NBU 921-25D1BS	Sec 25 T09S R21E 0807 FNL 0885 FWL
	BHL	Sec 25 T09S R21E 0060 FNL 0716 FWL

43-047-51241	NBU 921-25E1CS	Sec 25 T09S R21E 0821 FNL 0871 FWL
	BHL	Sec 25 T09S R21E 1976 FNL 0947 FWL

43-047-51242	NBU 921-25E3AS	Sec 25 T09S R21E 0828 FNL 0864 FWL
	BHL	Sec 25 T09S R21E 2162 FNL 0371 FWL

43-047-51251	NBU 921-25D1CS	Sec 25 T09S R21E 0814 FNL 0878 FWL
	BHL	Sec 25 T09S R21E 0460 FNL 0726 FWL

API #	WELL NAME	LOCATION
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(Proposed PZ WASATCH-MESA VERDE)

**NBU 921-25F Pad**

43-047-51243	NBU 921-25F1BS	Sec 25 T09S R21E 2580 FNL 1780 FWL
	BHL	Sec 25 T09S R21E 1366 FNL 2296 FWL
43-047-51244	NBU 921-25F1CS	Sec 25 T09S R21E 2571 FNL 1784 FWL
	BHL	Sec 25 T09S R21E 1754 FNL 2259 FWL
43-047-51245	NBU 921-25F3AS	Sec 25 T09S R21E 2589 FNL 1776 FWL
	BHL	Sec 25 T09S R21E 2034 FNL 1905 FWL
43-047-51246	NBU 921-25F3CS	Sec 25 T09S R21E 2598 FNL 1772 FWL
	BHL	Sec 25 T09S R21E 2461 FNL 1628 FWL
43-047-51247	NBU 921-25L1BS	Sec 25 T09S R21E 2607 FNL 1768 FWL
	BHL	Sec 25 T09S R21E 2597 FSL 0969 FWL

**NBU 921-25H Pad**

43-047-51248	NBU 921-25A3DS	Sec 25 T09S R21E 1498 FNL 0736 FEL
	BHL	Sec 25 T09S R21E 1110 FNL 0776 FEL
43-047-51249	NBU 921-25G1CS	Sec 25 T09S R21E 1489 FNL 0754 FEL
	BHL	Sec 25 T09S R21E 1895 FNL 1893 FEL
43-047-51250	NBU 921-25G2AS	Sec 25 T09S R21E 1484 FNL 0763 FEL
	BHL	Sec 25 T09S R21E 1439 FNL 2042 FEL
43-047-51252	NBU 921-25H2AS	Sec 25 T09S R21E 1493 FNL 0745 FEL
	BHL	Sec 25 T09S R21E 1538 FNL 0857 FEL
43-047-51253	NBU 921-25H2DS	Sec 25 T09S R21E 1502 FNL 0727 FEL
	BHL	Sec 25 T09S R21E 1958 FNL 0913 FEL

**NBU 921-25J Pad**

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

**NBU 921-25K Pad**

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

API #	WELL NAME	LOCATION
(Proposed PZ WASATCH-MESA VERDE)		
43-047-51259	NBU 921-25L4AS	Sec 25 T09S R21E 1829 FSL 1397 FWL
	BHL	Sec 25 T09S R21E 1975 FSL 1088 FWL
43-047-51260	NBU 921-25N2BS	Sec 25 T09S R21E 1819 FSL 1394 FWL
	BHL	Sec 25 T09S R21E 1260 FSL 1508 FWL
<b>NBU 921-25N Pad</b>		
43-047-51261	NBU 921-25K4CS	Sec 25 T09S R21E 1157 FSL 2585 FWL
	BHL	Sec 25 T09S R21E 1450 FSL 2045 FWL
43-047-51262	NBU 921-25N2DS	Sec 25 T09S R21E 1159 FSL 2565 FWL
	BHL	Sec 25 T09S R21E 0800 FSL 1896 FWL
43-047-51263	NBU 921-25N3AS	Sec 25 T09S R21E 1158 FSL 2575 FWL
	BHL	Sec 25 T09S R21E 0508 FSL 1729 FWL
43-047-51264	NBU 921-25O4BS	Sec 25 T09S R21E 1156 FSL 2595 FWL
	BHL	Sec 25 T09S R21E 0485 FSL 1741 FEL
<b>NBU 921-25C Pad</b>		
43-047-51265	NBU 921-25B3AS	Sec 25 T09S R21E 0645 FNL 1955 FWL
	BHL	Sec 25 T09S R21E 0720 FNL 1985 FEL
43-047-51266	NBU 921-25B3DS	Sec 25 T09S R21E 0654 FNL 1972 FWL
	BHL	Sec 25 T09S R21E 1070 FNL 1985 FEL
43-047-51267	NBU 921-25C2DS	Sec 25 T09S R21E 0640 FNL 1946 FWL
	BHL	Sec 25 T09S R21E 0504 FNL 1975 FWL
43-047-51268	NBU 921-25C3AS	Sec 25 T09S R21E 0650 FNL 1964 FWL
	BHL	Sec 25 T09S R21E 0841 FNL 1975 FWL
<b>NBU 921-25I Pad</b>		
43-047-51269	NBU 921-25H3DS	Sec 25 T09S R21E 2074 FSL 0690 FEL
	BHL	Sec 25 T09S R21E 2395 FNL 0870 FEL
43-047-51270	NBU 921-25I2AS	Sec 25 T09S R21E 2054 FSL 0687 FEL
	BHL	Sec 25 T09S R21E 2445 FSL 0924 FEL
43-047-51271	NBU 921-25I4AS	Sec 25 T09S R21E 2045 FSL 0686 FEL
	BHL	Sec 25 T09S R21E 1882 FSL 0091 FEL
43-047-51272	NBU 921-25I4DS	Sec 25 T09S R21E 2035 FSL 0684 FEL
	BHL	Sec 25 T09S R21E 1420 FSL 0105 FEL
43-047-51273	NBU 921-25IT	Sec 25 T09S R21E 2064 FSL 0689 FEL
	BHL	Sec 25 T09S R21E 2064 FSL 0689 FEL

API # WELL NAME LOCATION

(Proposed PZ WASATCH-MESA VERDE)

**NBU 921-25J2 Pad**

43-047-51274	NBU	921-25G3AS	Sec 25	T09S	R21E	2611	FSL	2578	FEL
		BHL	Sec 25	T09S	R21E	2265	FNL	2136	FEL
43-047-51275	NBU	921-25G3CS	Sec 25	T09S	R21E	2606	FSL	2587	FEL
		BHL	Sec 25	T09S	R21E	2530	FNL	2518	FEL
43-047-51276	NBU	921-25J2CS	Sec 25	T09S	R21E	2601	FSL	2596	FEL
		BHL	Sec 25	T09S	R21E	2310	FSL	2410	FEL
43-047-51277	NBU	921-25K1CS	Sec 25	T09S	R21E	2596	FSL	2605	FEL
		BHL	Sec 25	T09S	R21E	2186	FSL	2231	FWL

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

Michael L. Coulthard

Digitally signed by Michael L. Coulthard  
DN: cn=Michael L. Coulthard, o=Bureau of Land Management, ou=Branch of Minerals,  
email=Michael.Coulthard@blm.gov, c=US  
Date: 2010.08.17 14:58:46 -0600

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

MCoulthard:mc:8-17-10

**From:** Jim Davis  
**To:** Bonner, Ed; Garrison, LaVonne; Hill, Brad; Mason, Diana  
**CC:** Bartlett, Floyd; Laura.Gianakos@anadarko.com; Piernot, Danielle; Upch...  
**Date:** 9/2/2010 9:13 AM  
**Subject:** SITLA approval of Kerr McGee wells  
**Attachments:** KMG approvals and paleo 9.1.2010.xlsx

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

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

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

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

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

NBU 921-25O4BS [API 4304751264]	Spot Monitoring	IPC 10-23	
NBU 921-25B3AS [API 4304751265]	Spot Monitoring	IPC 10-20	
NBU 921-25B3DS [API 4304751266]	Spot Monitoring	IPC 10-20	
NBU 921-25C2DS [API 4304751267]	Spot Monitoring	IPC 10-20	
NBU 921-25C3AS [API 4304751268]	Spot Monitoring	IPC 10-20	
NBU 921-25IT [API 4304751273]	Spot Monitoring	IPC 10-23	
NBU 921-25H3DS [API 4304751269]	Spot Monitoring	IPC 10-23	
NBU 921-25I2AS [API 4304751270]	Spot Monitoring	IPC 10-23	
NBU 921-25I4AS [API 4304751271]	Spot Monitoring	IPC 10-23	
NBU 921-25I4DS [API 4304751272]	Spot Monitoring	IPC 10-23	
NBU 922-29A1BS [API #4304751183]	Spot Monitoring	IPC 10-06	
NBU 922-29A1CS [API #4304751184]	Spot Monitoring	IPC 10-06	
NBU 922-29A4CS [API #4304751185]	Spot Monitoring	IPC 10-06	
NBU 922-29H1BS [API #4304751186]	Spot Monitoring	IPC 10-06	
NBU 922-29B2CS [API #4304751187]	Spot Monitoring	IPC 10-06	
NBU 922-29B4AS [API #4304751188]	Spot Monitoring	IPC 10-06	(SITLA surf/ Fed Min)
NBU 922-29C2AS [API #4304751189]	Spot Monitoring	IPC 10-06	(SITLA surf/ Fed Min)
NBU 922-29C4AS [API #4304751190]	Spot Monitoring	IPC 10-06	
NBU 922-29B1AS [API #4304751191]	Spot Monitoring	IPC 10-06	
NBU 922-29B1DS [API #4304751192]	Spot Monitoring	IPC 10-06	
NBU 922-29B2BS [API #4304751193]	Spot Monitoring	IPC 10-06	
NBU 922-29D4DS [API #4304751198]	Spot Monitoring	IPC 10-05	
NBU 922-29E3BS [API #4304751199]	Spot Monitoring	IPC 10-05	
NBU 922-29F3AS [API #4304751200]	Spot Monitoring	IPC 10-05	
NBU 922-29F3BS [API #4304751201]	Spot Monitoring	IPC 10-05	
NBU 922-29G4AS [API #4304751202]	Spot Monitoring	IPC 10-06	
NBU 922-29H1CS [API #4304751203]	Spot Monitoring	IPC 10-06	
NBU 922-29H4CS [API #4304751204]	Spot Monitoring	IPC 10-06	
NBU 922-29I1BS [API #4304751205]	Spot Monitoring	IPC 10-06	
NBU 922-29I1CS [API #4304751206]	Spot Monitoring	IPC 10-06	
NBU 922-29K2CS [API #4304751211]	Spot Monitoring	IPC 10-07	
NBU 922-29K4AS [API #4304751212]	Spot Monitoring	IPC 10-07	
NBU 922-29L1AS [API #4304751213]	Spot Monitoring	IPC 10-07	
NBU 922-29L2BS [API #4304751214]	Spot Monitoring	IPC 10-07	
NBU 922-29L2CS [API #4304751215]	Spot Monitoring	IPC 10-07	
NBU 922-29L3CS [API #4304751216]	Spot Monitoring	IPC 10-07	
NBU 922-29M2AS [API #4304751217]	Spot Monitoring	IPC 10-07	
NBU 922-29N2BS [API #4304751218]	Spot Monitoring	IPC 10-07	
NBU 922-29N3BS [API #4304751219]	Spot Monitoring	IPC 10-07	
NBU 922-30I4BS [API #4304751220]	Spot Monitoring	IPC 10-07	(SITLA surf/ Fed Min)
NBU 922-30I4CS [API #4304751221]	Spot Monitoring	IPC 10-07	(SITLA surf/Fed Min)
NBU 922-29J4CS [API #4304751222]	Spot Monitoring	IPC 10-08	
NBU 922-29N1BS [API #4304751223]	Spot Monitoring	IPC 10-08	
NBU 922-29O1CS [API #4304751224]	Spot Monitoring	IPC 10-08	

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

Thanks.  
-Jim

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

Well Name	KERR-MCGEE OIL & GAS ONSHORE, L.P. NBU 921-25F3AS 4304751245			
String	Surf	Prod		
Casing Size(")	8.625	4.500		
Setting Depth (TVD)	2390	9660		
Previous Shoe Setting Depth (TVD)	40	2390		
Max Mud Weight (ppg)	8.3	12.4		
BOPE Proposed (psi)	500	5000		
Casing Internal Yield (psi)	3390	7780		
Operators Max Anticipated Pressure (psi)	6119	12.2		

Calculations	Surf String	8.625	"
Max BHP (psi)	.052*Setting Depth*MW=	1035	
			<b>BOPE Adequate For Drilling And Setting Casing at Depth?</b>
MASP (Gas) (psi)	Max BHP-(0.12*Setting Depth)=	748	NO <input type="text" value="air drill"/>
MASP (Gas/Mud) (psi)	Max BHP-(0.22*Setting Depth)=	509	NO <input type="text" value="OK"/>
			<b>*Can Full Expected Pressure Be Held At Previous Shoe?</b>
Pressure At Previous Shoe	Max BHP-.22*(Setting Depth - Previous Shoe Depth)=	518	NO <input type="text" value="Reasonable depth in area"/>
Required Casing/BOPE Test Pressure=		2373	psi
*Max Pressure Allowed @ Previous Casing Shoe=		40	psi *Assumes 1psi/ft frac gradient

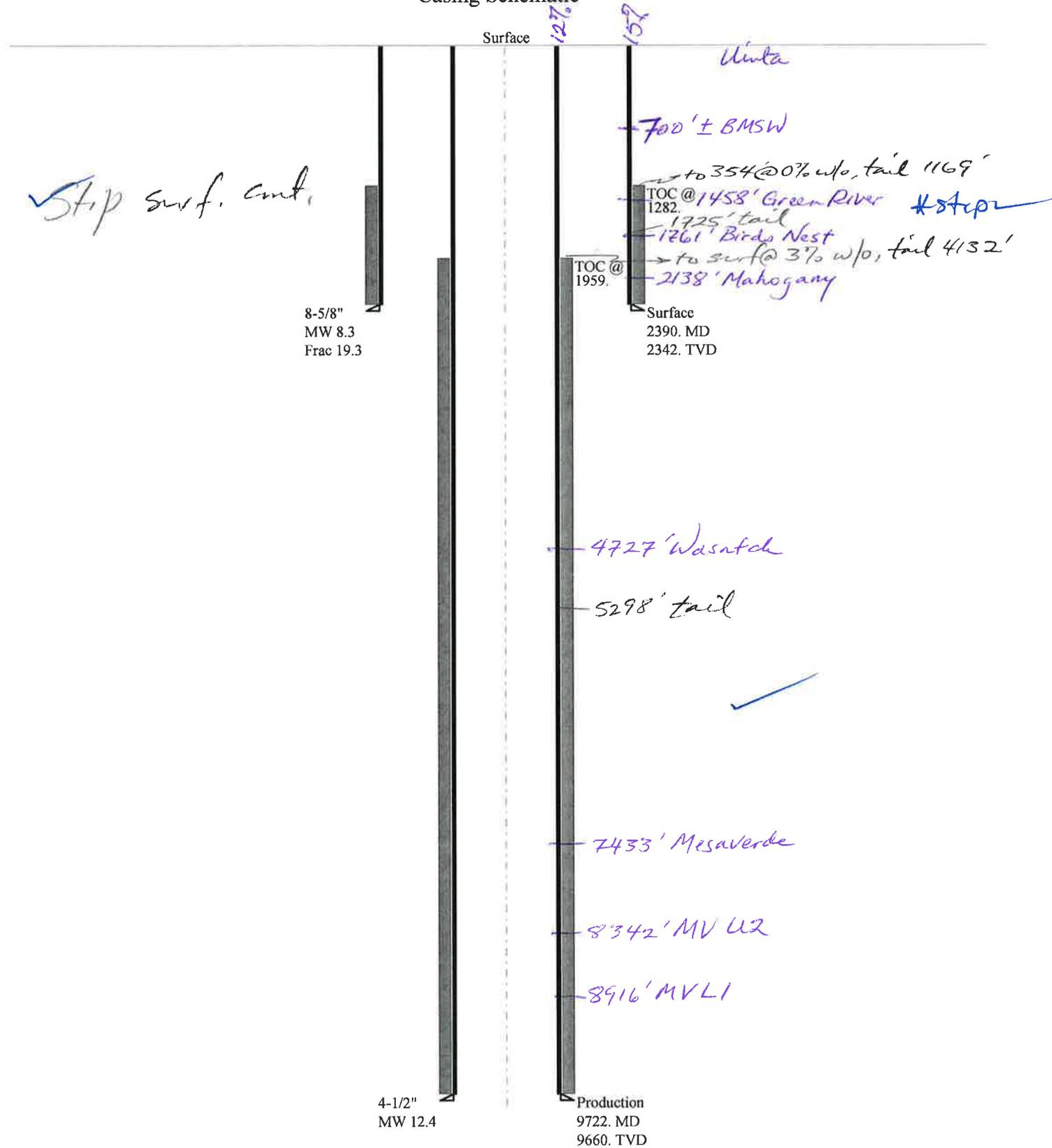
Calculations	Prod String	4.500	"
Max BHP (psi)	.052*Setting Depth*MW=	6229	
			<b>BOPE Adequate For Drilling And Setting Casing at Depth?</b>
MASP (Gas) (psi)	Max BHP-(0.12*Setting Depth)=	5070	NO <input type="text"/>
MASP (Gas/Mud) (psi)	Max BHP-(0.22*Setting Depth)=	4104	YES <input type="text" value="OK"/>
			<b>*Can Full Expected Pressure Be Held At Previous Shoe?</b>
Pressure At Previous Shoe	Max BHP-.22*(Setting Depth - Previous Shoe Depth)=	4630	NO <input type="text" value="Reasonable"/>
Required Casing/BOPE Test Pressure=		5000	psi
*Max Pressure Allowed @ Previous Casing Shoe=		2390	psi *Assumes 1psi/ft frac gradient

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

# 43047512450000 NBU 921-25F3AS

## Casing Schematic



Well name:	<b>43047512450000 NBU 921-25F3AS</b>		
Operator:	<b>KERR-MCGEE OIL &amp; GAS ONSHORE, L.P.</b>		
String type:	Surface	Project ID:	43-047-51245
Location:	UINTAH	COUNTY	

**Design parameters:**

**Collapse**

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

**Minimum design factors:**

**Collapse:**

Design factor 1.125

**Burst:**

Design factor 1.00

**Environment:**

H2S considered? No  
 Surface temperature: 74 °F  
 Bottom hole temperature: 107 °F  
 Temperature gradient: 1.40 °F/100ft  
 Minimum section length: 100 ft

Cement top: 1,282 ft

**Burst**

Max anticipated surface pressure: 2,103 psi  
 Internal gradient: 0.120 psi/ft  
 Calculated BHP 2,384 psi

No backup mud specified.

**Tension:**

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

Tension is based on air weight.  
 Neutral point: 2,094 ft

**Directional Info - Build & Drop**

Kick-off point 300 ft  
 Departure at shoe: 421 ft  
 Maximum dogleg: 2 °/100ft  
 Inclination at shoe: 13.99 °

**Re subsequent strings:**

Next setting depth: 9,660 ft  
 Next mud weight: 12.400 ppg  
 Next setting BHP: 6,222 psi  
 Fracture mud wt: 19.250 ppg  
 Fracture depth: 2,390 ft  
 Injection pressure: 2,390 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	2390	8.625	28.00	I-55	LT&C	2342	2390	7.892	94644
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	1013	1880	1.855	2384	3390	1.42	65.6	348	5.31 J

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

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

Date: October 6, 2010  
 Salt Lake City, Utah

**Remarks:**

Collapse is based on a vertical depth of 2342 ft, a mud weight of 8.33 ppg. The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

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

Well name:	<b>43047512450000 NBU 921-25F3AS</b>		
Operator:	<b>KERR-MCGEE OIL &amp; GAS ONSHORE, L.P.</b>		
String type:	Production	Project ID:	43-047-51245
Location:	UINTAH	COUNTY	

**Design parameters:**

**Collapse**

Mud weight: 12.400 ppg  
 Internal fluid density: 2.330 ppg

**Burst**

Max anticipated surface pressure: 4,097 psi  
 Internal gradient: 0.220 psi/ft  
 Calculated BHP: 6,222 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: 1.80 (J)  
 Buttress: 1.60 (J)  
 Premium: 1.50 (J)  
 Body yield: 1.60 (B)

Tension is based on air weight.

Neutral point: 7,932 ft

**Environment:**

H2S considered? No  
 Surface temperature: 74 °F  
 Bottom hole temperature: 209 °F  
 Temperature gradient: 1.40 °F/100ft  
 Minimum section length: 100 ft

Cement top: 1,959 ft

**Directional Info - Build & Drop**

Kick-off point: 300 ft  
 Departure at shoe: 570 ft  
 Maximum dogleg: 2 °/100ft  
 Inclination at shoe: 0 °

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Est. Cost (\$)
1	9722	4.5	11.60	I-80	LT&C	9660	9722	3.875	128330
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	5053	6360	1.259	6222	7780	1.25	112.1	212	1.89 J

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

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

Date: October 6, 2010  
 Salt Lake City, Utah

**Remarks:**

Collapse is based on a vertical depth of 9660 ft, a mud weight of 12.4 ppg. An internal gradient of .121 psi/ft was used for collapse from TD. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

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

# ON-SITE PREDRILL EVALUATION

## Utah Division of Oil, Gas and Mining

**Operator** KERR-MCGEE OIL & GAS ONSHORE, L.P.  
**Well Name** NBU 921-25F3AS  
**API Number** 43047512450000      **APD No** 2931      **Field/Unit** NATURAL BUTTES  
**Location: 1/4,1/4** SENW      **Sec** 25      **Tw** 9.0S      **Rng** 21.0E      2589      FNL 1776      FWL  
**GPS Coord (UTM)** 627823 4429421      **Surface Owner**

**Participants**

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

**Regional/Local Setting & Topography**

The general area is the Natural Buttes Unit in a major un-named drainage west of the lower portion of the Sand Wash drainage of Uintah, County, approximately 34 air miles and 42.6 road miles south of Vernal, Utah. Access is by State of Utah Highways, Uintah County and existing oilfield development roads. Approximately 245 feet of new construction will be needed. Topography of the area is characterized by open flats bordered or dissected by numerous sub-drainages, which often become steep with ridges and draws with exposed sandstone layers. No perennial streams occur in the drainage. Individual draws or washes are ephemeral with spring runoff or flows from sometimes-intense summer rainstorms. No springs exist in the area. An occasional constructed pond occurs furnishing water for antelope or livestock.

The NBU 921-25F pad will be a new location oriented in a north to southerly direction on the east slope of a ridge which runs northerly. The main road through the area is immediately to the east. At the well location the topography becomes more gentle. The reserve pit will be excavated into a moderately steep side slope. Any overland flow from the slope above the pit will be blocked with pit spoils. A small but active drainage angles across the location from the southwest or reserve pit side. This will be blocked with excess location spoils and diverted into a small natural pond area which could be cleaned to store water for sheep and antelope. Excess flow will leave the southeast side and flow around the fill of the pad. On the northwest side of the location a drainage will be blocked by spoils material. After the reserve pit is closed this side and drainage will be tightened-up, blocked with spoils and diverted around the pad. Five gas wells will be directionally drilled from this pad. They are the NBU 921-25F1CS, 921-25F1BS, 921-25F3AS, 921-25F3CS and 921-25L1BS. The White River is approximately 3-1/2 miles down drainage. The selected site appears to be a good location for constructing a pad, drilling and operating the proposed wells and is the best site in the immediate area.

Both the surface and minerals are owned by SITLA.

**Surface Use Plan**

**Current Surface Use**

Grazing  
 Wildlife Habitat

<b>New Road Miles</b>	<b>Well Pad</b>	<b>Src Const Material</b>	<b>Surface Formation</b>
0.05	<b>Width</b> 342 <b>Length</b> 465	Onsite	UNTA

**Ancillary Facilities** N

**Waste Management Plan Adequate?**

**Environmental Parameters**

**Affected Floodplains and/or Wetlands** N

**Flora / Fauna**

Vegetation is a poor desert shrub type, which includes rabbit brush, shadscale, curly mesquite, broom snakeweed, herbaceous sage, globemallow, greasewood and halogeton..

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

**Soil Type and Characteristics**

Surface soils are a moderately deep sandy loam with some small surface rock

**Erosion Issues** Y

A small but active drainage angles across the location from the southwest or reserve pit side. This will be blocked with excess location spoils and diverted into a small natural pond area which could be cleaned to store water for sheep and antelope.

**Sedimentation Issues** Y

A small but active drainage angles across the location from the southwest or reserve pit side. This will be blocked with excess location spoils and diverted into a small natural pond area which could be cleaned to store water for sheep and antelope.

**Site Stability Issues** N

**Drainage Diversion Required?** Y

On the northwest side of the location a drainage will be blocked by spoils material. After the reserve pit is closed this side and drainage will be tightened-up, blocked with spoils and diverted around the pad.

**Berm Required?** N

**Erosion Sedimentation Control Required?** Y

A small but active drainage angles across the location from the southwest or reserve pit side. This will be blocked with excess location spoils and diverted into a small natural pond area which could be cleaned to store water for sheep and antelope.

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

**Reserve Pit**

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

**Characteristics / Requirements**

The proposed reserve pit is 125' x 260' x 12' deep located in a cut on the southwest side of the location. Kerr McGee plans a 30-mil liner with a double felt sub-liner.

The reserve pit will be excavated into a moderately steep side slope. Any overland flow from the slope above the pit will be blocked with pit spoils.

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

**Other Observations / Comments**

Floyd Bartlett  
**Evaluator**

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

# Application for Permit to Drill Statement of Basis

10/7/2010

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

Page 1

<b>APD No</b>	<b>API WellNo</b>	<b>Status</b>	<b>Well Type</b>	<b>Surf Owner</b>	<b>CBM</b>
2931	43047512450000	SITLA	GW	S	No
<b>Operator</b>	KERR-MCGEE OIL & GAS ONSHORE, L.P.		<b>Surface Owner-APD</b>		
<b>Well Name</b>	NBU 921-25F3AS	<b>Unit</b>		NATURAL BUTTES	
<b>Field</b>	NATURAL BUTTES	<b>Type of Work</b>		DRILL	
<b>Location</b>	SEW 25 9S 21E S 2589 FNL 1776 FWL GPS Coord (UTM) 627827E 4429415N				

**Geologic Statement of Basis**

Kerr McGee proposes to set 2,390' 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 700'. A search of Division of Water Rights records shows no water wells within a 10,000 foot radius of the center of Section 25. The surface formation at this site is the Uinta Formation. The Uinta Formation is made up of interbedded shales and sandstones. The sandstones are mostly lenticular and discontinuous and should not be a significant source of useable ground water. The proposed casing and cement should adequately protect any usable ground water.

Brad Hill  
**APD Evaluator**

9/29/2010  
**Date / Time**

**Surface Statement of Basis**

The general area is the Natural Buttes Unit in a major un-named drainage west of the lower portion of the Sand Wash drainage of Uintah, County, approximately 34 air miles and 42.6 road miles south of Vernal, Utah. Access is by State of Utah Highways, Uintah County and existing oilfield development roads. Approximately 245 feet of new construction will be needed. Topography of the area is characterized by open flats bordered or dissected by numerous sub-drainages, which often become steep with ridges and draws with exposed sandstone layers. No perennial streams occur in the drainage. Individual draws or washes are ephemeral with spring runoff or flows from sometimes-intense summer rainstorms. No springs exist in the area. An occasional constructed pond occurs furnishing water for antelope or livestock.

The NBU 921-25F pad will be a new location oriented in a north to southerly direction on the east slope of a ridge which runs northerly. The main road through the area is immediately to the east. At the well location the topography becomes more gentle. The reserve pit will be excavated into a moderately steep side slope. Any overland flow from the slope above the pit will be blocked with pit spoils. A small but active drainage angles across the location from the southwest or reserve pit side. This will be blocked with excess location spoils and diverted into a small natural pond area which could be cleaned to store water for sheep and antelope. Excess flow will leave the southeast side and flow around the fill of the pad. On the northwest side of the location a drainage will be blocked by spoils material. After the reserve pit is closed this side and drainage will be tightened-up, blocked with spoils and diverted around the pad. Five gas wells will be directionally drilled from this pad. They are the NBU 921-25F1CS, 921-25F1BS, 921-25F3AS, 921-25F3CS and 921-25L1BS. The White River is approximately 3-1/2 miles down drainage. The selected site appears to be a good location for constructing a pad, drilling and operating the proposed wells and is the best site in the immediate area.

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

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

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# Application for Permit to Drill Statement of Basis

10/7/2010

Utah Division of Oil, Gas and Mining

Page 2

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Floyd Bartlett  
Onsite Evaluator

8/26/2010  
Date / Time

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

<b>Category</b>	<b>Condition</b>
Pits	A synthetic liner with a minimum thickness of 30 mils with a double felt subliner shall be properly installed and maintained in the reserve pit.
Surface	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:** 8/13/2010

**API NO. ASSIGNED:** 43047512450000

**WELL NAME:** NBU 921-25F3AS

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

**PHONE NUMBER:** 720 929-6156

**CONTACT:** Danielle Piernot

**PROPOSED LOCATION:** SENW 25 090S 210E

**Permit Tech Review:**

**SURFACE:** 2589 FNL 1776 FWL

**Engineering Review:**

**BOTTOM:** 2034 FNL 1905 FWL

**Geology Review:**

**COUNTY:** UINTAH

**LATITUDE:** 40.00715

**LONGITUDE:** -109.50240

**UTM SURF EASTINGS:** 627827.00

**NORTHINGS:** 4429415.00

**FIELD NAME:** NATURAL BUTTES

**LEASE TYPE:** 3 - State

**LEASE NUMBER:** UO 1194 ST

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

**SURFACE OWNER:** 3 - State

**COALBED METHANE:** NO

## RECEIVED AND/OR REVIEWED:

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

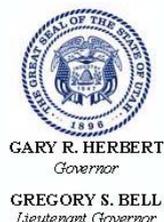
Commingle Approved

## LOCATION AND SITING:

- R649-2-3.  
Unit: NATURAL BUTTES
- R649-3-2. General
- R649-3-3. Exception
- Drilling Unit  
Board Cause No: Cause 173-14  
Effective Date: 12/2/1999  
Siting: Suspends General Siting
- 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



# State of Utah

DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER  
*Executive Director*

Division of Oil, Gas and Mining

JOHN R. BAZA  
*Division Director*

## Permit To Drill

\*\*\*\*\*

**Well Name:** NBU 921-25F3AS  
**API Well Number:** 43047512450000  
**Lease Number:** UO 1194 ST  
**Surface Owner:** STATE  
**Approval Date:** 10/7/2010

### Issued to:

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

### Authority:

Pursuant to Utah Code Ann. §40-6-1 et seq., and Utah Administrative Code R649-3-1 et seq., the Utah Division of Oil, Gas and Mining issues conditions of approval, and permit to drill the listed well. This permit is issued in accordance with the requirements of Cause 173-14. The expected producing formation or pool is the WASATCH-MESA VERDE Formation(s), completion into any other zones will require filing a Sundry Notice (Form 9). Completion and commingling of more than one pool will require approval in accordance with R649-3-22.

### Duration:

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date

### Commingle:

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

### General:

Compliance with the requirements of Utah Admin. R. 649-1 et seq., the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for permit to drill.

### Conditions of Approval:

In accordance with Utah Admin. R.649-3-11, Directional Drilling, the operator shall submit a complete angular deviation and directional survey report to the Division within 30 days following completion of the well.

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

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

Surface casing shall be cemented to the surface.

**Additional Approvals:**

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

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

**Notification Requirements:**

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

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

**Contact Information:**

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

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

**Reporting Requirements:**

All reports, forms and submittals as required by the Utah Oil and Gas Conservation General Rules will be promptly filed with the Division of Oil, Gas and Mining, including but not limited to:

- Entity Action Form (Form 6) – due within 5 days of spudding the well
- Monthly Status Report (Form 9) – due by 5th day of the following calendar month
- Requests to Change Plans (Form 9) – due prior to implementation
- Written Notice of Emergency Changes (Form 9) – due within 5 days
- Notice of Operations Suspension or Resumption (Form 9) – due prior to implementation
- Report of Water Encountered (Form 7) – due within 30 days after completion
- Well Completion Report (Form 8) – due within 30 days after completion or plugging

**Approved By:**



For John Rogers  
Associate Director, Oil & Gas

BLM - Vernal Field Office - Notification Form

Operator KERR-McGEE OIL & GAS Rig Name/# BUCKET RIG  
Submitted By ANDY LYTLE Phone Number 720.929.6100  
Well Name/Number NBU 921-25F3AS  
Qtr/Qtr SENW Section 25 Township 9S Range 21E  
Lease Serial Number UO 1194 ST  
API Number 4304751245

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

Date/Time 10/25/2010 14:00 HRS AM  PM

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

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

Date/Time 12/23/2010 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 435.781.7048 OR LEVEL YOUNG AT 435.828.0986

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

FORM 6

**ENTITY ACTION FORM**

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

Operator Account Number: N 2995

Phone Number: (720) 929-6100

**Well 1**

API Number	Well Name		QQ	Sec	Twp	Rng	County
4304751247	NBU 921-25L1BS		SEnw	25	9S	21E	UINTAH
Action Code	Current Entity Number	New Entity Number	Spud Date		Entity Assignment Effective Date		
B	99999	2900	10/25/2010		11/4/10		
<b>Comments:</b> MIRU PETE MARTIN BUCKET RIG. <i>WSMVD</i> SPUD WELL LOCATION ON 10/25/2010 AT 08:00 HRS. <i>BHL=NWSW</i>							

**Well 2**

API Number	Well Name		QQ	Sec	Twp	Rng	County
4304751246	NBU 921-25F3CS		SEnw	25	9S	21E	UINTAH
Action Code	Current Entity Number	New Entity Number	Spud Date		Entity Assignment Effective Date		
B	99999	2900	10/25/2010		11/4/10		
<b>Comments:</b> MIRU PETE MARTIN BUCKET RIG. <i>WSMVD</i> SPUD WELL LOCATION ON 10/25/2010 AT 11:00 HRS. <i>BHL=SEnw</i>							

**Well 3**

API Number	Well Name		QQ	Sec	Twp	Rng	County
4304751245	NBU 921-25F3AS		SEnw	25	9S	21E	UINTAH
Action Code	Current Entity Number	New Entity Number	Spud Date		Entity Assignment Effective Date		
B	99999	2900	10/25/2010		11/4/10		
<b>Comments:</b> MIRU PETE MARTIN BUCKET RIG. <i>WSMVD</i> SPUD WELL LOCATION ON 10/25/2010 AT 14:00 HRS. <i>BHL=SEnw</i>							

**ACTION CODES:**

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

ANDY LYTLE

Name (Please Print)

Signature

REGULATORY ANALYST

Title

11/1/2010

Date

**RECEIVED**

NOV 01 2010

<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	<b>FORM 9</b>  <b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> UO 1194 ST
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<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.	<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b>  <b>7. UNIT or CA AGREEMENT NAME:</b> NATURAL BUTTES
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<b>1. TYPE OF WELL</b> Gas Well	<b>8. WELL NAME and NUMBER:</b> NBU 921-25F3AS
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<b>2. NAME OF OPERATOR:</b> KERR-MCGEE OIL & GAS ONSHORE, L.P.	<b>9. API NUMBER:</b> 43047512450000
---	---

<b>3. ADDRESS OF OPERATOR:</b> P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779	<b>PHONE NUMBER:</b> 720 929-6007 Ext	<b>9. FIELD and POOL or WILDCAT:</b> NATURAL BUTTES
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<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 2589 FNL 1776 FWL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: SENW Section: 25 Township: 09.0S Range: 21.0E Meridian: S	<b>COUNTY:</b> Uintah  <b>STATE:</b> 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: 10/25/2010	<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 PETE MARTIN BUCKET RIG. DRILLED 20" CONDUCTOR HOLE TO 40'.  
 RAN 14" 36.7# SCHEDULE 10 CONDUCTOR PIPE. CMT W/ 28 SX READY MIX  
 SPUD WELL LOCATION ON OCTOBER 25, 2010 AT 14:00 HRS.

**Accepted by the**  
**Utah Division of**  
**Oil, Gas and Mining**  
**FOR RECORD ONLY**  
 November 02, 2010

<b>NAME (PLEASE PRINT)</b> Andy Lytle	<b>PHONE NUMBER</b> 720 929-6100	<b>TITLE</b> Regulatory Analyst
<b>SIGNATURE</b> N/A	<b>DATE</b> 11/1/2010	

<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	<b>FORM 9</b>
<b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> UO 1194 ST	

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

<b>1. TYPE OF WELL</b> Gas Well	<b>8. WELL NAME and NUMBER:</b> NBU 921-25F3AS
------------------------------------	---

<b>2. NAME OF OPERATOR:</b> KERR-MCGEE OIL & GAS ONSHORE, L.P.	<b>9. API NUMBER:</b> 43047512450000
---	---

<b>3. ADDRESS OF OPERATOR:</b> P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779	<b>PHONE NUMBER:</b> 720 929-6007 Ext	<b>9. FIELD and POOL or WILDCAT:</b> NATURAL BUTTES
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<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 2589 FNL 1776 FWL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: SENW Section: 25 Township: 09.0S Range: 21.0E Meridian: S	<b>COUNTY:</b> Uintah
<b>STATE:</b> UTAH	

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

TYPE OF SUBMISSION	TYPE OF ACTION		
<input type="checkbox"/> <b>NOTICE OF INTENT</b> Approximate date work will start:	<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 style="width: 50px;" type="text"/>
<input type="checkbox"/> <b>SUBSEQUENT REPORT</b> Date of Work Completion:			
<input type="checkbox"/> <b>SPUD REPORT</b> Date of Spud:			
<input checked="" type="checkbox"/> <b>DRILLING REPORT</b> Report Date: 11/5/2010			

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

MIRU PROPETRO AIR RIG ON NOVEMBER 2, 2010. DRILLED 11" SURFACE HOLE TO 2690'. RAN 8 5/8" 28# IJ-55 SURFACE CSG. PUMP 25 BBLS FRESH WATER. PUMP 20 BBLS GEL WATER. LEAD CEMENT W/ 200 SX CLASS G PREM @ 11.0 PPG, 3.82 YD. TAILED CEMENT W/ 200 SX CLASS G PREM LITE @ 15.8 PPG, 1.15 YD. DROP PLUG ON THE FLY, DISPLACED W/ 163 BBLS WATER PARTIAL RETURNS, SLOWED DOWN RATE, LIFT PRESSURE WAS 500 PSI, BUMP PLUG & HOLD 100 PSI FOR 5 MIN. FLOAT HELD. TOP OUT #1 W/ 200 SX SAME CEMENT. CEMENT TO SURFACE. WORT.

**Accepted by the**  
**Utah Division of**  
**Oil, Gas and Mining**  
**FOR RECORD ONLY**  
 November 09, 2010

<b>NAME (PLEASE PRINT)</b> Andy Lytle	<b>PHONE NUMBER</b> 720 929-6100	<b>TITLE</b> Regulatory Analyst
<b>SIGNATURE</b> N/A	<b>DATE</b> 11/8/2010	

<p><b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING</p>	<p><b>FORM 9</b></p>
<p><b>SUNDRY NOTICES AND REPORTS ON WELLS</b></p> <p>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.</p>	<p><b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> UO 1194 ST</p>
<p><b>1. TYPE OF WELL</b> Gas Well</p>	<p><b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b></p>
<p><b>2. NAME OF OPERATOR:</b> KERR-MCGEE OIL &amp; GAS ONSHORE, L.P.</p>	<p><b>7. UNIT or CA AGREEMENT NAME:</b> NATURAL BUTTES</p>
<p><b>3. ADDRESS OF OPERATOR:</b> P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779</p>	<p><b>8. WELL NAME and NUMBER:</b> NBU 921-25F3AS</p>
<p><b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 2589 FNL 1776 FWL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: SENW Section: 25 Township: 09.0S Range: 21.0E Meridian: S</p>	<p><b>9. API NUMBER:</b> 43047512450000</p> <p><b>9. FIELD and POOL or WILDCAT:</b> NATURAL BUTTES</p> <p><b>COUNTY:</b> UINTAH</p> <p><b>STATE:</b> UTAH</p>
<p><b>11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA</b></p>	

TYPE OF SUBMISSION	TYPE OF ACTION		
<input type="checkbox"/> <b>NOTICE OF INTENT</b> Approximate date work will start:	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> CASING REPAIR
<input type="checkbox"/> <b>SUBSEQUENT REPORT</b> 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"/> <b>SPUD REPORT</b> Date of Spud: 10/25/2010	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> CONVERT WELL TYPE
<input type="checkbox"/> <b>DRILLING REPORT</b> 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 PETE MARTIN BUCKET RIG. DRILLED 20" CONDUCTOR HOLE TO 40'.  
 RAN 14" 36.7# SCHEDULE 10 CONDUCTOR PIPE. CMT W/ 28 SX READY MIX  
 SPUD WELL LOCATION ON OCTOBER 25, 2010 AT 14:00 HRS.

**Accepted by the**  
**Utah Division of**  
**Oil, Gas and Mining**  
**FOR RECORD ONLY**  
 November 02, 2010

<p><b>NAME (PLEASE PRINT)</b> Andy Lytle</p>	<p><b>PHONE NUMBER</b> 720 929-6100</p>	<p><b>TITLE</b> Regulatory Analyst</p>
<p><b>SIGNATURE</b> N/A</p>	<p><b>DATE</b> 11/1/2010</p>	

<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	<b>FORM 9</b>  <b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> UO 1194 ST
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<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.	<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b>  <b>7. UNIT or CA AGREEMENT NAME:</b> NATURAL BUTTES
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<b>1. TYPE OF WELL</b> Gas Well	<b>8. WELL NAME and NUMBER:</b> NBU 921-25F3AS
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<b>2. NAME OF OPERATOR:</b> KERR-MCGEE OIL & GAS ONSHORE, L.P.	<b>9. API NUMBER:</b> 43047512450000
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<b>3. ADDRESS OF OPERATOR:</b> P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779	<b>PHONE NUMBER:</b> 720 929-6007 Ext	<b>9. FIELD and POOL or WILDCAT:</b> NATURAL BUTTES
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<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 2589 FNL 1776 FWL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: SENW Section: 25 Township: 09.0S Range: 21.0E Meridian: S	<b>COUNTY:</b> UINTAH  <b>STATE:</b> UTAH
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11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
<input type="checkbox"/> <b>NOTICE OF INTENT</b> Approximate date work will start:	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> CASING REPAIR
<input type="checkbox"/> <b>SUBSEQUENT REPORT</b> Date of Work Completion:	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> CHANGE WELL NAME
<input type="checkbox"/> <b>SPUD REPORT</b> Date of Spud:	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> CONVERT WELL TYPE
<input checked="" type="checkbox"/> <b>DRILLING REPORT</b> Report Date: 11/5/2010	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> NEW CONSTRUCTION
	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> PLUG BACK
	<input type="checkbox"/> PRODUCTION START OR RESUME	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION
	<input type="checkbox"/> REPERFORATE CURRENT FORMATION	<input type="checkbox"/> SIDETRACK TO REPAIR WELL	<input type="checkbox"/> TEMPORARY ABANDON
	<input type="checkbox"/> TUBING REPAIR	<input type="checkbox"/> VENT OR FLARE	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> WATER SHUTOFF	<input type="checkbox"/> SI TA STATUS EXTENSION	<input type="checkbox"/> APD EXTENSION
	<input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> OTHER	OTHER: <input style="width: 100px;" type="text"/>

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

MIRU PROPETRO AIR RIG ON NOVEMBER 2, 2010. DRILLED 11" SURFACE HOLE TO 2690'. RAN 8 5/8" 28# IJ-55 SURFACE CSG. PUMP 25 BBLS FRESH WATER. PUMP 20 BBLS GEL WATER. LEAD CEMENT W/ 200 SX CLASS G PREM @ 11.0 PPG, 3.82 YD. TAILED CEMENT W/ 200 SX CLASS G PREM LITE @ 15.8 PPG, 1.15 YD. DROP PLUG ON THE FLY, DISPLACED W/ 163 BBLS WATER PARTIAL RETURNS, SLOWED DOWN RATE, LIFT PRESSURE WAS 500 PSI, BUMP PLUG & HOLD 100 PSI FOR 5 MIN. FLOAT HELD. TOP OUT #1 W/ 200 SX SAME CEMENT. CEMENT TO SURFACE. WORT.

**Accepted by the**  
**Utah Division of**  
**Oil, Gas and Mining**  
**FOR RECORD ONLY**  
 November 09, 2010

<b>NAME (PLEASE PRINT)</b> Andy Lytle	<b>PHONE NUMBER</b> 720 929-6100	<b>TITLE</b> Regulatory Analyst
<b>SIGNATURE</b> N/A		<b>DATE</b> 11/8/2010

<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	<b>FORM 9</b>  <b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> UO 1194 ST
---	---

<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.	<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b>  <b>7. UNIT or CA AGREEMENT NAME:</b> NATURAL BUTTES
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<b>1. TYPE OF WELL</b> Gas Well	<b>8. WELL NAME and NUMBER:</b> NBU 921-25F3AS
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<b>2. NAME OF OPERATOR:</b> KERR-MCGEE OIL & GAS ONSHORE, L.P.	<b>9. API NUMBER:</b> 43047512450000
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<b>3. ADDRESS OF OPERATOR:</b> P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779	<b>PHONE NUMBER:</b> 720 929-6007 Ext	<b>9. FIELD and POOL or WILDCAT:</b> NATURAL BUTTES
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<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 2589 FNL 1776 FWL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: SENW Section: 25 Township: 09.0S Range: 21.0E Meridian: S	<b>COUNTY:</b> UINTAH  <b>STATE:</b> UTAH
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11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
<input checked="" type="checkbox"/> <b>NOTICE OF INTENT</b> Approximate date work will start: 11/15/2010  <input type="checkbox"/> <b>SUBSEQUENT REPORT</b> Date of Work Completion:  <input type="checkbox"/> <b>SPUD REPORT</b> Date of Spud:  <input type="checkbox"/> <b>DRILLING REPORT</b> Report Date:	<input type="checkbox"/> ACIDIZE  <input type="checkbox"/> CHANGE TO PREVIOUS PLANS  <input type="checkbox"/> CHANGE WELL STATUS  <input checked="" 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 style="width: 100px;" type="text"/>

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

Kerr-McGee Oil & Gas Onshore, L.P. (Kerr-McGee) respectfully requests to change the total depth (TD) to include the Blackhawk formation, which is in the Mesaverde group for this well. Please see the attached for additional details. All of the original information remains the same. Please contact the undersigned with any questions and/or comments. Thank you.

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

Date: 11/23/2010  
By: *Danielle Piernot*

<b>NAME (PLEASE PRINT)</b> Danielle Piernot	<b>PHONE NUMBER</b> 720 929-6156	<b>TITLE</b> Regulatory Analyst
<b>SIGNATURE</b> N/A	<b>DATE</b> 11/9/2010	

Well name: **43047512450000 NBU 921-25F3ASrev.**  
 Operator: **KERR-MCGEE OIL & GAS ONSHORE, L.P.**  
 String type: **Production** Project ID: **43-047-51245**  
 Location: **UINTAH COUNTY**

**Design parameters:**

**Collapse**

Mud weight: 13.000 ppg  
 Internal fluid density: 2.330 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: 223 °F  
 Temperature gradient: 1.40 °F/100ft  
 Minimum section length: 100 ft

Cement top:

1,595 ft → Surface shoe @ 2610'

**Burst**

Max anticipated surface pressure: 4,833 psi → 5m Col E proposed ✓  
 Internal gradient: 0.220 psi/ft  
 Calculated BHP: 7,168 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: 8,613 ft

**Directional well information:**

Kick-off point: 300 ft  
 Departure at shoe: 570 ft  
 Maximum dogleg: 2 °/100ft  
 Inclination at shoe: 0 °

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Est. Cost (\$)
1	10676	4.5	11.60	HCP-110	Buttress	10614	10676	3.875	55031
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	5883	8650	1.470 ✓	7168	10690	1.49 ✓	123.1	367.2	2.98 B ✓

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

Date: 11/23/2010  
 By: Dustin K Doucet

Prepared by: Dustin K. Doucet  
 Div of Oil, Gas & Mining

Phone: 801 538-5281  
 FAX: 801-359-3940

Date: November 23, 2010  
 Salt Lake City, Utah

**Remarks:**

Collapse is based on a vertical depth of 10614 ft, a mud weight of 13 ppg. An internal gradient of .121 psi/ft was used for collapse from TD. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

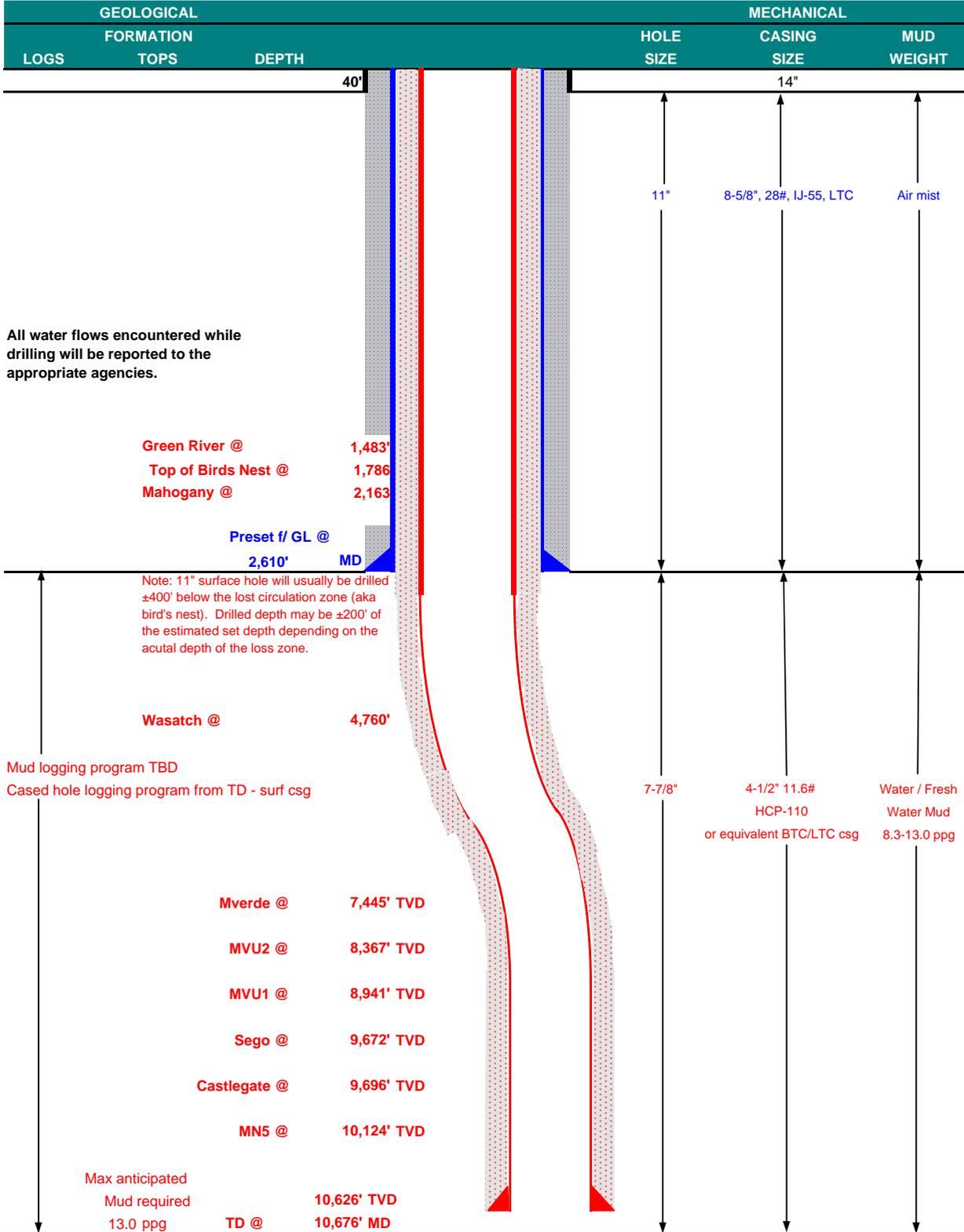
Burst strength is not adjusted for tension.

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



# KERR-McGEE OIL & GAS ONSHORE LP DRILLING PROGRAM

COMPANY NAME	KERR-McGEE OIL & GAS ONSHORE LP		DATE	November 9, 2010	
WELL NAME	<b>NBU 921-25F3AS</b>		TD	10,626'	MD 10,676'
FIELD	Natural Buttes	COUNTY	Uintah	STATE	Utah
SURFACE LOCATION	SE/4 NW/4	2,589' FNL	1,776' FWL	Sec 25 T 9S R 21E	FINISHED ELEVATION 4,931'
	Latitude: 40.007185	Longitude: -109.502473		NAD 27	
BTM HOLE LOCATION	SE/4 NW/4	2,034' FNL	1,905' FWL	Sec 25 T 9S R 21E	
	Latitude: 40.008709	Longitude: -109.502016		NAD 27	
OBJECTIVE ZONE(S)	Wasatch/Mesaverde				
ADDITIONAL INFO	Regulatory Agencies: UDOGM (Minerals), UDOGM (Surface), UDOGM Tri-County Health Dept.				



All water flows encountered while drilling will be reported to the appropriate agencies.





BLM - Vernal Field Office - Notification Form

Operator Anadarko Rig Name/# HP307

Submitted By ROGER BARBER Phone Number 435 790-2016

Well Name/Number NBU 921- 25F3AS

Qtr/Qtr NE/SE Section 25 Township 9S Range 21E

Lease Serial Number ML

UO1194ST

API Number

43047512450000

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

Date/Time \_\_\_\_\_ AM  PM

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

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

RECEIVED

DEC 13 2010

DIV. OF OIL, GAS & ENERGY

Date/Time 12/12/2010 05:00 AM  PM

BOPE

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

Date/Time 11/19/2010

13:00 AM  PM

Remarks SHOULD START RUNNING PRODUCTION CASING  
AROUND 05:00 ON 12/12/2010 AND CEMENT CASING AROUND  
16:00 ON 12/12/2010

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<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	<b>FORM 9</b>  <b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> UO 1194 ST
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.	<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b>  <b>7. UNIT or CA AGREEMENT NAME:</b> NATURAL BUTTES
<b>1. TYPE OF WELL</b> Gas Well	<b>8. WELL NAME and NUMBER:</b> NBU 921-25F3AS
<b>2. NAME OF OPERATOR:</b> KERR-MCGEE OIL & GAS ONSHORE, L.P.	<b>9. API NUMBER:</b> 43047512450000
<b>3. ADDRESS OF OPERATOR:</b> P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779	<b>PHONE NUMBER:</b> 720 929-6515 Ext
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 2589 FNL 1776 FWL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: SENW Section: 25 Township: 09.0S Range: 21.0E Meridian: S	<b>9. FIELD and POOL or WILDCAT:</b> NATURAL BUTTES  <b>COUNTY:</b> UINTAH  <b>STATE:</b> UTAH

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

TYPE OF SUBMISSION	TYPE OF ACTION		
<input type="checkbox"/> <b>NOTICE OF INTENT</b> Approximate date work will start:	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> CASING REPAIR
<input type="checkbox"/> <b>SUBSEQUENT REPORT</b> Date of Work Completion:	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> CHANGE WELL NAME
<input type="checkbox"/> <b>SPUD REPORT</b> Date of Spud:	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> CONVERT WELL TYPE
<input checked="" type="checkbox"/> <b>DRILLING REPORT</b> Report Date: 3/14/2011	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> NEW CONSTRUCTION
	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> PLUG BACK
	<input checked="" type="checkbox"/> <b>PRODUCTION START OR RESUME</b>	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION
	<input type="checkbox"/> REPERFORATE CURRENT FORMATION	<input type="checkbox"/> SIDETRACK TO REPAIR WELL	<input type="checkbox"/> TEMPORARY ABANDON
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	<input type="checkbox"/> WATER SHUTOFF	<input type="checkbox"/> SI TA STATUS EXTENSION	<input type="checkbox"/> APD EXTENSION
	<input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> OTHER	OTHER: <input style="width: 100px;" type="text"/>

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

THE SUBJECT WELL WAS PLACED ON PRODUCTION ON MARCH 14, 2011 AT 3:30 P.M. THE CHRONOLOGICAL WELL HISTORY WILL BE SUBMITTED WITH THE WELL COMPLETION REPORT.

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

<b>NAME (PLEASE PRINT)</b> Andy Lytle	<b>PHONE NUMBER</b> 720 929-6100	<b>TITLE</b> Regulatory Analyst
<b>SIGNATURE</b> N/A		<b>DATE</b> 3/15/2011

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

AMENDED REPORT  FORM 8  
(highlight changes)

**WELL COMPLETION OR RECOMPLETION REPORT AND LOG**

1a. TYPE OF WELL: OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> DRY <input type="checkbox"/> OTHER _____		5. LEASE DESIGNATION AND SERIAL NUMBER: <b>UO 1194 ST</b>
b. TYPE OF WORK: NEW WELL <input checked="" type="checkbox"/> HORIZ. LATS. <input type="checkbox"/> DEEP-EN <input type="checkbox"/> RE-ENTRY <input type="checkbox"/> DIFF. RESVR. <input type="checkbox"/> OTHER _____		6. IF INDIAN, ALLOTTEE OR TRIBE NAME
2. NAME OF OPERATOR: <b>KERR MCGEE OIL &amp; GAS ONSHORE, L.P.</b>		7. UNIT or CA AGREEMENT NAME <b>UTU63047A</b>
3. ADDRESS OF OPERATOR: <b>P.O. BOX 173779 CITY DENVER STATE CO ZIP 80217</b>		8. WELL NAME and NUMBER: <b>NBU 921-25F3AS</b>
PHONE NUMBER: <b>(720) 929-6100</b>		9. API NUMBER: <b>4304751245</b>
4. LOCATION OF WELL (FOOTAGES) AT SURFACE: <b>SENW 2589 FNL 1776 FWL S25, T9S, R21E</b> AT TOP PRODUCING INTERVAL REPORTED BELOW: <b>SENW 2019 FNL 1898 FWL S25, T9S, R21E</b> AT TOTAL DEPTH: <b>SENW 2028 FNL 1911 FWL S25, T9S, R21E</b>		10 FIELD AND POOL, OR WILDCAT <b>NATURAL BUTTES</b>
		11. QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: <b>SENW 25 9S 21E S</b>
		12. COUNTY <b>UINTAH</b>
		13. STATE <b>UTAH</b>

14. DATE SPUDDED: <b>10/25/2010</b>	15. DATE T.D. REACHED: <b>12/11/2010</b>	16. DATE COMPLETED: <b>3/14/2011</b>	ABANDONED <input type="checkbox"/> READY TO PRODUCE <input checked="" type="checkbox"/>	17. ELEVATIONS (DF, RKB, RT, GL): <b>4931 GL</b>
18. TOTAL DEPTH: MD <b>10,725</b> TVD <b>10,645</b>	19. PLUG BACK T.D.: MD <b>10,682</b> TVD <b>10,602</b>	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) <b>GR/CBL-BHV-SD/DSN/ACTR</b>			23. WAS WELL CORED? NO <input checked="" type="checkbox"/> YES <input type="checkbox"/> (Submit analysis) WAS DST RUN? NO <input checked="" type="checkbox"/> YES <input type="checkbox"/> (Submit report) DIRECTIONAL SURVEY? NO <input type="checkbox"/> YES <input checked="" type="checkbox"/> (Submit copy)	

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

HOLE SIZE	SIZE/GRADE	WEIGHT (#/ft.)	TOP (MD)	BOTTOM (MD)	STAGE CEMENTER DEPTH	CEMENT TYPE & NO. OF SACKS	SLURRY VOLUME (BBL)	CEMENT TOP **	AMOUNT PULLED
20"	14" STL	36.7#		40		28			
11"	8 5/8" IJ-55	28#		2,677		600		0	
7 7/8"	4 1/2" P110	11.6#		10,726		2,030		180	

25. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)
2 3/8"	9,995							

26. PRODUCING INTERVALS					27. PERFORATION RECORD				
FORMATION NAME	TOP (MD)	BOTTOM (MD)	TOP (TVD)	BOTTOM (TVD)	INTERVAL (Top/Bot - MD)	SIZE	NO. HOLES	PERFORATION STATUS	
(A) MESAVERDE	7,562	10,508			7,562 10,508	0.36	216	Open <input checked="" type="checkbox"/>	Squeezed <input type="checkbox"/>
(B) <b>W3MVD</b>								Open <input type="checkbox"/>	Squeezed <input type="checkbox"/>
(C)								Open <input type="checkbox"/>	Squeezed <input type="checkbox"/>
(D)								Open <input type="checkbox"/>	Squeezed <input type="checkbox"/>

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

DEPTH INTERVAL	AMOUNT AND TYPE OF MATERIAL
7562 - 10,508	PUMP 18,371 BBLs SLICK H2O & 606,368 LBS SAND

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

INTERVAL A (As shown in item #26)

DATE FIRST PRODUCED: 3/14/2011		TEST DATE: 3/20/2011		HOURS TESTED: 24		TEST PRODUCTION RATES: →	OIL – BBL: 0	GAS – MCF: 3,532	WATER – BBL: 721	PROD. METHOD: FLOWING
CHOKE SIZE: 20/64	TBG. PRESS. 2,178	CSG. PRESS. 3,250	API GRAVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL – BBL: 0	GAS – MCF: 3,532	WATER – BBL: 721	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.)

33. SUMMARY OF POROUS ZONES (Include Aquifers):

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

Formation	Top (MD)	Bottom (MD)	Descriptions, Contents, etc.	Name	Top (Measured Depth)
GREEN RIVER	1,457				
BIRD'S NEST	1,812				
MAHOGANY	2,293				
WASATCH	4,822	7,538			
MESAVERDE	7,538	10,725	TD		

34. FORMATION (Log) MARKERS:

35. ADDITIONAL REMARKS (Include plugging procedure)

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

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

NAME (PLEASE PRINT) ANDREW LYTLE TITLE REGULATORY ANALYST  
 SIGNATURE  DATE 4/12/2011

This report must be submitted within 30 days of

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

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

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

Send to: Utah Division of Oil, Gas and Mining 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: NBU 921-25F3AS-YELLOW	Spud Conductor: 10/25/2010	Spud Date: 11/3/2010
Project: UTAH-UJINTAH	Site: NBU 921-25F PAD	Rig Name No: H&P 307/307, PROPETRO/
Event: DRILLING	Start Date: 11/2/2010	End Date: 12/13/2010
Active Datum: RKB @4,956.00ft (above Mean Sea Level)	UWI: NBU 921-25F3AS	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
11/2/2010	19:00 - 23:30	4.50	MIRU	01	B	P		MOVE IN RIG UP, DRESS TOP OF CONDUCTOR. INSTALL DIVERTER HEAD AND BOWIE LINE. BUILD DITCH. MOVE RIG OVER HOLE AND RIG UP.. SET CATWALK AND PIPE RACKS. RIG UP AND PRIME PIT PUMP AND MUD PUMP. WAIT ON DRILL PIPE AND COLLARS TO COME FROM TOWN DUE TO RED TAGGED WHILE BEING INSPECTED.
	23:30 - 0:00	0.50	PRPSPD	01	B	P		P/U 1.83 DEG BENT HOUSING HUNTING MTR SN 8074 .7/8 LOBE .16 RPM. M/U Q506 SN 7023549 3RD RUN, W/ 6-18'S. INSTALL RUBBER.
11/3/2010	0:00 - 2:00	2.00	PRPSPD	01	B	P		FINISH RIGGING UP, SORT AND TALLY PIPE, COLLARS AND BHA
	2:00 - 4:00	2.00	DRLSUR	02	A	P		SPUD SURFACE 11-3-2010 @ 02:00. DRILL 11" SURFACE HOLE F/40'-200' (160' @ 80'/HR) PSI ON/ OFF 690/410, UP/ DOWN/ ROT 27/22/25. 500 GPM, 45 RPM ON TOP DRIVE, 15-18K WOB
	4:00 - 6:00	2.00	DRLSUR	06	A	P		TOOH, PU AND ORIENT DIR BHA, TIH TO BOTTOM
	6:00 - 9:30	3.50	DRLSUR	02	C	P		DRILL/ SLIDE 11" SURFACE HOLE F/200'-370' (170' @ 56'/HR) PSI ON/ OFF 1250/920, UP/ DOWN/ ROT51/45/49. 130 SPM 18-20K WOB, 45 RPM ON TOP DRIVE,MM ROT. 85 RPM
	9:30 - 10:00	0.50	DRLSUR	07	A	P		CIRCULATING RESERVE PIT
	10:00 - 12:00	2.00	DRLSUR	08	A	P		SERVICE RIG
	12:00 - 0:00	12.00	DRLSUR	02	D	P		CHANGE OIL IN RIG & HYDRAULIC OIL
								DRILL/ SLIDE 11" SURFACE HOLE F/370'-1600' (1230' @ 102'/HR) PSI ON/ OFF 1570/1410, UP/ DOWN/ ROT61/59/57. 130 SPM 18-20K WOB, 45 RPM ON TOP DRIVE,MM ROT 85 RPM
11/4/2010	0:00 - 16:00	16.00	DRLSUR	02	D	P		CIRCULATING RESERVE PIT
	16:00 - 17:30	1.50	DRLSUR	05	C	P		DRILL/ SLIDE 11" SURFACE HOLE F/1600'-2690' (1090' @ 68'/HR) PSI ON/ OFF 1700/1450, UP/ DOWN/ ROT80/65/72. 130 SPM 18-20K WOB, 45 RPM ON TOP DRIVE,MM ROT 85 RPM
	17:30 - 22:30	5.00	DRLSUR	06	D	P		CIRCULATING RESERVE PIT,(TD DIR SURF. HOLE @ 16:00)
	22:30 - 0:00	1.50	DRLSUR	12	C	P		CIRC & COND HOLE F/TOH & CSG
								TOH L/D 11" BHA & DIR. TOOLS & 11" BIT
								HOLD SAFTEY MEETING, R/U & RUN FLOAT SHOE,SHOE JNT,BAFFEL & 59 JNTS 8 5/8" J-55 28# LT&C CSG W/THE SHOE @2656' & BAFFEL @ 2610'(1300' CSG IN @ 23:59)
11/5/2010	0:00 - 2:30	2.50	DRLSUR	12	C	P		CONT T/ RUN FLOAT SHOE,SHOE JNT,BAFFEL & 59 JNTS 8 5/8" J-55 28# LT&C CSG W/THE SHOE @2656' & BAFFEL @ 2610'
	2:30 - 3:00	0.50	DRLSUR	12	B	P		HOLD SAFTEY MEETING R/U T/CEMENT 8 5/8" SURF. CSG

**US ROCKIES REGION  
Operation Summary Report**

Well: NBU 921-25F3AS-YELLOW		Spud Conductor: 10/25/2010	Spud Date: 11/3/2010
Project: UTAH-UINTAH		Site: NBU 921-25F PAD	Rig Name No: H&P 307/307, PROPETRO/
Event: DRILLING		Start Date: 11/2/2010	End Date: 12/13/2010
Active Datum: RKB @4,956.00ft (above Mean Sea Level)		UWI: NBU 921-25F3AS	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
	3:00 - 5:00	2.00	DRLSUR	12	E	P		HOLD SAFETY MEETING. INSTALL CEMENT HEAD. PSI TEST TO 2000 PSI. PUMP 25 BBLS OF 8.4# H2O AHEAD. FULL CIRC. PUMP 20 BBLS OF 8.4# GEL WATER AHEAD. FULL CIRC. PUMP 200 SX(136 BBLS) 11# 3.82 YIELD LEAD CEMENT, PUMP 200 SX (41 BBLS) OF 15.8# 1.15 YIELD TAIL(2% CALC, 1/4# /SK OF FLOCELE). FULL CIRC. DROP PLUG ON FLY AND DISPLACE W/163 BBLS OF 8.4# H2O. PARTIAL RETURNS, SLOWED DOWN RATE, LIFT PRESSURE WAS 500 PSI, BUMP PLUG AND HOLD 100 PSI FOR 5 MIN. FLOAT HELD.
	5:00 - 5:30	0.50	DRLSUR	12	F	P		TOP OUT #1 PUMP 200 SX (41 BBLS) OF 15.8# 1.15 YIELD TAIL(4 % CALC, 1/4# /SK OF FLOCELE). CMT TO SURFACE. RIG DOWN CEMENTERS AND RELEASE RIG @ 05: 30 11/05/2010
	5:30 - 5:30	0.00	DRLSUR					CONDUCTOR CASING: Cond. Depth set: 40' Cement sx used: 28  SPUD DATE/TIME: 11/3/2010 2:00  SURFACE HOLE: Surface From depth: 40' Surface To depth: 2,690 Total SURFACE hours: 33.50 Surface Casing size: 8.625" # of casing joints ran: 60 Casing set MD: 2,556.0 # sx of cement: 200/200/200 Cement blend (ppg): 11/15.8/15.8 Cement yield (ft3/sk): 3.82/1.15/1.15 # of bbls to surface: 2 Describe cement issues: NONE Describe hole issues: NONE
12/3/2010	21:30 - 22:00	0.50	RDMO	01	C	P		PREP TO SKID RIG
	22:00 - 23:00	1.00	RDMO	01	C	P		SKID RIG
	23:00 - 0:00	1.00	DRLPRO	14	A	P		NIPPLE UP BOPS
12/4/2010	0:00 - 0:30	0.50	DRLPRO	12	A	P		C/O CASING BAILE. ELEV.
	0:30 - 4:30	4.00	DRLPRO	15	A	P		TEST BOPS 250 LOW 5000 PSI HIGH PIP, BLINDS, HCR, CHOKEMANFOLD, CHECK IBOP FLOOR VAVLES ANN. 2500 PSI LOW 250 CASING 1500 30 MINS
	4:30 - 5:00	0.50	DRLPRO	09	A	P		CUT DRILL LINE 75'
	5:00 - 5:30	0.50	DRLPRO	06	A	P		INSTALL WEAR BUSHING
	5:30 - 7:30	2.00	DRLPRO	06	A	P		P/U BHA MWD TOOL SCRIB IN HOLE
	7:30 - 8:30	1.00	DRLPRO	06	A	P		TIH TAGED UP @ 2630'
	8:30 - 9:00	0.50	DRLPRO	06	A	P		INSTALLED ROTATING HEAD RUBBER
	9:00 - 10:00	1.00	DRLPRO	02	F	P		DRILL CMT, FLOAT EQUIPMENT F 2630 TO 2711
	10:00 - 17:30	7.50	DRLPRO	02	D	P		DRILL SLID F/ 2711 TO 3602 WT 18-20 RPM 40 MM RPM 114 PUMP ON 1500 OFF1180 TQ ON 4 OFF 3 FEET 891 ROP 118.8
	17:30 - 18:00	0.50	DRLPRO	07	A	P		RIG SER
	18:00 - 0:00	6.00	DRLPRO	02	D	P		DRILL SLIDF/3602 TO 4565 WT 18-20 RPM 40 MM RPM 114 PUMP ON 1800 OFF1300 TQ ON 11 OFF 5 FEET 963' ROP 160.5

**US ROCKIES REGION  
Operation Summary Report**

Well: NBU 921-25F3AS-YELLOW		Spud Conductor: 10/25/2010	Spud Date: 11/3/2010
Project: UTAH-UINTAH		Site: NBU 921-25F PAD	Rig Name No: H&P 307/307, PROPETRO/
Event: DRILLING		Start Date: 11/2/2010	End Date: 12/13/2010
Active Datum: RKB @4,956.00ft (above Mean Sea Level)		UWI: NBU 921-25F3AS	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
12/5/2010	0:00 - 9:30	9.50	DRLPRO	02	D	P		DRILL, SLID F/ 4565 TO 5835 WT 18-20 RPM 40 MM RPM 114 PUMP ON 1800 OFF1300 TQ ON 11 OFF 5 FEET 1270' ROP 133.68
	9:30 - 10:30	1.00	DRLPRO	22	G	X		LOST FULL RETRUNES @ 5835, MIX & PUMP 20 % LCM SWEEPS ,25 % LCM SWEEP # 2 PULLED 1 STD. OUT REGAINED CIRC LOST 250 BBLs MUD
	10:30 - 20:30	10.00	DRLPRO	02	D	P		DRILL, SLID F/ 5835 TO 6785 WT 18-20 RPM 40 MM RPM 114 PUMP ON 1800 OFF1300 TQ ON 11 OFF 5 FEET 950 ROP 95.0
	20:30 - 21:00	0.50	DRLPRO	07	A	P		RIG SER
	21:00 - 0:00	3.00	DRLPRO	02	D	P		DRILL, SLID F 6785 TO 6978 WT 18-20 RPM 40 MM RPM 114 GPM 495 PUMP ON 1800 OFF1300 TQ ON 11 OFF 5 FEET 193' ROP 64.33
12/6/2010	0:00 - 14:00	14.00	DRLPRO	02	D	P		DRILL, SLID F/ 6978 TO 7766 WT 18-20 RPM 40 MM RPM 114 GPM 495 PUMP ON 1800 OFF1300 TQ ON 10 OFF 5 FEET 788' ROP 56.28
	14:00 - 15:00	1.00	DRLPRO	22	G	X		LOST CIRC @ 7766 LOST 90 BBLs
	15:00 - 16:30	1.50	DRLPRO	02	D	P		DRILL. SLID F/ 7766 TO 7828 WT 18-20 RPM 40 MM RPM 114 GPM 495 PUMP ON 1800 OFF1300 TQ ON 10 OFF 5 FEET 62 ROP 41.33
	16:30 - 17:00	0.50	DRLPRO	07	A	P		RIG SER.
	17:00 - 0:00	7.00	DRLPRO	02	D	P		DRILL, SLID F/ 7828 TO 8205 WT 18-20 RPM 40 MM RPM 114 GPM 495 PUMP ON 2450 OFF1800 TQ ON 9 OFF 11 FEET 377 ROP 53.85
12/7/2010	0:00 - 17:30	17.50	DRLPRO	02	D	P		DRILL, SLID F/ 8205 TO 8960 WT 18-20 RPM 40 MM RPM 114 GPM 495 PUMP ON 2450 OFF1800 TQ ON 9 OFF 11 FEET 755' ROP 43.14
	17:30 - 18:00	0.50	DRLPRO	07	A	P		RIG SER
	18:00 - 0:00	6.00	DRLPRO	02	D	P		DRILL, SLID F 8960 TO 9130 WT 18-20 RPM 40 MM RPM 114 GPM 495 PUMP ON 2900 OFF2600 TQ ON 120OFF 9 FEET 170 ROP 28.3
12/8/2010	0:00 - 4:30	4.50	DRLPRO	02	C	P		DRILL (ROTATE & SLIDE) F/ 9130-9224 @ 20.8 FPH, WOB/ 21-28K, ROTARY RPM/ 0-50, STRKS/ 110 @ 495 GPM, SPP/ ON 2875-OFF 2640, TORQUE/ ON 11500-OFF 10200, P/U 247, S/O 161, ROT 191, MUD WT. 11.9, VIS 40
	4:30 - 5:30	1.00	DRLPRO	05	C	P		CIRC. & COND. / BUILD SLUG
	5:30 - 10:30	5.00	DRLPRO	06	A	P		P.O.O.H T/ 1066'
	10:30 - 11:00	0.50	DRLPRO	14	B	P		PULL ROTATING HAD
	11:00 - 13:00	2.00	DRLPRO	06	A	P		L/D MWD TOOL, BREAK BIT AND MUD MOTOR, L/D MOTOR
	13:00 - 14:30	1.50	DRLPRO	06	A	P		P/U MUD MOTOR AND MAKE UP BIT, SCRIBE AND INSTALL MWD TOOL
	14:30 - 16:30	2.00	DRLPRO	06	A	P		T.I.H. TO 2707' BREAK CIRC.
	16:30 - 17:00	0.50	DRLPRO	07	A	P		RIG SERVICE
	17:00 - 19:00	2.00	DRLPRO	06	A	P		T.I.H. T/ 9059'
	19:00 - 19:30	0.50	DRLPRO	03	E	P		WASH AND REAM F/ 9059' - 9224'
12/9/2010	0:00 - 4:00	4.00	DRLPRO	02	C	P		DRILL (ROTATE & SLIDE) F/ 9224-9436 @ 47.1 FPH, WOB/ 16-18K, ROTARY RPM/ 0-50, STRKS/ 110 @ 495 GPM, SPP/ ON 2765-OFF 2520, TORQUE/ ON 10000-OFF 9200, P/U 244, S/O 158, ROT 191, MUD WT. 12.1, VIS 43
	4:00 - 4:30	0.50	DRLPRO	05	A	X		DRILL (ROTATE & SLIDE) F/ 9436-9610 @ 43.5 FPH, WOB/ 17-19K, ROTARY RPM/ 0-60, STRKS/ 110 @ 495 GPM, SPP/ ON 2750-OFF 2510, TORQUE/ ON 10200-OFF 9750, P/U 245, S/O 159, ROT 193, MUD WT. 12.3, VIS 42

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

Well: NBU 921-25F3AS-YELLOW		Spud Conductor: 10/25/2010		Spud Date: 11/3/2010	
Project: UTAH-UINTAH		Site: NBU 921-25F PAD		Rig Name No: H&P 307/307, PROPETRO/	
Event: DRILLING		Start Date: 11/2/2010		End Date: 12/13/2010	
Active Datum: RKB @4,956.00ft (above Mean Sea Level)			UWI: NBU 921-25F3AS		

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
	4:30 - 17:00	12.50	DRLPRO	02	C	P		DRILL (ROTATE & SLIDE) F/ 9610-9973 @ 29 FPH, WOB/ 18-21K, ROTARY RPM/ 0-60, STRKS/ 110 @ 495 GPM, TORQUE/ ON 11800-OFF 10000, P/U 254, S/O 168, ROT 200, MUD WT. 12.5, VIS 42
	17:00 - 17:30	0.50	DRLPRO	07	A	P		RIG SERVICE
	17:30 - 0:00	6.50	DRLPRO	02	C	P		DRILL (ROTATE & SLIDE) F/ 9973-10104 @ 20 FPH, WOB/ 18-21K, ROTARY RPM/ 0-60, STRKS/ 110 @ 495 GPM, TORQUE/ ON 11800-OFF 10000, P/U 255, S/O 168, ROT 201, MUD WT. 12.5, VIS 42, SLIDE TIME 4.83 HRS, SLIDE FOOTAGE 60', SLIDE % 8.96
12/10/2010	0:00 - 6:00	6.00	DRLPRO	02	C	P		DRILL (ROTATE) F/ 10104-10223 @ 19.8 FPH, WOB/ 18-20K, ROTARY RPM/ 35-60, STRKS/ 110 @ 495 GPM, SPP/ ON 2875-OFF 2650, TORQUE/ ON 11000-OFF 9200, P/U 260, S/O 169, ROT 201, MUD WT. 12.4, VIS 48
	6:00 - 16:30	10.50	DRLPRO	02	C	P		DRILL (ROTATE) F/ 10223-10443 @ 20.9 FPH, WOB/ 18-20K, ROTARY RPM/ 35-60, STRKS/ 110 @ 495 GPM, SPP/ ON 2875-OFF 2650, TORQUE/ ON 11000-OFF 9200, P/U 264, S/O 180, ROT 207, MUD WT. 12.4, VIS 48
	16:30 - 17:00	0.50	DRLPRO	07	A	P		RIG SERVICE
	17:00 - 0:00	7.00	DRLPRO	02	C	P		DRILL (ROTATE) F/ 10443-10675 @ 33.1 FPH, WOB/ 18-20K, ROTARY RPM/ 35-60, STRKS/ 110 @ 495 GPM, SPP/ ON 2875-OFF 2650, TORQUE/ ON 11000-OFF 9200, P/U 281, S/O 176, ROT 208, MUD WT. 12.6, VIS 48
12/11/2010	0:00 - 1:30	1.50	DRLPRO	02	C	P		DRILL (ROTATE) F/ 10675-10725 @ 33.3 FPH, WOB/ 18-20K, ROTARY RPM/ 50, STRKS/ 110 @ 495 GPM, SPP/ ON 2975-OFF 2725, TORQUE/ ON 10500-OFF 11000, P/U 281, S/O 178, ROT 208, MUD WT. 12.6, VIS 46
	1:30 - 3:00	1.50	DRLPRO	05	C	P		CIRC. & COND. BOTTOMS UP
	3:00 - 7:30	4.50	DRLPRO	06	E	P		P.O.O.H. TO SURFACE CASING SHOE
	7:30 - 10:00	2.50	DRLPRO	06	E	P		T.I.H. WIPER TRIP
	10:00 - 11:30	1.50	DRLPRO	05	F	P		BREAK CIRC. WASH 2 STANDS TO BOTTOM, CIRC. BOTTOMS UP
	11:30 - 15:30	4.00	DRLPRO	06	B	P		P.O.O.H. T/ 1070'
	15:30 - 16:00	0.50	DRLPRO	14	B	P		PULL ROTATING HEAD
	16:00 - 16:30	0.50	DRLPRO	07	A	P		RIG SERVICE
	16:30 - 18:00	1.50	DRLPRO	06	B	P		P.O.O.H. / L/D MWD TOOL, BREAK BIT AND L/D MUD MOTOR
	18:00 - 23:00	5.00	DRLPRO	11	D	P		RIG UP HALLIBURTON LOGGERS AND RUN OPEN HOLE LOGS / LOGS BRIDGED OUT @ 5236', PULL LOGGING TOOL AND RIG DOWN LOGGERS
	23:00 - 0:00	1.00	DRLPRO	06	E	X		MAKE UP BIT AND BIT SUB, T.I.H./ SECOND WIPER TRIP
12/12/2010	0:00 - 1:00	1.00	DRLPRO	06	E	X		T.I.H. T/ 2526'
	1:00 - 1:30	0.50	DRLPRO	14	B	P		INSTALL ROTATING HEAD
	1:30 - 2:30	1.00	DRLPRO	09	A	P		SLIP AND CUT DRILLING LINE
	2:30 - 7:00	4.50	DRLPRO	06	E	X		T.I.H.
	7:00 - 10:30	3.50	DRLPRO	05	F	X		BREAK CIRC. / CIRC. & COND. PUMP HIGH VIS SWEEPS
	10:30 - 14:00	3.50	DRLPRO	06	E	X		P.O.O.H. FOR OPEN HOLE LOGS
	14:00 - 14:30	0.50	DRLPRO	14	B	P		PULL ROTATING HEAD
	14:30 - 15:00	0.50	DRLPRO	06	E	X		P.O.O.H./ BREAK BIT AND BIT SUB
	15:00 - 22:00	7.00	DRLPRO	11	D	P		RIG UP AND RUN TRIPPLE COMBO OPEN HOLE LOGS

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

Well: NBU 921-25F3AS-YELLOW		Spud Conductor: 10/25/2010	Spud Date: 11/3/2010
Project: UTAH-UINTAH		Site: NBU 921-25F PAD	Rig Name No: H&P 307/307, PROPETRO/
Event: DRILLING		Start Date: 11/2/2010	End Date: 12/13/2010
Active Datum: RKB @4,956.00ft (above Mean Sea Level)		UWI: NBU 921-25F3AS	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
12/13/2010	22:00 - 22:30	0.50	DRLPRO	14	B	P		PULL WEAR BUSHING
	22:30 - 23:00	0.50	DRLPRO	07	A	P		RIG SERVICE
	23:00 - 0:00	1.00	DRLPRO	12	A	P		HOLD SAFETY MEETING WITH CASERS AND RIG UP CASING CREW
	0:00 - 7:00	7.00	DRLPRO	12	C	P		RUN PROD. CASING, RAN 250 JTS AND 1 MARKER JT P-110 11.6# 4.5" CASING, SET FLOAT SHOE @ 10712' SET FLOAT COLLAR @ 10668' MARKR JT @ 4843'
	7:00 - 8:00	1.00	DRLPRO	12	A	P		RIG DOWN CASING CREW
	8:00 - 10:00	2.00	DRLPRO	05	D	P		CIRC. & COND. FOR CEMENT/ RIG UP HALLIBURTON CEMENTERS
	10:00 - 12:00	2.00	DRLPRO	12	E	P		CEMENT PROD. CASING, CEMENTD WITH 620 SKS 13 PPG, 1.77 YIELD LEAD AND 1410 SKS 14.3 PPG 1.25 YIELD TAIL CEMENT, DISPLACED WITH 165.4 BBLS CLAYFIX WATER, BUMPED PLUG WITH
	12:00 - 13:00	1.00	DRLPRO	12	B	P		RIG DOWN CEMENTERS
	13:00 - 14:00	1.00	DRLPRO	14	A	P		NIPPLE DOWN BOP
	14:00 - 14:30	0.50	DRLPRO	24	A	P		SET CASING SLIPS 88K WEIGHT IN SLIPS
14:30 - 16:00	1.50	DRLPRO	01	E	P		RIG DOWN TO SKID RIG / RIG RELEASED @ 16:00	

**US ROCKIES REGION  
Operation Summary Report**

Well: NBU 921-25F3AS-YELLOW		Spud Conductor: 10/25/2010	Spud Date: 11/3/2010
Project: UTAH-UINTAH		Site: NBU 921-25F PAD	Rig Name No: H&P 307/307, PROPETRO/
Event: DRILLING		Start Date: 11/2/2010	End Date: 12/13/2010
Active Datum: RKB @4,956.00ft (above Mean Sea Level)		UWI: NBU 921-25F3AS	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
	16:00 - 16:00	0.00	DRLPRO					<b>PRODUCTION:</b> Rig Move/Skid start date/time: 12/3/2010 22:00 Rig Move/Skid finish date/time: 12/3/2010 2300 Total MOVE hours: #VALUE! Prod Rig Spud date/time: 12/4/2010 10:00 Rig Release date/time: 12/13/2010 16:00 Total SPUD to RR hours:222.0 Planned depth MD 10,708 Planned depth TVD 10,626 Actual MD: 10,725 Actual TVD: 10,645 Open Wells \$: \$890,805 AFE \$: \$1,043,863 Open wells \$/ft: \$83.06  <b>PRODUCTION HOLE:</b> Prod. From depth: 2,711 Prod. To depth: 10,725 Total PROD hours: 139 Log Depth: 10722 Float Collar Top Depth: 10668 Production Casing size: 4 1/2 # of casing joints ran: 250 Casing set MD: 10,712.0 Stage 1 # sx of cement: LEAD 620SKS, TAIL 1410 SKS Cement density (ppg): LEAD 13 PPG, TAIL 14.3 PPG Cement yield (ft3/sk): LEAD 1.77, TAIL 1.25 Stage 2 # sx of cement: Cement density (ppg): Cement yield (ft3/sk): Top Out Cmt # sx of cement: Cement density (ppg): Cement yield (ft3/sk): Est. TOC (Lead & Tail) or 2 Stage : Describe cement issues: Describe hole issues:  <b>DIRECTIONAL INFO:</b> KOP: 700 Max angle: 19.06 Departure: 576.00 Max dogleg MD: 3527' 2.75*

12/14/2010 -

**US ROCKIES REGION  
Operation Summary Report**

Well: NBU 921-25F3AS-YELLOW	Spud Conductor: 10/25/2010	Spud Date: 11/3/2010
Project: UTAH-UINTAH	Site: NBU 921-25F PAD	Rig Name No: GWS 1/1
Event: COMPLETION	Start Date: 2/21/2011	End Date: 3/14/2011
Active Datum: RKB @4,956.00ft (above Mean Sea Level)	UWI: NBU 921-25F3AS	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
2/28/2011	6:30 - 7:00	0.50	COMP	48		P		HSM & JSA W/SUPERIOR WELL SERVICES.
	10:35 - 11:50	1.25	COMP	37	B	P		10:35 - OPEN WELL. WHP = 0 PSI. PERF STG 1) PU 3 1/8 EXP GUN, 23 GM, 0.36 HOLE SIZE, 90 DEG PHASING. RIH & PERF MV F/ 10507-08, 4 SPF, 4 HOLES. 10503-04, 4 SPF, 4 HOLES. 10475-76, 4 SPF, 4 HOLES. 10462-65, 4 SPF, 12 HOLES. 24 HOLES. POOH, X-OVER FOR FRAC CREW.
	15:55 - 18:09	2.23	COMP	36	E	P		WHP = 0 PSI. MIRU SUPERIOR WELL SERVICE. PT SURFACE EQUIP. TO 8000 PSI. 15:55 OPEN WELL FRAC STG 1) WHP 447 PSI, BRK DWN 3.7 BPM @ 4907 PSI. ISIP 3755 PSI, FG 0.80, PMP 6 BBLS 15% HCL, PMP 160 BBLS 10/M SCALE INHIBITOR. PUMP 950 BBLS @ 50.6 BPM @ 7645 PSI, 19/24 PERFS OPEN = 80%  [16:05 - 280 BBLS PMPD - SD - DOWN 2 PMPS, MAX RATE 45 BPM W/AVALIABLE PMPS. REPAIR PMPS. 17:06 - RESUME JOB - DWN 61 MIN.]  MP 9155 PSI, MR 51.6 BPM, AP 7372 PSI, AR 48.6 BPM, ISIP 3854 PSI, FG 0.81, NPI 99 PSI. PMP 3302 BBLS SW & 89,898 LBS OF 30/50 SND TLC SND. TOTAL PROP 89,898 LBS, SWI, 18:09 X-OVER FOR WL.  SWI - SDFN. FREEZE PROTECT WH. PREP TO PERFORATE IN AM.
3/1/2011	6:30 - 6:50	0.33	COMP	48		P		HSM & JSA W/SUPERIOR
	6:50 - 6:50	0.00	COMP	37	B	P		PERF STG 2) PU 4 1/2 10K HAL CBP & 3 1/8 EXP GUN, 23 GM, 0.36 HOLE SIZE. 120 DEG PHASING. RIH SET CBP @ 10424, P/U & PERF MV F/ 10392-94, 3 SPF, 6 HOLES. 10362-64, 3 SPF, 6 HOLES. 10343-44, 3 SPF, 3 HOLES. 10316-18, 3 SPF, 6 HOLES. 10299-01, 3 SPF, 6 HOLES. 27 HOLES. POOH, X-OVER FOR FRAC CREW.  STARTED IN HOLE W/HALCO 8K CBP TO 1300'. POOH W/PLG & GNS TO CHANGE PLUG TO HALCO 10K CBP. STUCK GUNS & PLUG IN WELL HEAD. FLOW WELL TO PIT. STILL STUCK. PMP ON WELL FROM 0.8 BPM TO 3 BPM @ 3400 PSI. STILL STUCK. JAR ON LINE W/HANDS. PLUG & GNS CAME FREE. POOH & LD TOOLS. (NO VISIBLE MARKS ON PLUG OR GNS) PU SETTING TOOL & RIH TO 1300'. POOH & LD TOOLS. TOOL SHOWED SIGNS OF SND ON THEM. REFLUSH WELL AFTER HAVING FLOWED BACK. WHP 3130 PSI. PMP 170 BBLS 11.5 BPM @ 5512 PSI.

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

Well: NBU 921-25F3AS-YELLOW	Spud Conductor: 10/25/2010	Spud Date: 11/3/2010
Project: UTAH-UINTAH	Site: NBU 921-25F PAD	Rig Name No: GWS 1/1
Event: COMPLETION	Start Date: 2/21/2011	End Date: 3/14/2011
Active Datum: RKB @4,956.00ft (above Mean Sea Level)	UWI: NBU 921-25F3AS	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
	13:20 - 15:27	2.12	COMP	36	E	P		13:20 OPEN WELL FRAC STG 2) WHP 3099 PSI, BRK DWN 3.7 BPM @ 3455 PSI. ISIP 3625 PSI, FG 0.79. PUMP 1450 BBLs @ 49.8 BPM @ 7665 PSI. 18/27 PERFS OPEN = 67%
	15:27 - 16:25	0.97	COMP	37	B	P		MP 9163 PSI, MR 50.1 BPM, AP 7406 PSI, AR 48.1 BPM, ISIP 3628 PSI, FG 0.79, NPI 3 PSI. PMP 5843 BBLs SW & 160,102 LBS OF 30/50 TLC SND. TOTAL PROP 160,102 LBS, SWI, 15:27 X-OVER FOR WL. PERF STG 3) PU 4 1/2 8K HAL CBP & 3 1/8 EXP GUN, 23 GM, 0.36 HOLE SIZE. 120 DEG PHASING. RIH SET CBP @ 9,660', P/U & PERF MV F/ 9558-60, 3 SPF, 6 HOLES. 9521-22, 3 SPF, 3 HOLES. 9476-78, 3 SPF, 6 HOLES. 9425-26, 3 SPF, 3 HOLES. 9249-50, 3 SPF, 3 HOLES. 21 HOLES. POOH, X-OVER FOR FRAC CREW.
3/2/2011	6:30 - 7:00	0.50	COMP	48		P		SWI - SDFN. FREEZE PROTECT WH. PREP TO FRAC IN AM. HSM & JSA W/SUPERIOR
	7:00 - 7:22	0.37	COMP	36	E	P		07:00 OPEN WELL FRAC STG 3) WHP 1634 PSI, BRK DWN 4.1 BPM @ 3152 PSI. ISIP 2428 PSI, FG 0.70. PUMP 100 BBLs @ 44.2 BPM @ 6419 PSI. 15/21 PERFS OPEN = 71%
	7:22 - 8:20	0.97	COMP	37	B	P		MP 6776 PSI, MR 50.8 BPM, AP 6148 PSI, AR 47.1 BPM, ISIP 2861 PSI, FG 0.74, NPI 433 PSI. PMP 877 BBLs SW & 25,772 LBS OF 30/50 SND & 5,207 LBS OF 20/40 SLC SND. TOTAL PROP 30,979 LBS, SWI, 07:22 X-OVER FOR WL. PERF STG 4) PU 4 1/2 8K HAL CBP & 3 1/8 EXP GUN, 23 GM, 0.36 HOLE SIZE. 120 DEG PHASING. RIH SET CBP @ 9,183', P/U & PERF MV F/ 9082-83, 3 SPF, 3 HOLES. 9057-58, 3 SPF, 3 HOLES. 9036-37, 3 SPF, 3 HOLES. 9007-08, 3 SPF, 3 HOLES. 8990-91, 3 SPF, 3 HOLES. 8954-56, 3 SPF, 6 HOLES. 8926-27, 3 SPF, 3 HOLES. 24 HOLES. POOH, X-OVER FOR FRAC CREW.
	9:10 - 10:07	0.95	COMP	36	E	P		09:10 OPEN WELL FRAC STG 4) WHP 857 PSI, BRK DWN 3.8 BPM @ 3790 PSI. ISIP 2403 PSI, FG 0.71. PUMP 380 BBLs @ 49.9 BPM @ 6231 PSI. 18/24 PERFS OPEN = 75%
								MP 6534 PSI, MR 50.8 BPM, AP 5915000 PSI, AR 49.8 BPM, ISIP 2741 PSI, FG 0.74, NPI 338 PSI. PMP 2679 BBLs SW & 99,116 LBS OF 30/50 SND & 5,388 LBS OF 20/40 SLC SND. TOTAL PROP 104,504 LBS, SWI, 10:07 X-OVER FOR WL.

**US ROCKIES REGION  
Operation Summary Report**

Well: NBU 921-25F3AS-YELLOW		Spud Conductor: 10/25/2010	Spud Date: 11/3/2010
Project: UTAH-UINTAH		Site: NBU 921-25F PAD	Rig Name No: GWS 1/1
Event: COMPLETION		Start Date: 2/21/2011	End Date: 3/14/2011
Active Datum: RKB @4,956.00ft (above Mean Sea Level)		UWI: NBU 921-25F3AS	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
	10:07 - 11:00	0.88	COMP	37	B	P		PERF STG 5) PU 4 1/2 8K HAL CBP & 3 1/8 EXP GUN, 23 GM, 0.36 HOLE SIZE. 90 DEG PHASING. RIH SET CBP @ 8,884', P/U & PERF MV F/ 8852-54, 4 SPF, 8 HOLES. 8836-38, 4 SPF, 8 HOLES. 8802-03, 4 SPF, 4 HOLES. 8785-86, 4 SPF, 4 HOLES. 24 HOLES. POOH, X-OVER FOR FRAC CREW.
	13:20 - 13:38	0.30	COMP	36	E	P		13:20 OPEN WELL FRAC STG 5) WHP 2257 PSI, BRK DWN 3.6 BPM @ 3110 PSI. ISIP 2522 PSI, FG 0.72. PUMP 80 BBLs @ 43.3 BPM @ 6419 PSI. 15/24 PERFS OPEN = 60%  MP 6675 PSI, MR 48.5 BPM, AP 5768 PSI, AR 45.1 BPM, ISIP 2800 PSI, FG 0.76, NPI 278 PSI. PMP 669 BBLs SW & 18,851 LBS OF 30/50 SND & 5,140 LBS OF 20/40 SLC SND. TOTAL PROP 23,991 LBS, SWI, 13:38 X-OVER FOR WL.
	13:38 - 14:40	1.03	COMP	37	B	P		PERF STG 6) PU 4 1/2 8K HAL CBP & 3 1/8 EXP GUN, 23 GM, 0.36 HOLE SIZE. 120 DEG PHASING. RIH SET CBP @ 8,734', P/U & PERF MV F/ 8702-04, 3 SPF, 6 HOLES. 8656-58, 3 SPF, 6 HOLES. 8585-86, 3 SPF, 3 HOLES. 8527-28, 3 SPF, 3 HOLES. 8510-12, 3 SPF, 6 HOLES. 24 HOLES. POOH, X-OVER FOR FRAC CREW
	17:19 - 17:38	0.32	COMP	36	E	P		17:12 OPEN WELL FRAC STG 6) WHP 2169 PSI, BRK DWN 6.4 BPM @ 3717 PSI. ISIP 2565 PSI, FG 0.74. PUMP 128 BBLs @ 46.7 BPM @ 6419 PSI. 16//24 PERFS OPEN = 67%  MP 6945 PSI, MR 51.7 BPM, AP 5631 PSI, AR 49.8 BPM, ISIP 2541 PSI, FG 0.73, NPI (-24) PSI. PMP 984 BBLs SW & 33,610 LBS OF 30/50 SND & 5,143 LBS OF 20/40 SLC SND. TOTAL PROP 38,753 LBS, SWI, 17:38 X-OVER FOR WL.
	17:38 - 17:38	0.00	COMP	37	B	P		PERF STG 7) PU 4 1/2 8K HAL CBP & 3 1/8 EXP GUN, 23 GM, 0.36 HOLE SIZE. 90 DEG PHASING. RIH SET CBP @ 8,434', P/U & PERF MV F/ 8333-34, 4 SPF, 4 HOLES. 8226-27, 4 SPF, 4 HOLES. 8198-8200, 4 SPF, 8 HOLES. 8104-06, 4 SPF, 8 HOLES. 24 HOLES. POOH, X-OVER FOR FRAC CREW.
3/3/2011	6:30 - 7:00	0.50	COMP	48		P		SWI - SDFN. FREEZE PROTECT WH. PREP TO FRAC IN AM. HSM & JSA W/SUPERIOR

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

Well: NBU 921-25F3AS-YELLOW		Spud Conductor: 10/25/2010	Spud Date: 11/3/2010
Project: UTAH-UINTAH		Site: NBU 921-25F PAD	Rig Name No: GWS 1/1
Event: COMPLETION		Start Date: 2/21/2011	End Date: 3/14/2011
Active Datum: RKB @4,956.00ft (above Mean Sea Level)		UWI: NBU 921-25F3AS	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
	8:42 - 8:59	0.28	COMP	36	E	P		08:42 OPEN WELL FRAC STG 7) WHP 1352 PSI, BRK DWN 3.6 BPM @ 3362 PSI. ISIP 2276 PSI, FG 0.72. PUMP 75 BBLs @ 49.3 BPM @ 6042 PSI. 17/24 PERFS OPEN = 73%  MP 6620 PSI, MR 52.5 BPM, AP 5815 PSI, AR 51 BPM, ISIP 2573 PSI, FG 0.75, NPI 297 PSI. PMP 623 BBLs SW & 17,148 LBS OF 30/50 SND & 5,118 LBS OF 20/40 SLC SND. TOTAL PROP 22,266 LBS, SWI, 08:59 X-OVER FOR WL.
	8:59 - 9:55	0.93	COMP	37	B	P		PERF STG 8) PU 4 1/2 8K HAL CBP & 3 1/8 EXP GUN, 23 GM, 0.36 HOLE SIZE. 120 DEG PHASING. RIH SET CBP @ 8,054', P/U & PERF MV F/ 8009-11, 3 SPF, 6 HOLES. 7968-69, 3 SPF, 3 HOLES. 7955-56, 3 SPF, 3 HOLES. 7939-40, 3 SPF, 3 HOLES. 7861-62, 3 SPF, 3 HOLES. 7843-44, 3 SPF, 3 HOLES. 7801-02, 3 SPF, 3 HOLES. 24 HOLES. POOH, X-OVER FOR FRAC CREW.
	13:59 - 14:29	0.50	COMP	36	E	P		13:59 OPEN WELL FRAC STG 8) WHP 1142 PSI, BRK DWN 3.7 BPM @ 2398 PSI. ISIP 1618 PSI, FG 0.64. PUMP 157 BBLs @ 49.1 BPM @ 5798 PSI. 16/24 PERFS OPEN = 66%  MP 6246 PSI, MR 51.5 BPM, AP 5344 PSI, AR 49.8 BPM, ISIP 2278 PSI, FG 0.73, NPI 660 PSI. PMP 1163 BBLs SW & 39,754 LBS OF 30/50 SND & 8,143 LBS OF 20/40 SLC SND. TOTAL PROP 47,897 LBS, SWI, 14:29 X-OVER FOR WL.
	14:29 - 14:29	0.00	COMP	37	B	P		PERF STG 9) PU 4 1/2 8K HAL CBP & 3 1/8 EXP GUN, 23 GM, 0.36 HOLE SIZE. 90 DEG PHASING. RIH SET CBP @ 7,751', P/U & PERF MV F/ 7706-08, 4 SPF, 8 HOLES. 7624-25, 4 SPF, 4 HOLES. 7589-91, 4 SPF, 8 HOLES. 7562-63, 4 SPF, 4 HOLES. 24 HOLES. POOH, X-OVER FOR FRAC CREW
	19:29 - 20:26	0.95	COMP	36	E	P		19:29 OPEN WELL FRAC STG 9) WHP 1319 PSI, BRK DWN 3.4 BPM @ 1960 PSI. ISIP 1389 PSI, FG 0.62. PUMP 279 BBLs @ 48.6 BPM @ 4941 PSI. 18/24 PERFS OPEN = 73%  MP 6778 PSI, MR 51 BPM, AP 5275 PSI, AR 49.4 BPM, ISIP 2545 PSI, FG 0.77, NPI 1156 PSI. PMP 2233 BBLs SW & 79,887 LBS OF 30/50 SND & 8,091 LBS OF 20/40 SLC SND. TOTAL PROP 87,978 LBS, SWI, 20:26 X-OVER FOR WL.

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

Well: NBU 921-25F3AS-YELLOW		Spud Conductor: 10/25/2010	Spud Date: 11/3/2010
Project: UTAH-UINTAH		Site: NBU 921-25F PAD	Rig Name No: GWS 1/1
Event: COMPLETION		Start Date: 2/21/2011	End Date: 3/14/2011
Active Datum: RKB @4,956.00ft (above Mean Sea Level)		UWI: NBU 921-25F3AS	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
	20:26 - 21:15	0.82	COMP	34	I	P		KILL PLG) PU 4 1/2 8K HALCO CBP, RIH SET CBP @ 7,512'. POOH & LD TOOLS. SWI - RD CUTTERS WL & SUPERIOR FRAC. 21:15 SDFN. PREP WELL TO RIH W/BHA & D/O CBPs.  TOTAL WATER USED 18,371 BBLS TOTAL PROP USED 606,368 LBS TOTAL SCALE INHIBITOR USED 1,750 GAL TOTAL BIOCIDES USED 350 GAL
3/11/2011	6:45 - 7:00	0.25	COMP	48		P		HSM. PINCH POINTS. PU TBG.
	7:00 - 18:00	11.00	COMP	31	I	P		MIRU WEST ROC. FAB NEW FLOW LINE FOR WELL HEAD. OPEN WELL 0 PSI. ND WH. NU BOP. RU TBG EQUIP & RIG FLOOR. PREP & TALLY 2 3/8 L-80 TBG. PU 3 7/8 BIT + X-DART + POBS + XN-NIPPLE. RIH TAG SAND @ 7481' W/ 238 JTS 2 3/8 L-80 TBG. LD 1 JT. RU DRL EQUIP. RU PUMP & LINES. SWIFWE. EOT @ 7505'.
3/14/2011	7:00 - 7:15	0.25	COMP	48		P		HSM, SLIPS, TRIPS & FALLS, D/O PLUGS & LANDING TBG.

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

Well: NBU 921-25F3AS-YELLOW	Spud Conductor: 10/25/2010	Spud Date: 11/3/2010
Project: UTAH-UINTAH	Site: NBU 921-25F PAD	Rig Name No: GWS 1/1
Event: COMPLETION	Start Date: 2/21/2011	End Date: 3/14/2011
Active Datum: RKB @4,956.00ft (above Mean Sea Level)		UWI: NBU 921-25F3AS

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
	7:15 - 17:00	9.75	COMP	44	C	P		<p>HOOK UP PUMP LINES &amp; FILL TBG, BREAK CIRC, PRESS TEST BOP TO 3,000 PSI, START DRLG PLUGS. ALL SURFACE CSG VAVLES OPEN TO ATMOSPHERE.</p> <p>C/O 20' SAND, TAG 1ST PLUG @ 7,512' DRL PLUG IN 7 MIN. 500 PSI INCREASE RIH, CSG PRESS 0 PSI.</p> <p>C/O 60' SAND, TAG 2ND PLUG @ 7,751' DRL PLUG IN 6 MIN. 300 PSI INCREASE RIH, CSG PRESS 50 PSI.</p> <p>C/O 50' SAND, TAG 3RD PLUG @ 8,054' DRL PLUG IN 6 MIN. 450 PSI INCREASE RIH, CSG PRESS 250 PSI.</p> <p>C/O 100' SAND, TAG 4TH PLUG @ 8,434' DRL PLUG IN 5 MIN. 550 PSI INCREASE RIH, CSG PRESS 400 PSI.</p> <p>C/O 30' SAND, TAG 5TH PLUG @ 8,734' DRL PLUG IN 5 MIN. 400 PSI INCREASE RIH, CSG PRESS 500 PSI.</p> <p>C/O 30' SAND, TAG 6TH PLUG @ 8,884' DRL PLUG IN 4 MIN. 350 PSI INCREASE RIH, CSG PRESS 700 PSI.</p> <p>C/O 20' SAND, TAG 7TH PLUG @ 9,183' DRL PLUG IN 5 MIN. 200 PSI INCREASE RIH, CSG PRESS 500 PSI.</p> <p>C/O 40' SAND, TAG 8TH PLUG @ 9,660' DRL PLUG IN 5 MIN. 300 PSI INCREASE RIH, CSG PRESS 650 PSI.</p> <p>C/O 30' SAND, TAG 9TH PLUG @ 10,424' DRL PLUG IN 5 MIN. 200 PSI INCREASE RIH, CSG PRESS 800 PSI.</p> <p>PBTD 10,680, BTM PERF @ 10,508', C/O TO 10,560', 52' PAST BTM PERF, W/ 333 JTS 2 3/8" L-80 TBG, LD 18 JTS, LAND TBG W/ 315 JTS 2 3/8" L-80 EOT 9,994.68'.</p> <p>RD POWER SWIVEL, FLOOR &amp; TBG EQUIP, ND BOPS, NU WH, DROP BALL TO SHEAR OFF TO SHEAR OFF BIT W/ 3,100 PSI.</p> <p>TURN OVER TO FLOW BACK CREW. RD TO MOVE IN AM, SDFN.</p> <p>KB= 25' 4 1/16" WEATHERFORD HANGER= .83' TBG DELIVERED 315 JTS 315 JTS 2 3/8" L-80 = 9,966.65' <span style="float: right;">TBG</span> USED 315 JTS POBS= 2.20' <span style="float: right;">TBG</span> RETURNED 0 JTS (CTAP) EOT @ 9,994.68' SN @ 9,992.68' <span style="float: right;">TBG</span> DELIVERED 26 JTS <span style="float: right;">TBG</span> USED 0 JTS</p>

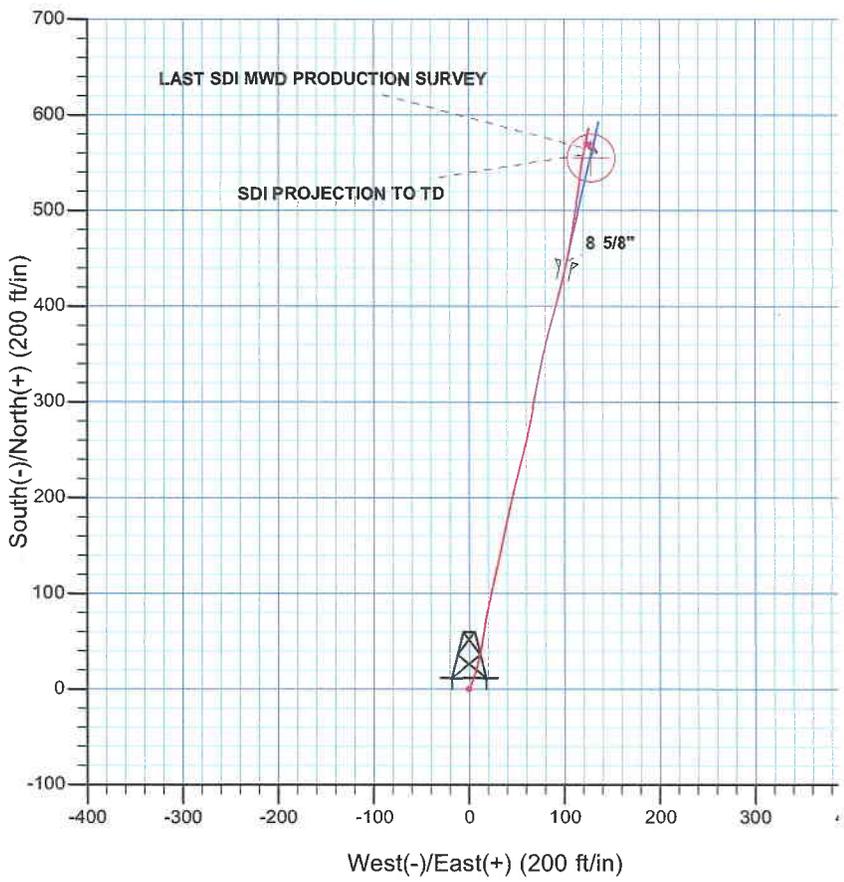
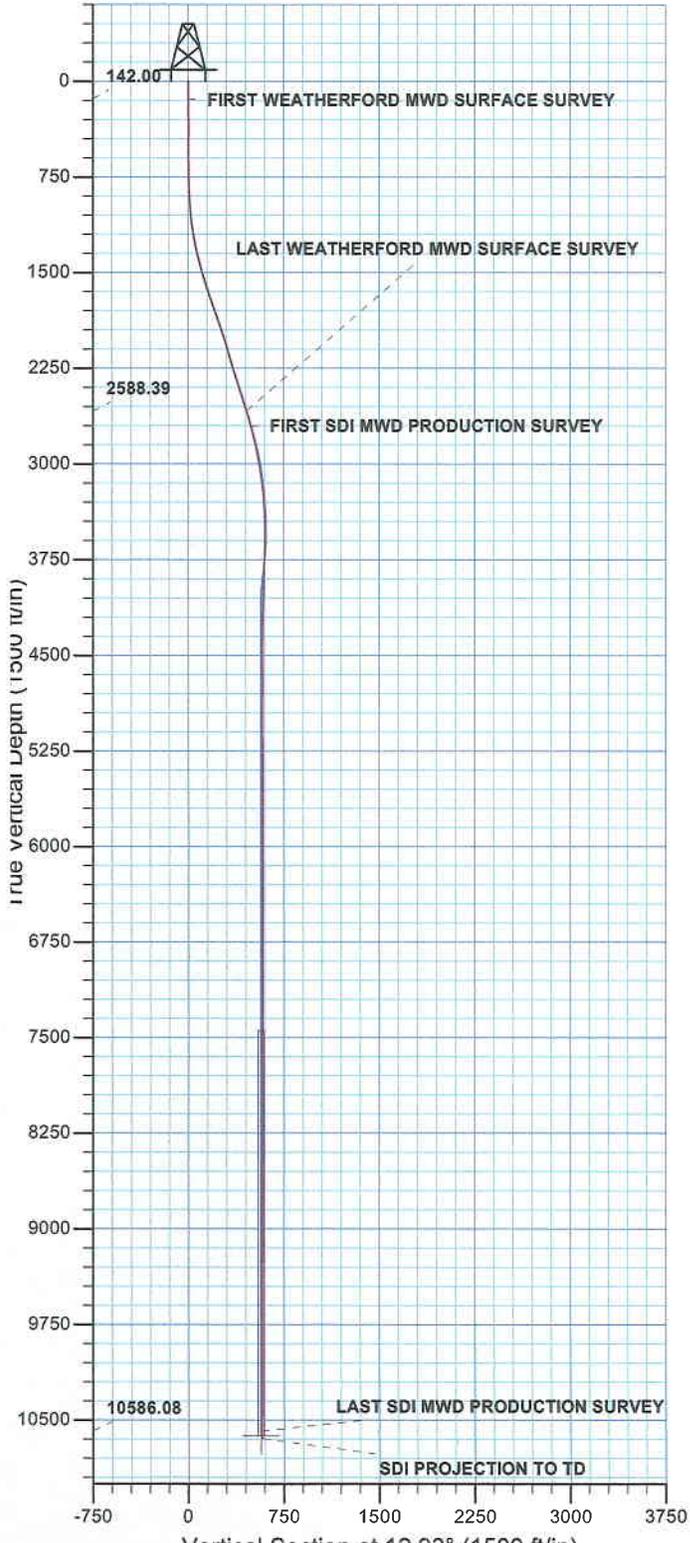
**US ROCKIES REGION**  
**Operation Summary Report**

Well: NBU 921-25F3AS-YELLOW		Spud Conductor: 10/25/2010	Spud Date: 11/3/2010
Project: UTAH-UINTAH		Site: NBU 921-25F PAD	Rig Name No: GWS 1/1
Event: COMPLETION		Start Date: 2/21/2011	End Date: 3/14/2011
Active Datum: RKB @4,956.00ft (above Mean Sea Level)		UWI: NBU 921-25F3AS	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
	15:30 - 15:30	0.00	PROD					TWTR= 18,466 BBLS RETURNED 26 JTS (B&C YARD) TWR= 2,000 BBLS W/ PITTING ON TUBES & COLLARS TWLTR= 16,466 BBLS WELL TURNED TO SALES @ 1530 HR ON 3/14/11 - 2700 MCFD, 2040 BWPD, CP 2900#, FTP 250#, CK 20/64"
3/15/2011	7:00 -			33	A			7 AM FLBK REPORT: CP 3575#, TP 2500#, 20/64" CK, 51 BWPH, MED SAND, - GAS TTL BBLS RECOVERED: 2894 BBLS LEFT TO RECOVER: 15572
3/20/2011	7:00 -			50				WELL IP'D ON 3/20/11 - 3532 MCFD, 0 BOPD, 721 BWPD, CP 3250#, FTP 2178#, CK 20/64", LP 343#, 24 HRS

WELL DETAILS: NBU 921-25F3AS					
GL 4931 & RKB 25' @ 4956.00ft (H&P 307)					
+N/-S 0.00	+E/-W 0.00	Northing 14532184.35	Eastng 2059775.97	Latitude 40° 0' 25.866 N	Longitude 109° 30' 8.903 W

Azimuths to True North  
Magnetic North: 11.15°  
Magnetic Field Strength: 52391.7snT  
Dip Angle: 65.89°  
Date: 11/11/2010  
Model: IGRF2010



<b>PROJECT DETAILS:</b> Uintah County, UT UTM12
Geodetic System: Universal Transverse Mercator (US Survey Feet)
Datum: NAD 1927 - Western US
Ellipsoid: Clarke 1866
Zone: Zone 12N (114 W to 108 W)
Location: SEC 25 T9S R21E
System Datum: Mean Sea Level

**Company:** Kerr McGee Oil and Gas Onshore LP  
**Project:** Uintah County, UT UTM12  
**Site:** NBU 921-25F Pad  
**Well:** NBU 921-25F3AS  
**Wellbore:** OH  
**Design:** OH

**Local Co-ordinate Reference:** Well NBU 921-25F3AS  
**TVD Reference:** GL 4931 & RKB 25' @ 4956.00ft (H&P 307)  
**MD Reference:** GL 4931 & RKB 25' @ 4956.00ft (H&P 307)  
**North Reference:** True  
**Survey Calculation Method:** Minimum Curvature  
**Database:** EDM5000-Roberts-Local

<b>Project</b>	Uintah County, UT UTM12		
<b>Map System:</b>	Universal Transverse Mercator (US Survey Feet)	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	NAD 1927 - Western US		
<b>Map Zone:</b>	Zone 12N (114 W to 108 W)		

<b>Site</b>	NBU 921-25F Pad, SEC 25 T9S R21E				
<b>Site Position:</b>	<b>Northing:</b>	14,532,166.00 usft	<b>Latitude:</b>	40° 0' 25.686 N	
<b>From:</b>	Lat/Long	<b>Easting:</b>	2,059,767.87 usft	<b>Longitude:</b>	109° 30' 9.011 W
<b>Position Uncertainty:</b>	0.00 ft	<b>Slot Radius:</b>	13.200 in	<b>Grid Convergence:</b>	0.96 °

<b>Well</b>	NBU 921-25F3AS, 2589' FNL 1776' FWL					
<b>Well Position</b>	<b>+N/-S</b>	0.00 ft	<b>Northing:</b>	14,532,184.35 usft	<b>Latitude:</b>	40° 0' 25.866 N
	<b>+E/-W</b>	0.00 ft	<b>Easting:</b>	2,059,775.96 usft	<b>Longitude:</b>	109° 30' 8.903 W
<b>Position Uncertainty</b>	0.00 ft	<b>Wellhead Elevation:</b>	ft	<b>Ground Level:</b>	4,931.00 ft	

<b>Wellbore</b>	OH				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	IGRF2010	11/11/2010	11.15	65.89	52,392

<b>Design</b>	OH				
<b>Audit Notes:</b>					
<b>Version:</b>	1.0	<b>Phase:</b>	ACTUAL	<b>Tie On Depth:</b>	0.00
<b>Vertical Section:</b>	<b>Depth From (TVD) (ft)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Direction (°)</b>	
	0.00	0.00	0.00	12.93	

<b>Survey Program</b>	<b>Date</b>	12/13/2010			
<b>From (ft)</b>	<b>To (ft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Description</b>	
21.00	2,653.00	Survey #1 WEATHERFORD SURFACE M	MWD	MWD - Standard	
2,772.00	10,725.00	Survey #2 SDI PRODUCTION MWD (OH)	MWD SDI	MWD - Standard ver 1.0.1	

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	
21.00	0.00	0.00	21.00	0.00	0.00	0.00	0.00	0.00	0.00	
142.00	0.37	10.09	142.00	0.38	0.07	0.39	0.30	0.30	0.00	
<b>FIRST WEATHERFORD MWD SURFACE SURVEY</b>										
163.00	0.43	10.09	163.00	0.52	0.09	0.53	0.30	0.30	0.00	
249.00	0.34	14.62	249.00	1.09	0.21	1.11	0.11	-0.10	5.27	
334.00	0.34	23.20	334.00	1.57	0.38	1.61	0.06	0.00	10.09	
424.00	0.25	24.07	423.99	1.99	0.56	2.07	0.10	-0.10	0.97	
514.00	0.25	36.32	513.99	2.33	0.76	2.44	0.06	0.00	13.61	
604.00	0.31	32.19	603.99	2.69	1.00	2.85	0.07	0.07	-4.59	

**Company:** Kerr McGee Oil and Gas Onshore LP  
**Project:** Uintah County, UT UTM12  
**Site:** NBU 921-25F Pad  
**Well:** NBU 921-25F3AS  
**Wellbore:** OH  
**Design:** OH

**Local Co-ordinate Reference:** Well NBU 921-25F3AS  
**TVD Reference:** GL 4931 & RKB 25' @ 4956.00ft (H&P 307)  
**MD Reference:** GL 4931 & RKB 25' @ 4956.00ft (H&P 307)  
**North Reference:** True  
**Survey Calculation Method:** Minimum Curvature  
**Database:** EDM5000-RobertS-Local

**Survey**

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N-S (ft)	+E-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
694.00	0.19	90.94	693.99	2.90	1.28	3.11	0.30	-0.13	65.28
784.00	1.00	27.32	783.99	3.59	1.79	3.90	1.03	0.90	-70.69
874.00	2.81	20.48	873.93	6.36	2.93	6.85	2.02	2.01	-7.60
964.00	4.19	18.82	963.76	11.53	4.76	12.31	1.54	1.53	-1.84
1,054.00	6.25	16.82	1,053.38	19.34	7.24	20.47	2.30	2.29	-2.22
1,144.00	7.81	14.19	1,142.71	29.95	10.15	31.47	1.77	1.73	-2.92
1,234.00	10.00	10.69	1,231.62	43.56	13.10	45.39	2.51	2.43	-3.89
1,324.00	12.31	8.32	1,319.91	60.74	15.94	62.76	2.62	2.57	-2.63
1,414.00	14.40	10.82	1,407.47	81.23	19.43	83.51	2.41	2.32	2.78
1,504.00	16.50	13.32	1,494.22	104.66	24.48	107.48	2.45	2.33	2.78
1,594.00	18.00	12.44	1,580.17	130.67	30.42	134.17	1.69	1.67	-0.98
1,684.00	18.63	11.57	1,665.61	158.34	36.30	162.44	0.76	0.70	-0.97
1,774.00	18.88	12.94	1,750.83	186.61	42.44	191.38	0.56	0.28	1.52
1,864.00	19.06	13.19	1,835.94	215.11	49.05	220.63	0.22	0.20	0.28
1,954.00	18.50	14.57	1,921.15	243.24	56.00	249.60	0.79	-0.62	1.53
2,044.00	17.94	11.69	2,006.64	270.63	62.40	277.73	1.18	-0.62	-3.20
2,134.00	16.81	10.57	2,092.53	297.00	67.60	304.60	1.31	-1.26	-1.24
2,224.00	16.37	10.39	2,178.78	322.27	72.27	330.27	0.49	-0.49	-0.20
2,314.00	17.00	12.19	2,264.99	347.60	77.34	356.09	0.91	0.70	2.00
2,404.00	17.25	15.32	2,351.01	373.33	83.64	382.58	1.06	0.28	3.48
2,494.00	18.38	14.94	2,436.69	399.92	90.82	410.10	1.26	1.26	-0.42
2,584.00	17.19	14.19	2,522.39	426.52	97.74	437.58	1.35	-1.32	-0.83
2,653.00	16.70	12.61	2,588.39	446.08	102.41	457.68	0.97	-0.71	-2.29
<b>LAST WEATHERFORD MWD SURFACE SURVEY</b>									
2,772.00	15.92	7.81	2,702.61	478.94	108.36	491.04	1.31	-0.66	-4.03
<b>FIRST SDI MWD PRODUCTION SURVEY</b>									
2,866.00	13.63	9.30	2,793.49	502.64	111.90	514.94	2.47	-2.44	1.59
2,960.00	12.13	6.58	2,885.13	523.38	114.82	535.81	1.72	-1.60	-2.89
3,055.00	10.02	6.14	2,978.35	541.52	116.85	553.93	2.22	-2.22	-0.46
3,149.00	8.76	13.13	3,071.09	556.62	119.35	569.21	1.81	-1.34	7.44
3,243.00	6.42	12.29	3,164.26	568.73	122.09	581.63	2.49	-2.49	-0.89
3,338.00	4.57	10.97	3,258.82	577.64	123.95	590.72	1.95	-1.95	-1.39
3,432.00	2.81	2.19	3,352.62	583.61	124.75	596.73	1.96	-1.87	-9.34
3,527.00	0.26	41.56	3,447.58	586.10	124.98	599.21	2.75	-2.68	41.44
3,621.00	0.35	135.95	3,541.58	586.06	125.32	599.24	0.48	0.10	100.41
3,715.00	0.32	177.07	3,635.58	585.59	125.53	598.83	0.25	-0.03	43.74
3,810.00	1.49	194.93	3,730.57	584.13	125.23	597.34	1.25	1.23	18.80
3,904.00	1.67	204.51	3,824.53	581.70	124.34	594.78	0.34	0.19	10.19
3,998.00	1.32	188.25	3,918.50	579.38	123.62	592.36	0.58	-0.37	-17.30
4,093.00	1.82	193.11	4,013.46	576.83	123.12	589.76	0.54	0.53	5.12
4,187.00	2.02	185.53	4,107.41	573.73	122.62	586.62	0.34	0.21	-8.06
4,281.00	1.06	205.48	4,201.38	571.30	122.09	584.13	1.15	-1.02	21.22
4,376.00	0.77	192.12	4,296.36	569.88	121.58	582.63	0.38	-0.31	-14.06

**Company:** Kerr McGee Oil and Gas Onshore LP  
**Project:** Uintah County, UT UTM12  
**Site:** NBU 921-25F Pad  
**Well:** NBU 921-25F3AS  
**Wellbore:** OH  
**Design:** OH

**Local Co-ordinate Reference:** Well NBU 921-25F3AS  
**TVD Reference:** GL 4931 & RKB 25' @ 4956.00ft (H&P 307)  
**MD Reference:** GL 4931 & RKB 25' @ 4956.00ft (H&P 307)  
**North Reference:** True  
**Survey Calculation Method:** Minimum Curvature  
**Database:** EDM5000-RobertsS-Local

**Survey**

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
4,470.00	1.32	150.37	4,390.35	568.32	121.98	581.20	0.96	0.59	-44.41
4,565.00	1.23	68.63	4,485.33	567.74	123.47	580.97	1.76	-0.09	-86.04
4,659.00	1.23	77.42	4,579.31	568.33	125.40	581.98	0.20	0.00	9.35
4,753.00	0.35	296.18	4,673.31	568.67	126.12	582.48	1.62	-0.94	-150.26
4,848.00	0.35	233.86	4,768.30	568.63	125.63	582.32	0.38	0.00	-65.60
4,942.00	0.35	239.05	4,862.30	568.31	125.15	581.91	0.03	0.00	5.52
5,036.00	0.44	218.04	4,956.30	567.88	124.68	581.38	0.18	0.10	-22.35
5,131.00	0.97	333.18	5,051.30	568.31	124.09	581.67	1.29	0.56	121.20
5,225.00	0.35	350.76	5,145.29	569.31	123.69	582.55	0.69	-0.66	18.70
5,319.00	0.44	345.75	5,239.29	569.94	123.55	583.13	0.10	0.10	-5.33
5,414.00	0.26	50.44	5,334.28	570.43	123.63	583.63	0.43	-0.19	68.09
5,508.00	0.26	85.15	5,428.28	570.58	124.01	583.86	0.17	0.00	36.93
5,603.00	0.44	154.32	5,523.28	570.27	124.38	583.64	0.45	0.19	72.81
5,697.00	0.44	184.03	5,617.28	569.59	124.51	583.01	0.24	0.00	31.61
5,791.00	0.53	320.17	5,711.28	569.56	124.21	582.91	0.96	0.10	144.83
5,886.00	0.09	223.41	5,806.28	569.84	123.87	583.11	0.58	-0.46	-101.85
5,980.00	0.35	182.01	5,900.28	569.50	123.81	582.77	0.31	0.28	-44.04
6,074.00	0.70	212.33	5,994.27	568.73	123.50	581.94	0.46	0.37	32.26
6,168.00	0.88	355.86	6,088.27	568.97	123.14	582.09	1.60	0.19	152.69
6,263.00	0.97	356.38	6,183.26	570.50	123.03	583.56	0.10	0.09	0.55
6,357.00	0.44	308.92	6,277.25	571.52	122.70	584.48	0.79	-0.56	-50.49
6,451.00	0.09	111.52	6,371.25	571.72	122.49	584.63	0.56	-0.37	172.98
6,546.00	0.26	122.86	6,466.25	571.57	122.74	584.54	0.18	0.18	11.94
6,640.00	0.35	160.12	6,560.25	571.19	123.02	584.23	0.23	0.10	39.64
6,734.00	0.35	177.00	6,654.25	570.63	123.13	583.71	0.11	0.00	17.96
6,829.00	0.79	215.67	6,749.24	569.81	122.76	582.83	0.59	0.46	40.71
6,923.00	0.62	297.23	6,843.24	569.52	121.93	582.36	0.99	-0.18	86.77
7,017.00	0.44	351.99	6,937.23	570.11	121.43	582.82	0.55	-0.19	58.26
7,112.00	0.24	206.10	7,032.23	570.29	121.29	582.97	0.69	-0.21	-153.57
7,206.00	0.26	94.03	7,126.23	570.10	121.42	582.81	0.44	0.02	-119.22
7,301.00	0.35	146.15	7,221.23	569.84	121.80	582.64	0.29	0.09	54.86
7,395.00	0.53	161.88	7,315.23	569.19	122.09	582.08	0.23	0.19	16.73
7,489.00	0.53	347.86	7,409.23	569.20	122.13	582.10	1.13	0.00	-185.13
7,584.00	0.70	23.28	7,504.22	570.16	122.27	583.07	0.43	0.18	37.28
7,678.00	0.26	23.89	7,598.22	570.89	122.58	583.84	0.47	-0.47	0.65
7,772.00	0.09	82.87	7,692.22	571.09	122.74	584.07	0.24	-0.18	62.74
7,867.00	0.24	37.68	7,787.22	571.26	122.94	584.28	0.20	0.16	-47.57
7,961.00	0.53	77.95	7,881.21	571.50	123.49	584.64	0.40	0.31	42.84
8,056.00	0.18	71.09	7,976.21	571.64	124.06	584.91	0.37	-0.37	-7.22
8,150.00	0.42	173.57	8,070.21	571.35	124.23	584.66	0.52	0.26	109.02
8,244.00	0.67	154.22	8,164.21	570.51	124.51	583.91	0.33	0.27	-20.59
8,339.00	0.70	21.87	8,259.20	570.55	124.97	584.05	1.32	0.03	-139.32
8,433.00	0.62	85.15	8,353.20	571.13	125.69	584.77	0.74	-0.09	67.32
8,527.00	0.79	92.62	8,447.19	571.14	126.84	585.04	0.21	0.18	7.95

**Company:** Kerr McGee Oil and Gas Onshore LP  
**Project:** Uintah County, UT UTM12  
**Site:** NBU 921-25F Pad  
**Well:** NBU 921-25F3AS  
**Wellbore:** OH  
**Design:** OH

**Local Co-ordinate Reference:** Well NBU 921-25F3AS  
**TVD Reference:** GL 4931 & RKB 25' @ 4956.00ft (H&P 307)  
**MD Reference:** GL 4931 & RKB 25' @ 4956.00ft (H&P 307)  
**North Reference:** True  
**Survey Calculation Method:** Minimum Curvature  
**Database:** EDM5000-RobertS-Local

**Survey**

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
8,622.00	0.26	36.02	8,542.19	571.28	127.63	585.36	0.72	-0.56	-59.58	
8,716.00	0.18	166.98	8,636.19	571.31	127.78	585.42	0.43	-0.09	139.32	
8,810.00	0.18	148.70	8,730.19	571.04	127.89	585.18	0.06	0.00	-19.45	
8,905.00	0.62	161.27	8,825.18	570.43	128.14	584.64	0.47	0.46	13.23	
8,999.00	0.44	212.68	8,919.18	569.64	128.11	583.86	0.52	-0.19	54.69	
9,093.00	0.44	243.44	9,013.18	569.18	127.59	583.29	0.25	0.00	32.72	
9,188.00	0.35	179.20	9,108.18	568.72	127.27	582.78	0.45	-0.09	-67.62	
9,283.00	0.88	236.41	9,203.17	568.03	126.66	581.97	0.79	0.56	60.22	
9,377.00	0.62	243.44	9,297.16	567.40	125.61	581.12	0.29	-0.28	7.48	
9,472.00	0.79	198.80	9,392.16	566.55	124.93	580.14	0.59	0.18	-46.99	
9,566.00	0.35	72.23	9,486.15	566.03	125.00	579.65	1.10	-0.47	-134.65	
9,660.00	0.48	118.53	9,580.15	565.93	125.62	579.69	0.37	0.14	49.26	
9,755.00	1.23	105.63	9,675.14	565.46	126.95	579.53	0.81	0.79	-13.58	
9,849.00	0.53	107.65	9,769.13	565.06	128.34	579.45	0.75	-0.74	2.15	
9,943.00	0.29	38.85	9,863.13	565.11	128.90	579.63	0.54	-0.26	-73.19	
10,038.00	0.44	56.68	9,958.12	565.50	129.35	580.11	0.20	0.16	18.77	
10,132.00	0.35	85.42	10,052.12	565.72	129.94	580.45	0.23	-0.10	30.57	
10,226.00	0.09	113.89	10,146.12	565.71	130.30	580.52	0.29	-0.28	30.29	
10,321.00	0.35	110.11	10,241.12	565.58	130.64	580.47	0.27	0.27	-3.98	
10,415.00	0.44	132.09	10,335.12	565.24	131.17	580.26	0.19	0.10	23.38	
10,510.00	0.97	135.78	10,430.11	564.42	132.01	579.65	0.56	0.56	3.88	
10,604.00	0.97	150.37	10,524.10	563.16	132.95	578.63	0.26	0.00	15.52	
10,666.00	1.43	143.75	10,586.08	562.08	133.67	577.74	0.77	0.74	-10.68	
<b>LAST SDI MWD PRODUCTION SURVEY</b>			10,600.2							
10,725.00	1.43	143.75	10,645.07	560.89	134.54	576.78	0.00	0.00	0.00	
<b>SDI PROJECTION TO TD</b>										

**Design Annotations**

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
142.00	142.00	0.38	0.07	FIRST WEATHERFORD MWD SURFACE SURVEY
2,653.00	2,588.39	446.08	102.41	LAST WEATHERFORD MWD SURFACE SURVEY
2,772.00	2,702.61	478.94	108.36	FIRST SDI MWD PRODUCTION SURVEY
10,666.00	10,586.08	562.08	133.67	LAST SDI MWD PRODUCTION SURVEY
10,725.00	10,645.07	560.89	134.54	SDI PROJECTION TO TD

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



**Scientific Drilling**  
Rocky Mountain Operations

# **Kerr McGee Oil and Gas Onshore LP**

Uintah County, UT UTM12  
NBU 921-25F Pad  
NBU 921-25F3AS

OH

Design: OH

## **Survey Report - Geographic**

13 December, 2010

<b>Company:</b>	Kerr McGee Oil and Gas Onshore LP	<b>Local Co-ordinate Reference:</b>	Well NBU 921-25F3AS
<b>Project:</b>	Uintah County, UT UTM12	<b>TVD Reference:</b>	GL 4931 & RKB 25' @ 4956.00ft (H&P 307)
<b>Site:</b>	NBU 921-25F Pad	<b>MD Reference:</b>	GL 4931 & RKB 25' @ 4956.00ft (H&P 307)
<b>Well:</b>	NBU 921-25F3AS	<b>North Reference:</b>	True
<b>Wellbore:</b>	OH	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	OH	<b>Database:</b>	EDM5000-RobertS-Local

<b>Project</b>	Uintah County, UT UTM12		
<b>Map System:</b>	Universal Transverse Mercator (US Survey Feet)	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	NAD 1927 - Western US		
<b>Map Zone:</b>	Zone 12N (114 W to 108 W)		

<b>Site</b>	NBU 921-25F Pad, SEC 25 T9S R21E				
<b>Site Position:</b>	<b>Northing:</b>	14,532,166.00 usft	<b>Latitude:</b>	40° 0' 25.686 N	
<b>From:</b>	Lat/Long	<b>Easting:</b>	2,059,767.87 usft	<b>Longitude:</b>	109° 30' 9.011 W
<b>Position Uncertainty:</b>	0.00 ft	<b>Slot Radius:</b>	13.200 in	<b>Grid Convergence:</b>	0.96 °

<b>Well</b>	NBU 921-25F3AS, 2589' FNL 1776' FWL					
<b>Well Position</b>	<b>+N/-S</b>	0.00 ft	<b>Northing:</b>	14,532,184.35 usft	<b>Latitude:</b>	40° 0' 25.866 N
	<b>+E/-W</b>	0.00 ft	<b>Easting:</b>	2,059,775.96 usft	<b>Longitude:</b>	109° 30' 8.903 W
<b>Position Uncertainty</b>	0.00 ft	<b>Wellhead Elevation:</b>	ft	<b>Ground Level:</b>	4,931.00 ft	

<b>Wellbore</b>	OH				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	IGRF2010	11/11/2010	11.15	65.89	52,392

<b>Design</b>	OH				
<b>Audit Notes:</b>					
<b>Version:</b>	1.0	<b>Phase:</b>	ACTUAL	<b>Tie On Depth:</b>	0.00
<b>Vertical Section:</b>	<b>Depth From (TVD) (ft)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Direction (°)</b>	
	0.00	0.00	0.00	12.93	

<b>Survey Program</b>	<b>Date</b>	12/13/2010			
<b>From (ft)</b>	<b>To (ft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Description</b>	
21.00	2,653.00	Survey #1 WEATHERFORD SURFACE M	MWD	MWD - Standard	
2,772.00	10,725.00	Survey #2 SDI PRODUCTION MWD (OH)	MWD SDI	MWD - Standard ver 1.0.1	

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
0.00	0.00	0.00	0.00	0.00	0.00	14,532,184.35	2,059,775.96	40° 0' 25.866 N	109° 30' 8.903 W
21.00	0.00	0.00	21.00	0.00	0.00	14,532,184.35	2,059,775.96	40° 0' 25.866 N	109° 30' 8.903 W
142.00	0.37	10.09	142.00	0.38	0.07	14,532,184.73	2,059,776.02	40° 0' 25.870 N	109° 30' 8.902 W
<b>FIRST WEATHERFORD MWD SURFACE SURVEY</b>									
163.00	0.43	10.09	163.00	0.52	0.09	14,532,184.88	2,059,776.05	40° 0' 25.871 N	109° 30' 8.902 W
249.00	0.34	14.62	249.00	1.09	0.21	14,532,185.44	2,059,776.16	40° 0' 25.877 N	109° 30' 8.900 W
334.00	0.34	23.20	334.00	1.57	0.38	14,532,185.92	2,059,776.31	40° 0' 25.881 N	109° 30' 8.898 W
424.00	0.25	24.07	423.99	1.99	0.56	14,532,186.35	2,059,776.49	40° 0' 25.886 N	109° 30' 8.896 W
514.00	0.25	36.32	513.99	2.33	0.76	14,532,186.69	2,059,776.68	40° 0' 25.889 N	109° 30' 8.893 W
604.00	0.31	32.19	603.99	2.69	1.00	14,532,187.06	2,059,776.92	40° 0' 25.893 N	109° 30' 8.890 W
694.00	0.19	90.94	693.99	2.90	1.28	14,532,187.27	2,059,777.20	40° 0' 25.895 N	109° 30' 8.886 W

**Company:** Kerr McGee Oil and Gas Onshore LP  
**Project:** Uintah County, UT UTM12  
**Site:** NBU 921-25F Pad  
**Well:** NBU 921-25F3AS  
**Wellbore:** OH  
**Design:** OH

**Local Co-ordinate Reference:** Well NBU 921-25F3AS  
**TVD Reference:** GL 4931 & RKB 25' @ 4956.00ft (H&P 307)  
**MD Reference:** GL 4931 & RKB 25' @ 4956.00ft (H&P 307)  
**North Reference:** True  
**Survey Calculation Method:** Minimum Curvature  
**Database:** EDM5000-RobertS-Local

Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude	
784.00	1.00	27.32	783.99	3.59	1.79	14,532,187.97	2,059,777.70	40° 0' 25.901 N	109° 30' 8.880 W	
874.00	2.81	20.48	873.93	6.36	2.93	14,532,190.75	2,059,778.78	40° 0' 25.929 N	109° 30' 8.865 W	
964.00	4.19	18.82	963.76	11.53	4.76	14,532,195.96	2,059,780.53	40° 0' 25.980 N	109° 30' 8.842 W	
1,054.00	6.25	16.82	1,053.38	19.34	7.24	14,532,203.81	2,059,782.87	40° 0' 26.057 N	109° 30' 8.810 W	
1,144.00	7.81	14.19	1,142.71	29.95	10.15	14,532,214.47	2,059,785.61	40° 0' 26.162 N	109° 30' 8.772 W	
1,234.00	10.00	10.69	1,231.62	43.56	13.10	14,532,228.13	2,059,788.33	40° 0' 26.297 N	109° 30' 8.734 W	
1,324.00	12.31	8.32	1,319.91	60.74	15.94	14,532,245.35	2,059,790.88	40° 0' 26.466 N	109° 30' 8.698 W	
1,414.00	14.40	10.82	1,407.47	81.23	19.43	14,532,265.89	2,059,794.03	40° 0' 26.669 N	109° 30' 8.653 W	
1,504.00	16.50	13.32	1,494.22	104.66	24.48	14,532,289.40	2,059,798.68	40° 0' 26.900 N	109° 30' 8.588 W	
1,594.00	18.00	12.44	1,580.17	130.67	30.42	14,532,315.52	2,059,804.18	40° 0' 27.158 N	109° 30' 8.512 W	
1,684.00	18.63	11.57	1,665.61	158.34	36.30	14,532,343.28	2,059,809.59	40° 0' 27.431 N	109° 30' 8.436 W	
1,774.00	18.88	12.94	1,750.83	186.61	42.44	14,532,371.65	2,059,815.26	40° 0' 27.711 N	109° 30' 8.357 W	
1,864.00	19.06	13.19	1,835.94	215.11	49.05	14,532,400.26	2,059,821.39	40° 0' 27.992 N	109° 30' 8.272 W	
1,954.00	18.50	14.57	1,921.15	243.24	56.00	14,532,428.50	2,059,827.87	40° 0' 28.270 N	109° 30' 8.183 W	
2,044.00	17.94	11.69	2,006.64	270.63	62.40	14,532,455.99	2,059,833.81	40° 0' 28.541 N	109° 30' 8.101 W	
2,134.00	16.81	10.57	2,092.53	297.00	67.60	14,532,482.44	2,059,838.56	40° 0' 28.802 N	109° 30' 8.034 W	
2,224.00	16.37	10.39	2,178.78	322.27	72.27	14,532,507.79	2,059,842.81	40° 0' 29.051 N	109° 30' 7.974 W	
2,314.00	17.00	12.19	2,264.99	347.60	77.34	14,532,533.20	2,059,847.45	40° 0' 29.302 N	109° 30' 7.909 W	
2,404.00	17.25	15.32	2,351.01	373.33	83.64	14,532,559.04	2,059,853.32	40° 0' 29.556 N	109° 30' 7.828 W	
2,494.00	18.38	14.94	2,436.69	399.92	90.82	14,532,585.73	2,059,860.05	40° 0' 29.819 N	109° 30' 7.735 W	
2,584.00	17.19	14.19	2,522.39	426.52	97.74	14,532,612.45	2,059,866.52	40° 0' 30.082 N	109° 30' 7.646 W	
2,653.00	16.70	12.61	2,588.39	446.08	102.41	14,532,632.09	2,059,870.86	40° 0' 30.275 N	109° 30' 7.587 W	
<b>LAST WEATHERFORD MWD SURFACE SURVEY</b>										
2,772.00	15.92	7.81	2,702.61	478.94	108.36	14,532,665.04	2,059,876.26	40° 0' 30.600 N	109° 30' 7.510 W	
<b>FIRST SDI MWD PRODUCTION SURVEY</b>										
2,866.00	13.63	9.30	2,793.49	502.64	111.90	14,532,688.80	2,059,879.40	40° 0' 30.834 N	109° 30' 7.465 W	
2,960.00	12.13	6.58	2,885.13	523.38	114.82	14,532,709.59	2,059,881.97	40° 0' 31.039 N	109° 30' 7.427 W	
3,055.00	10.02	6.14	2,978.35	541.52	116.85	14,532,727.76	2,059,883.69	40° 0' 31.219 N	109° 30' 7.401 W	
3,149.00	8.76	13.13	3,071.09	556.62	119.35	14,532,742.90	2,059,885.94	40° 0' 31.368 N	109° 30' 7.369 W	
3,243.00	6.42	12.29	3,164.26	568.73	122.09	14,532,755.05	2,059,888.48	40° 0' 31.488 N	109° 30' 7.333 W	
3,338.00	4.57	10.97	3,258.82	577.64	123.95	14,532,763.99	2,059,890.18	40° 0' 31.576 N	109° 30' 7.310 W	
3,432.00	2.81	2.19	3,352.62	583.61	124.75	14,532,769.98	2,059,890.88	40° 0' 31.635 N	109° 30' 7.299 W	
3,527.00	0.26	41.56	3,447.58	586.10	124.98	14,532,772.47	2,059,891.07	40° 0' 31.659 N	109° 30' 7.296 W	
3,621.00	0.35	135.95	3,541.58	586.06	125.32	14,532,772.43	2,059,891.42	40° 0' 31.659 N	109° 30' 7.292 W	
3,715.00	0.32	177.07	3,635.58	585.59	125.53	14,532,771.96	2,059,891.64	40° 0' 31.654 N	109° 30' 7.289 W	
3,810.00	1.49	194.93	3,730.57	584.13	125.23	14,532,770.50	2,059,891.36	40° 0' 31.640 N	109° 30' 7.293 W	
3,904.00	1.67	204.51	3,824.53	581.70	124.34	14,532,768.06	2,059,890.51	40° 0' 31.616 N	109° 30' 7.305 W	
3,998.00	1.32	188.25	3,918.50	579.38	123.62	14,532,765.73	2,059,889.83	40° 0' 31.593 N	109° 30' 7.314 W	
4,093.00	1.82	193.11	4,013.46	576.83	123.12	14,532,763.17	2,059,889.37	40° 0' 31.568 N	109° 30' 7.320 W	
4,187.00	2.02	185.53	4,107.41	573.73	122.62	14,532,760.06	2,059,888.93	40° 0' 31.537 N	109° 30' 7.327 W	
4,281.00	1.06	205.48	4,201.38	571.30	122.09	14,532,757.62	2,059,888.43	40° 0' 31.513 N	109° 30' 7.334 W	
4,376.00	0.77	192.12	4,296.36	569.88	121.58	14,532,756.19	2,059,887.95	40° 0' 31.499 N	109° 30' 7.340 W	
4,470.00	1.32	150.37	4,390.35	568.32	121.98	14,532,754.64	2,059,888.38	40° 0' 31.484 N	109° 30' 7.335 W	
4,565.00	1.23	68.63	4,485.33	567.74	123.47	14,532,754.08	2,059,889.88	40° 0' 31.478 N	109° 30' 7.316 W	
4,659.00	1.23	77.42	4,579.31	568.33	125.40	14,532,754.70	2,059,891.79	40° 0' 31.484 N	109° 30' 7.291 W	
4,753.00	0.35	296.18	4,673.31	568.67	126.12	14,532,755.06	2,059,892.51	40° 0' 31.487 N	109° 30' 7.282 W	
4,848.00	0.35	233.86	4,768.30	568.63	125.63	14,532,755.01	2,059,892.02	40° 0' 31.487 N	109° 30' 7.288 W	
4,942.00	0.35	239.05	4,862.30	568.31	125.15	14,532,754.69	2,059,891.54	40° 0' 31.483 N	109° 30' 7.294 W	
5,036.00	0.44	218.04	4,956.30	567.88	124.68	14,532,754.25	2,059,891.08	40° 0' 31.479 N	109° 30' 7.300 W	
5,131.00	0.97	333.18	5,051.30	568.31	124.09	14,532,754.67	2,059,890.49	40° 0' 31.483 N	109° 30' 7.308 W	
5,225.00	0.35	350.76	5,145.29	569.31	123.69	14,532,755.65	2,059,890.07	40° 0' 31.493 N	109° 30' 7.313 W	
5,319.00	0.44	345.75	5,239.29	569.94	123.55	14,532,756.28	2,059,889.92	40° 0' 31.500 N	109° 30' 7.315 W	
5,414.00	0.26	50.44	5,334.28	570.43	123.63	14,532,756.78	2,059,889.99	40° 0' 31.504 N	109° 30' 7.314 W	
5,508.00	0.26	85.15	5,428.28	570.58	124.01	14,532,756.94	2,059,890.36	40° 0' 31.506 N	109° 30' 7.309 W	
5,603.00	0.44	154.32	5,523.28	570.27	124.38	14,532,756.63	2,059,890.74	40° 0' 31.503 N	109° 30' 7.304 W	

**Company:** Kerr McGee Oil and Gas Onshore LP  
**Project:** Uintah County, UT UTM12  
**Site:** NBU 921-25F Pad  
**Well:** NBU 921-25F3AS  
**Wellbore:** OH  
**Design:** OH

**Local Co-ordinate Reference:** Well NBU 921-25F3AS  
**TVD Reference:** GL 4931 & RKB 25' @ 4956.00ft (H&P 307)  
**MD Reference:** GL 4931 & RKB 25' @ 4956.00ft (H&P 307)  
**North Reference:** True  
**Survey Calculation Method:** Minimum Curvature  
**Database:** EDM5000-RobertS-Local

Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude	
5,697.00	0.44	184.03	5,617.28	569.59	124.51	14,532,755.95	2,059,890.88	40° 0' 31.496 N	109° 30' 7.302 W	
5,791.00	0.53	320.17	5,711.28	569.56	124.21	14,532,755.92	2,059,890.58	40° 0' 31.496 N	109° 30' 7.306 W	
5,886.00	0.09	223.41	5,806.28	569.84	123.87	14,532,756.19	2,059,890.24	40° 0' 31.499 N	109° 30' 7.311 W	
5,980.00	0.35	182.01	5,900.28	569.50	123.81	14,532,755.85	2,059,890.19	40° 0' 31.495 N	109° 30' 7.311 W	
6,074.00	0.70	212.33	5,994.27	568.73	123.50	14,532,755.08	2,059,889.88	40° 0' 31.488 N	109° 30' 7.315 W	
6,168.00	0.88	355.86	6,088.27	568.97	123.14	14,532,755.30	2,059,889.52	40° 0' 31.490 N	109° 30' 7.320 W	
6,263.00	0.97	356.38	6,183.26	570.50	123.03	14,532,756.83	2,059,889.39	40° 0' 31.505 N	109° 30' 7.321 W	
6,357.00	0.44	308.92	6,277.25	571.52	122.70	14,532,757.85	2,059,889.04	40° 0' 31.515 N	109° 30' 7.326 W	
6,451.00	0.09	111.52	6,371.25	571.72	122.49	14,532,758.04	2,059,888.83	40° 0' 31.517 N	109° 30' 7.328 W	
6,546.00	0.26	122.86	6,466.25	571.57	122.74	14,532,757.90	2,059,889.08	40° 0' 31.516 N	109° 30' 7.325 W	
6,640.00	0.35	160.12	6,560.25	571.19	123.02	14,532,757.52	2,059,889.36	40° 0' 31.512 N	109° 30' 7.322 W	
6,734.00	0.35	177.00	6,654.25	570.63	123.13	14,532,756.97	2,059,889.49	40° 0' 31.506 N	109° 30' 7.320 W	
6,829.00	0.79	215.67	6,749.24	569.81	122.76	14,532,756.14	2,059,889.13	40° 0' 31.498 N	109° 30' 7.325 W	
6,923.00	0.62	297.23	6,843.24	569.52	121.93	14,532,755.83	2,059,888.31	40° 0' 31.495 N	109° 30' 7.336 W	
7,017.00	0.44	351.99	6,937.23	570.11	121.43	14,532,756.41	2,059,887.80	40° 0' 31.501 N	109° 30' 7.342 W	
7,112.00	0.24	206.10	7,032.23	570.29	121.29	14,532,756.59	2,059,887.65	40° 0' 31.503 N	109° 30' 7.344 W	
7,206.00	0.26	94.03	7,126.23	570.10	121.42	14,532,756.40	2,059,887.78	40° 0' 31.501 N	109° 30' 7.342 W	
7,301.00	0.35	146.15	7,221.23	569.84	121.80	14,532,756.16	2,059,888.16	40° 0' 31.499 N	109° 30' 7.337 W	
7,395.00	0.53	161.88	7,315.23	569.19	122.09	14,532,755.51	2,059,888.47	40° 0' 31.492 N	109° 30' 7.334 W	
7,489.00	0.53	347.86	7,409.23	569.20	122.13	14,532,755.52	2,059,888.51	40° 0' 31.492 N	109° 30' 7.333 W	
7,584.00	0.70	23.28	7,504.22	570.16	122.27	14,532,756.49	2,059,888.63	40° 0' 31.502 N	109° 30' 7.331 W	
7,678.00	0.26	23.89	7,598.22	570.89	122.58	14,532,757.21	2,059,888.94	40° 0' 31.509 N	109° 30' 7.327 W	
7,772.00	0.09	82.87	7,692.22	571.09	122.74	14,532,757.42	2,059,889.09	40° 0' 31.511 N	109° 30' 7.325 W	
7,867.00	0.24	37.68	7,787.22	571.26	122.94	14,532,757.59	2,059,889.28	40° 0' 31.513 N	109° 30' 7.323 W	
7,961.00	0.53	77.95	7,881.21	571.50	123.49	14,532,757.85	2,059,889.83	40° 0' 31.515 N	109° 30' 7.316 W	
8,056.00	0.18	71.09	7,976.21	571.64	124.06	14,532,758.00	2,059,890.39	40° 0' 31.516 N	109° 30' 7.308 W	
8,150.00	0.42	173.57	8,070.21	571.35	124.23	14,532,757.70	2,059,890.58	40° 0' 31.513 N	109° 30' 7.306 W	
8,244.00	0.67	154.22	8,164.21	570.51	124.51	14,532,756.87	2,059,890.87	40° 0' 31.505 N	109° 30' 7.302 W	
8,339.00	0.70	21.87	8,259.20	570.55	124.97	14,532,756.92	2,059,891.33	40° 0' 31.506 N	109° 30' 7.297 W	
8,433.00	0.62	85.15	8,353.20	571.13	125.69	14,532,757.51	2,059,892.04	40° 0' 31.511 N	109° 30' 7.287 W	
8,527.00	0.79	92.62	8,447.19	571.14	126.84	14,532,757.54	2,059,893.19	40° 0' 31.511 N	109° 30' 7.272 W	
8,622.00	0.26	36.02	8,542.19	571.28	127.63	14,532,757.70	2,059,893.97	40° 0' 31.513 N	109° 30' 7.262 W	
8,716.00	0.18	166.98	8,636.19	571.31	127.78	14,532,757.73	2,059,894.13	40° 0' 31.513 N	109° 30' 7.260 W	
8,810.00	0.18	148.70	8,730.19	571.04	127.89	14,532,757.46	2,059,894.24	40° 0' 31.510 N	109° 30' 7.259 W	
8,905.00	0.62	161.27	8,825.18	570.43	128.14	14,532,756.85	2,059,894.49	40° 0' 31.504 N	109° 30' 7.256 W	
8,999.00	0.44	212.68	8,919.18	569.64	128.11	14,532,756.06	2,059,894.48	40° 0' 31.497 N	109° 30' 7.256 W	
9,093.00	0.44	243.44	9,013.18	569.18	127.59	14,532,755.59	2,059,893.97	40° 0' 31.492 N	109° 30' 7.263 W	
9,188.00	0.35	179.20	9,108.18	568.72	127.27	14,532,755.13	2,059,893.65	40° 0' 31.488 N	109° 30' 7.267 W	
9,283.00	0.88	236.41	9,203.17	568.03	126.66	14,532,754.43	2,059,893.06	40° 0' 31.481 N	109° 30' 7.275 W	
9,377.00	0.62	243.44	9,297.16	567.40	125.61	14,532,753.78	2,059,892.01	40° 0' 31.474 N	109° 30' 7.288 W	
9,472.00	0.79	198.80	9,392.16	566.55	124.93	14,532,752.92	2,059,891.36	40° 0' 31.466 N	109° 30' 7.297 W	
9,566.00	0.35	72.23	9,486.15	566.03	125.00	14,532,752.40	2,059,891.43	40° 0' 31.461 N	109° 30' 7.296 W	
9,660.00	0.48	118.53	9,580.15	565.93	125.62	14,532,752.31	2,059,892.05	40° 0' 31.460 N	109° 30' 7.288 W	
9,755.00	1.23	105.63	9,675.14	565.46	126.95	14,532,751.86	2,059,893.39	40° 0' 31.455 N	109° 30' 7.271 W	
9,849.00	0.53	107.65	9,769.13	565.06	128.34	14,532,751.48	2,059,894.78	40° 0' 31.451 N	109° 30' 7.253 W	
9,943.00	0.29	38.85	9,863.13	565.11	128.90	14,532,751.55	2,059,895.35	40° 0' 31.452 N	109° 30' 7.246 W	
10,038.00	0.44	56.68	9,958.12	565.50	129.35	14,532,751.94	2,059,895.80	40° 0' 31.456 N	109° 30' 7.240 W	
10,132.00	0.35	85.42	10,052.12	565.72	129.94	14,532,752.17	2,059,896.38	40° 0' 31.458 N	109° 30' 7.233 W	
10,226.00	0.09	113.89	10,146.12	565.71	130.30	14,532,752.17	2,059,896.73	40° 0' 31.458 N	109° 30' 7.228 W	
10,321.00	0.35	110.11	10,241.12	565.58	130.64	14,532,752.05	2,059,897.08	40° 0' 31.456 N	109° 30' 7.224 W	
10,415.00	0.44	132.09	10,335.12	565.24	131.17	14,532,751.72	2,059,897.62	40° 0' 31.453 N	109° 30' 7.217 W	
10,510.00	0.97	135.78	10,430.11	564.42	132.01	14,532,750.91	2,059,898.46	40° 0' 31.445 N	109° 30' 7.206 W	
10,604.00	0.97	150.37	10,524.10	563.16	132.95	14,532,749.66	2,059,899.43	40° 0' 31.433 N	109° 30' 7.194 W	
10,666.00	1.43	143.75	10,586.08	562.08	133.67	14,532,748.60	2,059,900.17	40° 0' 31.422 N	109° 30' 7.185 W	

LAST SDI MWD PRODUCTION SURVEY

**Company:** Kerr McGee Oil and Gas Onshore LP  
**Project:** Uintah County, UT UTM12  
**Site:** NBU 921-25F Pad  
**Well:** NBU 921-25F3AS  
**Wellbore:** OH  
**Design:** OH

**Local Co-ordinate Reference:** Well NBU 921-25F3AS  
**TVD Reference:** GL 4931 & RKB 25' @ 4956.00ft (H&P 307)  
**MD Reference:** GL 4931 & RKB 25' @ 4956.00ft (H&P 307)  
**North Reference:** True  
**Survey Calculation Method:** Minimum Curvature  
**Database:** EDM5000-RobertsS-Local

Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude	
10,725.00	1.43	143.75	10,645.07	560.89	134.54	14,532,747.42	2,059,901.06	40° 0' 31.410 N	109° 30' 7.173 W	
<b>SDI PROJECTION TO TD</b>										

Design Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates			Comment
		+N/-S (ft)	+E/-W (ft)		
142.00	142.00	0.38	0.07		FIRST WEATHERFORD MWD SURFACE SURVEY
2,653.00	2,588.39	446.08	102.41		LAST WEATHERFORD MWD SURFACE SURVEY
2,772.00	2,702.61	478.94	108.36		FIRST SDI MWD PRODUCTION SURVEY
10,666.00	10,586.08	562.08	133.67		LAST SDI MWD PRODUCTION SURVEY
10,725.00	10,645.07	560.89	134.54		SDI PROJECTION TO TD

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

Carol Daniels - Copy of NotificationForm\_HP307.921-25F3AS.docm

From: "Anadarko - H & P 307"  
To:  
Date: 12/2/2010 2:19 PM  
Subject: Copy of NotificationForm\_HP307.921-25F3AS.docm

TESTING BOP

BLM - Vernal Field Office - Notification Form

Operator Anadarko Rig Name/# HP307  
Submitted By KENNY CRUTH Phone Number 435 790-2016  
Well Name/Number NBU 921- 25 F3AS  
Qtr/Qtr NE/SE Section 25 Township 9S Range 21E  
Lease Serial Number ML  
UO1194ST  
API Number  
43047512450000

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

Date/Time \_\_\_\_\_ AM PM

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

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

RECEIVED

DEC 02 2010

BUREAU OF OIL, GAS & MINING

Date/Time \_ AM PM

BOPE

- Initial BOPE test at surface casing point
- BOPE test at intermediate casing point

30 day BOPE test  
Other

Date/Time 12/02/2010 14:00 AM PM

Remarks SHOULD START TESTING BOPS AROUND 19:00 ON  
12/03/2010

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