

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

FORM 3

AMENDED REPORT

APPLICATION FOR PERMIT TO DRILL		1. WELL NAME and NUMBER NBU 921-25C MW1
2. TYPE OF WORK DRILL NEW WELL <input checked="" type="checkbox"/> REENTER P&A WELL <input type="checkbox"/> DEEPEN WELL <input type="checkbox"/>		3. FIELD OR WILDCAT NATURAL BUTTES
4. TYPE OF WELL Test Well Coalbed Methane Well: NO		5. UNIT or COMMUNITIZATION AGREEMENT NAME NATURAL BUTTES
6. NAME OF OPERATOR KERR-MCGEE OIL & GAS ONSHORE, L.P.		7. OPERATOR PHONE 720 929-6515
8. ADDRESS OF OPERATOR P.O. Box 173779, Denver, CO, 80217		9. OPERATOR E-MAIL julie.jacobson@anadarko.com
10. MINERAL LEASE NUMBER (FEDERAL, INDIAN, OR STATE) UO 01189 ST	11. MINERAL OWNERSHIP FEDERAL <input type="checkbox"/> INDIAN <input type="checkbox"/> STATE <input checked="" type="checkbox"/> FEE <input type="checkbox"/>	
12. SURFACE OWNERSHIP FEDERAL <input type="checkbox"/> INDIAN <input type="checkbox"/> STATE <input checked="" type="checkbox"/> FEE <input type="checkbox"/>		13. NAME OF SURFACE OWNER (if box 12 = 'fee')
14. SURFACE OWNER PHONE (if box 12 = 'fee')		15. ADDRESS OF SURFACE OWNER (if box 12 = 'fee')
16. SURFACE OWNER E-MAIL (if box 12 = 'fee')		17. INDIAN ALLOTTEE OR TRIBE NAME (if box 12 = 'INDIAN')
18. INTEND TO COMMINGLE PRODUCTION FROM MULTIPLE FORMATIONS YES <input type="checkbox"/> (Submit Commingling Application) NO <input checked="" type="checkbox"/>		19. SLANT VERTICAL <input type="checkbox"/> DIRECTIONAL <input checked="" type="checkbox"/> HORIZONTAL <input type="checkbox"/>

20. LOCATION OF WELL	FOOTAGES	QTR-QTR	SECTION	TOWNSHIP	RANGE	MERIDIAN
LOCATION AT SURFACE	793 FNL 900 FWL	NWNW	25	9.0 S	21.0 E	S
Top of Uppermost Producing Zone	658 FNL 1975 FWL	NENW	25	9.0 S	21.0 E	S
At Total Depth	658 FNL 1975 FWL	NENW	25	9.0 S	21.0 E	S

21. COUNTY UINTAH	22. DISTANCE TO NEAREST LEASE LINE (Feet) 658	23. NUMBER OF ACRES IN DRILLING UNIT 240
25. DISTANCE TO NEAREST WELL IN SAME POOL (Applied For Drilling or Completed) 6	26. PROPOSED DEPTH MD: 10920 TVD: 10750	
27. ELEVATION - GROUND LEVEL 4941	28. BOND NUMBER 22013542	29. SOURCE OF DRILLING WATER / WATER RIGHTS APPROVAL NUMBER IF APPLICABLE Permit #43-8496

Hole, Casing, and Cement Information										
String	Hole Size	Casing Size	Length	Weight	Grade & Thread	Max Mud Wt.	Cement	Sacks	Yield	Weight
Surf	11	8.625	0 - 2630	28.0	J-55 LT&C	8.4	Type V	180	1.15	15.8
							Class G	270	1.15	15.8
Prod	7.875	4.5	0 - 7300	11.6	I-80 LT&C	12.5	None	0	0.0	0.0
							None	0	0.0	0.0
L1	7.875	3.5	7300 - 10920	9.3	L-80 LT&C	12.5	Premium Lite High Strength	320	3.38	11.0
							50/50 Poz	1970	1.31	14.3

ATTACHMENTS

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

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

NAME Andy Lytle	TITLE Regulatory Analyst	PHONE 720 929-6100
SIGNATURE	DATE 04/28/2011	EMAIL andrew.lytle@anadarko.com
API NUMBER ASSIGNED 43047515670000	APPROVAL  Permit Manager	

Kerr-McGee Oil & Gas Onshore. L.P.**NBU 921-25C MW1**

Surface: 793 FNL / 900 FWL NWNW
 BHL: 658 FNL / 1975 FWL NENW

Section 25 T9S R21E

Unitah County, Utah
 Mineral Lease: UO 01189 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	1516	
Birds Nest	1808	Water
Mahogany	2181	Water
Wasatch	4787	Gas
Mesaverde	7486	Gas
MVU2	8431	Gas
MVL1	8992	Gas
Sego	9716	Gas
Castlegate	9761	Gas
MN5	10185	Gas
TVD	10750	Gas
TD	10920	Gas

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 bottom hole pressure calculated at 10750' TVD, approximately equals
6,865 psi (0.64 psi/ft = actual bottomhole gradient)

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

Maximum anticipated surface pressure equals approximately 4,500 psi (bottom hole pressure
minus the pressure of a partially evacuated hole calculated at 0.22 psi/foot, per Onshore Order No. 2).

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

8. **Anticipated Starting Dates:**

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

9. **Variances:**

Please refer to the attached 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 11 inch hole to just above the Bird's Nest interval with an air hammer. The hammer is then tripped and replaced with a 11 inch tri-cone bit. The tri-cone bit is used to drill to the surface casing point, approximately 500 feet below the loss circulation zone (Bird's Nest). The 8-5/8 inch surface casing is then run and cemented in place, thereby isolating the lost circulation zone.

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

Variance for BOPE Requirements

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

Variance for Mud Material Requirements

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

Variance for Special Drilling Operation (surface equipment placement) Requirements

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

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

Typically the air rig compressors are required to be located in the opposite direction from the blooie line and a minimum of 100 feet from the well bore. At the KMG locations, the air rig compressors are approximately 40 feet from the well bore and approximately 60 feet from the blooie line discharge due to the unique air rig design. The air compressors (see attachment) are located on the rig (1250 cfm) and

on a standby trailer (1170 cfm). A booster sits between the two compressors and boosts the output from 350 psi to 2000 psi. The design does put the booster and standby compressor opposite from the blooie line.

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

Conclusion

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

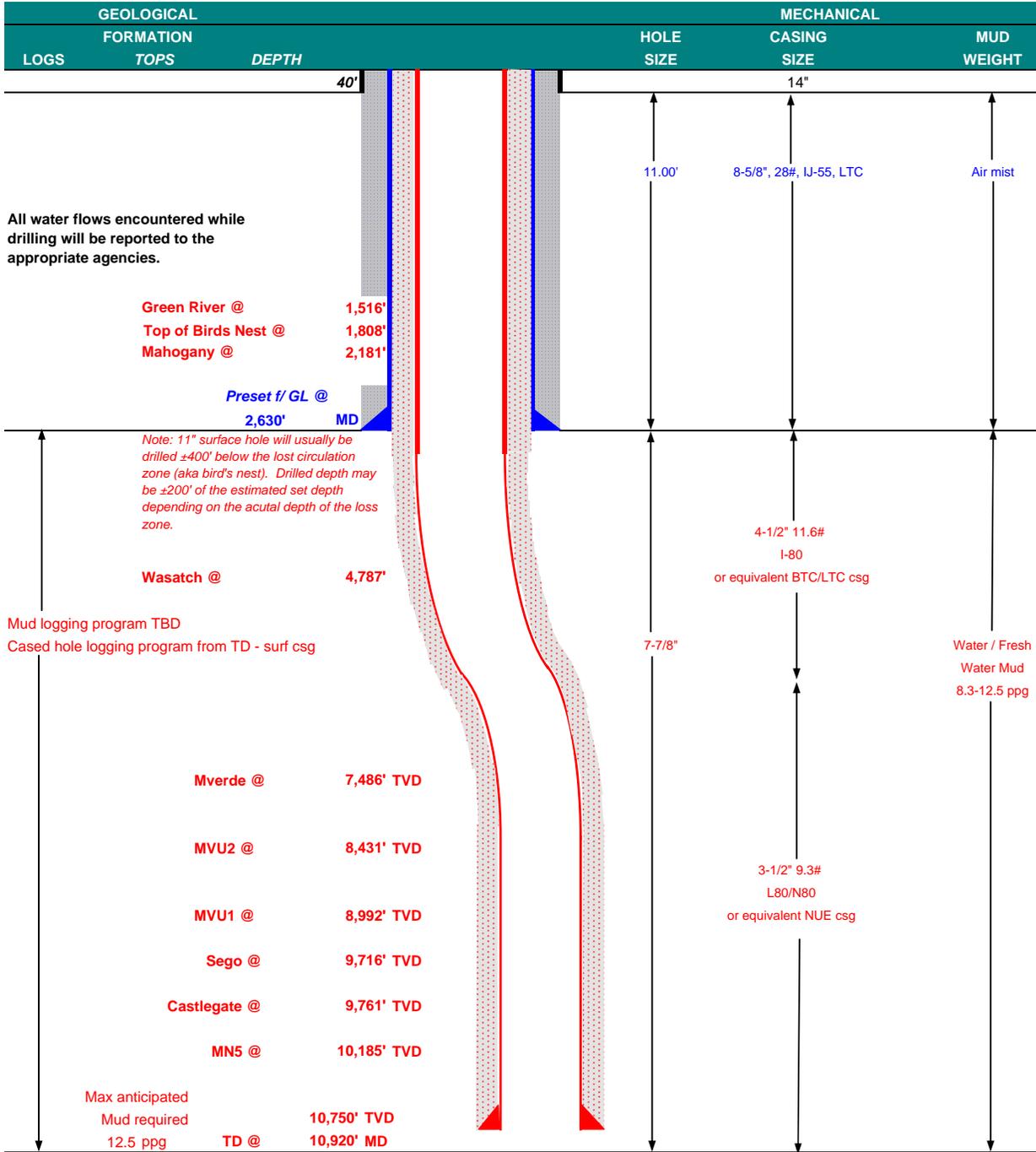
10. **Other Information:**

Please refer to the attached Drilling Program.



KERR-McGEE OIL & GAS ONSHORE LP
DRILLING PROGRAM

COMPANY NAME	KERR-McGEE OIL & GAS ONSHORE LP		DATE	April 25, 2011			
WELL NAME	NBU 921-25C MW1		TD	10,750'	TVD	10,920' MD	
FIELD	Natural Buttes	COUNTY	Uintah	STATE	Utah	FINISHED ELEVATION	4,941'
SURFACE LOCATION	NWNW	793 FNL	900 FWL	Sec 25	T 9S	R 21E	
	Latitude:	40.012103	Longitude:	-109.50561			NAD 27
BTM HOLE LOCATION	NENW	658 FNL	1975 FWL	Sec 25	T 9S	R 21E	
	Latitude:	40.012486	Longitude:	-109.501774			NAD 27
OBJECTIVE ZONE(S)	Wasatch/Mesaverde						
ADDITIONAL INFO	Regulatory Agencies: UDOGM (Minerals), SITLA (Surface), UDOGM Tri-County Health Dept.						





KERR-McGEE OIL & GAS ONSHORE LP
DRILLING PROGRAM

CASING PROGRAM

	SIZE	INTERVAL	WT.	GR.	CPLG.	DESIGN FACTORS			
						BURST	COLLAPSE	LTC	BTC
								TENSION	
CONDUCTOR	14"	0-40'							
SURFACE	8-5/8"	0 to 2,630	28.00	IJ-55	LTC	3,390	1,880	348,000	N/A
						2.06	1.53	5.40	N/A
PRODUCTION	4-1/2"	0 to 7,300	11.60	I-80	LTC or BTC	7,780	6,350	279,000	367,000
						1.11	0.91	4.07	5.36
PRODUCTION	3-1/2"	7,300 to 10,920	9.30	L80/N80	NUE	10,160	10,540	158,000	N/A
						1.45	1.51	5.80	N/A

Surface Casing:

(Burst Assumptions: TD = 12.5 ppg) 0.73 psi/ft = frac gradient @ surface shoe
 Fracture at surface shoe with 0.1 psi/ft gas gradient above
 (Collapse Assumption: Fully Evacuated Casing, Max MW) (Tension Assumptions: Air Weight of Casing*Buoy.Fact. of water)

Production casing:

(Burst Assumptions: Pressure test with 8.4ppg @ 7000 psi) 0.64 psi/ft = bottomhole gradient
 (Collapse Assumption: Fully Evacuated Casing, Max MW) (Tension Assumptions: Air Weight of Casing*Buoy.Fact. of water)

CEMENT PROGRAM

		FT. OF FILL	DESCRIPTION	SACKS	EXCESS	WEIGHT	YIELD
SURFACE Option 1	LEAD	500'	Premium cmt + 2% CaCl + 0.25 pps flocele	180	60%	15.80	1.15
	TOP OUT CMT (6 jobs)	1,200'	20 gals sodium silicate + Premium cmt + 2% CaCl + 0.25 pps flocele	270	0%	15.80	1.15
NOTE: If well will circulate water to surface, option 2 will be utilized							
SURFACE Option 2	LEAD	2,130'	65/35 Poz + 6% Gel + 10 pps gilsonite + 0.25 pps Flocele + 3% salt BWOW	200	35%	11.00	3.82
	TAIL	500'	Premium cmt + 2% CaCl + 0.25 pps flocele	150	35%	15.80	1.15
	TOP OUT CMT	as required	Premium cmt + 2% CaCl	as req.		15.80	1.15
PRODUCTION	LEAD	4,280'	Premium Lite II +0.25 pps celloflake + 5 pps gilsonite + 10% gel + 0.5% extender	320	20%	11.00	3.38
	TAIL	6,640'	50/50 Poz/G + 10% salt + 2% gel + 0.1% R-3	1,970	30%	14.30	1.31

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

FLOAT EQUIPMENT & CENTRALIZERS

SURFACE	Guide shoe, 1 jt, insert float. Centralize first 3 joints with bow spring centralizers. Thread lock guide shoe
PRODUCTION	Float shoe, 1 jt, float collar. 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:

Nick Spence / Emile Goodwin

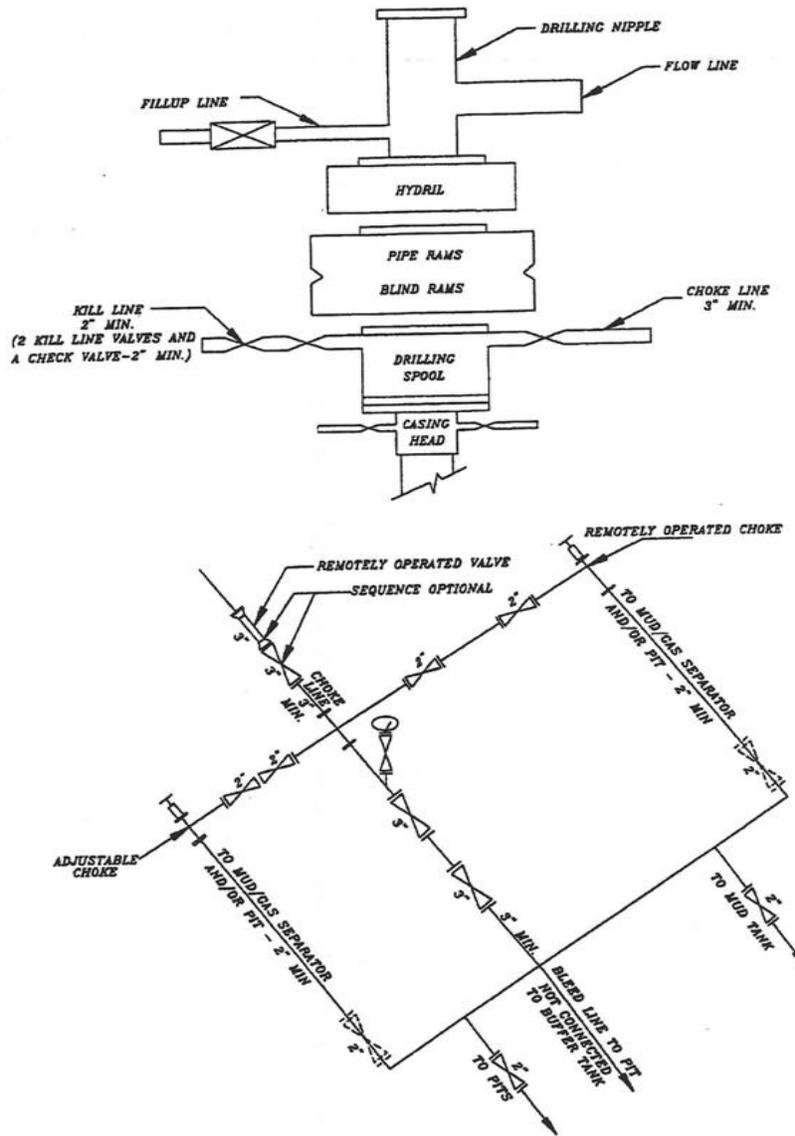
DATE:

DRILLING SUPERINTENDENT:

Kenny Gathings / Lovel Young

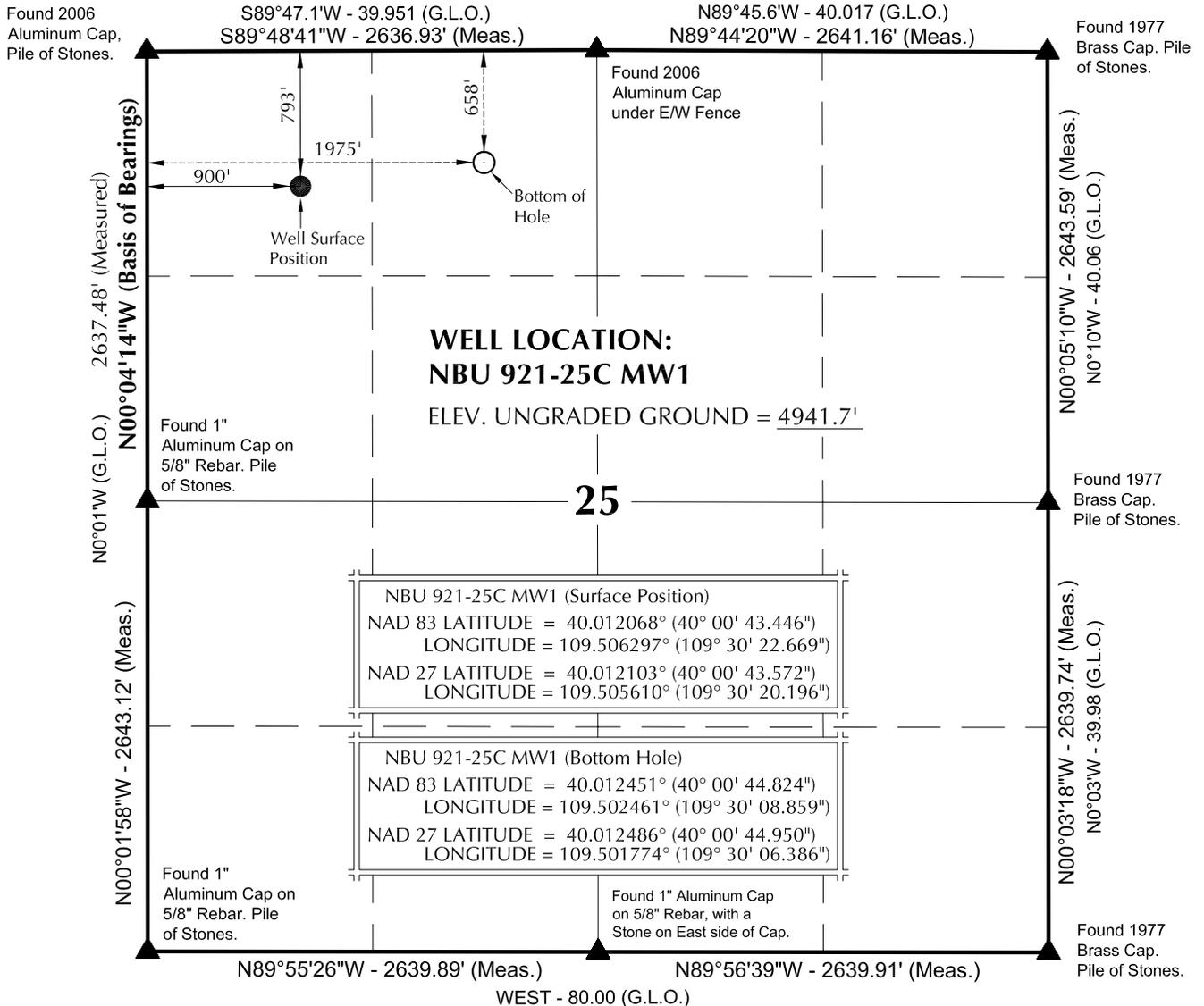
DATE:

EXHIBIT A
NBU 921-25C MW1



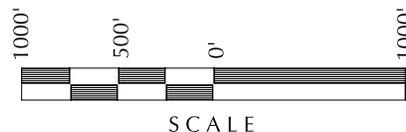
SCHEMATIC DIAGRAM OF 5,000 PSI BOP STACK

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



NOTES:

- ▲ = Section Corners Located
- 1. Well footages are measured at right angles to the Section Lines.
- 2. G.L.O. distances are shown in feet or chains. 1 chain = 66 feet.
- 3. The Bottom of hole bears N82°37'58"E - 1083.83' from the Surface Position.
- 4. Bearings are based on Global Positioning Satellite observations.
- 5. Basis of elevation is Tri-Sta "Two Water" located in the NW 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.

John R. Laugh
 PROFESSIONAL LAND SURVEYOR
 REGISTRATION No. 6028691
 STATE OF UTAH 3-23-11

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

WELL PAD: NBU 921-25D

**NBU 921-25C MW1
WELL PLAT**
658' FNL, 1975' FWL (Bottom Hole)
**NE ¼ NW ¼ OF SECTION 25, T9S, R21E,
S.L.B.&M., UTAH COUNTY, UTAH.**



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

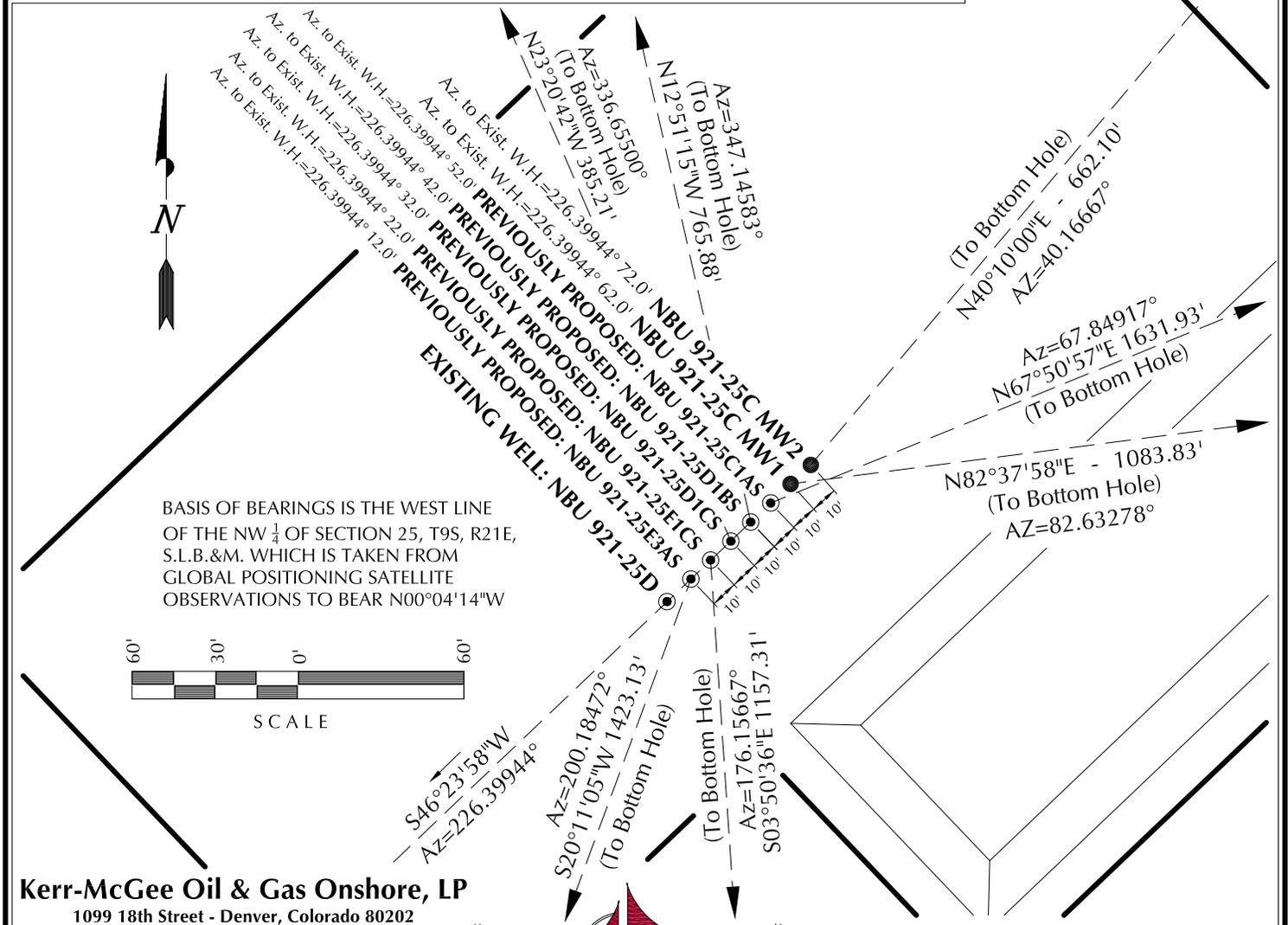
TIMBERLINE (435) 789-1365
ENGINEERING & LAND SURVEYING, INC.
 209 NORTH 300 WEST - VERNAL, UTAH 84078

DATE SURVEYED: 03-17-11	SURVEYED BY: M.S.B.	SHEET NO: 2
DATE DRAWN: 03-18-11	DRAWN BY: K.H.G.	
SCALE: 1" = 1000'		2 OF 12

WELL NAME	SURFACE POSITION					BOTTOM HOLE				
	NAD83		NAD27		FOOTAGES	NAD83		NAD27		FOOTAGES
	LATITUDE	LONGITUDE	LATITUDE	LONGITUDE		LATITUDE	LONGITUDE	LATITUDE	LONGITUDE	
NBU 921-25C MW2	40°00'43.514"	109°30'22.574"	40°00'43.640"	109°30'20.101"	787' FNL	40°00'48.515"	109°30'17.090"	40°00'48.641"	109°30'14.617"	282' FNL
NBU 921-25C MW1	40°00'43.446"	109°30'22.669"	40°00'43.572"	109°30'20.196"	793' FNL	40°00'44.824"	109°30'08.859"	40°00'44.950"	109°30'06.386"	658' FNL
NBU 921-25C1AS	40°00'43.377"	109°30'22.761"	40°00'43.504"	109°30'20.288"	800' FNL	40°00'49.463"	109°30'03.344"	40°00'49.590"	109°30'00.872"	190' FNL
NBU 921-25D1BS	40°00'43.309"	109°30'22.855"	40°00'43.435"	109°30'20.382"	807' FNL	40°00'50.685"	109°30'25.048"	40°00'50.812"	109°30'22.575"	60' FNL
NBU 921-25D1CS	40°00'43.240"	109°30'22.948"	40°00'43.366"	109°30'20.475"	814' FNL	40°00'46.733"	109°30'24.911"	40°00'46.860"	109°30'22.438"	460' FNL
NBU 921-25E1CS	40°00'43.172"	109°30'23.042"	40°00'43.298"	109°30'20.569"	821' FNL	40°00'31.764"	109°30'22.038"	40°00'31.890"	109°30'19.566"	1976' FNL
NBU 921-25E3AS	40°00'43.104"	109°30'23.134"	40°00'43.230"	109°30'20.661"	828' FNL	40°00'29.905"	109°30'29.435"	40°00'30.031"	109°30'26.962"	2162' FNL
NBU 921-25D	40°00'43.023"	109°30'23.246"	40°00'43.149"	109°30'20.773"	836' FNL	40°00'30.707"	109°30'29.435"	40°00'30.832"	109°30'26.962"	371' FNL

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 921-25C MW2	506.0'	427.1'	NBU 921-25C MW1	139.0'	1,074.9'	NBU 921-25C1AS	615.3'	1511.5'	NBU 921-25D1BS	746.7'	-170.4'
NBU 921-25D1CS	353.7'	-152.6'	NBU 921-25E1CS	-1154.7'	77.6'	NBU 921-25E3AS	-1335.7'	-491.0'			



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

WELL PAD - NBU 921-25D

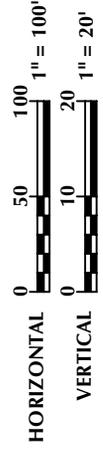
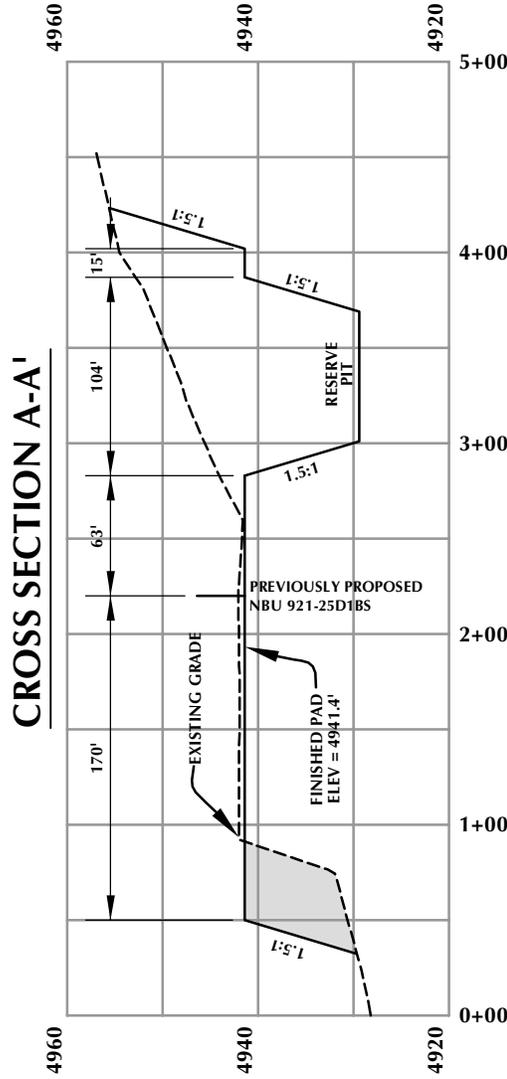
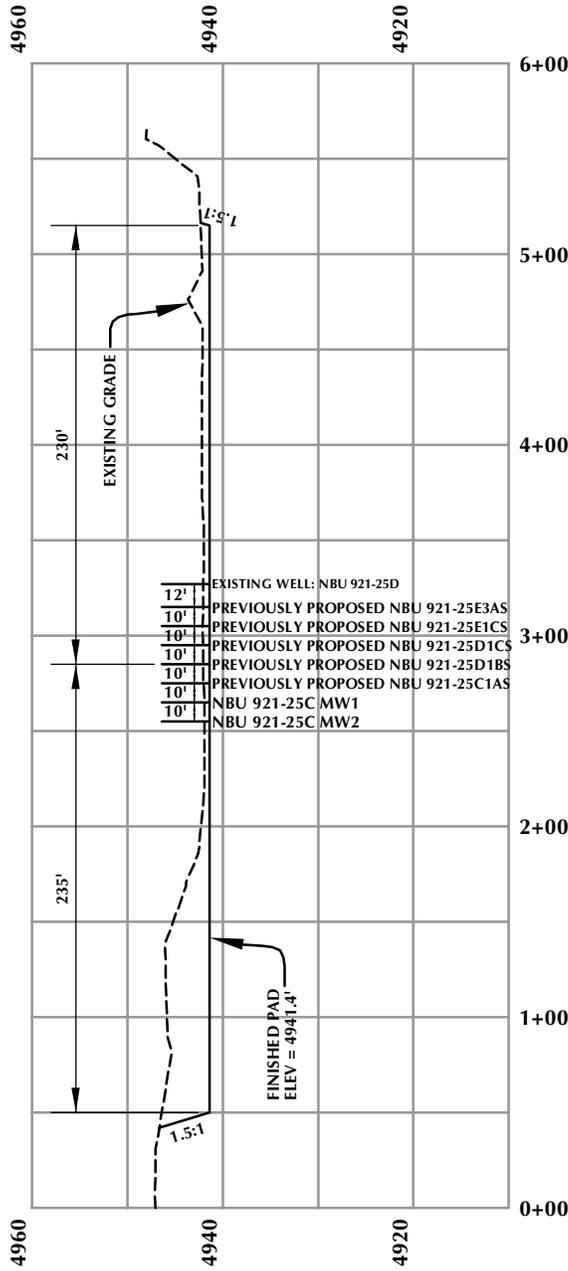
WELL PAD INTERFERENCE PLAT
 WELLS - NBU 921-25C MW2 & NBU 921-25C MW1
 LOCATED IN SECTION 25, T9S, R21E, S.L.B.&M., Uintah County, Utah.

609

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

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

DATE SURVEYED: 4-7-10	SURVEYED BY: M.S.B.	SHEET NO: 3
DATE DRAWN: 4-12-10	DRAWN BY: B.M.	
SCALE: 1" = 60'		3 OF 12



CROSS SECTION A-A'

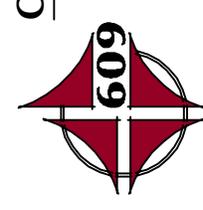
CROSS SECTION B-B'

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

WELL PAD - NBU 921-25D

WELL PAD - CROSS SECTIONS
 NBU 921-25C MW2 &
 NBU 921-25C MW1

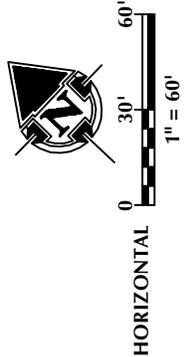
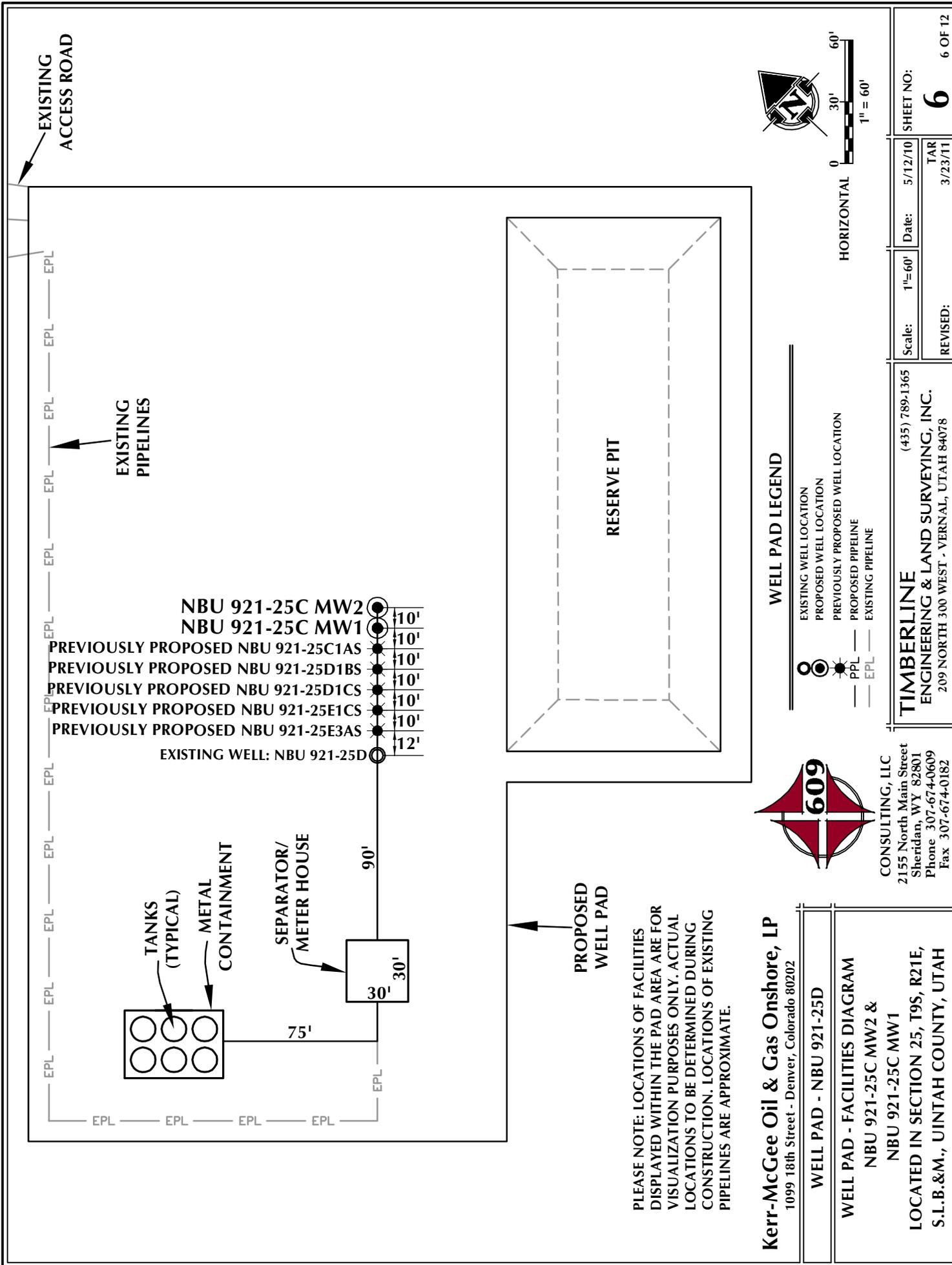
**LOCATED IN SECTION 25, T9S, R21E,
 S.L.B.&M., UINTAH COUNTY, UTAH**



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

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

Scale: 1"=100'
 Date: 5/12/10
 SHEET NO: **5**
 REVISED: TAR 3/23/11



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

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

Scale: 1"=60'	Date: 5/12/10	SHEET NO: 6
REVISED:	TAR 3/23/11	6 OF 12

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

WELL PAD - NBU 921-25D
WELL PAD - FACILITIES DIAGRAM
 NBU 921-25C MW2 &
 NBU 921-25C MW1
 LOCATED IN SECTION 25, T9S, R21E,
 S.L.B.&M., UINTAH COUNTY, UTAH

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

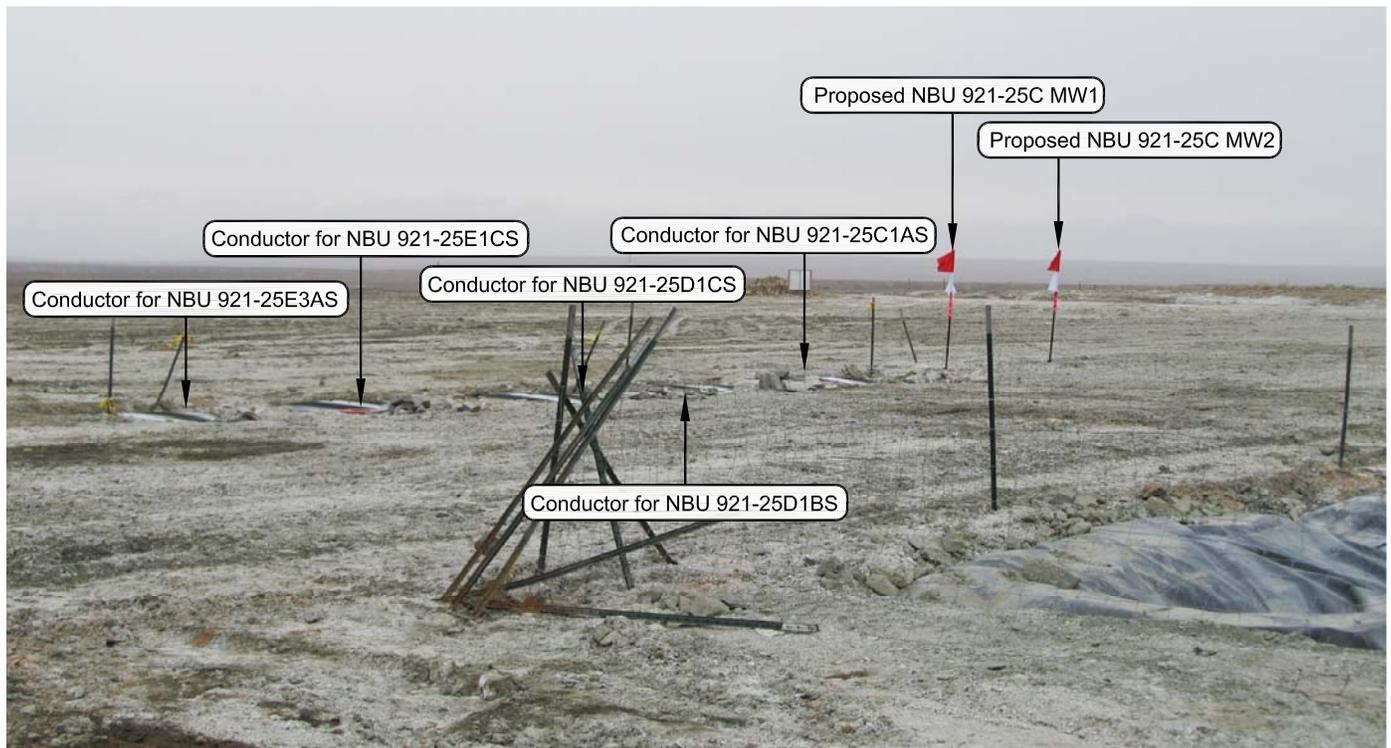


PHOTO VIEW: FROM PIT CORNER D TO LOCATION STAKE

CAMERA ANGLE: NORTHERLY



PHOTO VIEW: FROM EXISTING ACCESS ROAD

CAMERA ANGLE: EASTERLY

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

WELL PAD - NBU 921-25D

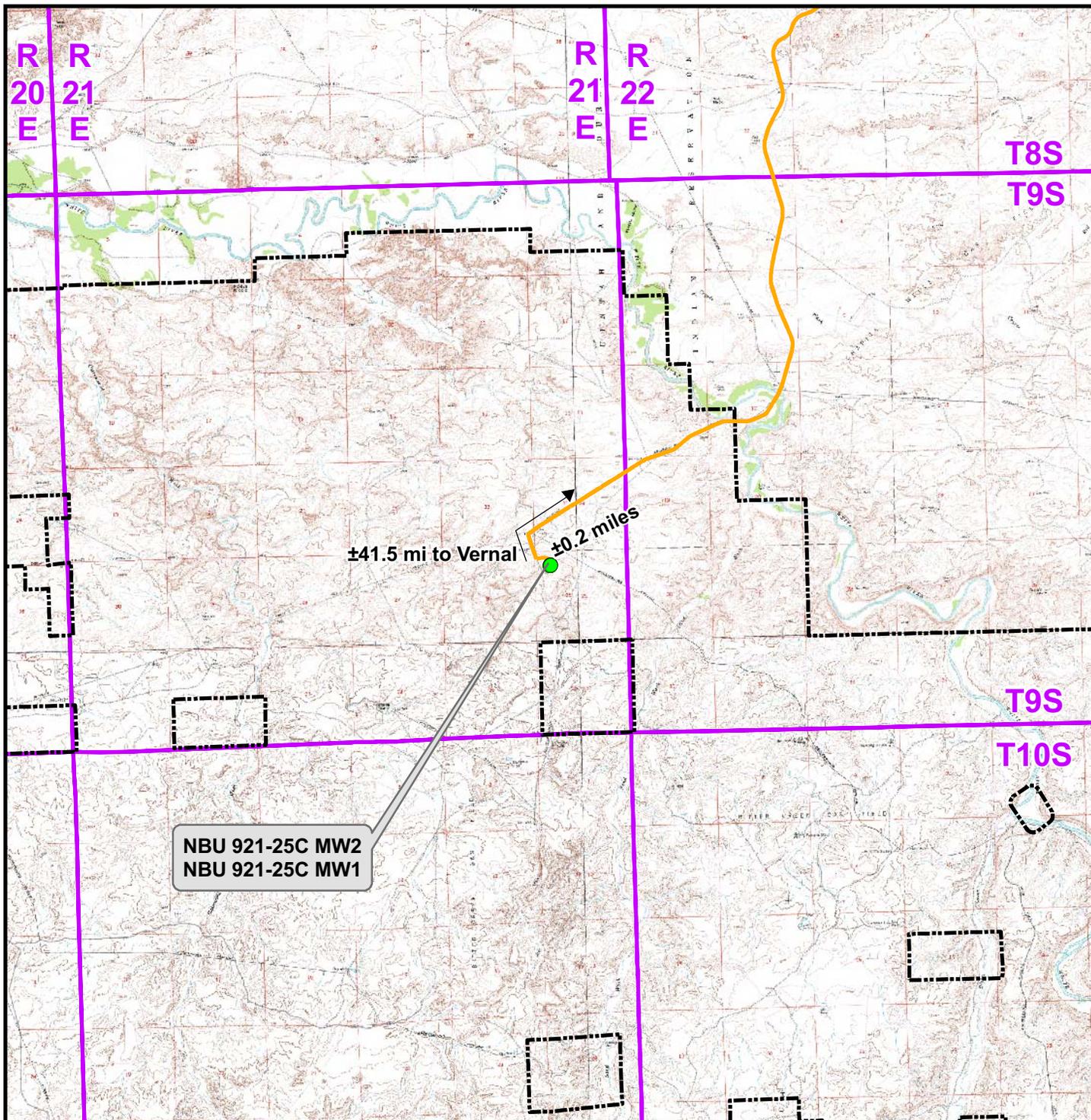
LOCATION PHOTOS
NBU 921-25C MW2 &
NBU 921-25C MW1
LOCATED IN SECTION 25, T9S, R21E,
S.L.B.&M., Uintah County, Utah.



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

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

DATE PHOTOS TAKEN: 03-17-11	PHOTOS TAKEN BY: M.S.B.	SHEET NO: 7
DATE DRAWN: 03-21-11	DRAWN BY: E.M.S.	
Date Last Revised: 03-22-11 M.W.W.		7 OF 12



Legend

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

Distance From Well Pad - NBU 921-25D To Unit Boundary: ±4,455ft

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

WELL PAD - NBU 921-25D

TOPO A
NBU 921-25C MW2 &
NBU 921-25C MW1
LOCATED IN SECTION 25, T9S, R21E
S.L.B.&M., UINTAH COUNTY, UTAH



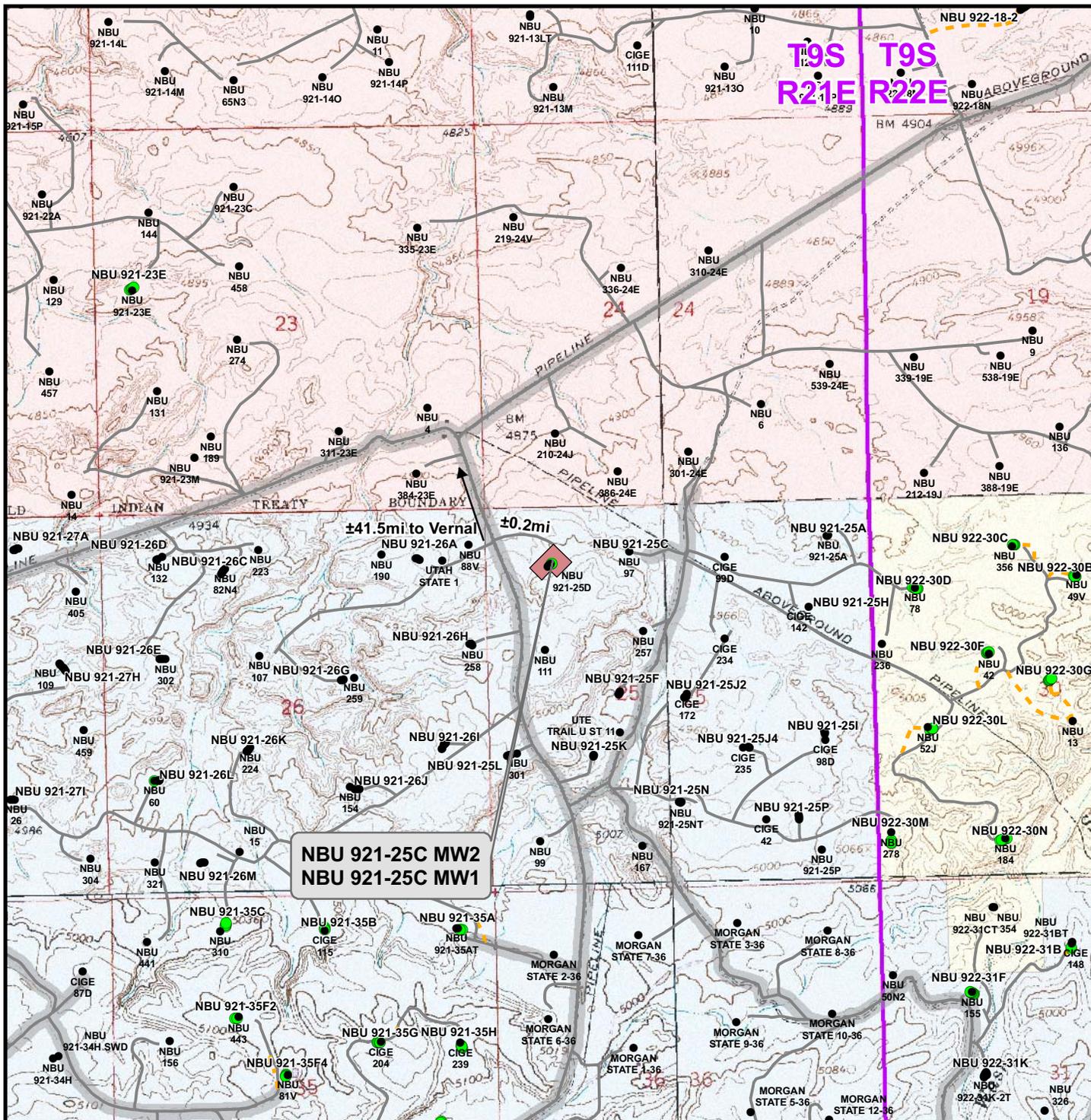
CONSULTING, LLC
2155 North Main Street
Sheridan, WY 82801
Phone (307) 674-0609
Fax (307) 674-0182



Scale: 1:100,000	NAD83 USP Central
Drawn: TL	Date: 14 May 2010
Revised: KGS	Date: 23 Mar 2011

Sheet No:

8 8 of 12



NBU 921-25C MW2
NBU 921-25C MW1

Legend

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

Total Proposed Road Length: ±0ft

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

WELL PAD - NBU 921-25D

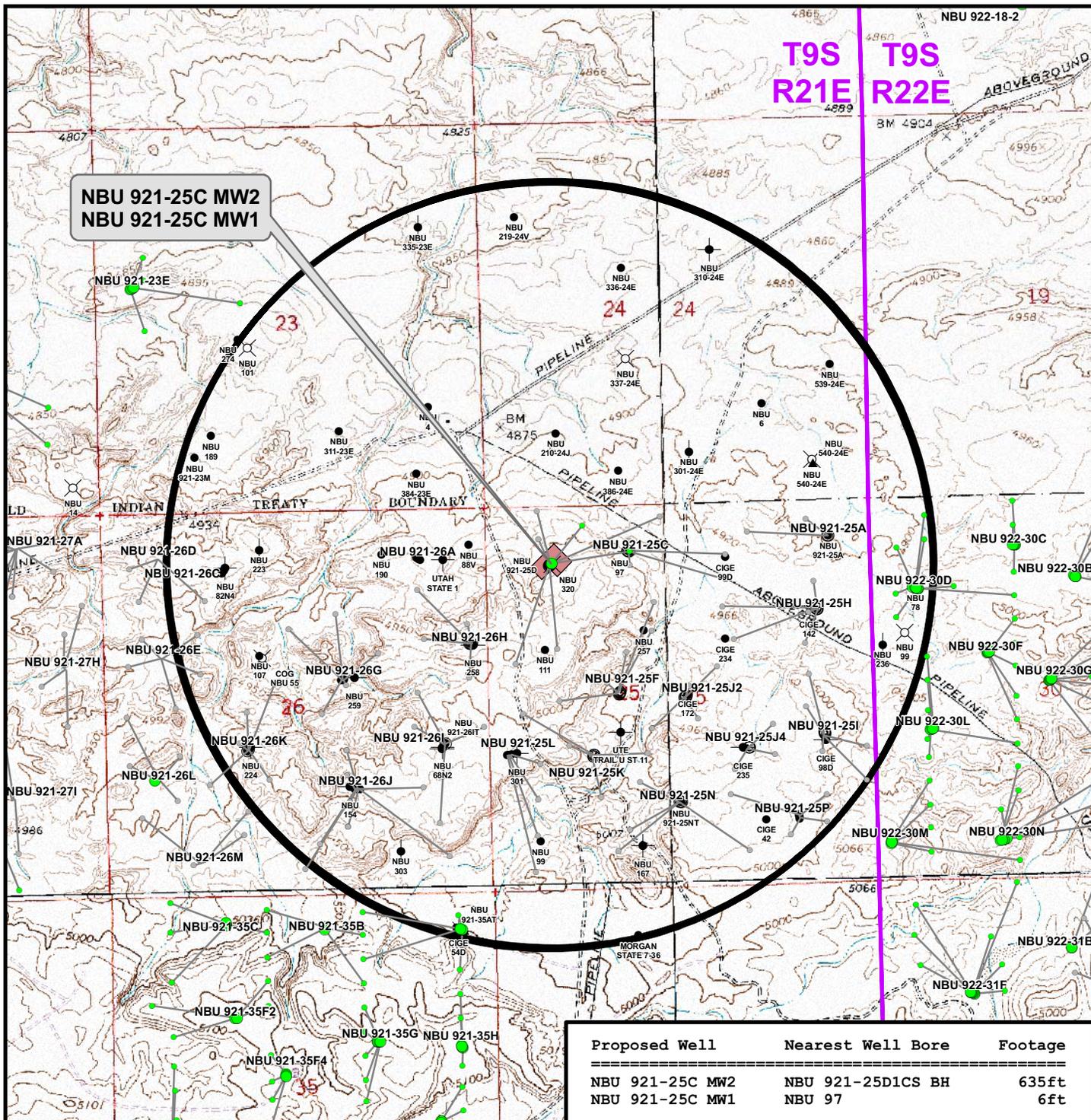
TOPO B
NBU 921-25C MW2 &
NBU 921-25C MW1
LOCATED IN SECTION 25, T9S, R21E
S.L.B.&M., UTAH COUNTY, UTAH

609

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

Scale: 1" = 2,000ft	NAD83 USP Central	Sheet No:
Drawn: TL	Date: 14 May 2010	9
Revised: KGS	Date: 23 Mar 2011	

9 of 12



Proposed Well	Nearest Well Bore	Footage
NBU 921-25C MW2	NBU 921-25D1CS BH	635ft
NBU 921-25C MW1	NBU 97	6ft

Legend

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

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

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

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

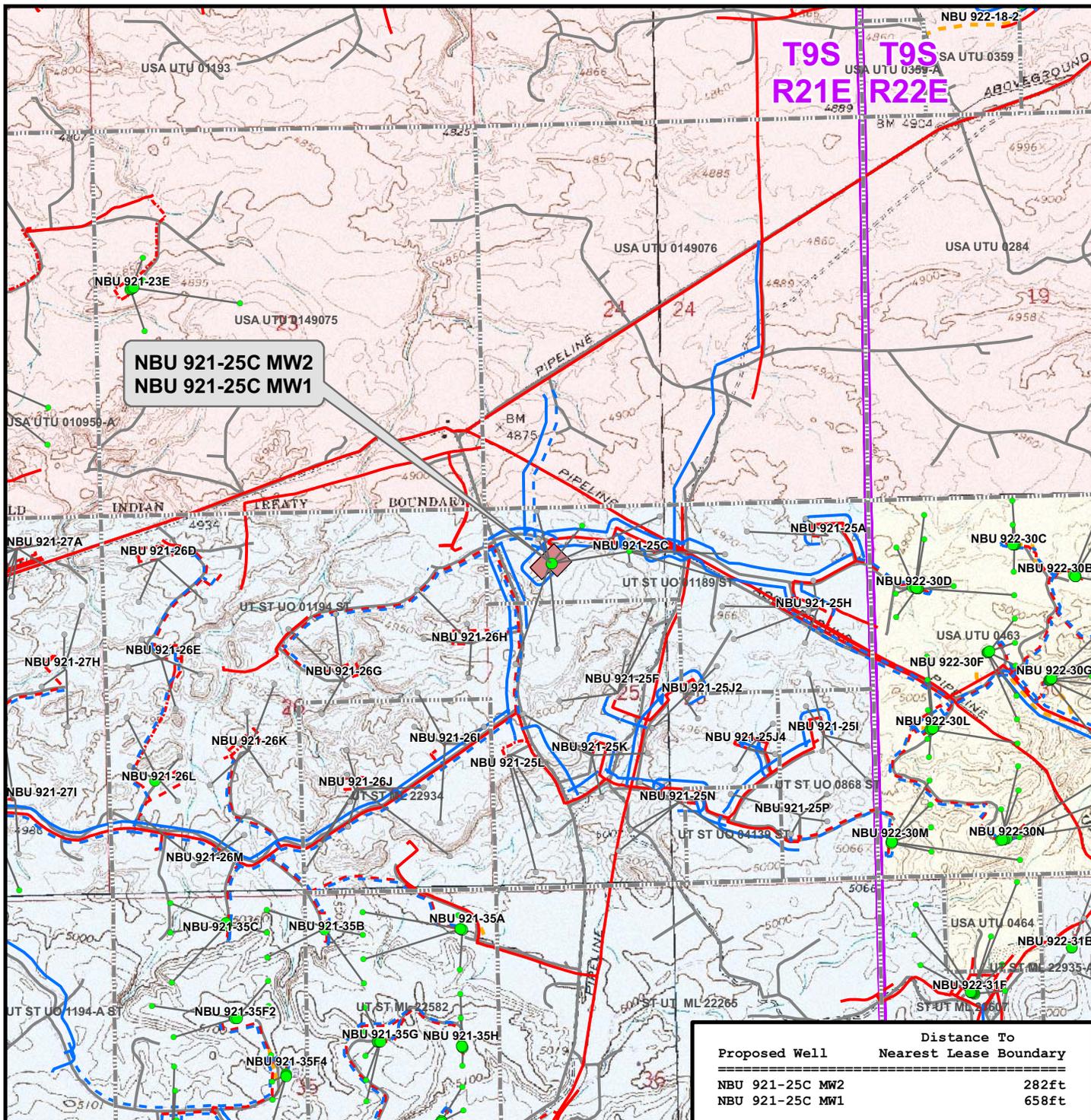
WELL PAD - NBU 921-25D

TOPO C
NBU 921-25C MW2 & MW1
LOCATED IN SECTION 25, T9S, R21E
S.L.B.&M., UINTAH COUNTY, UTAH

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



Scale: 1" = 2,000ft	NAD83 USP Central	Sheet No:
Drawn: TL	Date: 14 May 2010	10
Revised: KGS	Date: 23 Mar 2011	



Legend

- Well - Proposed
- Bottom Hole - Proposed
- Bottom Hole - Existing
- 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 921-25D

TOPO E
NBU 921-25C MW2 & NBU 921-25C MW1
LOCATED IN SECTION 25, T9S, R21E S.L.B.&M., UTAH COUNTY, UTAH

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

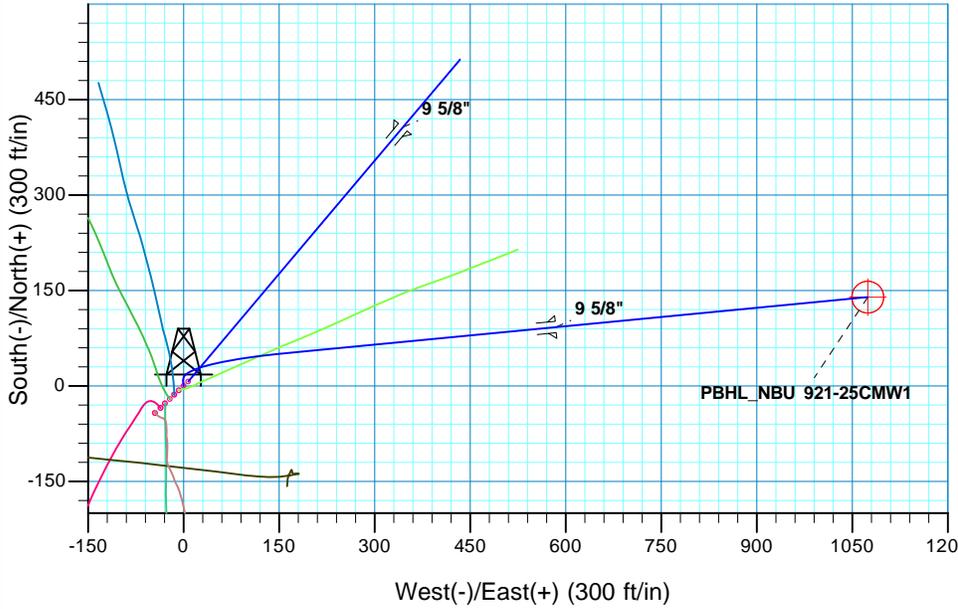
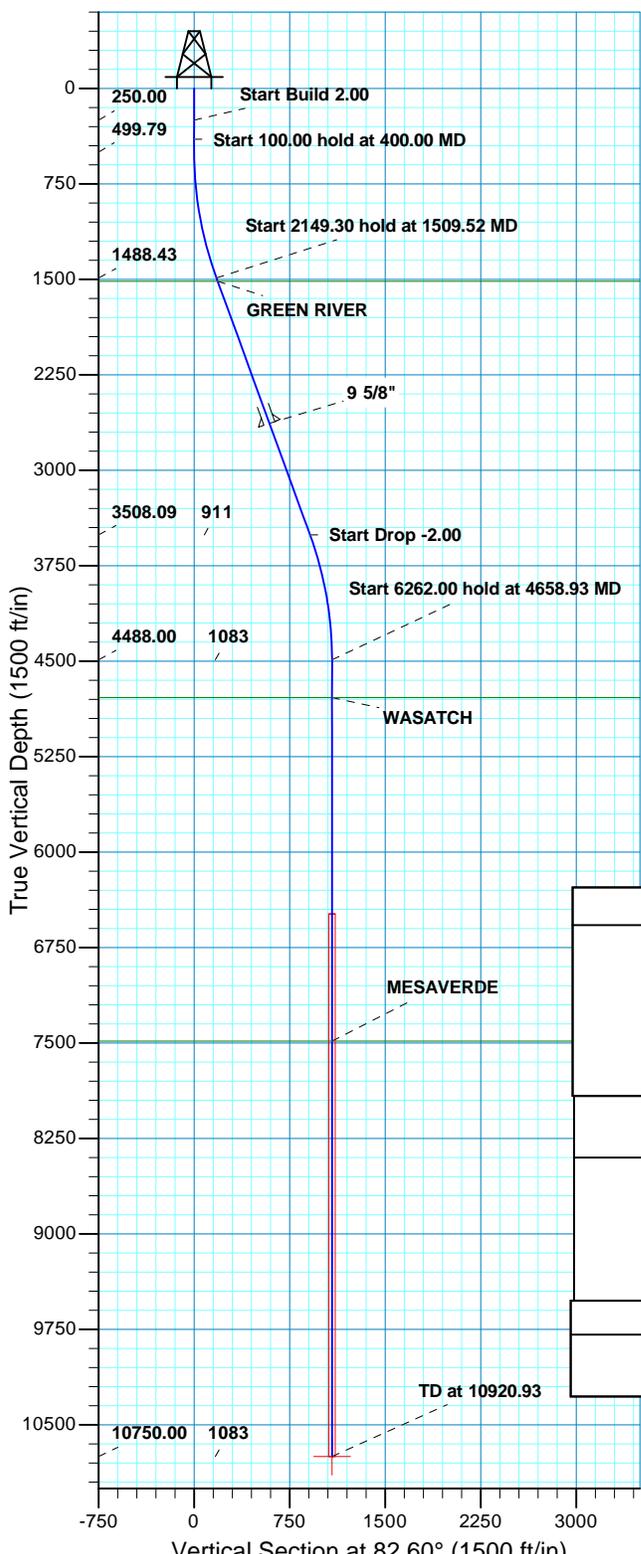
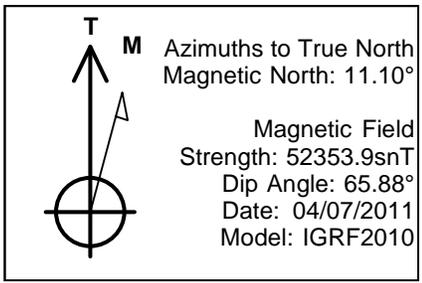
Scale: 1" = 2,000ft	NAD83 USP Central	Sheet No:
Drawn: TL	Date: 14 May 2010	11
Revised: KGS	Date: 23 Mar 2011	

Kerr-McGee Oil & Gas Onshore, LP
WELL PAD – NBU 921-25D
WELLS – NBU 921-25C MW2 & NBU 921-25C MW1
Section 25, T9S, R21E, S.L.B.&M.

From the intersection of U.S. Highway 40 and 500 East street in Vernal, Utah, proceed in an easterly, then southerly direction along U.S. Highway 40 approximately 3.3 miles to the junction of State Highway 45. Exit right and proceed in a southerly direction along State Highway 45 approximately 20.2 miles to the junction of the Glen Bench Road (County B Road 3260). Exit right and proceed in a southwesterly direction along the Glen Bench Road approximately 18.0 miles to a service road to the east. Exit left and proceed in an easterly direction along the service road approximately 0.2 miles to the proposed well location.

Total distance from Vernal, Utah to the proposed well location is approximately 41.7 miles in a southerly direction.

WELL DETAILS: NBU 921-25CMW1								
GL 4941 & KB 4' @ 4945.00ft (ASSUMED)								
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude			
0.00	0.00	14533960.52	2058867.43	40° 0' 43.571 N	109° 30' 20.196 W			
DESIGN TARGET DETAILS								
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
PBHL	10750.00	139.51	1074.33	14534118.03	2059939.26	40° 0' 44.950 N	109° 30' 6.386 W	Circle (Radius: 25.00)
- plan hits target center								



SECTION DETAILS									
MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
250.00	0.00	0.00	250.00	0.00	0.00	0.00	0.00	0.00	
400.00	3.00	355.00	399.93	3.91	-0.34	2.00	355.00	0.16	
500.00	3.00	355.00	499.79	9.12	-0.80	0.00	0.00	0.38	
1509.52	20.00	84.50	1488.43	52.45	170.54	2.00	97.69	175.87	
3658.83	20.00	84.50	3508.09	122.94	902.32	0.00	0.00	910.64	
4658.93	0.00	0.00	4488.00	139.51	1074.33	2.00	180.00	1083.35	
10920.93	0.00	0.00	10750.00	139.51	1074.33	0.00	0.00	1083.35	PBHL_NBU 921-25CMW1
PROJECT DETAILS: Uintah County, UT UTM12							FORMATION TOP DETAILS		
Geodetic System: Universal Transverse Mercator (US Survey Feet)							TVDPath	MDPath	Formation
Datum: NAD 1927 - Western US							4787.00	4957.93	GREEN RIVER
Ellipsoid: Clarke 1866							7486.00	7656.93	WASATCH
Zone: Zone 12N (114 W to 108 W)									MESAVERDE
Location: SEC 25 T9S R21E									
System Datum: Mean Sea Level									
CASING DETAILS									
	TVD	MD	Name	Size					
	2631.00	2725.43	9 5/8"	9.625					

RECEIVED: Apr. 26, 2011



Kerr McGee Oil and Gas Onshore LP

**Uintah County, UT UTM12
NBU 921-25D Pad
NBU 921-25CMW1**

OH

Plan: PLAN #1

Standard Planning Report

07 April, 2011





SDI
Planning Report



Database:	EDM5000-RobertS-Local	Local Co-ordinate Reference:	Well NBU 921-25CMW1
Company:	Kerr McGee Oil and Gas Onshore LP	TVD Reference:	GL 4941 & KB 4' @ 4945.00ft (ASSUMED)
Project:	Uintah County, UT UTM12	MD Reference:	GL 4941 & KB 4' @ 4945.00ft (ASSUMED)
Site:	NBU 921-25D Pad	North Reference:	True
Well:	NBU 921-25CMW1	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	PLAN #1		

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

Site	NBU 921-25D Pad, SEC 25 T9S R21E				
Site Position:	Northing:	14,533,953.48 usft	Latitude:	40° 0' 43.502 N	
From: Lat/Long	Easting:	2,058,860.26 usft	Longitude:	109° 30' 20.290 W	
Position Uncertainty:	0.00 ft	Slot Radius:	13.200 in	Grid Convergence:	0.96 °

Well	NBU 921-25CMW1, 793 FNL 900 FEL					
Well Position	+N/-S	6.92 ft	Northing:	14,533,960.52 usft	Latitude:	40° 0' 43.571 N
	+E/-W	7.28 ft	Easting:	2,058,867.42 usft	Longitude:	109° 30' 20.196 W
Position Uncertainty		0.00 ft	Wellhead Elevation:		Ground Level:	4,941.00 ft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	04/07/2011	11.10	65.88	52,354

Design	PLAN #1			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.00	0.00	0.00	82.60

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	
250.00	0.00	0.00	250.00	0.00	0.00	0.00	0.00	0.00	0.00	
400.00	3.00	355.00	399.93	3.91	-0.34	2.00	2.00	0.00	355.00	
500.00	3.00	355.00	499.79	9.12	-0.80	0.00	0.00	0.00	0.00	
1,509.52	20.00	84.50	1,488.43	52.45	170.54	2.00	1.68	8.87	97.69	
3,658.83	20.00	84.50	3,508.09	122.94	902.32	0.00	0.00	0.00	0.00	
4,658.93	0.00	0.00	4,488.00	139.51	1,074.33	2.00	-2.00	0.00	180.00	
10,920.93	0.00	0.00	10,750.00	139.51	1,074.33	0.00	0.00	0.00	0.00	PBHL_NBU 921-25CI



Database:	EDM5000-RobertS-Local	Local Co-ordinate Reference:	Well NBU 921-25CMW1
Company:	Kerr McGee Oil and Gas Onshore LP	TVD Reference:	GL 4941 & KB 4' @ 4945.00ft (ASSUMED)
Project:	Uintah County, UT UTM12	MD Reference:	GL 4941 & KB 4' @ 4945.00ft (ASSUMED)
Site:	NBU 921-25D Pad	North Reference:	True
Well:	NBU 921-25CMW1	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	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	0.00
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
250.00	0.00	0.00	250.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Start Build 2.00										
300.00	1.00	355.00	300.00	0.43	-0.04	0.02	2.00	2.00	2.00	0.00
400.00	3.00	355.00	399.93	3.91	-0.34	0.16	2.00	2.00	2.00	0.00
Start 100.00 hold at 400.00 MD										
500.00	3.00	355.00	499.79	9.12	-0.80	0.38	0.00	0.00	0.00	0.00
Start DLS 2.00 TFO 97.69										
600.00	3.38	30.98	599.65	14.26	0.49	2.32	2.00	0.38	35.98	
700.00	4.67	53.18	699.41	19.22	5.26	7.69	2.00	1.29	22.21	
800.00	6.34	64.82	798.95	24.00	13.51	16.49	2.00	1.67	11.63	
900.00	8.16	71.45	898.14	28.61	25.23	28.71	2.00	1.82	6.64	
1,000.00	10.04	75.65	996.88	33.03	40.41	44.32	2.00	1.89	4.20	
1,100.00	11.97	78.52	1,095.04	37.25	59.02	63.32	2.00	1.92	2.87	
1,200.00	13.91	80.60	1,192.50	41.28	81.04	85.68	2.00	1.95	2.08	
1,300.00	15.87	82.18	1,289.13	45.11	106.45	111.38	2.00	1.96	1.58	
1,400.00	17.84	83.41	1,384.83	48.73	135.22	140.37	2.00	1.97	1.24	
1,500.00	19.81	84.41	1,479.48	52.13	167.31	172.63	2.00	1.97	1.00	
1,509.52	20.00	84.50	1,488.43	52.45	170.54	175.87	2.00	1.98	0.89	
Start 2149.30 hold at 1509.52 MD										
1,538.86	20.00	84.50	1,516.00	53.41	180.52	185.90	0.00	0.00	0.00	
GREEN RIVER										
1,600.00	20.00	84.50	1,573.45	55.41	201.34	206.80	0.00	0.00	0.00	
1,700.00	20.00	84.50	1,667.42	58.69	235.39	240.99	0.00	0.00	0.00	
1,800.00	20.00	84.50	1,761.39	61.97	269.44	275.17	0.00	0.00	0.00	
1,900.00	20.00	84.50	1,855.35	65.25	303.48	309.36	0.00	0.00	0.00	
2,000.00	20.00	84.50	1,949.32	68.53	337.53	343.55	0.00	0.00	0.00	
2,100.00	20.00	84.50	2,043.29	71.81	371.58	377.73	0.00	0.00	0.00	
2,200.00	20.00	84.50	2,137.26	75.09	405.63	411.92	0.00	0.00	0.00	
2,300.00	20.00	84.50	2,231.23	78.37	439.67	446.10	0.00	0.00	0.00	
2,400.00	20.00	84.50	2,325.20	81.65	473.72	480.29	0.00	0.00	0.00	
2,500.00	20.00	84.50	2,419.16	84.93	507.77	514.48	0.00	0.00	0.00	
2,600.00	20.00	84.50	2,513.13	88.21	541.82	548.66	0.00	0.00	0.00	
2,700.00	20.00	84.50	2,607.10	91.49	575.86	582.85	0.00	0.00	0.00	
2,725.43	20.00	84.50	2,631.00	92.33	584.52	591.55	0.00	0.00	0.00	
9 5/8"										
2,800.00	20.00	84.50	2,701.07	94.77	609.91	617.04	0.00	0.00	0.00	
2,900.00	20.00	84.50	2,795.04	98.05	643.96	651.22	0.00	0.00	0.00	
3,000.00	20.00	84.50	2,889.00	101.33	678.01	685.41	0.00	0.00	0.00	
3,100.00	20.00	84.50	2,982.97	104.61	712.05	719.60	0.00	0.00	0.00	
3,200.00	20.00	84.50	3,076.94	107.89	746.10	753.78	0.00	0.00	0.00	
3,300.00	20.00	84.50	3,170.91	111.17	780.15	787.97	0.00	0.00	0.00	
3,400.00	20.00	84.50	3,264.88	114.45	814.20	822.16	0.00	0.00	0.00	
3,500.00	20.00	84.50	3,358.84	117.73	848.24	856.34	0.00	0.00	0.00	
3,600.00	20.00	84.50	3,452.81	121.01	882.29	890.53	0.00	0.00	0.00	
3,658.83	20.00	84.50	3,508.09	122.94	902.32	910.64	0.00	0.00	0.00	
Start Drop -2.00										
3,700.00	19.18	84.50	3,546.88	124.27	916.06	924.44	2.00	-2.00	0.00	
3,800.00	17.18	84.50	3,641.88	127.26	947.11	955.62	2.00	-2.00	0.00	
3,900.00	15.18	84.50	3,737.92	129.93	974.85	983.46	2.00	-2.00	0.00	
4,000.00	13.18	84.50	3,834.87	132.28	999.23	1,007.94	2.00	-2.00	0.00	



Database:	EDM5000-RobertS-Local	Local Co-ordinate Reference:	Well NBU 921-25CMW1
Company:	Kerr McGee Oil and Gas Onshore LP	TVD Reference:	GL 4941 & KB 4' @ 4945.00ft (ASSUMED)
Project:	Uintah County, UT UTM12	MD Reference:	GL 4941 & KB 4' @ 4945.00ft (ASSUMED)
Site:	NBU 921-25D Pad	North Reference:	True
Well:	NBU 921-25CMW1	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	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)	
4,100.00	11.18	84.50	3,932.61	134.30	1,020.23	1,029.03	2.00	-2.00	0.00	
4,200.00	9.18	84.50	4,031.03	136.00	1,037.81	1,046.69	2.00	-2.00	0.00	
4,300.00	7.18	84.50	4,130.01	137.36	1,051.97	1,060.90	2.00	-2.00	0.00	
4,400.00	5.18	84.50	4,229.43	138.39	1,062.69	1,071.66	2.00	-2.00	0.00	
4,500.00	3.18	84.50	4,329.16	139.09	1,069.94	1,078.94	2.00	-2.00	0.00	
4,600.00	1.18	84.50	4,429.08	139.46	1,073.72	1,082.74	2.00	-2.00	0.00	
4,658.93	0.00	0.00	4,488.00	139.51	1,074.33	1,083.35	2.00	-2.00	0.00	
Start 6262.00 hold at 4658.93 MD										
4,700.00	0.00	0.00	4,529.07	139.51	1,074.33	1,083.35	0.00	0.00	0.00	
4,800.00	0.00	0.00	4,629.07	139.51	1,074.33	1,083.35	0.00	0.00	0.00	
4,900.00	0.00	0.00	4,729.07	139.51	1,074.33	1,083.35	0.00	0.00	0.00	
4,957.93	0.00	0.00	4,787.00	139.51	1,074.33	1,083.35	0.00	0.00	0.00	
WASATCH										
5,000.00	0.00	0.00	4,829.07	139.51	1,074.33	1,083.35	0.00	0.00	0.00	
5,100.00	0.00	0.00	4,929.07	139.51	1,074.33	1,083.35	0.00	0.00	0.00	
5,200.00	0.00	0.00	5,029.07	139.51	1,074.33	1,083.35	0.00	0.00	0.00	
5,300.00	0.00	0.00	5,129.07	139.51	1,074.33	1,083.35	0.00	0.00	0.00	
5,400.00	0.00	0.00	5,229.07	139.51	1,074.33	1,083.35	0.00	0.00	0.00	
5,500.00	0.00	0.00	5,329.07	139.51	1,074.33	1,083.35	0.00	0.00	0.00	
5,600.00	0.00	0.00	5,429.07	139.51	1,074.33	1,083.35	0.00	0.00	0.00	
5,700.00	0.00	0.00	5,529.07	139.51	1,074.33	1,083.35	0.00	0.00	0.00	
5,800.00	0.00	0.00	5,629.07	139.51	1,074.33	1,083.35	0.00	0.00	0.00	
5,900.00	0.00	0.00	5,729.07	139.51	1,074.33	1,083.35	0.00	0.00	0.00	
6,000.00	0.00	0.00	5,829.07	139.51	1,074.33	1,083.35	0.00	0.00	0.00	
6,100.00	0.00	0.00	5,929.07	139.51	1,074.33	1,083.35	0.00	0.00	0.00	
6,200.00	0.00	0.00	6,029.07	139.51	1,074.33	1,083.35	0.00	0.00	0.00	
6,300.00	0.00	0.00	6,129.07	139.51	1,074.33	1,083.35	0.00	0.00	0.00	
6,400.00	0.00	0.00	6,229.07	139.51	1,074.33	1,083.35	0.00	0.00	0.00	
6,500.00	0.00	0.00	6,329.07	139.51	1,074.33	1,083.35	0.00	0.00	0.00	
6,600.00	0.00	0.00	6,429.07	139.51	1,074.33	1,083.35	0.00	0.00	0.00	
6,700.00	0.00	0.00	6,529.07	139.51	1,074.33	1,083.35	0.00	0.00	0.00	
6,800.00	0.00	0.00	6,629.07	139.51	1,074.33	1,083.35	0.00	0.00	0.00	
6,900.00	0.00	0.00	6,729.07	139.51	1,074.33	1,083.35	0.00	0.00	0.00	
7,000.00	0.00	0.00	6,829.07	139.51	1,074.33	1,083.35	0.00	0.00	0.00	
7,100.00	0.00	0.00	6,929.07	139.51	1,074.33	1,083.35	0.00	0.00	0.00	
7,200.00	0.00	0.00	7,029.07	139.51	1,074.33	1,083.35	0.00	0.00	0.00	
7,300.00	0.00	0.00	7,129.07	139.51	1,074.33	1,083.35	0.00	0.00	0.00	
7,400.00	0.00	0.00	7,229.07	139.51	1,074.33	1,083.35	0.00	0.00	0.00	
7,500.00	0.00	0.00	7,329.07	139.51	1,074.33	1,083.35	0.00	0.00	0.00	
7,600.00	0.00	0.00	7,429.07	139.51	1,074.33	1,083.35	0.00	0.00	0.00	
7,656.93	0.00	0.00	7,486.00	139.51	1,074.33	1,083.35	0.00	0.00	0.00	
MESAVERDE										
7,700.00	0.00	0.00	7,529.07	139.51	1,074.33	1,083.35	0.00	0.00	0.00	
7,800.00	0.00	0.00	7,629.07	139.51	1,074.33	1,083.35	0.00	0.00	0.00	
7,900.00	0.00	0.00	7,729.07	139.51	1,074.33	1,083.35	0.00	0.00	0.00	
8,000.00	0.00	0.00	7,829.07	139.51	1,074.33	1,083.35	0.00	0.00	0.00	
8,100.00	0.00	0.00	7,929.07	139.51	1,074.33	1,083.35	0.00	0.00	0.00	
8,200.00	0.00	0.00	8,029.07	139.51	1,074.33	1,083.35	0.00	0.00	0.00	
8,300.00	0.00	0.00	8,129.07	139.51	1,074.33	1,083.35	0.00	0.00	0.00	
8,400.00	0.00	0.00	8,229.07	139.51	1,074.33	1,083.35	0.00	0.00	0.00	
8,500.00	0.00	0.00	8,329.07	139.51	1,074.33	1,083.35	0.00	0.00	0.00	
8,600.00	0.00	0.00	8,429.07	139.51	1,074.33	1,083.35	0.00	0.00	0.00	
8,700.00	0.00	0.00	8,529.07	139.51	1,074.33	1,083.35	0.00	0.00	0.00	



Database:	EDM5000-RobertS-Local	Local Co-ordinate Reference:	Well NBU 921-25CMW1
Company:	Kerr McGee Oil and Gas Onshore LP	TVD Reference:	GL 4941 & KB 4' @ 4945.00ft (ASSUMED)
Project:	Uintah County, UT UTM12	MD Reference:	GL 4941 & KB 4' @ 4945.00ft (ASSUMED)
Site:	NBU 921-25D Pad	North Reference:	True
Well:	NBU 921-25CMW1	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	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)
8,800.00	0.00	0.00	8,629.07	139.51	1,074.33	1,083.35	0.00	0.00	0.00
8,900.00	0.00	0.00	8,729.07	139.51	1,074.33	1,083.35	0.00	0.00	0.00
9,000.00	0.00	0.00	8,829.07	139.51	1,074.33	1,083.35	0.00	0.00	0.00
9,100.00	0.00	0.00	8,929.07	139.51	1,074.33	1,083.35	0.00	0.00	0.00
9,200.00	0.00	0.00	9,029.07	139.51	1,074.33	1,083.35	0.00	0.00	0.00
9,300.00	0.00	0.00	9,129.07	139.51	1,074.33	1,083.35	0.00	0.00	0.00
9,400.00	0.00	0.00	9,229.07	139.51	1,074.33	1,083.35	0.00	0.00	0.00
9,500.00	0.00	0.00	9,329.07	139.51	1,074.33	1,083.35	0.00	0.00	0.00
9,600.00	0.00	0.00	9,429.07	139.51	1,074.33	1,083.35	0.00	0.00	0.00
9,700.00	0.00	0.00	9,529.07	139.51	1,074.33	1,083.35	0.00	0.00	0.00
9,800.00	0.00	0.00	9,629.07	139.51	1,074.33	1,083.35	0.00	0.00	0.00
9,900.00	0.00	0.00	9,729.07	139.51	1,074.33	1,083.35	0.00	0.00	0.00
10,000.00	0.00	0.00	9,829.07	139.51	1,074.33	1,083.35	0.00	0.00	0.00
10,100.00	0.00	0.00	9,929.07	139.51	1,074.33	1,083.35	0.00	0.00	0.00
10,200.00	0.00	0.00	10,029.07	139.51	1,074.33	1,083.35	0.00	0.00	0.00
10,300.00	0.00	0.00	10,129.07	139.51	1,074.33	1,083.35	0.00	0.00	0.00
10,400.00	0.00	0.00	10,229.07	139.51	1,074.33	1,083.35	0.00	0.00	0.00
10,500.00	0.00	0.00	10,329.07	139.51	1,074.33	1,083.35	0.00	0.00	0.00
10,600.00	0.00	0.00	10,429.07	139.51	1,074.33	1,083.35	0.00	0.00	0.00
10,700.00	0.00	0.00	10,529.07	139.51	1,074.33	1,083.35	0.00	0.00	0.00
10,800.00	0.00	0.00	10,629.07	139.51	1,074.33	1,083.35	0.00	0.00	0.00
10,900.00	0.00	0.00	10,729.07	139.51	1,074.33	1,083.35	0.00	0.00	0.00
10,920.93	0.00	0.00	10,750.00	139.51	1,074.33	1,083.35	0.00	0.00	0.00
TD at 10920.93 - PBHL_NBU 921-25CMW1									

Design Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude
PBHL_NBU 921-25CMW - hit/miss target - Shape - plan hits target center - Circle (radius 25.00)	0.00	0.00	10,750.00	139.51	1,074.33	14,534,118.03	2,059,939.25	40° 0' 44.950 N	109° 30' 6.386 W

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (in)	Hole Diameter (in)	
2,725.43	2,631.00	9 5/8"	9.625	12.250	

Formations					
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
1,538.86	1,516.00	GREEN RIVER			
4,957.93	4,787.00	WASATCH			
7,656.93	7,486.00	MESAVERDE			



Database:	EDM5000-RobertS-Local	Local Co-ordinate Reference:	Well NBU 921-25CMW1
Company:	Kerr McGee Oil and Gas Onshore LP	TVD Reference:	GL 4941 & KB 4' @ 4945.00ft (ASSUMED)
Project:	Uintah County, UT UTM12	MD Reference:	GL 4941 & KB 4' @ 4945.00ft (ASSUMED)
Site:	NBU 921-25D Pad	North Reference:	True
Well:	NBU 921-25CMW1	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	PLAN #1		

Plan Annotations				
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
250.00	250.00	0.00	0.00	Start Build 2.00
400.00	399.93	3.91	-0.34	Start 100.00 hold at 400.00 MD
500.00	499.79	9.12	-0.80	Start DLS 2.00 TFO 97.69
1,509.52	1,488.43	52.45	170.54	Start 2149.30 hold at 1509.52 MD
3,658.83	3,508.09	122.94	902.32	Start Drop -2.00
4,658.93	4,488.00	139.51	1,074.33	Start 6262.00 hold at 4658.93 MD
10,920.93	10,750.00	139.51	1,074.33	TD at 10920.93



Kerr McGee Oil and Gas Onshore LP

**Uintah County, UT UTM12
NBU 921-25D Pad
NBU 921-25CMW1**

OH

Plan: PLAN #1

Standard Planning Report - Geographic

07 April, 2011





SDI
Planning Report - Geographic



Database:	EDM5000-RobertS-Local	Local Co-ordinate Reference:	Well NBU 921-25CMW1
Company:	Kerr McGee Oil and Gas Onshore LP	TVD Reference:	GL 4941 & KB 4' @ 4945.00ft (ASSUMED)
Project:	Uintah County, UT UTM12	MD Reference:	GL 4941 & KB 4' @ 4945.00ft (ASSUMED)
Site:	NBU 921-25D Pad	North Reference:	True
Well:	NBU 921-25CMW1	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	PLAN #1		

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

Site	NBU 921-25D Pad, SEC 25 T9S R21E				
Site Position:		Northing:	14,533,953.48 usft	Latitude:	40° 0' 43.502 N
From:	Lat/Long	Easting:	2,058,860.26 usft	Longitude:	109° 30' 20.290 W
Position Uncertainty:	0.00 ft	Slot Radius:	13.200 in	Grid Convergence:	0.96 °

Well	NBU 921-25CMW1, 793 FNL 900 FEL					
Well Position	+N/-S	0.00 ft	Northing:	14,533,960.52 usft	Latitude:	40° 0' 43.571 N
	+E/-W	0.00 ft	Easting:	2,058,867.42 usft	Longitude:	109° 30' 20.196 W
Position Uncertainty		0.00 ft	Wellhead Elevation:		Ground Level:	4,941.00 ft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	04/07/2011	11.10	65.88	52,354

Design	PLAN #1			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.00	0.00	0.00	82.60

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,300.00	20.00	82.60	1,279.82	22.25	171.33	2.00	2.00	0.00	82.60	
3,457.22	20.00	82.60	3,306.93	117.26	903.00	0.00	0.00	0.00	0.00	
4,457.22	0.00	0.00	4,286.75	139.51	1,074.33	2.00	-2.00	0.00	180.00	
10,920.47	0.00	0.00	10,750.00	139.51	1,074.33	0.00	0.00	0.00	0.00	PBHL_NBU 921-25CI



Database:	EDM5000-RobertS-Local	Local Co-ordinate Reference:	Well NBU 921-25CMW1
Company:	Kerr McGee Oil and Gas Onshore LP	TVD Reference:	GL 4941 & KB 4' @ 4945.00ft (ASSUMED)
Project:	Uintah County, UT UTM12	MD Reference:	GL 4941 & KB 4' @ 4945.00ft (ASSUMED)
Site:	NBU 921-25D Pad	North Reference:	True
Well:	NBU 921-25CMW1	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	PLAN #1		

Planned Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude	
0.00	0.00	0.00	0.00	0.00	0.00	14,533,960.52	2,058,867.42	40° 0' 43.571 N	109° 30' 20.196 W	
100.00	0.00	0.00	100.00	0.00	0.00	14,533,960.52	2,058,867.42	40° 0' 43.571 N	109° 30' 20.196 W	
200.00	0.00	0.00	200.00	0.00	0.00	14,533,960.52	2,058,867.42	40° 0' 43.571 N	109° 30' 20.196 W	
300.00	0.00	0.00	300.00	0.00	0.00	14,533,960.52	2,058,867.42	40° 0' 43.571 N	109° 30' 20.196 W	
Start Build 2.00										
400.00	2.00	82.60	399.98	0.22	1.73	14,533,960.78	2,058,869.15	40° 0' 43.573 N	109° 30' 20.174 W	
500.00	4.00	82.60	499.84	0.90	6.92	14,533,961.54	2,058,874.33	40° 0' 43.580 N	109° 30' 20.107 W	
600.00	6.00	82.60	599.45	2.02	15.56	14,533,962.80	2,058,882.95	40° 0' 43.591 N	109° 30' 19.996 W	
700.00	8.00	82.60	698.70	3.59	27.65	14,533,964.58	2,058,895.01	40° 0' 43.606 N	109° 30' 19.841 W	
800.00	10.00	82.60	797.47	5.60	43.16	14,533,966.85	2,058,910.48	40° 0' 43.626 N	109° 30' 19.641 W	
900.00	12.00	82.60	895.62	8.06	62.08	14,533,969.62	2,058,929.36	40° 0' 43.650 N	109° 30' 19.398 W	
1,000.00	14.00	82.60	993.06	10.96	84.39	14,533,972.89	2,058,951.61	40° 0' 43.679 N	109° 30' 19.111 W	
1,100.00	16.00	82.60	1,089.64	14.29	110.05	14,533,976.66	2,058,977.22	40° 0' 43.712 N	109° 30' 18.781 W	
1,200.00	18.00	82.60	1,185.27	18.06	139.05	14,533,980.91	2,059,006.14	40° 0' 43.749 N	109° 30' 18.409 W	
1,300.00	20.00	82.60	1,279.82	22.25	171.33	14,533,985.64	2,059,038.35	40° 0' 43.791 N	109° 30' 17.994 W	
Start 2157.22 hold at 1300.00 MD										
1,400.00	20.00	82.60	1,373.78	26.65	205.25	14,533,990.61	2,059,072.19	40° 0' 43.834 N	109° 30' 17.558 W	
1,500.00	20.00	82.60	1,467.75	31.06	239.16	14,533,995.59	2,059,106.03	40° 0' 43.878 N	109° 30' 17.122 W	
1,551.34	20.00	82.60	1,516.00	33.32	256.58	14,533,998.14	2,059,123.40	40° 0' 43.900 N	109° 30' 16.898 W	
GREEN RIVER										
1,600.00	20.00	82.60	1,561.72	35.46	273.08	14,534,000.56	2,059,139.87	40° 0' 43.921 N	109° 30' 16.686 W	
1,700.00	20.00	82.60	1,655.69	39.87	307.00	14,534,005.53	2,059,173.71	40° 0' 43.965 N	109° 30' 16.250 W	
1,800.00	20.00	82.60	1,749.66	44.27	340.92	14,534,010.50	2,059,207.55	40° 0' 44.008 N	109° 30' 15.814 W	
1,900.00	20.00	82.60	1,843.63	48.68	374.83	14,534,015.48	2,059,241.38	40° 0' 44.052 N	109° 30' 15.378 W	
2,000.00	20.00	82.60	1,937.60	53.08	408.75	14,534,020.45	2,059,275.22	40° 0' 44.095 N	109° 30' 14.942 W	
2,100.00	20.00	82.60	2,031.57	57.49	442.67	14,534,025.42	2,059,309.06	40° 0' 44.139 N	109° 30' 14.506 W	
2,200.00	20.00	82.60	2,125.54	61.89	476.58	14,534,030.40	2,059,342.90	40° 0' 44.183 N	109° 30' 14.070 W	
2,300.00	20.00	82.60	2,219.51	66.29	510.50	14,534,035.37	2,059,376.74	40° 0' 44.226 N	109° 30' 13.634 W	
2,400.00	20.00	82.60	2,313.48	70.70	544.42	14,534,040.34	2,059,410.58	40° 0' 44.270 N	109° 30' 13.198 W	
2,500.00	20.00	82.60	2,407.45	75.10	578.34	14,534,045.31	2,059,444.42	40° 0' 44.313 N	109° 30' 12.762 W	
2,600.00	20.00	82.60	2,501.42	79.51	612.25	14,534,050.29	2,059,478.25	40° 0' 44.357 N	109° 30' 12.326 W	
2,700.00	20.00	82.60	2,595.39	83.91	646.17	14,534,055.26	2,059,512.09	40° 0' 44.400 N	109° 30' 11.890 W	
2,737.90	20.00	82.60	2,631.00	85.58	659.03	14,534,057.14	2,059,524.92	40° 0' 44.417 N	109° 30' 11.725 W	
9 5/8"										
2,800.00	20.00	82.60	2,689.35	88.32	680.09	14,534,060.23	2,059,545.93	40° 0' 44.444 N	109° 30' 11.454 W	
2,900.00	20.00	82.60	2,783.32	92.72	714.00	14,534,065.21	2,059,579.77	40° 0' 44.487 N	109° 30' 11.018 W	
3,000.00	20.00	82.60	2,877.29	97.13	747.92	14,534,070.18	2,059,613.61	40° 0' 44.531 N	109° 30' 10.582 W	
3,100.00	20.00	82.60	2,971.26	101.53	781.84	14,534,075.15	2,059,647.45	40° 0' 44.574 N	109° 30' 10.146 W	
3,200.00	20.00	82.60	3,065.23	105.94	815.76	14,534,080.12	2,059,681.28	40° 0' 44.618 N	109° 30' 9.710 W	
3,300.00	20.00	82.60	3,159.20	110.34	849.67	14,534,085.10	2,059,715.12	40° 0' 44.661 N	109° 30' 9.274 W	
3,400.00	20.00	82.60	3,253.17	114.74	883.59	14,534,090.07	2,059,748.96	40° 0' 44.705 N	109° 30' 8.838 W	
3,457.22	20.00	82.60	3,306.93	117.26	903.00	14,534,092.91	2,059,768.32	40° 0' 44.730 N	109° 30' 8.589 W	
Start Drop -2.00										
3,500.00	19.14	82.60	3,347.25	119.11	917.21	14,534,095.00	2,059,782.50	40° 0' 44.748 N	109° 30' 8.406 W	
3,600.00	17.14	82.60	3,442.27	123.12	948.09	14,534,099.53	2,059,813.31	40° 0' 44.788 N	109° 30' 8.009 W	
3,700.00	15.14	82.60	3,538.32	126.70	975.66	14,534,103.57	2,059,840.82	40° 0' 44.823 N	109° 30' 7.655 W	
3,800.00	13.14	82.60	3,635.28	129.85	999.89	14,534,107.12	2,059,865.00	40° 0' 44.854 N	109° 30' 7.343 W	
3,900.00	11.14	82.60	3,733.04	132.56	1,020.76	14,534,110.18	2,059,885.81	40° 0' 44.881 N	109° 30' 7.075 W	
4,000.00	9.14	82.60	3,831.47	134.83	1,038.22	14,534,112.74	2,059,903.23	40° 0' 44.903 N	109° 30' 6.851 W	
4,100.00	7.14	82.60	3,930.46	136.65	1,052.27	14,534,114.80	2,059,917.25	40° 0' 44.921 N	109° 30' 6.670 W	
4,200.00	5.14	82.60	4,029.88	138.03	1,062.88	14,534,116.36	2,059,927.84	40° 0' 44.935 N	109° 30' 6.533 W	
4,300.00	3.14	82.60	4,129.61	138.96	1,070.05	14,534,117.41	2,059,934.99	40° 0' 44.944 N	109° 30' 6.441 W	
4,400.00	1.14	82.60	4,229.54	139.44	1,073.76	14,534,117.95	2,059,938.69	40° 0' 44.949 N	109° 30' 6.394 W	



Database:	EDM5000-RobertS-Local	Local Co-ordinate Reference:	Well NBU 921-25CMW1
Company:	Kerr McGee Oil and Gas Onshore LP	TVD Reference:	GL 4941 & KB 4' @ 4945.00ft (ASSUMED)
Project:	Uintah County, UT UTM12	MD Reference:	GL 4941 & KB 4' @ 4945.00ft (ASSUMED)
Site:	NBU 921-25D Pad	North Reference:	True
Well:	NBU 921-25CMW1	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	PLAN #1		

Planned Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude	
4,457.22	0.00	0.00	4,286.75	139.51	1,074.33	14,534,118.03	2,059,939.25	40° 0' 44.950 N	109° 30' 6.386 W	
Start 6463.25 hold at 4457.22 MD										
4,500.00	0.00	0.00	4,329.54	139.51	1,074.33	14,534,118.03	2,059,939.25	40° 0' 44.950 N	109° 30' 6.386 W	
4,600.00	0.00	0.00	4,429.54	139.51	1,074.33	14,534,118.03	2,059,939.25	40° 0' 44.950 N	109° 30' 6.386 W	
4,700.00	0.00	0.00	4,529.54	139.51	1,074.33	14,534,118.03	2,059,939.25	40° 0' 44.950 N	109° 30' 6.386 W	
4,800.00	0.00	0.00	4,629.54	139.51	1,074.33	14,534,118.03	2,059,939.25	40° 0' 44.950 N	109° 30' 6.386 W	
4,900.00	0.00	0.00	4,729.54	139.51	1,074.33	14,534,118.03	2,059,939.25	40° 0' 44.950 N	109° 30' 6.386 W	
4,957.47	0.00	0.00	4,787.00	139.51	1,074.33	14,534,118.03	2,059,939.25	40° 0' 44.950 N	109° 30' 6.386 W	
WASATCH										
5,000.00	0.00	0.00	4,829.54	139.51	1,074.33	14,534,118.03	2,059,939.25	40° 0' 44.950 N	109° 30' 6.386 W	
5,100.00	0.00	0.00	4,929.54	139.51	1,074.33	14,534,118.03	2,059,939.25	40° 0' 44.950 N	109° 30' 6.386 W	
5,200.00	0.00	0.00	5,029.54	139.51	1,074.33	14,534,118.03	2,059,939.25	40° 0' 44.950 N	109° 30' 6.386 W	
5,300.00	0.00	0.00	5,129.54	139.51	1,074.33	14,534,118.03	2,059,939.25	40° 0' 44.950 N	109° 30' 6.386 W	
5,400.00	0.00	0.00	5,229.54	139.51	1,074.33	14,534,118.03	2,059,939.25	40° 0' 44.950 N	109° 30' 6.386 W	
5,500.00	0.00	0.00	5,329.54	139.51	1,074.33	14,534,118.03	2,059,939.25	40° 0' 44.950 N	109° 30' 6.386 W	
5,600.00	0.00	0.00	5,429.54	139.51	1,074.33	14,534,118.03	2,059,939.25	40° 0' 44.950 N	109° 30' 6.386 W	
5,700.00	0.00	0.00	5,529.54	139.51	1,074.33	14,534,118.03	2,059,939.25	40° 0' 44.950 N	109° 30' 6.386 W	
5,800.00	0.00	0.00	5,629.54	139.51	1,074.33	14,534,118.03	2,059,939.25	40° 0' 44.950 N	109° 30' 6.386 W	
5,900.00	0.00	0.00	5,729.54	139.51	1,074.33	14,534,118.03	2,059,939.25	40° 0' 44.950 N	109° 30' 6.386 W	
6,000.00	0.00	0.00	5,829.54	139.51	1,074.33	14,534,118.03	2,059,939.25	40° 0' 44.950 N	109° 30' 6.386 W	
6,100.00	0.00	0.00	5,929.54	139.51	1,074.33	14,534,118.03	2,059,939.25	40° 0' 44.950 N	109° 30' 6.386 W	
6,200.00	0.00	0.00	6,029.54	139.51	1,074.33	14,534,118.03	2,059,939.25	40° 0' 44.950 N	109° 30' 6.386 W	
6,300.00	0.00	0.00	6,129.54	139.51	1,074.33	14,534,118.03	2,059,939.25	40° 0' 44.950 N	109° 30' 6.386 W	
6,400.00	0.00	0.00	6,229.54	139.51	1,074.33	14,534,118.03	2,059,939.25	40° 0' 44.950 N	109° 30' 6.386 W	
6,500.00	0.00	0.00	6,329.54	139.51	1,074.33	14,534,118.03	2,059,939.25	40° 0' 44.950 N	109° 30' 6.386 W	
6,600.00	0.00	0.00	6,429.54	139.51	1,074.33	14,534,118.03	2,059,939.25	40° 0' 44.950 N	109° 30' 6.386 W	
6,700.00	0.00	0.00	6,529.54	139.51	1,074.33	14,534,118.03	2,059,939.25	40° 0' 44.950 N	109° 30' 6.386 W	
6,800.00	0.00	0.00	6,629.54	139.51	1,074.33	14,534,118.03	2,059,939.25	40° 0' 44.950 N	109° 30' 6.386 W	
6,900.00	0.00	0.00	6,729.54	139.51	1,074.33	14,534,118.03	2,059,939.25	40° 0' 44.950 N	109° 30' 6.386 W	
7,000.00	0.00	0.00	6,829.54	139.51	1,074.33	14,534,118.03	2,059,939.25	40° 0' 44.950 N	109° 30' 6.386 W	
7,100.00	0.00	0.00	6,929.54	139.51	1,074.33	14,534,118.03	2,059,939.25	40° 0' 44.950 N	109° 30' 6.386 W	
7,200.00	0.00	0.00	7,029.54	139.51	1,074.33	14,534,118.03	2,059,939.25	40° 0' 44.950 N	109° 30' 6.386 W	
7,300.00	0.00	0.00	7,129.54	139.51	1,074.33	14,534,118.03	2,059,939.25	40° 0' 44.950 N	109° 30' 6.386 W	
7,400.00	0.00	0.00	7,229.54	139.51	1,074.33	14,534,118.03	2,059,939.25	40° 0' 44.950 N	109° 30' 6.386 W	
7,500.00	0.00	0.00	7,329.54	139.51	1,074.33	14,534,118.03	2,059,939.25	40° 0' 44.950 N	109° 30' 6.386 W	
7,600.00	0.00	0.00	7,429.54	139.51	1,074.33	14,534,118.03	2,059,939.25	40° 0' 44.950 N	109° 30' 6.386 W	
7,656.47	0.00	0.00	7,486.00	139.51	1,074.33	14,534,118.03	2,059,939.25	40° 0' 44.950 N	109° 30' 6.386 W	
MESAVERDE										
7,700.00	0.00	0.00	7,529.54	139.51	1,074.33	14,534,118.03	2,059,939.25	40° 0' 44.950 N	109° 30' 6.386 W	
7,800.00	0.00	0.00	7,629.54	139.51	1,074.33	14,534,118.03	2,059,939.25	40° 0' 44.950 N	109° 30' 6.386 W	
7,900.00	0.00	0.00	7,729.54	139.51	1,074.33	14,534,118.03	2,059,939.25	40° 0' 44.950 N	109° 30' 6.386 W	
8,000.00	0.00	0.00	7,829.54	139.51	1,074.33	14,534,118.03	2,059,939.25	40° 0' 44.950 N	109° 30' 6.386 W	
8,100.00	0.00	0.00	7,929.54	139.51	1,074.33	14,534,118.03	2,059,939.25	40° 0' 44.950 N	109° 30' 6.386 W	
8,200.00	0.00	0.00	8,029.54	139.51	1,074.33	14,534,118.03	2,059,939.25	40° 0' 44.950 N	109° 30' 6.386 W	
8,300.00	0.00	0.00	8,129.54	139.51	1,074.33	14,534,118.03	2,059,939.25	40° 0' 44.950 N	109° 30' 6.386 W	
8,400.00	0.00	0.00	8,229.54	139.51	1,074.33	14,534,118.03	2,059,939.25	40° 0' 44.950 N	109° 30' 6.386 W	
8,500.00	0.00	0.00	8,329.54	139.51	1,074.33	14,534,118.03	2,059,939.25	40° 0' 44.950 N	109° 30' 6.386 W	
8,600.00	0.00	0.00	8,429.54	139.51	1,074.33	14,534,118.03	2,059,939.25	40° 0' 44.950 N	109° 30' 6.386 W	
8,700.00	0.00	0.00	8,529.54	139.51	1,074.33	14,534,118.03	2,059,939.25	40° 0' 44.950 N	109° 30' 6.386 W	
8,800.00	0.00	0.00	8,629.54	139.51	1,074.33	14,534,118.03	2,059,939.25	40° 0' 44.950 N	109° 30' 6.386 W	
8,900.00	0.00	0.00	8,729.54	139.51	1,074.33	14,534,118.03	2,059,939.25	40° 0' 44.950 N	109° 30' 6.386 W	
9,000.00	0.00	0.00	8,829.54	139.51	1,074.33	14,534,118.03	2,059,939.25	40° 0' 44.950 N	109° 30' 6.386 W	
9,100.00	0.00	0.00	8,929.54	139.51	1,074.33	14,534,118.03	2,059,939.25	40° 0' 44.950 N	109° 30' 6.386 W	
9,200.00	0.00	0.00	9,029.54	139.51	1,074.33	14,534,118.03	2,059,939.25	40° 0' 44.950 N	109° 30' 6.386 W	



Database:	EDM5000-RobertS-Local	Local Co-ordinate Reference:	Well NBU 921-25CMW1
Company:	Kerr McGee Oil and Gas Onshore LP	TVD Reference:	GL 4941 & KB 4' @ 4945.00ft (ASSUMED)
Project:	Uintah County, UT UTM12	MD Reference:	GL 4941 & KB 4' @ 4945.00ft (ASSUMED)
Site:	NBU 921-25D Pad	North Reference:	True
Well:	NBU 921-25CMW1	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	PLAN #1		

Planned Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude	
9,300.00	0.00	0.00	9,129.54	139.51	1,074.33	14,534,118.03	2,059,939.25	40° 0' 44.950 N	109° 30' 6.386 W	
9,400.00	0.00	0.00	9,229.54	139.51	1,074.33	14,534,118.03	2,059,939.25	40° 0' 44.950 N	109° 30' 6.386 W	
9,500.00	0.00	0.00	9,329.54	139.51	1,074.33	14,534,118.03	2,059,939.25	40° 0' 44.950 N	109° 30' 6.386 W	
9,600.00	0.00	0.00	9,429.54	139.51	1,074.33	14,534,118.03	2,059,939.25	40° 0' 44.950 N	109° 30' 6.386 W	
9,700.00	0.00	0.00	9,529.54	139.51	1,074.33	14,534,118.03	2,059,939.25	40° 0' 44.950 N	109° 30' 6.386 W	
9,800.00	0.00	0.00	9,629.54	139.51	1,074.33	14,534,118.03	2,059,939.25	40° 0' 44.950 N	109° 30' 6.386 W	
9,900.00	0.00	0.00	9,729.54	139.51	1,074.33	14,534,118.03	2,059,939.25	40° 0' 44.950 N	109° 30' 6.386 W	
10,000.00	0.00	0.00	9,829.54	139.51	1,074.33	14,534,118.03	2,059,939.25	40° 0' 44.950 N	109° 30' 6.386 W	
10,100.00	0.00	0.00	9,929.54	139.51	1,074.33	14,534,118.03	2,059,939.25	40° 0' 44.950 N	109° 30' 6.386 W	
10,200.00	0.00	0.00	10,029.54	139.51	1,074.33	14,534,118.03	2,059,939.25	40° 0' 44.950 N	109° 30' 6.386 W	
10,300.00	0.00	0.00	10,129.54	139.51	1,074.33	14,534,118.03	2,059,939.25	40° 0' 44.950 N	109° 30' 6.386 W	
10,400.00	0.00	0.00	10,229.54	139.51	1,074.33	14,534,118.03	2,059,939.25	40° 0' 44.950 N	109° 30' 6.386 W	
10,500.00	0.00	0.00	10,329.54	139.51	1,074.33	14,534,118.03	2,059,939.25	40° 0' 44.950 N	109° 30' 6.386 W	
10,600.00	0.00	0.00	10,429.54	139.51	1,074.33	14,534,118.03	2,059,939.25	40° 0' 44.950 N	109° 30' 6.386 W	
10,700.00	0.00	0.00	10,529.54	139.51	1,074.33	14,534,118.03	2,059,939.25	40° 0' 44.950 N	109° 30' 6.386 W	
10,800.00	0.00	0.00	10,629.54	139.51	1,074.33	14,534,118.03	2,059,939.25	40° 0' 44.950 N	109° 30' 6.386 W	
10,900.00	0.00	0.00	10,729.54	139.51	1,074.33	14,534,118.03	2,059,939.25	40° 0' 44.950 N	109° 30' 6.386 W	
10,920.47	0.00	0.00	10,750.00	139.51	1,074.33	14,534,118.03	2,059,939.25	40° 0' 44.950 N	109° 30' 6.386 W	
TD at 10920.46 - PBHL_NBU 921-25CMW1										

Design Targets										
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude	
PBHL_NBU 921-25CMV - hit/miss target - Shape - plan hits target center - Circle (radius 25.00)	0.00	0.00	10,750.00	139.51	1,074.33	14,534,118.03	2,059,939.25	40° 0' 44.950 N	109° 30' 6.386 W	

Casing Points						
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (in)	Hole Diameter (in)		
2,737.90	2,631.00	9 5/8"	9.625	12.250		

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
1,551.34	1,516.00	GREEN RIVER				
4,957.47	4,787.00	WASATCH				
7,656.47	7,486.00	MESAVERDE				



Database:	EDM5000-RobertS-Local	Local Co-ordinate Reference:	Well NBU 921-25CMW1
Company:	Kerr McGee Oil and Gas Onshore LP	TVD Reference:	GL 4941 & KB 4' @ 4945.00ft (ASSUMED)
Project:	Uintah County, UT UTM12	MD Reference:	GL 4941 & KB 4' @ 4945.00ft (ASSUMED)
Site:	NBU 921-25D Pad	North Reference:	True
Well:	NBU 921-25CMW1	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	PLAN #1		

Plan Annotations				
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
300.00	300.00	0.00	0.00	Start Build 2.00
1,300.00	1,279.82	22.25	171.33	Start 2157.22 hold at 1300.00 MD
3,457.22	3,306.93	117.26	903.00	Start Drop -2.00
4,457.22	4,286.75	139.51	1,074.33	Start 6463.25 hold at 4457.22 MD
10,920.47	10,750.00	139.51	1,074.33	TD at 10920.46

NBU 921-25C1AS

Surface: 800' FNL 893' FWL (NW/4NW/4)
BHL: 190' FNL 2,405' FWL (NE/4NW/4)
Mineral Lease: UO 1189 ST

NBU 921-25D1BS

Surface: 807' FNL 885' FWL (NW/4NW/4)
BHL: 60' FNL 716' FWL (NW/4NW/4)
Mineral Lease: UO 1189 ST

NBU 921-25D1CS

Surface: 814' FNL 878' FWL (NW/4NW/4)
BHL: 460' FNL 726' FWL (NW/4NW/4)
Mineral Lease: UO 1189 ST

NBU 921-25E1CS

Surface: 821' FNL 871' FWL (NW/4NW/4)
BHL: 1,976' FNL 947' FWL (SW/4NW/4)
Mineral Lease: UO 1194 ST

NBU 921-25E3AS

Surface: 828' FNL 864' FWL (NW/4NW/4)
BHL: 2,162' FNL 371' FWL (SW/4NW/4)
Mineral Lease: UO 1194 ST

NBU 921-25C MW1

Surface: 793' FNL 900' FWL (NW/4NW/4)
BHL: 658' FNL 1,975' FWL (NE/4NW/4)
Mineral Lease: UO 1189 ST

NBU 921-25C MW2

Surface: 787' FNL 907' FWL (NW/4NW/4)
BHL: 282' FNL 1,335' FWL (NE/4NW/4)
Mineral Lease: UO 1189 ST

Pad: NBU 921-25D
Section 25 T9S R21E

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

MULTI-POINT SURFACE USE PLAN of OPERATIONS (SUPO)

This SUPO contains surface operating procedures for Kerr-McGee Oil & Gas Onshore LP (KMG), a wholly owned subsidiary of Anadarko Petroleum Corporation (APC) pertaining to actions that involve the State of Utah School and Institutional Trust Lands Administration (SITLA) in the development of minerals leased to

Surface Use Plan of Operations

NBU 921-25C1AS / 25D1BS/ 25D1CS/ 25E1CS/ 25E3AS/25C MW1/25C MW2

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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. 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:

No 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 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 road/corridor were to cross a water of the United States, KMG will adhere to the requirements of applicable Nationwide or Individual Permits of the Department of Army Corps of Engineers.

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

C. Location of Existing and Proposed Facilities:

This pad will expand the existing pad for the NBU 921-25D, which is a temporarily abandoned well according to Utah Division of Oil, Gas and Mining (UDOGM) records as of April 19, 2011.

Surface Use Plan of Operations

NBU 921-25C1AS / 25D1BS/ 25D1CS/ 25E1CS/ 25E3AS/25C MW1/25C MW2

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Production facilities (see Well Pad Design Summary and Facilities Diagram): Not applicable for Monitor Wells (MW 1 & MW2).

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) from the producing wells on location. 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: Not applicable for Monitor wells.

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:

Surface Use Plan of Operations

NBU 921-25C1AS / 25D1BS/ 25D1CS/ 25E1CS/ 25E3AS/25C MW1/25C MW2

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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, 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.

Surface Use Plan of Operations

NBU 921-25C1AS / 25D1BS/ 25D1CS/ 25E1CS/ 25E3AS/25C MW1/25C MW2

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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, and drilling 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.

Surface Use Plan of Operations

NBU 921-25C1AS / 25D1BS/ 25D1CS/ 25E1CS/ 25E3AS/25C MW1/25C MW2

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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.

Surface Use Plan of Operations

NBU 921-25C1AS / 25D1BS/ 25D1CS/ 25E1CS/ 25E3AS/25C MW1/25C MW2

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Final Reclamation

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

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

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

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

Seeding and Measures Common to Interim and Final Reclamation

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

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

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

J. Surface/Mineral Ownership:

SITLA

675 East 500 South, Suite 500

Salt Lake City, UT 84102

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-289.

Surface Use Plan of Operations

NBU 921-25C1AS / 25D1BS/ 25D1CS/ 25E1CS/ 25E3AS/25C MW1/25C MW2

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

Andy Lytle
Regulatory Analyst I
Kerr-McGee Oil & Gas Onshore LP
PO Box 173779
Denver, CO 80217-3779
(720) 929-6100

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.



Andy Lytle

April 25, 2011

Date



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

April 7, 2011

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

Re: Directional Drilling R649-3-11
NBU 921-25C MW1 (Pressure Monitor Well)
T9S-R21E
Section 25: NWNW (Surf), NENW (Bottom)
Surface: 793' FNL, 900' FWL
Bottom Hole: 658' FNL, 1975' 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 921-25C MW1 pressure monitor well 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 well pads and roads in the area.
- Furthermore, Kerr-McGee certifies that it is the sole working interest owner within 460 feet of the entire directional well bore.

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

Sincerely,

KERR-MCGEE OIL & GAS ONSHORE LP

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

Joe Matney
Sr. Staff Landman

United States Department of the Interior

BUREAU OF LAND MANAGEMENT

Utah State Office

P.O. Box 45155

Salt Lake City, Utah 84145-0155

IN REPLY REFER TO:

3160

(UT-922)

April 29, 2011

Memorandum

To: Assistant District Manager Minerals, Vernal District

From: Michael Coulthard, Petroleum Engineer

Subject: 2011 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 2011 within the Natural Buttes Unit, Uintah County, Utah.

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

NBU 921-25D Pad

43-047-51567	NBU 921-25C MW1	Sec 25 T09S R21E 0793 FNL 0900 FWL BHL Sec 25 T09S R21E 0658 FNL 1975 FWL
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43-047-51568	NBU 921-25C MW2	Sec 25 T09S R21E 0787 FNL 0907 FWL BHL Sec 25 T09S R21E 0282 FNL 1335 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: 2011.04.29 13:48:30 -06'00'

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

MCoulthard:mc:4-29-11

RECEIVED: May. 02, 2011

From: Jim Davis
To: Hill, Brad; Mason, Diana
CC: Andrew.Lytle@anadarko.com; Bonner, Ed; Garrison, LaVonne
Date: 5/3/2011 8:38 AM
Subject: Fwd: Submission of 2 State APD's

SITLA approves these two APDs. Arch and paleo surveys were submitted and approved on the existing well pad. No new surface disturbance will be made.

NBU 921-25C MW1 (4304751567)
NBU 921-25C MW2 (4304751568)

-Jim

>>> "Lytle, Andrew" <Andrew.Lytle@anadarko.com> 4/28/2011 9:06 AM >>>
Hi Jim,

I submitted 2 APD's this morning on UDOGM's website. These 2 wells will be monitor wells and will not be producers. They will be additional wells added and drilled off the previously approved NBU 921-25D pad. Since this pad has already been onsited and approved will it be necessary to onsite these wells? There will be no additional ground disturbance.

Let me know when you get a chance. Thanks!

Andy

APD's submitted:

NBU 921-25C MW1
NBU 921-25C MW2

Andy Lytle
Anadarko E&P Company, LP
Direct: 720-929-6100
Fax: 720-929-7100
andrew.lytle@anadarko.com

</PRE>

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| | | | | |
|--|---|-------|-------|--|
| Well Name | KERR-MCGEE OIL & GAS ONSHORE, L.P. NBU 921-25C MW | | | |
| String | Surf | Prod | P2 | |
| Casing Size(") | 8.625 | 4.500 | 3.500 | |
| Setting Depth (TVD) | 2630 | 7300 | 10920 | |
| Previous Shoe Setting Depth (TVD) | 40 | 2630 | 7300 | |
| Max Mud Weight (ppg) | 8.4 | 12.5 | 12.5 | |
| BOPE Proposed (psi) | 500 | 5000 | 5000 | |
| Casing Internal Yield (psi) | 3390 | 7780 | 10160 | |
| Operators Max Anticipated Pressure (psi) | 6865 | | 12.1 | |

| | | | |
|---|--|-------|--|
| Calculations | Surf String | 8.625 | " |
| Max BHP (psi) | .052*Setting Depth*MW= | 1149 | |
| | | | BOPE Adequate For Drilling And Setting Casing at Depth? |
| MASP (Gas) (psi) | Max BHP-(0.12*Setting Depth)= | 833 | YES <input type="checkbox"/> air drill with diverter |
| MASP (Gas/Mud) (psi) | Max BHP-(0.22*Setting Depth)= | 570 | YES <input type="checkbox"/> OK |
| | | | *Can Full Expected Pressure Be Held At Previous Shoe? |
| Pressure At Previous Shoe | Max BHP-.22*(Setting Depth - Previous Shoe Depth)= | 579 | NO <input type="checkbox"/> 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= | 4745 | |
| | | | BOPE Adequate For Drilling And Setting Casing at Depth? |
| MASP (Gas) (psi) | Max BHP-(0.12*Setting Depth)= | 3869 | YES <input type="checkbox"/> |
| MASP (Gas/Mud) (psi) | Max BHP-(0.22*Setting Depth)= | 3139 | YES <input type="checkbox"/> OK |
| | | | *Can Full Expected Pressure Be Held At Previous Shoe? |
| Pressure At Previous Shoe | Max BHP-.22*(Setting Depth - Previous Shoe Depth)= | 3718 | NO <input type="checkbox"/> Reasonable |
| Required Casing/BOPE Test Pressure= | | 5000 | psi |
| *Max Pressure Allowed @ Previous Casing Shoe= | | 2630 | psi *Assumes 1psi/ft frac gradient |

| | | | |
|---|--|-------|--|
| Calculations | P2 String | 3.500 | " |
| Max BHP (psi) | .052*Setting Depth*MW= | 7098 | |
| | | | BOPE Adequate For Drilling And Setting Casing at Depth? |
| MASP (Gas) (psi) | Max BHP-(0.12*Setting Depth)= | 5788 | NO <input type="checkbox"/> |
| MASP (Gas/Mud) (psi) | Max BHP-(0.22*Setting Depth)= | 4696 | YES <input type="checkbox"/> OK |
| | | | *Can Full Expected Pressure Be Held At Previous Shoe? |
| Pressure At Previous Shoe | Max BHP-.22*(Setting Depth - Previous Shoe Depth)= | 6302 | YES <input type="checkbox"/> OK |
| Required Casing/BOPE Test Pressure= | | 5000 | psi |
| *Max Pressure Allowed @ Previous Casing Shoe= | | 7300 | psi *Assumes 1psi/ft frac gradient |

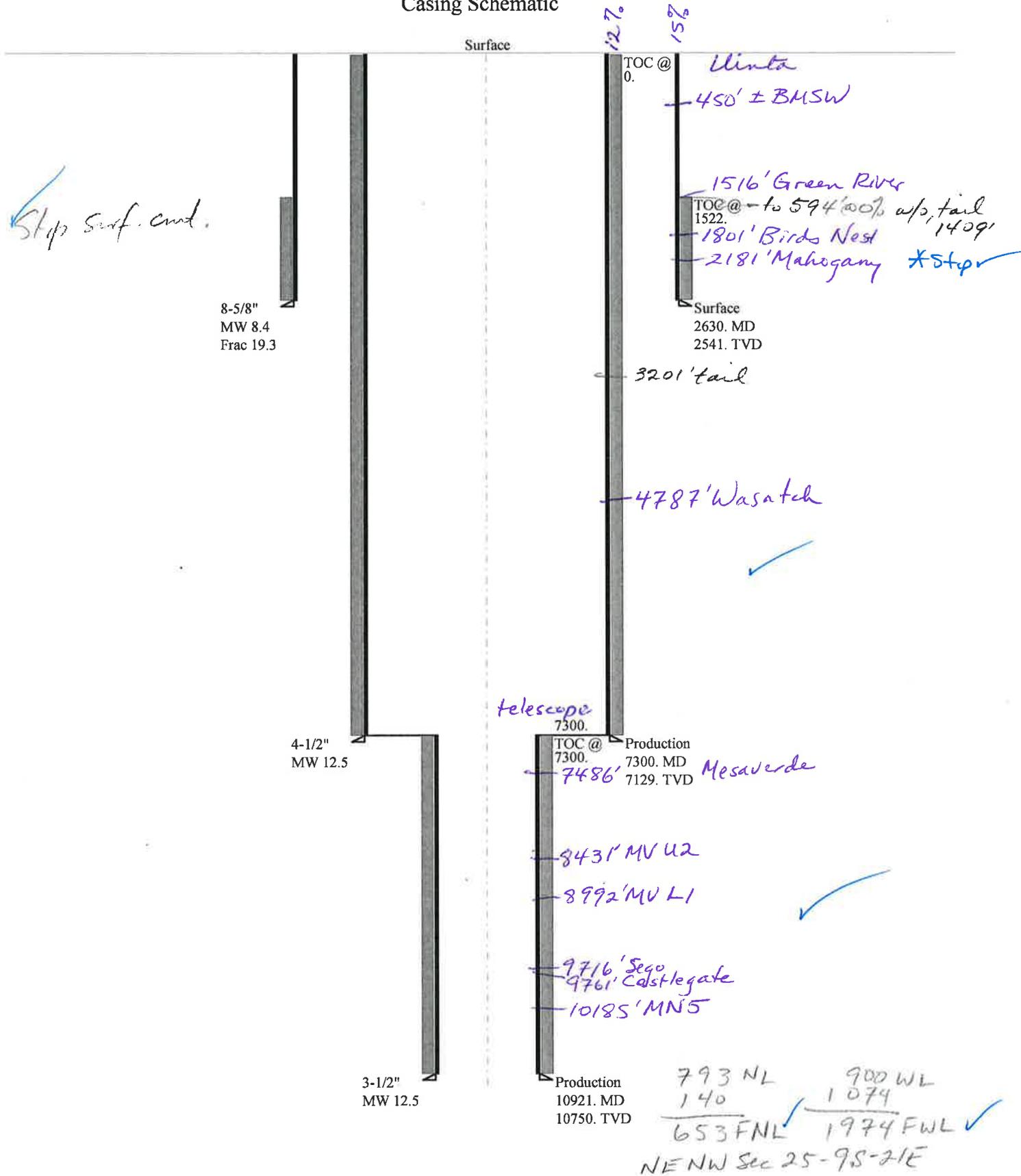
| | | | |
|-------------------------------------|--|--|--|
| Calculations | String | | " |
| Max BHP (psi) | .052*Setting Depth*MW= | | |
| | | | BOPE Adequate For Drilling And Setting Casing at Depth? |
| MASP (Gas) (psi) | Max BHP-(0.12*Setting Depth)= | | NO <input type="checkbox"/> |
| MASP (Gas/Mud)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

API Well Number: 43047515670000

| | | |
|---|----------------------|------------------------------------|
| *Max Pressure Allowed @ Previous Casing Shoe= | <input type="text"/> | psi *Assumes 1psi/ft frac gradient |
|---|----------------------|------------------------------------|

43047515670000 NBU 921-25C MW1

Casing Schematic



| | | |
|--------------|---|-----------------------------|
| Well name: | 43047515670000 NBU 921-25C MW1 | |
| Operator: | KERR-MCGEE OIL & GAS ONSHORE, L.P. | |
| String type: | Production | Project ID:
43-047-51567 |
| Location: | UINTAH COUNTY | |

Design parameters:

Collapse

Mud weight: 12.500 ppg
Design is based on evacuated pipe.

Burst

Max anticipated surface pressure: 3,061 psi
Internal gradient: 0.220 psi/ft
Calculated BHP 4,629 psi

No backup mud specified.

Minimum design factors:

Collapse:

Design factor 1.125

Burst:

Design factor 1.00

Tension:

API - tubing: 1.50 (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: 5,968 ft

Environment:

H2S considered? No
Surface temperature: 74 °F
Bottom hole temperature: 174 °F
Temperature gradient: 1.40 °F/100ft
Minimum section length: 100 ft

Cement top: Surface

Directional Info - Build & Hold

Kick-off point 250 ft
Departure at shoe: 1083 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 | 7300 | 4.5 | 11.60 | I-80 | LT&C | 7129 | 7300 | 3.875 | 96355 |
| 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 | 4629 | 6360 | 1.374 | 4629 | 7780 | 1.68 | 82.7 | 212 | 2.56 J |

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

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

Date: May 3, 2011
Salt Lake City, Utah

Remarks:

Collapse is based on a vertical depth of 7129 ft, a mud weight of 12.5 ppg. The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

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

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

| | | | |
|--------------|---|-------------|--------------|
| Well name: | 43047515670000 NBU 921-25C MW1 | | |
| Operator: | KERR-MCGEE OIL & GAS ONSHORE, L.P. | | |
| String type: | Production Liner | Project ID: | 43-047-51567 |
| Location: | UINTAH COUNTY | | |

Design parameters:

Collapse

Mud weight: 12.500 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: 225 °F
 Temperature gradient: 1.40 °F/100ft
 Minimum section length: 1,000 ft

Cement top: 7,300 ft

Burst

Max anticipated surface pressure: 4,616 psi
 Internal gradient: 0.220 psi/ft
 Calculated BHP 6,981 psi

No backup mud specified.

Tension:

API - tubing: 1.50 (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: 10,266 ft

Liner top: 7,300 ft

Directional Info - Build & Hold

Kick-off point 250 ft
 Departure at shoe: 1083 ft
 Maximum dogleg: 0 °/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 | 3621 | 3.5 | 9.30 | L-80 | IJ Nu-Lock | 10750 | 10921 | 2.867 | 9559 |
| 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 | 6981 | 10530 | 1.508 | 6981 | 10160 | 1.46 | 33.7 | 207.2 | 6.15 J |

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

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

Date: May 3, 2011
 Salt Lake City, Utah

Remarks:

For this liner string, the top is rounded to the nearest 100 ft. Collapse is based on a vertical depth of 10750 ft, a mud weight of 12.5 ppg. The Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

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

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

ON-SITE PREDRILL EVALUATION

Utah Division of Oil, Gas and Mining

Operator KERR-MCGEE OIL & GAS ONSHORE, L.P.
Well Name NBU 921-25C MW1
API Number 43047515670000 **APD No** 3664 **Field/Unit** NATURAL BUTTES
Location: 1/4,1/4 NWNW **Sec** 25 **Tw** 9.0S **Rng** 21.0E 793 FNL 900 FWL
GPS Coord (UTM) 627538 4429953 **Surface Owner**

Participants

See other comments:

Regional/Local Setting & Topography

At the request of Kerr McGee, two additional wells to be used as monitoring wells are proposed to be drilled from the existing NBU 921-25D Pad. The additional wells are the NBU 921-25C MW1 and NBU 921-25C MW2. Both will be directionally drilled. On August 26, 2010 a pre-site evaluation was conducted on this pad for 5 additional wells to be drilled. At that time it was determined that the pad with the modifications included in this report should be suitable for drilling these additional wells. In reviewing the pre-site evaluation it is determined that the two additional wells can be added to this pad. The statements in this report reflect the findings of the August 26, 2010 evaluation. The five wells currently approved have surface casings set.

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 41.7 road miles south of Vernal, Utah. Access is by State of Utah Highways, Uintah County and existing oilfield development roads. Topography of the area is characterized by open flats bordered or dissected by numerous sub-drainages, which often become steep with ridges and draws with exposed sandstone layers. No perennial streams occur in the drainage. Individual draws or washes are ephemeral with spring runoff or flows from sometimes-intense summer rainstorms. No springs exist in the area. An occasional constructed pond occurs furnishing water for antelope or livestock.

The NBU 921-25D pad will be created by enlarging the existing pad of the NBU 921-25D gas well. Five gas wells, to be directionally drilled, will be added. They are the NBU 921-25E3AS, 921-25E1CS, 921-25D1CS, 921-25D1BS and 921-25C1AS. The existing pad will be extended in all directions except to the west. The site is on the north slope of a ridge with a drainage to the east which will be filled. Significant excavation will be needed to extend the pad leaving an excess of 4,800 cubic yards of spoils to be stockpiled. A draw to the west beyond Corner 10 will be avoided. No drainage diversions are required. The White River is approximately 3 miles down drainage. The selected site as adjusted appears to be suitable for enlarging a pad, drilling and operating the proposed wells and is the best site in the immediate area.

Both the surface and minerals are owned by SITLA.

Surface Use Plan

Current Surface Use

Existing Well Pad

New Road Miles

Well Pad

Src Const Material

Surface Formation

Width Length

Ancillary Facilities

Waste Management Plan Adequate?

Environmental Parameters

Affected Floodplains and/or Wetlands

Flora / Fauna

Existing pad.

Soil Type and Characteristics

Erosion Issues

Sedimentation Issues

Site Stability Issues

Drainage Diversion Required?

Berm Required?

Erosion Sedimentation Control Required?

Paleo Survey Run? Paleo Potential Observed? Cultural Survey Run? Cultural Resources?

Reserve Pit

Site-Specific Factors

Site Ranking

- Distance to Groundwater (feet)**
- Distance to Surface Water (feet)**
- Dist. Nearest Municipal Well (ft)**
- Distance to Other Wells (feet)**
- Native Soil Type**
- Fluid Type**
- Drill Cuttings**
- Annual Precipitation (inches)**
- Affected Populations**
- Presence Nearby Utility Conduits**

Final Score

Sensitivity Level

Characteristics / Requirements

Pit has been constructed.

Closed Loop Mud Required? Liner Required? Liner Thickness Pit Underlayment Required?

Other Observations / Comments

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).

Floyd Bartlett
Evaluator

5/2/2011
Date / Time

Application for Permit to Drill

Statement of Basis

5/4/2011

Utah Division of Oil, Gas and Mining

Page 1

| | | | | | |
|------------------|--|---------------------|--------------------------|-------------------|------------|
| APD No | API WellNo | Status | Well Type | Surf Owner | CBM |
| 3664 | 43047515670000 | SITLA | TW | S | No |
| Operator | KERR-MCGEE OIL & GAS ONSHORE, L.P. | | Surface Owner-APD | | |
| Well Name | NBU 921-25C MW1 | Unit | | NATURAL BUTTES | |
| Field | NATURAL BUTTES | Type of Work | | DRILL | |
| Location | NWNW 25 9S 21E S 793 FNL 900 FWL GPS Coord (UTM) | | | 627550E | 4429957N |

Geologic Statement of Basis

Kerr McGee proposes to set 2,630' 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 450'. A search of Division of Water Rights records shows one water well within a 10,000 foot radius of the center of section 25. The well is listed as 2,640 feet deep and is used for oil well drilling water. The surface formation at this site is the Uinta Formation. The Uinta Formation is made up of interbedded shales and sandstones. The sandstones are mostly lenticular and discontinuous and should not be a significant source of useable ground water. The proposed surface casing and cement should adequately protect ground water in this area.

Brad Hill
APD Evaluator

5/3/2011
Date / Time

Surface Statement of Basis

At the request of Kerr McGee, two additional wells to be used as monitoring wells are proposed to be drilled from the existing NBU 921-25D Pad. The additional wells are the NBU 921-25C MW1 and NBU 921-25C MW2. Both will be directionally drilled. On August 26, 2010 a pre-site evaluation was conducted on this pad for 5 additional wells to be drilled. At that time it was determined that the pad with the modifications included in this report should be suitable for drilling these additional wells. In reviewing the pre-site evaluation it is determined that the two additional wells can be added to this pad. The statements in this report reflect the findings of the August 26, 2010 evaluation. The five wells currently approved have surface casings set.

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 41.7 road miles south of Vernal, Utah. Access is by State of Utah Highways, Uintah County and existing oilfield development roads. Topography of the area is characterized by open flats bordered or dissected by numerous sub-drainages, which often become steep with ridges and draws with exposed sandstone layers. No perennial streams occur in the drainage. Individual draws or washes are ephemeral with spring runoff or flows from sometimes-intense summer rainstorms. No springs exist in the area. An occasional constructed pond occurs furnishing water for antelope or livestock.

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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 excepted as covered above. SITLA will provide site

Application for Permit to Drill Statement of Basis

5/4/2011

Utah Division of Oil, Gas and MiningPage 2

reclamation standards and a seed mix.

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

Floyd Bartlett
Onsite Evaluator

5/2/2011
Date / Time

Conditions of Approval / Application for Permit to Drill

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

WORKSHEET APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 4/28/2011**API NO. ASSIGNED:** 43047515670000**WELL NAME:** NBU 921-25C MW1**OPERATOR:** KERR-MCGEE OIL & GAS ONSHORE, L.P. (N2995)**PHONE NUMBER:** 720 929-6100**CONTACT:** Andy Lytle**PROPOSED LOCATION:** NWNW 25 090S 210E**Permit Tech Review:** **SURFACE:** 0793 FNL 0900 FWL**Engineering Review:** **BOTTOM:** 0658 FNL 1975 FWL**Geology Review:** **COUNTY:** UINTAH**LATITUDE:** 40.01208**LONGITUDE:** -109.50555**UTM SURF EASTINGS:** 627550.00**NORTHINGS:** 4429957.00**FIELD NAME:** NATURAL BUTTES**LEASE TYPE:** 3 - State**LEASE NUMBER:** UO 01189 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**

Commingling 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: 5 - Statement of Basis - bhll
 15 - Directional - dmason
 17 - Oil Shale 190-5(b) - dmason
 25 - Surface Casing - hmacdonald



GARY R. HERBERT
Governor

GREGORY S. BELL
Lieutenant Governor

State of Utah

DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER
Executive Director

Division of Oil, Gas and Mining

JOHN R. BAZA
Division Director

Permit To Drill

Well Name: NBU 921-25C MW1
API Well Number: 43047515670000
Lease Number: UO 01189 ST
Surface Owner: STATE
Approval Date: 5/4/2011

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

General:

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

Conditions of Approval:

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

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

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

Surface casing shall be cemented to the surface.

Additional Approvals:

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

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

Notification Requirements:

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

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

Contact Information:

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

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

Reporting Requirements:

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

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

Approved By:



For John Rogers
Associate Director, Oil & Gas

| | | |
|--|---|---|
| STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING | | FORM 9 |
| SUNDRY NOTICES AND REPORTS ON WELLS | | 5. LEASE DESIGNATION AND SERIAL NUMBER:
UO 01189 ST |
| Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals. | | 6. IF INDIAN, ALLOTTEE OR TRIBE NAME: |
| 1. TYPE OF WELL
Test Well | | 7. UNIT or CA AGREEMENT NAME:
NATURAL BUTTES |
| 2. NAME OF OPERATOR:
KERR-MCGEE OIL & GAS ONSHORE, L.P. | | 8. WELL NAME and NUMBER:
NBU 921-25C MW1 |
| 3. ADDRESS OF OPERATOR:
P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779 | | 9. API NUMBER:
43047515670000 |
| 4. LOCATION OF WELL
FOOTAGES AT SURFACE:
0793 FNL 0900 FWL
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:
Qtr/Qtr: NWNW Section: 25 Township: 09.0S Range: 21.0E Meridian: S | | 9. FIELD and POOL or WILDCAT:
NATURAL BUTTES |
| | | COUNTY:
UINTAH |
| | | STATE:
UTAH |
| 11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA | | |
| TYPE OF SUBMISSION | TYPE OF ACTION | |
| <input type="checkbox"/> NOTICE OF INTENT
Approximate date work will start: | <input type="checkbox"/> ACIDIZE
<input type="checkbox"/> 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"/> SUBSEQUENT REPORT
Date of Work Completion: | <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 checked="" type="checkbox"/> SPUD REPORT
Date of Spud:
5/4/2011 | <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"/> DRILLING REPORT
Report Date: | | |
| 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 PIPE. CMT W/28 SX READY MIX. SPUD WELL
LOCATION ON 05/04/2011 AT 1700 HRS. | | |
| Accepted by the
 Utah Division of
 Oil, Gas and Mining
 FOR RECORD ONLY | | |
| NAME (PLEASE PRINT)
Sheila Wopsock | PHONE NUMBER
435 781-7024 | TITLE
Regulatory Analyst |
| SIGNATURE
N/A | DATE
5/6/2011 | |

| | | | | | |
|---|---|---|---|---|---|
| STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING | | FORM 9

5. LEASE DESIGNATION AND SERIAL NUMBER:
UO 01189 ST | | | |
| SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals. | | 6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7. UNIT or CA AGREEMENT NAME:
NATURAL BUTTES | | | |
| 1. TYPE OF WELL
Test Well | 8. WELL NAME and NUMBER:
NBU 921-25C MW1 | | | | |
| 2. NAME OF OPERATOR:
KERR-MCGEE OIL & GAS ONSHORE, L.P. | 9. API NUMBER:
43047515670000 | | | | |
| 3. ADDRESS OF OPERATOR:
P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779 | PHONE NUMBER:
720 929-6515 Ext | 9. FIELD and POOL or WILDCAT:
NATURAL BUTTES | | | |
| 4. LOCATION OF WELL
FOOTAGES AT SURFACE:
0793 FNL 0900 FWL
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:
Qtr/Qtr: NWNW Section: 25 Township: 09.0S Range: 21.0E Meridian: S | COUNTY:
UINTAH

STATE:
UTAH | | | | |
| 11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA | | | | | |
| TYPE OF SUBMISSION | TYPE OF ACTION | | | | |
| <input type="checkbox"/> NOTICE OF INTENT
Approximate date work will start:

<input type="checkbox"/> SUBSEQUENT REPORT
Date of Work Completion:

<input type="checkbox"/> SPUD REPORT
Date of Spud:

<input checked="" type="checkbox"/> DRILLING REPORT
Report Date:
5/9/2011 | <table style="width: 100%; border: none;"> <tr> <td style="width: 33%; vertical-align: top;"> <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 </td> <td style="width: 33%; vertical-align: top;"> <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 </td> <td style="width: 33%; vertical-align: top;"> <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"/> </td> </tr> </table> | | <input type="checkbox"/> ACIDIZE

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OTHER: <input style="width: 100px;" type="text"/> |
| <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

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<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

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<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.
MIRU AIR RIG ON MAY 7, 2011. DRILLED SURFACE HOLE TO 2740'. RAN SURFACE CASING AND CEMENTED. WELL IS WAITING ON ROTARY RIG. DETAILS OF CEMENT JOB WILL BE INCLUDED WITH WELL COMPLETION REPORT. | | | | | |
| NAME (PLEASE PRINT)
Andy Lytle | | PHONE NUMBER
720 929-6100 | | | |
| SIGNATURE
N/A | | TITLE
Regulatory Analyst

DATE
5/10/2011 | | | |

BLM - Vernal Field Office - Notification Form

Operator KERR-McGEE OIL & GAS Rig Name/# BUCKET RIG
 Submitted By SHEILA WOPSOCK Phone Number 435.781.7024
 Well Name/Number NBU 921-25C MW1
 Qtr/Qtr NWNW Section 25 Township 9S Range 21E
 Lease Serial Number UO 01189 ST
 API Number 4304751567

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

Date/Time 05/04/2011 1500 HRS AM PM

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

- Surface Casing
 Intermediate Casing
 Production Casing
 Liner
 Other

RECEIVED

MAY 04 2011

DIV. OF OIL, GAS & MINING

Date/Time 05/07/2011 0800 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 FOR MORE

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

FORM 6

ENTITY ACTION FORM

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

Well 1

| API Number | Well Name | | QQ | Sec | Twp | Rng | County |
|---|-----------------------|-------------------|-----------|-----|----------------------------------|-----|--------|
| 4304751567 | NBU 921-25C MW1 | | NWNW | 25 | 9S | 21E | UINTAH |
| Action Code | Current Entity Number | New Entity Number | Spud Date | | Entity Assignment Effective Date | | |
| <i>B</i> | 99999 | <i>2900</i> | 5/4/2011 | | <i>5/10/11</i> | | |
| Comments: MIRU PETE MARTIN BUCKET RIG. <i>W57MVD</i>
SPUD WELL LOCATION ON 05/04/2011 AT 1700 HRS <i>BHL = NENW</i> | | | | | | | |

Well 2

| API Number | Well Name | | QQ | Sec | Twp | Rng | County |
|--|-----------------------|-------------------|-----------|-----|----------------------------------|-----|--------|
| 4304751568 | NBU 921-25C MW2 | | NWNW | 25 | 9S | 21E | UINTAH |
| Action Code | Current Entity Number | New Entity Number | Spud Date | | Entity Assignment Effective Date | | |
| <i>B</i> | 99999 | <i>2900</i> | 5/4/2011 | | <i>5/10/11</i> | | |
| Comments: MIRU PETE MARTIN BUCKET RIG. <i>W57MVD</i>
SPUD WELL LOCATION ON 05/04/2011 AT 1430 HRS. <i>BHL = NENW</i> | | | | | | | |

Well 3

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

ACTION CODES:

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

SHEILA WOPSOCK

Name (Please Print)

Signature

REGULATORY ANALYST

Title

5/6/2011

Date

(5/2000)

RECEIVED

MAY 09 2011

DIV. OF OIL, GAS & MINING

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|--|----------------------------------|---------------------------------------|--|--|--|---|---|---|--|---------------------------------|---|---|--|---|------------------------------------|---|---|---|--|---|--|--|--|---|--|---|--|---|--------------------------------|---|
| STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING | | FORM 9

5. LEASE DESIGNATION AND SERIAL NUMBER:
UO 01189 ST | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals. | | 6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7. UNIT or CA AGREEMENT NAME:
NATURAL BUTTES | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1. TYPE OF WELL
Test Well | 8. WELL NAME and NUMBER:
NBU 921-25C MW1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2. NAME OF OPERATOR:
KERR-MCGEE OIL & GAS ONSHORE, L.P. | 9. API NUMBER:
43047515670000 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3. ADDRESS OF OPERATOR:
P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779 | PHONE NUMBER:
720 929-6515 Ext | 9. FIELD and POOL or WILDCAT:
NATURAL BUTTES | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4. LOCATION OF WELL
FOOTAGES AT SURFACE:
0793 FNL 0900 FWL
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:
Qtr/Qtr: NWNW Section: 25 Township: 09.0S Range: 21.0E Meridian: S | COUNTY:
UINTAH

STATE:
UTAH | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| TYPE OF SUBMISSION | TYPE OF ACTION | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <input checked="" type="checkbox"/> NOTICE OF INTENT
Approximate date work will start:
10/20/2011

<input type="checkbox"/> SUBSEQUENT REPORT
Date of Work Completion:

<input type="checkbox"/> SPUD REPORT
Date of Spud:

<input type="checkbox"/> DRILLING REPORT
Report Date: | <table style="width: 100%; border: none;"> <tr> <td style="width: 33%; border: none;"><input type="checkbox"/> ACIDIZE</td> <td style="width: 33%; border: none;"><input type="checkbox"/> ALTER CASING</td> <td style="width: 33%; border: none;"><input type="checkbox"/> CASING REPAIR</td> </tr> <tr> <td style="border: none;"><input checked="" type="checkbox"/> CHANGE TO PREVIOUS PLANS</td> <td style="border: none;"><input type="checkbox"/> CHANGE TUBING</td> <td style="border: none;"><input type="checkbox"/> CHANGE WELL NAME</td> </tr> <tr> <td style="border: none;"><input type="checkbox"/> CHANGE WELL STATUS</td> <td style="border: none;"><input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS</td> <td style="border: none;"><input type="checkbox"/> CONVERT WELL TYPE</td> </tr> <tr> <td style="border: none;"><input type="checkbox"/> DEEPEN</td> <td style="border: none;"><input type="checkbox"/> FRACTURE TREAT</td> <td style="border: none;"><input type="checkbox"/> NEW CONSTRUCTION</td> </tr> <tr> <td style="border: none;"><input type="checkbox"/> OPERATOR CHANGE</td> <td style="border: none;"><input type="checkbox"/> PLUG AND ABANDON</td> <td style="border: none;"><input type="checkbox"/> PLUG BACK</td> </tr> <tr> <td style="border: none;"><input type="checkbox"/> PRODUCTION START OR RESUME</td> <td style="border: none;"><input type="checkbox"/> RECLAMATION OF WELL SITE</td> <td style="border: none;"><input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION</td> </tr> <tr> <td style="border: none;"><input type="checkbox"/> REPERFORATE CURRENT FORMATION</td> <td style="border: none;"><input type="checkbox"/> SIDETRACK TO REPAIR WELL</td> <td style="border: none;"><input type="checkbox"/> TEMPORARY ABANDON</td> </tr> <tr> <td style="border: none;"><input type="checkbox"/> TUBING REPAIR</td> <td style="border: none;"><input type="checkbox"/> VENT OR FLARE</td> <td style="border: none;"><input type="checkbox"/> WATER DISPOSAL</td> </tr> <tr> <td style="border: none;"><input type="checkbox"/> WATER SHUTOFF</td> <td style="border: none;"><input type="checkbox"/> SI TA STATUS EXTENSION</td> <td style="border: none;"><input type="checkbox"/> APD EXTENSION</td> </tr> <tr> <td style="border: none;"><input type="checkbox"/> WILDCAT WELL DETERMINATION</td> <td style="border: none;"><input type="checkbox"/> OTHER</td> <td style="border: none;">OTHER: <input style="width: 100px;" type="text"/></td> </tr> </table> | | <input type="checkbox"/> ACIDIZE | <input type="checkbox"/> ALTER CASING | <input type="checkbox"/> CASING REPAIR | <input checked="" type="checkbox"/> CHANGE TO PREVIOUS PLANS | <input type="checkbox"/> CHANGE TUBING | <input type="checkbox"/> CHANGE WELL NAME | <input type="checkbox"/> CHANGE WELL STATUS | <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS | <input type="checkbox"/> CONVERT WELL TYPE | <input type="checkbox"/> DEEPEN | <input type="checkbox"/> FRACTURE TREAT | <input type="checkbox"/> NEW CONSTRUCTION | <input type="checkbox"/> OPERATOR CHANGE | <input type="checkbox"/> PLUG AND ABANDON | <input type="checkbox"/> PLUG BACK | <input type="checkbox"/> PRODUCTION START OR RESUME | <input type="checkbox"/> RECLAMATION OF WELL SITE | <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION | <input type="checkbox"/> REPERFORATE CURRENT FORMATION | <input type="checkbox"/> SIDETRACK TO REPAIR WELL | <input type="checkbox"/> TEMPORARY ABANDON | <input type="checkbox"/> TUBING REPAIR | <input type="checkbox"/> VENT OR FLARE | <input type="checkbox"/> WATER DISPOSAL | <input type="checkbox"/> WATER SHUTOFF | <input type="checkbox"/> SI TA STATUS EXTENSION | <input type="checkbox"/> APD EXTENSION | <input type="checkbox"/> WILDCAT WELL DETERMINATION | <input type="checkbox"/> OTHER | OTHER: <input style="width: 100px;" type="text"/> |
| <input type="checkbox"/> ACIDIZE | <input type="checkbox"/> ALTER CASING | <input type="checkbox"/> CASING REPAIR | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <input checked="" type="checkbox"/> CHANGE TO PREVIOUS PLANS | <input type="checkbox"/> CHANGE TUBING | <input type="checkbox"/> CHANGE WELL NAME | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <input type="checkbox"/> CHANGE WELL STATUS | <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS | <input type="checkbox"/> CONVERT WELL TYPE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <input type="checkbox"/> DEEPEN | <input type="checkbox"/> FRACTURE TREAT | <input type="checkbox"/> NEW CONSTRUCTION | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <input type="checkbox"/> OPERATOR CHANGE | <input type="checkbox"/> PLUG AND ABANDON | <input type="checkbox"/> PLUG BACK | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <input type="checkbox"/> PRODUCTION START OR RESUME | <input type="checkbox"/> RECLAMATION OF WELL SITE | <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <input type="checkbox"/> REPERFORATE CURRENT FORMATION | <input type="checkbox"/> SIDETRACK TO REPAIR WELL | <input type="checkbox"/> TEMPORARY ABANDON | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <input type="checkbox"/> TUBING REPAIR | <input type="checkbox"/> VENT OR FLARE | <input type="checkbox"/> WATER DISPOSAL | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <input type="checkbox"/> WATER SHUTOFF | <input type="checkbox"/> SI TA STATUS EXTENSION | <input type="checkbox"/> APD EXTENSION | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <input type="checkbox"/> WILDCAT WELL DETERMINATION | <input type="checkbox"/> OTHER | OTHER: <input style="width: 100px;" type="text"/> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.
The Operator requests approval for changes in the drilling plan. Specifically, the Operator requests approval for a FIT waiver and a production casing change. Please see attachments. Thank you. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | Approved by the
 Utah Division of
 Oil, Gas and Mining

Date: 11/07/2011
By: <u><i>Dark K. Quist</i></u> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| NAME (PLEASE PRINT)
Jaime Scharnowske | PHONE NUMBER
720 929-6304 | TITLE
Regularatory Analyst | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SIGNATURE
N/A | DATE
10/20/2011 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

Kerr-McGee Oil & Gas Onshore. L.P.**NBU 921-25C MW1**

Surface: 793 FNL / 900 FWL NWNW
 BHL: 658 FNL / 1975 FWL NENW

Section 25 T9S R21E

Unitah County, Utah
 Mineral Lease: UO 01189 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 | 1516 | |
| Birds Nest | 1808 | Water |
| Mahogany | 2181 | Water |
| Wasatch | 4787 | Gas |
| Mesaverde | 7486 | Gas |
| MVU2 | 8431 | Gas |
| MVL1 | 8992 | Gas |
| Sego | 9716 | Gas |
| Castlegate | 9761 | Gas |
| MN5 | 10185 | Gas |
| TVD | 10750 | Gas |
| TD | 10920 | Gas |

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 bottom hole pressure calculated at 10750' TVD, approximately equals
6,865 psi (0.64 psi/ft = actual bottomhole gradient)

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

Maximum anticipated surface pressure equals approximately 4,500 psi (bottom hole pressure
minus the pressure of a partially evacuated hole calculated at 0.22 psi/foot, per Onshore Order No. 2).

Per Onshore Order No. 2 - Max Anticipated Surf. Press.(MASP) = (Pore Pressure at next csg point-

(0.22 psi/ft-partial evac gradient x TVD of next csg point))

8. Anticipated Starting Dates:

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

9. Variances:

Please refer to the attached 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 11 inch hole to just above the Bird's Nest interval with an air hammer. The hammer is then tripped and replaced with a 11 inch tri-cone bit. The tri-cone bit is used to drill to the surface casing point, approximately 500 feet below the loss circulation zone (Bird's Nest). The 8-5/8 inch surface casing is then run and cemented in place, thereby isolating the lost circulation zone.

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

Variance for BOPE Requirements

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

Variance for Mud Material Requirements

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

Variance for Special Drilling Operation (surface equipment placement) Requirements

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

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

Typically the air rig compressors are required to be located in the opposite direction from the blooie line and a minimum of 100 feet from the well bore. At the KMG locations, the air rig compressors are approximately 40 feet from the well bore and approximately 60 feet from the blooie line discharge due to the unique air rig design. The air compressors (see attachment) are located on the rig (1250 cfm) and

on a standby trailer (1170 cfm). A booster sits between the two compressors and boosts the output from 350 psi to 2000 psi. The design does put the booster and standby compressor opposite from the blooie line.

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

Variance for FIT Requirements

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

Conclusion

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

10. Other Information:

Please refer to the attached Drilling Program.



KERR-McGEE OIL & GAS ONSHORE LP
DRILLING PROGRAM

CASING PROGRAM

| | SIZE | INTERVAL | WT. | GR. | CPLG. | DESIGN FACTORS | | | |
|------------|--------|-----------------|-------|---------|----------|----------------|----------|-----------|---------|
| | | | | | | BURST | COLLAPSE | LTC/ 8 RD | BTC |
| | | | | | | | | TENSION | |
| CONDUCTOR | 14" | 0-40' | | | | | | | |
| SURFACE | 8-5/8" | 0 to 2,630 | 28.00 | IJ-55 | LTC | 3,390 | 1,880 | 348,000 | N/A |
| | | | | | | 2.06 | 1.53 | 5.40 | N/A |
| PRODUCTION | 4-1/2" | 0 to 7,300 | 11.60 | HCP-110 | BTC | 10,690 | 8,650 | 279,000 | 367,000 |
| | | | | | | 1.53 | 1.24 | 4.07 | 5.36 |
| PRODUCTION | 3-1/2" | 7,300 to 10,920 | 9.30 | P-110 | EUE 8 RD | 13,970 | 12,620 | 284,920 | N/A |
| | | | | | | 2.00 | 1.81 | 10.46 | N/A |

Surface Casing:

(Burst Assumptions: TD = 12.5 ppg) 0.73 psi/ft = frac gradient @ surface shoe

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

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

Production casing:

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

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

CEMENT PROGRAM

| | | FT. OF FILL | DESCRIPTION | SACKS | EXCESS | WEIGHT | YIELD |
|---|----------------------------------|-------------|---|---------|--------|--------|-------|
| SURFACE | LEAD | 500' | Premium cmt + 2% CaCl
+ 0.25 pps flocele | 180 | 60% | 15.80 | 1.15 |
| | Option 1
TOP OUT CMT (6 jobs) | 1,200' | 20 gals sodium silicate + Premium cmt
+ 2% CaCl + 0.25 pps flocele | 270 | 0% | 15.80 | 1.15 |
| NOTE: If well will circulate water to surface, option 2 will be utilized | | | | | | | |
| SURFACE | LEAD | 2,130' | 65/35 Poz + 6% Gel + 10 pps gilsonite
+ 0.25 pps Flocele + 3% salt BWOW | 200 | 35% | 11.00 | 3.82 |
| | TAIL | 500' | Premium cmt + 2% CaCl
+ 0.25 pps flocele | 150 | 35% | 15.80 | 1.15 |
| | TOP OUT CMT | as required | Premium cmt + 2% CaCl | as req. | | 15.80 | 1.15 |
| PRODUCTION | LEAD | 4,280' | Premium Lite II + 0.25 pps
celloflake + 5 pps gilsonite + 10% gel
+ 0.5% extender | 320 | 20% | 11.00 | 3.38 |
| | TAIL | 6,640' | 50/50 Poz/G + 10% salt + 2% gel
+ 0.1% R-3 | 1,970 | 30% | 14.30 | 1.31 |

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

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

FLOAT EQUIPMENT & CENTRALIZERS

| | |
|------------|--|
| SURFACE | Guide shoe, 1 jt, insert float. Centralize first 3 joints with bow spring centralizers. Thread lock guide shoe |
| PRODUCTION | Float shoe, 1 jt, float collar. 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.

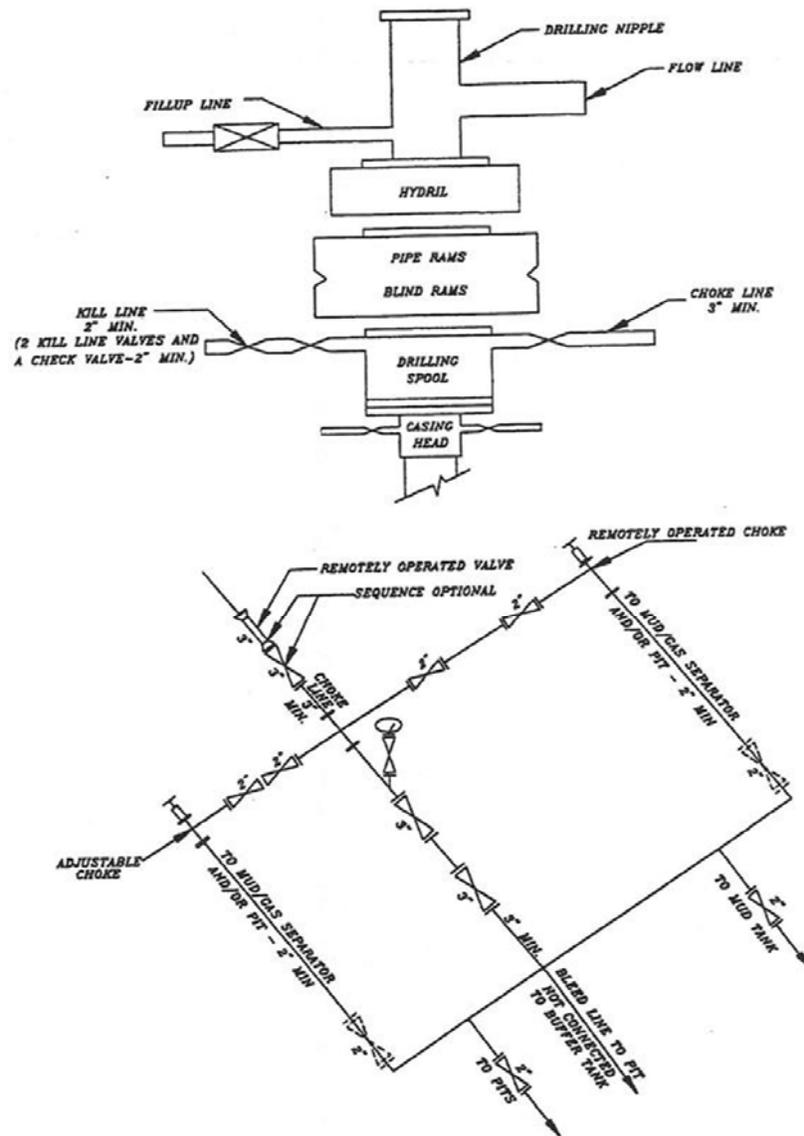
DRILLING ENGINEER: _____
Nick Spence / Danny Showers

DATE: _____

DRILLING SUPERINTENDENT: _____
Kenny Gathings / Lovel Young

DATE: _____

EXHIBIT A
NBU 921-25C MW1



SCHEMATIC DIAGRAM OF 5,000 PSI BOP STACK

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

FORM 9

5. LEASE DESIGNATION AND SERIAL NUMBER:
UO 01189 ST

SUNDRY NOTICES AND REPORTS ON WELLS

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

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7. UNIT or CA AGREEMENT NAME:
NATURAL BUTTES

1. TYPE OF WELL
Test Well

8. WELL NAME and NUMBER:
NBU 921-25C MW1

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

9. API NUMBER:
43047515670000

3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779

PHONE NUMBER: 720 929-6514
9. FIELD and POOL or WILDCAT:
NATURAL BUTTES

4. LOCATION OF WELL
FOOTAGES AT SURFACE:
0793 FNL 0900 FWL
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:
Qtr/Qtr: NWNW Section: 25 Township: 09.0S Range: 21.0E Meridian: S

COUNTY:
UINTAH

STATE:
UTAH

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

| TYPE OF SUBMISSION | TYPE OF ACTION | | |
|---|--|---|---|
| <input type="checkbox"/> NOTICE OF INTENT
Approximate date work will start: | <input type="checkbox"/> ACIDIZE | <input type="checkbox"/> ALTER CASING | <input type="checkbox"/> CASING REPAIR |
| <input type="checkbox"/> SUBSEQUENT REPORT
Date of Work Completion: | <input type="checkbox"/> CHANGE TO PREVIOUS PLANS | <input type="checkbox"/> CHANGE TUBING | <input type="checkbox"/> CHANGE WELL NAME |
| <input type="checkbox"/> SPUD REPORT
Date of Spud: | <input type="checkbox"/> CHANGE WELL STATUS | <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS | <input type="checkbox"/> CONVERT WELL TYPE |
| <input checked="" type="checkbox"/> DRILLING REPORT
Report Date:
11/23/2011 | <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 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 type="text"/> |

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

MIRU ROTARY RIG. FINISHED DRILLING FROM 2740' TO 10,979' ON NOV. 17, 2011. RAN PRODUCTION CASING AND CEMENTED PRODUCTION CASING. RELEASED PIONEER RIG 54 ON NOV. 23, 2011 @ 13:30 HRS. DETAILS WILL BE INCLUDED WITH THE WELL COMPLETION REPORT.

| | | |
|---|-------------------------------------|------------------------------------|
| NAME (PLEASE PRINT)
Jaime Scharnowske | PHONE NUMBER
720 929-6304 | TITLE
Regulatory Analyst |
| SIGNATURE
N/A | DATE
11/28/2011 | |

| STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING | | FORM 9 | |
|--|---|---|---|
| SUNDRY NOTICES AND REPORTS ON WELLS | | 5. LEASE DESIGNATION AND SERIAL NUMBER:
UO 01189 ST | |
| Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals. | | 6. IF INDIAN, ALLOTTEE OR TRIBE NAME: | |
| 1. TYPE OF WELL
Test Well | | 7. UNIT or CA AGREEMENT NAME:
NATURAL BUTTES | |
| 2. NAME OF OPERATOR:
KERR-MCGEE OIL & GAS ONSHORE, L.P. | | 8. WELL NAME and NUMBER:
NBU 921-25C MW1 | |
| 3. ADDRESS OF OPERATOR:
P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779 | | 9. API NUMBER:
43047515670000 | |
| 4. LOCATION OF WELL
FOOTAGES AT SURFACE:
0793 FNL 0900 FWL
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:
Qtr/Qtr: NWNW Section: 25 Township: 09.0S Range: 21.0E Meridian: S | | 9. FIELD and POOL or WILDCAT:
NATURAL BUTTES | |
| | | COUNTY:
UINTAH | |
| | | STATE:
UTAH | |
| 11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA | | | |
| TYPE OF SUBMISSION | TYPE OF ACTION | | |
| <input type="checkbox"/> NOTICE OF INTENT
Approximate date work will start:

<input type="checkbox"/> SUBSEQUENT REPORT
Date of Work Completion:

<input type="checkbox"/> SPUD REPORT
Date of Spud:

<input checked="" type="checkbox"/> DRILLING REPORT
Report Date:
11/23/2011 | <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: 100px;" type="text"/> |
| 12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc. | | | |
| MIRU ROTARY RIG. FINISHED DRILLING FROM 2740' TO 10,979' ON
NOV. 17, 2011. RAN PRODUCTION CASING AND CEMENTED
PRODUCTION CASING. RELEASED PIONEER RIG 54 ON NOV. 23, 2011 @
13:30 HRS. DETAILS WILL BE INCLUDED WITH THE WELL COMPLETION
REPORT. | | | |
| NAME (PLEASE PRINT)
Jaime Scharnowske | | PHONE NUMBER
720 929-6304 | TITLE
Regulatory Analyst |
| SIGNATURE
N/A | | DATE
11/28/2011 | |

Sundry Number: 20652 API Well Number: 43047515670000

State of Utah - Notification Form

Operator Anadarko Petroleum Rig Name/# PIONEER 54
Submitted By STUART NEILSON Phone Number 435-790-2921
Well Name/Number NBU 921-25C MW1
Qtr/Qtr NW4, NW/4 Section 25 Township 9S Range 21E
Lease Serial Number UO 01189 ST
API Number 4304751567

Casing – Time casing run starts, not cementing times.

- Production Casing
- Other

Date/Time _ _ AM PM

BOPE

- Initial BOPE test at surface casing point
- Other

Date/Time 11/11/11 8 AM PM

Rig Move

Location To:

Date/Time _ _ AM PM

RECEIVED

NOV 15 2011

DIV. OF OIL, GAS & MINING

Remarks

State of Utah - Notification Form

Operator Anadarko Petroleum Rig Name/# PIONEER 54
Submitted By STUART NEILSON Phone Number 435-790-2921
Well Name/Number NBU 921-25C MW1
Qtr/Qtr NW4, NW/4 Section 25 Township 9S Range 21E
Lease Serial Number UO 01189 ST
API Number 4304751567

Casing – Time casing run starts, not cementing times.

- Production Casing
- Other

Date/Time 11/18/11 8 AM PM

BOPE

- Initial BOPE test at surface casing point
- Other

Date/Time _ _ AM PM

RECEIVED

NOV 18 2011

DIV. OF OIL, GAS & MINING

Rig Move

Location To:

Date/Time _ _ AM PM

Remarks

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

5. LEASE DESIGNATION AND SERIAL NUMBER:
UO 01189 ST

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT or CA AGREEMENT NAME
UTU63047A

8. WELL NAME and NUMBER:
NBU 921-25C MW1

9. API NUMBER:
4304751567

10. FIELD AND POOL, OR WILDCAT
NATURAL BUTTES

11. QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:
NWNW 25 9S 21E S

12. COUNTY
UINTAH

13. STATE
UTAH

14. DATE SPUNDED: **5/4/2011**

15. DATE T.D. REACHED: **11/17/2011**

16. DATE COMPLETED: **12/7/2011**

ABANDONED READY TO PRODUCE

17. ELEVATIONS (DF, RKB, RT, GL):
4941 GL

18. TOTAL DEPTH: MD **10,979** TVD **10,815**

19. PLUG BACK T.D.: MD **10,900** TVD **10,736**

20. IF MULTIPLE COMPLETIONS, HOW MANY? *

21. DEPTH BRIDGE PLUG SET: MD TVD

22. TYPE ELECTRIC AND OTHER MECHANICAL LOGS RUN (Submit copy of each)
HDIL/ZDL/CNGR-GR/CCL

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

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

| HOLE SIZE | SIZE/GRADE | WEIGHT (#/ft.) | TOP (MD) | BOTTOM (MD) | STAGE CEMENTER DEPTH | CEMENT TYPE & NO. OF SACKS | SLURRY VOLUME (BBL) | CEMENT TOP ** | AMOUNT PULLED |
|-----------|--------------|----------------|----------|-------------|----------------------|----------------------------|---------------------|---------------|---------------|
| 20" | 14" STL | 36.7# | 0 | 40 | | 28 | | | |
| 11" | 8 5/8" IJ-55 | 28# | 0 | 2,731 | | 510 | | | |
| 7 7/8" | 4 1/2" I-80 | 11.6# | 0 | 7,253 | | 2,556 | | | |
| 7 7/8" | 3 1/2" L-80 | 9.2# | 7,253 | 10,933 | | | | | |

25. TUBING RECORD

| SIZE | DEPTH SET (MD) | PACKER SET (MD) | SIZE | DEPTH SET (MD) | PACKER SET (MD) | SIZE | DEPTH SET (MD) | PACKER SET (MD) |
|------|----------------|-----------------|------|----------------|-----------------|------|----------------|-----------------|
| | | | | | | | | |

26. PRODUCING INTERVALS

| FORMATION NAME | TOP (MD) | BOTTOM (MD) | TOP (TVD) | BOTTOM (TVD) |
|------------------|----------|-------------|-----------|--------------|
| (A) MESAVERDE | | | | |
| (B) BLACKHAWK | | | | |
| (C) WSMVD | | | | |
| (D) | | | | |

27. PERFORATION RECORD

| INTERVAL (Top/Bot - MD) | SIZE | NO. HOLES | PERFORATION STATUS |
|-------------------------|------|-----------|--|
| 7,723 9,597 | 0.20 | 84 | Open <input checked="" type="checkbox"/> Squeezed <input type="checkbox"/> |
| 10,511 10,632 | 0.20 | 12 | Open <input checked="" type="checkbox"/> Squeezed <input type="checkbox"/> |
| | | | Open <input type="checkbox"/> Squeezed <input type="checkbox"/> |
| | | | Open <input type="checkbox"/> Squeezed <input type="checkbox"/> |

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

| DEPTH INTERVAL | AMOUNT AND TYPE OF MATERIAL |
|----------------|-----------------------------|
| | |

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

29. ENCLOSED ATTACHMENTS:

ELECTRICAL/MECHANICAL LOGS GEOLOGIC REPORT DST REPORT DIRECTIONAL SURVEY

SUNDRY NOTICE FOR PLUGGING AND CEMENT VERIFICATION CORE ANALYSIS OTHER: _____

30. WELL STATUS:

31. INITIAL PRODUCTION

INTERVAL A (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 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.

34. FORMATION (Log) MARKERS:

| Formation | Top (MD) | Bottom (MD) | Descriptions, Contents, etc. | Name | Top (Measured Depth) |
|-----------|----------|-------------|------------------------------|-------------|----------------------|
| | | | | GREEN RIVER | 1,588 |
| | | | | BIRD'S NEST | 1,825 |
| | | | | WASATCH | 4,960 |
| | | | | MESAVERDE | 7,777 |

35. ADDITIONAL REMARKS (Include plugging procedure)

The first 210' of the surface hole was drilled with a 12 1/4" bit. The remainder of surface hole was drilled with an 11" bit. Attached is the chronological history & final survey. The well has 16 MW stations. The well has 16 flowmeter monitoring stations; 1-2 are in blackhawk & 3-16 are in Mesaverde.

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

NAME (PLEASE PRINT) JAIME SCHARNOWSKE

TITLE REGULATORY ANALYST

SIGNATURE *Jaime Scharnowske*

DATE 1/19/2012

This report must be submitted within 30 days of

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

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

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

Send to: Utah Division of Oil, Gas and Mining
1594 West North Temple, Suite 1210
Box 145801
Salt Lake City, Utah 84114-5801

Phone: 801-538-5340
Fax: 801-359-3940

**US ROCKIES REGION
Operation Summary Report**

| | | |
|--|--|---|
| Well: NBU 921-25C MW1 | Spud Conductor: 5/4/2011 | Spud Date: 5/7/2011 |
| Project: UTAH-UINTAH | Site: NBU 921-25D PAD | Rig Name No: PIONEER 54/54, CAPSTAR 310/310 |
| Event: DRILLING | Start Date: 4/27/2011 | End Date: 11/23/2011 |
| Active Datum: RKB @4,960.00usft (above Mean Sea Level) | UWI: NW/NW/0/9/S/21/E/25/0/0/26/PM/N/793/W/0/900/0/0 | |

| Date | Time Start-End | Duration (hr) | Phase | Code | Sub Code | P/U | MD From (usft) | Operation |
|----------|----------------|---------------|--------|------|----------|-----|----------------|---|
| 5/7/2011 | 9:30 - 11:30 | 2.00 | DRLPRO | 01 | C | P | | SKID RIG TO LAST WELL ON PAD NBU 921-25C MW1 |
| | 11:30 - 15:00 | 3.50 | DRLPRO | 14 | A | P | | WELD ON CONDUCTOR AND RIG UP FLOW LINE |
| | 15:00 - 16:00 | 1.00 | DRLPRO | 06 | A | P | | PICK UP 12.25" BIT AND MUD MOTOR |
| | 16:00 - 17:30 | 1.50 | DRLPRO | 02 | C | P | | SPUD WELL DRILL 12.25" HOLE F/ 40' - 210' WOB 8-15 ROT 45-55 DHR 96 GPM 600 |
| | 17:30 - 20:00 | 2.50 | DRLPRO | 06 | A | P | | TOOH PICK UP DIRECTIONAL TOOLS AND 11" BIT ORIENT MWD TOOL TO MUD MOTOR AND TIH |
| | 20:00 - 0:00 | 4.00 | DRLPRO | 02 | C | P | | DRILL 11" HOLE F/ 210' - 800' WOB 20-22 ROT 45-55 DHR 96 GPM 600 NO LOSSES |
| 5/8/2011 | 0:00 - 13:30 | 13.50 | DRLSUR | 02 | C | P | | DRILL F/ 800' - 2225' AVE ROP 105 FT HR WOB 20-21 ROT 45-55 DHR 96 GPM 600 LAST SURVEY 21.19 DEG 88.12 AZI NO LOSSES |
| | 13:30 - 14:00 | 0.50 | DRLSUR | 07 | A | P | | DAILY RIG SERVICE |
| | 14:00 - 19:30 | 5.50 | DRLSUR | 02 | C | P | | DRILL F/2225' - 2740' T.D. AVE ROP 105 FT HR WOB 20-21 ROT 45-55 DHR 96 GPM 600 LAST SURVEY 19.05 DEG 85.60 AZI 30' LEFT 12' BELOW LINE |
| | 19:30 - 21:30 | 2.00 | DRLSUR | 05 | C | P | | CIRCULATE AND CONDITION MUD PRIOR TO LDDS |
| | 21:30 - 0:00 | 2.50 | DRLSUR | 06 | A | P | | TOOH LAYING DOWN DRILL STRING |
| 5/9/2011 | 0:00 - 2:00 | 2.00 | DRLSUR | 06 | A | P | | LDDS BREAK DOWN DIRECTIONAL TOOLS AND BIT AND MUD MOTOR |
| | 2:00 - 5:30 | 3.50 | DRLSUR | 12 | C | P | | RIG UP AND RUN 62 JOINTS 8.625 28# J55 SURFACE CASING SHOE AT 2720' BAFFLE AT 2676' |
| | 5:30 - 7:00 | 1.50 | DRLSUR | 12 | D | P | | HOLD SAFETY MEETING W/ SUPERIOR WELL SERVICES CEMENTERS. INSTALL CEMENT HEAD ON TOP OF LANDING JT. PRESSURE TEST LINE TO 2000 PSI. PUMP 50 BBLS OF WATER AHEAD, PUMP 20 BBLS OF GEL WATER. PUMP 200 SX OF 11#, 3.52 YD, 23 GAL/SK HI FILL LEAD, PUMP 225 SX OF 15.8# 1.15 YD, 5 GAL/SK TAIL PREM. CLASS G CEMENT. DROP PLUG ON FLY, DISPLACE W/ 156 BBLS OF WATER. 490 PSI OF LIFT @ 2 BBLS/MIN RATE. 30 BBLS OF LEAD TO SURFACE. BUMP PLUG W/ 900 PSI. FLOAT HELD. |
| | 7:00 - 7:30 | 0.50 | DRLSUR | 14 | A | P | | CUT CONDUCTOR AND RIG DOWN FLOW LINE |
| | 7:30 - 8:00 | 0.50 | DRLSUR | 12 | E | P | | RUN 60' OF 1" PIPE AND PUMP 85 SX OF 15.8# PREMIUM 3% CALC CEMENT DOWN 1" DOWN BACK SIDE. CEMENT TO SURFACE RELEASE RIG |

US ROCKIES REGION

Operation Summary Report

| | | | | | |
|--|--|---|--|---|--|
| Well: NBU 921-25C MW1 | | Spud Conductor: 5/4/2011 | | Spud Date: 5/7/2011 | |
| Project: UTAH-UINTAH | | Site: NBU 921-25D PAD | | Rig Name No: PIONEER 54/54, CAPSTAR 310/310 | |
| Event: DRILLING | | Start Date: 4/27/2011 | | End Date: 11/23/2011 | |
| Active Datum: RKB @4,960.00usft (above Mean Sea Level) | | UWI: NWNW/0/9/S/21/E/25/0/0/26/PM/N/793/W/0/900/0/0 | | | |

| Date | Time Start-End | Duration (hr) | Phase | Code | Sub Code | P/U | MD From (usft) | Operation |
|------------|----------------|---------------|--------|------|----------|-----|----------------|---|
| | 8:00 - 8:00 | 0.00 | DRLSUR | | | | | CONDUCTOR CASING:
Cond. Depth set:40
Cement sx used:28

SPUD DATE/TIME:5/7/2011 16:00

SURFACE HOLE:
Surface From depth:40
Surface To depth:2,740
Total SURFACE hours:24.50
Surface Casing size:8 5/8
of casing joints ran:62
Casing set MD:2,720.0
sx of cement:200/225/85
Cement blend (ppg):11/15.8/15/8
Cement yield (ft3/sk):3.82/1.15/1.15
of bbls to surface:30
Describe cement issues: NONE
Describe hole issues:NONE |
| 11/9/2011 | 0:00 - 7:00 | 7.00 | DRLPRO | 01 | E | P | | RDRT |
| | 7:00 - 18:00 | 11.00 | DRLPRO | 01 | A | P | | MOVE RIG TO THE NBU 921-25CMW1, 8 HAUL, 2 BED & 1 POLE TRUCKS, 1 CRANE & 3 OILERS, 6 EXTRA RIG HANDS, 80% MOVED, 0% RIGGED UP |
| 11/10/2011 | 18:00 - 0:00 | 6.00 | DRLPRO | 21 | C | P | | WAIT ON DAYLIGHT |
| | 0:00 - 6:00 | 6.00 | DRLPRO | 21 | C | P | | WAIT ON DAYLIGHT |
| | 6:00 - 18:30 | 12.50 | DRLPRO | 01 | A | P | | FINISH RIG MOVE, TRICKS LEFT @ 18:30, CRANE @ 18:00 |
| | 18:30 - 0:00 | 5.50 | DRLPRO | 01 | B | P | | R/U TOP DRIVE, BACKYARD, 100% MOVED, 85 % RIGGED UP |
| 11/11/2011 | 0:00 - 6:00 | 6.00 | DRLPRO | 01 | B | P | | RURT |
| | 6:00 - 7:00 | 1.00 | DRLPRO | 14 | A | P | | N/U BOPE |
| | 7:00 - 12:00 | 5.00 | DRLPRO | 15 | A | P | | HPJSM W/ RIG & TESTER, TEST RAMS & ALL VALVES 250 LOW 5000 HIGH, ANN 2500 |
| | 12:00 - 14:00 | 2.00 | DRLPRO | 15 | A | Z | | TEST STRATA./ ORBIT VALVE FAILED, NEW ONE COMING F/ WYO |
| | 14:00 - 17:00 | 3.00 | DRLPRO | 06 | A | P | | P/U HWDP & D/P W/ KIMZEY |
| | 17:00 - 18:00 | 1.00 | DRLPRO | 14 | B | Z | | R/D STRATA ORBIT VALVE |
| | 18:00 - 20:00 | 2.00 | DRLPRO | 09 | A | P | | CUT DRLG LINE & CHANGE OUT SAVER SUB |
| | 20:00 - 21:30 | 1.50 | DRLPRO | 15 | | P | | RIG BACK UP & TEST CASING |
| | 21:30 - 22:00 | 0.50 | DRLPRO | 21 | D | Z | | WAIT ON ORBIT VALVE |
| | 22:00 - 23:30 | 1.50 | DRLPRO | 14 | B | Z | | INSTALL NEW ORBIT VALVE |
| | 23:30 - 0:00 | 0.50 | DRLPRO | 15 | A | P | | TEST STRATA ORBIT VALVE |
| 11/12/2011 | 0:00 - 1:30 | 1.50 | DRLPRO | 15 | A | P | | TEST STRATA TO 3000, SURFACE CASING 1500 F/ 30 MIN |
| | 1:30 - 2:00 | 0.50 | DRLPRO | 14 | B | P | | INSTALL WEAR BUSHING, PRE-SPUD INSPECTION |
| | 2:00 - 5:00 | 3.00 | DRLPRO | 06 | A | P | | P/U BIT #1, MM DIR TOOLS & SCRIBE, TIH TO TOP OF CEMENT @ 2554 |
| | 5:00 - 7:30 | 2.50 | DRLPRO | 02 | F | P | | DRLG CEMENT, F/E & OPEN HOLE TO 2750 FLOAT @ 2700, SHOE @ 2745 |

US ROCKIES REGION
Operation Summary Report

| | | | |
|--|--|--|---|
| Well: NBU 921-25C MW1 | | Spud Conductor: 5/4/2011 | Spud Date: 5/7/2011 |
| Project: UTAH-UINTAH | | Site: NBU 921-25D PAD | Rig Name No: PIONEER 54/54, CAPSTAR 310/310 |
| Event: DRILLING | | Start Date: 4/27/2011 | End Date: 11/23/2011 |
| Active Datum: RKB @4,960.00usft (above Mean Sea Level) | | UWI: NW/NW/0/9/S/21/E/25/0/0/26/PM/N/793/W/0/900/0/0 | |

| Date | Time Start-End | Duration (hr) | Phase | Code | Sub Code | P/U | MD From (usft) | Operation |
|------------|----------------|---------------|--------|------|----------|-----|----------------|---|
| | 7:30 - 12:00 | 4.50 | DRLPRO | 02 | D | P | | DRLG F/ 2750 TO 3331', 581' @ 129.1' PH
WOB / 18-20, RPM 60
SPM 200 - GPM 586
MW 8.4, VIS 26, CIRC RESERVE PIT
TRQ ON/OFF = 3-5 K
PSI ON /OFF = 1500-1300 , DIFF 250-500
PU/SO/RT = 90-85-80
SLIDE = 194' IN 1.82 HRS = 106.6' PH
ROT = 387' IN 2.68 HRS = 144.4' PH
STRATA - OFF LINE
0 CONN FLARE, 0 B/G FLARE
30' LEFT & 12' BELOW LINE |
| | 12:00 - 12:30 | 0.50 | DRLPRO | 07 | A | P | | SERVICE RIG, F/T ANN & HCR VALVE, BOP DRLL 69 SEC |
| | 12:30 - 0:00 | 11.50 | DRLPRO | 02 | D | P | | DRLG F/ 3331' TO 4847', 1516' @ 131.8' PH
WOB / 18-20, RPM 60
SPM 200 - GPM 586
MW 8.4, VIS 26, CIRC RESERVE PIT
TRQ ON/OFF = 7-10 K
PSI ON /OFF = 1700-1500 , DIFF 250-500
PU/SO/RT = 140-108-125
SLIDE = 292' IN 4.6 HRS = 63.5' PH
ROT = 1224' IN 6.9 HRS = 177.4' PH
STRATA - OFF LINE
0 CONN FLARE, 0 B/G FLARE
11' N & 6.34 E OF TARGET CENTER |
| 11/13/2011 | 0:00 - 15:00 | 15.00 | DRLPRO | 02 | D | P | | DRLG F/ 4847' TO 6459', 1612' @ 107.5' PH
WOB / 18-20, RPM 60
SPM 200 - GPM 586
MW 8.4, VIS 26, CIRC RESERVE PIT
TRQ ON/OFF = 7-10 K
PSI ON /OFF = 1700-1400 , DIFF 250-500
PU/SO/RT = 170-120-140
SLIDE = 137' IN 3.28 HRS = 41.8' PH
ROT = 1475' IN 11.72 HRS = 125.8' PH
STRATA - OFF LINE
0 CONN FLARE, 0 B/G FLARE
300-1500 GAS UINTS
14' N & 0 E-W OF TARGET CENTER
START LOSS @ 5800' LOST @ 1000 BBLS,
WATER, PUMPING LCM SWEEPS & CIRC TO PILL PIT |
| | 15:00 - 15:30 | 0.50 | DRLPRO | 07 | A | P | | SERVICE RIG, F/T ANN & PIPE RAMS, BOP DRILL 72 SEC, CHECK RIG F/ LEVEL |
| | 15:30 - 17:30 | 2.00 | DRLPRO | 02 | D | P | | DRLG F/ 6459 TO 6649', 190' @ 95' PH
WOB / 18-20, RPM 60
SPM 200 - GPM 586
MW 8.4, VIS 26, CIRC RESERVE PIT
TRQ ON/OFF = 9-12 K
PSI ON /OFF = 1700-1500 , DIFF 250-500
P/U/SO/ROT 175-120-145 |
| | 17:30 - 18:00 | 0.50 | DRLPRO | 08 | B | Z | | CHANGE OUT STRATA ROT HEAD |

US ROCKIES REGION

Operation Summary Report

| | | | |
|--|--|---|---|
| Well: NBU 921-25C MW1 | | Spud Conductor: 5/4/2011 | Spud Date: 5/7/2011 |
| Project: UTAH-UJINTAH | | Site: NBU 921-25D PAD | Rig Name No: PIONEER 54/54, CAPSTAR 310/310 |
| Event: DRILLING | | Start Date: 4/27/2011 | End Date: 11/23/2011 |
| Active Datum: RKB @4,960.00usft (above Mean Sea Level) | | UWI: NWNW/0/9/S/21/E/25/0/0/26/PM/N/793/W/0/900/0/0 | |

| Date | Time Start-End | Duration (hr) | Phase | Code | Sub Code | P/U | MD From (usft) | Operation |
|------------|----------------|---------------|--------|------|----------|-----|----------------|---|
| | 18:00 - 0:00 | 6.00 | DRLPRO | 02 | D | P | | DRLG F/ 6649 TO 7137', 488' @ 81.3' PH
WOB / 18-20, RPM 60
SPM 200 - GPM 586
MW 8.4, VIS 26, CIRC RESERVE PIT
TRQ ON/OFF = 10-12 K
PSI ON /OFF = 1700-1400 , DIFF 250-500
PU/SO/RT = 200-120-155
SLIDE =20' IN .5 HRS = 40' PH
ROT = 468' IN 5.5 HRS = 85' PH
STRATA - OFF LINE
0 CONN FLARE, 0 B/G FLARE
300-1500 GAS UINTS
10' N & 2.25 W OF TARGET CENTER
PUMPING LCM SWEEPS & CIRC TO PILL PIT, LOST @ 1000 BBLs WATER |
| 11/14/2011 | 0:00 - 17:00 | 17.00 | DRLPRO | 02 | D | P | | DRLG F/ 7137' TO 8073', 936' @ 55' PH
WOB / 20-22 , RPM 60
SPM 200 - GPM 586
MW 8.7, VIS 30, LCM SWEEPS 20%, 40 BBLs
TRQ ON/OFF = 12-14 K
PSI ON /OFF = 1700-1400 , DIFF 250-500
PU/SO/RT = 210-135-175
SLIDE = 40' IN 1.5 HRS = 26.6' PH
ROT = 896' IN 15.5 HRS = 57.8' PH
STRATA - OFF LINE
20' B/U, 10' B/G FLARE
600-3000 GAS UINTS
11' N & 7' W OF TARGET CENTER
LOST @ 1000 BBLs WATER
SERVICE RIG |
| | 17:00 - 17:30 | 0.50 | DRLPRO | 07 | A | P | | |
| | 17:30 - 0:00 | 6.50 | DRLPRO | 02 | D | P | | DRLG F/ 8073' TO 8415', 342' @ 52.6' PH
WOB / 20-22 , RPM 60
SPM 200 - GPM 586
MW 8.7, VIS 30, 40 BBL, 20% LCM SWEEPS
TRQ ON/OFF = 12-15 K
PSI ON /OFF = 1800-1500 , DIFF 250-500
PU/SO/RT = 210-135-175
SLIDE = 20' IN .75 HRS = 26.6' PH
ROT = 322' IN 5.75 HRS = 56' PH
STRATA - OFF LINE
10' B/U, 2' B/G FLARE
600-8000 GAS UINTS
5' N & 1.8 W OF TARGET CENTER
LOST @ 500 BBLs WATER |

US ROCKIES REGION

Operation Summary Report

| | | | | | |
|--|--|--------------------------|---|---------------------|---|
| Well: NBU 921-25C MW1 | | Spud Conductor: 5/4/2011 | | Spud Date: 5/7/2011 | |
| Project: UTAH-UINTAH | | | Site: NBU 921-25D PAD | | Rig Name No: PIONEER 54/54, CAPSTAR 310/310 |
| Event: DRILLING | | | Start Date: 4/27/2011 | | End Date: 11/23/2011 |
| Active Datum: RKB @4,960.00usft (above Mean Sea Level) | | | UWI: NWNW/0/9/S/21/E/25/0/0/26/PM/N/793/W/0/900/0/0 | | |

| Date | Time Start-End | Duration (hr) | Phase | Code | Sub Code | P/U | MD From (usft) | Operation |
|------------|----------------|---------------|--------|------|----------|-----|----------------|--|
| 11/15/2011 | 0:00 - 13:30 | 13.50 | DRLPRO | 02 | D | P | | DRLG F/ 8415' TO 9020', 605' @ 45.5' PH
WOB / 20-22 , RPM 60
SPM 200 - GPM 586
MW 8.7, VIS 30, 40 BBL, 20% LCM SWEEPS
TRQ ON/OFF = 14-16 K
PSI ON /OFF = 1800-1500 , DIFF 250-500
PU/SO/RT = 250-140-180
SLIDE = 102' IN 3.33 HRS = 30.6' PH
ROT = 503' IN 10.17 HRS = 49.5' PH
STRATA - OFF LINE
10' B/U, 2' B/G FLARE
600-6000 GAS UINTS
8' N & 3' W OF TARGET CENTER
LOST @ 500 BBLs WATER |
| | 13:30 - 14:00 | 0.50 | DRLPRO | 07 | A | P | | SERVICE RIG, F/T CROWN-O MATIC, CHECK BRAKES & LINKAGE |
| | 14:00 - 17:30 | 3.50 | DRLPRO | 02 | D | P | | DRLG F/ 9020 TO 9210', 190' @ 54.3' PH
MW 8.7, VIS 31, PUMPING 50 BBL 20% SWEEPS |
| | 17:30 - 18:00 | 0.50 | DRLPRO | 08 | B | Z | | PULL 1 STD, CHANGE OUT SWIVEL PACKING, NO FLOW |
| | 18:00 - 0:00 | 6.00 | DRLPRO | 02 | D | P | | DRLG F/ 9210 TO 9440', 230' @ 38.3' PH
WOB / 22-24 , RPM 60
SPM 200 - GPM 586
MW 8.7, VIS 30, 40 BBL, 20% LCM SWEEPS
TRQ ON/OFF = 16-18 K
PSI ON /OFF = 1800-1500 , DIFF 250-500
PU/SO/RT = 250-140-180
SLIDE =
ROT = 100%
STRATA - ON LINE @ 9375'
ANN PSI DRLG 100, CONN 150
20' B/U, 10' B/G FLARE
600-6000 GAS UINTS
16' N & 2.3 W OF TARGET CENTER
LOST @ 500 BBLs WATER |
| 11/16/2011 | 0:00 - 12:00 | 12.00 | DRLPRO | 02 | D | P | | DRLG F/ 9440' TO 9991', 551' @ 45.9' PH
WOB / 22-24 , RPM 60
SPM 200 - GPM 586
MW 9.0, VIS 32, 40 BBL, 20% LCM SWEEPS
TRQ ON/OFF = 16-18 K
PSI ON /OFF = 1800-1500 , DIFF 250-500
PU/SO/RT = 250-140-180
SLIDE =
ROT = 100%
STRATA - ON LINE @ 9375'
ANN PSI DRLG 150, CONN 150
20' B/U, 10' B/G FLARE
600-5000 GAS UINTS ON BUSTER
12' N & 3.5 E OF TARGET CENTER
LOST @ 500 BBLs |
| | 12:00 - 13:30 | 1.50 | DRLPRO | 05 | C | P | | CIRC & COND F/ TRIP, MIX 12 PPG PILL |
| | 13:30 - 0:00 | 10.50 | DRLPRO | 06 | A | P | | SPOT 100 BBL 12 PPG PILL ON BOTTOM, PUMP 8
STDS OF BOTTOM, POOH, SPOT 50 BBL 20% LCM
PILL @ 7000', POOH, TIGHT SPOT @ 4800' OUT, C/O
BIT & MM, TIH |

US ROCKIES REGION
Operation Summary Report

| | | |
|--|---|---|
| Well: NBU 921-25C MW1 | Spud Conductor: 5/4/2011 | Spud Date: 5/7/2011 |
| Project: UTAH-UINTAH | Site: NBU 921-25D PAD | Rig Name No: PIONEER 54/54, CAPSTAR 310/310 |
| Event: DRILLING | Start Date: 4/27/2011 | End Date: 11/23/2011 |
| Active Datum: RKB @4,960.00usft (above Mean Sea Level) | UWI: NWNW/0/9/S/21/E/25/0/0/26/PM/N/793/W/0/900/0/0 | |

| Date | Time Start-End | Duration (hr) | Phase | Code | Sub Code | P/U | MD From (usft) | Operation |
|------------|----------------|---------------|--------|------|----------|-----|----------------|---|
| 11/17/2011 | 0:00 - 1:30 | 1.50 | DRLPRO | 06 | A | P | | FINISH TIH W/ NO PROBLEMS, 5' FILL, 40' TRIP GAS FLARE |
| | 1:30 - 16:00 | 14.50 | DRLPRO | 02 | D | P | | DRLG F/ 9991' TO 10544', 553' @ 38.1' PH
WOB / 22-24 , RPM 60
SPM 200 - GPM 586
MW 10.5, VIS 32, 15% LCM
TRQ ON/OFF = 16-18 K
PSI ON /OFF = 1800-1500 , DIFF 250-500
PU/SO/RT = 265-150-190
SLIDE =
ROT = 100%
STRATA - ON LINE @ 9375'
ANN PSI DRLG 150, CONN 150
20' B/U, 10' B/G FLARE
600-5000 GAS UINTS ON BUSTER
14' S & 10' E OF TARGET CENTER
SERVICE RIG |
| | 16:00 - 16:30 | 0.50 | DRLPRO | 07 | A | P | | |
| | 16:30 - 23:00 | 6.50 | DRLPRO | 02 | D | P | | DRLG F/ 10544' TO 10979, TD, 435' @ 66.9' PH
WOB / 22-24 , RPM 60
SPM 200 - GPM 586
MW 11, VIS40, 20% LCM
TRQ ON/OFF = 16-18 K
PSI ON /OFF = 1800-1500 , DIFF 250-500
PU/SO/RT = 265-150-190
SLIDE =
ROT = 100%
STRATA - OFF LINE @ 10,670
10 B/U, 5 B/G FLARE
200-800 GAS UNITS OFF BUSTER
34 S & 19 E OF TARGET CENTER
RAISE LCM TO 25% CIRC & COND HOLE |
| 11/18/2011 | 23:00 - 0:00 | 1.00 | DRLPRO | 05 | C | P | | RAISE MW TO 11.2, VIS 45, LCM 25% |
| | 0:00 - 2:30 | 2.50 | DRLPRO | 05 | C | P | | SHORT TRIP TO SHOE, WORK TIGHT SPOT @ 4800'
CLEAN, TIH |
| | 2:30 - 9:30 | 7.00 | DRLPRO | 06 | E | P | | RAISE MW TO 11.4, VIS 45, LCM 25% |
| | 9:30 - 12:00 | 2.50 | DRLPRO | 05 | B | P | | POOH F/ OPEN HOLE LOGS |
| | 12:00 - 19:00 | 7.00 | DRLPRO | 06 | B | P | | HPJSM W/ RIG & BAKER LOGGING, R/U & RUN OPEN HOLE LOGS, LOGGING TOOL WOULD NOT COMM , TROUBLE SHOOT |
| 11/19/2011 | 19:00 - 0:00 | 5.00 | DRLPRO | 11 | C | Z | | TROUBLE SHOOT LOGGING TOOLS |
| | 0:00 - 2:30 | 2.50 | DRLPRO | 22 | O | Z | | TIH TO SHOE |
| | 2:30 - 4:30 | 2.00 | DRLPRO | 06 | E | Z | | CUT 18 WRAPS, F/T CROWN-O-MATIC |
| | 4:30 - 5:30 | 1.00 | DRLPRO | 09 | A | P | | TIH TO 4400, FILL PIPE, PLUGED, WORKED THOUGH TIGHT SPOT TO 5500', POOH TO UNPLUG DRILL STRING & RUN LOGS |
| | 5:30 - 10:00 | 4.50 | DRLPRO | 06 | E | Z | | RUN OPEN HOLE LOG TO 10,160' HIT BRIDGE, LOG OUT, R/D |
| | 10:00 - 15:30 | 5.50 | DRLPRO | 11 | C | P | | CLEAN LCM PLUG OUT OF D/C |
| 11/20/2011 | 15:30 - 17:00 | 1.50 | DRLPRO | 22 | O | Z | | TIH, WIPER TRIP F/ LOGS |
| | 17:00 - 23:30 | 6.50 | DRLPRO | 06 | E | P | | CIRC & COND HOLE F/ LOGS |
| | 0:00 - 1:00 | 1.00 | DRLPRO | 05 | C | P | | POOH F/ LOGS |
| | 1:00 - 5:30 | 4.50 | DRLPRO | 06 | F | P | | |

US ROCKIES REGION

Operation Summary Report

| | | | |
|--|--|--|---|
| Well: NBU 921-25C MW1 | | Spud Conductor: 5/4/2011 | Spud Date: 5/7/2011 |
| Project: UTAH-UINTAH | | Site: NBU 921-25D PAD | Rig Name No: PIONEER 54/54, CAPSTAR 310/310 |
| Event: DRILLING | | Start Date: 4/27/2011 | End Date: 11/23/2011 |
| Active Datum: RKB @4,960.00usft (above Mean Sea Level) | | UWI: NWWNW/0/9/S/21/E/25/0/0/26/PM/N/793/W/0/900/0/0 | |

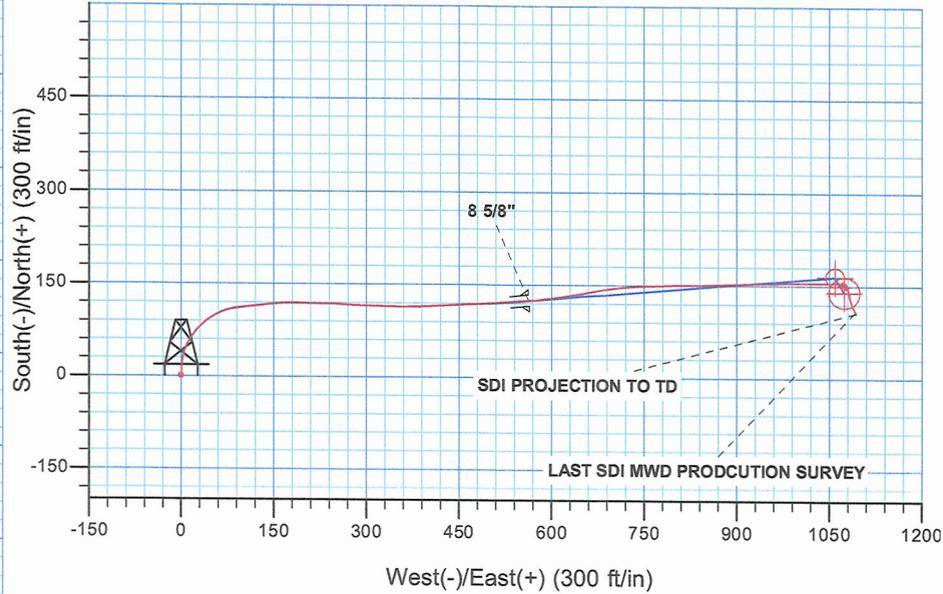
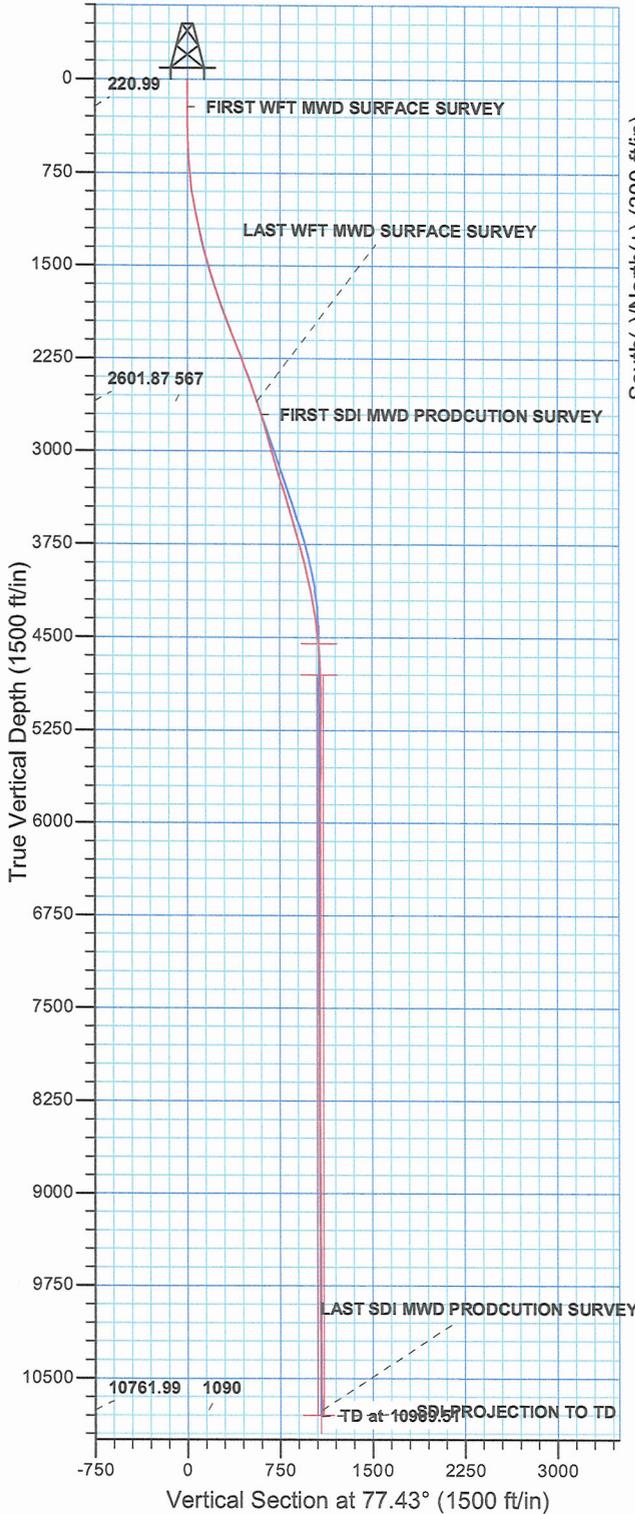
| Date | Time Start-End | Duration (hr) | Phase | Code | Sub Code | P/U | MD From (usft) | Operation |
|------------|----------------|---------------|--------|------|----------|-----|----------------|---|
| | 5:30 - 8:30 | 3.00 | DRLPRO | 11 | C | P | | HPJSM W/ RIG & LOGGERS, R/U & RUN OPEN HOLE LOGS, LOGGERS DEPTH 10,976, DRILLERS DEPTH 10,979, R/D |
| | 8:30 - 13:30 | 5.00 | DRLPRO | 06 | E | P | | TIH WASH & REAM 45' TO BOTTOM |
| | 13:30 - 15:00 | 1.50 | DRLPRO | 05 | F | P | | CIRC & COND HOLE F/ CASING RUN |
| | 15:00 - 19:00 | 4.00 | DRLPRO | 06 | F | P | | POOH |
| | 19:00 - 0:00 | 5.00 | DRLPRO | 12 | A | P | | HPJSM W/ RIG, SAGERIDER & KIMZEY, R/U SAGERIDER & KIMZEY |
| 11/21/2011 | 0:00 - 3:00 | 3.00 | DRLPRO | 12 | A | P | | R/U SAGERIDER & KIMZEY |
| | 3:00 - 0:00 | 21.00 | DRLPRO | 12 | C | P | | HPJSM W/ RIG & SAGERIDER & KIMZEY, RUN 3.5" TUBING, 16 MW STATIONS & 4.5" P-110 BTC CASING, FILL CASING |
| 11/22/2011 | 0:00 - 6:00 | 6.00 | DRLPRO | 12 | C | P | | RUN 3.5" TUBING & MW STATIONS, R/D 3.5" TOOLS |
| | 6:00 - 20:30 | 14.50 | DRLPRO | 12 | C | P | | R/U 4.5" TOOLS & RUN 4.5" BTC, BANDING CABLES TO PIPE, WASH 4 JTS DOWN |
| | 20:30 - 21:30 | 1.00 | DRLPRO | 05 | A | P | | CIRC OUT GAS TO LOG |
| | 21:30 - 0:00 | 2.50 | DRLPRO | 11 | C | P | | HPJSM W/ RIG & LOGGERS, R/U & RUN IN TO CHECK MW STATIONS, |
| 11/23/2011 | 0:00 - 0:30 | 0.50 | DRLPRO | 11 | C | P | | CORRELATION WITHIN 0.02', R/D LOGS |
| | 0:30 - 2:30 | 2.00 | DRLPRO | 05 | A | P | | CIRC BTMS UP |
| | 2:30 - 7:00 | 4.50 | DRLPRO | 12 | E | P | | HPJSM W/ RIG & BJ CEMENTERS, PSI TEST LINES TO 5275, PUMP 25 BBLS WATER, LEAD 463 SKS 11.9 PPG 2.4 YLD, TAIL 2093 SKS 14.3 PPG, 1.31 YLD, DROP PLUG & DISPLACE W/ 290 BBLS CLAYCARE WATER, DISPLACE W/ 145 BBLS BRINE SOLUTION FULL RETURNS THOUGHOUT JOB, W/ 100 BBLS TO PIT |
| | 7:00 - 7:30 | 0.50 | DRLPRO | 14 | A | P | | SET C-21 SLIPS, N/D AND MAKE ROUGH CUT TO CASING |
| | 7:30 - 13:30 | 6.00 | DRLPRO | 14 | A | P | | R/D & PREPARE TO SKID RIG & RELEASE RIG TO THE NBU 921-25C MW2 @ 13:30 11/23/11 |

| WELL DETAILS: NBU 921-25CMW1 | | | | | |
|--|-------|-------------|------------|-----------------|-------------------|
| GL 4941 & KB 19' @ 4960.00R (PIONEER 54) | | | | | |
| +N/-S | +E/-W | Northing | Easting | Latitude | Longitude |
| 0.00 | 0.00 | 14533960.52 | 2058867.43 | 40° 0' 43.571 N | 109° 30' 20.196 W |



Azimuths to True North
 Magnetic North: 11.04°

Magnetic Field
 Strength: 52303.7snT
 Dip Angle: 65.87°
 Date: 2011/10/08
 Model: IGRF2010



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



Scientific Drilling
Rocky Mountain Operations

Kerr McGee Oil and Gas Onshore LP

**Uintah County, UT UTM12
NBU 921-25D Pad
NBU 921-25CMW1**

OH

Design: OH

Standard Survey Report

13 December, 2011

Anadarko 
Petroleum Corporation

| | | | |
|------------------|-----------------------------------|-------------------------------------|---|
| Company: | Kerr McGee Oil and Gas Onshore LP | Local Co-ordinate Reference: | Well NBU 921-25CMW1 |
| Project: | Uintah County, UT UTM12 | TVD Reference: | GL 4941 & KB 19' @ 4960.00ft (PIONEER 54) |
| Site: | NBU 921-25D Pad | MD Reference: | GL 4941 & KB 19' @ 4960.00ft (PIONEER 54) |
| Well: | NBU 921-25CMW1 | North Reference: | True |
| Wellbore: | OH | Survey Calculation Method: | Minimum Curvature |
| Design: | OH | Database: | EDM5000-RobertS-Local |

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

| | | | | | |
|------------------------------|----------------------------------|---------------------|--------------------|--------------------------|-------------------|
| Site | NBU 921-25D Pad, SEC 25 T9S R21E | | | | |
| Site Position: | | Northing: | 14,533,953.48 usft | Latitude: | 40° 0' 43.502 N |
| From: | Lat/Long | Easting: | 2,058,860.26 usft | Longitude: | 109° 30' 20.290 W |
| Position Uncertainty: | 0.00 ft | Slot Radius: | 13.200 in | Grid Convergence: | 0.96 ° |

| | | | | | | |
|-----------------------------|---------------------------------|---------|----------------------------|--------------------|----------------------|-------------------|
| Well | NBU 921-25CMW1, 793 FNL 900 FEL | | | | | |
| Well Position | +N/-S | 0.00 ft | Northing: | 14,533,960.52 usft | Latitude: | 40° 0' 43.571 N |
| | +E/-W | 0.00 ft | Easting: | 2,058,867.42 usft | Longitude: | 109° 30' 20.196 W |
| Position Uncertainty | | 0.00 ft | Wellhead Elevation: | ft | Ground Level: | 4,941.00 ft |

| | | | | | |
|------------------|-------------------|--------------------|------------------------|----------------------|----------------------------|
| Wellbore | OH | | | | |
| Magnetics | Model Name | Sample Date | Declination (°) | Dip Angle (°) | Field Strength (nT) |
| | IGRF2010 | 2011/10/08 | 11.04 | 65.87 | 52,304 |

| | | | | | |
|--------------------------|------------------------------|-------------------|-------------------|----------------------|------|
| Design | OH | | | | |
| Audit Notes: | | | | | |
| Version: | 1.0 | Phase: | ACTUAL | Tie On Depth: | 0.00 |
| Vertical Section: | Depth From (TVD) (ft) | +N/-S (ft) | +E/-W (ft) | Direction (°) | |
| | 0.00 | 0.00 | 0.00 | 77.43 | |

| | | | | | |
|-----------------------|----------------|-----------------------------------|------------------|--------------------------|--|
| Survey Program | Date | 2011/12/08 | | | |
| From (ft) | To (ft) | Survey (Wellbore) | Tool Name | Description | |
| 15.00 | 2,695.00 | Survey #1 WFT MWD SURFACE (OH) | MWD | MWD - Standard | |
| 2,801.00 | 10,979.00 | Survey #2 SDI MWD PRODCUTION (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 | |
| 15.00 | 0.00 | 0.00 | 15.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 221.00 | 0.91 | 27.89 | 220.99 | 1.45 | 0.77 | 1.06 | 0.44 | 0.44 | 0.00 | |
| FIRST WFT MWD SURFACE SURVEY | | | | | | | | | | |
| 312.00 | 2.30 | 5.52 | 311.95 | 3.90 | 1.28 | 2.10 | 1.65 | 1.53 | -24.58 | |
| 406.00 | 4.00 | 359.56 | 405.81 | 9.06 | 1.44 | 3.37 | 1.84 | 1.81 | -6.34 | |
| 500.00 | 5.69 | 0.75 | 499.47 | 17.00 | 1.47 | 5.13 | 1.80 | 1.80 | 1.27 | |
| 595.00 | 7.00 | 9.25 | 593.89 | 27.42 | 2.46 | 8.37 | 1.69 | 1.38 | 8.95 | |
| 690.00 | 8.38 | 19.00 | 688.04 | 39.68 | 5.65 | 14.15 | 1.99 | 1.45 | 10.26 | |
| 786.00 | 9.50 | 27.25 | 782.87 | 53.34 | 11.55 | 22.88 | 1.77 | 1.17 | 8.59 | |

Company: Kerr McGee Oil and Gas Onshore LP
Project: Uintah County, UT UTM12
Site: NBU 921-25D Pad
Well: NBU 921-25CMW1
Wellbore: OH
Design: OH

Local Co-ordinate Reference: Well NBU 921-25CMW1
TVD Reference: GL 4941 & KB 19' @ 4960.00ft (PIONEER 54)
MD Reference: GL 4941 & KB 19' @ 4960.00ft (PIONEER 54)
North Reference: True
Survey Calculation Method: Minimum Curvature
Database: EDM5000-RobertS-Local

| Survey | | | | | | | | | | |
|--|-----------------|-------------|---------------------|------------|------------|-----------------------|-----------------------|----------------------|---------------------|--|
| Measured Depth (ft) | Inclination (°) | Azimuth (°) | Vertical Depth (ft) | +N/-S (ft) | +E/-W (ft) | Vertical Section (ft) | Dogleg Rate (°/100ft) | Build Rate (°/100ft) | Turn Rate (°/100ft) | |
| 881.00 | 11.06 | 36.50 | 876.35 | 67.64 | 20.56 | 34.79 | 2.39 | 1.64 | 9.74 | |
| 976.00 | 11.75 | 46.00 | 969.48 | 81.68 | 32.94 | 49.92 | 2.10 | 0.73 | 10.00 | |
| 1,071.00 | 12.38 | 57.00 | 1,062.40 | 93.95 | 48.44 | 67.72 | 2.51 | 0.66 | 11.58 | |
| 1,166.00 | 12.88 | 67.25 | 1,155.11 | 103.59 | 66.75 | 87.69 | 2.41 | 0.53 | 10.79 | |
| 1,261.00 | 12.75 | 78.62 | 1,247.76 | 109.75 | 86.80 | 108.60 | 2.65 | -0.14 | 11.97 | |
| 1,356.00 | 13.81 | 84.62 | 1,340.22 | 112.89 | 108.36 | 130.33 | 1.83 | 1.12 | 6.32 | |
| 1,452.00 | 15.31 | 83.12 | 1,433.13 | 115.48 | 132.36 | 154.31 | 1.61 | 1.56 | -1.56 | |
| 1,548.00 | 16.13 | 87.49 | 1,525.55 | 117.58 | 158.26 | 180.05 | 1.50 | 0.85 | 4.55 | |
| 1,643.00 | 17.44 | 89.87 | 1,616.50 | 118.19 | 185.68 | 206.95 | 1.56 | 1.38 | 2.51 | |
| 1,737.00 | 19.19 | 90.87 | 1,705.73 | 117.99 | 215.22 | 235.73 | 1.89 | 1.86 | 1.06 | |
| 1,832.00 | 20.63 | 92.00 | 1,795.05 | 117.17 | 247.56 | 267.12 | 1.57 | 1.52 | 1.19 | |
| 1,926.00 | 20.88 | 92.50 | 1,882.95 | 115.86 | 280.84 | 299.32 | 0.33 | 0.27 | 0.53 | |
| 2,021.00 | 21.69 | 93.00 | 1,971.47 | 114.20 | 315.29 | 332.58 | 0.87 | 0.85 | 0.53 | |
| 2,116.00 | 21.69 | 90.00 | 2,059.75 | 113.28 | 350.38 | 366.63 | 1.17 | 0.00 | -3.16 | |
| 2,212.00 | 21.19 | 88.12 | 2,149.11 | 113.85 | 385.46 | 400.99 | 0.89 | -0.52 | -1.96 | |
| 2,307.00 | 20.69 | 87.50 | 2,237.83 | 115.15 | 419.38 | 434.39 | 0.58 | -0.53 | -0.65 | |
| 2,402.00 | 20.56 | 86.50 | 2,326.74 | 116.90 | 452.80 | 467.39 | 0.40 | -0.14 | -1.05 | |
| 2,496.00 | 20.00 | 86.25 | 2,414.91 | 118.96 | 485.32 | 499.57 | 0.60 | -0.60 | -0.27 | |
| 2,590.00 | 20.56 | 86.75 | 2,503.09 | 120.94 | 517.84 | 531.75 | 0.62 | 0.60 | 0.53 | |
| 2,695.00 | 19.05 | 85.60 | 2,601.87 | 123.30 | 553.33 | 566.90 | 1.49 | -1.44 | -1.10 | |
| LAST WFT MWD SURFACE SURVEY | | | | | | | | | | |
| 2,801.00 | 16.61 | 84.22 | 2,702.78 | 126.16 | 585.66 | 599.08 | 2.34 | -2.30 | -1.30 | |
| FIRST SDI MWD PRODCUTION SURVEY | | | | | | | | | | |
| 2,896.00 | 15.74 | 82.48 | 2,794.01 | 129.21 | 611.94 | 625.40 | 1.05 | -0.92 | -1.83 | |
| 2,991.00 | 16.18 | 79.58 | 2,885.35 | 133.29 | 637.74 | 651.46 | 0.96 | 0.46 | -3.05 | |
| 3,086.00 | 16.52 | 79.94 | 2,976.51 | 138.05 | 664.05 | 678.18 | 0.37 | 0.36 | 0.38 | |
| 3,181.00 | 15.68 | 79.60 | 3,067.79 | 142.72 | 689.98 | 704.50 | 0.89 | -0.88 | -0.36 | |
| 3,276.00 | 16.97 | 84.24 | 3,158.96 | 146.43 | 716.40 | 731.10 | 1.93 | 1.36 | 4.88 | |
| 3,371.00 | 18.38 | 87.23 | 3,249.47 | 148.55 | 745.16 | 759.63 | 1.76 | 1.48 | 3.15 | |
| 3,466.00 | 18.38 | 88.99 | 3,339.63 | 149.53 | 775.09 | 789.06 | 0.58 | 0.00 | 1.85 | |
| 3,561.00 | 17.92 | 88.23 | 3,429.90 | 150.25 | 804.68 | 818.09 | 0.54 | -0.48 | -0.80 | |
| 3,655.00 | 17.05 | 90.14 | 3,519.56 | 150.66 | 832.91 | 845.74 | 1.11 | -0.93 | 2.03 | |
| 3,750.00 | 16.00 | 89.16 | 3,610.63 | 150.82 | 859.93 | 872.15 | 1.14 | -1.11 | -1.03 | |
| 3,845.00 | 15.34 | 86.55 | 3,702.10 | 151.77 | 885.57 | 897.37 | 1.02 | -0.69 | -2.75 | |
| 3,939.00 | 15.12 | 88.28 | 3,792.80 | 152.89 | 910.23 | 921.69 | 0.54 | -0.23 | 1.84 | |
| 4,034.00 | 15.79 | 89.61 | 3,884.37 | 153.35 | 935.54 | 946.50 | 0.80 | 0.71 | 1.40 | |
| 4,129.00 | 13.72 | 88.99 | 3,976.23 | 153.63 | 959.73 | 970.17 | 2.19 | -2.18 | -0.65 | |
| 4,224.00 | 11.83 | 88.65 | 4,068.87 | 154.06 | 980.74 | 990.76 | 1.99 | -1.99 | -0.36 | |
| 4,319.00 | 10.54 | 89.30 | 4,162.07 | 154.40 | 999.16 | 1,008.82 | 1.36 | -1.36 | 0.68 | |
| 4,413.00 | 10.39 | 89.63 | 4,254.50 | 154.56 | 1,016.23 | 1,025.52 | 0.17 | -0.16 | 0.35 | |
| 4,508.00 | 8.35 | 90.48 | 4,348.23 | 154.55 | 1,031.70 | 1,040.61 | 2.15 | -2.15 | 0.89 | |
| 4,603.00 | 7.56 | 91.36 | 4,442.31 | 154.35 | 1,044.84 | 1,053.40 | 0.84 | -0.83 | 0.93 | |
| 4,698.00 | 6.95 | 88.99 | 4,536.55 | 154.30 | 1,056.84 | 1,065.09 | 0.72 | -0.64 | -2.49 | |

Company: Kerr McGee Oil and Gas Onshore LP
Project: Uintah County, UT UTM12
Site: NBU 921-25D Pad
Well: NBU 921-25CMW1
Wellbore: OH
Design: OH

Local Co-ordinate Reference: Well NBU 921-25CMW1
TVD Reference: GL 4941 & KB 19' @ 4960.00ft (PIONEER 54)
MD Reference: GL 4941 & KB 19' @ 4960.00ft (PIONEER 54)
North Reference: True
Survey Calculation Method: Minimum Curvature
Database: EDM5000-RobertS-Local

Survey

| Measured Depth (ft) | Inclination (°) | Azimuth (°) | Vertical Depth (ft) | +N-S (ft) | +E-W (ft) | Vertical Section (ft) | Dogleg Rate (°/100ft) | Build Rate (°/100ft) | Turn Rate (°/100ft) |
|---------------------|-----------------|-------------|---------------------|-----------|-----------|-----------------------|-----------------------|----------------------|---------------------|
| 4,792.00 | 5.45 | 92.85 | 4,630.00 | 154.18 | 1,066.98 | 1,074.97 | 1.66 | -1.60 | 4.11 |
| 4,887.00 | 3.43 | 102.35 | 4,724.71 | 153.35 | 1,074.27 | 1,081.90 | 2.26 | -2.13 | 10.00 |
| 4,982.00 | 2.20 | 114.21 | 4,819.60 | 151.99 | 1,078.71 | 1,085.93 | 1.43 | -1.29 | 12.48 |
| 5,077.00 | 1.42 | 166.52 | 4,914.55 | 150.10 | 1,080.64 | 1,087.41 | 1.83 | -0.82 | 55.06 |
| 5,172.00 | 0.59 | 173.04 | 5,009.54 | 148.47 | 1,080.98 | 1,087.39 | 0.88 | -0.87 | 6.86 |
| 5,267.00 | 0.44 | 286.92 | 5,104.54 | 148.09 | 1,080.69 | 1,087.02 | 0.91 | -0.16 | 119.87 |
| 5,361.00 | 0.44 | 244.03 | 5,198.53 | 148.03 | 1,080.02 | 1,086.35 | 0.34 | 0.00 | -45.63 |
| 5,456.00 | 0.44 | 222.93 | 5,293.53 | 147.61 | 1,079.44 | 1,085.70 | 0.17 | 0.00 | -22.21 |
| 5,551.00 | 0.53 | 176.88 | 5,388.53 | 146.90 | 1,079.22 | 1,085.33 | 0.41 | 0.09 | -48.47 |
| 5,646.00 | 0.70 | 175.56 | 5,483.52 | 145.89 | 1,079.29 | 1,085.17 | 0.18 | 0.18 | -1.39 |
| 5,741.00 | 0.70 | 270.74 | 5,578.52 | 145.31 | 1,078.75 | 1,084.53 | 1.09 | 0.00 | 100.19 |
| 5,835.00 | 1.32 | 319.35 | 5,672.51 | 146.14 | 1,077.47 | 1,083.46 | 1.07 | 0.66 | 51.71 |
| 5,930.00 | 1.16 | 329.68 | 5,767.48 | 147.80 | 1,076.27 | 1,082.65 | 0.29 | -0.17 | 10.87 |
| 6,025.00 | 0.97 | 336.84 | 5,862.47 | 149.37 | 1,075.47 | 1,082.21 | 0.24 | -0.20 | 7.54 |
| 6,120.00 | 0.97 | 9.01 | 5,957.45 | 150.91 | 1,075.28 | 1,082.36 | 0.57 | 0.00 | 33.86 |
| 6,215.00 | 0.95 | 21.07 | 6,052.44 | 152.44 | 1,075.69 | 1,083.09 | 0.21 | -0.02 | 12.69 |
| 6,310.00 | 0.62 | 305.64 | 6,147.43 | 153.47 | 1,075.55 | 1,083.18 | 1.05 | -0.35 | -79.40 |
| 6,404.00 | 0.77 | 293.71 | 6,241.43 | 154.02 | 1,074.56 | 1,082.33 | 0.22 | 0.16 | -12.69 |
| 6,499.00 | 0.53 | 279.89 | 6,336.42 | 154.35 | 1,073.55 | 1,081.41 | 0.30 | -0.25 | -14.55 |
| 6,594.00 | 0.44 | 237.79 | 6,431.42 | 154.23 | 1,072.80 | 1,080.66 | 0.38 | -0.09 | -44.32 |
| 6,689.00 | 0.53 | 118.04 | 6,526.42 | 153.83 | 1,072.88 | 1,080.65 | 0.88 | 0.09 | -126.05 |
| 6,784.00 | 0.68 | 141.52 | 6,621.41 | 153.18 | 1,073.62 | 1,081.23 | 0.30 | 0.16 | 24.72 |
| 6,879.00 | 0.97 | 151.30 | 6,716.40 | 152.04 | 1,074.36 | 1,081.70 | 0.34 | 0.31 | 10.29 |
| 6,973.00 | 0.44 | 243.76 | 6,810.40 | 151.18 | 1,074.42 | 1,081.57 | 1.15 | -0.56 | 98.36 |
| 7,068.00 | 0.44 | 237.35 | 6,905.39 | 150.82 | 1,073.78 | 1,080.88 | 0.05 | 0.00 | -6.75 |
| 7,163.00 | 0.70 | 224.25 | 7,000.39 | 150.21 | 1,073.07 | 1,080.05 | 0.30 | 0.27 | -13.79 |
| 7,258.00 | 0.75 | 255.93 | 7,095.38 | 149.64 | 1,072.06 | 1,078.94 | 0.42 | 0.05 | 33.35 |
| 7,353.00 | 0.53 | 248.33 | 7,190.37 | 149.33 | 1,071.05 | 1,077.88 | 0.25 | -0.23 | -8.00 |
| 7,448.00 | 0.79 | 305.20 | 7,285.37 | 149.54 | 1,070.11 | 1,077.01 | 0.70 | 0.27 | 59.86 |
| 7,542.00 | 0.79 | 287.53 | 7,379.36 | 150.11 | 1,068.96 | 1,076.01 | 0.26 | 0.00 | -18.80 |
| 7,637.00 | 0.62 | 292.72 | 7,474.35 | 150.51 | 1,067.86 | 1,075.03 | 0.19 | -0.18 | 5.46 |
| 7,732.00 | 0.53 | 294.83 | 7,569.35 | 150.89 | 1,066.99 | 1,074.26 | 0.10 | -0.09 | 2.22 |
| 7,827.00 | 0.00 | 257.82 | 7,664.35 | 151.08 | 1,066.59 | 1,073.91 | 0.56 | -0.56 | 0.00 |
| 7,922.00 | 0.26 | 138.47 | 7,759.35 | 150.92 | 1,066.73 | 1,074.02 | 0.27 | 0.27 | 0.00 |
| 8,018.00 | 0.62 | 142.25 | 7,855.34 | 150.34 | 1,067.20 | 1,074.34 | 0.38 | 0.38 | 3.94 |
| 8,113.00 | 0.88 | 143.92 | 7,950.34 | 149.35 | 1,067.94 | 1,074.85 | 0.27 | 0.27 | 1.76 |
| 8,207.00 | 0.79 | 135.57 | 8,044.33 | 148.30 | 1,068.82 | 1,075.48 | 0.16 | -0.10 | -8.88 |
| 8,302.00 | 1.19 | 136.00 | 8,139.31 | 147.12 | 1,069.96 | 1,076.34 | 0.42 | 0.42 | 0.45 |
| 8,397.00 | 1.32 | 136.45 | 8,234.29 | 145.62 | 1,071.40 | 1,077.42 | 0.14 | 0.14 | 0.47 |
| 8,492.00 | 0.62 | 149.98 | 8,329.27 | 144.38 | 1,072.41 | 1,078.14 | 0.77 | -0.74 | 14.24 |
| 8,586.00 | 0.07 | 245.12 | 8,423.27 | 143.92 | 1,072.62 | 1,078.23 | 0.67 | -0.59 | 101.21 |
| 8,681.00 | 0.18 | 220.47 | 8,518.27 | 143.78 | 1,072.47 | 1,078.06 | 0.13 | 0.12 | -25.95 |
| 8,776.00 | 0.62 | 330.86 | 8,613.27 | 144.11 | 1,072.12 | 1,077.79 | 0.74 | 0.46 | 116.20 |
| 8,870.00 | 1.44 | 345.15 | 8,707.25 | 145.70 | 1,071.57 | 1,077.60 | 0.91 | 0.87 | 15.20 |

Company: Kerr McGee Oil and Gas Onshore LP
Project: Uintah County, UT UTM12
Site: NBU 921-25D Pad
Well: NBU 921-25CMW1
Wellbore: OH
Design: OH

Local Co-ordinate Reference: Well NBU 921-25CMW1
TVD Reference: GL 4941 & KB 19' @ 4960.00ft (PIONEER 54)
MD Reference: GL 4941 & KB 19' @ 4960.00ft (PIONEER 54)
North Reference: True
Survey Calculation Method: Minimum Curvature
Database: EDM5000-RobertS-Local

Survey

| Measured Depth (ft) | Inclination (°) | Azimuth (°) | Vertical Depth (ft) | +N/S (ft) | +E/W (ft) | Vertical Section (ft) | Dogleg Rate (°/100ft) | Build Rate (°/100ft) | Turn Rate (°/100ft) | |
|---------------------------------------|-----------------|-------------|---------------------|-----------|-----------|-----------------------|-----------------------|----------------------|---------------------|--|
| 8,965.00 | 1.41 | 346.68 | 8,802.23 | 147.99 | 1,070.99 | 1,077.54 | 0.05 | -0.03 | 1.61 | |
| 9,061.00 | 1.23 | 354.25 | 8,898.20 | 150.17 | 1,070.62 | 1,077.64 | 0.26 | -0.19 | 7.89 | |
| 9,155.00 | 1.14 | 345.36 | 8,992.18 | 152.07 | 1,070.28 | 1,077.73 | 0.22 | -0.10 | -9.46 | |
| 9,250.00 | 0.97 | 2.94 | 9,087.16 | 153.79 | 1,070.08 | 1,077.91 | 0.38 | -0.18 | 18.51 | |
| 9,345.00 | 0.79 | 16.65 | 9,182.15 | 155.22 | 1,070.31 | 1,078.44 | 0.29 | -0.19 | 14.43 | |
| 9,439.00 | 0.70 | 53.92 | 9,276.15 | 156.18 | 1,070.96 | 1,079.29 | 0.51 | -0.10 | 39.65 | |
| 9,534.00 | 0.79 | 95.67 | 9,371.14 | 156.46 | 1,072.08 | 1,080.44 | 0.57 | 0.09 | 43.95 | |
| 9,629.00 | 1.01 | 117.09 | 9,466.13 | 156.01 | 1,073.48 | 1,081.71 | 0.42 | 0.23 | 22.55 | |
| 9,724.00 | 0.95 | 122.47 | 9,561.11 | 155.21 | 1,074.89 | 1,082.91 | 0.12 | -0.06 | 5.66 | |
| 9,819.00 | 1.32 | 130.38 | 9,656.09 | 154.08 | 1,076.39 | 1,084.13 | 0.42 | 0.39 | 8.33 | |
| 9,913.00 | 2.20 | 157.54 | 9,750.05 | 151.71 | 1,077.90 | 1,085.09 | 1.27 | 0.94 | 28.89 | |
| 10,015.00 | 2.43 | 163.01 | 9,851.97 | 147.83 | 1,079.28 | 1,085.59 | 0.31 | 0.23 | 5.36 | |
| 10,110.00 | 2.90 | 166.68 | 9,946.86 | 143.57 | 1,080.42 | 1,085.78 | 0.53 | 0.49 | 3.86 | |
| 10,205.00 | 2.73 | 167.74 | 10,041.75 | 139.02 | 1,081.46 | 1,085.80 | 0.19 | -0.18 | 1.12 | |
| 10,300.00 | 2.55 | 165.80 | 10,136.65 | 134.76 | 1,082.46 | 1,085.85 | 0.21 | -0.19 | -2.04 | |
| 10,395.00 | 2.75 | 164.80 | 10,231.55 | 130.51 | 1,083.57 | 1,086.01 | 0.22 | 0.21 | -1.05 | |
| 10,489.00 | 2.73 | 166.24 | 10,325.44 | 126.16 | 1,084.70 | 1,086.16 | 0.08 | -0.02 | 1.53 | |
| 10,584.00 | 2.55 | 157.37 | 10,420.34 | 122.01 | 1,086.05 | 1,086.58 | 0.47 | -0.19 | -9.34 | |
| 10,678.00 | 2.73 | 156.22 | 10,514.24 | 118.03 | 1,087.75 | 1,087.38 | 0.20 | 0.19 | -1.22 | |
| 10,773.00 | 2.64 | 154.11 | 10,609.13 | 113.99 | 1,089.62 | 1,088.32 | 0.14 | -0.09 | -2.22 | |
| 10,868.00 | 2.41 | 157.51 | 10,704.04 | 110.18 | 1,091.34 | 1,089.17 | 0.29 | -0.24 | 3.58 | |
| 10,926.00 | 2.37 | 159.56 | 10,761.99 | 107.93 | 1,092.23 | 1,089.55 | 0.16 | -0.07 | 3.53 | |
| LAST SDI MWD PRODCUTION SURVEY | | | | | | | | | | |
| 10,979.00 | 2.37 | 159.56 | 10,814.95 | 105.88 | 1,092.99 | 1,089.85 | 0.00 | 0.00 | 0.00 | |
| SDI PROJECTION TO TD | | | | | | | | | | |

Design Annotations

| Measured Depth (ft) | Vertical Depth (ft) | Local Coordinates | | Comment |
|---------------------|---------------------|-------------------|-----------|---------------------------------|
| | | +N/S (ft) | +E/W (ft) | |
| 221.00 | 220.99 | 1.45 | 0.77 | FIRST WFT MWD SURFACE SURVEY |
| 2,695.00 | 2,601.87 | 123.30 | 553.33 | LAST WFT MWD SURFACE SURVEY |
| 2,801.00 | 2,702.78 | 126.16 | 585.66 | FIRST SDI MWD PRODCUTION SURVEY |
| 10,926.00 | 10,761.99 | 107.93 | 1,092.23 | LAST SDI MWD PRODCUTION SURVEY |
| 10,979.00 | 10,814.95 | 105.88 | 1,092.99 | 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 921-25D Pad
NBU 921-25CMW1**

OH

Design: OH

Survey Report - Geographic

13 December, 2011

Anadarko 
Petroleum Corporation

| | | | |
|------------------|-----------------------------------|-------------------------------------|---|
| Company: | Kerr McGee Oil and Gas Onshore LP | Local Co-ordinate Reference: | Well NBU 921-25CMW1 |
| Project: | Uintah County, UT UTM12 | TVD Reference: | GL 4941 & KB 19' @ 4960.00ft (PIONEER 54) |
| Site: | NBU 921-25D Pad | MD Reference: | GL 4941 & KB 19' @ 4960.00ft (PIONEER 54) |
| Well: | NBU 921-25CMW1 | North Reference: | True |
| Wellbore: | OH | Survey Calculation Method: | Minimum Curvature |
| Design: | OH | Database: | EDM5000-RobertS-Local |

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

| | | | |
|------------------------------|----------------------------------|--------------------------|--------------------|
| Site | NBU 921-25D Pad, SEC 25 T9S R21E | | |
| Site Position: | | Northing: | 14,533,953.48 usft |
| From: | Lat/Long | Easting: | 2,058,860.26 usft |
| Position Uncertainty: | 0.00 ft | Slot Radius: | 13.200 in |
| | | Latitude: | 40° 0' 43.502 N |
| | | Longitude: | 109° 30' 20.290 W |
| | | Grid Convergence: | 0.96 ° |

| | | | |
|-----------------------------|---------------------------------|----------------------------|-------------------------------------|
| Well | NBU 921-25CMW1, 793 FNL 900 FEL | | |
| Well Position | +N/-S | 0.00 ft | Northing: 14,533,960.52 usft |
| | +E/-W | 0.00 ft | Easting: 2,058,867.42 usft |
| Position Uncertainty | 0.00 ft | Wellhead Elevation: | ft |
| | | Latitude: | 40° 0' 43.571 N |
| | | Longitude: | 109° 30' 20.196 W |
| | | Ground Level: | 4,941.00 ft |

| | | | | | |
|------------------|-------------------|--------------------|------------------------|----------------------|----------------------------|
| Wellbore | OH | | | | |
| Magnetics | Model Name | Sample Date | Declination (°) | Dip Angle (°) | Field Strength (nT) |
| | IGRF2010 | 2011/10/08 | 11.04 | 65.87 | 52,304 |

| | | | | | |
|--------------------------|------------------------------|-------------------|-------------------|----------------------|------|
| Design | OH | | | | |
| Audit Notes: | | | | | |
| Version: | 1.0 | Phase: | ACTUAL | Tie On Depth: | 0.00 |
| Vertical Section: | Depth From (TVD) (ft) | +N/-S (ft) | +E/-W (ft) | Direction (°) | |
| | 0.00 | 0.00 | 0.00 | 77.43 | |

| | | | | | |
|-----------------------|----------------|-----------------------------------|------------------|--------------------------|--|
| Survey Program | Date | 2011/12/08 | | | |
| From (ft) | To (ft) | Survey (Wellbore) | Tool Name | Description | |
| 15.00 | 2,695.00 | Survey #1 WFT MWD SURFACE (OH) | MWD | MWD - Standard | |
| 2,801.00 | 10,979.00 | Survey #2 SDI MWD PRODCUTION (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 | 14,533,960.52 | 2,058,867.42 | 40° 0' 43.571 N | 109° 30' 20.196 W |
| 15.00 | 0.00 | 0.00 | 15.00 | 0.00 | 0.00 | 14,533,960.52 | 2,058,867.42 | 40° 0' 43.571 N | 109° 30' 20.196 W |
| 221.00 | 0.91 | 27.89 | 220.99 | 1.45 | 0.77 | 14,533,961.98 | 2,058,868.16 | 40° 0' 43.585 N | 109° 30' 20.186 W |
| FIRST WFT MWD SURFACE SURVEY | | | | | | | | | |
| 312.00 | 2.30 | 5.52 | 311.95 | 3.90 | 1.28 | 14,533,964.44 | 2,058,868.63 | 40° 0' 43.609 N | 109° 30' 20.180 W |
| 406.00 | 4.00 | 359.56 | 405.81 | 9.06 | 1.44 | 14,533,969.60 | 2,058,868.70 | 40° 0' 43.660 N | 109° 30' 20.178 W |
| 500.00 | 5.69 | 0.75 | 499.47 | 17.00 | 1.47 | 14,533,977.54 | 2,058,868.61 | 40° 0' 43.739 N | 109° 30' 20.177 W |
| 595.00 | 7.00 | 9.25 | 593.89 | 27.42 | 2.46 | 14,533,987.98 | 2,058,869.42 | 40° 0' 43.842 N | 109° 30' 20.164 W |
| 690.00 | 8.38 | 19.00 | 688.04 | 39.68 | 5.65 | 14,534,000.29 | 2,058,872.40 | 40° 0' 43.963 N | 109° 30' 20.123 W |
| 786.00 | 9.50 | 27.25 | 782.87 | 53.34 | 11.55 | 14,534,014.05 | 2,058,878.08 | 40° 0' 44.098 N | 109° 30' 20.047 W |
| 881.00 | 11.06 | 36.50 | 876.35 | 67.64 | 20.56 | 14,534,028.49 | 2,058,886.85 | 40° 0' 44.239 N | 109° 30' 19.932 W |

Company: Kerr McGee Oil and Gas Onshore LP
Project: Uintah County, UT UTM12
Site: NBU 921-25D Pad
Well: NBU 921-25CMW1
Wellbore: OH
Design: OH

Local Co-ordinate Reference: Well NBU 921-25CMW1
TVD Reference: GL 4941 & KB 19' @ 4960.00ft (PIONEER 54)
MD Reference: GL 4941 & KB 19' @ 4960.00ft (PIONEER 54)
North Reference: True
Survey Calculation Method: Minimum Curvature
Database: EDM5000-RobertS-Local

Survey

| Measured Depth (ft) | Inclination (°) | Azimuth (°) | Vertical Depth (ft) | +N/-S (ft) | +E/-W (ft) | Map Northing (usft) | Map Easting (usft) | Latitude | Longitude |
|--|-----------------|-------------|---------------------|------------|------------|---------------------|--------------------|-----------------|-------------------|
| 976.00 | 11.75 | 46.00 | 969.48 | 81.68 | 32.94 | 14,534,042.74 | 2,058,898.99 | 40° 0' 44.378 N | 109° 30' 19.773 W |
| 1,071.00 | 12.38 | 57.00 | 1,062.40 | 93.95 | 48.44 | 14,534,055.27 | 2,058,914.28 | 40° 0' 44.499 N | 109° 30' 19.573 W |
| 1,166.00 | 12.88 | 67.25 | 1,155.11 | 103.59 | 66.75 | 14,534,065.22 | 2,058,932.43 | 40° 0' 44.595 N | 109° 30' 19.338 W |
| 1,261.00 | 12.75 | 78.62 | 1,247.76 | 109.75 | 86.80 | 14,534,071.72 | 2,058,952.37 | 40° 0' 44.656 N | 109° 30' 19.080 W |
| 1,356.00 | 13.81 | 84.62 | 1,340.22 | 112.89 | 108.36 | 14,534,075.21 | 2,058,973.88 | 40° 0' 44.687 N | 109° 30' 18.803 W |
| 1,452.00 | 15.31 | 83.12 | 1,433.13 | 115.48 | 132.36 | 14,534,078.20 | 2,058,997.82 | 40° 0' 44.712 N | 109° 30' 18.495 W |
| 1,548.00 | 16.13 | 87.49 | 1,525.55 | 117.58 | 158.26 | 14,534,080.74 | 2,059,023.69 | 40° 0' 44.733 N | 109° 30' 18.162 W |
| 1,643.00 | 17.44 | 89.87 | 1,616.50 | 118.19 | 185.68 | 14,534,081.81 | 2,059,051.10 | 40° 0' 44.739 N | 109° 30' 17.809 W |
| 1,737.00 | 19.19 | 90.87 | 1,705.73 | 117.99 | 215.22 | 14,534,082.10 | 2,059,080.63 | 40° 0' 44.737 N | 109° 30' 17.430 W |
| 1,832.00 | 20.63 | 92.00 | 1,795.05 | 117.17 | 247.56 | 14,534,081.82 | 2,059,112.98 | 40° 0' 44.729 N | 109° 30' 17.014 W |
| 1,926.00 | 20.88 | 92.50 | 1,882.95 | 115.86 | 280.84 | 14,534,081.07 | 2,059,146.28 | 40° 0' 44.716 N | 109° 30' 16.586 W |
| 2,021.00 | 21.69 | 93.00 | 1,971.47 | 114.20 | 315.29 | 14,534,080.00 | 2,059,180.75 | 40° 0' 44.700 N | 109° 30' 16.143 W |
| 2,116.00 | 21.69 | 90.00 | 2,059.75 | 113.28 | 350.38 | 14,534,079.67 | 2,059,215.85 | 40° 0' 44.691 N | 109° 30' 15.692 W |
| 2,212.00 | 21.19 | 88.12 | 2,149.11 | 113.85 | 385.46 | 14,534,080.82 | 2,059,250.91 | 40° 0' 44.696 N | 109° 30' 15.241 W |
| 2,307.00 | 20.69 | 87.50 | 2,237.83 | 115.15 | 419.38 | 14,534,082.69 | 2,059,284.81 | 40° 0' 44.709 N | 109° 30' 14.805 W |
| 2,402.00 | 20.56 | 86.50 | 2,326.74 | 116.90 | 452.80 | 14,534,085.00 | 2,059,318.20 | 40° 0' 44.726 N | 109° 30' 14.376 W |
| 2,496.00 | 20.00 | 86.25 | 2,414.91 | 118.96 | 485.32 | 14,534,087.60 | 2,059,350.67 | 40° 0' 44.747 N | 109° 30' 13.958 W |
| 2,590.00 | 20.56 | 86.75 | 2,503.09 | 120.94 | 517.84 | 14,534,090.13 | 2,059,383.16 | 40° 0' 44.766 N | 109° 30' 13.540 W |
| 2,695.00 | 19.05 | 85.60 | 2,601.87 | 123.30 | 553.33 | 14,534,093.09 | 2,059,418.61 | 40° 0' 44.790 N | 109° 30' 13.083 W |
| LAST WFT MWD SURFACE SURVEY | | | | | | | | | |
| 2,801.00 | 16.61 | 84.22 | 2,702.78 | 126.16 | 585.66 | 14,534,096.48 | 2,059,450.88 | 40° 0' 44.818 N | 109° 30' 12.668 W |
| FIRST SDI MWD PRODUCTION SURVEY | | | | | | | | | |
| 2,896.00 | 15.74 | 82.48 | 2,794.01 | 129.21 | 611.94 | 14,534,099.98 | 2,059,477.11 | 40° 0' 44.848 N | 109° 30' 12.330 W |
| 2,991.00 | 16.18 | 79.58 | 2,885.35 | 133.29 | 637.74 | 14,534,104.49 | 2,059,502.83 | 40° 0' 44.888 N | 109° 30' 11.998 W |
| 3,086.00 | 16.52 | 79.94 | 2,976.51 | 138.05 | 664.05 | 14,534,109.68 | 2,059,529.06 | 40° 0' 44.935 N | 109° 30' 11.660 W |
| 3,181.00 | 15.68 | 79.60 | 3,067.79 | 142.72 | 689.98 | 14,534,114.80 | 2,059,554.91 | 40° 0' 44.981 N | 109° 30' 11.327 W |
| 3,276.00 | 16.97 | 84.24 | 3,158.96 | 146.43 | 716.40 | 14,534,118.95 | 2,059,581.27 | 40° 0' 45.018 N | 109° 30' 10.987 W |
| 3,371.00 | 18.38 | 87.23 | 3,249.47 | 148.55 | 745.16 | 14,534,121.54 | 2,059,609.98 | 40° 0' 45.039 N | 109° 30' 10.618 W |
| 3,466.00 | 18.38 | 88.99 | 3,339.63 | 149.53 | 775.09 | 14,534,123.03 | 2,059,639.90 | 40° 0' 45.049 N | 109° 30' 10.233 W |
| 3,561.00 | 17.92 | 88.23 | 3,429.90 | 150.25 | 804.68 | 14,534,124.25 | 2,059,669.46 | 40° 0' 45.056 N | 109° 30' 9.853 W |
| 3,655.00 | 17.05 | 90.14 | 3,519.56 | 150.66 | 832.91 | 14,534,125.13 | 2,059,697.69 | 40° 0' 45.060 N | 109° 30' 9.490 W |
| 3,750.00 | 16.00 | 89.16 | 3,610.63 | 150.82 | 859.93 | 14,534,125.74 | 2,059,724.70 | 40° 0' 45.061 N | 109° 30' 9.142 W |
| 3,845.00 | 15.34 | 86.55 | 3,702.10 | 151.77 | 885.57 | 14,534,127.12 | 2,059,750.32 | 40° 0' 45.071 N | 109° 30' 8.813 W |
| 3,939.00 | 15.12 | 88.28 | 3,792.80 | 152.89 | 910.23 | 14,534,128.65 | 2,059,774.96 | 40° 0' 45.082 N | 109° 30' 8.496 W |
| 4,034.00 | 15.79 | 89.61 | 3,884.37 | 153.35 | 935.54 | 14,534,129.54 | 2,059,800.26 | 40° 0' 45.086 N | 109° 30' 8.170 W |
| 4,129.00 | 13.72 | 88.99 | 3,976.23 | 153.63 | 959.73 | 14,534,130.23 | 2,059,824.44 | 40° 0' 45.089 N | 109° 30' 7.859 W |
| 4,224.00 | 11.83 | 88.65 | 4,068.87 | 154.06 | 980.74 | 14,534,131.01 | 2,059,845.43 | 40° 0' 45.093 N | 109° 30' 7.589 W |
| 4,319.00 | 10.54 | 89.30 | 4,162.07 | 154.40 | 999.16 | 14,534,131.65 | 2,059,863.85 | 40° 0' 45.097 N | 109° 30' 7.353 W |
| 4,413.00 | 10.39 | 89.63 | 4,254.50 | 154.56 | 1,016.23 | 14,534,132.10 | 2,059,880.92 | 40° 0' 45.098 N | 109° 30' 7.133 W |
| 4,508.00 | 8.35 | 90.48 | 4,348.23 | 154.55 | 1,031.70 | 14,534,132.36 | 2,059,896.38 | 40° 0' 45.098 N | 109° 30' 6.934 W |
| 4,603.00 | 7.56 | 91.36 | 4,442.31 | 154.35 | 1,044.84 | 14,534,132.37 | 2,059,909.53 | 40° 0' 45.096 N | 109° 30' 6.765 W |
| 4,698.00 | 6.95 | 88.99 | 4,536.55 | 154.30 | 1,056.84 | 14,534,132.52 | 2,059,921.52 | 40° 0' 45.096 N | 109° 30' 6.611 W |
| 4,792.00 | 5.45 | 92.85 | 4,630.00 | 154.18 | 1,066.98 | 14,534,132.57 | 2,059,931.67 | 40° 0' 45.095 N | 109° 30' 6.481 W |
| 4,887.00 | 3.43 | 102.35 | 4,724.71 | 153.35 | 1,074.27 | 14,534,131.86 | 2,059,938.96 | 40° 0' 45.086 N | 109° 30' 6.387 W |
| 4,982.00 | 2.20 | 114.21 | 4,819.60 | 151.99 | 1,078.71 | 14,534,130.58 | 2,059,943.42 | 40° 0' 45.073 N | 109° 30' 6.330 W |
| 5,077.00 | 1.42 | 166.52 | 4,914.55 | 150.10 | 1,080.64 | 14,534,128.72 | 2,059,945.39 | 40° 0' 45.054 N | 109° 30' 6.305 W |
| 5,172.00 | 0.59 | 173.04 | 5,009.54 | 148.47 | 1,080.98 | 14,534,127.10 | 2,059,945.75 | 40° 0' 45.038 N | 109° 30' 6.301 W |
| 5,267.00 | 0.44 | 286.92 | 5,104.54 | 148.09 | 1,080.69 | 14,534,126.71 | 2,059,945.47 | 40° 0' 45.034 N | 109° 30' 6.305 W |
| 5,361.00 | 0.44 | 244.03 | 5,198.53 | 148.03 | 1,080.02 | 14,534,126.65 | 2,059,944.80 | 40° 0' 45.034 N | 109° 30' 6.313 W |
| 5,456.00 | 0.44 | 222.93 | 5,293.53 | 147.61 | 1,079.44 | 14,534,126.21 | 2,059,944.23 | 40° 0' 45.030 N | 109° 30' 6.321 W |
| 5,551.00 | 0.53 | 176.88 | 5,388.53 | 146.90 | 1,079.22 | 14,534,125.50 | 2,059,944.02 | 40° 0' 45.023 N | 109° 30' 6.324 W |
| 5,646.00 | 0.70 | 175.56 | 5,483.52 | 145.89 | 1,079.29 | 14,534,124.49 | 2,059,944.11 | 40° 0' 45.013 N | 109° 30' 6.323 W |
| 5,741.00 | 0.70 | 270.74 | 5,578.52 | 145.31 | 1,078.75 | 14,534,123.91 | 2,059,943.58 | 40° 0' 45.007 N | 109° 30' 6.330 W |
| 5,835.00 | 1.32 | 319.35 | 5,672.51 | 146.14 | 1,077.47 | 14,534,124.71 | 2,059,942.29 | 40° 0' 45.015 N | 109° 30' 6.346 W |
| 5,930.00 | 1.16 | 329.68 | 5,767.48 | 147.80 | 1,076.27 | 14,534,126.35 | 2,059,941.06 | 40° 0' 45.032 N | 109° 30' 6.361 W |

Company: Kerr McGee Oil and Gas Onshore LP
Project: Uintah County, UT UTM12
Site: NBU 921-25D Pad
Well: NBU 921-25CMW1
Wellbore: OH
Design: OH

Local Co-ordinate Reference: Well NBU 921-25CMW1
TVD Reference: GL 4941 & KB 19' @ 4960.00ft (PIONEER 54)
MD Reference: GL 4941 & KB 19' @ 4960.00ft (PIONEER 54)
North Reference: True
Survey Calculation Method: Minimum Curvature
Database: EDM5000-RobertS-Local

| Survey | | | | | | | | | | |
|---------------------|-----------------|-------------|---------------------|------------|------------|---------------------|--------------------|-----------------|------------------|--|
| Measured Depth (ft) | Inclination (°) | Azimuth (°) | Vertical Depth (ft) | +N/-S (ft) | +E/-W (ft) | Map Northing (usft) | Map Easting (usft) | Latitude | Longitude | |
| 6,025.00 | 0.97 | 336.84 | 5,862.47 | 149.37 | 1,075.47 | 14,534,127.91 | 2,059,940.23 | 40° 0' 45.047 N | 109° 30' 6.372 W | |
| 6,120.00 | 0.97 | 9.01 | 5,957.45 | 150.91 | 1,075.28 | 14,534,129.44 | 2,059,940.02 | 40° 0' 45.062 N | 109° 30' 6.374 W | |
| 6,215.00 | 0.95 | 21.07 | 6,052.44 | 152.44 | 1,075.69 | 14,534,130.98 | 2,059,940.40 | 40° 0' 45.077 N | 109° 30' 6.369 W | |
| 6,310.00 | 0.62 | 305.64 | 6,147.43 | 153.47 | 1,075.55 | 14,534,132.01 | 2,059,940.25 | 40° 0' 45.088 N | 109° 30' 6.371 W | |
| 6,404.00 | 0.77 | 293.71 | 6,241.43 | 154.02 | 1,074.56 | 14,534,132.54 | 2,059,939.25 | 40° 0' 45.093 N | 109° 30' 6.383 W | |
| 6,499.00 | 0.53 | 279.89 | 6,336.42 | 154.35 | 1,073.55 | 14,534,132.86 | 2,059,938.23 | 40° 0' 45.096 N | 109° 30' 6.396 W | |
| 6,594.00 | 0.44 | 237.79 | 6,431.42 | 154.23 | 1,072.80 | 14,534,132.73 | 2,059,937.49 | 40° 0' 45.095 N | 109° 30' 6.406 W | |
| 6,689.00 | 0.53 | 118.04 | 6,526.42 | 153.83 | 1,072.88 | 14,534,132.33 | 2,059,937.57 | 40° 0' 45.091 N | 109° 30' 6.405 W | |
| 6,784.00 | 0.68 | 141.52 | 6,621.41 | 153.18 | 1,073.62 | 14,534,131.69 | 2,059,938.32 | 40° 0' 45.085 N | 109° 30' 6.395 W | |
| 6,879.00 | 0.97 | 151.30 | 6,716.40 | 152.04 | 1,074.36 | 14,534,130.56 | 2,059,939.08 | 40° 0' 45.073 N | 109° 30' 6.386 W | |
| 6,973.00 | 0.44 | 243.76 | 6,810.40 | 151.18 | 1,074.42 | 14,534,129.70 | 2,059,939.15 | 40° 0' 45.065 N | 109° 30' 6.385 W | |
| 7,068.00 | 0.44 | 237.35 | 6,905.39 | 150.82 | 1,073.78 | 14,534,129.33 | 2,059,938.52 | 40° 0' 45.061 N | 109° 30' 6.393 W | |
| 7,163.00 | 0.70 | 224.25 | 7,000.39 | 150.21 | 1,073.07 | 14,534,128.71 | 2,059,937.82 | 40° 0' 45.055 N | 109° 30' 6.403 W | |
| 7,258.00 | 0.75 | 255.93 | 7,095.38 | 149.64 | 1,072.06 | 14,534,128.12 | 2,059,936.82 | 40° 0' 45.050 N | 109° 30' 6.415 W | |
| 7,353.00 | 0.53 | 248.33 | 7,190.37 | 149.33 | 1,071.05 | 14,534,127.79 | 2,059,935.82 | 40° 0' 45.047 N | 109° 30' 6.428 W | |
| 7,448.00 | 0.79 | 305.20 | 7,285.37 | 149.54 | 1,070.11 | 14,534,127.99 | 2,059,934.87 | 40° 0' 45.049 N | 109° 30' 6.441 W | |
| 7,542.00 | 0.79 | 287.53 | 7,379.36 | 150.11 | 1,068.96 | 14,534,128.54 | 2,059,933.71 | 40° 0' 45.054 N | 109° 30' 6.455 W | |
| 7,637.00 | 0.62 | 292.72 | 7,474.35 | 150.51 | 1,067.86 | 14,534,128.92 | 2,059,932.61 | 40° 0' 45.058 N | 109° 30' 6.469 W | |
| 7,732.00 | 0.53 | 294.83 | 7,569.35 | 150.89 | 1,066.99 | 14,534,129.29 | 2,059,931.73 | 40° 0' 45.062 N | 109° 30' 6.481 W | |
| 7,827.00 | 0.00 | 257.82 | 7,664.35 | 151.08 | 1,066.59 | 14,534,129.47 | 2,059,931.33 | 40° 0' 45.064 N | 109° 30' 6.486 W | |
| 7,922.00 | 0.26 | 138.47 | 7,759.35 | 150.92 | 1,066.73 | 14,534,129.31 | 2,059,931.47 | 40° 0' 45.062 N | 109° 30' 6.484 W | |
| 8,018.00 | 0.62 | 142.25 | 7,855.34 | 150.34 | 1,067.20 | 14,534,128.74 | 2,059,931.94 | 40° 0' 45.057 N | 109° 30' 6.478 W | |
| 8,113.00 | 0.88 | 143.92 | 7,950.34 | 149.35 | 1,067.94 | 14,534,127.76 | 2,059,932.70 | 40° 0' 45.047 N | 109° 30' 6.468 W | |
| 8,207.00 | 0.79 | 135.57 | 8,044.33 | 148.30 | 1,068.82 | 14,534,126.73 | 2,059,933.60 | 40° 0' 45.036 N | 109° 30' 6.457 W | |
| 8,302.00 | 1.19 | 136.00 | 8,139.31 | 147.12 | 1,069.96 | 14,534,125.57 | 2,059,934.76 | 40° 0' 45.025 N | 109° 30' 6.442 W | |
| 8,397.00 | 1.32 | 136.45 | 8,234.29 | 145.62 | 1,071.40 | 14,534,124.09 | 2,059,936.23 | 40° 0' 45.010 N | 109° 30' 6.424 W | |
| 8,492.00 | 0.62 | 149.98 | 8,329.27 | 144.38 | 1,072.41 | 14,534,122.87 | 2,059,937.26 | 40° 0' 44.998 N | 109° 30' 6.411 W | |
| 8,586.00 | 0.07 | 245.12 | 8,423.27 | 143.92 | 1,072.62 | 14,534,122.41 | 2,059,937.47 | 40° 0' 44.993 N | 109° 30' 6.408 W | |
| 8,681.00 | 0.18 | 220.47 | 8,518.27 | 143.78 | 1,072.47 | 14,534,122.27 | 2,059,937.32 | 40° 0' 44.992 N | 109° 30' 6.410 W | |
| 8,776.00 | 0.62 | 330.86 | 8,613.27 | 144.11 | 1,072.12 | 14,534,122.60 | 2,059,936.97 | 40° 0' 44.995 N | 109° 30' 6.415 W | |
| 8,870.00 | 1.44 | 345.15 | 8,707.25 | 145.70 | 1,071.57 | 14,534,124.17 | 2,059,936.39 | 40° 0' 45.011 N | 109° 30' 6.422 W | |
| 8,965.00 | 1.41 | 346.68 | 8,802.23 | 147.99 | 1,070.99 | 14,534,126.45 | 2,059,935.78 | 40° 0' 45.033 N | 109° 30' 6.429 W | |
| 9,061.00 | 1.23 | 354.25 | 8,898.20 | 150.17 | 1,070.62 | 14,534,128.62 | 2,059,935.37 | 40° 0' 45.055 N | 109° 30' 6.434 W | |
| 9,155.00 | 1.14 | 345.36 | 8,992.18 | 152.07 | 1,070.28 | 14,534,130.52 | 2,059,935.00 | 40° 0' 45.074 N | 109° 30' 6.438 W | |
| 9,250.00 | 0.97 | 2.94 | 9,087.16 | 153.79 | 1,070.08 | 14,534,132.24 | 2,059,934.77 | 40° 0' 45.091 N | 109° 30' 6.441 W | |
| 9,345.00 | 0.79 | 16.65 | 9,182.15 | 155.22 | 1,070.31 | 14,534,133.67 | 2,059,934.98 | 40° 0' 45.105 N | 109° 30' 6.438 W | |
| 9,439.00 | 0.70 | 53.92 | 9,276.15 | 156.18 | 1,070.96 | 14,534,134.64 | 2,059,935.61 | 40° 0' 45.114 N | 109° 30' 6.430 W | |
| 9,534.00 | 0.79 | 95.67 | 9,371.14 | 156.46 | 1,072.08 | 14,534,134.94 | 2,059,936.73 | 40° 0' 45.117 N | 109° 30' 6.415 W | |
| 9,629.00 | 1.01 | 117.09 | 9,466.13 | 156.01 | 1,073.48 | 14,534,134.52 | 2,059,938.13 | 40° 0' 45.113 N | 109° 30' 6.397 W | |
| 9,724.00 | 0.95 | 122.47 | 9,561.11 | 155.21 | 1,074.89 | 14,534,133.74 | 2,059,939.55 | 40° 0' 45.105 N | 109° 30' 6.379 W | |
| 9,819.00 | 1.32 | 130.38 | 9,656.09 | 154.08 | 1,076.39 | 14,534,132.63 | 2,059,941.07 | 40° 0' 45.094 N | 109° 30' 6.360 W | |
| 9,913.00 | 2.20 | 157.54 | 9,750.05 | 151.71 | 1,077.90 | 14,534,130.29 | 2,059,942.62 | 40° 0' 45.070 N | 109° 30' 6.340 W | |
| 10,015.00 | 2.43 | 163.01 | 9,851.97 | 147.83 | 1,079.28 | 14,534,126.43 | 2,059,944.07 | 40° 0' 45.032 N | 109° 30' 6.323 W | |
| 10,110.00 | 2.90 | 166.68 | 9,946.86 | 143.57 | 1,080.42 | 14,534,122.19 | 2,059,945.28 | 40° 0' 44.990 N | 109° 30' 6.308 W | |
| 10,205.00 | 2.73 | 167.74 | 10,041.75 | 139.02 | 1,081.46 | 14,534,117.66 | 2,059,946.39 | 40° 0' 44.945 N | 109° 30' 6.295 W | |
| 10,300.00 | 2.55 | 165.80 | 10,136.65 | 134.76 | 1,082.46 | 14,534,113.41 | 2,059,947.46 | 40° 0' 44.903 N | 109° 30' 6.282 W | |
| 10,395.00 | 2.75 | 164.80 | 10,231.55 | 130.51 | 1,083.57 | 14,534,109.19 | 2,059,948.65 | 40° 0' 44.861 N | 109° 30' 6.268 W | |
| 10,489.00 | 2.73 | 166.24 | 10,325.44 | 126.16 | 1,084.70 | 14,534,104.85 | 2,059,949.85 | 40° 0' 44.818 N | 109° 30' 6.253 W | |
| 10,584.00 | 2.55 | 157.37 | 10,420.34 | 122.01 | 1,086.05 | 14,534,100.73 | 2,059,951.27 | 40° 0' 44.777 N | 109° 30' 6.236 W | |
| 10,678.00 | 2.73 | 156.22 | 10,514.24 | 118.03 | 1,087.75 | 14,534,096.78 | 2,059,953.04 | 40° 0' 44.737 N | 109° 30' 6.214 W | |
| 10,773.00 | 2.64 | 154.11 | 10,609.13 | 113.99 | 1,089.62 | 14,534,092.77 | 2,059,954.98 | 40° 0' 44.697 N | 109° 30' 6.190 W | |
| 10,868.00 | 2.41 | 157.51 | 10,704.04 | 110.18 | 1,091.34 | 14,534,088.99 | 2,059,956.76 | 40° 0' 44.660 N | 109° 30' 6.168 W | |
| 10,926.00 | 2.37 | 159.56 | 10,761.99 | 107.93 | 1,092.23 | 14,534,086.75 | 2,059,957.68 | 40° 0' 44.637 N | 109° 30' 6.156 W | |

LAST SDI MWD PRODCUTION SURVEY

| | | | |
|------------------|-----------------------------------|-------------------------------------|---|
| Company: | Kerr McGee Oil and Gas Onshore LP | Local Co-ordinate Reference: | Well NBU 921-25CMW1 |
| Project: | Uintah County, UT UTM12 | TVD Reference: | GL 4941 & KB 19' @ 4960.00ft (PIONEER 54) |
| Site: | NBU 921-25D Pad | MD Reference: | GL 4941 & KB 19' @ 4960.00ft (PIONEER 54) |
| Well: | NBU 921-25CMW1 | North Reference: | True |
| Wellbore: | OH | Survey Calculation Method: | Minimum Curvature |
| Design: | OH | 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 |
|-----------------------------|-----------------|-------------|---------------------|------------|------------|---------------------|--------------------|-----------------|------------------|
| 10,979.00 | 2.37 | 159.56 | 10,814.95 | 105.88 | 1,092.99 | 14,534,084.71 | 2,059,958.48 | 40° 0' 44.617 N | 109° 30' 6.146 W |
| SDI PROJECTION TO TD | | | | | | | | | |

Design Annotations

| Measured Depth (ft) | Vertical Depth (ft) | Local Coordinates | | Comment |
|---------------------|---------------------|-------------------|------------|---------------------------------|
| | | +N/-S (ft) | +E/-W (ft) | |
| 221.00 | 220.99 | 1.45 | 0.77 | FIRST WFT MWD SURFACE SURVEY |
| 2,695.00 | 2,601.87 | 123.30 | 553.33 | LAST WFT MWD SURFACE SURVEY |
| 2,801.00 | 2,702.78 | 126.16 | 585.66 | FIRST SDI MWD PRODCUTION SURVEY |
| 10,926.00 | 10,761.99 | 107.93 | 1,092.23 | LAST SDI MWD PRODCUTION SURVEY |
| 10,979.00 | 10,814.95 | 105.88 | 1,092.99 | SDI PROJECTION TO TD |

Checked By: _____ Approved By: _____ Date: _____