

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS AND MINING						FORM 3 AMENDED REPORT <input checked="" type="checkbox"/>
APPLICATION FOR PERMIT TO DRILL						1. WELL NAME and NUMBER NBU 921-35C1CS
2. TYPE OF WORK DRILL NEW WELL <input checked="" type="checkbox"/> REENTER P&A WELL <input type="checkbox"/> DEEPEN WELL <input type="checkbox"/>						3. FIELD OR WILDCAT NATURAL BUTTES
4. TYPE OF WELL Gas Well Coalbed Methane Well: NO						5. UNIT or COMMUNITIZATION AGREEMENT NAME NATURAL BUTTES
6. NAME OF OPERATOR KERR-MCGEE OIL & GAS ONSHORE, L.P.						7. OPERATOR PHONE 720 929-6007
8. ADDRESS OF OPERATOR P.O. Box 173779, Denver, CO, 80217						9. OPERATOR E-MAIL Kathy.SchneebeckDulnoan@anadarko.com
10. MINERAL LEASE NUMBER (FEDERAL, INDIAN, OR STATE) UO 01194 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 checked="" type="checkbox"/> (Submit Commingling Application) NO <input type="checkbox"/>			19. SLANT VERTICAL <input type="checkbox"/> DIRECTIONAL <input checked="" type="checkbox"/> HORIZONTAL <input type="checkbox"/>
20. LOCATION OF WELL	FOOTAGES	QTR-QTR	SECTION	TOWNSHIP	RANGE	MERIDIAN
LOCATION AT SURFACE	399 FNL 1591 FWL	NENW	35	9.0 S	21.0 E	S
Top of Uppermost Producing Zone	522 FNL 2147 FWL	NENW	35	9.0 S	21.0 E	S
At Total Depth	522 FNL 2147 FWL	NENW	35	9.0 S	21.0 E	S
21. COUNTY UINTAH			22. DISTANCE TO NEAREST LEASE LINE (Feet) 522		23. NUMBER OF ACRES IN DRILLING UNIT 1083	
			25. DISTANCE TO NEAREST WELL IN SAME POOL (Applied For Drilling or Completed) 638		26. PROPOSED DEPTH MD: 9746 TVD: 9684	
27. ELEVATION - GROUND LEVEL 4988			28. BOND NUMBER 22013542		29. SOURCE OF DRILLING WATER / WATER RIGHTS APPROVAL NUMBER IF APPLICABLE Permit #43-8496	
ATTACHMENTS						
VERIFY THE FOLLOWING ARE ATTACHED IN ACCORDANCE WITH THE UTAH OIL AND GAS CONSERVATION GENERAL RULES						
<input checked="" type="checkbox"/> WELL PLAT OR MAP PREPARED BY LICENSED SURVEYOR OR ENGINEER			<input checked="" type="checkbox"/> COMPLETE DRILLING PLAN			
<input type="checkbox"/> AFFIDAVIT OF STATUS OF SURFACE OWNER AGREEMENT (IF FEE SURFACE)			<input type="checkbox"/> FORM 5. IF OPERATOR IS OTHER THAN THE LEASE OWNER			
<input checked="" type="checkbox"/> DIRECTIONAL SURVEY PLAN (IF DIRECTIONALLY OR HORIZONTALLY DRILLED)			<input checked="" type="checkbox"/> TOPOGRAPHICAL MAP			
NAME Danielle Piernot		TITLE Regulatory Analyst		PHONE 720 929-6156		
SIGNATURE		DATE 11/18/2010		EMAIL gnbregulatory@anadarko.com		
API NUMBER ASSIGNED 43047513470000		 Permit Manager				

Proposed Hole, Casing, and Cement						
String	Hole Size	Casing Size	Top (MD)	Bottom (MD)		
Prod	7.875	4.5	0	9746		
Pipe	Grade	Length	Weight			
	Grade I-80 Buttress	9746	11.6			

Proposed Hole, Casing, and Cement						
String	Hole Size	Casing Size	Top (MD)	Bottom (MD)		
Surf	11	8.625	0	2350		
Pipe	Grade	Length	Weight			
	Grade J-55 LT&C	2350	28.0			

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

NBU 921-35C1CS

Surface: 399 FNL / 1591 FWL NENW
BHL: 522 FNL / 2147 FWL NENW

Section 35 T9S R21E

Unitah County, Utah
Mineral Lease: ST UT UO 01194 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	1424	
Birds Nest	1719	Water
Mahogany	2099	Water
Wasatch	4699	Gas
Mesaverde	7362	Gas
MVU2	8323	Gas
MVL1	8905	Gas
TVD	9684	
TD	9746	

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 9,684' TVD, approximately equals 5,933 psi (calculated at 0.61 psi/foot).

Maximum anticipated surface pressure equals approximately 3,802 psi (bottom hole pressure minus the pressure of a partially evacuated hole calculated at 0.22 psi/foot).

8. Anticipated Starting Dates:

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

9. Variances:

Please refer to the attached Drilling Program.

Onshore Order #2 – Air Drilling Variance

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

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

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

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

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

Background

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

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

The air rig is then mobilized to drill the surface casing hole by drilling a 11 inch hole to just above the Bird's Nest interval with an air hammer. The hammer is then tripped and replaced with a 12-1/4 inch tri-cone bit. The tri-cone bit is used to drill to the surface casing point, approximately 500 feet below the loss circulation zone (Bird's Nest). The 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. 4 of 16

Conclusion

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

10. Other Information:

Please refer to the attached Drilling Program.



KERR-McGEE OIL & GAS ONSHORE LP DRILLING PROGRAM

CASING PROGRAM

	SIZE	INTERVAL	WT.	GR.	CPLG.	DESIGN FACTORS		
						BURST	COLLAPSE	TENSION
CONDUCTOR	14"	0-40'				3,390	1,880	348,000
SURFACE	8-5/8"	0 to 2,350	28.00	IJ-55	LTC	0.86	1.71	5.24
PRODUCTION	4-1/2"	0 to 9,746	11.60	I-80	BTC	1.99	1.05	2.82

*Burst on surface casing is controlled by fracture gradient as shoe with gas gradient above. D.F. = 2.29

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

2) MASP (Prod Casing) = Pore Pressure at TD - (0.22 psi/ft-partial evac gradient x TD)
 (Burst Assumptions: TD = 12.0 ppg) 0.22 psi/ft = gradient for partially evac wellbore
 (Collapse Assumption: Fully Evacuated Casing, Max MW) (Tension Assumptions: Air Weight of Casing*Buoyn.Fact. of water)
MASP 3,802 psi

3) Maximum Anticipated Bottom Hole Pressure (MABHP) = Pore Pressure at TD
 (Burst Assumptions: TD = 12.0 ppg) 0.61 psi/ft = bottomhole gradient
 (Collapse Assumption: Fully Evacuated Casing, Max MW) (Tension Assumptions: Air Weight of Casing*Buoyn.Fact. of water)
MABHP 5,933 psi

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
SURFACE			NOTE: If well will circulate water to surface, option 2 will be utilized				
Option 2	LEAD	1,850'	65/35 Poz + 6% Gel + 10 pps gilsonite + 0.25 pps Flocele + 3% salt BWOW	170	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	4,196'	Premium Lite II +0.25 pps celloflake + 5 pps gilsonite + 10% gel + 0.5% extender	300	10%	11.00	3.38
	TAIL	5,550'	50/50 Poz/G + 10% salt + 2% gel + 0.1% R-3	1,070	10%	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.

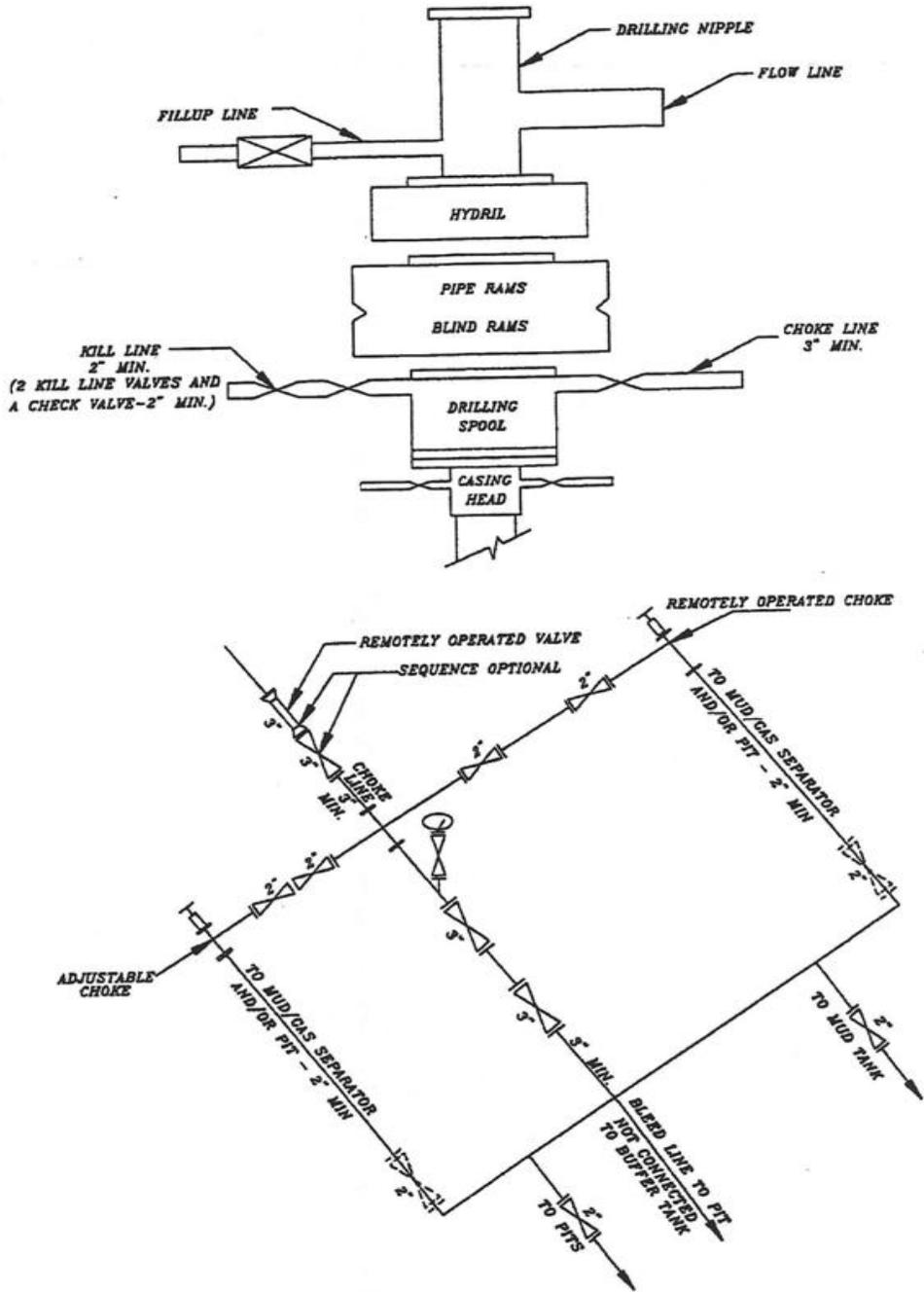
Surveys will be taken at 1,000' minimum intervals.

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

DRILLING ENGINEER: _____ **DATE:** _____
 John Huycke / Emile Goodwin

DRILLING SUPERINTENDENT: _____ **DATE:** _____
 John Merkel / Lovel Young

EXHIBIT A NBU 921-35C1CS



SCHEMATIC DIAGRAM OF 5,000 PSI BOP STACK

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

WEST - 80.00 (G.L.O.)

Found Uintah County Aluminum Cap in Pile of Stones.

N89°47'37"W - 2646.18' (Meas.)

N89°47'25"W - 2645.99' (Meas.)

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

N00°21'17"W (Basis of Bearings)

2645.28' (Measured)

N00°03'W - 81.10 (G.L.O.)

N00°12'59"E

2703.72' (Measured to C.C.)

2702.74' (Measured to True Corner)

N00°03'41"W - 2641.51' (Meas.)

N00°03'E - 79.80 (G.L.O.)

N00°00'34"E - 2612.15' (Meas.)

WELL LOCATION: NBU 921-35C1CS

ELEV. UNGRADED GROUND = 4988.1'

35

NBU 921-35C1CS (Surface Position)
 NAD 83 LATITUDE = 39.998681° (39° 59' 55.253")
 LONGITUDE = 109.522686° (109° 31' 21.670")
 NAD 27 LATITUDE = 39.998716° (39° 59' 55.379")
 LONGITUDE = 109.521999° (109° 31' 19.195")

NBU 921-35C1CS (Bottom Hole)
 NAD 83 LATITUDE = 39.998338° (39° 59' 54.018")
 LONGITUDE = 109.520697° (109° 31' 14.510")
 NAD 27 LATITUDE = 39.998373° (39° 59' 54.144")
 LONGITUDE = 109.520010° (109° 31' 12.036")

LOT 4

LOT 1

LOT 3

LOT 2

2.50 (G.L.O.)
164.44'

Found 1977 Brass Cap in Pile of Stones.

2.19 (G.L.O.)
144.58'

Found 1977 Brass Cap

1.51 (G.L.O.)
99.10'

Found 1977 Brass Cap

Found 1977 Brass Cap in Pile of Stones.

2501.71'

2543.51'

2579.41'

S89°07'53"W - 2666.15' (Meas.)

S89°14'29"W - 2688.09' (Meas.)

2678.51' (Meas.)

S89°06'W - 40.39 (G.L.O.)

S89°12'W - 40.73 (G.L.O.)

S89°06'03"W

Found 1977 Brass Cap in Pile of Stones.

Found 1977 Brass Cap

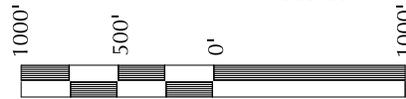
Found 1977 Brass Cap

S89°06'W - 40.59 (G.L.O.)

NOTES:

▲ = Section Corners Located

- Well footages are measured at right angles to the Section Lines.
- G.L.O. distances are shown in feet or chains.
1 chain = 66 feet.
- The Bottom of hole bears S77°19'13"E 571.16' from the Surface Position.
- Bearings are based on Global Positioning Satellite observations.
- 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'.



SCALE

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. Slough
 No. 6028691
 JOHN R. SLOUGH
 PROFESSIONAL LAND SURVEYOR
 REGISTRATION No. 6028691
 STATE OF UTAH

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

WELL PAD: NBU 921-35C

**NBU 921-35C1CS
 WELL PLAT**

**522' FNL, 2147' FWL (Bottom Hole)
 NE ¼ NW ¼ OF SECTION 35, 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

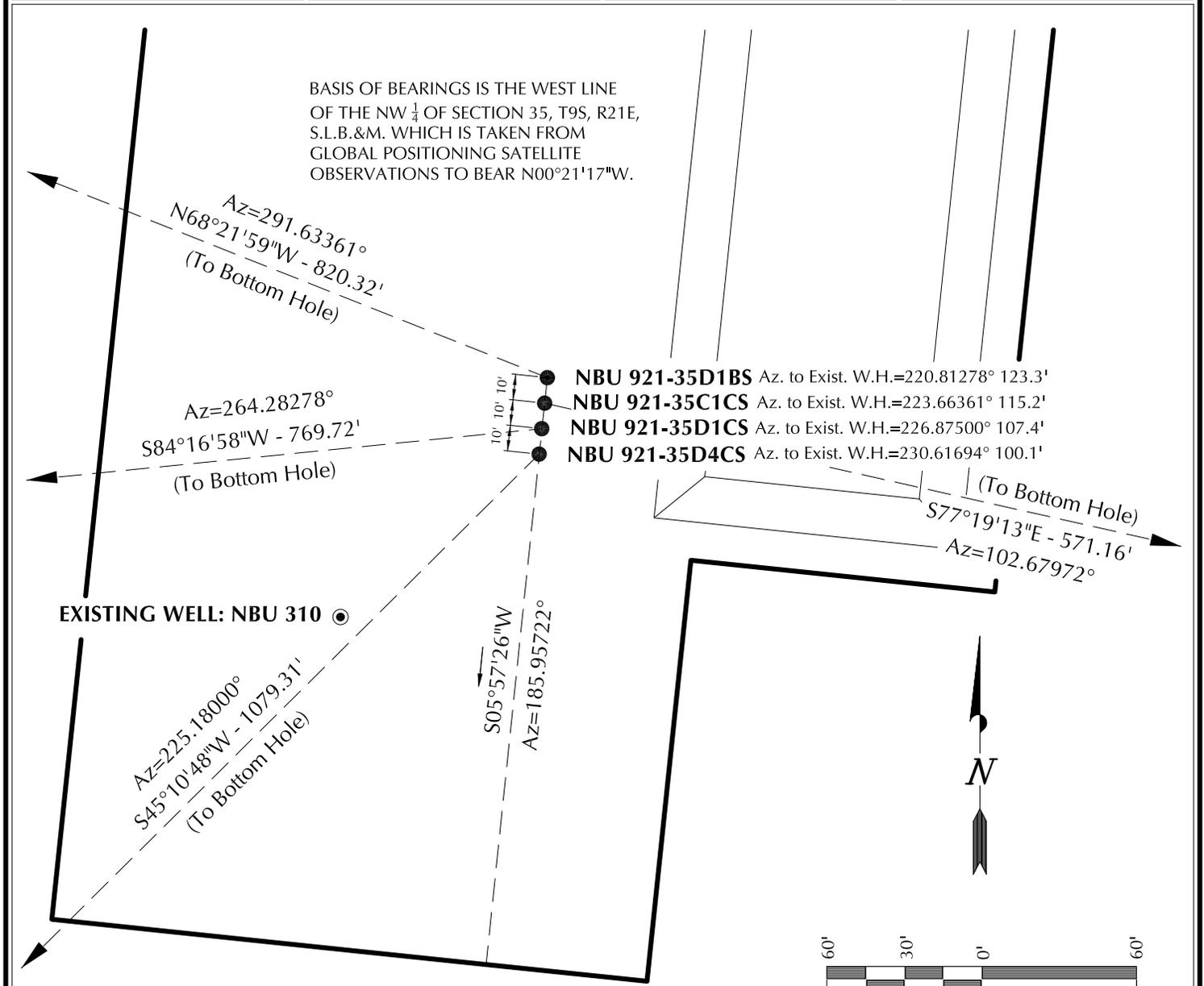
ENGINEERING & LAND SURVEYING, INC.
 209 NORTH 300 WEST - VERNAL, UTAH 84078

DATE SURVEYED: 9-24-10	SURVEYED BY: M.S.B.	SHEET NO: 3
DATE DRAWN: 9-28-10	DRAWN BY: E.M.S.	
SCALE: 1" = 1000'	Date Last Revised:	3 OF 16

WELL NAME	SURFACE POSITION					BOTTOM HOLE				
	NAD83		NAD27		FOOTAGES	NAD83		NAD27		FOOTAGES
	LATITUDE	LONGITUDE	LATITUDE	LONGITUDE		LATITUDE	LONGITUDE	LATITUDE	LONGITUDE	
NBU 921-35D4CS	39°59'55.057"	109°31'21.697"	39°59'55.183"	109°31'19.223"	418' FNL 1588' FWL	39°59'47.535"	109°31'31.525"	39°59'47.662"	109°31'29.051"	1182' FNL 818' FWL
NBU 921-35D1CS	39°59'55.155"	109°31'21.684"	39°59'55.281"	109°31'19.210"	409' FNL 1589' FWL	39°59'54.392"	109°31'31.522"	39°59'54.518"	109°31'29.048"	488' FNL 823' FWL
NBU 921-35C1CS	39°59'55.253"	109°31'21.670"	39°59'55.379"	109°31'19.195"	399' FNL 1591' FWL	39°59'54.018"	109°31'14.510"	39°59'54.144"	109°31'12.036"	522' FNL 2147' FWL
NBU 921-35D1BS	39°59'55.351"	109°31'21.656"	39°59'55.477"	109°31'19.182"	389' FNL 1592' FWL	39°59'58.334"	109°31'31.455"	39°59'58.460"	109°31'28.980"	89' FNL 831' FWL
NBU 310	39°59'54.429"	109°31'22.691"	39°59'54.555"	109°31'20.216"	482' FNL 1511' FWL	39°59'58.334"	109°31'31.455"	39°59'58.460"	109°31'28.980"	

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 921-35D4CS	-760.8'	-765.6'	NBU 921-35D1CS	-76.7'	-765.9'	NBU 921-35C1CS	-125.4'	557.2'	NBU 921-35D1BS	302.4'	-762.5'



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

WELL PAD - NBU 921-35C

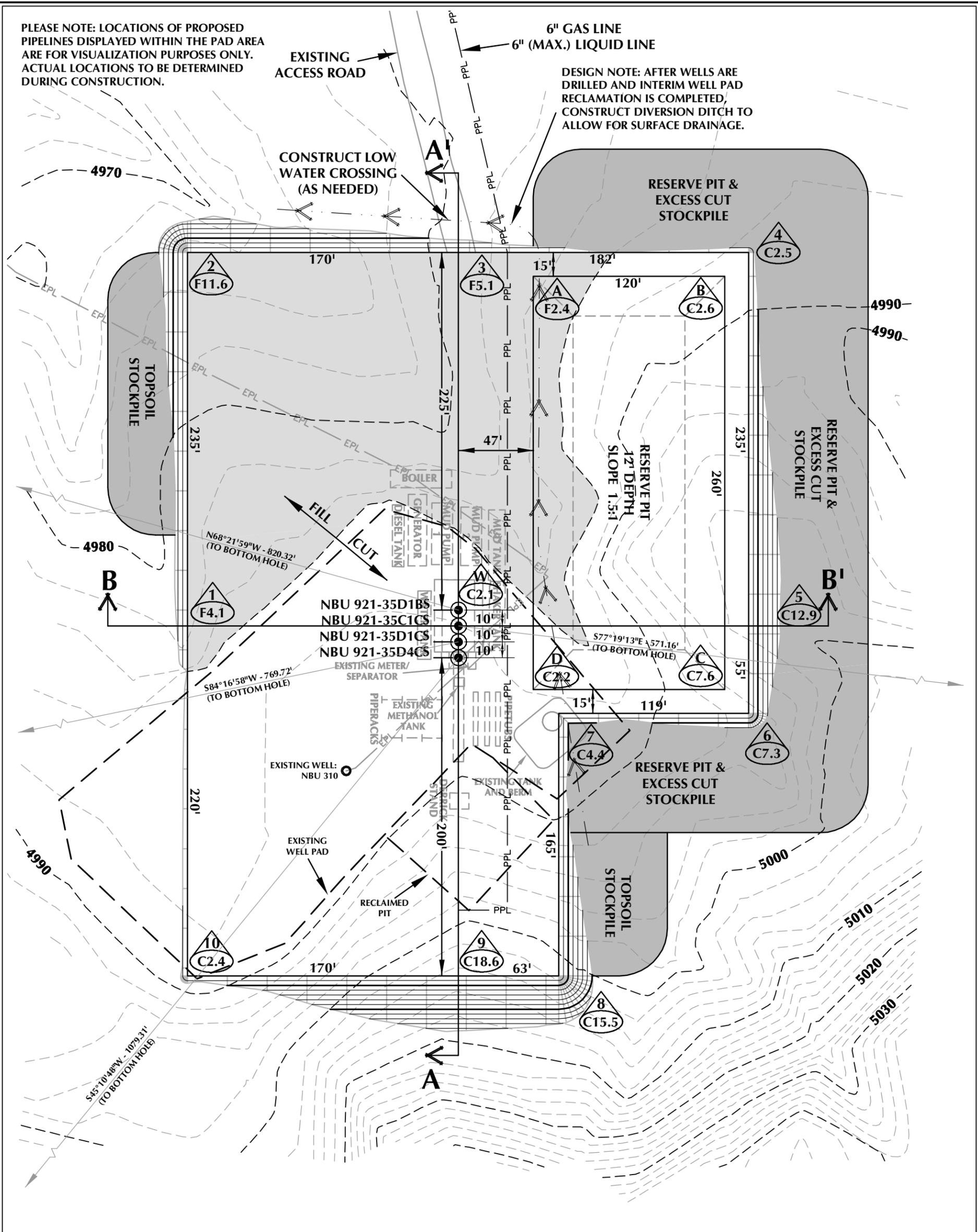
WELL PAD INTERFERENCE PLAT
 WELLS - NBU 921-35D4CS, NBU 921-35D1CS,
 NBU 921-35C1CS & NBU 921-35D1BS
 LOCATED IN SECTION 35, T9S, R21E,
 S.L.B.&M., UINTAH COUNTY, UTAH.



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: 9-24-10	SURVEYED BY: M.S.B.	SHEET NO: 5
DATE DRAWN: 9-27-10	DRAWN BY: E.M.S.	
SCALE: 1" = 60'	Date Last Revised:	5 OF 16



WELL PAD - NBU 921-35C DESIGN SUMMARY

EXISTING GRADE @ CENTER OF WELL PAD = 4988.1'
FINISHED GRADE ELEVATION = 4986.0'
CUT SLOPES = 1.5:1
FILL SLOPES = 1.5:1
TOTAL WELL PAD AREA = 3.66 ACRES
TOTAL DAMAGE AREA = 6.28 ACRES
SHRINKAGE FACTOR = 1.10
SWELL FACTOR = 1.00

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

WELL PAD - NBU 921-35C

WELL PAD - LOCATION LAYOUT
NBU 921-35D4CS, NBU 921-35D1CS,
NBU 921-35C1CS & NBU 921-35D1BS
LOCATED IN SECTION 35, 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

WELL PAD QUANTITIES
TOTAL CUT FOR WELL PAD = 16,615 C.Y.
TOTAL FILL FOR WELL PAD = 11,689 C.Y.
TOPSOIL @ 6" DEPTH = 2,177 C.Y.
EXCESS MATERIAL = 4,926 C.Y.

RESERVE PIT QUANTITIES
TOTAL CUT FOR RESERVE PIT +/- 11,020 CY
RESERVE PIT CAPACITY (2' OF FREEBOARD) +/- 42,290 BARRELS

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

WELL PAD LEGEND

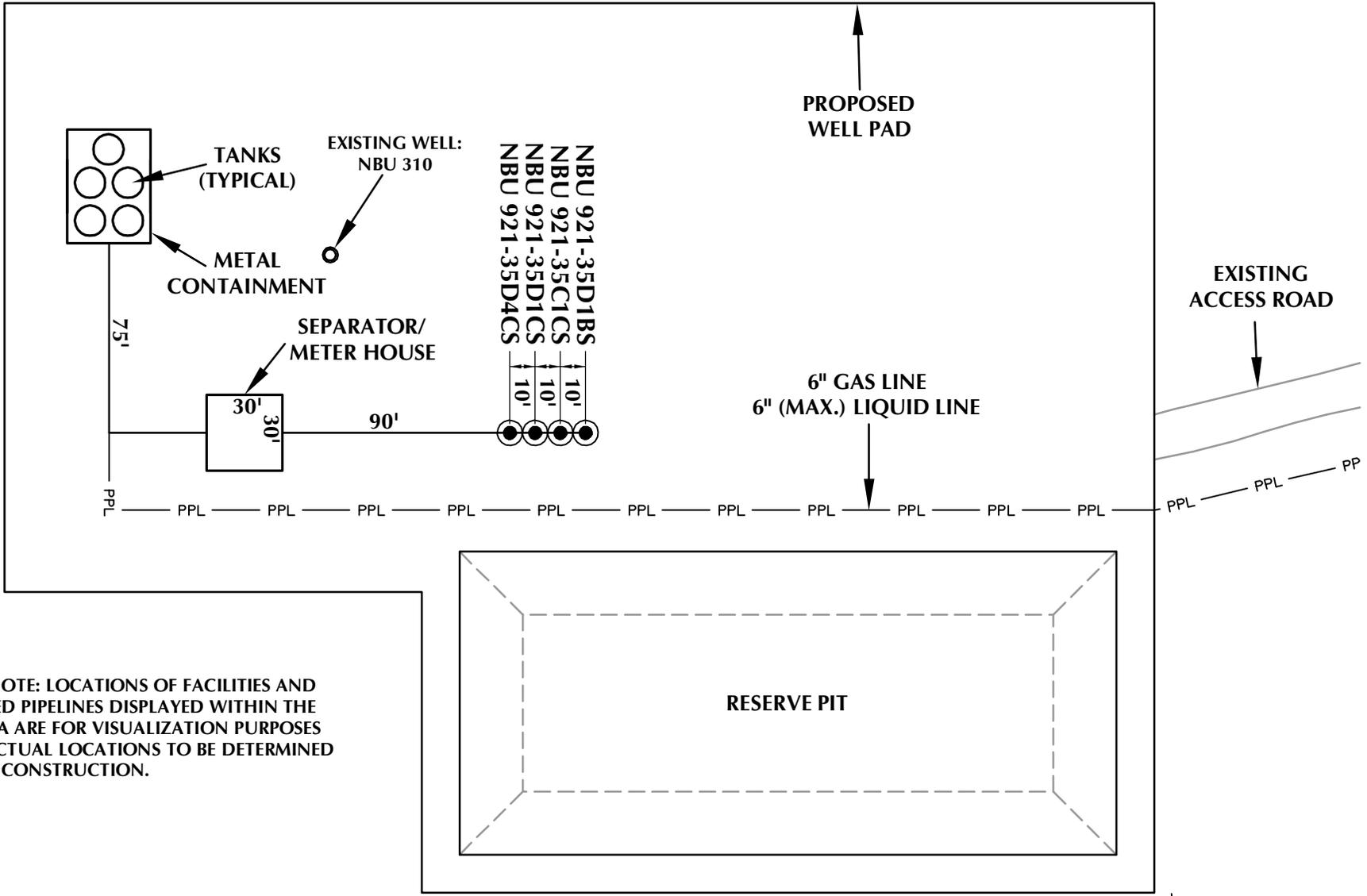
- EXISTING WELL LOCATION
- PROPOSED WELL LOCATION
- PROPOSED BOTTOM HOLE LOCATION
- EXISTING CONTOURS (2' INTERVAL)
- PROPOSED CONTOURS (2' INTERVAL)
- PROPOSED PIPELINE
- EXISTING PIPELINE



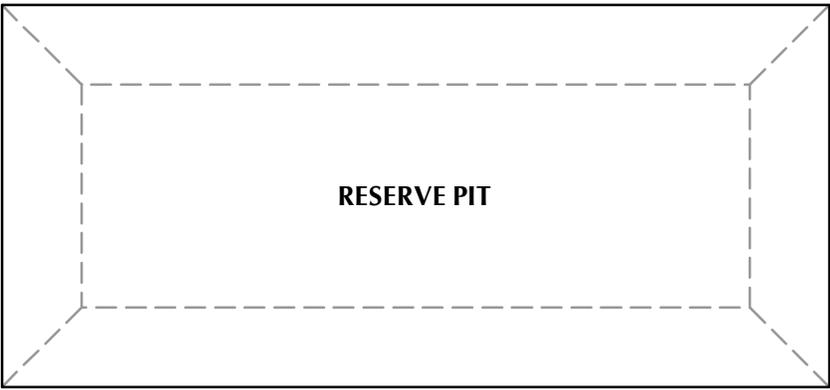
HORIZONTAL 0 30 60 1" = 60'
2' CONTOURS

Scale: 1"=60' **Date: 10/15/10** **SHEET NO: 6**
REVISED: GRB 12/9/10 **6 OF 16**

I:\ANACARDIO\010_53_NBU_FOCUS_SEC_921-35C\NBU_921-35C\NBU_921-35C\0100531.dwg, 12/9/2010 3:04:37 PM, jsh



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



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

WELL PAD - NBU 921-35C

WELL PAD - FACILITIES DIAGRAM
NBU 921-35D4CS, NBU 921-35D1CS,
NBU 921-35C1CS & NBU 921-35D1BS
LOCATED IN SECTION 35, T9S, R21E,
S.L.B.&M., Uintah County, Utah



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

WELL PAD LEGEND

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



HORIZONTAL 0 30' 60' 1" = 60'

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

Scale: 1"=60' Date: 10/19/10
REVISED:

SHEET NO:
8 8 OF 16

APW_e:\jnc\43047513470000\10/19/2010 9:24:52 AM

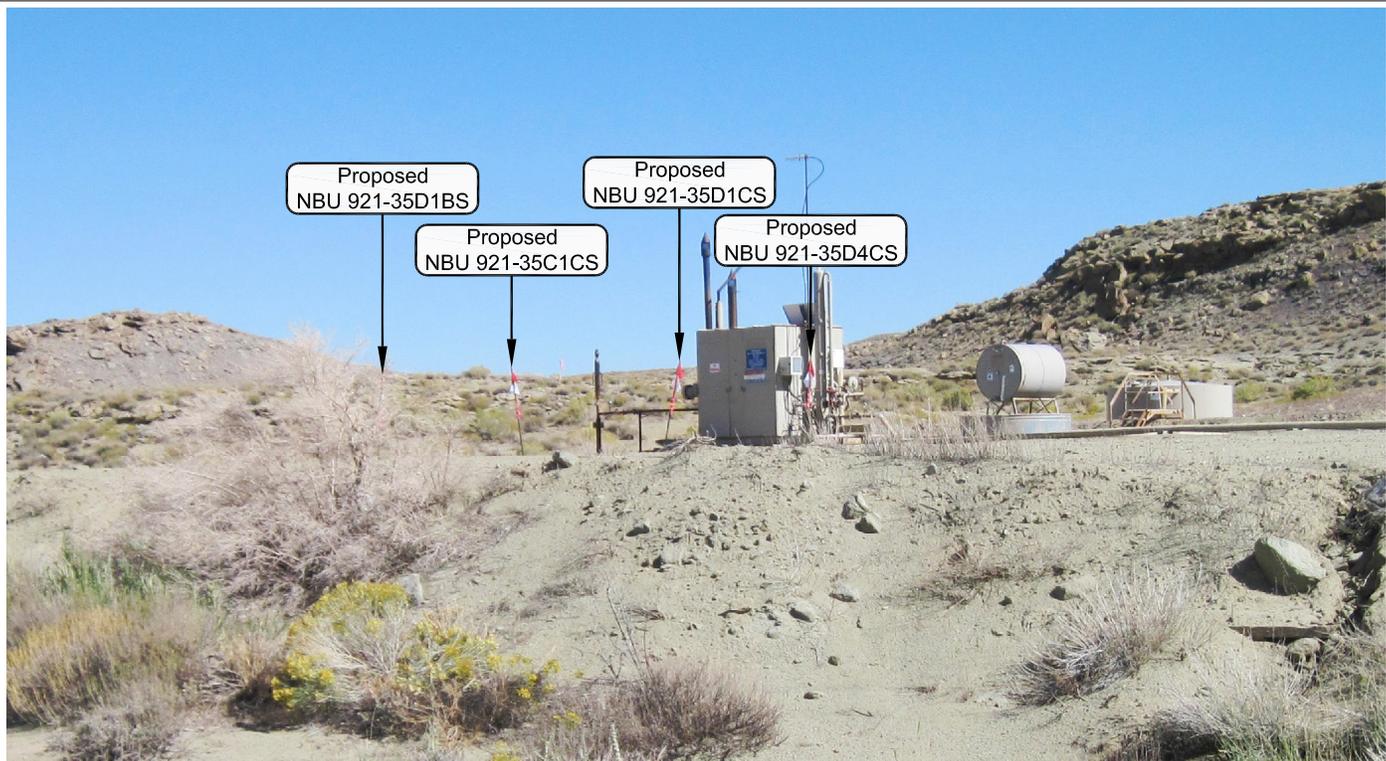


PHOTO VIEW: FROM CORNER #1 TO LOCATION STAKE

CAMERA ANGLE: EASTERLY



PHOTO VIEW: FROM EXISTING ACCESS ROAD

CAMERA ANGLE: SOUTHERLY

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

WELL PAD - NBU 921-35C

LOCATION PHOTOS

**NBU 921-35D4CS, NBU 921-35D1CS,
 NBU 921-35C1CS & NBU 921-35D1BS
 LOCATED IN SECTION 35, T9S, R21E,
 S.L.B.&M., UINTAH COUNTY, UTAH.**



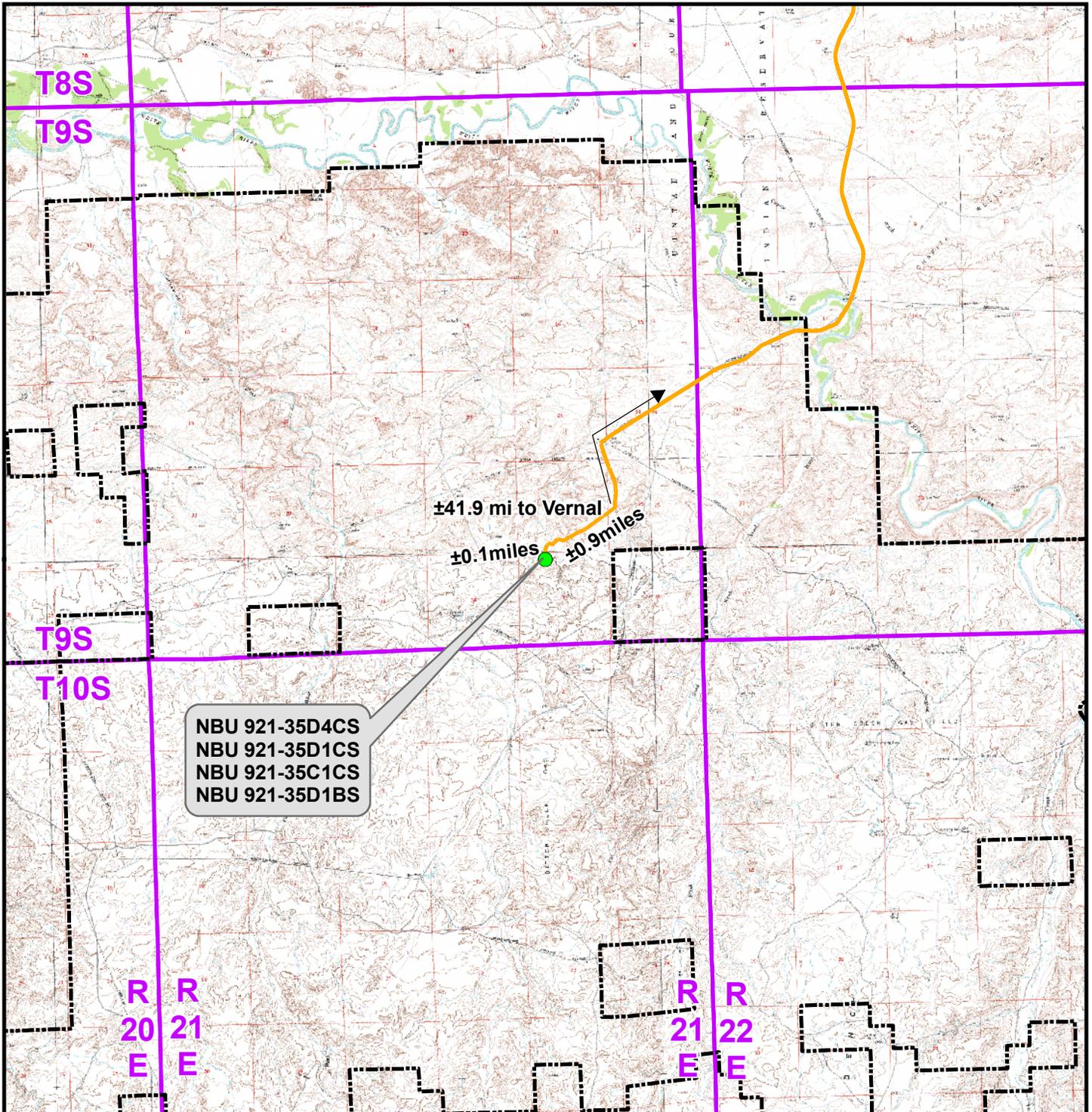
CONSULTING, LLC
 2155 North Main Street
 Sheridan WY 82801
 Phone 307-674-0609
 Fax 307-674-0182

TIMBERLINE

(435) 789-1365

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

DATE PHOTOS TAKEN: 9-24-10	PHOTOS TAKEN BY: M.S.B.	SHEET NO: 9 9 OF 16
DATE DRAWN: 9-28-10	DRAWN BY: E.M.S.	
Date Last Revised:		



NBU 921-35D4CS
 NBU 921-35D1CS
 NBU 921-35C1CS
 NBU 921-35D1BS

Legend

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

Distance From Well Pad - NBU 921-35C To Unit Boundary: ±3,697ft

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

WELL PAD - NBU 921-35C

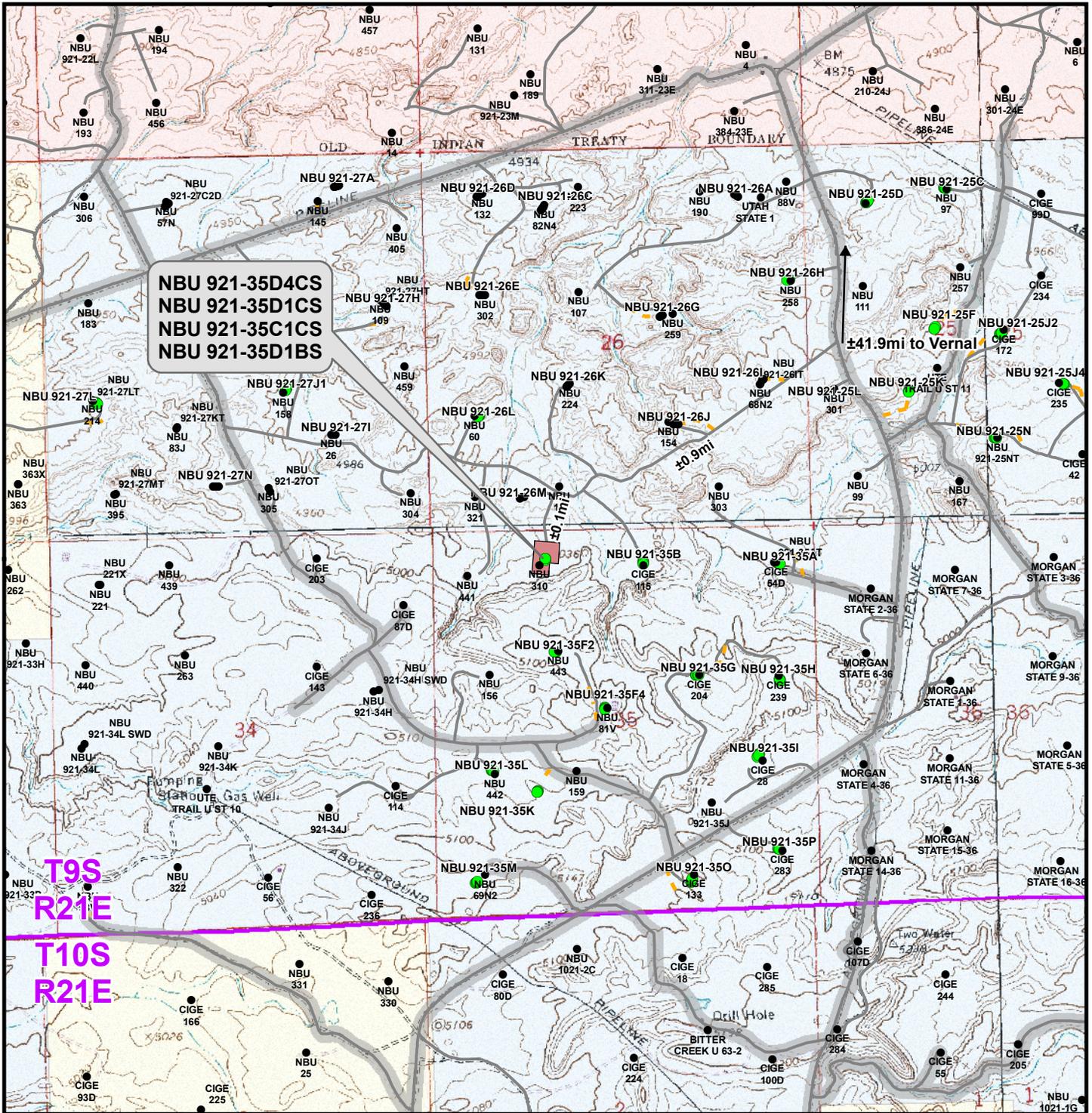
TOPO A
 NBU 921-35D4CS, NBU 921-35D1CS,
 NBU 921-35C1CS & NBU 921-35D1BS
 LOCATED IN SECTION 35, T9S, R21E,
 S.L.B.&M., UINTAH COUNTY, UTAH



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



Scale: 1:100,000	NAD83 USP Central	Sheet No:
Drawn: KGS	Date: 19 Oct 2010	10
Revised:	Date:	



Legend

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

Total Proposed Road Length: ±0ft

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

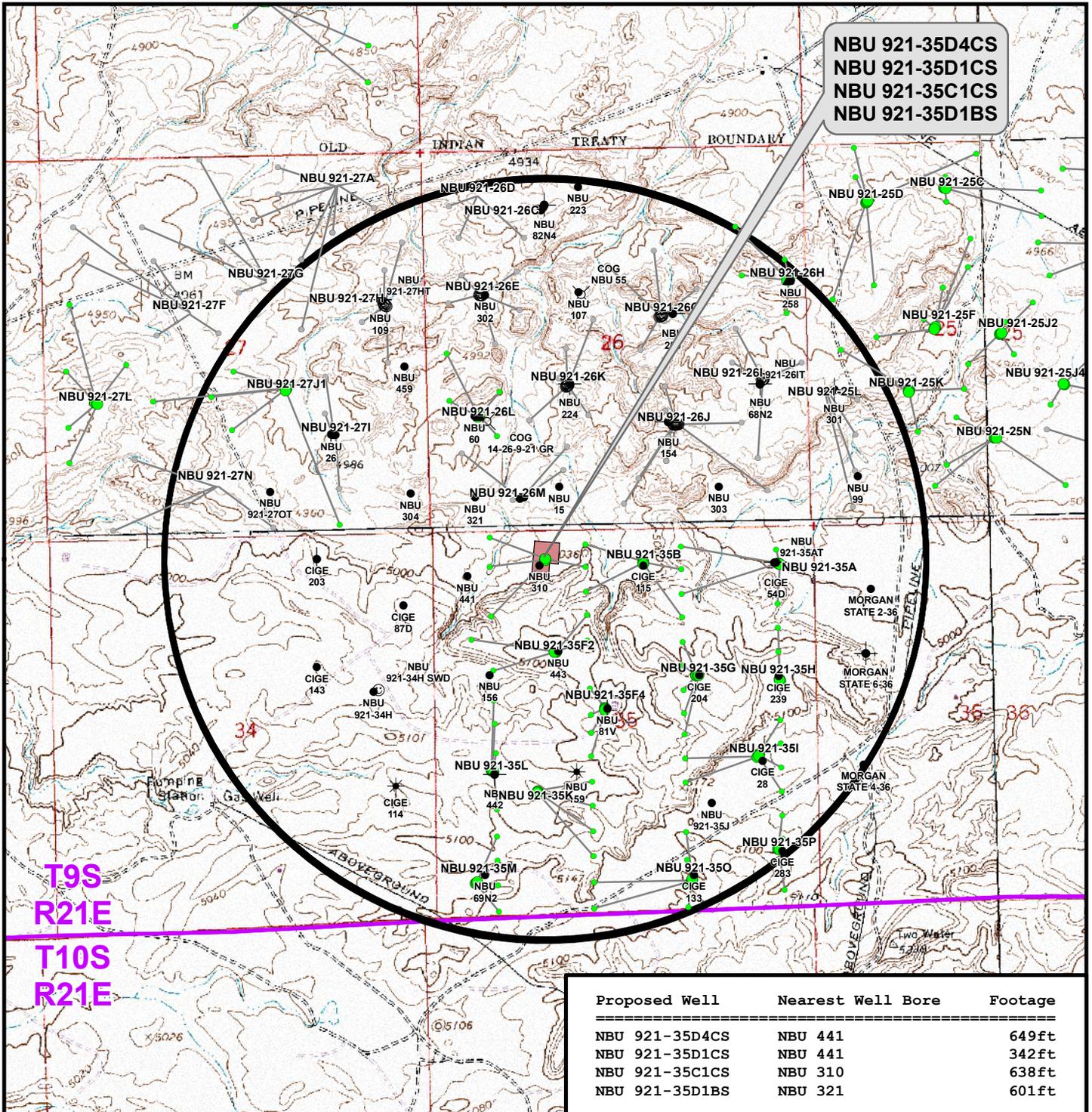
WELL PAD - NBU 921-35C

TOPO B
NBU 921-35D4CS, NBU 921-35D1CS,
NBU 921-35C1CS & NBU 921-35D1BS
LOCATED IN SECTION 35, 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: 11
Drawn: KGS	Date: 19 Oct 2010	11 of 16
Revised:	Date:	



Legend

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

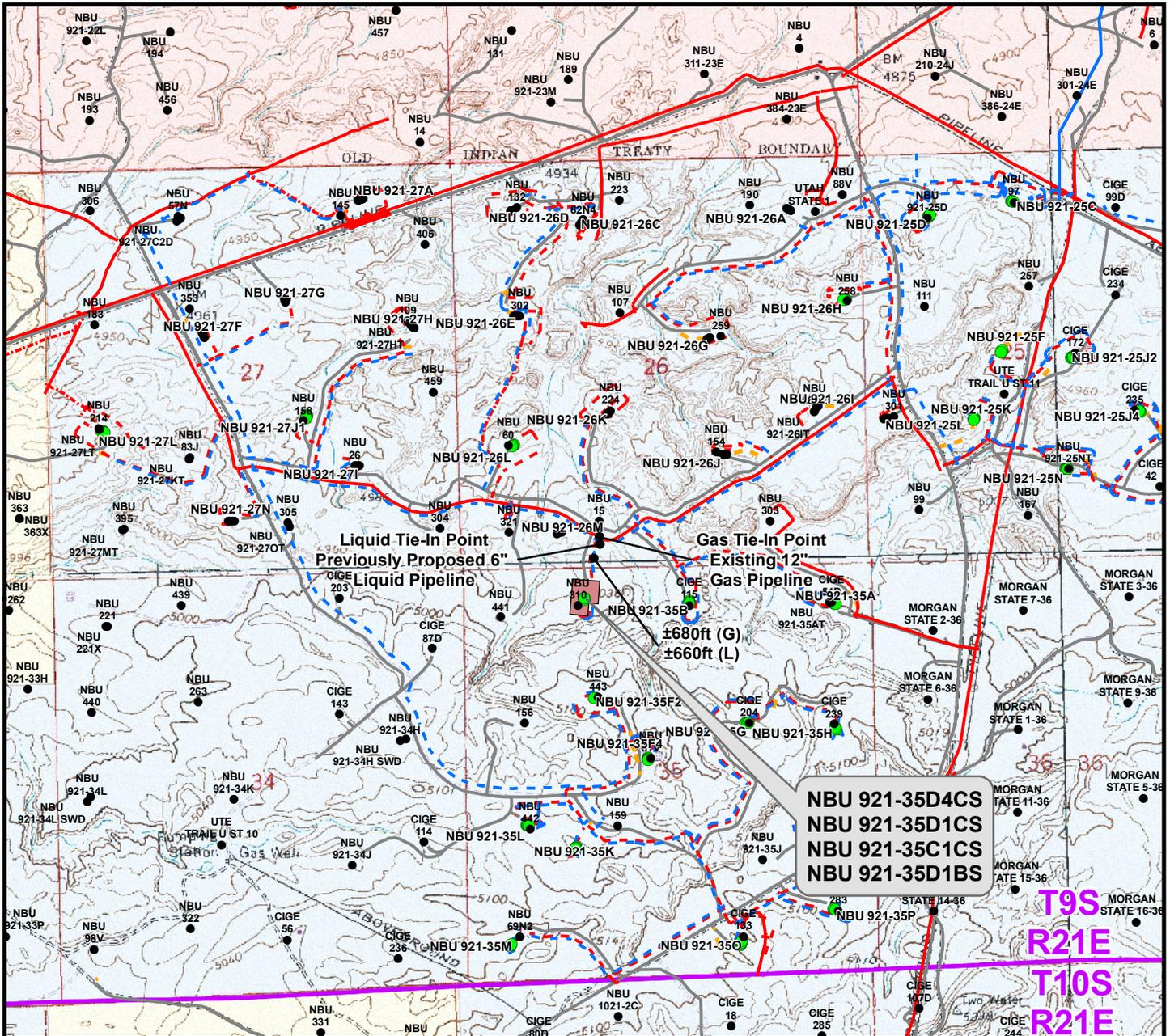
WELL PAD - NBU 921-35C

TOPO C
NBU 921-35D4CS, NBU 921-35D1CS,
NBU 921-35C1CS & NBU 921-35D1BS
LOCATED IN SECTION 35, 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: KGS	Date: 19 Oct 2010	12
Revised:	Date:	



**NBU 921-35D4CS
NBU 921-35D1CS
NBU 921-35C1CS
NBU 921-35D1BS**

**T9S
R21E
T10S
R21E**

Proposed Liquid Pipeline	Length
Proposed 6" (Max.) (Meter House to Edge of Pad)	±500ft
Proposed 6" (Max.) (Edge of Pad to Previously Proposed 6" Pipeline)	±660ft
TOTAL PROPOSED LIQUID PIPELINE =	±1,160ft

Proposed Gas Pipeline	Length
Proposed 6" (Meter House to Edge of Pad)	±500ft
Proposed 6" (Edge of Pad to Existing 12" Pipeline)	±680ft
TOTAL PROPOSED GAS PIPELINE =	±1,180ft

Legend

- Well - Proposed
- Well - Existing
- Well Pad
- 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 921-35C

TOPO D
NBU 921-35D4CS, NBU 921-35D1CS,
NBU 921-35C1CS & NBU 921-35D1BS
LOCATED IN SECTION 35, T9S, R21E,
S.L.B.&M., UTAH COUNTY, UTAH

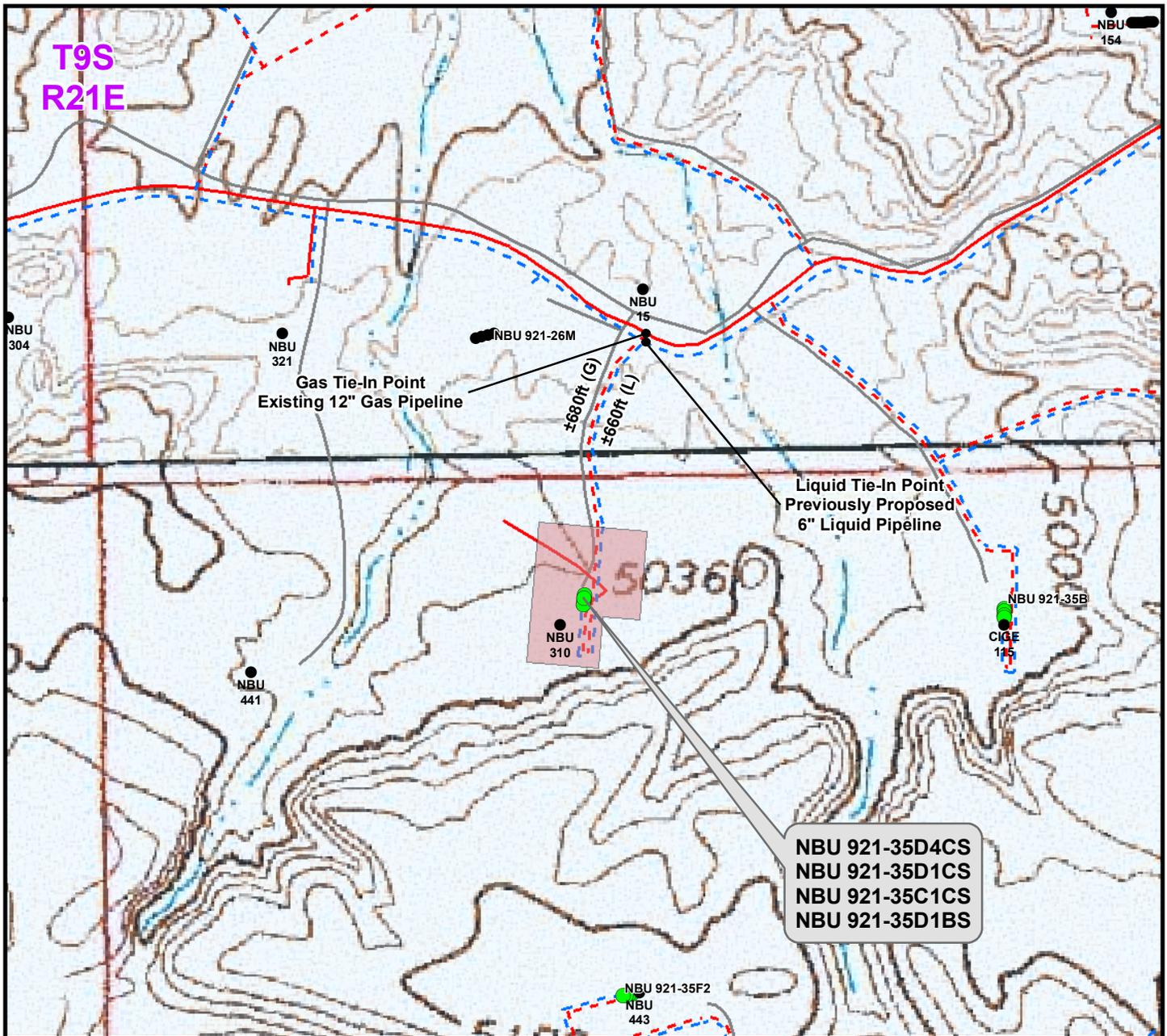
609

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



Scale: 1" = 2,000ft	NAD83 USP Central
Drawn: KGS	Date: 19 Oct 2010
Revised:	Date:

Sheet No:
13
13 of 16



Proposed Liquid Pipeline	Length
Proposed 6" (Max.) (Meter House to Edge of Pad)	±500ft
Proposed 6" (Max.) (Edge of Pad to Previously Proposed 6" Pipeline)	±660ft
TOTAL PROPOSED LIQUID PIPELINE =	±1,160ft

Proposed Gas Pipeline	Length
Proposed 6" (Meter House to Edge of Pad)	±500ft
Proposed 6" (Edge of Pad to Existing 12" Pipeline)	±680ft
TOTAL PROPOSED GAS PIPELINE =	±1,180ft

Legend

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

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

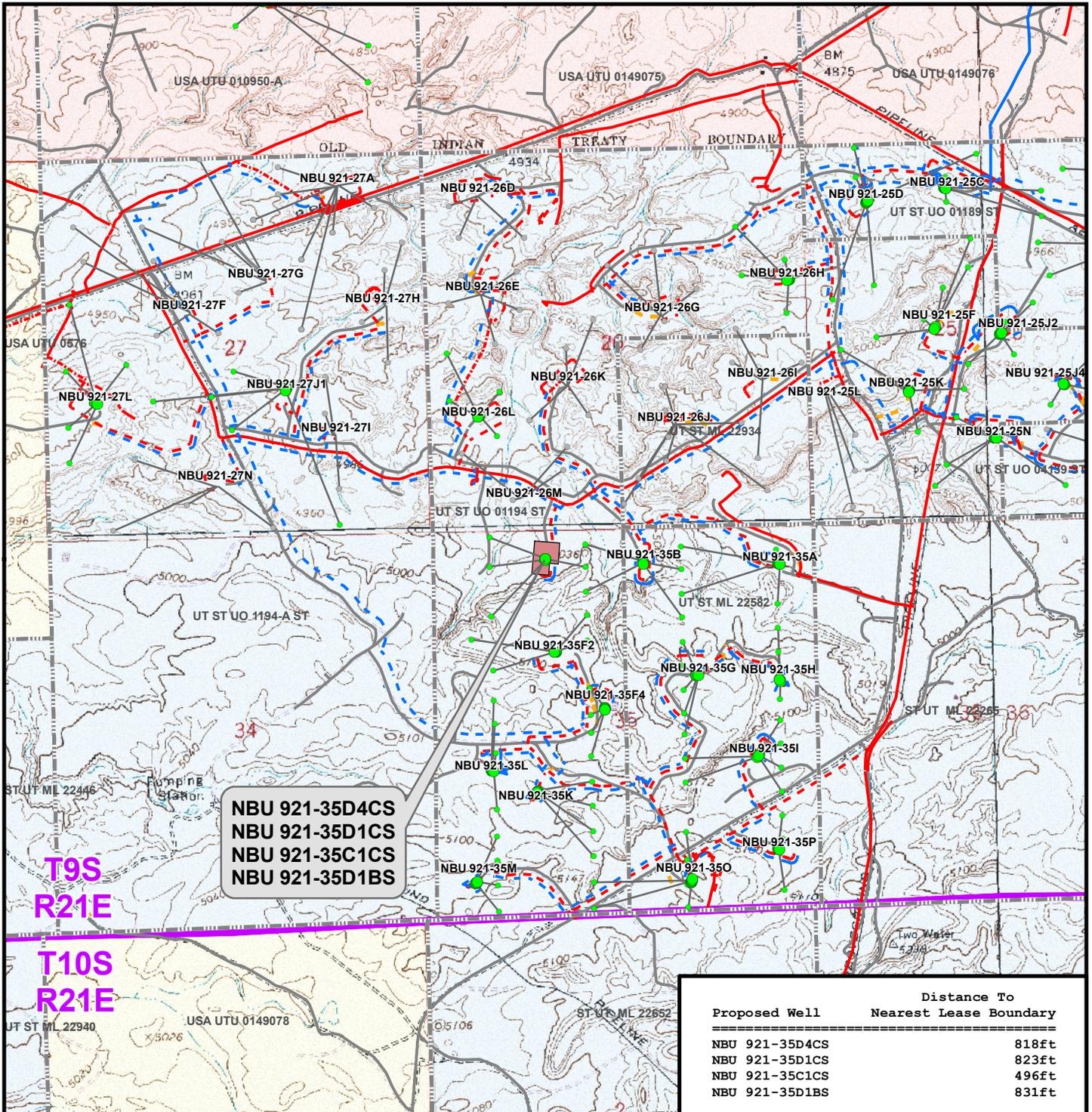
WELL PAD - NBU 921-35C

TOPO D2 (PAD & PIPELINE DETAIL)
 NBU 921-35D4CS, NBU 921-35D1CS,
 NBU 921-35C1CS & NBU 921-35D1BS
 LOCATED IN SECTION 35, 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" = 500ft	NAD83 USP Central	Sheet No:
Drawn: KGS	Date: 19 Oct 2010	14
Revised:	Date:	



Proposed Well	Distance To Nearest Lease Boundary
NBU 921-35D4CS	818ft
NBU 921-35D1CS	823ft
NBU 921-35C1CS	496ft
NBU 921-35D1BS	831ft

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

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

WELL PAD - NBU 921-35C

TOPO E
 NBU 921-35D4CS, NBU 921-35D1CS,
 NBU 921-35C1CS & NBU 921-35D1BS
 LOCATED IN SECTION 35, 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



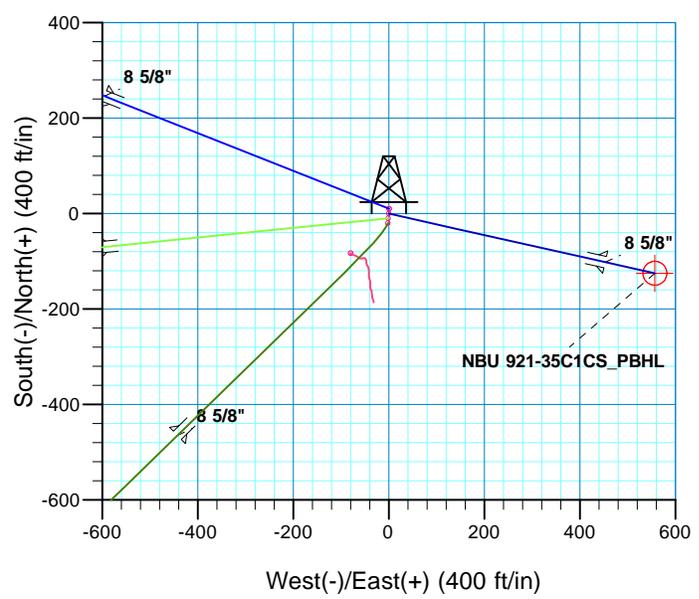
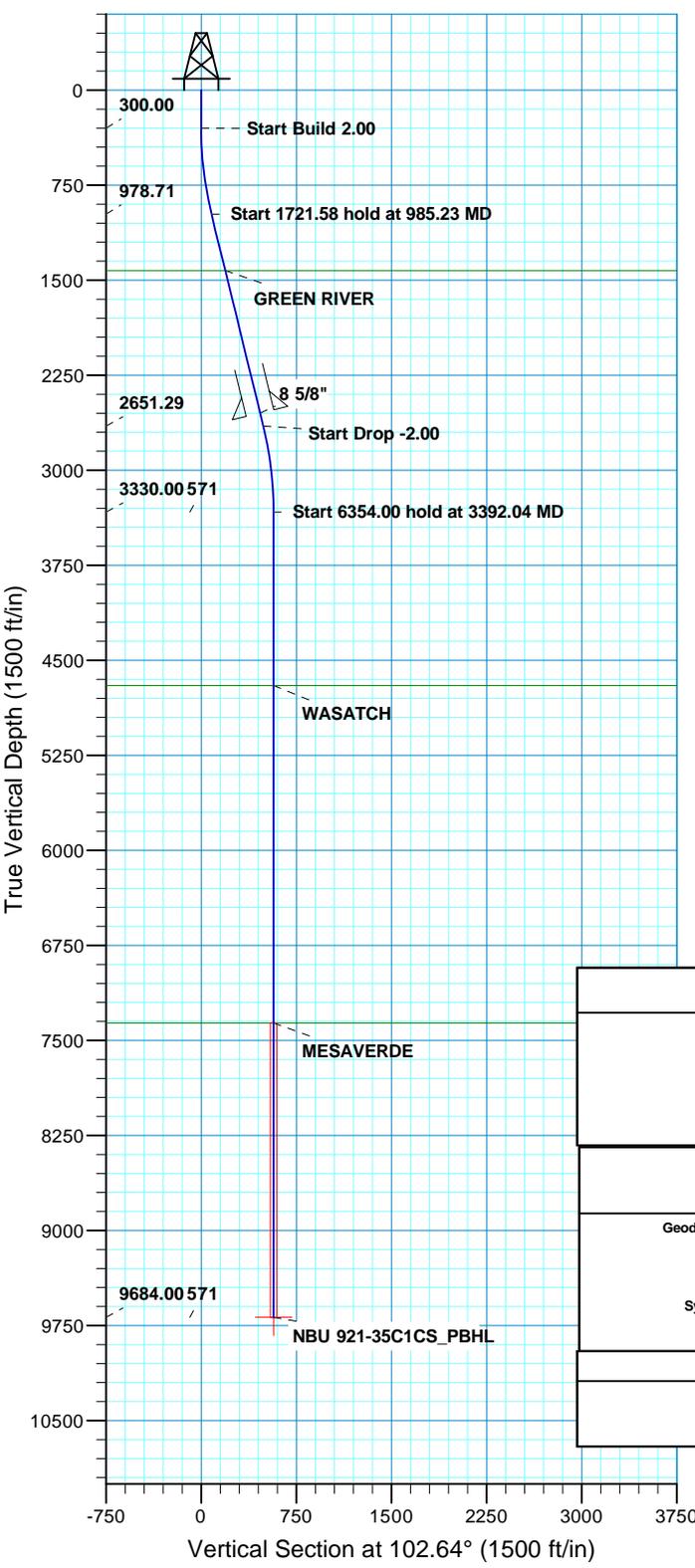
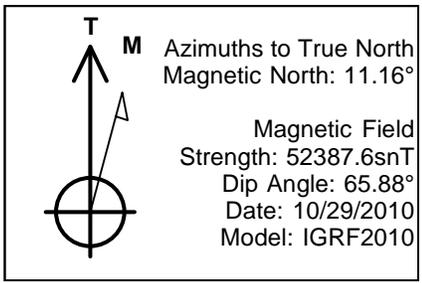
Scale: 1" = 2,000ft	NAD83 USP Central	Sheet No:
Drawn: KGS	Date: 19 Oct 2010	15
Revised:	Date:	

**Kerr-McGee Oil & Gas Onshore, LP
WELL PAD – NBU 921-35C
WELLS – NBU 921-35D4CS, NBU 921-35D1CS,
NBU 921-35C1CS & NBU 921-35D1BS
Section 35, 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 18.4 miles to a service road to the southwest. Exit right and proceed in a southwesterly direction along the service road approximately 0.9 miles to a second service road to the south. Exit left and proceed in a southerly direction along the second service road approximately 0.1 miles to the proposed well location.

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

WELL DETAILS: NBU 921-35C1CS						
GL 4986' & KB 14' @ 5000.00ft (ASSUMED)						
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	
0.00	0.00	14529009.01	2054358.95	39° 59' 55.378 N	109° 31' 19.196 W	
DESIGN TARGET DETAILS						
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude
PBHL	9684.00	-124.92	557.16	14528893.35	2054918.10	39° 59' 54.143 N
	- plan hits target center					
Shape	Circle (Radius: 25.00)					



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	
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	
985.23	13.70	102.64	978.71	-17.84	79.58	2.00	102.64	81.56	
2706.81	13.70	102.64	2651.29	-107.07	477.58	0.00	0.00	489.43	
3392.04	0.00	0.00	3330.00	-124.92	557.16	2.00	180.00	570.99	
9746.04	0.00	0.00	9684.00	-124.92	557.16	0.00	0.00	570.99	NBU 921-35C1CS_PBHL
PROJECT DETAILS: Uintah County, UT UTM12							FORMATION TOP DETAILS		
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 35 T9S R21E System Datum: Mean Sea Level							TVDPath	MDPath	Formation
							1424.00	1443.56	GREEN RIVER
							4699.00	4761.04	WASATCH
				MESAVERDE					
CASING DETAILS									
	TVD	MD	Name	Size					
	2549.00	2601.53	8 5/8"	8.625					



Scientific Drilling
Rocky Mountain Operations

Kerr McGee Oil and Gas Onshore LP

Uintah County, UT UTM12

NBU 921-35C Pad

NBU 921-35C1CS

OH

Plan: PLAN #1

Standard Planning Report

29 October, 2010

Database:	EDM5000-RobertS-Local	Local Co-ordinate Reference:	Well NBU 921-35C1CS
Company:	Kerr McGee Oil and Gas Onshore LP	TVD Reference:	GL 4986' & KB 14' @ 5000.00ft (ASSUMED)
Project:	Uintah County, UT UTM12	MD Reference:	GL 4986' & KB 14' @ 5000.00ft (ASSUMED)
Site:	NBU 921-35C Pad	North Reference:	True
Well:	NBU 921-35C1CS	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 921-35C Pad, SEC 35 T9S R21E				
Site Position:	Northing:	14,529,019.23 usft	Latitude:	39° 59' 55.478 N	
From: Lat/Long	Easting:	2,054,359.90 usft	Longitude:	109° 31' 19.182 W	
Position Uncertainty:	0.00 ft	Slot Radius:	13.200 in	Grid Convergence:	0.95 °

Well	NBU 921-35C1CS, 399' FNL 1591' FWL					
Well Position	+N/-S	-10.20 ft	Northing:	14,529,009.01 usft	Latitude:	39° 59' 55.378 N
	+E/-W	-1.12 ft	Easting:	2,054,358.95 usft	Longitude:	109° 31' 19.196 W
Position Uncertainty		0.00 ft	Wellhead Elevation:		Ground Level:	4,986.00 ft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	10/29/2010	11.16	65.88	52,388

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	102.64

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	
985.23	13.70	102.64	978.71	-17.84	79.58	2.00	2.00	0.00	102.64	
2,706.81	13.70	102.64	2,651.29	-107.07	477.58	0.00	0.00	0.00	0.00	
3,392.04	0.00	0.00	3,330.00	-124.92	557.16	2.00	-2.00	0.00	180.00	
9,746.04	0.00	0.00	9,684.00	-124.92	557.16	0.00	0.00	0.00	0.00	NBU 921-35C1CS_PI

Database:	EDM5000-RobertS-Local	Local Co-ordinate Reference:	Well NBU 921-35C1CS
Company:	Kerr McGee Oil and Gas Onshore LP	TVD Reference:	GL 4986' & KB 14' @ 5000.00ft (ASSUMED)
Project:	Uintah County, UT UTM12	MD Reference:	GL 4986' & KB 14' @ 5000.00ft (ASSUMED)
Site:	NBU 921-35C Pad	North Reference:	True
Well:	NBU 921-35C1CS	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
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Start Build 2.00										
400.00	2.00	102.64	399.98	-0.38	1.70	1.75	2.00	2.00	2.00	0.00
500.00	4.00	102.64	499.84	-1.53	6.81	6.98	2.00	2.00	2.00	0.00
600.00	6.00	102.64	599.45	-3.43	15.31	15.69	2.00	2.00	2.00	0.00
700.00	8.00	102.64	698.70	-6.10	27.20	27.88	2.00	2.00	2.00	0.00
800.00	10.00	102.64	797.47	-9.52	42.47	43.52	2.00	2.00	2.00	0.00
900.00	12.00	102.64	895.62	-13.70	61.09	62.60	2.00	2.00	2.00	0.00
985.23	13.70	102.64	978.71	-17.84	79.58	81.56	2.00	2.00	2.00	0.00
Start 1721.58 hold at 985.23 MD										
1,000.00	13.70	102.64	993.06	-18.61	83.00	85.06	0.00	0.00	0.00	0.00
1,100.00	13.70	102.64	1,090.22	-23.79	106.12	108.75	0.00	0.00	0.00	0.00
1,200.00	13.70	102.64	1,187.37	-28.97	129.23	132.44	0.00	0.00	0.00	0.00
1,300.00	13.70	102.64	1,284.52	-34.16	152.35	156.13	0.00	0.00	0.00	0.00
1,400.00	13.70	102.64	1,381.68	-39.34	175.47	179.83	0.00	0.00	0.00	0.00
1,443.56	13.70	102.64	1,424.00	-41.60	185.54	190.15	0.00	0.00	0.00	0.00
GREEN RIVER										
1,500.00	13.70	102.64	1,478.83	-44.52	198.59	203.52	0.00	0.00	0.00	0.00
1,600.00	13.70	102.64	1,575.98	-49.71	221.71	227.21	0.00	0.00	0.00	0.00
1,700.00	13.70	102.64	1,673.14	-54.89	244.82	250.90	0.00	0.00	0.00	0.00
1,800.00	13.70	102.64	1,770.29	-60.07	267.94	274.59	0.00	0.00	0.00	0.00
1,900.00	13.70	102.64	1,867.44	-65.26	291.06	298.28	0.00	0.00	0.00	0.00
2,000.00	13.70	102.64	1,964.59	-70.44	314.18	321.98	0.00	0.00	0.00	0.00
2,100.00	13.70	102.64	2,061.75	-75.62	337.29	345.67	0.00	0.00	0.00	0.00
2,200.00	13.70	102.64	2,158.90	-80.81	360.41	369.36	0.00	0.00	0.00	0.00
2,300.00	13.70	102.64	2,256.05	-85.99	383.53	393.05	0.00	0.00	0.00	0.00
2,400.00	13.70	102.64	2,353.21	-91.17	406.65	416.74	0.00	0.00	0.00	0.00
2,500.00	13.70	102.64	2,450.36	-96.35	429.76	440.43	0.00	0.00	0.00	0.00
2,600.00	13.70	102.64	2,547.51	-101.54	452.88	464.13	0.00	0.00	0.00	0.00
2,601.53	13.70	102.64	2,549.00	-101.62	453.24	464.49	0.00	0.00	0.00	0.00
8 5/8"										
2,700.00	13.70	102.64	2,644.67	-106.72	476.00	487.82	0.00	0.00	0.00	0.00
2,706.81	13.70	102.64	2,651.29	-107.07	477.58	489.43	0.00	0.00	0.00	0.00
Start Drop -2.00										
2,800.00	11.84	102.64	2,742.16	-111.58	497.68	510.03	2.00	-2.00	0.00	0.00
2,900.00	9.84	102.64	2,840.37	-115.70	516.03	528.84	2.00	-2.00	0.00	0.00
3,000.00	7.84	102.64	2,939.18	-119.06	531.02	544.21	2.00	-2.00	0.00	0.00
3,100.00	5.84	102.64	3,038.46	-121.66	542.65	556.12	2.00	-2.00	0.00	0.00
3,200.00	3.84	102.64	3,138.10	-123.51	550.88	564.56	2.00	-2.00	0.00	0.00
3,300.00	1.84	102.64	3,237.97	-124.59	555.72	569.51	2.00	-2.00	0.00	0.00
3,392.04	0.00	0.00	3,330.00	-124.92	557.16	570.99	2.00	-2.00	0.00	0.00
Start 6354.00 hold at 3392.04 MD										
3,400.00	0.00	0.00	3,337.96	-124.92	557.16	570.99	0.00	0.00	0.00	0.00
3,500.00	0.00	0.00	3,437.96	-124.92	557.16	570.99	0.00	0.00	0.00	0.00
3,600.00	0.00	0.00	3,537.96	-124.92	557.16	570.99	0.00	0.00	0.00	0.00
3,700.00	0.00	0.00	3,637.96	-124.92	557.16	570.99	0.00	0.00	0.00	0.00
3,800.00	0.00	0.00	3,737.96	-124.92	557.16	570.99	0.00	0.00	0.00	0.00
3,900.00	0.00	0.00	3,837.96	-124.92	557.16	570.99	0.00	0.00	0.00	0.00
4,000.00	0.00	0.00	3,937.96	-124.92	557.16	570.99	0.00	0.00	0.00	0.00
4,100.00	0.00	0.00	4,037.96	-124.92	557.16	570.99	0.00	0.00	0.00	0.00

Database:	EDM5000-RobertS-Local	Local Co-ordinate Reference:	Well NBU 921-35C1CS
Company:	Kerr McGee Oil and Gas Onshore LP	TVD Reference:	GL 4986' & KB 14' @ 5000.00ft (ASSUMED)
Project:	Uintah County, UT UTM12	MD Reference:	GL 4986' & KB 14' @ 5000.00ft (ASSUMED)
Site:	NBU 921-35C Pad	North Reference:	True
Well:	NBU 921-35C1CS	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)
4,200.00	0.00	0.00	4,137.96	-124.92	557.16	570.99	0.00	0.00	0.00
4,300.00	0.00	0.00	4,237.96	-124.92	557.16	570.99	0.00	0.00	0.00
4,400.00	0.00	0.00	4,337.96	-124.92	557.16	570.99	0.00	0.00	0.00
4,500.00	0.00	0.00	4,437.96	-124.92	557.16	570.99	0.00	0.00	0.00
4,600.00	0.00	0.00	4,537.96	-124.92	557.16	570.99	0.00	0.00	0.00
4,700.00	0.00	0.00	4,637.96	-124.92	557.16	570.99	0.00	0.00	0.00
4,761.04	0.00	0.00	4,699.00	-124.92	557.16	570.99	0.00	0.00	0.00
WASATCH									
4,800.00	0.00	0.00	4,737.96	-124.92	557.16	570.99	0.00	0.00	0.00
4,900.00	0.00	0.00	4,837.96	-124.92	557.16	570.99	0.00	0.00	0.00
5,000.00	0.00	0.00	4,937.96	-124.92	557.16	570.99	0.00	0.00	0.00
5,100.00	0.00	0.00	5,037.96	-124.92	557.16	570.99	0.00	0.00	0.00
5,200.00	0.00	0.00	5,137.96	-124.92	557.16	570.99	0.00	0.00	0.00
5,300.00	0.00	0.00	5,237.96	-124.92	557.16	570.99	0.00	0.00	0.00
5,400.00	0.00	0.00	5,337.96	-124.92	557.16	570.99	0.00	0.00	0.00
5,500.00	0.00	0.00	5,437.96	-124.92	557.16	570.99	0.00	0.00	0.00
5,600.00	0.00	0.00	5,537.96	-124.92	557.16	570.99	0.00	0.00	0.00
5,700.00	0.00	0.00	5,637.96	-124.92	557.16	570.99	0.00	0.00	0.00
5,800.00	0.00	0.00	5,737.96	-124.92	557.16	570.99	0.00	0.00	0.00
5,900.00	0.00	0.00	5,837.96	-124.92	557.16	570.99	0.00	0.00	0.00
6,000.00	0.00	0.00	5,937.96	-124.92	557.16	570.99	0.00	0.00	0.00
6,100.00	0.00	0.00	6,037.96	-124.92	557.16	570.99	0.00	0.00	0.00
6,200.00	0.00	0.00	6,137.96	-124.92	557.16	570.99	0.00	0.00	0.00
6,300.00	0.00	0.00	6,237.96	-124.92	557.16	570.99	0.00	0.00	0.00
6,400.00	0.00	0.00	6,337.96	-124.92	557.16	570.99	0.00	0.00	0.00
6,500.00	0.00	0.00	6,437.96	-124.92	557.16	570.99	0.00	0.00	0.00
6,600.00	0.00	0.00	6,537.96	-124.92	557.16	570.99	0.00	0.00	0.00
6,700.00	0.00	0.00	6,637.96	-124.92	557.16	570.99	0.00	0.00	0.00
6,800.00	0.00	0.00	6,737.96	-124.92	557.16	570.99	0.00	0.00	0.00
6,900.00	0.00	0.00	6,837.96	-124.92	557.16	570.99	0.00	0.00	0.00
7,000.00	0.00	0.00	6,937.96	-124.92	557.16	570.99	0.00	0.00	0.00
7,100.00	0.00	0.00	7,037.96	-124.92	557.16	570.99	0.00	0.00	0.00
7,200.00	0.00	0.00	7,137.96	-124.92	557.16	570.99	0.00	0.00	0.00
7,300.00	0.00	0.00	7,237.96	-124.92	557.16	570.99	0.00	0.00	0.00
7,400.00	0.00	0.00	7,337.96	-124.92	557.16	570.99	0.00	0.00	0.00
7,424.04	0.00	0.00	7,362.00	-124.92	557.16	570.99	0.00	0.00	0.00
MESAVERDE									
7,500.00	0.00	0.00	7,437.96	-124.92	557.16	570.99	0.00	0.00	0.00
7,600.00	0.00	0.00	7,537.96	-124.92	557.16	570.99	0.00	0.00	0.00
7,700.00	0.00	0.00	7,637.96	-124.92	557.16	570.99	0.00	0.00	0.00
7,800.00	0.00	0.00	7,737.96	-124.92	557.16	570.99	0.00	0.00	0.00
7,900.00	0.00	0.00	7,837.96	-124.92	557.16	570.99	0.00	0.00	0.00
8,000.00	0.00	0.00	7,937.96	-124.92	557.16	570.99	0.00	0.00	0.00
8,100.00	0.00	0.00	8,037.96	-124.92	557.16	570.99	0.00	0.00	0.00
8,200.00	0.00	0.00	8,137.96	-124.92	557.16	570.99	0.00	0.00	0.00
8,300.00	0.00	0.00	8,237.96	-124.92	557.16	570.99	0.00	0.00	0.00
8,400.00	0.00	0.00	8,337.96	-124.92	557.16	570.99	0.00	0.00	0.00
8,500.00	0.00	0.00	8,437.96	-124.92	557.16	570.99	0.00	0.00	0.00
8,600.00	0.00	0.00	8,537.96	-124.92	557.16	570.99	0.00	0.00	0.00
8,700.00	0.00	0.00	8,637.96	-124.92	557.16	570.99	0.00	0.00	0.00
8,800.00	0.00	0.00	8,737.96	-124.92	557.16	570.99	0.00	0.00	0.00
8,900.00	0.00	0.00	8,837.96	-124.92	557.16	570.99	0.00	0.00	0.00
9,000.00	0.00	0.00	8,937.96	-124.92	557.16	570.99	0.00	0.00	0.00
9,100.00	0.00	0.00	9,037.96	-124.92	557.16	570.99	0.00	0.00	0.00

Database:	EDM5000-RobertS-Local	Local Co-ordinate Reference:	Well NBU 921-35C1CS
Company:	Kerr McGee Oil and Gas Onshore LP	TVD Reference:	GL 4986' & KB 14' @ 5000.00ft (ASSUMED)
Project:	Uintah County, UT UTM12	MD Reference:	GL 4986' & KB 14' @ 5000.00ft (ASSUMED)
Site:	NBU 921-35C Pad	North Reference:	True
Well:	NBU 921-35C1CS	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)
9,200.00	0.00	0.00	9,137.96	-124.92	557.16	570.99	0.00	0.00	0.00
9,300.00	0.00	0.00	9,237.96	-124.92	557.16	570.99	0.00	0.00	0.00
9,400.00	0.00	0.00	9,337.96	-124.92	557.16	570.99	0.00	0.00	0.00
9,500.00	0.00	0.00	9,437.96	-124.92	557.16	570.99	0.00	0.00	0.00
9,600.00	0.00	0.00	9,537.96	-124.92	557.16	570.99	0.00	0.00	0.00
9,700.00	0.00	0.00	9,637.96	-124.92	557.16	570.99	0.00	0.00	0.00
9,746.04	0.00	0.00	9,684.00	-124.92	557.16	570.99	0.00	0.00	0.00
NBU 921-35C1CS_PBHL									

Design Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude
NBU 921-35C1CS_PBH - hit/miss target - Shape - Circle (radius 25.00)	0.00	0.00	9,684.00	-124.92	557.16	14,528,893.35	2,054,918.10	39° 59' 54.143 N	109° 31' 12.036 W

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (in)	Hole Diameter (in)	
2,601.53	2,549.00	8 5/8"	8.625	11.000	

Formations					
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
1,443.56	1,424.00	GREEN RIVER			
4,761.04	4,699.00	WASATCH			
7,424.04	7,362.00	MESAVERDE			

Plan Annotations					
Measured Depth (ft)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Comment	
300.00	300.00	0.00	0.00	Start Build 2.00	
985.23	978.71	-17.84	79.58	Start 1721.58 hold at 985.23 MD	
2,706.81	2,651.29	-107.07	477.58	Start Drop -2.00	
3,392.04	3,330.00	-124.92	557.16	Start 6354.00 hold at 3392.04 MD	
9,746.04	9,684.00	-124.92	557.16	TD at 9746.04	



Scientific Drilling
Rocky Mountain Operations

Kerr McGee Oil and Gas Onshore LP

**Uintah County, UT UTM12
NBU 921-35C Pad
NBU 921-35C1CS**

OH

Plan: PLAN #1

Standard Planning Report - Geographic

29 October, 2010



Database:	EDM5000-RobertS-Local	Local Co-ordinate Reference:	Well NBU 921-35C1CS
Company:	Kerr McGee Oil and Gas Onshore LP	TVD Reference:	GL 4986' & KB 14' @ 5000.00ft (ASSUMED)
Project:	Uintah County, UT UTM12	MD Reference:	GL 4986' & KB 14' @ 5000.00ft (ASSUMED)
Site:	NBU 921-35C Pad	North Reference:	True
Well:	NBU 921-35C1CS	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 921-35C Pad, SEC 35 T9S R21E				
Site Position:	Northing:	14,529,019.23 usft	Latitude:	39° 59' 55.478 N	
From: Lat/Long	Easting:	2,054,359.90 usft	Longitude:	109° 31' 19.182 W	
Position Uncertainty:	0.00 ft	Slot Radius:	13.200 in	Grid Convergence:	0.95 °

Well	NBU 921-35C1CS, 399' FNL 1591' FWL					
Well Position	+N/-S	0.00 ft	Northing:	14,529,009.01 usft	Latitude:	39° 59' 55.378 N
	+E/-W	0.00 ft	Easting:	2,054,358.95 usft	Longitude:	109° 31' 19.196 W
Position Uncertainty		0.00 ft	Wellhead Elevation:		Ground Level:	4,986.00 ft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	10/29/2010	11.16	65.88	52,388

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	102.64

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	
985.23	13.70	102.64	978.71	-17.84	79.58	2.00	2.00	0.00	102.64	
2,706.81	13.70	102.64	2,651.29	-107.07	477.58	0.00	0.00	0.00	0.00	
3,392.04	0.00	0.00	3,330.00	-124.92	557.16	2.00	-2.00	0.00	180.00	
9,746.04	0.00	0.00	9,684.00	-124.92	557.16	0.00	0.00	0.00	0.00	NBU 921-35C1CS_PI

Database:	EDM5000-RobertS-Local	Local Co-ordinate Reference:	Well NBU 921-35C1CS
Company:	Kerr McGee Oil and Gas Onshore LP	TVD Reference:	GL 4986' & KB 14' @ 5000.00ft (ASSUMED)
Project:	Uintah County, UT UTM12	MD Reference:	GL 4986' & KB 14' @ 5000.00ft (ASSUMED)
Site:	NBU 921-35C Pad	North Reference:	True
Well:	NBU 921-35C1CS	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	14,529,009.01	2,054,358.95	39° 59' 55.378 N	109° 31' 19.196 W	
100.00	0.00	0.00	100.00	0.00	0.00	14,529,009.01	2,054,358.95	39° 59' 55.378 N	109° 31' 19.196 W	
200.00	0.00	0.00	200.00	0.00	0.00	14,529,009.01	2,054,358.95	39° 59' 55.378 N	109° 31' 19.196 W	
300.00	0.00	0.00	300.00	0.00	0.00	14,529,009.01	2,054,358.95	39° 59' 55.378 N	109° 31' 19.196 W	
Start Build 2.00										
400.00	2.00	102.64	399.98	-0.38	1.70	14,529,008.66	2,054,360.65	39° 59' 55.374 N	109° 31' 19.175 W	
500.00	4.00	102.64	499.84	-1.53	6.81	14,529,007.60	2,054,365.78	39° 59' 55.363 N	109° 31' 19.109 W	
600.00	6.00	102.64	599.45	-3.43	15.31	14,529,005.84	2,054,374.31	39° 59' 55.344 N	109° 31' 19.000 W	
700.00	8.00	102.64	698.70	-6.10	27.20	14,529,003.37	2,054,386.25	39° 59' 55.317 N	109° 31' 18.847 W	
800.00	10.00	102.64	797.47	-9.52	42.47	14,529,000.20	2,054,401.57	39° 59' 55.283 N	109° 31' 18.651 W	
900.00	12.00	102.64	895.62	-13.70	61.09	14,528,996.33	2,054,420.25	39° 59' 55.242 N	109° 31' 18.411 W	
985.23	13.70	102.64	978.71	-17.84	79.58	14,528,992.49	2,054,438.82	39° 59' 55.201 N	109° 31' 18.174 W	
Start 1721.58 hold at 985.23 MD										
1,000.00	13.70	102.64	993.06	-18.61	83.00	14,528,991.79	2,054,442.24	39° 59' 55.194 N	109° 31' 18.130 W	
1,100.00	13.70	102.64	1,090.22	-23.79	106.12	14,528,986.99	2,054,465.44	39° 59' 55.142 N	109° 31' 17.833 W	
1,200.00	13.70	102.64	1,187.37	-28.97	129.23	14,528,982.19	2,054,488.64	39° 59' 55.091 N	109° 31' 17.536 W	
1,300.00	13.70	102.64	1,284.52	-34.16	152.35	14,528,977.39	2,054,511.84	39° 59' 55.040 N	109° 31' 17.238 W	
1,400.00	13.70	102.64	1,381.68	-39.34	175.47	14,528,972.59	2,054,535.04	39° 59' 54.989 N	109° 31' 16.941 W	
1,443.56	13.70	102.64	1,424.00	-41.60	185.54	14,528,970.50	2,054,545.15	39° 59' 54.966 N	109° 31' 16.812 W	
GREEN RIVER										
1,500.00	13.70	102.64	1,478.83	-44.52	198.59	14,528,967.79	2,054,558.24	39° 59' 54.937 N	109° 31' 16.644 W	
1,600.00	13.70	102.64	1,575.98	-49.71	221.71	14,528,962.99	2,054,581.44	39° 59' 54.886 N	109° 31' 16.347 W	
1,700.00	13.70	102.64	1,673.14	-54.89	244.82	14,528,958.19	2,054,604.64	39° 59' 54.835 N	109° 31' 16.050 W	
1,800.00	13.70	102.64	1,770.29	-60.07	267.94	14,528,953.39	2,054,627.85	39° 59' 54.784 N	109° 31' 15.753 W	
1,900.00	13.70	102.64	1,867.44	-65.26	291.06	14,528,948.59	2,054,651.05	39° 59' 54.733 N	109° 31' 15.456 W	
2,000.00	13.70	102.64	1,964.59	-70.44	314.18	14,528,943.80	2,054,674.25	39° 59' 54.681 N	109° 31' 15.159 W	
2,100.00	13.70	102.64	2,061.75	-75.62	337.29	14,528,939.00	2,054,697.45	39° 59' 54.630 N	109° 31' 14.862 W	
2,200.00	13.70	102.64	2,158.90	-80.81	360.41	14,528,934.20	2,054,720.65	39° 59' 54.579 N	109° 31' 14.565 W	
2,300.00	13.70	102.64	2,256.05	-85.99	383.53	14,528,929.40	2,054,743.85	39° 59' 54.528 N	109° 31' 14.267 W	
2,400.00	13.70	102.64	2,353.21	-91.17	406.65	14,528,924.60	2,054,767.05	39° 59' 54.476 N	109° 31' 13.970 W	
2,500.00	13.70	102.64	2,450.36	-96.35	429.76	14,528,919.80	2,054,790.25	39° 59' 54.425 N	109° 31' 13.673 W	
2,600.00	13.70	102.64	2,547.51	-101.54	452.88	14,528,915.00	2,054,813.45	39° 59' 54.374 N	109° 31' 13.376 W	
2,601.53	13.70	102.64	2,549.00	-101.62	453.24	14,528,914.93	2,054,813.80	39° 59' 54.373 N	109° 31' 13.372 W	
8 5/8"										
2,700.00	13.70	102.64	2,644.67	-106.72	476.00	14,528,910.20	2,054,836.65	39° 59' 54.323 N	109° 31' 13.079 W	
2,706.81	13.70	102.64	2,651.29	-107.07	477.58	14,528,909.88	2,054,838.23	39° 59' 54.319 N	109° 31' 13.059 W	
Start Drop -2.00										
2,800.00	11.84	102.64	2,742.16	-111.58	497.68	14,528,905.70	2,054,858.40	39° 59' 54.275 N	109° 31' 12.800 W	
2,900.00	9.84	102.64	2,840.37	-115.70	516.03	14,528,901.89	2,054,876.82	39° 59' 54.234 N	109° 31' 12.565 W	
3,000.00	7.84	102.64	2,939.18	-119.06	531.02	14,528,898.78	2,054,891.87	39° 59' 54.201 N	109° 31' 12.372 W	
3,100.00	5.84	102.64	3,038.46	-121.66	542.65	14,528,896.37	2,054,903.53	39° 59' 54.175 N	109° 31' 12.223 W	
3,200.00	3.84	102.64	3,138.10	-123.51	550.88	14,528,894.66	2,054,911.80	39° 59' 54.157 N	109° 31' 12.117 W	
3,300.00	1.84	102.64	3,237.97	-124.59	555.72	14,528,893.65	2,054,916.65	39° 59' 54.146 N	109° 31' 12.055 W	
3,392.04	0.00	0.00	3,330.00	-124.92	557.16	14,528,893.35	2,054,918.10	39° 59' 54.143 N	109° 31' 12.036 W	
Start 6354.00 hold at 3392.04 MD										
3,400.00	0.00	0.00	3,337.96	-124.92	557.16	14,528,893.35	2,054,918.10	39° 59' 54.143 N	109° 31' 12.036 W	
3,500.00	0.00	0.00	3,437.96	-124.92	557.16	14,528,893.35	2,054,918.10	39° 59' 54.143 N	109° 31' 12.036 W	
3,600.00	0.00	0.00	3,537.96	-124.92	557.16	14,528,893.35	2,054,918.10	39° 59' 54.143 N	109° 31' 12.036 W	
3,700.00	0.00	0.00	3,637.96	-124.92	557.16	14,528,893.35	2,054,918.10	39° 59' 54.143 N	109° 31' 12.036 W	
3,800.00	0.00	0.00	3,737.96	-124.92	557.16	14,528,893.35	2,054,918.10	39° 59' 54.143 N	109° 31' 12.036 W	
3,900.00	0.00	0.00	3,837.96	-124.92	557.16	14,528,893.35	2,054,918.10	39° 59' 54.143 N	109° 31' 12.036 W	
4,000.00	0.00	0.00	3,937.96	-124.92	557.16	14,528,893.35	2,054,918.10	39° 59' 54.143 N	109° 31' 12.036 W	
4,100.00	0.00	0.00	4,037.96	-124.92	557.16	14,528,893.35	2,054,918.10	39° 59' 54.143 N	109° 31' 12.036 W	
4,200.00	0.00	0.00	4,137.96	-124.92	557.16	14,528,893.35	2,054,918.10	39° 59' 54.143 N	109° 31' 12.036 W	

Database:	EDM5000-RobertS-Local	Local Co-ordinate Reference:	Well NBU 921-35C1CS
Company:	Kerr McGee Oil and Gas Onshore LP	TVD Reference:	GL 4986' & KB 14' @ 5000.00ft (ASSUMED)
Project:	Uintah County, UT UTM12	MD Reference:	GL 4986' & KB 14' @ 5000.00ft (ASSUMED)
Site:	NBU 921-35C Pad	North Reference:	True
Well:	NBU 921-35C1CS	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	
4,300.00	0.00	0.00	4,237.96	-124.92	557.16	14,528,893.35	2,054,918.10	39° 59' 54.143 N	109° 31' 12.036 W	
4,400.00	0.00	0.00	4,337.96	-124.92	557.16	14,528,893.35	2,054,918.10	39° 59' 54.143 N	109° 31' 12.036 W	
4,500.00	0.00	0.00	4,437.96	-124.92	557.16	14,528,893.35	2,054,918.10	39° 59' 54.143 N	109° 31' 12.036 W	
4,600.00	0.00	0.00	4,537.96	-124.92	557.16	14,528,893.35	2,054,918.10	39° 59' 54.143 N	109° 31' 12.036 W	
4,700.00	0.00	0.00	4,637.96	-124.92	557.16	14,528,893.35	2,054,918.10	39° 59' 54.143 N	109° 31' 12.036 W	
4,761.04	0.00	0.00	4,699.00	-124.92	557.16	14,528,893.35	2,054,918.10	39° 59' 54.143 N	109° 31' 12.036 W	
WASATCH										
4,800.00	0.00	0.00	4,737.96	-124.92	557.16	14,528,893.35	2,054,918.10	39° 59' 54.143 N	109° 31' 12.036 W	
4,900.00	0.00	0.00	4,837.96	-124.92	557.16	14,528,893.35	2,054,918.10	39° 59' 54.143 N	109° 31' 12.036 W	
5,000.00	0.00	0.00	4,937.96	-124.92	557.16	14,528,893.35	2,054,918.10	39° 59' 54.143 N	109° 31' 12.036 W	
5,100.00	0.00	0.00	5,037.96	-124.92	557.16	14,528,893.35	2,054,918.10	39° 59' 54.143 N	109° 31' 12.036 W	
5,200.00	0.00	0.00	5,137.96	-124.92	557.16	14,528,893.35	2,054,918.10	39° 59' 54.143 N	109° 31' 12.036 W	
5,300.00	0.00	0.00	5,237.96	-124.92	557.16	14,528,893.35	2,054,918.10	39° 59' 54.143 N	109° 31' 12.036 W	
5,400.00	0.00	0.00	5,337.96	-124.92	557.16	14,528,893.35	2,054,918.10	39° 59' 54.143 N	109° 31' 12.036 W	
5,500.00	0.00	0.00	5,437.96	-124.92	557.16	14,528,893.35	2,054,918.10	39° 59' 54.143 N	109° 31' 12.036 W	
5,600.00	0.00	0.00	5,537.96	-124.92	557.16	14,528,893.35	2,054,918.10	39° 59' 54.143 N	109° 31' 12.036 W	
5,700.00	0.00	0.00	5,637.96	-124.92	557.16	14,528,893.35	2,054,918.10	39° 59' 54.143 N	109° 31' 12.036 W	
5,800.00	0.00	0.00	5,737.96	-124.92	557.16	14,528,893.35	2,054,918.10	39° 59' 54.143 N	109° 31' 12.036 W	
5,900.00	0.00	0.00	5,837.96	-124.92	557.16	14,528,893.35	2,054,918.10	39° 59' 54.143 N	109° 31' 12.036 W	
6,000.00	0.00	0.00	5,937.96	-124.92	557.16	14,528,893.35	2,054,918.10	39° 59' 54.143 N	109° 31' 12.036 W	
6,100.00	0.00	0.00	6,037.96	-124.92	557.16	14,528,893.35	2,054,918.10	39° 59' 54.143 N	109° 31' 12.036 W	
6,200.00	0.00	0.00	6,137.96	-124.92	557.16	14,528,893.35	2,054,918.10	39° 59' 54.143 N	109° 31' 12.036 W	
6,300.00	0.00	0.00	6,237.96	-124.92	557.16	14,528,893.35	2,054,918.10	39° 59' 54.143 N	109° 31' 12.036 W	
6,400.00	0.00	0.00	6,337.96	-124.92	557.16	14,528,893.35	2,054,918.10	39° 59' 54.143 N	109° 31' 12.036 W	
6,500.00	0.00	0.00	6,437.96	-124.92	557.16	14,528,893.35	2,054,918.10	39° 59' 54.143 N	109° 31' 12.036 W	
6,600.00	0.00	0.00	6,537.96	-124.92	557.16	14,528,893.35	2,054,918.10	39° 59' 54.143 N	109° 31' 12.036 W	
6,700.00	0.00	0.00	6,637.96	-124.92	557.16	14,528,893.35	2,054,918.10	39° 59' 54.143 N	109° 31' 12.036 W	
6,800.00	0.00	0.00	6,737.96	-124.92	557.16	14,528,893.35	2,054,918.10	39° 59' 54.143 N	109° 31' 12.036 W	
6,900.00	0.00	0.00	6,837.96	-124.92	557.16	14,528,893.35	2,054,918.10	39° 59' 54.143 N	109° 31' 12.036 W	
7,000.00	0.00	0.00	6,937.96	-124.92	557.16	14,528,893.35	2,054,918.10	39° 59' 54.143 N	109° 31' 12.036 W	
7,100.00	0.00	0.00	7,037.96	-124.92	557.16	14,528,893.35	2,054,918.10	39° 59' 54.143 N	109° 31' 12.036 W	
7,200.00	0.00	0.00	7,137.96	-124.92	557.16	14,528,893.35	2,054,918.10	39° 59' 54.143 N	109° 31' 12.036 W	
7,300.00	0.00	0.00	7,237.96	-124.92	557.16	14,528,893.35	2,054,918.10	39° 59' 54.143 N	109° 31' 12.036 W	
7,400.00	0.00	0.00	7,337.96	-124.92	557.16	14,528,893.35	2,054,918.10	39° 59' 54.143 N	109° 31' 12.036 W	
7,424.04	0.00	0.00	7,362.00	-124.92	557.16	14,528,893.35	2,054,918.10	39° 59' 54.143 N	109° 31' 12.036 W	
MESAVERDE										
7,500.00	0.00	0.00	7,437.96	-124.92	557.16	14,528,893.35	2,054,918.10	39° 59' 54.143 N	109° 31' 12.036 W	
7,600.00	0.00	0.00	7,537.96	-124.92	557.16	14,528,893.35	2,054,918.10	39° 59' 54.143 N	109° 31' 12.036 W	
7,700.00	0.00	0.00	7,637.96	-124.92	557.16	14,528,893.35	2,054,918.10	39° 59' 54.143 N	109° 31' 12.036 W	
7,800.00	0.00	0.00	7,737.96	-124.92	557.16	14,528,893.35	2,054,918.10	39° 59' 54.143 N	109° 31' 12.036 W	
7,900.00	0.00	0.00	7,837.96	-124.92	557.16	14,528,893.35	2,054,918.10	39° 59' 54.143 N	109° 31' 12.036 W	
8,000.00	0.00	0.00	7,937.96	-124.92	557.16	14,528,893.35	2,054,918.10	39° 59' 54.143 N	109° 31' 12.036 W	
8,100.00	0.00	0.00	8,037.96	-124.92	557.16	14,528,893.35	2,054,918.10	39° 59' 54.143 N	109° 31' 12.036 W	
8,200.00	0.00	0.00	8,137.96	-124.92	557.16	14,528,893.35	2,054,918.10	39° 59' 54.143 N	109° 31' 12.036 W	
8,300.00	0.00	0.00	8,237.96	-124.92	557.16	14,528,893.35	2,054,918.10	39° 59' 54.143 N	109° 31' 12.036 W	
8,400.00	0.00	0.00	8,337.96	-124.92	557.16	14,528,893.35	2,054,918.10	39° 59' 54.143 N	109° 31' 12.036 W	
8,500.00	0.00	0.00	8,437.96	-124.92	557.16	14,528,893.35	2,054,918.10	39° 59' 54.143 N	109° 31' 12.036 W	
8,600.00	0.00	0.00	8,537.96	-124.92	557.16	14,528,893.35	2,054,918.10	39° 59' 54.143 N	109° 31' 12.036 W	
8,700.00	0.00	0.00	8,637.96	-124.92	557.16	14,528,893.35	2,054,918.10	39° 59' 54.143 N	109° 31' 12.036 W	
8,800.00	0.00	0.00	8,737.96	-124.92	557.16	14,528,893.35	2,054,918.10	39° 59' 54.143 N	109° 31' 12.036 W	
8,900.00	0.00	0.00	8,837.96	-124.92	557.16	14,528,893.35	2,054,918.10	39° 59' 54.143 N	109° 31' 12.036 W	
9,000.00	0.00	0.00	8,937.96	-124.92	557.16	14,528,893.35	2,054,918.10	39° 59' 54.143 N	109° 31' 12.036 W	
9,100.00	0.00	0.00	9,037.96	-124.92	557.16	14,528,893.35	2,054,918.10	39° 59' 54.143 N	109° 31' 12.036 W	
9,200.00	0.00	0.00	9,137.96	-124.92	557.16	14,528,893.35	2,054,918.10	39° 59' 54.143 N	109° 31' 12.036 W	

Database:	EDM5000-RobertS-Local	Local Co-ordinate Reference:	Well NBU 921-35C1CS
Company:	Kerr McGee Oil and Gas Onshore LP	TVD Reference:	GL 4986' & KB 14' @ 5000.00ft (ASSUMED)
Project:	Uintah County, UT UTM12	MD Reference:	GL 4986' & KB 14' @ 5000.00ft (ASSUMED)
Site:	NBU 921-35C Pad	North Reference:	True
Well:	NBU 921-35C1CS	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	9,237.96	-124.92	557.16	14,528,893.35	2,054,918.10	39° 59' 54.143 N	109° 31' 12.036 W	
9,400.00	0.00	0.00	9,337.96	-124.92	557.16	14,528,893.35	2,054,918.10	39° 59' 54.143 N	109° 31' 12.036 W	
9,500.00	0.00	0.00	9,437.96	-124.92	557.16	14,528,893.35	2,054,918.10	39° 59' 54.143 N	109° 31' 12.036 W	
9,600.00	0.00	0.00	9,537.96	-124.92	557.16	14,528,893.35	2,054,918.10	39° 59' 54.143 N	109° 31' 12.036 W	
9,700.00	0.00	0.00	9,637.96	-124.92	557.16	14,528,893.35	2,054,918.10	39° 59' 54.143 N	109° 31' 12.036 W	
9,746.04	0.00	0.00	9,684.00	-124.92	557.16	14,528,893.35	2,054,918.10	39° 59' 54.143 N	109° 31' 12.036 W	
NBU 921-35C1CS_PBHL										

Design Targets										
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude	
NBU 921-35C1CS_PBHL - hit/miss target - Shape - Circle (radius 25.00)	0.00	0.00	9,684.00	-124.92	557.16	14,528,893.35	2,054,918.10	39° 59' 54.143 N	109° 31' 12.036 W	

Casing Points						
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (in)	Hole Diameter (in)		
2,601.53	2,549.00	8 5/8"	8.625	11.000		

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
1,443.56	1,424.00	GREEN RIVER				
4,761.04	4,699.00	WASATCH				
7,424.04	7,362.00	MESAVERDE				

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	
985.23	978.71	-17.84	79.58	Start 1721.58 hold at 985.23 MD	
2,706.81	2,651.29	-107.07	477.58	Start Drop -2.00	
3,392.04	3,330.00	-124.92	557.16	Start 6354.00 hold at 3392.04 MD	
9,746.04	9,684.00	-124.92	557.16	TD at 9746.04	

NBU 921-35C1CS

Surface: 399' FNL 1,591' FWL (NE/4NW/4)
BHL: 522' FNL 2,147' FWL (NE/4NW/4)

NBU 921-35D1BS

Surface: 389' FNL 1,592' FEL (NE/4NW/4)
BHL: 89' FNL 831' FWL (NW/4NW/4)

NBU 921-35D1CS

Surface: 409' FNL 1,589' FEL (NE/4NW/4)
BHL: 488' FNL 823' FWL (NW/4NW/4)

NBU 921-35D4CS

Surface: 418' FNL 1,588' FWL (NE/4NW/4)
BHL: 1,182' FNL 818' FWL (NW/4NW/4)

Pad: NBU 921-35C
Section 35 T9S R21E
Mineral Lease: UO 01194 ST

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

MULTI-POINT SURFACE USE PLAN of OPERATIONS (SUPO)

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

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

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

A. Existing Roads:

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

Typically, roads, gathering lines and electrical distribution lines will occupy common disturbance corridors and roadways will be used as working space. All disturbances located in the same corridor will overlap each

other to the maximum extent possible; in no case will the maximum disturbance width of the access road and utility corridors exceed 50', unless otherwise approved.

B. Planned Access Roads:

No new road is proposed (see Topo Map B). Applicable Uintah County encroachment and/or pipeline crossing permits will be obtained prior to construction/development. No other pipelines will be crossed at this location.

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

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

C. Location of Existing and Proposed Facilities:

This pad will expand the existing pad for the NBU 310. This well location is a vertical producing well according to Utah Division of Oil, Gas and Mining (UDOGM) records as of November 11, 2010.

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

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

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

Gathering facilities:

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

The total gas gathering (steel line pipe with fusion bond epoxy coating) pipeline distances from the meter to the tie in point is $\pm 1,180'$ and the individual segments are broken up as follows:

$\pm 500'$ (0.1 miles) –New 6" buried gas pipeline from the meter to the edge of the pad.

$\pm 680'$ (0.1 miles) –New 6" buried gas pipeline from the edge of pad to the existing 12" pipeline.

The total liquid gathering pipeline distance from the separator to the tie in point is $\pm 1,160'$ and the individual segments are broken up as follows:

- $\pm 500'$ (0.1 miles) –New 6” buried liquid pipeline from the separator to the edge of the pad.
- $\pm 660'$ (0.1 miles) –New 6” buried liquid pipeline from the edge of pad to the proposed 6” liquid pipeline.

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

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

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

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

D. Location and Type of Water Supply:

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

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

Water will be hauled to location over the roads marked on Maps A and B.
No water well is to be drilled on this lease.

E. Source of Construction Materials:

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

F. Methods of Handling Waste Materials:

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

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

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

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

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

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

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

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

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

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

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

Materials Management

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

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

G. Ancillary Facilities:

None are anticipated.

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

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

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

I. Plans for Reclamation of the Surface:

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

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

Interim Reclamation

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

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

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

Final Reclamation

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

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

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

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

Seeding and Measures Common to Interim and Final Reclamation

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

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

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

vegetation. The site specific seed mix will be provided by SITLA.

J. Surface/Mineral Ownership:

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

K. Other Information:

None

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

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

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

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

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

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

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

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


Danielle Piernot

November 19, 2010
Date



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

October 25, 2010

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

Re: Directional Drilling R649-3-11
NBU 921-35C1CS
T9S-R21E
Section 35: NENW (Surf), NENW (Bottom)
Surface: 399' FNL, 1591' FWL
Bottom Hole: 522' FNL, 2147' 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 921-35C1CS is located within the Natural Buttes Unit area.
- Kerr-McGee is permitting this well as a directional well in order to minimize surface disturbance. Locating the well at the surface location and directionally drilling from this location, Kerr-McGee will be able to utilize the existing road and pipelines in the area.
- Furthermore, Kerr-McGee certifies that it is the sole working interest owner within 460 feet of the entire directional well bore.

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

Sincerely,

KERR-MCGEE OIL & GAS ONSHORE LP

A handwritten signature in blue ink 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)

November 19, 2010

Memorandum

To: Assistant District Manager Minerals, Vernal District

From: Michael Coulthard, Petroleum Engineer

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

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

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

(Proposed PZ WASATCH-MESA VERDE)

NBU 921-35A Pad

43-047-51339	NBU 921-35A1BS	Sec 35 T09S R21E 0522 FNL 0455 FEL
	BHL	Sec 35 T09S R21E 0327 FNL 0499 FEL

43-047-51340	NBU 921-35A4CS	Sec 35 T09S R21E 0524 FNL 0445 FEL
	BHL	Sec 35 T09S R21E 1079 FNL 0494 FEL

43-047-51341	NBU 921-35B1BS	Sec 35 T09S R21E 0518 FNL 0474 FEL
	BHL	Sec 35 T09S R21E 0257 FNL 1813 FEL

43-047-51342	NBU 921-35B4BS	Sec 35 T09S R21E 0520 FNL 0464 FEL
	BHL	Sec 35 T09S R21E 0916 FNL 1817 FEL

NBU 921-35B Pad

43-047-51343	NBU 921-35B1CS	Sec 35 T09S R21E 0468 FNL 2339 FEL
	BHL	Sec 35 T09S R21E 0582 FNL 1816 FEL

43-047-51344	NBU 921-35B4CS	Sec 35 T09S R21E 0488 FNL 2340 FEL
	BHL	Sec 35 T09S R21E 1249 FNL 1818 FEL

43-047-51345	NBU 921-35C1BS	Sec 35 T09S R21E 0458 FNL 2338 FEL
	BHL	Sec 35 T09S R21E 0207 FNL 2154 FWL

43-047-51346	NBU 921-35C4BS	Sec 35 T09S R21E 0478 FNL 2339 FEL
	BHL	Sec 35 T09S R21E 0860 FNL 2144 FWL

API # WELL NAME LOCATION

(Proposed PZ WASATCH-MESA VERDE)

NBU 921-35C Pad

43-047-51347 NBU 921-35C1CS Sec 35 T09S R21E 0399 FNL 1591 FWL
BHL Sec 35 T09S R21E 0522 FNL 2147 FWL
43-047-51348 NBU 921-35D1BS Sec 35 T09S R21E 0389 FNL 1592 FWL
BHL Sec 35 T09S R21E 0089 FNL 0831 FWL
43-047-51349 NBU 921-35D1CS Sec 35 T09S R21E 0409 FNL 1589 FWL
BHL Sec 35 T09S R21E 0488 FNL 0823 FWL
43-047-51350 NBU 921-35D4CS Sec 35 T09S R21E 0418 FNL 1588 FWL
BHL Sec 35 T09S R21E 1182 FNL 0818 FWL

NBU 921-35F2 Pad

43-047-51351 NBU 921-35C4CS Sec 35 T09S R21E 1686 FNL 1699 FWL
BHL Sec 35 T09S R21E 1187 FNL 2148 FWL
43-047-51352 NBU 921-35E1CS Sec 35 T09S R21E 1691 FNL 1679 FWL
BHL Sec 35 T09S R21E 1933 FNL 0826 FWL
43-047-51353 NBU 921-35E2AS Sec 35 T09S R21E 1688 FNL 1689 FWL
BHL Sec 35 T09S R21E 1498 FNL 0535 FWL

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

Michael L. Coulthard

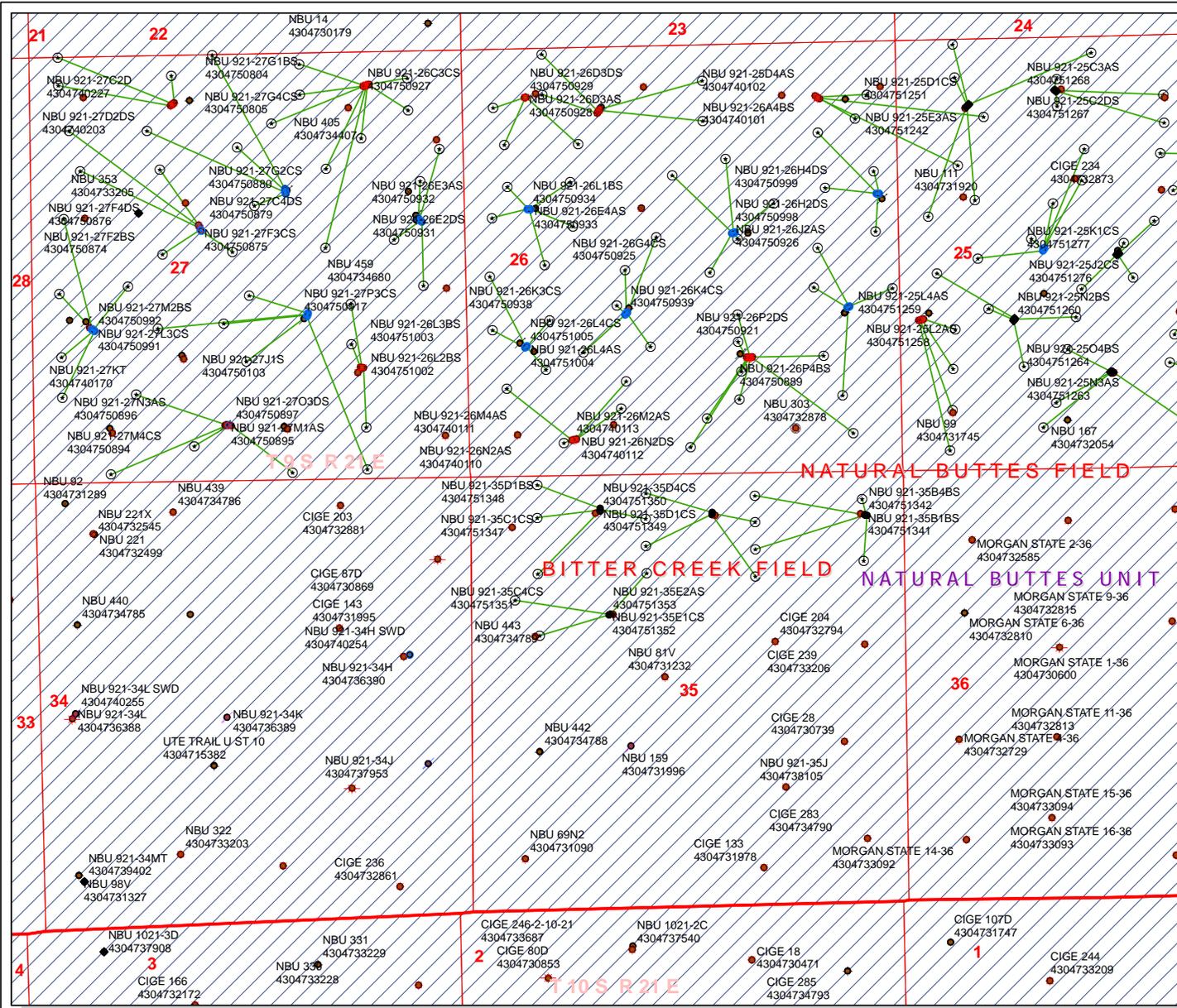
Digitally signed by Michael L. Coulthard
DN: cn=Michael L. Coulthard, o=Bureau of Land Management,
ou=Branch of Minerals, email=Michael_Coulthard@blm.gov, c=US
Date: 2010.11.19 09:52:13 -07'00'

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

MCoulthard:mc:11-19-10

API Number: 4304751347
Well Name: NBU 921-35C1CS
Township 09.0 S Range 21.0 E Section 35
Meridian: SLBM
Operator: KERR-MCGEE OIL & GAS ONSHORE, L.P.

Map Prepared:
Map Produced by Diana Mason



Units

STATUS

- ACTIVE
- EXPLORATORY
- GAS STORAGE
- NF PP OIL
- NF SECONDARY
- PI OIL
- PP GAS
- PP GEOTHERMAL
- PP OIL
- SECONDARY
- TERMINATED

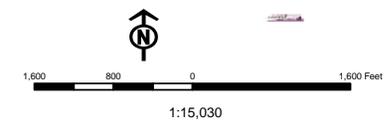
Fields

- Sections
- Township
- Bottom Hole Location - AGRC

Wells Query

Status

- APD - Approved Permit
- DRL - Spurred (Drilling Commenced)
- GIW - Gas Injection
- GS - Gas Storage
- LA - Location Abandoned
- LDC - New Location
- OPS - Operation Suspended
- PL - Plugged Abandoned
- PGW - Producing Gas Well
- POW - Producing Oil Well
- RET - Returned APD
- SGW - Shut-in Gas Well
- SHW - Shut-in Oil Well
- TA - Temp. Abandoned
- TW - Test Well
- WDW - Water Disposal
- WIW - Water Injection Well
- WSW - Water Supply Well



BOPE REVIEW KERR-MCGEE OIL & GAS ONSHORE, L.P. NBU 921-35C1CS 4304751347000

Well Name	KERR-MCGEE OIL & GAS ONSHORE, L.P. NBU 921-35C1CS 430475134			
String	Surf	Prod		
Casing Size(")	8.625	4.500		
Setting Depth (TVD)	2305	9684		
Previous Shoe Setting Depth (TVD)	40	2305		
Max Mud Weight (ppg)	8.4	12.0		
BOPE Proposed (psi)	500	5000		
Casing Internal Yield (psi)	3390	7780		
Operators Max Anticipated Pressure (psi)	5907	11.7		

Calculations	Surf String	8.625	"
Max BHP (psi)	$.052 * \text{Setting Depth} * \text{MW} =$	1007	
			BOPE Adequate For Drilling And Setting Casing at Depth?
MASP (Gas) (psi)	$\text{Max BHP} - (0.12 * \text{Setting Depth}) =$	730	NO <input type="text" value="air drill"/>
MASP (Gas/Mud) (psi)	$\text{Max BHP} - (0.22 * \text{Setting Depth}) =$	500	NO <input type="text" value="OK"/>
			*Can Full Expected Pressure Be Held At Previous Shoe?
Pressure At Previous Shoe	$\text{Max BHP} - .22 * (\text{Setting Depth} - \text{Previous Shoe Depth}) =$	509	NO <input type="text" value="Reasonable depth in area"/>
Required Casing/BOPE Test Pressure=		2305	psi
*Max Pressure Allowed @ Previous Casing Shoe=		40	psi *Assumes 1psi/ft frac gradient

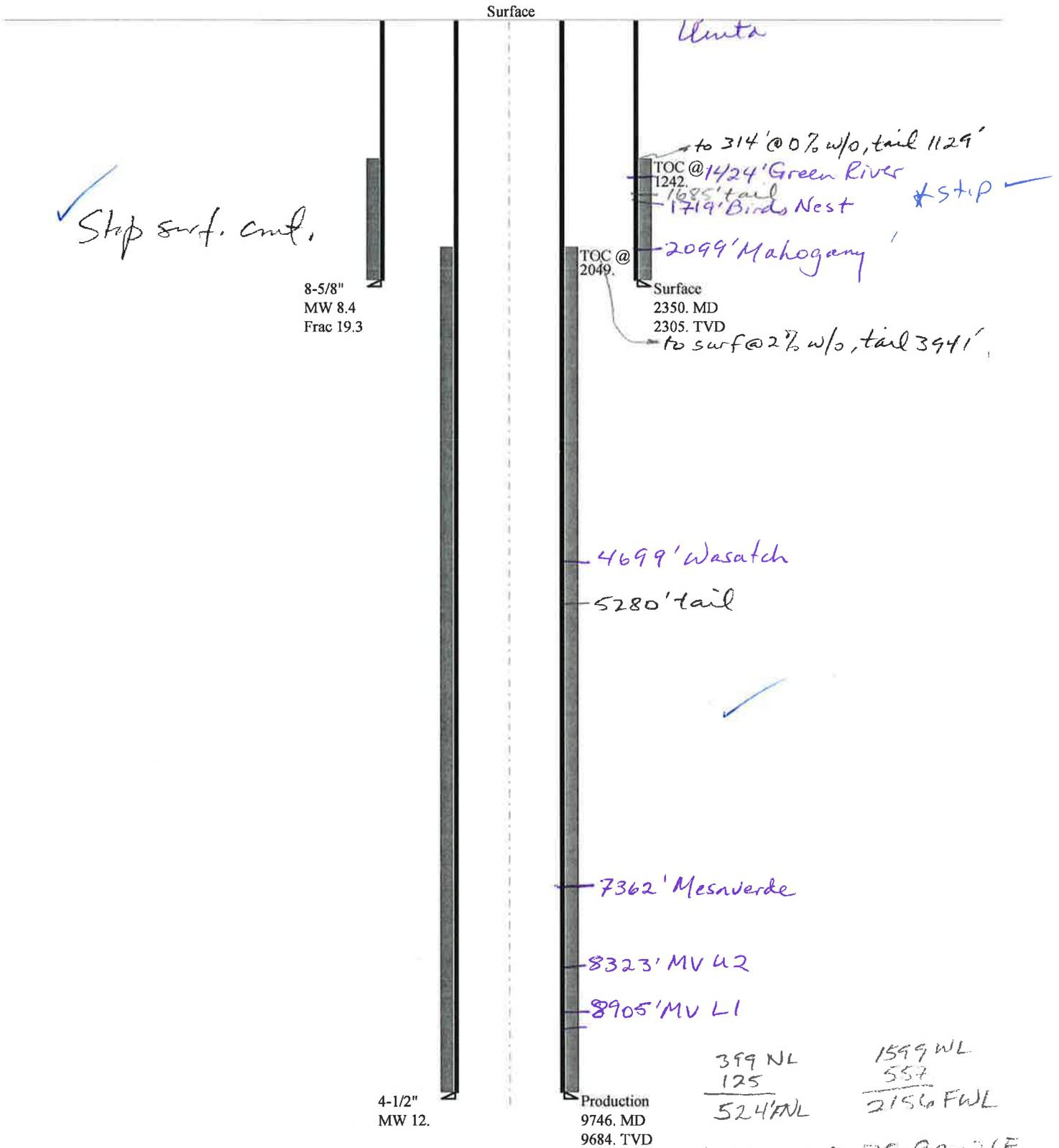
Calculations	Prod String	4.500	"
Max BHP (psi)	$.052 * \text{Setting Depth} * \text{MW} =$	6043	
			BOPE Adequate For Drilling And Setting Casing at Depth?
MASP (Gas) (psi)	$\text{Max BHP} - (0.12 * \text{Setting Depth}) =$	4881	YES <input type="text"/>
MASP (Gas/Mud) (psi)	$\text{Max BHP} - (0.22 * \text{Setting Depth}) =$	3913	YES <input type="text" value="OK"/>
			*Can Full Expected Pressure Be Held At Previous Shoe?
Pressure At Previous Shoe	$\text{Max BHP} - .22 * (\text{Setting Depth} - \text{Previous Shoe Depth}) =$	4420	NO <input type="text" value="Reasonable"/>
Required Casing/BOPE Test Pressure=		5000	psi
*Max Pressure Allowed @ Previous Casing Shoe=		2305	psi *Assumes 1psi/ft frac gradient

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

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

43047513470000 NBU 921-35C1CS

Casing Schematic



NE NW Sec 35-98-21E

Well name:	43047513470000 NBU 921-35C1CS		
Operator:	KERR-MCGEE OIL & GAS ONSHORE, L.P.		
String type:	Surface	Project ID:	43-047-51347
Location:	UINTAH COUNTY		

Design parameters:

Collapse

Mud weight: 8.400 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: 106 °F
 Temperature gradient: 1.40 °F/100ft
 Minimum section length: 100 ft

Cement top: 1,242 ft

Burst

Max anticipated surface pressure: 2,068 psi
 Internal gradient: 0.120 psi/ft
 Calculated BHP 2,345 psi

No backup mud specified.

Tension:

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

Tension is based on air weight.
 Neutral point: 2,056 ft

Directional Info - Build & Drop

Kick-off point 300 ft
 Departure at shoe: 405 ft
 Maximum dogleg: 2 °/100ft
 Inclination at shoe: 13.7 °

Re subsequent strings:

Next setting depth: 9,746 ft
 Next mud weight: 12,000 ppg
 Next setting BHP: 6,075 psi
 Fracture mud wt: 19,250 ppg
 Fracture depth: 2,350 ft
 Injection pressure: 2,350 psi

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Est. Cost (\$)
1	2350	8.625	28.00	I-55	LT&C	2305	2350	7.892	93060

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	1006	1880	1.869	2345	3390	1.45	64.5	348	5.39 J

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

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

Date: December 2, 2010
 Salt Lake City, Utah

Remarks:

Collapse is based on a vertical depth of 2305 ft, a mud weight of 8.4 ppg. The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

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

Well name:	43047513470000 NBU 921-35C1CS		
Operator:	KERR-MCGEE OIL & GAS ONSHORE, L.P.		
String type:	Production	Project ID:	43-047-51347
Location:	UINTAH	COUNTY	

Design parameters:

Collapse

Mud weight: 12.000 ppg
Internal fluid density: 1.000 ppg

Minimum design factors:

Collapse:

Design factor 1.125

Environment:

H2S considered? No
Surface temperature: 74 °F
Bottom hole temperature: 210 °F
Temperature gradient: 1.40 °F/100ft
Minimum section length: 100 ft

Burst:

Design factor 1.00

Cement top: 2,049 ft

Burst

Max anticipated surface pressure: 3,906 psi
Internal gradient: 0.220 psi/ft
Calculated BHP 6,037 psi

No backup mud specified.

Tension:

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

Directional Info - Build & Drop

Kick-off point 300 ft
Departure at shoe: 571 ft
Maximum dogleg: 2 °/100ft
Inclination at shoe: 0 °

Tension is based on air weight.

Neutral point: 8,009 ft

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Est. Cost (\$)
1	9746	4.5	11.60	I-80	LT&C	9684	9746	3.875	128647
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	5534	6360	1.149	6037	7780	1.29	112.3	212	1.89 J

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

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

Date: December 2, 2010
Salt Lake City, Utah

Remarks:

Collapse is based on a vertical depth of 9684 ft, a mud weight of 12 ppg. An internal gradient of .052 psi/ft was used for collapse from TD to TD. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

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

From: Jim Davis
To: Bonner, Ed; Hill, Brad; Mason, Diana
CC: Curry, Kristine; Danielle Piernot; Garrison, LaVonne; Hayden, Martha;...
Date: 12/22/2010 5:49 AM
Subject: Kerr McGee APD approvals in 9S 21E Sec 35
Attachments: KMG approvals 921-35 on 12.22.2010.xls

The following wells have been approved by SITLA under the following arch and paleo stipulations. This is a long list, so I'm attaching a spreadsheet with the same information.

A note on arch and paleo stipulations: Wells that have an arch note "non-significant site" do not need to be avoided or mitigated. Only those that say "needs to be avoided".

The paleo reports make recommendations for "spot paleo monitoring" or "full paleo monitoring". It is my understanding that Kerr McGee is taking these stipulations and doing full monitoring in either case, in an abundance of caution.

-Jim Davis

Well Name	API	Paleo Stipulations	Arch Stipulations
Kerr-McGee's NBU 921-35A1BS (U-07-MQ-1437b,i,p,s)		API #4304751339	IPC 10-98 Spot Paleo Monitoring
Kerr-McGee's NBU 921-35A4CS (U-07-MQ-1437b,i,p,s)		API #4304751340	IPC 10-98 Spot Paleo Monitoring
Kerr-McGee's NBU 921-35B1BS (U-07-MQ-1437b,i,p,s)		API #4304751341	IPC 10-98 Spot Paleo Monitoring
Kerr-McGee's NBU 921-35B4BS (U-07-MQ-1437b,i,p,s)		API #4304751342	IPC 10-98 Spot Paleo Monitoring
Kerr-McGee's NBU 921-35B1CS (U-07-MQ-1437b,i,p,s; eligible site 42Un6461, just south of proposed pipeline needs to be avoided)		API #4304751343	IPC 10-98 Spot Paleo Monitoring
Kerr-McGee's NBU 921-35B4CS (U-07-MQ-1437b,i,p,s; eligible site 42Un6461, just south of proposed pipeline needs to be avoided)		API #4304751344	IPC 10-98 Spot Paleo Monitoring
Kerr-McGee's NBU 921-35C1BS (U-07-MQ-1437b,i,p,s; eligible site 42Un6461, just south of proposed pipeline needs to be avoided)		API #4304751345	IPC 10-98 Spot Paleo Monitoring
Kerr-McGee's NBU 921-35C4BS (U-07-MQ-1437b,i,p,s; eligible site 42Un6461, just south of proposed pipeline needs to be avoided)		API #4304751346	IPC 10-98 Spot Paleo Monitoring
Kerr-McGee's NBU 921-35C1CS MQ-1437b,i,p,s)		API #4304751347	IPC 10-97 Full Paleo Monitoring (U-07-
Kerr-McGee's NBU 921-35D1BS MQ-1437b,i,p,s)		API #4304751348	IPC 10-97 Full Paleo Monitoring (U-07-
Kerr-McGee's NBU 921-35D1CS MQ-1437b,i,p,s)		API #4304751349	IPC 10-97 Full Paleo Monitoring (U-07-
Kerr-McGee's NBU 921-35D4CS MQ-1437b,i,p,s)		API #4304751350	IPC 10-97 Full Paleo Monitoring (U-07-
Kerr-McGee's NBU 921-35C4CS MQ-1437b,i,p,s)		API #4304751351	IPC 10-97 Full Paleo Monitoring (U-07-
Kerr-McGee's NBU 921-35E1CS MQ-1437b,i,p,s)		API #4304751352	IPC 10-97 Full Paleo Monitoring (U-07-
Kerr-McGee's NBU 921-35E2AS MQ-1437b,i,p,s)		API #4304751353	IPC 10-97 Full Paleo Monitoring (U-07-
Kerr-McGee's NBU 921-35F1BS MQ-1437b,i,p,s)		API #4304751355	IPC 10-97 Full Paleo Monitoring (U-07-
Kerr-McGee's NBU 921-35F4BS MQ-1437b,i,p,s)		API #4304751356	IPC 10-97 Full Paleo Monitoring (U-07-
Kerr-McGee's NBU 921-35F4CS MQ-1437b,i,p,s)		API #4304751357	IPC 10-97 Full Paleo Monitoring (U-07-
Kerr-McGee's NBU 921-35K1BS		API #4304751358	IPC 10-97 Full Paleo Monitoring (U-07-

MQ-1437b,i,p,s)			
Kerr-McGee's NBU 921-35K1CS	API #4304751359	IPC 10-97 Full Paleo Monitoring	(U-07-MQ-1437b,i,p,s)
Kerr-McGee's NBU 921-35G1BS	API #4304751360	IPC 10-98 Spot Paleo Monitoring	(U-07-MQ-1437b,i,p,s; 1 non-significant site, 42Un2395, adjacent to the road)
Kerr-McGee's NBU 921-35G1CS	API #4304751361	IPC 10-98 Spot Paleo Monitoring	(U-07-MQ-1437b,i,p,s; 1 non-significant site, 42Un2395, adjacent to the road)
Kerr-McGee's NBU 921-35G4BS	API #4304751362	IPC 10-98 Spot Paleo Monitoring	(U-07-MQ-1437b,i,p,s; 1 non-significant site, 42Un2395, adjacent to the road)
Kerr-McGee's NBU 921-35G4CS	API #4304751363	IPC 10-98 Spot Paleo Monitoring	(U-07-MQ-1437b,i,p,s; 1 non-significant site, 42Un2395, adjacent to the road)
Kerr-McGee's NBU 921-35J1S	API #4304751364	IPC 10-98 Spot Paleo Monitoring	(U-07-MQ-1437b,i,p,s; 1 non-significant site, 42Un2395, adjacent to the road)
Kerr-McGee's NBU 921-35H1BS	API #4304751365	IPC 10-98 Spot Paleo Monitoring	(U-07-MQ-1437b,i,p,s)
Kerr-McGee's NBU 921-35H1CS	API #4304751366	IPC 10-98 Spot Paleo Monitoring	(U-07-MQ-1437b,i,p,s)
Kerr-McGee's NBU 921-35H4BS	API #4304751367	IPC 10-98 Spot Paleo Monitoring	(U-07-MQ-1437b,i,p,s)
Kerr-McGee's NBU 921-35H4CS	API #4304751368	IPC 10-98 Spot Paleo Monitoring	(U-07-MQ-1437b,i,p,s)
Kerr-McGee's NBU 921-35I1BS	API #4304751369	IPC 10-100 Full Paleo Monitoring	(U-07-MQ-1437b,i,p,s)
Kerr-McGee's NBU 921-35I1CS	API #4304751370	IPC 10-100 Full Paleo Monitoring	(U-07-MQ-1437b,i,p,s)
Kerr-McGee's NBU 921-35I4BS	API #4304751371	IPC 10-100 Full Paleo Monitoring	(U-07-MQ-1437b,i,p,s)
Kerr-McGee's NBU 921-35I4CS	API #4304751372	IPC 10-100 Full Paleo Monitoring	(U-07-MQ-1437b,i,p,s)
Kerr-McGee's NBU 921-35J1CS	API #4304751373	IPC 10-98 Spot Paleo Monitoring	(U-07-MQ-1437b,i,p,s)
Kerr-McGee's NBU 921-35J4BS	API #4304751374	IPC 10-100 Full Paleo Monitoring	(U-07-MQ-1437b,i,p,s)
Kerr-McGee's NBU 921-35K4BS	API #4304751375	IPC 10-99 Spot Paleo Monitoring	(U-07-MQ-1437b,i,p,s)
Kerr-McGee's NBU 921-35K4CS	API #4304751376	IPC 10-99 Spot Paleo Monitoring	(U-07-MQ-1437b,i,p,s)
Kerr-McGee's NBU 921-35N1BS	API #4304751377	IPC 10-99 Spot Paleo Monitoring	(U-07-MQ-1437b,i,p,s)
Kerr-McGee's NBU 921-35N1CS	API #4304751378	IPC 10-99 Spot Paleo Monitoring	(U-07-MQ-1437b,i,p,s)
Kerr-McGee's NBU 921-35E4CS	API #4304751379	IPC 10-99 Spot Paleo Monitoring	(U-07-MQ-1437b,i,p,s)
Kerr-McGee's NBU 921-35P4CS	API #4304751380	IPC 10-100 Full Paleo Monitoring	(U-07-MQ-1437b,i,p,s)
Kerr-McGee's NBU 921-35P1CS	API #4304751381	IPC 10-100 Full Paleo Monitoring	(U-07-MQ-1437b,i,p,s)
Kerr-McGee's NBU 921-35P1BS	API #4304751382	IPC 10-100 Full Paleo Monitoring	(U-07-MQ-1437b,i,p,s)
Kerr-McGee's NBU 921-35O4CS	API #4304751383	IPC 10-100 Full Paleo Monitoring	(U-07-MQ-1437b,i,p,s; 1 non-significant site, 42Un1836, adjacent to pipeline)
Kerr-McGee's NBU 921-35O4BS	API #4304751384	IPC 10-100 Full Paleo Monitoring	(U-07-MQ-1437b,i,p,s; 1 non-significant site, 42Un1836, adjacent to pipeline)
Kerr-McGee's NBU 921-35O1CS	API #4304751385	IPC 10-100 Full Paleo Monitoring	(U-07-MQ-1437b,i,p,s; 1 non-significant site, 42Un1836, adjacent to pipeline)
Kerr-McGee's NBU 921-35L1BS	API #4304751386	IPC 10-99 Spot Paleo Monitoring	

(U-07-MQ-1437b,i,p,s)		
Kerr-McGee's NBU 921-35O1BS	API #4304751387	IPC 10-100 Spot Paleo Monitoring
(U-07-MQ-1437b,i,p,s; 1 non-significant site, 42Un1836, adjacent to pipeline)		
Kerr-McGee's NBU 921-35N4CS	API #4304751388	IPC 10-100 Spot Paleo Monitoring
(U-07-MQ-1437b,i,p,s; 1 non-significant site, 42Un1836, adjacent to pipeline)		
Kerr-McGee's NBU 921-35L1CS	API #4304751389	IPC 10-99 Spot Paleo Monitoring
(U-07-MQ-1437b,i,p,s)		
Kerr-McGee's NBU 921-35L4CS	API #4304751390	IPC 10-99 Spot Paleo Monitoring
(U-07-MQ-1437b,i,p,s)		
Kerr-McGee's NBU 921-35M1BS	API #4304751391	IPC 10-99 Spot Paleo Monitoring
(U-07-MQ-1437b,i,p,s)		
Kerr-McGee's NBU 921-35M1CS	API #4304751392	IPC 10-99 Spot Paleo Monitoring
(U-07-MQ-1437b,i,p,s)		
Kerr-McGee's NBU 921-35M4BS	API #4304751393	IPC 10-99 Spot Paleo Monitoring
(U-07-MQ-1437b,i,p,s)		
Kerr-McGee's NBU 921-35M4CS	API #4304751394	IPC 10-99 Spot Paleo Monitoring
(U-07-MQ-1437b,i,p,s)		
Kerr-McGee's NBU 921-35N4BS	API #4304751395	IPC 10-100 Spot Paleo Monitoring
(U-07-MQ-1437b,i,p,s; 1 non-significant site, 42Un1836, adjacent to pipeline)		

ON-SITE PREDRILL EVALUATION

Utah Division of Oil, Gas and Mining

Operator	KERR-MCGEE OIL & GAS ONSHORE, L.P.				
Well Name	NBU 921-35C1CS				
API Number	43047513470000	APD No	3161	Field/Unit	NATURAL BUTTES
Location: 1/4,1/4	NENW	Sec 35	Tw 9.0S	Rng 21.0E	399 FNL 1591 FWL
GPS Coord (UTM)	626170	4428454	Surface Owner		

Participants

See other comments.

Regional/Local Setting & Topography

The general area is within the Natural Buttes Unit in the lower portion of the Sand Wash Drainage of Uintah, County, approximately 36 air miles and 42.9 road miles south of Vernal, Utah. Access is by State of Utah Highways, Uintah County and existing oilfield development roads to the site. Topography of the Sand Wash area is characterized by broad open flats 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 921-35C pad will be created by significantly enlarging the existing pad of the NBU 310 gas well. It will be primarily enlarged to the east, west and north. Four gas wells, to be directionally drilled, will be added. They are the NBU 921-35D1BS, 921-35C1CS, 921135D1CS and 921-35D4CS. The site is at the end of a sloping rocky ridge on the south and extends to broken terrain on the north. It is oriented in a south to north direction. Significant fill (11.6) feet will be needed on the northwest or Location Corner 2, and 18.6 feet of fill on the southeast at Corner 9. A swale or drainage with minor flows crosses the reserve pit area. It will be blocked with pit spoils until the pit is closed. Following pit closure, a diversion needs to be constructed across the pit area running north and crossing the road. A swale to the northwest is partially filled now. It will be filled with the new construction. A major tributary of Sand Wash is about 1 mile to the east of the site and the White River about 3 mile down drainage. The selected site appears to be suitable for enlarging a pad, drilling and operating the proposed wells and is the only site in the immediate area.

Both the surface and minerals are owned by SITLA. Jim Davis represented SITLA at the pre-site investigation. Mr. Davis had no concerns pertaining to this location excepted as covered above. SITLA provided a seed mix to be used when reclaiming the site.

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.

Surface Use Plan

Current Surface Use

- Grazing
- Recreational
- Wildlife Habitat
- Existing Well Pad

New Road Miles	Well Pad	Src Const Material	Surface Formation
0	Width 237 Length 435	Onsite	UNTA

Ancillary Facilities N

Waste Management Plan Adequate?

Environmental Parameters

Affected Floodplains and/or Wetlands N

Flora / Fauna

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

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

Soil Type and Characteristics

Surface soils are shallow and rocky

Erosion Issues Y

Sedimentation Issues Y

Site Stability Issues N

Drainage Diversion Required? Y

A swale or drainage with minor flows crosses the reserve pit area. It will be blocked with pit spoils until the pit is closed. Following pit closure, a diversion needs to be constructed across the pit area running north and crossing the road.

Berm Required? N

Erosion Sedimentation Control Required?

A swale or drainage with minor flows crosses the reserve pit area. It will be blocked with pit spoils until the pit is closed. Following pit closure, a diversion needs to be constructed across the pit area running north and crossing the road.

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

Reserve Pit

Site-Specific Factors

Site Ranking

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

Characteristics / Requirements

The proposed reserve pit is 1205' x 260' x 12' deep located primarily in a cut on the northeast corner of the location. Kerr McGee plans a 30-mil liner with a double felt sub-liner.

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

Other Observations / Comments

Floyd Bartlett (DOGM), Sheila Wopsock, Clay Einerson, Lovell Young, Grizz Oleen, Charles Chase, Colby Sutton, Doyle Holmes, Claudia Sassa, (Kerr McGee), Mitch Batty, John Slaugh, (Timberline Engineering and Land Surveying), Jim Davis (SITLA) and Ben Williams, (UDWR).

Floyd Bartlett
Evaluator

11/30/2010
Date / Time

Application for Permit to Drill

Statement of Basis

12/27/2010

Utah Division of Oil, Gas and Mining

Page 1

APD No	API WellNo	Status	Well Type	Surf Owner	CBM
3161	43047513470000	LOCKED	GW	S	No
Operator	KERR-MCGEE OIL & GAS ONSHORE, L.P.		Surface Owner-APD		
Well Name	NBU 921-35C1CS		Unit	NATURAL BUTTES	
Field	NATURAL BUTTES		Type of Work	DRILL	
Location	NENW 35 9S 21E S 399 FNL 1591 FWL		GPS Coord (UTM)	626174E	4428444N

Geologic Statement of Basis

Kerr McGee proposes to set 2,350' of surface casing at this location. The depth to the base of the moderately saline water at this location is estimated to be at a depth of 1,900'. A search of Division of Water Rights records shows one water well within a 10,000 foot radius of the center of Section 35. The well is listed as 2,640 feet deep and used for drilling water. The surface formation at this site is the Uinta Formation. The Uinta Formation is made up of interbedded shales and sandstones. The sandstones are mostly lenticular and discontinuous and should not be a significant source of useable ground water. The proposed casing and cement should adequately protect. Any usable ground water.

Brad Hill
APD Evaluator

12/13/2010
Date / Time

Surface Statement of Basis

The general area is within the Natural Buttes Unit in the lower portion of the Sand Wash Drainage of Uintah, County, approximately 36 air miles and 42.9 road miles south of Vernal, Utah. Access is by State of Utah Highways, Uintah County and existing oilfield development roads to the site. Topography of the Sand Wash area is characterized by broad open flats 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 921-35C pad will be created by significantly enlarging the existing pad of the NBU 310 gas well. It will be primarily enlarged to the east, west and north. Four gas wells, to be directionally drilled, will be added. They are the NBU 921-35D1BS, NBU 921-35C1CS, NBU 921-35D1CS and NBU 921-35D4CS. The site is at the end of a sloping rocky ridge on the south and extends to broken terrain on the north. It is oriented in a south to north direction. Significant fill (11.6) feet will be needed on the northwest or Location Corner 2, and 18.6 feet of fill on the southeast at Corner 9. A swale or drainage with minor flows crosses the reserve pit area. It will be blocked with pit spoils until the pit is closed. Following pit closure, a diversion needs to be constructed across the pit area running north and crossing the road. A swale to the northwest is partially filled now. It will be filled with the new construction. A major tributary of Sand Wash is about 1 mile to the east of the site and the White River about 3 mile down drainage. The selected site appears to be suitable for enlarging a pad, drilling and operating the proposed wells and is the only site in the immediate area.

Both the surface and minerals are owned by SITLA. Jim Davis represented SITLA at the pre-site investigation. Mr. Davis had no concerns pertaining to this location excepted as covered above. SITLA provided a seed mix to be used when reclaiming the site.

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.

Application for Permit to Drill Statement of Basis

12/27/2010

Utah Division of Oil, Gas and Mining

Page 2

Floyd Bartlett
Onsite Evaluator

11/30/2010
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	Drainages adjacent to the proposed pad shall be diverted around the location.
Surface	The reserve pit shall be fenced upon completion of drilling operations.

WORKSHEET APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 11/18/2010

WELL NAME: NBU 921-35C1CS

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

CONTACT: Danielle Piernot

API NO. ASSIGNED: 43047513470000

PHONE NUMBER: 720 929-6156

PROPOSED LOCATION: NENW 35 090S 210E

SURFACE: 0399 FNL 1591 FWL

BOTTOM: 0522 FNL 2147 FWL

COUNTY: UINTAH

LATITUDE: 39.99865

UTM SURF EASTINGS: 626174.00

FIELD NAME: NATURAL BUTTES

LEASE TYPE: 3 - State

LEASE NUMBER: UO 01194 ST

SURFACE OWNER: 3 - State

Permit Tech Review:

Engineering Review:

Geology Review:

LONGITUDE: -109.52195

NORTHINGS: 4428444.00

PROPOSED PRODUCING FORMATION(S): WASATCH-MESA VERDE

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: 460' Fr U Bdry & Uncommitted Tracts
- R649-3-11. Directional Drill

Comments: Presite Completed

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



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 921-35C1CS
API Well Number: 43047513470000
Lease Number: UO 01194 ST
Surface Owner: STATE
Approval Date: 12/27/2010

Issued to:

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

Authority:

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

Duration:

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

Commingle:

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

General:

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

Conditions of Approval:

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

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

Surface casing shall be cemented to the surface.

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

Additional Approvals:

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

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

Notification Requirements:

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

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

Contact Information:

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

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

Reporting Requirements:

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

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

Approved By:



For John Rogers
Associate Director, Oil & Gas

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 01194 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:
		7. UNIT or CA AGREEMENT NAME: NATURAL BUTTES
1. TYPE OF WELL Gas Well	8. WELL NAME and NUMBER: NBU 921-35C1CS	
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.	9. API NUMBER: 43047513470000	
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: 0399 FNL 1591 FWL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NENW Section: 35 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 checked="" type="checkbox"/> SPUD REPORT Date of Spud: 3/25/2011 <input type="checkbox"/> DRILLING REPORT Report Date:	<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 PETE MARTIN BUCKET RIG. DRILLED 20" CONDUCTOR HOLE TO 40'. RAN 14" 36.7# SCHEDULE 10 CONDUCTOR PIPE. CMT W/28 SX READY MIX. SPUD WELLL LOCATION ON 03/25/2011 AT 13:30 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 3/29/2011	

BLM - Vernal Field Office - Notification Form

Operator KERR-McGEE OIL & GAS Rig Name/# BUCKET RIG
 Submitted By ANDY LYTLE Phone Number 720.929.6100
 Well Name/Number NBU 921-35C1CS
 Qtr/Qtr NENW Section 35 Township 9S Range 21E
 Lease Serial Number UO-01194ST
 API Number 4304751347

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

Date/Time 03/25/2011 14:00 HRS AM PM

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

- Surface Casing
 Intermediate Casing
 Production Casing
 Liner
 Other

RECEIVED

MAR 24 2011

DIV. OF OIL, GAS & MINING

Date/Time 04/20/2011 08:00 HRS AM PM

BOPE

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

Date/Time _____ AM PM

Remarks ESTIMATED DATE AND TIME. PLEASE CONTACT KENNY GATHINGS AT

435.781.7048 OR LOVEL YOUNG AT 435.828.0986

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	FORM 9 5. LEASE DESIGNATION AND SERIAL NUMBER: UO 01194 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 Gas Well	8. WELL NAME and NUMBER: NBU 921-35C1CS
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.	9. API NUMBER: 43047513470000
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779	PHONE NUMBER: 720 929-6515 Ext
4. LOCATION OF WELL FOOTAGES AT SURFACE: 0399 FNL 1591 FWL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NENW Section: 35 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 checked="" type="checkbox"/> NOTICE OF INTENT Approximate date work will start: 4/5/2011 <input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion: <input type="checkbox"/> SPUD REPORT Date of Spud: <input type="checkbox"/> DRILLING REPORT Report Date:	<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 checked="" type="checkbox"/> OTHER	<input type="checkbox"/> CASING REPAIR <input type="checkbox"/> CHANGE WELL NAME <input type="checkbox"/> CONVERT WELL TYPE <input type="checkbox"/> NEW CONSTRUCTION <input type="checkbox"/> PLUG BACK <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION <input type="checkbox"/> TEMPORARY ABANDON <input type="checkbox"/> WATER DISPOSAL <input type="checkbox"/> APD EXTENSION OTHER: <input type="text" value="Pit Refurb/ ACTS"/>

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

Kerr-McGee Oil & Gas Onshore, LP is requesting to refurb the existing pit on this multi-well pad for completion operations. The refurb pit will be relined per the requirements in the COA of the APD. Upon completion of the wells on this pad, Kerr-McGee is also requesting to utilize this pit as an ACTS staging pit to be utilized for other completion operations in the area. The trucks will unload water into these tanks before the water is placed into the refurbished pit. The purpose of the frac tanks is to collect any hydro-carbons that may have been associated with the other completion operations before releasing into the pit. We plan to keep this pit open for 1 year. During this time the surrounding well location completion fluids will be recycled in this pit and utilized for other frac jobs in the surrounding sections. Thank you.

Approved by the Utah Division of Oil, Gas and Mining

Date: 04/04/2011

By:

NAME (PLEASE PRINT) Danielle Piernot	PHONE NUMBER 720 929-6156	TITLE Regulatory Analyst
SIGNATURE N/A	DATE 3/31/2011	



The Utah Division of Oil, Gas, and Mining

- State of Utah
- Department of Natural Resources

Electronic Permitting System - Sundry Notices

Sundry Conditions of Approval Well Number 43047513470000

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

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
4304751350	NBU 921-35D4CS		NENW	35	9S	21E	UINTAH
Action Code	Current Entity Number	New Entity Number	Spud Date			Entity Assignment Effective Date	
B	99999	2900	3/25/2011			3/31/11	
Comments: MIRU PETE MARTIN BUCKET RIG. <i>WSMVD</i> SPUD WELL LOCATION ON 03/25/2011 AT 0930 HRS <i>BHL = NWNW</i>							

Well 2

API Number	Well Name		QQ	Sec	Twp	Rng	County
4304751349	NBU 921-35D1CS		NENW	35	9S	21E	UINTAH
Action Code	Current Entity Number	New Entity Number	Spud Date			Entity Assignment Effective Date	
B	99999	2900	3/25/2011			3/31/11	
Comments: MIRU PETE MARTIN BUCKET RIG. <i>WSMVD</i> SPUD WELL LOCATION ON 03/25/2011 AT 10:45 HRS. <i>BHL = NWNW</i>							

Well 3

API Number	Well Name		QQ	Sec	Twp	Rng	County
4304751347	NBU 921-35C1CS		NENW	35	9S	21E	UINTAH
Action Code	Current Entity Number	New Entity Number	Spud Date			Entity Assignment Effective Date	
B	99999	2900	3/25/2011			3/31/11	
Comments: MIRU PETE MARTIN BUCKET RIG. <i>WSMVD</i> SPUD WELL LOCATION 03/25/2011 AT 13:30 HRS <i>BHL = NENW</i>							

ACTION CODES:

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

SHEILA WOPSOCK

Name (Please Print)

Signature

REGULATORY ANALYST

3/31/2011

Title

Date

(5/2000)

RECEIVED

MAR 31 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 01194 ST
SUNDRY NOTICES AND REPORTS ON WELLS		6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		7. UNIT or CA AGREEMENT NAME: NATURAL BUTTES
1. TYPE OF WELL Gas Well	8. WELL NAME and NUMBER: NBU 921-35C1CS	
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.	9. API NUMBER: 43047513470000	
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: 0399 FNL 1591 FWL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NENW Section: 35 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"/> 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"/> SUBSEQUENT REPORT Date of Work Completion:		<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
<input type="checkbox"/> SPUD REPORT Date of Spud:		<input type="checkbox"/> OTHER: <input style="width: 50px;" type="text"/>
<input checked="" type="checkbox"/> DRILLING REPORT Report Date: 4/14/2011		
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc. MIRU AIR RIG ON APRIL 11, 2011. DRILLED 11" SURFACE HOLE TO 2600'. RAN 8 5/8" 28# IJ55 SURFACE CASING. CEMENTED SURFACE CASING. WELL IS WAITING ON ROTARY RIG. DETAILS OF CEMENT JOB WILL BE INCLUDED WITH WELL COMPLETION REPORT.		
Accepted by the Utah Division of Oil, Gas and Mining FOR RECORD ONLY		
NAME (PLEASE PRINT) Andy Lytle	PHONE NUMBER 720 929-6100	TITLE Regulatory Analyst
SIGNATURE N/A	DATE 4/15/2011	

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	FORM 9 5. LEASE DESIGNATION AND SERIAL NUMBER: UO 01194 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 Gas Well	8. WELL NAME and NUMBER: NBU 921-35C1CS
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.	9. API NUMBER: 43047513470000
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779	PHONE NUMBER: 720 929-6515 Ext
4. LOCATION OF WELL FOOTAGES AT SURFACE: 0399 FNL 1591 FWL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NENW Section: 35 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 checked="" type="checkbox"/> NOTICE OF INTENT Approximate date work will start: 5/16/2011	<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 type="checkbox"/> DRILLING REPORT Report Date:	<input checked="" 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: 50px;" type="text"/>

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

The operator requests to change the total depth (TD) in the subject well location. TD will reside in the Blackhawk formation, which is in the Mesaverde group for this well. Please see attached drilling diagram for details.

Approved by the Utah Division of Oil, Gas and Mining

Date: 06/08/2011

By: *Derek Duff*

NAME (PLEASE PRINT) Gina Becker	PHONE NUMBER 720 929-6086	TITLE Regulatory Analyst II
SIGNATURE N/A	DATE 5/16/2011	

Well name:	43047513470000 NBU 921-35C1CS	
Operator:	KERR-MCGEE OIL & GAS ONSHORE, L.P.	
String type:	Production	Project ID: 43-047-51347
Location:	UINTAH COUNTY	

Design parameters:

Collapse

Mud weight: 13.000 ppg
Internal fluid density: 1.000 ppg

Minimum design factors:

Collapse:

Design factor 1.125

Burst:

Design factor 1.00

Environment:

H2S considered? No
Surface temperature: 74 °F
Bottom hole temperature: 225 °F
Temperature gradient: 1.40 °F/100ft
Minimum section length: 100 ft

Cement top:

866 ft

*w/128w
Surf.
CSG @ 257
- Vol*

Burst

Max anticipated surface pressure: 4,900 psi
Internal gradient: 0.220 psi/ft
Calculated BHP 7,268 psi

5m BHP Proposed ✓ on

No backup mud specified.

Tension:

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

Directional well information:

Kick-off point 300 ft
Departure at shoe: 571 ft
Maximum dogleg: 2 °/100ft
Inclination at shoe: 0 °

Tension is based on air weight.
Neutral point: 8,733 ft

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Est. Cost (\$)
1	10824	4.5	11.60	HCP-110	LT&C	10762	10824	3.875	52150
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	6709	8650	1.289	7268	10690	1.47	124.8	279	2.23 J

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

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

Date: June 8, 2011
Salt Lake City, Utah

Remarks:

Collapse is based on a vertical depth of 10762 ft, a mud weight of 13 ppg. An internal gradient of .052 psi/ft was used for collapse from TD. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

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

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

RECEIVED May. 16, 2011



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'				3,390	1,880	348,000	N/A
SURFACE	8-5/8"	0 to 2,570	28.00	IJ-55	LTC	2.10	1.56	5.52	N/A
PRODUCTION	4-1/2"	0 to 10,824	11.60	HCP-110	LTC or BTC	10,690	8,650	279,000	367,000
						1.19	1.19	2.77	3.65

Surface Casing:

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

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

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

Production casing:

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

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

CEMENT PROGRAM

		FT. OF FILL	DESCRIPTION	SACKS	EXCESS	WEIGHT	YIELD
SURFACE	LEAD	500'	Premium cmt + 2% CaCl	180	60%	15.80	1.15
Option 1			+ 0.25 pps flocele				
	TOP OUT CMT (6 jobs)	1,200'	20 gals sodium silicate + Premium cmt	270	0%	15.80	1.15
			+ 2% CaCl + 0.25 pps flocele				
SURFACE		NOTE: If well will circulate water to surface, option 2 will be utilized					
Option 2	LEAD	2,070'	65/35 Poz + 6% Gel + 10 pps gilsonite	190	35%	11.00	3.82
			+ 0.25 pps Flocele + 3% salt BWOW				
	TAIL	500'	Premium cmt + 2% CaCl	150	35%	15.80	1.15
			+ 0.25 pps flocele				
	TOP OUT CMT	as required	Premium cmt + 2% CaCl	as req.		15.80	1.15
PRODUCTION	LEAD	4,224'	Premium Lite II +0.25 pps	320	20%	11.00	3.38
			celloflake + 5 pps gilsonite + 10% gel				
			+ 0.5% extender				
	TAIL	6,600'	50/50 Poz/G + 10% salt + 2% gel	1,560	35%	14.30	1.31
			+ 0.1% R-3				

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

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

FLOAT EQUIPMENT & CENTRALIZERS

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

ADDITIONAL INFORMATION

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

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

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

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

DRILLING ENGINEER:

Nick Spence / Emile Goodwin

DATE:

DRILLING SUPERINTENDENT:

Kenny Gathings / Lovel Young

DATE:



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 01194 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:
		7. UNIT or CA AGREEMENT NAME: NATURAL BUTTES
1. TYPE OF WELL Gas Well	8. WELL NAME and NUMBER: NBU 921-35C1CS	
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.	9. API NUMBER: 43047513470000	
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: 0399 FNL 1591 FWL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NENW Section: 35 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"/> SUBSEQUENT REPORT Date of Work Completion:	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> CHANGE TUBING
<input type="checkbox"/> SPUD REPORT Date of Spud:	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS
<input checked="" type="checkbox"/> DRILLING REPORT Report Date: 6/28/2011	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> FRACTURE TREAT
	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> PLUG AND ABANDON
	<input type="checkbox"/> PRODUCTION START OR RESUME	<input type="checkbox"/> RECLAMATION OF WELL SITE
	<input type="checkbox"/> REPERFORATE CURRENT FORMATION	<input type="checkbox"/> SIDETRACK TO REPAIR WELL
	<input type="checkbox"/> TUBING REPAIR	<input type="checkbox"/> VENT OR FLARE
	<input type="checkbox"/> WATER SHUTOFF	<input type="checkbox"/> SI TA STATUS EXTENSION
	<input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> OTHER: <input type="text"/>
		<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
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.		
MIRU ROTARY RIG. FINISHED DRILLING FROM 2600' TO 10,812' ON JUNE 26, 2011. RAN 4-1/2" 11.6# P110 PRODUCTION CASING. CEMENTED PRODUCTION CASING. RELEASED H&P RIG 311 ON JUNE 28, 2011 @ 20:00 HRS. DETAILS OF CEMENT JOB WILL BE INCLUDED WITH THE WELL COMPLETION REPORT. WELL IS WAITING ON FINAL COMPLETION ACTIVITIES.		
Accepted by the Utah Division of Oil, Gas and Mining FOR RECORD ONLY		
NAME (PLEASE PRINT) Andy Lytle	PHONE NUMBER 720 929-6100	TITLE Regulatory Analyst
SIGNATURE N/A	DATE 6/29/2011	

BLM - Vernal Field Office - Notification Form

Operator KERR MCGEE Rig Name/# H&P 311
Submitted By DOUG BARONE Phone Number 435- 790-1884
Well Name/Number NBU 921-35C1CS

Qtr/Qtr NE/NW Section 35 Township 9S Range 21E
Lease Serial Number UTU-01194 ST
API Number 43-047-51347

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

Date/Time _____ AM PM

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

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

RECEIVED
JUN 28 2011
DIV. OF OIL, GAS & MINING

Date/Time __ __ AM PM

BOPE

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

Date/Time 6/19/2011 18:00 AM PM

Remarks B&C QUICK TEST

BLM - Vernal Field Office - Notification Form

Operator KERR MCGEE Rig Name/# H&P 311
Submitted By PAT CAIN Phone Number 435- 790-1884
Well Name/Number NBU 921-35C1CS

Qtr/Qtr NE/NW Section 35 Township 9S Range 21E
Lease Serial Number UO-01194 ST
API Number 43-047-51347

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

Date/Time _____ AM PM

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

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

RECEIVED

JUN 29 2011

DIV. OF OIL, GAS & MINING

Date/Time TUESDAY JUNE 28TH 2011 AT 1:00 AM
AM PM

BOPE

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

Date/Time 6/19/2011 18:00 AM PM

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		FORM 9
		5. LEASE DESIGNATION AND SERIAL NUMBER: UO 01194 ST
SUNDRY NOTICES AND REPORTS ON WELLS		6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		7. UNIT or CA AGREEMENT NAME: NATURAL BUTTES
1. TYPE OF WELL Gas Well	8. WELL NAME and NUMBER: NBU 921-35C1CS	
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.	9. API NUMBER: 43047513470000	
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: 0399 FNL 1591 FWL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NENW Section: 35 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"/> CHANGE TO PREVIOUS PLANS <input type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> DEEPEN <input type="checkbox"/> OPERATOR CHANGE <input checked="" 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 style="width: 50px;" type="text"/>
<input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion:		<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
<input type="checkbox"/> SPUD REPORT Date of Spud:		
<input checked="" type="checkbox"/> DRILLING REPORT Report Date: 8/17/2011		
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc. THE SUBJECT WELL WAS PLACED ON PRODUCTION ON 08/17/2011 AT 2:30 PM. THE CHRONOLOGICAL WELL HISTORY WILL BE SUBMITTED WITH THE WELL COMPLETION REPORT.		
Accepted by the Utah Division of Oil, Gas and Mining FOR RECORD ONLY		
NAME (PLEASE PRINT) Sheila Wopsock	PHONE NUMBER 435 781-7024	TITLE Regulatory Analyst
SIGNATURE N/A	DATE 8/22/2011	

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

AMENDED REPORT FORM 8
(highlight changes)

5. LEASE DESIGNATION AND SERIAL NUMBER:
UO 01194 ST

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT or CA AGREEMENT NAME
UTU63047A

8. WELL NAME and NUMBER:
NBU 921-35C1CS

9. API NUMBER:
4304751347

10. FIELD AND POOL, OR WILDCAT
NATURAL BUTTES

11. QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:
NENW 35 9S 21E S

12. COUNTY **UINTAH** 13. STATE **UTAH**

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

1a. TYPE OF WELL: OIL WELL GAS WELL DRY OTHER _____

b. TYPE OF WORK: NEW WELL HORIZ. LATS. DEEP-EN RE-ENTRY DIFF. RESVR. OTHER _____

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

3. ADDRESS OF OPERATOR: P.O. BOX 173779 CITY **DENVER** STATE **CO** ZIP **80217** PHONE NUMBER: **(720) 929-6100**

4. LOCATION OF WELL (FOOTAGES)
AT SURFACE: **NENW 399 FNL 1591 FWL S35, T9S, R21E**
AT TOP PRODUCING INTERVAL REPORTED BELOW: **NENW 523 FNL 2133 FWL S35, T9S, R21E**
AT TOTAL DEPTH: **NENW 524 FNL 2140 FWL S35, T9S, R21E**

14. DATE SPURRED: **3/25/2011** 15. DATE T.D. REACHED: **6/26/2011** 16. DATE COMPLETED: **8/17/2011** ABANDONED READY TO PRODUCE 17. ELEVATIONS (DF, RKB, RT, GL): **4986 GL**

18. TOTAL DEPTH: MD **10,812** 19. PLUG BACK T.D.: MD **10,759** 20. IF MULTIPLE COMPLETIONS, HOW MANY? * _____
TVD **10,759** TVD **10,706** 21. DEPTH BRIDGE MD _____
PLUG SET: _____ TVD _____

22. TYPE ELECTRIC AND OTHER MECHANICAL LOGS RUN (Submit copy of each)
BHV-DSN/SD/ACTR-WAVESONIC TOOL-EXTENDED RANGE MICRO-IMAGER-CBL/VDL-CBL/VDL/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#		40		28			
11"	8 5/8" IJ-55	28#		2,591		550		0	
7 7/8"	4 1/2" P110	11.6#		10,798		1,899		550	

25. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)
2 3/8"	10,069							

26. PRODUCING INTERVALS

FORMATION NAME	TOP (MD)	BOTTOM (MD)	TOP (TVD)	BOTTOM (TVD)	INTERVAL (Top/Bot - MD)	SIZE	NO. HOLES	PERFORATION STATUS
(A) WASATCH	7,428	7,430			7,428 7,430	0.36	8	Open <input checked="" type="checkbox"/> Squeezed <input type="checkbox"/>
(B) MESAVERDE	7,458	10,446			7,458 10,446	0.36	208	Open <input checked="" type="checkbox"/> Squeezed <input type="checkbox"/>
(C)								Open <input type="checkbox"/> Squeezed <input type="checkbox"/>
(D)								Open <input type="checkbox"/> Squeezed <input type="checkbox"/>

27. PERFORATION RECORD

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

DEPTH INTERVAL	AMOUNT AND TYPE OF MATERIAL
7428 - 10,446	PUMP 13,335 BBLs SLICK H2O & 322,215 LBS SAND

29. ENCLOSED ATTACHMENTS:

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

30. WELL STATUS:
PROD

RECEIVED

SEP 30 2011

31. INITIAL PRODUCTION

INTERVAL A (As shown in item #26)

DATE FIRST PRODUCED: 8/17/2011		TEST DATE: 8/24/2011		HOURS TESTED: 24		TEST PRODUCTION RATES: →	OIL – BBL: 0	GAS – MCF: 2,302	WATER – BBL: 668	PROD. METHOD: FLOWING
CHOKE SIZE: 20/64	TBG. PRESS. 1,950	CSG. PRESS. 3,000	API GRAVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL – BBL: 0	GAS – MCF: 2,302	WATER – BBL: 668	INTERVAL STATUS: PROD

INTERVAL B (As shown in item #26)

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

INTERVAL C (As shown in item #26)

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

INTERVAL D (As shown in item #26)

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

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

33. SUMMARY OF POROUS ZONES (Include Aquifers):

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

Formation	Top (MD)	Bottom (MD)	Descriptions, Contents, etc.	Name	Top (Measured Depth)
GREEN RIVER	1,469				
BIRD'S NEST	1,721				
MAHOGANY	2,305				
WASATCH	4,770	7,455			
MESAVERDE	7,455	10,812	TD		

34. FORMATION (Log) MARKERS:

35. ADDITIONAL REMARKS (Include plugging procedure)

The first 225' of the surface hole was drilled with a 12 3/4" bit. The remainder of surface hole was drilled with an 11" bit. Attached is the chronological well history, perforation report & final survey.

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

NAME (PLEASE PRINT) ANDREW LYTLE TITLE REGULATORY ANALYST

SIGNATURE  DATE 9/21/2011

This report must be submitted within 30 days of

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

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

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

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

Phone: 801-538-5340

Fax: 801-359-3940

**US ROCKIES REGION
Operation Summary Report**

Well: NBU 921-35C1CS [BLUE] Spud Conductor: 3/25/2011 Spud Date: 4/12/2011
 Project: UTAH-UINTAH Site: NBU 921-35C PAD Rig Name No: H&P 311/311, CAPSTAR 310/310
 Event: DRILLING Start Date: 3/26/2011 End Date: 8/28/2011
 Active Datum: RKB @5,011.00ft (above Mean Sea Level) UWI: NE/NW/0/9/S/21/E/35/0/0/26/PM/N/399/W/0/1591/0/0

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
4/11/2011	20:30 - 0:00	3.50	DRLSUR	01	E	P		RIG DOWN WAIT ON DAYLIGHT TO SKID RIG
4/12/2011	0:00 - 10:00	10.00	DRLSUR	01	C	P		SKID RIG TO WELL # 2/4
	10:00 - 12:30	2.50	DRLSUR	14	A	P		WELD ON CONDUCTOR AND RIG UP FLOW LINE
	12:30 - 13:00	0.50	DRLSUR	06	A	P		PICK UP MOTOR AND 12.25" BIT PREP FOR SPUD
	13:00 - 14:00	1.00	DRLSUR	02	C	P		SPUD 12.25" HOLE DRILL F/ 40' - 225' WOB 8-18 ROT 45-55 DHR 96 GPM 600
	14:00 - 14:30	0.50	DRLSUR	06	A	P		TOOH TO INSTALL DIRECTIONAL TOOLS
	14:30 - 19:00	4.50	DRLSUR	08	A	Z		WELD ON SWIVEL LOCK
	19:00 - 21:00	2.00	DRLSUR	06	A	P		PU/ 11" BIT, AND ORIENT MUD MOTOR TO MWD TOOL AND TIH
	21:00 - 21:30	0.50	DRLSUR	23		P		CAPSTAR SAFETY MAN ON LOCATION CONDUCTED SAFETY MEETING
	21:30 - 22:00	0.50	DRLSUR	08	A	Z		WORK ON SWIVEL LOCK
	22:00 - 0:00	2.00	DRLSUR	02	C	P		DRILL 11" HOLE F/ 225' - 447' AVE ROP 111 FT HR WOB 20-22 ROT 45-55 DHR 96 GPM 600 NO LOSSES LAST SURVEY 5.63 DEG 106.52 AZI
4/13/2011	0:00 - 2:30	2.50	DRLSUR	02	D	P		DIR DRLG 11" SURFACE HOLE F/ 447'- 794' // ROP= 139 FPH // WOB= 18-22K // RPM= 55/96 // SPP= 1250/1100 // GPM= 600 // NO LOSSES
	2:30 - 3:00	0.50	DRLSUR	08	B	Z		REPLACE POP OFF ON #1 PUMP
	3:00 - 9:30	6.50	DRLSUR	02	D	P		DIR DRLG 11" SURFACE HOLE F/ 794'-1648' // ROP= 131 FPH // WOB= 18-22K // RPM= 55/96 // SPP= 1250/1100 // GPM= 600 // NO LOSSES
	9:30 - 10:00	0.50	DRLSUR	07	A	P		SERVICE RIG & EQUIPMENT
	10:00 - 11:30	1.50	DRLSUR	02	D	P		DIR DRLG 11" SURFACE HOLE F/ 1648'-1839' // ROP= 127 FPH // WOB= 18-22K // RPM= 55/96 // SPP= 1250/1100 // GPM= 600 // NO LOSSES
	11:30 - 12:00	0.50	DRLSUR	08	A	Z		REPAIR WILDCAT AUTO DRILLER
	12:00 - 19:30	7.50	DRLSUR	02	D	P		DIR DRLG 11" SURFACE HOLE F/ 1839'- 2600' // ROP= 101 FPH // WOB= 18-22K // RPM= 55/96 // SPP= 1300/1150 // GPM= 600 // NO LOSSES // LAST SURVEY @ 2545'= 11.58 DEG & 99.67 AZ // 7' LOW & 7' RIGHT OF LINE // 86.8% ROTATE & 13.2% SLIDE
	19:30 - 20:00	0.50	DRLSUR	05	A	P		CIRC & COND HOLE FOR 8-5/8" CSG
	20:00 - 23:30	3.50	DRLSUR	06	A	P		LD DRILL STRING & DIR TOOLS
	23:30 - 0:00	0.50	DRLSUR	11	E	P		RUN OH CALIPER LOG

US ROCKIES REGION
Operation Summary Report

Well: NBU 921-35C1CS [BLUE] Spud Conductor: 3/25/2011 Spud Date: 4/12/2011
 Project: UTAH-UINTAH Site: NBU 921-35C PAD Rig Name No: H&P 311/311, CAPSTAR 310/310
 Event: DRILLING Start Date: 3/26/2011 End Date: 6/28/2011
 Active Datum: RKB @5,011.00ft (above Mean Sea Level) UWI: NE/NW/0/9/S/21/E/35/0/0/26/PM/N/399/W/0/1591/0/0

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
4/14/2011	-		RDMO					CONDUCTOR CASING: Cond. Depth set: 40 Cement sx used: 28 SPUD DATE/TIME: 4/12/2011 13:00 SURFACE HOLE: Surface From depth: 40 Surface To depth: 2,600 Total SURFACE hours: 21.00 Surface Casing size: 8-5/8" # of casing joints ran: 58 Casing set MD: 2,575.0 # sx of cement: 200/225/125 Cement blend (ppg): 11/15.8/15/8 Cement yield (ft3/sk): 3.38/1.15/1.15 # of bbls to surface: 0 Describe cement issues: CMT TO SURFACE ON 1" TOP OUT Describe hole issues: NONE
	0:00 - 2:30	2.50	DRLSUR	11	E	P		RUN OH CALIPER LOG
	2:30 - 6:00	3.50	CSG	12	C	P		PJSM // RUN 58 JT'S 8-5/8", 28#, J-55, LT&C CSG // SHOE SET @ 2575' // BAFFLE @ 2528'
	6:00 - 6:30	0.50	CSG	05	A	P		CIRC 8-5/8" CSG @ 2575'
	6:30 - 8:00	1.50	CSG	12	E	P		PJSM W/ SUPERIOR CMT CREW /// TEST LINES TO 2500 PSI // PUMP 25 BBL SPACER // LEAD= 200sx CLASS G CMT @ 3.83 YIELD & 11.0 WT // TAIL= 225sx CLASS G CMT @ 1.15 YIELD & 15.8 WT // DROP PLUG & DISPLACE W/ 150 BBL'S WATER // PLUG DN @ 07:42 4/14/2011 // BUMP PLUG @ 650 PSI // FINAL LIFT = 200 PSI // CHECK FLOATS- HELD W/ 1 BBL BACK // LOST RETURNS 80 BBL'S INTO DISPLACEMENT // NO CMT TO SURFACE
	8:00 - 8:30	0.50	CSG	14	A	P		CUT OFF CONDUCTOR & HANG OFF 8-5/8" SURFACE CSG
	8:30 - 9:30	1.00	CSG	12	E	P		RUN 100' OF 1" AND PUMP TOP OUT W/ 125sx CMT @ 1.15 YIELD & 15.8 WT. /// CMT TO SURFACE
	9:30 - 10:30	1.00	RDMO	01	E	P		RIG DN /// RELEASE RIG @ 10:30 04/14/2011 TO THE NBU 921-35D1CS
6/19/2011	12:00 - 12:30	0.50	DRLPRO	01	C	P		SKID RIG, CENTER & LEVEL DERRICK
	12:30 - 13:30	1.00	DRLPRO	14	A	P		NU BOP, INSTALL MOUSE HOLE, FLOW LINE
	13:30 - 14:00	0.50	DRLPRO	01	B	P		CHANE OUT BAILS & ELEVATORS
	14:00 - 14:30	0.50	DRLPRO	07	A	P		LUBRICATE RIG
	14:30 - 15:00	0.50	DRLPRO	15	A	P		HOLD JSA, RU TESTER
	15:00 - 20:00	5.00	DRLPRO	15	A	P		PRESSURE TEST PIPE RAMS, BLIND RAMS, IBOP, FLOOR VALVE, KILL LINE, & KILL LINE VALVES, BOP WING VALVES, HCR VALVE, CHOKE LINE INNER & OUTER CHOKE VALVES, & MANIFOLD 250 PSI LOW/ 5 MINUTES, 5K HIGH FOR 10 MINUTES, TEST ANNULAR 250 LOW/5 MINUTES, 2500 HIGH/10 MINUTES, TEST SUPER CHOKE & CSG TO 1500 PSI FOR 30 MINUTES. FUNCTION TEST CLOSING UNIT.
	20:00 - 20:30	0.50	DRLPRO	06	A	P		INSTALL WEAR BUSHING
	20:30 - 23:00	2.50	DRLPRO	06	A	P		PU BHA, ORIENT TOOLS, TIH, TAG CMT AT 2520
	23:00 - 0:00	1.00	DRLPRO	02	F	P		DRILL OUT CMT & SHOE TO NEW HOLE AT 2616

US ROCKIES REGION
Operation Summary Report

Well: NBU 921-35C1CS [BLUE]		Spud Conductor: 3/25/2011		Spud Date: 4/12/2011	
Project: UTAH-UINTAH		Site: NBU 921-35C PAD		Rig Name No: H&P 311/311, CAPSTAR 310/310	
Event: DRILLING		Start Date: 3/26/2011		End Date: 6/28/2011	
Active Datum: RKB @5,011.00ft (above Mean Sea Level)		UWI: NE/NW/0/9/S/21/E/35/0/0/28/PM/N/399/W/0/1591/0/0			

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
6/20/2011	0:00 - 8:00	8.00	DRLPRO	02	D	P		DRILL & SLIDE 2616 TO 3565 '949', 118 1FPH. MADE 5 SLIDES, TOTAL TIME-.67 HOURS, TOTAL FT-74, WOB WAS 19-24K, PUMP #1 - 110SPM, 495 GPM, MOTOR- 104 RPM, TOP DRIVE- 45 RPM, 149 RPM AT THE BIT. DIFFERENTIAL PRESSURE - 350-450 PSI. ON/OFF BOTTOM PUMP PRESSURE-1721/971 PSI. ON/OFF BOTTOM TORQUE-4/5K. PU/SO/ROT-130/95/109. MW-8.5, VIS-26, CIRCULATING THE PIT
	8:00 - 17:30	9.50	DRLPRO	02	D	P		DRILL & SLIDE 3565 TO 4999,'1434', 150 FPH. MADE 4 SLIDES, TOTAL TIME-.84 HOURS, TOTAL FT-55, WOB WAS 19-24K, PUMP #1 - 110SPM, 495 GPM, MOTOR- 104 RPM, TOP DRIVE- 45 RPM, 149 RPM AT THE BIT. DIFFERENTIAL PRESSURE - 350-450 PSI. ON/OFF BOTTOM PUMP PRESSURE-1740/1102 PSI. ON/OFF BOTTOM TORQUE-4/6K. PU/SO/ROT-150/105/125. MW-8.5, VIS-26, CIRCULATING THE PIT
	17:30 - 18:00	0.50	DRLPRO	07	A	P		LUBRICATE RIG
	18:00 - 0:00	6.00	DRLPRO	02	D	P		DRILL & SLIDE 4999 TO 5940', 941', 156 FPH. MADE 2 SLIDES, TOTAL TIME-.34 HOURS, TOTAL FT-23, WOB WAS 19-24K, PUMP #1 - 110SPM, 495 GPM, MOTOR- 104 RPM, TOP DRIVE- 45 RPM, 149 RPM AT THE BIT. DIFFERENTIAL PRESSURE - 350-450 PSI. ON/OFF BOTTOM PUMP PRESSURE-1740/1102 PSI. ON/OFF BOTTOM TORQUE-5/7K. PU/SO/ROT-177/128/144. MW-8.5, VIS-26, CIRCULATING THE PIT
6/21/2011	0:00 - 8:00	8.00	DRLPRO	02	D	P		DRILL & SLIDE 5940 TO 6760', 820', 102 FPH. MADE 2 SLIDES, TOTAL TIME-.34 HOURS, TOTAL FT-23, WOB WAS 19-24K, PUMP #1 - 110SPM, 495 GPM, MOTOR- 104 RPM, TOP DRIVE- 45 RPM, 149 RPM AT THE BIT. DIFFERENTIAL PRESSURE - 350-450 PSI. ON/OFF BOTTOM PUMP PRESSURE-1740/1302 PSI. ON/OFF BOTTOM TORQUE-7/9K. PU/SO/ROT-190/145/167. MW-8.5, VIS-26, CIRCULATING THE PIT
	8:00 - 17:30	9.50	DRLPRO	02	D	P		DRILLED & SLIDE 6760'-7421', 661' IN 9.5 HRS, 69.6 FPH. MADE 1 SLIDE, 7359'-7380', 21' IN 1.17 HRS, 17.9 FPH. WOB WAS 19-24K, PUMP #1 - 110SPM, 495 GPM, MOTOR- 104 RPM, TOP DRIVE- 45 RPM, 149 RPM AT THE BIT. DIFFERENTIAL PRESSURE - 350-450 PSI. ON/OFF BOTTOM PUMP PRESSURE-1800/1402 PSI. ON/OFF BOTTOM TORQUE-10/10K. PU/SO/ROT-205/140/164. MW-9.2, VIS-34 WITH 2-3% LCM, STILL GOING OVER THE SHAKERS. STARTED MUDDING UP AT 7300'.
	17:30 - 18:00	0.50	DRLPRO	07	A	P		RIG SERVICE

US ROCKIES REGION
Operation Summary Report

Well: NBU 921-35C1CS [BLUE]	Spud Conductor: 3/25/2011	Spud Date: 4/12/2011
Project: UTAH-UINTAH	Site: NBU 921-35C PAD	Rig Name No: H&P 311/311, CAPSTAR 310/310
Event: DRILLING	Start Date: 3/26/2011	End Date: 6/28/2011
Active Datum: RKB @5,011.00ft (above Mean Sea Level)		UWI: NE/NW/0/9/S/21/E/35/0/0/26/PM/N/399/W/0/1591/0/0

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
	18:00 - 0:00	6.00	DRLPRO	02	D	P		DRILLED 7421'-7693', 272' IN 6 HRS, 45.3 FPH. MADE 1 SLIDE, 7452'-7477', 25' IN 1.42 HRS, 17.6 FPH. TOTAL SLIDE PERCENT OF DEPTH IS 3.9, TOTAL SLIDE PERCENT OF TIME IS 8.92. WOB WAS 19-25K, PUMP #1 - 90 SPM, 405 GPM, MOTOR- 85 RPM, TOP DRIVE- 40 RPM, 125 RPM AT THE BIT. DIFFERENTIAL PRESSURE 350-450 PSI. ON/OFF BOTTOM PUMP PRESSURE-1600/1360 PSI. ON/OFF BOTTOM TORQUE-10/10K. PU/SO/ROT-211/138/169. MW-9.9, VIS-37 WITH 2-3% LCM, STILL GOING OVER THE SHAKERS. SOME SEEPAGE LOSSES, PUMPING LCM SWEEPS. CHANGED DRILLING PARAMETERS AT THE TOP OF THE MESA VERDE (7437'). MUD LOGGER ON LOCATION AND READING GAS, BACKGROUND GAS WAS 25-200 UNITS, CONNECTION GAS WAS 45-515 UNITS, PEAK GAS AT 1335 UNITS. SHOW #1 WAS 7565'-7597'. GAS BEFORE/DURING/AFTER WAS 125/1335/145.
6/22/2011	0:00 - 6:00	6.00	DRLPRO	02	D	P		DRILLED 7693'-7956', 263' IN 6 HRS, 43.8 FPH. 100% ROTATING. WOB WAS 22-25K, PUMP #2 - 90 SPM, 405 GPM, MOTOR- 85 RPM, TOP DRIVE- 40 RPM, 125 RPM AT THE BIT. DIFFERENTIAL PRESSURE 350-450 PSI. ON/OFF BOTTOM PUMP PRESSURE-1700/1460 PSI. ON/OFF BOTTOM TORQUE-10/10K. PU/SO/ROT-212/142/170. MW-10.2, VIS-37 WITH 2-3% LCM, STILL GOING OVER THE SHAKERS. SOME SEEPAGE LOSSES, PUMPING LCM SWEEPS.
	6:00 - 17:30	11.50	DRLPRO	02	D	P		DRILLED 7956'-8490', 534' IN 11.5 HRS, 46.4 FPH. MADE 1 SLIDE FROM 8397'-8417', 20' IN 1.75 HRS, 11.4 FPH FOR THE SLIDE. WOB WAS 22-25K, PUMP #2 - 90 SPM, 405 GPM, MOTOR- 85 RPM, TOP DRIVE- 40 RPM, 125 RPM AT THE BIT. DIFFERENTIAL PRESSURE 300-400 PSI. ON/OFF BOTTOM PUMP PRESSURE-1950/1560 PSI. ON/OFF BOTTOM TORQUE-10/10K. PU/SO/ROT-230/150/178. MW-10.9, VIS-37 WITH 8% LCM. LOST ALL RETURNS FOR ABOUT 5 MINUTES AT 8393', WE HAD JUST PUMPED A LCM SWEEP SO GOT RETURNS RIGHT BACK, SLOWLY AT FIRST THEN FULL RETURNS. PULLED THE SCREENS AND STARTED ADDING LCM TO THE SYSTEM. 10.8 PPG, 37 VIS WITH 8% LCM. HAD 5 GAS SHOWS WHILE DRILLING, 7946'-7979', 33', GAS BEFORE/DURING/AFTER WAS 310/1660/385, 7990'-8061', 71', 315/2770/505, 8179'-8234', 55', 300/2420/385, 8250'-8297', 47', 275/2980/290, 8348'-8430', 82', 1600/3575/1890. RIG SERVICE.
	17:30 - 18:00	0.50	DRLPRO	07	A	P		

US ROCKIES REGION
Operation Summary Report

Well: NBU 921-35C1CS [BLUE]		Spud Conductor: 3/25/2011		Spud Date: 4/12/2011	
Project: UTAH-UINTAH			Site: NBU 921-35C PAD		Rig Name No: H&P 311/311, CAPSTAR 310/310
Event: DRILLING			Start Date: 3/26/2011		End Date: 6/28/2011
Active Datum: RKB @5,011.00ft (above Mean Sea Level)			UWI: NE/NW/0/9/S/21/E/35/0/0/26/PM/N/399/W/0/1591/0/0		

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
	18:00 - 0:00	6.00	DRLPRO	02	D	P		DRILLED 8490'-8686', 196' IN 6 HRS, 32.7 FPH. MADE 1 SLIDE FROM 8491'-8522', 31' IN 2.0 HRS, 15.5 FPH FOR THE SLIDE. WITHOUT THE SLIDE THE FPH WAS 41.3. WOB WAS 22-25K, PUMP #2 - 90 SPM, 405 GPM, MOTOR- 85 RPM, TOP DRIVE- 40 RPM, 125 RPM AT THE BIT. DIFFERENTIAL PRESSURE 250-350 PSI. ON/OFF BOTTOM PUMP PRESSURE-2050/1725 PSI. ON/OFF BOTTOM TORQUE-10/10K. PU/SO/ROT-225/152/179. MW-11.2, VIS-37 WITH 16% LCM. CONTINUED TO LOSE MUD WHILE SLOWLY RAISING MW, INCREASED LCM FROM 8 TO 16%. PUT WELL ON GAS BUSTER AT 2200 HRS/8587' WITH A 20-30' FLARE. CURRENTLY HAS 10' FLARE.
6/23/2011	0:00 - 9:00	9.00	DRLPRO	02	D	P		DRILLED 8686'-9017', 331' IN 9 HRS, 36.7 FPH. 100% ROTATING. WOB WAS 22-25K, PUMP #2 - 90 SPM, 405 GPM, MOTOR- 85 RPM, TOP DRIVE- 40 RPM, 125 RPM AT THE BIT. DIFFERENTIAL PRESSURE 250-350 PSI. ON/OFF BOTTOM PUMP PRESSURE-2100/1800 PSI. ON/OFF BOTTOM TORQUE-10/10K. PU/SO/ROT-230/160/185. MW-11.7, VIS-37 WITH 20% LCM. CONTINUED TO LOSE MUD WHILE SLOWLY RAISING MW, INCREASED LCM FROM 16 TO 20%. TOOK WELL OFF BUSTER AT 0700 HRS/8970'. TRIED RESETTING BIT SEVERAL TIMES, KEPT GETTING DIFFERENTIAL PRESSURE SPIKES UP TO 1000 PSI, STALLED MOTOR AND TORQUED UP STRING SEVERAL TIMES. COULD NOT GET THE BIT TO DRILL. HAD TWO SHOWS, 8517'-8546', 29', GAS BEFORE/DURING/AFTER WAS 2825/3260/2555 AND 8930'-8985', 55', 285/3830/440. CIRC/COND MUD RAISED MW TO 11.7 PPG, 37 VIS WITH 20% LCM, NO LOSSES.
	9:00 - 10:30	1.50	DRLPRO	05	C	P		FLOW CHECKED WELL, NO FLOW.
	10:30 - 11:00	0.50	DRLPRO	05	J	P		
	11:00 - 17:30	6.50	DRLPRO	06	A	P		PUMPED SLUG AND PULLED STRAIGHT OFF BOTTOM. NO TITE SPOTS OR OVERPULLS. FLOW CHECKED WELL AT THE CASING SHOE, NO FLOW. PULLED EFIELD TOOL, RACKED BACK DIRECTIONAL TOOLS. DRAINED MOTOR WITH NO PROBLEMS, BROKE BIT OFF AND LD BOTH. PICKED UP NEW INTEQ 6.5", 5:6 LOBE, 3.0, 1.5 DEGREE 0.16 REV/GAL MUD MOTOR WITH A HUGHES Q506FX BIT # 7132936 W 6-16'S. RIG SERVICE.
	17:30 - 18:00	0.50	DRLPRO	07	A	P		
	18:00 - 21:00	3.00	DRLPRO	06	A	P		TRIPPED IN THE HOLE, NO TITE SPOTS, STRAIGHT TO BOTTOM. WASHED AND REAMED THE LAST 50' TO BOTTOM.
	21:00 - 0:00	3.00	DRLPRO	02	D	P		DRILLED 9017'-9171', 154' IN 3 HRS, 51.3 FPH. MADE ONE SLIDE FROM 9056'-9074', 18' IN 1 HR, 18 FPH. 68 FPH WITHOUT THE SLIDE. WOB WAS 22-25K, PUMP #2 - 110 SPM, 495 GPM, MOTOR- 80 RPM, TOP DRIVE- 45 RPM, 125 RPM AT THE BIT. DIFFERENTIAL PRESSURE 250-350 PSI. ON/OFF BOTTOM PUMP PRESSURE-2650/2300 PSI. ON/OFF BOTTOM TORQUE-11/11K. PU/SO/ROT-240/157/185. MW-11.9, VIS-37 WITH 20% LCM. SOME SEEPAGE LOSSES. BOTTOMS UP GAS WAS A 20' FLARE FOR 30 MINUTES, TOOK WELL OFF BUSTER.

US ROCKIES REGION
Operation Summary Report

Well: NBU 921-35C1CS [BLUE]	Spud Conductor: 3/25/2011	Spud Date: 4/12/2011
Project: UTAH-UINTAH	Site: NBU 921-35C PAD	Rig Name No: H&P 311/311, CAPSTAR 310/310
Event: DRILLING	Start Date: 3/26/2011	End Date: 6/28/2011
Active Datum: RKB @5,011.00ft (above Mean Sea Level)	UWI: NE/NW/0/9/S/21/E/35/0/0/26/PM/N/399/W/0/1591/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
6/24/2011	0:00 - 6:00	6.00	DRLPRO	02	D	P		DRILLED 9171'-9496', 325' IN 6 HRS, 54.2 FPH. 100% ROTATING. WOB WAS 22-25K, PUMP #2 - 110 SPM, 495 GPM, MOTOR- 80 RPM, TOP DRIVE- 45 RPM, 125 RPM AT THE BIT. DIFFERENTIAL PRESSURE 250-350 PSI. ON/OFF BOTTOM PUMP PRESSURE-2700/2400 PSI. ON/OFF BOTTOM TORQUE-11/11K. PU/SO/ROT-243/160/190. MW-11.9, VIS-37 WITH 20% LCM. SOME SEEPAGE LOSSES. BACKGROUND GAS UNITS WERE 200-800. HAD A SHOW FROM 9469'-9529', 60', GAS BEFORE/DURING/AFTER WAS 310/3830/1445.
	6:00 - 17:30	11.50	DRLPRO	02	D	P		DRILLED 9496'-9795', 299' IN 10.5 HRS, 28.5 FPH. MADE 2 SLIDES, 31' TOTAL FEET IN 3 HRS, TOTAL SLIDE FPH WAS 10.3. FPH WITHOUT THE SLIDES WAS 35.7 FPH. WOB WAS 22-25K, PUMP #2 - 110 SPM, 495 GPM, MOTOR- 80 RPM, TOP DRIVE- 45 RPM, 125 RPM AT THE BIT. DIFFERENTIAL PRESSURE 250-350 PSI. ON/OFF BOTTOM PUMP PRESSURE-2800/2500 PSI. ON/OFF BOTTOM TORQUE-11/11K. PU/SO/ROT-248/162/195. MW-11.9, VIS-37 WITH 20% LCM. SOME SEEPAGE LOSSES. BACKGROUND GAS UNITS WERE 200-900. SHOW FROM 9683'-9722', 39', 645/3660/775.
	17:30 - 18:00	0.50	DRLPRO	07	A	P		RIG SERVICE.
	18:00 - 0:00	6.00	DRLPRO	02	D	P		DRILLED 9795'-9867', 72' IN 6 HRS, 12 FPH. 100% ROTATING. WOB WAS 22-25K, PUMP #2 - 110 SPM, 495 GPM, MOTOR- 80 RPM, TOP DRIVE- 45 RPM, 125 RPM AT THE BIT. DIFFERENTIAL PRESSURE 150-250 PSI. ON/OFF BOTTOM PUMP PRESSURE-2800/2500 PSI. ON/OFF BOTTOM TORQUE-9/9K. PU/SO/ROT-250/162/192. MW-12.1, VIS-39 WITH 18% LCM. SOME SEEPAGE LOSSES. TOP OF THE CASTLEGATE AT 9803', TRIED EVERY COMBINATION OF WOB, STROKES AND TOPDRIVE RPMS TO TRY AND GET THIS THING TO DRILL, JUST GRINDING AWAY. GOOD DIFFERENTIAL, JUST HARD DIGGING. GAS UNITS KEPT DROPPING TO AROUND 200-400.
6/25/2011	0:00 - 9:30	9.50	DRLPRO	02	D	P		DRILLED 9867'-9992', 125' IN 9.5 HRS, 13.2 FPH. 100% ROTATING. WOB WAS 22-25K, PUMP #2 - 110 SPM, 495 GPM, MOTOR- 80 RPM, TOP DRIVE- 45 RPM, 125 RPM AT THE BIT. DIFFERENTIAL PRESSURE 150-250 PSI. ON/OFF BOTTOM PUMP PRESSURE-2600/2450 PSI. ON/OFF BOTTOM TORQUE-9/9K. PU/SO/ROT-251/163/195. MW-12.1, VIS-39 WITH 16% LCM. SOME SEEPAGE LOSSES. TOP OF THE CASTLEGATE AT 9803', TRIED EVERY COMBINATION OF WOB, STROKES AND TOPDRIVE RPMS TO TRY AND GET THIS THING TO DRILL, JUST GRINDING AWAY. GOOD DIFFERENTIAL, JUST HARD DIGGING. BACKGROUND GAS WAS 60-2900 UNITS WITH CONNECTION GAS AT 890 UNITS.
	9:30 - 11:00	1.50	DRLPRO	05	C	P		CIRCULATE AND CONDITION MUD. 12.1 PPG WITH 38 VIS AND 18% LCM. CIRCULATED 2 BOTTOMS UP, NO GAS NO FLARE, GAS READINGS WERE LESS THAN 200 UNITS WITH A 2500 UNIT SPIKE.
	11:00 - 11:30	0.50	DRLPRO	05	J	P		FLOW CHECKED WELL, NO FLOW.

US ROCKIES REGION
Operation Summary Report

Well: NBU 921-35C1CS [BLUE]		Spud Conductor: 3/25/2011		Spud Date: 4/12/2011	
Project: UTAH-UINTAH		Site: NBU 921-35C PAD		Rig Name No: H&P 311/311, CAPSTAR 310/310	
Event: DRILLING		Start Date: 3/26/2011		End Date: 6/28/2011	
Active Datum: RKB @5,011.00ft (above Mean Sea Level)		UWI: NE/NW/0/9/S/21/E/35/0/0/26/PM/N/399/W/0/1591/0/0			

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
	11:30 - 16:30	5.00	DRLPRO	06	A	P		PUMPED SLUG AND TRIPPED OUT OF THE HOLE. STRAIGHT PULLED OFF BOTTOM. NO TIE SPOTS OR OVERPULLS. FLOW CHECKED AT CASING SHOE, NO FLOW. PULLED EFIELD TOOL, RACKED BACK DIRECTIONAL TOOLS. BROKE AND LD BIT AND MUD MOTOR.
	16:30 - 17:30	1.00	DRLPRO	06	A	P		MADE UP HUGHES Q506F #7134923 WITH 6-16S ON A NATIONAL STRAIGHT, 7:8 LOBE, 3.3, 0.16 REV/GAL MOTOR AND A MONEL DRILL COLLAR. TRIPPED IN THE HOLE WITH 2 STANDS OF HWDP.
	17:30 - 23:30	6.00	DRLPRO	22	O	X		WHILE MAKING A CONNECTION DURING TRIPPING BACK IN THE HOLE OPERATIONS A BOLT SHEARED ON ONE OF TWO ST 80 TONG RETAINER PLATES CAUSING A 3" x 4" x 5/8" TONG DIE TO COME DISPLACED. THE RIG FLOOR AND CELLAR WERE SEARCHED FOR THE DIE. THE BOPE STACK WAS DRAINED AND WITH THE AID OF MIRRORS THE DIE WAS FOUND LEANING AGAINST THE STAND IN THE HOLE AND THE WEAR BUSHING/RESTING ON TOP OF THE WEAR BUSHING. IF WE TRIED TO MOVE THE PIPE THE DIE WOULD FALL IN THE HOLE SO WE FILLED THE HOLE, DRAINED THE STACK AGAIN AND UNBOLTED THE BOP RISER FROM THE WELLHEAD ADAPTER FLANGE IN AN EFFORT TO GAIN ACCESS TO REMOVE THE DIE. AS WE STARTED TO PICK UP THE BOPE IT BECAME LODGED AND BY THE TIME WE COULD SHUTDOWN THE PICKING UP MOTION THE BOPE POPPED FREE CAUSING THE DIE TO FALL DOWN THE WELL. WE FLANGED THE RISER AND WELLHEAD ADAPTER BACK TOGETHER. IT WAS DETERMINED THAT SINCE THE DIE WAS 5/8" THICK AND THE CLEARANCE IS LIMITED WITHIN THE SURFACE CASING/BHA THE DIE MAY NOT HAVE DROPPED ALL THE WAY TO BOTTOM. WE TRIPPED OUT OF THE HOLE VERY SLOWLY AND RACKED BACK OUR TWO STANDS OF HWDP. WE PULLED UP TO WHERE THE MONEL COLLAR WAS AT THE FLOOR, WHILE PULLING THE MONEL OUT THE STRING WAS WEIGHING 37K, WE STARTED GAINING WEIGHT TO 53K, AT THAT POINT WE SLACKED OFF AND PICKED UP THE BOPE AND RECOVERED THE DIE. WE SET THE STACK BACK, RACKED BACK THE MONEL AND MUD MOTOR, CHANGED OUT THE BOPE RINGS AND RETESTED THE BOPE. JUST THE BREAKS WE MADE IN THE BOPE WERE RETESTED.
	23:30 - 0:00	0.50	DRLPRO	06	A	P		CONTINUE THE TRIP IN THE HOLE AFTER REPLACING THE BIT AND MUD MOTOR.
6/26/2011	0:00 - 0:30	0.50	DRLPRO	06	A	P		CONTINUED TRIPPING IN THE HOLE TO THE SURFACE CASING SHOE.
	0:30 - 1:00	0.50	DRLPRO	09	A	P		CUT AND SLIP 110' OF DRILLING LINE.
	1:00 - 1:30	0.50	DRLPRO	07	A	P		RIG SERVICE
	1:30 - 4:30	3.00	DRLPRO	06	A	P		CONTINUED TRIPPING IN THE HOLE, NO TITE SPOTS. WASHED AND REAMED THE FINAL 121'; TO BOTTOM, NO FILL. JUST EASY PRECAUTIONARY WASHING AND REAMING.

US ROCKIES REGION
Operation Summary Report

Well: NBU 921-35C1CS [BLUE]		Spud Conductor: 3/25/2011		Spud Date: 4/12/2011	
Project: UTAH-UINTAH		Site: NBU 921-35C PAD		Rig Name No: H&P 311/311, CAPSTAR 310/310	
Event: DRILLING		Start Date: 3/26/2011		End Date: 6/28/2011	
Active Datum: RKB @5,011.00ft (above Mean Sea Level)			UWI: NE/NW/0/9/S/21/E/35/0/0/26/PM/N/399/W/0/1591/0/0		

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
	4:30 - 18:00	13.50	DRLPRO	02	D	P		DRILLED 9992'-10660', 668' IN 13.5 HRS, 49.5 FPH. 100% ROTATING. WOB WAS 22-25K, PUMP #1 - 110 SPM, 495 GPM, MOTOR- 80 RPM, TOP DRIVE- 45 RPM, 125 RPM AT THE BIT. DIFFERENTIAL PRESSURE 150-250 PSI. ON/OFF BOTTOM PUMP PRESSURE-2750/2470 PSI. ON/OFF BOTTOM TORQUE-10/10K. PU/SO/ROT-255/170/199. MW-12.6, VIS-39 WITH 22% LCM. SOME SEEPAGE LOSSES, INCREASING LCM AS WE INCREASE THE MW. PUT WELL ON BUSTER WITH A 15-20' FLARE AT 10310'/1045 HRS WITH A MW OF 12.3 PPG, OFF BUSTER AT 1230 HRS WITH 12.5 PPG MW. ON BUSTER AT 1700 HRS/10605' WITH 15' FLARE AND 12.6 PPG, OFF BUSTER AT 1830 HRS. HAD SHOWS AT 10114'-10141', 27', GAS BEFOR/DURING/AFTER WAS 155/565/555 UNITS, 10232'-10329', 107', 260/2150/275, 10448'-10468', 20', 240/830/355.
	18:00 - 21:00	3.00	DRLPRO	02	D	P		DRILLED 10660'-10812', 152' IN 3 HRS, 50.7 FPH. 100% ROTATING. WOB WAS 22-25K, PUMP #1 - 110 SPM, 495 GPM, MOTOR- 80 RPM, TOP DRIVE- 45 RPM, 125 RPM AT THE BIT. DIFFERENTIAL PRESSURE 150-250 PSI. ON/OFF BOTTOM PUMP PRESSURE-2800/2500 PSI. ON/OFF BOTTOM TORQUE-10/10K. PU/SO/ROT-255/170/199. MW-12.8, VIS-39 WITH 25% LCM. SOME SEEPAGE LOSSES, INCREASING LCM AS WE INCREASE THE MW.
	21:00 - 22:00	1.00	DRLPRO	05	C	P		CIRCULATE AND CONDITION PRIOR TO MAKING A WIPER TRIP. 12.8 PPG MW, 40 VIS WITH 25% LCM. GAS READINGS WERE LESS THAN 400 UNITS.
	22:00 - 22:30	0.50	DRLPRO	05	J	P		FLOW CHECKED WELL, NO FLOW.
	22:30 - 0:00	1.50	DRLPRO	06	E	P		PULLED 5 STANDS STRAIGHT OFF BOTTOM AND PUMPED A SLUG. CONTINUED TRIPPING OUT OF THE HOLE, NO TITE SPOTS OR OVERPULLS.
6/27/2011	0:00 - 8:00	8.00	DRLPRO	06	E	P		CONTINUED TRIPPING OUT OF THE HOLE, FLOW CHECKED WELL AT THE CASING SHOE. STARTED TRIPPING BACK IN THE HOLE TO 6788', TRIED FILLING THE PIPE, PUMPED AWAY 280 BBLs WITH NO RETURNS. PULLED UP TO 4888' AND STARTED TO CIRCULATE. PUMPED AWAY ANOTHER 140 BBLs AND RAN OUT OF FLUIDS. STARTED BUILDING VOLUME, WHILE MOVING THE PIPE, KICKED THE PUMPS ON EVERY 15 MINUTES TO KEEP THE DP CLEAR. ON THE THIRD PUMP CYCLE WE STARTED GAINING RETURNS. STAGED STROKES UP TO 70, NO LOSSES. ALL NEW MUD THAT WAS BUILT WAS 12.6 PPG, 40 VIS WITH 28% LCM. LOST A TOTAL OF 675 BBLs, 2270' FOR THE WELL.
	8:00 - 11:30	3.50	DRLPRO	06	E	P		STARTED STAGING IN THE HOLE 10 STDS AT A TIME, BROKE CIRCULATION EACH 10 STDS. NO TITE SPOTS.
	11:30 - 13:00	1.50	EVALPR	05	C	P		CIRCULATE AND CONDITION MUD, NO LOSSES. BOTTOMS UP WAS 2200 UNITS WITH NO FLARE. MW WAS 12.6 PPG, 39 VIS WITH 28% LCM.
	13:00 - 13:30	0.50	EVALPR	05	J	P		CIRCULATING AT 80 SPM, 360 GPM AT 1700 PSI. FLOW CHECK, NO FLOW.
	13:30 - 17:30	4.00	EVALPR	06	B	P		PUMPED SLUG AND TRIPPED OUT OF THE HOLE, NO TITE SPOTS OR OVERPULLS. FLOW CHECKED WELL AT THE SHOE, NO FLOW.

US ROCKIES REGION
Operation Summary Report

Well: NBU 921-35C1CS [BLUE]	Spud Conductor: 3/25/2011	Spud Date: 4/12/2011
Project: UTAH-UINTAH	Site: NBU 921-35C PAD	Rig Name No: H&P 311/311, CAPSTAR 310/310
Event: DRILLING	Start Date: 3/26/2011	End Date: 6/28/2011
Active Datum: RKB @5,011.00ft (above Mean Sea Level)		UWI: NE/NW/0/9/S/21/E/35/0/0/26/PM/N/399/W/0/1591/0/0

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
	17:30 - 18:00	0.50	EVALPR	07	A	P		RIG SERVICE.
	18:00 - 0:00	6.00	EVALPR	11	D	P		RIGGED UP HALLIBURTON AND RAN TRIPLE COMBO LOG SWEEP. LOGGERS TD WAS 10814' (DRILLERS 10812'), BHT WAS 178 DEGREES. BASE OF SURFACE CASING WAS 2586'. RAN SPECTRAL DENSITY LOG FROM TD TO BASE OF SURFACE CASING, RAN DUAL SPACED NEUTRON FROM TD TO SURFACE CASING. RAN AN ARRAY COMPENSATED TRUE RESISTIVITY FROM TD TO SURFACE SHOE. RAN A CALIPER LOG FROM TD TO SURFACE CASING SHOE AND A GAMMA RAY FROM TD TO 100'. RAN BOREHOLE VOLUME LOG. NO TITE SPOTS WENT STRAIGHT TO BOTTOM. LAID DOWN TOOLS AND STARTED PICKING UP DIPOLE SONIC/XRMI TOOL.
6/28/2011	0:00 - 4:30	4.50	EVALPR	11	D	P		RAN A WAVESONIC/EXTENDED RANGE MICRO-IMAGER LOG FROM 5000' TO THE SURFACE CASING SHOE. NO TITE SPOTS, HAD 1 PAD FAIL ON THE TOOL. HALLIBURTON ENGINEER KEPT IN CONTACT WITH GEOLOGIST. LAID TOOLS DOWN AND RIGGED DOWN.
	4:30 - 5:00	0.50	CSG	12	D	P		PULLED WEAR BUSHING.
	5:00 - 7:00	2.00	CSG	12	A	P		RIGGED UP CASING CREW AND CASING RUNNING EQUIPMENT.
	7:00 - 14:00	7.00	CSG	12	C	P		STARTED RUNNING 4.5" CASING, 4.5" CASING WAS RUN AS FOLLOWS- MADE UP WITH THREAD LOCK, SHOE, SHOE TRACK-HCP110 AND FLOAT COLLAR. INSTALLED CENTRALIZER ON SHOE TRACK. RAN 251 JTS HCP110, BTC, 11.6#, R3. SET 20' MARKER JOINTS AT 7363' AND 4707'. SET CASING AT 10798' WITH FLOAT COLLAR AT 10760'. FILLED AND CIRCULATE CASING AT 2550', 5230' AND 7180'
	14:00 - 16:00	2.00	CSG	05	D	P		FILLED CASING AND STARTED CIRCULATING AT 360 GPM AND 950 PSI. RIGGED DOWN CASERS AND STARTED RIGGING UP CEMENTERS. HAD TO PUT WELL ON GAS BUSTER, HAD 10-15' FLARE FOR 10 MINUTES. GAS DIED OFF IMMEDIATELY.
	16:00 - 18:00	2.00	CSG	12	E	P		PRESSURE TESTED LINES TO 5000 PSI. PUMPED 40 BBLs OF H2O SPACER AHEAD, PUMPED 194 BBLs (564 SX OF 12.6#, 1.93 CFT/SX, 10.09 GAL/SK) LEAD PREMIUM LIGHT CEMENT. PUMPED 311 BBLs (1335 SX OF 14.3#, 1.31 YD, 5.90 GAL/SK) POZ PREMIUM 50/50 TAIL CEMENT. SHUT DOWN AND WASHED LINES, DROP 4.5" TOP PLUG, PUMP 167.5 BBLs OF H2O TREATED WITH BIOCIDES AND CLAY INHIBITOR. BUMPED PLUG AT 3225 PSI, PRESSURED UP CSG TO 3955 PSI AND HELD FOR 5 MIN. CHECKED FLOATS, FLOATS HELD, FLOWED BACK 2.00 BBLs. EST TOC TAIL @ 4200', LEAD @ 100'. HAD 100% RETURNS EXCEPT FOR THE LAST 5 BBLs AND GOT BACK 38 BBLs WATER.
	18:00 - 18:30	0.50	CSG	12	B	P		RIGGED DOWN CEMENTERS
	18:30 - 19:00	0.50	CSG	14	A	P		ND BOPE.
	19:00 - 19:30	0.50	CSG	12	C	P		PICK UP BOP STACK AND SET C22 SLIPS WITH 110K. CUT OFF CASING AND LD JOINT.
	19:30 - 20:00	0.50	RDMO	01	C	P		RIGGED DOWN, CLEANED MUD TANKS AND PREPARED TO SKID. RELEASED RIG ON TUESDAY JUNE 28TH AT 2000 HRS.

US ROCKIES REGION
Operation Summary Report

Well: NBU 921-35C1CS [BLUE]	Spud Conductor: 3/25/2011	Spud Date: 4/12/2011
Project: UTAH-UINTAH	Site: NBU 921-35C PAD	Rig Name No: H&P 311/311, CAPSTAR 310/310
Event: DRILLING	Start Date: 3/26/2011	End Date: 6/28/2011
Active Datum: RKB @5,011.00ft (above Mean Sea Level)	UWI: NE/NW/0/9/S/21/E/35/0/0/26/PM/N/399/W/0/1591/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
------	----------------	---------------	-------	------	----------	-----	--------------	-----------

20:00 - 20:00 0.00 RDMO

CONDUCTOR CASING:
 Cond. Depth set: 40
 Cement sx used: 28

SPUD DATE/TIME: 4/12/2011 13:00

SURFACE HOLE: 11"
 Surface From depth: 40
 Surface To depth: 2,600
 Total SURFACE hours: 21.00
 Surface Casing size: 8 5/8"
 # of casing joints ran: 58
 Casing set MD: 2575'
 # sx of cement: 200/225/125
 Cement blend (ppg): 11.0/15.8/15.8
 Cement yield (ft3/sk): 3.38/1.15/1.15
 # of bbls to surface: 0
 Describe cement issues: CMT TO SURFACE ON 1" TOP OUT
 Describe hole issues: NONE

PRODUCTION:
 Rig Move/Skid start date/time: 6/19/2011 12:00
 Rig Move/Skid finish date/time: 6/19/2011 12:30
 Total MOVE hours: 0.5
 Prod Rig Spud date/time: 6/19/2011 23:00
 Rig Release date/time: 6/28/2011 20:00
 Total SPUD to RR hours: 213.0
 Planned depth MD 9762'
 Planned depth TVD 9700'
 Actual MD: 10,812
 Actual TVD: 10,759
 Open Wells \$:
 AFE \$:
 Open wells \$/ft:

PRODUCTION HOLE: 7 7/8"
 Prod. From depth: 2616'
 Prod. To depth: 10,812
 Total PROD hours: 133.5
 Log Depth: 10814'
 Float Collar Top Depth: 10760'
 Production Casing size: 4 1/2"
 # of casing joints ran: 251
 Casing set MD: 10,798.0
 # sx of cement: 564+1335=1899
 Cement blend (ppg): 12.6/14.3
 Cement yield (ft3/sk): 1.93/1.31
 Est. TOC (Lead & Tail) or 2 Stage : SURFACE/4200'
 Describe cement issues: NONE
 Describe hole issues: NONE

DIRECTIONAL INFO:
 KOP: 204'
 Max angle: 12.4@2767'
 Departure: 562.7'@8427'
 Max dogleg MD: 2.77@3239'

1 General

1.1 Customer Information

Company	US ROCKIES REGION		
Representative			
Address			

1.2 Well Information

Well	NBU 921-35C1CS [BLUE]		
Common Name	NBU 921-35C1CS		
Well Name	NBU 921-35C1CS	Wellbore No.	OH
Report No.	1	Report Date	8/8/2011
Project	UTAH-UINTAH	Site	NBU 921-35C PAD
Rig Name/No.		Event	COMPLETION
Start Date	8/8/2011	End Date	8/18/2011
Spud Date	4/12/2011	Active Datum	RKB @5,011.00ft (above Mean Sea Level)
UWI	NE/NW/0/9/S/21/E/35/0/0/26/PM/N/399/W/0/1591/0/0		

1.3 General

Contractor		Job Method	PERFORATE	Supervisor	
Perforated Assembly	PRODUCTION CASING	Conveyed Method	WIRELINE		

1.4 Initial Conditions

Fluid Type		Fluid Density		Gross Interval	7,428.0 (ft)-10,446.0 (ft)	Start Date/Time	8/8/2011 12:00AM
Surface Press		Estimate Res Press		No. of Intervals	45	End Date/Time	8/8/2011 12:00AM
TVD Fluid Top		Fluid Head		Total Shots	216	Net Perforation Interval	67.00 (ft)
Hydrostatic Press		Press Difference		Avg Shot Density	3.22 (shot/ft)	Final Surface Pressure	
Balance Cond	NEUTRAL					Final Press Date	

1.5 Summary

2 Intervals

2.1 Perforated Interval

Date	Formation/Reservoir	CCL@ (ft)	CCL-T S (ft)	MD Top (ft)	MD Base (ft)	Shot Density (shot/ft)	Misfires/ Add. Shot	Diameter (in)	Carr Type /Carr Manuf	Carr Size (in)	Phasing (°)	Charge Desc /Charge Manufacturer	Charge Weight (gram)	Reason	Misrun
12:00AM	WASATCH/			7,428.0	7,430.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO	

2.1 Perforated Interval (Continued)

Date	Formation/ Reservoir	CCL@ (ft)	CCL-T S (ft)	MD Top (ft)	MD Base (ft)	Shot Density (shot/ft)	Misfires/ Add. Shot	Diamete r (in)	Carr Type /Carr Manuf	Carr Size (in)	Phasing (°)	Charge Desc /Charge Manufacturer	Charge Weight (gram)	Reason	Misrun
12:00	AMMESAVERDE/			7,458.0	7,460.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
12:00	AMMESAVERDE/			7,488.0	7,490.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
12:00	AMMESAVERDE/			7,567.0	7,568.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
12:00	AMMESAVERDE/			7,591.0	7,592.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
12:00	AMMESAVERDE/			7,610.0	7,611.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
12:00	AMMESAVERDE/			7,660.0	7,662.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
12:00	AMMESAVERDE/			7,702.0	7,703.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
12:00	AMMESAVERDE/			7,742.0	7,743.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
12:00	AMMESAVERDE/			7,932.0	7,933.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
12:00	AMMESAVERDE/			7,952.0	7,953.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
12:00	AMMESAVERDE/			7,992.0	7,994.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
12:00	AMMESAVERDE/			8,024.0	8,025.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
12:00	AMMESAVERDE/			8,046.0	8,047.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
12:00	AMMESAVERDE/			8,070.0	8,072.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
12:00	AMMESAVERDE/			8,215.0	8,216.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
12:00	AMMESAVERDE/			8,227.0	8,228.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
12:00	AMMESAVERDE/			8,270.0	8,272.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
12:00	AMMESAVERDE/			8,330.0	8,332.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
12:00	AMMESAVERDE/			8,362.0	8,364.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
12:00	AMMESAVERDE/			8,570.0	8,572.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
12:00	AMMESAVERDE/			8,594.0	8,596.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	

2.1 Perforated Interval (Continued)

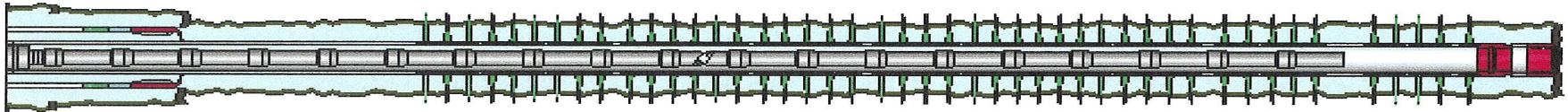
Date	Formation/ Reservoir	CCL@ (ft)	CCL-T S (ft)	MD Top (ft)	MD Base (ft)	Shot Density (shot/ft)	Misfires/ Add. Shot	Diamete r (in)	Carr Type /Carr Manuf	Carr Size (in)	Phasing (°)	Charge Desc /Charge Manufacturer	Charge Weight (gram)	Reason	Misrun
12:00AM	MESAVERDE/			8,654.0	8,656.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
12:00AM	MESAVERDE/			8,714.0	8,716.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
12:00AM	MESAVERDE/			8,830.0	8,831.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
12:00AM	MESAVERDE/			8,858.0	8,859.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
12:00AM	MESAVERDE/			8,903.0	8,904.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
12:00AM	MESAVERDE/			8,920.0	8,921.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
12:00AM	MESAVERDE/			8,936.0	8,937.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
12:00AM	MESAVERDE/			8,953.0	8,954.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
12:00AM	MESAVERDE/			8,971.0	8,972.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
12:00AM	MESAVERDE/			9,046.0	9,048.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
12:00AM	MESAVERDE/			9,094.0	9,096.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
12:00AM	MESAVERDE/			9,146.0	9,148.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
12:00AM	MESAVERDE/			9,178.0	9,180.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
12:00AM	MESAVERDE/			9,459.0	9,460.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
12:00AM	MESAVERDE/			9,526.0	9,528.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
12:00AM	MESAVERDE/			9,622.0	9,624.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
12:00AM	MESAVERDE/			9,654.0	9,655.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
12:00AM	MESAVERDE/			9,682.0	9,684.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
12:00AM	MESAVERDE/			10,282.0	10,283.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
12:00AM	MESAVERDE/			10,300.0	10,302.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
12:00AM	MESAVERDE/			10,330.0	10,331.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	

2.1 Perforated Interval (Continued)

Date	Formation/ Reservoir	CCL@ (ft)	CCL-T S (ft)	MD Top (ft)	MD Base (ft)	Shot Density (shot/ft)	Misfires/ Add. Shot	Diamete r (in)	Carr Type /Carr Manuf	Carr Size (in)	Phasing (°)	Charge Desc /Charge Manufacturer	Charge Weight (gram)	Reason	Misrun
12:00AM	MESAVERDE/			10,348.0	10,349.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
12:00AM	MESAVERDE/			10,444.0	10,446.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	

3 Plots

3.1 Wellbore Schematic



US ROCKIES REGION
Operation Summary Report

Well: NBU 921-35C1CS [BLUE] Spud Conductor: 3/25/2011 Spud Date: 4/12/2011

Project: UTAH-UINTAH Site: NBU 921-35C PAD Rig Name No: MILES 2/2

Event: COMPLETION Start Date: 8/8/2011 End Date: 8/18/2011

Active Datum: RKB @5,011.01ft (above Mean Sea Level) UWI: NE/NW/0/9/S/21/E/35/0/0/26/PM/N/399/W/0/1591/0/0

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
8/5/2011	7:00 - 15:00	8.00	COMP	47	B	P		MIRU B&C TESTERS, FILL SURFACE CSG, HOOK UP TO 4-1/2 PRODUCTION CSG, PRESSURE UP 1000# W/ 1# LOSS IN 15 MIN. PRESSURE UP TO 3500# W/ 37# LOSS IN 15 MIN. PRESSURE UP TO 9000# W/ 135# LOSS IN 30 MIN. [GOOD TEST]
								P/U RIH W/ HALIBURTON 8K CBP & PERF GUN, PERF MESAVERDE USING 3-1/8 EXPEND, 23 GRM, 0.36" HOLE. AS PERSAY IN PROCEDURE, SWM.
8/8/2011	7:00 - 7:15	0.25	COMP	48		P		HSM, PRE FRAC INTRUCTIONS
	7:15 - 17:30	10.25	COMP	36	E	P		PERF & FRAC FOLLOWING WELL AS PER DESIGN W/ 30/50 TLC SAND & SLK WTR. ALL CBP'S ARE HALIBURTON 8K CBP'S. REFER TO STIM PJR FOR FLIUD, SAND AND CHEMICL VOLUME PUM'D
								FRAC STG #1] WHP=1,660#, BRK DN PERFS=4,656#, @=4.8 BPM, INJ RT=50.1, INJ PSI=7,266#, INITIAL ISIP=3,320#, INITIAL FG=.76, FINAL ISIP=3,886#, FINAL FG=.81, AVERAGE RATE=42.4, AVERAGE PRESSURE=7,709#, MAX RATE=50.2, MAX PRESSURE=8,513#, NET PRESSURE INCREASE=566#, 19/24 77% CALC PERFS OPEN. X OVER TO WIRE LINE
								PERF STG #2] P/U RIH W/ HALIBURTON 8K CBP & PERF GUN, SET CBP @=9,714', PERF MESAVERDE USING 3-1/8 EXPEND, 23 GRM, 0.36" HOLE. AS PERSAY IN PROCEDURE, X OVER TO FRAC CREW
								FRAC STG #2] WHP=1,814#, BRK DN PERFS=3,480#, @=4.7 BPM, INJ RT=45.3, INJ PSI=6,052#, INITIAL ISIP=2,586#, INITIAL FG=.71, FINAL ISIP=2,955#, FINAL FG=.75, AVERAGE RATE=50.7, AVERAGE PRESSURE=5,670#, MAX RATE=52.8, MAX PRESSURE=6,487#, NET PRESSURE INCREASE=369#, 17/24 72% CALC PERFS OPEN. X OVER TO WIRE LINE
								PERF STG #3] P/U RIH W/ HALIBURTON 8K CBP & PERF GUN, SET CBP @=9,210', PERF MESAVERDE USING 3-1/8 EXPEND, 23 GRM, 0.36" HOLE. AS PERSAY IN PROCEDURE, X OVER TO FRAC CREW SWMFN.
8/9/2011	6:45 - 7:00	0.25	COMP	48		P		HSM, STAYING HYDRATED

US ROCKIES REGION

Operation Summary Report

Well: NBU 921-35C1CS [BLUE]		Spud Conductor: 3/25/2011	Spud Date: 4/12/2011
Project: UTAH-UINTAH		Site: NBU 921-35C PAD	Rig Name No: MILES 2/2
Event: COMPLETION		Start Date: 8/8/2011	End Date: 8/18/2011
Active Datum: RKB @5,011.01ft (above Mean Sea Level)		UWI: NE/NW/0/9/S/21/E/35/0/0/26/PM/N/399/W/0/1591/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
	7:00 - 7:00	0.00	COMP	36	E	P		<p>FRAC STG #3] WHP=1,559#, BRK DN PERFS=3,428#, @=4.5 BPM, INJ RT=50.5, INJ PSI=6,052#, INITIAL ISIP=2,425#, INITIAL FG=.70, FINAL ISIP=3,351#, FINAL FG=.81, AVERAGE RATE=50.6, AVERAGE PRESSURE=5,699#, MAX RATE=51, MAX PRESSURE=6,596#, NET PRESSURE INCREASE=926#, 19/24 80% CALC PERFS OPEN. X OVER TO WIRE LINE</p> <p>PERF STG #4] P/U RIH W/ HALIBURTON 8K CBP & PERF GUN, SET CBP @=9,002', PERF MESAVERDE USING 3-1/8 EXPEND, 23 GRM, 0.36" HOLE. AS PERSAY IN PROCEDURE, X OVER TO FRAC CREW</p> <p>FRAC STG #4] WHP=2,141#, BRK DN PERFS=3,795#, @=4.3 BPM, INJ RT=44.9, INJ PSI=6,091#, INITIAL ISIP=2,649#, INITIAL FG=.74, FINAL ISIP=2,929#, FINAL FG=.77, AVERAGE RATE=50.1, AVERAGE PRESSURE=5,640#, MAX RATE=51.1, MAX PRESSURE=6,413#, NET PRESSURE INCREASE=280#, 17/24 70% CALC PERFS OPEN. X OVER TO WIRE LINE</p> <p>PERF STG #5] P/U RIH W/ HALIBURTON 8K CBP & PERF GUN, SET CBP @=8,746', PERF MESAVERDE USING 3-1/8 EXPEND, 23 GRM, 0.36" HOLE. AS PERSAY IN PROCEDURE, X OVER TO FRAC CREW</p> <p>FRAC STG #5] WHP=1,816#, BRK DN PERFS=3,671#, @=4.7 BPM, INJ RT=39.1, INJ PSI=6,247#, INITIAL ISIP=2,305#, INITIAL FG=.71, FINAL ISIP=2,922#, FINAL FG=.78, AVERAGE RATE=48.5, AVERAGE PRESSURE=5,938#, MAX RATE=50.6, MAX PRESSURE=6,484#, NET PRESSURE INCREASE=617#, 14/24 60% CALC PERFS OPEN. X OVER TO WIRE LINE</p> <p>PERF STG #6] P/U RIH W/ HALIBURTON 8K CBP & PERF GUN, SET CBP @=8,394', PERF MESAVERDE USING 3-1/8 EXPEND, 23 GRM, 0.36" HOLE. AS PERSAY IN PROCEDURE, X OVER TO FRAC CREW</p> <p>FRAC STG #6] WHP=749#, BRK DN PERFS=6,008#, @=4.7 BPM, INJ RT=37.3, INJ PSI=5,750#, INITIAL ISIP=2,468#, INITIAL FG=.74, FINAL ISIP=2,652#, FINAL FG=.76, AVERAGE RATE=48.1, AVERAGE PRESSURE=5,981#, MAX RATE=52.7, MAX PRESSURE=6,946#, NET PRESSURE INCREASE=184#, 14/24 60% CALC PERFS OPEN. X OVER TO WIRE LINE</p> <p>PERF STG #7] P/U RIH W/ HALIBURTON 8K CBP & PERF GUN, SET CBP @=8,102', PERF MESAVERDE USING 3-1/8 EXPEND, 23 GRM, 0.36" HOLE. AS PERSAY IN PROCEDURE, X OVER TO FRAC CREW. SWFN.</p>

US ROCKIES REGION

Operation Summary Report

Well: NBU 921-35C1CS [BLUE]		Spud Conductor: 3/25/2011	Spud Date: 4/12/2011
Project: UTAH-UINTAH		Site: NBU 921-35C PAD	Rig Name No: MILES 2/2
Event: COMPLETION		Start Date: 8/8/2011	End Date: 8/18/2011
Active Datum: RKB @5,011.01ft (above Mean Sea Level)		UWI: NE/NW/0/9/S/21/E/35/0/0/26/PM/N/399/W/0/1591/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
8/10/2011	6:45 - 7:00	0.25	COMP	48		P		HSM, R/D
	7:00 - 7:00	0.00	COMP	36	E	P		<p>FRAC STG #7] WHP=1,574#, BRK DN PERFS=2,876#, @=4.1 BPM, INJ RT=50.8, INJ PSI=4,591#, INITIAL ISIP=2,051#, INITIAL FG=.70, FINAL ISIP=2,294#, FINAL FG=.73, AVERAGE RATE=50.3, AVERAGE PRESSURE=4,391#, MAX RATE=51, MAX PRESSURE=4,978#, NET PRESSURE INCREASE=243#, 24/24 100% CALC PERFS OPEN. X OVER TO WIRE LINE</p> <p>PERF STG #8] P/U RIH W/ HALIBURTON 8K CBP & PERF GUN, SET CBP @=7,773', PERF MESAVERDE USING 3-1/8 EXPEND, 23 GRM, 0.36" HOLE. AS PERSAY IN PROCEDURE, X OVER TO FRAC CREW</p> <p>FRAC STG #8] WHP=8857#, BRK DN PERFS=3,281#, @=4.2 BPM, INJ RT=50.3, INJ PSI=5,909#, INITIAL ISIP=1,885#, INITIAL FG=.68, FINAL ISIP=2,558#, FINAL FG=.77, AVERAGE RATE=52.4, AVERAGE PRESSURE=5,267#, MAX RATE=53.1, MAX PRESSURE=6,37#, NET PRESSURE INCREASE=673#, 17/24 70% CALC PERFS OPEN. X OVER TO WIRE LINE</p> <p>PERF STG #9] P/U RIH W/ HALIBURTON 8K CBP & PERF GUN, SET CBP @=7,520', PERF MESAVERDE / WASATCH USING 3-1/8 EXPEND, 23 GRM, 0.36" HOLE. AS PERSAY IN PROCEDURE, X OVER TO FRAC CREW</p> <p>FRAC STG #9] WHP=1,178#, BRK DN PERFS=2,963#, @=4.4 BPM, INJ RT=50.3, INJ PSI=6,386#, INITIAL ISIP=1,593#, INITIAL FG=.65, FINAL ISIP=2,604#, FINAL FG=.79, AVERAGE RATE=49, AVERAGE PRESSURE=6,169#, MAX RATE=51.3, MAX PRESSURE=6,443#, NET PRESSURE INCREASE=1,011#, 15/24 61% CALC PERFS OPEN. X OVER TO WIRE LINE</p> <p>P/U RIH W/ HALIBURTON 8K CBP, SET FOR TOP KILL @=7,378'</p> <p>TOTAL FLUID PUMP'D=13,335 TOTAL SAND PUMP'D= 322,215</p>
8/17/2011	12:00 - 17:30	5.50	COMP	44		P		MIRU, NDWH, NU BOP'S, TEST BOP'S, PU TBG TIH TO 6744', 213 JTS, SWIFN
8/18/2011	7:00 - 7:30	0.50	COMP	48		P		DRILLING PLUGS

US ROCKIES REGION
Operation Summary Report

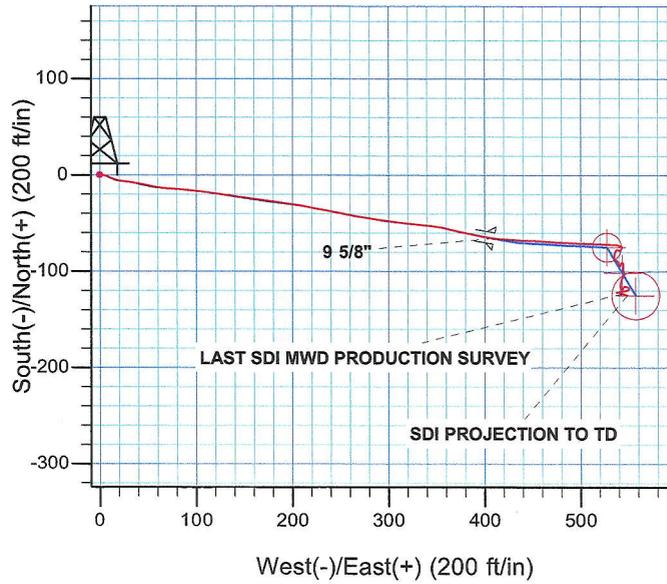
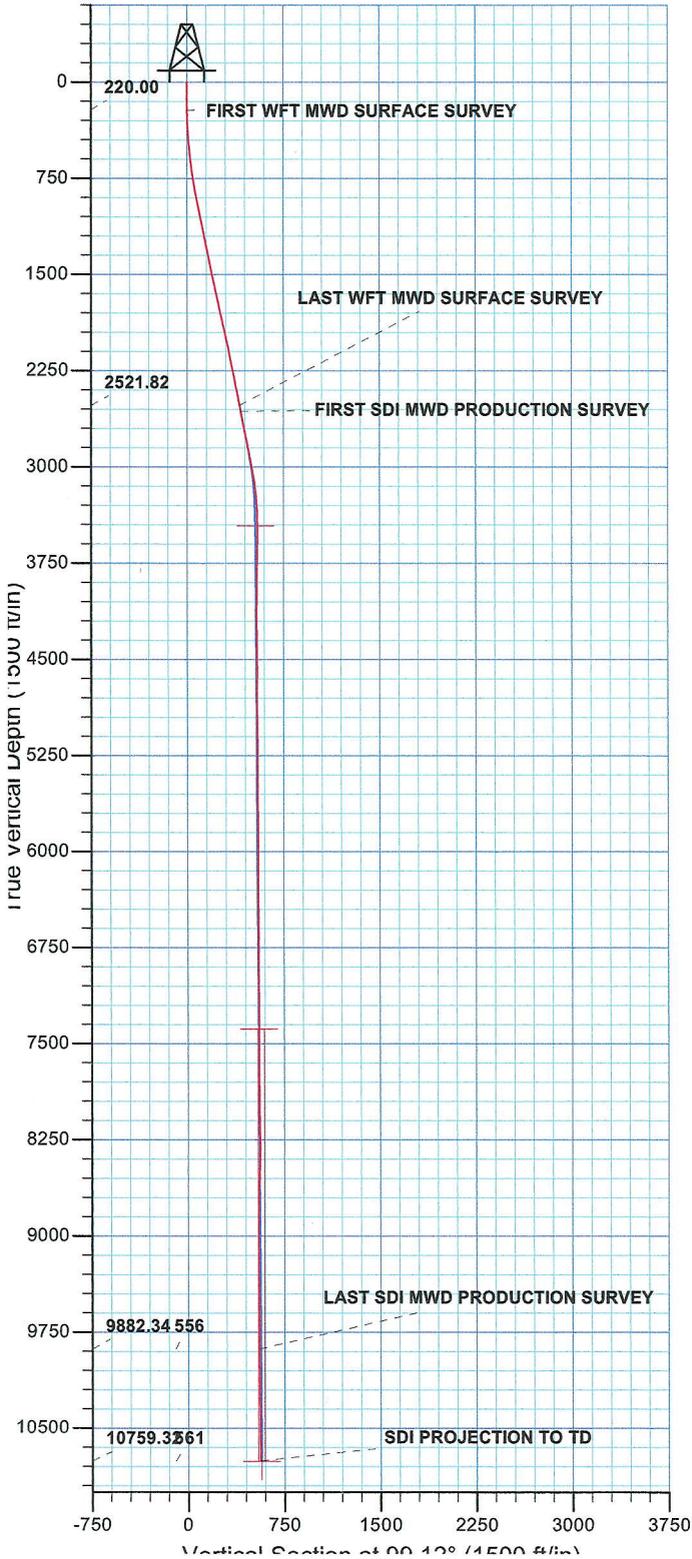
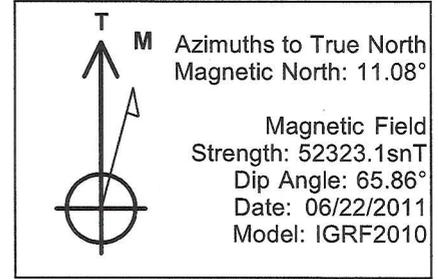
Well: NBU 921-35C1CS [BLUE]		Spud Conductor: 3/25/2011	Spud Date: 4/12/2011
Project: UTAH-UINTAH		Site: NBU 921-35C PAD	Rig Name No: MILES 2/2
Event: COMPLETION		Start Date: 8/8/2011	End Date: 8/18/2011
Active Datum: RKB @5,011.01ft (above Mean Sea Level)		UWI: NE/NW09/S/21/E/35/0/0/26/PM/N/399/W/0/1591/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
	7:30 - 15:00	7.50	COMP	44		P		TIH TO 7318' 234 JTS, TAG PLUG# 1, MILL OUT PLUGS. PLUG# 1 7378' 30' SAND 5 MIN 300# KICK PLUG# 2 7793' 30' SAND 5 MIN 300# KICK PLUG# 3 8122' 30' SAND 5 MIN 300# KICK PLUG# 4 8414' 40' SAND 6 MIN 200# KICK PLUG# 5 8766' 30' SAND 7 MIN 300# KICK PLUG# 6 9002' 30' SAND 6 MIN 400# KICK PLUG# 7 9230' 30' SAND 7 MIN 600# KICK PLUG# 8 9459' 30' SAND 5 MIN 600# KICK PLUG# 9 9734' 40' SAND 5 MIN 500# KICK CLEAN OUT TO 335 JTS 10599.7', POOH TO 10068.71', LAND TBG, ND BOP'S, NU WH, POBS 2500#, TURN TO FBC, RDMO TO NBU 921-35D1CS. TBG RAN 318 JTS 10,040.78' KB 25.00' XNSN 1.875" 2.20" HANGER .83' EOT 10,068.71' FRAC WTR 13,334 BBLs WTR RVCD LTR PBTD10758' BTM PERF 10446' TOP PERF 7428' 7 AM FLBK REPORT: CP 3700#, TP 2400#, 20/64" CK, 40 BWPH, MED SAND, - GAS TTL BBLs RECOVERED: 2905 BBLs LEFT TO RECOVER: 10429 7 AM FLBK REPORT: CP 3525#, TP 2375#, 20/64" CK, 35 BWPH, LIGHT SAND, - GAS TTL BBLs RECOVERED: 3795 BBLs LEFT TO RECOVER: 9539 7 AM FLBK REPORT: CP 3250#, TP 2275#, 20/64" CK, 35 BWPH, LIGHT SAND, - GAS TTL BBLs RECOVERED: 4635 BBLs LEFT TO RECOVER: 8699 7 AM FLBK REPORT: CP 3050#, TP 2150#, 20/64" CK, 35 BWPH, LIGHT SAND, - GAS TTL BBLs RECOVERED: 5475 BBLs LEFT TO RECOVER: 7859 7 AM FLBK REPORT: CP 2875#, TP 2025#, 20/64" CK, 25 BWPH, LIGHT SAND, - GAS TTL BBLs RECOVERED: 6120 BBLs LEFT TO RECOVER: 7214 8/24/2011 7:00 - 50 WELL IP'D ON 8/24/11 - 2302 MCFD, 0 BOPD, 668 BWPD, CP 3000#, FTP 1950#, CK 20/64", LP 134#, 24 HRS
8/19/2011	7:00 -			33	A			
8/20/2011	7:00 -			33	A			
8/21/2011	7:00 -			33	A			
8/22/2011	7:00 -			33	A			
8/23/2011	7:00 -			33	A			
8/24/2011	7:00 -			50				

WELL DETAILS: NBU 921-35C1CS

GL 4986' & KB 25' @ 5011.00ft (H&P 311)

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.00	0.00	14529009.00	2054358.96	39° 59' 55.377 N	109° 31' 19.196 W





Scientific Drilling
Rocky Mountain Operations

Kerr McGee Oil and Gas Onshore LP

**Uintah County, UT UTM12
NBU 921-35C Pad
NBU 921-35C1CS**

OH

Design: OH

Standard Survey Report

13 July, 2011

Anadarko 
Petroleum Corporation

Company: Kerr McGee Oil and Gas Onshore LP
Project: Uintah County, UT UTM12
Site: NBU 921-35C Pad
Well: NBU 921-35C1CS
Wellbore: OH
Design: OH

Local Co-ordinate Reference: Well NBU 921-35C1CS
TVD Reference: GL 4986' & KB 25' @ 5011.00ft (H&P 311)
MD Reference: GL 4986' & KB 25' @ 5011.00ft (H&P 311)
North Reference: True
Survey Calculation Method: Minimum Curvature
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 921-35C Pad, SEC 35 T9S R21E				
Site Position:		Northing:	14,529,019.23 usft	Latitude:	39° 59' 55.478 N
From:	Lat/Long	Easting:	2,054,359.90 usft	Longitude:	109° 31' 19.182 W
Position Uncertainty:	0.00 ft	Slot Radius:	13.200 in	Grid Convergence:	0.95 °

Well	NBU 921-35C1CS, 399' FNL 1591' FWL					
Well Position	+N/-S	0.00 ft	Northing:	14,529,009.00 usft	Latitude:	39° 59' 55.377 N
	+E/-W	0.00 ft	Easting:	2,054,358.96 usft	Longitude:	109° 31' 19.196 W
Position Uncertainty		0.00 ft	Wellhead Elevation:	ft	Ground Level:	4,986.00 ft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	06/22/2011	11.08	65.86	52,323

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	99.12	

Survey Program	Date	07/13/2011			
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
16.00	2,561.00	Survey #1 WFT MWD SURFACE (OH)	MWD	MWD - Standard	
2,609.00	10,812.00	Survey #2 SDI MWD PRODUCTION (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	
16.00	0.00	0.00	16.00	0.00	0.00	0.00	0.00	0.00	0.00	
220.00	0.67	81.22	220.00	0.18	1.18	1.14	0.33	0.33	0.00	
FIRST WFT MWD SURFACE SURVEY										
315.00	2.25	99.43	314.96	-0.04	3.57	3.53	1.71	1.66	19.17	
408.00	4.33	118.95	407.81	-2.04	8.44	8.66	2.51	2.24	20.99	
503.00	5.63	106.52	502.45	-5.10	16.05	16.65	1.77	1.37	-13.08	
598.00	7.06	94.27	596.87	-6.86	26.34	27.09	2.06	1.51	-12.89	
691.00	7.19	103.14	689.15	-8.61	37.71	38.59	1.19	0.14	9.54	
787.00	9.19	101.27	784.17	-11.47	51.08	52.25	2.10	2.08	-1.95	

Company: Kerr McGee Oil and Gas Onshore LP
Project: Uintah County, UT UTM12
Site: NBU 921-35C Pad
Well: NBU 921-35C1CS
Wellbore: OH
Design: OH

Local Co-ordinate Reference: Well NBU 921-35C1CS
TVD Reference: GL 4986' & KB 25' @ 5011.00ft (H&P 311)
MD Reference: GL 4986' & KB 25' @ 5011.00ft (H&P 311)
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)
880.00	11.00	95.14	875.73	-13.72	67.20	68.52	2.26	1.95	-6.59
975.00	11.63	94.02	968.88	-15.20	85.78	87.10	0.70	0.66	-1.18
1,071.00	11.44	97.77	1,062.94	-17.17	104.86	106.26	0.81	-0.20	3.91
1,166.00	11.60	98.76	1,156.03	-19.90	123.64	125.23	0.27	0.17	1.04
1,261.00	11.75	97.89	1,249.06	-22.68	142.66	144.45	0.24	0.16	-0.92
1,357.00	11.50	98.39	1,343.10	-25.42	161.81	163.79	0.28	-0.26	0.52
1,451.00	11.69	97.89	1,435.18	-28.09	180.51	182.68	0.23	0.20	-0.53
1,546.00	11.94	96.52	1,528.16	-30.53	199.81	202.12	0.40	0.26	-1.44
1,641.00	11.81	102.27	1,621.13	-33.71	219.07	221.64	1.25	-0.14	6.05
1,737.00	12.19	100.77	1,715.04	-37.69	238.63	241.59	0.51	0.40	-1.56
1,831.00	12.17	100.17	1,806.92	-41.29	258.13	261.41	0.14	-0.02	-0.64
1,926.00	12.31	99.27	1,899.76	-44.69	277.98	281.55	0.25	0.15	-0.95
2,022.00	12.50	98.02	1,993.52	-47.79	298.37	302.17	0.34	0.20	-1.30
2,117.00	11.94	95.02	2,086.37	-50.09	318.34	322.25	0.89	-0.59	-3.16
2,213.00	11.38	95.77	2,180.39	-51.91	337.65	341.61	0.60	-0.58	0.78
2,308.00	10.69	101.77	2,273.63	-54.65	355.61	359.77	1.41	-0.73	6.32
2,404.00	11.38	103.77	2,367.86	-58.72	373.52	378.11	0.82	0.72	2.08
2,499.00	11.13	100.64	2,461.03	-62.64	391.64	396.61	0.69	-0.26	-3.29
2,561.00	11.58	99.67	2,521.82	-64.79	403.65	408.82	0.79	0.73	-1.56
LAST WFT MWD SURFACE SURVEY									
2,609.00	11.26	97.57	2,568.87	-66.22	413.05	418.32	1.09	-0.67	-4.38
FIRST SDI MWD PRODUCTION SURVEY									
2,672.00	10.90	92.91	2,630.69	-67.33	425.09	430.39	1.53	-0.57	-7.40
2,767.00	12.40	91.42	2,723.74	-68.04	444.26	449.43	1.61	1.58	-1.57
2,861.00	12.21	93.96	2,815.58	-68.98	464.27	469.33	0.61	-0.20	2.70
2,956.00	10.20	92.73	2,908.76	-70.07	482.69	487.70	2.13	-2.12	-1.29
3,050.00	10.64	91.85	3,001.21	-70.75	499.68	504.58	0.50	0.47	-0.94
3,144.00	8.79	92.47	3,093.86	-71.34	515.53	520.32	1.97	-1.97	0.66
3,239.00	6.16	91.68	3,188.04	-71.80	527.88	532.59	2.77	-2.77	-0.83
3,333.00	4.13	95.19	3,281.66	-72.25	536.29	540.97	2.18	-2.16	3.73
3,428.00	2.29	119.45	3,376.51	-73.50	541.35	546.16	2.37	-1.94	25.54
3,522.00	0.97	195.74	3,470.48	-75.19	542.77	547.83	2.41	-1.40	81.16
3,616.00	0.88	215.17	3,564.47	-76.54	542.14	547.42	0.35	-0.10	20.67
3,710.00	1.14	212.97	3,658.45	-77.92	541.22	546.73	0.28	0.28	-2.34
3,804.00	0.97	302.44	3,752.44	-78.27	540.04	545.62	1.59	-0.18	95.18
3,899.00	0.97	305.34	3,847.43	-77.38	538.70	544.16	0.05	0.00	3.05
3,993.00	1.32	225.18	3,941.41	-77.68	537.28	542.81	1.59	0.37	-85.28
4,087.00	1.60	205.62	4,035.38	-79.63	535.95	541.80	0.60	0.30	-20.81
4,182.00	1.67	190.64	4,130.35	-82.18	535.12	541.38	0.45	0.07	-15.77
4,276.00	1.70	184.70	4,224.30	-84.92	534.75	541.45	0.19	0.03	-6.32
4,370.00	1.35	163.83	4,318.27	-87.37	534.95	542.03	0.69	-0.37	-22.20
4,465.00	0.62	85.88	4,413.26	-88.41	535.77	543.01	1.43	-0.77	-82.05
4,559.00	0.75	114.07	4,507.25	-88.63	536.84	544.10	0.38	0.14	29.99

Company: Kerr McGee Oil and Gas Onshore LP
Project: Uintah County, UT UTM12
Site: NBU 921-35C Pad
Well: NBU 921-35C1CS
Wellbore: OH
Design: OH

Local Co-ordinate Reference: Well NBU 921-35C1CS
TVD Reference: GL 4986' & KB 25' @ 5011.00ft (H&P 311)
MD Reference: GL 4986' & KB 25' @ 5011.00ft (H&P 311)
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)
4,653.00	0.26	308.50	4,601.25	-88.74	537.24	544.51	1.07	-0.52	-176.14
4,748.00	0.53	171.83	4,696.25	-89.04	537.13	544.45	0.78	0.28	-143.86
4,842.00	0.44	329.51	4,790.25	-89.16	537.01	544.35	1.01	-0.10	167.74
4,936.00	0.18	55.64	4,884.25	-88.77	536.95	544.23	0.49	-0.28	91.63
5,031.00	0.47	100.21	4,979.25	-88.75	537.45	544.73	0.38	0.31	46.92
5,125.00	0.62	139.75	5,073.24	-89.21	538.16	545.50	0.42	0.16	42.06
5,219.00	0.79	160.50	5,167.24	-90.21	538.71	546.19	0.32	0.18	22.07
5,314.00	0.88	173.59	5,262.23	-91.55	539.01	546.70	0.22	0.09	13.78
5,408.00	0.79	161.20	5,356.22	-92.88	539.30	547.20	0.21	-0.10	-13.18
5,502.00	1.06	147.40	5,450.20	-94.23	539.97	548.08	0.37	0.29	-14.68
5,597.00	0.70	11.70	5,545.20	-94.40	540.56	548.69	1.72	-0.38	-142.84
5,691.00	0.97	27.69	5,639.19	-93.13	541.05	548.97	0.38	0.29	17.01
5,785.00	0.44	23.56	5,733.18	-92.10	541.56	549.32	0.57	-0.56	-4.39
5,880.00	0.44	29.72	5,828.18	-91.45	541.89	549.54	0.05	0.00	6.48
5,974.00	0.36	45.94	5,922.18	-90.93	542.28	549.84	0.15	-0.09	17.26
6,068.00	0.35	93.17	6,016.17	-90.74	542.78	550.30	0.30	-0.01	50.24
6,163.00	0.62	112.60	6,111.17	-90.95	543.55	551.09	0.33	0.28	20.45
6,257.00	1.76	185.11	6,205.15	-92.59	543.89	551.69	1.79	1.21	77.14
6,352.00	1.49	176.14	6,300.11	-95.27	543.84	552.06	0.39	-0.28	-9.44
6,446.00	1.55	173.32	6,394.08	-97.75	544.07	552.69	0.10	0.06	-3.00
6,540.00	1.85	165.86	6,488.04	-100.49	544.59	553.63	0.40	0.32	-7.94
6,635.00	1.49	199.70	6,583.00	-103.14	544.55	554.01	1.09	-0.38	35.62
6,729.00	1.68	200.46	6,676.97	-105.58	543.65	553.51	0.20	0.20	0.81
6,824.00	1.76	203.04	6,771.92	-108.23	542.59	552.89	0.12	0.08	2.72
6,918.00	1.67	189.85	6,865.88	-110.90	541.80	552.52	0.43	-0.10	-14.03
7,012.00	1.76	184.23	6,959.84	-113.69	541.45	552.63	0.20	0.10	-5.98
7,106.00	1.49	175.44	7,053.80	-116.35	541.45	553.04	0.39	-0.29	-9.35
7,201.00	1.58	173.59	7,148.77	-118.88	541.69	553.68	0.11	0.09	-1.95
7,295.00	1.85	184.40	7,242.73	-121.68	541.72	554.16	0.45	0.29	11.50
7,389.00	0.45	158.41	7,336.70	-123.54	541.74	554.47	1.55	-1.49	-27.65
7,484.00	1.76	10.47	7,431.69	-122.45	542.14	554.70	2.27	1.38	-155.73
7,578.00	1.32	17.94	7,525.66	-120.00	542.74	554.90	0.51	-0.47	7.95
7,672.00	1.23	26.20	7,619.63	-118.07	543.51	555.36	0.22	-0.10	8.79
7,767.00	0.70	39.94	7,714.62	-116.71	544.34	555.95	0.60	-0.56	14.46
7,861.00	0.79	43.60	7,808.61	-115.80	545.15	556.62	0.11	0.10	3.89
7,955.00	0.44	88.25	7,902.61	-115.32	545.96	557.34	0.60	-0.37	47.50
8,050.00	0.53	117.08	7,997.60	-115.51	546.72	558.11	0.27	0.09	30.35
8,144.00	0.53	101.87	8,091.60	-115.79	547.53	558.96	0.15	0.00	-16.18
8,238.00	0.62	117.25	8,185.60	-116.12	548.41	559.88	0.19	0.10	16.36
8,333.00	1.14	124.81	8,280.58	-116.89	549.64	561.22	0.56	0.55	7.96
8,427.00	1.14	183.44	8,374.57	-118.36	550.35	562.15	1.19	0.00	62.37
8,521.00	1.93	258.76	8,468.54	-119.60	548.74	560.76	2.10	0.84	80.13
8,616.00	1.49	262.89	8,563.50	-120.07	545.95	558.08	0.48	-0.46	4.35
8,710.00	1.65	256.68	8,657.46	-120.53	543.42	555.65	0.25	0.17	-6.61

Company: Kerr McGee Oil and Gas Onshore LP
Project: Uintah County, UT UTM12
Site: NBU 921-35C Pad
Well: NBU 921-35C1CS
Wellbore: OH
Design: OH

Local Co-ordinate Reference: Well NBU 921-35C1CS
TVD Reference: GL 4986' & KB 25' @ 5011.00ft (H&P 311)
MD Reference: GL 4986' & KB 25' @ 5011.00ft (H&P 311)
North Reference: True
Survey Calculation Method: Minimum Curvature
Database: EDM5000-RobertS-Local

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)
8,804.00	1.23	256.47	8,751.43	-121.08	541.12	553.47	0.45	-0.45	-0.22
8,898.00	1.23	260.00	8,845.41	-121.49	539.15	551.59	0.08	0.00	3.76
8,993.00	0.97	249.35	8,940.40	-121.95	537.39	549.92	0.35	-0.27	-11.21
9,087.00	0.70	47.38	9,034.39	-121.84	537.07	549.59	1.74	-0.29	168.12
9,181.00	0.66	87.13	9,128.39	-121.42	538.03	550.47	0.49	-0.04	42.29
9,275.00	0.70	102.14	9,222.38	-121.52	539.13	551.58	0.19	0.04	15.97
9,369.00	0.97	134.66	9,316.37	-122.20	540.26	552.80	0.57	0.29	34.60
9,464.00	1.14	160.06	9,411.35	-123.65	541.15	553.91	0.52	0.18	26.74
9,558.00	0.26	22.77	9,505.35	-124.33	541.56	554.42	1.43	-0.94	-146.05
9,652.00	0.53	14.33	9,599.35	-123.72	541.75	554.51	0.29	0.29	-8.98
9,747.00	0.44	69.71	9,694.34	-123.16	542.20	554.86	0.48	-0.09	58.29
9,841.00	0.44	101.26	9,788.34	-123.11	542.89	555.54	0.25	0.00	33.56
9,935.00	0.35	107.32	9,882.34	-123.26	543.52	556.18	0.11	-0.10	6.45
LAST SDI MWD PRODUCTION SURVEY									
10,812.00	0.35	107.32	10,759.32	-124.86	548.63	561.49	0.00	0.00	0.00
SDI PROJECTION TO TD									

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
220.00	220.00	0.18	1.18	FIRST WFT MWD SURFACE SURVEY
2,561.00	2,521.82	-64.79	403.65	LAST WFT MWD SURFACE SURVEY
2,609.00	2,568.87	-66.22	413.05	FIRST SDI MWD PRODUCTION SURVEY
9,935.00	9,882.34	-123.26	543.52	LAST SDI MWD PRODUCTION SURVEY
10,812.00	10,759.32	-124.86	548.63	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 921-35C Pad
NBU 921-35C1CS**

OH

Design: OH

Survey Report - Geographic

13 July, 2011

Anadarko 
Petroleum Corporation

Company: Kerr McGee Oil and Gas Onshore LP	Local Co-ordinate Reference: Well NBU 921-35C1CS
Project: Uintah County, UT UTM12	TVD Reference: GL 4986' & KB 25' @ 5011.00ft (H&P 311)
Site: NBU 921-35C Pad	MD Reference: GL 4986' & KB 25' @ 5011.00ft (H&P 311)
Well: NBU 921-35C1CS	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 921-35C Pad, SEC 35 T9S R21E
Site Position: Northing: 14,529,019.23 usft Latitude: 39° 59' 55.478 N
From: Lat/Long Easting: 2,054,359.90 usft Longitude: 109° 31' 19.182 W
Position Uncertainty: 0.00 ft Slot Radius: 13.200 in Grid Convergence: 0.95 °

Well NBU 921-35C1CS, 399' FNL 1591' FWL
Well Position +N/-S 0.00 ft Northing: 14,529,009.00 usft Latitude: 39° 59' 55.377 N
+E/-W 0.00 ft Easting: 2,054,358.96 usft Longitude: 109° 31' 19.196 W
Position Uncertainty 0.00 ft Wellhead Elevation: ft Ground Level: 4,986.00 ft

Wellbore OH
Magnetics
Model Name IGRF2010 Sample Date 06/22/2011 Declination (°) 11.08 Dip Angle (°) 65.86 Field Strength (nT) 52,323

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 99.12

Survey Program Date 07/13/2011
From (ft) To (ft) Survey (Wellbore) Tool Name Description
16.00 2,561.00 Survey #1 WFT MWD SURFACE (OH) MWD MWD - Standard
2,609.00 10,812.00 Survey #2 SDI MWD PRODUCTION (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	14,529,009.00	2,054,358.96	39° 59' 55.377 N	109° 31' 19.196 W
16.00	0.00	0.00	16.00	0.00	0.00	14,529,009.00	2,054,358.96	39° 59' 55.377 N	109° 31' 19.196 W
220.00	0.67	81.22	220.00	0.18	1.18	14,529,009.21	2,054,360.13	39° 59' 55.379 N	109° 31' 19.181 W
FIRST WFT MWD SURFACE SURVEY									
315.00	2.25	99.43	314.96	-0.04	3.57	14,529,009.02	2,054,362.52	39° 59' 55.377 N	109° 31' 19.150 W
408.00	4.33	118.95	407.81	-2.04	8.44	14,529,007.11	2,054,367.43	39° 59' 55.357 N	109° 31' 19.088 W
503.00	5.63	106.52	502.45	-5.10	16.05	14,529,004.17	2,054,375.09	39° 59' 55.327 N	109° 31' 18.990 W
598.00	7.06	94.27	596.87	-6.86	26.34	14,529,002.58	2,054,385.41	39° 59' 55.310 N	109° 31' 18.858 W
691.00	7.19	103.14	689.15	-8.61	37.71	14,529,001.02	2,054,396.80	39° 59' 55.292 N	109° 31' 18.712 W
787.00	9.19	101.27	784.17	-11.47	51.08	14,528,998.38	2,054,410.22	39° 59' 55.264 N	109° 31' 18.540 W
880.00	11.00	95.14	875.73	-13.72	67.20	14,528,996.40	2,054,426.37	39° 59' 55.242 N	109° 31' 18.333 W

Company: Kerr McGee Oil and Gas Onshore LP
Project: Uintah County, UT UTM12
Site: NBU 921-35C Pad
Well: NBU 921-35C1CS
Wellbore: OH
Design: OH

Local Co-ordinate Reference: Well NBU 921-35C1CS
TVD Reference: GL 4986' & KB 25' @ 5011.00ft (H&P 311)
MD Reference: GL 4986' & KB 25' @ 5011.00ft (H&P 311)
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	
975.00	11.63	94.02	968.88	-15.20	85.78	14,528,995.23	2,054,444.97	39° 59' 55.227 N	109° 31' 18.094 W	
1,071.00	11.44	97.77	1,062.94	-17.17	104.86	14,528,993.58	2,054,464.09	39° 59' 55.208 N	109° 31' 17.849 W	
1,166.00	11.60	98.76	1,156.03	-19.90	123.64	14,528,991.16	2,054,482.91	39° 59' 55.181 N	109° 31' 17.607 W	
1,261.00	11.75	97.89	1,249.06	-22.68	142.66	14,528,988.70	2,054,501.97	39° 59' 55.153 N	109° 31' 17.363 W	
1,357.00	11.50	98.39	1,343.10	-25.42	161.81	14,528,986.28	2,054,521.16	39° 59' 55.126 N	109° 31' 17.117 W	
1,451.00	11.69	97.89	1,435.18	-28.09	180.51	14,528,983.91	2,054,539.91	39° 59' 55.100 N	109° 31' 16.876 W	
1,546.00	11.94	96.52	1,528.16	-30.53	199.81	14,528,981.80	2,054,559.24	39° 59' 55.076 N	109° 31' 16.628 W	
1,641.00	11.81	102.27	1,621.13	-33.71	219.07	14,528,978.93	2,054,578.56	39° 59' 55.044 N	109° 31' 16.381 W	
1,737.00	12.19	100.77	1,715.04	-37.69	238.63	14,528,975.28	2,054,598.18	39° 59' 55.005 N	109° 31' 16.129 W	
1,831.00	12.17	100.17	1,806.92	-41.29	258.13	14,528,972.00	2,054,617.74	39° 59' 54.969 N	109° 31' 15.879 W	
1,926.00	12.31	99.27	1,899.76	-44.69	277.98	14,528,968.93	2,054,637.64	39° 59' 54.936 N	109° 31' 15.624 W	
2,022.00	12.50	98.02	1,993.52	-47.79	298.37	14,528,966.17	2,054,658.08	39° 59' 54.905 N	109° 31' 15.362 W	
2,117.00	11.94	95.02	2,086.37	-50.09	318.34	14,528,964.20	2,054,678.08	39° 59' 54.882 N	109° 31' 15.105 W	
2,213.00	11.38	95.77	2,180.39	-51.91	337.65	14,528,962.70	2,054,697.43	39° 59' 54.864 N	109° 31' 14.857 W	
2,308.00	10.69	101.77	2,273.63	-54.65	355.61	14,528,960.26	2,054,715.42	39° 59' 54.837 N	109° 31' 14.626 W	
2,404.00	11.38	103.77	2,367.86	-58.72	373.52	14,528,956.49	2,054,733.40	39° 59' 54.797 N	109° 31' 14.396 W	
2,499.00	11.13	100.64	2,461.03	-62.64	391.64	14,528,952.87	2,054,751.58	39° 59' 54.758 N	109° 31' 14.163 W	
2,561.00	11.58	99.67	2,521.82	-64.79	403.65	14,528,950.92	2,054,763.63	39° 59' 54.737 N	109° 31' 14.009 W	
LAST WFT MWD SURFACE SURVEY										
2,609.00	11.26	97.57	2,568.87	-66.22	413.05	14,528,949.64	2,054,773.04	39° 59' 54.723 N	109° 31' 13.888 W	
FIRST SDI MWD PRODUCTION SURVEY										
2,672.00	10.90	92.91	2,630.69	-67.33	425.09	14,528,948.73	2,054,785.11	39° 59' 54.712 N	109° 31' 13.733 W	
2,767.00	12.40	91.42	2,723.74	-68.04	444.26	14,528,948.34	2,054,804.28	39° 59' 54.705 N	109° 31' 13.487 W	
2,861.00	12.21	93.96	2,815.58	-68.98	464.27	14,528,947.74	2,054,824.30	39° 59' 54.696 N	109° 31' 13.230 W	
2,956.00	10.20	92.73	2,908.76	-70.07	482.69	14,528,946.95	2,054,842.75	39° 59' 54.685 N	109° 31' 12.993 W	
3,050.00	10.64	91.85	3,001.21	-70.75	499.68	14,528,946.55	2,054,859.74	39° 59' 54.678 N	109° 31' 12.775 W	
3,144.00	8.79	92.47	3,093.86	-71.34	515.53	14,528,946.23	2,054,875.60	39° 59' 54.672 N	109° 31' 12.571 W	
3,239.00	6.16	91.68	3,188.04	-71.80	527.88	14,528,945.97	2,054,887.95	39° 59' 54.668 N	109° 31' 12.412 W	
3,333.00	4.13	95.19	3,281.66	-72.25	536.29	14,528,945.65	2,054,896.37	39° 59' 54.663 N	109° 31' 12.304 W	
3,428.00	2.29	119.45	3,376.51	-73.50	541.35	14,528,944.50	2,054,901.45	39° 59' 54.651 N	109° 31' 12.239 W	
3,522.00	0.97	195.74	3,470.48	-75.19	542.77	14,528,942.83	2,054,902.90	39° 59' 54.634 N	109° 31' 12.221 W	
3,616.00	0.88	215.17	3,564.47	-76.54	542.14	14,528,941.46	2,054,902.29	39° 59' 54.621 N	109° 31' 12.229 W	
3,710.00	1.14	212.97	3,658.45	-77.92	541.22	14,528,940.07	2,054,901.39	39° 59' 54.607 N	109° 31' 12.241 W	
3,804.00	0.97	302.44	3,752.44	-78.27	540.04	14,528,939.70	2,054,900.22	39° 59' 54.604 N	109° 31' 12.256 W	
3,899.00	0.97	305.34	3,847.43	-77.38	538.70	14,528,940.57	2,054,898.87	39° 59' 54.613 N	109° 31' 12.273 W	
3,993.00	1.32	225.18	3,941.41	-77.68	537.28	14,528,940.24	2,054,897.45	39° 59' 54.610 N	109° 31' 12.291 W	
4,087.00	1.60	205.62	4,035.38	-79.63	535.95	14,528,938.28	2,054,896.15	39° 59' 54.590 N	109° 31' 12.308 W	
4,182.00	1.67	190.64	4,130.35	-82.18	535.12	14,528,935.71	2,054,895.37	39° 59' 54.565 N	109° 31' 12.319 W	
4,276.00	1.70	184.70	4,224.30	-84.92	534.75	14,528,932.96	2,054,895.04	39° 59' 54.538 N	109° 31' 12.324 W	
4,370.00	1.35	163.83	4,318.27	-87.37	534.95	14,528,930.51	2,054,895.28	39° 59' 54.514 N	109° 31' 12.321 W	
4,465.00	0.62	85.88	4,413.26	-88.41	535.77	14,528,929.49	2,054,896.12	39° 59' 54.504 N	109° 31' 12.311 W	
4,559.00	0.75	114.07	4,507.25	-88.63	536.84	14,528,929.29	2,054,897.19	39° 59' 54.501 N	109° 31' 12.297 W	
4,653.00	0.26	308.50	4,601.25	-88.74	537.24	14,528,929.18	2,054,897.59	39° 59' 54.500 N	109° 31' 12.292 W	
4,748.00	0.53	171.83	4,696.25	-89.04	537.13	14,528,928.88	2,054,897.49	39° 59' 54.497 N	109° 31' 12.293 W	
4,842.00	0.44	329.51	4,790.25	-89.16	537.01	14,528,928.76	2,054,897.37	39° 59' 54.496 N	109° 31' 12.295 W	
4,936.00	0.18	55.64	4,884.25	-88.77	536.95	14,528,929.15	2,054,897.30	39° 59' 54.500 N	109° 31' 12.296 W	
5,031.00	0.47	100.21	4,979.25	-88.75	537.45	14,528,929.18	2,054,897.81	39° 59' 54.500 N	109° 31' 12.289 W	
5,125.00	0.62	139.75	5,073.24	-89.21	538.16	14,528,928.73	2,054,898.52	39° 59' 54.496 N	109° 31' 12.280 W	
5,219.00	0.79	160.50	5,167.24	-90.21	538.71	14,528,927.74	2,054,899.08	39° 59' 54.486 N	109° 31' 12.273 W	
5,314.00	0.88	173.59	5,262.23	-91.55	539.01	14,528,926.40	2,054,899.41	39° 59' 54.472 N	109° 31' 12.269 W	
5,408.00	0.79	161.20	5,356.22	-92.88	539.30	14,528,925.08	2,054,899.72	39° 59' 54.459 N	109° 31' 12.265 W	
5,502.00	1.06	147.40	5,450.20	-94.23	539.97	14,528,923.74	2,054,900.42	39° 59' 54.446 N	109° 31' 12.257 W	
5,597.00	0.70	11.70	5,545.20	-94.40	540.56	14,528,923.58	2,054,901.01	39° 59' 54.444 N	109° 31' 12.249 W	
5,691.00	0.97	27.69	5,639.19	-93.13	541.05	14,528,924.86	2,054,901.48	39° 59' 54.457 N	109° 31' 12.243 W	
5,785.00	0.44	23.56	5,733.18	-92.10	541.56	14,528,925.90	2,054,901.97	39° 59' 54.467 N	109° 31' 12.236 W	

Company: Kerr McGee Oil and Gas Onshore LP
Project: Uintah County, UT UTM12
Site: NBU 921-35C Pad
Well: NBU 921-35C1CS
Wellbore: OH
Design: OH

Local Co-ordinate Reference: Well NBU 921-35C1CS
TVD Reference: GL 4986' & KB 25' @ 5011.00ft (H&P 311)
MD Reference: GL 4986' & KB 25' @ 5011.00ft (H&P 311)
North Reference: True
Survey Calculation Method: Minimum Curvature
Database: EDM5000-RobertS-Local

Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
5,880.00	0.44	29.72	5,828.18	-91.45	541.89	14,528,926.56	2,054,902.29	39° 59' 54.474 N	109° 31' 12.232 W
5,974.00	0.36	45.94	5,922.18	-90.93	542.28	14,528,927.08	2,054,902.67	39° 59' 54.479 N	109° 31' 12.227 W
6,068.00	0.35	93.17	6,016.17	-90.74	542.78	14,528,927.28	2,054,903.17	39° 59' 54.481 N	109° 31' 12.221 W
6,163.00	0.62	112.60	6,111.17	-90.95	543.55	14,528,927.08	2,054,903.93	39° 59' 54.478 N	109° 31' 12.211 W
6,257.00	1.76	185.11	6,205.15	-92.59	543.89	14,528,925.45	2,054,904.30	39° 59' 54.462 N	109° 31' 12.206 W
6,352.00	1.49	176.14	6,300.11	-95.27	543.84	14,528,922.77	2,054,904.30	39° 59' 54.436 N	109° 31' 12.207 W
6,446.00	1.55	173.32	6,394.08	-97.75	544.07	14,528,920.29	2,054,904.57	39° 59' 54.411 N	109° 31' 12.204 W
6,540.00	1.85	165.86	6,488.04	-100.49	544.59	14,528,917.56	2,054,905.14	39° 59' 54.384 N	109° 31' 12.197 W
6,635.00	1.49	199.70	6,583.00	-103.14	544.55	14,528,914.91	2,054,905.14	39° 59' 54.358 N	109° 31' 12.198 W
6,729.00	1.68	200.46	6,676.97	-105.58	543.65	14,528,912.46	2,054,904.28	39° 59' 54.334 N	109° 31' 12.209 W
6,824.00	1.76	203.04	6,771.92	-108.23	542.59	14,528,909.79	2,054,903.27	39° 59' 54.308 N	109° 31' 12.223 W
6,918.00	1.67	189.85	6,865.88	-110.90	541.80	14,528,907.10	2,054,902.52	39° 59' 54.281 N	109° 31' 12.233 W
7,012.00	1.76	184.23	6,959.84	-113.69	541.45	14,528,904.31	2,054,902.22	39° 59' 54.254 N	109° 31' 12.238 W
7,106.00	1.49	175.44	7,053.80	-116.35	541.45	14,528,901.65	2,054,902.26	39° 59' 54.227 N	109° 31' 12.238 W
7,201.00	1.58	173.59	7,148.77	-118.88	541.69	14,528,899.12	2,054,902.54	39° 59' 54.202 N	109° 31' 12.235 W
7,295.00	1.85	184.40	7,242.73	-121.68	541.72	14,528,896.32	2,054,902.62	39° 59' 54.175 N	109° 31' 12.234 W
7,389.00	0.45	158.41	7,336.70	-123.54	541.74	14,528,894.47	2,054,902.67	39° 59' 54.156 N	109° 31' 12.234 W
7,484.00	1.76	10.47	7,431.69	-122.45	542.14	14,528,895.56	2,054,903.05	39° 59' 54.167 N	109° 31' 12.229 W
7,578.00	1.32	17.94	7,525.66	-120.00	542.74	14,528,898.02	2,054,903.61	39° 59' 54.191 N	109° 31' 12.221 W
7,672.00	1.23	26.20	7,619.63	-118.07	543.51	14,528,899.97	2,054,904.35	39° 59' 54.210 N	109° 31' 12.211 W
7,767.00	0.70	39.94	7,714.62	-116.71	544.34	14,528,901.34	2,054,905.15	39° 59' 54.224 N	109° 31' 12.201 W
7,861.00	0.79	43.60	7,808.61	-115.80	545.15	14,528,902.26	2,054,905.95	39° 59' 54.233 N	109° 31' 12.190 W
7,955.00	0.44	88.25	7,902.61	-115.32	545.96	14,528,902.76	2,054,906.75	39° 59' 54.238 N	109° 31' 12.180 W
8,050.00	0.53	117.08	7,997.60	-115.51	546.72	14,528,902.58	2,054,907.51	39° 59' 54.236 N	109° 31' 12.170 W
8,144.00	0.53	101.87	8,091.60	-115.79	547.53	14,528,902.31	2,054,908.33	39° 59' 54.233 N	109° 31' 12.160 W
8,238.00	0.62	117.25	8,185.60	-116.12	548.41	14,528,902.00	2,054,909.21	39° 59' 54.230 N	109° 31' 12.148 W
8,333.00	1.14	124.81	8,280.58	-116.89	549.64	14,528,901.24	2,054,910.46	39° 59' 54.222 N	109° 31' 12.133 W
8,427.00	1.14	183.44	8,374.57	-118.36	550.35	14,528,899.79	2,054,911.19	39° 59' 54.208 N	109° 31' 12.123 W
8,521.00	1.93	258.76	8,468.54	-119.60	548.74	14,528,898.52	2,054,909.61	39° 59' 54.195 N	109° 31' 12.144 W
8,616.00	1.49	262.89	8,563.50	-120.07	545.95	14,528,898.01	2,054,906.82	39° 59' 54.191 N	109° 31' 12.180 W
8,710.00	1.65	256.68	8,657.46	-120.53	543.42	14,528,897.50	2,054,904.30	39° 59' 54.186 N	109° 31' 12.212 W
8,804.00	1.23	256.47	8,751.43	-121.08	541.12	14,528,896.92	2,054,902.01	39° 59' 54.181 N	109° 31' 12.242 W
8,898.00	1.23	260.00	8,845.41	-121.49	539.15	14,528,896.47	2,054,900.04	39° 59' 54.177 N	109° 31' 12.267 W
8,993.00	0.97	249.35	8,940.40	-121.95	537.39	14,528,895.99	2,054,898.29	39° 59' 54.172 N	109° 31' 12.290 W
9,087.00	0.70	47.38	9,034.39	-121.84	537.07	14,528,896.09	2,054,897.97	39° 59' 54.173 N	109° 31' 12.294 W
9,181.00	0.66	87.13	9,128.39	-121.42	538.03	14,528,896.52	2,054,898.93	39° 59' 54.177 N	109° 31' 12.282 W
9,275.00	0.70	102.14	9,222.38	-121.52	539.13	14,528,896.44	2,054,900.03	39° 59' 54.176 N	109° 31' 12.268 W
9,369.00	0.97	134.66	9,316.37	-122.20	540.26	14,528,895.78	2,054,901.17	39° 59' 54.170 N	109° 31' 12.253 W
9,464.00	1.14	160.06	9,411.35	-123.65	541.15	14,528,894.34	2,054,902.09	39° 59' 54.155 N	109° 31' 12.242 W
9,558.00	0.26	22.77	9,505.35	-124.33	541.56	14,528,893.67	2,054,902.50	39° 59' 54.148 N	109° 31' 12.236 W
9,652.00	0.53	14.33	9,599.35	-123.72	541.75	14,528,894.29	2,054,902.68	39° 59' 54.155 N	109° 31' 12.234 W
9,747.00	0.44	69.71	9,694.34	-123.16	542.20	14,528,894.85	2,054,903.12	39° 59' 54.160 N	109° 31' 12.228 W
9,841.00	0.44	101.26	9,788.34	-123.11	542.89	14,528,894.92	2,054,903.81	39° 59' 54.161 N	109° 31' 12.219 W
9,935.00	0.35	107.32	9,882.34	-123.26	543.52	14,528,894.77	2,054,904.44	39° 59' 54.159 N	109° 31' 12.211 W
LAST SDI MWD PRODUCTION SURVEY									
10,812.00	0.35	107.32	10,759.32	-124.86	548.63	14,528,893.26	2,054,909.58	39° 59' 54.143 N	109° 31' 12.145 W
SDI PROJECTION TO TD									

Company: Kerr McGee Oil and Gas Onshore LP
Project: Uintah County, UT UTM12
Site: NBU 921-35C Pad
Well: NBU 921-35C1CS
Wellbore: OH
Design: OH

Local Co-ordinate Reference: Well NBU 921-35C1CS
TVD Reference: GL 4986' & KB 25' @ 5011.00ft (H&P 311)
MD Reference: GL 4986' & KB 25' @ 5011.00ft (H&P 311)
North Reference: True
Survey Calculation Method: Minimum Curvature
Database: EDM5000-RobertS-Local

Design Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
220.00	220.00	0.18	1.18	FIRST WFT MWD SURFACE SURVEY
2,561.00	2,521.82	-64.79	403.65	LAST WFT MWD SURFACE SURVEY
2,609.00	2,568.87	-66.22	413.05	FIRST SDI MWD PRODUCTION SURVEY
9,935.00	9,882.34	-123.26	543.52	LAST SDI MWD PRODUCTION SURVEY
10,812.00	10,759.32	-124.86	548.63	SDI PROJECTION TO TD

Checked By: _____ Approved By: _____ Date: _____