

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 921-3504BS	
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) ML 22582			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	370 FSL 1777 FEL	SWSE	35	9.0 S	21.0 E	S
Top of Uppermost Producing Zone	336 FSL 1833 FEL	SWSE	35	9.0 S	21.0 E	S
At Total Depth	336 FSL 1833 FEL	SWSE	35	9.0 S	21.0 E	S
21. COUNTY UINTAH			22. DISTANCE TO NEAREST LEASE LINE (Feet) 336		23. NUMBER OF ACRES IN DRILLING UNIT 321	
			25. DISTANCE TO NEAREST WELL IN SAME POOL (Applied For Drilling or Completed) 164		26. PROPOSED DEPTH MD: 9616 TVD: 9615	
27. ELEVATION - GROUND LEVEL 5101			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 11/23/2010			EMAIL gnbregulatory@anadarko.com	
API NUMBER ASSIGNED 43047513840000		APPROVAL  Permit Manager				

Proposed Hole, Casing, and Cement						
String	Hole Size	Casing Size	Top (MD)	Bottom (MD)		
Prod	7.875	4.5	0	9616		
Pipe	Grade	Length	Weight			
	Grade I-80 Buttress	9616	11.6			

Proposed Hole, Casing, and Cement						
String	Hole Size	Casing Size	Top (MD)	Bottom (MD)		
Surf	11	8.625	0	2530		
Pipe	Grade	Length	Weight			
	Grade J-55 LT&C	2530	28.0			

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

NBU 921-3504BS

Surface:	370 FSL / 1777 FEL	SWSE
BHL:	336 FSL / 1833 FEL	SWSE

Section 35 T9S R21E

Unitah County, Utah
Mineral Lease: ST UT ML 22582

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	1427	
Birds Nest	1700	Water
Mahogany	2078	Water
Wasatch	4671	Gas
Mesaverde	7376	Gas
MVU2	8284	Gas
MVL1	8838	Gas
TVD	9615	
TD	9616	

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 9,615' TVD, approximately equals 5,891 psi (calculated at 0.61 psi/foot).

Maximum anticipated surface pressure equals approximately 3,775 psi (bottom hole pressure minus the pressure of a partially evacuated hole calculated at 0.22 psi/foot).

8. Anticipated Starting Dates:**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. 20 of 24

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 2,530	28.00	IJ-55	LTC	0.87	1.59	4.86
PRODUCTION	4-1/2"	0 to 9,616	11.60	I-80	BTC	2.00	1.06	2.86

*Burst on surface casing is controlled by fracture gradient as shoe with gas gradient above. D.F. = 2.13

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 3,775 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 5,891 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	2,030'	65/35 Poz + 6% Gel + 10 pps gilsonite + 0.25 pps Flocele + 3% salt BWOW	190	35%	11.00	3.82
	TAIL	500'	Premium cmt + 2% CaCl + 0.25 pps flocele	150	35%	15.80	1.15
	TOP OUT CMT	as required	Premium cmt + 2% CaCl	as req.		15.80	1.15
PRODUCTION	LEAD	4,166'	Premium Lite II +0.25 pps celloflake + 5 pps gilsonite + 10% gel + 0.5% extender	300	10%	11.00	3.38
	TAIL	5,450'	50/50 Poz/G + 10% salt + 2% gel + 0.1% R-3	1,050	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.

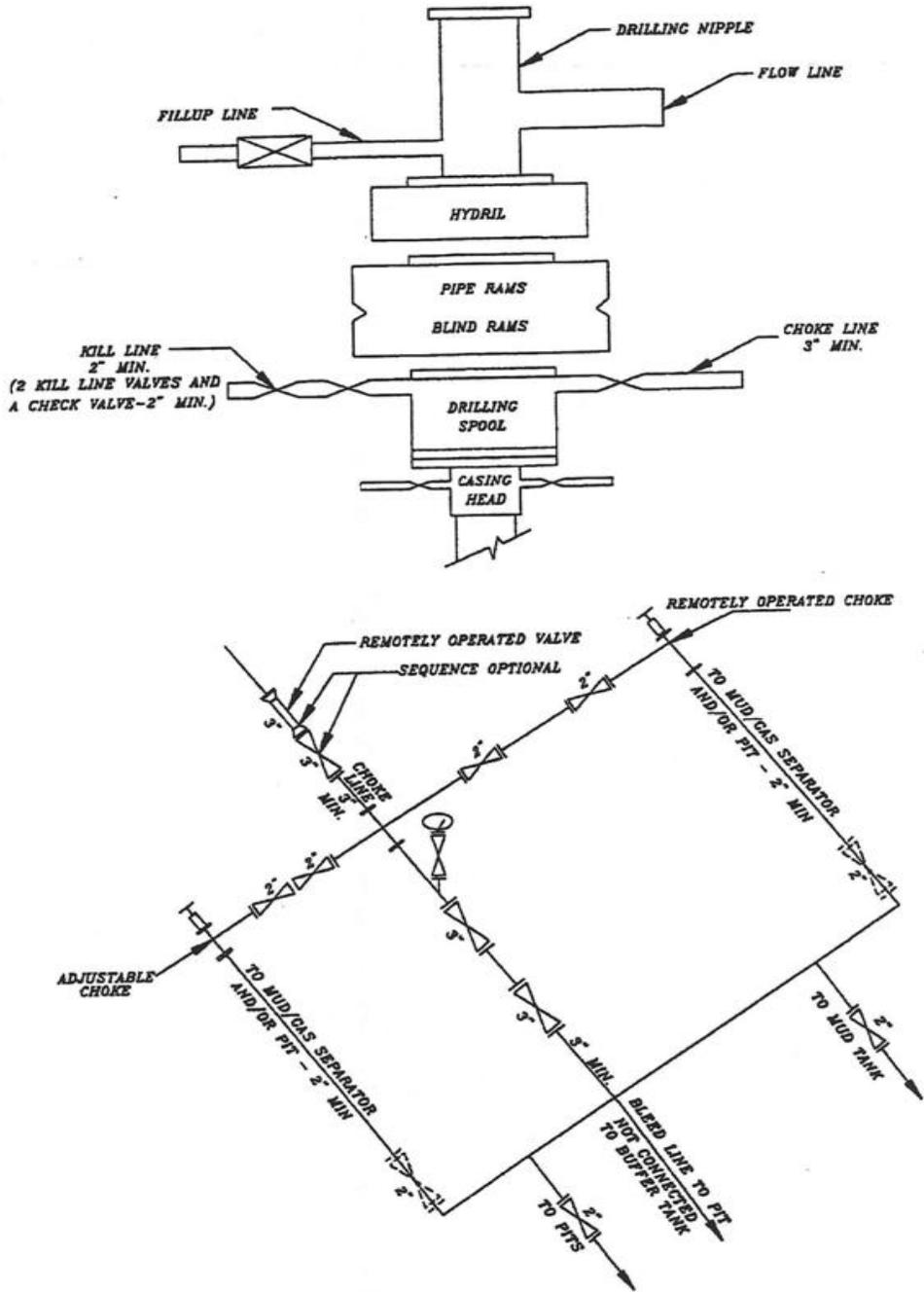
Surveys will be taken at 1,000' minimum intervals.

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 921-3504BS



SCHEMATIC DIAGRAM OF 5,000 PSI BOP STACK

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

WEST - 80.00 (G.L.O.)

N89°47'37"W - 2646.18' (Meas.)

N89°47'25"W - 2645.99' (Meas.)

Found Uintah County Aluminum Cap in Pile of Stones.

Found Uintah County Aluminum Cap in Pile of Stones.

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

NBU 921-35O4BS (Surface Position)
 NAD 83 LATITUDE = 39.986273° (39° 59' 10.582")
 LONGITUDE = 109.515808° (109° 30' 56.908")
 NAD 27 LATITUDE = 39.986308° (39° 59' 10.708")
 LONGITUDE = 109.515121° (109° 30' 54.436")

NBU 921-35O4BS (Bottom Hole)
 NAD 83 LATITUDE = 39.986178° (39° 59' 10.242")
 LONGITUDE = 109.516009° (109° 30' 57.632")
 NAD 27 LATITUDE = 39.986213° (39° 59' 10.368")
 LONGITUDE = 109.515322° (109° 30' 55.159")

N00°21'17"W - 2645.28' (Meas.)

N00°03'41"W - 2641.51' (Meas.)

N00°03'W - 81.10 (G.L.O.)

N00°12'59"E 2703.72' (Measured to C.C.)

N00°21'17"W - 2645.28' (Measured to True Corner)

Found Uintah County Surveyor 1 1/2" Aluminum Cap on 5/8" Rebar in Pile of Stones.

Found 1 1/2" Aluminum Cap on 5/8" Rebar in Pile of Stones.

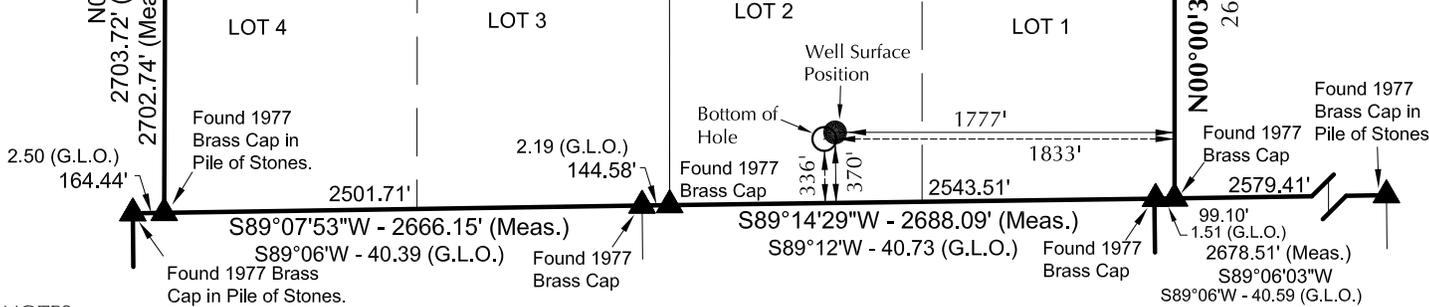
35

WELL LOCATION: NBU 921-35O4BS

ELEV. UNGRADED GROUND = 5100.5'

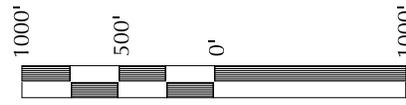
N00°00'34"E (Basis of Bearings) 2612.15' (Measured)

N00°03'E - 79.80 (G.L.O.)



NOTES:

- ▲ = Section Corners Located
- 1. Well footages are measured at right angles to the Section Lines.
- 2. G.L.O. distances are shown in feet or chains.
1 chain = 66 feet.
- 3. The Bottom of hole bears S58°38'13"W 66.03' from the Surface Position.
- 4. Bearings are based on Global Positioning Satellite observations.
- 5. Basis of elevation is Tri-Sta "Two Water" located in the NW 1/4 of Section 1, T10S, R21E, S.L.B.&M. The elevation of this Tri-Sta is shown on the Big Pack Mtn NE 7.5 Min. Quadrangle as being 5238'.



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

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

WELL PAD: NBU 921-35O

**NBU 921-35O4BS
WELL PLAT**

**336' FSL, 1833' FEL (Bottom Hole)
 LOT 2 OF 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

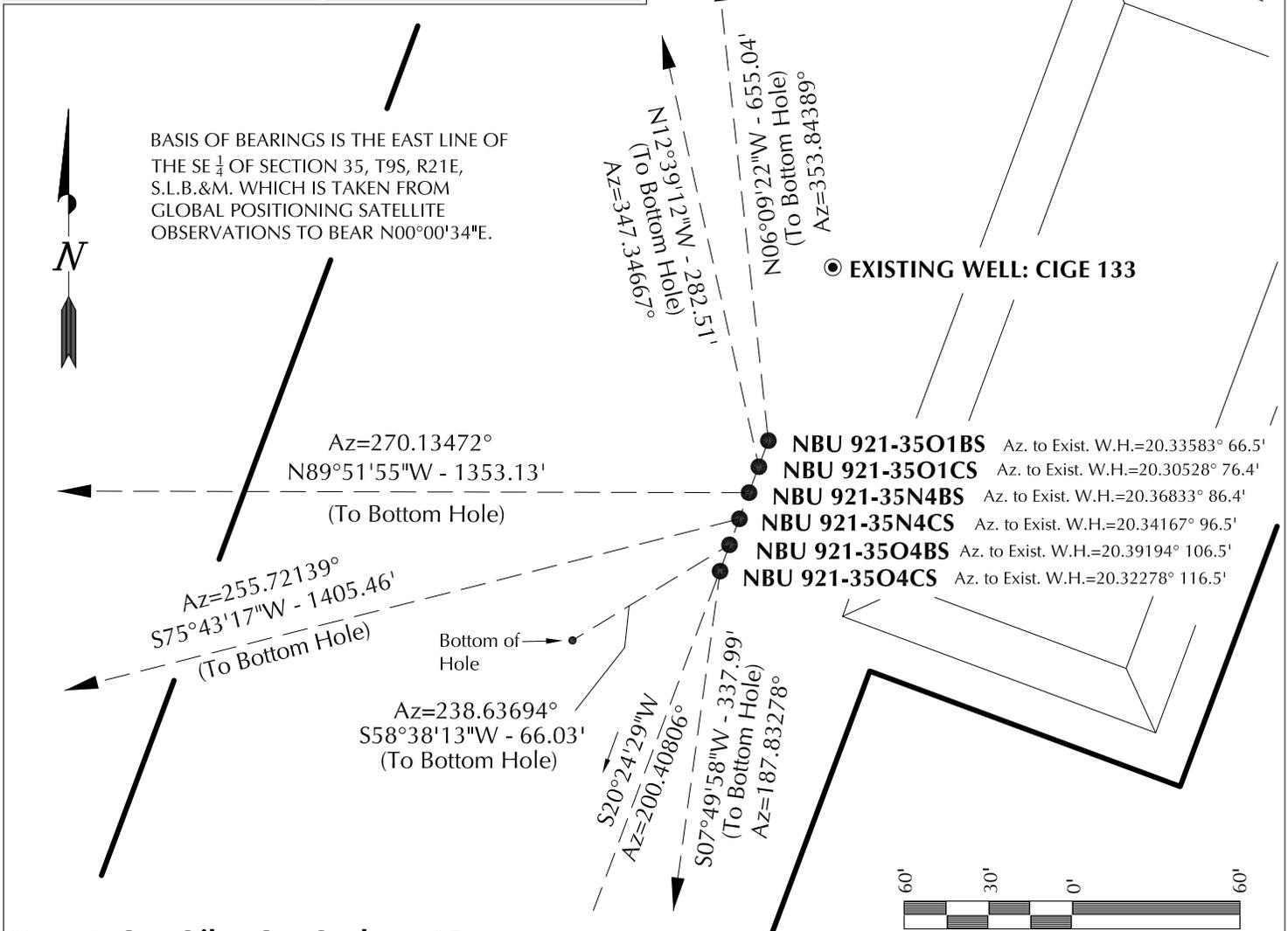
TIMBERLINE (435) 789-1365
 ENGINEERING & LAND SURVEYING, INC.
 209 NORTH 300 WEST - VERNAL, UTAH 84078

DATE SURVEYED: 9-28-10	SURVEYED BY: M.S.B.	SHEET NO: 2
DATE DRAWN: 9-29-10	DRAWN BY: E.M.S.	
SCALE: 1" = 1000'		2 OF 18

WELL NAME	SURFACE POSITION					BOTTOM HOLE				
	NAD83		NAD27		FOOTAGES	NAD83		NAD27		FOOTAGES
	LATITUDE	LONGITUDE	LATITUDE	LONGITUDE		LATITUDE	LONGITUDE	LATITUDE	LONGITUDE	
NBU 921-35O4CS	39°59'10.488"	109°30'56.951"	39°59'10.614"	109°30'54.479"	360' FSL	39°59'07.180"	109°30'57.541"	39°59'07.306"	109°30'55.068"	26' FSL
NBU 921-35O4BS	39°59'10.582"	109°30'56.908"	39°59'10.708"	109°30'54.436"	1780' FEL	39°59'10.242"	109°30'57.632"	39°59'10.368"	109°30'55.159"	1826' FEL
NBU 921-35O4CS	39°59'10.582"	109°30'56.908"	39°59'10.708"	109°30'54.436"	370' FSL	39°59'10.242"	109°30'57.632"	39°59'10.368"	109°30'55.159"	336' FSL
NBU 921-35O4BS	39°59'10.582"	109°30'56.908"	39°59'10.708"	109°30'54.436"	1777' FEL	39°59'10.242"	109°30'57.632"	39°59'10.368"	109°30'55.159"	1833' FEL
NBU 921-35N4CS	39°59'10.674"	109°30'56.863"	39°59'10.800"	109°30'54.390"	379' FSL	39°59'07.241"	109°31'14.354"	39°59'07.367"	109°31'11.880"	51' FSL
NBU 921-35N4BS	39°59'10.674"	109°30'56.863"	39°59'10.800"	109°30'54.390"	1773' FEL	39°59'07.241"	109°31'14.354"	39°59'07.367"	109°31'11.880"	2153' FWL
NBU 921-35N4CS	39°59'10.767"	109°30'56.818"	39°59'10.893"	109°30'54.346"	388' FSL	39°59'10.790"	109°31'14.198"	39°59'10.916"	109°31'11.725"	410' FSL
NBU 921-35N4BS	39°59'10.767"	109°30'56.818"	39°59'10.893"	109°30'54.346"	1770' FEL	39°59'10.790"	109°31'14.198"	39°59'10.916"	109°31'11.725"	2164' FWL
NBU 921-35O1CS	39°59'10.859"	109°30'56.773"	39°59'10.985"	109°30'54.300"	398' FSL	39°59'13.582"	109°30'57.570"	39°59'13.708"	109°30'55.097"	674' FSL
NBU 921-35O1BS	39°59'10.859"	109°30'56.773"	39°59'10.985"	109°30'54.300"	1766' FEL	39°59'13.582"	109°30'57.570"	39°59'13.708"	109°30'55.097"	1828' FEL
NBU 921-35O1CS	39°59'10.952"	109°30'56.729"	39°59'11.078"	109°30'54.256"	407' FSL	39°59'17.386"	109°30'57.636"	39°59'17.512"	109°30'55.163"	1059' FSL
NBU 921-35O1BS	39°59'10.952"	109°30'56.729"	39°59'11.078"	109°30'54.256"	1763' FEL	39°59'17.386"	109°30'57.636"	39°59'17.512"	109°30'55.163"	1833' FEL
CIGE 133	39°59'11.568"	109°30'56.433"	39°59'11.694"	109°30'53.960"	469' FSL	39°59'11.568"	109°30'56.433"	39°59'11.694"	109°30'53.960"	1740' FSL

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 921-35O4CS	-334.8'	-46.1'	NBU 921-35O4BS	-34.4'	-56.4'	NBU 921-35N4CS	-346.6'	-1,362.0'	NBU 921-35N4BS	3.2'	-1,353.1'
NBU 921-35O1CS	275.6'	-61.9'	NBU 921-35O1BS	651.3'	-70.2'						



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

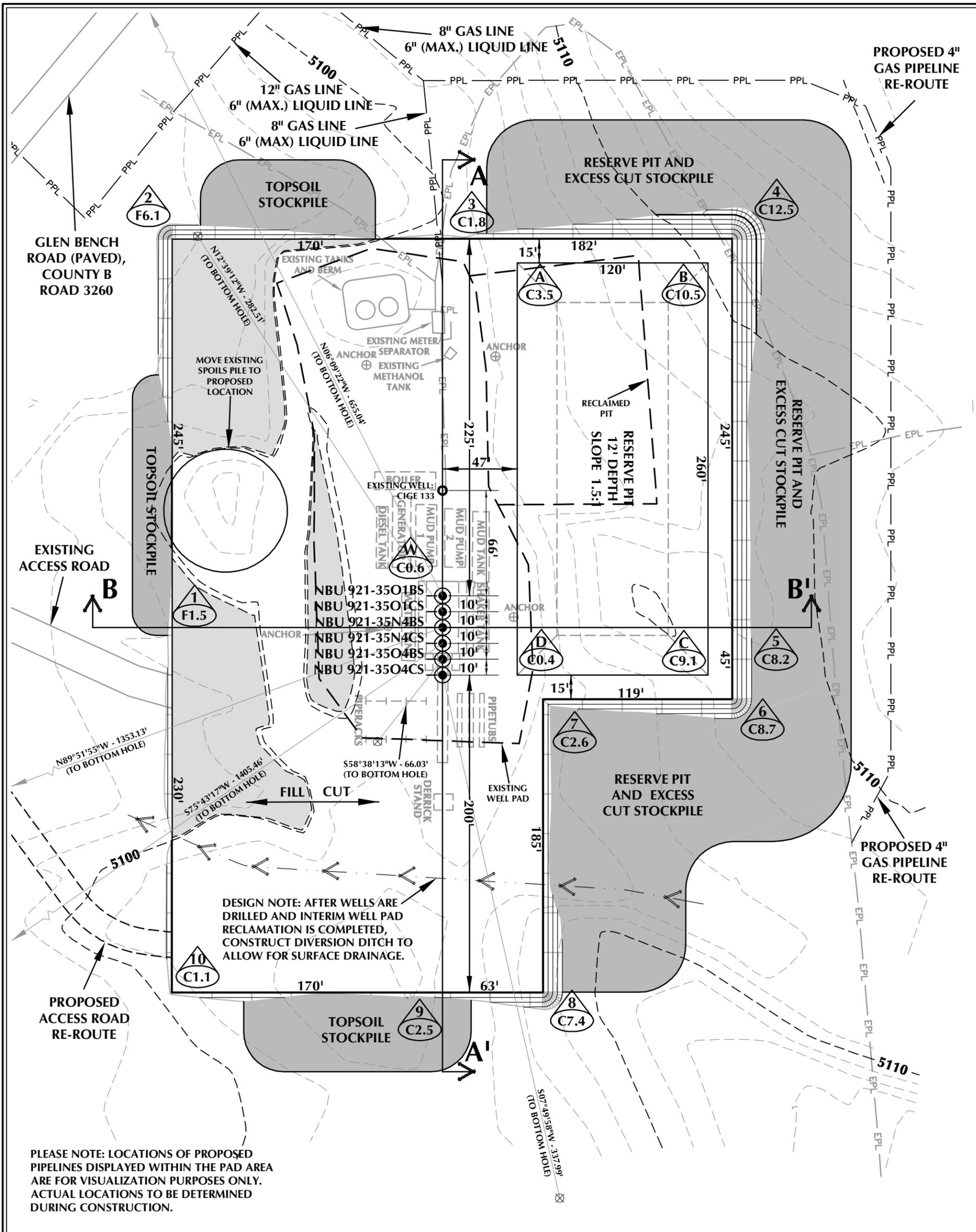
WELL PAD - NBU 921-35O

WELL PAD INTERFERENCE PLAT
WELLS - NBU 921-35O4CS, NBU 921-35O4BS, NBU 921-35N4CS, NBU 921-35N4BS, NBU 921-35O1CS & NBU 921-35O1BS
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: 9-28-10	SURVEYED BY: M.S.B.	SHEET NO: 7
DATE DRAWN: 9-29-10	DRAWN BY: M.W.W.	
SCALE: 1" = 60'	Date Last Revised:	7 OF 18



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

WELL PAD - NBU 921-350 DESIGN SUMMARY

EXISTING GRADE @ CENTER OF WELL PAD = 5100.4'
 FINISHED GRADE ELEVATION = 5099.8'
 CUT SLOPES = 1.5:1
 FILL SLOPES = 1.5:1
 TOTAL WELL PAD AREA = 3.62 ACRES
 TOTAL DAMAGE AREA = 6.49 ACRES
 SHRINKAGE FACTOR = 1.10
 SWELL FACTOR = 1.00

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

WELL PAD - NBU 921-350
 WELL PAD - LOCATION LAYOUT
 NBU 921-35O4CS, NBU 921-35O4BS,
 NBU 921-35N4CS, NBU 921-35N4BS,
 NBU 921-35O1CS & NBU 921-35O1BS
 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 QUANTITIES

TOTAL CUT FOR WELL PAD = 13,694 C.Y.
 TOTAL FILL FOR WELL PAD = 2,423 C.Y.
 TOPSOIL @ 6" DEPTH = 2,240 C.Y.
 EXCESS MATERIAL = 11,271 C.Y.

RESERVE PIT QUANTITIES

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

WELL PAD LEGEND

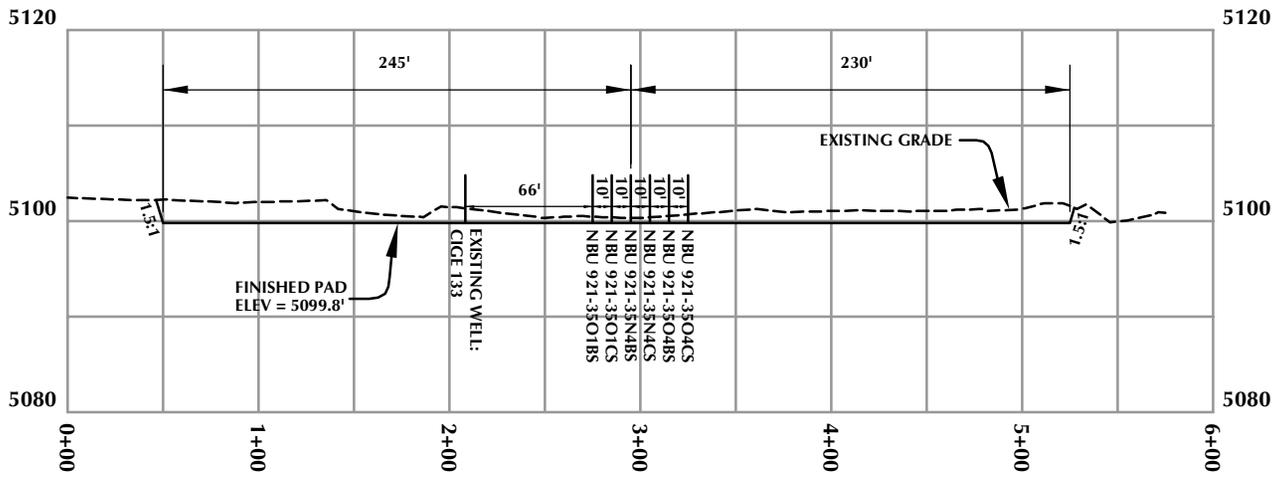
- EXISTING WELL LOCATION
- PROPOSED WELL LOCATION
- PROPOSED BOTTOM HOLE LOCATION
- EXISTING CONTOURS (2' INTERVAL)
- PROPOSED CONTOURS (2' INTERVAL)
- PPL - PROPOSED PIPELINE
- EPL - EXISTING PIPELINE



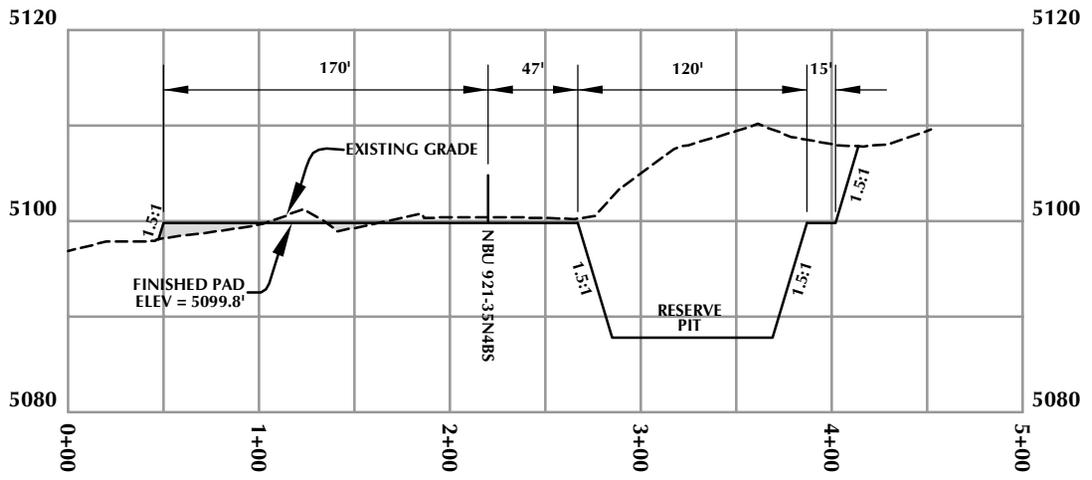
HORIZONTAL 0 30 60 1" = 60'
 2' CONTOURS

Scale: 1"=60' Date: 10/15/10 SHEET NO:
 REVISED: JFE 12/9/10 **8** 8 OF 18

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



CROSS SECTION A-A'



CROSS SECTION B-B'

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

WELL PAD - NBU 921-35O

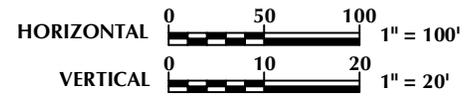
WELL PAD - CROSS SECTIONS
NBU 921-35O4CS, NBU 921-35O4BS,
NBU 921-35N4CS, NBU 921-35N4BS,
NBU 921-35O1CS & NBU 921-35O1BS
LOCATED IN SECTION 35, T9S, R21E,
S.L.B.&M., UINTAH COUNTY, UTAH



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

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

(435) 789-1365



Scale: 1"=100' Date: 10/15/10
REVISED:

SHEET NO:
9
9 OF 18

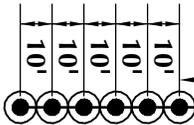
APW:unc:43047513840000

PROPOSED
ACCESS ROAD
RE-ROUTE

PROPOSED
WELL PAD

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.

NBU 921-3501BS
NBU 921-3501CS
NBU 921-35N4BS
NBU 921-35N4CS
NBU 921-35O4BS
NBU 921-35O4CS

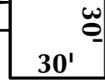


EXISTING WELL: CIGE 133

66'

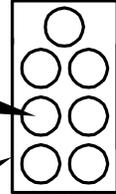
SEPARATOR/
METER HOUSE

90'



TANKS
(TYPICAL)

METAL
CONTAINMENT



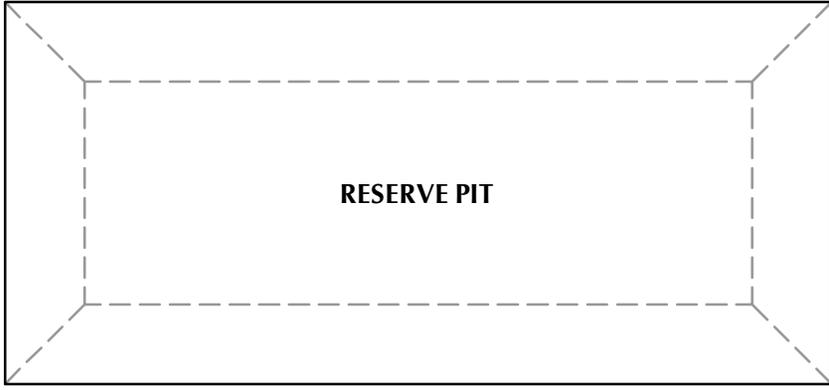
75'

8" GAS LINE
6" (MAX.)
LIQUID LINE

PPL

PPL

f



RESERVE PIT

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

WELL PAD - NBU 921-350

WELL PAD - FACILITIES DIAGRAM
NBU 921-35O4CS, NBU 921-35O4BS,
NBU 921-35N4CS, NBU 921-35N4BS,
NBU 921-35O1CS & NBU 921-35O1BS
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
ENGINEERING & LAND SURVEYING, INC.
209 NORTH 300 WEST - VERNAL, UTAH 84078

(435) 789-1365

Scale: 1"=60'

Date: 10/15/10

SHEET NO:

REVISED:

10 10 OF 18

APW:unc:43047513840000 NBU 921-35O_20100930.dwg, 10/19/2010 5:21:32 PM

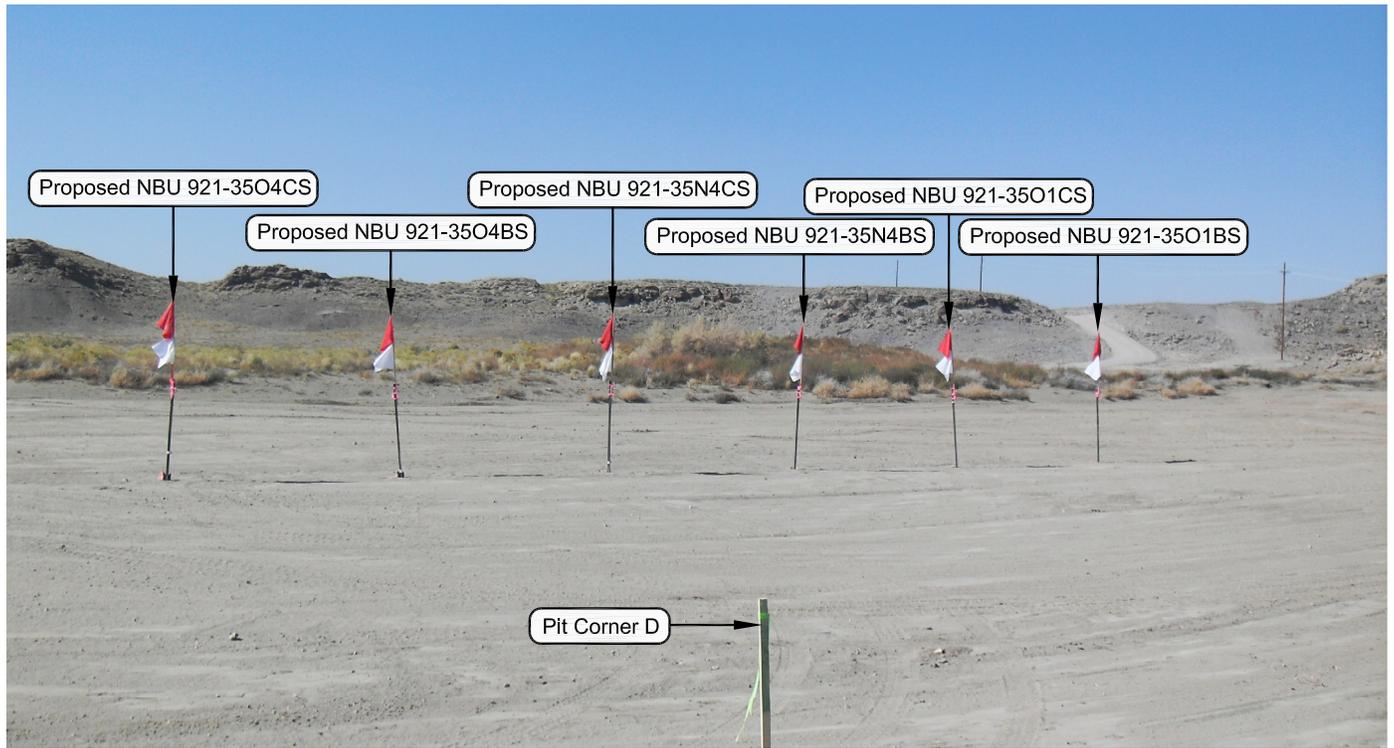


PHOTO VIEW: FROM PIT CORNER D TO LOCATION STAKE

CAMERA ANGLE: NORTHWESTERLY

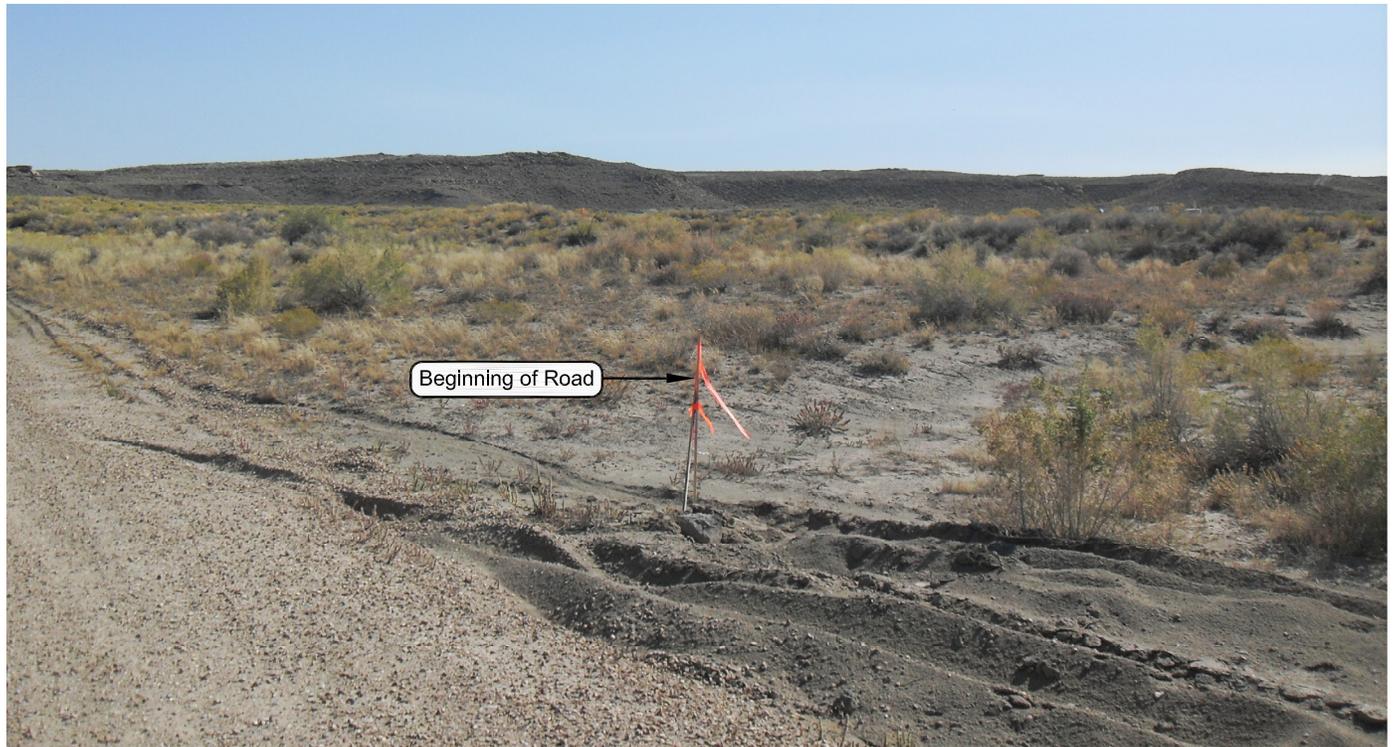


PHOTO VIEW: FROM BEGINNING OF PROPOSED ROAD

CAMERA ANGLE: SOUTHEASTERLY

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

WELL PAD - NBU 921-35O

LOCATION PHOTOS
 NBU 921-35O4CS, NBU 921-35O4BS,
 NBU 921-35N4CS, NBU 921-35N4BS,
 NBU 921-35O1CS & NBU 921-35O1BS
 LOCATED IN SECTION 35, T9S, R21E,
 S.L.B.&M., Uintah County, Utah.



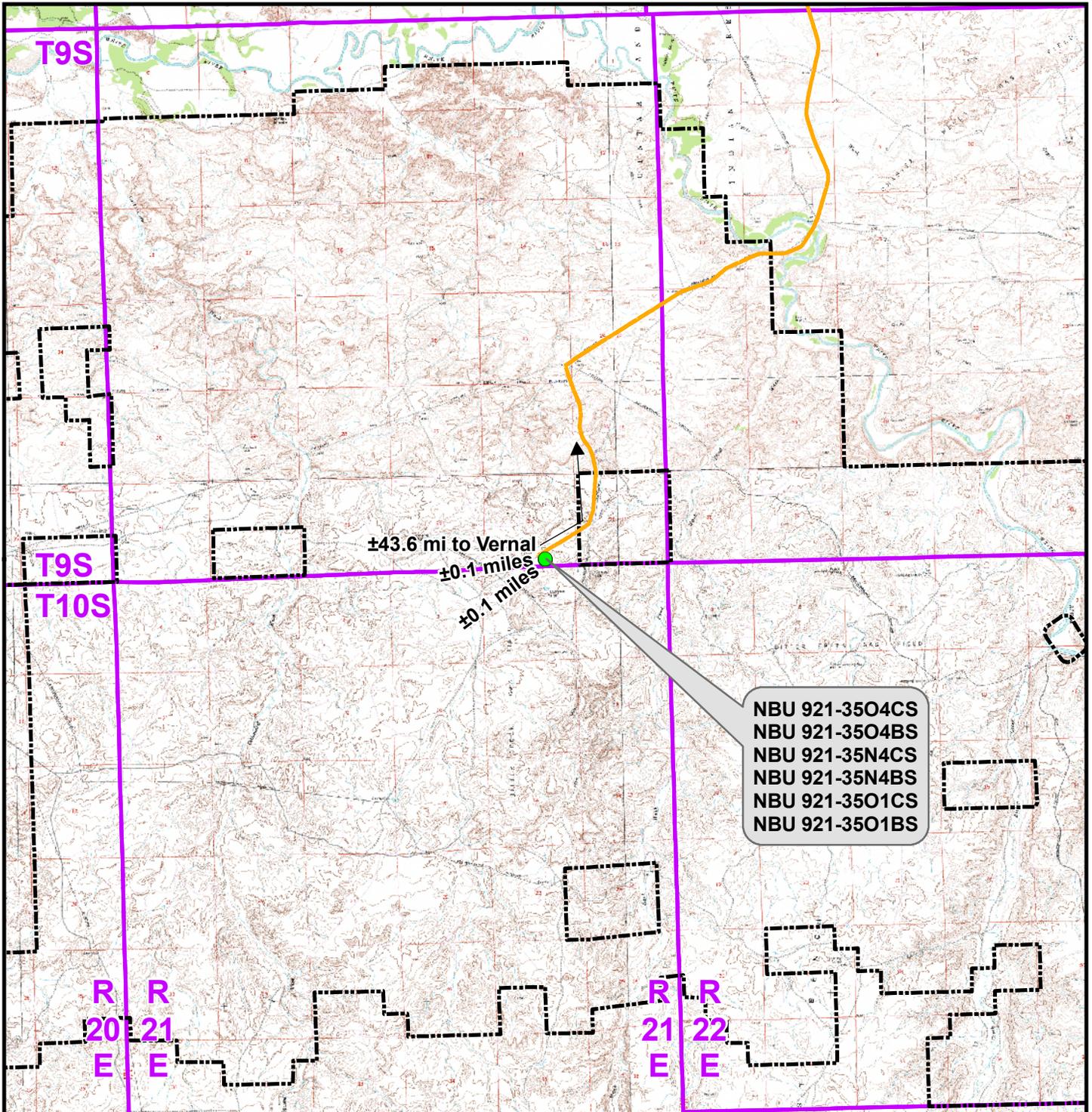
CONSULTING, LLC
 2155 North Main Street
 Sheridan WY 82801
 Phone 307-674-0609
 Fax 307-674-0182

TIMBERLINE

(435) 789-1365

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

DATE PHOTOS TAKEN: 9-28-10	PHOTOS TAKEN BY: M.S.B.	SHEET NO: 11
DATE DRAWN: 9-29-10	DRAWN BY: E.M.S.	
Date Last Revised:		11 OF 18



Legend

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

Distance From Well Pad - NBU 921-350 To Unit Boundary: ±1,763ft

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

WELL PAD - NBU 921-350

TOPO A

NBU 921-3504CS, NBU 921-3504BS,
 NBU 921-35N4CS, NBU 921-35N4BS,
 NBU 921-3501CS & NBU 921-3501BS
 LOCATED IN SECTION 35, T9S, R21E,
 S.L.B.&M., UINTAH COUNTY, UTAH



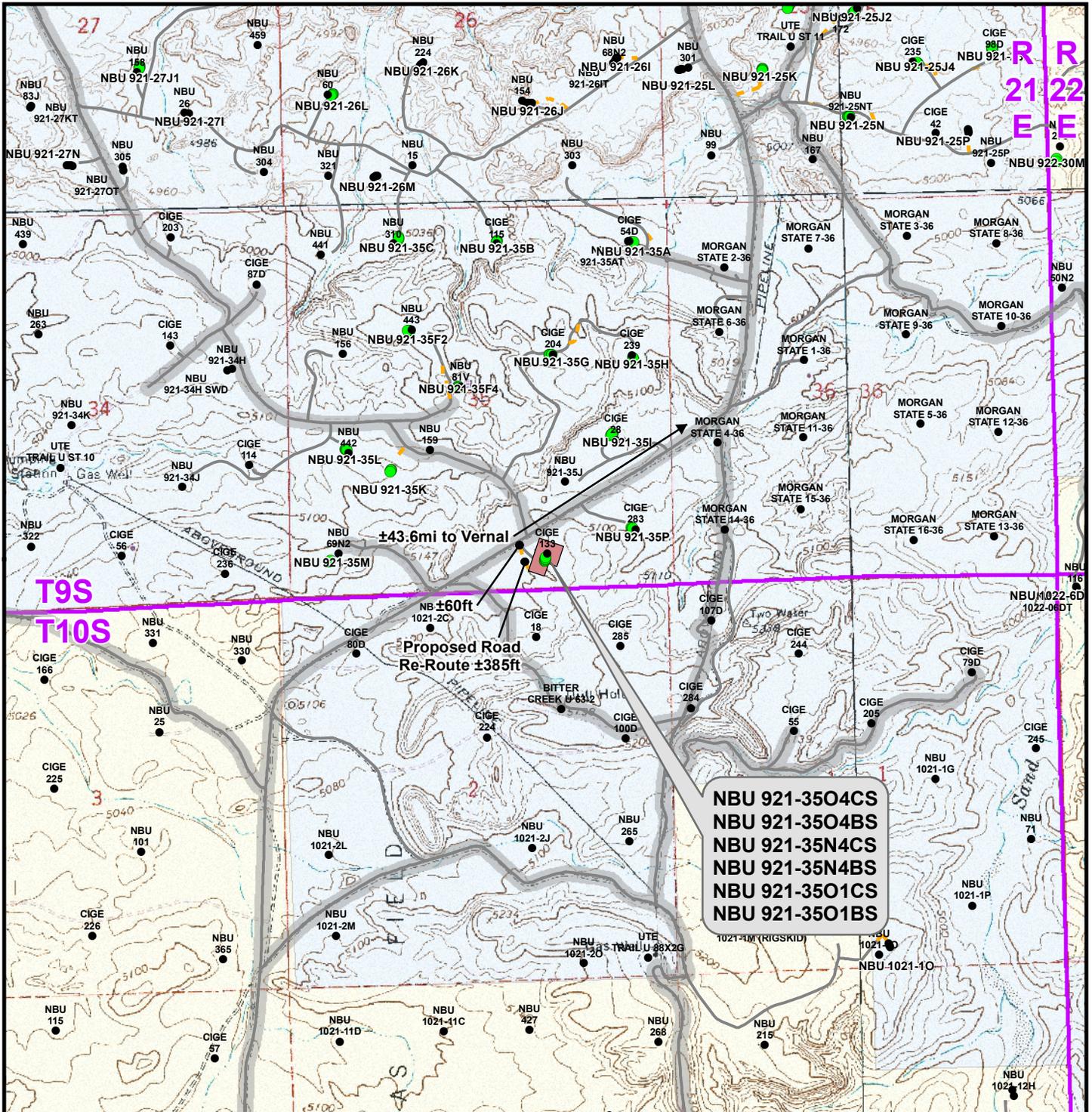
CONSULTING, LLC
 2155 North Main Street
 Sheridan, WY 82801
 Phone (307) 674-0609
 Fax (307) 674-0182



Scale: 1:100,000	NAD83 USP Central
Drawn: KGS	Date: 19 Oct 2010
Revised:	Date:

Sheet No:

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Legend

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

Total Proposed Road Re-Route Length: ±385ft

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

WELL PAD - NBU 921-350

TOPO B

NBU 921-3504CS, NBU 921-3504BS,
NBU 921-35N4CS, NBU 921-35N4BS,
NBU 921-3501CS & NBU 921-3501BS
LOCATED IN SECTION 35, T9S, R21E,
S.L.B.&M., UTAH COUNTY, UTAH



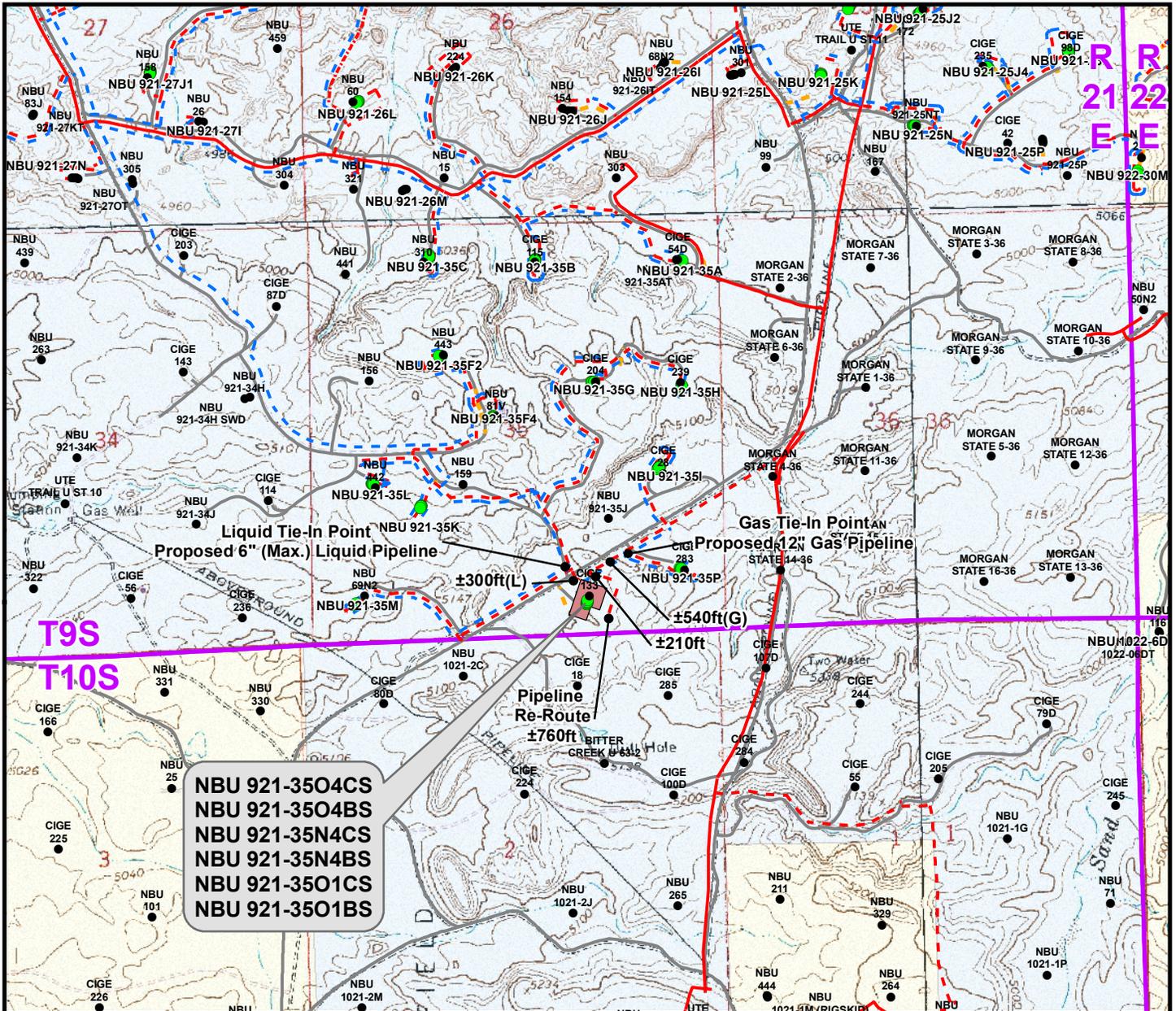
CONSULTING, LLC
2155 North Main Street
Sheridan, WY 82801
Phone (307) 674-0609
Fax (307) 674-0182



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

Sheet No:

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NBU 921-35O4CS
NBU 921-35O4BS
NBU 921-35N4CS
NBU 921-35N4BS
NBU 921-35O1CS
NBU 921-35O1BS

Proposed Liquid Pipeline	Length	Proposed Gas Pipeline	Length
Proposed 6" (Max.) (Meter House to Edge of Pad)	±60ft	Proposed 8" (Meter House to Edge of Pad)	±60ft
Proposed 6" (Max.) (Edge of Pad to 35P Intersection)	±210ft	Proposed 8" (Edge of Pad to 35M Intersection)	±210ft
Proposed 6" (Max.) (35P Intersection to 35M Intersection)	±300ft	Proposed 12" (35M Intersection to 35P Intersection)	±540ft
		Proposed 4" (Pipeline Re-Route)	±760ft
TOTAL PROPOSED LIQUID PIPELINE =	±570ft	TOTAL PROPOSED GAS PIPELINE =	±1,570ft

Legend

- Well - Proposed (Green dot)
- Well - Existing (Black dot)
- Well Pad (Brown rectangle)
- Gas Pipeline - Proposed (Red dashed line)
- Gas Pipeline - To Be Upgraded (Red dash-dot line)
- Gas Pipeline - Existing (Red solid line)
- Liquid Pipeline - Proposed (Blue dashed line)
- Liquid Pipeline - To Be Upgraded (Blue dash-dot line)
- Liquid Pipeline - Existing (Blue solid line)
- Road - Proposed (Yellow dashed line)
- Road - Existing (Grey solid line)
- Bureau of Land Management (Yellow rectangle)
- Indian Reservation (Pink rectangle)
- State (Light blue rectangle)
- Private (White rectangle)

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

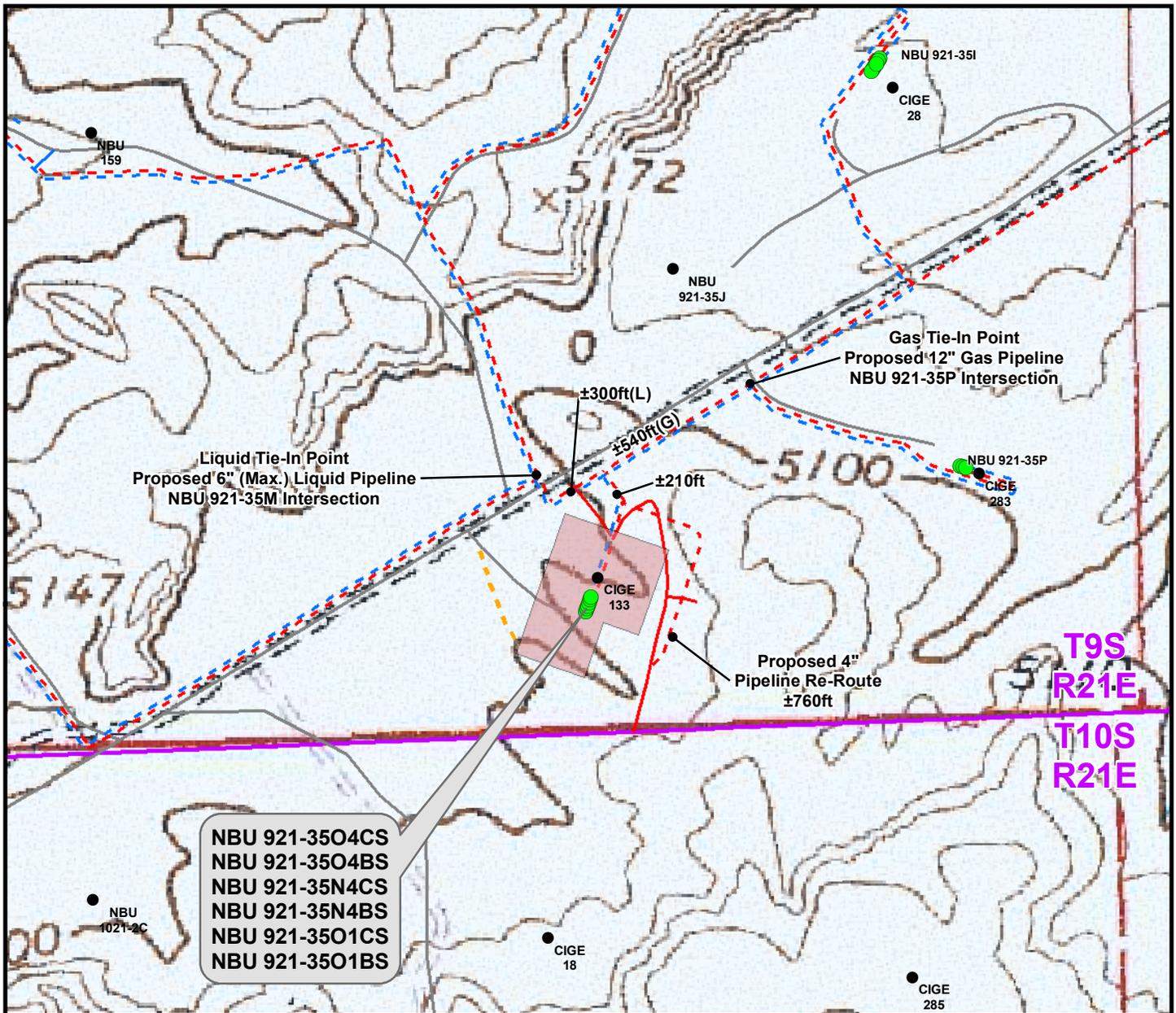
WELL PAD - NBU 921-35O

TOPO D
 NBU 921-35O4CS, NBU 921-35O4BS,
 NBU 921-35N4CS, NBU 921-35N4BS,
 NBU 921-35O1CS & NBU 921-35O1BS
 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:
Drawn: KGS	Date: 19 Oct 2010	15 of 18
Revised:	Date:	



NBU 921-35O4CS
NBU 921-35O4BS
NBU 921-35N4CS
NBU 921-35N4BS
NBU 921-35O1CS
NBU 921-35O1BS

T9S
R21E
T10S
R21E

Proposed Liquid Pipeline	Length	Proposed Gas Pipeline	Length
Proposed 6" (Max.) (Meter House to Edge of Pad)	±60ft	Proposed 8" (Meter House to Edge of Pad)	±60ft
Proposed 6" (Max.) (Edge of Pad to 35P Intersection)	±210ft	Proposed 8" (Edge of Pad to 35M Intersection)	±210ft
Proposed 6" (Max.) (35P Intersection to 35M Intersection)	±300ft	Proposed 12" (35M Intersection to 35P Intersection)	±540ft
		Proposed 4" (Pipeline Re-Route)	±760ft
TOTAL PROPOSED LIQUID PIPELINE =	±570ft	TOTAL PROPOSED GAS PIPELINE =	±1,570ft

Legend

- Well - Proposed (Green circle)
- Well - Existing (Black circle)
- Well Pad (Brown rectangle)
- Gas Pipeline - Proposed (Red dashed line)
- Gas Pipeline - To Be Upgraded (Red dash-dot line)
- Gas Pipeline - Existing (Red solid line)
- Liquid Pipeline - Proposed (Blue dashed line)
- Liquid Pipeline - To Be Upgraded (Blue dash-dot line)
- Liquid Pipeline - Existing (Blue solid line)
- Road - Proposed (Yellow dashed line)
- Road - Existing (Grey solid line)
- Bureau of Land Management (Yellow rectangle)
- Indian Reservation (Pink rectangle)
- State (Light blue rectangle)
- Private (White rectangle)

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

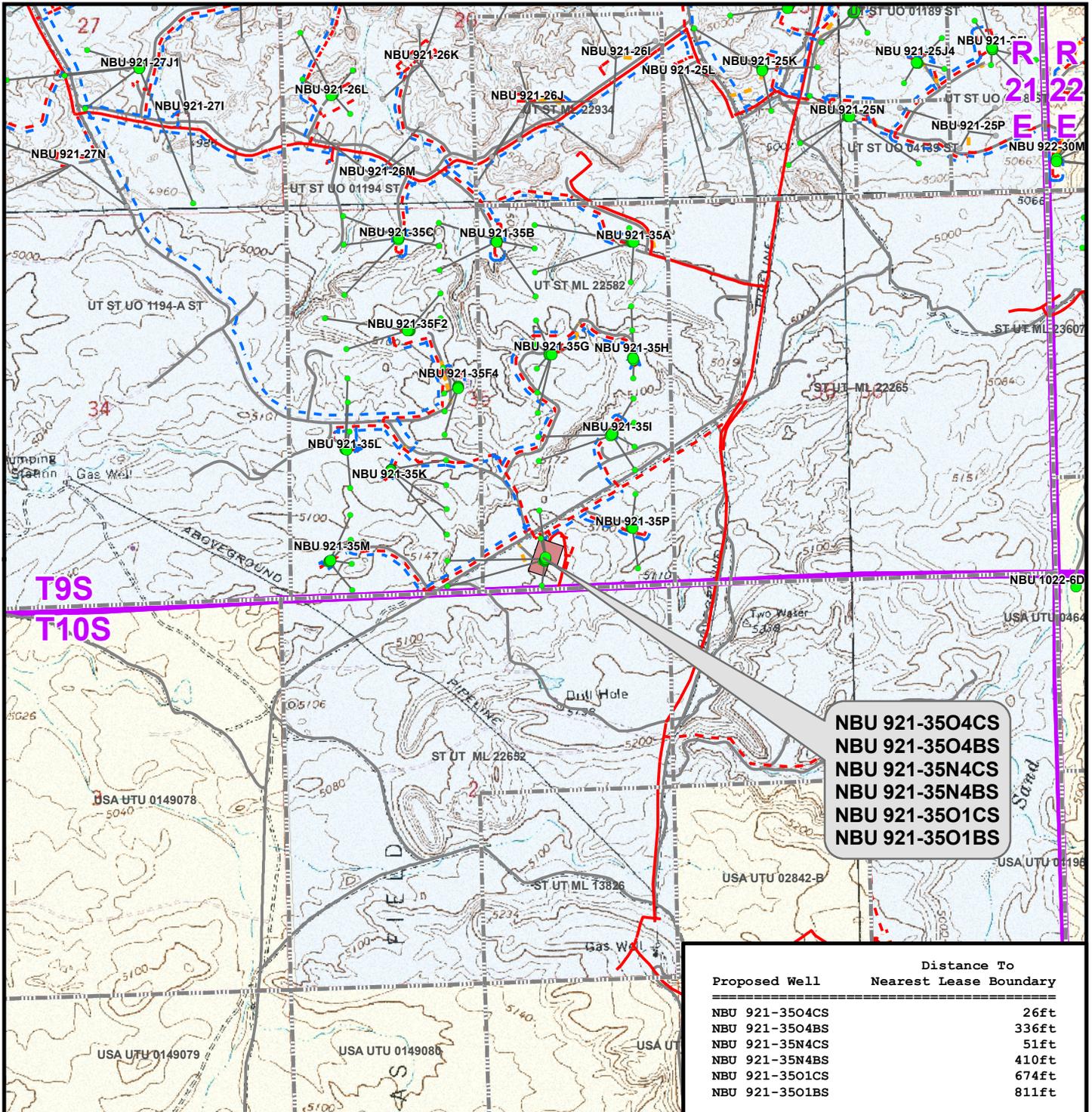
WELL PAD - NBU 921-35O

TOPO D2 (PAD & PIPELINE DETAIL)
 NBU 921-35O4CS, NBU 921-35O4BS,
 NBU 921-35N4CS, NBU 921-35N4BS,
 NBU 921-35O1CS & NBU 921-35O1BS
 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	16 16 of 18
Revised:	Date:	



Legend

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

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

WELL PAD - NBU 921-350
TOPO E

NBU 921-3504CS, NBU 921-3504BS,
 NBU 921-35N4CS, NBU 921-35N4BS,
 NBU 921-3501CS & NBU 921-3501BS
 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
Drawn: KGS	Date: 19 Oct 2010
Revised:	Date:

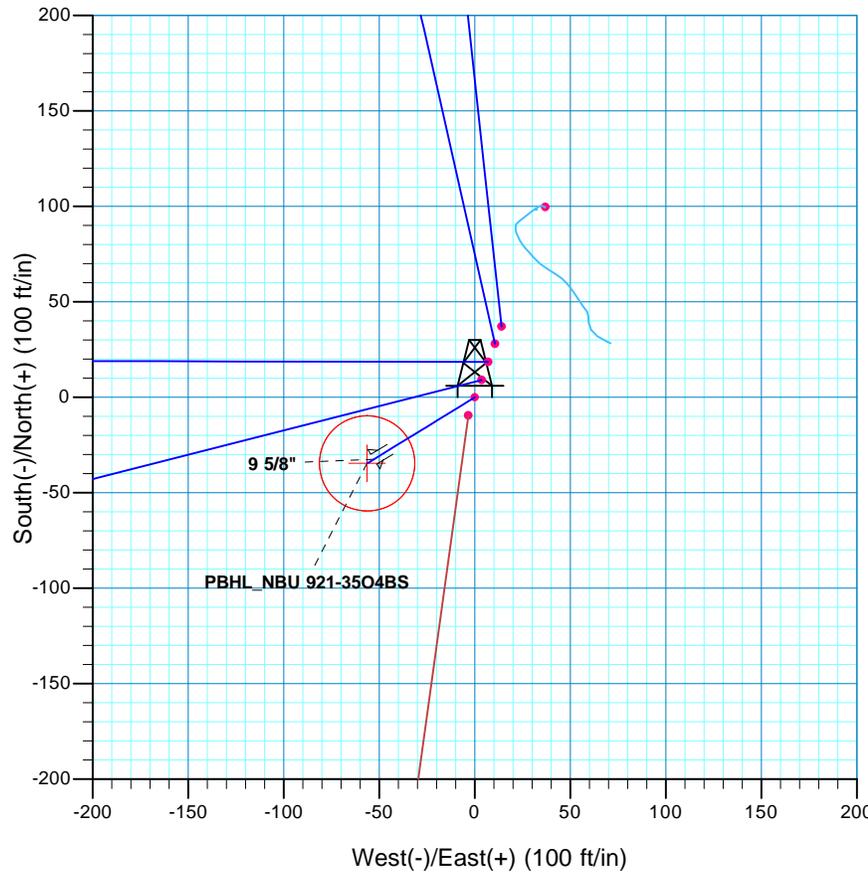
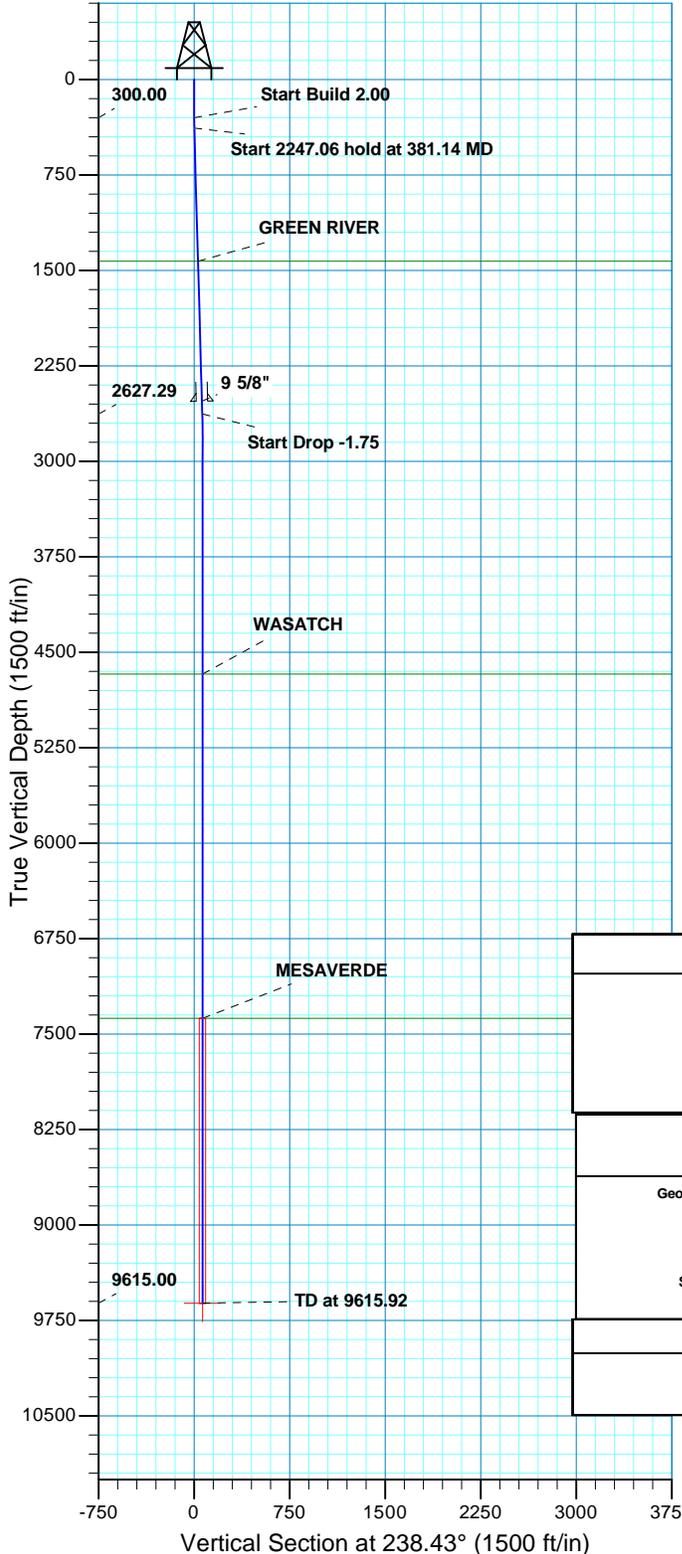
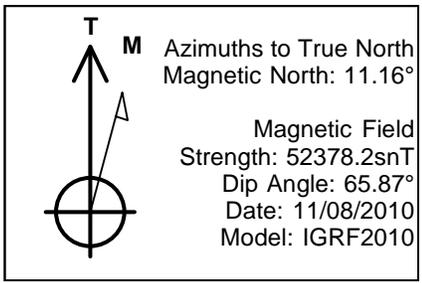
Sheet No:
17
 17 of 18

**Kerr-McGee Oil & Gas Onshore, LP
WELL PAD – NBU 921-35O
WELLS – NBU 921-35O4CS, NBU 921-35O4BS,
NBU 921-35N4CS, NBU 921-35N4BS,
NBU 921-35O1CS & NBU 921-35O1BS
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 20.1 miles to a service road to the southeast. Exit left and proceed in a southeasterly direction along the service road approximately 60 feet to the proposed access road. Follow road flags in a southeasterly direction approximately 385 feet to the proposed well pad.

Total distance from Vernal, Utah to the proposed well location is approximately 43.7 miles in a southerly direction.

WELL DETAILS: P_NBU 921-3504BS								
GL 5100' & KB 4' @ 5104.00ft (ASSUMED)								
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude			
0.00	0.00	14524522.60	2056360.62	39° 59' 10.709 N	109° 30' 54.436 W			
DESIGN TARGET DETAILS								
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
PBHL	9615.00	-34.60	-56.31	14524487.07	2056304.89	39° 59' 10.367 N	109° 30' 55.159 W	Circle (Radius: 25.00)
- plan hits target center								



SECTION DETAILS									
MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	
381.14	1.62	238.43	381.12	-0.60	-0.98	2.00	238.43	1.15	
2628.20	1.62	238.43	2627.29	-33.91	-55.20	0.00	0.00	64.78	
2720.92	0.00	0.00	2720.00	-34.60	-56.31	1.75	180.00	66.09	
9615.92	0.00	0.00	9615.00	-34.60	-56.31	0.00	0.00	66.09	PBHL_NBU 921-3504BS

PROJECT DETAILS: UTAH - UTM (feet), NAD27, Zone 12N			FORMATION TOP DETAILS		
Geodetic System: Universal Transverse Mercator (US Survey Feet) Datum: NAD 1927 (NADCON CONUS) Ellipsoid: Clarke 1866 Zone: Zone 12N (114 W to 108 W) Location: SECTION 35 T9S R21E System Datum: Mean Sea Level			TVDPath	MDPath	Formation
			1427.00	1427.43	GREEN RIVER
			4671.00	4671.92	WASATCH
			7376.00	7376.92	MESAVERDE

CASING DETAILS				
TVD	MD	Name	Size	
2528.00	2528.87	9 5/8"	9.625	



Scientific Drilling
Rocky Mountain Operations

US ROCKIES REGION PLANNING

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

UINTAH_NBU 921-350 PAD

P_NBU 921-3504BS

P_NBU 921-3504BS

Plan: PLAN #1 11-17-10 RHS

Standard Planning Report

17 November, 2010

Database:	EDM5000-RobertS-Local	Local Co-ordinate Reference:	Well P_NBU 921-35O4BS
Company:	US ROCKIES REGION PLANNING	TVD Reference:	GL 5100' & KB 4' @ 5104.00ft (ASSUMED)
Project:	UTAH - UTM (feet), NAD27, Zone 12N	MD Reference:	GL 5100' & KB 4' @ 5104.00ft (ASSUMED)
Site:	UINTAH_NBU 921-35O PAD	North Reference:	True
Well:	P_NBU 921-35O4BS	Survey Calculation Method:	Minimum Curvature
Wellbore:	P_NBU 921-35O4BS		
Design:	PLAN #1 11-17-10 RHS		

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

Site	UINTAH_NBU 921-35O PAD, SECTION 35 T9S R21E				
Site Position:		Northing:	14,524,559.98 usft	Latitude:	39° 59' 11.076 N
From:	Lat/Long	Easting:	2,056,374.00 usft	Longitude:	109° 30' 54.256 W
Position Uncertainty:	0.00 ft	Slot Radius:	13.200 in	Grid Convergence:	0.95 °

Well	P_NBU 921-35O4BS, 370 FSL 1777 FEL					
Well Position	+N/-S	-37.15 ft	Northing:	14,524,522.60 usft	Latitude:	39° 59' 10.709 N
	+E/-W	-14.01 ft	Easting:	2,056,360.61 usft	Longitude:	109° 30' 54.436 W
Position Uncertainty		0.00 ft	Wellhead Elevation:		Ground Level:	5,100.00 ft

Wellbore	P_NBU 921-35O4BS				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	11/08/2010	11.16	65.87	52,378

Design	PLAN #1 11-17-10 RHS			
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	238.43

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	
381.14	1.62	238.43	381.12	-0.60	-0.98	2.00	2.00	0.00	238.43	
2,628.20	1.62	238.43	2,627.29	-33.91	-55.20	0.00	0.00	0.00	0.00	
2,720.92	0.00	0.00	2,720.00	-34.60	-56.31	1.75	-1.75	0.00	180.00	
9,615.92	0.00	0.00	9,615.00	-34.60	-56.31	0.00	0.00	0.00	0.00	PBHL_NBU 921-35O

Database:	EDM5000-RobertS-Local	Local Co-ordinate Reference:	Well P_NBU 921-3504BS
Company:	US ROCKIES REGION PLANNING	TVD Reference:	GL 5100' & KB 4' @ 5104.00ft (ASSUMED)
Project:	UTAH - UTM (feet), NAD27, Zone 12N	MD Reference:	GL 5100' & KB 4' @ 5104.00ft (ASSUMED)
Site:	UINTAH_NBU 921-350 PAD	North Reference:	True
Well:	P_NBU 921-3504BS	Survey Calculation Method:	Minimum Curvature
Wellbore:	P_NBU 921-3504BS		
Design:	PLAN #1 11-17-10 RHS		

Planned Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00	
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00	
Start Build 2.00										
381.14	1.62	238.43	381.12	-0.60	-0.98	1.15	2.00	2.00	0.00	
Start 2247.06 hold at 381.14 MD										
400.00	1.62	238.43	399.98	-0.88	-1.43	1.68	0.00	0.00	0.00	
500.00	1.62	238.43	499.94	-2.36	-3.85	4.51	0.00	0.00	0.00	
600.00	1.62	238.43	599.90	-3.85	-6.26	7.35	0.00	0.00	0.00	
700.00	1.62	238.43	699.86	-5.33	-8.67	10.18	0.00	0.00	0.00	
800.00	1.62	238.43	799.82	-6.81	-11.09	13.01	0.00	0.00	0.00	
900.00	1.62	238.43	899.78	-8.29	-13.50	15.84	0.00	0.00	0.00	
1,000.00	1.62	238.43	999.74	-9.78	-15.91	18.67	0.00	0.00	0.00	
1,100.00	1.62	238.43	1,099.70	-11.26	-18.32	21.51	0.00	0.00	0.00	
1,200.00	1.62	238.43	1,199.66	-12.74	-20.74	24.34	0.00	0.00	0.00	
1,300.00	1.62	238.43	1,299.62	-14.22	-23.15	27.17	0.00	0.00	0.00	
1,400.00	1.62	238.43	1,399.58	-15.71	-25.56	30.00	0.00	0.00	0.00	
1,427.43	1.62	238.43	1,427.00	-16.11	-26.22	30.78	0.00	0.00	0.00	
GREEN RIVER										
1,500.00	1.62	238.43	1,499.54	-17.19	-27.97	32.83	0.00	0.00	0.00	
1,600.00	1.62	238.43	1,599.50	-18.67	-30.39	35.66	0.00	0.00	0.00	
1,700.00	1.62	238.43	1,699.46	-20.15	-32.80	38.50	0.00	0.00	0.00	
1,800.00	1.62	238.43	1,799.42	-21.63	-35.21	41.33	0.00	0.00	0.00	
1,900.00	1.62	238.43	1,899.38	-23.12	-37.63	44.16	0.00	0.00	0.00	
2,000.00	1.62	238.43	1,999.34	-24.60	-40.04	46.99	0.00	0.00	0.00	
2,100.00	1.62	238.43	2,099.30	-26.08	-42.45	49.82	0.00	0.00	0.00	
2,200.00	1.62	238.43	2,199.26	-27.56	-44.86	52.66	0.00	0.00	0.00	
2,300.00	1.62	238.43	2,299.22	-29.05	-47.28	55.49	0.00	0.00	0.00	
2,400.00	1.62	238.43	2,399.18	-30.53	-49.69	58.32	0.00	0.00	0.00	
2,500.00	1.62	238.43	2,499.14	-32.01	-52.10	61.15	0.00	0.00	0.00	
2,528.87	1.62	238.43	2,528.00	-32.44	-52.80	61.97	0.00	0.00	0.00	
9 5/8"										
2,600.00	1.62	238.43	2,599.10	-33.49	-54.52	63.98	0.00	0.00	0.00	
2,628.20	1.62	238.43	2,627.29	-33.91	-55.20	64.78	0.00	0.00	0.00	
Start Drop -1.75										
2,700.00	0.37	238.43	2,699.08	-34.56	-56.26	66.03	1.75	-1.75	0.00	
2,720.92	0.00	0.00	2,720.00	-34.60	-56.31	66.09	1.75	-1.75	0.00	
Start 6895.00 hold at 2720.92 MD										
2,800.00	0.00	0.00	2,799.08	-34.60	-56.31	66.09	0.00	0.00	0.00	
2,900.00	0.00	0.00	2,899.08	-34.60	-56.31	66.09	0.00	0.00	0.00	
3,000.00	0.00	0.00	2,999.08	-34.60	-56.31	66.09	0.00	0.00	0.00	
3,100.00	0.00	0.00	3,099.08	-34.60	-56.31	66.09	0.00	0.00	0.00	
3,200.00	0.00	0.00	3,199.08	-34.60	-56.31	66.09	0.00	0.00	0.00	
3,300.00	0.00	0.00	3,299.08	-34.60	-56.31	66.09	0.00	0.00	0.00	
3,400.00	0.00	0.00	3,399.08	-34.60	-56.31	66.09	0.00	0.00	0.00	
3,500.00	0.00	0.00	3,499.08	-34.60	-56.31	66.09	0.00	0.00	0.00	
3,600.00	0.00	0.00	3,599.08	-34.60	-56.31	66.09	0.00	0.00	0.00	
3,700.00	0.00	0.00	3,699.08	-34.60	-56.31	66.09	0.00	0.00	0.00	
3,800.00	0.00	0.00	3,799.08	-34.60	-56.31	66.09	0.00	0.00	0.00	
3,900.00	0.00	0.00	3,899.08	-34.60	-56.31	66.09	0.00	0.00	0.00	

Database:	EDM5000-RobertS-Local	Local Co-ordinate Reference:	Well P_NBU 921-3504BS
Company:	US ROCKIES REGION PLANNING	TVD Reference:	GL 5100' & KB 4' @ 5104.00ft (ASSUMED)
Project:	UTAH - UTM (feet), NAD27, Zone 12N	MD Reference:	GL 5100' & KB 4' @ 5104.00ft (ASSUMED)
Site:	UINTAH_NBU 921-350 PAD	North Reference:	True
Well:	P_NBU 921-3504BS	Survey Calculation Method:	Minimum Curvature
Wellbore:	P_NBU 921-3504BS		
Design:	PLAN #1 11-17-10 RHS		

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)	
4,000.00	0.00	0.00	3,999.08	-34.60	-56.31	66.09	0.00	0.00	0.00	
4,100.00	0.00	0.00	4,099.08	-34.60	-56.31	66.09	0.00	0.00	0.00	
4,200.00	0.00	0.00	4,199.08	-34.60	-56.31	66.09	0.00	0.00	0.00	
4,300.00	0.00	0.00	4,299.08	-34.60	-56.31	66.09	0.00	0.00	0.00	
4,400.00	0.00	0.00	4,399.08	-34.60	-56.31	66.09	0.00	0.00	0.00	
4,500.00	0.00	0.00	4,499.08	-34.60	-56.31	66.09	0.00	0.00	0.00	
4,600.00	0.00	0.00	4,599.08	-34.60	-56.31	66.09	0.00	0.00	0.00	
4,671.92	0.00	0.00	4,671.00	-34.60	-56.31	66.09	0.00	0.00	0.00	
WASATCH										
4,700.00	0.00	0.00	4,699.08	-34.60	-56.31	66.09	0.00	0.00	0.00	
4,800.00	0.00	0.00	4,799.08	-34.60	-56.31	66.09	0.00	0.00	0.00	
4,900.00	0.00	0.00	4,899.08	-34.60	-56.31	66.09	0.00	0.00	0.00	
5,000.00	0.00	0.00	4,999.08	-34.60	-56.31	66.09	0.00	0.00	0.00	
5,100.00	0.00	0.00	5,099.08	-34.60	-56.31	66.09	0.00	0.00	0.00	
5,200.00	0.00	0.00	5,199.08	-34.60	-56.31	66.09	0.00	0.00	0.00	
5,300.00	0.00	0.00	5,299.08	-34.60	-56.31	66.09	0.00	0.00	0.00	
5,400.00	0.00	0.00	5,399.08	-34.60	-56.31	66.09	0.00	0.00	0.00	
5,500.00	0.00	0.00	5,499.08	-34.60	-56.31	66.09	0.00	0.00	0.00	
5,600.00	0.00	0.00	5,599.08	-34.60	-56.31	66.09	0.00	0.00	0.00	
5,700.00	0.00	0.00	5,699.08	-34.60	-56.31	66.09	0.00	0.00	0.00	
5,800.00	0.00	0.00	5,799.08	-34.60	-56.31	66.09	0.00	0.00	0.00	
5,900.00	0.00	0.00	5,899.08	-34.60	-56.31	66.09	0.00	0.00	0.00	
6,000.00	0.00	0.00	5,999.08	-34.60	-56.31	66.09	0.00	0.00	0.00	
6,100.00	0.00	0.00	6,099.08	-34.60	-56.31	66.09	0.00	0.00	0.00	
6,200.00	0.00	0.00	6,199.08	-34.60	-56.31	66.09	0.00	0.00	0.00	
6,300.00	0.00	0.00	6,299.08	-34.60	-56.31	66.09	0.00	0.00	0.00	
6,400.00	0.00	0.00	6,399.08	-34.60	-56.31	66.09	0.00	0.00	0.00	
6,500.00	0.00	0.00	6,499.08	-34.60	-56.31	66.09	0.00	0.00	0.00	
6,600.00	0.00	0.00	6,599.08	-34.60	-56.31	66.09	0.00	0.00	0.00	
6,700.00	0.00	0.00	6,699.08	-34.60	-56.31	66.09	0.00	0.00	0.00	
6,800.00	0.00	0.00	6,799.08	-34.60	-56.31	66.09	0.00	0.00	0.00	
6,900.00	0.00	0.00	6,899.08	-34.60	-56.31	66.09	0.00	0.00	0.00	
7,000.00	0.00	0.00	6,999.08	-34.60	-56.31	66.09	0.00	0.00	0.00	
7,100.00	0.00	0.00	7,099.08	-34.60	-56.31	66.09	0.00	0.00	0.00	
7,200.00	0.00	0.00	7,199.08	-34.60	-56.31	66.09	0.00	0.00	0.00	
7,300.00	0.00	0.00	7,299.08	-34.60	-56.31	66.09	0.00	0.00	0.00	
7,376.92	0.00	0.00	7,376.00	-34.60	-56.31	66.09	0.00	0.00	0.00	
MESAVERDE										
7,400.00	0.00	0.00	7,399.08	-34.60	-56.31	66.09	0.00	0.00	0.00	
7,500.00	0.00	0.00	7,499.08	-34.60	-56.31	66.09	0.00	0.00	0.00	
7,600.00	0.00	0.00	7,599.08	-34.60	-56.31	66.09	0.00	0.00	0.00	
7,700.00	0.00	0.00	7,699.08	-34.60	-56.31	66.09	0.00	0.00	0.00	
7,800.00	0.00	0.00	7,799.08	-34.60	-56.31	66.09	0.00	0.00	0.00	
7,900.00	0.00	0.00	7,899.08	-34.60	-56.31	66.09	0.00	0.00	0.00	
8,000.00	0.00	0.00	7,999.08	-34.60	-56.31	66.09	0.00	0.00	0.00	
8,100.00	0.00	0.00	8,099.08	-34.60	-56.31	66.09	0.00	0.00	0.00	
8,200.00	0.00	0.00	8,199.08	-34.60	-56.31	66.09	0.00	0.00	0.00	
8,300.00	0.00	0.00	8,299.08	-34.60	-56.31	66.09	0.00	0.00	0.00	
8,400.00	0.00	0.00	8,399.08	-34.60	-56.31	66.09	0.00	0.00	0.00	
8,500.00	0.00	0.00	8,499.08	-34.60	-56.31	66.09	0.00	0.00	0.00	
8,600.00	0.00	0.00	8,599.08	-34.60	-56.31	66.09	0.00	0.00	0.00	
8,700.00	0.00	0.00	8,699.08	-34.60	-56.31	66.09	0.00	0.00	0.00	

Database:	EDM5000-RobertS-Local	Local Co-ordinate Reference:	Well P_NBU 921-35O4BS
Company:	US ROCKIES REGION PLANNING	TVD Reference:	GL 5100' & KB 4' @ 5104.00ft (ASSUMED)
Project:	UTAH - UTM (feet), NAD27, Zone 12N	MD Reference:	GL 5100' & KB 4' @ 5104.00ft (ASSUMED)
Site:	UINTAH_NBU 921-35O PAD	North Reference:	True
Well:	P_NBU 921-35O4BS	Survey Calculation Method:	Minimum Curvature
Wellbore:	P_NBU 921-35O4BS		
Design:	PLAN #1 11-17-10 RHS		

Planned Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
8,800.00	0.00	0.00	8,799.08	-34.60	-56.31	66.09	0.00	0.00	0.00	
8,900.00	0.00	0.00	8,899.08	-34.60	-56.31	66.09	0.00	0.00	0.00	
9,000.00	0.00	0.00	8,999.08	-34.60	-56.31	66.09	0.00	0.00	0.00	
9,100.00	0.00	0.00	9,099.08	-34.60	-56.31	66.09	0.00	0.00	0.00	
9,200.00	0.00	0.00	9,199.08	-34.60	-56.31	66.09	0.00	0.00	0.00	
9,300.00	0.00	0.00	9,299.08	-34.60	-56.31	66.09	0.00	0.00	0.00	
9,400.00	0.00	0.00	9,399.08	-34.60	-56.31	66.09	0.00	0.00	0.00	
9,500.00	0.00	0.00	9,499.08	-34.60	-56.31	66.09	0.00	0.00	0.00	
9,600.00	0.00	0.00	9,599.08	-34.60	-56.31	66.09	0.00	0.00	0.00	
9,615.92	0.00	0.00	9,615.00	-34.60	-56.31	66.09	0.00	0.00	0.00	
TD at 9615.92 - PBHL_NBU 921-35O4BS										

Design Targets										
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude	
PBHL_NBU 921-35O4B - hit/miss target - Shape - plan hits target center - Circle (radius 25.00)	0.00	0.00	9,615.00	-34.60	-56.31	14,524,487.07	2,056,304.88	39° 59' 10.367 N	109° 30' 55.159 W	

Casing Points						
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (in)	Hole Diameter (in)		
2,528.87	2,528.00	9 5/8"	9.625	12.250		

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
1,427.43	1,427.00	GREEN RIVER				
4,671.92	4,671.00	WASATCH				
7,376.92	7,376.00	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	
381.14	381.12	-0.60	-0.98	Start 2247.06 hold at 381.14 MD	
2,628.20	2,627.29	-33.91	-55.20	Start Drop -1.75	
2,720.92	2,720.00	-34.60	-56.31	Start 6895.00 hold at 2720.92 MD	
9,615.92	9,615.00	-34.60	-56.31	TD at 9615.92	



Scientific Drilling
Rocky Mountain Operations

US ROCKIES REGION PLANNING

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

UINTAH_NBU 921-350 PAD

P_NBU 921-3504BS

P_NBU 921-3504BS

Plan: PLAN #1 11-17-10 RHS

Standard Planning Report - Geographic

17 November, 2010

Database:	EDM5000-RobertS-Local	Local Co-ordinate Reference:	Well P_NBU 921-35O4BS
Company:	US ROCKIES REGION PLANNING	TVD Reference:	GL 5100' & KB 4' @ 5104.00ft (ASSUMED)
Project:	UTAH - UTM (feet), NAD27, Zone 12N	MD Reference:	GL 5100' & KB 4' @ 5104.00ft (ASSUMED)
Site:	UINTAH_NBU 921-35O PAD	North Reference:	True
Well:	P_NBU 921-35O4BS	Survey Calculation Method:	Minimum Curvature
Wellbore:	P_NBU 921-35O4BS		
Design:	PLAN #1 11-17-10 RHS		

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

Site	UINTAH_NBU 921-35O PAD, SECTION 35 T9S R21E				
Site Position:		Northing:	14,524,559.98 usft	Latitude:	39° 59' 11.076 N
From:	Lat/Long	Easting:	2,056,374.00 usft	Longitude:	109° 30' 54.256 W
Position Uncertainty:	0.00 ft	Slot Radius:	13.200 in	Grid Convergence:	0.95 °

Well	P_NBU 921-35O4BS, 370 FSL 1777 FEL					
Well Position	+N/-S	0.00 ft	Northing:	14,524,522.60 usft	Latitude:	39° 59' 10.709 N
	+E/-W	0.00 ft	Easting:	2,056,360.61 usft	Longitude:	109° 30' 54.436 W
Position Uncertainty	0.00 ft		Wellhead Elevation:		Ground Level:	5,100.00 ft

Wellbore	P_NBU 921-35O4BS				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	11/08/2010	11.16	65.87	52,378

Design	PLAN #1 11-17-10 RHS			
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	238.43

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	
381.14	1.62	238.43	381.12	-0.60	-0.98	2.00	2.00	0.00	238.43	
2,628.20	1.62	238.43	2,627.29	-33.91	-55.20	0.00	0.00	0.00	0.00	
2,720.92	0.00	0.00	2,720.00	-34.60	-56.31	1.75	-1.75	0.00	180.00	
9,615.92	0.00	0.00	9,615.00	-34.60	-56.31	0.00	0.00	0.00	0.00	PBHL_NBU 921-35O

Database:	EDM5000-RobertS-Local	Local Co-ordinate Reference:	Well P_NBU 921-35O4BS
Company:	US ROCKIES REGION PLANNING	TVD Reference:	GL 5100' & KB 4' @ 5104.00ft (ASSUMED)
Project:	UTAH - UTM (feet), NAD27, Zone 12N	MD Reference:	GL 5100' & KB 4' @ 5104.00ft (ASSUMED)
Site:	UINTAH_NBU 921-35O PAD	North Reference:	True
Well:	P_NBU 921-35O4BS	Survey Calculation Method:	Minimum Curvature
Wellbore:	P_NBU 921-35O4BS		
Design:	PLAN #1 11-17-10 RHS		

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	14,524,522.60	2,056,360.61	39° 59' 10.709 N	109° 30' 54.436 W	
100.00	0.00	0.00	100.00	0.00	0.00	14,524,522.60	2,056,360.61	39° 59' 10.709 N	109° 30' 54.436 W	
200.00	0.00	0.00	200.00	0.00	0.00	14,524,522.60	2,056,360.61	39° 59' 10.709 N	109° 30' 54.436 W	
300.00	0.00	0.00	300.00	0.00	0.00	14,524,522.60	2,056,360.61	39° 59' 10.709 N	109° 30' 54.436 W	
Start Build 2.00										
381.14	1.62	238.43	381.12	-0.60	-0.98	14,524,521.98	2,056,359.64	39° 59' 10.703 N	109° 30' 54.448 W	
Start 2247.06 hold at 381.14 MD										
400.00	1.62	238.43	399.98	-0.88	-1.43	14,524,521.70	2,056,359.19	39° 59' 10.700 N	109° 30' 54.454 W	
500.00	1.62	238.43	499.94	-2.36	-3.85	14,524,520.17	2,056,356.80	39° 59' 10.685 N	109° 30' 54.485 W	
600.00	1.62	238.43	599.90	-3.85	-6.26	14,524,518.65	2,056,354.42	39° 59' 10.671 N	109° 30' 54.516 W	
700.00	1.62	238.43	699.86	-5.33	-8.67	14,524,517.13	2,056,352.03	39° 59' 10.656 N	109° 30' 54.547 W	
800.00	1.62	238.43	799.82	-6.81	-11.09	14,524,515.61	2,056,349.64	39° 59' 10.641 N	109° 30' 54.578 W	
900.00	1.62	238.43	899.78	-8.29	-13.50	14,524,514.09	2,056,347.25	39° 59' 10.627 N	109° 30' 54.609 W	
1,000.00	1.62	238.43	999.74	-9.78	-15.91	14,524,512.56	2,056,344.87	39° 59' 10.612 N	109° 30' 54.640 W	
1,100.00	1.62	238.43	1,099.70	-11.26	-18.32	14,524,511.04	2,056,342.48	39° 59' 10.598 N	109° 30' 54.671 W	
1,200.00	1.62	238.43	1,199.66	-12.74	-20.74	14,524,509.52	2,056,340.09	39° 59' 10.583 N	109° 30' 54.702 W	
1,300.00	1.62	238.43	1,299.62	-14.22	-23.15	14,524,508.00	2,056,337.70	39° 59' 10.568 N	109° 30' 54.733 W	
1,400.00	1.62	238.43	1,399.58	-15.71	-25.56	14,524,506.47	2,056,335.32	39° 59' 10.554 N	109° 30' 54.764 W	
1,427.43	1.62	238.43	1,427.00	-16.11	-26.22	14,524,506.06	2,056,334.66	39° 59' 10.550 N	109° 30' 54.773 W	
GREEN RIVER										
1,500.00	1.62	238.43	1,499.54	-17.19	-27.97	14,524,504.95	2,056,332.93	39° 59' 10.539 N	109° 30' 54.795 W	
1,600.00	1.62	238.43	1,599.50	-18.67	-30.39	14,524,503.43	2,056,330.54	39° 59' 10.524 N	109° 30' 54.826 W	
1,700.00	1.62	238.43	1,699.46	-20.15	-32.80	14,524,501.91	2,056,328.15	39° 59' 10.510 N	109° 30' 54.857 W	
1,800.00	1.62	238.43	1,799.42	-21.63	-35.21	14,524,500.38	2,056,325.76	39° 59' 10.495 N	109° 30' 54.888 W	
1,900.00	1.62	238.43	1,899.38	-23.12	-37.63	14,524,498.86	2,056,323.38	39° 59' 10.480 N	109° 30' 54.919 W	
2,000.00	1.62	238.43	1,999.34	-24.60	-40.04	14,524,497.34	2,056,320.99	39° 59' 10.466 N	109° 30' 54.950 W	
2,100.00	1.62	238.43	2,099.30	-26.08	-42.45	14,524,495.82	2,056,318.60	39° 59' 10.451 N	109° 30' 54.981 W	
2,200.00	1.62	238.43	2,199.26	-27.56	-44.86	14,524,494.29	2,056,316.21	39° 59' 10.436 N	109° 30' 55.012 W	
2,300.00	1.62	238.43	2,299.22	-29.05	-47.28	14,524,492.77	2,056,313.83	39° 59' 10.422 N	109° 30' 55.043 W	
2,400.00	1.62	238.43	2,399.18	-30.53	-49.69	14,524,491.25	2,056,311.44	39° 59' 10.407 N	109° 30' 55.074 W	
2,500.00	1.62	238.43	2,499.14	-32.01	-52.10	14,524,489.73	2,056,309.05	39° 59' 10.392 N	109° 30' 55.105 W	
2,528.87	1.62	238.43	2,528.00	-32.44	-52.80	14,524,489.29	2,056,308.36	39° 59' 10.388 N	109° 30' 55.114 W	
9 5/8"										
2,600.00	1.62	238.43	2,599.10	-33.49	-54.52	14,524,488.20	2,056,306.66	39° 59' 10.378 N	109° 30' 55.136 W	
2,628.20	1.62	238.43	2,627.29	-33.91	-55.20	14,524,487.78	2,056,305.99	39° 59' 10.374 N	109° 30' 55.145 W	
Start Drop -1.75										
2,700.00	0.37	238.43	2,699.08	-34.56	-56.26	14,524,487.11	2,056,304.94	39° 59' 10.367 N	109° 30' 55.158 W	
2,720.92	0.00	0.00	2,720.00	-34.60	-56.31	14,524,487.07	2,056,304.88	39° 59' 10.367 N	109° 30' 55.159 W	
Start 6895.00 hold at 2720.92 MD										
2,800.00	0.00	0.00	2,799.08	-34.60	-56.31	14,524,487.07	2,056,304.88	39° 59' 10.367 N	109° 30' 55.159 W	
2,900.00	0.00	0.00	2,899.08	-34.60	-56.31	14,524,487.07	2,056,304.88	39° 59' 10.367 N	109° 30' 55.159 W	
3,000.00	0.00	0.00	2,999.08	-34.60	-56.31	14,524,487.07	2,056,304.88	39° 59' 10.367 N	109° 30' 55.159 W	
3,100.00	0.00	0.00	3,099.08	-34.60	-56.31	14,524,487.07	2,056,304.88	39° 59' 10.367 N	109° 30' 55.159 W	
3,200.00	0.00	0.00	3,199.08	-34.60	-56.31	14,524,487.07	2,056,304.88	39° 59' 10.367 N	109° 30' 55.159 W	
3,300.00	0.00	0.00	3,299.08	-34.60	-56.31	14,524,487.07	2,056,304.88	39° 59' 10.367 N	109° 30' 55.159 W	
3,400.00	0.00	0.00	3,399.08	-34.60	-56.31	14,524,487.07	2,056,304.88	39° 59' 10.367 N	109° 30' 55.159 W	
3,500.00	0.00	0.00	3,499.08	-34.60	-56.31	14,524,487.07	2,056,304.88	39° 59' 10.367 N	109° 30' 55.159 W	
3,600.00	0.00	0.00	3,599.08	-34.60	-56.31	14,524,487.07	2,056,304.88	39° 59' 10.367 N	109° 30' 55.159 W	
3,700.00	0.00	0.00	3,699.08	-34.60	-56.31	14,524,487.07	2,056,304.88	39° 59' 10.367 N	109° 30' 55.159 W	
3,800.00	0.00	0.00	3,799.08	-34.60	-56.31	14,524,487.07	2,056,304.88	39° 59' 10.367 N	109° 30' 55.159 W	
3,900.00	0.00	0.00	3,899.08	-34.60	-56.31	14,524,487.07	2,056,304.88	39° 59' 10.367 N	109° 30' 55.159 W	
4,000.00	0.00	0.00	3,999.08	-34.60	-56.31	14,524,487.07	2,056,304.88	39° 59' 10.367 N	109° 30' 55.159 W	

Database:	EDM5000-RobertS-Local	Local Co-ordinate Reference:	Well P_NBU 921-35O4BS
Company:	US ROCKIES REGION PLANNING	TVD Reference:	GL 5100' & KB 4' @ 5104.00ft (ASSUMED)
Project:	UTAH - UTM (feet), NAD27, Zone 12N	MD Reference:	GL 5100' & KB 4' @ 5104.00ft (ASSUMED)
Site:	UINTAH_NBU 921-35O PAD	North Reference:	True
Well:	P_NBU 921-35O4BS	Survey Calculation Method:	Minimum Curvature
Wellbore:	P_NBU 921-35O4BS		
Design:	PLAN #1 11-17-10 RHS		

Planned Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude	
4,100.00	0.00	0.00	4,099.08	-34.60	-56.31	14,524,487.07	2,056,304.88	39° 59' 10.367 N	109° 30' 55.159 W	
4,200.00	0.00	0.00	4,199.08	-34.60	-56.31	14,524,487.07	2,056,304.88	39° 59' 10.367 N	109° 30' 55.159 W	
4,300.00	0.00	0.00	4,299.08	-34.60	-56.31	14,524,487.07	2,056,304.88	39° 59' 10.367 N	109° 30' 55.159 W	
4,400.00	0.00	0.00	4,399.08	-34.60	-56.31	14,524,487.07	2,056,304.88	39° 59' 10.367 N	109° 30' 55.159 W	
4,500.00	0.00	0.00	4,499.08	-34.60	-56.31	14,524,487.07	2,056,304.88	39° 59' 10.367 N	109° 30' 55.159 W	
4,600.00	0.00	0.00	4,599.08	-34.60	-56.31	14,524,487.07	2,056,304.88	39° 59' 10.367 N	109° 30' 55.159 W	
4,671.92	0.00	0.00	4,671.00	-34.60	-56.31	14,524,487.07	2,056,304.88	39° 59' 10.367 N	109° 30' 55.159 W	
WASATCH										
4,700.00	0.00	0.00	4,699.08	-34.60	-56.31	14,524,487.07	2,056,304.88	39° 59' 10.367 N	109° 30' 55.159 W	
4,800.00	0.00	0.00	4,799.08	-34.60	-56.31	14,524,487.07	2,056,304.88	39° 59' 10.367 N	109° 30' 55.159 W	
4,900.00	0.00	0.00	4,899.08	-34.60	-56.31	14,524,487.07	2,056,304.88	39° 59' 10.367 N	109° 30' 55.159 W	
5,000.00	0.00	0.00	4,999.08	-34.60	-56.31	14,524,487.07	2,056,304.88	39° 59' 10.367 N	109° 30' 55.159 W	
5,100.00	0.00	0.00	5,099.08	-34.60	-56.31	14,524,487.07	2,056,304.88	39° 59' 10.367 N	109° 30' 55.159 W	
5,200.00	0.00	0.00	5,199.08	-34.60	-56.31	14,524,487.07	2,056,304.88	39° 59' 10.367 N	109° 30' 55.159 W	
5,300.00	0.00	0.00	5,299.08	-34.60	-56.31	14,524,487.07	2,056,304.88	39° 59' 10.367 N	109° 30' 55.159 W	
5,400.00	0.00	0.00	5,399.08	-34.60	-56.31	14,524,487.07	2,056,304.88	39° 59' 10.367 N	109° 30' 55.159 W	
5,500.00	0.00	0.00	5,499.08	-34.60	-56.31	14,524,487.07	2,056,304.88	39° 59' 10.367 N	109° 30' 55.159 W	
5,600.00	0.00	0.00	5,599.08	-34.60	-56.31	14,524,487.07	2,056,304.88	39° 59' 10.367 N	109° 30' 55.159 W	
5,700.00	0.00	0.00	5,699.08	-34.60	-56.31	14,524,487.07	2,056,304.88	39° 59' 10.367 N	109° 30' 55.159 W	
5,800.00	0.00	0.00	5,799.08	-34.60	-56.31	14,524,487.07	2,056,304.88	39° 59' 10.367 N	109° 30' 55.159 W	
5,900.00	0.00	0.00	5,899.08	-34.60	-56.31	14,524,487.07	2,056,304.88	39° 59' 10.367 N	109° 30' 55.159 W	
6,000.00	0.00	0.00	5,999.08	-34.60	-56.31	14,524,487.07	2,056,304.88	39° 59' 10.367 N	109° 30' 55.159 W	
6,100.00	0.00	0.00	6,099.08	-34.60	-56.31	14,524,487.07	2,056,304.88	39° 59' 10.367 N	109° 30' 55.159 W	
6,200.00	0.00	0.00	6,199.08	-34.60	-56.31	14,524,487.07	2,056,304.88	39° 59' 10.367 N	109° 30' 55.159 W	
6,300.00	0.00	0.00	6,299.08	-34.60	-56.31	14,524,487.07	2,056,304.88	39° 59' 10.367 N	109° 30' 55.159 W	
6,400.00	0.00	0.00	6,399.08	-34.60	-56.31	14,524,487.07	2,056,304.88	39° 59' 10.367 N	109° 30' 55.159 W	
6,500.00	0.00	0.00	6,499.08	-34.60	-56.31	14,524,487.07	2,056,304.88	39° 59' 10.367 N	109° 30' 55.159 W	
6,600.00	0.00	0.00	6,599.08	-34.60	-56.31	14,524,487.07	2,056,304.88	39° 59' 10.367 N	109° 30' 55.159 W	
6,700.00	0.00	0.00	6,699.08	-34.60	-56.31	14,524,487.07	2,056,304.88	39° 59' 10.367 N	109° 30' 55.159 W	
6,800.00	0.00	0.00	6,799.08	-34.60	-56.31	14,524,487.07	2,056,304.88	39° 59' 10.367 N	109° 30' 55.159 W	
6,900.00	0.00	0.00	6,899.08	-34.60	-56.31	14,524,487.07	2,056,304.88	39° 59' 10.367 N	109° 30' 55.159 W	
7,000.00	0.00	0.00	6,999.08	-34.60	-56.31	14,524,487.07	2,056,304.88	39° 59' 10.367 N	109° 30' 55.159 W	
7,100.00	0.00	0.00	7,099.08	-34.60	-56.31	14,524,487.07	2,056,304.88	39° 59' 10.367 N	109° 30' 55.159 W	
7,200.00	0.00	0.00	7,199.08	-34.60	-56.31	14,524,487.07	2,056,304.88	39° 59' 10.367 N	109° 30' 55.159 W	
7,300.00	0.00	0.00	7,299.08	-34.60	-56.31	14,524,487.07	2,056,304.88	39° 59' 10.367 N	109° 30' 55.159 W	
7,376.92	0.00	0.00	7,376.00	-34.60	-56.31	14,524,487.07	2,056,304.88	39° 59' 10.367 N	109° 30' 55.159 W	
MESAVERDE										
7,400.00	0.00	0.00	7,399.08	-34.60	-56.31	14,524,487.07	2,056,304.88	39° 59' 10.367 N	109° 30' 55.159 W	
7,500.00	0.00	0.00	7,499.08	-34.60	-56.31	14,524,487.07	2,056,304.88	39° 59' 10.367 N	109° 30' 55.159 W	
7,600.00	0.00	0.00	7,599.08	-34.60	-56.31	14,524,487.07	2,056,304.88	39° 59' 10.367 N	109° 30' 55.159 W	
7,700.00	0.00	0.00	7,699.08	-34.60	-56.31	14,524,487.07	2,056,304.88	39° 59' 10.367 N	109° 30' 55.159 W	
7,800.00	0.00	0.00	7,799.08	-34.60	-56.31	14,524,487.07	2,056,304.88	39° 59' 10.367 N	109° 30' 55.159 W	
7,900.00	0.00	0.00	7,899.08	-34.60	-56.31	14,524,487.07	2,056,304.88	39° 59' 10.367 N	109° 30' 55.159 W	
8,000.00	0.00	0.00	7,999.08	-34.60	-56.31	14,524,487.07	2,056,304.88	39° 59' 10.367 N	109° 30' 55.159 W	
8,100.00	0.00	0.00	8,099.08	-34.60	-56.31	14,524,487.07	2,056,304.88	39° 59' 10.367 N	109° 30' 55.159 W	
8,200.00	0.00	0.00	8,199.08	-34.60	-56.31	14,524,487.07	2,056,304.88	39° 59' 10.367 N	109° 30' 55.159 W	
8,300.00	0.00	0.00	8,299.08	-34.60	-56.31	14,524,487.07	2,056,304.88	39° 59' 10.367 N	109° 30' 55.159 W	
8,400.00	0.00	0.00	8,399.08	-34.60	-56.31	14,524,487.07	2,056,304.88	39° 59' 10.367 N	109° 30' 55.159 W	
8,500.00	0.00	0.00	8,499.08	-34.60	-56.31	14,524,487.07	2,056,304.88	39° 59' 10.367 N	109° 30' 55.159 W	
8,600.00	0.00	0.00	8,599.08	-34.60	-56.31	14,524,487.07	2,056,304.88	39° 59' 10.367 N	109° 30' 55.159 W	
8,700.00	0.00	0.00	8,699.08	-34.60	-56.31	14,524,487.07	2,056,304.88	39° 59' 10.367 N	109° 30' 55.159 W	
8,800.00	0.00	0.00	8,799.08	-34.60	-56.31	14,524,487.07	2,056,304.88	39° 59' 10.367 N	109° 30' 55.159 W	

Database:	EDM5000-RobertS-Local	Local Co-ordinate Reference:	Well P_NBU 921-35O4BS
Company:	US ROCKIES REGION PLANNING	TVD Reference:	GL 5100' & KB 4' @ 5104.00ft (ASSUMED)
Project:	UTAH - UTM (feet), NAD27, Zone 12N	MD Reference:	GL 5100' & KB 4' @ 5104.00ft (ASSUMED)
Site:	UINTAH_NBU 921-35O PAD	North Reference:	True
Well:	P_NBU 921-35O4BS	Survey Calculation Method:	Minimum Curvature
Wellbore:	P_NBU 921-35O4BS		
Design:	PLAN #1 11-17-10 RHS		

Planned Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude	
8,900.00	0.00	0.00	8,899.08	-34.60	-56.31	14,524,487.07	2,056,304.88	39° 59' 10.367 N	109° 30' 55.159 W	
9,000.00	0.00	0.00	8,999.08	-34.60	-56.31	14,524,487.07	2,056,304.88	39° 59' 10.367 N	109° 30' 55.159 W	
9,100.00	0.00	0.00	9,099.08	-34.60	-56.31	14,524,487.07	2,056,304.88	39° 59' 10.367 N	109° 30' 55.159 W	
9,200.00	0.00	0.00	9,199.08	-34.60	-56.31	14,524,487.07	2,056,304.88	39° 59' 10.367 N	109° 30' 55.159 W	
9,300.00	0.00	0.00	9,299.08	-34.60	-56.31	14,524,487.07	2,056,304.88	39° 59' 10.367 N	109° 30' 55.159 W	
9,400.00	0.00	0.00	9,399.08	-34.60	-56.31	14,524,487.07	2,056,304.88	39° 59' 10.367 N	109° 30' 55.159 W	
9,500.00	0.00	0.00	9,499.08	-34.60	-56.31	14,524,487.07	2,056,304.88	39° 59' 10.367 N	109° 30' 55.159 W	
9,600.00	0.00	0.00	9,599.08	-34.60	-56.31	14,524,487.07	2,056,304.88	39° 59' 10.367 N	109° 30' 55.159 W	
9,615.92	0.00	0.00	9,615.00	-34.60	-56.31	14,524,487.07	2,056,304.88	39° 59' 10.367 N	109° 30' 55.159 W	
TD at 9615.92 - PBHL_NBU 921-35O4BS										

Design Targets										
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude	
PBHL_NBU 921-35O4B - hit/miss target - Shape - Circle (radius 25.00)	0.00	0.00	9,615.00	-34.60	-56.31	14,524,487.07	2,056,304.88	39° 59' 10.367 N	109° 30' 55.159 W	

Casing Points						
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (in)	Hole Diameter (in)		
2,528.87	2,528.00	9 5/8"	9.625	12.250		

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
1,427.43	1,427.00	GREEN RIVER				
4,671.92	4,671.00	WASATCH				
7,376.92	7,376.00	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	
381.14	381.12	-0.60	-0.98	Start 2247.06 hold at 381.14 MD	
2,628.20	2,627.29	-33.91	-55.20	Start Drop -1.75	
2,720.92	2,720.00	-34.60	-56.31	Start 6895.00 hold at 2720.92 MD	
9,615.92	9,615.00	-34.60	-56.31	TD at 9615.92	

NBU 921-35N4BS

Surface: 388' FSL 1,770' FEL (SW/4SE/4) Lot 2
BHL: 410' FSL 2,164' FWL (SE/4SW/4) Lot 3
Mineral Lease: UO 1194 ST

NBU 921-35N4CS

Surface: 379' FSL 1,773' FEL (SW/4SE/4) Lot 2
BHL: 51' FSL 2,153' FWL (SE/4SW/4) Lot 3
Mineral Lease: UO 1194 ST

NBU 921-35O1BS

Surface: 407' FSL 1,763' FEL (SW/4SE/4) Lot 2
BHL: 1,059' FSL 1,833' FEL (SW/4SE/4) Lot 2
Mineral Lease: ML 22582

NBU 921-35O1CS

Surface: 398' FSL 1,766' FEL (SW/4SE/4) Lot 2
BHL: 674' FSL 1,828' FEL (SW/4SE/4) Lot 2
Mineral Lease: ML 22582

NBU 921-35O4BS

Surface: 370' FSL 1,777' FEL (SW/4SE/4) Lot 2
BHL: 336' FSL 1,833' FEL (SW/4SE/4) Lot 2
Mineral Lease: ML 22582

NBU 921-35O4CS

Surface: 360' FSL 1,780' FEL (SW/4SE/4) Lot 2
BHL: 26' FSL 1,826' FEL (SW/4SE/4) Lot 2
Mineral Lease: ML 22582

Pad: NBU 921-35O
Section 35 T9S R21E

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

MULTI-POINT SURFACE USE PLAN of OPERATIONS (SUPO)

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

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

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

A. Existing Roads:

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

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

utility corridors exceed 50', unless otherwise approved.

B. Planned Access Roads:

Approximately $\pm 385'$ (0.07 miles) of road re-route 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 CIGE 133. 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 $\pm 1,570'$ and the individual segments are broken up as follows:

- $\pm 60'$ (0.01 miles) –New 8" buried gas pipeline from the meter to the edge of the pad.
- $\pm 210'$ (0.04 miles) –New 8" buried gas pipeline from the edge of pad to the NBU 921-35M pad intersection.
- $\pm 540'$ (0.1 miles) –New 12" buried gas pipeline from the NBU 921-35M pad intersection to the NBU 921-35P pad intersection.
- $\pm 760'$ (0.1 miles) –Re-route 4" buried gas pipeline around the well pad.

The total liquid gathering pipeline distance from the separator to the tie in point is $\pm 570'$ and the individual segments are broken up as follows:

- $\pm 60'$ (0.01 miles) –New 6” buried liquid pipeline from the meter to the edge of the pad.
- $\pm 210'$ (0.04 miles) –New 6” buried liquid pipeline from the edge of pad to the NBU 921-35P pad intersection.
- $\pm 300'$ (0.06 miles) –New 6” buried liquid pipeline from the NBU 921-35P pad intersection to the NBU 921-35M pad intersection.

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

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

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

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

D. Location and Type of Water Supply:

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

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

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

No water well is to be drilled on this lease.

E. Source of Construction Materials:

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

F. Methods of Handling Waste Materials:

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

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

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

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

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

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

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

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

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

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

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

Materials Management

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

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

G. Ancillary Facilities:

None are anticipated.

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

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

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

I. Plans for Reclamation of the Surface:

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

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

Interim Reclamation

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

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

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

Final Reclamation

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

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

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

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

Seeding and Measures Common to Interim and Final Reclamation

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

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

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

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

J. Surface/Mineral Ownership:

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

K. Other Information:

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 27, 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 921-35O4BS
T9S-R21E
Section 35: SWSE (Surf), SWSE (Bottom)
Surface: 370' FSL, 1777' FEL
Bottom Hole: 336' FSL, 1833' FEL
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 921-35O4BS 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

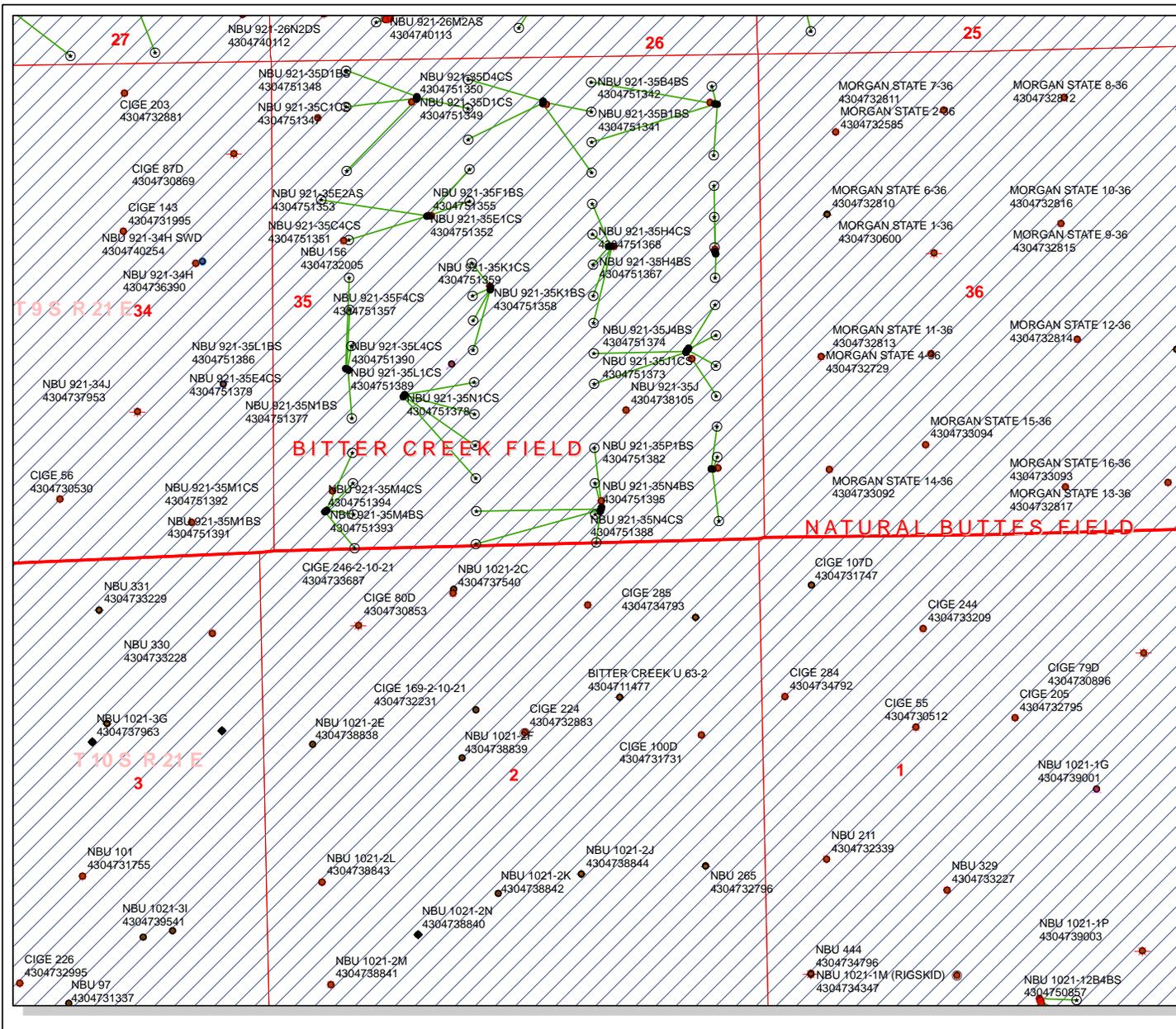
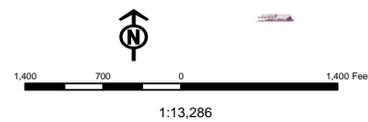
A handwritten signature in blue ink that reads 'Joe Matney'.

Joe Matney
Sr. Staff Landman

API Number: 4304751384
Well Name: NBU 921-35O4BS
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	Wells Query
STATUS	<-all other values>
ACTIVE	APD - Approved Permit
EXPLORATORY	DRL - Spurred (Drilling Commenced)
GAS STORAGE	GIW - Gas Injection
NF PP OIL	GS - Gas Storage
NF SECONDARY	LA - Location Abandoned
PI OIL	LOC - New Location
PP GAS	OPS - Operation Suspended
PP GEOTHERML	PA - Plugged Abandoned
PP OIL	PGW - Producing Gas Well
SECONDARY	POW - Producing Oil Well
TERMINATED	RET - Returned APD
Fields	SGW - Shut-in Gas Well
Sections	SOW - Shut-in Oil Well
Township	TA - Temp. Abandoned
Bottom Hole Location - AGRC	TW - Test Well
	WDW - Water Disposal
	WW - Water Injection Well
	WSW - Water Supply Well



United States Department of the Interior

BUREAU OF LAND MANAGEMENT

Utah State Office

P.O. Box 45155

Salt Lake City, Utah 84145-0155

IN REPLY REFER TO:

3160

(UT-922)

December 1, 2010

Memorandum

To: Assistant District Manager Minerals, Vernal District

From: Michael Coulthard, Petroleum Engineer

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

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

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

NBU 921-35F2 Pad

43-047-51355	NBU 921-35F1BS	Sec 35 T09S R21E 1684 FNL 1709 FWL
	BHL	Sec 35 T09S R21E 1531 FNL 2146 FWL

NBU 921-35F4 PAD

43-047-51356	NBU 921-35F4BS	Sec 35 T09S R21E 2473 FNL 2358 FWL
	BHL	Sec 35 T09S R21E 2210 FNL 2158 FWL

43-047-51357	NBU 921-35F4CS	Sec 35 T09S R21E 2483 FNL 2358 FWL
	BHL	Sec 35 T09S R21E 2567 FNL 2159 FWL

43-047-51358	NBU 921-35K1BS	Sec 35 T09S R21E 2493 FNL 2358 FWL
	BHL	Sec 35 T09S R21E 2484 FSL 2161 FWL

43-047-51359	NBU 921-35K1CS	Sec 35 T09S R21E 2503 FNL 2357 FWL
	BHL	Sec 35 T09S R21E 2163 FSL 2155 FWL

NBU 921-35G Pad

43-047-51360	NBU 921-35G1BS	Sec 35 T09S R21E 2053 FNL 1633 FEL
	BHL	Sec 35 T09S R21E 1583 FNL 1819 FEL

43-047-51361	NBU 921-35G1CS	Sec 35 T09S R21E 2053 FNL 1653 FEL
	BHL	Sec 35 T09S R21E 1916 FNL 1820 FEL

43-047-51362	NBU 921-35G4BS	Sec 35 T09S R21E 2053 FNL 1643 FEL
	BHL	Sec 35 T09S R21E 2250 FNL 1822 FEL

API #	WELL NAME	LOCATION
(Proposed PZ WASATCH-MESA VERDE)		
43-047-51363	NBU 921-35G4CS	Sec 35 T09S R21E 2053 FNL 1623 FEL
	BHL	Sec 35 T09S R21E 2583 FNL 1823 FEL
43-047-51364	NBU 921-35J1BS	Sec 35 T09S R21E 2053 FNL 1613 FEL
	BHL	Sec 35 T09S R21E 2419 FSL 1824 FEL
NBU 921-35H PAD		
43-047-51365	NBU 921-35H1BS	Sec 35 T09S R21E 2143 FNL 0486 FEL
	BHL	Sec 35 T09S R21E 1411 FNL 0494 FEL
43-047-51366	NBU 921-35H1CS	Sec 35 T09S R21E 2133 FNL 0490 FEL
	BHL	Sec 35 T09S R21E 1743 FNL 0495 FEL
43-047-51367	NBU 921-35H4BS	Sec 35 T09S R21E 2124 FNL 0493 FEL
	BHL	Sec 35 T09S R21E 2075 FNL 0495 FEL
43-047-51368	NBU 921-35H4CS	Sec 35 T09S R21E 2152 FNL 0483 FEL
	BHL	Sec 35 T09S R21E 2407 FNL 0495 FEL
NBU 921-35I PAD		
43-047-51369	NBU 921-35I1BS	Sec 35 T09S R21E 2106 FSL 0794 FEL
	BHL	Sec 35 T09S R21E 2572 FSL 0496 FEL
43-047-51370	NBU 921-35I1CS	Sec 35 T09S R21E 2098 FSL 0800 FEL
	BHL	Sec 35 T09S R21E 2240 FSL 0496 FEL
43-047-51371	NBU 921-35I4BS	Sec 35 T09S R21E 2090 FSL 0806 FEL
	BHL	Sec 35 T09S R21E 1908 FSL 0496 FEL
43-047-51372	NBU 921-35I4CS	Sec 35 T09S R21E 2082 FSL 0811 FEL
	BHL	Sec 35 T09S R21E 1577 FSL 0497 FEL
43-047-51373	NBU 921-35J1CS	Sec 35 T09S R21E 2074 FSL 0817 FEL
	BHL	Sec 35 T09S R21E 2086 FSL 1825 FEL
43-047-51374	NBU 921-35J4BS	Sec 35 T09S R21E 2066 FSL 0823 FEL
	BHL	Sec 35 T09S R21E 1752 FSL 1826 FEL
NBU 921-35K PAD		
43-047-51375	NBU 921-35K4BS	Sec 35 T09S R21E 1710 FSL 1409 FWL
	BHL	Sec 35 T09S R21E 1814 FSL 2165 FWL
43-047-51376	NBU 921-35K4CS	Sec 35 T09S R21E 1702 FSL 1403 FWL
	BHL	Sec 35 T09S R21E 1469 FSL 2163 FWL
43-047-51377	NBU 921-35N1BS	Sec 35 T09S R21E 1694 FSL 1397 FWL
	BHL	Sec 35 T09S R21E 1124 FSL 2161 FWL
43-047-51378	NBU 921-35N1CS	Sec 35 T09S R21E 1686 FSL 1392 FWL
	BHL	Sec 35 T09S R21E 0771 FSL 2162 FWL

API #	WELL NAME	LOCATION									
NBU 921-35L PAD											
43-047-51379	NBU 921-35E4CS	Sec 35	T09S	R21E	2016	FSL	0768	FWL			
	BHL	Sec 35	T09S	R21E	2343	FNL	0823	FWL			
43-047-51386	NBU 921-35L1BS	Sec 35	T09S	R21E	2013	FSL	0778	FWL			
	BHL	Sec 35	T09S	R21E	2658	FSL	0826	FWL			
43-047-51389	NBU 921-35L1CS	Sec 35	T09S	R21E	2009	FSL	0787	FWL			
	BHL	Sec 35	T09S	R21E	2255	FSL	0835	FWL			
43-047-51390	NBU 921-35L4CS	Sec 35	T09S	R21E	2005	FSL	0796	FWL			
	BHL	Sec 35	T09S	R21E	1470	FSL	0832	FWL			
NBU 921-35P PAD											
43-047-51380	NBU 921-35P4CS	Sec 35	T09S	R21E	0781	FSL	0557	FEL			
	BHL	Sec 35	T09S	R21E	0208	FSL	0489	FEL			
43-047-51381	NBU 921-35P1CS	Sec 35	T09S	R21E	0778	FSL	0547	FEL			
	BHL	Sec 35	T09S	R21E	0913	FSL	0497	FEL			
43-047-51382	NBU 921-35P1BS	Sec 35	T09S	R21E	0785	FSL	0566	FEL			
	BHL	Sec 35	T09S	R21E	1245	FSL	0497	FEL			
NBU 921-35O PAD											
43-047-51383	NBU 921-35O4CS	Sec 35	T09S	R21E	0360	FSL	1780	FEL			
	BHL	Sec 35	T09S	R21E	0026	FSL	1826	FEL			
43-047-51384	NBU 921-35O4BS	Sec 35	T09S	R21E	0370	FSL	1777	FEL			
	BHL	Sec 35	T09S	R21E	0336	FSL	1833	FEL			
43-047-51385	NBU 921-35O1CS	Sec 35	T09S	R21E	0398	FSL	1766	FEL			
	BHL	Sec 35	T09S	R21E	0674	FSL	1828	FEL			
43-047-51387	NBU 921-35O1BS	Sec 35	T09S	R21E	0407	FSL	1763	FEL			
	BHL	Sec 35	T09S	R21E	1059	FSL	1833	FEL			
43-047-51388	NBU 921-35N4CS	Sec 35	T09S	R21E	0379	FSL	1773	FEL			
	BHL	Sec 35	T09S	R21E	0051	FSL	2153	FWL			
43-047-51395	NBU 921-35N4BS	Sec 35	T09S	R21E	0388	FSL	1770	FEL			
	BHL	Sec 35	T09S	R21E	0410	FSL	2164	FWL			
NBU 921-35M PAD											
43-047-51391	NBU 921-35M1BS	Sec 35	T09S	R21E	0469	FSL	0526	FWL			
	BHL	Sec 35	T09S	R21E	1096	FSL	0830	FWL			
43-047-51392	NBU 921-35M1CS	Sec 35	T09S	R21E	0474	FSL	0534	FWL			
	BHL	Sec 35	T09S	R21E	0760	FSL	0830	FWL			

API #	WELL NAME	LOCATION
43-047-51393	NBU 921-35M4BS	Sec 35 T09S R21E 0478 FSL 0543 FWL BHL Sec 35 T09S R21E 0423 FSL 0831 FWL
43-047-51394	NBU 921-35M4CS	Sec 35 T09S R21E 0464 FSL 0517 FWL BHL Sec 35 T09S R21E 0055 FSL 0834 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: 2010.12.01 10:03:00 -07'00'

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

MCoulthard:mc:12-1-10

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 (U-07-MQ-1437b,i,p,s)		API #4304751347	IPC 10-97 Full Paleo Monitoring (U-07-MQ-1437b,i,p,s)
Kerr-McGee's NBU 921-35D1BS (U-07-MQ-1437b,i,p,s)		API #4304751348	IPC 10-97 Full Paleo Monitoring (U-07-MQ-1437b,i,p,s)
Kerr-McGee's NBU 921-35D1CS (U-07-MQ-1437b,i,p,s)		API #4304751349	IPC 10-97 Full Paleo Monitoring (U-07-MQ-1437b,i,p,s)
Kerr-McGee's NBU 921-35D4CS (U-07-MQ-1437b,i,p,s)		API #4304751350	IPC 10-97 Full Paleo Monitoring (U-07-MQ-1437b,i,p,s)
Kerr-McGee's NBU 921-35C4CS (U-07-MQ-1437b,i,p,s)		API #4304751351	IPC 10-97 Full Paleo Monitoring (U-07-MQ-1437b,i,p,s)
Kerr-McGee's NBU 921-35E1CS (U-07-MQ-1437b,i,p,s)		API #4304751352	IPC 10-97 Full Paleo Monitoring (U-07-MQ-1437b,i,p,s)
Kerr-McGee's NBU 921-35E2AS (U-07-MQ-1437b,i,p,s)		API #4304751353	IPC 10-97 Full Paleo Monitoring (U-07-MQ-1437b,i,p,s)
Kerr-McGee's NBU 921-35F1BS (U-07-MQ-1437b,i,p,s)		API #4304751355	IPC 10-97 Full Paleo Monitoring (U-07-MQ-1437b,i,p,s)
Kerr-McGee's NBU 921-35F4BS (U-07-MQ-1437b,i,p,s)		API #4304751356	IPC 10-97 Full Paleo Monitoring (U-07-MQ-1437b,i,p,s)
Kerr-McGee's NBU 921-35F4CS (U-07-MQ-1437b,i,p,s)		API #4304751357	IPC 10-97 Full Paleo Monitoring (U-07-MQ-1437b,i,p,s)
Kerr-McGee's NBU 921-35K1BS		API #4304751358	IPC 10-97 Full Paleo Monitoring (U-07-MQ-1437b,i,p,s)

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)		

Well Name	KERR-MCGEE OIL & GAS ONSHORE, L.P. NBU 921-3504BS 430475138			
String	Surf	Prod		
Casing Size(")	8.625	4.500		
Setting Depth (TVD)	2529	9615		
Previous Shoe Setting Depth (TVD)	40	2529		
Max Mud Weight (ppg)	8.3	12.0		
BOPE Proposed (psi)	500	5000		
Casing Internal Yield (psi)	3390	7780		
Operators Max Anticipated Pressure (psi)	5865	11.7		

Calculations	Surf String	8.625	"
Max BHP (psi)	$.052 * \text{Setting Depth} * \text{MW} =$	1095	
			BOPE Adequate For Drilling And Setting Casing at Depth?
MASP (Gas) (psi)	$\text{Max BHP} - (0.12 * \text{Setting Depth}) =$	792	NO <input type="text" value="air drill"/>
MASP (Gas/Mud) (psi)	$\text{Max BHP} - (0.22 * \text{Setting Depth}) =$	539	NO <input type="text"/>
			*Can Full Expected Pressure Be Held At Previous Shoe?
Pressure At Previous Shoe	$\text{Max BHP} - .22 * (\text{Setting Depth} - \text{Previous Shoe Depth}) =$	547	NO <input type="text" value="Reasonable depth in area"/>
Required Casing/BOPE Test Pressure=		2373	psi
*Max Pressure Allowed @ Previous Casing Shoe=		40	psi *Assumes 1psi/ft frac gradient

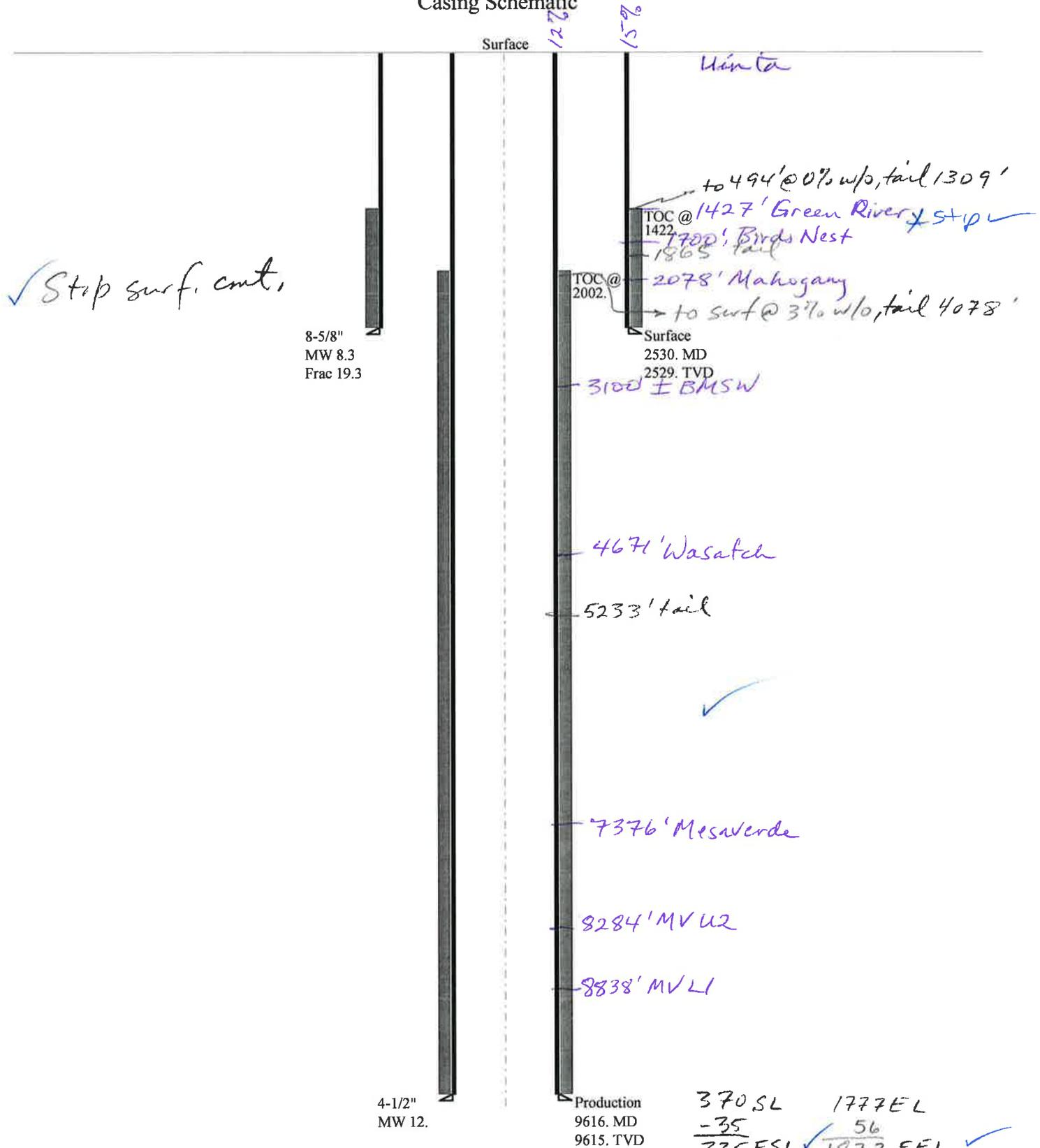
Calculations	Prod String	4.500	"
Max BHP (psi)	$.052 * \text{Setting Depth} * \text{MW} =$	6000	
			BOPE Adequate For Drilling And Setting Casing at Depth?
MASP (Gas) (psi)	$\text{Max BHP} - (0.12 * \text{Setting Depth}) =$	4846	YES <input type="text"/>
MASP (Gas/Mud) (psi)	$\text{Max BHP} - (0.22 * \text{Setting Depth}) =$	3885	YES <input type="text" value="OK"/>
			*Can Full Expected Pressure Be Held At Previous Shoe?
Pressure At Previous Shoe	$\text{Max BHP} - .22 * (\text{Setting Depth} - \text{Previous Shoe Depth}) =$	4441	NO <input type="text" value="Reasonable"/>
Required Casing/BOPE Test Pressure=		5000	psi
*Max Pressure Allowed @ Previous Casing Shoe=		2529	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

43047513840000 NBU 921-35O4BS

Casing Schematic



✓ Stop surf. cont.

8-5/8"
MW 8.3
Frac 19.3

4-1/2"
MW 12.

Production
9616. MD
9615. TVD

370 SL 1777 EL
 -35
 335 FSL ✓ 56
 1833 FEL ✓

SWSE Sec 35-9S -21E

Well name:	43047513840000 NBU 921-35O4BS		
Operator:	KERR-MCGEE OIL & GAS ONSHORE, L.P.		
String type:	Surface	Project ID:	43-047-51384
Location:	UINTAH	COUNTY	

Design parameters:

Collapse

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

Minimum design factors:

Collapse:

Design factor 1.125

Burst:

Design factor 1.00

Environment:

H2S considered? No
 Surface temperature: 74 °F
 Bottom hole temperature: 109 °F
 Temperature gradient: 1.40 °F/100ft
 Minimum section length: 100 ft

Cement top: 1,422 ft

Burst

Max anticipated surface pressure: 2,226 psi
 Internal gradient: 0.120 psi/ft
 Calculated BHP 2,530 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: 2,219 ft

Directional Info - Build & Drop

Kick-off point 300 ft
 Departure at shoe: 62 ft
 Maximum dogleg: 0 °/100ft
 Inclination at shoe: 1.62 °

Re subsequent strings:

Next setting depth: 9,615 ft
 Next mud weight: 12.000 ppg
 Next setting BHP: 5,994 psi
 Fracture mud wt: 19.250 ppg
 Fracture depth: 2,530 ft
 Injection pressure: 2,530 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	2530	8.625	28.00	I-55	LT&C	2529	2530	7.892	100188
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	1094	1880	1.718	2530	3390	1.34	70.8	348	4.91 J

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

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

Date: December 27, 2010
 Salt Lake City, Utah

Remarks:

Collapse is based on a vertical depth of 2529 ft, a mud weight of 8.33 ppg. The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

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

Well name:	43047513840000 NBU 921-3504BS		
Operator:	KERR-MCGEE OIL & GAS ONSHORE, L.P.		
String type:	Production	Project ID:	43-047-51384
Location:	UINTAH COUNTY		

Design parameters:

Collapse

Mud weight: 12.000 ppg
Internal fluid density: 1.000 ppg

Burst

Max anticipated surface pressure: 3,878 psi
Internal gradient: 0.220 psi/ft
Calculated BHP: 5,994 psi

No backup mud specified.

Minimum design factors:

Collapse:

Design factor: 1.125

Burst:

Design factor: 1.00

Tension:

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

Tension is based on air weight.
Neutral point: 7,891 ft

Environment:

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

Cement top: 2,002 ft

Directional Info - Build & Drop

Kick-off point: 300 ft
Departure at shoe: 66 ft
Maximum dogleg: 1.75 °/100ft
Inclination at shoe: 0 °

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Est. Cost (\$)
1	9616	4.5	11.60	I-80	LT&C	9615	9616	3.875	126931
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	5494	6360	1.158	5994	7780	1.30	111.5	212	1.90 J

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

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

Date: December 27, 2010
Salt Lake City, Utah

Remarks:

Collapse is based on a vertical depth of 9615 ft, a mud weight of 12 ppg. An internal gradient of .052 psi/ft was used for collapse from TD to Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

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

ON-SITE PREDRILL EVALUATION

Utah Division of Oil, Gas and Mining

Operator KERR-MCGEE OIL & GAS ONSHORE, L.P.
Well Name NBU 921-35O4BS
API Number 43047513840000 **APD No** 3224 **Field/Unit** NATURAL BUTTES
Location: 1/4,1/4 SWSE **Sec** 35 **Tw** 9.0S **Rng** 21.0E 370 FSL 1777 FEL
GPS Coord (UTM) 626781 4427089 **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 43.7 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 921-35O pad will be created by significantly enlarging the existing pad of the CIGE 133 gas well. It will be enlarged in all directions except to the north. Six gas wells, to be directionally drilled, will be added. They are the NBU 921-35O1BS, NBU 921-35O1CS, NBU 921-35N4BS, NBU 921-35N4CS, NBU 921-35O4BS and NBU 921-35O4CS. . The site is in moderately rolling terrain which slopes to the west. A drainage intersects the location on the south. It will be blocked with excess spoils until after drilling. After the pad is put into production its length will be reduced on this end and the drainage re-routed thru the area to the west. The surface of the pad may be sandy and need hardening. A major tributary of Sand Wash is about 1/2 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.

Surface Use Plan

Current Surface Use

- Grazing
- Wildlfe Habitat
- Existing Well Pad

New Road Miles	Well Pad	Src Const Material	Surface Formation
0	Width 352 Length 475	Onsite	UNTA

Ancillary Facilities N

Waste Management Plan Adequate?

Environmental Parameters

Affected Floodplains and/or Wetlands N

Flora / Fauna

Vegetation is a desert shrub type, which includes rabbit brush, Indian ricegrass, big sage, Russian thistle, stipa commata, 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 a moderately deep sandy loam.

Erosion Issues N

Sedimentation Issues N

Site Stability Issues N

Drainage Diversion Required? Y

. A drainage intersects the location on the south. It will be blocked with excess spoils until after drilling. After the pad is put into production its length will be reduced on this end and the drainage re-routed thru the area to the west.

Berm Required? N

Erosion Sedimentation Control Required? Y

A drainage intersects the location on the south. It will be blocked with excess spoils until after drilling. After the pad is put into production its length will be reduced on this end and the drainage re-routed thru the area to the west.

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 120' x 260' x 12' deep located in a cut on the snortheast 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 Sass, (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

12/28/2010

Utah Division of Oil, Gas and Mining

Page 1

APD No	API WellNo	Status	Well Type	Surf Owner	CBM
3224	43047513840000	LOCKED	GW	S	No
Operator	KERR-MCGEE OIL & GAS ONSHORE, L.P.		Surface Owner-APD		
Well Name	NBU 921-35O4BS		Unit	NATURAL BUTTES	
Field	NATURAL BUTTES		Type of Work	DRILL	
Location	SWSE 35 9S 21E S 370 FSL 1777 FEL		GPS Coord (UTM)	626782E	4427074N

Geologic Statement of Basis

Kerr McGee proposes to set 2,530' 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 3,100'. 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. Production casing cement should be brought up to cover the base of the moderately saline ground water in order to isolate fresher waters uphole.

Brad Hill
APD Evaluator

12/15/2010
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 43.7 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 921-35O pad will be created by significantly enlarging the existing pad of the CIGE 133 gas well. It will be enlarged in all directions except to the north. Six gas wells, to be directionally drilled, will be added. They are the NBU 921-35O1BS, NBU 921-35O1CS, NBU 921-35N4BS, NBU 921-35N4CS, NBU 921-35O4BS and NBU 921-35O4CS. . The site is in moderately rolling terrain which slopes to the west. A drainage intersects the location on the south. It will be blocked with excess spoils until after drilling. After the pad is put into production its length will be reduced on this end and the drainage re-routed thru the area to the west. The surface of the pad may be sandy and need hardening. A major tributary of Sand Wash is about 1/2 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

12/28/2010

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	The well site shall be bermed to prevent fluids from leaving the pad.
Surface	The reserve pit shall be fenced upon completion of drilling operations.

**WORKSHEET
APPLICATION FOR PERMIT TO DRILL**

APD RECEIVED: 11/23/2010

API NO. ASSIGNED: 43047513840000

WELL NAME: NBU 921-3504BS

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

PHONE NUMBER: 720 929-6156

CONTACT: Danielle Piernot

PROPOSED LOCATION: SWSE 35 090S 210E

Permit Tech Review:

SURFACE: 0370 FSL 1777 FEL

Engineering Review:

BOTTOM: 0336 FSL 1833 FEL

Geology Review:

COUNTY: UINTAH

LATITUDE: 39.98622

LONGITUDE: -109.51510

UTM SURF EASTINGS: 626782.00

NORTHINGS: 4427074.00

FIELD NAME: NATURAL BUTTES

LEASE TYPE: 3 - State

LEASE NUMBER: ML 22582

PROPOSED PRODUCING FORMATION(S): WASATCH-MESA VERDE

SURFACE OWNER: 3 - State

COALBED METHANE: NO

RECEIVED AND/OR REVIEWED:

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

Commingling Approved

LOCATION AND SITING:

- R649-2-3.
Unit: NATURAL BUTTES
- R649-3-2. General
- R649-3-3. Exception
- Drilling Unit
Board Cause No: Cause 173-14
Effective Date: 12/2/1999
Siting: Suspends General Siting
- R649-3-11. Directional Drill

Comments: Presite Completed

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



GARY R. HERBERT
Governor

GREGORY S. BELL
Lieutenant Governor

State of Utah

DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER
Executive Director

Division of Oil, Gas and Mining

JOHN R. BAZA
Division Director

Permit To Drill

Well Name: NBU 921-3504BS
API Well Number: 43047513840000
Lease Number: ML 22582
Surface Owner: STATE
Approval Date: 12/28/2010

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

Commingling:

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

General:

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

Conditions of Approval:

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

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

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

Surface casing shall be cemented to the surface.

Additional Approvals:

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

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

Notification Requirements:

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

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

Contact Information:

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

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

Reporting Requirements:

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

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

Approved By:



For John Rogers
Associate Director, Oil & Gas

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	FORM 9 5. LEASE DESIGNATION AND SERIAL NUMBER: ML 22582
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 921-3504BS
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.	9. API NUMBER: 43047513840000
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: 0370 FSL 1777 FEL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SWSE 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 type="checkbox"/> NOTICE OF INTENT Approximate date work will start:	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> CASING REPAIR
<input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion:	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> CHANGE WELL NAME
<input checked="" type="checkbox"/> SPUD REPORT Date of Spud: 1/31/2011	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> CONVERT WELL TYPE
<input type="checkbox"/> DRILLING REPORT Report Date:	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> NEW CONSTRUCTION
	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> PLUG BACK
	<input type="checkbox"/> PRODUCTION START OR RESUME	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION
	<input type="checkbox"/> REPERFORATE CURRENT FORMATION	<input type="checkbox"/> SIDETRACK TO REPAIR WELL	<input type="checkbox"/> TEMPORARY ABANDON
	<input type="checkbox"/> TUBING REPAIR	<input type="checkbox"/> VENT OR FLARE	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> WATER SHUTOFF	<input type="checkbox"/> SI TA STATUS EXTENSION	<input type="checkbox"/> APD EXTENSION
	<input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> OTHER	OTHER: <input style="width: 100px;" type="text"/>

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

MIRU PETE MARTIN BUCKET RIG. DRILLED 20" CONDUCTOR HOLE TO 40'.
 RAN 14" 36.7# SCHEDULE 10 CONDUCTOR PIPE. CMT W/28 SX READY MIX
 SPUD WELL LOCATION ON JANUARY 31, 2011 AT 14:30 HRS.

Accepted by the
Utah Division of
Oil, Gas and Mining
FOR RECORD ONLY
 02/02/2011

NAME (PLEASE PRINT) Andy Lytle	PHONE NUMBER 720 929-6100	TITLE Regulatory Analyst
SIGNATURE N/A		DATE 2/2/2011

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 921-35O4BS
 Qtr/Qtr SWSE Section 35 Township 9S Range 21E
 Lease Serial Number ML 22582
 API Number 4304751384

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

Date/Time 02/01/2011 08:00HRS AM PM

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

- Surface Casing
 Intermediate Casing
 Production Casing
 Liner
 Other

RECEIVED

JAN 28 2011

DIV. OF OIL, GAS & MINING

Date/Time 03/11/2011 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

435.828.0986 OR LOVEL YOUNG AT 435.781.7051

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	FORM 9 5. LEASE DESIGNATION AND SERIAL NUMBER: ML 22582
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 921-3504BS
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.	9. API NUMBER: 43047513840000
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: 0370 FSL 1777 FEL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SWSE 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 type="checkbox"/> NOTICE OF INTENT Approximate date work will start:	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> CASING REPAIR
<input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion:	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> CHANGE WELL NAME
<input type="checkbox"/> SPUD REPORT Date of Spud:	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> CONVERT WELL TYPE
<input checked="" type="checkbox"/> DRILLING REPORT Report Date: 2/24/2011	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> NEW CONSTRUCTION
	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> PLUG BACK
	<input type="checkbox"/> PRODUCTION START OR RESUME	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION
	<input type="checkbox"/> REPERFORATE CURRENT FORMATION	<input type="checkbox"/> SIDETRACK TO REPAIR WELL	<input type="checkbox"/> TEMPORARY ABANDON
	<input type="checkbox"/> TUBING REPAIR	<input type="checkbox"/> VENT OR FLARE	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> WATER SHUTOFF	<input type="checkbox"/> SI TA STATUS EXTENSION	<input type="checkbox"/> APD EXTENSION
	<input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> OTHER	OTHER: <input style="width: 100px;" type="text"/>

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

MIRU PROPETRO AIR RIG #11 ON FEBRUARY 22, 2011. DRILLED 11" SURFACE HOLE TO 2560'. RAN 8 5/8" 28# IJ-55 SURFACE CSG. PUMP 150 BBLS FRESH WATER. PUMP 20 BBLS GEL WATER. LEAD CEMENT W/ 200 SX CLASS G PREM @ 11.0 PPG, 3.82 YD. TAILED CEMENT W/ 200 SX CLASS G PREM LITE @ 15.8 PPG, 1.15 YD. DROPPED PLUG ON THE FLY, DISPLACED W/ 155 BBLS WATER. NO CIRC. LIFT PRESSURE WAS 300 PSI, BUMPED PLUG & HELD 800 PSI FOR 5 MIN. FLOAT HELD; NO CEMENT TO SURFACE. TOP OUT #1 THRU 1" PIPE W/ 125 SX CLASS G PREM LITE @ 15.8 PPG, 1.15 YD. WOC. TOP OUT #2 W/ 125 SX CLASS G PREM LITE @ 15.8 PPG, 1.15 YD. NO CEMENT TO SURFACE. WORT.

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 2/25/2011

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		FORM 9 5. LEASE DESIGNATION AND SERIAL NUMBER: ML 22582
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 921-3504BS	
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.	9. API NUMBER: 43047513840000	
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: 0370 FSL 1777 FEL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SWSE 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 type="checkbox"/> SPUD REPORT Date of Spud: <input checked="" type="checkbox"/> DRILLING REPORT Report Date: 4/5/2011	<input type="checkbox"/> ACIDIZE <input type="checkbox"/> CHANGE TO PREVIOUS PLANS <input type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> DEEPEN <input type="checkbox"/> OPERATOR CHANGE <input type="checkbox"/> PRODUCTION START OR RESUME <input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> WATER SHUTOFF <input type="checkbox"/> WILDCAT WELL DETERMINATION <input type="checkbox"/> ALTER CASING <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input type="checkbox"/> FRACTURE TREAT <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> SI TA STATUS EXTENSION <input type="checkbox"/> OTHER	
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc. MIRU ROTARY RIG. FINISHED DRILLING FROM 2560' TO 9650' ON APRIL 4, 2011. RAN 4-1/2" 11.6# I-80 PRODUCTION CASING TO 9470'. RAN 4 1/2" 11.6# P110 CSG FROM 9470' TO 9642'. CEMENTED PRODUCTION CASING RELEASED PIONEER RIG 54 ON APRIL 5, 2011 @ 18:00 HRS. DETAILS OF CEMENT JOB WILL BE INCLUDED WITH THE WELL COMPLETION REPORT WELL IS WAITING ON FINAL COMPLETION ACTIVITIES.		
NAME (PLEASE PRINT) Andy Lytle	PHONE NUMBER 720 929-6100	TITLE Regulatory Analyst
SIGNATURE N/A	DATE 4/6/2011	

State of Utah - Notification Form

Operator Anadarko Petroleum Rig Name/# PIONEER 54
Submitted By DARWYNE CADY Phone Number 435- 790-2921
Well Name/Number NBU 921-3504BS
Qtr/Qtr SE/4 SW/4 Section 35 Township 9S Range 21E
Lease Serial Number ML 22582
API Number 43047513840000

Casing – Time casing run starts, not cementing times.

- Production Casing
- Other

Date/Time _ _ _ _ AM PM

BOPE

- Initial BOPE test at surface casing point
- Other

Date/Time 3/30/11 _ _ _ _ AM PM

Rig Move
Location To:

Date/Time _ _ _ _ AM PM

RECEIVED
MAR 30 2011
DIV. OF OIL, GAS & MINING

Remarks
TEST BOPE

Carol Daniels - RUN CSG NBU 921-3504BS, PIONEER 54

From: "Anadarko - Pioneer 54"
To: , "DAVID HACKFORD"
Date: 4/3/2011 5:46 PM
Subject: RUN CSG NBU 921-3504BS, PIONEER 54

State of Utah - Notification Form

Operator Anadarko Petroleum Rig Name/# PIONEER 54
Submitted By STUART NEILSON Phone Number 435- 790-2921
Well Name/Number NBU 921-3504BS
Qtr/Qtr SE/4 SW/4 Section 35 Township 9S Range 21E
Lease Serial Number ML 22582
API Number 43047513840000

Casing – Time casing run starts, not cementing times.

Production Casing
Other

Date/Time 4/4/11 11 AM PM

RECEIVED

APR 04 2011

DIV. OF OIL, GAS & MINING

BOPE

Initial BOPE test at surface casing point
Other

Date/Time _ _ AM PM

Rig Move

Location To: _

Date/Time _ _ AM PM

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		FORM 9
SUNDRY NOTICES AND REPORTS ON WELLS		5. LEASE DESIGNATION AND SERIAL NUMBER: ML 22582
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 921-3504BS	
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.	9. API NUMBER: 43047513840000	
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: 0370 FSL 1777 FEL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SWSE 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 type="checkbox"/> SPUD REPORT Date of Spud: <input checked="" type="checkbox"/> DRILLING REPORT Report Date: 6/28/2011	<input type="checkbox"/> ACIDIZE <input type="checkbox"/> ALTER CASING <input type="checkbox"/> CASING REPAIR <input type="checkbox"/> CHANGE TO PREVIOUS PLANS <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> CHANGE WELL NAME <input type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input type="checkbox"/> CONVERT WELL TYPE <input type="checkbox"/> DEEPEN <input type="checkbox"/> FRACTURE TREAT <input type="checkbox"/> NEW CONSTRUCTION <input type="checkbox"/> OPERATOR CHANGE <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> PLUG BACK <input checked="" type="checkbox"/> PRODUCTION START OR RESUME <input type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION <input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> TEMPORARY ABANDON <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> WATER DISPOSAL <input type="checkbox"/> WATER SHUTOFF <input type="checkbox"/> SI TA STATUS EXTENSION <input type="checkbox"/> WILDCAT WELL DETERMINATION <input type="checkbox"/> OTHER <input type="checkbox"/> OTHER: <input style="width: 100px; height: 15px;" type="text"/>	
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.		
<p>THE SUBJECT WELL WAS PLACED ON PRODUCTION ON 06/28/2011 AT 11:00 AM. THE CHRONOLOGICAL WELL HISTORY WILL BE SUBMITTED WITH THE WELL COMPLETION REPORT.</p> <p style="text-align: right;">Accepted by the Utah Division of Oil, Gas and Mining FOR RECORD ONLY</p>		
NAME (PLEASE PRINT) Sheila Wopsock	PHONE NUMBER 435 781-7024	TITLE Regulatory Analyst
SIGNATURE N/A	DATE 6/29/2011	

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:
ML 22582

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT or CA AGREEMENT NAME
UTU63047A

8. WELL NAME and NUMBER:
NBU 921-3504BS

9. API NUMBER:
4304751384

10. FIELD AND POOL, OR WILDCAT
NATURAL BUTTES

11. QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:
SWSE 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: **SWSE 370 FSL 1777 FEL S35, T9S, R21E** *Bill reviewed by JP*
AT TOP PRODUCING INTERVAL REPORTED BELOW: **SWSE 330 FSL 1841 FEL S35, T9S, R21E**
AT TOTAL DEPTH: **SWSE 346 FSL 1817 FEL S35, T9S, R21E**

14. DATE SPUNDED: 1/31/2011 15. DATE T.D. REACHED: 4/4/2011 16. DATE COMPLETED: 6/28/2011 ABANDONED READY TO PRODUCE

17. ELEVATIONS (DF, RKB, RT, GL):
5100 GL

18. TOTAL DEPTH: MD 9,650 TVD 9,648

19. PLUG BACK T.D.: MD 9,599 TVD 9,597

20. IF MULTIPLE COMPLETIONS, HOW MANY? *

21. DEPTH BRIDGE MD PLUG SET: TVD

22. TYPE ELECTRIC AND OTHER MECHANICAL LOGS RUN (Submit copy of each)
RCBL-GR/RCBL-HDIZ/ZDLZCNGR

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#		2,542		650		0	
7 7/8"	4 1/2" I-80	11.6#		9,470		1,636		460	
7 7/8"	4 1/2" P110	11.6#	9,470	9,642					

25. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)
2 3/8"	9,255							

26. PRODUCING INTERVALS

FORMATION NAME	TOP (MD)	BOTTOM (MD)	TOP (TVD)	BOTTOM (TVD)
(A) MESAVERDE	7,392	9,572		
(B) <i>WSPMD</i>				
(C)				
(D)				

27. PERFORATION RECORD

INTERVAL (Top/Bot - MD)	SIZE	NO. HOLES	PERFORATION STATUS
7,392 9,572	0.36	192	Open <input checked="" type="checkbox"/> Squeezed <input type="checkbox"/>
			Open <input type="checkbox"/> Squeezed <input type="checkbox"/>
			Open <input type="checkbox"/> Squeezed <input type="checkbox"/>
			Open <input type="checkbox"/> Squeezed <input type="checkbox"/>

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

DEPTH INTERVAL	AMOUNT AND TYPE OF MATERIAL
7392 - 9572	PUMP 5,742 BBLs SLICK H2O & 104,575 LBS SAND

RECEIVED

AUG 09 2011

DIV. OF OIL, GAS & MINING

29. ENCLOSED ATTACHMENTS:

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

30. WELL STATUS:

PROD

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

AMENDED REPORT FORM 8
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DEPTH INTERVAL	AMOUNT AND TYPE OF MATERIAL
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RECEIVED

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DIV. OF OIL, GAS & MINING

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

30. WELL STATUS:

PROD

31. INITIAL PRODUCTION

INTERVAL A (As shown in item #26)

DATE FIRST PRODUCED: 6/28/2011		TEST DATE: 7/1/2011		HOURS TESTED: 24		TEST PRODUCTION RATES: →	OIL – BBL: 0	GAS – MCF: 1,570	WATER – BBL: 562	PROD. METHOD: FLOWING
CHOKE SIZE: 20/64	TBG. PRESS. 1,700	CSG. PRESS. 2,900	API GRAVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL – BBL: 0	GAS – MCF: 1,570	WATER – BBL: 562	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.

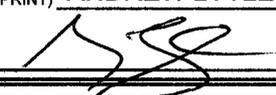
34. FORMATION (Log) MARKERS:

Formation	Top (MD)	Bottom (MD)	Descriptions, Contents, etc.	Name	Top (Measured Depth)
GREEN RIVER	1,371				
BIRD'S NEST	1,719				
MAHOGANY	2,213				
WASATCH	4,688	7,375			
MESAVERDE	7,375	9,650	TD		

35. ADDITIONAL REMARKS (Include plugging procedure)

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

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

NAME (PLEASE PRINT) ANDREW LYTLE TITLE REGULATORY ANALYST
 SIGNATURE  DATE 7/25/2011

This report must be submitted within 30 days of

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

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

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

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

**US ROCKIES REGION
Operation Summary Report**

Well: NBU 921-3504BS [ORANGE] Spud Conductor: 2/1/2011 Spud Date: 2/22/2011

Project: UTAH-UINTAH Site: NBU 921-350 PAD Rig Name No: PROPETRO 12/12, PIONEER 54/54

Event: DRILLING Start Date: 2/3/2011 End Date: 4/5/2011

Active Datum: RKB @5,119.00ft (above Mean Sea Level) UWI: SW/SE/0/9/S/21/E/35/0/0/6/PM/S/370.00/E/0/1,777.00/0/0

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
2/22/2011	15:30 - 17:30	2.00	MIRU	01	A	P		MOVE RIG IN OFF NBU 921-35N4CS
	17:30 - 22:00	4.50	MIRU	01	B	P		RIG UP
	22:00 - 22:30	0.50	DRLSUR	06	A	P		P/U 1.83 DEG BENT HOUSING HUNTING MTR SN 8009 . 7/8 LOBE .17 RPG. M/U Q506 SN 702486 1ST RUN, W/ 6-18'S. INSTALL RUBBER
	22:30 - 23:30	1.00	DRLSUR	02	B	P		SPUD SURFACE 02/22/2011 @ 22:30 HRS. DRILL 11" SURFACE HOLE F/40'-210' (170' @ 170'/HR) PSI ON/ OFF 690/450, UP/ DOWN/ ROT 25/20/22. 532 GPM, 45 RPM ON TOP DRIVE,90 RPM ON MM 15-18K WOB
	23:30 - 0:00	0.50	DRLSUR	06	A	P		TOH T/P/U DIR TOOLS
2/23/2011	0:00 - 2:00	2.00	DRLSUR	06	A	P		P/U DIR. TOOLS & SCRIBE, TIH T/210'
	2:00 - 5:30	3.50	DRLSUR	02	D	P		DRILL/ SLIDE 11" SURFACE HOLE F/ 210'-700' (490' @ 140'/HR) PSI ON/ OFF 980/720, UP/ DOWN/ ROT 48/42/49 136 SPM, 532 GPM, 18-22K WOB, 45 RPM ON TOP DRIVE,90 RPM ON MM, CIRC RESERVE PIT
	5:30 - 15:00	9.50	DRLSUR	02	D	P		DRILL/ SLIDE 11" SURFACE HOLE F/ 700'-1840' (1140' @ 120'/HR) PSI ON/ OFF 1390/1150, UP/ DOWN/ ROT 69/65/60 136 SPM, 532 GPM, 18-22K WOB, 45 RPM ON TOP DRIVE,90 RPM ON MM, LOST PARTIAL RETURNS @ 1660', RUN AIR AS NEEDED TO MAINTAIN CIRC & RESERVE PIT LEVEL
	15:00 - 0:00	9.00	DRLSUR	02	D	P		DRILL/ SLIDE 11" SURFACE HOLE F/1840'-2560' (720' @ 80'/HR) PSI ON/ OFF 1560/1320, UP/ DOWN/ ROT 80/68/73 136 SPM, 532 GPM, 18-22K WOB, 45 RPM ON TOP DRIVE,90 RPM ON MM, RUN AIR AS NEEDED TO MAINTAIN CIRC & RESERVE PIT LEVEL (TD 11" SURF. HOLE)
2/24/2011	0:00 - 1:30	1.50	DRLSUR	05	C	P		CIEC & COND HOLE F/L/D & 8 5/8" 28# SURF. CSG RUN
	1:30 - 4:30	3.00	DRLSUR	06	D	P		LAY DOWN DRILL STRING, 11" BHA & DIR TOOLS
	4:30 - 5:30	1.00	CSG	12	A	P		R/U T/RUN 8 5/8" 28# SURF. CSG
	5:30 - 8:30	3.00	CSG	12	C	P		HOLD SAFETY MEETING, RUN FLOAT SHOE, SHOE JNT., BAFFEL & 56 JNTS 8 5/8" 28# LT&C SURF. CSG W/THE SHOE SET @2527' & THE BAFFEL SET @ 2481'
	8:30 - 9:00	0.50	CSG	12	A	P		RUN 100' 1" PIPE DOWN ANNULUS, R/U PRO PETRO CEMENTING EQUIP
	9:00 - 10:30	1.50	CSG	12	E	P		HOLD SAFETY MEETING. INSTALL CEMENT HEAD. PSI TEST TO 2000 PSI. PUMP 150 BBLs OF 8.3# H2O AHEAD. NO CIRC. PUMP 20 BBLs OF 8.4# GEL WATER AHEAD. NO CIRC. PUMP 200 SX (136.1 BBLs) 11# 3.82 YIELD LEAD CEMENT, PUMP 200 SX (41 BBLs) OF 15.8# 1.15 YIELD TAIL (2% CALC, 1/4# /SK OF FLOCELE). DROP PLUG ON FLY AND DISPLACE W/155 BBLs OF 8.3# H2O. NO CIRC LIFT PRESSURE WAS 300 PSI, BUMP PLUG AND HOLD 800 PSI FOR 5 MIN. FLOAT HELD NO CEMENT TO SURF.
	10:30 - 11:00	0.50	CSG	12	F	P		TOP OUT THRU 1" PIPE, W/125 SKS 15.8 PPG CLASS "G" CEMENT W/1.15 CUFT/SK YIELD, 4% CACL2 & 1/4#SK FLOCELE, NO CEMENT TO SURF.
	11:00 - 13:00	2.00	CSG	13	A	P		WAIT ON CEMENT

**US ROCKIES REGION
Operation Summary Report**

Well: NBU 921-3504BS [ORANGE] Spud Conductor: 2/1/2011 Spud Date: 2/22/2011
 Project: UTAH-UINTAH Site: NBU 921-350 PAD Rig Name No: PROPETRO 12/12, PIONEER 54/54
 Event: DRILLING Start Date: 2/3/2011 End Date: 4/5/2011
 Active Datum: RKB @5,119.00ft (above Mean Sea Level) UWI: SW/SE/0/9/S/21/E/35/0/0/6/PM/S/370.00/E/0/1,777.00/0/0

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
	13:00 - 13:30	0.50	CSG	12	F	P		TOP OUT ,W/125 SKS 15.8 PPG CLASS "G" CEMENT W/1.15 CUFT/SK YIELD,4% CACL2 & 1/4#SK FLOCELE,NO CEMENT TO SURF.RELEASE RIG @ 13:30 02/24/2011
	13:30 - 13:30	0.00	CSG					CONDUCTOR CASING: Cond. Depth set: 40' Cement sx used: 28
								SPUD DATE/TIME: 2/22/2011 22:30
								SURFACE HOLE: Surface From depth: 40' Surface To depth: 2,560 Total SURFACE hours: 25.00 Surface Casing size: 8 5/8 # of casing joints ran: 57 Casing set MD: 2,527.0 # sx of cement: 200/200/250 Cement blend (ppg:): 11.0/15.8/15.8 Cement yield (ft3/sk): 3.82/1.15/1.15 # of bbls to surface: Describe cement issues: NONE Describe hole issues: NONE
3/30/2011	0:00 - 1:00	1.00	DRLPRO	01	C	P		SKID RIG TO THE NBU 921-3504BS
	1:00 - 2:00	1.00	DRLPRO	14	A	P		N/U BOPE
	2:00 - 6:00	4.00	DRLPRO	15	A	P		HPJSM W/ RIG & TESTER, TEST BOPE, RAMS & ALL VALVES 250 LOW 5000 HIGH, ANN 2500, CASING 1500 F/ 30 MIN'S
	6:00 - 8:30	2.50	DRLPRO	06	A	P		P/U BIT, MM & DIR TOOLS & SCRIBE, TIH , TAG CEMENT @ 2420'
	8:30 - 9:30	1.00	DRLPRO	02	F	P		DRLG CEMENT, F/E & OPEN HOLE TO 2575'
	9:30 - 16:00	6.50	DRLPRO	02	D	P		DIR DRLG F/ 2575 TO 3587', 1012' @ 155.7' PH, WOB 20, CIRC RESERVE W/ GEL & POLY SWEEPS, RPM 55, MM 167 , PSI ON/OFF 2000-1600, DIFF 300-500, SPM 165, GPM 595, PU/SO/ROT 110-102-107, TOR ON/OFF SLIDE 105' IN 1 HR = 105' PH ROT 907' IN 5.5 HRS = 165' PH
	16:00 - 16:30	0.50	DRLPRO	07	A	P		SERVICE RIG, BOP DRILL 1 MIN, F/T ANN & HCR
	16:30 - 0:00	7.50	DRLPRO	02	D	P		DIR DRLG F/ 3587 TO 4858', 1271' @ 169.5' PH, WOB 20-22, CIRC RESERVE W/ GEL & POLY SWEEPS, RPM 55, MM 167 , PSI ON/OFF 2550-1950, DIFF 400-550, SPM 165, GPM 595, PU/SO/ROT 149-129-142, TOR ON/OFF 7-5 K SLIDES 95' IN 2.08 HRS = 45.7' PH ROT 1176' IN 5.42 HRS = 217' PH
3/31/2011	0:00 - 16:00	16.00	DRLPRO	02	D	P		DRLG F/ 4858 TO 7098', 2240' @ 140' PH, WOB 22, CIRC RESERVE PIT W/ GEL & POLY SWEEPS, RPM 55, MM 167, PSI ON/OFF 2700-2200, DIFF 300-550, SPM 165, GPM 595, PU/SO/ROT 170-148-162, TOR ON/OFF 7-5 K SLIDES 26' IN 1.08 HRS = 24' PH ROT 2214' IN 14.92 HRS = 148.4' PH
	16:00 - 16:30	0.50	DRLPRO	07	A	P		SERVICE RIG
	16:30 - 0:00	7.50	DRLPRO	02	D	P		DRLG F/ 7098 TO 7656',558' @ 74.4' PH WOB 22, SHUT IN PITS, MW 8.5, VIS 28, RPM 50-55, PSI ON/OFF 1800-1400, DIFF 300-500, SPM 120, GPM 454, PU/SO/ROT 190-165-175, TOR ON/OFF 7-5 K SLIDES ROT

US ROCKIES REGION
Operation Summary Report

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Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
4/1/2011	0:00 - 1:30	1.50	DRLPRO	02	D	P		DRLG F/ 7656 TO 7712', 56' @ 37.33' PH SLIDES 26' IN 1.17 HRS = 22.2' PH ROT 30' IN .33 HRS = 90.9' PH
	1:30 - 3:00	1.50	DRLPRO	08	B	Z		CIRC & MUD UP TO 35 VIS, 9.6 MW
	3:00 - 3:30	0.50	DRLPRO	08	B	Z		POOH 2 STDS & 1 JTS, BEARING ON COMPOUND WENT OUT
	3:30 - 22:00	18.50	DRLPRO	08	B	Z		PULL GARUDS, CHAINS, GEAR & SHIFT, REPLACE BEARINGS & INSTALL SAFT, GEAR, CHAINS & GAURDS, WASH TO BOTTOM
	22:00 - 23:00	1.00	DRLPRO	02	D	P		DRLG F/ 7712 TO 7764', 52' @ 52' PH, WOB 24, MW 9.6 VIS 37 ROT 100%
	23:00 - 23:30	0.50	DRLPRO	22	L	Z		REGAIN COMM W/ MWD TOOL
	23:30 - 0:00	0.50	DRLPRO	02	D	P		DRLG F/ 7764 TO 7773', 16' @ 32.2' PH, WOB 24, MW 10, VIS 37 SLIDE 100%
4/2/2011	0:00 - 16:00	16.00	DRLPRO	02	D	P		DRLG F/ 7773 TO 8429', 656' @ 41' PH, WOB 24, MW 10.7, VIS 38, START LCM LOST 300 BBLS TO FORMATION, RPM 50, MM 127, SPM 120, GPM 454, PSI ON/OFF 2400-2100, DIFF 150-400, TOR ON/OFF 7-6 K SLIDES 61' IN 2.92 HRS = 20.9' PH ROT 595' IN 13.08 HRS = 45.5' PH SERVICE RIG
	16:00 - 16:30	0.50	DRLPRO	07	A	P		
	16:30 - 0:00	7.50	DRLPRO	02	D	P		DRLG F/ 8429 TO 8805', 376' @ 50.1' PH, WOB 24, MW 11.8, VIS 41, LCM 15%, RPM 50, MM 127, SPM 120, GPM 454, PSI ON/OFF 2600-2250, DIFF 200-500, TOR ON/OFF 8-7 K, PU/SO/ROT 190-130-160 100% ROT
4/3/2011	0:00 - 1:00	1.00	DRLPRO	02	D	P		DRLG F/ 8805 TO 8834, 31' PH, WOB 24, MW 11.6, VIS 41, LCM 15%
	1:00 - 7:30	6.50	DRLPRO	06	A	P		TFNB & MM, TIGHT OUT 4700-4500, P/U NEW BIT & MM, SCRIBE DIR TOOLS, TIH TO SHOE, F/T PIPE & BLIND RAMS, RIG CENTERED & LEVEL
	7:30 - 8:30	1.00	DRLPRO	09	A	P		CUT & SLIP 105' DRLG LINE, FILL PIPE
	8:30 - 11:00	2.50	DRLPRO	06	A	P		TIH, WASH & REAM 45' TO BOTTOM, 20' FLARE F/ 45 MIN
	11:00 - 17:00	6.00	DRLPRO	02	D	P		DRLG F/ 8834 TO 9097', 263' @ 43.8' PH, WOB 20, MW 12, VIS 42, LCM 15%, RPM 50, MM ,SPM 120, GPM 454, PSI ON/OFF 2600-2250, DIFF 200-450, TOR ON/OFF 10-8 K SLIDE 37' IN 1.67 HRS = 22.1' PH, INC KILL ROT 226' IN 4.33 HRS = 52.2' PH SERVICE RIG
	17:00 - 17:30	0.50	DRLPRO	07	A	P		
	17:30 - 0:00	6.50	DRLPRO	02	D	P		DRLG F/ 9097 TO 9382', 285' @ 47.5' PH, WOB 20, MW 12, VIS 28, LCM 15%, RPM 55, MM 91, SPM 115, GPM 435, PSI ON/OFF 2750-2500, DIFF 150-350, TOR ON/OFF 8-6 K SLIDES 30' IN 1.67 HRS = 17.9' PH ROT 255' IN 4.83 HRS = 52.8' PH
4/4/2011	0:00 - 6:00	6.00	DRLPRO	02	D	P		DRLG F/ 9382 TO 9650', TD, 268' @ 44.6' PH
	6:00 - 8:00	2.00	DRLPRO	05	F	P		PUMP HIGH VIS SWEEP, CIRC
	8:00 - 13:00	5.00	DRLPRO	06	E	P		SHORT TRIP TO SHOE, REAM TIGHT SPOT @ 8650'
	13:00 - 15:00	2.00	DRLPRO	05	C	P		CIRC F/ TRIP, PUMP HIGH VIS SWEEP
	15:00 - 19:00	4.00	DRLPRO	06	A	P		POOH F/ OPEN HOLE LOGS

US ROCKIES REGION
Operation Summary Report

Well: NBU 921-3504BS [ORANGE]	Spud Conductor: 2/1/2011	Spud Date: 2/22/2011
Project: UTAH-UINTAH	Site: NBU 921-350 PAD	Rig Name No: PROPETRO 12/12, PIONEER 54/54
Event: DRILLING	Start Date: 2/3/2011	End Date: 4/5/2011
Active Datum: RKB @5,119.00ft (above Mean Sea Level)	UWI: SW/SE/0/9/S/21/E/35/0/0/6/PM/S/370.00/E/0/1,777.00/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
	19:00 - 23:30	4.50	DRLPRO	11	D	P		HPJSM W/ RIG & BAKER LOGGING, R/U & RUN TRIPLE COMBO OPEN HOLE LOGS, R/D LOGGERS DEPTH 9620'
	23:30 - 0:00	0.50	DRLPRO	14	B	P		DRLG DEPTH 9650'
4/5/2011	0:00 - 10:00	10.00	DRLPRO	12	C	P		PULL WEAR BUSHING
	10:00 - 11:00	1.00	DRLPRO	05	D	P		RUN 4 JTS P-110, 224 JTS I-80, 2 MARKERS WASATCH MARKER 4696. MASA MARKER 7413, SHOE @ 9642, FLOAT @ 9598'
	11:00 - 14:30	3.50	DRLPRO	12	E	P		CIRC OUT GAS, 5' FLARE FOR 5 MIN
	14:30 - 15:30	1.00	DRLPRO	14	B	P		HPJSM W/ RIG & CEMENTER'S, R/U & PSI TEST LINES TO 5000, PUMP 40 BBLS SPACER, LEAD 465 SKS 12.2 PPG, 2.17 YLD, TAIL 14.3 PPG, 1180 SKS, YLD 1.31, DROP PLUG & DISPLACE W/ 149 BBLS CLAYTREAT WATER, BUMP PLUG @ 3300 PSI 500 OVER FINAL LIFT PSI OF 2700, FLOATS HELD, PLUG BACK TO 9598', FULL RETURNS THOUGHOUT JOB W/ 5 BBLS SPACER TO PIT, 1.5 BACK TO TRUCK, EST TOP OF TAIL 4200'
	15:30 - 18:00	2.50	DRLPRO	14	A	P		SET C-22 SLIPS W/ 115 K
								N/D,CLEAN PITS & RELEASE RIG TO THE NBU 921-3504CS @ 18:00 4/5/11

US ROCKIES REGION
Operation Summary Report

Well: NBU 921-3504BS [ORANGE] Spud Conductor: 2/1/2011 Spud Date: 2/22/2011
 Project: UTAH-UINTAH Site: NBU 921-350 PAD Rig Name No: PROPETRO 12/12, PIONEER 54/54
 Event: DRILLING Start Date: 2/3/2011 End Date: 4/5/2011
 Active Datum: RKB @5,119.00ft (above Mean Sea Level) UWI: SW/SE/0/9/S/21/E/35/0/0/6/PM/S/370.00/E/0/1,777.00/0/0

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
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18:00 - 18:00 0.00 DRLPRO

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

SPUD DATE/TIME: 2/22/2011 22:30

SURFACE HOLE:
 Surface From depth: 40
 Surface To depth: 2,560
 Total SURFACE hours: 25.00
 Surface Casing size: 8 5/8
 # of casing joints ran: 57
 Casing set MD: 2,527.0
 # sx of cement: 200/200/250
 Cement blend (ppg): 11/15.8/15.8
 Cement yield (ft3/sk): 3.82/1.15/1.15
 # of bbls to surface:
 Describe cement issues: NONE
 Describe hole issues: NONE

PRODUCTION:
 Rig Move/Skid start date/time: 3/30/2011 0:00
 Rig Move/Skid finish date/time: 3/30/2011 1:00
 Total MOVE hours: 1.0
 Prod Rig Spud date/time: 3/30/2011 8:30
 Rig Release date/time: 4/5/2011 18:00
 Total SPUD to RR hours: 153.5
 Planned depth MD 9,634
 Planned depth TVD 9,634
 Actual MD: 9,650
 Actual TVD: 9,650
 Open Wells \$:
 AFE \$:
 Open wells \$/ft:

PRODUCTION HOLE:
 Prod. From depth: 2,575
 Prod. To depth: 9,650
 Total PROD hours: 83.5
 Log Depth: 9620
 Float Collar Top Depth: 9600
 Production Casing size: 4 1/2
 # of casing joints ran: 4 P-110, 224 I-80
 Casing set MD: 9,642.5
 Stage 1
 # sx of cement: LEAD 465, TAIL 1180
 Cement density (ppg): LEAD 12.2, TAIL 14.3
 Cement yield (ft3/sk): LEAD 2.17, TAIL 1.31
 Stage 2
 # sx of cement:
 Cement density (ppg):
 Cement yield (ft3/sk):
 Top Out Cmt
 # sx of cement:
 Cement density (ppg):
 Cement yield (ft3/sk):
 Est. TOC (Lead & Tail) or 2 Stage :
 Describe cement issues:
 Describe hole issues:

DIRECTIONAL INFO:
 KOP: 0
 Max angle: 2.24
 Departure: 86.65 @ 4484

US ROCKIES REGION
Operation Summary Report

Well: NBU 921-3504BS [ORANGE]		Spud Conductor: 2/1/2011		Spud Date: 2/22/2011				
Project: UTAH-UINTAH		Site: NBU 921-350 PAD		Rig Name No: PROPETRO 12/12, PIONEER 54/54				
Event: DRILLING		Start Date: 2/3/2011		End Date: 4/5/2011				
Active Datum: RKB @5,119.00ft (above Mean Sea Level)		UWI: SW/SE/0/9/S/21/E/35/0/0/6/PM/S/370.00/E/0/1,777.00/0/0						
Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
								Max dogleg MD: 2.24 @ 4484

1 General

1.1 Customer Information

Company	US ROCKIES REGION
Representative	
Address	

1.2 Well Information

Well	NBU 921-35O4BS [ORANGE]		
Common Name	NBU 921-35O4BS		
Well Name	NBU 921-35O4BS	Wellbore No.	OH
Report No.	1	Report Date	6/2/2011
Project	UTAH-UINTAH	Site	NBU 921-35O PAD
Rig Name/No.	SWABBCO 6/6	Event	COMPLETION
Start Date	6/2/2011	End Date	6/28/2011
Spud Date	2/22/2011	Active Datum	RKB @5,119.00ft (above Mean Sea Level)
UWI	SW/SE/0/9/S/21/E/35/0/0/6/PM/S/370.00/E/0/1,777.00/0/0		

1.3 General

Contractor	CUTTERS WIRELINE	Job Method	PERFORATE	Supervisor	DAVE DANIELS
Perforated Assembly	PRODUCTION CASING	Conveyed Method	WIRELINE		

1.4 Initial Conditions

Fluid Type		Fluid Density		Gross Interval	7,392.0 (ft)-9,572.0 (ft)	Start Date/Time	6/13/2011 12:00AM
Surface Press		Estimate Res Press		No. of Intervals	25	End Date/Time	6/13/2011 12:00AM
TVD Fluid Top		Fluid Head		Total Shots	192	Net Perforation Interval	48.00 (ft)
Hydrostatic Press		Press Difference		Avg Shot Density	4.00 (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	MESAVERDE/			7,392.0	7,396.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO	
														N	

2.1 Perforated Interval (Continued)

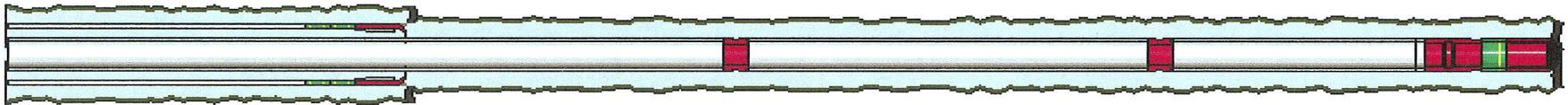
Date	Formation/ Reservoir	CCL@ (ft)	CCL-T S (ft)	MD Top (ft)	MD Base (ft)	Shot Density (shot/ft)	Misfires/ Add. Shot	Diamete r (in)	Carr Type /Carr Manuf	Carr Size (in)	Phasing (°)	Charge Desc /Charge Manufacturer	Charge Weight (gram)	Reason	Misrun
12:00	AMMESAVERDE/			7,419.0	7,421.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
12:00	AMMESAVERDE/			7,578.0	7,580.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
12:00	AMMESAVERDE/			7,679.0	7,681.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
12:00	AMMESAVERDE/			7,750.0	7,751.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
12:00	AMMESAVERDE/			7,801.0	7,802.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
12:00	AMMESAVERDE/			7,924.0	7,926.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
12:00	AMMESAVERDE/			8,012.0	8,014.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
12:00	AMMESAVERDE/			8,048.0	8,049.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
12:00	AMMESAVERDE/			8,091.0	8,092.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
12:00	AMMESAVERDE/			8,376.0	8,378.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
12:00	AMMESAVERDE/			8,551.0	8,553.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
12:00	AMMESAVERDE/			8,597.0	8,599.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
12:00	AMMESAVERDE/			8,781.0	8,784.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
12:00	AMMESAVERDE/			8,823.0	8,824.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
12:00	AMMESAVERDE/			8,876.0	8,878.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
12:00	AMMESAVERDE/			8,993.0	8,994.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
12:00	AMMESAVERDE/			9,066.0	9,068.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
12:00	AMMESAVERDE/			9,103.0	9,104.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
12:00	AMMESAVERDE/			9,145.0	9,147.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
12:00	AMMESAVERDE/			9,283.0	9,285.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
12:00	AMMESAVERDE/			9,383.0	9,387.0	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/			9,502.0	9,504.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
12:00AM	MESAVERDE/			9,552.0	9,554.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
12:00AM	MESAVERDE/			9,570.0	9,572.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	

3 Plots

3.1 Wellbore Schematic



**US ROCKIES REGION
Operation Summary Report**

Well: NBU 921-3504BS [ORANGE]	Spud Conductor: 2/1/2011	Spud Date: 2/22/2011
Project: UTAH-UINTAH	Site: NBU 921-350 PAD	Rig Name No: MILES 3/3, SWABBCO 6/6
Event: COMPLETION	Start Date: 6/2/2011	End Date: 6/28/2011
Active Datum: RKB @5,119.00ft (above Mean Sea Level)	UWI: SW/SE/0/9/S/21/E/35/0/0/6/PM/S/370.00/E/0/1,777.00/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
6/7/2011	12:00 - 17:00	5.00	WO/REP	30		P		MIRU SPOT IN EQUIP ND W/H NU BOPS PU TUBING TAG FILL @9577' RU PWR SWVL C/O & DRILL TO PBTD @ 9597' CIRC CLEAN RD PWR SWVL PUH LD 10 JNTS SDFN
6/8/2011	7:00 - 7:15	0.25	WO/REP	48		P		JSA= TRAFFIC ON LOCATION
	7:15 - 12:00	4.75	WO/REP	30		P		CONTINUE TO POOH LD TUBING LD BIT RD FLOOR & TUBING EQUIP ND BOPS NU WELLHEAD RD RIG & PUMP MOVE RIG & EQUIP TO NBU 1021-32G
6/10/2011	7:00 - 15:00	8.00	COMP	33	C	P		FILL SURFACE CSG. PSI TEST CSG & FRAC VALVE'S. PSI TEST T/ 1056 PSI. HOLD FOR 15 MIN. LOST 9 PSI. PSI TEST T/ 3538 PSI. HOLD FOR 15 MIN. LOST 22 PSI. 1ST PSI T/ 7140 PSI. HOLD FOR 30 MIN. LOST 57 PSI. GOOD TEST. BLEED OFF PSI. SWIFWE.
6/14/2011	14:00 - 18:00	4.00	COMP	36	B	P		PERF STG 1)PU 3 1/8 EXP GUN, 23 GM, .36 HOLE SIZE. 90 DEG PHASING. RIH PERF AS PER STG 1 PERF DESIGN. POOH. X-OVER FOR FRAC CREW. FRAC STG 1)WHP 161 PSI, BRK 4456 PSI @ 4.7 BPM. ISIP 3092 PSI, FG .76. PUMP 100 BBLS @ 40.5 BPM @ 6007 PSI = 71% HOLES OPEN. ISIP 3012 PSI, FG .75, NPI -80 PSI. MP 6572 PSI, MR 40.6 BPM, AP 6269 PSI, AR 36.3 BPM, PMP 775 BBLS SW & 8386 LBS OF 30/50 SND & 2364 LBS OF 20/40 RESIN SND. TOTAL PROP 10,750 LBS SWI X-OVER TO WL PERF STG 2)PU 4 1/2 8K HAL CBP & 3 1/8 EXP GUN, 23 GM, .36 HOLE SIZE. 90 DEG PHASING. RIH SET CBP @ 9417' P/U PERF AS PER PERF DESIGN. POOH. SWIFN.

US ROCKIES REGION
Operation Summary Report

Well: NBU 921-3504BS [ORANGE]		Spud Conductor: 2/1/2011	Spud Date: 2/22/2011
Project: UTAH-UINTAH		Site: NBU 921-350 PAD	Rig Name No: MILES 3/3, SWABBCO 6/6
Event: COMPLETION		Start Date: 6/2/2011	End Date: 6/28/2011
Active Datum: RKB @5,119.00ft (above Mean Sea Level)		UWI: SW/SE/0/9/S/21/E/35/0/0/6/PM/S/370.00/E/0/1,777.00/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
6/15/2011	7:00 - 18:00	11.00	COMP	36	B	P		<p>FRAC STG 2)WHP 1456 PSI, BRK 4498 PSI @ 4.8 BPM. ISIP 2572 PSI, FG .71. PUMP 100 BBLS @ 36.4 BPM @ 5891 PSI = 60% HOLES OPEN. ISIP 2894 PSI, FG .75, NPI 322 PSI. MP 6555 PSI, MR 40.8 BPM, AP 6301 PSI, AR 39.2 BPM, PMP 629 BBLS SW & 8571 LBS OF 30/50 SND & 2547 LBS OF 20/40 RESIN SND. TOTAL PROP 11,118 LBS SWI X-OVER TO W L</p> <p>PERF STG 3)PU 4 1/2 8K HAL CBP & 3 1/8 EXP GUN, 23 GM, .36 HOLE SIZE. 9 DEG PHASING. RIH SET CBP @ 9177' P/U PERF AS PER STG 3 PERF DESIGN. POOH.X-OVER TO FRAC CREW</p> <p>FRAC STG 3)WHP 165 PSI, BRK 3440 PSI @ 4.8 BPM. ISIP 2714 PSI, FG .74. PUMP 100 BBLS @ 40.5 BPM @ 6525 PSI = 60% HOLES OPEN. ISIP 3223 PSI, FG .79, NPI 509 PSI. MP 6744 PSI, MR 40.4 BPM, AP 6454 PSI, AR 38.2 BPM, PMP 957 BBLS SW & 17,177 LBS OF 30/50 SND & 2237 LBS OF 20/40 RESIN SND. TOTAL PROP 19,414 LBS SWI X-OVER FOR W L</p> <p>PERF STG 4)PU 4 1/2 8K HAL CBP & 3 1/8 EXP GUN, 23 GM, .36 HOLE SIZE. 90 DEG PHASING. RIH SET CBP @ 8908' P/U PERF AS PER PERF DESIGN. POOH.X-OVER TO FRAC CREW</p> <p>FRAC STG 4)WHP 1422 PSI, BRK 3070 PSI @ 4.7 BPM. ISIP 2506 PSI, FG .72. PUMP 100 BBLS @ 42.2 BPM @ 5974 PSI = 64% HOLES OPEN. ISIP 2827 PSI, FG .76, NPI 321 PSI. MP 6444 PSI, MR 51.9 BPM, AP 5791 PSI, AR 50.4 BPM, PMP 886 BBLS SW & 14,905 LBS OF 30/50 SND & 2532 LBS OF 20/40 RESIN SND. TOTAL PROP 17,437 LBS SWI X-OVER TO W L</p> <p>PERF STG 5)PU 4 1/2 8K HAL CBP & 3 1/8 EXP GUN, 23 GM, .36 HOLE SIZE. 90 DEG PHASING. RIH SET CBP @ 8629' P/U PERF AS PER PERF DESIGN. POOH.X-OVER TO FRAC CREW</p> <p>FRAC STG 5)WHP 312 PSI, BRK 6449 PSI @ 4.7 BPM. ISIP 2591 PSI, FG .74. PUMP 100 BBLS @ 28.2 BPM @ 5213 PSI = 60% HOLES OPEN. ISIP 2521 PSI, FG .74, NPI -70 PSI. MP 6528 PSI, MR 49.0 BPM, AP 6005 PSI, AR 42.9 BPM, PMP 634 BBLS SW & 8723 LBS OF 30/50 SND & 2806 LBS OF 20/40 RESIN SND. TOTAL PROP 11,529 LBS SWI X-OVER TO W L</p> <p>PERF STG 6)PU 4 1/2 8K HAL CBP & 3 1/8 EXP GUN, 23 GM, .36 HOLE SIZE. 90 DEG PHASING. RIH SET CBP @ 8122' P/U PERF AS PER PERF DESIGN. POOH X-OVER FOR FRAC CREW</p> <p>FRAC STG 6)WHP 145 PSI, BRK 4475 PSI @ 4.7</p>

**US ROCKIES REGION
Operation Summary Report**

Well: NBU 921-3504BS [ORANGE]		Spud Conductor: 2/1/2011	Spud Date: 2/22/2011
Project: UTAH-UINTAH		Site: NBU 921-350 PAD	Rig Name No: MILES 3/3, SWABBCO 6/6
Event: COMPLETION		Start Date: 6/2/2011	End Date: 6/28/2011
Active Datum: RKB @5,119.00ft (above Mean Sea Level)		UWI: SW/SE/0/9/S/21/E/35/0/0/6/PM/S/370.00/E/0/1,777.00/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
								<p>BPM. ISIP 2435 PSI, FG .74. PUMP 100 BBLS @ 42.2 BPM @ 5792 PSI = 64% HOLES OPEN. ISIP 2521 PSI, FG .75, NPI .75 PSI. MP 6300 PSI, MR 50.2 BPM, AP 5481 PSI, AR 48.2 BPM, PMP 622 BBLS SW & 8709 LBS OF 30/50 SND & 2695 LBS OF 20/40 RESIN SND. TOTAL PROP 11,404 LBS SWI X-OVER TO W L.</p> <p>PERF STG 7)PU 4 1/2 8K BAKER CBP & 3 1/8 EXP GUN, 23 GM, .36 HOLE SIZE. 90 DEG PHASING. RIH SET CBP @ 7493' P/U PERF AS PER PERF DESIGN. POOH X-OVER FOR FRAC CREW</p> <p>FRAC STG 7)WHP 47 PSI, BRK 3474 PSI @ 4.7 BPM. ISIP 2202 PSI, FG .73. PUMP 100 BBLS @ 33.1 BPM @ 5054 PSI = 60% HOLES OPEN. ISIP 2184 PSI, FG .72, NPI -18 PSI. MP 6741 PSI, MR 49.9 BPM, AP 5847 PSI, AR 41.3 BPM, PMP 621 BBLS SW & 8848 LBS OF 30/50 SND & 2722 LBS OF 20/40 RESIN SND. TOTAL PROP 11,570 LBS. SWIFN.</p> <p>PERF STG 8)PU 4 1/2 8K HAL CBP & 3 1/8 EXP GUN, 23 GM, .36 HOLE SIZE. 90 DEG PHASING. RIH SET CBP @ 7451' P/U PERF AS PER STG 8 PERF DESIGN. POOH. X-OVER FOR FRAC CREW.</p> <p>FRAC STG 8)WHP 180 PSI, BRK 2087 PSI @ 4.4 BPM. ISIP 1337 PSI, FG .62. PUMP 100 BBLS @ 50.3 BPM @ 5676 PSI = 66% HOLES OPEN. ISIP 2141 PSI, FG .73, NPI 804 PSI. MP 5708 PSI, MR 50.3 BPM, AP 4883 PSI, AR 49.6 BPM, PMP 619 BBLS SW & 8,700 LBS OF 30/50 SND & 2,653 LBS OF 20/40 RESIN SND. TOTAL PROP 11,353 LBS. SWI, X-OVER FOR WL. DONE FRACING THE WELL.</p> <p>PU 4 1/2 8K HAL CBP. RIH SET KILL PLUG @ 7342'.</p> <p>TOTAL SAND = 104,575 LBS TOTAL CLFL = 5742 BBLS TOTAL SCALE = 761 GAL TOTAL BIO = 122 GAL JSA- RUSU. PU TBG.</p> <p>RUSU. ND WH. NU BOP. RU FLOOR AND TBG EQUIP. SPOT TBG. MU 3-7/8" BIT, POBS AND 1.87" XN NIPPLE. RIH AS MEAS AND PU 2-3/8" L-80 TBG. TAG AT 7319' WI #232.</p>
6/16/2011	7:30 - 15:00	7.50	COMP	36	B	P		
6/27/2011	7:00 - 7:15	0.25	COMP	48		P		
	7:15 - 13:00	5.75	COMP	31	I	P		

US ROCKIES REGION
Operation Summary Report

Well: NBU 921-3504BS [ORANGE] Spud Conductor: 2/1/2011 Spud Date: 2/22/2011
 Project: UTAH-UINTAH Site: NBU 921-350 PAD Rig Name No: MILES 3/3, SWABBCO 6/6
 Event: COMPLETION Start Date: 6/2/2011 End Date: 6/28/2011
 Active Datum: RKB @5,119.00ft (above Mean Sea Level) UWI: SW/SE/0/9/S/21/E/35/0/0/6/PM/S/370.00/E/0/1,777.00/0/0

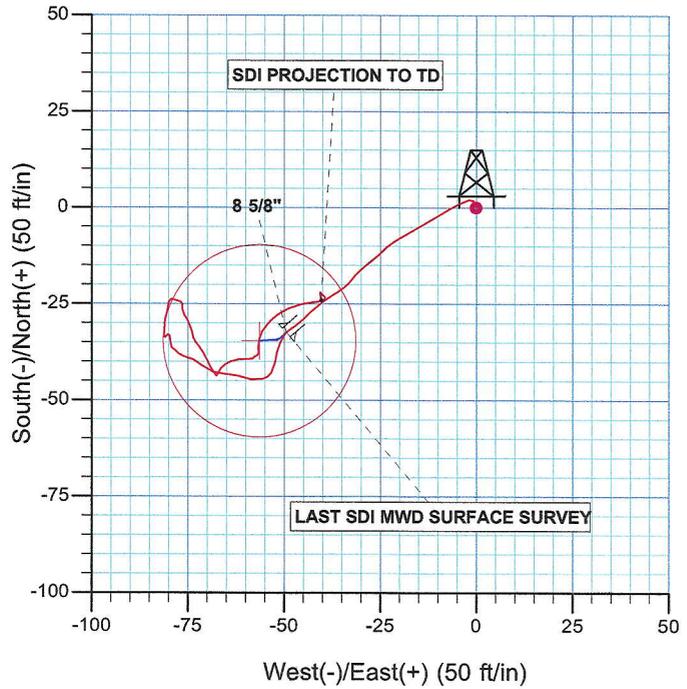
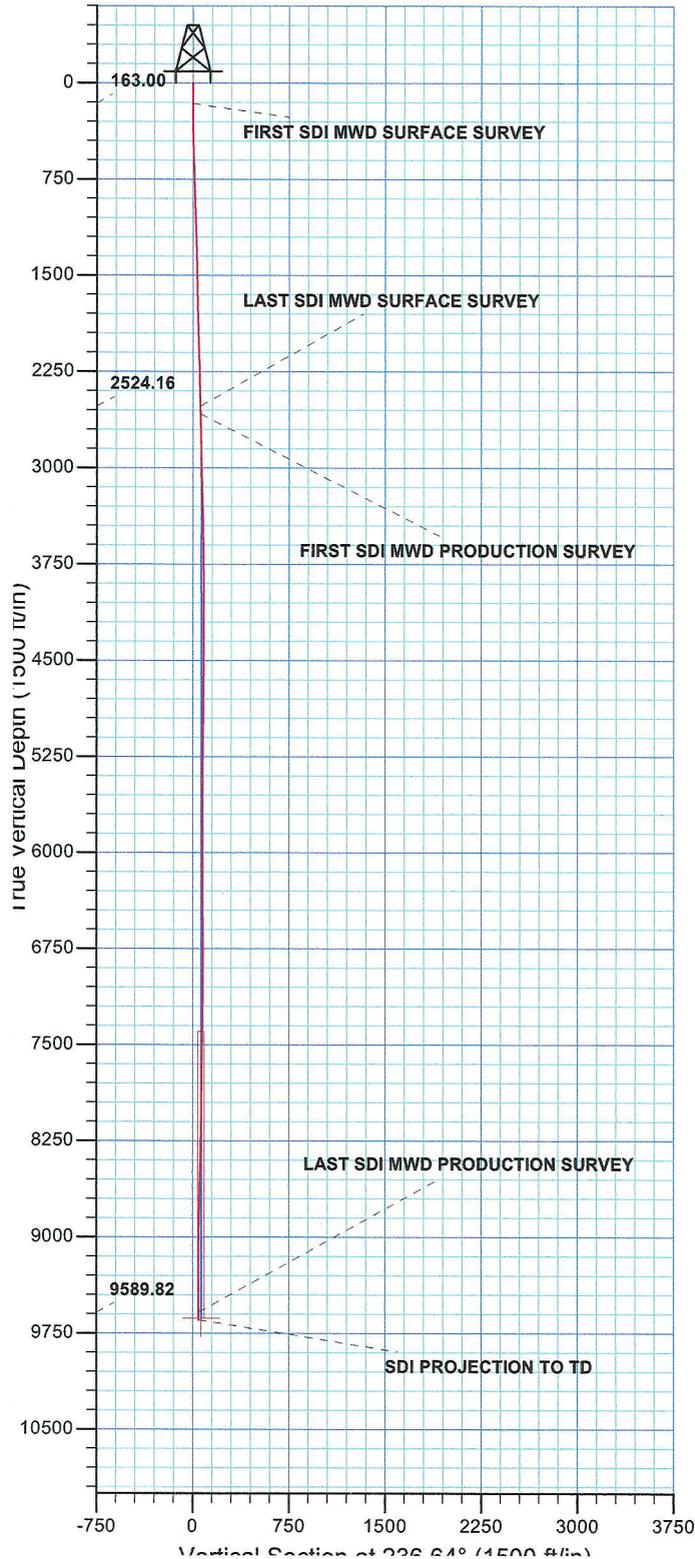
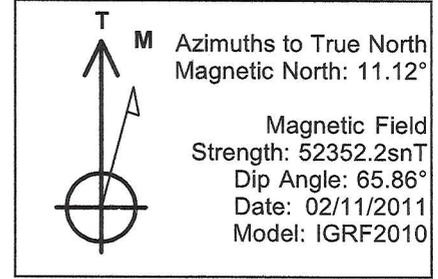
Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
	13:00 - 16:00	3.00	COMP	44	C	P		RU DRLG EQUIP. FILL TBG AND PRES TEST TO 3000#. GOOD. EST CIRC AND D/O PLUGS. #1- C/O 20' SAND TO CBP AT 7339'. D/O IN 5 MIN. 200# INC. FCP 0. RIH. #2- C/O 25' SAND TO CBP AT 7451'. D/O IN 5 MIN. 200# INC. FCP 0-400. RIH. #3- C/O 135' SAND TO CBP AT 7832'. D/O IN 3 MIN. 600# INC. FCP 100-800. RIH. #4- C/O 35' SAND TO CBP AT 8122'. D/O IN 3 MIN. 200# INC. FCP 500-900. CIRC AND FLOW CLEAN. SDFN W/ 258-JTS IN, EOT AT 8171. SWI. JSA- BLEED OFF WELL. D/O PLUGS. LAND HANGER. SITP 0, SICP 3500. BLEED OFF CSG TO PIT. CONT RIH AS D/O PLUGS. #5- C/O 30' SAND TO CBP AT 8629'. D/O IN 4 MIN. 300# INC. FCP 450-650. RIH. #6- C/O 27' SAND TO CBP AT 8908'. D/O IN 3 MIN. 600# INC. FCP 550-600. RIH. #7- C/O 30' SAND TO CBP AT 9177'. D/O IN 3 MIN. 400# INC. FCP 500-600. RIH. #8- C/O 33' SAND TO CBP AT 9420'. D/O IN 4 MIN. 200# INC. FCP 550-700. RIH. PBTD- C/O 15' SAND TO PBTD AT 9597' (25' RATHOLE) W/ 304-JTS IN. CIRC CLEAN. RD PWR SWIVEL. POOH AS LD 12-JTS. PU 4" 10K HANGER. LUB IN AND LAND 292-JTS 2-3/8" L-80 TBG W/ EOT AT 9254.97'. RD FLOOR. ND BOP. NU WH. POBS AT 3500#. SITP -1100, SICP -2100, SURFACE CSG OPEN- DRIBBLED DRLG MUD THEN WTR AS D/O PLUGS 7&8 THEN QUIT AS LAND TBG. HOOK UP TO HAL 9000. TURN OVER TO FBC AND SALES. RDSU. MOVE OVER. TBG DETAIL KB 19.00 4" 10K HANGER .83 292-JTS 2-3/8" L-80 9232.94 1.87" XN FE POBS 2.20 EOT 9254.97 315-JTS DELIVERED, 23-JTS RETURNED. TWTR 5742 / TWR 2350 / LTR 3392 WELL TURNED TO SALES @ 1100 HR ON 6/28/11 - 515 MCFD, 2160 BWPD, CP 2300#, FTP 1600#, CK 20/64"
6/28/2011	7:00 - 7:15	0.25	COMP	48		P		
	7:15 - 10:30	3.25	COMP	44	C	P		
	11:00 - 11:00	0.00	PROD	50				
6/29/2011	7:00 -			33	A			7 AM FLBK REPORT: CP 3600#, TP 1950#, 20/64" CK, 44 BWPH, HVY SAND, - GAS TTL BBLS RECOVERED: 3408 BBLS LEFT TO RECOVER: 2334
6/30/2011	7:00 -			33	A			7 AM FLBK REPORT: CP 3250#, TP 1900#, 20/64" CK, 35 BWPH, LIGHT SAND, - GAS TTL BBLS RECOVERED: 4362 BBLS LEFT TO RECOVER: 1380
7/1/2011	7:00 -			33	A			7 AM FLBK REPORT: CP 2900#, TP 1700#, 20/64" CK, 28 BWPH, TRACE SAND, - GAS TTL BBLS RECOVERED: 5106 BBLS LEFT TO RECOVER: 636

US ROCKIES REGION
Operation Summary Report

Well: NBU 921-3504BS [ORANGE]	Spud Conductor: 2/1/2011	Spud Date: 2/22/2011
Project: UTAH-UINTAH	Site: NBU 921-350 PAD	Rig Name No: MILES 3/3, SWABBCO 6/6
Event: COMPLETION	Start Date: 6/2/2011	End Date: 6/28/2011
Active Datum: RKB @5,119.00ft (above Mean Sea Level)	UWI: SW/SE/0/9/S/21/E/35/0/0/6/PM/S/370.00/E/0/1,777.00/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
7/2/2011	7:00 -			33	A			7 AM FLBK REPORT: CP 2600#, TP 1550#, 20/64" CK, 18 BWPH, TRAC SAND, - GAS TTL BBLS RECOVERED: 5668 BBLS LEFT TO RECOVER: 74

WELL DETAILS: NBU 921-3504BS					
GL 5100' & KB 19' @ 5119.00R (PIONEER 54)					
+N/-S 0.00	+E/-W 0.00	Northing 14524522.60	Easting 2056360.62	Latitude 39° 59' 10.709 N	Longitude 109° 30' 54.436 W



PROJECT DETAILS: UTAH - UTM (feet), NAD27, Zone 12N
Geodetic System: Universal Transverse Mercator (US Survey Feet)
Datum: NAD 1927 (NADCON CONUS)
Ellipsoid: Clarke 1866
Zone: Zone 12N (114 W to 108 W)
Location: SECTION 35 T9S R21E
System Datum: Mean Sea Level



Scientific Drilling
Rocky Mountain Operations

US ROCKIES REGION PLANNING

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

UINTAH_NBU 921-350 PAD

NBU 921-3504BS

NBU 921-3504BS

Design: NBU 921-3504BS

Standard Survey Report

18 April, 2011

Anadarko[®]
E&P Company LP

Company: US ROCKIES REGION PLANNING
Project: UTAH - UTM (feet), NAD27, Zone 12N
Site: UINTAH_NBU 921-35O PAD
Well: NBU 921-35O4BS
Wellbore: NBU 921-35O4BS
Design: NBU 921-35O4BS

Local Co-ordinate Reference: Well NBU 921-35O4BS
TVD Reference: GL 5100' & KB 19' @ 5119.00ft (PIONEER 54)
MD Reference: GL 5100' & KB 19' @ 5119.00ft (PIONEER 54)
North Reference: True
Survey Calculation Method: Minimum Curvature
Database: EDM5000-RobertS-Local

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

Site	UINTAH_NBU 921-35O PAD, SECTION 35 T9S R21E				
Site Position:		Northing:	14,524,559.98 usft	Latitude:	39° 59' 11.076 N
From:	Lat/Long	Easting:	2,056,374.00 usft	Longitude:	109° 30' 54.256 W
Position Uncertainty:	0.00 ft	Slot Radius:	13.200 in	Grid Convergence:	0.95 °

Well	NBU 921-35O4BS, 370 FSL 1777 FEL					
Well Position	+N/-S	0.00 ft	Northing:	14,524,522.60 usft	Latitude:	39° 59' 10.709 N
	+E/-W	0.00 ft	Easting:	2,056,360.61 usft	Longitude:	109° 30' 54.436 W
Position Uncertainty		0.00 ft	Wellhead Elevation:	ft	Ground Level:	5,100.00 ft

Wellbore	NBU 921-35O4BS				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	02/11/2011	11.12	65.86	52,352

Design	NBU 921-35O4BS				
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	236.64	

Survey Program	Date	04/18/2011			
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
15.00	2,525.00	Survey #1 SDI MWD SURFACE (NBU 92	SDI MWD	SDI MWD - Standard ver 1.0.1	
2,585.00	9,650.00	Survey #2 SDI MWD PRODUCTION (NBU	SDI MWD	SDI MWD - Standard ver 1.0.1	

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15.00	0.00	0.00	15.00	0.00	0.00	0.00	0.00	0.00	0.00
163.00	0.75	345.74	163.00	0.94	-0.24	-0.32	0.51	0.51	0.00
FIRST SDI MWD SURFACE SURVEY									
249.00	0.67	319.35	248.99	1.87	-0.70	-0.44	0.39	-0.09	-30.69
334.00	1.04	258.17	333.98	2.08	-1.78	0.34	1.09	0.44	-71.98
425.00	2.02	243.41	424.95	1.20	-4.03	2.70	1.15	1.08	-16.22
515.00	2.03	239.23	514.89	-0.33	-6.81	5.87	0.16	0.01	-4.64
605.00	1.91	238.93	604.84	-1.92	-9.47	8.96	0.13	-0.13	-0.33
695.00	1.86	240.94	694.79	-3.40	-12.03	11.92	0.09	-0.06	2.23

Company: US ROCKIES REGION PLANNING
Project: UTAH - UTM (feet), NAD27, Zone 12N
Site: UINTAH_NBU 921-350 PAD
Well: NBU 921-3504BS
Wellbore: NBU 921-3504BS
Design: NBU 921-3504BS

Local Co-ordinate Reference: Well NBU 921-3504BS
TVD Reference: GL 5100' & KB 19' @ 5119.00ft (PIONEER 54)
MD Reference: GL 5100' & KB 19' @ 5119.00ft (PIONEER 54)
North Reference: True
Survey Calculation Method: Minimum Curvature
Database: EDM5000-RobertS-Local

Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
785.00	1.77	239.03	784.74	-4.83	-14.50	14.76	0.12	-0.10	-2.12
875.00	1.77	239.69	874.70	-6.24	-16.89	17.54	0.02	0.00	0.73
965.00	1.75	240.36	964.66	-7.62	-19.28	20.30	0.03	-0.02	0.74
1,055.00	1.61	237.31	1,054.62	-8.99	-21.54	22.93	0.18	-0.16	-3.39
1,145.00	1.53	224.30	1,144.59	-10.53	-23.45	25.37	0.40	-0.09	-14.46
1,235.00	1.79	226.89	1,234.55	-12.35	-25.31	27.93	0.30	0.29	2.88
1,325.00	1.31	233.94	1,324.52	-13.92	-27.17	30.34	0.57	-0.53	7.83
1,415.00	1.24	232.12	1,414.49	-15.12	-28.77	32.34	0.09	-0.08	-2.02
1,505.00	1.26	228.84	1,504.47	-16.37	-30.28	34.29	0.08	0.02	-3.64
1,595.00	1.55	218.67	1,594.45	-17.97	-31.79	36.43	0.42	0.32	-11.30
1,685.00	1.15	220.12	1,684.42	-19.61	-33.13	38.46	0.45	-0.44	1.61
1,775.00	1.11	233.03	1,774.40	-20.83	-34.41	40.19	0.29	-0.04	14.34
1,865.00	1.27	237.43	1,864.38	-21.89	-35.95	42.06	0.20	0.18	4.89
1,955.00	1.44	237.61	1,954.36	-23.03	-37.74	44.19	0.19	0.19	0.20
2,045.00	1.87	234.90	2,044.32	-24.48	-39.90	46.79	0.49	0.48	-3.01
2,135.00	1.44	222.52	2,134.28	-26.16	-41.86	49.35	0.62	-0.48	-13.76
2,225.00	1.45	234.14	2,224.25	-27.66	-43.55	51.58	0.33	0.01	12.91
2,315.00	1.64	217.40	2,314.22	-29.35	-45.26	53.94	0.54	0.21	-18.60
2,405.00	1.41	246.07	2,404.19	-30.82	-47.05	56.25	0.87	-0.26	31.86
2,495.00	1.29	225.05	2,494.17	-31.99	-48.78	58.33	0.56	-0.13	-23.36
2,525.00	1.27	229.01	2,524.16	-32.44	-49.27	58.99	0.30	-0.07	13.20
LAST SDI MWD SURFACE SURVEY									
2,585.00	1.24	212.50	2,584.15	-33.43	-50.12	60.24	0.60	-0.05	-27.52
FIRST SDI MWD PRODUCTION SURVEY									
2,679.00	1.43	200.30	2,678.12	-35.38	-51.07	62.12	0.36	0.20	-12.98
2,774.00	1.57	195.28	2,773.09	-37.75	-51.83	64.05	0.20	0.15	-5.28
2,869.00	1.74	187.95	2,868.05	-40.43	-52.37	65.98	0.29	0.18	-7.72
2,964.00	1.62	213.75	2,963.01	-42.98	-53.32	68.17	0.80	-0.13	27.16
3,059.00	1.84	252.97	3,057.97	-44.54	-55.52	70.87	1.24	0.23	41.28
3,154.00	2.03	284.37	3,152.92	-44.57	-58.61	73.46	1.12	0.20	33.05
3,249.00	2.24	284.33	3,247.85	-43.69	-62.04	75.84	0.22	0.22	-0.04
3,343.00	2.11	273.38	3,341.78	-43.14	-65.55	78.47	0.46	-0.14	-11.65
3,438.00	1.43	289.82	3,436.74	-42.63	-68.41	80.58	0.89	-0.72	17.31
3,533.00	2.19	305.37	3,531.69	-41.18	-71.00	81.95	0.95	0.80	16.37
3,628.00	1.63	300.22	3,626.64	-39.45	-73.65	83.21	0.62	-0.59	-5.42
3,723.00	1.07	273.20	3,721.61	-38.72	-75.70	84.52	0.88	-0.59	-28.44
3,818.00	1.14	316.31	3,816.60	-37.99	-77.24	85.40	0.86	0.07	45.38
3,913.00	0.82	307.91	3,911.58	-36.89	-78.43	85.79	0.37	-0.34	-8.84
4,008.00	0.24	304.08	4,006.58	-36.36	-79.13	86.08	0.61	-0.61	-4.03
4,103.00	1.51	353.07	4,101.57	-35.00	-79.45	85.60	1.44	1.34	51.57
4,198.00	0.62	345.11	4,196.55	-33.26	-79.73	84.88	0.95	-0.94	-8.38
4,293.00	0.43	223.76	4,291.55	-33.02	-80.11	85.07	0.97	-0.20	-127.74
4,388.00	0.73	221.89	4,386.54	-33.73	-80.76	86.00	0.32	0.32	-1.97

Company: US ROCKIES REGION PLANNING
Project: UTAH - UTM (feet), NAD27, Zone 12N
Site: UINTAH_NBU 921-350 PAD
Well: NBU 921-3504BS
Wellbore: NBU 921-3504BS
Design: NBU 921-3504BS

Local Co-ordinate Reference: Well NBU 921-3504BS
TVD Reference: GL 5100' & KB 19' @ 5119.00ft (PIONEER 54)
MD Reference: GL 5100' & KB 19' @ 5119.00ft (PIONEER 54)
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)
4,484.00	0.78	6.61	4,482.54	-33.54	-81.09	86.17	1.50	0.05	150.75
4,579.00	1.64	0.62	4,577.52	-31.54	-81.00	85.00	0.91	0.91	-6.31
4,674.00	1.30	9.28	4,672.48	-29.11	-80.81	83.51	0.43	-0.36	9.12
4,769.00	0.97	19.06	4,767.47	-27.29	-80.38	82.14	0.40	-0.35	10.29
4,863.00	0.62	4.88	4,861.46	-26.03	-80.08	81.19	0.42	-0.37	-15.09
4,958.00	0.55	3.81	4,956.45	-25.06	-80.00	80.60	0.07	-0.07	-1.13
5,053.00	0.27	64.78	5,051.45	-24.51	-79.77	80.10	0.51	-0.29	64.18
5,148.00	0.19	346.59	5,146.45	-24.27	-79.60	79.83	0.31	-0.08	-82.31
5,243.00	0.03	102.23	5,241.45	-24.12	-79.61	79.76	0.22	-0.17	121.73
5,338.00	0.25	42.06	5,336.45	-23.97	-79.45	79.54	0.25	0.23	-63.34
5,432.00	0.34	84.95	5,430.45	-23.79	-79.04	79.10	0.25	0.10	45.63
5,527.00	0.34	112.93	5,525.45	-23.88	-78.50	78.69	0.17	0.00	29.45
5,622.00	0.61	108.03	5,620.44	-24.14	-77.76	78.22	0.29	0.28	-5.16
5,717.00	0.64	108.02	5,715.44	-24.46	-76.77	77.57	0.03	0.03	-0.01
5,811.00	0.62	186.93	5,809.43	-25.13	-76.33	77.57	0.85	-0.02	83.95
5,906.00	1.05	174.24	5,904.42	-26.51	-76.31	78.31	0.49	0.45	-13.36
6,001.00	0.75	146.18	5,999.41	-27.89	-75.87	78.71	0.55	-0.32	-29.54
6,095.00	0.78	146.65	6,093.40	-28.94	-75.18	78.70	0.03	0.03	0.50
6,190.00	1.00	163.56	6,188.39	-30.27	-74.59	78.94	0.36	0.23	17.80
6,285.00	1.21	159.09	6,283.37	-32.00	-74.00	79.40	0.24	0.22	-4.71
6,380.00	0.94	170.54	6,378.36	-33.71	-73.51	79.93	0.36	-0.28	12.05
6,475.00	0.84	134.62	6,473.35	-34.97	-72.89	80.10	0.59	-0.11	-37.81
6,570.00	0.99	149.06	6,568.33	-36.16	-71.97	79.99	0.29	0.16	15.20
6,665.00	1.11	143.19	6,663.32	-37.60	-71.00	79.97	0.17	0.13	-6.18
6,759.00	1.27	158.56	6,757.30	-39.30	-70.07	80.13	0.38	0.17	16.35
6,854.00	1.18	151.34	6,852.28	-41.14	-69.22	80.43	0.19	-0.09	-7.60
6,949.00	1.13	143.56	6,947.26	-42.75	-68.19	80.46	0.17	-0.05	-8.19
7,044.00	0.34	149.84	7,042.25	-43.75	-67.49	80.43	0.83	-0.83	6.61
7,139.00	1.08	17.20	7,137.24	-43.13	-67.09	79.75	1.40	0.78	-139.62
7,234.00	0.94	43.72	7,232.23	-41.72	-66.28	78.30	0.51	-0.15	27.92
7,329.00	0.88	55.59	7,327.22	-40.74	-65.14	76.81	0.21	-0.06	12.49
7,425.00	1.26	67.16	7,423.20	-39.91	-63.56	75.04	0.45	0.40	12.05
7,520.00	1.13	80.69	7,518.18	-39.36	-61.67	73.15	0.33	-0.14	14.24
7,615.00	1.36	96.17	7,613.16	-39.33	-59.63	71.43	0.43	0.24	16.29
7,710.00	0.43	48.74	7,708.15	-39.21	-58.24	70.21	1.17	-0.98	-49.93
7,805.00	0.57	55.93	7,803.14	-38.71	-57.58	69.38	0.16	0.15	7.57
7,900.00	0.42	69.43	7,898.14	-38.33	-56.86	68.57	0.20	-0.16	14.21
7,996.00	0.57	352.11	7,994.14	-37.73	-56.60	68.02	0.66	0.16	-80.54
8,090.00	1.28	0.55	8,088.12	-36.22	-56.65	67.23	0.77	0.76	8.98
8,185.00	1.28	10.87	8,183.10	-34.11	-56.44	65.90	0.24	0.00	10.86
8,280.00	1.19	31.42	8,278.08	-32.23	-55.73	64.27	0.47	-0.09	21.63
8,375.00	1.32	41.40	8,373.06	-30.57	-54.49	62.32	0.27	0.14	10.51
8,470.00	1.33	47.12	8,468.03	-29.00	-52.96	60.18	0.14	0.01	6.02
8,565.00	1.61	53.81	8,563.00	-27.46	-51.07	57.76	0.35	0.29	7.04

Company: US ROCKIES REGION PLANNING
Project: UTAH - UTM (feet), NAD27, Zone 12N
Site: UINTAH_NBU 921-350 PAD
Well: NBU 921-3504BS
Wellbore: NBU 921-3504BS
Design: NBU 921-3504BS

Local Co-ordinate Reference: Well NBU 921-3504BS
TVD Reference: GL 5100' & KB 19' @ 5119.00ft (PIONEER 54)
MD Reference: GL 5100' & KB 19' @ 5119.00ft (PIONEER 54)
North Reference: True
Survey Calculation Method: Minimum Curvature
Database: EDM5000-RobertS-Local

Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
8,660.00	1.53	69.06	8,657.96	-26.22	-48.81	55.19	0.45	-0.08	16.05
8,755.00	1.58	71.95	8,752.93	-25.36	-46.38	52.68	0.10	0.05	3.04
8,850.00	1.57	82.29	8,847.89	-24.78	-43.85	50.25	0.30	-0.01	10.88
8,945.00	1.60	80.79	8,942.86	-24.39	-41.25	47.86	0.05	0.03	-1.58
9,039.00	0.71	61.48	9,036.84	-23.90	-39.44	46.09	1.02	-0.95	-20.54
9,134.00	0.71	314.78	9,131.83	-23.21	-39.34	45.62	1.20	0.00	-112.32
9,229.00	0.32	303.14	9,226.83	-22.65	-39.98	45.85	0.42	-0.41	-12.25
9,324.00	0.21	325.05	9,321.83	-22.36	-40.30	45.96	0.16	-0.12	23.06
9,418.00	0.27	322.02	9,415.83	-22.04	-40.54	45.98	0.07	0.06	-3.22
9,513.00	0.51	175.39	9,510.83	-22.29	-40.64	46.20	0.79	0.25	-154.35
9,592.00	0.87	167.22	9,589.82	-23.22	-40.48	46.58	0.47	0.46	-10.34
LAST SDI MWD PRODUCTION SURVEY									
9,650.00	0.87	167.22	9,647.81	-24.08	-40.29	46.89	0.00	0.00	0.00
SDI PROJECTION TO TD									

Design Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
163.00	163.00	0.94	-0.24	FIRST SDI MWD SURFACE SURVEY
2,525.00	2,524.16	-32.44	-49.27	LAST SDI MWD SURFACE SURVEY
2,585.00	2,584.15	-33.43	-50.12	FIRST SDI MWD PRODUCTION SURVEY
9,592.00	9,589.82	-23.22	-40.48	LAST SDI MWD PRODUCTION SURVEY
9,650.00	9,647.81	-24.08	-40.29	SDI PROJECTION TO TD

Checked By: _____ Approved By: _____ Date: _____



US ROCKIES REGION PLANNING

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

UINTAH_NBU 921-350 PAD

NBU 921-3504BS

NBU 921-3504BS

Design: NBU 921-3504BS

Survey Report - Geographic

18 April, 2011



Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well NBU 921-3504BS
Project:	UTAH - UTM (feet), NAD27, Zone 12N	TVD Reference:	GL 5100' & KB 19' @ 5119.00ft (PIONEER 54)
Site:	UINTAH_NBU 921-350 PAD	MD Reference:	GL 5100' & KB 19' @ 5119.00ft (PIONEER 54)
Well:	NBU 921-3504BS	North Reference:	True
Wellbore:	NBU 921-3504BS	Survey Calculation Method:	Minimum Curvature
Design:	NBU 921-3504BS	Database:	EDM5000-RobertS-Local

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

Site	UINTAH_NBU 921-350 PAD, SECTION 35 T9S R21E				
Site Position:	Northing:	14,524,559.98 usft	Latitude:	39° 59' 11.076 N	
From:	Lat/Long	Easting:	2,056,374.00 usft	Longitude:	109° 30' 54.256 W
Position Uncertainty:	0.00 ft	Slot Radius:	13.200 in	Grid Convergence:	0.95 °

Well	NBU 921-3504BS, 370 FSL 1777 FEL					
Well Position	+N/-S	0.00 ft	Northing:	14,524,522.60 usft	Latitude:	39° 59' 10.709 N
	+E/-W	0.00 ft	Easting:	2,056,360.61 usft	Longitude:	109° 30' 54.436 W
Position Uncertainty	0.00 ft	Wellhead Elevation:	ft	Ground Level:	5,100.00 ft	

Wellbore	NBU 921-3504BS				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	02/11/2011	11.12	65.86	52,352

Design	NBU 921-3504BS				
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	236.64	

Survey Program	Date	04/18/2011			
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
15.00	2,525.00	Survey #1 SDI MWD SURFACE (NBU 92	SDI MWD	SDI MWD - Standard ver 1.0.1	
2,585.00	9,650.00	Survey #2 SDI MWD PRODUCTION (NBU	SDI 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	14,524,522.60	2,056,360.61	39° 59' 10.709 N	109° 30' 54.436 W
15.00	0.00	0.00	15.00	0.00	0.00	14,524,522.60	2,056,360.61	39° 59' 10.709 N	109° 30' 54.436 W
163.00	0.75	345.74	163.00	0.94	-0.24	14,524,523.54	2,056,360.36	39° 59' 10.718 N	109° 30' 54.439 W
FIRST SDI MWD SURFACE SURVEY									
249.00	0.67	319.35	248.99	1.87	-0.70	14,524,524.46	2,056,359.88	39° 59' 10.727 N	109° 30' 54.445 W
334.00	1.04	258.17	333.98	2.08	-1.78	14,524,524.66	2,056,358.79	39° 59' 10.729 N	109° 30' 54.459 W
425.00	2.02	243.41	424.95	1.20	-4.03	14,524,523.73	2,056,356.57	39° 59' 10.721 N	109° 30' 54.487 W
515.00	2.03	239.23	514.89	-0.33	-6.81	14,524,522.16	2,056,353.80	39° 59' 10.706 N	109° 30' 54.523 W
605.00	1.91	238.93	604.84	-1.92	-9.47	14,524,520.53	2,056,351.18	39° 59' 10.690 N	109° 30' 54.557 W
695.00	1.86	240.94	694.79	-3.40	-12.03	14,524,519.00	2,056,348.64	39° 59' 10.675 N	109° 30' 54.590 W
785.00	1.77	239.03	784.74	-4.83	-14.50	14,524,517.54	2,056,346.20	39° 59' 10.661 N	109° 30' 54.622 W

Company: US ROCKIES REGION PLANNING
Project: UTAH - UTM (feet), NAD27, Zone 12N
Site: UINTAH_NBU 921-350 PAD
Well: NBU 921-3504BS
Wellbore: NBU 921-3504BS
Design: NBU 921-3504BS

Local Co-ordinate Reference: Well NBU 921-3504BS
TVD Reference: GL 5100' & KB 19' @ 5119.00ft (PIONEER 54)
MD Reference: GL 5100' & KB 19' @ 5119.00ft (PIONEER 54)
North Reference: True
Survey Calculation Method: Minimum Curvature
Database: EDM5000-RobertS-Local

Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
875.00	1.77	239.69	874.70	-6.24	-16.89	14,524,516.08	2,056,343.83	39° 59' 10.647 N	109° 30' 54.653 W
965.00	1.75	240.36	964.66	-7.62	-19.28	14,524,514.66	2,056,341.46	39° 59' 10.633 N	109° 30' 54.683 W
1,055.00	1.61	237.31	1,054.62	-8.99	-21.54	14,524,513.26	2,056,339.22	39° 59' 10.620 N	109° 30' 54.712 W
1,145.00	1.53	224.30	1,144.59	-10.53	-23.45	14,524,511.68	2,056,337.34	39° 59' 10.605 N	109° 30' 54.737 W
1,235.00	1.79	226.89	1,234.55	-12.35	-25.31	14,524,509.83	2,056,335.51	39° 59' 10.587 N	109° 30' 54.761 W
1,325.00	1.31	233.94	1,324.52	-13.92	-27.17	14,524,508.24	2,056,333.68	39° 59' 10.571 N	109° 30' 54.785 W
1,415.00	1.24	232.12	1,414.49	-15.12	-28.77	14,524,507.01	2,056,332.10	39° 59' 10.559 N	109° 30' 54.805 W
1,505.00	1.26	228.84	1,504.47	-16.37	-30.28	14,524,505.73	2,056,330.61	39° 59' 10.547 N	109° 30' 54.825 W
1,595.00	1.55	218.67	1,594.45	-17.97	-31.79	14,524,504.11	2,056,329.13	39° 59' 10.531 N	109° 30' 54.844 W
1,685.00	1.15	220.12	1,684.42	-19.61	-33.13	14,524,502.44	2,056,327.81	39° 59' 10.515 N	109° 30' 54.861 W
1,775.00	1.11	233.03	1,774.40	-20.83	-34.41	14,524,501.21	2,056,326.55	39° 59' 10.503 N	109° 30' 54.878 W
1,865.00	1.27	237.43	1,864.38	-21.89	-35.95	14,524,500.12	2,056,325.03	39° 59' 10.492 N	109° 30' 54.897 W
1,955.00	1.44	237.61	1,954.36	-23.03	-37.74	14,524,498.95	2,056,323.26	39° 59' 10.481 N	109° 30' 54.921 W
2,045.00	1.87	234.90	2,044.32	-24.48	-39.90	14,524,497.46	2,056,321.13	39° 59' 10.467 N	109° 30' 54.948 W
2,135.00	1.44	222.52	2,134.28	-26.16	-41.86	14,524,495.75	2,056,319.19	39° 59' 10.450 N	109° 30' 54.974 W
2,225.00	1.45	234.14	2,224.25	-27.66	-43.55	14,524,494.22	2,056,317.53	39° 59' 10.435 N	109° 30' 54.995 W
2,315.00	1.64	217.40	2,314.22	-29.35	-45.26	14,524,492.50	2,056,315.85	39° 59' 10.419 N	109° 30' 55.017 W
2,405.00	1.41	246.07	2,404.19	-30.82	-47.05	14,524,491.00	2,056,314.08	39° 59' 10.404 N	109° 30' 55.040 W
2,495.00	1.29	225.05	2,494.17	-31.99	-48.78	14,524,489.81	2,056,312.37	39° 59' 10.393 N	109° 30' 55.062 W
2,525.00	1.27	229.01	2,524.16	-32.44	-49.27	14,524,489.34	2,056,311.89	39° 59' 10.388 N	109° 30' 55.069 W
LAST SDI MWD SURFACE SURVEY									
2,585.00	1.24	212.50	2,584.15	-33.43	-50.12	14,524,488.35	2,056,311.05	39° 59' 10.378 N	109° 30' 55.080 W
FIRST SDI MWD PRODUCTION SURVEY									
2,679.00	1.43	200.30	2,678.12	-35.38	-51.07	14,524,486.37	2,056,310.13	39° 59' 10.359 N	109° 30' 55.092 W
2,774.00	1.57	195.28	2,773.09	-37.75	-51.83	14,524,483.99	2,056,309.42	39° 59' 10.336 N	109° 30' 55.102 W
2,869.00	1.74	187.95	2,868.05	-40.43	-52.37	14,524,481.30	2,056,308.92	39° 59' 10.309 N	109° 30' 55.109 W
2,964.00	1.62	213.75	2,963.01	-42.98	-53.32	14,524,478.74	2,056,308.02	39° 59' 10.284 N	109° 30' 55.121 W
3,059.00	1.84	252.97	3,057.97	-44.54	-55.52	14,524,477.14	2,056,305.84	39° 59' 10.269 N	109° 30' 55.149 W
3,154.00	2.03	284.37	3,152.92	-44.57	-58.61	14,524,477.06	2,056,302.75	39° 59' 10.268 N	109° 30' 55.189 W
3,249.00	2.24	284.33	3,247.85	-43.69	-62.04	14,524,477.88	2,056,299.31	39° 59' 10.277 N	109° 30' 55.233 W
3,343.00	2.11	273.38	3,341.78	-43.14	-65.55	14,524,478.38	2,056,295.79	39° 59' 10.282 N	109° 30' 55.278 W
3,438.00	1.43	289.82	3,436.74	-42.63	-68.41	14,524,478.84	2,056,292.93	39° 59' 10.287 N	109° 30' 55.315 W
3,533.00	2.19	305.37	3,531.69	-41.18	-71.00	14,524,480.24	2,056,290.31	39° 59' 10.302 N	109° 30' 55.348 W
3,628.00	1.63	300.22	3,626.64	-39.45	-73.65	14,524,481.93	2,056,287.63	39° 59' 10.319 N	109° 30' 55.382 W
3,723.00	1.07	273.20	3,721.61	-38.72	-75.70	14,524,482.63	2,056,285.57	39° 59' 10.326 N	109° 30' 55.408 W
3,818.00	1.14	316.31	3,816.60	-37.99	-77.24	14,524,483.33	2,056,284.01	39° 59' 10.333 N	109° 30' 55.428 W
3,913.00	0.82	307.91	3,911.58	-36.89	-78.43	14,524,484.41	2,056,282.81	39° 59' 10.344 N	109° 30' 55.443 W
4,008.00	0.24	304.08	4,006.58	-36.36	-79.13	14,524,484.93	2,056,282.10	39° 59' 10.349 N	109° 30' 55.452 W
4,103.00	1.51	353.07	4,101.57	-35.00	-79.45	14,524,486.28	2,056,281.76	39° 59' 10.363 N	109° 30' 55.456 W
4,198.00	0.62	345.11	4,196.55	-33.26	-79.73	14,524,488.02	2,056,281.45	39° 59' 10.380 N	109° 30' 55.460 W
4,293.00	0.43	223.76	4,291.55	-33.02	-80.11	14,524,488.25	2,056,281.06	39° 59' 10.382 N	109° 30' 55.465 W
4,388.00	0.73	221.89	4,386.54	-33.73	-80.76	14,524,487.53	2,056,280.43	39° 59' 10.375 N	109° 30' 55.473 W
4,484.00	0.78	6.61	4,482.54	-33.54	-81.09	14,524,487.72	2,056,280.09	39° 59' 10.377 N	109° 30' 55.478 W
4,579.00	1.64	0.62	4,577.52	-31.54	-81.00	14,524,489.72	2,056,280.15	39° 59' 10.397 N	109° 30' 55.476 W
4,674.00	1.30	9.28	4,672.48	-29.11	-80.81	14,524,492.15	2,056,280.29	39° 59' 10.421 N	109° 30' 55.474 W
4,769.00	0.97	19.06	4,767.47	-27.29	-80.38	14,524,493.98	2,056,280.70	39° 59' 10.439 N	109° 30' 55.468 W
4,863.00	0.62	4.88	4,861.46	-26.03	-80.08	14,524,495.24	2,056,280.98	39° 59' 10.451 N	109° 30' 55.465 W
4,958.00	0.55	3.81	4,956.45	-25.06	-80.00	14,524,496.21	2,056,281.04	39° 59' 10.461 N	109° 30' 55.464 W
5,053.00	0.27	64.78	5,051.45	-24.51	-79.77	14,524,496.76	2,056,281.26	39° 59' 10.466 N	109° 30' 55.461 W
5,148.00	0.19	346.59	5,146.45	-24.27	-79.60	14,524,497.01	2,056,281.42	39° 59' 10.469 N	109° 30' 55.458 W
5,243.00	0.03	102.23	5,241.45	-24.12	-79.61	14,524,497.16	2,056,281.41	39° 59' 10.470 N	109° 30' 55.459 W
5,338.00	0.25	42.06	5,336.45	-23.97	-79.45	14,524,497.31	2,056,281.57	39° 59' 10.472 N	109° 30' 55.456 W
5,432.00	0.34	84.95	5,430.45	-23.79	-79.04	14,524,497.50	2,056,281.98	39° 59' 10.474 N	109° 30' 55.451 W
5,527.00	0.34	112.93	5,525.45	-23.88	-78.50	14,524,497.42	2,056,282.52	39° 59' 10.473 N	109° 30' 55.444 W
5,622.00	0.61	108.03	5,620.44	-24.14	-77.76	14,524,497.17	2,056,283.27	39° 59' 10.470 N	109° 30' 55.435 W

Company: US ROCKIES REGION PLANNING
Project: UTAH - UTM (feet), NAD27, Zone 12N
Site: UINTAH_NBU 921-35O PAD
Well: NBU 921-35O4BS
Wellbore: NBU 921-35O4BS
Design: NBU 921-35O4BS

Local Co-ordinate Reference: Well NBU 921-35O4BS
TVD Reference: GL 5100' & KB 19' @ 5119.00ft (PIONEER 54)
MD Reference: GL 5100' & KB 19' @ 5119.00ft (PIONEER 54)
North Reference: True
Survey Calculation Method: Minimum Curvature
Database: EDM5000-RobertS-Local

Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
5,717.00	0.64	108.02	5,715.44	-24.46	-76.77	14,524,496.86	2,056,284.26	39° 59' 10.467 N	109° 30' 55.422 W
5,811.00	0.62	186.93	5,809.43	-25.13	-76.33	14,524,496.20	2,056,284.71	39° 59' 10.460 N	109° 30' 55.416 W
5,906.00	1.05	174.24	5,904.42	-26.51	-76.31	14,524,494.83	2,056,284.76	39° 59' 10.447 N	109° 30' 55.416 W
6,001.00	0.75	146.18	5,999.41	-27.89	-75.87	14,524,493.45	2,056,285.21	39° 59' 10.433 N	109° 30' 55.411 W
6,095.00	0.78	146.65	6,093.40	-28.94	-75.18	14,524,492.42	2,056,285.93	39° 59' 10.423 N	109° 30' 55.402 W
6,190.00	1.00	163.56	6,188.39	-30.27	-74.59	14,524,491.09	2,056,286.54	39° 59' 10.410 N	109° 30' 55.394 W
6,285.00	1.21	159.09	6,283.37	-32.00	-74.00	14,524,489.37	2,056,287.16	39° 59' 10.392 N	109° 30' 55.386 W
6,380.00	0.94	170.54	6,378.36	-33.71	-73.51	14,524,487.67	2,056,287.67	39° 59' 10.376 N	109° 30' 55.380 W
6,475.00	0.84	134.62	6,473.35	-34.97	-72.89	14,524,486.43	2,056,288.32	39° 59' 10.363 N	109° 30' 55.372 W
6,570.00	0.99	149.06	6,568.33	-36.16	-71.97	14,524,485.25	2,056,289.26	39° 59' 10.351 N	109° 30' 55.360 W
6,665.00	1.11	143.19	6,663.32	-37.60	-71.00	14,524,483.82	2,056,290.25	39° 59' 10.337 N	109° 30' 55.348 W
6,759.00	1.27	158.56	6,757.30	-39.30	-70.07	14,524,482.14	2,056,291.21	39° 59' 10.320 N	109° 30' 55.336 W
6,854.00	1.18	151.34	6,852.28	-41.14	-69.22	14,524,480.32	2,056,292.09	39° 59' 10.302 N	109° 30' 55.325 W
6,949.00	1.13	143.56	6,947.26	-42.75	-68.19	14,524,478.72	2,056,293.14	39° 59' 10.286 N	109° 30' 55.312 W
7,044.00	0.34	149.84	7,042.25	-43.75	-67.49	14,524,477.74	2,056,293.86	39° 59' 10.276 N	109° 30' 55.303 W
7,139.00	1.08	17.20	7,137.24	-43.13	-67.09	14,524,478.36	2,056,294.25	39° 59' 10.282 N	109° 30' 55.298 W
7,234.00	0.94	43.72	7,232.23	-41.72	-66.28	14,524,479.79	2,056,295.03	39° 59' 10.296 N	109° 30' 55.287 W
7,329.00	0.88	55.59	7,327.22	-40.74	-65.14	14,524,480.78	2,056,296.16	39° 59' 10.306 N	109° 30' 55.273 W
7,425.00	1.26	67.16	7,423.20	-39.91	-63.56	14,524,481.63	2,056,297.72	39° 59' 10.314 N	109° 30' 55.252 W
7,520.00	1.13	80.69	7,518.18	-39.36	-61.67	14,524,482.22	2,056,299.60	39° 59' 10.320 N	109° 30' 55.228 W
7,615.00	1.36	96.17	7,613.16	-39.33	-59.63	14,524,482.29	2,056,301.65	39° 59' 10.320 N	109° 30' 55.202 W
7,710.00	0.43	48.74	7,708.15	-39.21	-58.24	14,524,482.42	2,056,303.03	39° 59' 10.321 N	109° 30' 55.184 W
7,805.00	0.57	55.93	7,803.14	-38.71	-57.58	14,524,482.93	2,056,303.68	39° 59' 10.326 N	109° 30' 55.175 W
7,900.00	0.42	69.43	7,898.14	-38.33	-56.86	14,524,483.33	2,056,304.40	39° 59' 10.330 N	109° 30' 55.166 W
7,996.00	0.57	352.11	7,994.14	-37.73	-56.60	14,524,483.93	2,056,304.65	39° 59' 10.336 N	109° 30' 55.163 W
8,090.00	1.28	0.55	8,088.12	-36.22	-56.65	14,524,485.45	2,056,304.57	39° 59' 10.351 N	109° 30' 55.164 W
8,185.00	1.28	10.87	8,183.10	-34.11	-56.44	14,524,487.55	2,056,304.75	39° 59' 10.372 N	109° 30' 55.161 W
8,280.00	1.19	31.42	8,278.08	-32.23	-55.73	14,524,489.45	2,056,305.43	39° 59' 10.390 N	109° 30' 55.152 W
8,375.00	1.32	41.40	8,373.06	-30.57	-54.49	14,524,491.13	2,056,306.64	39° 59' 10.407 N	109° 30' 55.136 W
8,470.00	1.33	47.12	8,468.03	-29.00	-52.96	14,524,492.73	2,056,308.14	39° 59' 10.422 N	109° 30' 55.116 W
8,565.00	1.61	53.81	8,563.00	-27.46	-51.07	14,524,494.30	2,056,310.00	39° 59' 10.437 N	109° 30' 55.092 W
8,660.00	1.53	69.06	8,657.96	-26.22	-48.81	14,524,495.58	2,056,312.24	39° 59' 10.450 N	109° 30' 55.063 W
8,755.00	1.58	71.95	8,752.93	-25.36	-46.38	14,524,496.48	2,056,314.66	39° 59' 10.458 N	109° 30' 55.032 W
8,850.00	1.57	82.29	8,847.89	-24.78	-43.85	14,524,497.10	2,056,317.18	39° 59' 10.464 N	109° 30' 54.999 W
8,945.00	1.60	80.79	8,942.86	-24.39	-41.25	14,524,497.53	2,056,319.77	39° 59' 10.468 N	109° 30' 54.966 W
9,039.00	0.71	61.48	9,036.84	-23.90	-39.44	14,524,498.05	2,056,321.57	39° 59' 10.473 N	109° 30' 54.942 W
9,134.00	0.71	314.78	9,131.83	-23.21	-39.34	14,524,498.74	2,056,321.66	39° 59' 10.479 N	109° 30' 54.941 W
9,229.00	0.32	303.14	9,226.83	-22.65	-39.98	14,524,499.29	2,056,321.01	39° 59' 10.485 N	109° 30' 54.949 W
9,324.00	0.21	325.05	9,321.83	-22.36	-40.30	14,524,499.57	2,056,320.69	39° 59' 10.488 N	109° 30' 54.953 W
9,418.00	0.27	322.02	9,415.83	-22.04	-40.54	14,524,499.89	2,056,320.45	39° 59' 10.491 N	109° 30' 54.956 W
9,513.00	0.51	175.39	9,510.83	-22.29	-40.64	14,524,499.64	2,056,320.35	39° 59' 10.488 N	109° 30' 54.958 W
9,592.00	0.87	167.22	9,589.82	-23.22	-40.48	14,524,498.71	2,056,320.52	39° 59' 10.479 N	109° 30' 54.956 W
LAST SDI MWD PRODUCTION SURVEY									
9,650.00	0.87	167.22	9,647.81	-24.08	-40.29	14,524,497.85	2,056,320.73	39° 59' 10.471 N	109° 30' 54.953 W
SDI PROJECTION TO TD									

Company: US ROCKIES REGION PLANNING
Project: UTAH - UTM (feet), NAD27, Zone 12N
Site: UINTAH_NBU 921-35O PAD
Well: NBU 921-35O4BS
Wellbore: NBU 921-35O4BS
Design: NBU 921-35O4BS

Local Co-ordinate Reference: Well NBU 921-35O4BS
TVD Reference: GL 5100' & KB 19' @ 5119.00ft (PIONEER 54)
MD Reference: GL 5100' & KB 19' @ 5119.00ft (PIONEER 54)
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)	
163.00	163.00	0.94	-0.24	FIRST SDI MWD SURFACE SURVEY
2,525.00	2,524.16	-32.44	-49.27	LAST SDI MWD SURFACE SURVEY
2,585.00	2,584.15	-33.43	-50.12	FIRST SDI MWD PRODUCTION SURVEY
9,592.00	9,589.82	-23.22	-40.48	LAST SDI MWD PRODUCTION SURVEY
9,650.00	9,647.81	-24.08	-40.29	SDI PROJECTION TO TD

Checked By: _____ Approved By: _____ Date: _____

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: P.O. Box 173779
city DENVER
state CO zip 80217 Phone Number: (720) 929-6100

Well 1

API Number	Well Name		QQ	Sec	Twp	Rng	County
4304751383	NBU 921-35O4CS		SWSE	35	9S	21E	UINTAH
Action Code	Current Entity Number	New Entity Number	Spud Date			Entity Assignment Effective Date	
<i>B</i>	99999	<i>2900</i>	1/31/2011			<i>2/15/11</i>	
Comments: MIRU PETE MARTIN BUCKET RIG. <i>WSMVD</i> SPUD WELL LOCATION ON 01/31/2011 AT 12:00 HRS. <i>BHL = SWSE</i>							

Well 2

API Number	Well Name		QQ	Sec	Twp	Rng	County
4304751384	NBU 921-35O4BS		SWSE	35	9S	21E	UINTAH
Action Code	Current Entity Number	New Entity Number	Spud Date			Entity Assignment Effective Date	
<i>B</i>	99999	<i>2900</i>	1/31/2011			<i>2/15/11</i>	
Comments: MIRU PETE MARTIN BUCKET RIG. <i>WSMVD</i> SPUD WELL LOCATION ON 01/31/2011 AT 14:30 HRS. <i>BHL = SWSE</i>							

Well 3

API Number	Well Name		QQ	Sec	Twp	Rng	County
4304751388	NBU 921-35N4CS		SWSE	35	9S	21E	UINTAH
Action Code	Current Entity Number	New Entity Number	Spud Date			Entity Assignment Effective Date	
<i>B</i>	99999	<i>2900</i>	2/1/2011			<i>2/15/11</i>	
Comments: MIRU PETE MARTIN BUCKET RIG. <i>WSMVD</i> SPUD WELL LOCATION ON 02/01/2011 AT 11:15 HRS. <i>BHL = SESW</i>							

ACTION CODES:

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

ANDY LYTLE

Name (Please Print)

Signature

REGULATORY ANALYST

Title

2/2/2011

Date

RECEIVED

FEB 02 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: ML 22582	
6. IF INDIAN, ALLOTTEE OR TRIBE NAME:	
7. UNIT or CA AGREEMENT NAME: NATURAL BUTTES	
8. WELL NAME and NUMBER: NBU 921-35O4BS	
9. API NUMBER: 43047513840000	
9. FIELD and POOL or WILDCAT: NATURAL BUTTES	
COUNTY: UINTAH	
STATE: UTAH	

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.

1. TYPE OF WELL Gas Well	1. TYPE OF WELL Gas Well
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.	2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779	PHONE NUMBER: 720 929-6507
4. LOCATION OF WELL FOOTAGES AT SURFACE: 0370 FSL 1777 FEL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SWSE Section: 35 Township: 09.0S Range: 21.0E Meridian: S	

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

TYPE OF SUBMISSION	TYPE OF ACTION		
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start:	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> CASING REPAIR
<input checked="" type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion: 10/30/2015	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> CHANGE WELL NAME
<input type="checkbox"/> SPUD REPORT Date of Spud:	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> CONVERT WELL TYPE
<input type="checkbox"/> DRILLING REPORT Report Date:	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> NEW CONSTRUCTION
	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> PLUG BACK
	<input checked="" type="checkbox"/> PRODUCTION START OR RESUME	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION
	<input type="checkbox"/> REPERFORATE CURRENT FORMATION	<input type="checkbox"/> SIDETRACK TO REPAIR WELL	<input type="checkbox"/> TEMPORARY ABANDON
	<input type="checkbox"/> TUBING REPAIR	<input type="checkbox"/> VENT OR FLARE	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> WATER SHUTOFF	<input type="checkbox"/> SI TA STATUS EXTENSION	<input type="checkbox"/> APD EXTENSION
	<input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> OTHER	OTHER: <input style="width: 100px;" type="text"/>

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

The NBU 921-35O4BS well was returned to production on 10/30/2015.
Thank you.

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

FOR RECORD ONLY

November 09, 2015

NAME (PLEASE PRINT) Jennifer Thomas	PHONE NUMBER 720 929-6808	TITLE Regulatory Specialist
SIGNATURE N/A	DATE 11/9/2015	