

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

FORM 3

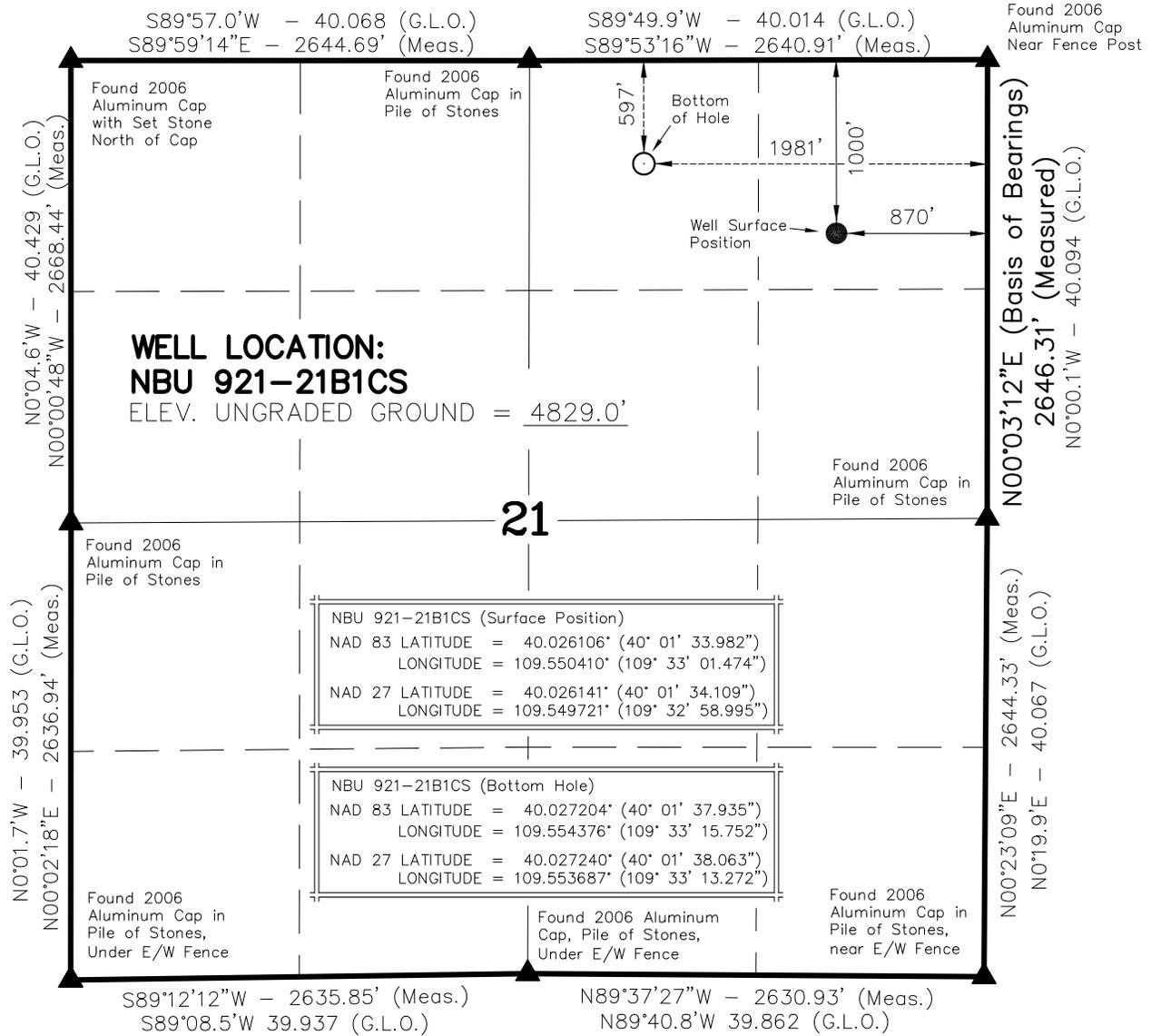
AMENDED REPORT

APPLICATION FOR PERMIT TO DRILL						1. WELL NAME and NUMBER NBU 921-21B1CS	
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 720 929-6587	
8. ADDRESS OF OPERATOR P.O. Box 173779, Denver, CO, 80217						9. OPERATOR E-MAIL mary.mondragon@anadarko.com	
10. MINERAL LEASE NUMBER (FEDERAL, INDIAN, OR STATE) UTU 0576			11. MINERAL OWNERSHIP FEDERAL <input checked="" type="checkbox"/> INDIAN <input type="checkbox"/> STATE <input type="checkbox"/> FEE <input type="checkbox"/>			12. SURFACE OWNERSHIP FEDERAL <input type="checkbox"/> INDIAN <input checked="" type="checkbox"/> STATE <input 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') Ute Tribe			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	1000 FNL 870 FEL	NENE	21	9.0 S	21.0 E	S	
Top of Uppermost Producing Zone	597 FNL 1981 FEL	NWNE	21	9.0 S	21.0 E	S	
At Total Depth	597 FNL 1981 FEL	NWNE	21	9.0 S	21.0 E	S	
21. COUNTY UINTAH			22. DISTANCE TO NEAREST LEASE LINE (Feet) 597			23. NUMBER OF ACRES IN DRILLING UNIT 1480	
			25. DISTANCE TO NEAREST WELL IN SAME POOL (Applied For Drilling or Completed) 1320			26. PROPOSED DEPTH MD: 10489 TVD: 10220	
27. ELEVATION - GROUND LEVEL 4829			28. BOND NUMBER WYB000291			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 07/30/2009			EMAIL danielle.piernot@anadarko.com	
API NUMBER ASSIGNED 43047506120000			APPROVAL  Permit Manager				

Proposed Hole, Casing, and Cement						
String	Hole Size	Casing Size	Top (MD)	Bottom (MD)		
Prod	7.875	4.5	0	10489		
Pipe	Grade	Length	Weight			
	Grade HCP-110 LT&C	570	11.6			
	Grade I-80 LT&C	9919	11.6			

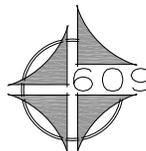
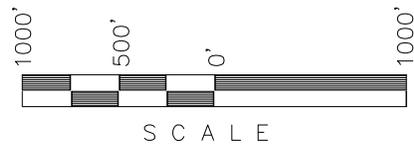
Proposed Hole, Casing, and Cement						
String	Hole Size	Casing Size	Top (MD)	Bottom (MD)		
Surf	12.25	9.625	0	2640		
Pipe	Grade	Length	Weight			
	Grade J-55 LT&C	2640	36.0			

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



NOTES:

- ▲ = Section Corners Located
- 1. Well footages are measured at right angles to the Section Lines.
- 2. G.L.O. distances are shown in feet or chains. 1 chain = 66 feet.
- 3. The Bottom of hole bears N70°08'10"W 1180.82' from the Surface Position.
- 4. Bearings are based on Global Positioning Satellite observations.
- 5. Basis of elevation is Tri-Sta "Two Water" located in the NW ¼ of Section 1, T10S, R21E, S.L.B.&M. The elevation of this Tri-Sta is shown on the Big Pack mtn NE 7.5 Min. Quadrangle as being 5238'.



SURVEYOR'S CERTIFICATE

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

REGISTERED LAND SURVEYOR
 REGISTRATION NO. 362251
 STATE OF UTAH

COLE CREDITED LAND SURVEYOR
 No. 362251
 KOLBY R. KAY

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

NBU 921-21B1CS
WELL PLAT
 597' FNL, 1981' FEL (Bottom Hole)
 NW ¼ NE ¼ OF SECTION 21, T9S, R21E,
 S.L.B.&M. UINTAH COUNTY, UTAH.

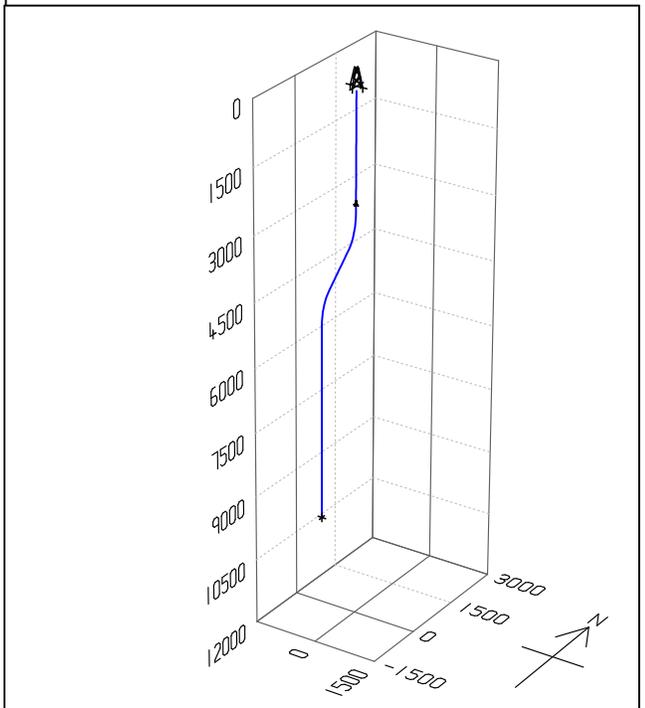
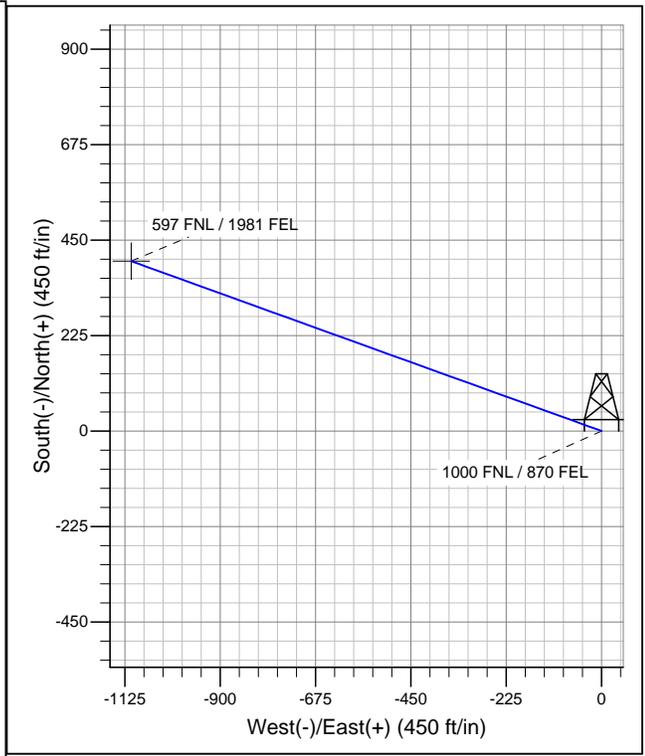
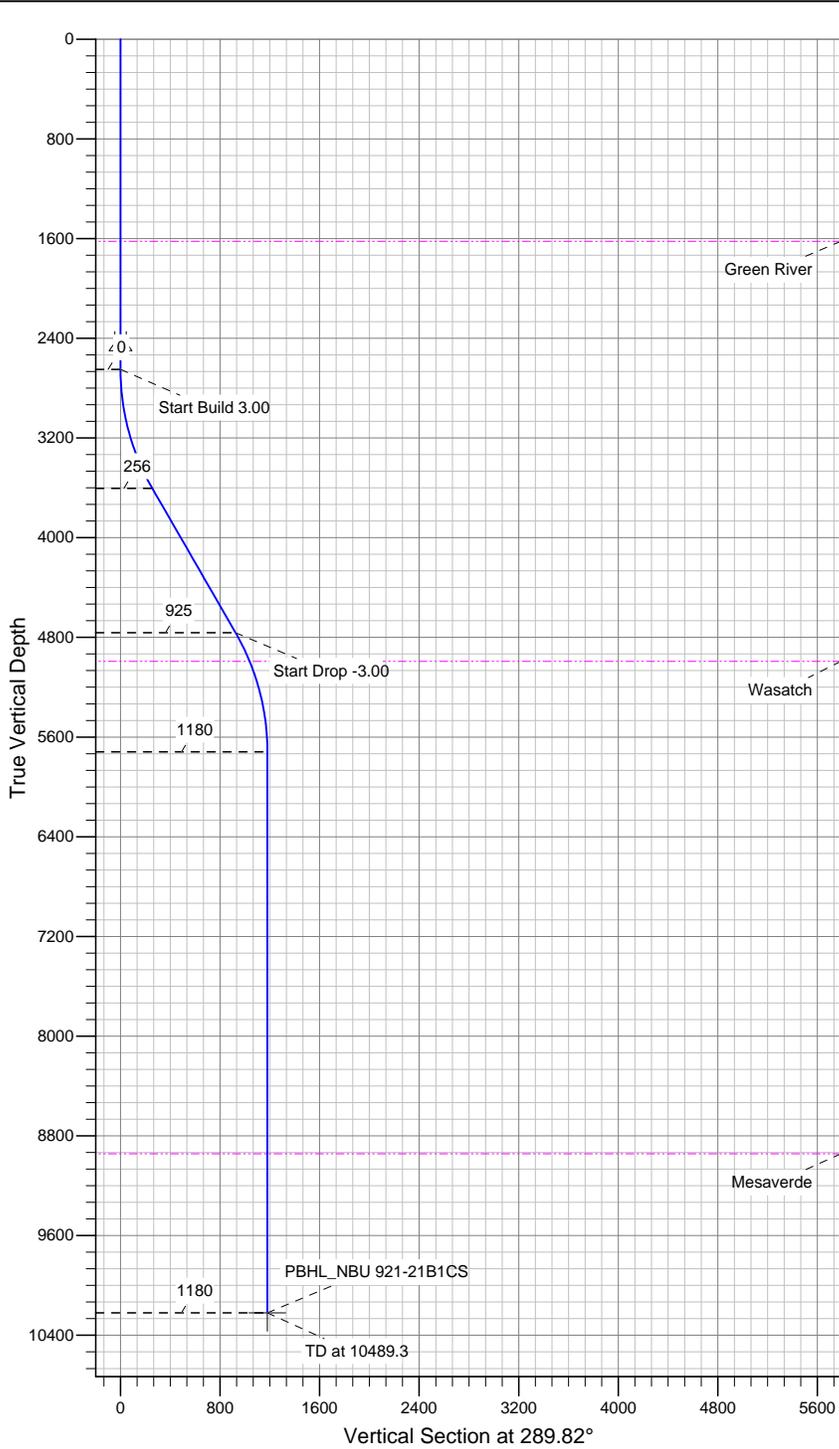
CONSULTING, LLC
 371 Coffeen Avenue
 Sheridan WY 82801
 Phone 307-674-0609
 Fax 307-674-0182

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

DATE SURVEYED: 01-12-09	SURVEYED BY: M.S.B.	SHEET 4
DATE DRAWN: 02-13-09	DRAWN BY: E.M.S.	
SCALE: 1" = 1000'	Date Last Revised:	OF 13



Well Name: P_NBU 921-21B1CS
 Surface Location: UINTAH_NBU 921-21A
 NAD 1927 (NADCON CONUS) Universal Transverse Mercator (US Survey Feet)
 UTAH - UTM (feet), NAD27, Zone 12N
 Ground Elevation: 4829.0
 Northing 14538868.41 Easting 2046432.01 Latitude 40.026141°N Longitude 109.549721°W



SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0
2	2650.0	0.00	0.00	2650.0	0.0	0.0	0.00	0.00	0.0
3	3650.0	30.00	289.82	3604.9	86.8	-240.7	3.00	289.82	255.9
4	4987.3	30.00	289.82	4763.1	313.5	-869.8	0.00	0.00	924.5
5	5987.3	0.00	0.00	5718.0	400.3	-1110.5	3.00	180.00	1180.4
6	10489.3	0.00	0.00	10220.0	400.3	-1110.5	0.00	0.00	1180.4



Azimuths to True North
 Magnetic North: 11.36°

Magnetic Field
 Strength: 52578.6snT
 Dip Angle: 65.94°
 Date: 4/20/2009
 Model: IGRF200510

ROCKIES - PLANNING

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

UINTAH_NBU 921-21A

P_NBU 921-21B1CS

P_NBU 921-21B1CS

Plan: Plan #1 04-20-09 ZJRA6

Standard Planning Report - Geographic

20 April, 2009

APC Planning Report - Geographic

Database: apc_edmp	Local Co-ordinate Reference: Well P_NBU 921-21B1CS
Company: ROCKIES - PLANNING	TVD Reference: WELL @ 4829.0ft (Original Well Elev)
Project: UTAH - UTM (feet), NAD27, Zone 12N	MD Reference: WELL @ 4829.0ft (Original Well Elev)
Site: UINTAH_NBU 921-21A	North Reference: True
Well: P_NBU 921-21B1CS	Survey Calculation Method: Minimum Curvature
Wellbore: P_NBU 921-21B1CS	
Design: Plan #1 04-20-09 ZJRA6	

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

Site UINTAH_NBU 921-21A		
Site Position:	Northing: 14,538,868.41 ft	Latitude: 40.026141°N
From: Lat/Long	Easting: 2,046,432.01 ft	Longitude: 109.549721°W
Position Uncertainty: 0.0 ft	Slot Radius: "	Grid Convergence: 0.93 °

Well P_NBU 921-21B1CS			
Well Position	+N/-S 0.0 ft	Northing: 14,538,868.41 ft	Latitude: 40.026141°N
	+E/-W 0.0 ft	Easting: 2,046,432.01 ft	Longitude: 109.549721°W
Position Uncertainty	0.0 ft	Wellhead Elevation: ft	Ground Level: 4,829.0 ft

Wellbore P_NBU 921-21B1CS					
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF200510	4/20/2009	11.36	65.94	52,579

Design Plan #1 04-20-09 ZJRA6				
Audit Notes:				
Version:	Phase: PLAN	Tie On Depth: 0.0		
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	10,220.0	0.0	0.0	289.82

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
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
2,650.0	0.00	0.00	2,650.0	0.0	0.0	0.00	0.00	0.00	0.00	
3,650.0	30.00	289.82	3,604.9	86.8	-240.7	3.00	3.00	0.00	289.82	
4,987.3	30.00	289.82	4,763.1	313.5	-869.8	0.00	0.00	0.00	0.00	
5,987.3	0.00	0.00	5,718.0	400.3	-1,110.5	3.00	-3.00	0.00	180.00	
10,489.3	0.00	0.00	10,220.0	400.3	-1,110.5	0.00	0.00	0.00	0.00	PBHL_NBU 921-21

APC

Planning Report - Geographic

Database:	apc_edmp	Local Co-ordinate Reference:	Well P_NBU 921-21B1CS
Company:	ROCKIES - PLANNING	TVD Reference:	WELL @ 4829.0ft (Original Well Elev)
Project:	UTAH - UTM (feet), NAD27, Zone 12N	MD Reference:	WELL @ 4829.0ft (Original Well Elev)
Site:	UINTAH_NBU 921-21A	North Reference:	True
Well:	P_NBU 921-21B1CS	Survey Calculation Method:	Minimum Curvature
Wellbore:	P_NBU 921-21B1CS		
Design:	Plan #1 04-20-09 ZJRA6		

Planned Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (ft)	Map Easting (ft)	Latitude	Longitude	
0.0	0.00	0.00	0.0	0.0	0.0	14,538,868.41	2,046,432.01	40.026141°N	109.549721°W	
1,621.0	0.00	0.00	1,621.0	0.0	0.0	14,538,868.41	2,046,432.01	40.026141°N	109.549721°W	
Green River										
2,500.0	0.00	0.00	2,500.0	0.0	0.0	14,538,868.41	2,046,432.01	40.026141°N	109.549721°W	
Surface Casing										
2,650.0	0.00	0.00	2,650.0	0.0	0.0	14,538,868.41	2,046,432.01	40.026141°N	109.549721°W	
3,650.0	30.00	289.82	3,604.9	86.8	-240.7	14,538,951.24	2,046,189.92	40.026379°N	109.550581°W	
4,987.3	30.00	289.82	4,763.1	313.5	-869.8	14,539,167.72	2,045,557.26	40.027002°N	109.552827°W	
5,243.7	22.31	289.82	4,993.0	351.8	-976.0	14,539,204.27	2,045,450.44	40.027107°N	109.553207°W	
Wasatch										
5,987.3	0.00	0.00	5,718.0	400.3	-1,110.5	14,539,250.56	2,045,315.17	40.027240°N	109.553687°W	
9,213.3	0.00	0.00	8,944.0	400.3	-1,110.5	14,539,250.56	2,045,315.17	40.027240°N	109.553687°W	
Mesaverde										
10,489.3	0.00	0.00	10,220.0	400.3	-1,110.5	14,539,250.56	2,045,315.17	40.027240°N	109.553687°W	

Targets										
Target Name	- hit/miss target	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
PBHL_NBU 921-21B1	- plan hits target center	0.00	0.00	10,220.0	400.3	-1,110.5	14,539,250.56	2,045,315.17	40.027240°N	109.553687°W
	- Point									

Casing Points						
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")		
2,500.0	2,500.0	Surface Casing	9-5/8	12-1/4		

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
9,213.3	8,944.0	Mesaverde		0.00		
1,621.0	1,621.0	Green River		0.00		
5,243.7	4,993.0	Wasatch		0.00		

NBU 921-21B1CS

Pad: NBU 921-21A

Surface: 1,000' FNL 870' FEL (NE/4NE/4)

BHL: 597' FNL 1,981' FEL (NW/4NE/4)

Sec. 21 T9S R21E

Uintah, Utah

Mineral Lease: UTU 0576

ONSHORE ORDER NO. 1

DRILLING PROGRAM

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

<u>Formation</u>	<u>Depth</u>	<u>Resource</u>
Uinta	0 – Surface	
Green River	1,621'	
Birds Nest	1,959'	Water
Mahogany	2,438'	Water
Wasatch	4,993'	Gas
Mesaverde	7,992'	Gas
MVU2	8,944'	Gas
MVL1	9,504'	Gas
TVD	10,220'	
TD	10,489'	

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

Please refer to the attached Drilling Program.

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

Please refer to the attached Drilling Program.

5. **Drilling Fluids Program:**

Please refer to the attached Drilling Program.

6. **Evaluation Program:**

Please refer to the attached Drilling Program.

7. Abnormal Conditions:

Maximum anticipated bottomhole pressure calculated at 10,489' TD, approximately equals 6,535 psi (calculated at 0.62 psi/foot).

Maximum anticipated surface pressure equals approximately 4,119 psi (bottomhole pressure minus the pressure of a partially evacuated hole calculated at 0.22 psi/foot).

8. Anticipated Starting Dates:

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

9. Variances:

Please refer to the attached Drilling Program.

Onshore Order #2 – Air Drilling Variance

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

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

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

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

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

Background

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

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

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

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

Variance for BOPE Requirements

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

Variance for Mud Material Requirements

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

Variance for Special Drilling Operation (surface equipment placement) Requirements

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

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

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

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

Variance for FIT Requirements

KMG also respectfully requests a variance to Onshore Order 2, Section III, Part Bi, for the pressure integrity test (PIT, also known as a formation integrity test (FIT)). The air rig operation utilizes a 5M BOPE when drilling. This well is not an exploratory well and is being drilled in an area where the formation integrity is well known. Additionally, when an FIT is run with the mud weight as required, the casing shoe frequently breaks down and causes subsequent lost circulation when drilling the entire depth of the well.

Conclusion

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

10. Other Information:

Please refer to the attached Drilling Program.



KERR-McGEE OIL & GAS ONSHORE LP
DRILLING PROGRAM

CASING PROGRAM

	SIZE	INTERVAL	WT.	GR.	CPLG.	DESIGN FACTORS		
						BURST	COLLAPSE	TENSION
CONDUCTOR	14"	0-40'				3,520	2,020	453,000
SURFACE	9-5/8"	0 to 2,640	36.00	J-55	LTC	0.81	1.63	6.07
PRODUCTION	4-1/2"	0 to 9,919	11.60	I-80	LTC	7,780	6,350	201,000
	4-1/2"	9,919 to 10,489	11.60	HCP-110	LTC	1.84	1.07	2.03
						10,690	8,650	279,000
						85.25	1.33	51.87

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 = 12.2 ppg) 0.22 psi/ft = gradient for partially evac wellbore
 (Collapse Assumption: Fully Evacuated Casing, Max MW) (Tension Assumptions: Air Weight of Casing*Buoy.Fact. of water)
MASP 4,119 psi

3) Maximum Anticipated Bottom Hole Pressure (MABHP) = Pore Pressure at TD
 (Burst Assumptions: TD = 12.2 ppg) 0.62 psi/ft = bottomhole gradient
 (Collapse Assumption: Fully Evacuated Casing, Max MW) (Tension Assumptions: Air Weight of Casing*Buoy.Fact. of water)
MABHP 6,535 psi

CEMENT PROGRAM

		FT. OF FILL	DESCRIPTION	SACKS	EXCESS	WEIGHT	YIELD
SURFACE	LEAD	500'	Premium cmt + 2% CaCl + 0.25 pps flocele	215	60%	15.60	1.18
Option 1							
	TOP OUT CMT (6 jobs)	1,200'	20 gals sodium silicate + Premium cmt + 2% CaCl + 0.25 pps flocele	380	0%	15.60	1.18
			Premium cmt + 2% CaCl				
NOTE: If well will circulate water to surface, option 2 will be utilized							
SURFACE	LEAD	2,140'	65/35 Poz + 6% Gel + 10 pps gilsonite + 0.25 pps Flocele + 3% salt BWOW	500	35%	12.60	1.81
Option 2							
	TAIL	500'	Premium cmt + 2% CaCl + 0.25 pps flocele	180	35%	15.60	1.18
	TOP OUT CMT	as required	Premium cmt + 2% CaCl	as req.		15.60	1.18
PRODUCTION	LEAD	4,489'	Premium Lite II + 3% KCl + 0.25 pps celloflake + 5 pps gilsonite + 10% gel + 0.5% extender	430	40%	11.00	3.38
	TAIL	6,000'	50/50 Poz/G + 10% salt + 2% gel + 0.1% R-3	1,470	40%	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.

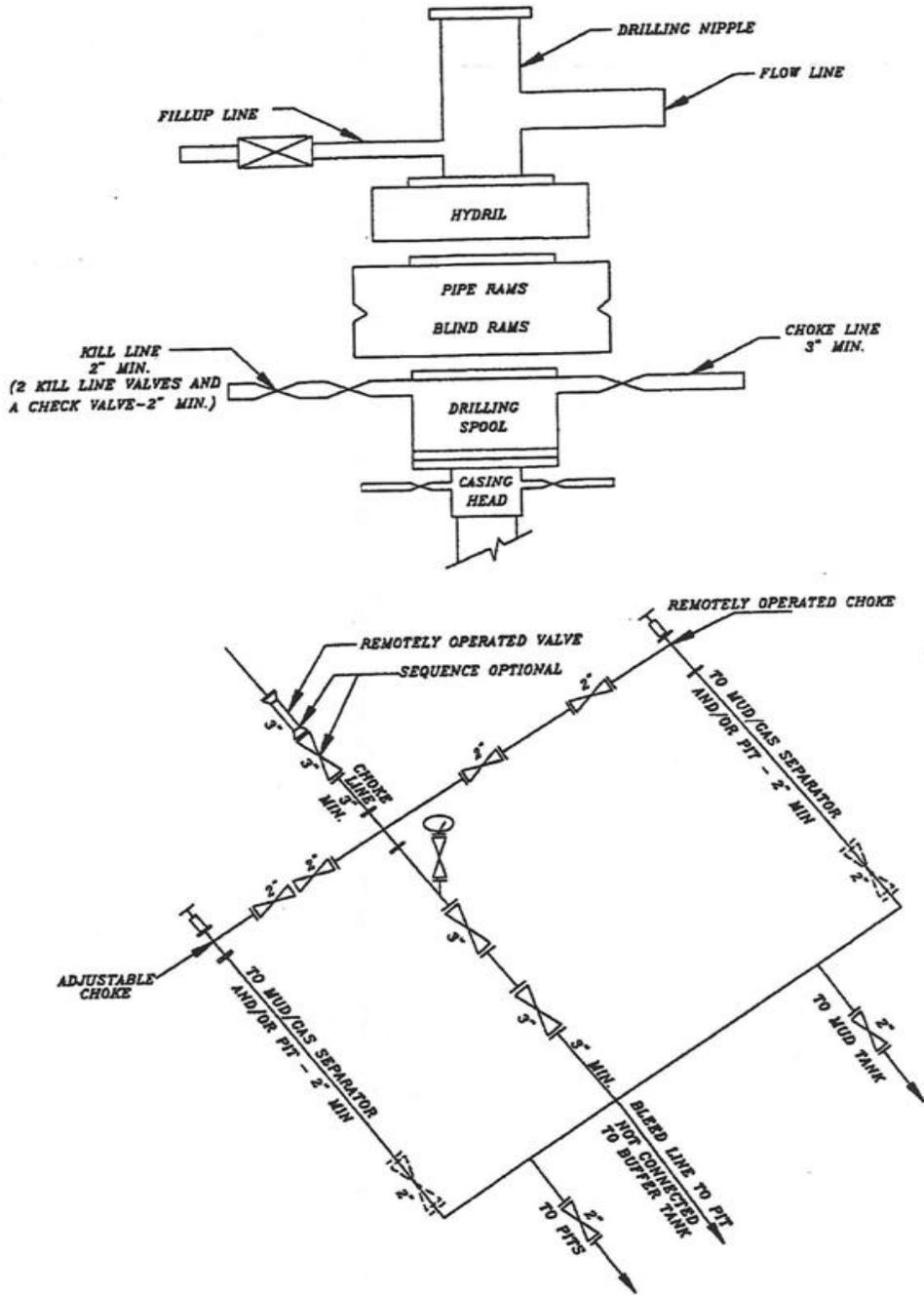
Surveys will be taken at 1,000' minimum intervals.

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 921-21B1CS



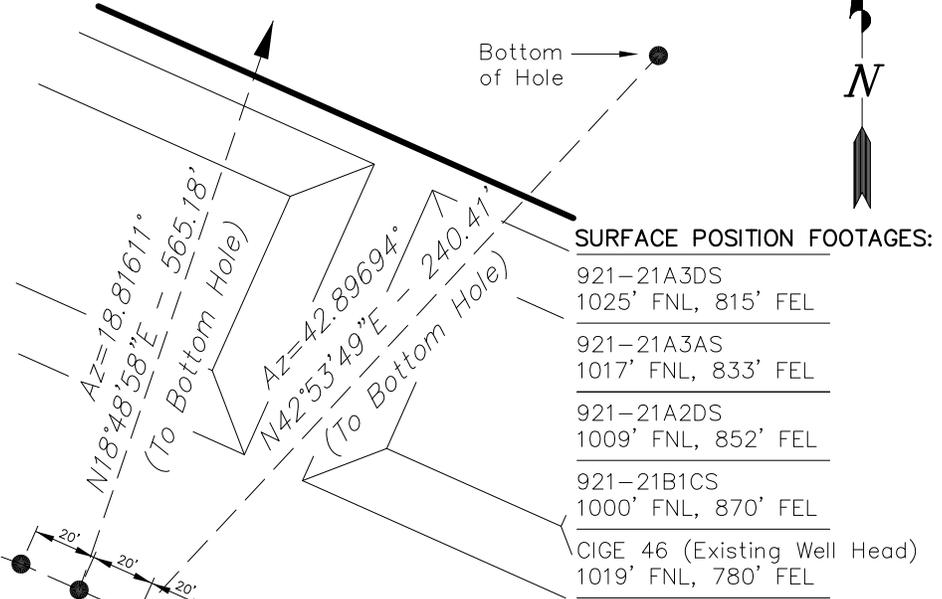
SCHEMATIC DIAGRAM OF 5,000 PSI BOP STACK

WELL PAD INTERFERENCE PLAT

DIRECTIONAL PAD - CIGE 46



LATITUDE & LONGITUDE Bottom Hole - (NAD 83)		
WELL	N. LATITUDE	W. LONGITUDE
921-21A3DS	40°01'32.085" 40.025579°	109°32'58.903" 109.549695°
921-21A3AS	40°01'35.563" 40.026545°	109°32'58.903" 109.549695°
921-21A2DS	40°01'39.189" 40.027552°	109°32'58.904" 109.549695°
921-21B1CS	40°01'37.935" 40.027204°	109°33'15.752" 109.554376°

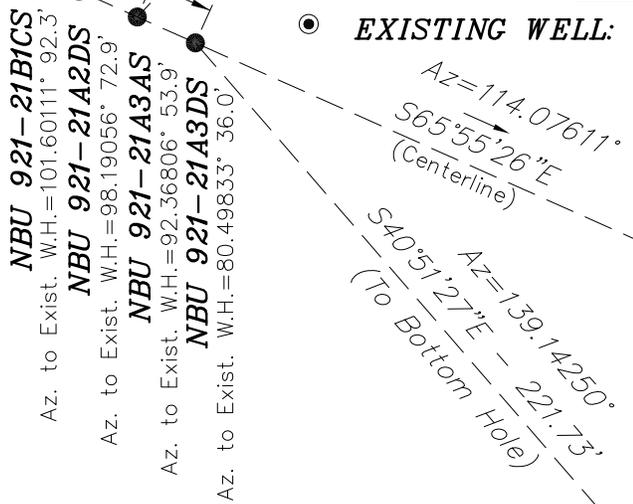


SURFACE POSITION FOOTAGES:

921-21A3DS	1025' FNL, 815' FEL
921-21A3AS	1017' FNL, 833' FEL
921-21A2DS	1009' FNL, 852' FEL
921-21B1CS	1000' FNL, 870' FEL
CIGE 46 (Existing Well Head)	1019' FNL, 780' FEL

BASIS OF BEARINGS IS THE EAST LINE OF THE NE 1/4 OF SECTION 21, T9S, R21E, S.L.B.&M. WHICH IS TAKEN FROM GLOBAL POSITIONING SATELLITE OBSERVATIONS TO BEAR N00°03'12"E.

LATITUDE & LONGITUDE Bottom Hole - (NAD 27)		
WELL	N. LATITUDE	W. LONGITUDE
921-21A3DS	40°01'32.212" 40.025615°	109°32'56.424" 109.549007°
921-21A3AS	40°01'35.690" 40.026581°	109°32'56.424" 109.549007°
921-21A2DS	40°01'39.316" 40.027588°	109°32'56.424" 109.549007°
921-21B1CS	40°01'38.063" 40.027240°	109°33'13.272" 109.553687°



BOTTOM HOLE FOOTAGES

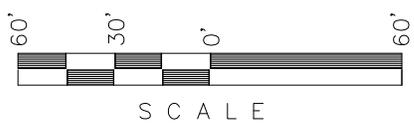
921-21A3DS	1193' FNL, 670' FEL
921-21A3AS	841' FNL, 670' FEL
921-21A2DS	474' FNL, 670' FEL
921-21B1CS	597' FNL, 1981' FEL

LATITUDE & LONGITUDE Surface Position - (NAD 83)		
WELL	N. LATITUDE	W. LONGITUDE
921-21A3DS	40°01'33.741" 40.026039°	109°33'00.769" 109.550214°
921-21A3AS	40°01'33.821" 40.026061°	109°33'01.004" 109.550279°
921-21A2DS	40°01'33.902" 40.026084°	109°33'01.240" 109.550344°
921-21B1CS	40°01'33.982" 40.026106°	109°33'01.474" 109.550410°
Existing Well CIGE 46	40°01'33.800" 40.026055°	109°33'00.313" 109.550087°

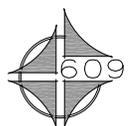
LATITUDE & LONGITUDE Surface Position - (NAD 27)		
WELL	N. LATITUDE	W. LONGITUDE
921-21A3DS	40°01'33.868" 40.026074°	109°32'58.290" 109.549525°
921-21A3AS	40°01'33.948" 40.026097°	109°32'58.525" 109.549590°
921-21A2DS	40°01'34.029" 40.026119°	109°32'58.760" 109.549656°
921-21B1CS	40°01'34.109" 40.026141°	109°32'58.995" 109.549721°
Existing Well CIGE 46	40°01'33.927" 40.026091°	109°32'57.833" 109.549398°

RELATIVE COORDINATES
From Surface Position to Bottom Hole

WELL	NORTH	EAST
921-21A3DS	-168'	145'
921-21A3AS	176'	164'
921-21A2DS	535'	182'
921-21B1CS	401'	-1111'



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



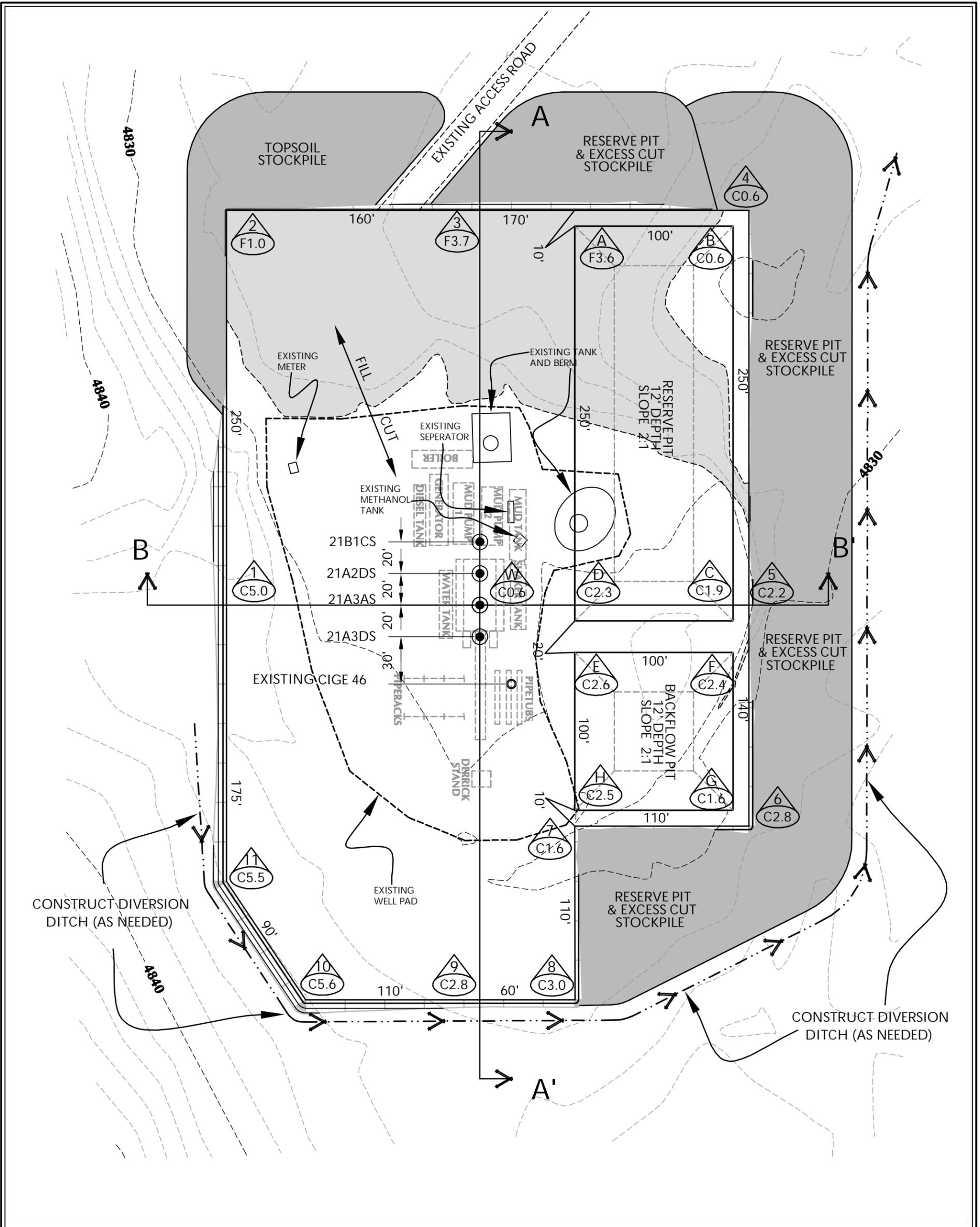
CONSULTING, LLC
371 Coffeen Avenue
Sheridan WY 82801
Phone 307-674-0609
Fax 307-674-0182

DATE SURVEYED: 01-12-09	SURVEYED BY: M.S.B.
DATE DRAWN: 02-13-09	DRAWN BY: E.M.S.
REVISED:	

Timberline (435) 789-1365
Engineering & Land Surveying, Inc.
209 NORTH 300 WEST VERNAL, UTAH 84078

SHEET
5
OF 13

NBU 921-21A3DS, NBU 921-21A3AS,
NBU 921-21A2DS & NBU 921-21B1CS
LOCATED IN SECTION 21, T9S, R21E,
S.L.B.&M. UINTAH COUNTY, UTAH.



WELL PAD CIGE 46 QUANTITIES

EXISTING GRADE @ CENTER OF WELL PAD = 4829.1'
 FINISHED GRADE ELEVATION = 4828.5'
 CUT SLOPES = 1.5:1
 FILL SLOPES = 1.5:1

TOTAL CUT FOR WELL PAD = 6,246 C.Y.
 TOTAL FILL FOR WELL PAD = 3,631 C.Y.
 TOPSOIL @ 6" DEPTH = 2,919 C.Y.
 EXCESS MATERIAL = 2,615 C.Y.
 TOTAL DISTURBANCE = 3.62 ACRES
 SHRINKAGE FACTOR = 1.10
 SWELL FACTOR = 1.00
 RESERVE PIT CAPACITY (2' OF FREEBOARD)
 +/- 28,730 BARRELS
 RESERVE PIT VOLUME
 +/- 7,720 CY
 BACKFLOW PIT CAPACITY (2' OF FREEBOARD)
 +/- 9,490 BARRELS
 BACKFLOW PIT VOLUME
 +/- 2,660 CY

WELL PAD LEGEND

- EXISTING WELL LOCATION
- PROPOSED WELL LOCATION
- EXISTING CONTOURS (2' INTERVAL)
- PROPOSED CONTOURS (2' INTERVAL)



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

KERR-MCGEE OIL & GAS
 ONSHORE L.P.
 1099 18th Street - Denver, Colorado 80202

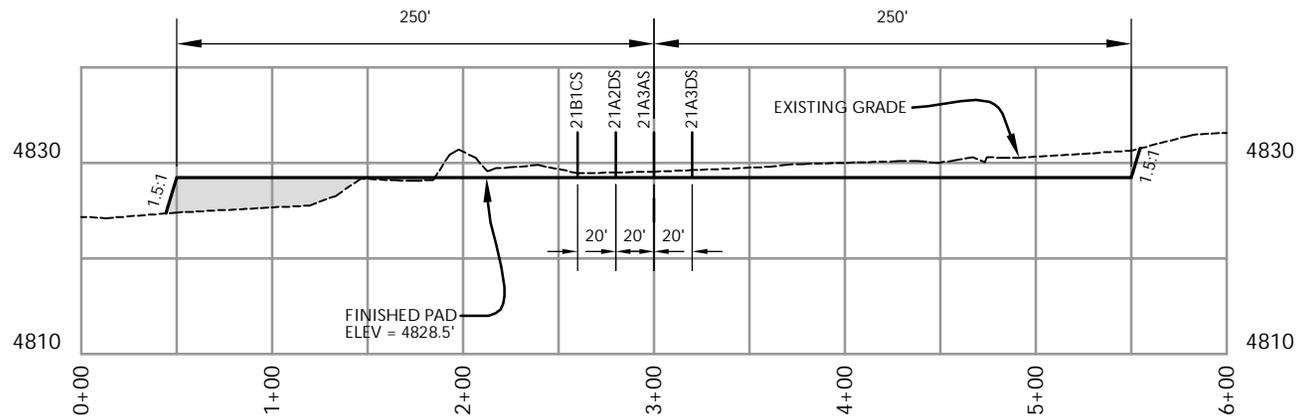


609 CONSULTING, LLC
 371 Coffeen Avenue
 Sheridan WY 82801
 Phone 307-674-0609
 Fax 307-674-0182

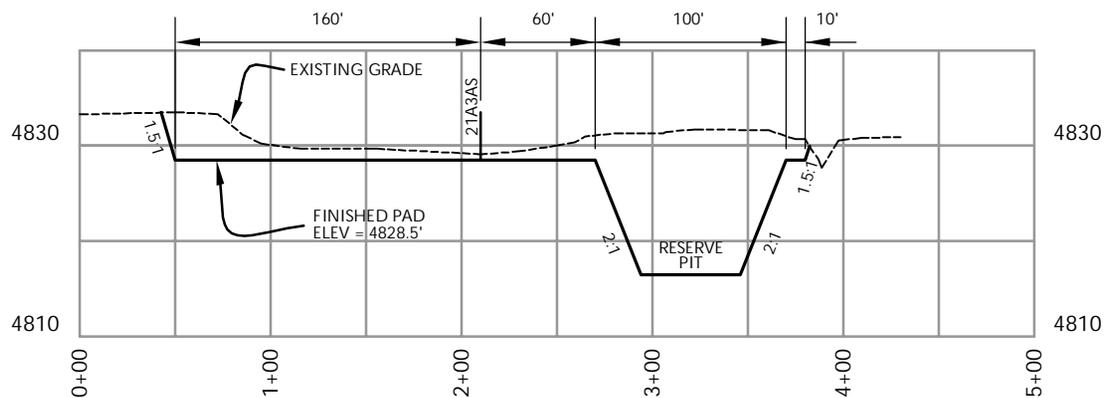
Scale: 1"=60'	Date: 3/18/09	SHEET NO:
REVISED:		6 6 OF 13

WELL PAD - LOCATION LAYOUT
 NBU 921-21A3DS, NBU 921-21A3AS,
 NBU 921-21A2DS & NBU 921-21B1CS
 LOCATED IN SECTION 21, T.9S., R.21E.
 S.L.B.&M., UINTAH COUNTY, UTAH

Timberline (435) 789-1365
 Engineering & Land Surveying, Inc.
 38 WEST 100 NORTH VERNAL, UTAH 84078



CROSS SECTION A-A'



CROSS SECTION B-B'

NOTE: CROSS SECTION B-B' DEPICTS
MAXIMUM RESERVE PIT DEPTH.

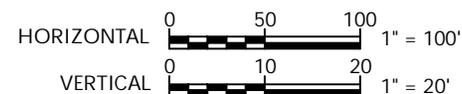
KERR-MCGEE OIL & GAS
ONSHORE L.P.
1099 18th Street - Denver, Colorado 80202



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

WELL PAD - CROSS SECTIONS
NBU 921-21A3DS, NBU 921-21A3AS,
NBU 921-21A2DS & NBU 921-21B1CS
LOCATED IN SECTION 21, T.9S., R.21E.
S.L.B.&M., UINTAH COUNTY, UTAH

Scale: 1"=100'	Date: 3/18/09	SHEET NO:
REVISED:		7 7 OF 13



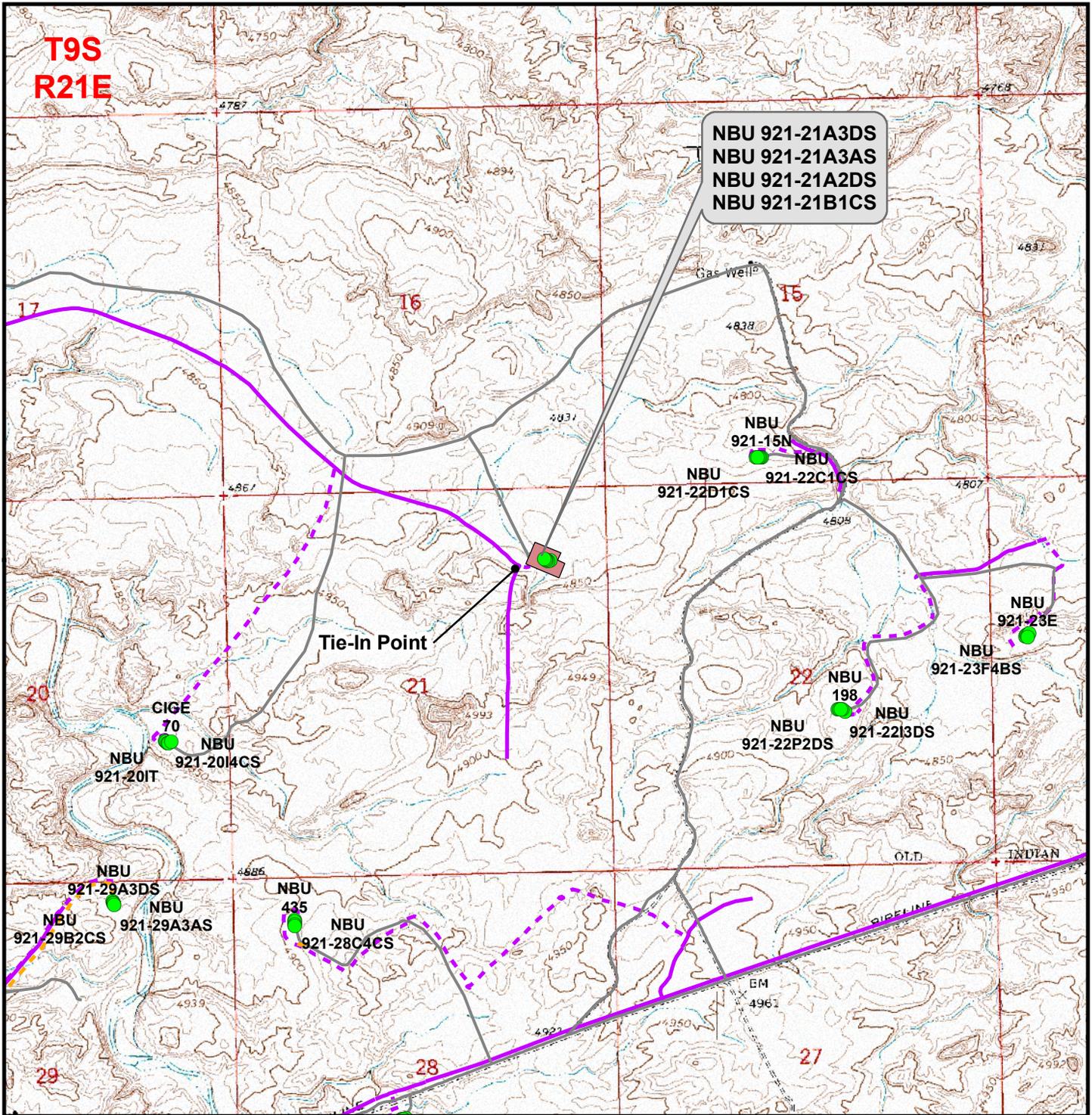
Timberline (435) 789-1365
Engineering & Land Surveying, Inc.
38 WEST 100 NORTH VERNAL, UTAH 84078

'APIWellNo:43047506120000'









Legend

- Well - Proposed
- Well Pad
- Road - Proposed
- Pipeline - Proposed
- Road - Existing
- Pipeline - Existing

Proposed Pipeline Length From Tie-In Point To Edge Of Pad: ±50ft
 Proposed Pipeline Length Around Pad: ±660ft

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

**NBU 921-21A3DS, NBU 921-21A3AS,
 NBU 921-21A2DS & NBU 921-21B1CS**
 Topo D
 Located In Section 21, T9S, R21E
 S.L.B.&M., Uintah County, Utah

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



Scale: 1" = 2000ft	NAD83 USP Central	Sheet No:
Drawn: JELo	Date: 24 Feb 2009	12
Revised:	Date:	

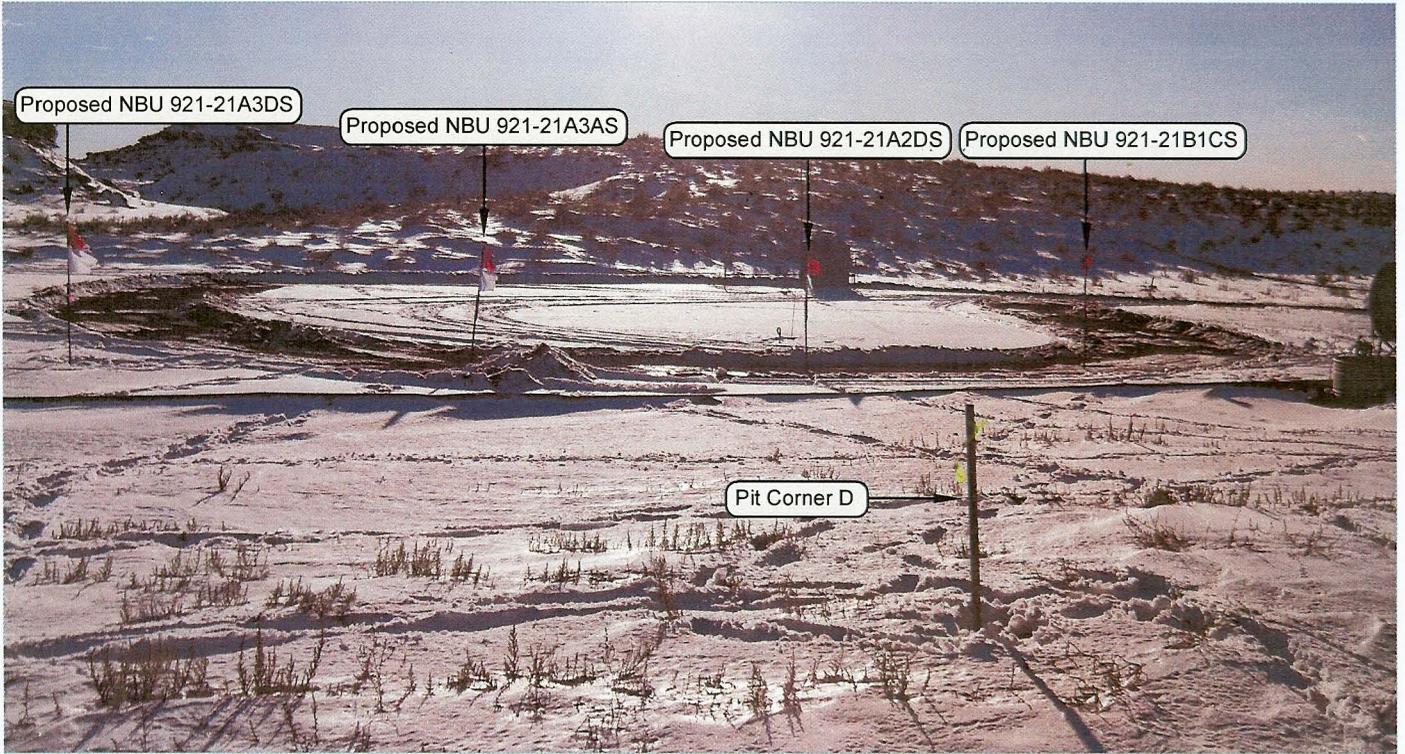


PHOTO VIEW: FROM PIT CORNER D TO LOCATION STAKES

CAMERA ANGLE: SOUTHWESTERLY

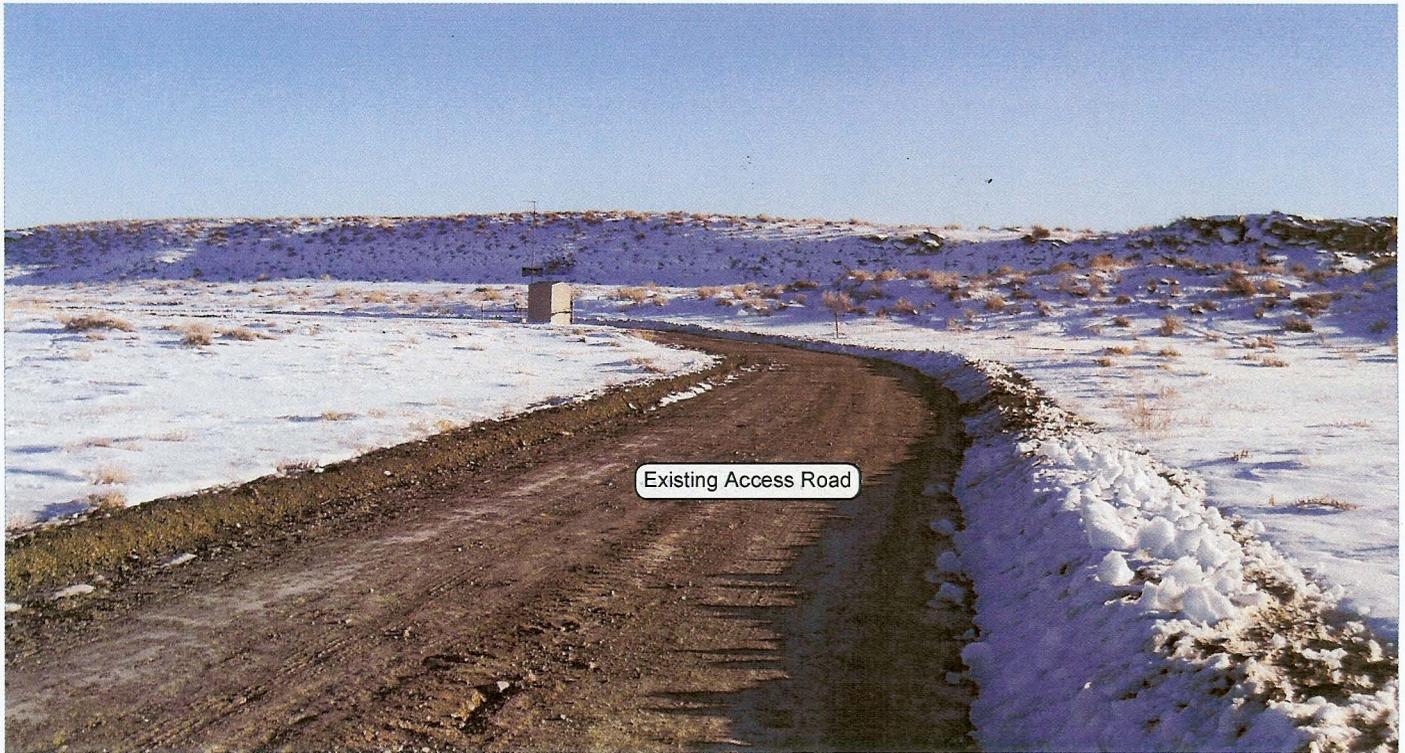
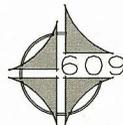


PHOTO VIEW: FROM EXISTING ACCESS ROAD

CAMERA ANGLE: SOUTHEASTERLY

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



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

NBU 921-21A3DS, NBU 921-21A3AS,
 NBU 921-21A2DS & NBU 921-21B1CS
 LOCATED IN SECTION 21, T9S, R21E,
 S.L.B.&M. UINTAH COUNTY, UTAH.

LOCATION PHOTOS

TAKEN BY: M.S.B.

DRAWN BY: E.M.S.

DATE TAKEN: 01-12-09

DATE DRAWN: 02-13-09

REVISED:

Timberline (435) 789-1365
Engineering & Land Surveying, Inc.
 209 NORTH 300 WEST VERNAL, UTAH 84078

SHEET
8
OF 13

Kerr-McGee Oil & Gas Onshore, LP
NBU 921-21A3DS, NBU 921-21A3AS, NBU 921-21A2DS & NBU 921-21B1CS
Section 21, T9S, R21E, S.L.B.&M.

PROCEED IN A WESTERLY DIRECTION FROM VERNAL, UTAH ALONG U.S. HIGHWAY 40 APPROXIMATELY 13.9 MILES TO THE JUNCTION OF STATE HIGHWAY 88. EXIT LEFT AND PROCEED IN A SOUTHERLY DIRECTION ALONG STATE HIGHWAY 88 APPROXIMATELY 16.8 MILES TO OURAY, UTAH. FROM OURAY, PROCEED IN A SOUTHERLY DIRECTION ALONG THE SEEP RIDGE ROAD (COUNTY B ROAD 2810) APPROXIMATELY 11.2 MILES TO THE INTERSECTION OF THE GLEN BENCH ROAD (COUNTY B ROAD 3260). EXIT LEFT AND PROCEED IN AN EASTERLY, THEN SOUTHEASTERLY, THEN NORTHEASTERLY DIRECTION ALONG THE GLEN BENCH ROAD APPROXIMATELY 11.4 MILES TO A CLASS D COUNTY ROAD TO THE SOUTHWEST. EXIT LEFT AND PROCEED IN A SOUTHWESTERLY DIRECTION ALONG THE CLASS D COUNTY ROAD APPROXIMATELY 1.8 MILES TO A SECOND CLASS D COUNTY ROAD TO THE NORTH. EXIT RIGHT AND PROCEED IN A NORTH BY NORTHWEST DIRECTION ALONG THE SECOND CLASS D COUNTY ROAD APPROXIMATELY 0.3 MILES TO A THIRD CLASS D COUNTY ROAD TO THE NORTH. EXIT RIGHT AND PROCEED IN A NORTHERLY, THEN NORTHEASTERLY, THEN NORTHERLY DIRECTION ALONG THE THIRD CLASS D COUNTY ROAD APPROXIMATELY 2.0 MILES TO A SERVICE ROAD TO THE SOUTHWEST. EXIT LEFT AND PROCEED IN A SOUTHWESTERLY DIRECTION ALONG THE SERVICE ROAD APPROXIMATELY 0.9 MILES TO A SECOND SERVICE ROAD TO THE SOUTH. EXIT LEFT AND PROCEED IN A SOUTH BY SOUTHWEST DIRECTION APPROXIMATELY 0.4 MILES TO THE CIGE 46 WELL PAD.

TOTAL DISTANCE FROM VERNAL, UTAH TO THE PROPOSED WELL LOCATION IS APPROXIMATELY 58.7 MILES IN A SOUTHERLY DIRECTION.

NBU 921-21A2DS

Surface: 1,009' FNL 852' FEL (NE/4NE/4)
BHL: 474' FNL 670' FEL (NE/4NE/4)

NBU 921-21A3AS

Surface: 1,017' FNL 833' FEL (NE/4NE/4)
BHL: 841' FNL 670' FEL (NE/4NE/4)

NBU 921-21A3DS

Surface: 1,025' FNL 815' FEL (NE/4NE/4)
BHL: 1,193' FNL 670' FEL (NE/4NE/4)

NBU 921-21B1CS

Surface: 1,000' FNL 870' FEL (NE/4NE/4)
BHL: 597' FNL 1,981' FEL (NW/4NE/4)

Pad: NBU 921-21A
Sec. 21 T9S R21E

Uintah, Utah
Mineral Lease: UTU 0576

Surface Owner: Ute Indian Tribe

ONSHORE ORDER NO. 1

***MULTI-POINT SURFACE USE & OPERATIONS PLAN
SUBMITTED WITH SITE-SPECIFIC INFORMATION***

This Application for Permit to Drill (APD) is filed under the Notice of Staking (NOS) process as stated in Onshore Order No. 1 (OSO #1) and supporting Bureau of Land Management (BLM) and Bureau of Indian Affairs (BIA) documents. An NOS was submitted showing the surface locations in NE/4 NE/4 of Section 21 T9S R21E. The NBU 921-21B1CS was formerly known as the NBU 921-21B2DS, therefore documents may reflect the old name.

This Surface Use Plan of Operations (SUPO) or 13-point plan provides the site-specific information for the above-referenced wells. This information is to be incorporated by reference into the Master Development Plan (MDP) for Kerr-McGee Oil & Gas Onshore LP (Kerr-McGee). The MDP is available upon request from the BIA-Ft Duchesne Office.

An on-site meeting was held on June 24, 2009. Present were:

- Verlyn Pindell and Dave Gordon – BLM;
- Bucky Secakuku – BIA
- Kolby Kay and Mitch Batty – Timberline Surveying, Inc.
- Nick Hall – Grasslands Consulting, Inc.
- Scott Carson – Smiling Lake Consulting
- Keith Montgomery – Montgomery Archaeological Consultants, Inc.
- Tony Kazeck, Jeff Samuels, Raleen White, David Liddell, and Hal Blanchard – Kerr-McGee

Directional Drilling:

In accordance with Utah Oil & Gas Conservation Rule R649-3-11 pertaining to Directional Drilling, this well will be directionally drilled in order to access portions of Kerr-McGee's lease which are otherwise inaccessible due to topography.

1. Existing Roads:

- A) Refer to Topo Map A for directions to the location.
- B) Refer to Topo Maps A and B for location of access roads within a 2-mile radius.

2. Planned Access Roads:

See MDP for additional details on road construction.

No new access road is proposed, as the road was previously included with the existing CIGE 46 well. Please refer to the attached Topo Map B. No pipelines will be crossed with the new construction.

Existence of pipelines; maximum grade; turnouts; major cut and fills, culverts, or bridges; gates, cattle guards, fence cuts, or modifications to existing facilities were determined at the on-site and are typically shown on the attached Exhibits and Topo maps.

3. Location of Existing Wells Within a 1-Mile Radius:

Please refer to Topo Map C.

4. Location of Existing and Proposed Facilities:

See MDP for additional details on Existing and Proposed Facilities.

This pad will expand the existing pad for the CIGE 46, which is a producing well according to Utah Division of Oil, Gas and Mining (UDOGM) records.

The following guidelines will apply if the well is productive.

Approximately ±710' (±0.13 miles) of pipeline is proposed. The existing pipeline, as shown on Topo D, will be upgraded to accommodate anticipated production from the proposed wells. The upgraded pipeline will follow the same route as the existing pipeline. Appropriate surface use agreements have been or will be obtained from the Ute Indian Tribe. Pipeline segments will be welded or zaplocked together on disturbed areas in or near the location, whenever possible, and dragged into place

Per the onsite meeting, the following items were requested:

- The equipment (new and old infrastructure) will be painted Shadow Grey.
- The existing pipeline will be moved off the damage area of the well pad.
- Diversion drainages will be constructed around the well pad.

5. Location and Type of Water Supply:

See MDP for additional details on 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.

No water well is to be drilled on this lease.

6. Source of Construction Materials:

See MDP for additional details on Source of Construction Materials.

7. Methods of Handling Waste Materials:

See MDP for additional details on Methods of Handling Waste Materials.

Any produced water from the proposed well will be contained in a water tank and will then be hauled by truck to one of the pre-approved disposal sites:

- RNI in Sec. 5 T9S R22E
- NBU #159 in Sec. 35 T9S R21E
- 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

8. Ancillary Facilities:

See MDP for additional details on Ancillary Facilities.

None are anticipated.

9. Well Site Layout: (See Location Layout Diagram)

See MDP for additional details on Well Site Layout.

All pits will be fenced according to the following minimum standards:

- Net wire (39-inch) will be used with at least one strand of barbed wire on top of the net wire. Barbed wire is not necessary if pipe or some type of reinforcement rod is attached to the top of the entire fence.
- The net wire shall be no more than two inches above the ground. The barbed wire shall be three inches over the net wire. Total height of the fence shall be at least 42 inches.
- Corner posts shall be cemented and/or braced in such a manner 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.
- All wire shall be stretched, by using a stretching device, before it is attached to corner posts.

10. Plans for Reclamation of the Surface:

See MDP for additional details on Plans for Reclamation of the Surface.

Kerr-McGee shall call the BIA for the seed mixture prior to starting interim and/or final reclamation actions.

11. Surface/Mineral Ownership:

The well pad and access road are located on lands owned by:

Ute Indian Tribe
PO Box 70
Fort Duchesne, Utah 84026
435-722-5141

The mineral ownership is listed below:

United States of America
Bureau of Land Management
170 South 500 East
Vernal, UT 84078
435-781-4400

12. Other Information:

See MDP for additional details on Other Information.

At the time the Arch report was prepared, the NBU 921-21B1CS was known as the NBU 921-21B2DS.

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

Kathy Schneebeck Dulnoan
Regulatory Analyst
Kerr-McGee Oil & Gas Onshore LP
PO Box 173779
Denver, CO 80217-3779
(720) 929-6007

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 pursuant to 43 CFR 3104 for lease activities is being provided 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.



Kathy Schneebeck Dulnoan

July 28, 2009

Date



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

June 9, 2009

Diana Mason
Utah Department of Oil, Gas & Mining
P.O. Box 145801
Salt Lake City, Utah 54114-6100

RE: Directional Drilling Letter R649-3-11
NBU 921-21B1CS
T9S-R21E
Section 21: NE/4NE/4 surface, NW/4NE/4 bottom hole
1000' FNL, 870' FEL (surface)
597' FNL, 1981' FEL (bottom hole)
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 the Exception to Location and Siting of Wells.

- Kerr-McGee's NBU 921-21B1CS 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 to be granted pursuant to R649-3-11.

Sincerely,

KERR-MCGEE OIL & GAS ONSHORE LP

Joe Matney
Senior Staff Landman

CLASS I REVIEW OF KERR-MCGEE OIL & GAS
ONSHORE LP'S 50 PROPOSED WELL LOCATIONS
IN T9S, R21E SECS. 19, 20, 21, 23, 28, 29 AND 30
UINTAH COUNTY, UTAH

By:

Jacki A. Montgomery

Prepared For:

Ute Tribal Land
Uintah and Ouray Agency

Bureau of Land Management
Vernal Field Office

Prepared Under Contract With:

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

Prepared By:

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

MOAC Report No. 09-11

February 23, 2009

United States Department of Interior (FLPMA)
Permit No. 08-UT-60122

Public Lands Policy Coordination Office
Archaeological Survey Permit No. 117

Ute Tribal Permit No. A08-363

Paleontological Assessment for Anadarko Petroleum Corp.

NBU 921-21A3DS, A3AS, A2DS, B1CS
Ouray SE Quadrangle
Uintah County, Utah

Prepared for
Anadarko Petroleum Corp.
and
Ute Tribe
Uintah and Ouray Reservation

Prepared by
SWCA Environmental Consultants
SWCA #UT09-14314-31



Grasslands Consulting, Inc.

4800 Happy Canyon Road, Suite 110, Denver, CO 80237

(303) 759-5377 Office (303) 759-5324 Fax

SPECIAL STATUS PLANT AND WILDLIFE SPECIES REPORT

Operator: Kerr-McGee Oil & Gas Onshore LP

Wells: NBU 921-21A Pad (Bores: NBU 921-21A2DS, NBU 921-21A3AS, NBU 921-21A3DS, and NBU 921-21B1CS) and NBU 921-21E Pad (Bores: NBU 921-21F4SC, NBU 921-21E4T, NBU 921-21L1S, and NBU 921-21E1S)

Pipelines: Proposed Pipeline leading to the NBU 921-21E Pad

Access Roads: N/A

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

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

Date: 06/17/2009

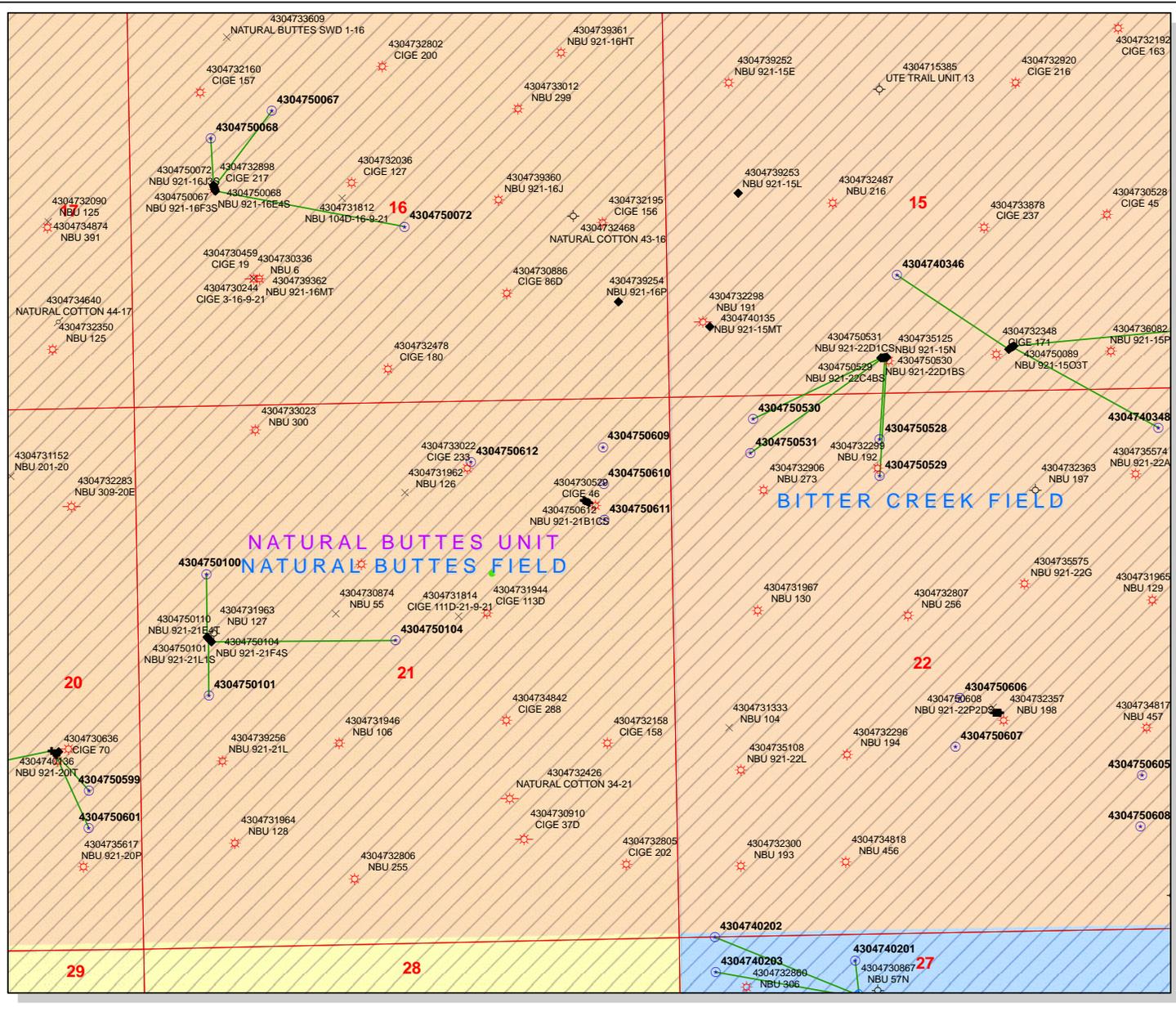
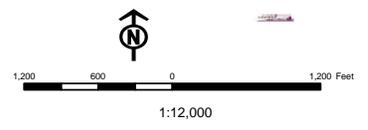
Observer(s): Grasslands Consulting, Inc. Biologists: Nick Hall, Jay Slocum, Dan Hamilton, Matt Kelahan, Jonathan Sexauer, and BJ Lukins. Technicians: Chad Johnson

Weather: Partly cloudy, 80-85°F, 0-5 mph winds with no precipitation.

API Number: 4304750611
Well Name: NBU 921-21A3DS
Township 09.0 S Range 21.0 E Section 21
Meridian: SLBM
 Operator: KERR-MCGEE OIL & GAS ONSHORE, L.P.

Map Prepared:
 Map Produced by Diana Mason

Units	Wells Query Events
STATUS	GIS_STAT_TYPE
ACTIVE	<-Null>
EXPLORATORY	APD
GAS STORAGE	DRL
NP PP OIL	GI
NP SECONDARY	GS
PI OIL	LA
PP GAS	NEW
PP GEOTHERMAL	OPS
PP OIL	PA
SECONDARY	PGW
TERMINATED	POW
Fields	RET
ACTIVE	SGW
COMBINED	SOW
Sections	TA
	TW
	WD
	WT
	WS



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)

July 31, 2009

Memorandum

To: Assistant District Manager Minerals, Vernal District
From: Michael Coulthard, Petroleum Engineer
Subject: 2009 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 2009 within the Natural Buttes Unit, Uintah County, Utah.

API #	WELL NAME	LOCATION
(Proposed PZ WASATCH-MESA VERDE)		
43-047-50602	NBU 922-34C3DS	Sec 34 T09S R22E 2026 FNL 0491 FWL
	BHL	Sec 34 T09S R22E 1062 FNL 1840 FWL
43-047-50603	NBU 922-34D3AS	Sec 34 T09S R22E 2025 FNL 0472 FWL
	BHL	Sec 34 T09S R22E 0889 FNL 0580 FWL
43-047-50604	NBU 922-34D2DS	Sec 34 T09S R22E 2025 FNL 0452 FWL
	BHL	Sec 34 T09S R22E 0531 FNL 0556 FWL
43-047-50605	NBU 921-22I3DS	Sec 22 T09S R21E 2131 FSL 2077 FEL
	BHL	Sec 22 T09S R21E 1486 FSL 0685 FEL
43-047-50606	NBU 921-22J2CS	Sec 22 T09S R21E 2130 FSL 2137 FEL
	BHL	Sec 22 T09S R21E 2281 FSL 2476 FEL
43-047-50607	NBU 921-22J3BS	Sec 22 T09S R21E 2130 FSL 2117 FEL
	BHL	Sec 22 T09S R21E 1798 FSL 2526 FEL
43-047-50608	NBU 921-22P2DS	Sec 22 T09S R21E 2131 FSL 2097 FEL
	BHL	Sec 22 T09S R21E 0978 FSL 0709 FEL
43-047-50609	NBU 921-21A2DS	Sec 21 T09S R21E 1009 FNL 0852 FEL
	BHL	Sec 21 T09S R21E 0474 FNL 0670 FEL

Page 2

43-047-50610	NBU 921-21A3AS	Sec 21 T09S R21E 1017 FNL 0833 FEL
	BHL	Sec 21 T09S R21E 0841 FNL 0670 FEL
43-047-50611	NBU 921-21A3DS	Sec 21 T09S R21E 1025 FNL 0815 FEL
	BHL	Sec 21 T09S R21E 1193 FNL 0670 FEL
43-047-50612	NBU 921-21B1CS	Sec 21 T09S R21E 1000 FNL 0870 FEL
	BHL	Sec 21 T09S R21E 0597 FNL 1981 FEL

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

/s/ Michael L. Coulthard

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

MCoulthard:mc:7-31-09

**WORKSHEET
APPLICATION FOR PERMIT TO DRILL**

APD RECEIVED: 7/30/2009

API NO. ASSIGNED: 43047506120000

WELL NAME: NBU 921-21B1CS

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

PHONE NUMBER: 720 929-6156

CONTACT: Danielle Piernot

PROPOSED LOCATION: NENE 21 090S 210E

Permit Tech Review:

SURFACE: 1000 FNL 0870 FEL

Engineering Review:

BOTTOM: 0597 FNL 1981 FEL

Geology Review:

COUNTY: UINTAH

LATITUDE: 40.02607

LONGITUDE: -109.54969

UTM SURF EASTINGS: 623757.00

NORTHINGS: 4431448.00

FIELD NAME: NATURAL BUTTES

LEASE TYPE: 1 - Federal

LEASE NUMBER: UTU 0576

PROPOSED PRODUCING FORMATION(S): WASATCH-MESA VERDE

SURFACE OWNER: 2 - Indian

COALBED METHANE: NO

RECEIVED AND/OR REVIEWED:

- PLAT
- Bond: FEDERAL - WYB000291
- Potash
- Oil Shale 190-5
- Oil Shale 190-3
- Oil Shale 190-13
- Water Permit: Permit #43-8496
- RDCC Review:
- Fee Surface Agreement
- Intent to Commingle

Commingle Approved

LOCATION AND SITING:

- R649-2-3.
Unit: NATURAL BUTTES
- R649-3-2. General
- R649-3-3. Exception
- Drilling Unit
Board Cause No: Cause 173-14
Effective Date: 12/2/1999
Siting: 460' fr u bdry & uncomm. tract
- R649-3-11. Directional Drill

Comments: Presite Completed

Stipulations:
3 - Commingle - ddoucet
4 - Federal Approval - dmason
15 - Directional - dmason
17 - Oil Shale 190-5(b) - dmason



JON M. HUNTSMAN, JR.
Governor

GARY R. HERBERT
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 921-21B1CS
API Well Number: 43047506120000
Lease Number: UTU 0576
Surface Owner: INDIAN
Approval Date: 8/11/2009

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 Cause No. 173-14 commingling 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:

State approval of this well does not supercede the required federal approval, which must be obtained prior to drilling.

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.

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 at 801-538-5284 (please leave a voicemail message if not available)

OR

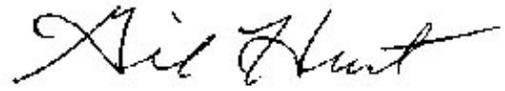
submit an electronic sundry notice (pre-registration required) via the Utah Oil & Gas website at <http://oilgas.ogm.utah.gov>

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:



Gil Hunt
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: UTU 0576
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: Ute Tr
1. TYPE OF WELL Gas Well	7. UNIT or CA AGREEMENT NAME: NATURAL BUTTES
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.	8. WELL NAME and NUMBER: NBU 921-21B1CS
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779	9. API NUMBER: 43047506120000
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1000 FNL 0870 FEL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NENE Section: 21 Township: 09.0S Range: 21.0E Meridian: S	9. FIELD and POOL or WILDCAT: NATURAL BUTTES
	COUNTY: UINTAH
	STATE: UTAH

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

TYPE OF SUBMISSION	TYPE OF ACTION		
<input checked="" type="checkbox"/> NOTICE OF INTENT Approximate date work will start: 8/12/2010	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> CASING REPAIR
<input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion:	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> CHANGE WELL NAME
<input type="checkbox"/> SPUD REPORT Date of Spud:	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> CONVERT WELL TYPE
<input type="checkbox"/> DRILLING REPORT Report Date:	<input 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 checked="" 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.

Kerr-McGee Oil & Gas Onshore, L.P. (Kerr-McGee) respectfully requests an extension to this APD for the maximum time allowed. Please contact the undersigned with any questions and/or comments. Thank you.

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

Date: August 23, 2010
By: 

NAME (PLEASE PRINT) Danielle Piernot	PHONE NUMBER 720 929-6156	TITLE Regulatory Analyst
SIGNATURE N/A	DATE 8/12/2010	



The Utah Division of Oil, Gas, and Mining

- State of Utah
- Department of Natural Resources

Electronic Permitting System - Sundry Notices

Request for Permit Extension Validation Well Number 43047506120000

API: 43047506120000

Well Name: NBU 921-21B1CS

Location: 1000 FNL 0870 FEL QTR NENE SEC 21 TWP 090S RNG 210E MER S

Company Permit Issued to: KERR-MCGEE OIL & GAS ONSHORE, L.P.

Date Original Permit Issued: 8/11/2009

The undersigned as owner with legal rights to drill on the property as permitted above, hereby verifies that the information as submitted in the previously approved application to drill, remains valid and does not require revision. Following is a checklist of some items related to the application, which should be verified.

- If located on private land, has the ownership changed, if so, has the surface agreement been updated? Yes No
- Have any wells been drilled in the vicinity of the proposed well which would affect the spacing or siting requirements for this location? Yes No
- Has there been any unit or other agreements put in place that could affect the permitting or operation of this proposed well? Yes No
- Have there been any changes to the access route including ownership, or rightof- way, which could affect the proposed location? Yes No
- Has the approved source of water for drilling changed? Yes No
- Have there been any physical changes to the surface location or access route which will require a change in plans from what was discussed at the onsite evaluation? Yes No
- Is bonding still in place, which covers this proposed well? Yes No

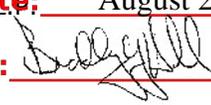
**Approved by the
Utah Division of
Oil, Gas and Mining**

Signature: Danielle Piernot

Date: 8/12/2010

Title: Regulatory Analyst **Representing:** KERR-MCGEE OIL & GAS ONSHORE, L.P.

Date: August 23, 2010

By: 

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

RECEIVED

FORM APPROVED
OMB No. 1004-0136
Expires July 31, 2010

August 2009
mc
BLM

APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of Work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. UTU0576
1b. Type of Well: <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input type="checkbox"/> Single Zone <input checked="" type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name
2. Name of Operator KERRMCGEE OIL&GAS ONSHORE LP Contact: DANIELLE E PIERNOT Email: Danielle.Piernot@anadarko.com		7. If Unit or CA Agreement, Name and No. 891008900A
3a. Address PO BOX 173779 DENVER, CO 80202-3779		8. Lease Name and Well No. NBU 921-21B1CS
3b. Phone No. (include area code) Ph: 720-929-6156 Fx: 720-929-7156		9. API Well No. <i>13-047-50612</i>
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface NENE 1000FNL 870FEL 40.02611 N Lat, 109.55041 W Lon At proposed prod. zone NWNE 597FNL 1981FEL 40.02720 N Lat, 109.55438 W Lon		10. Field and Pool, or Exploratory NATURAL BUTTES
14. Distance in miles and direction from nearest town or post office* APPROXIMATELY 28 MILES SOUTHEAST OF OURAY, UTAH		11. Sec., T., R., M., or Blk. and Survey or Area Sec 21 T9S R21E Mer SLB
15. Distance from proposed location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 597 FEET	16. No. of Acres in Lease 1480.00	12. County or Parish UINTAH
17. Spacing Unit dedicated to this well	13. State UT	20. BLM/BIA Bond No. on file WYB000291
18. Distance from proposed location to nearest well, drilling, completed, applied for, on this lease, ft. APPROXIMATELY 1320 FEET	19. Proposed Depth 10489 MD 10220 TVD	21. Estimated duration 60-90 DAYS
21. Elevations (Show whether DF, KB, RT, GL, etc.) 4829 GL	22. Approximate date work will start 08/17/2009	

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, shall be attached to this form:

- | | |
|---|--|
| 1. Well plat certified by a registered surveyor. | 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above). |
| 2. A Drilling Plan. | 5. Operator certification |
| 3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office). | 6. Such other site specific information and/or plans as may be required by the authorized officer. |

25. Signature (Electronic Submission)	Name (Printed/Typed) DANIELLE E PIERNOT Ph: 720-929-6156	Date 07/30/2009
Title REGULATORY ANALYST		
Approved by (Signature) <i>Jerry Kenczka</i>	Name (Printed/Typed) Jerry Kenczka	Date MAY 24 2011
Title Assistant Field Manager Lands & Mineral Resources	Office VERNAL FIELD OFFICE	

Application approval does not warrant or certify the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.
Conditions of approval, if any, are attached.

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

Additional Operator Remarks (see next page)

Electronic Submission #72661 verified by the BLM Well Information System
For KERRMCGEE OIL&GAS ONSHORE LP, sent to the Vernal
Committed to AFMSS for processing by GAIL JENKINS on 08/04/2009 ()

UDOGM

RECEIVED
JUN 08 2011
DIV. OF OIL, GAS & MIN
NOS APD POSTED 81009
AFMSS#09GXJ5646A

** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED **

NOTICE OF APPROVAL

09GXJ5646AE NO NOS

CONDITIONS OF APPROVAL ATTACHED



**UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
VERNAL FIELD OFFICE**

170 South 500 East

VERNAL, UT 84078

(435) 781-4400



CONDITIONS OF APPROVAL FOR APPLICATION FOR PERMIT TO DRILL

Company:	Kerr McGee Oil & Gas Onshore LP	Location:	NENE, Sec 21, T9S R21E
Well No:	NBU 921-21B1CS	Lease No:	UTU-0576
API No:	43-047-50612	Agreement:	Natural Buttes Unit

OFFICE NUMBER: (435) 781-4400

OFFICE FAX NUMBER: (435) 781-3420

**A COPY OF THESE CONDITIONS SHALL BE FURNISHED TO YOUR
FIELD REPRESENTATIVE TO INSURE COMPLIANCE**

All lease and/or unit operations are to be conducted in such a manner that full compliance is made with the applicable laws, regulations (43 CFR Part 3160), and this approved Application for Permit to Drill including Surface and Downhole Conditions of Approval. The operator is considered fully responsible for the actions of his subcontractors. A copy of the approved APD must be on location during construction, drilling, and completion operations. **This permit is approved for a two (2) year period, or until lease expiration, whichever occurs first. An additional extension, up to two (2) years, may be applied for by sundry notice prior to expiration.**

NOTIFICATION REQUIREMENTS

Construction Activity (Notify Ute Tribe Energy & Minerals Dept. and BLM Environmental Scientist)	- The Ute Tribe Energy & Minerals Dept. and BLM Environmental Scientist shall be notified at least 48 hours in advance of any construction activity. The Ute Tribal office is open Monday through Thursday.
Construction Completion (Notify Ute Tribe Energy & Minerals Dept. and BLM Environmental Scientist)	- Upon completion of the pertinent APD/ROW construction, notify the Ute Tribe Energy & Minerals Dept. for a Tribal Technician to verify the Affidavit of Completion. Notify the BLM Environmental Scientist prior to moving on the drilling rig.
Spud Notice (Notify BLM Petroleum Engineer)	- Twenty-Four (24) hours prior to spudding the well.
Casing String & Cementing (Notify BLM Supv. Petroleum Tech.)	- Twenty-Four (24) hours prior to running casing and cementing all casing strings to: ut_vn_opreport@blm.gov .
BOP & Related Equipment Tests (Notify BLM Supv. Petroleum Tech.)	- Twenty-Four (24) hours prior to initiating pressure tests.
First Production Notice (Notify BLM Petroleum Engineer)	- Within Five (5) business days after new well begins or production resumes after well has been off production for more than ninety (90) days.

SURFACE USE PROGRAM CONDITIONS OF APPROVAL (COAs)

SITE SPECIFIC CONDITIONS OF APPROVAL

- Paint old and new facilities "Shadow Gray."
- Move the existing pipeline off the damage area of the well pad.
- Construct diversion ditches around the well pad.
- In accordance with the guidelines specified in the Utah BLM Field Office Guidelines for Raptor Protection from Human and Land Use Disturbances, 2002 (See Appendix D), a raptor survey would take place during raptor nesting season (January 1 through September 30) and conduct its operations according to specifications in the guidelines.
- If project construction operation are not initiated before June 17, 2010. KMG should conduct additional biological surveys in accordance with the guidelines specified in the USFWS Rare Plant Conservation Measurements for Uinta Basin Hookless cactus (See Appendix D) and conduct its operations according to its specifications.

BIA Standard Conditions of Approval:

- Soil erosion will be mitigated by reseeded all disturbed areas.
- The gathering pipelines will be constructed to lie on the surface. The surface pipelines will not be bladed or cleared of vegetation. Where pipelines are constructed parallel to roads they may be welded on the road and then lifted from the road onto the right-of-way. Where pipelines do not parallel roads but cross-country between sites, they shall be welded in place at well sites or on access roads and then pulled between stations with a suitable piece of equipment. Traffic will be restricted along these areas so that the pipeline right-of-way will not be used as an access road.
- An open drilling system shall be used, unless otherwise specified in 10.0 Additional Stipulations of this document and in the Application for Permit to Drill. A closed drilling system shall be used in all flood plain areas, and other highly sensitive areas, recommended by the Ute Tribe Technician, BIA, and other agencies involved.
- The reserve pit shall be lined with a synthetic leak proof liner. After the drilling operation is complete, excess fluids shall be removed from the reserve pit and either hauled to an approved disposal site or shall be used to drill other wells. When the fluids are removed the pit shall be backfilled a minimum of 3.0' below the soil surface elevation.
- A closed production system shall be used. This means all produced water and oil field fluid wastes shall be contained in leak proof tanks. These fluids shall be disposed of in either approved injection wells or disposal pits.
- Major low water crossings will be armored with pit run material to protect them from erosion.
- All personnel should refrain from collecting any paleontological fossils and from disturbing any fossil resources in the area.

- If fossils are exposed or identified during construction, all construction must cease and immediate notification to the Energy and Minerals Department and the Cultural Rights Protection Officer.
- Before the site is abandoned the company will be required to restore the right-of-way to near its original state. The disturbed area will be reseeded with desirable perennial vegetation. If necessary, the Bureau of Indian Affairs or Bureau of Land Management will provide a suitable seed mixture.
- Noxious weeds will be controlled on all surface disturbances within the project area. If noxious weeds spread from the project area onto adjoining land, the company will also be responsible for their control.
- If project construction operations are scheduled to occur after December 31, 2009, KMG should conduct annual raptor surveys in accordance with the guidelines specified in the Utah Field Office Guidelines for Raptor Protection from Human and Land Use Disturbances, 2002. If active raptor nest are identified during a new survey, KMG should conduct its operations according to the seasonal restrictions detailed in the Uinta basin-specific RMP guidelines and spatial offsets specified by the USFWS Utah Raptor Guidelines (See Appendix D).
- USFWS threatened and endangered plant and animal conservation measures will be followed, as appropriate to the species identified by the biological resource survey (See Appendix D).
- All personnel should refrain from collecting artifacts and from disturbing any significant cultural resources in the area.
- If artifacts or any culturally sensitive materials are exposed or identified during construction, all construction must cease and immediate notification to the Energy and Minerals Department and the Cultural Rights Protection Officer.

**DOWNHOLE PROGRAM
CONDITIONS OF APPROVAL (COAs)**

SITE SPECIFIC DOWNHOLE CONDITIONS OF APPROVAL

- A Gama Ray Log shall be run from TD to surface.

Variances Granted:

Air Drilling:

- Properly lubricated and maintained rotating head, variance granted to use a properly maintained and lubricated diverter bowl in place of a rotating head.
- Blooie line discharge 100' from the well bore, variance granted for blooie line discharge to be 45' from the well bore.
- Compressors located in the opposite direction from the blooie line a minimum of 100' from the well bore. Variance granted for two truck/trailer mounted air compressors located within 40 feet from the well bore and 60' from the blooie line.
- In lieu of mud products on location, Kerr McGee will fill the reserve pit with water for kill fluid.
- Automatic igniter. Variance granted for igniter due to there being no productive formations while drilling with air.
- FIT test. Variance granted due to well known geology and problems that can occur with FIT test.

All provisions outlined in Onshore Oil & Gas Order #2 Drilling Operations shall be strictly adhered to. The following items are emphasized:

DRILLING/COMPLETION/PRODUCING OPERATING STANDARDS

- The spud date and time shall be reported orally to Vernal Field Office within 24 hours of spudding.
- Notify Vernal Field Office Supervisory Petroleum Engineering Technician at least 24 hours in advance of casing cementing operations and BOPE & casing pressure tests.
- All requirements listed in Onshore Order #2 III. E. Special Drilling Operations are applicable for air drilling of surface hole.
- Blowout prevention equipment (BOPE) shall remain in use until the well is completed or abandoned. Closing unit controls shall remain unobstructed and readily accessible at all times. Choke manifolds shall be located outside of the rig substructure.
- All BOPE components shall be inspected daily and those inspections shall be recorded in the daily drilling report. Components shall be operated and tested as required by Onshore Oil & Gas Order No. 2 to insure good mechanical working order. All BOPE pressure tests shall be

performed by a test pump with a chart recorder and **NOT** by the rig pumps. Test shall be reported in the driller's log.

- BOP drills shall be initially conducted by each drilling crew within 24 hours of drilling out from under the surface casing and weekly thereafter as specified in Onshore Oil & Gas Order No. 2.
- Casing pressure tests are required before drilling out from under all casing strings set and cemented in place.
- No aggressive/fresh hard-banded drill pipe shall be used within casing.
- **Cement baskets shall not be run on surface casing.**
- The operator must report all shows of water or water-bearing sands to the BLM. If flowing water is encountered it must be sampled, analyzed, and a copy of the analyses submitted to the BLM Vernal Field Office.
- The operator must report encounters of all non oil & gas mineral resources (such as Gilsonite, tar sands, oil shale, trona, etc.) to the Vernal Field Office, in writing, within 5 working days of each encounter. Each report shall include the well name/number, well location, date and depth (from KB or GL) of encounter, vertical footage of the encounter and, the name of the person making the report (along with a telephone number) should the BLM need to obtain additional information.
- A complete set of angular deviation and directional surveys of a directional well will be submitted to the Vernal BLM office engineer within 30 days of the completion of the well.
- While actively drilling, chronologic drilling progress reports shall be filed directly with the BLM, Vernal Field Office on a weekly basis in sundry, letter format or e-mail to the Petroleum Engineers until the well is completed.
- A cement bond log (CBL) will be run from the production casing shoe to the top of cement and shall be utilized to determine the bond quality for the production casing. Submit a field copy of the CBL to this office.
- **Please submit an electronic copy of all other logs run on this well in LAS format to UT_VN_Welllogs@BLM.gov. This submission will supersede the requirement for submittal of paper logs to the BLM.**
- There shall be no deviation from the proposed drilling, completion, and/or workover program as approved. Safe drilling and operating practices must be observed. Any changes in operation must have prior approval from the BLM Vernal Field Office.

OPERATING REQUIREMENT REMINDERS:

- All wells, whether drilling, producing, suspended, or abandoned, shall be identified in accordance with 43 CFR 3162.6. There shall be a sign or marker with the name of the operator, lease serial number, well number, and surveyed description of the well.
- In accordance with 43 CFR 3162.4-3, this well shall be reported on the "Monthly Report of Operations" (Oil and Gas Operations Report ((OGOR)) starting with the month in which operations commence and continue each month until the well is physically plugged and abandoned. This report shall be filed in duplicate, directly with the Minerals Management Service, P.O. Box 17110, Denver, Colorado 80217-0110, or call 1-800-525-7922 (303) 231-3650 for reporting information.
- Should the well be successfully completed for production, the BLM Vernal Field office must be notified when it is placed in a producing status. Such notification will be by written communication and must be received in this office by not later than the fifth business day following the date on which the well is placed on production. The notification shall provide, as a minimum, the following informational items:
 - Operator name, address, and telephone number.
 - Well name and number.
 - Well location (¼¼, Sec., Twn, Rng, and P.M.).
 - Date well was placed in a producing status (date of first production for which royalty will be paid).
 - The nature of the well's production, (i.e., crude oil, or crude oil and casing head gas, or natural gas and entrained liquid hydrocarbons).
 - The Federal or Indian lease prefix and number on which the well is located; otherwise the non-Federal or non-Indian land category, i.e., State or private.
 - Unit agreement and/or participating area name and number, if applicable.
 - Communitization agreement number, if applicable.
- Any venting or flaring of gas shall be done in accordance with Notice to Lessees (NTL) 4A and needs prior approval from the BLM Vernal Field Office.
- All undesirable events (fires, accidents, blowouts, spills, discharges) as specified in NTL 3A will be reported to the BLM, Vernal Field Office. Major events, as defined in NTL3A, shall be reported verbally within 24 hours, followed by a written report within 15 days. "Other than Major Events" will be reported in writing within 15 days. "Minor Events" will be reported on the Monthly Report of Operations and Production.
- Whether the well is completed as a dry hole or as a producer, "Well Completion and Recompletion Report and Log" (BLM Form 3160-4) shall be submitted not later than 30 days after completion of the well or after completion of operations being performed, in accordance with 43 CFR 3162.4-1. Two copies of all logs run, core descriptions, and all other surveys or

data obtained and compiled during the drilling, workover, and/or completion operations, shall be filed on BLM Form 3160-4. Submit with the well completion report a geologic report including, at a minimum, formation tops, and a summary and conclusions. Also include deviation surveys, sample descriptions, strip logs, core data, drill stem test data, and results of production tests if performed. Samples (cuttings, fluid, and/or gas) shall be submitted only when requested by the BLM, Vernal Field Office.

- All off-lease storage, off-lease measurement, or commingling on-lease or off-lease, shall have prior written approval from the BLM Vernal Field Office.
- Oil and gas meters shall be calibrated in place prior to any deliveries. The BLM Vernal Field Office Petroleum Engineers will be provided with a date and time for the initial meter calibration and all future meter proving schedules. A copy of the meter calibration reports shall be submitted to the BLM Vernal Field Office. All measurement facilities will conform to the API standards for liquid hydrocarbons and the AGA standards for natural gas measurement. All measurement points shall be identified as the point of sale or allocation for royalty purposes.
- A schematic facilities diagram as required by Onshore Oil & Gas Order No. 3 shall be submitted to the BLM Vernal Field Office within 30 days of installation or first production, whichever occurs first. All site security regulations as specified in Onshore Oil & Gas Order No. 3 shall be adhered to. All product lines entering and leaving hydrocarbon storage tanks will be effectively sealed in accordance with Onshore Oil & Gas Order No. 3.
- Any additional construction, reconstruction, or alterations of facilities, including roads, gathering lines, batteries, etc., which will result in the disturbance of new ground, shall require the filing of a suitable plan and need prior approval of the BLM Vernal Field Office. Emergency approval may be obtained orally, but such approval does not waive the written report requirement.
- No location shall be constructed or moved, no well shall be plugged, and no drilling or workover equipment shall be removed from a well to be placed in a suspended status without prior approval of the BLM Vernal Field Office. If operations are to be suspended for more than 30 days, prior approval of the BLM Vernal Field Office shall be obtained and notification given before resumption of operations.
- Pursuant to Onshore Oil & Gas Order No. 7, this is authorization for pit disposal of water produced from this well for a period of 90 days from the date of initial production. A permanent disposal method must be approved by this office and in operation prior to the end of this 90-day period. In order to meet this deadline, an application for the proposed permanent disposal method shall be submitted along with any necessary water analyses, as soon as possible, but no later than 45 days after the date of first production. Any method of disposal which has not been approved prior to the end of the authorized 90-day period will be considered as an Incident of Noncompliance and will be grounds for issuing a shut-in order until an acceptable manner for disposing of said water is provided and approved by this office.
- Unless the plugging is to take place immediately upon receipt of oral approval, the Field Office Petroleum Engineers must be notified at least 24 hours in advance of the plugging of the well, in order that a representative may witness plugging operations. If a well is suspended or abandoned, all pits must be fenced immediately until they are backfilled. The "Subsequent Report of Abandonment" (Form BLM 3160-5) must be submitted within 30 days after the actual plugging of the well bore, showing location of plugs, amount of cement in each, and amount of casing left in hole, and the current status of the surface restoration.

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		FORM 9
		5. LEASE DESIGNATION AND SERIAL NUMBER: UTU 0576
SUNDRY NOTICES AND REPORTS ON WELLS		6. IF INDIAN, ALLOTTEE OR TRIBE NAME: Ute Tr
Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		7. UNIT or CA AGREEMENT NAME: NATURAL BUTTES
1. TYPE OF WELL Gas Well		8. WELL NAME and NUMBER: NBU 921-21B1CS
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.		9. API NUMBER: 43047506120000
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: 1000 FNL 0870 FEL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NENE Section: 21 Township: 09.0S Range: 21.0E Meridian: S		COUNTY: UINTAH
		STATE: UTAH
11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA		
TYPE OF SUBMISSION	TYPE OF ACTION	
<input checked="" type="checkbox"/> NOTICE OF INTENT Approximate date work will start: 7/11/2011 <input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion: <input type="checkbox"/> SPUD REPORT Date of Spud: <input type="checkbox"/> DRILLING REPORT Report Date:	<input type="checkbox"/> ACIDIZE <input type="checkbox"/> CHANGE TO PREVIOUS PLANS <input type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> DEEPEN <input type="checkbox"/> OPERATOR CHANGE <input type="checkbox"/> PRODUCTION START OR RESUME <input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> WATER SHUTOFF <input type="checkbox"/> WILDCAT WELL DETERMINATION <input type="checkbox"/> ALTER CASING <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input type="checkbox"/> FRACTURE TREAT <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> SI TA STATUS EXTENSION <input type="checkbox"/> OTHER	
	<input type="checkbox"/> CASING REPAIR <input type="checkbox"/> CHANGE WELL NAME <input type="checkbox"/> CONVERT WELL TYPE <input type="checkbox"/> NEW CONSTRUCTION <input type="checkbox"/> PLUG BACK <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION <input type="checkbox"/> TEMPORARY ABANDON <input type="checkbox"/> WATER DISPOSAL <input checked="" type="checkbox"/> APD EXTENSION OTHER: <input style="width: 100px;" type="text"/>	
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.		
Kerr-McGee Oil & Gas Onshore, L.P. (Kerr-McGee) respectfully requests an extension to this APD for the maximum time allowed. Please contact the undersigned with any questions and/or comments. Thank you.		
		Approved by the Utah Division of Oil, Gas and Mining
		Date: <u>07/11/2011</u>
		By: <u></u>
NAME (PLEASE PRINT) Andy Lytle	PHONE NUMBER 720 929-6100	TITLE Regulatory Analyst
SIGNATURE N/A		DATE 7/11/2011



The Utah Division of Oil, Gas, and Mining

- State of Utah
- Department of Natural Resources

Electronic Permitting System - Sundry Notices

Request for Permit Extension Validation Well Number 43047506120000

API: 43047506120000

Well Name: NBU 921-21B1CS

Location: 1000 FNL 0870 FEL QTR NENE SEC 21 TWP 090S RNG 210E MER S

Company Permit Issued to: KERR-MCGEE OIL & GAS ONSHORE, L.P.

Date Original Permit Issued: 8/11/2009

The undersigned as owner with legal rights to drill on the property as permitted above, hereby verifies that the information as submitted in the previously approved application to drill, remains valid and does not require revision. Following is a checklist of some items related to the application, which should be verified.

- If located on private land, has the ownership changed, if so, has the surface agreement been updated? Yes No

- Have any wells been drilled in the vicinity of the proposed well which would affect the spacing or siting requirements for this location? Yes No

- Has there been any unit or other agreements put in place that could affect the permitting or operation of this proposed well? Yes No

- Have there been any changes to the access route including ownership, or rightof- way, which could affect the proposed location? Yes No

- Has the approved source of water for drilling changed? Yes No

- Have there been any physical changes to the surface location or access route which will require a change in plans from what was discussed at the onsite evaluation? Yes No

- Is bonding still in place, which covers this proposed well? Yes No

Signature: Andy Lytle

Date: 7/11/2011

Title: Regulatory Analyst **Representing:** KERR-MCGEE OIL & GAS ONSHORE, L.P.

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	FORM 9 5. LEASE DESIGNATION AND SERIAL NUMBER: UTU 0576
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: Ute Tr
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	COUNTY: UINTAH
	STATE: UTAH

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

TYPE OF SUBMISSION	TYPE OF ACTION		
<input checked="" type="checkbox"/> NOTICE OF INTENT Approximate date work will start: 7/8/2011	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> CASING REPAIR
<input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion:	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> CHANGE WELL NAME
<input type="checkbox"/> SPUD REPORT Date of Spud:	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> CONVERT WELL TYPE
<input type="checkbox"/> DRILLING REPORT Report Date:	<input checked="" type="checkbox"/> DEEPEN	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> NEW CONSTRUCTION
	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> PLUG BACK
	<input type="checkbox"/> PRODUCTION START OR RESUME	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION
	<input type="checkbox"/> REPERFORATE CURRENT FORMATION	<input type="checkbox"/> SIDETRACK TO REPAIR WELL	<input type="checkbox"/> TEMPORARY ABANDON
	<input type="checkbox"/> TUBING REPAIR	<input type="checkbox"/> VENT OR FLARE	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> WATER SHUTOFF	<input type="checkbox"/> SI TA STATUS EXTENSION	<input type="checkbox"/> APD EXTENSION
	<input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> OTHER	OTHER: <input style="width: 100px;" type="text"/>

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

Kerr-McGee Oil & Gas Onshore, L.P. (Kerr-McGee) respectfully requests to change the total depth (TD) to include the Blackhawk formation, which is in the Mesaverde group for this well. In addition, Kerr-McGee respectfully requests approval in the well design, which includes hole and casing size changes. Please see the attached for additional details. Please contact the undersigned if you have any questions and/or comments. Thank you.

Approved by the Utah Division of Oil, Gas and Mining

Date: 07/11/2011

By: 

NAME (PLEASE PRINT) Laura Abrams	PHONE NUMBER 720 929-6356	TITLE Regulatory Analyst II
SIGNATURE N/A	DATE 7/7/2011	

Kerr-McGee Oil & Gas Onshore. L.P.**NBU 921-21B1CS**

Surface: 1000 FNL / 870 FEL NENE
 BHL: 597 FNL / 1981 FEL NWNE

Section 21 T9S R21E

Unitah County, Utah
 Mineral Lease: UTU-0576

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	1637	
Birds Nest	1984	Water
Mahogany	2325	Water
Wasatch	5022	Gas
Mesaverde	8000	Gas
MVU2	8970	Gas
MVL1	9473	Gas
Sego	10265	Gas
Castlegate	10353	Gas
MN5	10700	Gas
TVD	11300	
TD	11569	

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 11300' TVD, approximately equals
7,509 psi (0.66 psi/ft = actual bottomhole gradient)

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

Maximum anticipated surface pressure equals approximately 5,023 psi (bottom hole pressure
minus the pressure of a partially evacuated hole calculated at 0.22 psi/foot, per Onshore Order No. 2).

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

8. Anticipated Starting Dates:

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

9. Variances:

*Please refer to the attached Drilling Program.
Onshore Order #2 – Air Drilling Variance*

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

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

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

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

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

Background

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

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

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

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

Variance for BOPE Requirements

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

Variance for Mud Material Requirements

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

Variance for Special Drilling Operation (surface equipment placement) Requirements

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

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

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

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

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

Conclusion

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

10. **Other Information:**

Please refer to the attached Drilling Program.



KERR-McGEE OIL & GAS ONSHORE LP
DRILLING PROGRAM

CASING PROGRAM

							DESIGN FACTORS			
							LTC		BTC	
	SIZE	INTERVAL		WT.	GR.	CPLG.	BURST	COLLAPSE	TENSION	
CONDUCTOR	14"	0-40'					3,390	1,880	348,000	N/A
SURFACE	8-5/8"	0	to 2,780	28.00	IJ-55	LTC	1.95	1.44	5.11	N/A
PRODUCTION	4-1/2"	0	to 11,569	11.60	HCP-110	LTC or BTC	10,690 1.19	8,650 1.13	279,000 2.59	367,000 3.41

Surface casing:

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

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

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

Production casing:

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

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

CEMENT PROGRAM

		FT. OF FILL	DESCRIPTION	SACKS	EXCESS	WEIGHT		YIELD
SURFACE	LEAD	500'	Premium cmt + 2% CaCl	180	60%	15.80		1.15
Option 1			+ 0.25 pps flocele					
	TOP OUT CMT (6 jobs)	1,200'	20 gals sodium silicate + Premium cmt	270	0%	15.80		1.15
			+ 2% CaCl + 0.25 pps flocele					
SURFACE		NOTE: If well will circulate water to surface, option 2 will be utilized						
Option 2	LEAD	2,280'	65/35 Poz + 6% Gel + 10 pps gilsonite	210	35%	11.00		3.82
			+ 0.25 pps Flocele + 3% salt BWOW					
	TAIL	500'	Premium cmt + 2% CaCl	150	35%	15.80		1.15
			+ 0.25 pps flocele					
	TOP OUT CMT	as required	Premium cmt + 2% CaCl	as req.		15.80		1.15
PRODUCTION	LEAD	4,519'	Premium Lite II +0.25 pps	340	20%	11.00		3.38
			celloflake + 5 pps gilsonite + 10% gel					
			+ 0.5% extender					
	TAIL	7,050'	50/50 Poz/G + 10% salt + 2% gel	1,660	35%	14.30		1.31
			+ 0.1% R-3					

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

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

FLOAT EQUIPMENT & CENTRALIZERS

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

ADDITIONAL INFORMATION

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

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

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

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

DRILLING ENGINEER:

Nick Spence / Danny Showers

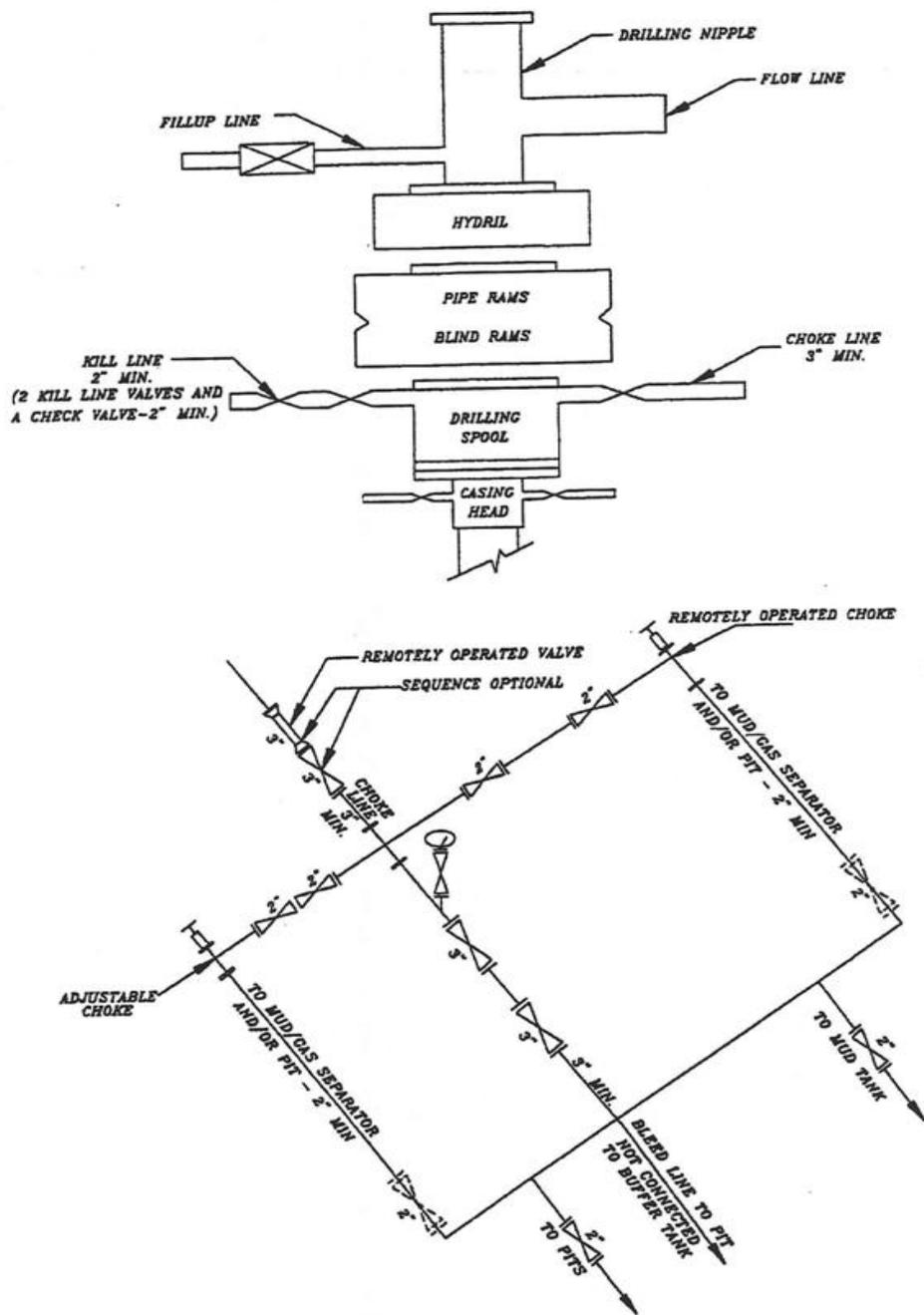
DATE:

DRILLING SUPERINTENDENT:

Kenny Gathings / Lovel Young

DATE:

EXHIBIT A NBU 921-21B1CS



SCHEMATIC DIAGRAM OF 5,000 PSI BOP STACK

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	FORM 9 5. LEASE DESIGNATION AND SERIAL NUMBER: UTU 0576
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: UTE 7. UNIT or CA AGREEMENT NAME: NATURAL BUTTES
1. TYPE OF WELL Gas Well	8. WELL NAME and NUMBER: NBU 921-21B1CS
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.	9. API NUMBER: 43047506120000
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: 1000 FNL 0870 FEL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NENE Section: 21 Township: 09.0S Range: 21.0E Meridian: S	9. FIELD and POOL or WILDCAT: NATURAL BUTTES COUNTY: UINTAH STATE: UTAH

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

TYPE OF SUBMISSION	TYPE OF ACTION		
<input checked="" type="checkbox"/> NOTICE OF INTENT Approximate date work will start: 10/19/2011 <input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion: <input type="checkbox"/> SPUD REPORT Date of Spud: <input type="checkbox"/> DRILLING REPORT Report Date:	<input type="checkbox"/> ACIDIZE <input checked="" type="checkbox"/> CHANGE TO PREVIOUS PLANS <input type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> DEEPEN <input type="checkbox"/> OPERATOR CHANGE <input type="checkbox"/> PRODUCTION START OR RESUME <input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> WATER SHUTOFF <input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> ALTER CASING <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input type="checkbox"/> FRACTURE TREAT <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> SI TA STATUS EXTENSION <input checked="" type="checkbox"/> OTHER	<input type="checkbox"/> CASING REPAIR <input type="checkbox"/> CHANGE WELL NAME <input type="checkbox"/> CONVERT WELL TYPE <input type="checkbox"/> NEW CONSTRUCTION <input type="checkbox"/> PLUG BACK <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION <input type="checkbox"/> TEMPORARY ABANDON <input type="checkbox"/> WATER DISPOSAL <input type="checkbox"/> APD EXTENSION OTHER: <input style="width: 50px;" type="text"/>

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.
 The Operator requests approval for changes in the drilling operations for this well. Changes include a FIT waiver, casing changes, and closed loop drilling options. Please see the attachment for details. Thank you.

Accepted by the Utah Division of Oil, Gas and Mining

Date: 11/10/2011

By: *Derek Quist*

NAME (PLEASE PRINT) Andy Lytle	PHONE NUMBER 720 929-6100	TITLE Regulatory Analyst
SIGNATURE N/A	DATE 10/19/2011	

Kerr-McGee Oil & Gas Onshore. L.P.**NBU 921-21B1CS**

Surface: 1000 FNL / 870 FEL NENE
 BHL: 597 FNL / 1981 FEL NWNE

Section 21 T9S R21E

Unitah County, Utah
 Mineral Lease: UTU-0576

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	1637	
Birds Nest	1984	Water
Mahogany	2325	Water
Wasatch	5022	Gas
Mesaverde	8000	Gas
MVU2	8970	Gas
MVL1	9473	Gas
Sego	10265	Gas
Castlegate	10353	Gas
MN5	10700	Gas
TVD	11300	
TD	11569	

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 11300' TVD, approximately equals
7,458 psi (0.66 psi/ft = actual bottomhole gradient)

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

Maximum anticipated surface pressure equals approximately 5,023 psi (bottom hole pressure
minus the pressure of a partially evacuated hole calculated at 0.22 psi/foot, per Onshore Order No. 2).

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

8. Anticipated Starting Dates:

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

9. Variances:

Please refer to the attached Drilling Program.
Onshore Order #2 – Air Drilling Variance

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

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

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

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

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

Background

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

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

The air rig is then mobilized to drill the surface casing hole by drilling a 12 1/4 inch hole for the first 200 feet, then will drill a 11 inch hole to just above the Bird's Nest interval with an air hammer. The hammer is then tripped and replaced with a 11 inch tri-cone bit. The tri-cone bit is used to drill to the surface casing point, approximately 500 feet below the loss circulation zone (Bird's Nest). The 8-5/8 inch surface casing is then run and cemented in place, thereby isolating the lost circulation zone.

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

Variance for BOPE Requirements

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

Variance for Mud Material Requirements

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

Variance for Special Drilling Operation (surface equipment placement) Requirements

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

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

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

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

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

Variance for FIT Requirements

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

Conclusion

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

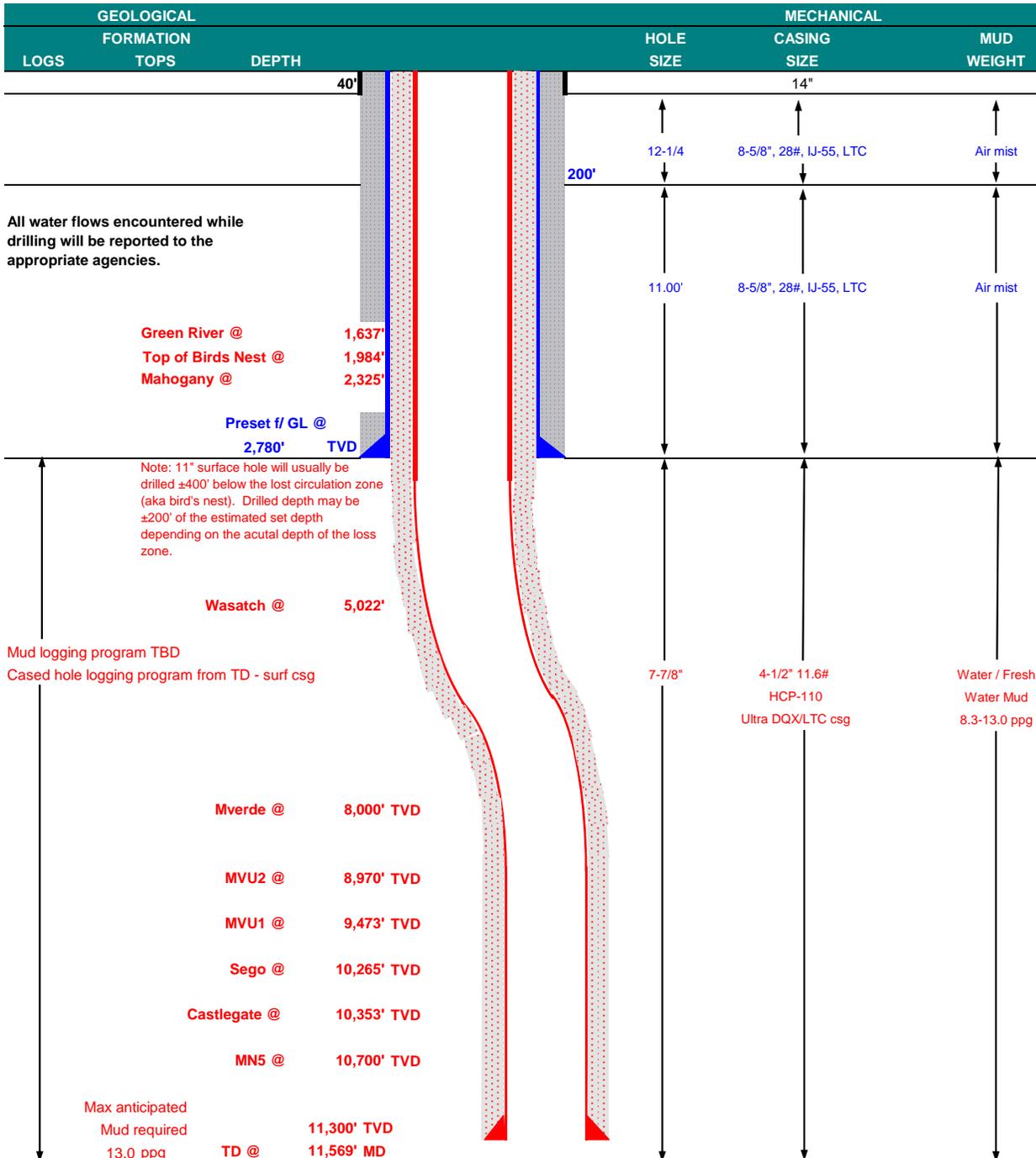
10. **Other Information:**

Please refer to the attached Drilling Program.



KERR-McGEE OIL & GAS ONSHORE LP DRILLING PROGRAM

COMPANY NAME	KERR-McGEE OIL & GAS ONSHORE LP		DATE	October 19, 2011			
WELL NAME	NBU 921-21B1CS		TD	11,300'	TVD	11,569' MD	
FIELD	Natural Buttes	COUNTY	Uintah	STATE	Utah	FINISHED ELEVATION	4829
SURFACE LOCATION	NENE	1000 FNL	870 FEL	Sec 21	T 9S	R 21E	
	Latitude: 40.026106		Longitude: -109.550410		NAD 83		
BTM HOLE LOCATION	NWNE	597 FNL	1981 FEL	Sec 21	T 9S	R 21E	
	Latitude: 40.027204		Longitude: -109.554376		NAD 83		
OBJECTIVE ZONE(S)	BLACKHAWK						
ADDITIONAL INFO	Regulatory Agencies: BLM (Minerals), TRIBAL (Surface), UDOGM Tri-County Health Dept.						





KERR-McGEE OIL & GAS ONSHORE LP
DRILLING PROGRAM

CASING PROGRAM

	SIZE	INTERVAL	WT.	GR.	CPLG.	DESIGN FACTORS			
						BURST	COLLAPSE	LTC	DQX
								TENSION	
CONDUCTOR	14"	0-40'							
SURFACE	8-5/8"	0 to 2,780	28.00	IJ-55	LTC	3,390	1,880	348,000	N/A
						1.94	1.44	5.11	N/A
PRODUCTION	4-1/2"	0 to 5,000	11.60	HCP-110	DQX	10,690	8,650	279,000	367,174
						1.19	1.13	4.57	3.41
	4-1/2"	5,000 to 11,569'	11.60	HCP-110	LTC	1.19	1.13		

Surface Casing:

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

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

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

Production casing:

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

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

CEMENT PROGRAM

		FT. OF FILL	DESCRIPTION	SACKS	EXCESS	WEIGHT	YIELD
SURFACE	LEAD	500'	Premium cmt + 2% CaCl	180	60%	15.80	1.15
			+ 0.25 pps flocele				
Option 1	TOP OUT CMT (6 jobs)	1,200'	20 gals sodium silicate + Premium cmt	270	0%	15.80	1.15
			+ 2% CaCl + 0.25 pps flocele				
NOTE: If well will circulate water to surface, option 2 will be utilized							
SURFACE	LEAD	2,280'	65/35 Poz + 6% Gel + 10 pps gilsonite	210	35%	11.00	3.82
			+ 0.25 pps Flocele + 3% salt BWOW				
		TAIL	500'	Premium cmt + 2% CaCl	150	35%	15.80
			+ 0.25 pps flocele				
	TOP OUT CMT	as required	Premium cmt + 2% CaCl	as req.		15.80	1.15
PRODUCTION	LEAD	4,519'	Premium Lite II +0.25 pps	340	20%	11.00	3.38
			celloflake + 5 pps gilsonite + 10% gel				
			+ 0.5% extender				
	TAIL	7,050'	50/50 Poz/G + 10% salt + 2% gel	1,660	35%	14.30	1.31
			+ 0.1% R-3				

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

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

FLOAT EQUIPMENT & CENTRALIZERS

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

ADDITIONAL INFORMATION

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

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

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

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

DRILLING ENGINEER:

Nick Spence / Danny Showers / Chad Loesel

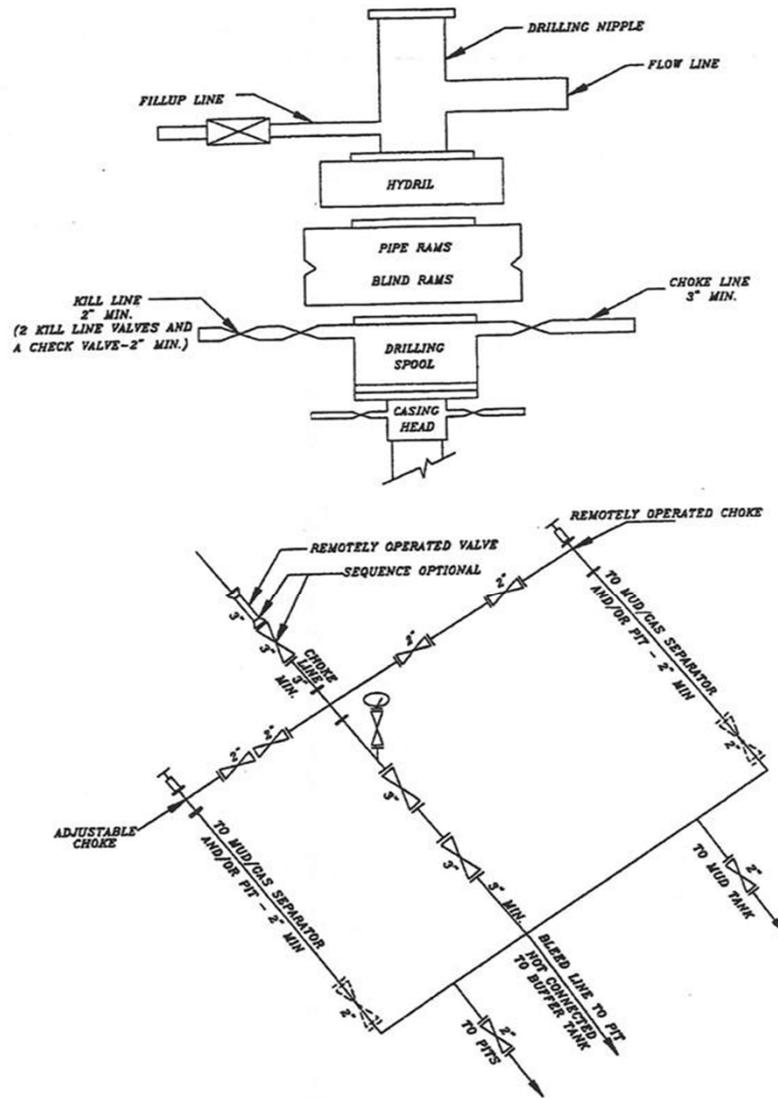
DATE: _____

DRILLING SUPERINTENDENT:

Kenny Gathings / Lovel Young

DATE: _____

EXHIBIT A
NBU 921-21B1CS



SCHEMATIC DIAGRAM OF 5,000 PSI BOP STACK

Requested Drilling Options:

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

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

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	FORM 9 5. LEASE DESIGNATION AND SERIAL NUMBER: UTU 0576
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: UTE 7. UNIT or CA AGREEMENT NAME: NATURAL BUTTES
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2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.	9. API NUMBER: 43047506120000
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779	PHONE NUMBER: 720 929-6515 Ext
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NAME (PLEASE PRINT) Andy Lytle	PHONE NUMBER 720 929-6100	TITLE Regulatory Analyst
SIGNATURE N/A	DATE 10/19/2011	

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Section 21 T9S R21E

Unitah County, Utah
 Mineral Lease: UTU-0576

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

Conclusion

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

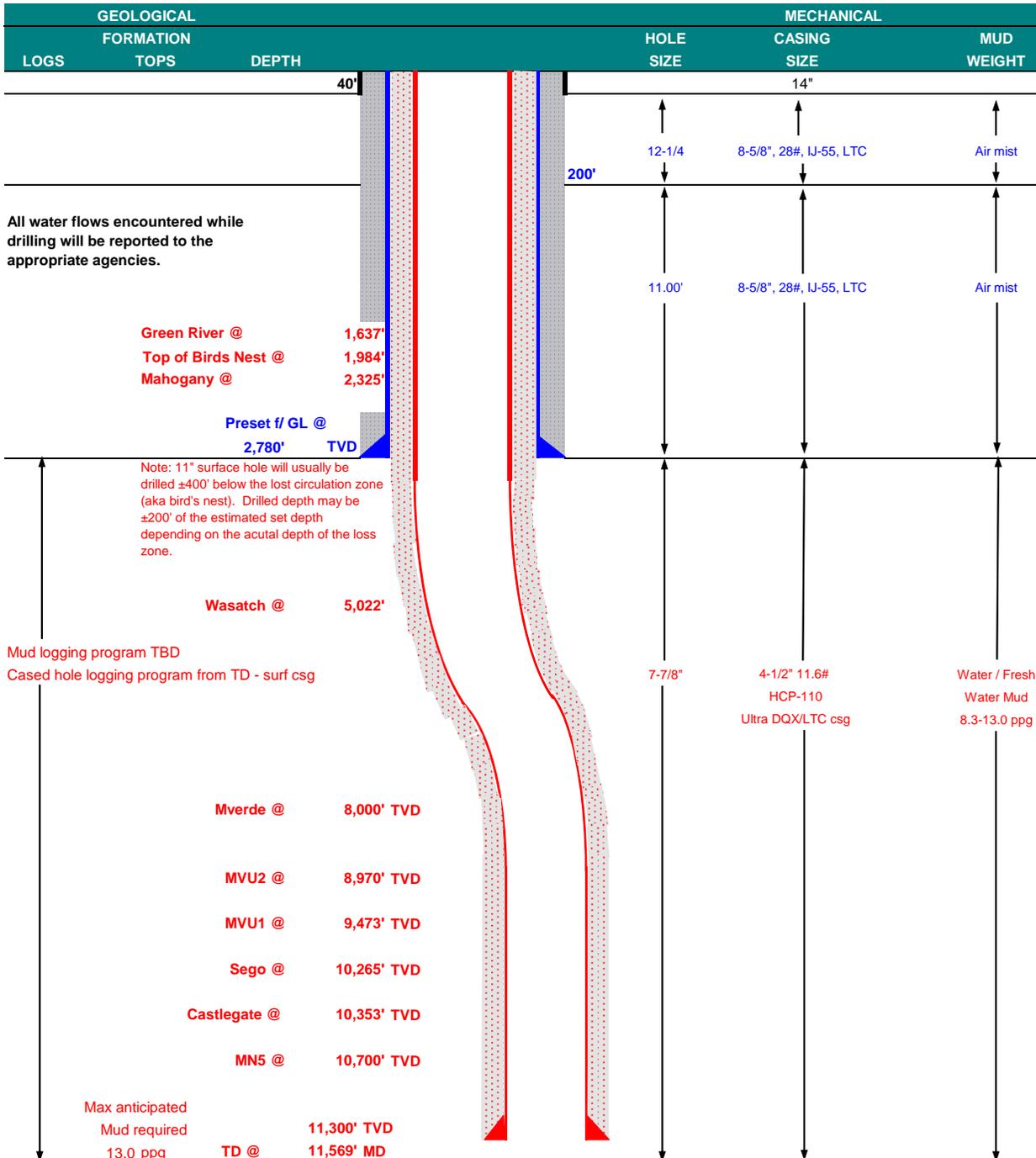
10. **Other Information:**

Please refer to the attached Drilling Program.



KERR-McGEE OIL & GAS ONSHORE LP DRILLING PROGRAM

COMPANY NAME	KERR-McGEE OIL & GAS ONSHORE LP			DATE	October 19, 2011	
WELL NAME	NBU 921-21B1CS			TD	11,300'	TVD 11,569' MD
FIELD	Natural Buttes	COUNTY	Uintah	STATE	Utah	FINISHED ELEVATION 4829
SURFACE LOCATION	NENE	1000 FNL	870 FEL	Sec 21	T 9S	R 21E
	Latitude: 40.026106		Longitude: -109.550410		NAD 83	
BTM HOLE LOCATION	NWNE	597 FNL	1981 FEL	Sec 21	T 9S	R 21E
	Latitude: 40.027204		Longitude: -109.554376		NAD 83	
OBJECTIVE ZONE(S)	BLACKHAWK					
ADDITIONAL INFO	Regulatory Agencies: BLM (Minerals), TRIBAL (Surface), UDOGM Tri-County Health Dept.					





KERR-McGEE OIL & GAS ONSHORE LP
DRILLING PROGRAM

CASING PROGRAM

	SIZE	INTERVAL	WT.	GR.	CPLG.	DESIGN FACTORS			
						BURST	COLLAPSE	LTC	DQX
								TENSION	
CONDUCTOR	14"	0-40'							
SURFACE	8-5/8"	0 to 2,780	28.00	IJ-55	LTC	3,390	1,880	348,000	N/A
						1.94	1.44	5.11	N/A
PRODUCTION	4-1/2"	0 to 5,000	11.60	HCP-110	DQX	10,690	8,650	279,000	367,174
						1.19	1.13	4.57	3.41
	4-1/2"	5,000 to 11,569'	11.60	HCP-110	LTC	1.19	1.13	4.57	

Surface Casing:

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

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

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

Production casing:

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

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

CEMENT PROGRAM

		FT. OF FILL	DESCRIPTION	SACKS	EXCESS	WEIGHT	YIELD
SURFACE	LEAD	500'	Premium cmt + 2% CaCl	180	60%	15.80	1.15
			+ 0.25 pps flocele				
Option 1	TOP OUT CMT (6 jobs)	1,200'	20 gals sodium silicate + Premium cmt	270	0%	15.80	1.15
			+ 2% CaCl + 0.25 pps flocele				
NOTE: If well will circulate water to surface, option 2 will be utilized							
SURFACE	LEAD	2,280'	65/35 Poz + 6% Gel + 10 pps gilsonite	210	35%	11.00	3.82
			+ 0.25 pps Flocele + 3% salt BWOW				
		TAIL	500'	Premium cmt + 2% CaCl	150	35%	15.80
			+ 0.25 pps flocele				
	TOP OUT CMT	as required	Premium cmt + 2% CaCl	as req.		15.80	1.15
PRODUCTION	LEAD	4,519'	Premium Lite II +0.25 pps	340	20%	11.00	3.38
			celloflake + 5 pps gilsonite + 10% gel				
			+ 0.5% extender				
	TAIL	7,050'	50/50 Poz/G + 10% salt + 2% gel	1,660	35%	14.30	1.31
			+ 0.1% R-3				

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

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

FLOAT EQUIPMENT & CENTRALIZERS

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

ADDITIONAL INFORMATION

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

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

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

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

DRILLING ENGINEER:

Nick Spence / Danny Showers / Chad Loesel

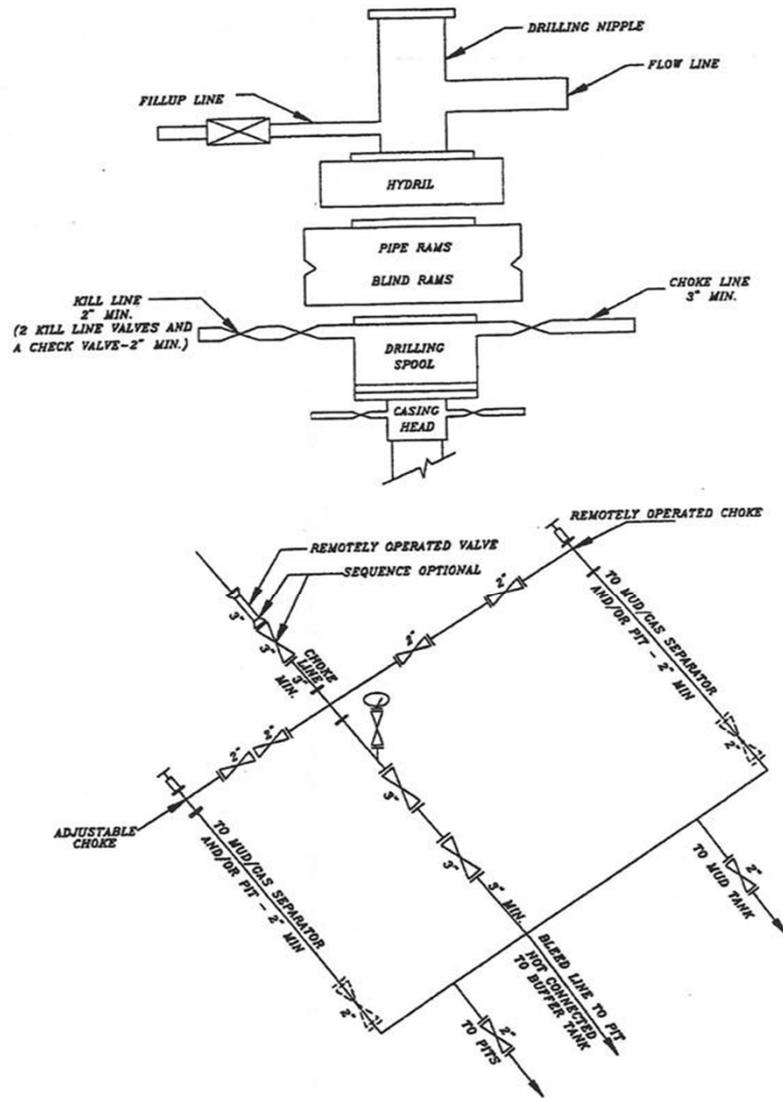
DATE: _____

DRILLING SUPERINTENDENT:

Kenny Gathings / Lovel Young

DATE: _____

EXHIBIT A
NBU 921-21B1CS



SCHEMATIC DIAGRAM OF 5,000 PSI BOP STACK

Requested Drilling Options:

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

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

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: UTU 0576
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: UTE
		7. UNIT or CA AGREEMENT NAME: NATURAL BUTTES
1. TYPE OF WELL Gas Well	8. WELL NAME and NUMBER: NBU 921-21B1CS	
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.	9. API NUMBER: 43047506120000	
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: 1000 FNL 0870 FEL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NENE Section: 21 Township: 09.0S Range: 21.0E Meridian: S	COUNTY: UINTAH	
		STATE: UTAH
11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA		
TYPE OF SUBMISSION	TYPE OF ACTION	
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start: <input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion: <input checked="" type="checkbox"/> SPUD REPORT Date of Spud: 11/17/2011 <input type="checkbox"/> DRILLING REPORT Report Date:	<input type="checkbox"/> ACIDIZE <input type="checkbox"/> ALTER CASING <input type="checkbox"/> CHANGE TO PREVIOUS PLANS <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input type="checkbox"/> DEEPEN <input type="checkbox"/> FRACTURE TREAT <input type="checkbox"/> OPERATOR CHANGE <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> PRODUCTION START OR RESUME <input type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> WATER SHUTOFF <input type="checkbox"/> SI TA STATUS EXTENSION <input type="checkbox"/> WILDCAT WELL DETERMINATION <input type="checkbox"/> OTHER	
<input type="checkbox"/> CASING REPAIR <input type="checkbox"/> CHANGE WELL NAME <input type="checkbox"/> CONVERT WELL TYPE <input type="checkbox"/> NEW CONSTRUCTION <input type="checkbox"/> PLUG BACK <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION <input type="checkbox"/> TEMPORARY ABANDON <input type="checkbox"/> WATER DISPOSAL <input type="checkbox"/> APD EXTENSION OTHER: <input type="text"/>		
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc. MIRU PETE MARTIN BUCKET RIG. DRILLED 20" CONDUCTOR HOLE TO 40'. RAN 14" 36.7# SCHEDULE 10 PIPE. CMT W/28 SX READY MIX. SPUD WELL ON 11/17/2011 AT 0930 HRS.		
Accepted by the Utah Division of Oil, Gas and Mining FOR RECORD ONLY		
NAME (PLEASE PRINT) Sheila Wopsock	PHONE NUMBER 435 781-7024	TITLE Regulatory Analyst
SIGNATURE N/A	DATE 11/21/2011	

BLM - Vernal Field Office - Notification Form

Operator KERR-McGEE OIL & GAS Rig Name/# BUCKET RIG
Submitted By SHEILA WOPSOCK Phone Number 435.781.7024
Well Name/Number NBU 921-21B1CS
Qtr/Qtr NE/NE Section 21 Township 9S Range 21E
Lease Serial Number UTU-0576
API Number 4304750612

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

Date/Time 11/17/2011 0800 HRS AM PM

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

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

Date/Time 12/10/2011 0800 HRS AM PM

BOPE

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

RECEIVED
NOV 16 2011
DIV. OF OIL, GAS & MINING

Date/Time _____ AM PM

Remarks ESTIMATED DATE AND TIME. PLEASE CONTACT
LOVEL YOUNG AT 435.781.7051 FOR MORE

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: UTU 0576
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: UTE
		7. UNIT or CA AGREEMENT NAME: NATURAL BUTTES
1. TYPE OF WELL Gas Well	8. WELL NAME and NUMBER: NBU 921-21B1CS	
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.	9. API NUMBER: 43047506120000	
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: 1000 FNL 0870 FEL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NENE Section: 21 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: 12/3/2011	<input type="checkbox"/> ACIDIZE <input type="checkbox"/> CHANGE TO PREVIOUS PLANS <input type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> DEEPEN <input type="checkbox"/> OPERATOR CHANGE <input type="checkbox"/> PRODUCTION START OR RESUME <input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> WATER SHUTOFF <input type="checkbox"/> WILDCAT WELL DETERMINATION	
	<input type="checkbox"/> ALTER CASING <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input type="checkbox"/> FRACTURE TREAT <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> SI TA STATUS EXTENSION <input type="checkbox"/> OTHER	<input type="checkbox"/> CASING REPAIR <input type="checkbox"/> CHANGE WELL NAME <input type="checkbox"/> CONVERT WELL TYPE <input type="checkbox"/> NEW CONSTRUCTION <input type="checkbox"/> PLUG BACK <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION <input type="checkbox"/> TEMPORARY ABANDON <input type="checkbox"/> WATER DISPOSAL <input type="checkbox"/> APD EXTENSION OTHER: <input style="width: 100px;" type="text"/>
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.		
MIRU AIR RIG ON NOV. 29, 2011. DRILLED SURFACE HOLE TO 2928'. RAN SURFACE CASING AND CEMENTED. WELL IS WAITING ON ROTARY RIG. DETAILS OF CEMENT JOB WILL BE INCLUDED WITH WELL COMPLETION REPORT.		
Accepted by the Utah Division of Oil, Gas and Mining FOR RECORD ONLY		
NAME (PLEASE PRINT) Jaime Scharnowske	PHONE NUMBER 720 929-6304	TITLE Regulatory Analyst
SIGNATURE N/A	DATE 12/5/2011	

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

FORM 6

ENTITY ACTION FORM

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

Well 1

API Number	Well Name		QQ	Sec	Twp	Rng	County
4304750704	NBU 921-19E		SWNW	19	9S	21E	UINTAH
Action Code	Current Entity Number	New Entity Number	Spud Date		Entity Assignment Effective Date		
B	99999	2900	11/21/2011		11/30/11		
Comments: MIRU PETE MARTIN BUCKET RIG. <i>BLKHK = MVRD = WSMVD</i> SPUD WELL ON 11/21/2011 AT 0800 HRS.							

Well 2

API Number	Well Name		QQ	Sec	Twp	Rng	County
4304750612	NBU 921-21B1CS		NENE	21	9S	21E	UINTAH
Action Code	Current Entity Number	New Entity Number	Spud Date		Entity Assignment Effective Date		
B	99999	2900	11/17/2011		11/30/11		
Comments: MIRU PETE MARTIN BUCKET RIG. <i>WSMVD</i> SPUD WELL ON 11/17/2011 AT 0930 HRS. <i>BNL = N WNE</i>							

Well 3

API Number	Well Name		QQ	Sec	Twp	Rng	County
4304750609	NBU 921-21A2DS		NENE	21	9S	21E	UINTAH
Action Code	Current Entity Number	New Entity Number	Spud Date		Entity Assignment Effective Date		
B	99999	2900	11/17/2011		11/30/11		
Comments: MIRU PETE MARTIN BUCKET RIG. <i>BLKHK = MVRD = WSMVD</i> SPUD WELL ON 11/17/2011 AT 1330 HRS. <i>BNL = NENE</i>							

ACTION CODES:

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

SHEILA WOPSOCK

Name (Please Print)

Signature

REGULATORY ANALYST

Title

11/21/2011

Date

(5/2000)

RECEIVED

NOV 21 2011

DIV. OF OIL, GAS & MINING

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	FORM 9
SUNDRY NOTICES AND REPORTS ON WELLS Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.	5. LEASE DESIGNATION AND SERIAL NUMBER: UTU 0576
1. TYPE OF WELL Gas Well	6. IF INDIAN, ALLOTTEE OR TRIBE NAME: UTE
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.	7. UNIT or CA AGREEMENT NAME: NATURAL BUTTES
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779	8. WELL NAME and NUMBER: NBU 921-21B1CS
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1000 FNL 0870 FEL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NENE Section: 21 Township: 09.0S Range: 21.0E Meridian: S	9. API NUMBER: 43047506120000
5. PHONE NUMBER: 720 929-6511	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: 2/15/2012	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> NEW CONSTRUCTION
	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> PLUG BACK
	<input type="checkbox"/> PRODUCTION START OR RESUME	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION
	<input type="checkbox"/> REPERFORATE CURRENT FORMATION	<input type="checkbox"/> SIDETRACK TO REPAIR WELL	<input type="checkbox"/> TEMPORARY ABANDON
	<input type="checkbox"/> TUBING REPAIR	<input type="checkbox"/> VENT OR FLARE	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> WATER SHUTOFF	<input type="checkbox"/> SI TA STATUS EXTENSION	<input type="checkbox"/> APD EXTENSION
	<input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> OTHER	OTHER: <input style="width: 100px;" type="text"/>

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

MIRU ROTARY RIG. FINISHED DRILLING FROM 2,928' TO 11,480' ON FEBRUARY 10, 2012. RAN 4-1/2" 11.6# P-110 PRODUCTION CASING. CEMENTED PRODUCTION CASING. RELEASED H&P 298 RIG ON FEBRUARY 15, 2012 @ 06:00 HRS. DETAILS OF CEMENT JOB WILL BE INCLUDED WITH THE WELL COMPLETION REPORT. WELL IS WAITING ON FINAL COMPLETION ACTIVITIES.

**Accepted by the
 Utah Division of
 Oil, Gas and Mining
 FOR RECORD ONLY
 February 21, 2012**

NAME (PLEASE PRINT) Jaime Scharnowske	PHONE NUMBER 720 929-6304	TITLE Regularatory Analyst
SIGNATURE N/A	DATE 2/16/2012	

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	FORM 9 5.LEASE DESIGNATION AND SERIAL NUMBER: UTU 0576
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: UTE 7.UNIT or CA AGREEMENT NAME: NATURAL BUTTES
1. TYPE OF WELL Gas Well	8. WELL NAME and NUMBER: NBU 921-21B1CS
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.	9. API NUMBER: 43047506120000
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779	PHONE NUMBER: 720 929-6511 9. FIELD and POOL or WILDCAT: NATURAL BUTTES
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1000 FNL 0870 FEL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NENE Section: 21 Township: 09.0S Range: 21.0E Meridian: S	COUNTY: UINTAH STATE: UTAH

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

TYPE OF SUBMISSION	TYPE OF ACTION		
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start:	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> CASING REPAIR
<input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion:	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> CHANGE WELL NAME
<input type="checkbox"/> SPUD REPORT Date of Spud:	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> CONVERT WELL TYPE
<input checked="" type="checkbox"/> DRILLING REPORT Report Date: 5/8/2012	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> NEW CONSTRUCTION
	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> PLUG BACK
	<input 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 SUBJECT WELL WAS PLACED ON PRODUCTION ON 5/8/2012 AT 7:00 P.M. THE CHRONOLOGICAL WELL HISTORY WILL BE SUBMITTED WITH THE WELL COMPLETION REPORT.

Accepted by the
Utah Division of
Oil, Gas and Mining
FOR RECORD ONLY
 June 27, 2012

NAME (PLEASE PRINT) Cara Mahler	PHONE NUMBER 720 929-6029	TITLE Regulatory Analyst I
SIGNATURE N/A	DATE 6/27/2012	

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB No. 1004-0137
Expires: July 31, 2010

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

5. Lease Serial No.
UTU0576

1a. Type of Well Oil Well Gas Well Dry Other
 b. Type of Completion New Well Work Over Deepen Plug Back Diff. Resvr.
 Other _____

2. Name of Operator: KERR MCGEE OIL & GAS ONSHORE
 Contact: CARA MAHLER
 Email: cara.mahler@anadarko.com

3. Address: 1099 18TH STREET, SUITE 1800
 DENVER, CO 80202
 3a. Phone No. (include area code)
 Ph: 720-929-6029

4. Location of Well (Report location clearly and in accordance with Federal requirements)*
 At surface: NENE 1000FNL 870FEL 40.026106 N Lat, 109.550410 W Lon
 At top prod interval reported below: NWNE 641FNL 1958FEL
 At total depth: NWNE 666FNL 1950FEL *BHL by HSM*

6. If Indian, Allottee or Tribe Name
 7. Unit or CA Agreement Name and No.
 UTU63047A

8. Lease Name and Well No.
 NBU 921-21B1CS ✓

9. API Well No.
 43-047-50612

10. Field and Pool, or Exploratory
 NATURAL BUTTES

11. Sec., T., R., M., or Block and Survey
 or Area: Sec 21 T9S R21E Mer SLB

12. County or Parish
 UINTAH

13. State
 UT

14. Date Spudded
 11/17/2011

15. Date T.D. Reached
 02/10/2012

16. Date Completed
 D & A Ready to Prod.
 05/08/2012

17. Elevations (DF, KB, RT, GL)*
 4829 GL

18. Total Depth: MD 11480 TVD 11305
 19. Plug Back T.D.: MD 11444 TVD 11267

20. Depth Bridge Plug Set: MD TVD

21. Type Electric & Other Mechanical Logs Run (Submit copy of each)
 BHV-DSN/SD/ACTR-CBL/CM/GR/CCL

22. Was well cored? No Yes (Submit analysis)
 Was DST run? No Yes (Submit analysis)
 Directional Survey? No Yes (Submit analysis)

23. Casing and Liner Record (Report all strings set in well)

Hole Size	Size/Grade	Wt. (#/ft.)	Top (MD)	Bottom (MD)	Stage Cementer Depth	No. of Sk. & Type of Cement	Slurry Vol. (BBL)	Cement Top*	Amount Pulled
20.000	14.000 STL	36.7	0	40		28			
11.000	8.625 IJ-55	28.0	0	2910		680		0	
7.875	4.500 P-110	11.6	0	11466		2760		750	

24. Tubing Record

Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)
2.375	11053							

25. Producing Intervals

Formation	Top	Bottom	Perforated Interval	Size	No. Holes	Perf. Status
A) MESAVERDE	10923	11240	10923 TO 11240	0.360	48	OPEN
B)						
C)						
D)						

26. Perforation Record

Depth Interval	Amount and Type of Material
10923 TO 11240	PUMP 7,686 BBLs SLICK H2O & 185,615 LBS 30/50 OTTAWA SAND

27. Acid, Fracture, Treatment, Cement Squeeze, Etc.

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
05/08/2012	05/12/2012	24	→	0.0	1125.0	550.0			FLows FROM WELL
Choke Size	Tbg. Press. Flwg.	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status	
20/64	SI 1109	1744.0	→	0	1125	550		PGW	

28a. Production - Interval B

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
			→						
Choke Size	Tbg. Press. Flwg.	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status	
	SI		→						

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28b. Production - Interval C

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
			→						
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status	
			→						

28c. Production - Interval D

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
			→						
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status	
			→						

29. Disposition of Gas(Sold, used for fuel, vented, etc.)
SOLD

30. 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.

31. Formation (Log) Markers

Formation	Top	Bottom	Descriptions, Contents, etc.	Name	Top
					Meas. Depth
				GREEN RIVER	1736
				BIRD'S NEST	2049
				MAHOGANY	2393
				WASATCH	5196
				MESAVERDE	8181

32. Additional remarks (include plugging procedure):

The first 210' of the surface hole was drilled with a 12 ?? bit. The remainder of surface hole was drilled with an 11? bit. P-110 DQX csg was run from surface to 5141?; LTC csg was run from 5141? to 11,466?. Attached is the chronological well history, perforation report & final survey.

33. Circle enclosed attachments:

- 1. Electrical/Mechanical Logs (1 full set req'd.)
- 2. Geologic Report
- 3. DST Report
- 4. Directional Survey
- 5. Sundry Notice for plugging and cement verification
- 6. Core Analysis
- 7 Other:

34. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records (see attached instructions):

**Electronic Submission #143263 Verified by the BLM Well Information System.
For KERR MCGEE OIL & GAS ONSHORE L, sent to the Vernal**

Name (please print) CARA MAHLER Title AUTHORIZED REPRESENTATIVE

Signature (Electronic Submission) Date 07/18/2012

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

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**US ROCKIES REGION
Operation Summary Report**

Well: NBU 921-21B1CS RED Spud Date: 11/30/2011
 Project: UTAH-UINTAH Site: NBU 921-21A PAD Rig Name No: PROPETRO 11/11, H&P 298/298
 Event: DRILLING Start Date: 11/10/2011 End Date: 2/15/2012
 Active Datum: RKB @4,855.00usft (above Mean Sea Level) UWI: NE/NE/0/9/S/21/E/21/0/0/26/PM/N/1000/E/0/870/0/0

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
11/29/2011	14:30 - 17:00	2.50	DRLSUR	01	A	P		MOVE RIG TO NBU 921-21B1CS (WELL 1 OF 4.
	17:00 - 0:00	7.00	DRLSUR	01	B	P		INSTALL DIVERTOR HEAD AND BOUY LINE. BUILD DITCH. SPOT IN RIG. SPOT IN CATWALK AND PIPE RACKS. RIG UP PIT PUMP. RIG UP PUMP. PRIME PUMP. INSPECT RIG. HELD PRE-SPUD SAFETY MEETING.
11/30/2011	0:00 - 1:00	1.00	PRPSPD	01	B	P		INSTALL DIVERTOR HEAD AND BOUY LINE. BUILD DITCH. SPOT IN RIG. SPOT IN CATWALK AND PIPE RACKS. RIG UP PIT PUMP. RIG UP PUMP. PRIME PUMP. INSPECT RIG. HELD PRE-SPUD SAFETY MEETING.
	1:00 - 3:00	2.00	PRPSPD	02	D	P		DRILL 12.25" HOLE 44'- 210'. (166', 83'/HR) RPM=45, WOB 5-15K. PSI ON/OFF 600/400. UP/DOWN/ ROT 20/20/20 K. DRAG 0 K. CIRC RESERVE W. 8.3# WATER. DRILL DOWN TO 210' W/ 6" COLLARS.
	3:00 - 5:30	2.50	PRPSPD	06	A	P		SPUD 11/30/2011 @ 01:00 POOH, PU, 11" BIT AND DIRECTIONAL TOOLS, TIH T/ 210'
	5:30 - 12:00	6.50	PRPSPD	02	D	P		DRILL F/210 T/1000 (790' @ 121' PER HR) WOB 20K, PSI ON/OFF 1250/1050, RPM 50 UP/DWN/ROT 62/45/55
	12:00 - 22:00	10.00	PRPSPD	02	D	P		DRILL F/1000 T/1840 (840" @ 115' PER HR) WOB 20K, PSI ON/OFF 1600/1390, RPM 50 UP/DWN/ROT 80/50/64
12/1/2011	22:00 - 0:00	2.00	PRPSPD	22				RE-ESTABLISH CONNECTION W/MWD
	0:00 - 0:30	0.50	DRLSUR	22	L	Z		RE-ESTABLISH COMMUNICATION W/MWD
	0:30 - 6:30	6.00	DRLSUR	02	D	P		DRILL F/1840 T/2230 (390" @ 65' PER HR) WOB 20K, PSI ON/OFF 1600/1390, RPM 40 UP/DWN/ROT 85/75/70 CIRC. RESERVE PIT
	6:30 - 7:30	1.00	DRLSUR	08	A	Z		FIX HYDRAULIC HOSE & COOLERS ON PUMP
	7:30 - 15:00	7.50	DRLSUR	02	D	P		DRILL F/2230 T/2530 (300" @ 40' PER HR) WOB 20K, PSI ON/OFF 1600/1400, RPM 40 UP/DWN/ROT 90/58/70 CIRC. RESERVE PIT
12/2/2011	15:00 - 21:30	6.50	DRLSUR	08	A	Z		POOH 10 JTS, REPLACE RESERVE PIT PUMP, WAIT ON & REPLACE HYDRAULIC HOSE, & FIX MUD PUMP.
	21:30 - 22:30	1.00	DRLSUR	02	D	P		DRILL F/2530 T/2560 (30" @ 30' PER HR) WOB 20K, PSI ON/OFF 1600/1400, RPM 40 UP/DWN/ROT 90/58/70 CIRC. RESERVE PIT
	22:30 - 0:00	1.50	DRLSUR	22	L	Z		TRY TO RE-ESTABLISH COMMUNICATION W/MWD
	0:00 - 1:00	1.00	DRLSUR	22	L	Z		TRY TO ESTABLISH COMMUNICATION W/MWD TOOL (UNSUCCESSFUL)
	1:00 - 6:00	5.00	DRLSUR	06	H	Z		POOH T/FIX MWD TOOL.
	6:00 - 8:00	2.00	DRLSUR	21	D	Z		CHANGE BITS, CHECK MUD MOTOR, WAIT ON MWD HAND TO CHECK TOOLS, SCRIBE TOOLS. (CHANGED BATTERIES IN MWD)
	8:00 - 12:30	4.50	DRLSUR	06	H	Z		RIH

US ROCKIES REGION
Operation Summary Report

Well: NBU 921-21B1CS RED

Spud Date: 11/30/2011

Project: UTAH-UINTAH

Site: NBU 921-21A PAD

Rig Name No: PROPETRO 11/11, H&P 298/298

Event: DRILLING

Start Date: 11/10/2011

End Date: 2/15/2012

Active Datum: RKB @4,855.00usft (above Mean Sea Level)

UWI: NE/NE/0/9/S/21/E/21/0/0/26/PM/N/1000/E/0/870/0/0

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
12/3/2011	12:30 - 19:30	7.00	DRLSUR	02	D	P		DRILL F/2560 T/2928 (428" @ 61' PER HR) WOB 20K, PSI ON/OFF 1830/1560, RPM 45 UP/DWN/ROT 98/60/78 CIRC. RESERVE PIT TD @ 19:30 12/02/2001
	19:30 - 21:30	2.00	DRLSUR	05	C	P		CIRC F/CSNG
	21:30 - 0:00	2.50	DRLSUR	06	D	P		LDDS BHA & DIR TOOLS
	0:00 - 3:30	3.50	DRLSUR	06	D	P		LDDS BHA & DIR. TOOLS
	3:30 - 4:30	1.00	DRLSUR	12	A	P		MOVE PIPE RACKS AND CATWALK. PULL DIVERTER HEAD. RIG UP TO RUN CSG. AND MOVE CSG INTO POSITION TO P/U.
	4:30 - 10:00	5.50	DRLSUR	12	C	P		RUN 65 JTS 8 5/8, 28# CSNG. LAND CSNG @ 10:00, SHOE SET @ 2888', BAFFLE SET @ 2841.9'
	10:00 - 11:00	1.00	DRLSUR	12	B	P		HOLD SAFETY MEETING, RUN 200' OF 1". RIG DOWN RIG MOVE OFF WELL, REBUILD DITCH. RIG UP CEMENT TRUCK, 2" HARD LINES,. CEMENT HEAD, LOAD PLUG.
	11:00 - 13:00	2.00	DRLSUR	12	E	P		LAND CSNG @ 10:30 PRESSURE TEST LINES TO 2500 PSI. PUMP 50 BBLs OF WATER AHEAD. PUMP 20 BBLs OF 8.3# GEL WATER AHEAD. PUMP (230 SX) 156.4 BBLs OF 11.0# 3.82 YD 23 GAL/SK PREMIUM CEMENT WITH 16% GEL, 3% SALT. 3# PER SX GR3, .25# ER SC FLOCELE, 10# PER SX GILSONITE. PUMP 200 SX TAIL, 2% CACL, .25# PER SX FLOCELE. DROP PLUG ON FLY. DISLPACE WITH 177.3 BBLs OF H2O. FULL CIRC THROUGHOUT. FINAL LIFT 750PSI AT 4 BBLs MIN. BUMP PLUG WITH 1220 PSI HELD FOR 5 MIN. FLOAT HELD. PUMP 125 SX (26.6 BBLs) OF SAME TAIL CEMENT WITH 2% CACL DOWN 1". SHUT DOWN AND CLEAN TRUCK. CEMENT TO SURFACE..
	12:30 - 12:30	0.00	DRLSUR	13	A	P		RELEASE RIG @ 12:30 WOC (CMT FELL BACK)
	12:30 - 12:30	0.00	DRLSUR	12	E	P		PUMP 125 SKS SAME TAIL CMT DWN BACKSIDE. CMT TO SURFACE. CMT STAYED
1/30/2012	12:00 - 19:00	7.00	RDMO	01	E	P		RDMO / PREP RIG FOR TRUCKS,/ SKID RIG BACK 30' / JW JONES 6 TRUCKS ,2 FORKLIFTS 12 MEN,ON LOC @ 8 AM TO START RM LOAD OUT PIPE TUBS,CMT SILOS,FRAC TANKS,TRANSFER MUD,MOVE UPRIGHTS,BOILER & BAR HOPPER CREWS RIGGING DOWN BACK YARD,ELECT CORDS / SFTN / ROUTE TAKEN FOR THE 8 MILE RIG MOVE, HAS 3 OVER HEAD POWER LINES / LOCATION OF THE LINES WAS REPORTED, TO VERNAL FOR MORE FOLLOW UP ON HEIGHT VOLTAGE & CLEARANCE OF LINES /ELECT CO TO WRAP LINES OVER TRUCK ROUTE
1/31/2012	19:00 - 0:00	5.00	RDMO	21	C	P		WAIT ON DAY LIGHT
	0:00 - 6:00	6.00	MIRU	21	C	P		WAIT ON DAYLIGHT

**US ROCKIES REGION
Operation Summary Report**

Well: NBU 921-21B1CS RED

Spud Date: 11/30/2011

Project: UTAH-UJINTAH

Site: NBU 921-21A PAD

Rig Name No: PROPETRO 11/11, H&P 298/298

Event: DRILLING

Start Date: 11/10/2011

End Date: 2/15/2012

Active Datum: RKB @4,855.00usft (above Mean Sea Level)

UWI: NE/NE/0/9/S/21/E/21/0/0/26/PM/N/1000/E/0/870/0/0

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
	6:00 - 19:00	13.00	MIRU	01	A	P		HSM, WITH H&P CREWS,14 MEN, RW JONES TRUCKING,14 MEN J&C CRANE,5 MEN,RD MOVE RIG W/ 5 BED TRUCKS,2 HAUL TRUCKS /2 FORKLIFTS, 1 CRANE /MOVE CAMPS & RIG UP / HAUL FUEL TANK, ,GENS,MCC HOUSE,PUMPS WATER TANK,OIL LUBSTER, 6 CONEX HOUSES/, BOP HANDLER,PARTS HOUSE,1 LOAD SKID RAILS, MUD TANKS ,SHAKERS, CHOKE HOUSE,FLOW LINES,/STRATA & NOV EQUIP / LOWER DERRICK @ 13:00 HRS,LOAD OUT/ LOWER DOG HOUSE / BLEED SUB CYLINDERS / LOWER SUB,16:30 PREP FOR TRUCKS / RIG 90% MOVED, W/ BACK YARD SET IN PLACE & RIGGED UP,SFTN / MAN HRS =182 / 40% RIGGED UP, WAIT ON DAYLIGHT
2/1/2012	19:00 - 0:00	5.00	MIRU	21	C	P		WAIT ON DAYLIGHT TO CONTINUE RIG UP
	0:00 - 6:00	6.00	MIRU	21	C	P		WAIT ON DAYLIGHT TO CONTINUE RIG UP
	6:00 - 18:00	12.00	MIRU	01	B	P		MIRU / RU /RT 75 % RIGGED UP / BACK YARD SET IN / SUB SET 100% MOVED OFF OLD LOCATION / RW JONES 6 TRUCKS 1 FORK LIFT - 10 PERSONNEL / 1 J&C CRANE - 4 PERSONNEL / H&P 15 PERSONNEL
2/2/2012	18:00 - 0:00	6.00	MIRU	21	C	P		WAIT ON DAYLIGHT TO CONTINUE RIG UP
	0:00 - 6:00	6.00	MIRU	21	C	P		W.O.DAYLIGHTS TO CONTINUE TO RIG UP
	6:00 - 0:00	18.00	MIRU	01	B	P		MIRU / RW JONES TRUCKING 6 TRUCKS -1 FORK LIFT 10 PERSONNEL / J&C CRANE -1 CRANE 4 PERSONNEL / H&P 15 PERSONNEL / DRK IN AIR @ 14:00 HRS / CRANE OFF LOCATION @ 15:00 HRS / TRUCKS OFF LOCATION @ 17:00 HRS / CONTINUE TO RU / RT
2/3/2012	0:00 - 15:30	15.50	MIRU	01	B	P		CONTINUE TO RU RT
	15:30 - 20:30	5.00	PRPSPD	14	A	P		NU BOP & EQUIPMENT
	20:30 - 0:00	3.50	PRPSPD	14	A	P		NU STRATA PRESSURE CONTROL EQUIPMENT
2/4/2012	0:00 - 3:30	3.50	PRPSPD	15	A	P		PJSM TEST BOP'S & EQUIPMENT AS PER PROGRAM 250/5000 ANNULAR 250/2500
	3:30 - 6:00	2.50	PRPSPD	15	A	P		TESTING STRATA PRESSURE CONTROL EQUIPMENT SEVERAL LEAKS & RETEST
	6:00 - 6:30	0.50	PRPSPD	23		S		SAFETY STAND DOWN WITH DRILL CREW / STRATA & A-1 TESTING / 2" LINE BLEW APART WHILE UNDER PRESSURE / DETERMINE CAUSE & CORRECTIVE ACTION
	6:30 - 9:30	3.00	PRPSPD	15	A	P		CONTINUE TESTING STRATA PRESSURE CONTROL EQUIPMENT SEVERAL LEAKS & RETEST
	9:30 - 10:00	0.50	PRPSPD	14	B	P		INSTALL WEAR BUSHING
	10:00 - 11:30	1.50	PRPSPD	06	A	P		PU & MU DIRECTIONAL BHA# 1 W/ WEATHERFORD / SCRIBE /ORIENTATE & TEST SAME
	11:30 - 14:00	2.50	PRPSPD	06	A	P		TIH PU HWT DRILL PIPE
	14:00 - 15:30	1.50	PRPSPD	07	B	P		LEVEL DRK & PRE SPUD INSPECTION
	15:30 - 16:00	0.50	PRPSPD	06	A	P		INSTALL ROT HEAD
	16:00 - 18:00	2.00	PRPSPD	06	A	P		CONT TO PU DRILL PIPE & TIH TO 2,780' TAG CMT
	18:00 - 19:30	1.50	DRLPRO	02	F	P		DRILL CMT & SHOE TRACK FROM / 2,780' TO 2910' CLEAN OUT RAT HOLE TO 2,950'

**US ROCKIES REGION
Operation Summary Report**

Well: NBU 921-21B1CS RED Spud Date: 11/30/2011
 Project: UTAH-UINTAH Site: NBU 921-21A PAD Rig Name No: PROPETRO 11/11, H&P 298/298
 Event: DRILLING Start Date: 11/10/2011 End Date: 2/15/2012
 Active Datum: RKB @4,855.00usft (above Mean Sea Level) UWI: NE/NE/0/9/S/21/E/21/0/0/26/PM/N/1000/E/0/870/0/0

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
	19:30 - 0:00	4.50	DRLPRO	02	D	P		DRILL/ SLIDE / SURVEY F/ 2,950 TO 3,476' = 526 '@ 116.88 FPH / WOB 16K-22K / TOP DRIVE RPM 40-65 / PUMP 125 SPM = 562 GPM / PUMP PRESSURE ON/OFF BOTTOM 2100 / 1900 MUD MOTOR RPM 90 / PU/SO/ROT WT 110/ 95/105 TORQUE ON/OFF BOTTOM 6K/4 SLIDE 85' IN 85 MIN 16% OF FOOTAGE DRILLED, 35% OF HRS DRILLED MW 8.4VIS 27
2/5/2012	0:00 - 7:00	7.00	DRLPRO	02	D	P		DRILL/ SLIDE / SURVEY F/ 3,476 TO 4,180' = 704 '@ 100.57 FPH / WOB 16K-22K / TOP DRIVE RPM 40-65 / PUMP 125 SPM = 562 GPM / PUMP PRESSURE ON/OFF BOTTOM 2100 / 1900 MUD MOTOR RPM 90 / PU/SO/ROT WT 110/ 95/105 TORQUE ON/OFF BOTTOM 6K/4 SLIDE 0' IN 0 MIN 0% OF FOOTAGE DRILLED, 0% OF HRS DRILLED MW 8.4VIS 27
	7:00 - 7:30	0.50	DRLPRO	07	A	P		SERVICE RIG @ 4,150'
	7:30 - 13:30	6.00	DRLPRO	02	D	P		DRILL/ SLIDE / SURVEY F/ 4,180 TO 4,795' = 615 '@102.5 FPH / WOB 16K-22K / TOP DRIVE RPM 40-65 / PUMP 125 SPM = 562 GPM / PUMP PRESSURE ON/OFF BOTTOM 2100 / 1900 MUD MOTOR RPM 90 / PU/SO/ROT WT 150/ 120/131 TORQUE ON/OFF BOTTOM 8K/6 SLIDE 78' IN 95 MIN 11% OF FOOTAGE DRILLED, 25% OF HRS DRILLED MW 8.4VIS 27
	13:30 - 14:00	0.50	DRLPRO	08	B	Z		REPAIR ENCODER ON TDS
	14:00 - 0:00	10.00	DRLPRO	02	D	P		DRILL/ SLIDE / SURVEY F/ 4,795 TO 6,170' = 1,375'@ 137.40 FPH / WOB 20K-22K / TOP DRIVE RPM 45-65 / PUMP 125 SPM = 562 GPM / PUMP PRESSURE ON/OFF BOTTOM 2325/2200 MUD MOTOR RPM 90 / PU/SO/ROT WT 180/130/150 TORQUE ON/OFF BOTTOM 12K/10K SLIDE 63' IN 65 MIN 4.92% OF FOOTAGE DRILLED, 11.2% OF HRS DRILLED MW 8.4VIS 26
2/6/2012	0:00 - 12:30	12.50	DRLPRO	02	D	P		DRILL/ SLIDE / SURVEY F/ 6,170' TO 7,346' = 1,176'@ 94.08 FPH / WOB 20K-22K / TOP DRIVE RPM 45-65 / PUMP 125 SPM = 562 GPM / PUMP PRESSURE ON/OFF BOTTOM 2325/2200 MUD MOTOR RPM 90 / PU/SO/ROT WT 210/130/170 TORQUE ON/OFF BOTTOM 13K/10K SLIDE 120' IN 145 MIN 10% OF FOOTAGE DRILLED, 19% OF HRS DRILLED MW 8.5 VIS 26 / 75 BBL LOSE
	12:30 - 13:00	0.50	DRLPRO	07	A	P		SERVICE RIG @ 7,346'
	13:00 - 0:00	11.00	DRLPRO	02	D	P		DRILL/ SLIDE / SURVEY F/ 7,346' TO 8,115' = 769'@ 69.9 FPH / WOB 20K-23K / TOP DRIVE RPM 45-65 / PUMP 120 SPM = 540 GPM / PUMP PRESSURE ON/OFF BOTTOM 2350/2200 MUD MOTOR RPM 86 / PU/SO/ROT WT 230/150/180 TORQUE ON/OFF BOTTOM 13K/10K SLIDE 47' IN 65 MIN 6% OF FOOTAGE DRILLED, 10% OF HRS DRILLED MW 8.5 VIS 26 / 50 BBL LOSE

**US ROCKIES REGION
Operation Summary Report**

Well: NBU 921-21B1CS RED Spud Date: 11/30/2011
 Project: UTAH-UINTAH Site: NBU 921-21A PAD Rig Name No: PROPETRO 11/11, H&P 298/298
 Event: DRILLING Start Date: 11/10/2011 End Date: 2/15/2012
 Active Datum: RKB @4,855.00usft (above Mean Sea Level) UWI: NE/NE/0/9/S/21/E/21/0/0/26/PM/N/1000/E/0/870/0/0

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
2/7/2012	0:00 - 15:30	15.50	DRLPRO	02	D	P		DRILL/ SLIDE / SURVEY F/ 8,115' TO 9,235'= 1,120'@ 72.25 FPH / WOB 20K-23K / TOP DRIVE RPM 45-65 / PUMP 120 SPM = 540 GPM / PUMP PRESSURE ON/OFF BOTTOM 2400/2225 MUD MOTOR RPM 86 / PU/SO/ROT WT 255/160/200 TORQUE ON/OFF BOTTOM 17K/11K SLIDE 75' IN 145 MIN 6.6% OF FOOTAGE DRILLED, 15.8% OF HRS DRILLED MW 8.5 VIS 26 / 75 BBL LOSE / 10' TO 15' FLARE
	15:30 - 16:00	0.50	DRLPRO	07	A	P		SERVICE RIG @ 9,235'
	16:00 - 0:00	8.00	DRLPRO	02	D	P		DRILL/ SLIDE / SURVEY F/ 9,235' TO 9,726'= 491'@ 61.37 FPH / WOB 20K-23K / TOP DRIVE RPM 45-65 / PUMP 120 SPM = 540 GPM / PUMP PRESSURE ON/OFF BOTTOM 2400/2225 MUD MOTOR RPM 86 / PU/SO/ROT WT 275/190/210 TORQUE ON/OFF BOTTOM 17K/18K SLIDE 0' IN 0 MIN 0% OF FOOTAGE DRILLED,0% OF HRS DRILLED MW 8.8 VIS 29 / 105 BBL LOSE / 10' TO 15' FLARE
2/8/2012	0:00 - 6:00	6.00	DRLPRO	02	D	P		DRILL/ SLIDE / SURVEY F/ 9,726' TO 9,965'= 239'@ 39.83 FPH / WOB 20K-23K / TOP DRIVE RPM 45-65 / PUMP 120 SPM = 540 GPM / PUMP PRESSURE ON/OFF BOTTOM 2400/2225 MUD MOTOR RPM 86 / PU/SO/ROT WT 275/190/210 TORQUE ON/OFF BOTTOM 19K/18K / MW 9.3 VIS 34 / NO MUD LOSE / 10' TO 15' FLARE
	6:00 - 0:00	18.00	DRLPRO	02	D	P		DRILL/ SLIDE / SURVEY F/ 9,965' TO 10,541'= 576'@ 32 FPH / WOB 20K-23K / TOP DRIVE RPM 45-65 / PUMP 110 SPM = 495 GPM / PUMP PRESSURE ON/OFF BOTTOM 2350/2180 MUD MOTOR RPM 79 / PU/SO/ROT WT 275/190/210 TORQUE ON/OFF BOTTOM 19K/18K / MW 9.3 VIS 34 / NO MUD LOSE / 10' TO 15' FLARE
2/9/2012	0:00 - 2:30	2.50	DRLPRO	02	D	P		DRILL/ SLIDE / SURVEY F/ 10,541' TO 10,599' = 58'@ 23.2 FPH / WOB 23K / TOP DRIVE RPM 45-65 / PUMP 110 SPM = 495 GPM / PUMP PRESSURE ON/OFF BOTTOM 2350/2180 MUD MOTOR RPM 79 / PU/SO/ROT WT 275/190/210 TORQUE ON/OFF BOTTOM 20K/18K / MW 9.5 VIS 34 / NO MUD LOSE / 10' TO 15' FLARE
	2:30 - 3:30	1.00	DRLPRO	03	A	X		WORK TIGHT HOLE F/ 10,599' TO 10,570'
	3:30 - 0:00	20.50	DRLPRO	02	D	P		DRILL/ SLIDE / SURVEY F/ 10,599' TO 11,025' = 426'@ 20.78 FPH / WOB 22-24K / TOP DRIVE RPM 40-55 / PUMP 110 SPM = 495 GPM / PUMP PRESSURE ON/OFF BOTTOM 2700/2300 MUD MOTOR RPM 79 / PU/SO/ROT WT 285/185/220 TORQUE ON/OFF BOTTOM 17K/18K / MW 10.9 VIS 38 / NO MUD LOSE / 10' TO 15' FLARE
2/10/2012	0:00 - 16:30	16.50	DRLPRO	02	D	P		DRILL / SURVEY F/ 11,025' TO 11,408' = 383'@ 23.21 FPH / WOB 22-24K / TOP DRIVE RPM 40-55 / PUMP 110 SPM = 495 GPM / PUMP PRESSURE ON/OFF BOTTOM 2850/2650 MUD MOTOR RPM 79 / PU/SO/ROT WT 275/200/222 TORQUE ON/OFF BOTTOM 17K/18K / MW 11.3 VIS 42 / NO MUD LOSE / 10' TO 15' FLARE
	16:30 - 17:00	0.50	DRLPRO	07	A	P		SERVICE RIG @ 11,408'

US ROCKIES REGION
Operation Summary Report

Well: NBU 921-21B1CS RED

Spud Date: 11/30/2011

Project: UTAH-UJINTAH

Site: NBU 921-21A PAD

Rig Name No: PROPETRO 11/11, H&P 298/298

Event: DRILLING

Start Date: 11/10/2011

End Date: 2/15/2012

Active Datum: RKB @4,855.00usft (above Mean Sea Level)

UWI: NE/NE/0/9/S/21/E/21/0/0/26/PM/N/1000/E/0/870/0/0

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
	17:00 - 20:00	3.00	DRLPRO	02	D	P		DRILL / SURVEY F/ 11,408' TO 11,480' TD = 72' @ 24 FPH / WOB 22-28K / TOP DRIVE RPM 40-55 / PUMP 100 SPM = 450 GPM / PUMP PRESSURE ON/OFF BOTTOM 3100/2950 MUD MOTOR RPM 72 / PU/SO/ROT WT 285/185/223 TORQUE ON/OFF BOTTOM 17K/19K / MW 11.3 VIS 43 / NO MUD LOSE / 10' TO 15' FLARE
	20:00 - 22:30	2.50	DRLPRO	05	C	P		CIRC & RECIPROCATATE @ 11,480' TD
	22:30 - 0:00	1.50	DRLPRO	06	E	P		TOOH (WIPER TRIP) F/ 11,480 TO 10,550' BEAKREAM & PUMP OUT SPOTTING 100 BBL 12.8 PPG PILL
2/11/2012	0:00 - 5:00	5.00	DRLPRO	06	E	P		WIPER TRIP TOO H F/ 10,550' TO 2,950' W/ NO PROBLEMS
	5:00 - 14:00	9.00	DRLPRO	06	E	P		TIH F/ 2,950' TO 8,727' FILL EA 2500' WASH F/ 8957' TO 11,480' NO FILL
	14:00 - 17:00	3.00	DRLPRO	05	C	P		CIRC & RECIPROCATATE @ 11,480' / 10 TO 20' FLARE ON BTM'S UP
	17:00 - 0:00	7.00	DRLPRO	06	A	P		TOOH F/ LOGS F/ 11,480' TO 300' W/ NO PROBLEMS
2/12/2012	0:00 - 1:30	1.50	DRLPRO	06	A	P		TOOH LD BHA & BIT
	1:30 - 5:30	4.00	DRLPRO	11	D	P		PJSM RU HALLIBURTON WIRE LINE EQUIPMENT RIH TO 4,560 LOGS STOOD UP ATTEMPT TO WORK PAST BRIDGE - NO LUCK POOH & RD LOGGERS PU & TIH W/ MILL TOOTH BIT TO 2,910'
	5:30 - 7:00	1.50	DRLPRO	06	F	X		SERVICE RIG @ 2,910'
	7:00 - 7:30	0.50	DRLPRO	07	A	P		CONT TO TIH TO 4,570' WASH & REAM F/ 4,570' TO 11,480' / 10' FILL / NO EXCESSIVE SHALE COMING OVER SHAKERS RAISE MUD WT TO 12 PPG WHILE WASHING & REAMING
	7:30 - 22:30	15.00	DRLPRO	06	F	X		CIRC & COND MUD MUD WT 12.PPG VIS 40
2/13/2012	22:30 - 0:00	1.50	DRLPRO	05	A	X		TOOH F/ 11,480' TO 5,200 EXCESSIVE DRAG WORK TIGHT HOLE F/ 6,700' TO 5,200
	0:00 - 6:00	6.00	DRLPRO	06	F	X		TIH F/ 5,200' TO 11,480' WASH LAST 3 STDS TO BTM @ 11,480' 14' FILL
	6:00 - 10:00	4.00	DRLPRO	06	F	X		CIRC & COND MUD RAISE MUD WT TO 12.3 PPG
	10:00 - 13:00	3.00	DRLPRO	05	B	X		TOOH TO RUN LOGS F/ 11,480 TO BIT
	13:00 - 19:30	6.50	DRLPRO	06	A	X		PULL WEAR BUSHING
	19:30 - 20:00	0.50	DRLPRO	14	B	P		PJSM RU HALLIBURTON WIRE LINE LOGGING EQUIPMENT & RIH W/ TRIPPLE COMBO TO 11,490' LOGGERS DEPTH - DRILLERS DEPTH 11,480' LOG UP F/ 11,487'
	20:00 - 0:00	4.00	DRLPRO	11	D	P		CONTINUE TO LOG UP TO 200' / RD LOGGING EQUIPMENT
2/14/2012	0:00 - 3:00	3.00	DRLPRO	11	D	P		PJSM / CHANGE OUT BAILS
	3:00 - 5:30	2.50	DRLPRO	12	A	P		RUN 4 1/2" PRODUCTION CSG TO 9,795'
	5:30 - 18:00	12.50	DRLPRO	12	C	P		REPAIR FRANKS CSG TONGS
	18:00 - 19:00	1.00	DRLPRO	12	C	Z		CONT TO RUN 4 1/2" CSG F/ 9,795' TO 11,468' / SHOE @ 11,468' / FLOAT COLLAR @ 11,441' / Black Hawk Marker @ 10,852' Mverde Marker @ 8,186' / X-O @ 5,139' TOTAL JTS 273
	19:00 - 21:00	2.00	DRLPRO	12	C	P		CIRC BTM'S UP @ 11,468' / PJSM W/ BJ CEMENTERS
	21:00 - 22:30	1.50	DRLPRO	05	A	P		

**US ROCKIES REGION
Operation Summary Report**

Well: NBU 921-21B1CS RED		Spud Date: 11/30/2011	
Project: UTAH-UINTAH		Site: NBU 921-21A PAD	Rig Name No: PROPETRO 11/11, H&P 298/298
Event: DRILLING		Start Date: 11/10/2011	End Date: 2/15/2012
Active Datum: RKB @4,855.00usft (above Mean Sea Level)		UWI: NE/NE/0/9/S/21/E/21/0/0/26/PM/N/1000/E/0/870/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
	22:30 - 0:00	1.50	DRLPRO	12	E	P		BJ INSTALL CMT HEAD , TEST PUMP & LINES TO 5,000 PSI , DROP BTM PLUG /PUMP 25 BBLs FW SPACER ,PUMP 227 BBL / 720 SKS LEAD CEMENT @ 13.0 PPG, (PREM LITE II + .025 pps CELLO FLAKE + 5 pps KOL SEAL + .05 lb/sx STATIC FREE + 6% bwoc BENTONITE + .4% bwoc SODIUM META SILICATE + .6 % R-3 + 84.8% FRESH WATER / (8.85 gal/sx, 1.77 yield)
2/15/2012	0:00 - 3:00	3.00	DRLPRO	12	E	P		BJ CONTINUE TO PUMP 476 BBL / 2040 SX TAIL @ 14.3 ppg (CLASS G 50/50 POZ + 10% SALT + .05lbs/sx STATIC FREE + .2% R3 + .002 GPS FP-6L + 2% BENTONITE + 58.7% FW / (5.91 gal/sx, 1.31 yield) / DROP TOP PLUG & DISPLACE W/ 178 BBLs H2O + ADDITIVES / PLUG DOWN @ 02:06 HOURS / SPACER WATER BACK TO SURFACE/ FLOATS HELD W 2.25 BBLs H2O RETURNED TO INVENTORY / LOST RETURNS 105 BBL INTO DISPLACEMENT REGAINED FULL RETURNS 165 BBL INTO DISPLACEMENT / LIFT PRESSURE @3017 PSI / BUMP PRESSURE TO 3826 PSI / TOP OF TAIL CEMENT CALCULATED @ 4760 / RIG DOWN CMT EQUIPMENT
	3:00 - 6:00	3.00	DRLPRO	14	A	P		FLUSH BOP & EQUIPMENT / RAISE BOP SET SLIPS W/ 100K / CUT OFF CSG LD SAME / ND BOP'S & CLEAN PITS / RELEASE RIG @ 06:00 HRS 2/15/12

1 General

1.1 Customer Information

Company	US ROCKIES REGION
Representative	
Address	

1.2 Well/Wellbore Information

Well	NBU 921-21B1CS RED	Wellbore No.	OH
Well Name	NBU 921-21B1CS	Wellbore Name	NBU 921-21B1CS
Report No.	1	Report Date	4/16/2012
Project	UTAH-UINTAH	Site	NBU 921-21A PAD
Rig Name/No.		Event	COMPLETION
Start Date	5/1/2012	End Date	5/8/2012
Spud Date	11/30/2011	Active Datum	RKB @4,855.00usft (above Mean Sea Level)
UWI	NE/NE/O/9/S/21/E/21/O/O/26/PM/N/1000/E/O/870/O/O		

1.3 General

Contractor	CASED HOLE SOLUTIONS	Job Method	PERFORATE	Supervisor	DAVE DANIELS
Perforated Assembly	PRODUCTION CASING	Conveyed Method	WIRELINE		

1.4 Initial Conditions

Fluid Type	KCL WATER	Fluid Density	
Surface Press		Estimate Res Press	
TVD Fluid Top		Fluid Head	
Hydrostatic Press		Press Difference	
Balance Cond	NEUTRAL		

1.5 Summary

Gross Interval	10,923.0 (usft)-11,240.0 (u	Start Date/Time	5/1/2012 12:00AM
No. of Intervals	9	End Date/Time	5/1/2012 12:00AM
Total Shots	48	Net Perforation Interval	16.00 (usft)
Avg Shot Density	3.00 (shot/ft)	Final Surface Pressure	
		Final Press Date	

2 Intervals

2.1 Perforated Interval

Date	Formation/Reservoir	CCL@ (usft)	CCL-T S (usft)	MD Top (usft)	MD Base (usft)	Shot Density (shot/ft)	Misfires/Add Shot	Diameter (in)	Carr Type /Stage No	Carr Size (in)	Phasing (°)	Charge Desc /Charge Manufacturer	Charge Weight (gram)	Reason	Misrun
5/1/2012 12:00AM	MESAVERDE/			10,923.0	10,924.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO	N

2.1 Perforated Interval (Continued)

Date	Formation/ Reservoir	CCL@ (usft)	CCL-T S (usft)	MD Top (usft)	MD Base (usft)	Shot Density (shot/ft)	Misfires/ Add. Shot	Diamete r (in)	Carr Type /Stage No	Carr Size (in)	Phasing (°)	Charge Desc /Charge Manufacturer	Charge Weight (gram)	Reason	Misrun
5/1/2012 12:00AM	MESAVERDE/			10,940.0	10,942.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
5/1/2012 12:00AM	MESAVERDE/			10,965.0	10,966.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
5/1/2012 12:00AM	MESAVERDE/			11,002.0	11,004.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
5/1/2012 12:00AM	MESAVERDE/			11,032.0	11,034.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
5/1/2012 12:00AM	MESAVERDE/			11,094.0	11,096.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
5/1/2012 12:00AM	MESAVERDE/			11,106.0	11,107.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
5/1/2012 12:00AM	MESAVERDE/			11,119.0	11,121.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
5/1/2012 12:00AM	MESAVERDE/			11,237.0	11,240.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	

3 Plots

3.1 Wellbore Schematic



**US ROCKIES REGION
Operation Summary Report**

Well: NBU 921-21B1CS RED

Spud Date: 11/30/2011

Project: UTAH-UINTAH

Site: NBU 921-21A PAD

Rig Name No: MILES 3/3

Event: COMPLETION

Start Date: 5/1/2012

End Date: 5/8/2012

Active Datum: RKB @4,855.00usft (above Mean Sea Level)

UWI: NE/NE/0/9/S/21/E/21/0/0/26/PM/N/1000/E/0/870/0/0

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
11/30/2011	-							
12/1/2011	-							
12/2/2011	-							
4/24/2012	8:00 - 9:30	1.50	COMP	33		P		FILL SURFACE CSG. MIRU B&C QUICK TEST. PSI TEST T/ 1000 PSI. HELD FOR 15 MIN LOST 13 PSI. PSI TEST T/ 3500 PSI. HELD FOR 15 MIN LOST 25 PSI. 1ST PSI TEST T/ 9000 PSI. HELD FOR 30 MIN LOST 69 PSI. NO COMMUNICATION OR MIGRATION WITH SURFACE CSG BLEED OFF PSI. MOVE T/ NEXT WELL. SWMFW
4/27/2012	7:00 - 11:00	4.00		37		P		PERF STG 1)PU 3 1/8 EXP GUN, 23 GM, .36 HOLE SIZE. 90 DEG PHASING. RIH PERF AS PER PERF DESIGN. POOH. SWMFW
4/30/2012	6:00 - 17:00	11.00	FRAC	36	E	P		6AM [DAY 3] MIRU SUPERIOR & CHS. HLD SUPERIOR JSA. P.T. SURFACE LINES TO 9446#. LOST 368# IN 15 MINUTES. POP OFFS SET & KICK OUTS ON PUMPS SET. [STG#1] PERF & FRAC BY DESIGN. [STG#2] PERF BY DESIGN. SDFN 7AM [DAY 4] HLD SUPERIOR JSA. [STG#2] PERF & FRAC AS PER DESIGN. TOTAL 30/50 TLC PUMPED IN RED WELL 921-21B1CS =185,615# SAND AND TOTAL FLUID PUMPED IN 921-21B1CS= 7686 BBLS. [KILL PLUG] SET KILL PLUG @ 10,870'. GRAND TOTAL 30/50 TLC SAND PUMPED ON 4 WELL PAD=736,439# AND TOTAL FLUID PUMPED ON 4 WELL PAD=31,275 BBLS.
5/1/2012	7:00 -		FRAC	36	E	P		
5/7/2012	7:00 - 7:15	0.25	COMP	48		P		RDMO CHS & SUPERIOR.
	7:15 - 9:00	1.75	COMP	30	A	P		JSA- RUSU. PU TBG. WELL CONTROL (5/4- ROAD RIG FROM 1022-11G2 PAD). SPOT AND RUSU. ND WH. NU 4" 10K BOP. RU FLOOR AND TBG EQUIP. LAY PMP LINES.
	9:00 - 18:00	9.00	COMP	31	I	P		MU 3-7/8" BIT, POBS, AND 1.87" XN. RIH AS MEAS AND PU 2-3/8" P-110 TBG. (TRUCK TO SPOT TBG BROKE DOWN. WAIT ON TRUCK). TAG AT 10,839' W/ 343-JTS. RU DRLG EQUIP. FILL AND PRES TEST TO 4000#. GOOD. 242-JTS IN, EOT AT 10,834'. SDFN

**US ROCKIES REGION
Operation Summary Report**

Well: NBU 921-21B1CS RED

Spud Date: 11/30/2011

Project: UTAH-UINTAH

Site: NBU 921-21A PAD

Rig Name No: MILES 3/3

Event: COMPLETION

Start Date: 5/1/2012

End Date: 5/8/2012

Active Datum: RKB @4,855.00usft (above Mean Sea Level)

UWI: NE/NE/O/S/21/E/21/O/O/26/PM/N/1000/E/O/870/O/O

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
5/8/2012	7:00 - 7:30	0.50	COMP	50				WELL TURNED TO SALES@ 07:00 HR ON 5/8/2012-2585 MCFD, 1440 BWPD, FCP 2950#, FTP 22500#, 20/64"
	7:00 - 7:15	0.25	COMP	48		P		JSA- D/O PLUGS. HIGH PRESSURES.
	7:15 - 7:15	0.00	COMP	44	C	P		EST CIRC. D/O 2 PLUGS.
								#1- C/O 5' SAND TO CBP AT 10,870'. D/O IN 4 MIN. 1900# INC. 0-600# FCP. RIH.
								#2- C/O 35' SAND TO CBP AT 11,064'. D/O IN 9 MIN. 1100# INC. 600-800# FCP. RIH.
								PBTD AT 11,442'. BTM PERF AT 11,240'. C/O 40' TO 11,345' W/ 358-JTS IN (105' RATHOLE). CIRC CLEAN.
								RD PWR SWIVEL. POOH AS LD 10-JTS TBG. PU 4" 10K HANGER. LUB IN AND LAND 348-JTS 2-3/8" P-110 TBG W/ EOT AT . RD FLOOR. ND BOP. NU WH. HOOK UP FLOW LINES. POBS AT 2500#. PRES TEST LINES TO 4000#. TURN OVER TO FBC AND SALES. RDSU AND MOVE OVER.
								TBG DETAIL KB 26.00 4" 10K HANGER .83 348-JTS 2-3/8" P-110 11,024.17 1.87" XN POBS 2.20 EOT 11,053.20
								356-JTS DELIVERED, 8-JTS TRANSFERED TO 921-21A2DS.
5/9/2012	7:00 -			50				TLTR 7686, TLR 700, LLTR 6986. WELL IP'D ON 5/9/12 - 1939 MCFD, 0 BOPD, 360 BWPD, CP 1000#, FTP 600#, CK 20/64, LP 60#, 24 HRS

Project: UTAH - UTM (feet), NAD27, Zone 12N
 Site: UINTAH_NBU 921-21A PAD
 Well: NBU 921-21B1CS
 Wellbore: NBU 921-21B1CS
 Section:
 SHL: P_NBU 921-21B1CS
 Design: NBU 921-21B1CS (wp03) H&P 298
 Latitude: 40.026141
 Longitude: -109.549721
 GL: 4829.00
 KB: 26' rkb + 4829' gl @ 4855.01ft (h&p 298)

FORMATION TOP DETAILS

TVDPath	MDPath	Formation
5022.00	5206.28	Top Wasatch
5622.00	5806.28	top of cylinder
8000.00	8184.29	Top Mesaverde:
8970.00	9154.30	MVU21:
9473.00	9657.30	MVL1:
10265.00	10449.31	Top Segoe:
10353.00	10537.31	Top Castlegate
10700.00	10884.31	Top Blackhawk

CASING DETAILS

TVD	MD	Name	Size
2780.57	2888.01	8-5/8"	8-5/8

Azimuths to True North
 Magnetic North: 11.36°
 Magnetic Field
 Strength: 52579.8nT
 Dip Angle: 65.94°
 Date: 4/20/2009
 Model: IGRF200510



WELL DETAILS: NBU 921-21B1CS

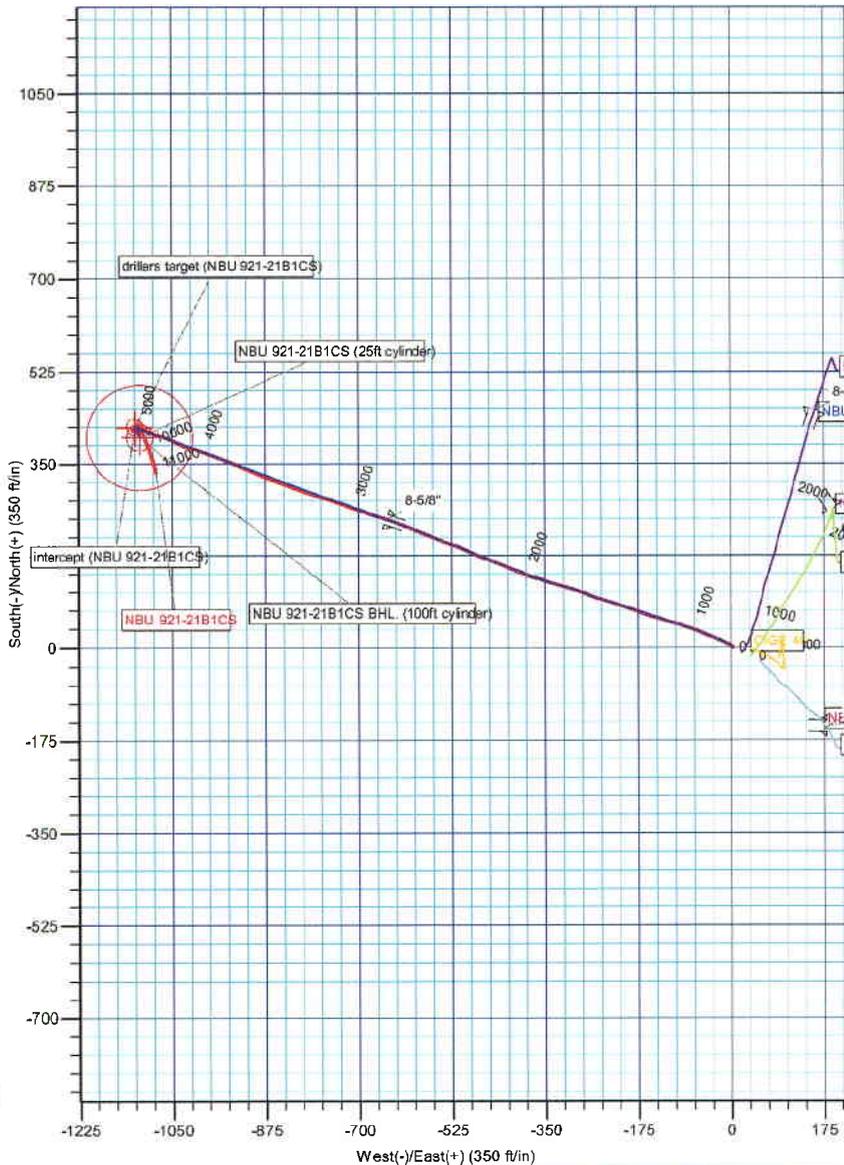
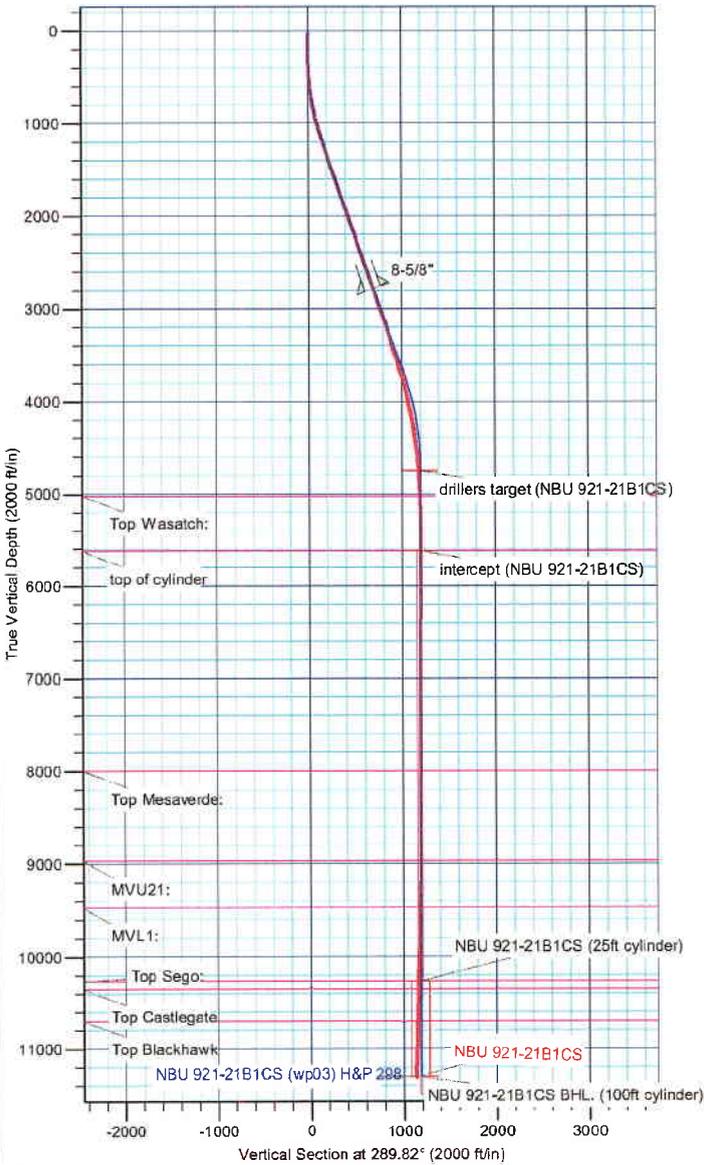
+N/-S	+E/-W	Northing	Ground Level: Easting	4829.00 Latitude	Longitude	Slot
0.00	0.00	14538868.41	2046432.01	40.026141	-109.549721	

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
drillers target (NBU 921-21B1CS)	4750.00	420.29	-1120.48	14539270.40	2045304.84	40.027295	-109.553723	Circle (Radius: 15.00)
Intercept (NBU 921-21B1CS)	5622.00	417.71	-1119.19	14539267.84	2045306.17	40.027288	-109.553718	Point
NBU 921-21B1CS (25ft cylinder)	10265.00	400.29	-1110.48	14539250.56	2045315.17	40.027240	-109.553687	Circle (Radius: 25.00)
NBU 921-21B1CS BHL. (100ft cylinder)	11300.00	400.29	-1110.48	14539250.56	2045315.17	40.027240	-109.553687	Circle (Radius: 100.00)

SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect
2890.01	19.57	290.29	2782.45	244.62	-648.33	0.00	0.00	692.86
3040.01	19.57	290.29	2923.79	262.04	-695.45	0.00	0.00	743.11
3058.16	19.93	290.42	2940.87	264.17	-701.21	2.00	7.17	749.24
3795.40	19.93	290.42	3633.95	351.87	-936.72	0.00	0.00	1000.53
4934.28	0.00	0.00	4750.00	420.29	-1120.48	1.75	180.00	1196.61
4999.81	0.20	153.44	4815.54	420.19	-1120.43	0.30	153.44	1196.53
11484.31	0.20	153.44	11300.00	400.29	-1110.48	0.00	0.00	1180.42



Anadarko Petroleum Corp

Survey Report

Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well NBU 921-21B1CS
Project:	UTAH - UTM (feet), NAD27, Zone 12N	TVD Reference:	26' rkb + 4829' gl @ 4855.01ft (h&p 298)
Site:	UINTAH_NBU 921-21A PAD	MD Reference:	26' rkb + 4829' gl @ 4855.01ft (h&p 298)
Well:	NBU 921-21B1CS	North Reference:	True
Wellbore:	NBU 921-21B1CS	Survey Calculation Method:	Minimum Curvature
Design:	NBU 921-21B1CS	Database:	edmp

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 921-21A PAD				
Site Position:		Northing:	14,538,868.41 usft	Latitude:	40.026141
From:	Lat/Long	Easting:	2,046,432.01 usft	Longitude:	-109.549721
Position Uncertainty:	0.00 ft	Slot Radius:	13-3/16 "	Grid Convergence:	0.93 °

Well	NBU 921-21B1CS					
Well Position	+N/-S	0.00 ft	Northing:	14,538,868.41 usft	Latitude:	40.026141
	+E/-W	0.00 ft	Easting:	2,046,432.01 usft	Longitude:	-109.549721
Position Uncertainty		0.00 ft	Wellhead Elevation:	ft	Ground Level:	4,829.00 ft

Wellbore	NBU 921-21B1CS				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF200510	4/20/2009	11.36	65.94	52,580

Design	NBU 921-21B1CS				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	22.01
Vertical Section:		Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
		22.01	0.00	0.00	289.20

Survey Program	Date 2/15/2012			
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description
193.01	2,890.01	Survey #1 (NBU 921-21B1CS)	MWD	MWD - Standard
2,940.00	11,480.00	Survey #2 (NBU 921-21B1CS)	MWD	MWD - Standard

Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
22.01	0.00	0.00	22.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
193.01	1.11	68.72	193.00	0.60	1.54	-1.26	0.65	0.65	0.00	
280.01	1.00	350.46	279.99	1.66	2.20	-1.54	1.53	-0.13	-89.95	
362.01	1.97	292.59	361.96	2.90	0.78	0.22	2.04	1.18	-70.57	
452.01	3.63	300.95	451.85	4.96	-3.09	4.55	1.89	1.84	9.29	
542.01	4.81	299.21	541.61	8.27	-8.83	11.05	1.32	1.31	-1.93	
632.01	6.50	296.08	631.17	12.35	-16.70	19.83	1.91	1.88	-3.48	
722.01	8.44	292.96	720.40	17.17	-27.35	31.48	2.20	2.16	-3.47	
812.01	10.63	291.71	809.15	22.81	-41.15	46.36	2.44	2.43	-1.39	
902.01	12.38	291.71	897.34	29.45	-57.83	64.30	1.94	1.94	0.00	

Anadarko Petroleum Corp

Survey Report

Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well NBU 921-21B1CS
Project:	UTAH - UTM (feet), NAD27, Zone 12N	TVD Reference:	26' rkb + 4829' gl @ 4855.01ft (h&p 298)
Site:	UINTAH_NBU 921-21A PAD	MD Reference:	26' rkb + 4829' gl @ 4855.01ft (h&p 298)
Well:	NBU 921-21B1CS	North Reference:	True
Wellbore:	NBU 921-21B1CS	Survey Calculation Method:	Minimum Curvature
Design:	NBU 921-21B1CS	Database:	edmp

Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
992.01	14.00	290.21	984.96	36.78	-77.01	84.82	1.84	1.80	-1.67
1,082.01	15.69	288.58	1,071.95	44.42	-98.76	107.88	1.93	1.88	-1.81
1,172.01	17.44	286.20	1,158.22	52.06	-123.25	133.52	2.09	1.94	-2.64
1,262.01	18.44	288.21	1,243.84	60.28	-149.72	161.22	1.31	1.11	2.23
1,352.01	18.31	288.71	1,329.25	69.26	-176.63	189.59	0.23	-0.14	0.56
1,442.01	18.63	288.96	1,414.62	78.46	-203.62	218.10	0.37	0.36	0.28
1,532.01	18.31	287.71	1,499.98	87.44	-230.68	246.61	0.57	-0.36	-1.39
1,622.01	18.75	290.33	1,585.32	96.76	-257.71	275.20	1.05	0.49	2.91
1,712.01	18.50	288.83	1,670.60	106.40	-284.79	303.94	0.60	-0.28	-1.67
1,802.01	20.00	288.45	1,755.57	115.88	-312.91	333.61	1.67	1.67	-0.42
1,892.01	20.38	288.71	1,840.04	125.77	-342.35	364.67	0.43	0.42	0.29
1,982.01	19.00	287.33	1,924.77	135.17	-371.18	394.99	1.62	-1.53	-1.53
2,072.01	18.50	291.08	2,010.00	144.67	-398.49	423.90	1.45	-0.56	4.17
2,162.01	19.50	293.08	2,095.10	155.69	-425.63	453.16	1.33	1.11	2.22
2,252.01	19.88	291.71	2,179.84	167.24	-453.67	483.43	0.66	0.42	-1.52
2,342.01	18.75	292.21	2,264.77	178.37	-481.28	513.17	1.27	-1.26	0.56
2,432.01	18.56	291.83	2,350.04	189.16	-507.97	541.92	0.25	-0.21	-0.42
2,522.01	19.06	292.20	2,435.23	200.04	-534.87	570.90	0.57	0.56	0.41
2,612.01	19.06	291.71	2,520.30	211.03	-562.13	600.26	0.18	0.00	-0.54
2,702.01	19.88	291.96	2,605.15	222.19	-589.97	630.23	0.92	0.91	0.28
2,792.01	19.13	290.95	2,689.99	233.18	-617.94	660.25	0.91	-0.83	-1.12
2,890.01	19.57	290.29	2,782.45	244.62	-648.33	692.71	0.50	0.45	-0.67
tie on point									
2,940.00	19.08	289.20	2,829.62	250.21	-663.90	709.25	1.22	-0.98	-2.18
3,035.00	18.75	289.94	2,919.49	260.52	-692.91	740.05	0.43	-0.35	0.78
3,130.00	18.69	287.69	3,009.47	270.35	-721.77	770.53	0.76	-0.06	-2.37
3,224.00	19.13	288.94	3,098.40	279.93	-750.69	800.99	0.64	0.47	1.33
3,318.00	17.31	288.06	3,187.68	289.26	-778.55	830.38	1.96	-1.94	-0.94
3,413.00	17.13	289.61	3,278.42	298.34	-805.17	858.50	0.52	-0.19	1.63
3,507.00	17.06	290.69	3,368.27	307.86	-831.11	886.12	0.35	-0.07	1.15
3,602.00	16.56	292.19	3,459.21	317.90	-856.68	913.58	0.70	-0.53	1.58
3,696.00	16.63	292.31	3,549.30	328.06	-881.53	940.38	0.08	0.07	0.13
3,791.00	16.88	294.44	3,640.26	338.93	-906.66	967.69	0.70	0.26	2.24
3,885.00	16.63	291.19	3,730.27	349.44	-931.63	994.73	1.03	-0.27	-3.46
3,979.00	16.13	291.56	3,820.46	359.10	-956.32	1,021.22	0.54	-0.53	0.39
4,074.00	14.13	290.31	3,912.16	367.97	-979.47	1,046.00	2.13	-2.11	-1.32
4,169.00	12.56	288.94	4,004.59	375.35	-1,000.11	1,067.92	1.69	-1.65	-1.44
4,263.00	11.94	287.56	4,096.45	381.60	-1,019.05	1,087.86	0.73	-0.66	-1.47
4,357.00	9.00	291.44	4,188.88	387.22	-1,035.17	1,104.93	3.21	-3.13	4.13
4,452.00	9.06	297.56	4,282.70	393.40	-1,048.72	1,119.76	1.01	0.06	6.44
4,546.00	7.81	289.69	4,375.69	398.98	-1,061.29	1,133.47	1.81	-1.33	-8.37
4,641.00	6.88	289.94	4,469.91	403.09	-1,072.72	1,145.61	0.98	-0.98	0.26
4,735.00	6.06	288.31	4,563.31	406.57	-1,082.72	1,156.20	0.89	-0.87	-1.73

Anadarko Petroleum Corp

Survey Report

Company: US ROCKIES REGION PLANNING
Project: UTAH - UTM (feet), NAD27, Zone 12N
Site: UINTAH_NBU 921-21A PAD
Well: NBU 921-21B1CS
Wellbore: NBU 921-21B1CS
Design: NBU 921-21B1CS

Local Co-ordinate Reference: Well NBU 921-21B1CS
TVD Reference: 26' rkb + 4829' gl @ 4855.01ft (h&p 298)
MD Reference: 26' rkb + 4829' gl @ 4855.01ft (h&p 298)
North Reference: True
Survey Calculation Method: Minimum Curvature
Database: edmp

Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
4,830.00	5.63	293.94	4,657.81	410.04	-1,091.74	1,165.86	0.75	-0.45	5.93
4,924.00	4.56	290.19	4,751.44	413.20	-1,099.46	1,174.19	1.19	-1.14	-3.99
5,019.00	3.69	284.31	4,846.20	415.26	-1,105.97	1,181.02	1.02	-0.92	-6.19
5,114.00	2.69	278.31	4,941.05	416.34	-1,111.14	1,186.25	1.11	-1.05	-6.32
5,208.00	2.19	275.19	5,034.96	416.82	-1,115.11	1,190.16	0.55	-0.53	-3.32
5,302.00	1.81	268.06	5,128.90	416.93	-1,118.38	1,193.29	0.48	-0.40	-7.59
5,397.00	1.44	247.81	5,223.87	416.43	-1,120.99	1,195.58	0.71	-0.39	-21.32
5,491.00	1.44	235.06	5,317.84	415.30	-1,123.05	1,197.16	0.34	0.00	-13.56
5,586.00	0.81	194.81	5,412.82	413.97	-1,124.20	1,197.81	1.03	-0.66	-42.37
5,680.00	0.06	182.19	5,506.82	413.28	-1,124.37	1,197.74	0.80	-0.80	-13.43
5,775.00	0.50	156.40	5,601.82	412.85	-1,124.21	1,197.45	0.47	0.46	-27.15
5,869.00	1.13	36.69	5,695.81	413.22	-1,123.49	1,196.89	1.54	0.67	-127.35
5,964.00	1.06	43.69	5,790.79	414.60	-1,122.32	1,196.24	0.16	-0.07	7.37
6,058.00	0.56	54.69	5,884.78	415.50	-1,121.35	1,195.62	0.55	-0.53	11.70
6,153.00	0.25	131.19	5,979.78	415.63	-1,120.81	1,195.15	0.59	-0.33	80.53
6,247.00	0.19	312.31	6,073.78	415.60	-1,120.77	1,195.11	0.47	-0.06	-190.30
6,341.00	0.50	29.31	6,167.78	416.06	-1,120.69	1,195.18	0.52	0.33	81.92
6,435.00	0.56	61.81	6,261.77	416.64	-1,120.08	1,194.80	0.32	0.06	34.57
6,530.00	0.44	99.44	6,356.77	416.80	-1,119.31	1,194.12	0.36	-0.13	39.61
6,624.00	0.50	132.19	6,450.77	416.46	-1,118.65	1,193.39	0.29	0.06	34.84
6,719.00	0.63	142.69	6,545.76	415.77	-1,118.03	1,192.57	0.17	0.14	11.05
6,813.00	0.94	140.94	6,639.76	414.76	-1,117.23	1,191.48	0.33	0.33	-1.86
6,908.00	1.63	105.81	6,734.73	413.79	-1,115.44	1,189.47	1.07	0.73	-36.98
7,002.00	0.31	218.19	6,828.72	413.22	-1,114.31	1,188.22	1.88	-1.40	119.55
7,097.00	0.69	264.19	6,923.72	412.96	-1,115.04	1,188.82	0.55	0.40	48.42
7,191.00	0.75	7.19	7,017.71	413.52	-1,115.52	1,189.46	1.20	0.06	109.57
7,286.00	0.69	38.56	7,112.70	414.58	-1,115.09	1,189.40	0.41	-0.06	33.02
7,380.00	0.63	61.19	7,206.70	415.27	-1,114.28	1,188.87	0.28	-0.06	24.07
7,475.00	0.50	83.06	7,301.69	415.57	-1,113.41	1,188.15	0.26	-0.14	23.02
7,569.00	1.00	338.81	7,395.69	416.39	-1,113.30	1,188.31	1.30	0.53	-110.90
7,664.00	0.81	338.81	7,490.68	417.79	-1,113.85	1,189.28	0.20	-0.20	0.00
7,758.00	0.50	346.56	7,584.67	418.80	-1,114.18	1,189.94	0.34	-0.33	8.24
7,852.00	0.38	1.81	7,678.67	419.52	-1,114.27	1,190.25	0.18	-0.13	16.22
7,947.00	0.31	24.44	7,773.67	420.06	-1,114.15	1,190.32	0.16	-0.07	23.82
8,041.00	0.44	19.94	7,867.66	420.63	-1,113.92	1,190.29	0.14	0.14	-4.79
8,136.00	0.50	13.19	7,962.66	421.38	-1,113.70	1,190.33	0.09	0.06	-7.11
8,230.00	0.56	67.31	8,056.66	421.96	-1,113.19	1,190.03	0.52	0.06	57.57
8,324.00	0.63	84.06	8,150.65	422.19	-1,112.25	1,189.22	0.20	0.07	17.82
8,419.00	0.38	54.31	8,245.65	422.43	-1,111.47	1,188.57	0.37	-0.26	-31.32
8,514.00	1.00	289.56	8,340.64	422.89	-1,112.00	1,189.22	1.32	0.65	-131.32
8,608.00	0.88	280.31	8,434.63	423.29	-1,113.48	1,190.75	0.21	-0.13	-9.84
8,703.00	0.75	272.19	8,529.62	423.45	-1,114.82	1,192.07	0.18	-0.14	-8.55
8,797.00	0.38	241.19	8,623.62	423.32	-1,115.71	1,192.86	0.50	-0.39	-32.98

Anadarko Petroleum Corp

Survey Report

Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well NBU 921-21B1CS
Project:	UTAH - UTM (feet), NAD27, Zone 12N	TVD Reference:	26' rkb + 4829' gl @ 4855.01ft (h&p 298)
Site:	UINTAH_NBU 921-21A PAD	MD Reference:	26' rkb + 4829' gl @ 4855.01ft (h&p 298)
Well:	NBU 921-21B1CS	North Reference:	True
Wellbore:	NBU 921-21B1CS	Survey Calculation Method:	Minimum Curvature
Design:	NBU 921-21B1CS	Database:	edmp

Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
8,892.00	0.50	204.44	8,718.61	422.79	-1,116.15	1,193.11	0.32	0.13	-38.68	
8,986.00	0.69	168.44	8,812.61	421.86	-1,116.21	1,192.86	0.44	0.20	-38.30	
9,080.00	1.00	148.69	8,906.60	420.61	-1,115.67	1,191.94	0.45	0.33	-21.01	
9,175.00	1.31	156.69	9,001.58	418.90	-1,114.81	1,190.56	0.37	0.33	8.42	
9,269.00	1.50	143.94	9,095.55	416.92	-1,113.66	1,188.83	0.39	0.20	-13.56	
9,364.00	1.63	137.31	9,190.52	414.92	-1,112.01	1,186.61	0.23	0.14	-6.98	
9,458.00	1.75	142.94	9,284.48	412.79	-1,110.24	1,184.24	0.22	0.13	5.99	
9,553.00	1.81	143.31	9,379.43	410.43	-1,108.47	1,181.79	0.06	0.06	0.39	
9,647.00	1.81	144.06	9,473.38	408.04	-1,106.71	1,179.34	0.03	0.00	0.80	
9,741.00	1.94	152.81	9,567.33	405.42	-1,105.11	1,176.97	0.33	0.14	9.31	
9,836.00	2.00	150.81	9,662.28	402.55	-1,103.57	1,174.57	0.10	0.06	-2.11	
9,930.00	2.06	153.81	9,756.22	399.60	-1,102.03	1,172.14	0.13	0.06	3.19	
10,025.00	2.13	155.19	9,851.15	396.46	-1,100.53	1,169.70	0.09	0.07	1.45	
10,119.00	2.19	156.81	9,945.09	393.23	-1,099.09	1,167.27	0.09	0.06	1.72	
10,214.00	2.38	158.56	10,040.01	389.72	-1,097.66	1,164.77	0.21	0.20	1.84	
10,308.00	2.25	162.94	10,133.94	386.14	-1,096.40	1,162.40	0.23	-0.14	4.66	
10,403.00	2.25	158.94	10,228.86	382.62	-1,095.18	1,160.10	0.17	0.00	-4.21	
10,497.00	2.31	162.56	10,322.79	379.09	-1,093.95	1,157.77	0.17	0.06	3.85	
10,592.00	2.50	162.06	10,417.70	375.29	-1,092.74	1,155.38	0.20	0.20	-0.53	
10,686.00	2.50	163.19	10,511.62	371.38	-1,091.52	1,152.94	0.05	0.00	1.20	
10,780.00	2.56	163.94	10,605.52	367.40	-1,090.34	1,150.52	0.07	0.06	0.80	
10,875.00	2.63	163.31	10,700.43	363.27	-1,089.13	1,148.02	0.08	0.07	-0.66	
10,970.00	2.75	162.44	10,795.32	359.01	-1,087.82	1,145.37	0.13	0.13	-0.92	
11,064.00	2.75	163.06	10,889.21	354.70	-1,086.48	1,142.70	0.03	0.00	0.66	
11,158.00	2.94	162.94	10,983.10	350.24	-1,085.11	1,139.94	0.20	0.20	-0.13	
11,253.00	3.00	163.31	11,077.97	345.53	-1,083.69	1,137.04	0.07	0.06	0.39	
11,347.00	3.00	162.94	11,171.84	340.82	-1,082.26	1,134.14	0.02	0.00	-0.39	
11,420.00	3.06	162.81	11,244.74	337.14	-1,081.12	1,131.86	0.08	0.08	-0.18	
last mwd survey										
11,480.00	3.06	162.81	11,304.65	334.08	-1,080.18	1,129.96	0.00	0.00	0.00	
projection										

Design Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment	
		+N/-S (ft)	+E/-W (ft)		
2,890.01	2,782.45	244.62	-648.33	tie on point	
11,420.00	11,244.74	337.14	-1,081.12	last mwd survey	
11,480.00	11,304.65	334.08	-1,080.18	projection	

Checked By: _____ Approved By: _____ Date: _____

US ROCKIES REGION PLANNING

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

UINTAH_NBU 921-21A PAD

NBU 921-21B1CS

NBU 921-21B1CS

Design: NBU 921-21B1CS

Survey Report - Geographic

15 February, 2012

Anadarko Petroleum Corp
Survey Report - Geographic

Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well NBU 921-21B1CS
Project:	UTAH - UTM (feet), NAD27, Zone 12N	TVD Reference:	26' rkb + 4829' gl @ 4855.01ft (h&p 298)
Site:	UINTAH_NBU 921-21A PAD	MD Reference:	26' rkb + 4829' gl @ 4855.01ft (h&p 298)
Well:	NBU 921-21B1CS	North Reference:	True
Wellbore:	NBU 921-21B1CS	Survey Calculation Method:	Minimum Curvature
Design:	NBU 921-21B1CS	Database:	edmp

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 921-21A PAD				
Site Position:		Northing:	14,538,868.41 usft	Latitude:	40.026141
From:	Lat/Long	Easting:	2,046,432.01 usft	Longitude:	-109.549721
Position Uncertainty:	0.00 ft	Slot Radius:	13-3/16 "	Grid Convergence:	0.93 °

Well	NBU 921-21B1CS					
Well Position	+N/-S	0.00 ft	Northing:	14,538,868.41 usft	Latitude:	40.026141
	+E/-W	0.00 ft	Easting:	2,046,432.01 usft	Longitude:	-109.549721
Position Uncertainty		0.00 ft	Wellhead Elevation:	ft	Ground Level:	4,829.00 ft

Wellbore	NBU 921-21B1CS				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF200510	4/20/2009	11.36	65.94	52,580

Design	NBU 921-21B1CS				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	22.01
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)	
	22.01	0.00	0.00	289.20	

Survey Program	Date	2/15/2012			
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
193.01	2,890.01	Survey #1 (NBU 921-21B1CS)	MWD	MWD - Standard	
2,940.00	11,480.00	Survey #2 (NBU 921-21B1CS)	MWD	MWD - Standard	

Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude	
22.01	0.00	0.00	22.01	0.00	0.00	14,538,868.41	2,046,432.01	40.026141	-109.549721	
193.01	1.11	68.72	193.00	0.60	1.54	14,538,869.04	2,046,433.54	40.026143	-109.549716	
280.01	1.00	350.46	279.99	1.66	2.20	14,538,870.10	2,046,434.19	40.026146	-109.549713	
362.01	1.97	292.59	361.96	2.90	0.78	14,538,871.33	2,046,432.75	40.026149	-109.549718	
452.01	3.63	300.95	451.85	4.96	-3.09	14,538,873.32	2,046,428.84	40.026155	-109.549732	
542.01	4.81	299.21	541.61	8.27	-8.83	14,538,876.54	2,046,423.05	40.026164	-109.549753	
632.01	6.50	296.08	631.17	12.35	-16.70	14,538,880.49	2,046,415.12	40.026175	-109.549781	
722.01	8.44	292.96	720.40	17.17	-27.35	14,538,885.13	2,046,404.38	40.026188	-109.549819	
812.01	10.63	291.71	809.15	22.81	-41.15	14,538,890.55	2,046,390.49	40.026204	-109.549868	
902.01	12.38	291.71	897.34	29.45	-57.83	14,538,896.92	2,046,373.71	40.026222	-109.549928	
992.01	14.00	290.21	984.96	36.78	-77.01	14,538,903.94	2,046,354.41	40.026242	-109.549996	

Anadarko Petroleum Corp

Survey Report - Geographic

Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well NBU 921-21B1CS
Project:	UTAH - UTM (feet), NAD27, Zone 12N	TVD Reference:	26' rkb + 4829' gl @ 4855.01ft (h&p 298)
Site:	UINTAH_NBU 921-21A PAD	MD Reference:	26' rkb + 4829' gl @ 4855.01ft (h&p 298)
Well:	NBU 921-21B1CS	North Reference:	True
Wellbore:	NBU 921-21B1CS	Survey Calculation Method:	Minimum Curvature
Design:	NBU 921-21B1CS	Database:	edmp

Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N-S (ft)	+E-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
1,082.01	15.69	288.58	1,071.95	44.42	-98.76	14,538,911.22	2,046,332.54	40.026263	-109.550074
1,172.01	17.44	286.20	1,158.22	52.06	-123.25	14,538,918.46	2,046,307.93	40.026284	-109.550161
1,262.01	18.44	288.21	1,243.84	60.28	-149.72	14,538,926.24	2,046,281.33	40.026307	-109.550256
1,352.01	18.31	288.71	1,329.25	69.26	-176.63	14,538,934.78	2,046,254.27	40.026331	-109.550352
1,442.01	18.63	288.96	1,414.62	78.46	-203.62	14,538,943.55	2,046,227.14	40.026357	-109.550448
1,532.01	18.31	287.71	1,499.98	87.44	-230.68	14,538,952.08	2,046,199.94	40.026381	-109.550545
1,622.01	18.75	290.33	1,585.32	96.76	-257.71	14,538,960.96	2,046,172.76	40.026407	-109.550642
1,712.01	18.50	288.83	1,670.60	106.40	-284.79	14,538,970.16	2,046,145.52	40.026433	-109.550738
1,802.01	20.00	288.45	1,755.57	115.88	-312.91	14,538,979.18	2,046,117.26	40.026459	-109.550839
1,892.01	20.38	288.71	1,840.04	125.77	-342.35	14,538,988.59	2,046,087.66	40.026486	-109.550944
1,982.01	19.00	287.33	1,924.77	135.17	-371.18	14,538,997.51	2,046,058.68	40.026512	-109.551047
2,072.01	18.50	291.08	2,010.00	144.67	-398.49	14,539,006.57	2,046,031.22	40.026538	-109.551144
2,162.01	19.50	293.08	2,095.10	155.69	-425.63	14,539,017.15	2,046,003.90	40.026569	-109.551241
2,252.01	19.88	291.71	2,179.84	167.24	-453.67	14,539,028.24	2,045,975.68	40.026600	-109.551342
2,342.01	18.75	292.21	2,264.77	178.37	-481.28	14,539,038.92	2,045,947.89	40.026631	-109.551440
2,432.01	18.56	291.83	2,350.04	189.16	-507.97	14,539,049.28	2,045,921.03	40.026660	-109.551535
2,522.01	19.06	292.20	2,435.23	200.04	-534.87	14,539,059.72	2,045,893.96	40.026690	-109.551632
2,612.01	19.06	291.71	2,520.30	211.03	-562.13	14,539,070.26	2,045,866.52	40.026721	-109.551729
2,702.01	19.88	291.96	2,605.15	222.19	-589.97	14,539,080.96	2,045,838.50	40.026751	-109.551828
2,792.01	19.13	290.95	2,689.99	233.18	-617.94	14,539,091.50	2,045,810.36	40.026781	-109.551928
2,890.01	19.57	290.29	2,782.45	244.62	-648.33	14,539,102.44	2,045,779.79	40.026813	-109.552037
tie on point									
2,940.00	19.08	289.20	2,829.62	250.21	-663.90	14,539,107.77	2,045,764.13	40.026828	-109.552092
3,035.00	18.75	289.94	2,919.49	260.52	-692.91	14,539,117.61	2,045,734.95	40.026856	-109.552196
3,130.00	18.69	287.69	3,009.47	270.35	-721.77	14,539,126.98	2,045,705.94	40.026883	-109.552299
3,224.00	19.13	288.94	3,098.40	279.93	-750.69	14,539,136.08	2,045,676.87	40.026910	-109.552402
3,318.00	17.31	288.06	3,187.68	289.26	-778.55	14,539,144.96	2,045,648.85	40.026935	-109.552502
3,413.00	17.13	289.61	3,278.42	298.34	-805.17	14,539,153.60	2,045,622.09	40.026960	-109.552597
3,507.00	17.06	290.69	3,368.27	307.86	-831.11	14,539,162.70	2,045,596.00	40.026986	-109.552690
3,602.00	16.56	292.19	3,459.21	317.90	-856.68	14,539,172.32	2,045,570.27	40.027014	-109.552781
3,696.00	16.63	292.31	3,549.30	328.06	-881.53	14,539,182.07	2,045,545.26	40.027042	-109.552870
3,791.00	16.88	294.44	3,640.26	338.93	-906.66	14,539,192.53	2,045,519.95	40.027072	-109.552959
3,885.00	16.63	291.19	3,730.27	349.44	-931.63	14,539,202.63	2,045,494.82	40.027101	-109.553049
3,979.00	16.13	291.56	3,820.46	359.10	-956.32	14,539,211.89	2,045,469.98	40.027127	-109.553137
4,074.00	14.13	290.31	3,912.16	367.97	-979.47	14,539,220.39	2,045,446.68	40.027151	-109.553219
4,169.00	12.56	288.94	4,004.59	375.35	-1,000.11	14,539,227.43	2,045,425.92	40.027172	-109.553293
4,263.00	11.94	287.56	4,096.45	381.60	-1,019.05	14,539,233.37	2,045,406.88	40.027189	-109.553361
4,357.00	9.00	291.44	4,188.88	387.22	-1,035.17	14,539,238.73	2,045,390.68	40.027204	-109.553418
4,452.00	9.06	297.56	4,282.70	393.40	-1,048.72	14,539,244.68	2,045,377.03	40.027221	-109.553467
4,546.00	7.81	289.69	4,375.69	398.98	-1,061.29	14,539,250.06	2,045,364.37	40.027237	-109.553512
4,641.00	6.88	289.94	4,469.91	403.09	-1,072.72	14,539,253.98	2,045,352.87	40.027248	-109.553552
4,735.00	6.06	288.31	4,563.31	406.57	-1,082.72	14,539,257.30	2,045,342.81	40.027257	-109.553588
4,830.00	5.63	293.94	4,657.81	410.04	-1,091.74	14,539,260.62	2,045,333.74	40.027267	-109.553620
4,924.00	4.56	290.19	4,751.44	413.20	-1,099.46	14,539,263.65	2,045,325.97	40.027276	-109.553648
5,019.00	3.69	284.31	4,846.20	415.26	-1,105.97	14,539,265.61	2,045,319.43	40.027281	-109.553671
5,114.00	2.69	278.31	4,941.05	416.34	-1,111.14	14,539,266.60	2,045,314.24	40.027284	-109.553690
5,208.00	2.19	275.19	5,034.96	416.82	-1,115.11	14,539,267.02	2,045,310.26	40.027285	-109.553704
5,302.00	1.81	268.06	5,128.90	416.93	-1,118.38	14,539,267.07	2,045,306.99	40.027286	-109.553715
5,397.00	1.44	247.81	5,223.87	416.43	-1,120.99	14,539,266.53	2,045,304.39	40.027284	-109.553725
5,491.00	1.44	235.06	5,317.84	415.30	-1,123.05	14,539,265.38	2,045,302.35	40.027281	-109.553732
5,586.00	0.81	194.81	5,412.82	413.97	-1,124.20	14,539,264.02	2,045,301.22	40.027278	-109.553736
5,680.00	0.06	182.19	5,506.82	413.28	-1,124.37	14,539,263.33	2,045,301.06	40.027276	-109.553737
5,775.00	0.50	156.40	5,601.82	412.85	-1,124.21	14,539,262.90	2,045,301.23	40.027275	-109.553736
5,869.00	1.13	36.69	5,695.81	413.22	-1,123.49	14,539,263.28	2,045,301.95	40.027276	-109.553734
5,964.00	1.06	43.69	5,790.79	414.60	-1,122.32	14,539,264.69	2,045,303.09	40.027279	-109.553730

Anadarko Petroleum Corp

Survey Report - Geographic

Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well NBU 921-21B1CS
Project:	UTAH - UTM (feet), NAD27, Zone 12N	TVD Reference:	26' rkb + 4829' gl @ 4855.01ft (h&p 298)
Site:	UINTAH_NBU 921-21A PAD	MD Reference:	26' rkb + 4829' gl @ 4855.01ft (h&p 298)
Well:	NBU 921-21B1CS	North Reference:	True
Wellbore:	NBU 921-21B1CS	Survey Calculation Method:	Minimum Curvature
Design:	NBU 921-21B1CS	Database:	edmp

Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N-S (ft)	+E-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude	
6,058.00	0.56	54.69	5,884.78	415.50	-1,121.35	14,539,265.60	2,045,304.05	40.027282	-109.553726	
6,153.00	0.25	131.19	5,979.78	415.63	-1,120.81	14,539,265.74	2,045,304.58	40.027282	-109.553724	
6,247.00	0.19	312.31	6,073.78	415.60	-1,120.77	14,539,265.71	2,045,304.62	40.027282	-109.553724	
6,341.00	0.50	29.31	6,167.78	416.06	-1,120.69	14,539,266.17	2,045,304.70	40.027283	-109.553724	
6,435.00	0.56	61.81	6,261.77	416.64	-1,120.08	14,539,266.76	2,045,305.30	40.027285	-109.553722	
6,530.00	0.44	99.44	6,356.77	416.80	-1,119.31	14,539,266.93	2,045,306.06	40.027285	-109.553719	
6,624.00	0.50	132.19	6,450.77	416.46	-1,118.65	14,539,266.60	2,045,306.73	40.027285	-109.553716	
6,719.00	0.63	142.69	6,545.76	415.77	-1,118.03	14,539,265.92	2,045,307.36	40.027283	-109.553714	
6,813.00	0.94	140.94	6,639.76	414.76	-1,117.23	14,539,264.92	2,045,308.18	40.027280	-109.553711	
6,908.00	1.63	105.81	6,734.73	413.79	-1,115.44	14,539,263.98	2,045,309.99	40.027277	-109.553705	
7,002.00	0.31	218.19	6,828.72	413.22	-1,114.31	14,539,263.43	2,045,311.12	40.027276	-109.553701	
7,097.00	0.69	264.19	6,923.72	412.96	-1,115.04	14,539,263.16	2,045,310.40	40.027275	-109.553704	
7,191.00	0.75	7.19	7,017.71	413.52	-1,115.52	14,539,263.71	2,045,309.90	40.027276	-109.553705	
7,286.00	0.69	38.56	7,112.70	414.58	-1,115.09	14,539,264.78	2,045,310.32	40.027279	-109.553704	
7,380.00	0.63	61.19	7,206.70	415.27	-1,114.28	14,539,265.48	2,045,311.12	40.027281	-109.553701	
7,475.00	0.50	83.06	7,301.69	415.57	-1,113.41	14,539,265.80	2,045,311.98	40.027282	-109.553698	
7,569.00	1.00	338.81	7,395.69	416.39	-1,113.30	14,539,266.62	2,045,312.08	40.027284	-109.553697	
7,664.00	0.81	338.81	7,490.68	417.79	-1,113.85	14,539,268.01	2,045,311.51	40.027288	-109.553699	
7,758.00	0.50	346.56	7,584.67	418.80	-1,114.18	14,539,269.02	2,045,311.16	40.027291	-109.553700	
7,852.00	0.38	1.81	7,678.67	419.52	-1,114.27	14,539,269.73	2,045,311.06	40.027293	-109.553701	
7,947.00	0.31	24.44	7,773.67	420.06	-1,114.15	14,539,270.28	2,045,311.17	40.027294	-109.553700	
8,041.00	0.44	19.94	7,867.66	420.63	-1,113.92	14,539,270.85	2,045,311.39	40.027296	-109.553700	
8,136.00	0.50	13.19	7,962.66	421.38	-1,113.70	14,539,271.60	2,045,311.60	40.027298	-109.553699	
8,230.00	0.56	67.31	8,056.66	421.96	-1,113.19	14,539,272.19	2,045,312.10	40.027300	-109.553697	
8,324.00	0.63	84.06	8,150.65	422.19	-1,112.25	14,539,272.43	2,045,313.04	40.027300	-109.553694	
8,419.00	0.38	54.31	8,245.65	422.43	-1,111.47	14,539,272.68	2,045,313.81	40.027301	-109.553691	
8,514.00	1.00	289.56	8,340.64	422.89	-1,112.00	14,539,273.14	2,045,313.28	40.027302	-109.553693	
8,608.00	0.88	280.31	8,434.63	423.29	-1,113.48	14,539,273.52	2,045,311.79	40.027303	-109.553698	
8,703.00	0.75	272.19	8,529.62	423.45	-1,114.82	14,539,273.65	2,045,310.45	40.027304	-109.553703	
8,797.00	0.38	241.19	8,623.62	423.32	-1,115.71	14,539,273.51	2,045,309.56	40.027303	-109.553706	
8,892.00	0.50	204.44	8,718.61	422.79	-1,116.15	14,539,272.97	2,045,309.12	40.027302	-109.553708	
8,986.00	0.69	168.44	8,812.61	421.86	-1,116.21	14,539,272.04	2,045,309.08	40.027299	-109.553708	
9,080.00	1.00	148.69	8,906.60	420.61	-1,115.67	14,539,270.80	2,045,309.64	40.027296	-109.553706	
9,175.00	1.31	156.69	9,001.58	418.90	-1,114.81	14,539,269.10	2,045,310.53	40.027291	-109.553703	
9,269.00	1.50	143.94	9,095.55	416.92	-1,113.66	14,539,267.14	2,045,311.71	40.027286	-109.553699	
9,364.00	1.63	137.31	9,190.52	414.92	-1,112.01	14,539,265.17	2,045,313.39	40.027280	-109.553693	
9,458.00	1.75	142.94	9,284.48	412.79	-1,110.24	14,539,263.07	2,045,315.20	40.027274	-109.553686	
9,553.00	1.81	143.31	9,379.43	410.43	-1,108.47	14,539,260.74	2,045,317.01	40.027268	-109.553680	
9,647.00	1.81	144.06	9,473.38	408.04	-1,106.71	14,539,258.38	2,045,318.80	40.027261	-109.553674	
9,741.00	1.94	152.81	9,567.33	405.42	-1,105.11	14,539,255.79	2,045,320.44	40.027254	-109.553668	
9,836.00	2.00	150.81	9,662.28	402.55	-1,103.57	14,539,252.93	2,045,322.03	40.027246	-109.553663	
9,930.00	2.06	153.81	9,756.22	399.60	-1,102.03	14,539,250.01	2,045,323.63	40.027238	-109.553657	
10,025.00	2.13	155.19	9,851.15	396.46	-1,100.53	14,539,246.90	2,045,325.17	40.027230	-109.553652	
10,119.00	2.19	156.81	9,945.09	393.23	-1,099.09	14,539,243.69	2,045,326.66	40.027221	-109.553647	
10,214.00	2.38	158.56	10,040.01	389.72	-1,097.66	14,539,240.21	2,045,328.16	40.027211	-109.553641	
10,308.00	2.25	162.94	10,133.94	386.14	-1,096.40	14,539,236.65	2,045,329.47	40.027201	-109.553637	
10,403.00	2.25	158.94	10,228.86	382.62	-1,095.18	14,539,233.15	2,045,330.74	40.027192	-109.553633	
10,497.00	2.31	162.56	10,322.79	379.09	-1,093.95	14,539,229.64	2,045,332.03	40.027182	-109.553628	
10,592.00	2.50	162.06	10,417.70	375.29	-1,092.74	14,539,225.86	2,045,333.31	40.027171	-109.553624	
10,686.00	2.50	163.19	10,511.62	371.38	-1,091.52	14,539,221.97	2,045,334.59	40.027161	-109.553620	
10,780.00	2.56	163.94	10,605.52	367.40	-1,090.34	14,539,218.01	2,045,335.83	40.027150	-109.553615	
10,875.00	2.63	163.31	10,700.43	363.27	-1,089.13	14,539,213.90	2,045,337.11	40.027138	-109.553611	
10,970.00	2.75	162.44	10,795.32	359.01	-1,087.82	14,539,209.66	2,045,338.49	40.027127	-109.553606	
11,064.00	2.75	163.06	10,889.21	354.70	-1,086.48	14,539,205.38	2,045,339.90	40.027115	-109.553602	
11,158.00	2.94	162.94	10,983.10	350.24	-1,085.11	14,539,200.94	2,045,341.34	40.027103	-109.553597	

Anadarko Petroleum Corp

Survey Report - Geographic

Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well NBU 921-21B1CS
Project:	UTAH - UTM (feet), NAD27, Zone 12N	TVD Reference:	26' rkb + 4829' gl @ 4855.01ft (h&p 298)
Site:	UINTAH_NBU 921-21A PAD	MD Reference:	26' rkb + 4829' gl @ 4855.01ft (h&p 298)
Well:	NBU 921-21B1CS	North Reference:	True
Wellbore:	NBU 921-21B1CS	Survey Calculation Method:	Minimum Curvature
Design:	NBU 921-21B1CS	Database:	edmp

Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
11,253.00	3.00	163.31	11,077.97	345.53	-1,083.69	14,539,196.25	2,045,342.84	40.027090	-109.553592
11,347.00	3.00	162.94	11,171.84	340.82	-1,082.26	14,539,191.57	2,045,344.35	40.027077	-109.553586
11,420.00	3.06	162.81	11,244.74	337.14	-1,081.12	14,539,187.90	2,045,345.54	40.027067	-109.553582
last mwd survey									
11,480.00	3.06	162.81	11,304.65	334.08	-1,080.18	14,539,184.86	2,045,346.54	40.027058	-109.553579
projection									

Design Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment	
		+N/-S (ft)	+E/-W (ft)		
2,890.01	2,782.45	244.62	-648.33	tie on point	
11,420.00	11,244.74	337.14	-1,081.12	last mwd survey	
11,480.00	11,304.65	334.08	-1,080.18	projection	

Checked By: _____	Approved By: _____	Date: _____
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STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		FORM 9
		5. LEASE DESIGNATION AND SERIAL NUMBER: UTU 0576
SUNDRY NOTICES AND REPORTS ON WELLS		6. IF INDIAN, ALLOTTEE OR TRIBE NAME: UTE
Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		7. UNIT or CA AGREEMENT NAME: NATURAL BUTTES
1. TYPE OF WELL Gas Well		8. WELL NAME and NUMBER: NBU 921-21B1CS
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.		9. API NUMBER: 43047506120000
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779	PHONE NUMBER: 720 929-6507	9. FIELD and POOL or WILDCAT: NATURAL BUTTES
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1000 FNL 0870 FEL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NENE Section: 21 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 checked="" type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion: 12/10/2015 <input type="checkbox"/> SPUD REPORT Date of Spud: <input type="checkbox"/> DRILLING REPORT Report Date:	<input type="checkbox"/> ACIDIZE <input type="checkbox"/> ALTER CASING <input type="checkbox"/> CHANGE TO PREVIOUS PLANS <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input type="checkbox"/> DEEPEN <input type="checkbox"/> FRACTURE TREAT <input type="checkbox"/> OPERATOR CHANGE <input type="checkbox"/> PLUG AND ABANDON <input checked="" type="checkbox"/> PRODUCTION START OR RESUME <input type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> WATER SHUTOFF <input type="checkbox"/> SI TA STATUS EXTENSION <input type="checkbox"/> WILDCAT WELL DETERMINATION <input type="checkbox"/> OTHER	
	<input type="checkbox"/> CASING REPAIR <input type="checkbox"/> CHANGE WELL NAME <input type="checkbox"/> CONVERT WELL TYPE <input type="checkbox"/> NEW CONSTRUCTION <input type="checkbox"/> PLUG BACK <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION <input type="checkbox"/> TEMPORARY ABANDON <input type="checkbox"/> WATER DISPOSAL <input type="checkbox"/> APD EXTENSION OTHER: <input style="width: 100px;" type="text"/>	
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.		
The NBU 921-21B1CS well was returned to production on 12/10/2015. Thank you.		
Accepted by the Utah Division of Oil, Gas and Mining FOR RECORD ONLY December 15, 2015		
NAME (PLEASE PRINT) Jennifer Thomas	PHONE NUMBER 720 929-6808	TITLE Regulatory Specialist
SIGNATURE N/A		DATE 12/14/2015