

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 921-20J4BS		
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 0575		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	1910 FSL 891 FEL	NESE	20	9.0 S	21.0 E	S
Top of Uppermost Producing Zone	1734 FSL 1839 FEL	NWSE	20	9.0 S	21.0 E	S
At Total Depth	1734 FSL 1839 FEL	NWSE	20	9.0 S	21.0 E	S
21. COUNTY UINTAH		22. DISTANCE TO NEAREST LEASE LINE (Feet) 1734		23. NUMBER OF ACRES IN DRILLING UNIT 1600		
27. ELEVATION - GROUND LEVEL 4829		25. DISTANCE TO NEAREST WELL IN SAME POOL (Applied For Drilling or Completed) 980		26. PROPOSED DEPTH MD: 10376 TVD: 10210		
		28. BOND NUMBER WYB000291		29. SOURCE OF DRILLING WATER / WATER RIGHTS APPROVAL NUMBER IF APPLICABLE Permit #43-8496		

Hole, Casing, and Cement Information										
String	Hole Size	Casing Size	Length	Weight	Grade & Thread	Max Mud Wt.	Cement	Sacks	Yield	Weight
Surf	12.25	9.625	0 - 2580	36.0	J-55 LT&C	0.2	Class G	215	1.18	15.6
							Class G	380	1.18	15.6
Prod	7.875	4.5	0 - 9816	11.6	I-80 LT&C	11.6	Premium Lite High Strength	420	3.38	11.0
			9816 - 10376	11.6	HCP-110 LT&C	11.6	50/50 Poz	1450	1.31	14.3

ATTACHMENTS

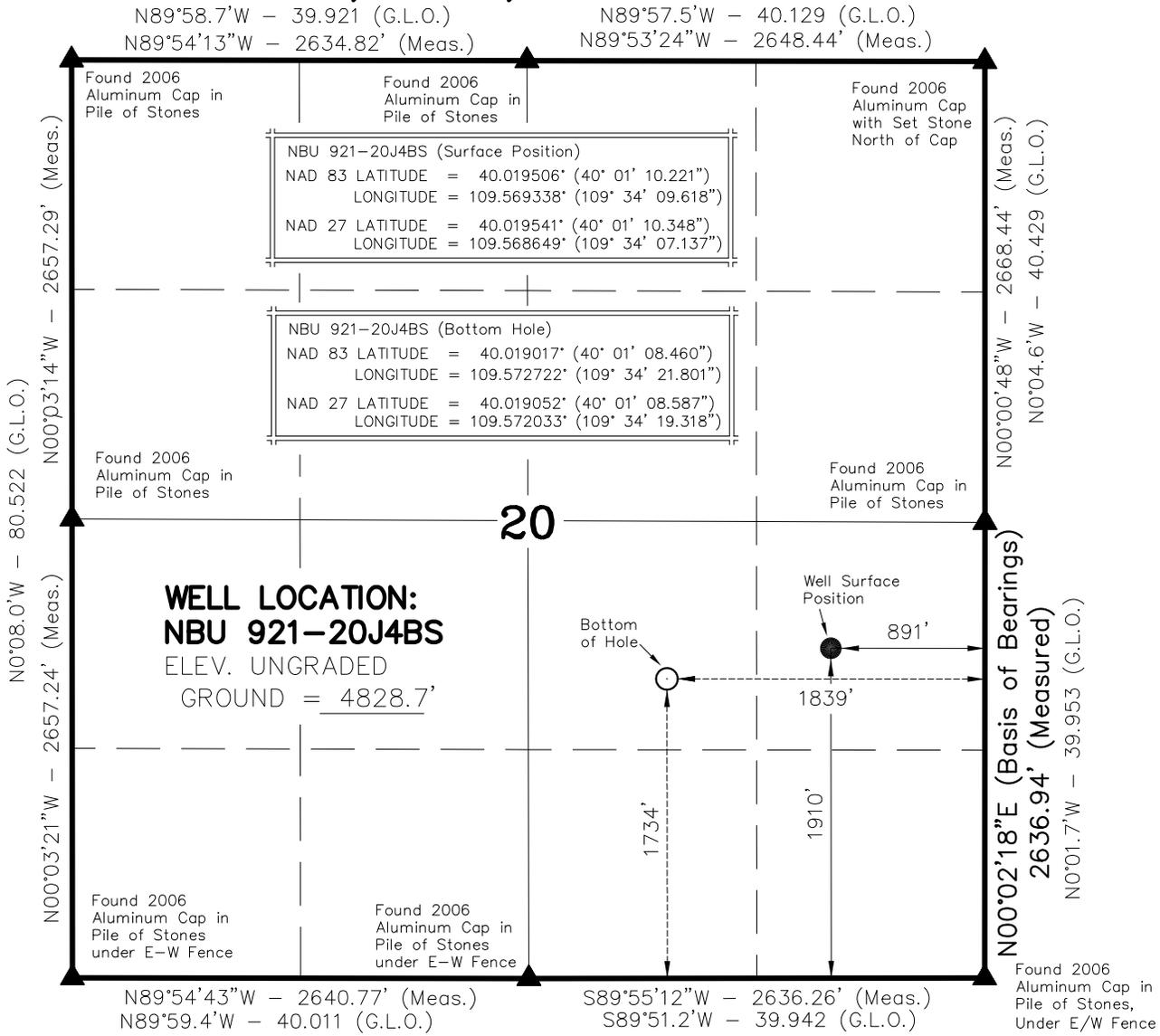
VERIFY THE FOLLOWING ARE ATTACHED IN ACCORDANCE WITH THE UTAH OIL AND GAS CONSERVATION GENERAL RULES

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

NAME Danielle Piernot	TITLE Regulatory Analyst	PHONE 720 929-6156
SIGNATURE	DATE 07/22/2009	EMAIL danielle.piernot@anadarko.com

API NUMBER ASSIGNED 4304750600000 **APPROVAL**

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



WELL LOCATION:
NBU 921-20J4BS
 ELEV. UNGRADED
 GROUND = 4828.7'

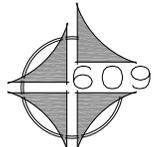
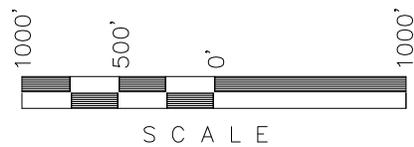
NOTES:

- ▲ = 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 S79°25'08"W 964.66' 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'.

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

NBU 921-20J4BS
WELL PLAT
 1734' FSL, 1839' FEL (Bottom Hole)
 NW ¼ SE ¼ OF SECTION 20, 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



SURVEYOR'S CERTIFICATE

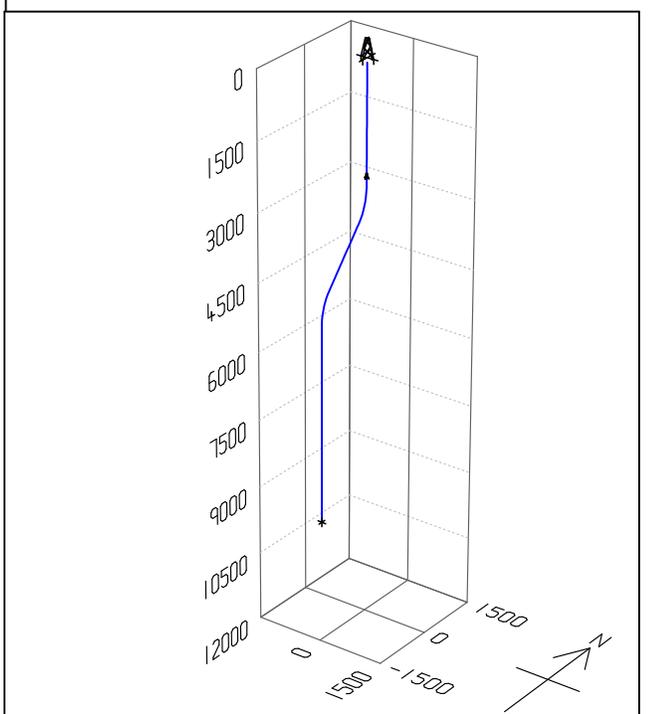
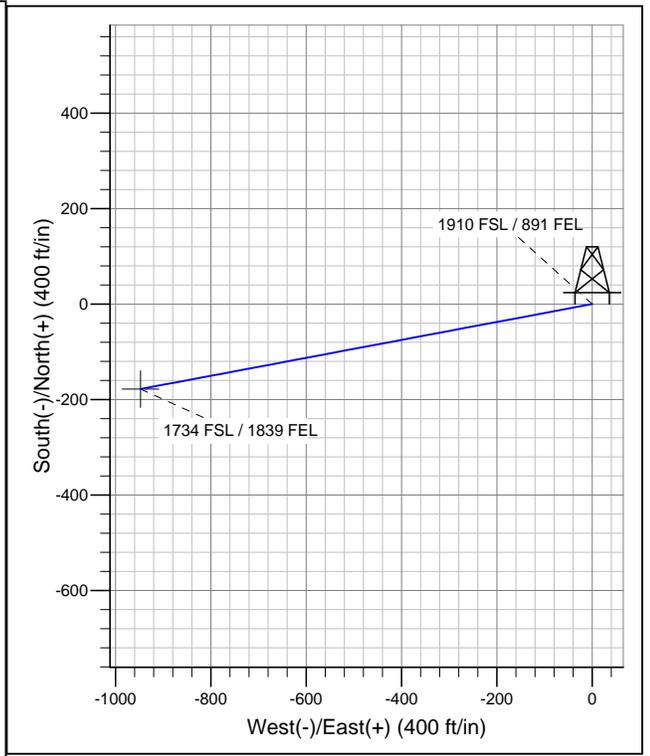
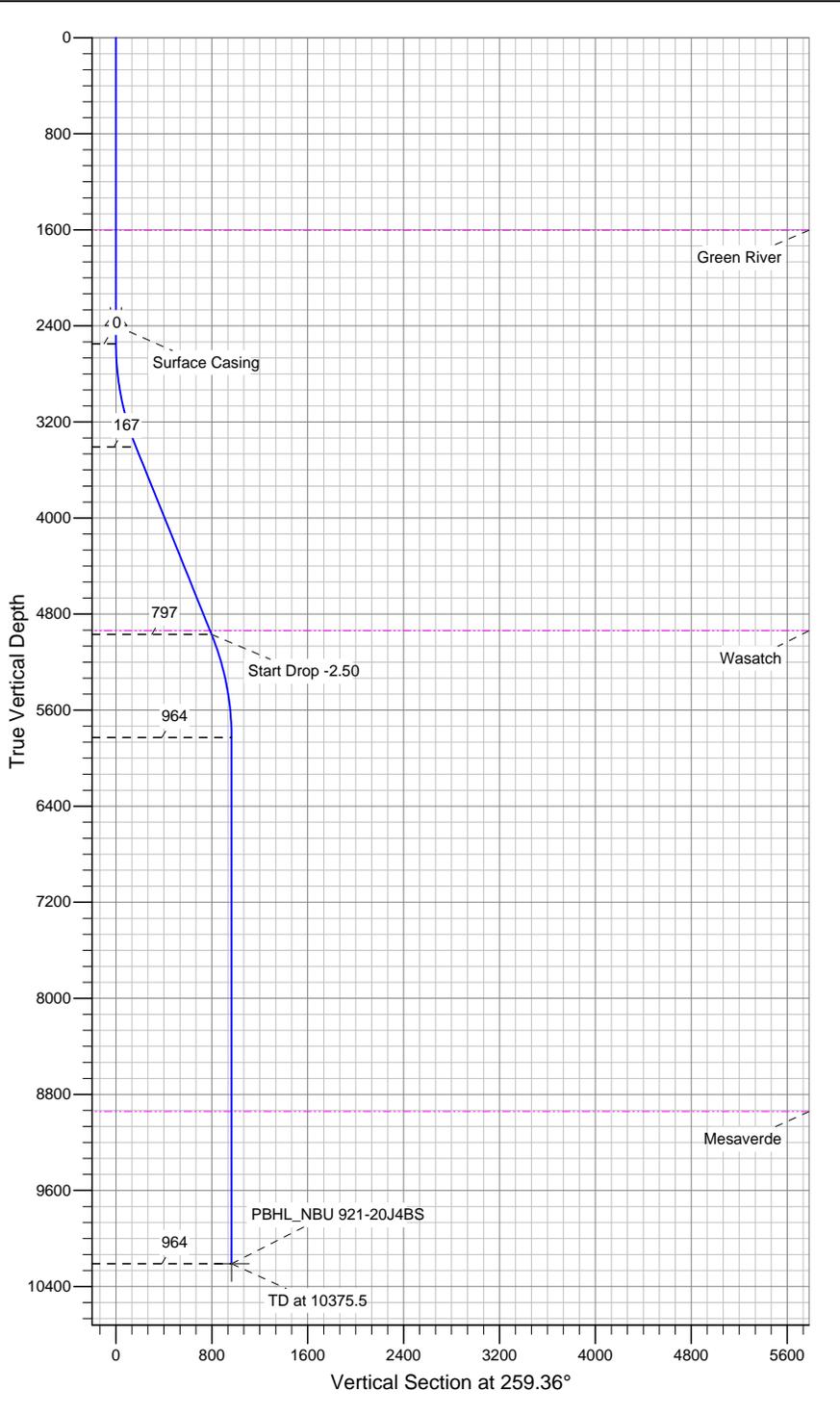
THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

Koby R. Kay
 REGISTERED LAND SURVEYOR
 REGISTRATION NO. 362251
 STATE OF UTAH

TIMBERLINE (435) 789-1365		
ENGINEERING & LAND SURVEYING, INC.		
209 NORTH 300 WEST - VERNAL, UTAH 84078		
DATE SURVEYED: 01-16-09	SURVEYED BY: M.S.B.	SHEET 1
DATE DRAWN: 02-11-09	DRAWN BY: E.M.S.	
SCALE: 1" = 1000'	Date Last Revised:	OF 13



Well Name: P_NBU 921-20J4BS
 Surface Location: UINTAH_NBU 921-20I PAD
 NAD 1927 (NADCON CONUS) Universal Transverse Mercator (US Survey Feet)
 UTAH - UTM (feet), NAD27, Zone 12N
 Ground Elevation: 4828.0
 Northing 14536379.26 Easting 2041171.42 Latitude 40.019541°N Longitude 109.568649°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	2550.0	0.00	0.00	2550.0	0.0	0.0	0.00	0.00	0.0
3	3430.0	22.00	259.36	3408.5	-30.8	-164.0	2.50	259.36	166.9
4	5113.0	22.00	259.36	4969.0	-147.3	-783.6	0.00	0.00	797.3
5	5993.0	0.00	0.00	5827.5	-178.1	-947.6	2.50	180.00	964.2
6	10375.5	0.00	0.00	10210.0	-178.1	-947.6	0.00	0.00	964.2

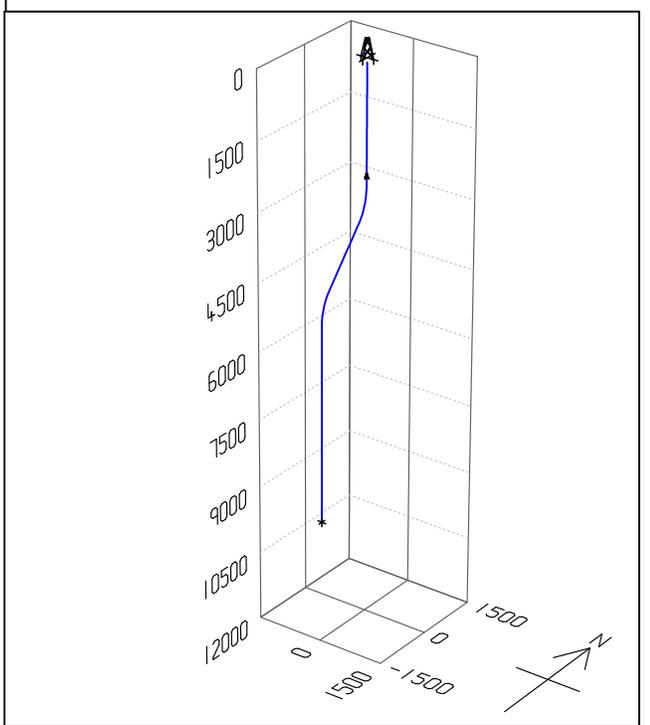
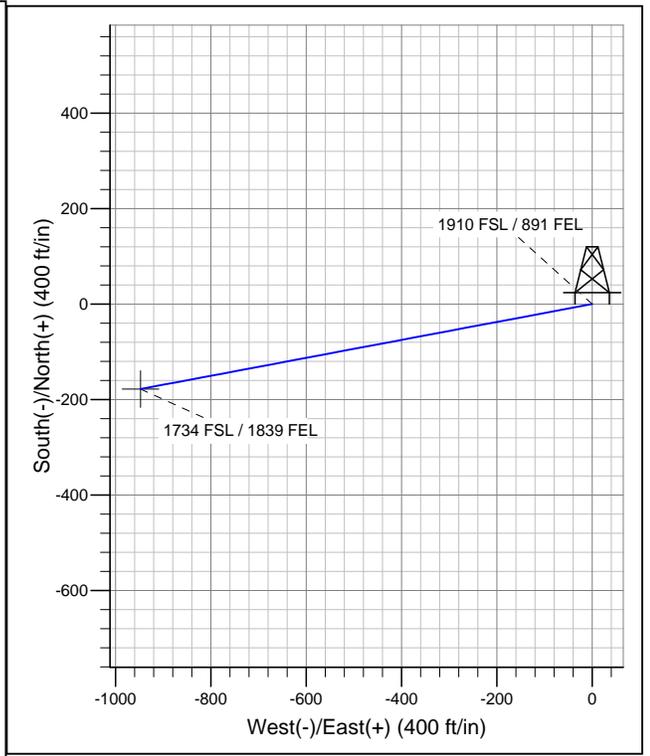
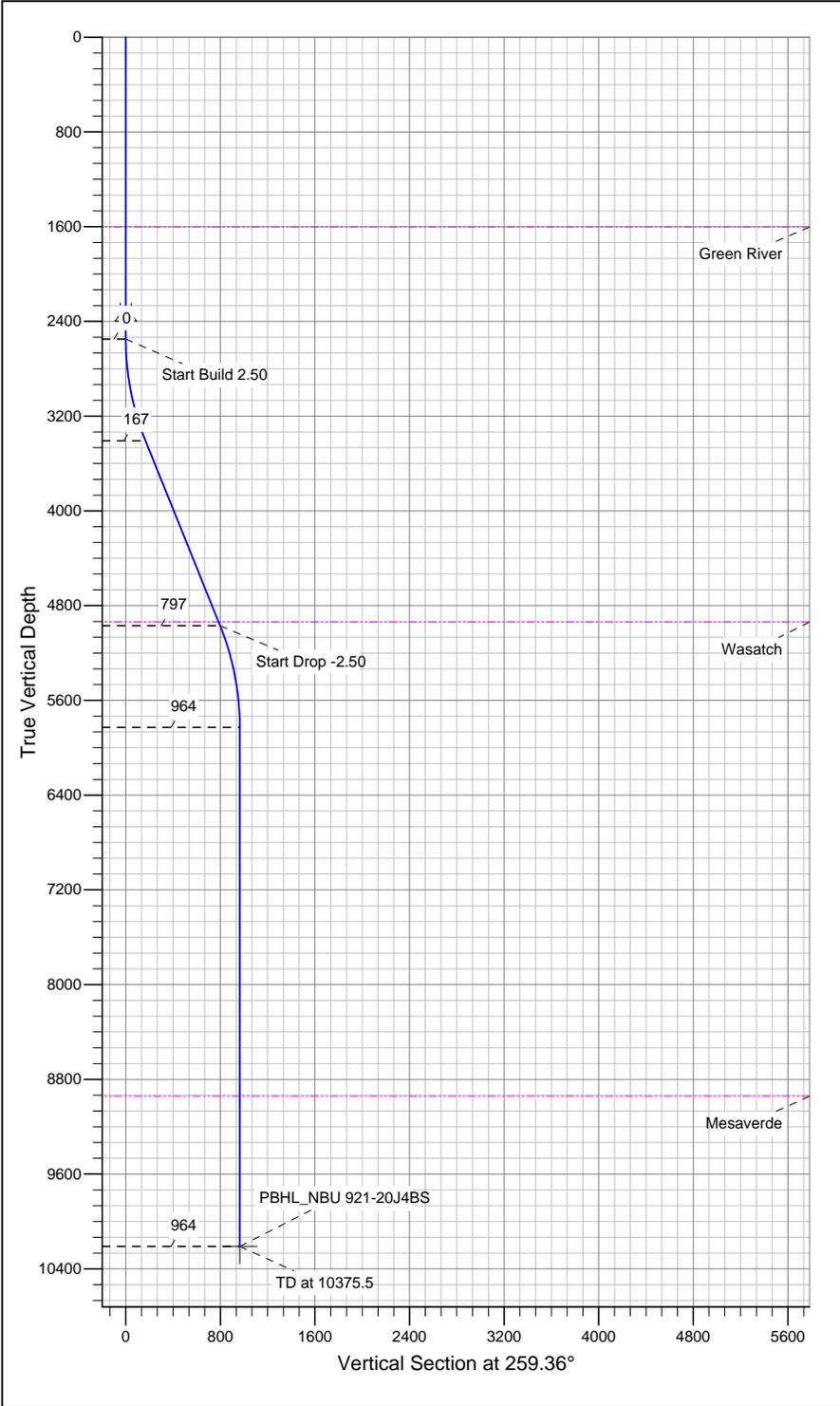


Azimuths to True North
 Magnetic North: 11.37°

Magnetic Field
 Strength: 52571.5snT
 Dip Angle: 65.93°
 Date: 4/23/2009
 Model: IGRF200510



Well Name: P_NBU 921-20J4BS
 Surface Location: UINTAH_NBU 921-20I PAD
 NAD 1927 (NADCON CONUS) Universal Transverse Mercator (US Survey Feet)
 UTAH - UTM (feet), NAD27, Zone 12N
 Ground Elevation: 4828.0
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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	2550.0	0.00	0.00	2550.0	0.0	0.0	0.00	0.00	0.0
3	3430.0	22.00	259.36	3408.5	-30.8	-164.0	2.50	259.36	166.9
4	5113.0	22.00	259.36	4969.0	-147.3	-783.6	0.00	0.00	797.3
5	5993.0	0.00	0.00	5827.5	-178.1	-947.6	2.50	180.00	964.2
6	10375.5	0.00	0.00	10210.0	-178.1	-947.6	0.00	0.00	964.2



Azimuths to True North
 Magnetic North: 11.37°
 Magnetic Field
 Strength: 52571.5snT
 Dip Angle: 65.93°
 Date: 4/23/2009
 Model: IGRF200510

ROCKIES - PLANNING

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

UINTAH_NBU 921-20I PAD

P_NBU 921-20J4BS

P_NBU 921-20J4BS

Plan: Plan #1 04-23-09 ZJRA6

Standard Planning Report - Geographic

23 April, 2009

APC Planning Report - Geographic

Database: apc_edmp	Local Co-ordinate Reference: Well P_NBU 921-20J4BS
Company: ROCKIES - PLANNING	TVD Reference: WELL @ 4828.0ft (Original Well Elev)
Project: UTAH - UTM (feet), NAD27, Zone 12N	MD Reference: WELL @ 4828.0ft (Original Well Elev)
Site: UINTAH_NBU 921-20I PAD	North Reference: True
Well: P_NBU 921-20J4BS	Survey Calculation Method: Minimum Curvature
Wellbore: P_NBU 921-20J4BS	
Design: Plan #1 04-23-09 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 921-20I PAD		
Site Position:	Northing: 14,536,379.26ft	Latitude: 40.019541°N
From: Lat/Long	Easting: 2,041,171.42ft	Longitude: 109.568649°W
Position Uncertainty: 0.0 ft	Slot Radius: "	Grid Convergence: 0.92 °

Well P_NBU 921-20J4BS			
Well Position	+N/-S 0.0 ft	Northing: 14,536,379.26 ft	Latitude: 40.019541°N
	+E/-W 0.0 ft	Easting: 2,041,171.42 ft	Longitude: 109.568649°W
Position Uncertainty	0.0 ft	Wellhead Elevation: ft	Ground Level: 4,828.0 ft

Wellbore P_NBU 921-20J4BS					
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF200510	4/23/2009	11.37	65.93	52,572

Design Plan #1 04-23-09 ZJRA6				
Audit Notes:				
Version:	Phase: PLAN	Tie On Depth: 0.0		
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.0	0.0	0.0	259.36

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	
2,550.0	0.00	0.00	2,550.0	0.0	0.0	0.00	0.00	0.00	0.00	
3,430.0	22.00	259.36	3,408.5	-30.8	-164.0	2.50	2.50	0.00	259.36	
5,113.0	22.00	259.36	4,969.0	-147.3	-783.6	0.00	0.00	0.00	0.00	
5,993.0	0.00	0.00	5,827.5	-178.1	-947.6	2.50	-2.50	0.00	180.00	
10,375.5	0.00	0.00	10,210.0	-178.1	-947.6	0.00	0.00	0.00	0.00	PBHL_NBU 921-20

APC

Planning Report - Geographic

Database:	apc_edmp	Local Co-ordinate Reference:	Well P_NBU 921-20J4BS
Company:	ROCKIES - PLANNING	TVD Reference:	WELL @ 4828.0ft (Original Well Elev)
Project:	UTAH - UTM (feet), NAD27, Zone 12N	MD Reference:	WELL @ 4828.0ft (Original Well Elev)
Site:	UINTAH_NBU 921-20I PAD	North Reference:	True
Well:	P_NBU 921-20J4BS	Survey Calculation Method:	Minimum Curvature
Wellbore:	P_NBU 921-20J4BS		
Design:	Plan #1 04-23-09 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	14,536,379.26	2,041,171.42	40.019541°N	109.568649°W
1,604.0	0.00	0.00	1,604.0	0.0	0.0	14,536,379.26	2,041,171.42	40.019541°N	109.568649°W
Green River									
2,400.0	0.00	0.00	2,400.0	0.0	0.0	14,536,379.26	2,041,171.42	40.019541°N	109.568649°W
Surface Casing									
2,550.0	0.00	0.00	2,550.0	0.0	0.0	14,536,379.26	2,041,171.42	40.019541°N	109.568649°W
3,430.0	22.00	259.36	3,408.5	-30.8	-164.0	14,536,345.81	2,041,007.92	40.019456°N	109.569235°W
5,079.6	22.00	259.36	4,938.0	-144.9	-771.3	14,536,221.94	2,040,402.52	40.019143°N	109.571403°W
Wasatch									
5,113.0	22.00	259.36	4,969.0	-147.3	-783.6	14,536,219.43	2,040,390.27	40.019137°N	109.571447°W
5,993.0	0.00	0.00	5,827.5	-178.1	-947.6	14,536,185.98	2,040,226.78	40.019052°N	109.572033°W
9,108.5	0.00	0.00	8,943.0	-178.1	-947.6	14,536,185.98	2,040,226.78	40.019052°N	109.572033°W
Mesaverde									
10,375.5	0.00	0.00	10,210.0	-178.1	-947.6	14,536,185.98	2,040,226.78	40.019052°N	109.572033°W

Targets

Target Name	- hit/miss target	- Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
PBHL_NBU 921-20J4			0.00	0.00	10,210.0	-178.1	-947.6	14,536,185.98	2,040,226.78	40.019052°N	109.572033°W
- plan hits target center											
- Point											

Casing Points

Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")
2,400.0	2,400.0	Surface Casing	9-5/8	12-1/4

Formations

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
5,079.6	4,938.0	Wasatch		0.00	
1,604.0	1,604.0	Green River		0.00	
9,108.5	8,943.0	Mesaverde		0.00	

NBU 921-20J4BS

Pad: NBU 921-20IT

Surface: 1,910' FSL 891' FEL (NE/4SE/4)

BHL: 1,734' FSL 1,839' FEL (NW/4SE/4)

Sec. 20 T9S R21E

Uintah, Utah

Mineral Lease: UTU 0575

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	1,604'	
Birds Nest	1,876'	Water
Mahogany	2,378'	Water
Wasatch	4,938'	Gas
Mesaverde	7,959'	Gas
MVU2	8,943'	Gas
MVL1	9,483'	Gas
TVD	10,210'	
TD	10,376'	

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 10,376' TD, approximately equals 6,357 psi (calculated at 0.61 psi/foot).

Maximum anticipated surface pressure equals approximately 4,009 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 2,580	36.00	J-55	LTC	0.84	1.67	6.21
PRODUCTION	4-1/2"	0 to 9,816	11.60	I-80	LTC	7,780	6,350	201,000
	4-1/2"	9,816 to 10,376	11.60	HCP-110	LTC	1.89	1.09	2.04
						10,690	8,650	279,000
						86.77	1.36	52.59

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

2) MASP (Prod Casing) = Pore Pressure at TD - (0.22 psi/ft-partial evac gradient x TD)
 (Burst Assumptions: TD = 12.0 ppg) 0.22 psi/ft = gradient for partially evac wellbore
 (Collapse Assumption: Fully Evacuated Casing, Max MW) (Tension Assumptions: Air Weight of Casing*Buoy.Fact. of water)
MASP 4,009 psi

3) Maximum Anticipated Bottom Hole Pressure (MABHP) = Pore Pressure at TD
 (Burst Assumptions: TD = 12.0 ppg) 0.61 psi/ft = bottomhole gradient
 (Collapse Assumption: Fully Evacuated Casing, Max MW) (Tension Assumptions: Air Weight of Casing*Buoy.Fact. of water)
MABHP 6,357 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	2,080'	65/35 Poz + 6% Gel + 10 pps gilsonite + 0.25 pps Flocele + 3% salt BWOW	490	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	4,436'	Premium Lite II + 3% KCl + 0.25 pps celloflake + 5 pps gilsonite + 10% gel + 0.5% extender	420	40%	11.00	3.38
	TAIL	5,940'	50/50 Poz/G + 10% salt + 2% gel + 0.1% R-3	1,450	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.

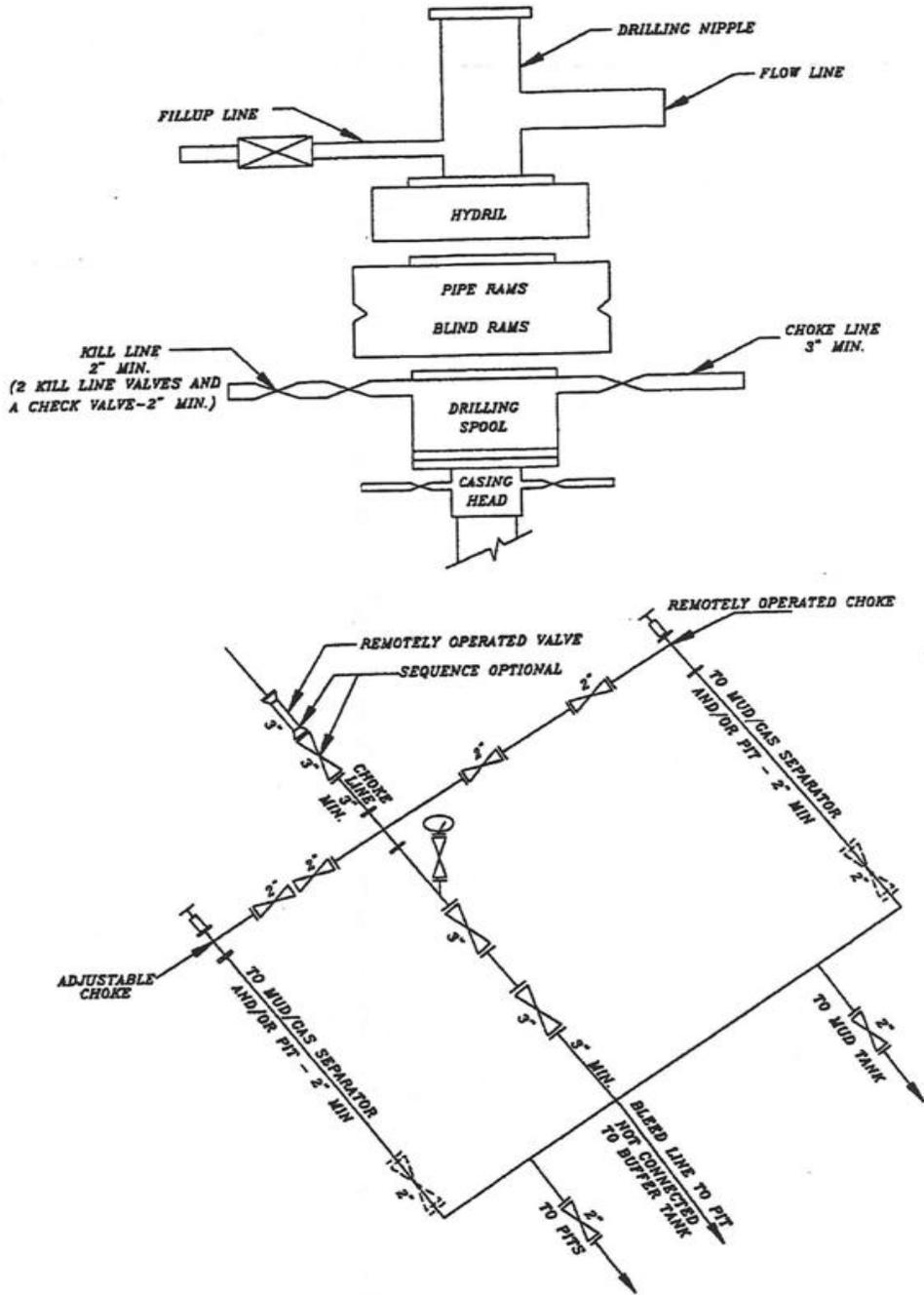
Surveys will be taken at 1,000' minimum intervals.

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 921-20J4BS



SCHEMATIC DIAGRAM OF 5,000 PSI BOP STACK

WELL PAD INTERFERENCE PLAT

DIRECTIONAL PAD - CIGE 70

SURFACE POSITION FOOTAGES:

NBU 921-20J4BS
1910' FSL, 891' FEL

NBU 921-20IT
1898' FSL, 875' FEL

NBU 921-20P1BS
1885' FSL, 859' FEL

NBU 921-20I4CS
1873' FSL, 843' FEL

CIGE 70 (Existing Well Head)
1896' FSL, 802' FEL

Existing EOG Well Head
NAD 83

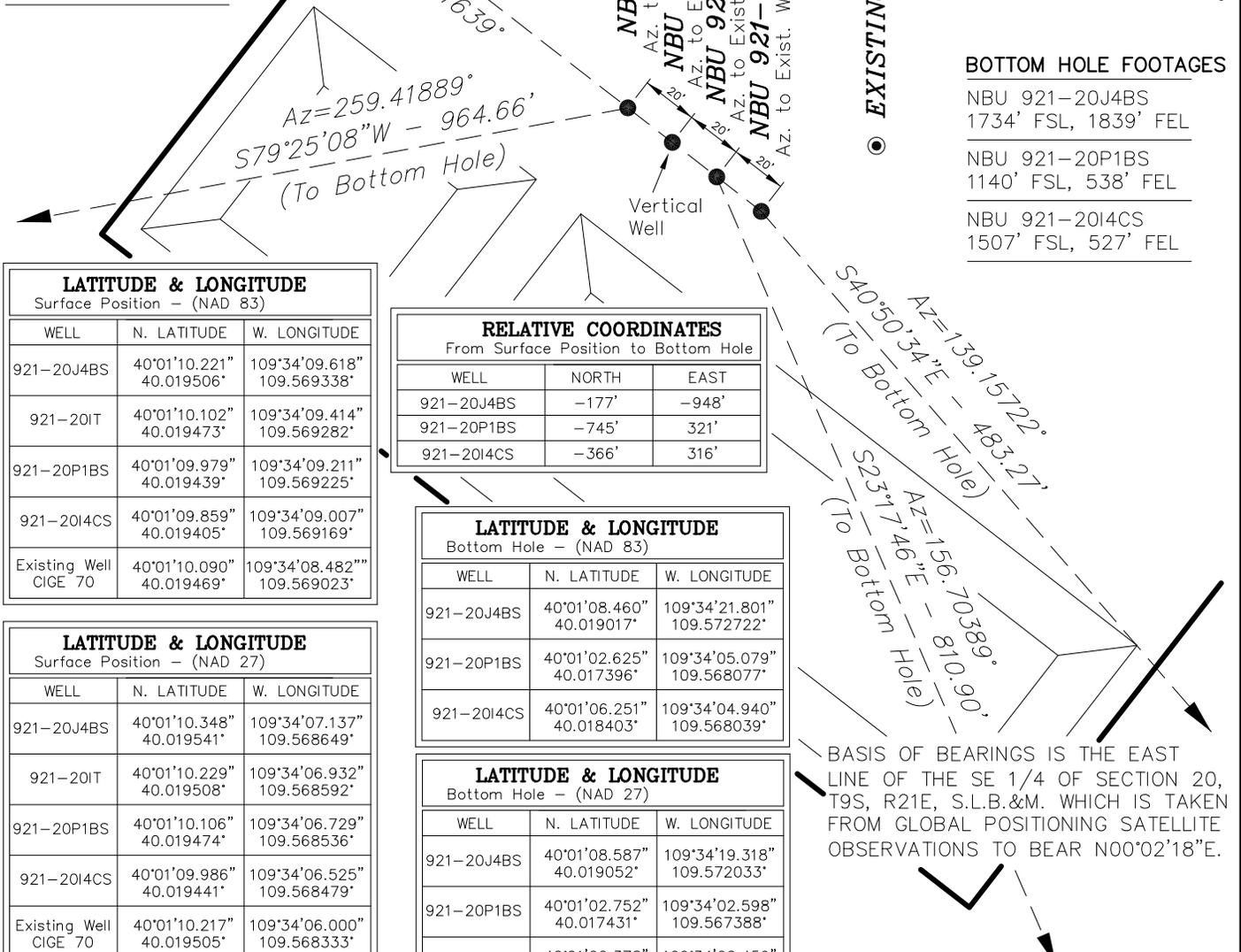
N. LATITUDE = 40.019820° (40° 01' 11.352")
W. LONGITUDE = 109.568643° (109° 34' 07.114")
NAD 27
N. LATITUDE = 40.019855° (40° 01' 11.479")
W. LONGITUDE = 109.567953° (109° 34' 04.632")

BOTTOM HOLE FOOTAGES

NBU 921-20J4BS
1734' FSL, 1839' FEL

NBU 921-20P1BS
1140' FSL, 538' FEL

NBU 921-20I4CS
1507' FSL, 527' FEL



LATITUDE & LONGITUDE Surface Position - (NAD 83)		
WELL	N. LATITUDE	W. LONGITUDE
921-20J4BS	40°01'10.221" 40.019506°	109°34'09.618" 109.569338°
921-20IT	40°01'10.102" 40.019473°	109°34'09.414" 109.569282°
921-20P1BS	40°01'09.979" 40.019439°	109°34'09.211" 109.569225°
921-20I4CS	40°01'09.859" 40.019405°	109°34'09.007" 109.569169°
Existing Well CIGE 70	40°01'10.090" 40.019469°	109°34'08.482" 109.569023°

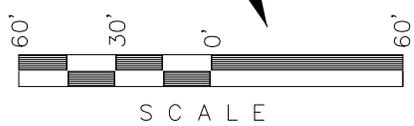
RELATIVE COORDINATES From Surface Position to Bottom Hole		
WELL	NORTH	EAST
921-20J4BS	-177'	-948'
921-20P1BS	-745'	321'
921-20I4CS	-366'	316'

LATITUDE & LONGITUDE Bottom Hole - (NAD 83)		
WELL	N. LATITUDE	W. LONGITUDE
921-20J4BS	40°01'08.460" 40.019017°	109°34'21.801" 109.572722°
921-20P1BS	40°01'02.625" 40.017396°	109°34'05.079" 109.568077°
921-20I4CS	40°01'06.251" 40.018403°	109°34'04.940" 109.568039°

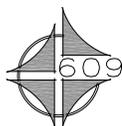
LATITUDE & LONGITUDE Surface Position - (NAD 27)		
WELL	N. LATITUDE	W. LONGITUDE
921-20J4BS	40°01'10.348" 40.019541°	109°34'07.137" 109.568649°
921-20IT	40°01'10.229" 40.019508°	109°34'06.932" 109.568592°
921-20P1BS	40°01'10.106" 40.019474°	109°34'06.729" 109.568536°
921-20I4CS	40°01'09.986" 40.019441°	109°34'06.525" 109.568479°
Existing Well CIGE 70	40°01'10.217" 40.019505°	109°34'06.000" 109.568333°

LATITUDE & LONGITUDE Bottom Hole - (NAD 27)		
WELL	N. LATITUDE	W. LONGITUDE
921-20J4BS	40°01'08.587" 40.019052°	109°34'19.318" 109.572033°
921-20P1BS	40°01'02.752" 40.017431°	109°34'02.598" 109.567388°
921-20I4CS	40°01'06.378" 40.018438°	109°34'02.459" 109.567350°

BASIS OF BEARINGS IS THE EAST LINE OF THE SE 1/4 OF SECTION 20, T9S, R21E, S.L.B.&M. WHICH IS TAKEN FROM GLOBAL POSITIONING SATELLITE OBSERVATIONS TO BEAR N00°02'18"E.



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



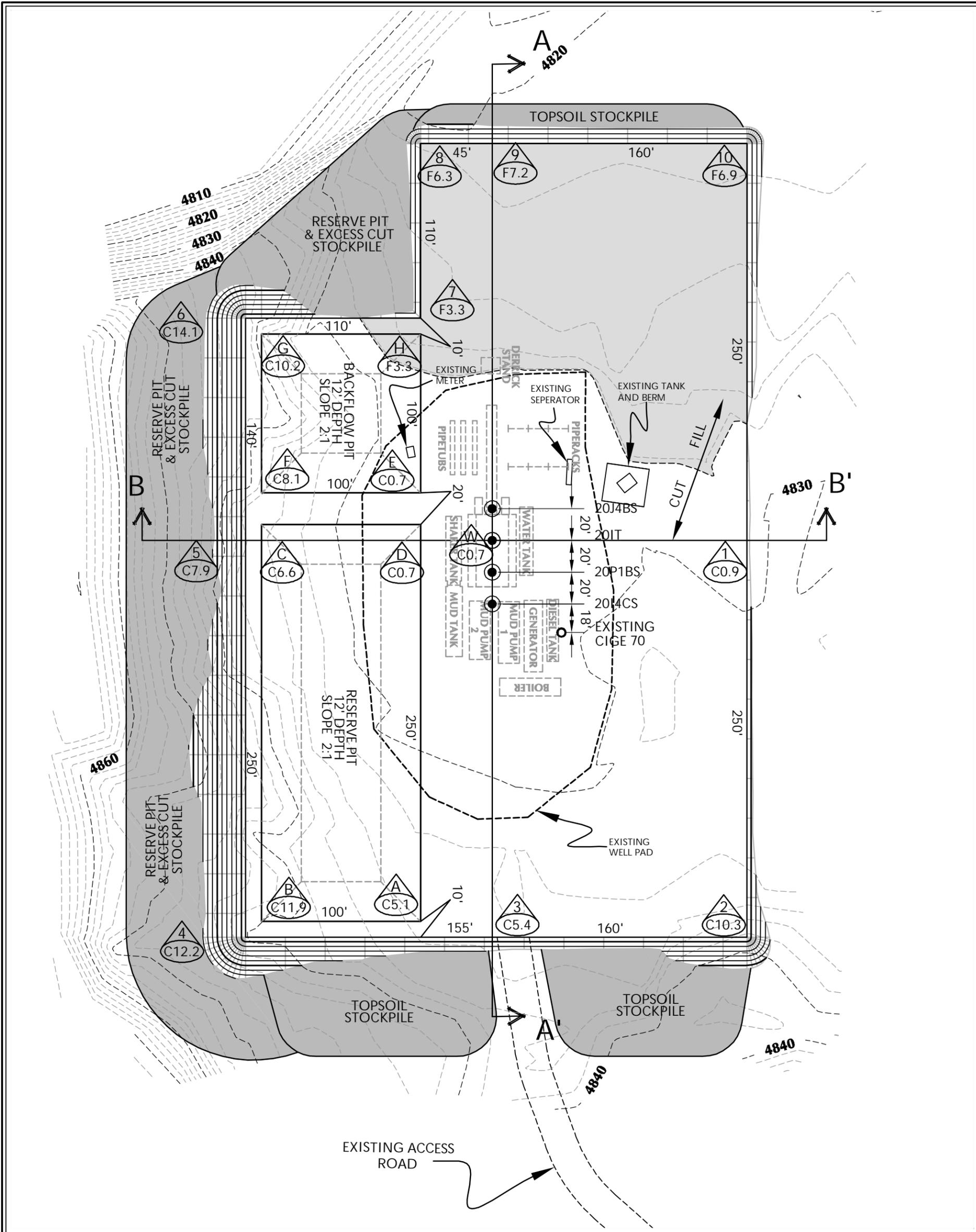
CONSULTING, LLC
371 Coffeen Avenue
Sheridan WY 82801
Phone 307-674-0609
Fax 307-674-0182

DATE SURVEYED: 01-16-09	SURVEYED BY: M.S.B.
DATE DRAWN: 02-11-09	DRAWN BY: E.M.S.
REVISED:	

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

SHEET
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NBU 921-20J4BS, NBU 921-20IT,
NBU 921-20P1BS & NBU 921-20I4CS
LOCATED IN SECTION 20, T9S, R21E,
S.L.B.&M. UTAH COUNTY, UTAH.



WELL PAD CIGE 70 QUANTITIES

EXISTING GRADE @ CENTER OF WELL PAD = 4,828.9'
 FINISHED GRADE ELEVATION = 4,828.2'
 CUT SLOPES = 1.5:1
 FILL SLOPES = 1.5:1

TOTAL CUT FOR WELL PAD = 14,901 C.Y.
 TOTAL FILL FOR WELL PAD = 7,378 C.Y.
 TOPSOIL @ 6" DEPTH = 2,409 C.Y.
 EXCESS MATERIAL = 7,523 C.Y.
 TOTAL DISTURBANCE = 3.83 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

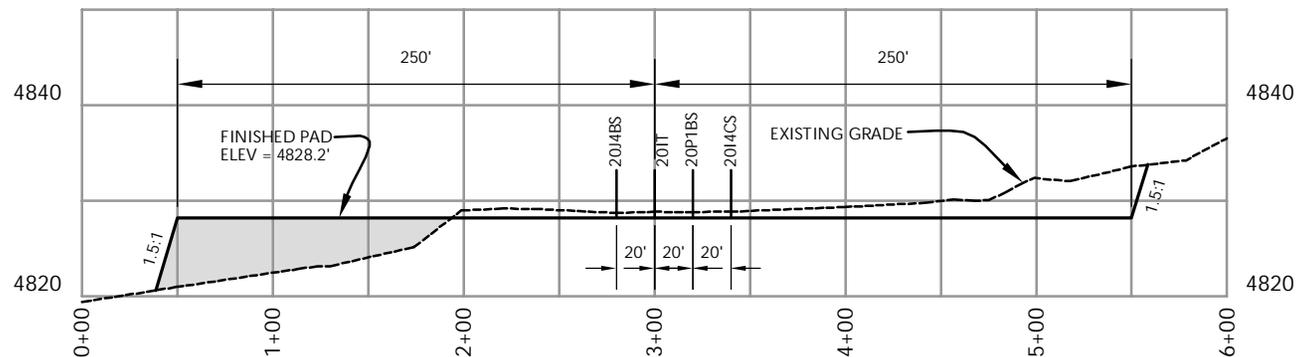


609 CONSULTING, LLC
 371 Coffeen Avenue
 Sheridan WY 82801
 Phone 307-674-0609
 Fax 307-674-0182

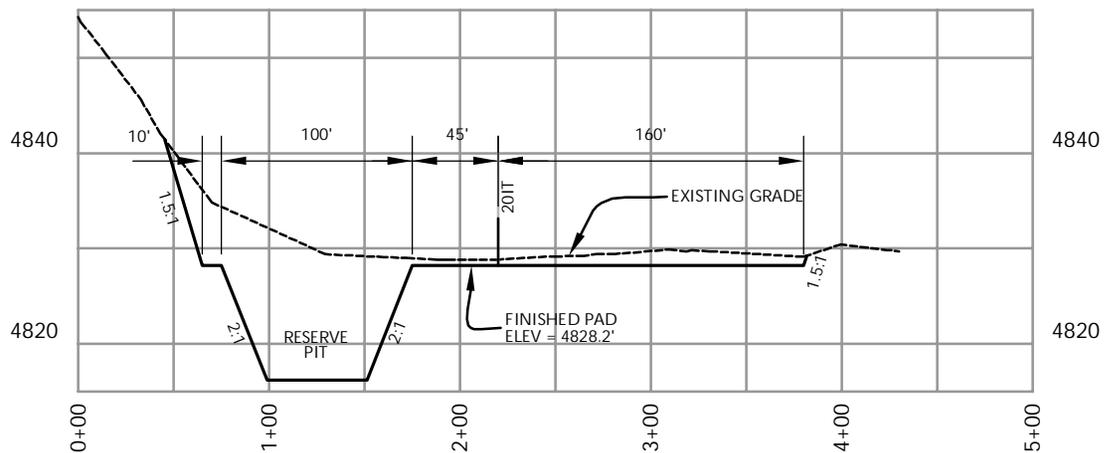
Scale: 1"=60'	Date: 3/18/09	SHEET NO: 6
REVISED:		6 OF 13

WELL PAD - LOCATION LAYOUT
 NBU 921-20J4BS, NBU 921-20IT,
 NBU 921-20P1BS & NBU 921-20I4CS
 LOCATED IN SECTION 20, 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

WELL PAD - CROSS SECTIONS
NBU 921-20J4BS, NBU 921-20IT,
NBU 921-20P1BS & NBU 921-2014CS
LOCATED IN SECTION 20, T.9S., R.21E.
S.L.B.&M., Uintah County, Utah



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

Scale: 1"=100'

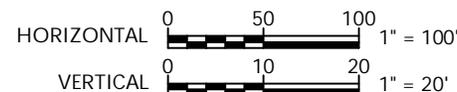
Date: 3/18/09

SHEET NO:

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7 OF 13

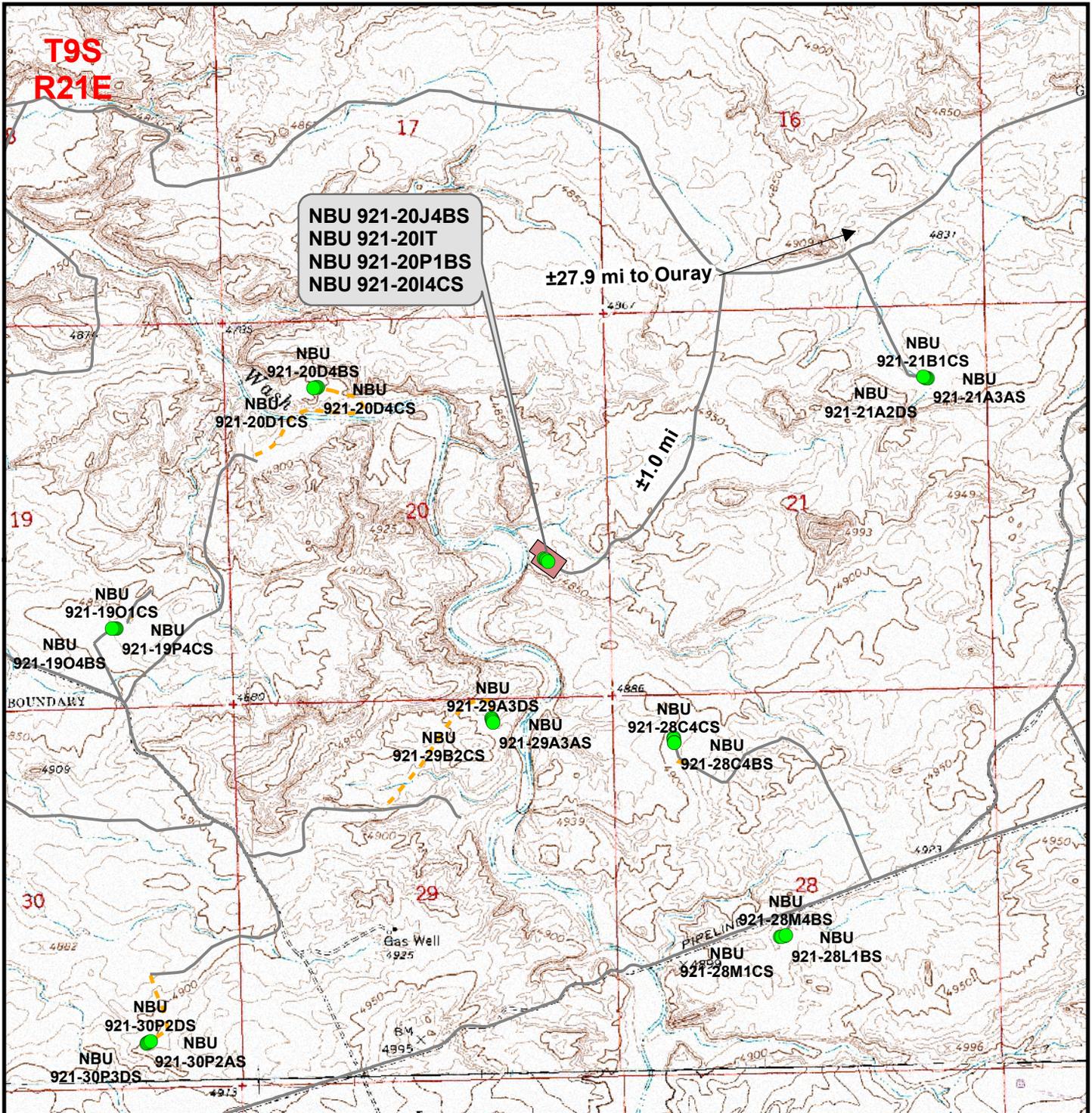
REVISED:



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

'APIWellNo:43047506000000'





Legend

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

Total Proposed Road Length: ±0ft

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

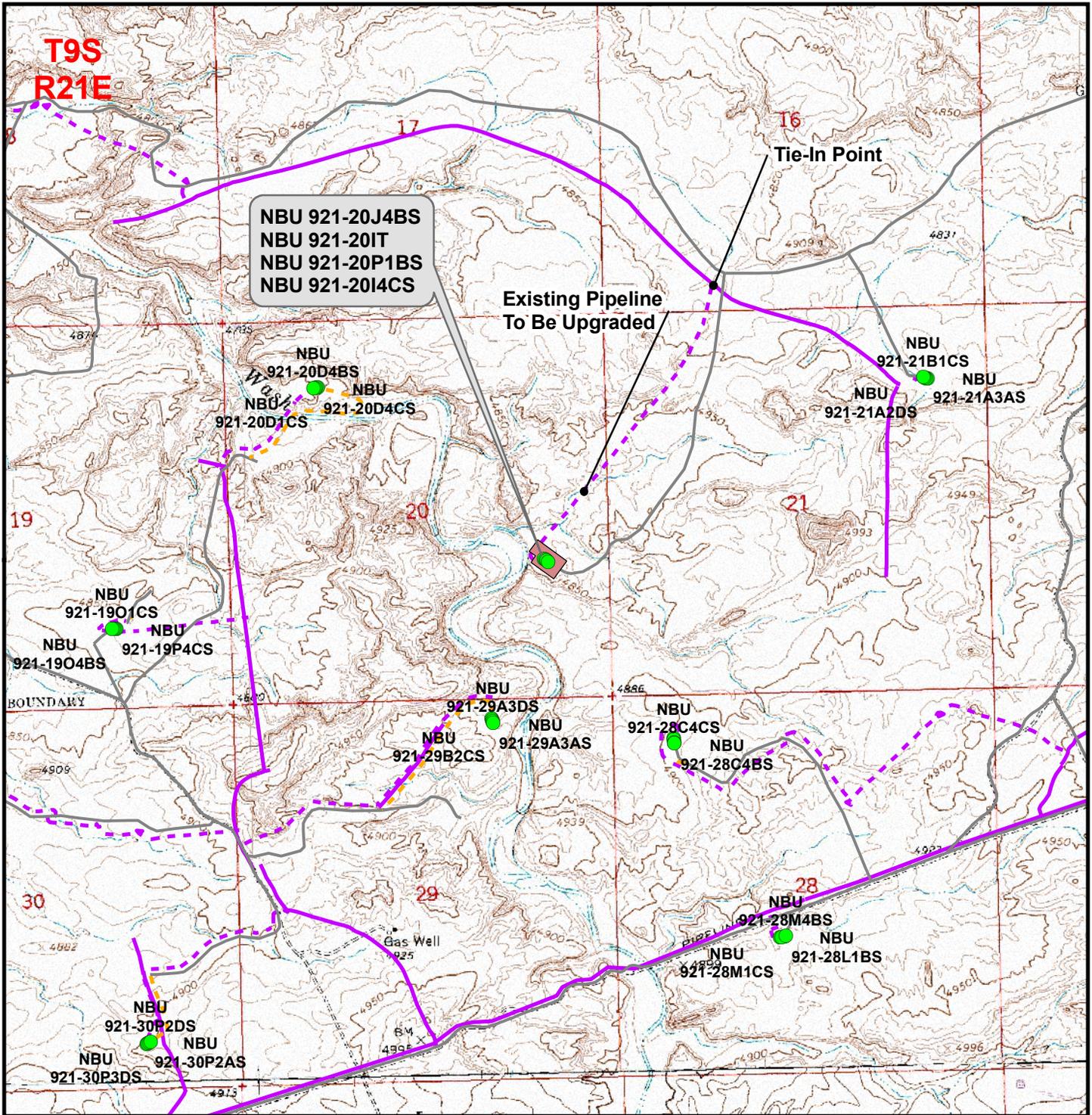
**NBU 921-20J4BS, NBU 921-20IT,
NBU 921-20P1BS & NBU 921-20I4CS**
Topo B
Located In Section 20, T9S, R21E
S.L.B.&M., Uintah County, Utah

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	10
Revised:	Date:	





Legend

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

Proposed Pipeline Length From Tie-In Point To Edge Of Pad: ±4,630ft
 Proposed Pipeline Length Around Pad: ±660ft

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

**NBU 921-20J4BS, NBU 921-20IT,
 NBU 921-20P1BS & NBU 921-20I4CS**
 Topo D
 Located In Section 20, 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
Drawn: JELO	Date: 24 Feb 2009
Revised:	Date:

Sheet No:
12 12 of 13

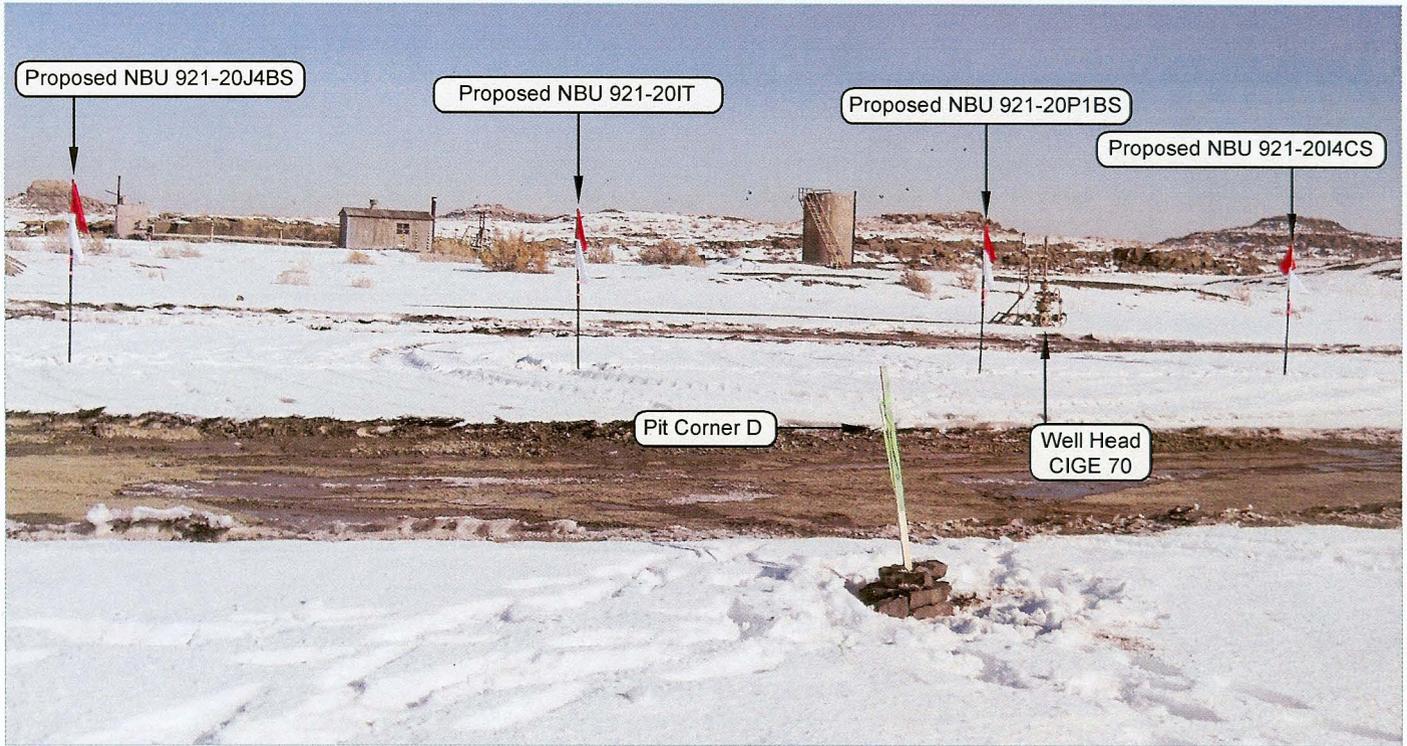


PHOTO VIEW: FROM PIT CORNER D TO LOCATION STAKES

CAMERA ANGLE: NORTHEASTERLY



PHOTO VIEW: FROM EXISTING ACCESS ROAD

CAMERA ANGLE: WESTERLY

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

LOCATION PHOTOS		DATE TAKEN: 01-16-09
TAKEN BY: M.S.B.		DATE DRAWN: 02-11-09
DRAWN BY: E.M.S.		REVISED:

NBU 921-20J4BS, NBU 921-20IT,
 NBU 921-20P1BS & NBU 921-20I4CS
 LOCATED IN SECTION 20, T9S, R21E,
 S.L.B.&M. UINTAH COUNTY, UTAH.

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 921-20J4BS, NBU 921-20IT, NBU 921-20P1BS & NBU 921-20I4CS
Section 20, 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 1.2 MILES TO A SECOND SERVICE ROAD TO THE SOUTH. EXIT LEFT AND PROCEED IN A SOUTH BY SOUTHWEST DIRECTION APPROXIMATELY 1.0 MILES TO THE CIGE 70 WELL PAD.

TOTAL DISTANCE FROM VERNAL, UTAH TO THE PROPOSED WELL LOCATION IS APPROXIMATELY 59.6 MILES IN A SOUTHERLY DIRECTION.

NBU 921-20I4CS

Surface: 1,873' FSL 843' FEL (NE/4SE/4)

BHL: 1,507' FSL 527' FEL (NE/4SE/4)

NBU 921-20J4BS

Surface: 1,910' FSL 891' FEL (NE/4SE/4)

BHL: 1,734' FSL 1,839' FEL (NW/4SE/4)

NBU 921-20P1BS

Surface: 1,885' FSL 859' FEL (NE/4SE/4)

BHL: 1,140' FSL 538' FEL (SE/4SE/4)

Approved well on pad: NBU 921-20IT
1,898' FSL 875' FEL (NE/4 SE/4) – Vertical well

Pad: NBU 921-20IT

Sec. 20 T9S R21E

Uintah, Utah

Mineral Lease: UTU 0575

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 SE/4 of Section 20 T9S R21E.

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.

Please contact Raleen White at 720-929-6666 to arrange an on-site meeting.

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 our 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 NBU 921-20IT APD. 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.

The following guidelines will apply if the well is productive.

Approximately ±5,290' (±1.0 miles) of pipeline is proposed. Refer to Topo D for 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

The equipment (new and old infrastructure) will be painted Shadow Grey.

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.

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 22, 2009

Date

'APIWellNo:43047506000000'



Kerr-McGee Oil & Gas Onshore LP
P.O. 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 921-20J4BS
T9S-R21E
Section 20: NE/4SE/4 surface, NW/4SE/4 bottom hole
1910' FSL, 891' FEL (surface)
1734' FSL, 1839' 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 921-20J4BS 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

IPC #09-71

Paleontological Reconnaissance Survey Report

**Survey of Kerr McGee's Proposed Multi-Well Pad and Pipeline
Upgrade for "NBU #921-20J4BS, IT, P1BS & I4CS"
(Sec. 16, 20 & 21, T 9 S, R 21 E)**

**Ouray SE
Topographic Quadrangle
Uintah County, Utah**

May 12, 2009

Prepared by Stephen D. Sandau
Paleontologist for
Intermountain Paleo-Consulting
P. O. Box 1125
Vernal, Utah 84078



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 921-20I Pad (Bores: NBU 921-20J4BS2, NBU 921-20I4CS2, NBU 921-20P1BS2)

Pipelines: Proposed pipeline to 921-20I well pad

Access Roads: N/A

Location: Section 20, 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: Jay Slocum, Dan Hamilton, Matt Kelahan, and Jonathan Sexauer, BJ Lukins, Nick Hall, Chris Gayer. Technician: Chad Johnson.

Weather: Partly cloudy, 75-80°F, 0-5 mph winds with no precipitation.

API Number: 4304750600

Well Name: NBU 920-20J4BS

Township 09.0 S Range 21.0 E Section 20

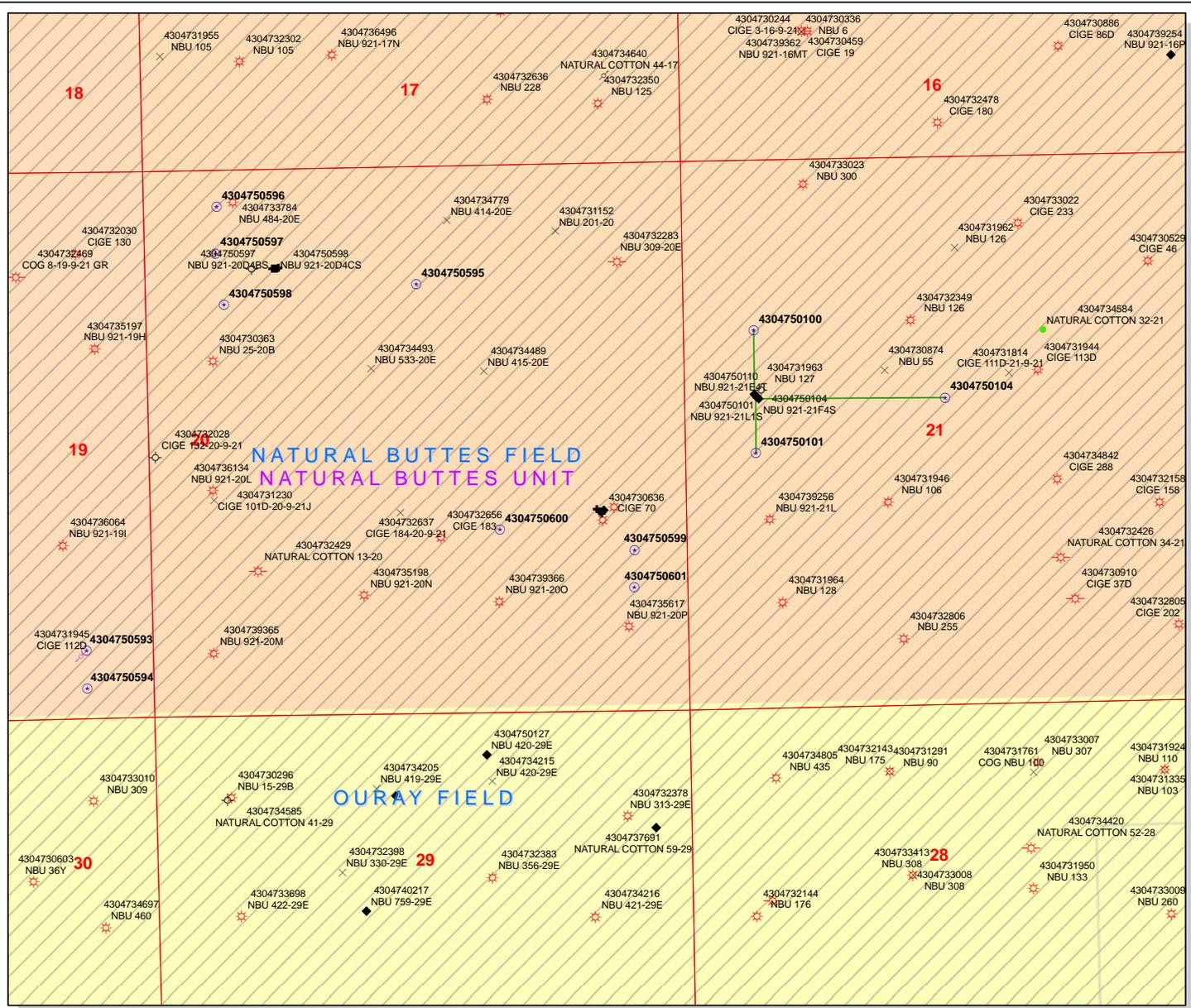
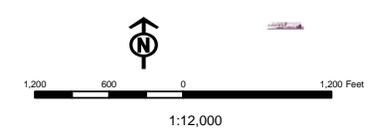
Meridian: SLBM

Operator: KERR-MCGEE OIL & GAS ONSHORE, L.P.

Map Prepared:

Map Produced by Diana Mason

Units	Wells Query Events
STATUS	X <call other values>
ACTIVE	-Nub
EXPLORATORY	APD
GAS STORAGE	DRL
NF PP OIL	GI
NF SECONDARY	GS
PI OIL	LA
PP GAS	NEW
PP GEOTHERM	OPS
PP OIL	PA
SECONDARY	PGW
TERMINATED	POW
Fields	RET
STATUS	SGW
ACTIVE	SOW
COMBINED	TA
Sections	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 24, 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)

43-047-50590	NBU 920-14H	Sec 14 T09S R20E 1562 FNL 0500 FEL
43-047-50589	NBU 920-14G	Sec 14 T09S R20E 2444 FNL 1947 FEL
43-047-50591	NBU 921-1901CS	Sec 19 T09S R21E 1078 FSL 1614 FEL BHL Sec 19 T09S R21E 0897 FSL 1974 FEL
43-047-50592	NBU 921-1904BS	Sec 19 T09S R21E 1079 FSL 1594 FEL BHL Sec 19 T09S R21E 0540 FSL 1974 FEL
43-047-50593	NBU 921-19P4BS	Sec 19 T09S R21E 1082 FSL 1554 FEL BHL Sec 19 T09S R21E 0621 FSL 0654 FEL
43-047-50594	NBU 921-19P4CS	Sec 19 T09S R21E 1080 FSL 1574 FEL BHL Sec 19 T09S R21E 0254 FSL 0654 FEL
43-047-50595	NBU 921-20B3CS	Sec 20 T09S R21E 0957 FNL 1312 FWL BHL Sec 20 T09S R21E 1144 FNL 2612 FEL
43-047-50596	NBU 921-20D1CS	Sec 20 T09S R21E 0961 FNL 1272 FWL BHL Sec 20 T09S R21E 0346 FNL 0720 FWL

Page 2

43-047-50597 NBU 921-20D4BS Sec 20 T09S R21E 0963 FNL 1252 FWL
BHL Sec 20 T09S R21E 0798 FNL 0698 FWL

43-047-50598 NBU 921-20D4CS Sec 20 T09S R21E 0959 FNL 1292 FWL
BHL Sec 20 T09S R21E 1306 FNL 0770 FWL

43-047-50599 NBU 921-20I4CS Sec 20 T09S R21E 1873 FSL 0843 FEL
BHL Sec 20 T09S R21E 1507 FSL 0527 FEL

43-047-50600 NBU 920-20J4BS Sec 20 T09S R21E 1910 FSL 0891 FEL
BHL Sec 20 T09S R21E 1734 FSL 1839 FEL

43-047-50601 NBU 921-20P1BS Sec 20 T09S R21E 1885 FSL 0859 FEL
BHL Sec 20 T09S R21E 1140 FSL 0538 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:7-24-09

**WORKSHEET
APPLICATION FOR PERMIT TO DRILL**

APD RECEIVED: 7/22/2009

API NO. ASSIGNED: 43047506000000

WELL NAME: NBU 920-20J4BS

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

PHONE NUMBER: 720 929-6156

CONTACT: Danielle Piernot

PROPOSED LOCATION: NESE 20 090S 210E

Permit Tech Review:

SURFACE: 1910 FSL 0891 FEL

Engineering Review:

BOTTOM: 1734 FSL 1839 FEL

Geology Review:

COUNTY: UINTAH

LATITUDE: 40.01950

LONGITUDE: -109.56863

UTM SURF EASTINGS: 622152.00

NORTHINGS: 4430693.00

FIELD NAME: NATURAL BUTTES

LEASE TYPE: 1 - Federal

LEASE NUMBER: UTU 0575

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:
1 - Exception Location - dmason
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 921-20J4BS
API Well Number: 43047506000000
Lease Number: UTU 0575
Surface Owner: INDIAN
Approval Date: 8/10/2009

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

Exception Location:

Appropriate information has been submitted to DOGM and administrative approval of the requested exception location is hereby granted.

Commingle:

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

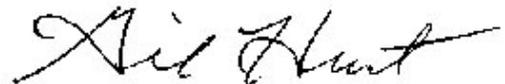
submit an electronic sundry notice (pre-registration required) via the Utah Oil & Gas website at <http://oilgas.ogm.utah.gov>

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 0575
---	---

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 7. UNIT or CA AGREEMENT NAME: NATURAL BUTTES
--	--

1. TYPE OF WELL Gas Well	8. WELL NAME and NUMBER: NBU 921-20J4BS
------------------------------------	---

2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.	9. API NUMBER: 4304750600000
---	--

3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779	PHONE NUMBER: 720 929-6007 Ext	9. FIELD and POOL or WILDCAT: NATURAL BUTTES
---	--	--

4. LOCATION OF WELL FOOTAGES AT SURFACE: 1910 FSL 0891 FEL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NESE Section: 20 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: 8/10/2010 <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: August 09, 2010
 By: 

NAME (PLEASE PRINT) Danielle Piernot	PHONE NUMBER 720 929-6156	TITLE Regulatory Analyst
SIGNATURE N/A	DATE 8/9/2010	



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 43047506000000

API: 43047506000000

Well Name: NBU 921-20J4BS

Location: 1910 FSL 0891 FEL QTR NESE SEC 20 TWP 090S RNG 210E MER S

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

Date Original Permit Issued: 8/10/2009

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

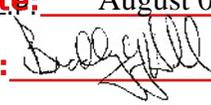
**Approved by the
Utah Division of
Oil, Gas and Mining**

Signature: Danielle Piernot

Date: 8/9/2010

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

Date: August 09, 2010

By: 

RECEIVED August 09, 2010

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

RECEIVED

JUL 23 2009

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

APPLICATION FOR PERMIT TO DRILL OR REENTER **BLM**

1a. Type of Work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. UTU0575
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 921-20J4BS
3b. Phone No. (include area code) Ph: 720-929-6156 Fx: 720-929-7156		9. API Well No. <i>13-047-50600</i>
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface NESE 1910FSL 891FEL 40.01951 N Lat, 109.56934 W Lon At proposed prod. zone NWSE 1734FSL 1839FEL 40.01902 N Lat, 109.57272 W Lon		10. Field and Pool, or Exploratory NATURAL BUTTES
14. Distance in miles and direction from nearest town or post office* APPROXIMATELY 29 MILES SOUTHEAST OF OURAY, UTAH		11. Sec., T., R., M., or Blk. and Survey or Area Sec 20 T9S R21E Mer SLB
15. Distance from proposed location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 1734 FEET	16. No. of Acres in Lease 1600.00	12. County or Parish UINTAH
18. Distance from proposed location to nearest well, drilling, completed, applied for, on this lease, ft. APPROXIMATELY 980 FEET	19. Proposed Depth 10376 MD 10210 TVD	13. State UT
21. Elevations (Show whether DF, KB, RT, GL, etc.) 4829 GL	22. Approximate date work will start 08/10/2009	17. Spacing Unit dedicated to this well
		20. BLM/BIA Bond No. on file WYB000291
		23. Estimated duration 60-90 DAYS

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 07/23/2009
--	---	--------------------

Title
REGULATORY ANALYST

Approved by (Signature) <i>Jerry Kenczka</i>	Name (Printed/Typed) Jerry Kenczka	Date APR 26 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.

RECEIVED

Additional Operator Remarks (see next page)

MAY 16 2011

Electronic Submission #72420 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 07/27/2009 ()

DIV. OF OIL, GAS & MINING

UDOGM

NOS and posted 7-27-09

AFMSS#

NOTICE OF APPROVAL

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

096XJ5443 AE

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:	NESE, Sec. 20, T9S R21E
Well No:	NBU 921-20J4BS	Lease No:	UTU-0575
API No:	43-047-50600	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)***

- Paint new "Shadow Gray."
- Monitoring by a permitted paleontologist during construction operations.
- 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 should be conducted prior to construction of the proposed location, pipeline, or access road if construction 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 operations 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 Measures for Uinta Basin hookless cactus (See Appendix D) and conduct its operation according to its specifications.

BIA Standard Conditions of Approval:

- Soil erosion will be mitigated by reseeding 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 indentified 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 COAs:

- A copy of Kerr McGee's Standard Operating Practices (SOP version: dated 7/17/2008 and approved 7/28/2008) shall be on location.
- A variance is granted to the operators APD request to not conduct a pressure integrity test (also known as a formation integrity test – FIT), covering 5M BOPE systems, as covered in Onshore Order #2 Drilling Operations III. B i. "pressure integrity test of each casing shoe".

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.
- For information regarding production reporting, contact the Office of Natural Resources Revenue (ONRR) at www.ONRR.gov.
- 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 ($\frac{1}{4}$ $\frac{1}{4}$, 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.

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 921-20J4BS
Qtr/Qtr NE/SE Section 20 Township 9S Range 21E
Lease Serial Number UTU-0575
API Number 4304750600

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

Date/Time 07/01/2011 1400 HRS AM PM

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

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

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JUN 30 2011
DIV. OF OIL, GAS & MINING

Date/Time 07/18/2011 0800 HRS AM PM

BOPE

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

Date/Time _____ AM PM

Remarks ESTIMATED DATE AND TIME. PLEASE CONTACT KENNY GATHINGS AT 435.781.7048 FOR MORE

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		FORM 9
		5. LEASE DESIGNATION AND SERIAL NUMBER: UTU 0575
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 921-20J4BS
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.		9. API NUMBER: 43047506000000
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: 1910 FSL 0891 FEL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NESE Section: 20 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: 7/2/2011 <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 07/02/2011 AT 0800 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 7/7/2011

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

FORM 9

5. LEASE DESIGNATION AND SERIAL NUMBER:
UTU 0575

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

7. UNIT or CA AGREEMENT NAME:
NATURAL BUTTES

1. TYPE OF WELL
Gas Well

8. WELL NAME and NUMBER:
NBU 921-20J4BS

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

9. API NUMBER:
43047506000000

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:
1910 FSL 0891 FEL
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:
Qtr/Qtr: NESE Section: 20 Township: 09.0S Range: 21.0E Meridian: S

COUNTY:
UINTAH

STATE:
UTAH

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

TYPE OF SUBMISSION	TYPE OF ACTION		
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start:	<input type="checkbox"/> ACIDIZE <input type="checkbox"/> CHANGE TO PREVIOUS PLANS <input type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> DEEPEN <input type="checkbox"/> OPERATOR CHANGE <input type="checkbox"/> PRODUCTION START OR RESUME <input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> WATER SHUTOFF <input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> ALTER CASING <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input type="checkbox"/> FRACTURE TREAT <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> SI TA STATUS EXTENSION <input type="checkbox"/> OTHER	<input type="checkbox"/> 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"/>
<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: 7/18/2011			

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

MIRU AIR RIG ON JULY 15, 2011. DRILLED SURFACE HOLE TO 2890'. 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) Andy Lytle	PHONE NUMBER 720 929-6100	TITLE Regulatory Analyst
SIGNATURE N/A	DATE 7/20/2011	

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
4304750600	NBU 921-20J4BS		NESE	20	9S	21E	UINTAH
Action Code	Current Entity Number	New Entity Number	Spud Date		Entity Assignment Effective Date		
<u>B</u>	99999	<u>2900</u>	7/2/2011		<u>7/30/11</u>		
Comments: <u>MIRU PETE MARTIN BUCKET RIG. WSTMVD</u> <u>SPUD WELL ON 07/02/2011 AT 0800 HRS.</u> <u>BHL= NWSE</u>							

Well 2

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

Well 3

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

ACTION CODES:

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

SHEILA WOPSOCK

Name (Please Print)

Signature

REGULATORY ANALYST

Title

7/7/2011

Date

RECEIVED

JUL 07 2011

DIV. OF OIL, GAS & MINING

Carol Daniels - BOP TEST NBU 921-20J4BS

T09S R21E 5-20 43049-50600

From: "Anadarko - H&P 298"
To:
Date: 9/13/2011 9:51 AM
Subject: BOP TEST NBU 921-20J4BS

CAROL,
SKIDDING TO THE NBU 921-20J4BS THIS EVE, WILL BE TESTING BOP 12-2AM 9/14/2011 ON H&P 298

JIM MURRAY
H&P 298
435 828-0957

RECEIVED

SEP 13 2011

DIV. OF OIL, GAS & MINING

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		FORM 9	
		5. LEASE DESIGNATION AND SERIAL NUMBER: UTU 0575	
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 921-20J4BS	
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.		9. API NUMBER: 43047506000000	
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: 1910 FSL 0891 FEL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NESE Section: 20 Township: 09.0S Range: 21.0E Meridian: S		COUNTY: UINTAH	
		STATE: UTAH	
11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA			
TYPE OF SUBMISSION	TYPE OF ACTION		
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start:	<input type="checkbox"/> ACIDIZE <input type="checkbox"/> CHANGE TO PREVIOUS PLANS <input type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> DEEPEN <input type="checkbox"/> OPERATOR CHANGE <input type="checkbox"/> PRODUCTION START OR RESUME <input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> WATER SHUTOFF <input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> ALTER CASING <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input type="checkbox"/> FRACTURE TREAT <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> SI TA STATUS EXTENSION <input 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: RIG REL. - ACTS PIT
<input checked="" type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion: 9/21/2011			
<input type="checkbox"/> SPUD REPORT Date of Spud:			
<input type="checkbox"/> DRILLING REPORT Report Date:			
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.			
<p>MIRU ROTARY RIG. FINISHED DRILLING FROM 2890' TO 10379' ON SEPT 19, 2011. RAN 4-1/2" 11.6# I-80 PRODUCTION CASING TO 10,292'. RAN 4 1/2" 11.6# P110 CSG FROM 10,292' TO 10,334'. CEMENTED PRODUCTION CASING. RELEASED H&P RIG 298 ON SEPT. 21, 2011 @ 18:00 HRS. DETAILED OF CEMENT JOB WILL BE INCLUDED WITH THE WELL COMPLETION REPORT. WELL IS WAITING ON FINAL COMPLETION ACTIVITIES. THE PIT ON THIS LOCATION WILL BE REFURBISHED AND UTILIZED AS PART OF THE ACTS SYSTEM.</p>			
NAME (PLEASE PRINT) Andy Lytle	PHONE NUMBER 720 929-6100	TITLE Regulatory Analyst	
SIGNATURE N/A		DATE 9/22/2011	

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

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 0575
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 921-20J4BS	
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.	9. API NUMBER: 43047506000000	
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: 1910 FSL 0891 FEL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NESE Section: 20 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: 11/11/2011	<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 checked="" type="checkbox"/> PRODUCTION START OR RESUME <input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> WATER SHUTOFF <input type="checkbox"/> WILDCAT WELL DETERMINATION <input type="checkbox"/> ALTER CASING <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input type="checkbox"/> FRACTURE TREAT <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> SI TA STATUS EXTENSION <input type="checkbox"/> OTHER	
	<input 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.		
<p>THE SUBJECT WELL WAS PLACED ON PRODUCTION ON 11/11/2011 AT 1245 HRS. THE CHRONOLOGICAL WELL HISTORY WILL BE SUBMITTED WITH THE WELL COMPLETION REPORT.</p> <p style="text-align: right;">Accepted by the Utah Division of Oil, Gas and Mining FOR RECORD ONLY</p>		
NAME (PLEASE PRINT) Sheila Wopsock	PHONE NUMBER 435 781-7024	TITLE Regulatory Analyst
SIGNATURE N/A	DATE 11/15/2011	

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		FORM 9
SUNDRY NOTICES AND REPORTS ON WELLS		5. LEASE DESIGNATION AND SERIAL NUMBER: UTU 0575
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 921-20J4BS	
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.	9. API NUMBER: 43047506000000	
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: 1910 FSL 0891 FEL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NESE Section: 20 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: 11/11/2011	<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.		
<p>THE SUBJECT WELL WAS PLACED ON PRODUCTION ON 11/11/2011 AT 1245 HRS. THE CHRONOLOGICAL WELL HISTORY WILL BE SUBMITTED WITH THE WELL COMPLETION REPORT.</p> <p style="text-align: right;">Accepted by the Utah Division of Oil, Gas and Mining FOR RECORD ONLY</p>		
NAME (PLEASE PRINT) Sheila Wopsock	PHONE NUMBER 435 781-7024	TITLE Regulatory Analyst
SIGNATURE N/A	DATE 11/15/2011	

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. **UTU0575**

6. If Indian, Allottee or Tribe Name

7. Unit or CA Agreement Name and No. **UTU63047A**

8. Lease Name and Well No. **NBU 921-20J4BS**

9. API Well No. **43-047-50600**

10. Field and Pool, or Exploratory **NATURAL BUTTES**

11. Sec., T., R., M., or Block and Survey or Area **Sec 20 T9S R21E Mer SLB**

12. County or Parish **UINTAH** 13. State **UT**

14. Date Spudded **07/02/2011** 15. Date T.D. Reached **09/19/2011** 16. Date Completed D & A Ready to Prod. **11/11/2011** 17. Elevations (DF, KB, RT, GL)* **4828 GL**

18. Total Depth: MD **10379** TVD **10239** 19. Plug Back T.D.: MD **10293** TVD **10153** 20. Depth Bridge Plug Set: MD **MD** TVD **TVD**

21. Type Electric & Other Mechanical Logs Run (Submit copy of each) **SYNTHETIC TRIPLE COMBO-RSL/SM-CBL/GR/COLLARS** 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			
12.250	9.625 J-55	36.0	0	2883		600		0	
7.875	4.500 I-80	11.6	0	9444		1615		1812	
7.875	4.500 P-110	11.6	9444	10334					

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	9782							

25. Producing Intervals 26. Perforation Record

Formation	Top	Bottom	Perforated Interval	Size	No. Holes	Perf. Status
A) WASATCH	7331	7873	7331 TO 7873	0.360	40	OPEN
B) MESAVERDE	7991	10192	7991 TO 10192	0.360	176	OPEN
C)						
D)						

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

Depth Interval	Amount and Type of Material
7331 TO 10192	PUMP 7,765 BBLs SLICK H2O & 172,283 LBS 30/50 OTTAWA SAND

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DIV. OF OIL, GAS & MINING

28. Production - Interval A

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
11/11/2011	11/20/2011	24	→	0.0	3101.0	280.0			FLOWS FROM WELL
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status	
20/64	1973	2799.0	→	0	3101	280		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. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status	
			→						

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	1673
				BIRD'S NEST	1990
				MAHOGANY	2479
				WASATCH	5106
				MESAVERDE	7979

32. Additional remarks (include plugging procedure):
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 #127290 Verified by the BLM Well Information System.
For KERR MCGEE OIL & GAS ONSHORE,L, sent to the Vernal**

Name (please print) JAIME L. SCHARNOWSKE Title REGULATORY ANALYST

Signature (Electronic Submission) Date 01/04/2012

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.

**** ORIGINAL ** ORIGINAL ** ORIGINAL ** ORIGINAL ** ORIGINAL ** ORIGINAL ** ORIGINAL ****

US ROCKIES REGION

Operation Summary Report

Well: NBU 921-20J4BS GREEN		Spud Conductor: 7/2/2011		Spud Date: 7/16/2011	
Project: UTAH-UINTAH		Site: NBU 921-201 PAD		Rig Name No: PROPETRO 11/11, H&P 298/298	
Event: DRILLING		Start Date: 6/25/2011		End Date: 9/21/2011	
Active Datum: RKB @4,854.00usft (above Mean Sea Level)			UWI: NE/SE/0/9/S/21/E/20/0/0/26/PM/S/1910/E/0/891/0/0		

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
7/15/2011	20:00 - 21:30	1.50	MIRU	01	C	P		MOVE RIG IN OFF THE NBU 921-20IT
	21:30 - 23:30	2.00	MIRU	01	B	P		DRESS TOP OF CONDUCTOR. INSTALL DIVERTER HEAD AND BOWME LINE. BUILD DITCH. AND RIG UP.. SET CATWALK AND PIPE RACKS. RIG UP AND PRIME PIT PUMP AND MUD PUMP
	23:30 - 0:00	0.50	DRLSUR	06	A	P		P/U 1.83 DEG BENT HOUSING HUNTING MTR SN 8014 . 7/8 LOBE .17 RPM. M/U 12.1/4" MI 616 SN JD 4386 1ST RUN, W/ 6-20'S. INSTALL RUBBER
7/16/2011	0:00 - 1:30	1.50	DRLSUR	02	B	P		SPUD SURFACE 07/16/2011 @ 00:00 HRS. DRILL 12.1/4" SURFACE HOLE F/40'-210' (170' @ 113'/HR) PSI ON/ OFF 700/450, UP/ DOWN/ ROT 27/22/25. 500 GPM, 45 RPM ON TOP DRIVE, 15-18K WOB
	1:30 - 2:00	0.50	DRLSUR	06	A	P		TOH T/PU DIR TOOLS
	2:00 - 3:30	1.50	DRLSUR	06	A	P		P/U DIR TOOLS & SCRIBE, TIH T/210'
	3:30 - 15:30	12.00	DRLSUR	02	D	P		DRILL/SLIDE 12 1/4" SURF. HOLE F/210' -1390' (^1180' @ 98'/HR) PSI ON/ OFF 1400/1250, UP/ DOWN/ ROT 60/50/55. 130 SPM, 532 GPM, 18-20K WOB, 45 RPM ON TOP DRIVE, 90 RPM ON MM, CIRCULATING RESERVE PIT
7/16/2011	15:30 - 0:00	8.50	DRLSUR	02	D	P		DRILL/SLIDE 12 1/4" SURF. HOLE F/1390' -2020' (^630' @ 74'/HR) PSI ON/ OFF 1690/1490, UP/ DOWN/ ROT 78/50/62. 130 SPM, 532 GPM, 18-20K WOB, 45 RPM ON TOP DRIVE, 90 RPM ON MM, CIRCULATING RESERVE PIT
	0:00 - 5:30	5.50	DRLSUR	02	D	P		DRILL/SLIDE 12 1/4" SURF. HOLE F/2020' -2380' (^360' @ 65'/HR) PSI ON/ OFF 1775/1570, UP/ DOWN/ ROT 82/52/68. 130 SPM, 532 GPM, 18-20K WOB, 45 RPM ON TOP DRIVE, 90 RPM ON MM, CIRCULATING RESERVE PIT
7/17/2011	5:30 - 6:00	0.50	DRLSUR	07	A	P		SERVICE RIG
	6:00 - 16:00	10.00	DRLSUR	02	D	P		DRILL/SLIDE 12 1/4" SURF. HOLE F/2380' -2890' (^510' @ 51'/HR) PSI ON/ OFF 1940/1800, UP/ DOWN/ ROT 90/60/75. 130 SPM, 532 GPM, 18-20K WOB, 45 RPM ON TOP DRIVE, 90 RPM ON MM, CIRCULATING RESERVE PIT(TD 12 1/4" SURF. HOLE)
	16:00 - 18:00	2.00	DRLSUR	05	C	P		CIRC & COND HOLE F/LD & 9 5/8" 36# SURF. CSG RUN
	18:00 - 22:00	4.00	DRLSUR	06	D	P		L/D DS,BHA & DIR TOOLS & 12 1/4" SURF. BIT
7/18/2011	22:00 - 0:00	2.00	CSG	12	A	P		MOVE CATWALK AND PIPE RACKS, MOVE CSG OVER TO WORK AREA, R/U T/RUN 9 5/8" 36# SURF. CSG
	0:00 - 6:30	6.50	CSG	12	C	P		HOLD SAFTEY MEETING, RUN FLOAT SHOE ,SHOE JNT, BAFFLE & 64 JNTS 9 5/8" 36# LT&C CSG W/THE SHOE SET @2861' & THE BAFFLE @2815'(FILL CSG, WASH CSG F/2840' T/2861')
	6:30 - 8:00	1.50	CSG	12	A	P		RUN 200' I" PIPE DOWN ANNULUS, INSTALL CEMENT HEAD, R/U PRO PETRO CEMENTERS

US ROCKIES REGION

Operation Summary Report

Well: NBU 921-20J4BS GREEN		Spud Conductor: 7/2/2011		Spud Date: 7/16/2011	
Project: UTAH-UINTAH		Site: NBU 921-201 PAD		Rig Name No: PROPETRO 11/11, H&P 298/298	
Event: DRILLING		Start Date: 6/25/2011		End Date: 9/21/2011	
Active Datum: RKB @4,854.00usft (above Mean Sea Level)			UWI: NE/SE/O/9/S/21/E/20/0/0/26/PM/S/1910/E/0/891/0/0		

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
	8:00 - 9:30	1.50	CSG	12	E	P		HOLD SAFETY MEETING. TEST LINES TO 2000 PSI. PUMP 50 BBLS OF 8.4# H2O AHEAD, FULL RETURNS PUMP 20 BBLS OF 8.4# GEL WATER AHEAD. PUMP 250 SX(170 BBLS) 11# 3.82 YIELD LEAD CEMENT, PUMP 200 SX (41 BBLS) OF 15.8# 1.15 YIELD TAIL(2% CALC, 1/4#/SK OF FLOCELE).DROP PLUG ON FLY AND DISPLACE W214 BBLS OF 8.4# H2O. LIFT PRESSURE WAS 560 PSI, BUMP PLUG AND HOLD 950 PSI FOR 5 MIN. FLOAT HELD, FULL RETURNS THRU OUT JOB ,40 BBLS LEAD CEMENT TO SURF, CEMENT FELL BACK
	9:30 - 10:00	0.50	CSG	12	F	P		TOP OUT THRU 1" PIPE W/100 SKS 15.8 PPG, CLASS "G" CEMENT W/4% CACL2 & 1/4#/SK FLOCELE, CEMENT TO SURF, CEMENT FELL BACK
	10:00 - 11:30	1.50	CSG	13	A	P		WAIT ON CEMENT
	11:30 - 12:00	0.50	CSG	12	F	P		TOP OUT W/50 SKS 15.8 PPG, CLASS "G" CEMENT W/4% CACL2 & 1/4#/SK FLOCELE, CEMENT TO SURF, STAYED @ SURF(RELEASE RIG @ 12:00 07/18/2011
9/13/2011	18:00 - 23:00	5.00	MIRU	01	C	P		PREP TO SKID, SKID RIG 20', JUMP SKID RAILS FROM BACK TO FRONT, ALIGN RIG OVER HOLE, LAY OVER DEFIB ARM, ADD EXTENTIONS TO ELECTRIC LINES
	23:00 - 0:00	1.00	MIRU	14	A	P		NU/BOP, EXTEND CHOKE & MUD LINES
9/14/2011	0:00 - 1:30	1.50	MIRU	14	A	P		FINISH NU BOPE, ADD EXTENTION TO FLOWLINE
	1:30 - 2:00	0.50	PRPSPD	01	B	P		CHANGE OUT CASING BAILS TO DRILL BAILS
	2:00 - 6:00	4.00	PRPSPD	15	A	P		PRESSURE TEST PIPE RAMS, BLIND RAMS, IBOP, FLOOR VALVE, KILL LINES & KILL LINE VALVES, BOP WING VALVES, HCR VALVE + CHOKE LINE; INNER AND OUTER CHOKE VALVES & MANIFOLD TO 250 PSI LOW @ 5 MINUTES + 5000 PSI HIGH @ 10 MINUTES / TEST ANNULAR TO 250 PSI LOW @ 5 MINUTES + 2500 PSI HIGH @ 10 MINUTES / TEST SUPER CHOKE + SURFACE CASING TO 1500 PSI @ 30 MINUTES -
	6:00 - 7:00	1.00	PRPSPD	06	A	P		P/U BHA#1 W/ WEATHERFORD SCRIBE, ORIENTATE TEST SAME
	7:00 - 8:30	1.50	PRPSPD	06	A	P		TIH W/ BIT # 1 TO 2,769' CHECK LEVEL ON DRK-OK INSTALL ROT HEAD
	8:30 - 9:00	0.50	PRPSPD	23		P		PRE SPUD MTG & INSPECTION
	9:00 - 10:00	1.00	PRPSPD	02	F	P		DRILL CMT & SHOE TRACK F/ 2,769' TO 2,883' CLEAN OUT RAT HOLE TO 2,912'
	10:00 - 15:30	5.50	DRLPRO	02	D	P		DRILL/ SLIDE/ SURVEY F/ 2,912' TO 3,465' = 553' @ 100.5 FPH // WOB 15K-20K / TOP DRIVE RPM 40-60 / PUMP 100/120 SPM = 450/540 GPM / PUMP PRESSURE ON/OFF BOTTOM 1750/1580 PSI / MUD MOTOR RPM 114 / PU/SO/ROT WT 115/95/100 TORQUE ON/OFF BOTTOM 7K/4K / SLIDE 117' IN 85 MIN 21.5% OF FOOTAGE DRILLED 25.7% OF HRS DRILLED H2O + POLYMER W/ WEIGHTED SWEEPS +/- 1.5 PPG
	15:30 - 16:00	0.50	DRLPRO	07	A	P		SERVICE RIG 3,465'

US ROCKIES REGION
Operation Summary Report

Well: NBU 921-20J4BS GREEN		Spud Conductor: 7/2/2011		Spud Date: 7/16/2011	
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Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
	16:00 - 0:00	8.00	DRLPRO	02	D	P		DRILL/ SLIDE/ SURVEY F/ 3,465' TO 4,407' = 942'@ 117.5 FPH // WOB 15K-20K / TOP DRIVE RPM 40-60 / PUMP 100/120 SPM = 450/540 GPM / PUMP PRESSURE ON/OFF BOTTOM 1750/1580 PSI / MUD MOTOR RPM 114 / PU/SO/ROT WT 115/95/100 TORQUE ON/OFF BOTTOM 7K/4K / SLIDE 92' IN 55 MIN 16% OF FOOTAGE DRILLED 18% OF HRS DRILLED H2O + POLYMER W/ WEIGHTED SWEEPS +/- 1.5 PPG MUD WT 8.8 VIS 27
9/15/2011	0:00 - 13:00	13.00	DRLPRO	02	D	P		DRILL/ SLIDE/ SURVEY F/ 4,407' TO 5,923' = 1,516'@ 116.1 FPH // WOB 15K-20K / TOP DRIVE RPM 40-60 / PUMP 120 SPM = 540 GPM / PUMP PRESSURE ON/OFF BOTTOM 2250/2025 PSI / MUD MOTOR RPM 132 / PU/SO/ROT WT 163/122/141 TORQUE ON/OFF BOTTOM 11K/9K / SLIDE 92' IN 55 MIN 16% OF FOOTAGE DRILLED 18% OF HRS DRILLED H2O + POLYMER W/ WEIGHTED SWEEPS +/- 1.5 PPG MUD WT 8.8 VIS 27
	13:00 - 13:30	0.50	DRLPRO	05	C	P		CIRC & PUMP SLUG @ 5,923'
	13:30 - 17:00	3.50	DRLPRO	06	A	P		TOOH F/ 5,923' TO BIT W/ BIT #1 W/ NO PROBLEMS / FUNCTION BOP'S / BOP DRILL
	17:00 - 20:00	3.00	DRLPRO	06	A	P		TIH W/ BIT #2 TO 2,912' / FILL PIPE / CHECK LEVEL ON DRK - OK
	20:00 - 20:30	0.50	DRLPRO	07	A	P		SERVICE RIG & INSTALL ROT RUBBER @ 2,912'
	20:30 - 0:00	3.50	DRLPRO	03	E	P		WASH & REAM F/ 3,725' TO 5,260' / 10' FLARE
	20:30 - 20:30	0.00	DRLPRO	06	A	P		CONT. TO TIH TO 3,725'
9/16/2011	0:00 - 1:30	1.50	DRLPRO	03	E	P		WASH & REAM F/ 5,260' TO 5,923' (180' FILL)
	1:30 - 14:30	13.00	DRLPRO	05	D	P		DRILL/ SLIDE/ SURVEY F/ 5,923' TO 7,155' = 1,232'@ 94.76 FPH // WOB 17K-22K / TOP DRIVE RPM 40-60 / PUMP 120 SPM = 540 GPM / PUMP PRESSURE ON/OFF BOTTOM 2250/2025 PSI / MUD MOTOR RPM 132 / PU/SO/ROT WT 205/135/160 TORQUE ON/OFF BOTTOM 15K/14K / SLIDE 60' IN 90 MIN 5% OF FOOTAGE DRILLED 10% OF HRS DRILLED H2O + POLYMER W/ WEIGHTED SWEEPS +/- 1.5 PPG MUD WT 8.8 VIS 27
	14:30 - 15:00	0.50	DRLPRO	07	A	P		SERVICE RIG @ 7,155'
	15:00 - 0:00	9.00	DRLPRO	02	D	P		DRILL/ SLIDE/ SURVEY F/ 7,155' TO 7,718' = 563' @ 62.55 FPH // WOB 17K-22K / TOP DRIVE RPM 40-60 / PUMP 120 SPM = 540 GPM / PUMP PRESSURE ON/OFF BOTTOM 2250/2025 PSI / MUD MOTOR RPM 132 / PU/SO/ROT WT 205/135/160 TORQUE ON/OFF BOTTOM 15K/14K / SLIDE 40' IN 55 MIN 7% OF FOOTAGE DRILLED 10% OF HRS DRILLED / MUD WT 9.3 VIS 33 / MUD UP @ 7,600' 5-10' FLARE ON CONNECTIONS
9/17/2011	0:00 - 6:00	6.00	DRLPRO	02	D	P		DRILL/ SLIDE/ SURVEY F/ 7,718' TO 8,066' = 348' @ 58 FPH // WOB 18K-23K / TOP DRIVE RPM 40-48 / PUMP 110 SPM = 495 GPM / PUMP PRESSURE ON/OFF BOTTOM 1900/1650 PSI / MUD MOTOR RPM 119 / PU/SO/ROT WT 205/135/160 TORQUE ON/OFF BOTTOM 15K/14K / SLIDE 0' IN 0 MIN 0% OF FOOTAGE DRILLED 0% OF HRS DRILLED / MUD WT 9.4 VIS 34 / 5' FLARE ON CONNECTION GAS

US ROCKIES REGION

Operation Summary Report

Well: NBU 921-20J4BS GREEN		Spud Conductor: 7/2/2011	Spud Date: 7/16/2011
Project: UTAH-UINTAH		Site: NBU 921-20I PAD	Rig Name No: PROPETRO 11/11, H&P 298/298
Event: DRILLING		Start Date: 6/25/2011	End Date: 9/21/2011
Active Datum: RKB @4,854.00usft (above Mean Sea Level)		UWI: NE/SE/0/9/S/21/E/20/0/0/26/PM/S/1910/E/0/891/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
	6:00 - 14:00	8.00	DRLPRO	02	D	P		DRILL/ SLIDE/ SURVEY F/ 8,066' TO 8,477' = 411' @ 51.37 FPH // WOB 18K-23K / TOP DRIVE RPM 35-45 / PUMP 110 SPM = 495 GPM / PUMP PRESSURE ON/OFF BOTTOM 1900/1650 PSI / MUD MOTOR RPM 119 / PU/SO/ROT WT 240/155/185 TORQUE ON/OFF BOTTOM 17K/14K / SLIDE 35' IN 80 MIN 7% OF FOOTAGE DRILLED 16% OF HRS DRILLED / MUD WT 9.8 VIS 35 / 5' FLARE ON CONNECTION GAS SERVICE RIG @ 8,477'
	14:00 - 14:30	0.50	DRLPRO	07	A	P		
	14:30 - 0:00	9.50	DRLPRO	02	D	P		DRILL/ SLIDE/ SURVEY F/ 8,477' TO 8,930' = 453' @ 47.68 FPH // WOB 20K-23K / TOP DRIVE RPM 35-45 / PUMP 100/110 SPM = 450/495 GPM / PUMP PRESSURE ON/OFF BOTTOM 1900/1650 PSI / MUD MOTOR RPM 108/119 / PU/SO/ROT WT 240/165/190 TORQUE ON/OFF BOTTOM 18K/14K / SLIDE 40' IN 170 MIN 8% OF FOOTAGE DRILLED 33% OF HRS DRILLED / MUD WT 10.3 VIS 38 / 5' TO 10' FLARE ON CONNECTION GAS
9/18/2011	0:00 - 15:30	15.50	DRLPRO	02	D	P		DRILL/ SLIDE/ SURVEY F/ 8,930' TO 9,609' = 679' @ 43.80 FPH // WOB 18K-24K / TOP DRIVE RPM 35-45 / PUMP 90/110 SPM = 405/495 GPM / PUMP PRESSURE ON/OFF BOTTOM 2250/2085 PSI / MUD MOTOR RPM 97/119 / PU/SO/ROT WT 260/170/200 TORQUE ON/OFF BOTTOM 18K/15K / SLIDE 0' IN 0 MIN 0% OF FOOTAGE DRILLED 0% OF HRS DRILLED / MUD WT 10.8 VIS 39 / 5' TO 10' FLARE ON CONNECTION GAS
	15:30 - 16:00	0.50	DRLPRO	07	A	P		SERVICE RIG @ 9,609'
	16:00 - 0:00	8.00	DRLPRO	02	C	P		DRILL/ SLIDE/ SURVEY F/ 9,609' TO 9,880' = 271' @ 33.87 FPH // WOB 18K-24K / TOP DRIVE RPM 35-45 / PUMP 90/110 SPM = 405/495 GPM / PUMP PRESSURE ON/OFF BOTTOM 2250/2085 PSI / MUD MOTOR RPM 97/119 / PU/SO/ROT WT 260/171/202 TORQUE ON/OFF BOTTOM 18K/15K / MUD WT 11.4 VIS 39 / 5' TO 15' FLARE ON CONNECTION GAS
9/19/2011	0:00 - 15:00	15.00	DRLPRO	02	D	P		DRILL/ SLIDE/ SURVEY F/ 9,880' TO 10,270' = 390' @ 26 FPH // WOB 18K-24K / TOP DRIVE RPM 30-45 / PUMP 90/100 SPM = 405/450 GPM / PUMP PRESSURE ON/OFF BOTTOM 2250/2015 PSI / MUD MOTOR RPM 97/108 / PU/SO/ROT WT 272/170/208 TORQUE ON/OFF BOTTOM 18K/19K / MUD WT 11.6 VIS 43 / 5' TO 15' FLARE ON CONNECTION GAS
	15:00 - 15:30	0.50	DRLPRO	07	A	P		SERVICE RIG @ 10,270'
	15:30 - 20:00	4.50	DRLPRO	02	D	P		DRILL/ SLIDE/ SURVEY F/ 10,270' TO 10,379' TD = 109' @ 24.22 FPH // WOB 18K-24K / TOP DRIVE RPM 30-45 / PUMP 90/100 SPM = 405/450 GPM / PUMP PRESSURE ON/OFF BOTTOM 2250/2150 PSI / MUD MOTOR RPM 97/108 / PU/SO/ROT WT 272/170/208 TORQUE ON/OFF BOTTOM 18K/19K / MUD WT 11.6 VIS 43 / 5' TO 20' FLARE ON CONNECTION GAS
	20:00 - 21:00	1.00	DRLPRO	05	C	P		CIRC BTM'S @ TD 10,379'
	21:00 - 23:30	2.50	DRLPRO	06	D	P		WIPER TRIP (10 STD) W/ NO PROBLEMS
	23:30 - 0:00	0.50	DRLPRO	05	C	P		CIRC & COND MUD @ 10,379'

US ROCKIES REGION
Operation Summary Report

Well: NBU 921-20J4BS GREEN		Spud Conductor: 7/2/2011		Spud Date: 7/16/2011	
Project: UTAH-UINTAH		Site: NBU 921-201 PAD		Rig Name No: PROPETRO 11/11, H&P 298/298	
Event: DRILLING		Start Date: 6/25/2011		End Date: 9/21/2011	
Active Datum: RKB @4,854.00usft (above Mean Sea Level)			UWI: NE/SE/O/9/S/21/E/20/O/0/26/PM/S/1910/E/0/891/0/0		

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
9/20/2011	0:00 - 2:00	2.00	DRLPRO	05	C	P		CIRC & COND MUD @ 10,379'
	2:00 - 14:00	12.00	DRLPRO	06	A	P		TOOH LD TUBULARS W/ NO PROBLEMS
	14:00 - 14:30	0.50	DRLPRO	14	B	P		PULL WEAR BUSHING
	14:30 - 16:00	1.50	DRLPRO	12	A	P		PJSM RU FRANKS CASING EQUIPMENT
	16:00 - 19:30	3.50	DRLPRO	12	C	P		PJSM RUN 21 JTS 4 1/2" 11.60# P-110 BTC CSG CONT TO RUN 49 JTS OF 4 1/2" 11.60# I-80 BTC CSG TO 2,927'
	19:30 - 20:00	0.50	DRLPRO	05	A	P		INSTALL ROT RUBBER CIRC GAS OUT @ 2,927' / 15' TO 25' FLARE
	20:00 - 21:30	1.50	DRLPRO	12	C	P		CONT TO RUN 30 JTS OF 4 1/2" 11.60# I-80 BTC CSG TO 4,610'
	21:30 - 22:30	1.00	DRLPRO	05	A	P		CIRC OUT GAS / MUD CUT 3/10'S 20' TO 30' FLARE
	22:30 - 23:30	1.00	DRLPRO	12	C	P		CONT TO RUN 37 JTS OF 4 1/2" 11.60# I-80 BTC CSG TO 5,724'
	23:30 - 0:00	0.50	DRLPRO	05	A	P		SHUT ANNULAR CIRC OUT GAS 4/10'S MUD CUT 25' TO 35' FLARE
9/21/2011	0:00 - 0:30	0.50	DRLPRO	05	A	S		CIRC OUT GAS @ 5,700' 3/10'S MUD CUT 20' TO 35' FLARE
	0:30 - 1:30	1.00	DRLPRO	12	C	P		CONT TO RUN 4 1/2" CSG TO 7,284'
	1:30 - 2:30	1.00	DRLPRO	05	A	S		INCREASE IN FLOW SHUT IN ANNULAR CIRC OUT GAS THROUGH CHOKE @ 7,284' REDUCE ANNULAR PRESSURE WORK PIPE / 4/10'S MUD CUT 25' TO 40' FLARE / OPEN ANNULAR / WELL STATIC
	2:30 - 5:30	3.00	DRLPRO	22	A	X		WORK STUCK PIPE @ 7,284' PUMP 150 BBL WATER / CSG FREE / CIRC OUT WATER
	5:30 - 7:00	1.50	DRLPRO	12	C	P		RUN CSG TO 7,300' WASH & WORK CSG F/ 7,300' TO 7,410'
	7:00 - 10:00	3.00	DRLPRO	12	C	P		CONT TO RUN 4 1/2" PRODUCTION CSG F/ 7,410' TO 10,334' SHOE @ 10,334' FLOAT COLLAR @ 10,290' Mverde marker @ 8,008' Wasatch Marker @ 5,042' (21JTS OF P-110 BTC & 226 JTS OF I-80 BTC)
	10:00 - 12:00	2.00	DRLPRO	05	A	P		CIRC & COND 1 1/2 BTM'S @ 10,334'
	12:00 - 14:30	2.50	DRLPRO	12	E	P		PJSM TEST LINES TO 5000 PSI. PUMP 5 BBLS OF H2O AHEAD. PUMP 13 BBLS (20 SX) OF 10.6# 3.77 YD CEMENT. PUMP 227 BBLS (510 SX) OF 11.7# 2.5 YD PREMIUM LIGHT II LEAD CEMENT. PUMP 257 BBLS (1105 SX) OF 14.3# 1.31 YD 50/50 POZ TAIL CEMENT. DROP PLUG. PUMP 160 BBLS H2O W/ CLAYCARE AND MAGNACIDE FOR DISPL. 10 BBLS OF LEAD CEMENT TO SURFACE. 2777 PSI @ 3 BPM. BUMP PLUG 3361 PSI. HOLD PSI FOR 5 MIN. RELEASE PRESS. / FLOAT HELD. 2 BBL WATER BACK TO INVENTORY/ ESTIMATED. TAIL CEMENT @ 4,600'. FULL RETURNS DURING JOB / RD EQUIP.
	14:30 - 17:00	2.50	DRLPRO	14	A	P		FLUSH BOP'S & CHOKE EQUIPMENT / ND BOP'S
	17:00 - 18:00	1.00	DRLPRO	14	B	P		SET SLIPS W/ WEATHERFORD @ 110K CUT OFF CSG & LD SAME / RELEASE RIG @ 18:00 HRS 9/21/11

1 General

1.1 Customer Information

Company	US ROCKIES REGION
Representative	
Address	

1.2 Well/Wellbore Information

Well	NBU 921-20J4BS GREEN	Wellbore No.	OH
Well Name	NBU 921-20J4BS	Wellbore Name	NBU 921-20J4BS
Report No.	1	Report Date	11/4/2011
Project	UTAH-UINTAH	Site	NBU 921-20I PAD
Rig Name/No.		Event	COMPLETION
Start Date	11/4/2011	End Date	11/11/2011
Spud Date	7/16/2011	Active Datum	RKB @4,854.00usft (above Mean Sea Level)
UWI	NE/SE/O9/S/21/E/20/O/0/26/PM/S/1910/E/O/891/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		Fluid Density	
Surface Press		Estimate Res Press	
TVD Fluid Top		Fluid Head	
Hydrostatic Press		Press Difference	
Balance Cond	NEUTRAL		

1.5 Summary

Gross Interval	7,331.0 (usft)-10,192.0 (us)	Start Date/Time	11/11/2011 12:00AM
No. of Intervals	40	End Date/Time	11/11/2011 12:00AM
Total Shots	0	Net Perforation Interval	58.00 (usft)
Avg Shot Density	0.00 (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 /Carr Manuf	Carr Size (in)	Phasing (°)	Charge Desc /Charge Manufacturer	Charge Weight (gram)	Reason	Misrun
11/11/2011 12:00AM	WASATCH/1			7,331.0	7,333.0			0.360	EXP/	3.375	90.00		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 /Carr Manuf	Carr Size (in)	Phasing (°)	Charge Desc /Charge Manufacturer	Charge Weight (gram)	Reason	Misrun
11/11/2011 12:00AM	WASATCH/ 1			7,432.0	7,434.0			0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
11/11/2011 12:00AM	WASATCH/ 1			7,484.0	7,485.0			0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
11/11/2011 12:00AM	WASATCH/ 1			7,499.0	7,500.0			0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
11/11/2011 12:00AM	WASATCH/ 1			7,735.0	7,736.0			0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
11/11/2011 12:00AM	WASATCH/ 1			7,767.0	7,768.0			0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
11/11/2011 12:00AM	WASATCH/ 1			7,852.0	7,853.0			0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
11/11/2011 12:00AM	WASATCH/ 1			7,872.0	7,873.0			0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
11/11/2011 12:00AM	MESAVERDE/ 1			7,991.0	7,992.0			0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
11/11/2011 12:00AM	MESAVERDE/ 1			8,009.0	8,010.0			0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
11/11/2011 12:00AM	MESAVERDE/ 1			8,224.0	8,226.0			0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
11/11/2011 12:00AM	MESAVERDE/ 1			8,283.0	8,284.0			0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
11/11/2011 12:00AM	MESAVERDE/ 1			8,307.0	8,309.0			0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
11/11/2011 12:00AM	MESAVERDE/ 1			8,346.0	8,347.0			0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
11/11/2011 12:00AM	MESAVERDE/ 1			8,480.0	8,483.0			0.360	EXP/	3.375	90.00		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 /Carr Manuf	Carr Size (in)	Phasing (°)	Charge Desc /Charge Manufacturer	Charge Weight (gram)	Reason	Misrun
11/11/2011 12:00AM	MESAVERDE/			8,577.0	8,578.0			0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
11/11/2011 12:00AM	MESAVERDE/			8,609.0	8,610.0			0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
11/11/2011 12:00AM	MESAVERDE/			8,647.0	8,648.0			0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
11/11/2011 12:00AM	MESAVERDE/			8,731.0	8,732.0			0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
11/11/2011 12:00AM	MESAVERDE/			8,776.0	8,778.0			0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
11/11/2011 12:00AM	MESAVERDE/			8,793.0	8,794.0			0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
11/11/2011 12:00AM	MESAVERDE/			8,851.0	8,853.0			0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
11/11/2011 12:00AM	MESAVERDE/			9,090.0	9,092.0			0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
11/11/2011 12:00AM	MESAVERDE/			9,134.0	9,138.0			0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
11/11/2011 12:00AM	MESAVERDE/			9,194.0	9,196.0			0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
11/11/2011 12:00AM	MESAVERDE/			9,499.0	9,500.0			0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
11/11/2011 12:00AM	MESAVERDE/			9,513.0	9,514.0			0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
11/11/2011 12:00AM	MESAVERDE/			9,555.0	9,557.0			0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
11/11/2011 12:00AM	MESAVERDE/			9,588.0	9,589.0			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 /Carr Manuf	Carr Size (in)	Phasing (°)	Charge Desc /Charge Manufacturer	Charge Weight (gram)	Reason	Misrun
11/11/201 1 12:00AM	MESAVERDE/			9,640.0	9,641.0			0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
11/11/201 1 12:00AM	MESAVERDE/			9,656.0	9,657.0			0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
11/11/201 1 12:00AM	MESAVERDE/			9,715.0	9,716.0			0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
11/11/201 1 12:00AM	MESAVERDE/			9,816.0	9,817.0			0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
11/11/201 1 12:00AM	MESAVERDE/			9,828.0	9,829.0			0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
11/11/201 1 12:00AM	MESAVERDE/			9,864.0	9,866.0			0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
11/11/201 1 12:00AM	MESAVERDE/			9,934.0	9,935.0			0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
11/11/201 1 12:00AM	MESAVERDE/			9,976.0	9,977.0			0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
11/11/201 1 12:00AM	MESAVERDE/			10,017.0	10,019.0			0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
11/11/201 1 12:00AM	MESAVERDE/			10,048.0	10,050.0			0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
11/11/201 1 12:00AM	MESAVERDE/			10,190.0	10,192.0			0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	

3 Plots

US ROCKIES REGION
Operation Summary Report

Well: NBU 921-20J4BS GREEN	Spud Conductor: 7/2/2011	Spud Date: 7/16/2011
Project: UTAH-UINTAH	Site: NBU 921-20I PAD	Rig Name No: ROYAL WELL SERVICE 2/2
Event: COMPLETION	Start Date: 11/4/2011	End Date: 11/11/2011
Active Datum: RKB @4,854.00usft (above Mean Sea Level)	UWI: NE/SE/0/9/S/21/E/20/0/0/26/PM/S/1910/E/0/891/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
11/4/2011	9:00 - 11:30	2.50	COMP	33		P		FILL SURFACE CSG. MIRU B&C QUICK TEST. PSI TEST T/ 1000 PSI. HELD FOR 15 MIN LOST 26 PSI. PSI TEST T/ 3500 PSI. HELD FOR 15 MIN LOST 40 PSI. 1ST PSI TEST T/ 7000 PSI. HELD FOR 30 MIN LOST 160 PSI. 2ND PSI TEST T/ 7000 PSI. HELD FOR 30 MIN. LOST 90 PSI. NO COMMUNICATION WITH SURFACE CSG BLEED OFF PSI. MOVE T/ NEXT WELL. SWIFN
	7:00 - 9:30	2.50	COMP	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. SWIFW

US ROCKIES REGION

Operation Summary Report

Well: NBU 921-20J4BS GREEN		Spud Conductor: 7/2/2011	Spud Date: 7/16/2011
Project: UTAH-UINTAH		Site: NBU 921-20I PAD	Rig Name No: ROYAL WELL SERVICE 2/2
Event: COMPLETION		Start Date: 11/4/2011	End Date: 11/11/2011
Active Datum: RKB @4,854.00usft (above Mean Sea Level)		UWI: NE/SE/O/9/S/21/E/20/O/O/28/PM/S/1910/E/O/891/O/O	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
11/7/2011	7:00 - 18:00	11.00	COMP	36	B	P		<p>FRAC STG 1)WHP 1500 PSI, BRK 4748 PSI @ 4.7 BPM. ISIP 3276 PSI, FG .76 CALC HOLES OPEN @ 43.1 BPM @ 6132 PSI = 81% HOLES OPEN. ISIP 3095 PSI, FG .74 NPI -181 PSI. MP 6461 PSI, MR 52.1 BPM, AP 6000 PSI, AR 49.0 BPM PUMPED 30/50 OTTAWA SAND IN THIS STAGE X-OVER FOR W L</p> <p>PERF STG 2)PU 4 1/2 8K HAL CBP & 3 1/8 EXP GUN, 23 GM, .36 HOLE SIZE. 90 DEG PHASING. RIH SET CBP @ 10,007' P/U PERF AS PER PERF DESIGN. POOH. X-OVER FOR FRAC CREW</p> <p>FRAC STG 2)WHP 790 PSI, BRK 5032 PSI @ 6.6 BPM. ISIP 3093 PSI, FG .75. CALC HOLES OPEN @ 43.2 BPM @ 5489 PSI = 97% HOLES OPEN. ISIP 3073 PSI, FG .75, NPI -20 PSI. MP 6419 PSI, MR 51.4 BPM, AP 5969 PSI, AR 50.0 BPM PUMPED 30/50 OTTAWA SAND IN THIS STAGE X-OVER FOR W L</p> <p>PERF STG 3)PU 4 1/2 8K HAL CBP & 3 1/8 EXP GUN, 23 GM, .36 HOLE SIZE. 90 DEG PHASING. RIH SET CBP @ 9746' P/U PERF AS PER PERF DESIGN. POOH. X-OVER FOR FRAC CREW</p> <p>FRAC STG 3)WHP 1060 PSI, BRK 4363 PSI @ 4.6 BPM. ISIP 2870 PSI, FG .74 CALC HOLES OPEN @ 50.5 BPM @ 6067 PSI = 93% HOLES OPEN. ISIP 2971 PSI, FG .75, NPI 93 PSI. MP 6433 PSI, MR 52.9 BPM, AP 5869 PSI, AR 50.5 BPM PUMPED 30/50 OTTAWA SAND IN THIS STAGE X-OVER FOR W L</p> <p>PERF STG 4)PU 4 1/2 8K HAL CBP & 3 1/8 EXP GUN, 23 GM, .36 HOLE SIZE. 90 DEG PHASING. RIH SET CBP @ 9226' P/U PERF AS PER PERF DESIGN. POOH. X-OVER FOR FRAC CREW</p> <p>FRAC STG 4)WHP 550 PSI, BRK 3678 PSI @ 4.6 BPM. ISIP 2473 PSI, FG .71. CALC HOLES OPEN @ 42.3 BPM @ 5417 PSI = 74% HOLES OPEN. ISIP 2875 PSI, FG .75, NPI 402 PSI. MP 6415 PSI, MR 52.0 BPM, AP 6007 PSI, AR 49.7 BPM PUMPED 30/50 OTTAWA SAND IN THIS STAGE X-OVER FOR W L</p> <p>PERF STG 5)PU 4 1/2 8K HAL CBP & 3 1/8 EXP GUN,</p>

US ROCKIES REGION
Operation Summary Report

Well: NBU 921-20J4BS GREEN	Spud Conductor: 7/2/2011	Spud Date: 7/16/2011
Project: UTAH-UINTAH	Site: NBU 921-20I PAD	Rig Name No: ROYAL WELL SERVICE 2/2
Event: COMPLETION	Start Date: 11/4/2011	End Date: 11/11/2011

Active Datum: RKB @4,854.00usft (above Mean Sea Level) UWI: NE/SE/0/9/S/21/E/20/0/0/26/PM/S/1910/E/0/891/0/0

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
11/8/2011	6:45 - 7:00	0.25	COMP	48		P		23 GM, .36 HOLE SIZE. 90 DEG PHASING. RIH SET CBP @ 8883' P/U PERF AS PER PERF DESIGN. POOH. SWIFN HELD SAFETY MEETING: COLD WEATHER OPERATIONS

**US ROCKIES REGION
Operation Summary Report**

Well: NBU 921-20J4BS GREEN		Spud Conductor: 7/2/2011	Spud Date: 7/16/2011
Project: UTAH-UINTAH		Site: NBU 921-20I PAD	Rig Name No: ROYAL WELL SERVICE 2/2
Event: COMPLETION		Start Date: 11/4/2011	End Date: 11/11/2011
Active Datum: RKB @4,854.00usft (above Mean Sea Level)		UWI: NE/SE/0/9/S/21/E/20/0/0/26/PM/S/1910/E/0/891/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
	7:00 - 18:00	11.00	COMP	36	B	P		<p>FRAC STG 5)WHP 2140 PSI, BRK 4588 PSI @ 6.5 BPM. ISIP 2935 PSI, FG .77 CALC HOLES OPEN @ 40.9 BPM @ 5554 PSI = 76% HOLES OPEN. ISIP 3051 PSI, FG .79, NPI 116 PSI. MP 6242 PSI, MR 51.7 BPM, AP 5655 PSI, AR 50.1 BPM PUMPED 30/50 OTTAWA SAND IN THIS STAGE X-OVER FOR W L</p> <p>PERF STG 6)PU 4 1/2 8K HAL CBP & 3 1/8 EXP GUN, 23 GM, .36 HOLE SIZE. 90 DEG PHASING. RIH SET CBP @ 8678' P/U PERF AS PER PERF DESIGN. POOH. X-OVER FOR FRAC CREW</p> <p>FRAC STG 6)WHP 2180 PSI, BRK 4961 PSI @ 4.5 BPM. ISIP 2781 PSI, FG .76. CALC HOLES OPEN @ 48.1 BPM @ 5603 PSI = 91% HOLES OPEN. ISIP 2707 PSI, FG .75, NPI -74 PSI. MP 6433 PSI, MR 51.4 BPM, AP 5259 PSI, AR 50.3 BPM PUMPED 30/50 OTTAWA SAND IN THIS STAGE X-OVER FOR W L</p> <p>PERF STG 7)PU 4 1/2 8K HAL CBP & 3 1/8 EXP GUN, 23 GM, .36 HOLE SIZE. 90 DEG PHASING. RIH SET CBP @ 8377' P/U PERF AS PER PERF DESIGN. POOH. X-OVER FOR FRAC CREW</p> <p>FRAC STG 7)WHP 1450 PSI, BRK 3611 PSI @ 6.5 BPM. ISIP 2539 PSI, FG .75. CALC HOLES OPEN @ 43.7 BPM @ 6081 PSI = 65% HOLES OPEN. ISIP 2821 PSI, FG .78, NPI 282 PSI. MP 6460 PSI, MR 51.0 BPM, AP 59992 PSI, AR 48.6 BPM PUMPED 30/50 OTTAWA SAND IN THIS STAGE X-OVER FOR W L</p> <p>PERF STG 8)PU 4 1/2 8K HAL CBP & 3 1/8 EXP GUN, 23 GM, .36 HOLE SIZE. 90 DEG PHASING. RIH SET CBP @ 8040' P/U PERF AS PER PERF DESIGN. POOH. X-OVER FOR FRAC CREW</p> <p>FRAC STG 8)WHP 660 PSI, BRK 3824 PSI @ 4.6 BPM. ISIP 1996 PSI, FG .69. CALC HOLES OPEN @ 50.8 BPM @ 5780 PSI = 75% HOLES OPEN. ISIP 2797 PSI, FG .79, NPI 801 PSI. MP 6440 PSI, MR 51.9 BPM, AP 5184 PSI, AR 50.4 BPM PUMPED 30/50 OTTAWA SAND IN THIS STAGE X-OVER FOR W L</p>

US ROCKIES REGION
Operation Summary Report

Well: NBU 921-20J4BS GREEN		Spud Conductor: 7/2/2011		Spud Date: 7/16/2011	
Project: UTAH-UINTAH			Site: NBU 921-20I PAD		Rig Name No: ROYAL WELL SERVICE 2/2
Event: COMPLETION			Start Date: 11/4/2011		End Date: 11/11/2011
Active Datum: RKB @4,854.00usft (above Mean Sea Level)			UWI: NE/SE/0/9/S/21/E/20/0/0/26/PM/S/1910/E/0/891/0/0		

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation																								
								<p>PERF STG 9)PU 4 1/2 8K HAL CBP & 3 1/8 EXP GUN, 23 GM, .36 HOLE SIZE. 90 DEG PHASING. RIH SET CBP @ 7530' P/U PERF AS PER PERF DESIGN. POOH. X-OVER FOR FRAC CREW</p> <p>FRAC STG 9)WHP 800 PSI, BRK 2689 PSI @ 4.4 BPM. ISIP 1656 PSI, FG .66 CALC HOLES OPEN @ 46.8 BPM @ 5209 PSI = 69% HOLES OPEN. ISIP 2383 PSI, FG .76, NPI 707 PSI. MP 6423 PSI, MR 50.9 BPM, AP 4794 PSI, AR 49.4 BPM PUMPED 30/50 OTTAWA SAND IN THIS STAGE X-OVER FOR WL</p> <p>PU 4 1/2 8K HAL CBP . RIH SET KILL PLUG @ 7281. POOH. RD FRAC & WL CREW SWI</p> <p>TOTAL SAND = 172,283 # TOTAL TOTAL CLFL = 7765 BBLS HSM & JSA W/ROYAL WELL SERVICE.</p> <p>MIRU - SPOT EQUIP. SICP 0 PSI. NDWH, NU BOPs. RU FLOOR & TBG EQUIP. PREP & TALLY TBG. PU 3 7/8" BIT, POBS & XN NIPPLE. RIH ON 229 JTS NEW 2 3/8" TBG. TAG FILL @ 7258'. LD 2 JTS. RD TBG EQUIP. RU PWR SWWL & PMP. EST CIRC. PT CSG & BOPs TO 3000 PSI & HOLD 15 MIN. (0 PSI LOSS) RIH TAG FILL. C/O SND & D/O CBPs.</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">HALCO CBP @ PSI</th> <th style="text-align: left;">C/O FILL FCP</th> <th style="text-align: left;">D/O CBP</th> <th style="text-align: left;">DIFF</th> </tr> </thead> <tbody> <tr> <td>CBP #1 @ 7281' PSI 50 PSI</td> <td>23 FT</td> <td>09 MIN</td> <td>300</td> </tr> <tr> <td>CBP #2 @ 7530' PSI 100 PSI</td> <td>26 FT</td> <td>05 MIN</td> <td>0</td> </tr> <tr> <td>CBP #3 @ 8040' PSI 350 PSI</td> <td>26 FT</td> <td>06 MIN</td> <td>0</td> </tr> <tr> <td>CBP #4 @ 8377' PSI 400 PSI</td> <td>28 FT</td> <td>04 MIN</td> <td>0</td> </tr> <tr> <td>CBP #5 @ 8678' PSI 350 PSI</td> <td>16 FT</td> <td>07 MIN</td> <td>500</td> </tr> </tbody> </table> <p>EOT @ 8718'. PMP 10 BBLS TMAC. SHUT IN TBG. FLOW CSG TO PIT FOR 20 MIN TO CLEAN UP. SWI - SDFN. PREP TO CONT TO D/O CBPs IN AM. HSM & JSA W/ROYAL WELL SERVICE.</p>	HALCO CBP @ PSI	C/O FILL FCP	D/O CBP	DIFF	CBP #1 @ 7281' PSI 50 PSI	23 FT	09 MIN	300	CBP #2 @ 7530' PSI 100 PSI	26 FT	05 MIN	0	CBP #3 @ 8040' PSI 350 PSI	26 FT	06 MIN	0	CBP #4 @ 8377' PSI 400 PSI	28 FT	04 MIN	0	CBP #5 @ 8678' PSI 350 PSI	16 FT	07 MIN	500
HALCO CBP @ PSI	C/O FILL FCP	D/O CBP	DIFF																													
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11/10/2011	6:45 - 7:00	0.25	COMP	48		P																										
	7:00 - 7:00	0.00	COMP	30	A	P																										
11/11/2011	6:45 - 7:00	0.25	COMP	48		P																										

US ROCKIES REGION
Operation Summary Report

Well: NBU 921-20J4BS GREEN		Spud Conductor: 7/2/2011	Spud Date: 7/16/2011
Project: UTAH-UINTAH		Site: NBU 921-20I PAD	Rig Name No: ROYAL WELL SERVICE 2/2
Event: COMPLETION		Start Date: 11/4/2011	End Date: 11/11/2011
Active Datum: RKB @4,854.00usft (above Mean Sea Level)		UWI: NE/SE/0/9/S/21/E/20/0/0/26/PM/S/1910/E/0/891/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
	7:00 - 12:30	5.50	COMP	44	C	P		<p>EOT @ 8718'. SICP 2100 PSI. BLOWWELL DWN TO PIT. RIH TAG FILL @ 8853'. C/O SND & D/O CBPs.</p> <p>HALCO CBP @ C/O FILL D/O CBP DIFF PSI FCP</p> <p>CBP #6 @ 8883' 30 FT 05 MIN 0 PSI 500 PSI</p> <p>CBP #7 @ 9226' 20 FT 04 MIN 400 PSI 400 PSI</p> <p>CBP #8 @ 9746' 30 FT 04 MIN 400 PSI 500 PSI</p> <p>CBP #9 @ 10,007' 25 FT 05 MIN 700 PSI 500 PSI</p> <p>RIH & TAG FILL @ 10,218'. C/O TO 10,292'. (PBTD @ 10,292). FCP = 475 PSI. PMP 20 BBLS TMAC & CIRC WELL CLEAN. ND PWR SWWL, NU TBG EQUIP. LD 17 JTS ON FLOAT, (17 TOTAL ON FLOAT). LND TBG ON HNGR W/308 JTS NEW 2 3/8" 4.7# L80 TBG @ 9782.14'. RD FLOOR & TBG EQUIP. ND BOP, DROP BALL, NUWH. PMP OFF BIT W/8 BBLS TMAC @ 1800 PSI. WAIT 30 MIN FOR BIT TO FALL TO BTM. TURN WELL TO F.B.C.</p> <p>KB 26' HANGER 0.83' XN NIPPLE 1.33' TBG 308 JTS = 9752.93' XN NIPPLE @ 9779.76' EOT @ 9782.14' (325 JTS DLVRD - 0 JTS RTND)</p> <p>TWTR = 7945 BBLS TWR = 1130 BBLS TWLTR = 6815 SICP = 1350 PSI, SITP = 0 PSI.</p>

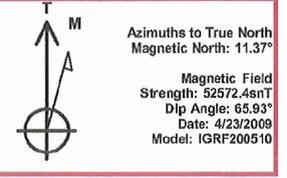
Project: UTAH - UTM (feet), NAD27, Zone 12N
 Site: UINTAH_NBU 921-20I PAD
 Well: NBU 921-20J4BS
 Wellbore: NBU 921-20J4BS
 Section:
 SHL: P_NBU 921-20J4BS
 Design: NBU 921-20J4BS (wp02)
 Latitude: 40.019541
 Longitude: -109.568649
 GL: 4828.01
 KB: 26' RKB + 4828' GL @ 4854.01ft (H&P 298)

FORMATION TOP DETAILS

TVDPATH	MDPATH	FORMATION
4966.01	5109.29	Top Wasatch
7956.02	8099.33	Top Mesaverde (TOP OF CYLINDER)
8981.02	9124.34	MVU21
9475.02	9618.35	MVL1

CASING DETAILS

TVD	MD	Name	Size
2776.74	2883.01	9 5/8"	9-5/8



WELL DETAILS: NBU 921-20J4BS

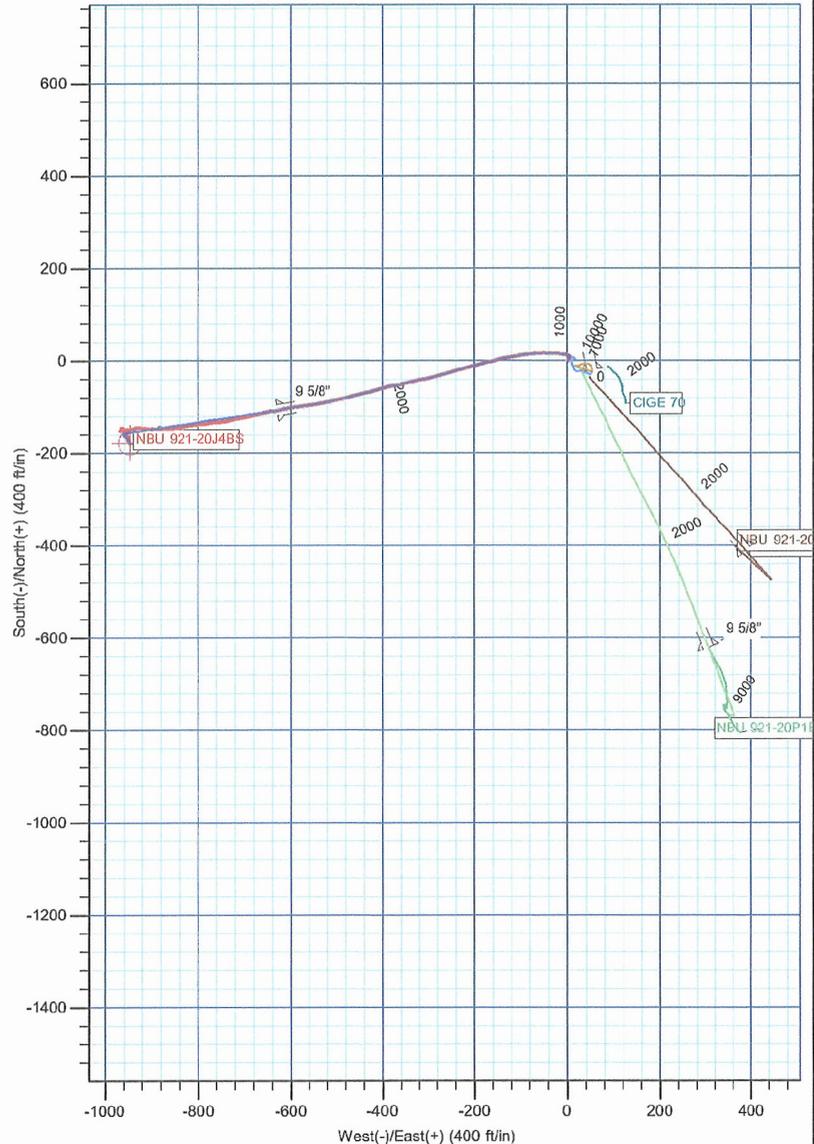
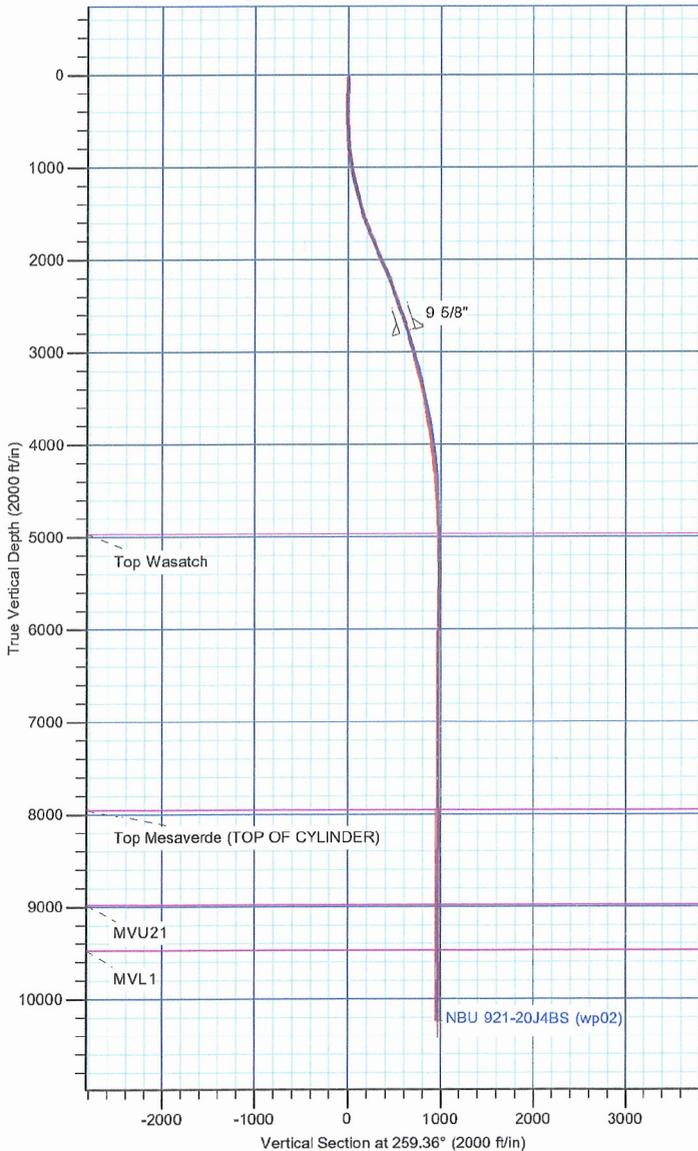
+N/-S	+E/-W	Northing	Ground Level: Easting	4828.01 Latitude	Longitude	Slot
0.00	0.00	14536379.26	2041171.42	40.019541	-109.568649	

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
NBU 921-20J4BS BHL	10235.02	-178.08	-947.63	14536185.98	2040226.78	40.019052	-109.572033	Circle (Radius: 25.00)

SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	Vsect
2852.01	17.91	261.09	2747.24	-105.48	-620.41	0.00	0.00	629.22
3002.01	17.91	261.09	2889.98	-112.63	-665.98	0.00	0.00	675.32
3009.71	17.77	261.29	2897.31	-112.99	-668.31	2.00	156.66	677.68
4945.29	0.00	0.00	4802.01	-158.08	-962.63	0.92	180.00	975.27
5033.89	0.27	143.12	4890.61	-158.24	-962.51	0.30	143.12	975.18
10378.36	0.27	143.12	10235.02	-178.08	-947.63	0.00	0.00	964.22



Anadarko Petroleum Corp

Survey Report

Company: US ROCKIES REGION PLANNING	Local Co-ordinate Reference: Well NBU 921-20J4BS
Project: UTAH - UTM (feet), NAD27, Zone 12N	TVD Reference: 26' RKB + 4828' GL @ 4854.01ft (H&P 298)
Site: UINTAH_NBU 921-20I PAD	MD Reference: 26' RKB + 4828' GL @ 4854.01ft (H&P 298)
Well: NBU 921-20J4BS	North Reference: True
Wellbore: NBU 921-20J4BS	Survey Calculation Method: Minimum Curvature
Design: NBU 921-20J4BS	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 921-20I PAD	
Site Position:	Northing: 14,536,367.50 usft Latitude: 40.019508
From: Lat/Long	Easting: 2,041,187.57 usft Longitude: -109.568592
Position Uncertainty: 0.00 ft	Slot Radius: 0 " Grid Convergence: 0.92 °

Well NBU 921-20J4BS	
Well Position	+N-S 0.00 ft Northing: 14,536,379.26 usft Latitude: 40.019541
	+E-W 0.00 ft Easting: 2,041,171.42 usft Longitude: -109.568649
Position Uncertainty	0.00 ft Wellhead Elevation: ft Ground Level: 4,828.01 ft

Wellbore NBU 921-20J4BS	
Magnetics	Model Name IGRF200510
	Sample Date 4/23/2009
	Declination (°) 11.37
	Dip Angle (°) 65.93
	Field Strength (nT) 52,572

Design NBU 921-20J4BS	
Audit Notes:	
Version: 1.0	Phase: ACTUAL Tie On Depth: 22.00
Vertical Section:	Depth From (TVD) (ft) 22.00
	+N-S (ft) 0.00
	+E-W (ft) 0.00
	Direction (°) 259.36

Survey Program Date 10/4/2011				
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description
198.00	2,852.01	Survey #1 (NBU 921-20J4BS)	MWD	MWD - Standard
2,944.01	10,379.02	Survey #2 (NBU 921-20J4BS)	MWD	MWD - Standard

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)
22.00	0.00	0.00	22.00	0.00	0.00	0.00	0.00	0.00	0.00
198.00	2.10	50.09	197.96	2.07	2.47	-2.81	1.19	1.19	0.00
278.00	1.50	38.27	277.92	3.83	4.25	-4.88	0.88	-0.75	-14.78
372.00	1.47	16.21	371.89	5.96	5.35	-6.35	0.61	-0.03	-23.47
462.00	1.38	330.77	461.87	8.01	5.14	-6.53	1.23	-0.10	-50.49
542.00	2.19	311.02	541.83	9.85	3.51	-5.27	1.26	1.01	-24.69
632.00	3.25	286.89	631.73	11.72	-0.22	-1.94	1.71	1.18	-26.81
722.00	4.38	282.02	721.53	13.18	-6.03	3.49	1.31	1.26	-5.41
812.00	5.81	278.27	811.17	14.55	-13.90	10.97	1.63	1.59	-4.17
902.00	7.31	272.27	900.58	15.43	-24.13	20.86	1.83	1.67	-6.67

Anadarko Petroleum Corp

Survey Report

Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well NBU 921-20J4BS
Project:	UTAH - UTM (feet), NAD27, Zone 12N	TVD Reference:	26' RKB + 4828' GL @ 4854.01ft (H&P 298)
Site:	UINTAH_NBU 921-20I PAD	MD Reference:	26' RKB + 4828' GL @ 4854.01ft (H&P 298)
Well:	NBU 921-20J4BS	North Reference:	True
Wellbore:	NBU 921-20J4BS	Survey Calculation Method:	Minimum Curvature
Design:	NBU 921-20J4BS	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)
992.00	9.25	272.77	989.64	16.01	-37.07	33.48	2.16	2.16	0.56
1,082.00	11.25	270.27	1,078.20	16.40	-53.08	49.14	2.28	2.22	-2.78
1,172.00	12.94	264.77	1,166.20	15.52	-71.90	67.79	2.27	1.88	-6.11
1,262.00	14.25	262.02	1,253.68	13.07	-92.90	88.89	1.62	1.46	-3.06
1,352.00	15.13	259.14	1,340.74	9.32	-115.41	111.70	1.27	0.98	-3.20
1,442.00	15.75	257.02	1,427.49	4.36	-138.85	135.65	0.93	0.69	-2.36
1,532.00	17.38	256.77	1,513.75	-1.46	-163.83	161.29	1.81	1.81	-0.28
1,622.00	20.00	255.64	1,599.00	-8.36	-191.83	190.08	2.94	2.91	-1.26
1,712.00	21.50	254.89	1,683.16	-16.47	-222.67	221.88	1.69	1.67	-0.83
1,802.00	22.56	253.89	1,766.58	-25.56	-255.18	255.51	1.25	1.18	-1.11
1,892.00	22.44	255.64	1,849.73	-34.61	-288.41	289.84	0.76	-0.13	1.94
1,982.00	22.56	258.64	1,932.89	-42.27	-321.97	324.24	1.28	0.13	3.33
2,072.00	22.88	257.89	2,015.90	-49.35	-356.01	359.00	0.48	0.36	-0.83
2,162.00	22.31	256.57	2,099.00	-56.98	-389.73	393.55	0.85	-0.63	-1.47
2,252.00	21.75	254.77	2,182.43	-65.33	-422.44	427.23	0.97	-0.62	-2.00
2,342.00	21.00	255.64	2,266.23	-73.71	-454.15	459.95	0.90	-0.83	0.97
2,432.00	20.13	256.52	2,350.50	-81.32	-484.83	491.51	1.03	-0.97	0.98
2,522.01	19.13	258.52	2,435.27	-87.87	-514.35	521.73	1.34	-1.11	2.22
2,612.01	19.75	260.52	2,520.14	-93.31	-543.80	551.67	1.01	0.69	2.22
2,702.01	19.13	261.52	2,605.01	-97.99	-573.38	581.61	0.78	-0.69	1.11
2,792.01	18.38	260.52	2,690.23	-102.50	-601.96	610.54	0.91	-0.83	-1.11
2,852.01	17.91	261.09	2,747.25	-105.48	-620.41	629.22	0.84	-0.78	0.95
tie on point									
2,944.01	16.43	258.87	2,835.14	-110.19	-647.15	656.37	1.76	-1.61	-2.41
3,038.01	15.30	256.22	2,925.56	-115.71	-672.24	682.05	1.43	-1.20	-2.82
3,133.01	14.82	257.58	3,017.30	-121.31	-696.28	706.71	0.63	-0.51	1.43
3,227.01	13.44	256.87	3,108.45	-126.37	-718.66	729.64	1.48	-1.47	-0.76
3,322.01	13.44	261.00	3,200.85	-130.61	-740.32	751.70	1.01	0.00	4.35
3,417.01	14.50	264.75	3,293.05	-133.42	-763.07	774.58	1.47	1.12	3.95
3,511.01	12.06	262.37	3,384.53	-135.81	-784.52	796.11	2.66	-2.60	-2.53
3,606.01	11.56	262.00	3,477.51	-138.45	-803.78	815.53	0.53	-0.53	-0.39
3,700.01	10.94	262.62	3,569.71	-140.90	-821.96	833.84	0.67	-0.66	0.66
3,794.01	9.88	258.50	3,662.16	-143.66	-838.71	850.81	1.38	-1.13	-4.38
3,889.01	8.56	263.25	3,755.93	-146.11	-853.71	866.01	1.60	-1.39	5.00
3,983.01	8.38	263.50	3,848.91	-147.71	-867.47	879.83	0.20	-0.19	0.27
4,078.01	8.25	272.00	3,942.91	-148.26	-881.16	893.38	1.30	-0.14	8.95
4,172.01	6.31	269.12	4,036.15	-148.10	-893.06	905.05	2.10	-2.06	-3.06
4,267.01	5.56	271.37	4,130.64	-148.07	-902.89	914.70	0.83	-0.79	2.37
4,361.01	7.25	275.37	4,224.05	-147.41	-913.34	924.86	1.86	1.80	4.26
4,456.01	5.25	275.50	4,318.48	-146.43	-923.64	934.79	2.11	-2.11	0.14
4,550.01	5.00	270.25	4,412.11	-146.00	-932.02	942.95	0.57	-0.27	-5.59
4,645.01	4.38	256.87	4,506.79	-146.81	-939.69	950.64	1.32	-0.65	-14.08
4,739.01	4.69	257.25	4,600.50	-148.47	-946.93	958.06	0.33	0.33	0.40

Anadarko Petroleum Corp

Survey Report

Company: US ROCKIES REGION PLANNING
Project: UTAH - UTM (feet), NAD27, Zone 12N
Site: UINTAH_NBU 921-20I PAD
Well: NBU 921-20J4BS
Wellbore: NBU 921-20J4BS
Design: NBU 921-20J4BS

Local Co-ordinate Reference: Well NBU 921-20J4BS
TVD Reference: 26' RKB + 4828' GL @ 4854.01ft (H&P 298)
MD Reference: 26' RKB + 4828' GL @ 4854.01ft (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)
4,834.01	4.63	271.50	4,695.19	-149.23	-954.55	965.69	1.22	-0.06	15.00
4,928.01	1.88	265.62	4,789.03	-149.25	-959.89	970.94	2.94	-2.93	-6.26
5,023.01	1.19	290.75	4,883.99	-149.01	-962.36	973.33	1.00	-0.73	26.45
5,118.01	1.00	260.37	4,978.98	-148.80	-964.10	975.00	0.63	-0.20	-31.98
5,212.01	0.88	243.37	5,072.97	-149.26	-965.56	976.51	0.32	-0.13	-18.09
5,307.01	0.88	218.87	5,167.95	-150.16	-966.67	977.77	0.39	0.00	-25.79
5,401.01	1.06	206.62	5,261.94	-151.50	-967.51	978.84	0.29	0.19	-13.03
5,495.01	0.81	290.12	5,355.93	-152.05	-968.52	979.94	1.34	-0.27	88.83
5,590.01	1.31	24.75	5,450.92	-150.83	-968.70	979.89	1.68	0.53	99.61
5,684.01	1.06	29.25	5,544.90	-149.10	-967.82	978.71	0.28	-0.27	4.79
5,779.01	0.88	40.37	5,639.89	-147.77	-966.92	977.58	0.27	-0.19	11.71
5,873.01	0.75	63.97	5,733.88	-146.95	-965.90	976.42	0.38	-0.14	25.11
5,968.01	0.81	62.50	5,828.87	-146.37	-964.75	975.18	0.07	0.06	-1.55
6,062.01	1.00	100.37	5,922.86	-146.21	-963.35	973.78	0.65	0.20	40.29
6,156.01	1.00	118.75	6,016.85	-146.75	-961.82	972.38	0.34	0.00	19.55
6,251.01	0.56	321.00	6,111.84	-146.79	-961.39	971.96	1.61	-0.46	-166.05
6,345.01	0.13	343.75	6,205.84	-146.33	-961.71	972.19	0.47	-0.46	24.20
6,440.01	0.06	51.74	6,300.84	-146.20	-961.70	972.16	0.13	-0.07	71.57
6,534.01	0.25	157.62	6,394.84	-146.36	-961.58	972.07	0.29	0.20	112.64
6,628.01	0.50	149.75	6,488.84	-146.90	-961.30	971.89	0.27	0.27	-8.37
6,723.01	0.75	151.75	6,583.83	-147.81	-960.79	971.56	0.26	0.26	2.11
6,817.01	0.94	163.87	6,677.82	-149.09	-960.29	971.30	0.28	0.20	12.89
6,912.01	1.31	165.62	6,772.81	-150.89	-959.80	971.16	0.39	0.39	1.84
7,007.01	1.63	159.25	6,867.77	-153.21	-959.05	970.85	0.38	0.34	-6.71
7,101.01	1.94	158.75	6,961.73	-155.94	-958.00	970.32	0.33	0.33	-0.53
7,196.01	0.69	276.37	7,056.71	-157.37	-957.99	970.58	2.46	-1.32	123.81
7,290.01	0.56	255.00	7,150.71	-157.43	-959.00	971.57	0.28	-0.14	-22.73
7,385.01	0.44	244.75	7,245.70	-157.71	-959.77	972.39	0.16	-0.13	-10.79
7,479.02	0.25	170.62	7,339.70	-158.06	-960.07	972.74	0.47	-0.20	-78.86
7,574.02	0.31	166.37	7,434.70	-158.52	-959.97	972.74	0.07	0.06	-4.47
7,668.02	0.31	167.12	7,528.70	-159.01	-959.86	972.71	0.00	0.00	0.80
7,763.02	0.31	159.62	7,623.70	-159.50	-959.71	972.66	0.04	0.00	-7.89
7,858.02	0.50	164.37	7,718.70	-160.14	-959.51	972.58	0.20	0.20	5.00
7,952.02	0.69	169.25	7,812.69	-161.09	-959.29	972.54	0.21	0.20	5.19
8,047.02	1.00	157.37	7,907.68	-162.42	-958.87	972.37	0.37	0.33	-12.51
8,142.02	0.69	40.75	8,002.68	-162.75	-958.17	971.75	1.52	-0.33	-122.76
8,236.02	0.69	65.75	8,096.67	-162.09	-957.29	970.76	0.32	0.00	26.60
8,331.02	1.00	87.87	8,191.66	-161.83	-955.94	969.38	0.47	0.33	23.28
8,425.02	1.19	98.87	8,285.64	-161.95	-954.15	967.65	0.30	0.20	11.70
8,520.02	0.44	157.75	8,380.63	-162.44	-953.04	966.65	1.09	-0.79	61.98
8,614.02	0.56	316.00	8,474.63	-162.44	-953.22	966.83	1.05	0.13	168.35
8,709.02	0.19	321.87	8,569.63	-161.98	-953.64	967.15	0.39	-0.39	6.18
8,803.02	0.19	342.62	8,663.63	-161.71	-953.79	967.25	0.07	0.00	22.07

Anadarko Petroleum Corp

Survey Report

Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well NBU 921-20J4BS
Project:	UTAH - UTM (feet), NAD27, Zone 12N	TVD Reference:	26' RKB + 4828' GL @ 4854.01ft (H&P 298)
Site:	UINTAH_NBU 921-20I PAD	MD Reference:	26' RKB + 4828' GL @ 4854.01ft (H&P 298)
Well:	NBU 921-20J4BS	North Reference:	True
Wellbore:	NBU 921-20J4BS	Survey Calculation Method:	Minimum Curvature
Design:	NBU 921-20J4BS	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)	
8,898.02	0.06	201.12	8,758.63	-161.61	-953.85	967.29	0.25	-0.14	-148.95	
9,087.02	0.56	146.00	8,947.63	-162.46	-953.37	966.98	0.28	0.26	-29.16	
9,181.02	0.56	142.00	9,041.62	-163.21	-952.83	966.58	0.04	0.00	-4.26	
9,275.02	0.44	144.50	9,135.62	-163.86	-952.34	966.22	0.13	-0.13	2.66	
9,370.02	0.50	142.62	9,230.62	-164.49	-951.88	965.88	0.07	0.06	-1.98	
9,464.02	0.56	166.50	9,324.61	-165.26	-951.52	965.67	0.24	0.06	25.40	
9,559.02	0.69	187.12	9,419.61	-166.28	-951.48	965.82	0.27	0.14	21.71	
9,653.02	1.00	194.75	9,513.60	-167.64	-951.76	966.35	0.35	0.33	8.12	
9,748.02	0.94	194.25	9,608.58	-169.19	-952.16	967.03	0.06	-0.06	-0.53	
9,842.02	1.00	168.25	9,702.57	-170.74	-952.19	967.34	0.47	0.06	-27.66	
9,937.02	1.19	159.37	9,797.55	-172.48	-951.67	967.15	0.27	0.20	-9.35	
10,032.02	1.06	141.87	9,892.54	-174.09	-950.78	966.58	0.38	-0.14	-18.42	
10,126.02	1.06	151.37	9,986.52	-175.54	-949.83	965.91	0.19	0.00	10.11	
10,221.02	1.13	142.37	10,081.50	-177.05	-948.83	965.21	0.20	0.07	-9.47	
10,315.02	1.00	147.37	10,175.49	-178.48	-947.83	964.48	0.17	-0.14	5.32	
10,329.02	1.00	144.62	10,189.48	-178.68	-947.69	964.39	0.34	0.00	-19.64	
last mwd survey										
10,379.02	1.00	144.62	10,239.48	-179.39	-947.18	964.02	0.00	0.00	0.00	
projection										

Design Annotations				
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
2,852.01	2,747.25	-105.48	-620.41	tie on point
10,329.02	10,189.48	-178.68	-947.69	last mwd survey
10,379.02	10,239.48	-179.39	-947.18	projection

Checked By: _____	Approved By: _____	Date: _____
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UTAH - UTM (feet), NAD27, Zone 12N
UINTAH_NBU 921-20I PAD
NBU 921-20J4BS

US ROCKIES REGION PLANNING

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

UINTAH_NBU 921-20I PAD

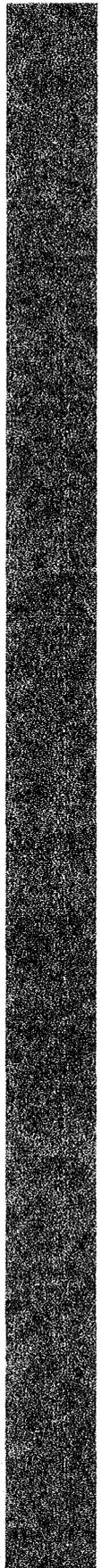
NBU 921-20J4BS

NBU 921-20J4BS

Design: NBU 921-20J4BS

Survey Report - Geographic

04 October, 2011



Anadarko Petroleum Corp

Survey Report - Geographic

Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well NBU 921-20J4BS
Project:	UTAH - UTM (feet), NAD27, Zone 12N	TVD Reference:	26' RKB + 4828' GL @ 4854.01ft (H&P 298)
Site:	UINTAH_NBU 921-20I PAD	MD Reference:	26' RKB + 4828' GL @ 4854.01ft (H&P 298)
Well:	NBU 921-20J4BS	North Reference:	True
Wellbore:	NBU 921-20J4BS	Survey Calculation Method:	Minimum Curvature
Design:	NBU 921-20J4BS	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 921-20I PAD				
Site Position:		Northing:	14,536,367.50 usft	Latitude:	40.019508
From:	Lat/Long	Easting:	2,041,187.57 usft	Longitude:	-109.568592
Position Uncertainty:	0.00 ft	Slot Radius:	0 "	Grid Convergence:	0.92 °

Well	NBU 921-20J4BS					
Well Position	+N/-S	0.00 ft	Northing:	14,536,379.26 usft	Latitude:	40.019541
	+E/-W	0.00 ft	Easting:	2,041,171.42 usft	Longitude:	-109.568649
Position Uncertainty		0.00 ft	Wellhead Elevation:	ft	Ground Level:	4,828.01 ft

Wellbore	NBU 921-20J4BS				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF200510	4/23/2009	11.37	65.93	52,572

Design	NBU 921-20J4BS				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	22.00
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)	
	22.00	0.00	0.00	259.36	

Survey Program	Date	10/4/2011			
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
198.00	2,852.01	Survey #1 (NBU 921-20J4BS)	MWD	MWD - Standard	
2,944.01	10,379.02	Survey #2 (NBU 921-20J4BS)	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	
22.00	0.00	0.00	22.00	0.00	0.00	14,536,379.26	2,041,171.42	40.019541	-109.568649	
198.00	2.10	50.09	197.96	2.07	2.47	14,536,381.37	2,041,173.86	40.019547	-109.568640	
278.00	1.50	38.27	277.92	3.83	4.25	14,536,383.16	2,041,175.60	40.019552	-109.568634	
372.00	1.47	16.21	371.89	5.96	5.35	14,536,385.30	2,041,176.66	40.019557	-109.568630	
462.00	1.38	330.77	461.87	8.01	5.14	14,536,387.35	2,041,176.42	40.019563	-109.568631	
542.00	2.19	311.02	541.83	9.85	3.51	14,536,389.17	2,041,174.77	40.019568	-109.568637	
632.00	3.25	286.89	631.73	11.72	-0.22	14,536,390.98	2,041,171.00	40.019573	-109.568650	
722.00	4.38	282.02	721.53	13.18	-6.03	14,536,392.35	2,041,165.18	40.019577	-109.568671	
812.00	5.81	278.27	811.17	14.55	-13.90	14,536,393.59	2,041,157.29	40.019581	-109.568699	
902.00	7.31	272.27	900.58	15.43	-24.13	14,536,394.31	2,041,147.04	40.019583	-109.568735	
992.00	9.25	272.77	989.64	16.01	-37.07	14,536,394.68	2,041,134.09	40.019585	-109.568782	

Anadarko Petroleum Corp

Survey Report - Geographic

Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well NBU 921-20J4BS
Project:	UTAH - UTM (feet), NAD27, Zone 12N	TVD Reference:	26' RKB + 4828' GL @ 4854.01ft (H&P 298)
Site:	UINTAH_NBU 921-20I PAD	MD Reference:	26' RKB + 4828' GL @ 4854.01ft (H&P 298)
Well:	NBU 921-20J4BS	North Reference:	True
Wellbore:	NBU 921-20J4BS	Survey Calculation Method:	Minimum Curvature
Design:	NBU 921-20J4BS	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	
1,082.00	11.25	270.27	1,078.20	16.40	-53.08	14,536,394.81	2,041,118.08	40.019586	-109.568839	
1,172.00	12.94	264.77	1,166.20	15.52	-71.90	14,536,393.63	2,041,099.28	40.019584	-109.568906	
1,262.00	14.25	262.02	1,253.68	13.07	-92.90	14,536,390.84	2,041,078.32	40.019577	-109.568981	
1,352.00	15.13	259.14	1,340.74	9.32	-115.41	14,536,386.72	2,041,055.87	40.019567	-109.569061	
1,442.00	15.75	257.02	1,427.49	4.36	-138.85	14,536,381.39	2,041,032.52	40.019553	-109.569145	
1,532.00	17.38	256.77	1,513.75	-1.46	-163.83	14,536,375.17	2,041,007.63	40.019537	-109.569234	
1,622.00	20.00	255.64	1,599.00	-8.36	-191.83	14,536,367.83	2,040,979.74	40.019518	-109.569334	
1,712.00	21.50	254.89	1,683.16	-16.47	-222.67	14,536,359.22	2,040,949.04	40.019496	-109.569444	
1,802.00	22.56	253.89	1,766.58	-25.56	-255.18	14,536,349.61	2,040,916.68	40.019471	-109.569561	
1,892.00	22.44	255.64	1,849.73	-34.61	-288.41	14,536,340.02	2,040,883.60	40.019446	-109.569679	
1,982.00	22.56	258.64	1,932.89	-42.27	-321.97	14,536,331.82	2,040,850.16	40.019425	-109.569799	
2,072.00	22.88	257.89	2,015.90	-49.35	-356.01	14,536,324.21	2,040,816.25	40.019406	-109.569921	
2,162.00	22.31	256.57	2,099.00	-56.98	-389.73	14,536,316.03	2,040,782.65	40.019385	-109.570041	
2,252.00	21.75	254.77	2,182.43	-65.33	-422.44	14,536,307.15	2,040,750.08	40.019362	-109.570158	
2,342.00	21.00	255.64	2,266.23	-73.71	-454.15	14,536,298.26	2,040,718.51	40.019339	-109.570271	
2,432.00	20.13	256.52	2,350.50	-81.32	-484.83	14,536,290.16	2,040,687.95	40.019318	-109.570381	
2,522.01	19.13	258.52	2,435.27	-87.87	-514.35	14,536,283.14	2,040,658.55	40.019300	-109.570486	
2,612.01	19.75	260.52	2,520.14	-93.31	-543.80	14,536,277.23	2,040,629.19	40.019285	-109.570591	
2,702.01	19.13	261.52	2,605.01	-97.99	-573.38	14,536,272.08	2,040,599.68	40.019272	-109.570697	
2,792.01	18.38	260.52	2,690.23	-102.50	-601.96	14,536,267.11	2,040,571.18	40.019260	-109.570799	
2,852.01	17.91	261.09	2,747.25	-105.48	-620.41	14,536,263.82	2,040,552.78	40.019251	-109.570865	
tie on point										
2,944.01	16.43	258.87	2,835.14	-110.19	-647.15	14,536,258.69	2,040,526.12	40.019239	-109.570960	
3,038.01	15.30	256.22	2,925.56	-115.71	-672.24	14,536,252.77	2,040,501.12	40.019223	-109.571050	
3,133.01	14.82	257.58	3,017.30	-121.31	-696.28	14,536,246.79	2,040,477.18	40.019208	-109.571136	
3,227.01	13.44	256.87	3,108.45	-126.37	-718.66	14,536,241.36	2,040,454.88	40.019194	-109.571216	
3,322.01	13.44	261.00	3,200.85	-130.61	-740.32	14,536,236.78	2,040,433.29	40.019182	-109.571293	
3,417.01	14.50	264.75	3,293.05	-133.42	-763.07	14,536,233.60	2,040,410.59	40.019175	-109.571374	
3,511.01	12.06	262.37	3,384.53	-135.81	-784.52	14,536,230.87	2,040,389.18	40.019168	-109.571451	
3,606.01	11.56	262.00	3,477.51	-138.45	-803.78	14,536,227.92	2,040,369.96	40.019161	-109.571520	
3,700.01	10.94	262.62	3,569.71	-140.90	-821.96	14,536,225.17	2,040,351.83	40.019154	-109.571585	
3,794.01	9.88	258.50	3,662.16	-143.66	-838.71	14,536,222.15	2,040,335.13	40.019147	-109.571644	
3,889.01	8.56	263.25	3,755.93	-146.11	-853.71	14,536,219.45	2,040,320.16	40.019140	-109.571698	
3,983.01	8.38	263.50	3,848.91	-147.71	-867.47	14,536,217.63	2,040,306.44	40.019135	-109.571747	
4,078.01	8.25	272.00	3,942.91	-148.26	-881.16	14,536,216.87	2,040,292.76	40.019134	-109.571796	
4,172.01	6.31	269.12	4,036.15	-148.10	-893.06	14,536,216.83	2,040,280.85	40.019134	-109.571838	
4,267.01	5.56	271.37	4,130.64	-148.07	-902.89	14,536,216.70	2,040,271.03	40.019134	-109.571873	
4,361.01	7.25	275.37	4,224.05	-147.41	-913.34	14,536,217.20	2,040,260.56	40.019136	-109.571911	
4,456.01	5.25	275.50	4,318.48	-146.43	-923.64	14,536,218.01	2,040,250.25	40.019139	-109.571948	
4,550.01	5.00	270.25	4,412.11	-146.00	-932.02	14,536,218.31	2,040,241.87	40.019140	-109.571978	
4,645.01	4.38	256.87	4,506.79	-146.81	-939.69	14,536,217.38	2,040,234.21	40.019138	-109.572005	
4,739.01	4.69	257.25	4,600.50	-148.47	-946.93	14,536,215.60	2,040,226.99	40.019133	-109.572031	
4,834.01	4.63	271.50	4,695.19	-149.23	-954.55	14,536,214.72	2,040,219.38	40.019131	-109.572058	
4,928.01	1.88	265.62	4,789.03	-149.25	-959.89	14,536,214.62	2,040,214.05	40.019131	-109.572077	
5,023.01	1.19	290.75	4,883.99	-149.01	-962.36	14,536,214.81	2,040,211.57	40.019132	-109.572086	
5,118.01	1.00	260.37	4,978.98	-148.80	-964.10	14,536,214.99	2,040,209.83	40.019132	-109.572092	
5,212.01	0.88	243.37	5,072.97	-149.26	-965.56	14,536,214.51	2,040,208.38	40.019131	-109.572097	
5,307.01	0.88	218.87	5,167.95	-150.16	-966.67	14,536,213.59	2,040,207.29	40.019129	-109.572101	
5,401.01	1.06	206.62	5,261.94	-151.50	-967.51	14,536,212.24	2,040,206.47	40.019125	-109.572104	
5,495.01	0.81	290.12	5,355.93	-152.05	-968.52	14,536,211.68	2,040,205.46	40.019124	-109.572108	
5,590.01	1.31	24.75	5,450.92	-150.83	-968.70	14,536,212.89	2,040,205.27	40.019127	-109.572109	
5,684.01	1.06	29.25	5,544.90	-149.10	-967.82	14,536,214.64	2,040,206.12	40.019132	-109.572105	
5,779.01	0.88	40.37	5,639.89	-147.77	-966.92	14,536,215.97	2,040,207.00	40.019135	-109.572102	
5,873.01	0.75	63.97	5,733.88	-146.95	-965.90	14,536,216.81	2,040,208.00	40.019138	-109.572099	
5,968.01	0.81	62.50	5,828.87	-146.37	-964.75	14,536,217.41	2,040,209.15	40.019139	-109.572094	

Anadarko Petroleum Corp

Survey Report - Geographic

Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well NBU 921-20J4BS
Project:	UTAH - UTM (feet), NAD27, Zone 12N	TVD Reference:	26' RKB + 4828' GL @ 4854.01ft (H&P 298)
Site:	UINTAH_NBU 921-20I PAD	MD Reference:	26' RKB + 4828' GL @ 4854.01ft (H&P 298)
Well:	NBU 921-20J4BS	North Reference:	True
Wellbore:	NBU 921-20J4BS	Survey Calculation Method:	Minimum Curvature
Design:	NBU 921-20J4BS	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	
6,062.01	1.00	100.37	5,922.86	-146.21	-963.35	14,536,217.59	2,040,210.54	40.019140	-109.572089	
6,156.01	1.00	118.75	6,016.85	-146.75	-961.82	14,536,217.08	2,040,212.08	40.019138	-109.572084	
6,251.01	0.56	321.00	6,111.84	-146.79	-961.39	14,536,217.05	2,040,212.51	40.019138	-109.572082	
6,345.01	0.13	343.75	6,205.84	-146.33	-961.71	14,536,217.50	2,040,212.18	40.019139	-109.572084	
6,440.01	0.06	51.74	6,300.84	-146.20	-961.70	14,536,217.63	2,040,212.19	40.019140	-109.572084	
6,534.01	0.25	157.62	6,394.84	-146.36	-961.58	14,536,217.48	2,040,212.31	40.019139	-109.572083	
6,628.01	0.50	149.75	6,488.84	-146.90	-961.30	14,536,216.94	2,040,212.60	40.019138	-109.572082	
6,723.01	0.75	151.75	6,583.83	-147.81	-960.79	14,536,216.04	2,040,213.12	40.019135	-109.572080	
6,817.01	0.94	163.87	6,677.82	-149.09	-960.29	14,536,214.77	2,040,213.65	40.019132	-109.572078	
6,912.01	1.31	165.62	6,772.81	-150.89	-959.80	14,536,212.97	2,040,214.16	40.019127	-109.572077	
7,007.01	1.63	159.25	6,867.77	-153.21	-959.05	14,536,210.67	2,040,214.95	40.019120	-109.572074	
7,101.01	1.94	158.75	6,961.73	-155.94	-958.00	14,536,207.95	2,040,216.04	40.019113	-109.572070	
7,196.01	0.69	276.37	7,056.71	-157.37	-957.99	14,536,206.52	2,040,216.08	40.019109	-109.572070	
7,290.01	0.56	255.00	7,150.71	-157.43	-959.00	14,536,206.45	2,040,215.07	40.019109	-109.572074	
7,385.01	0.44	244.75	7,245.70	-157.71	-959.77	14,536,206.16	2,040,214.30	40.019108	-109.572077	
7,479.02	0.25	170.62	7,339.70	-158.06	-960.07	14,536,205.80	2,040,214.01	40.019107	-109.572078	
7,574.02	0.31	166.37	7,434.70	-158.52	-959.97	14,536,205.34	2,040,214.11	40.019106	-109.572077	
7,668.02	0.31	167.12	7,528.70	-159.01	-959.86	14,536,204.85	2,040,214.24	40.019104	-109.572077	
7,763.02	0.31	159.62	7,623.70	-159.50	-959.71	14,536,204.36	2,040,214.39	40.019103	-109.572076	
7,858.02	0.50	164.37	7,718.70	-160.14	-959.51	14,536,203.73	2,040,214.61	40.019101	-109.572076	
7,952.02	0.69	169.25	7,812.69	-161.09	-959.29	14,536,202.78	2,040,214.84	40.019099	-109.572075	
8,047.02	1.00	157.37	7,907.68	-162.42	-958.87	14,536,201.46	2,040,215.28	40.019095	-109.572073	
8,142.02	0.69	40.75	8,002.68	-162.75	-958.17	14,536,201.14	2,040,215.98	40.019094	-109.572071	
8,236.02	0.69	65.75	8,096.67	-162.09	-957.29	14,536,201.81	2,040,216.86	40.019096	-109.572068	
8,331.02	1.00	87.87	8,191.66	-161.83	-955.94	14,536,202.10	2,040,218.20	40.019097	-109.572063	
8,425.02	1.19	98.87	8,285.64	-161.95	-954.15	14,536,202.01	2,040,219.99	40.019096	-109.572057	
8,520.02	0.44	157.75	8,380.63	-162.44	-953.04	14,536,201.54	2,040,221.11	40.019095	-109.572053	
8,614.02	0.56	316.00	8,474.63	-162.44	-953.22	14,536,201.53	2,040,220.93	40.019095	-109.572053	
8,709.02	0.19	321.87	8,569.63	-161.98	-953.64	14,536,201.98	2,040,220.50	40.019096	-109.572055	
8,803.02	0.19	342.62	8,663.63	-161.71	-953.79	14,536,202.25	2,040,220.35	40.019097	-109.572055	
8,898.02	0.06	201.12	8,758.63	-161.61	-953.85	14,536,202.35	2,040,220.29	40.019097	-109.572055	
9,087.02	0.56	146.00	8,947.63	-162.46	-953.37	14,536,201.50	2,040,220.78	40.019095	-109.572054	
9,181.02	0.56	142.00	9,041.62	-163.21	-952.83	14,536,200.77	2,040,221.33	40.019093	-109.572052	
9,275.02	0.44	144.50	9,135.62	-163.86	-952.34	14,536,200.12	2,040,221.83	40.019091	-109.572050	
9,370.02	0.50	142.62	9,230.62	-164.49	-951.88	14,536,199.50	2,040,222.31	40.019089	-109.572048	
9,464.02	0.56	166.50	9,324.61	-165.26	-951.52	14,536,198.74	2,040,222.68	40.019087	-109.572047	
9,559.02	0.69	187.12	9,419.61	-166.28	-951.48	14,536,197.72	2,040,222.73	40.019084	-109.572047	
9,653.02	1.00	194.75	9,513.60	-167.64	-951.76	14,536,196.36	2,040,222.47	40.019081	-109.572048	
9,748.02	0.94	194.25	9,608.58	-169.19	-952.16	14,536,194.80	2,040,222.09	40.019076	-109.572049	
9,842.02	1.00	168.25	9,702.57	-170.74	-952.19	14,536,193.24	2,040,222.10	40.019072	-109.572050	
9,937.02	1.19	159.37	9,797.55	-172.48	-951.67	14,536,191.52	2,040,222.64	40.019067	-109.572048	
10,032.02	1.06	141.87	9,892.54	-174.09	-950.78	14,536,189.92	2,040,223.56	40.019063	-109.572045	
10,126.02	1.06	151.37	9,986.52	-175.54	-949.83	14,536,188.49	2,040,224.53	40.019059	-109.572041	
10,221.02	1.13	142.37	10,081.50	-177.05	-948.83	14,536,186.99	2,040,225.55	40.019055	-109.572038	
10,315.02	1.00	147.37	10,175.49	-178.48	-947.83	14,536,185.58	2,040,226.58	40.019051	-109.572034	
10,329.02	1.00	144.62	10,189.48	-178.68	-947.69	14,536,185.38	2,040,226.72	40.019050	-109.572033	
last mwd survey projection										
10,379.02	1.00	144.62	10,239.48	-179.39	-947.18	14,536,184.68	2,040,227.24	40.019048	-109.572032	

Anadarko Petroleum Corp

Survey Report - Geographic

Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well NBU 921-20J4BS
Project:	UTAH - UTM (feet), NAD27, Zone 12N	TVD Reference:	26' RKB + 4828' GL @ 4854.01ft (H&P 298)
Site:	UINTAH_NBU 921-20I PAD	MD Reference:	26' RKB + 4828' GL @ 4854.01ft (H&P 298)
Well:	NBU 921-20J4BS	North Reference:	True
Wellbore:	NBU 921-20J4BS	Survey Calculation Method:	Minimum Curvature
Design:	NBU 921-20J4BS	Database:	edmp

Design Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
2,852.01	2,747.25	-105.48	-620.41	tie on point
10,329.02	10,189.48	-178.68	-947.69	last mwd survey
10,379.02	10,239.48	-179.39	-947.18	projection

Checked By: _____ Approved By: _____ Date: _____