

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 921-1904BS	
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 0581			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	1079 FSL 1594 FEL	SWSE	19	9.0 S	21.0 E	S	
Top of Uppermost Producing Zone	540 FSL 1974 FEL	SWSE	19	9.0 S	21.0 E	S	
At Total Depth	540 FSL 1974 FEL	SWSE	19	9.0 S	21.0 E	S	
21. COUNTY UINTAH			22. DISTANCE TO NEAREST LEASE LINE (Feet) 540			23. NUMBER OF ACRES IN DRILLING UNIT 2399	
			25. DISTANCE TO NEAREST WELL IN SAME POOL (Applied For Drilling or Completed) 360			26. PROPOSED DEPTH MD: 10395 TVD: 10300	
27. ELEVATION - GROUND LEVEL 4863			28. BOND NUMBER WYB000291			29. SOURCE OF DRILLING WATER / WATER RIGHTS APPROVAL NUMBER IF APPLICABLE Permit #43-8496	

ATTACHMENTS

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

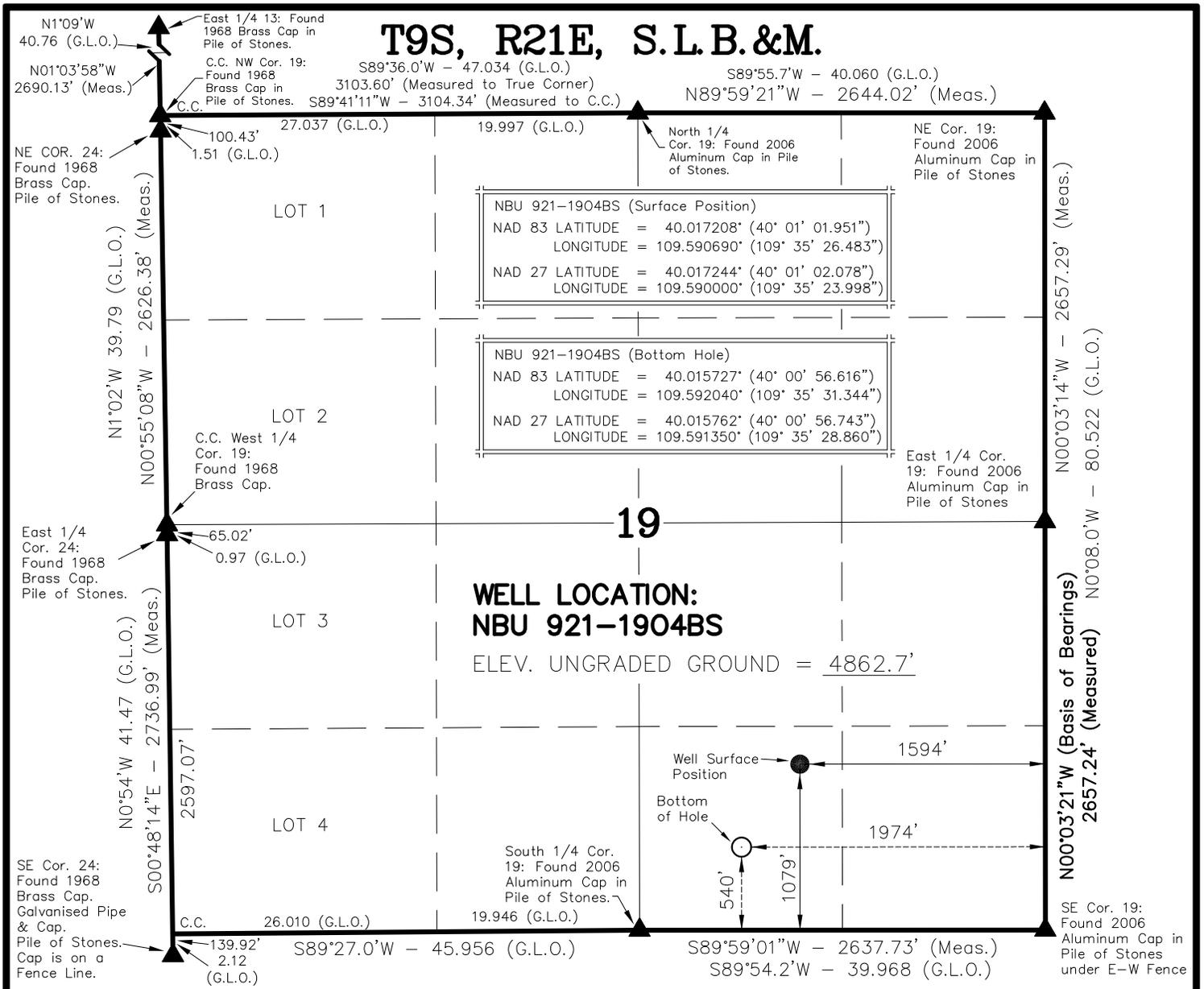
<input checked="" type="checkbox"/> WELL PLAT OR MAP PREPARED BY LICENSED SURVEYOR OR ENGINEER	<input checked="" type="checkbox"/> COMPLETE DRILLING PLAN
<input type="checkbox"/> AFFIDAVIT OF STATUS OF SURFACE OWNER AGREEMENT (IF FEE SURFACE)	<input type="checkbox"/> FORM 5. IF OPERATOR IS OTHER THAN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

NAME Danielle Piernot	TITLE Regulatory Analyst	PHONE 720 929-6156
SIGNATURE	DATE 07/22/2009	EMAIL danielle.piernot@anadarko.com
API NUMBER ASSIGNED 43047505920000	APPROVAL  Permit Manager	

Proposed Hole, Casing, and Cement						
String	Hole Size	Casing Size	Top (MD)	Bottom (MD)		
Prod	7.875	4.5	0	10395		
Pipe	Grade	Length	Weight			
	Grade HCP-110 LT&C	650	11.6			
	Grade I-80 LT&C	9745	11.6			

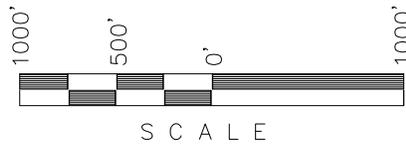
Proposed Hole, Casing, and Cement						
String	Hole Size	Casing Size	Top (MD)	Bottom (MD)		
Surf	12.25	9.625	0	2610		
Pipe	Grade	Length	Weight			
	Grade J-55 LT&C	2610	36.0			

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



NOTES:

- ▲ = Section Corners Located
- 1. Well footages are measured at right angles to the Section Lines.
- 2. G.L.O. distances are shown in feet or chains. 1 chain = 66 feet.
- 3. The Bottom of hole bears S35°06'00"W 659.35' from the Surface Position.
- 4. Bearings are based on Global Positioning Satellite observations.
- 5. Basis of elevation is Tri-Sta "Two Water" located in the NW ¼ of Section 1, T10S, R21E, S.L.B.&M. The elevation of this Tri-Sta is shown on the Big Pack mtn NE 7.5 Min. Quadrangle as being 5238'.

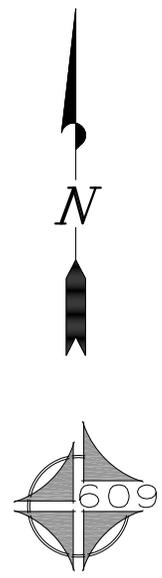


SURVEYOR'S CERTIFICATE

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

REGISTERED LAND SURVEYOR
 REGISTRATION No. 362251
 STATE OF UTAH
Kerry R. Kay
 No. 362251
 KERRY R. KAY
 UTAH

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

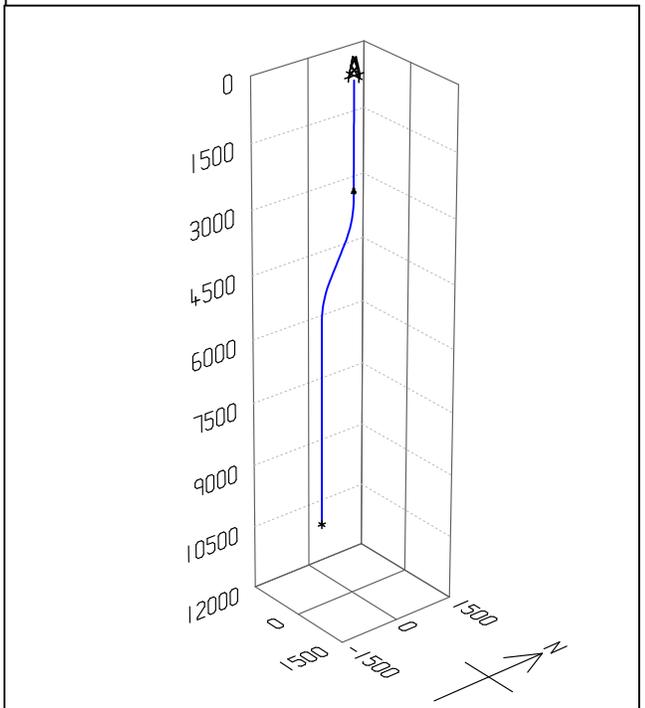
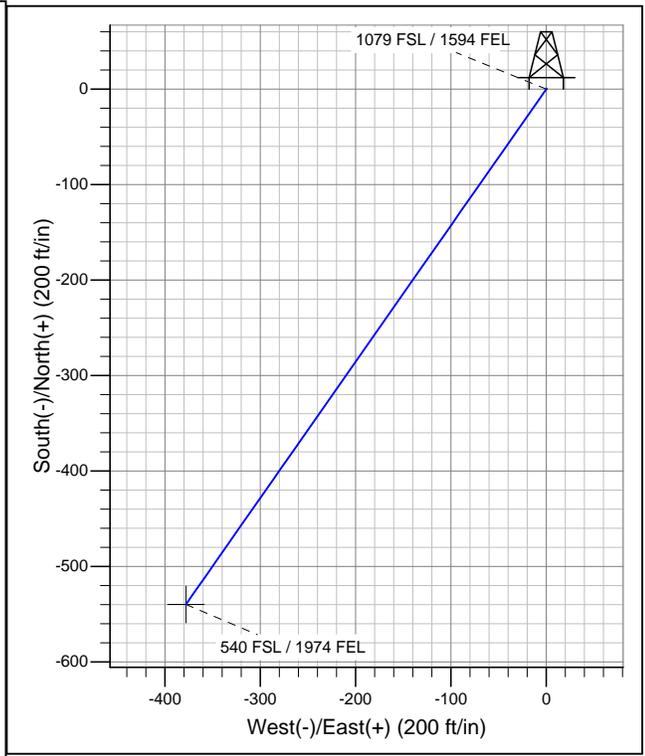
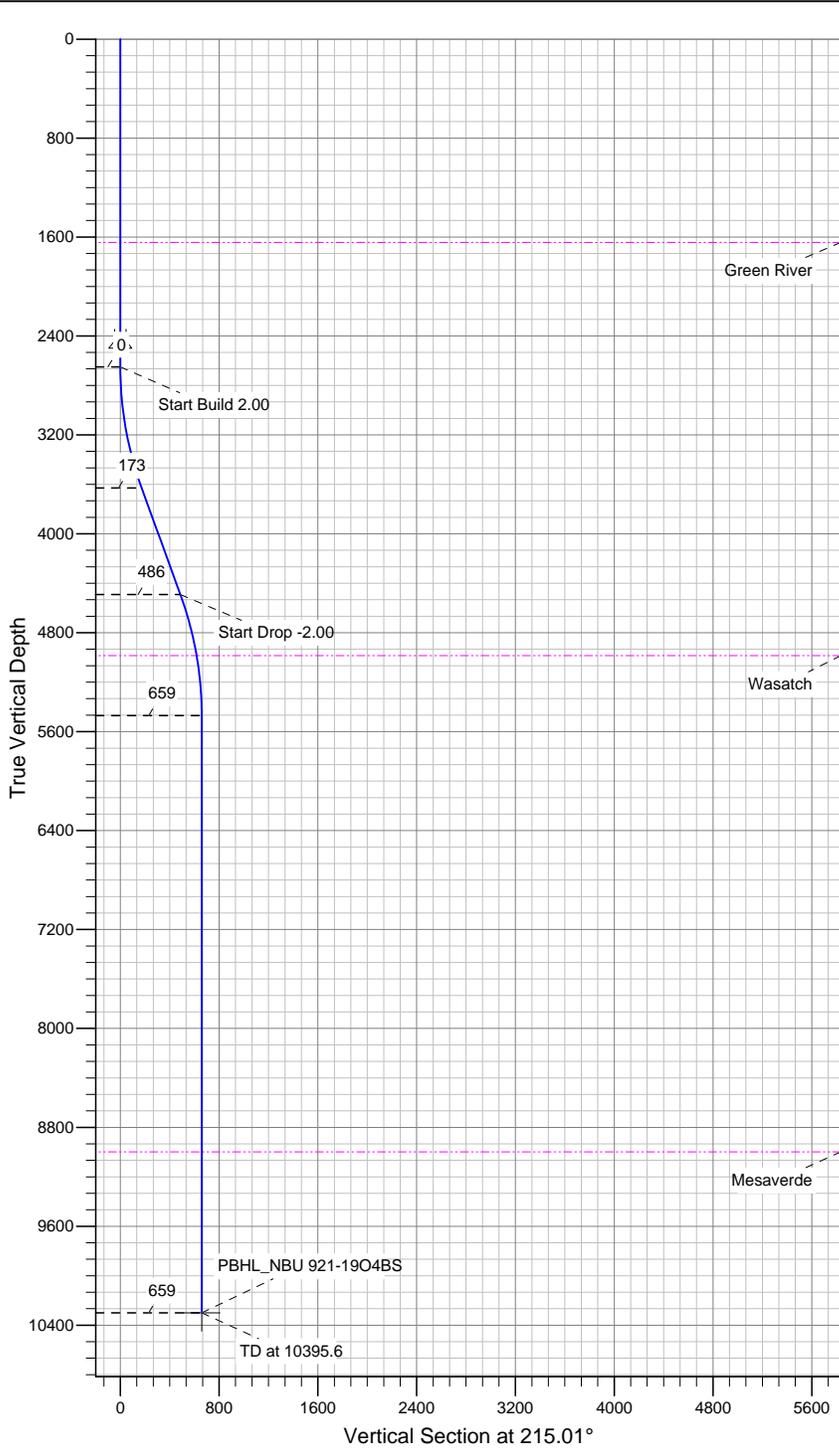
TIMBERLINE (435) 789-1365
ENGINEERING & LAND SURVEYING, INC.
 209 NORTH 300 WEST - VERNAL, UTAH 84078

DATE SURVEYED: 01-13-09	SURVEYED BY: M.S.B.	SHEET 3 OF 13
DATE DRAWN: 02-09-09	DRAWN BY: M.W.W.	
SCALE: 1" = 1000'	Date Last Revised:	

NBU 921-1904BS
WELL PLAT
 540' FSL, 1974' FEL (Bottom Hole)
 SW ¼ SE ¼ OF SECTION 19, T9S, R21E,
 S.L.B.&M. UTAH COUNTY, UTAH.



Well Name: P_NBU 921-1904BS
 Surface Location: UINTAH_NBU 921-190 PAD
 NAD 1927 (NADCON CONUS) Universal Transverse Mercator (US Survey Feet)
 UTAH - UTM (feet), NAD27, Zone 12N
 Ground Elevation: 4862.0
 Northing 14535447.46 Easting 2035206.52 Latitude 40.017244°N Longitude 109.590000°W



SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0
2	2650.0	0.00	0.00	2650.0	0.0	0.0	0.00	0.00	0.0
3	3650.0	20.00	215.01	3629.8	-141.5	-99.1	2.00	215.01	172.8
4	4566.4	20.00	215.01	4491.0	-398.2	-278.9	0.00	0.00	486.2
5	5566.4	0.00	0.00	5470.8	-539.7	-378.1	2.00	180.00	659.0
6	10395.6	0.00	0.00	10300.0	-539.7	-378.1	0.00	0.00	659.0



Azimuths to True North
 Magnetic North: 11.37°

Magnetic Field
 Strength: 52567.3snT
 Dip Angle: 65.93°
 Date: 4/22/2009
 Model: IGRF200510

ROCKIES - PLANNING

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

UINTAH_NBU 921-190 PAD

P_NBU 921-1904BS

P_NBU 921-1904BS

Plan: Plan #1 04-22-09 ZJRA6

Standard Planning Report - Geographic

22 April, 2009

APC Planning Report - Geographic

Database: apc_edmp	Local Co-ordinate Reference: Well P_NBU 921-19O4BS
Company: ROCKIES - PLANNING	TVD Reference: WELL @ 4862.0ft (Original Well Elev)
Project: UTAH - UTM (feet), NAD27, Zone 12N	MD Reference: WELL @ 4862.0ft (Original Well Elev)
Site: UINTAH_NBU 921-19O PAD	North Reference: True
Well: P_NBU 921-19O4BS	Survey Calculation Method: Minimum Curvature
Wellbore: P_NBU 921-19O4BS	
Design: Plan #1 04-22-09 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 921-19O PAD		
Site Position:	Northing: 14,535,450.28ft	Latitude: 40.017250°N
From: Lat/Long	Easting: 2,035,246.52ft	Longitude: 109.589857°W
Position Uncertainty: 0.0 ft	Slot Radius: "	Grid Convergence: 0.91 °

Well P_NBU 921-19O4BS			
Well Position	+N/-S 0.0 ft	Northing: 14,535,447.46 ft	Latitude: 40.017244°N
	+E/-W 0.0 ft	Easting: 2,035,206.52 ft	Longitude: 109.590000°W
Position Uncertainty	0.0 ft	Wellhead Elevation: ft	Ground Level: 4,862.0 ft

Wellbore P_NBU 921-19O4BS					
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF200510	4/22/2009	11.37	65.93	52,567

Design Plan #1 04-22-09 ZJRA6				
Audit Notes:				
Version:	Phase: PLAN	Tie On Depth: 0.0		
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	10,300.0	0.0	0.0	215.01

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
2,650.0	0.00	0.00	2,650.0	0.0	0.0	0.00	0.00	0.00	0.00	
3,650.0	20.00	215.01	3,629.8	-141.5	-99.1	2.00	2.00	0.00	215.01	
4,566.4	20.00	215.01	4,491.0	-398.2	-278.9	0.00	0.00	0.00	0.00	
5,566.4	0.00	0.00	5,470.8	-539.7	-378.1	2.00	-2.00	0.00	180.00	
10,395.6	0.00	0.00	10,300.0	-539.7	-378.1	0.00	0.00	0.00	0.00	PBHL_NBU 921-19

APC

Planning Report - Geographic

Database:	apc_edmp	Local Co-ordinate Reference:	Well P_NBU 921-19O4BS
Company:	ROCKIES - PLANNING	TVD Reference:	WELL @ 4862.0ft (Original Well Elev)
Project:	UTAH - UTM (feet), NAD27, Zone 12N	MD Reference:	WELL @ 4862.0ft (Original Well Elev)
Site:	UINTAH_NBU 921-19O PAD	North Reference:	True
Well:	P_NBU 921-19O4BS	Survey Calculation Method:	Minimum Curvature
Wellbore:	P_NBU 921-19O4BS		
Design:	Plan #1 04-22-09 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	14,535,447.46	2,035,206.52	40.017244°N	109.590000°W	
1,643.0	0.00	0.00	1,643.0	0.0	0.0	14,535,447.46	2,035,206.52	40.017244°N	109.590000°W	
Green River										
2,500.0	0.00	0.00	2,500.0	0.0	0.0	14,535,447.46	2,035,206.52	40.017244°N	109.590000°W	
Surface Casing										
2,650.0	0.00	0.00	2,650.0	0.0	0.0	14,535,447.46	2,035,206.52	40.017244°N	109.590000°W	
3,650.0	20.00	215.01	3,629.8	-141.5	-99.1	14,535,304.40	2,035,109.65	40.016855°N	109.590354°W	
4,566.4	20.00	215.01	4,491.0	-398.2	-278.9	14,535,044.86	2,034,933.91	40.016151°N	109.590996°W	
5,078.3	9.76	215.01	4,985.0	-505.8	-354.3	14,534,936.16	2,034,860.31	40.015855°N	109.591265°W	
Wasatch										
5,566.4	0.00	0.00	5,470.8	-539.7	-378.1	14,534,901.80	2,034,837.05	40.015762°N	109.591350°W	
9,094.6	0.00	0.00	8,999.0	-539.7	-378.1	14,534,901.80	2,034,837.05	40.015762°N	109.591350°W	
Mesaverde										
10,395.6	0.00	0.00	10,300.0	-539.7	-378.1	14,534,901.80	2,034,837.05	40.015762°N	109.591350°W	

Targets										
Target Name	- hit/miss target	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
PBHL_NBU 921-19O4	- plan hits target center	0.00	0.00	10,300.0	-539.7	-378.1	14,534,901.80	2,034,837.05	40.015762°N	109.591350°W
	- Point									

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

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
9,094.6	8,999.0	Mesaverde		0.00		
5,078.3	4,985.0	Wasatch		0.00		
1,643.0	1,643.0	Green River		0.00		

NBU 921-1904BS

Pad: NBU 921-190

Surface: 1,079' FSL, 1,594' FEL (SW/4SE/4)

BHL: 540' FSL 1,974' FEL (SW/4SE/4)

Sec. 19 T9S R21E

Uintah, Utah

Mineral Lease: UTU 0581

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	1,643'	
Birds Nest	1,905'	Water
Mahogany	2,408'	Water
Wasatch	4,985'	Gas
Mesaverde	8,060'	Gas
MVU2	8,999'	Gas
MVL1	9,539'	Gas
TVD	10,300'	
TD	10,395'	

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 10,395' TD, approximately equals 6,368 psi (calculated at 0.61 psi/foot).

Maximum anticipated surface pressure equals approximately 4,044 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

Kerr-McGee Oil & Gas Onshore LP (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 2,610	36.00	J-55	LTC	0.84	1.65	6.14
PRODUCTION	4-1/2"	0 to 9,745	11.60	I-80	LTC	1.87	1.10	2.04
	4-1/2"	9,745 to 10,395	11.60	HCP-110	LTC	74.76	1.35	45.31

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

2) MASP (Prod Casing) = Pore Pressure at TD - (0.22 psi/ft-partial evac gradient x TD)
 (Burst Assumptions: TD = 12.0 ppg) 0.22 psi/ft = gradient for partially evac wellbore
 (Collapse Assumption: Fully Evacuated Casing, Max MW) (Tension Assumptions: Air Weight of Casing*Buoyn.Fact. of water)
MASP 4,044 psi

3) Maximum Anticipated Bottom Hole Pressure (MABHP) = Pore Pressure at TD
 (Burst Assumptions: TD = 12.0 ppg) 0.61 psi/ft = bottomhole gradient
 (Collapse Assumption: Fully Evacuated Casing, Max MW) (Tension Assumptions: Air Weight of Casing*Buoyn.Fact. of water)
MABHP 6,368 psi

CEMENT PROGRAM

	FT. OF FILL	DESCRIPTION	SACKS	EXCESS	WEIGHT	YIELD
SURFACE Option 1	LEAD 500'	Premium cmt + 2% CaCl + 0.25 pps flocele	215	60%	15.60	1.18
	TOP OUT CMT (6 jobs) 1,200'	20 gals sodium silicate + Premium cmt + 2% CaCl + 0.25 pps flocele Premium cmt + 2% CaCl	380	0%	15.60	1.18
NOTE: If well will circulate water to surface, option 2 will be utilized						
SURFACE Option 2	LEAD 2,110'	65/35 Poz + 6% Gel + 10 pps gilsonite + 0.25 pps Flocele + 3% salt BWOW	500	35%	12.60	1.81
	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 4,485'	Premium Lite II + 3% KCl + 0.25 pps celloflake + 5 pps gilsonite + 10% gel + 0.5% extender	430	40%	11.00	3.38
	TAIL 5,910'	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.

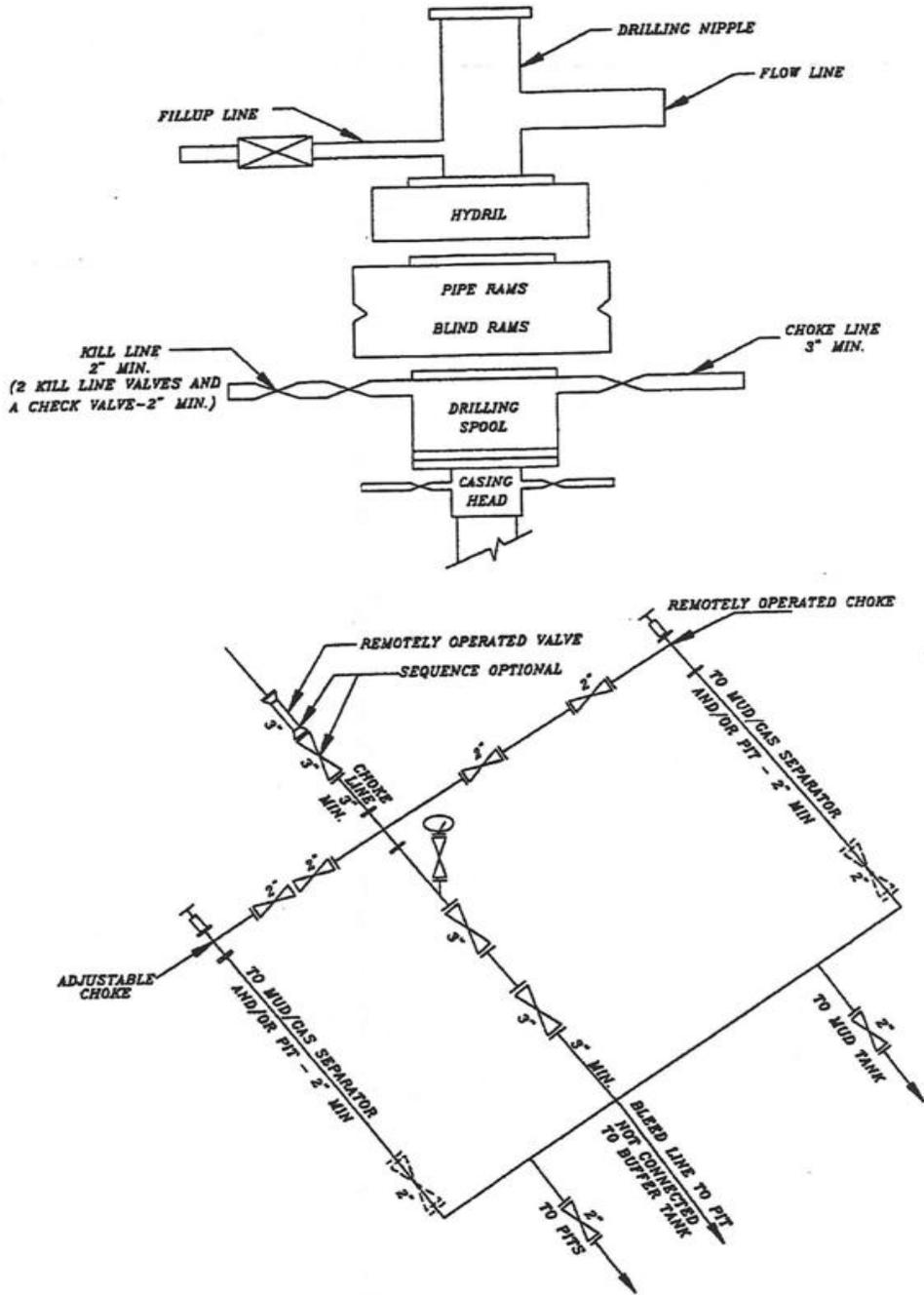
Surveys will be taken at 1,000' minimum intervals.

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

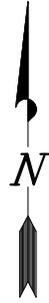
EXHIBIT A NBU 921-1904BS



SCHEMATIC DIAGRAM OF 5,000 PSI BOP STACK

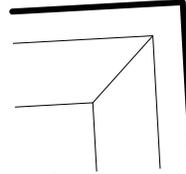
WELL PAD INTERFERENCE PLAT

DIRECTIONAL PAD – NBU CIGE 6-19-9-21



LATITUDE & LONGITUDE		
Bottom Hole – (NAD 83)		
WELL	N. LATITUDE	W. LONGITUDE
921-19P4BS	40°00'57.438" 40.015955°	109°35'14.386" 109.587329°
921-19P4CS	40°00'53.812" 40.014948°	109°35'14.375" 109.587326°
921-19O4BS	40°00'56.616" 40.015727°	109°35'31.344" 109.592040°
921-19O1CS	40°01'00.143" 40.016706°	109°35'31.356" 109.592043°

LATITUDE & LONGITUDE		
Bottom Hole – (NAD 27)		
WELL	N. LATITUDE	W. LONGITUDE
921-19P4BS	40°00'57.565" 40.015990°	109°35'11.902" 109.586639°
921-19P4CS	40°00'53.939" 40.014983°	109°35'11.891" 109.586636°
921-19O4BS	40°00'56.743" 40.015762°	109°35'28.860" 109.591350°
921-19O1CS	40°01'00.270" 40.016742°	109°35'28.871" 109.591353°



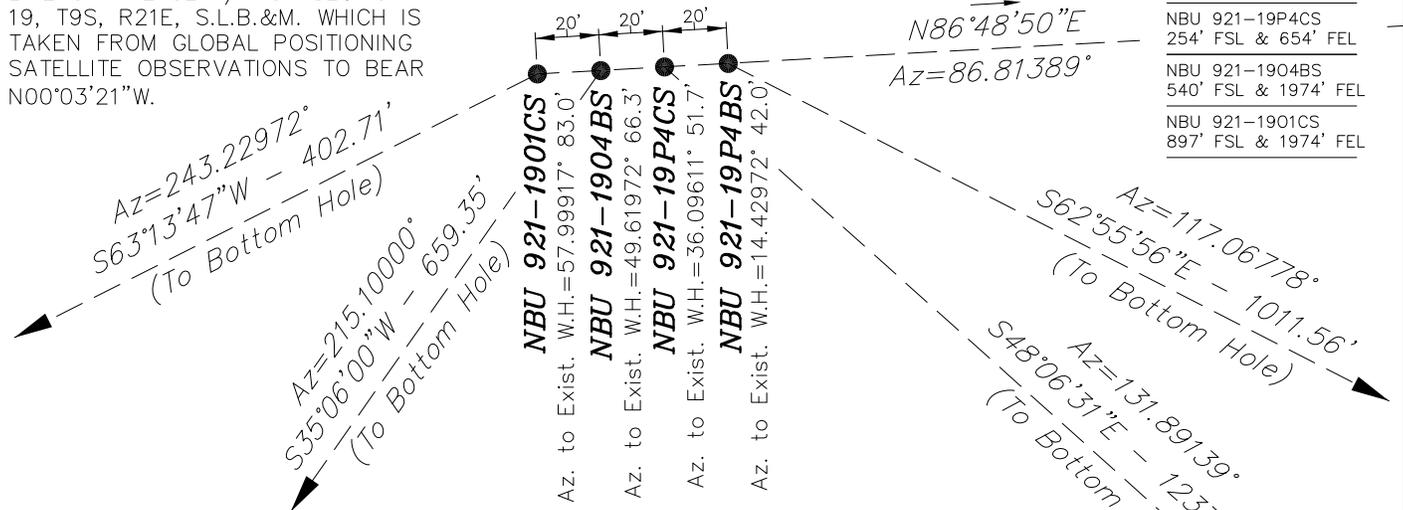
RELATIVE COORDINATES		
From Surface Position to Bottom Hole		
WELL	NORTH	EAST
921-19P4BS	-460'	901'
921-19P4CS	-826'	921'
921-19O4BS	-539'	-379'
921-19O1CS	-181'	-360'

EXISTING WELL: NBU CIGE 6-19-9-21

BASIS OF BEARINGS IS THE EAST LINE OF THE SE 1/4 OF SECTION 19, T9S, R21E, S.L.B.&M. WHICH IS TAKEN FROM GLOBAL POSITIONING SATELLITE OBSERVATIONS TO BEAR N00°03'21"W.

BOTTOM HOLE FOOTAGES

- 921-19P4BS
621' FSL & 654' FEL
- NBU 921-19P4CS
254' FSL & 654' FEL
- NBU 921-19O4BS
540' FSL & 1974' FEL
- NBU 921-19O1CS
897' FSL & 1974' FEL

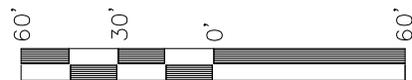


LATITUDE & LONGITUDE		
Surface Position – (NAD 83)		
WELL	N. LATITUDE	W. LONGITUDE
921-19P4BS	40°01'01.973" 40.017215°	109°35'25.968" 109.590547°
921-19P4CS	40°01'01.962" 40.017212°	109°35'26.225" 109.590618°
921-19O4BS	40°01'01.951" 40.017208°	109°35'26.483" 109.590690°
921-19O1CS	40°01'01.940" 40.017205°	109°35'26.739" 109.590761°
Existing Well NBU CIGE 6-19-9-21	40°01'02.376" 40.017327°	109°35'25.835" 109.590510°

LATITUDE & LONGITUDE		
Surface Position – (NAD 27)		
WELL	N. LATITUDE	W. LONGITUDE
921-19P4BS	40°01'02.100" 40.017250°	109°35'23.484" 109.589857°
921-19P4CS	40°01'02.089" 40.017247°	109°35'23.741" 109.589928°
921-19O4BS	40°01'02.078" 40.017244°	109°35'23.998" 109.590000°
921-19O1CS	40°01'02.067" 40.017241°	109°35'24.254" 109.590071°
Existing Well NBU CIGE 6-19-9-21	40°01'02.503" 40.017362°	109°35'23.350" 109.589820°

SURFACE POSITION FOOTAGES:

- 921-19P4BS
1082' FSL & 1554' FEL
- NBU 921-19P4CS
1080' FSL & 1574' FEL
- NBU 921-19O4BS
1079' FSL & 1594' FEL
- NBU 921-19O1CS
1078' FSL & 1614' FEL
- EXISTING WELL NBU CIGE 6-19-9-21
1122' FSL & 1544' FEL

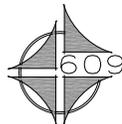


SCALE

Kerr-McGee
Oil & Gas Onshore, LP

1099 18th Street – Denver, Colorado 80202

NBU 921-19P4BS, NBU 921-19P4CS,
NBU 921-19O4BS & NBU 921-19O1CS
LOCATED IN SECTION 19, T9S, R21E,
S.L.B.&M. UTAH COUNTY, UTAH.

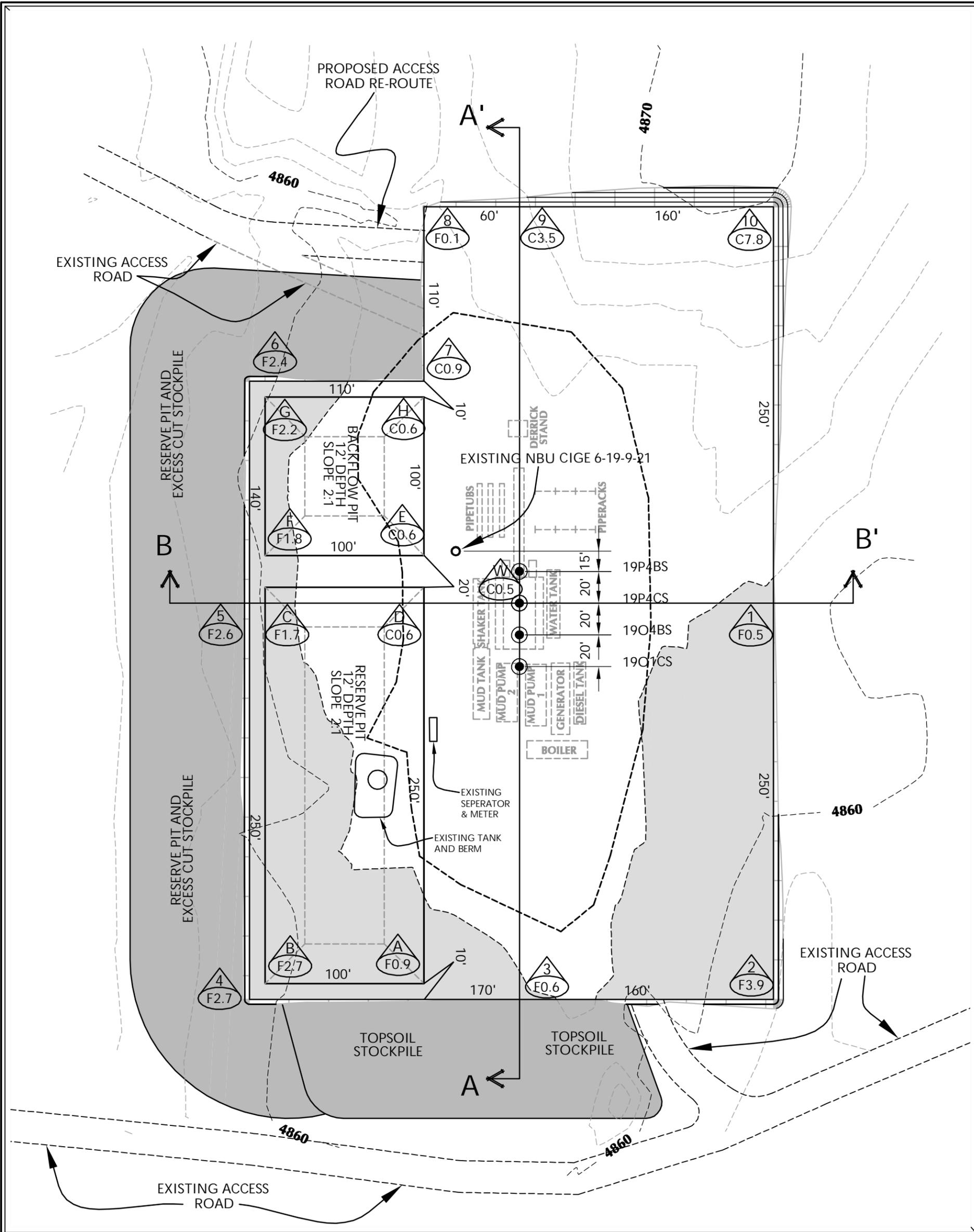


CONSULTING, LLC
371 Coffeen Avenue
Sheridan WY 82801
Phone 307-674-0609
Fax 307-674-0182

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

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

SHEET
5
OF 13



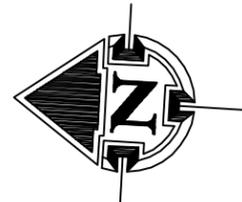
WELL PAD NBU CIGE 6-19-9-21 QUANTITIES

EXISTING GRADE @ CENTER OF WELL PAD = 4862.5'
 FINISHED GRADE ELEVATION = 4862.0'
 CUT SLOPES = 1.5:1
 FILL SLOPES = 1.5:1

TOTAL CUT FOR WELL PAD = 5,506 C.Y.
 TOTAL FILL FOR WELL PAD = 3,788 C.Y.
 TOPSOIL @ 6" DEPTH = 1,948 C.Y.
 EXCESS MATERIAL = 1,718 C.Y.
 TOTAL DISTURBANCE = 3.67 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

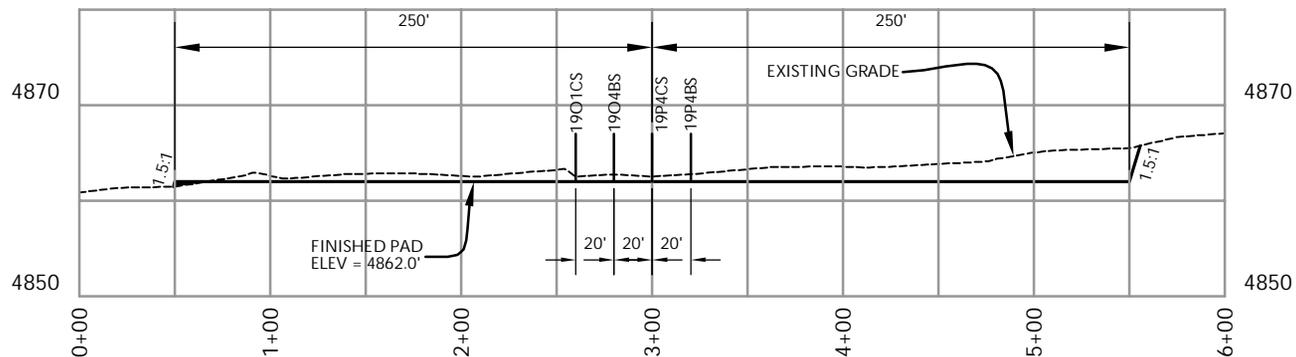


609 CONSULTING, LLC
 371 Coffeen Avenue
 Sheridan WY 82801
 Phone 307-674-0609
 Fax 307-674-0182

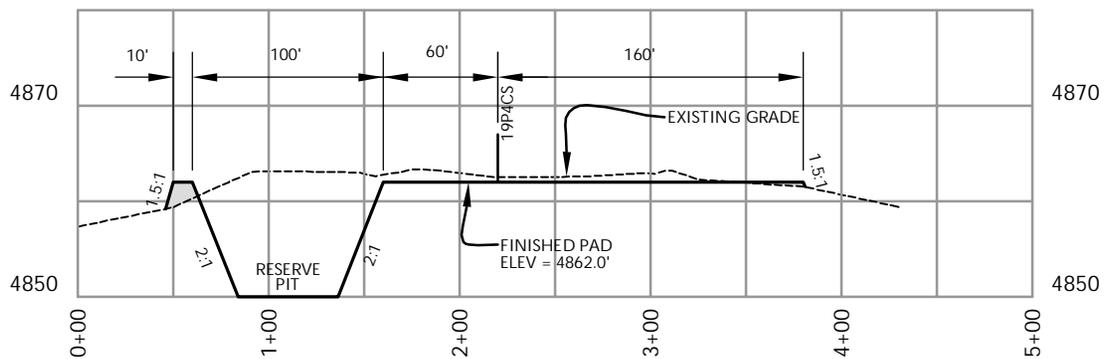
WELL PAD - LOCATION LAYOUT
 NBU 921-19P4BS, NBU 921-19P4CS,
 NBU 921-19O4BS & NBU 921-19O1CS
 LOCATED IN SECTION 19, T.9S., R.21E.
 S.L.B.&M., UINTAH COUNTY, UTAH

Scale: 1"=60'	Date: 3/16/09	SHEET NO: 6
REVISED:		6 OF 13

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



CROSS SECTION A-A'



CROSS SECTION B-B'

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

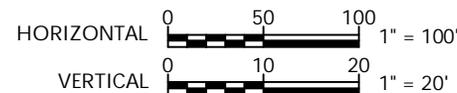
KERR-MCGEE OIL & GAS
ONSHORE L.P.
1099 18th Street - Denver, Colorado 80202



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

WELL PAD - CROSS SECTIONS
NBU 921-19P4BS, NBU 921-19P4CS,
NBU 921-19O4BS & NBU 921-19O1CS
LOCATED IN SECTION 19, T.9S., R.21E.
S.L.B.&M., UINTAH COUNTY, UTAH

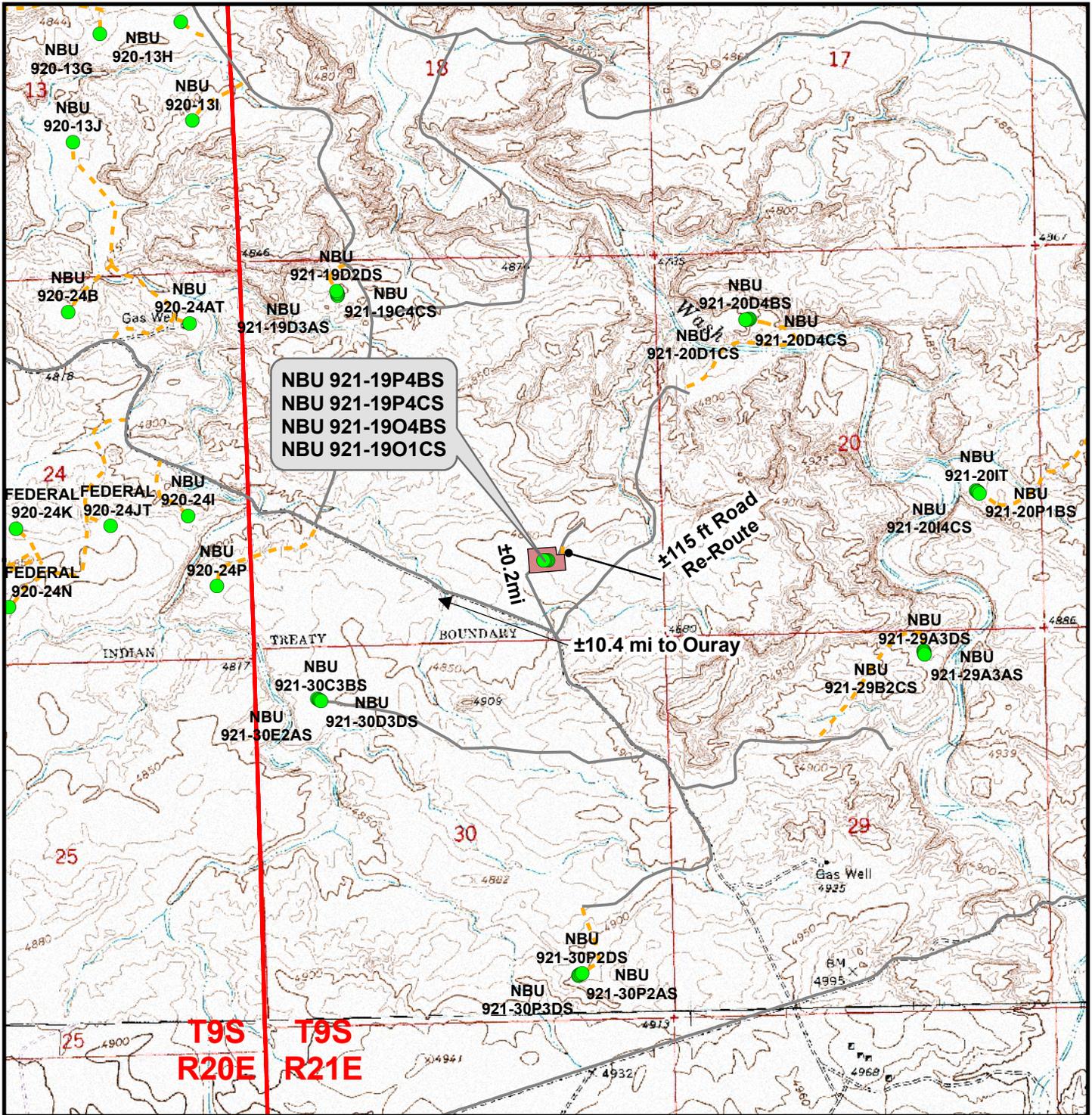
Scale: 1"=100'	Date: 3/16/09	SHEET NO:
REVISED:		7 7 OF 13



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

'APIWellNo:43047505920000'





Legend

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

Total Proposed Road Length: ±115ft

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

**NBU 921-19P4BS, NBU 921-19P4CS,
NBU 921-19O4BS & NBU 921-19O1CS**
Topo B

Located In Section 19, T9S, R21E
S.L.B.&M., Uintah County, Utah

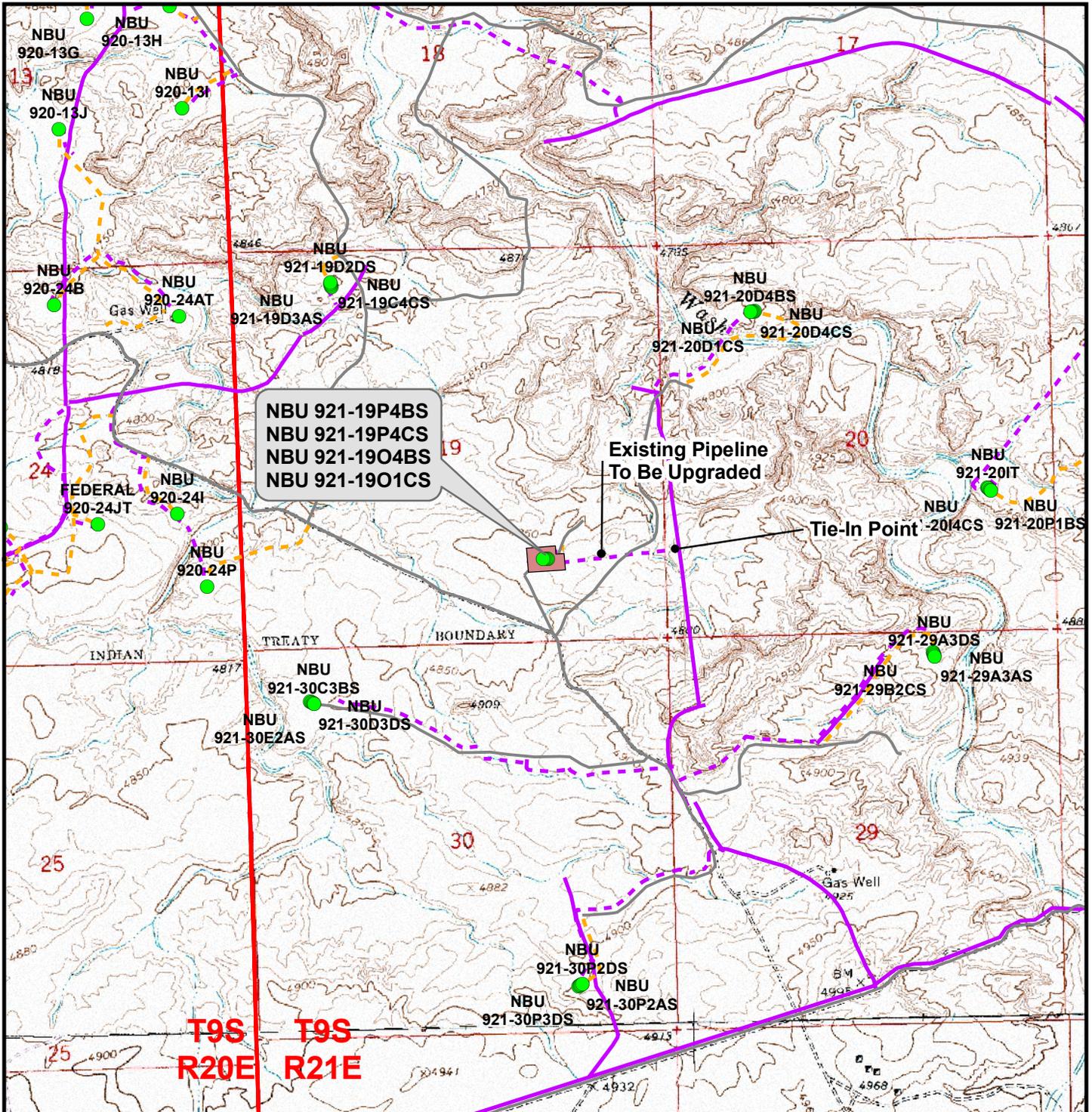
609
CONSULTING, LLC
371 Coffeen Avenue
Sheridan, WY 82801
Phone (307) 674-0609
Fax (307) 674-0182



Scale: 1" = 2000ft	NAD83 USP Central
Drawn: JELO	Date: 24 Feb 2009
Revised:	Date:

Sheet No:
10 10 of 13





Legend

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

Proposed Pipeline Length From Tie-In Point To Edge Of Pad: ±1,605ft
 Proposed Pipeline Length Around Pad: ±660ft

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

**NBU 921-19P4BS, NBU 921-19P4CS,
 NBU 921-19O4BS & NBU 921-19O1CS**
 Topo D
 Located In Section 19, 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

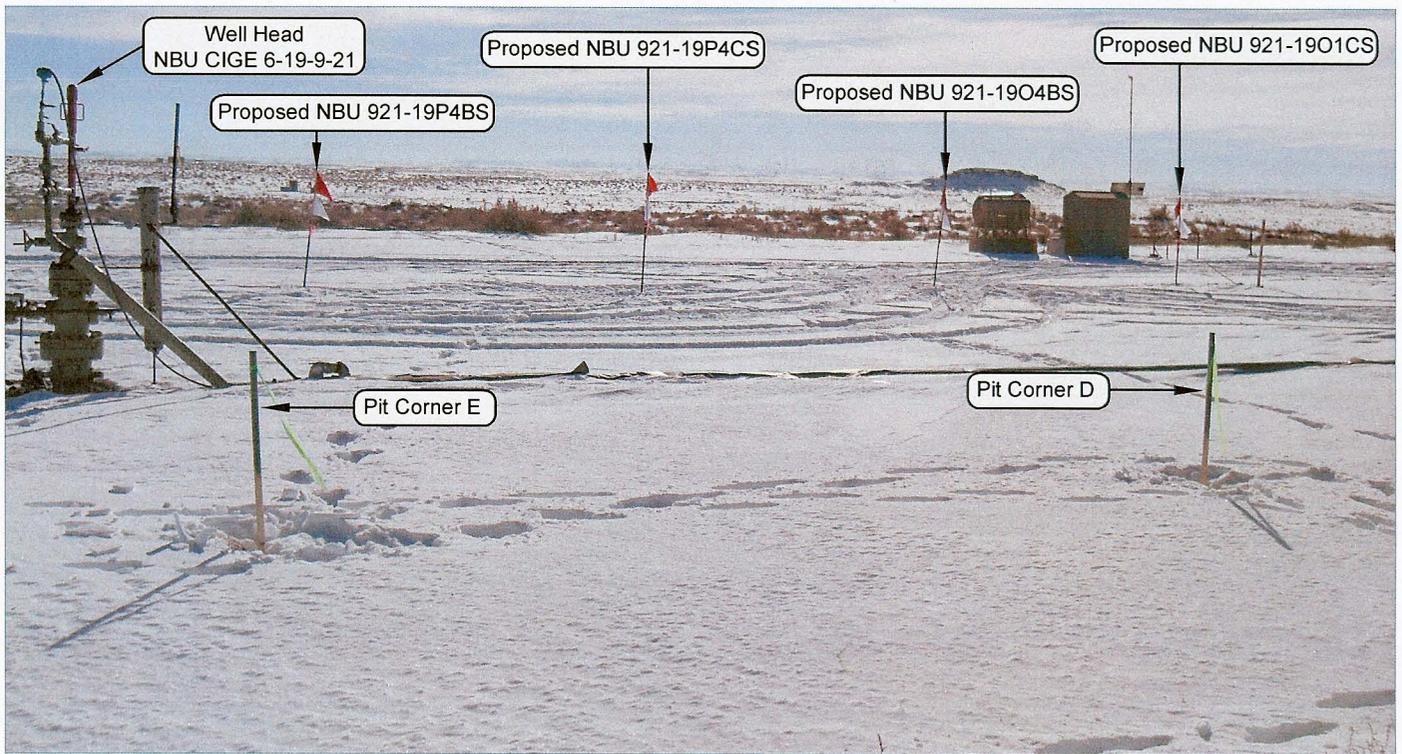


PHOTO VIEW: FROM PIT CORNER E TO LOCATION STAKES

CAMERA ANGLE: SOUTHERLY

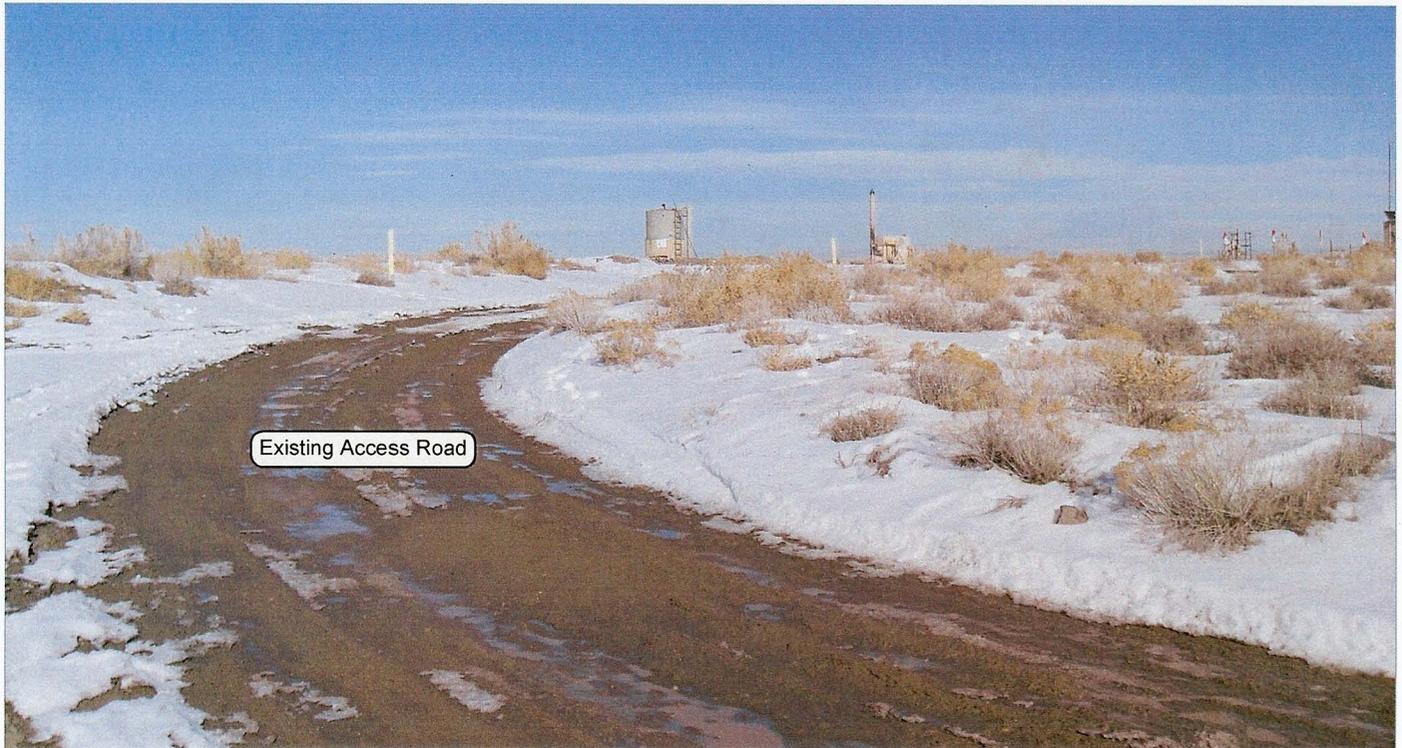


PHOTO VIEW: FROM BEGINNING OF PROPOSED ROAD

CAMERA ANGLE: NORTHEASTERLY

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



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

NBU 921-19P4BS, NBU 921-19P4CS,
 NBU 921-19O4BS & NBU 921-19O1CS
 LOCATED IN SECTION 19, T9S, R21E,
 S.L.B.&M. UINTAH COUNTY, UTAH.

LOCATION PHOTOS

DATE TAKEN: 01-13-09	
DATE DRAWN: 02-09-09	
TAKEN BY: M.S.B.	DRAWN BY: M.W.W.
REVISED:	

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

SHEET
8
 OF 13

Kerr-McGee Oil & Gas Onshore, LP
NBU 921-19P4BS, NBU 921-19P4CS, NBU 921-19O4BS, & NBU 921-19O1CS
Section 19, 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 5.3 MILES TO THE INTERSECTION OF A SERVICE ROAD TO THE EAST. EXIT LEFT AND PROCEED IN A NORTHEASTERLY THEN SOUTHEASTERLY DIRECTION ALONG THE SERVICE ROAD APPROXIMATELY 5.1 MILES TO A SECOND SERVICE ROAD TO THE NORTH. EXIT LEFT AND PROCEED IN A NORTHERLY DIRECTION ALONG THE SECOND SERVICE ROAD APPROXIMATELY 0.2 MILES TO THE CIGE 6-19-9-21 WELL PAD.

TOTAL DISTANCE FROM VERNAL, UTAH TO THE WELL LOCATION IS APPROXIMATELY 41.3 MILES IN A SOUTHERLY DIRECTION.

NBU 921-19O1CS

Surface: 1,078' FSL 1,614' FEL (SW/4SE/4)
BHL: 897' FSL 1,974' FEL (SW/4SE/4)

NBU 921-19O4BS

Surface: 1,079' FSL 1,594' FEL (SW/4SE/4)
BHL: 540' FSL 1,974' FEL (SW/4SE/4)

NBU 921-19P4BS

Surface: 1,082' FSL 1,554' FEL (SW/4SE/4)
BHL: 621' FSL 654' FEL (SE/4SE/4)

NBU 921-19P4CS

Surface: 1,080' FSL 1,574' FEL (SW/4SE/4)
BHL: 254' FSL 654' FEL (SE/4SE/4)

Pad: NBU 921-19O
Sec. 19 T9S R21E

Uintah, Utah
Mineral Lease: UTU 0581

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 SW/4 SE/4 of Section 19 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.

Approximately $\pm 115'$ (± 0.02 miles) of new access road is proposed. 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 $\pm 2,265'$ (± 0.4 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

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



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 921-19O4BS
T9S-R21E
Section 19: SW/4SE/4 surface and bottom hole
1079' FSL, 1594' FEL (surface)
540' FSL, 1974' 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 921-19 O4BS is located within the Natural Buttes Unit Area.
- Kerr-McGee is permitting this well as a directional well in order to minimize surface disturbance. Locating the well at the surface location and directionally drilling from this location, Kerr-McGee will be able to utilize the existing road and pipelines in the area.
- Furthermore, Kerr-McGee certifies that it is the sole working interest owner within 460 feet of the entire directional well bore.

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

Sincerely,

KERR-MCGEE OIL & GAS ONSHORE LP

Joe Matney
Senior Staff Landman

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

By:

Jacki A. Montgomery

Prepared For:

Ute Tribal Land
Uintah and Ouray Agency

Bureau of Land Management
Vernal Field Office

Prepared Under Contract With:

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

Prepared By:

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

MOAC Report No. 09-11

February 23, 2009

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

Public Lands Policy Coordination Office
Archaeological Survey Permit No. 117

Ute Tribal Permit No. A08-363

Paleontological Assessment for Anadarko Petroleum Corp.

NBU 921-19P4BS, P4CS, O4BS, O1CS
Ouray SE Quadrangle
Uintah County, Utah

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

Prepared by
SWCA Environmental Consultants
SWCA #UT09-14314-35



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 921-19P Pad (Bores: NBU 921-19P4BS, NBU 921-19P4CS, NBU 921-19O1CS, NBU 921-19O4BS)

Pipelines: Proposed Pipelines leading to the NBU 921-19P

Access Roads: N/A

Location: Section 19, Township 9 South, Range 21 East; Uintah County, Utah

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

Date: 06/17/2009

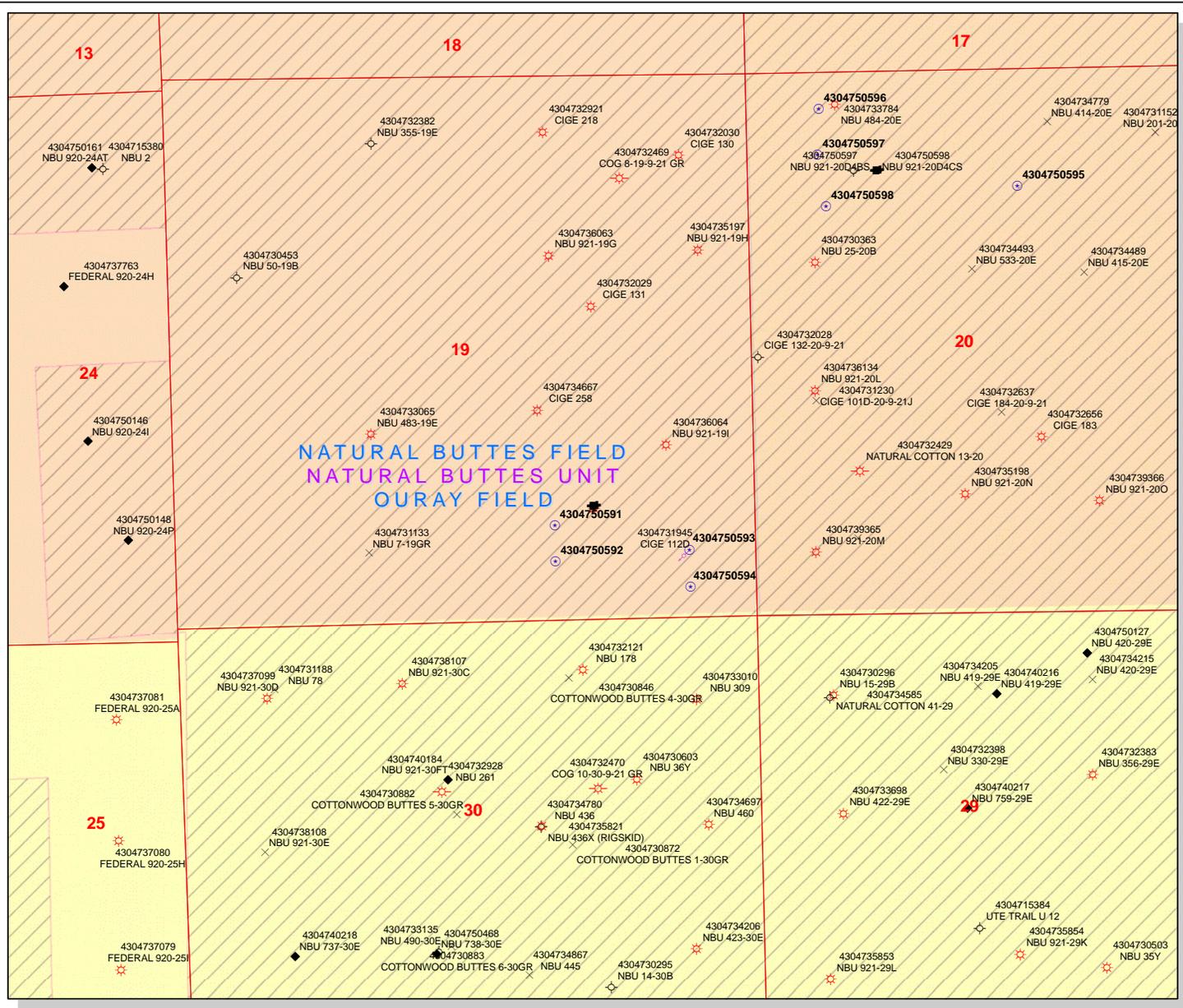
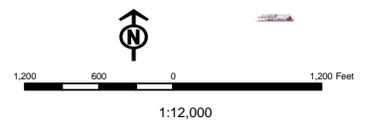
Observer(s): Grasslands Consulting, Inc. Biologists: Nick Hall, Dan Hamilton, Matt Kelahan, and Jonathan Sexauer. Technicians: Chad Johnson

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

API Number: 4304750592
Well Name: NBU 921-1904BS
Township 09.0 S Range 21.0 E Section 19
Meridian: SLBM
 Operator: KERR-MCGEE OIL & GAS ONSHORE, L.P.

Map Prepared:
 Map Produced by Diana Mason

Units	Wells Query Events
STATUS	GIS_STAT_TYPE
ACTIVE	<all other values>
EXPLORATORY	<Nub>
GAS STORAGE	APD
NF PP OIL	DRIL
NF SECONDARY	GI
PI OIL	GS
PP GAS	LA
PP GEOTHERM	NEW
PP OIL	OPS
SECONDARY	PA
TERMINATED	PGW
Fields	POW
STATUS	RET
ACTIVE	SGW
COMBINED	SOW
Sections	TA
	TW
	WD
	WI
	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: 43047505920000

WELL NAME: NBU 921-1904BS

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

PHONE NUMBER: 720 929-6156

CONTACT: Danielle Piernot

PROPOSED LOCATION: SWSE 19 090S 210E

Permit Tech Review:

SURFACE: 1079 FSL 1594 FEL

Engineering Review:

BOTTOM: 0540 FSL 1974 FEL

Geology Review:

COUNTY: UINTAH

LATITUDE: 40.01714

LONGITUDE: -109.58987

UTM SURF EASTINGS: 620343.00

NORTHINGS: 4430402.00

FIELD NAME: NATURAL BUTTES

LEASE TYPE: 1 - Federal

LEASE NUMBER: UTU 0581

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 Commingling**

Commingling Approved

LOCATION AND SITING:

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

Comments: Presite Completed

Stipulations:
3 - Commingling - 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 921-1904BS
API Well Number: 43047505920000
Lease Number: UTU 0581
Surface Owner: INDIAN
Approval Date: 8/11/2009

Issued to:

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

Authority:

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

Duration:

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

Commingling:

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

General:

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

Conditions of Approval:

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

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

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

Notification Requirements:

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

- Within 24 hours following the spudding of the well – contact Carol Daniels at 801-538-5284 (please leave a voicemail message if not available)

OR

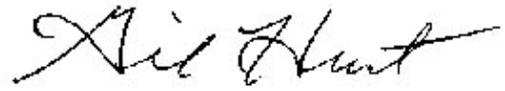
submit an electronic sundry notice (pre-registration required) via the Utah Oil & Gas website at <http://oilgas.ogm.utah.gov>

Reporting Requirements:

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

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

Approved By:



Gil Hunt
Associate Director, Oil & Gas

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	FORM 9 5. LEASE DESIGNATION AND SERIAL NUMBER: UTU 0581
SUNDRY NOTICES AND REPORTS ON WELLS Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.	6. IF INDIAN, ALLOTTEE OR TRIBE NAME: Ute Tr
1. TYPE OF WELL Gas Well	7. UNIT or CA AGREEMENT NAME: NATURAL BUTTES
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.	8. WELL NAME and NUMBER: NBU 921-1904BS
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779	9. API NUMBER: 43047505920000
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1079 FSL 1594 FEL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SWSE Section: 19 Township: 09.0S Range: 21.0E Meridian: S	9. FIELD and POOL or WILDCAT: NATURAL BUTTES
	COUNTY: UINTAH
	STATE: UTAH

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

TYPE OF SUBMISSION	TYPE OF ACTION		
<input checked="" type="checkbox"/> NOTICE OF INTENT Approximate date work will start: 8/12/2010	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> CASING REPAIR
<input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion:	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> CHANGE WELL NAME
<input type="checkbox"/> SPUD REPORT Date of Spud:	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> CONVERT WELL TYPE
<input type="checkbox"/> DRILLING REPORT Report Date:	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> NEW CONSTRUCTION
	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> PLUG BACK
	<input type="checkbox"/> PRODUCTION START OR RESUME	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION
	<input type="checkbox"/> REPERFORATE CURRENT FORMATION	<input type="checkbox"/> SIDETRACK TO REPAIR WELL	<input type="checkbox"/> TEMPORARY ABANDON
	<input type="checkbox"/> TUBING REPAIR	<input type="checkbox"/> VENT OR FLARE	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> WATER SHUTOFF	<input type="checkbox"/> SI TA STATUS EXTENSION	<input checked="" type="checkbox"/> APD EXTENSION
	<input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> OTHER	OTHER: <input style="width: 100px;" type="text"/>

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

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

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

Date: August 23, 2010

By: 

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



The Utah Division of Oil, Gas, and Mining

- State of Utah
- Department of Natural Resources

Electronic Permitting System - Sundry Notices

Request for Permit Extension Validation Well Number 43047505920000

API: 43047505920000

Well Name: NBU 921-1904BS

Location: 1079 FSL 1594 FEL QTR SWSE SEC 19 TWP 090S RNG 210E MER S

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

Date Original Permit Issued: 8/11/2009

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

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

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

Signature: Danielle Piernot

Date: 8/12/2010

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

Date: August 23, 2010

By: 

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	FORM 9 5. LEASE DESIGNATION AND SERIAL NUMBER: UTU 0581
SUNDRY NOTICES AND REPORTS ON WELLS Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.	6. IF INDIAN, ALLOTTEE OR TRIBE NAME: Ute Tr
1. TYPE OF WELL Gas Well	7. UNIT or CA AGREEMENT NAME: NATURAL BUTTES
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.	8. WELL NAME and NUMBER: NBU 921-1904BS
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779	9. API NUMBER: 43047505920000
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1079 FSL 1594 FEL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SWSE Section: 19 Township: 09.0S Range: 21.0E Meridian: S	9. FIELD and POOL or WILDCAT: NATURAL BUTTES
	COUNTY: UINTAH
	STATE: UTAH

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

TYPE OF SUBMISSION	TYPE OF ACTION		
<input checked="" type="checkbox"/> NOTICE OF INTENT Approximate date work will start: 7/11/2011	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> CASING REPAIR
<input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion:	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> CHANGE WELL NAME
<input type="checkbox"/> SPUD REPORT Date of Spud:	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> CONVERT WELL TYPE
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	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> PLUG BACK
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	<input type="checkbox"/> TUBING REPAIR	<input type="checkbox"/> VENT OR FLARE	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> WATER SHUTOFF	<input type="checkbox"/> SI TA STATUS EXTENSION	<input checked="" type="checkbox"/> APD EXTENSION
	<input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> OTHER	OTHER: <input style="width: 100px;" type="text"/>

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

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

Approved by the Utah Division of Oil, Gas and Mining

Date: 07/11/2011

By:

NAME (PLEASE PRINT) Andy Lytle	PHONE NUMBER 720 929-6100	TITLE Regulatory Analyst
SIGNATURE N/A	DATE 7/11/2011	



The Utah Division of Oil, Gas, and Mining

- State of Utah
- Department of Natural Resources

Electronic Permitting System - Sundry Notices

Request for Permit Extension Validation Well Number 43047505920000

API: 43047505920000

Well Name: NBU 921-1904BS

Location: 1079 FSL 1594 FEL QTR SWSE SEC 19 TWP 090S RNG 210E MER S

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

Date Original Permit Issued: 8/11/2009

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

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

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

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

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

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

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

Signature: Andy Lytle

Date: 7/11/2011

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

BLM - Vernal Field Office - Notification Form

Operator KERR-McGEE OIL & GAS Rig Name/# BUCKET RIG
Submitted By ANDY LYTLE Phone Number 720.929.6100
Well Name/Number NBU 921-19O4BS
Qtr/Qtr SWSE Section 19 Township 9S Range 21E
Lease Serial Number UTU 0581
API Number 4304750592

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

Date/Time 09/28/2011 14:00 HRS AM PM

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

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

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

Date/Time 10/23/2011 08:00 HRS AM PM

BOPE

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

Date/Time _____ AM PM

Remarks ESTIMATED DATE AND TIME. PLEASE CONTACT KENNY GATHINGS AT 435.828.0986 OR LOVEL YOUNG AT 435.781.7051

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		FORM 9
SUNDRY NOTICES AND REPORTS ON WELLS		5. LEASE DESIGNATION AND SERIAL NUMBER: UTU 0581
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 921-1904BS	
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.	9. API NUMBER: 43047505920000	
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: 1079 FSL 1594 FEL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SWSE Section: 19 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: 9/29/2011 <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 style="width: 100px;" type="text"/>		
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc. MIRU PETE MARTIN BUCKET RIG. DRILLED 20" CONDUCTOR HOLE TO 40'. RAN 14" 36.7# SCHEDULE 10 PIPE. CMT W/28 SX READY MIX. SPUD WELL ON 09/29/2011 AT 1130 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 9/30/2011	

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	FORM 9 5. LEASE DESIGNATION AND SERIAL NUMBER: UTU 0581
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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: 9/29/2011 <input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion: <input type="checkbox"/> SPUD REPORT Date of Spud: <input type="checkbox"/> DRILLING REPORT Report Date:	<input type="checkbox"/> ACIDIZE <input checked="" type="checkbox"/> CHANGE TO PREVIOUS PLANS <input type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> DEEPEN <input type="checkbox"/> OPERATOR CHANGE <input type="checkbox"/> PRODUCTION START OR RESUME <input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> WATER SHUTOFF <input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> ALTER CASING <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input type="checkbox"/> FRACTURE TREAT <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> SI TA STATUS EXTENSION <input type="checkbox"/> OTHER	<input type="checkbox"/> CASING REPAIR <input type="checkbox"/> CHANGE WELL NAME <input type="checkbox"/> CONVERT WELL TYPE <input type="checkbox"/> NEW CONSTRUCTION <input type="checkbox"/> PLUG BACK <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION <input type="checkbox"/> TEMPORARY ABANDON <input type="checkbox"/> WATER DISPOSAL <input type="checkbox"/> APD EXTENSION OTHER: <input style="width: 50px;" type="text"/>

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

The operator request approval to change the surface casing size, please see attached drilling plan. The operator also requests the change to drilling options for the use of a Closed Loop system (please refer to page 8 in attachment). Please contact the undersigned if you have any questions and/or concerns. Please be advised that verbal authorization for the proposed actions was given by Engineer Robin Hansen (Vernal BLM) to Andy Lytle (Kerr-McGee) on Wednesday, September 28, 2011.

Accepted by the Utah Division of Oil, Gas and Mining

Date: 10/06/2011

By: *Derek Quist*

NAME (PLEASE PRINT) Jaime Scharnowske	PHONE NUMBER 720 929-6304	TITLE Regulatory Analyst
SIGNATURE N/A	DATE 9/29/2011	

Kerr-McGee Oil & Gas Onshore. L.P.**NBU 921-1904BS**

Surface: 1079 FSL / 1594 FEL SWSE
 BHL: 540 FSL / 1974 FEL SWSE

Section 19 T9S R21E

Uintah County, Utah
 Mineral Lease: UTU 0581

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	1635	Water
Birds Nest	1896	Water
Mahogany	2385	Water
Wasatch	4894	Gas
Mesaverde	7971	Gas
Sego	10211	Gas
TVD	10306	
TD	10306	

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

Please refer to the attached Drilling Program

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

Please refer to the attached Drilling Program

5. **Drilling Fluids Program:**

Please refer to the attached Drilling Program

6. **Evaluation Program:**

Please refer to the attached Drilling Program

7. **Abnormal Conditions:**

Maximum anticipated bottom hole pressure calculated at 10306' TVD, approximately equals
6,596 psi (0.64 psi/ft = actual bottomhole gradient)

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

Maximum anticipated surface pressure equals approximately 4,314 psi (bottom hole pressure
minus the pressure of a partially evacuated hole calculated at 0.22 psi/foot, per Onshore Order No. 2).

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

8. **Anticipated Starting Dates:**

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

9. **Variances:**

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

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

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

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

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

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

Background

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

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

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

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

Variance for BOPE Requirements

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

Variance for Mud Material Requirements

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

Variance for Special Drilling Operation (surface equipment placement) Requirements

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

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

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

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

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

Variance for FIT Requirements

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

Conclusion

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

10. **Other Information:**

Please refer to the attached Drilling Program.



KERR-McGEE OIL & GAS ONSHORE LP
DRILLING PROGRAM

CASING PROGRAM

	SIZE	INTERVAL	WT.	GR.	CPLG.	DESIGN FACTORS			
						BURST	COLLAPSE	TENSION	
CONDUCTOR	14"	0-40'							
						3,390	1,880	348,000	N/A
SURFACE	8-5/8"	0 to 2,840	28.00	IJ-55	LTC	1.90	1.41	5.00	N/A
						10,690	8,650	279,000	367,174
PRODUCTION	4-1/2"	0 to 5,000	11.60	HCP-110	DQX	1.19	1.29		3.80
	4-1/2"	5,000 to 10,306'	11.60	HCP-110	LTC	1.19	1.29	5.60	

Surface Casing:

(Burst Assumptions: TD = 12.5 ppg) 0.73 psi/ft = frac gradient @ surface shoe
Fracture at surface shoe with 0.1 psi/ft gas gradient above

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

Production casing:

(Burst Assumptions: Pressure test with 8.4ppg @ 9000 psi) 0.64 psi/ft = bottomhole gradient

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

CEMENT PROGRAM

		FT. OF FILL	DESCRIPTION	SACKS	EXCESS	WEIGHT	YIELD
SURFACE	LEAD	500'	Premium cmt + 2% CaCl + 0.25 pps flocele	180	60%	15.80	1.15
Option 1	TOP OUT CMT (6 jobs)	1,200'	20 gals sodium silicate + Premium cmt + 2% CaCl + 0.25 pps flocele	270	0%	15.80	1.15
SURFACE		NOTE: If well will circulate water to surface, option 2 will be utilized					
Option 2	LEAD	2,340'	65/35 Poz + 6% Gel + 10 pps gilsonite + 0.25 pps Flocele + 3% salt BWOW	220	35%	11.00	3.82
	TAIL	500'	Premium cmt + 2% CaCl + 0.25 pps flocele	150	35%	15.80	1.15
	TOP OUT CMT	as required	Premium cmt + 2% CaCl	as req.		15.80	1.15
PRODUCTION	LEAD	4,386'	Premium Lite II +0.25 pps celloflake + 5 pps gilsonite + 10% gel + 0.5% extender	330	20%	11.00	3.38
	TAIL	5,920'	50/50 Poz/G + 10% salt + 2% gel + 0.1% R-3	1,400	35%	14.30	1.31

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

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

FLOAT EQUIPMENT & CENTRALIZERS

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

ADDITIONAL INFORMATION

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

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

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

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

DRILLING ENGINEER:

Nick Spence / Danny Showers / Chad Loesel

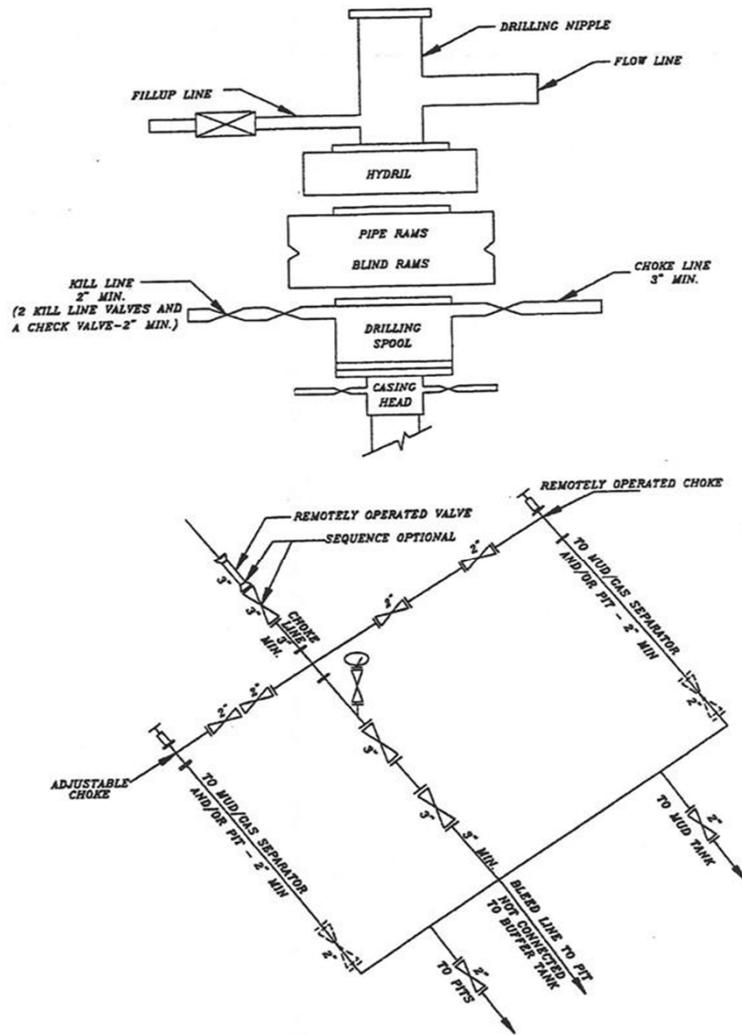
DATE: _____

DRILLING SUPERINTENDENT:

Kenny Gathings / Lovel Young

DATE: _____

EXHIBIT A
NBU 921-1904BS



SCHEMATIC DIAGRAM OF 5,000 PSI BOP STACK

Requested Drilling Options:

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

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

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

FORM 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
4304750591	NBU 921-19O1CS		SWSE	19	9S	21E	UINTAH
Action Code	Current Entity Number	New Entity Number	Spud Date			Entity Assignment Effective Date	
B	99999	2900	9/29/2011			10/14/11	
Comments: MIRU PETE MARTIN BUCKET RIG. <i>WSMVD</i> SPUD WELL ON 09/29/2011 AT 0830 HRS. <i>BHL = SWSE</i>							

Well 2

API Number	Well Name		QQ	Sec	Twp	Rng	County
4304750592	NBU 921-19O4BS		SWSE	19	9S	21E	UINTAH
Action Code	Current Entity Number	New Entity Number	Spud Date			Entity Assignment Effective Date	
B	99999	2900	9/29/2011			10/14/11	
Comments: MIRU PETE MARTIN BUCKET RIG. <i>WSMVD</i> SPUD WELL ON 09/29/2011 AT 1130 HRS. <i>BHL = SWSE</i>							

Well 3

API Number	Well Name		QQ	Sec	Twp	Rng	County
4304750594	NBU 921-19P4CS		SWSE	19	9S	21E	UINTAH
Action Code	Current Entity Number	New Entity Number	Spud Date			Entity Assignment Effective Date	
B	99999	2900	9/29/2011			10/14/11	
Comments: MIRU PETE MARTIN BUCKET RIG. <i>WSMVD</i> SPUD WELL ON 09/29/2011 AT 1430 HRS. <i>BHL = SESE</i>							

ACTION CODES:

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

SHEILA WOPSOCK

Name (Please Print)

Sheila Wopsock

Signature

REGULATORY ANALYST

9/30/2011

Title

Date

(5/2000)

RECEIVED

OCT 03 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 0581			
SUNDRY NOTICES AND REPORTS ON WELLS Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		6. IF INDIAN, ALLOTTEE OR TRIBE NAME: UTE 7. UNIT or CA AGREEMENT NAME: NATURAL BUTTES			
1. TYPE OF WELL Gas Well	8. WELL NAME and NUMBER: NBU 921-1904BS				
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.	9. API NUMBER: 43047505920000				
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: 1079 FSL 1594 FEL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SWSE Section: 19 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				
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12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc. <p style="text-align: center;">The Operator requests approval to change from 4-1/2 inch I-80 11.6 lb. BTC/LTC casing to 4-1/2 inch I-80/HCP-110 11.6 lb. DXQ/LTC casing. All other aspects of the previously approved drilling plan will not change. Please see attached drilling program. Thank you.</p>					
NAME (PLEASE PRINT) Jaime Scharnowske	PHONE NUMBER 720 929-6304	TITLE Regularatory Analyst			
SIGNATURE N/A	DATE 11/17/2011				

Kerr-McGee Oil & Gas Onshore. L.P.**NBU 921-1904BS**

Surface:	1079 FSL / 1594 FEL	SWSE
BHL:	540 FSL / 1974 FEL	SWSE

Section 19 T9S R21E

Unitah County, Utah
Mineral Lease: UTU 0581

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<u>Formation</u>	<u>Depth</u>	<u>Resource</u>
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TVD	10,306'	
TD	10,306'	

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

Please refer to the attached Drilling Program

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

Variance for Mud Material Requirements

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

Variance for Special Drilling Operation (surface equipment placement) Requirements

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

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

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

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

Variance for FIT Requirements

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

Conclusion

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

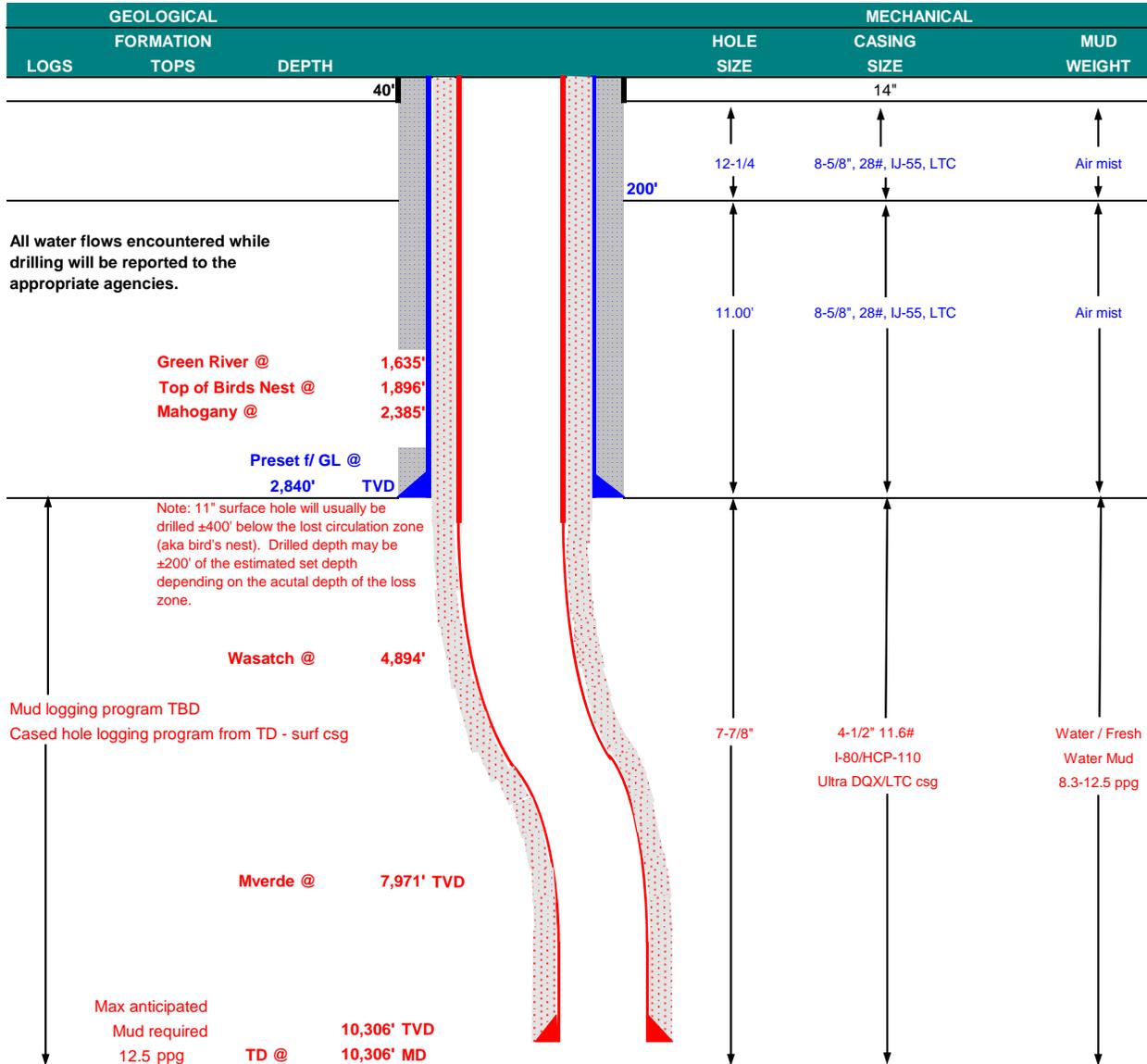
10. **Other Information:**

Please refer to the attached Drilling Program



KERR-McGEE OIL & GAS ONSHORE LP DRILLING PROGRAM

COMPANY NAME	KERR-McGEE OIL & GAS ONSHORE LP			DATE	November 17, 2011	
WELL NAME	NBU 921-1904BS			TD	10,306'	TVD 10,306' MD
FIELD	Natural Buttes	COUNTY	Uintah	STATE	Utah	FINISHED ELEVATION 4,863'
SURFACE LOCATION	SWSE	1079 FSL	1594 FEL	Sec 19	T 9S	R 21E
	Latitude:	40.017209	Longitude:	-109.590690		NAD 83
BTM HOLE LOCATION	SWSE	540 FSL	1974 FEL	Sec 19	T 9S	R 21E
	Latitude:	40.015727	Longitude:	-109.592040		NAD 83
OBJECTIVE ZONE(S)	Wasatch/Mesaverde					
ADDITIONAL INFO	Regulatory Agencies: BLM (Minerals), Tribal (Surface), UDOGM Tri-County Health Dept.					





KERR-McGEE OIL & GAS ONSHORE LP
DRILLING PROGRAM

CASING PROGRAM

	SIZE	INTERVAL	WT.	GR.	CPLG.	DESIGN FACTORS			
						BURST	COLLAPSE	LTC	DQX
								TENSION	
CONDUCTOR	14"	0-40'							
SURFACE	8-5/8"	0 to 2,840	28.00	IJ-55	LTC	3,390	1,880	348,000	N/A
						7,780	6,350	5.00	N/A
PRODUCTION	4-1/2"	0 to 5,000	11.60	I-80	DQX	1.11	0.95		267,035
						10,690	8,650	223,000	2.76
	4-1/2"	5,000 to 10,306'	11.60	HCP-110	LTC	1.53	1.29	4.48	

Surface Casing:

(Burst Assumptions: TD = 12.5 ppg) 0.73 psi/ft = frac gradient @ surface shoe
Fracture at surface shoe with 0.1 psi/ft gas gradient above

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

Production casing:

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

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

CEMENT PROGRAM

		FT. OF FILL	DESCRIPTION	SACKS	EXCESS	WEIGHT	YIELD
SURFACE Option 1	LEAD	500'	Premium cmt + 2% CaCl + 0.25 pps flocele	180	60%	15.80	1.15
	TOP OUT CMT (6 jobs)	1,200'	20 gals sodium silicate + Premium cmt + 2% CaCl + 0.25 pps flocele	270	0%	15.80	1.15
NOTE: If well will circulate water to surface, option 2 will be utilized							
SURFACE Option 2	LEAD	2,340'	65/35 Poz + 6% Gel + 10 pps gilsonite + 0.25 pps Flocele + 3% salt BWOW	220	35%	11.00	3.82
	TAIL	500'	Premium cmt + 2% CaCl + 0.25 pps flocele	150	35%	15.80	1.15
	TOP OUT CMT	as required	Premium cmt + 2% CaCl	as req.		15.80	1.15
PRODUCTION	LEAD	4,386'	Premium Lite II +0.25 pps celloflake + 5 pps gilsonite + 10% gel + 0.5% extender	330	20%	11.00	3.38
	TAIL	5,920'	50/50 Poz/G + 10% salt + 2% gel + 0.1% R-3	1,400	35%	14.30	1.31

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

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

FLOAT EQUIPMENT & CENTRALIZERS

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

ADDITIONAL INFORMATION

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

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

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

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

DRILLING ENGINEER:

Nick Spence / Danny Showers / Chad Loesel

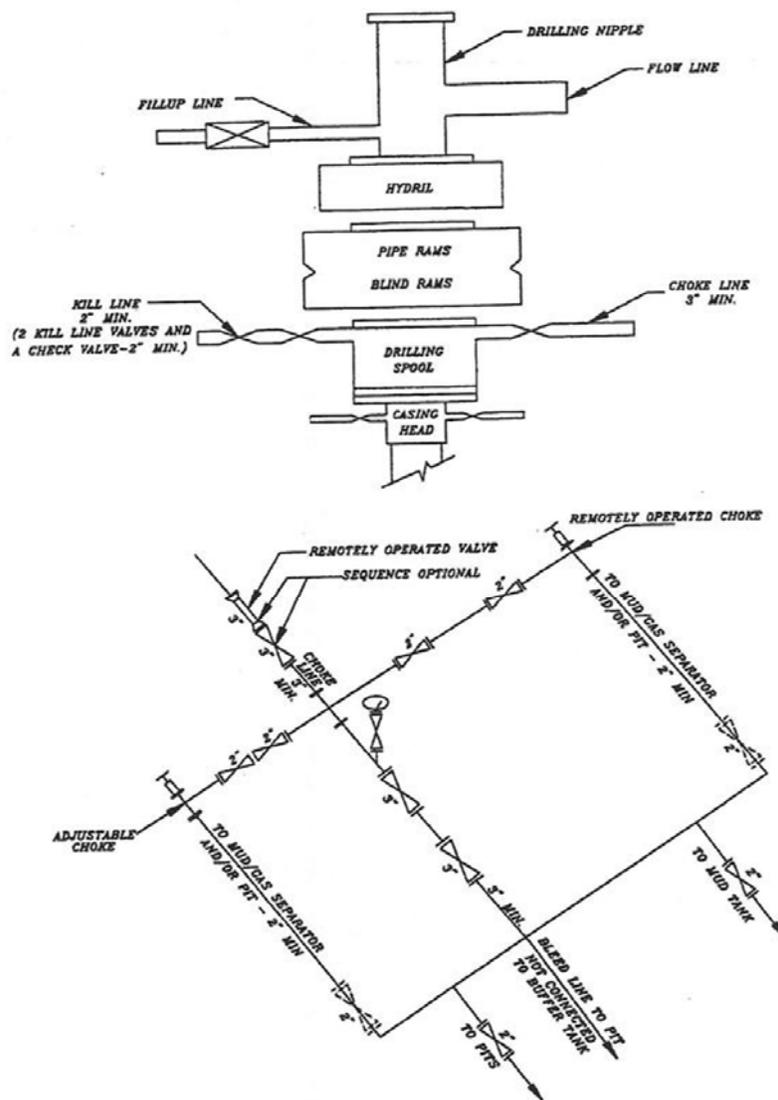
DATE:

DRILLING SUPERINTENDENT:

Kenny Gathings / Lovel Young

DATE:

EXHIBIT A
NBU 921-1904BS



SCHEMATIC DIAGRAM OF 5,000 PSI BOP STACK

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

FORM 9

5. LEASE DESIGNATION AND SERIAL NUMBER:
UTU 0581

SUNDRY NOTICES AND REPORTS ON WELLS

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

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
UTE

7. UNIT or CA AGREEMENT NAME:
NATURAL BUTTES

1. TYPE OF WELL
Gas Well

8. WELL NAME and NUMBER:
NBU 921-1904BS

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

9. API NUMBER:
43047505920000

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

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

4. LOCATION OF WELL
FOOTAGES AT SURFACE:
1079 FSL 1594 FEL
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:
Qtr/Qtr: SWSE Section: 19 Township: 09.0S Range: 21.0E Meridian: S

COUNTY:
UINTAH

STATE:
UTAH

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

TYPE OF SUBMISSION	TYPE OF ACTION		
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start:	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> CASING REPAIR
<input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion:	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> CHANGE WELL NAME
<input type="checkbox"/> SPUD REPORT Date of Spud:	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> CONVERT WELL TYPE
<input checked="" type="checkbox"/> DRILLING REPORT Report Date: 11/26/2011	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> NEW CONSTRUCTION
	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> PLUG BACK
	<input type="checkbox"/> PRODUCTION START OR RESUME	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION
	<input type="checkbox"/> REPERFORATE CURRENT FORMATION	<input type="checkbox"/> SIDETRACK TO REPAIR WELL	<input type="checkbox"/> TEMPORARY ABANDON
	<input type="checkbox"/> TUBING REPAIR	<input type="checkbox"/> VENT OR FLARE	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> WATER SHUTOFF	<input type="checkbox"/> SI TA STATUS EXTENSION	<input type="checkbox"/> APD EXTENSION
	<input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> OTHER	OTHER: <input type="text"/>

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

MIRU ROTARY RIG. FINISHED DRILLING FROM 2924' TO 10,314' ON NOV. 22, 2011. RAN 4-1/2" 11.6# P-110 PRODUCTION CASING. CEMENTED PRODUCTION CASING. RELEASED H&P RIG 298 ON NOV. 26, 2011 @ 12:30 HRS. DETAILS OF CEMENT JOB WILL BE INCLUDED WITH THE WELL COMPLETION REPORT. WELL IS WAITING ON FINAL COMPLETION ACTIVITIES.

NAME (PLEASE PRINT) Jaime Scharnowske	PHONE NUMBER 720 929-6304	TITLE Regulatory Analyst
SIGNATURE N/A	DATE 11/29/2011	

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 0581	
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	
1. TYPE OF WELL Gas Well		7. UNIT or CA AGREEMENT NAME: NATURAL BUTTES	
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.		8. WELL NAME and NUMBER: NBU 921-1904BS	
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779		9. API NUMBER: 43047505920000	
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1079 FSL 1594 FEL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SWSE Section: 19 Township: 09.0S Range: 21.0E Meridian: S		9. FIELD and POOL or WILDCAT: NATURAL BUTTES	
		COUNTY: UINTAH	
		STATE: UTAH	
11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA			
TYPE OF SUBMISSION	TYPE OF ACTION		
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start: <input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion: <input type="checkbox"/> SPUD REPORT Date of Spud: <input checked="" type="checkbox"/> DRILLING REPORT Report Date: 11/26/2011	<input type="checkbox"/> ACIDIZE <input type="checkbox"/> CHANGE TO PREVIOUS PLANS <input type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> DEEPEN <input type="checkbox"/> OPERATOR CHANGE <input type="checkbox"/> PRODUCTION START OR RESUME <input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> WATER SHUTOFF <input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> ALTER CASING <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input type="checkbox"/> FRACTURE TREAT <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> SI TA STATUS EXTENSION <input type="checkbox"/> OTHER	<input type="checkbox"/> CASING REPAIR <input type="checkbox"/> CHANGE WELL NAME <input type="checkbox"/> CONVERT WELL TYPE <input type="checkbox"/> NEW CONSTRUCTION <input type="checkbox"/> PLUG BACK <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION <input type="checkbox"/> TEMPORARY ABANDON <input type="checkbox"/> WATER DISPOSAL <input type="checkbox"/> APD EXTENSION OTHER: <input style="width: 100px;" type="text"/>
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.			
MIRU ROTARY RIG. FINISHED DRILLING FROM 2924' TO 10,314' ON NOV. 22, 2011. RAN 4-1/2" 11.6# P-110 PRODUCTION CASING. CEMENTED PRODUCTION CASING. RELEASED H&P RIG 298 ON NOV. 26, 2011 @ 12:30 HRS. DETAILS OF CEMENT JOB WILL BE INCLUDED WITH THE WELL COMPLETION REPORT. WELL IS WAITING ON FINAL COMPLETION ACTIVITIES.			
NAME (PLEASE PRINT) Jaime Scharnowske		PHONE NUMBER 720 929-6304	TITLE Regulatory Analyst
SIGNATURE N/A		DATE 11/29/2011	

Sundry Number: 20720 API Well Number: 43047505920000

Carol Daniels - PRODUCTION CASING ON NBU 921-1904BS

From: "Anadarko - H&P 298" <hp298@gesmail.net>
To: <caroldaniels@utah.gov>
Date: 11/23/2011 6:57 PM
Subject: PRODUCTION CASING ON NBU 921-1904BS

*T095 R21E S-19
43-047-50592*

ON NBU 921-1904BS WE WILL BE RUNNING 41/2,P-110,11.6# LT&C & DQX 11.6# CASING TO 10,314 FT,ON H&P 298 ON 11/24/2011 @ 10-12 PM

THANKS, JIM

RECEIVED

NOV 23 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 0581	
SUNDRY NOTICES AND REPORTS ON WELLS	
Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.	
1. TYPE OF WELL Gas Well	6. IF INDIAN, ALLOTTEE OR TRIBE NAME: UTE
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.	7. UNIT or CA AGREEMENT NAME: NATURAL BUTTES
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779	8. WELL NAME and NUMBER: NBU 921-19O4BS
PHONE NUMBER: 720 929-6511	9. API NUMBER: 43047505920000
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1079 FSL 1594 FEL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SWSE Section: 19 Township: 09.0S Range: 21.0E Meridian: S	9. FIELD and POOL or WILDCAT: NATURAL BUTTES
	COUNTY: Uintah
	STATE: UTAH

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

TYPE OF SUBMISSION	TYPE OF ACTION		
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start:	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> CASING REPAIR
<input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion:	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> CHANGE WELL NAME
<input type="checkbox"/> SPUD REPORT Date of Spud:	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> CONVERT WELL TYPE
<input checked="" type="checkbox"/> DRILLING REPORT Report Date: 2/1/2012	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> NEW CONSTRUCTION
	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> PLUG BACK
	<input checked="" type="checkbox"/> PRODUCTION START OR RESUME	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION
	<input type="checkbox"/> REPERFORATE CURRENT FORMATION	<input type="checkbox"/> SIDETRACK TO REPAIR WELL	<input type="checkbox"/> TEMPORARY ABANDON
	<input type="checkbox"/> TUBING REPAIR	<input type="checkbox"/> VENT OR FLARE	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> WATER SHUTOFF	<input type="checkbox"/> SI TA STATUS EXTENSION	<input type="checkbox"/> APD EXTENSION
	<input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> OTHER	OTHER: <input style="width: 100px;" type="text"/>

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

THE SUBJECT WELL WAS PLACED ON PRODUCTION ON 02/01/2012 AT 1330 HRS. THE CHONROLOGICAL WELL HISTORY WILL BE SUBMITTED WITH THE WELL COMPLETION REPORT.

Accepted by the
Utah Division of
Oil, Gas and Mining
FOR RECORD ONLY
 February 07, 2012

NAME (PLEASE PRINT) Sheila Wopsock	PHONE NUMBER 435 781-7024	TITLE Regulatory Analyst
SIGNATURE N/A	DATE 2/7/2012	

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

5. Lease Serial No.
UTU0581

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

2. Name of Operator
KERR MCGEE OIL & GAS ONSHORE, Mail: JAIME.SCHARNOWSKE@ANADARKO.COM
 Contact: JAIME L. SCHARNOWSKE

3. Address PO BOX 173779
DENVER, CO 80217
 3a. Phone No. (include area code)
Ph: 720-929-6304

4. Location of Well (Report location clearly and in accordance with Federal requirements)*
 At surface SWSE 1079FSL 1594FEL 40.017209 N Lat, 109.590690 W Lon
 At top prod interval reported below SWSE 550FSL 1977FEL
 At total depth SWSE 533FSL 1976FEL

6. If Indian, Allottee or Tribe Name

7. Unit or CA Agreement Name and No.
UTU63047A

8. Lease Name and Well No.
NBU 921-1904BS

9. API Well No.
43-047-50592

10. Field and Pool, or Exploratory
NATURAL BUTTES

11. Sec., T., R., M., or Block and Survey
or Area Sec 19 T9S R21E Mer SLB

12. County or Parish
UINTAH
 13. State
UT

14. Date Spudded
09/29/2011
 15. Date T.D. Reached
11/22/2011
 16. Date Completed
 D & A Ready to Prod.
02/01/2012

17. Elevations (DF, KB, RT, GL)*
4862 GL

18. Total Depth: MD 10314
TVD 10230
 19. Plug Back T.D.: MD 10250
TVD 10166
 20. Depth Bridge Plug Set: MD
TVD

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

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 Sks. & Type of Cement	Slurry Vol. (BBL)	Cement Top*	Amount Pulled
20.000	14.000 STL	36.7	0	40		28			
11.000	8.625 IJ-55	28.0	0	2950		615		0	
7.875	4.500 P-110	11.6	0	10294		1808		1650	

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	9736							

25. Producing Intervals

Formation	Top	Bottom	Perforated Interval	Size	No. Holes	Perf. Status
A) WASATCH	6998	8117	6998 TO 8117	0.360	56	OPEN
B) MESAVERDE	8142	10104	8142 TO 10104	0.360	184	OPEN
C)						
D)						

26. Perforation Record

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

Depth Interval	Amount and Type of Material
6998 TO 10104	PUMP 11,326 BBLs SLICK H2O & 237,780 LBS 30/50 OTTAWA SAND

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
02/01/2012	02/20/2012	24	→	0.0	2751.0	725.0			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	2229	3028.0	→	0	2751	725		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	
			→						

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MAR 13 2012

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28b. Production - Interval C

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

28c. Production - Interval D

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

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

30. Summary of Porous Zones (Include Aquifers):

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

31. Formation (Log) Markers

Formation	Top	Bottom	Descriptions, Contents, etc.	Name	Top
					Meas. Depth
				GREEN RIVER BIRD'S NEST MAHOGANY WASATCH MESAVERDE	1706 1968 2471 5091 8131

32. Additional remarks (include plugging procedure):

The first 2097' of the surface hole was drilled with a 12 ?? bit. The remainder of surface hole was drilled with an 11? bit. DQX csg was run from surface to 5120' LTC csg was run from 5120' to 10,294'. 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 #132609 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 03/09/2012

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.

**US ROCKIES REGION
Operation Summary Report**

Well: NBU 921-19O4BS BLUE	Spud Conductor: 9/30/2011	Spud Date: 10/6/2011
Project: UTAH-UINTAH	Site: NBU 921-19O PAD	Rig Name No: PROPETRO 11/11, H&P 298/298
Event: DRILLING	Start Date: 9/25/2011	End Date: 11/26/2011
Active Datum: RKB @4,888.00usft (above Mean Sea Level)	UWI: SWSE/0/9/S/21/E/19/0/0/26/PWS/1079/E/0/1594/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
10/6/2011	14:30 - 15:30	1.00	DRLSUR	01	C	P		MOVE RIG IN OFF THE NBU 921-19O1CS T/NBU 921-19O4BS
	15:30 - 18:30	3.00	DRLSUR	01	B	P		RIG UP.. SET CATWALK AND PIPE RACKS. RIG UP AND PRIME PIT PUMP AND MUD PUMP SPUD 10/06/2011 @ 18:30
	18:30 - 20:00	1.50	DRLSUR	02	B	P		DRLG 12 1/4" SURFACE HOLE FROM 40' TO 209'
	20:00 - 20:30	0.50	DRLSUR	06	A	P		POOH F/ DIRECTIONAL TOOLS
	20:30 - 22:00	1.50	DRLSUR	06	A	P		M/U 11" SURF. BIT,P/U DIR TOOLS & SCRIBE TIH T/210'
	22:00 - 0:00	2.00	DRLSUR	02	B	P		DRILL/ SLIDE 11" SURFACE HOLE F/ 209"-460' (250' @ 125'/HR) PSI ON/ OFF 1000/740, UP/ DOWN/ ROT 45/42/43. 136 SPM, 18-20K WOB, 45 RPM ON TOP DRIVE, CIRCULATING RESERVE PIT
10/7/2011	0:00 - 15:30	15.50	DRLSUR	02	B	P		DRILL/ SLIDE 11" SURFACE HOLE F/ 210"-2080;' (1870' @ 120'/HR) PSI ON/ OFF 1680/1400, UP/ DOWN/ ROT 75/52/66. 136 SPM, 532 GPM, 18-20K WOB, 41 RPM ON TOP DRIVE, CIRCULATING RESERVE PIT
	15:30 - 19:00	3.50	DRLSUR	08	A	Z		PULL OFF BOTTOM TO REPAIR RIG. HYDRAULIC PROBLEMS ON RIG, WAIT ON MECHANIC & REPAIR FUNK BOX
	19:00 - 19:30	0.50	DRLSUR	06	F	Z		WORK BACK TO BOTTOM AFTER RIG REPAIR
	19:30 - 0:00	4.50	DRLSUR	02	B	P		DRILL/ SLIDE 11" SURFACE HOLE F/ 2080 T/2500;' (420' @ 93'/HR) PSI ON/ OFF 1590/1460, UP/ DOWN/ ROT 81/58/68. 136 SPM, 532 GPM, 18-20K WOB, 44 RPM ON TOP DRIVE, CIRCULATING RESERVE PIT
10/8/2011	0:00 - 9:00	9.00	DRLSUR	02	B	P		DRILL/ SLIDE 11" SURFACE HOLE F/ 2500' T/2924;' (424' @ 47'/HR) PSI ON/ OFF 1620/1500, UP/ DOWN/ ROT 81/58/68. 136 SPM, 532 GPM, 18-20K WOB, 44 RPM ON TOP DRIVE, CIRCULATING RESERVE PIT
	9:00 - 11:00	2.00	DRLSUR	05	C	P		CIRC. & COND. F/8 5/8 28# CASING
	11:00 - 15:00	4.00	DRLSUR	06	D	P		L/D DRILL STRING, BHA & DIRECTIONAL TOOLS
	15:00 - 16:00	1.00	DRLSUR	12	A	P		MOVE CATWALK & PIPE RACKS, MOVE CASING TO WORK AREA, R/U T/RUN 8 5/8 CASING.
	16:00 - 20:30	4.50	DRLSUR	12	C	P		HOLD SAFTEY MEETING,RUN FLOAT SHOE ,SHOE JNT,BAFFLE & 66 JNTS 8 5/8" 28# LT&C CSG W/THE SHOE SET @2924' & THE BAFFLE @2876' LAND CASING @ 20:30
	20:30 - 21:30	1.00	DRLSUR	12	B	P		RUN 200' 1" PIPE DOWN ANNULUS, MOVE RIG OFF HOLE, INSTALL CMT HEAD, R/U PRO PETRO CEMENTERS

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 Project: UTAH-UINTAH Site: NBU 921-19O PAD Rig Name No: PROPETRO 11/11, H&P 298/298
 Event: DRILLING Start Date: 9/25/2011 End Date: 11/26/2011
 Active Datum: RKB @4,888.00usft (above Mean Sea Level) UWI: SW/SE/O/9/S/21/E/19/O/O/26/PM/S/1079/E/O/1594/O/O

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
	21:30 - 22:30	1.00	DRLSUR	12	E	P		HOLD SAFETY MEETING. TEST LINES TO 2000 PSI. PUMP 160 BBLs OF 8.4# H2O AHEAD, FULL RETURNS PUMP 20 BBLs OF 8.4# GEL WATER AHEAD. PUMP 230 SX(156 BBLs) 11# 3.82 YIELD LEAD CEMENT, PUMP 200 SX (41 BBLs) OF 15.8# 1.15 YIELD TAIL(2% CALC, 1/4# /SK OF FLOCELE). DROP PLUG ON FLY AND DISPLACE W/179.5 BBLs OF 8.4# H2O. LIFT PRESSURE WAS 700 PSI, BUMP PLUG AND HOLD 1100 PSI FOR 5 MIN. FLOAT HELD, FULL RETURNS THRU OUT JOB ,30 BBLs LEAD CEMENT TO SURF, CEMENT STARTED TO FALL BACK
	22:30 - 23:30	1.00	DRLSUR	13	A	P		WAIT ON CEMENT
	23:30 - 0:00	0.50	DRLSUR	12	A	P		CEMENT FELL 6', TOPPED OFF CEMENT W/ 185 SX. RELEASE RIG 00:00 10/9/11
11/17/2011	2:00 - 3:00	1.00	MIRU	01	C	P		PREPARE TO SKID RIG TO THE NBU 921-19O4BS
	3:00 - 7:00	4.00	MIRU	01	C	P		SKID RIG 20' TO THE NBU 921-19O4BS
	7:00 - 9:30	2.50	MIRU	01	B	P		RIG UP AFTER SKID
	9:30 - 10:00	0.50	MIRU	14	A	P		NIPPLE UP BOP
	10:00 - 13:00	3.00	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
	13:00 - 15:30	2.50	PRPSPD	15	A	P		(INSTALL STRATA TEST PLUG, TEST STRATA CHOKE MANIFOLD R/D TESTER)
	15:30 - 16:00	0.50	PRPSPD	07	A			RIG SERVICE / FUN ANN, PIPE , BLINDS, CHOKE
	16:00 - 16:30	0.50	PRPSPD	14	B	P		INSTALL WEAR BUSHING,
	16:30 - 17:00	0.50	PRPSPD	23		P		PRE SPUD INSPECTION / HAZERD HUNT.
	17:00 - 21:00	4.00	PRPSPD	01	G	S		HELD PRE JOB S/M WITH STRATA / RE-ROUTE STRATA RETURN LINE, HOOK GAS BUSTER AND FLOW LINE BACK UP CHECK ALL FLAIR LINE HAMMER UNIONS .
	21:00 - 0:00	3.00	PRPSPD	06	A	P		PICK UP M MTR, BIT, INSPECT, SCRIBE, DIRECTIONAL TOOLS & HWDP, AS TRIPPING IN HOLE, CHECK DERRICK FOR LEVEL, INSTALL ROTATING HEAD, TIH TO 2600'
11/18/2011	0:00 - 1:00	1.00	PRPSPD	14	A	P		CHECK DERRICK FOR LEVEL / INSTALL STRATA ROTATING HEAD
	1:00 - 2:00	1.00	PRPSPD	09	A	P		HELD S/M CUT 98' 13 WRAPS DRILLING LINE
	2:00 - 2:30	0.50	PRPSPD	14	A	P		INSTALL STRATA HIGH PRESSURE ROT HEAD.
	2:30 - 3:00	0.50	PRPSPD	06	A	P		TIH TAG CEMENT @ 2855'
	3:00 - 4:00	1.00	PRPSPD	02	F			DRILL CEMENT ,BAFFLE @ 2900, SHOE @ 2948
	4:00 - 6:00	2.00	DRLPRO	02	D	P		DRILL/ SURVEY F/2,948 TO 3195' =247' @ 123 FPH // WOB 16K-23K / TOP DRIVE RPM 40-60 / PUMP 122 SPM = 550 GPM / PUMP PRESSURE ON/OFF BOTTOM 1630/1360 PSI / MUD MOTOR RPM 88 / PU/SO/ROT WT 110/94/100 TORQUE ON/OFF BOTTOM 5K/6 K MW 8.7 VIS 26/ NO FLARE.

**US ROCKIES REGION
Operation Summary Report**

Well: NBU 921-1904BS BLUE		Spud Conductor: 9/30/2011		Spud Date: 10/6/2011	
Project: UTAH-UINTAH		Site: NBU 921-190 PAD		Rig Name No: PROPETRO 11/11, H&P 298/298	
Event: DRILLING		Start Date: 9/25/2011		End Date: 11/26/2011	
Active Datum: RKB @4,888.00usft (above Mean Sea Level)			UWM: SW/SE/0/9/S/21/E/19/0/0/26/PM/S/1079/E/0/1594/0/0		

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
	6:00 - 15:00	9.00	DRLPRO	02	D	P		DRILL/ SURVEY F/ 3195' TO 4405 =1210 '@ 134' FPH // WOB 16K-23K / TOP DRIVE RPM 40-60 / PUMP 122 SPM = 550 GPM / PUMP PRESSURE ON/OFF BOTTOM 1875/1490 PSI / MUD MOTOR RPM 88 / PU/SO/ROT WT 135/101/118 TORQUE ON/OFF BOTTOM 7 K / 3 K NO FLARE.
	15:00 - 15:30	0.50	DRLPRO	07	A	P		RIG SERVICE
	15:30 - 0:00	8.50	DRLPRO	02	D	P		DRILL/ SURVEY F/ 4405' TO 5540 =1135 '@ 133' FPH // WOB 16K-23K / TOP DRIVE RPM 40-60 / PUMP 122 SPM = 550 GPM / PUMP PRESSURE ON/OFF BOTTOM 2050/1670 PSI / MUD MOTOR RPM 88 / PU/SO/ROT WT 158/118/137 TORQUE ON/OFF BOTTOM 7 K / 3 K NO FLARE.
11/19/2011	0:00 - 6:00	6.00	DRLPRO	02	D	P		DRILL/ SURVEY F / 5540 TO 6400' =860' '@ 143' FPH // WOB 16K-23K / TOP DRIVE RPM 40-60 / PUMP 122 SPM = 550 GPM / PUMP PRESSURE ON/OFF BOTTOM 2100/1750 PSI / MUD MOTOR RPM 88 / PU/SO/ROT WT 158/118/137 TORQUE ON/OFF BOTTOM 13 K / 9 K NO FLARE.
	6:00 - 16:00	10.00	DRLPRO	02	D	P		DRILL/ SURVEY F / 6400' TO 7243 = 843 '@ 81' FPH // WOB 16K-23K / TOP DRIVE RPM 40-60 / PUMP 122 SPM = 550 GPM / PUMP PRESSURE ON/OFF BOTTOM 2315/1990 PSI / MUD MOTOR RPM 88 / PU/SO/ROT WT 199/134/159 TORQUE ON/OFF BOTTOM 12 K / 8 K 10/ 15' FLAIR 20/25 ON CONN.
	16:00 - 16:30	0.50	DRLPRO	07	A	P		RIG SERVICE
	16:30 - 0:00	7.50	DRLPRO	02	D	P		DRILL/ SURVEY F / 7243 TO 7710 = 467 '@ 62' FPH // WOB 16K-23K / TOP DRIVE RPM 40-60 / PUMP 122 SPM = 550 GPM / PUMP PRESSURE ON/OFF BOTTOM 2425/2175 PSI / MUD MOTOR RPM 88 / PU/SO/ROT WT 212/130/164 TORQUE ON/OFF BOTTOM 12 K / 8 K 10/ 15' FLAIR DRILLING 20/25 ON CONN.
11/20/2011	0:00 - 3:30	3.50	DRLPRO	02	D	P		DRILL/ SURVEY F / 7710 TO 7904 = 194 '@77' FPH // WOB 16K-23K / TOP DRIVE RPM 40-60 / PUMP 122 SPM = 550 GPM / PUMP PRESSURE ON/OFF BOTTOM 2425/2175 PSI / MUD MOTOR RPM 88 / PU/SO/ROT WT 212/130/164 TORQUE ON/OFF BOTTOM 12 K / 8 K 10/ 15' FLAIR DRILLING 20/25 ON CONN.
	3:30 - 5:00	1.50	DRLPRO	08	A	Z		LOST SWAB IN MUD PUMP #1 / AND VALVE IN MUD PUMP # 2
	5:00 - 14:00	9.00	DRLPRO	02	D	P		DRILL/ SURVEY F 7904 TO 8373 = 469 '@52' FPH / / WOB 16K-23K / TOP DRIVE RPM 40-60 / PUMP 122 SPM = 550 GPM / PUMP PRESSURE ON/OFF BOTTOM 2240/1880 PSI / MUD MOTOR RPM 88 / PU/SO/ROT WT 212/130/164 TORQUE ON/OFF BOTTOM 12 K / 8 K 5' FLAIR DRILLING 10/ 15 ON CONN.
	14:00 - 14:30	0.50	DRLPRO	07	A	P		RIG SERVICE

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Project: UTAH-UINTAH	Site: NBU 921-19O PAD	Rig Name No: PROPETRO 11/11, H&P 298/298
Event: DRILLING	Start Date: 9/25/2011	End Date: 11/26/2011
Active Datum: RKB @4,888.00usft (above Mean Sea Level)		UWI: SW/SE/0/9/S/21/E/19/0/0/26/PM/S/1079/E/0/1594/0/0

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
	14:30 - 18:00	3.50	DRLPRO	02	D	P		DRILL/ SURVEY F 8373 TO 8420 = 43 '@13' FPH / / WOB 16K-23K / TOP DRIVE RPM 40-60 / PUMP 122 SPM = 550 GPM / PUMP PRESSURE ON/OFF BOTTOM 2241/1890 PSI / MUD MOTOR RPM 88 / PU/SO/ROT WT 212/130/164 TORQUE ON/OFF BOTTOM 12 K / 8 K 5' FLAIR DRILLING 10 / 15 ON CONN.
	18:00 - 0:00	6.00	DRLPRO	02	D	P		DRILL/ SURVEY F 8420 TO 8710 = 290 '@48' FPH / / WOB 16K-23K / TOP DRIVE RPM 40-60 / PUMP 122 SPM = 550 GPM / PUMP PRESSURE ON/OFF BOTTOM 2425/2125 PSI / MUD MOTOR RPM 88 / PU/SO/ROT WT 226/144/181 TORQUE ON/OFF BOTTOM 12 K / 8 K 10' FLAIR DRILLING 10 / 20 ON CONN. TRAP 200 PSI ON CONN.
11/21/2011	0:00 - 6:00	6.00	DRLPRO	02	D	P		DRILL/ SURVEY F 8710 TO 8965 = 255 '@42' FPH / / WOB 16K-23K / TOP DRIVE RPM 40-60 / PUMP 122 SPM = 550 GPM / PUMP PRESSURE ON/OFF BOTTOM 2325/2100 PSI / MUD MOTOR RPM 88 / PU/SO/ROT WT 226/144/181 TORQUE ON/OFF BOTTOM 15 K / 15 K 10' FLAIR DRILLING 10 / 20 ON CONN. TRAP 200 PSI ON CONN.
	6:00 - 14:00	8.00	DRLPRO	02	D	P		DRILL/ SURVEY F 8965 TO 9319 = 354 '@44' FPH // WOB 16K-23K / TOP DRIVE RPM 40-60 / PUMP 122 SPM = 550 GPM / PUMP PRESSURE ON/OFF BOTTOM 2350/2114 PSI / MUD MOTOR RPM 88 / PU/SO/ROT WT 233/154/190 TORQUE ON/OFF BOTTOM 16 K / 15 K 15' FLAIR DRILLING 10 / 22 ON CONN. TRAP 200 PSI ON CONN.
	14:00 - 14:30	0.50	DRLPRO	07	A	P		RIG SERVICE
	14:30 - 0:00	9.50	DRLPRO	02	D	P		DRILL/ SURVEY F 9319 TO 9745= 426 '@44' FPH / / WOB 16K-23K / TOP DRIVE RPM 40-60 / PUMP 122 SPM = 550 GPM / PUMP PRESSURE ON/OFF BOTTOM 2350/2050 PSI / MUD MOTOR RPM 88 / PU/SO/ROT WT 233/154/190 TORQUE ON/OFF BOTTOM 16 K / 15 K 20' FLAIR DRILLING 20 / 25 ON CONN. TRAP 200 PSI ON CONN.
11/22/2011	0:00 - 1:30	1.50	DRLPRO	02	D	P		DRILL/ SURVEY F 9745 TO 9791 = 46 '@30' FPH / / WOB 16K-23K / TOP DRIVE RPM 40-60 / PUMP 122 SPM = 550 GPM / PUMP PRESSURE ON/OFF BOTTOM 2350/2050 PSI / MUD MOTOR RPM 88 / PU/SO/ROT WT 233/154/190 TORQUE ON/OFF BOTTOM 16 K / 15 K 20' FLAIR DRILLING 20 / 25 ON CONN. TRAP 200 PSI ON CONN.
	1:30 - 5:30	4.00	DRLPRO	22	C	S		RAISE MUD WT. GAIN 65 BBLs, BEFORE CONNECTION, ANN PSI 450, WITH CHOKE OPEN CLOSE CHOKE HOLDING 350 PSI WHILE INCREASEING MW. TO 10.0 PPG.
	5:30 - 15:30	10.00	DRLPRO	02	D	P		DRILL/ SURVEY F 9791 TO 10167 =376 '@37' FPH // WOB 16K-23K / TOP DRIVE RPM 40-60 / PUMP 122 SPM = 550 GPM / PUMP PRESSURE ON/OFF BOTTOM 2550/2260 PSI / MUD MOTOR RPM 88 / PU/SO/ROT WT 250/154/201 TORQUE ON/OFF BOTTOM 15 K / 16 K 20' FLAIR DRILLING 20 / 25 ON CONN. TRAP 200 PSI ON CONN.
	15:30 - 16:00	0.50	DRLPRO	07	A	P		RIG SERVICE

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Event: DRILLING		Start Date: 9/25/2011	End Date: 11/26/2011
Active Datum: RKB @4,888.00usft (above Mean Sea Level)		UWI: SW/SE/0/9/S/21/E/19/0/0/26/PM/S/1079/E/0/1594/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
	16:00 - 20:30	4.50	DRLPRO	02	D	P		DRILL/ SURVEY F 10167 TO 10314 =147 '@32' FPH // WOB 16K-23K / TOP DRIVE RPM 40-80 / PUMP 122 SPM = 550 GPM / PUMP PRESSURE ON/OFF BOTTOM 2500/2300 PSI / MUD MOTOR RPM 88 / PU/SO/ROT WT 256/156/190207 TORQUE ON/OFF BOTTOM 15 K / 16 K 20' FLAIR DRILLING 20 / 25 ON CONN. TRAP 250 PSI ON CONN.
	20:30 - 0:00	3.50	DRLPRO	05	C	P		CIRC COND HOLE RAISE MUD WT / FOR SHORT TRIP TO SHOE.
11/23/2011	0:00 - 7:00	7.00	DRLPRO	05	C	P		CIRC COND HOLE RAISE MUD WT / FOR SHORT TRIP TO SHOE.
	7:00 - 7:30	0.50	DRLPRO	06	E	P		TRIP OUT 2 STANDS MONITOR WELL WELL FLOWING (GAIN 65 BBLs) TIH
	7:30 - 15:00	7.50	DRLPRO	05	C	P		CIRC COND HOLE RAISE MUD WT / FOR SHORT TRIP TO SHOE. /STRATA ROTATING RUBBER LEAKING / CIRC THRU CHOKE / RAISING MUD WT TO KILL WELL MW 11.7 IN 11.4 OUT VIS 40 10% LCM / 120 BBL MUD LOSS / SPOT 85 BBLs 12.5 MUD ON BTM
	15:00 - 16:00	1.00	DRLPRO	07	C	P		TOH 2 STDS / X/O STRATA ROTATING RUBBER / WELL FLOWING,(20 BBL GAIN)TIH
	16:00 - 19:30	3.50	DRLPRO	05	B	P		CCH RAISING MUD WT TO 11.9 PPG /SPOT 90 BBLs 13# ON BTM
	19:30 - 0:00	4.50	DRLPRO	06	E	P		TOH / WIPER TRIP TO CSG SHOE / WORK THRU TIGHT SPOT 4390-4385 ,BREAK CIRC @ 2850',FLOW CHECK
11/24/2011	0:00 - 4:30	4.50	DRLPRO	06	E	P		TIH / WORK THRU TIGHT SPOT @ 4385-9390',CIH, BREAK CIRC @ 6800, CIH, TO 10,220 ,WASH 95'TO BTM , NO FILL / 20 BBL MUD LOSS ON TRIP
	4:30 - 7:30	3.00	DRLPRO	05	C	P		CCH FOR LOGS / BTMS UP MUD CUT 2/10THS 11.9-11.7 /NO FLARE / MW 12.0
	7:30 - 14:00	6.50	DRLPRO	06	B	P		TOH F/ LOGS, NO PROBLEMS
	14:00 - 17:00	3.00	EVALPR	11	G	P		REVIEW JSA R/U HALLIBURTON RUN TRIPLE COMBO,LOGS STOPPED @ 4450',TOH RU HALLIBURTON
	17:00 - 20:30	3.50	EVALPR	06	E	P		M/U TRICONE BIT ,BIT SUB TIH,BREAK CIRC @ SHOE,CIH ,TIGHTSPOTS @ 4375, 4395,4420 HIT BRIDGE @ 4550
	20:30 - 21:30	1.00	EVALPR	03	A	P		WASH & REAM F/ 4454- 4496
	21:30 - 0:00	2.50	EVALPR	06				TIH , BREAK CIRC @ 7500,CIH TRIPPING IN @ 8450'
11/25/2011	0:00 - 1:00	1.00	EVALPR	06	E	P		TIH ,WASH 95' TO BTM 4' FILL / 35 BBL MUD LOSS ON TRIP
	1:00 - 3:00	2.00	EVALPR	05	B	P		CIRC & COND HOLE F/ LOGS 12.0 MW ON BTMS UP / NO FLARE/ RAISE MT WT TO 12.3 LCM 10%
	3:00 - 8:00	5.00	EVALPR	06	B	P		PULL 5 STDS ,PUMP SLUG TOH F/LOGS 2ND RUN / NO TIGHT SPOTS/HOLE TOOK PROPER FLUID
	8:00 - 13:30	5.50	EVALPR	11	G	P		REVIEW CTJAS,RU HALLIBURTON RUN TRIPLE COMBO, LOGGER TD 10,321, DRILLER TD 10,314 LOG OUT TO SURFACE R/D SAME
	13:30 - 14:00	0.50	MAINT	07	A	P		RIG SERVICE CHANGE OIL IN TOP DRIVE
	14:00 - 15:00	1.00	CSG	12	B	P		PULL WEAR BUSHING / X/O BAILS
	15:00 - 16:30	1.50	CSG	12	A	P		REVIEW CTJSA ,RIG UP FRANKS CASING & TORQUE TURN EQUIP

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Project: UTAH-UINTAH			Site: NBU 921-19O PAD		Rig Name No: PROPETRO 11/11, H&P 298/298
Event: DRILLING			Start Date: 9/25/2011		End Date: 11/26/2011
Active Datum: RKB @4,888.00usft (above Mean Sea Level)			UWI: SW/SE/0/9/S/21/E/19/0/0/26/PM/S/1079/E/0/1594/0/0		

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	16:30 - 0:00	7.50	CSG	12	C	P		RUN 128 JTS P-110 11.6# LT&C(5194') & 34 JTS OF DQX I-80 CURRENTLY RUNNING CASING @ 6642'
11/26/2011	0:00 - 3:30	3.50	CSG	12	C	P		RUN 128 JTS P-110 11.6# LT&C(5194') & 124 JTS OF DQX I-80 (5100)4.5 CASING + RELATED TOOLS / BREAKING CIRCULATION @ SELECTED INTERVALS / HOLDING CSG @ 10,294 FOR CIRC & CEMENTING / DQX JTS TORQUE TURNED & TORQUED AS PER TSI PERSONNAL
	3:30 - 5:00	1.50	CSG	05	D	P		CIRC CASING / RU FRANKS CASERS / HOLD SAFETY MEETING W/ BJ
	5:00 - 8:30	3.50	CSG	12	E	P		INSTALL BJ CMT HEAD , TEST PUMP & LINES TO 5000 PSI,DROP BOTTOM PLUG,PUMP 25 BBLS FRESH WATER SPACER,563 SKS LEAD CEMENT @ 12.5 PPG, (PREM LITE II + .025 pps CELLO FLAKE + 5 pps KOL SEAL + .05 lb/sx STATIC FREE + 10% bwoc BENTONITE + .2% bwoc SODIUM META SILICATE + .35 % R-3 + 101.8% FRESH WATER / (14.52 gal/sx, 2.02 yield) + 1245 SX TAIL @ 14.3 ppg (CLS G 50/50 POZ + 10% SALT + .05lbs/sx STATIC FREE + .2% R3 + .002 GPS FP-6L + 2% BENTONITE + 213.9 BBLS H2O / (5.90 gal/sx, 1.31 yield) / DROP TOP PLUG & DISPLACE W/ 159.3 BBLS H2O + ADDITIVES / PLUG DOWN @ 08:11 HOURS / FLOATS HELD W/ 2.5 BBLS H2O RETURNED TO INVENTORY/ GOOD CIRC THRU 105 BBLS,IN DISP,SLOW RATE TO 5 BPM PARTICAL RETURNS @136 BBLS SLOW RATE 3 BPM / NO CMT TO SURFACE / LIFT PRESSURE @2,993 PSI / BUMP PRESSURE TO 3,547 PSI / TOP OF TAIL CEMENT CALCULATED @ 4400 / RIG DOWN CMT EQUIP/ CSG SHOE 10,294,FC @ 10,252/ TOP OF ,MKR JT MV 7,984,MKR JT WASATCH 5,100' / RD CEMENTERS
	8:30 - 12:30	4.00	CSG	14	A	P		FLUSH OUT & PICK UP BOP STACK,SET C-22 CSG SLIPS W/ 100K,CLEAN PITS /PREP TO SKID / RIG RELEASED TO NBU 921-19P4CS @ 12:30 PM 11/26/2011

1 General

1.1 Customer Information

Company	US ROCKIES REGION
Representative	
Address	

1.2 Well/Wellbore Information

Well	NBU 921-19O4BS BLUE	Wellbore No.	OH
Well Name	NBU 921-19O4BS	Wellbore Name	NBU 921-19O4BS
Report No.	1	Report Date	1/12/2012
Project	UTAH-UINTAH	Site	NBU 921-19O PAD
Rig Name/No.		Event	COMPLETION
Start Date	1/12/2012	End Date	
Spud Date	10/6/2011	Active Datum	RKB @4,888.00usft (above Mean Sea Level)
UWI	SW/SE/0/9/S/21/E/19/0/0/26/PM/S/1079/E/0/1594/0/0		

1.3 General

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

1.4 Initial Conditions

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

1.5 Summary

Gross Interval	6,998.0 (usft)-10,104.0 (us)	Start Date/Time	1/23/2012 12:00AM
No. of Intervals	49	End Date/Time	1/23/2012 12:00AM
Total Shots	240	Net Perforation Interval	74.00 (usft)
Avg Shot Density	3.24 (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
1/23/2012 12:00AM	WASATCH/			6,998.0	6,999.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO	N

2.1 Perforated Interval (Continued)

Date	Formation/ Reservoir	CCL@ (usft)	CCL-T S (usft)	MD Top (usft)	MD Base (usft)	Shot Density (shot/ft)	Misfires/ Add. Shot	Diamete r (in)	Carr Type /Carr Manuf	Carr Size (in)	Phasing (°)	Charge Desc /Charge Manufacturer	Charge Weight (gram)	Reason	Misrun
1/23/2012 12:00AM	WASATCH/			7,060.0	7,061.0	3.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
1/23/2012 12:00AM	WASATCH/			7,153.0	7,155.0	3.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
1/23/2012 12:00AM	WASATCH/			7,262.0	7,264.0	3.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
1/23/2012 12:00AM	WASATCH/			7,304.0	7,306.0	3.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
1/23/2012 12:00AM	WASATCH/			7,688.0	7,690.0	3.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
1/23/2012 12:00AM	WASATCH/			7,758.0	7,760.0	3.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
1/23/2012 12:00AM	WASATCH/			7,878.0	7,879.0	3.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
1/23/2012 12:00AM	WASATCH/			7,917.0	7,918.0	3.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
1/23/2012 12:00AM	WASATCH/			7,949.0	7,951.0	3.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
1/23/2012 12:00AM	WASATCH/			8,115.0	8,117.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
1/23/2012 12:00AM	MESA VERDE/			8,142.0	8,144.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
1/23/2012 12:00AM	MESA VERDE/			8,178.0	8,180.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
1/23/2012 12:00AM	MESA VERDE/			8,296.0	8,297.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
1/23/2012 12:00AM	MESA VERDE/			8,322.0	8,324.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
1/23/2012 12:00AM	MESA VERDE/			8,339.0	8,340.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
1/23/2012 12:00AM	MESA VERDE/			8,365.0	8,366.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
1/23/2012 12:00AM	MESA VERDE/			8,406.0	8,407.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
1/23/2012 12:00AM	MESA VERDE/			8,452.0	8,454.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
1/23/2012 12:00AM	MESA VERDE/			8,540.0	8,542.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
1/23/2012 12:00AM	MESA VERDE/			8,565.0	8,566.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
1/23/2012 12:00AM	MESA VERDE/			8,626.0	8,628.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	

2.1 Perforated Interval (Continued)

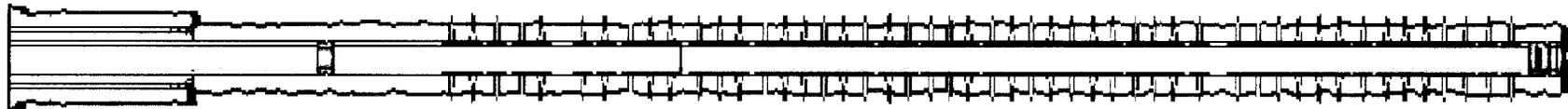
Date	Formation/ Reservoir	CCL@ (usft)	CCL-T S (usft)	MD Top (usft)	MD Base (usft)	Shot Density (shot/ft)	Misfires/ Add. Shot	Diamete r (in)	Carr Type /Carr Manuf	Carr Size (in)	Phasing (°)	Charge Desc /Charge Manufacturer	Charge Weight (gram)	Reason	Misrun
1/23/2012 12:00AM	MESA VERDE/			8,648.0	8,650.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
1/23/2012 12:00AM	MESA VERDE/			8,663.0	8,664.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
1/23/2012 12:00AM	MESA VERDE/			8,742.0	8,743.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
1/23/2012 12:00AM	MESA VERDE/			8,772.0	8,774.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
1/23/2012 12:00AM	MESA VERDE/			8,797.0	8,798.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
1/23/2012 12:00AM	MESA VERDE/			8,814.0	8,816.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
1/23/2012 12:00AM	MESA VERDE/			8,848.0	8,850.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
1/23/2012 12:00AM	MESA VERDE/			8,905.0	8,906.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
1/23/2012 12:00AM	MESA VERDE/			8,925.0	8,926.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
1/23/2012 12:00AM	MESA VERDE/			8,995.0	8,996.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
1/23/2012 12:00AM	MESA VERDE/			9,013.0	9,014.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
1/23/2012 12:00AM	MESA VERDE/			9,029.0	9,030.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
1/23/2012 12:00AM	MESA VERDE/			9,159.0	9,160.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
1/23/2012 12:00AM	MESA VERDE/			9,493.0	9,494.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
1/23/2012 12:00AM	MESA VERDE/			9,527.0	9,528.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
1/23/2012 12:00AM	MESA VERDE/			9,567.0	9,568.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
1/23/2012 12:00AM	MESA VERDE/			9,606.0	9,607.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
1/23/2012 12:00AM	MESA VERDE/			9,641.0	9,642.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
1/23/2012 12:00AM	MESA VERDE/			9,673.0	9,674.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
1/23/2012 12:00AM	MESA VERDE/			9,766.0	9,768.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
1/23/2012 12:00AM	MESA VERDE/			9,844.0	9,846.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	

2.1 Perforated Interval (Continued)

Date	Formation/ Reservoir	CCL@ (usft)	CCL-T S (usft)	MD Top (usft)	MD Base (usft)	Shot Density (shot/ft)	Misfires/ Add. Shot	Diamete r (in)	Carr Type /Carr Manuf	Carr Size (in)	Phasing (°)	Charge Desc /Charge Manufacturer	Charge Weight (gram)	Reason	Misrun
1/23/2012 12:00AM	MESA VERDE/			9,862.0	9,863.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
1/23/2012 12:00AM	MESA VERDE/			9,889.0	9,890.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
1/23/2012 12:00AM	MESA VERDE/			9,907.0	9,908.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
1/23/2012 12:00AM	MESA VERDE/			9,950.0	9,952.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
1/23/2012 12:00AM	MESA VERDE/			10,026.0	10,030.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
1/23/2012 12:00AM	MESA VERDE/			10,102.0	10,104.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	

3 Plots

3.1 Wellbore Schematic



**US ROCKIES REGION
Operation Summary Report**

Well: NBU 921-19O4BS BLUE		Spud Conductor: 9/30/2011		Spud Date: 10/6/2011	
Project: UTAH-UINTAH		Site: NBU 921-19O PAD		Rig Name No: SWABBCO 6/6	
Event: COMPLETION		Start Date: 1/12/2012		End Date:	
Active Datum: RKB @4,888.00usft (above Mean Sea Level)			UWI: SW/SE/0/9/S/21/E/19/0/0/26/PM/S/1079/E/0/1594/0/0		

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
10/6/2011	-							
1/12/2012	9:00 - 11:00	2.00	COMP	33		P		FILL SURFACE CSG. MIRU B&C QUICK TEST. PSI TEST T/ 1000 PSI. HELD FOR 15 MIN LOST 12 PSI. PSI TEST T/ 3500 PSI. HELD FOR 15 MIN LOST 21 PSI. 1ST PSI TEST T/ 7000 PSI. HELD FOR 30 MIN LOST 52 PSI. NO COMMUNICATION OR MIGRATION WITH SURFACE CSG BLEED OFF PSI. MOVE T/ NEXT WELL. SWIFW
1/23/2012	8:00 - 15:00	7.00	COMP	36	B	P		OPEN WELL 0 PSI. PERF STG 1)PU 3 1/8 EXP GUN, 23 GM, .36 HOLE SIZE. 120 DEG PHASING. RIH PERF AS PER DESIGN. POOH. SWIFN.

US ROCKIES REGION
Operation Summary Report

Well: NBU 921-1904BS BLUE		Spud Conductor: 9/30/2011	Spud Date: 10/6/2011
Project: UTAH-UINTAH		Site: NBU 921-190 PAD	Rig Name No: SWABBCO 6/6
Event: COMPLETION		Start Date: 1/12/2012	End Date:
Active Datum: RKB @4,888.00usft (above Mean Sea Level)		UWI: SW/SE/0/9/S/21/E/19/0/0/26/PM/S/1079/E/0/1594/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
1/24/2012	7:15 - 18:00	10.75	COMP	36	B	P		<p>FRAC STG 1)WHP 1421 PSI, BRK 3510 PSI @ 4.9 BPM. ISIP 2413 PSI, FG .68. CALC PERFS OPEN @ 45.4 BPM @ 6078 PSI = 70% HOLES OPEN. ISIP 3024 PSI, FG .74, NPI 611 PSI. MP 6769 PSI, MR 48.9 BPM, AP 5777 PSI, AR 45.8 BPM, PUMPED 30/50 OWATTA SAND. SWI, X-OVER FOR WL.</p> <p>PERF STG 2)PU 4 1/2 8K HAL CBP & 3 1/8 EXP GUN, 23 GM, .36 HOLE SIZE. 120 DEG PHASING. RIH SET CBP @ 9939' P/U PERF AS PER DESIGN. POOH, X-OVER FOR FRAC CREW.</p> <p>FRAC STG 2)WHP 2130 PSI, BRK 3226 PSI @ 4.4 BPM. ISIP 2470 PSI, FG .69. CALC PERFS OPEN @ 50.1 BPM @ 5811 PSI = 88% HOLES OPEN. ISIP 3373 PSI, FG .78, NPI 903 PSI. MP 6571 PSI, MR 50.5 BPM, AP 5701 PSI, AR 50 BPM, PUMPED 30/50 OWATTA SAND. SWI, X-OVER FOR WL.</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 @ 9710' P/U PERF AS PER DESIGN. POOH, X-OVER FOR FRAC CREW.</p> <p>FRAC STAGE 3# WHP 1870 PSI, BRK 3017 PSI @ 4.4 BPM. ISIP 2282 PSI, FG .68. CALC PERFS OPEN @ 48.7 BPM @ 5024 PSI = 100% HOLES OPEN. ISIP 2970 PSI, FG .75, NPI 696 PSI. MP 6078 PSI, MR 51 BPM, AP 4844 PSI, AR 50.6 BPM, PUMPED 30/50 OWATTA SAND. SWI, X-OVER FOR WL.</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 @ 9190' P/U PERF AS PER DESIGN. POOH, SWFN. HSM. HIGH PSI LINES</p>
1/25/2012	6:45 - 7:00	0.25	COMP	48		P		

**US ROCKIES REGION
Operation Summary Report**

Well: NBU 921-1904BS BLUE		Spud Conductor: 9/30/2011	Spud Date: 10/6/2011
Project: UTAH-UINTAH		Site: NBU 921-190 PAD	Rig Name No: SWABBCO 6/6
Event: COMPLETION		Start Date: 1/12/2012	End Date:
Active Datum: RKB @4,888.00usft (above Mean Sea Level)		UWI: SW/SE/0/9/S/21/E/19/0/0/26/PM/S/1079/E/0/1594/0/0	

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 4)WHP 1761 PSI, BRK 2964 PSI @ 4.5 BPM. ISIP 2174 PSI, FG .68. CALC PERFS OPEN @ 48.4 BPM @ 5968 PSI = 68% HOLES OPEN. ISIP 2875 PSI, FG .76, NPI 701 PSI. MP 6324 PSI, MR 50. BPM, AP 5073 PSI, AR 50.1 BPM, PUMPED 30/50 OWATTA SAND</p> <p>PERF STAGE 5) PU 4 1/2 HAL CBP, 3 1/8 EXP GUN, 23 GM, .36 HOLES. RIH SET CBP @ 8880'. P/U & PERF AS PER DES.</p> <p>FRAC STAGE 5)WHP 1761 PSI, BRK 3113 PSI @ 4.7 BPM. ISIP 2225 PSI, FG .69. CALC PERFS OPEN @ 50.5 BPM @ 4927 PSI = 100% HOLES OPEN. ISIP 2829 PSI, FG .76, NPI 604 PSI. MP 5235 PSI, MR 51.1 BPM, AP 4550 PSI, AR 50.5 BPM, PUMPED 30/50 OWATTA SAND</p> <p>PERF STAGE 6) PU 4 1/2 HAL CBP, 3 1/8 EXP GUN. 23 GM, .36 HOLE SIZE, 120 DEG PHASING. RIH SET CBP @ 8688'. P/U & PERF AS PER DES.</p> <p>FRAC STAGE 6)WHP 1740 PSI, BRK 2704 PSI @ 4.3 BPM. ISIP 2250 PSI, FG .70. CALC PERFS OPEN @ 48.4 BPM @ 5010 PSI = 94% HOLES OPEN. ISIP 2954 PSI, FG .78, NPI 704 PSI. MP 5462 PSI, MR 53 BPM, AP 4861 PSI, AR 50.8 BPM, PUMPED 30/50 OWATTA SAND</p> <p>PERF STAGE 7) PU 4 1/2 HAL CBP, 3 1/8 EXP GUN, 23 GM, .36 HOLE SIZE, 120 DEG PHASING, RIH SET CBP @ 8490'. P/U & PERF AS PER DES.</p> <p>FRAC STAGE 7)WHP 1374 PSI, BRK 2715 PSI @ 4.5 BPM. ISIP 1907 PSI, FG .67. CALC PERFS OPEN @ 52.6 BPM @ 4619 PSI = 100% HOLES OPEN. ISIP 2750 PSI, FG .77, NPI 851 PSI. MP 5512 PSI, MR 54.9 BPM, AP 4423 PSI, AR 53.4 BPM, PUMPED 30/50 OWATTA SAND</p> <p>PERF STAGE 8) PU 4 1/2 HAL CBP, & 3 1/8 EXP GUN. 23 GM, .36 HOLE SIZE, 90 DEG PHASING. SET CBP @ 8210'. P/U PERF AS PER DES.</p> <p>FRAC STAGE 8)WHP 1968 PSI, BRK 3060 PSI @ 4.3 BPM. ISIP 2441 PSI, FG .74. CALC PERFS OPEN @ 50.2 BPM @ 5091 PSI = 100% HOLES OPEN.</p>

US ROCKIES REGION
Operation Summary Report

Well: NBU 921-19O4BS BLUE		Spud Conductor: 9/30/2011		Spud Date: 10/6/2011	
Project: UTAH-UINTAH		Site: NBU 921-19O PAD		Rig Name No: SWABBCO 6/6	
Event: COMPLETION		Start Date: 1/12/2012		End Date:	
Active Datum: RKB @4,888.00usft (above Mean Sea Level)		UWI: SW/SE/0/9/S/21/E/19/0/0/26/PM/S/1079/E/0/1594/0/0			

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
1/26/2012	7:00 - 18:00	11.00	COMP	36	B	P		<p>ISIP 2745 PSI, FG .78, NPI 304 PSI. MP 5310 PSI, MR 50.6 BPM, AP 4719 PSI, AR 50.3 BPM, PUMPED 30/50 OWATTA SAND</p> <p>PERF STAGE 9) PU 4 1/2 HAL CBP, 3 1/8 EXP GUN. 23 GM, .36 HOLE SIZE, 120 DEG PHASING. SET CBP @ 7976'. P/U PERF AS PER DES. POOH, SWIFN. FRAC STG 9)WHP 1489 PSI, BRK 2237 PSI @ 4.0 BPM. ISIP 1698 PSI, FG .66. CALC PERFS OPEN @ 48.3 BPM @ 6073 PSI = 63% HOLES OPEN. ISIP 2693 PSI, FG .78, NPI 995 PSI. MP 6450 PSI, MR 53 BPM, AP 5480 PSI, AR 49.9 BPM, PUMPED 30/50 OWATTA SAND</p> <p>PERF STAGE 10) PU 4 1/2 HAL CBP, & 3 1/8 EXP GUN, 23 GM, .36 HOLE SIZE, 120 DEG PHASING. SET CBP @ 7338'. P/U & PERF AS PER DES.</p> <p>FRAC STAGE 10)WHP 1089 PSI, BRK 2158 PSI @ 5.1 BPM. ISIP 1571 PSI, FG .66. CALC PERFS OPEN @ 50.7 BPM @ 4434 PSI = 91% HOLES OPEN. ISIP 2316 PSI, FG .76, NPI 745 PSI. MP 4567 PSI, MR 53 BPM, AP 3924 PSI, AR 50.8 BPM, PUMPED 30/50 OWATTA SAND</p> <p>PU 4 1/2 HAL CBP SET @ 6940. POOH, SWI. DONE FRACING THIS WELL.</p> <p>TOTAL SAND = 237,780 LBS TOTAL CLFL = 11,326 BBLS JSA= RIG UP RESPONSIBILITIES</p>
1/31/2012	7:00 - 7:15	0.25	COMP	48		P		

US ROCKIES REGION
Operation Summary Report

Well: NBU 921-19O4BS BLUE		Spud Conductor: 9/30/2011	Spud Date: 10/6/2011
Project: UTAH-UINTAH		Site: NBU 921-19O PAD	Rig Name No: SWABBCO 6/6
Event: COMPLETION		Start Date: 1/12/2012	End Date:
Active Datum: RKB @4,888.00usft (above Mean Sea Level)		UWI: SW/SE/0/9/S/21/E/19/0/0/26/PM/S/1079/E/0/1594/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
	7:15 - 17:00	9.75	COMP	30		P		<p>RU RIG ND WELLHEAD NU BOPS RU FLOOR & TUBING EQUIP TALLY & PU 219 JNTS TAG 1 ST PLUG @ 6940' RU PWR SWWL TEST BOPS TO 3000# EST CIRC DILL 1 ST PLUG</p> <p>PLUG #1] DRILL THRU HALLI 8K CBP @ 6940' IN 15 MIN W/ 150# INCREASE</p> <p>PLUG #2] CONTINUE TO RIH TAG SAND @ 7308' (30' FILL) C/O & DRILL THRU HALLI 8K CBP @ 7338' IN 10 MIN W/ 150# INCREASE</p> <p>PLUG #3] CONTINUE TO RIH TAG SAND @ 7956' (20' FILL) C/O & DRILL THRU HALLI 8K CBP @ 7976' IN 9 MIN W/ 100# INCREASE</p> <p>PLUG #4] CONTINUE TO RIH TAG SAND @ 8180' (30' FILL) C/O & DRILL THRU HALLI 8K CBP @ 8210' IN 8 MIN W/ 200# INCREASE CONTINUE TO FLOW WELL 35 MIN TO ALLOW SAND TO CLEAN UP SIW SDFN</p>
2/1/2012	7:00 - 7:15	0.25	COMP	48		P		JSA= LANDING TUBING

US ROCKIES REGION
Operation Summary Report

Well: NBU 921-1904BS BLUE		Spud Conductor: 9/30/2011	Spud Date: 10/6/2011
Project: UTAH-UINTAH		Site: NBU 921-190 PAD	Rig Name No: SWABBCO 6/6
Event: COMPLETION		Start Date: 1/12/2012	End Date:
Active Datum: RKB @4,888.00usft (above Mean Sea Level)		UWI: SW/SE/0/9/S/21/E/19/0/0/26/PM/S/1079/E/0/1594/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
	7:15 - 17:00	9.75	COMP	30		P		<p>SIWP= 2000# OPEN WELL TO PIT NU RIG PUMP RIH TAG SAND ON PLUG #5 EST CIRC</p> <p>PLUG #5] TAG SAND @ 8460' (30' FILL) C/O & DRILL THRU HALLI 8K CBP @ 8490' IN 5 MIN W/ 150# INCREASE</p> <p>PLUG #6] CONTINUE TO RIH TAG SAND @ 8663' (25' FILL) C/O & DRILL THRU HALLI 8K CBP @ 8688' IN 9 MIN W/ 250# INCREASE</p> <p>PLUG #7] CONTINUE TO RIH TAG SAND @ 8860' (20' FILL) C/O & DRILL THRU HALLI 8K CBP @ 8880' IN 10 MIN W/ 100# INCREASE</p> <p>PLUG #8] CONTINUE TO RIH TAG SAND @ 9170' (20' FILL) C/O & DRILL THRU HALLI 8K CBP @ 9190' IN 8 MIN W/ 200# INCREASE (1000# ON WELL)</p> <p>PLUG #9] CONTINUE TO RIH TAG SAND @ 9680' (30' FILL) C/O & DRILL THRU HALLI 8K CBP @ 9710' IN 5 MIN W/ 150# INCREASE</p> <p>PLUG #10] CONTINUE TO RIH TAG SAND @ 9909' (30' FILL) C/O & DRILL THRU HALLI 8K CBP @ 9939' IN 7 MIN W/ 200# INCREASE</p> <p>PBDJ] CONTINUE TO RIH TAG SAND @ 10200' (48' FILL) C/O & DRILL TO 10248' CIRC CLEAN POOH LD 17 JNTS LAND TUB ON HNGR W/ 306 JNTS EOT @ 9735.71' RD PWR SWWL RD FLOOR & TUBING EQUIP ND BOPS NU WELLHEAD DROP BALL PUMP OFF BIT @ 2500# SIW ALLOW BIT TO FALL TURN WELL OVER TO FBC RD RIG & EQUIP MOVE TO LOVE 1-12</p> <p>TUBING DETAIL</p> <p>K.B.....26.0</p> <p>HNGR.....1.0</p> <p>306 JNTS 2-3/8" L-80.....9706.51</p> <p>POBS.....2.20</p> <p>EOT@.....9735.71</p> <p>TOTAL FLUID PUMPED= 11326 BBLS</p> <p>RIG REC= 3000 BBLS</p> <p>LEFT TO REC= 8326 BBLS</p> <p>TUBING ON LOC= 371 JNTS</p> <p>USED= 306 JNTS</p> <p>UNUSED= 65 JNTS</p>

1 General

1.1 Customer Information

Company	US ROCKIES REGION
Representative	
Address	

1.2 Well Information

Well	NBU 921-19O4BS BLUE	Wellbore No.	OH
Well Name	NBU 921-19O4BS	Common Name	NBU 921-19O4BS
Project	UTAH-UINTAH	Site	NBU 921-19O PAD
Vertical Section	215.01 (°)	North Reference	True
Azimuth		Origin E/W	
Origin N/S		UWI	SW/SE/0/9/S/21/E/19/0/0/26/PM/S/1079/E/0/159 4/0/0
Spud Date	10/6/2011	Active Datum	RKB @4,888.00usft (above Mean Sea Level)

2 Survey Name

2.1 Survey Name: Survey #1

Survey Name	Survey #1	Company	ANADARKO
Started	10/6/2011	Ended	
Tool Name	MWD	Engineer	Anadarko Employee

2.1.1 Tie On Point

MD (usft)	Inc (°)	Azi (°)	TVD (usft)	N/S (usft)	E/W (usft)
22.00	0.00	0.00	22.00	0.00	0.00

2.1.2 Survey Stations

Date	Type	MD (usft)	Inc (°)	Azi (°)	TVD (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLog (°/100usft)	Build (°/100usft)	Turn (°/100usft)	TFace (°)
10/6/2011	Tie On	22.00	0.00	0.00	22.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/6/2011	NORMAL	197.00	0.29	236.02	197.00	-0.25	-0.37	0.41	0.17	0.17	0.00	236.02
	NORMAL	279.00	1.18	241.87	278.99	-0.76	-1.28	1.36	1.09	1.09	7.13	7.75
	NORMAL	362.00	2.28	229.27	361.95	-2.24	-3.29	3.72	1.39	1.33	-15.18	-25.45
10/7/2011	NORMAL	452.00	3.63	228.11	451.83	-5.31	-6.77	8.23	1.50	1.50	-1.29	-3.12
	NORMAL	542.00	5.00	226.61	541.57	-9.91	-11.74	14.85	1.53	1.52	-1.67	-5.46
	NORMAL	632.00	6.44	229.49	631.12	-15.88	-18.43	23.58	1.63	1.60	3.20	12.71
	NORMAL	722.00	7.06	234.74	720.50	-22.35	-26.78	33.67	0.97	0.69	5.83	47.49
	NORMAL	812.00	8.31	230.11	809.69	-29.72	-36.29	45.16	1.55	1.39	-5.14	-28.66
	NORMAL	902.00	9.88	227.11	898.56	-39.15	-46.93	58.99	1.82	1.74	-3.33	-18.29
	NORMAL	992.00	11.31	223.36	987.02	-50.82	-58.65	75.27	1.76	1.59	-4.17	-27.59
	NORMAL	1,082.00	12.25	219.74	1,075.13	-64.58	-70.82	93.52	1.33	1.04	-4.02	-39.96
	NORMAL	1,172.00	13.69	216.36	1,162.83	-80.50	-83.23	113.68	1.81	1.60	-3.76	-29.44
	NORMAL	1,262.00	15.38	213.86	1,249.95	-98.98	-96.20	136.27	2.00	1.88	-2.78	-21.58
	NORMAL	1,352.00	16.81	213.61	1,336.42	-119.74	-110.05	161.21	1.59	1.59	-0.28	-2.89
	NORMAL	1,442.00	17.25	214.36	1,422.47	-141.59	-124.79	187.56	0.55	0.49	0.83	26.89
	NORMAL	1,532.00	17.13	213.24	1,508.45	-163.69	-139.59	214.15	0.39	-0.13	-1.24	-110.46
	NORMAL	1,622.00	17.44	214.61	1,594.39	-185.88	-154.51	240.89	0.57	0.34	1.52	53.36

2.1.2 Survey Stations (Continued)

Date	Type	MD (usft)	Inc (°)	Azi (°)	TVD (usft)	N/S (usft)	EW (usft)	V. Sec (usft)	DLeg (°/100usft)	Build (°/100usft)	Turn (°/100usft)	TFace (°)
10/7/2011	NORMAL	1,712.00	17.50	217.36	1,680.24	-207.73	-170.38	267.90	0.92	0.07	3.06	87.16
	NORMAL	1,802.00	17.94	216.99	1,765.97	-229.56	-186.93	295.27	0.50	0.49	-0.41	-14.53
	NORMAL	1,892.00	18.06	217.74	1,851.56	-251.66	-203.81	323.06	0.29	0.13	0.83	62.98
	NORMAL	1,982.00	18.00	218.99	1,937.14	-273.50	-221.10	350.86	0.44	-0.07	1.39	99.41
	NORMAL	2,072.00	17.69	220.49	2,022.81	-294.71	-238.73	378.35	0.62	-0.34	1.67	124.71
	NORMAL	2,162.00	17.81	217.86	2,108.53	-315.98	-256.06	405.71	0.90	0.13	-2.92	-82.74
	NORMAL	2,252.00	16.31	216.36	2,194.57	-337.02	-272.00	432.09	1.74	-1.67	-1.67	-164.37
	NORMAL	2,342.00	15.50	214.49	2,281.12	-357.11	-286.30	456.75	1.06	-0.90	-2.08	-148.58
10/8/2011	NORMAL	2,432.00	15.06	212.86	2,367.94	-376.85	-299.45	480.46	0.68	-0.49	-1.81	-136.47
	NORMAL	2,522.00	14.50	211.99	2,454.96	-396.22	-311.77	503.39	0.67	-0.62	-0.97	-158.80
	NORMAL	2,612.00	14.06	210.74	2,542.18	-415.18	-323.32	525.55	0.60	-0.49	-1.39	-145.58
	NORMAL	2,702.00	13.13	208.86	2,629.66	-433.53	-333.84	546.61	1.14	-1.03	-2.09	-155.50
	NORMAL	2,792.00	12.44	208.86	2,717.43	-450.97	-343.46	566.42	0.77	-0.77	0.00	180.00
	NORMAL	2,882.00	11.81	210.86	2,805.42	-467.36	-352.86	585.24	0.84	-0.70	2.22	147.28
	NORMAL	2,926.00	11.73	211.03	2,848.49	-475.06	-357.48	594.19	0.20	-0.18	0.39	156.65

2.2 Survey Name: PRODUCTION

Survey Name	PRODUCTION	Company	WEATHERFORD
Started	11/18/2011	Ended	
Tool Name	MWD	Engineer	Anadarko Employee

2.2.1 Tie On Point

MD (usft)	Inc (°)	Azi (°)	TVD (usft)	N/S (usft)	EW (usft)
2,926.00	11.73	211.03	2,848.49	-475.06	-357.48

2.2.2 Survey Stations

Date	Type	MD (usft)	Inc (°)	Azi (°)	TVD (usft)	N/S (usft)	EW (usft)	V. Sec (usft)	DLeg (°/100usft)	Build (°/100usft)	Turn (°/100usft)	TFace (°)
11/18/2011	Tie On	2,926.00	11.73	211.03	2,848.49	-475.06	-357.48	594.19	0.00	0.00	0.00	0.00
11/18/2011	NORMAL	3,028.00	10.38	207.74	2,948.60	-492.08	-367.10	613.65	1.46	-1.32	-3.23	-156.56
	NORMAL	3,123.00	9.06	204.36	3,042.23	-506.47	-374.17	629.49	1.51	-1.39	-3.56	-158.28
	NORMAL	3,217.00	6.71	205.29	3,135.34	-518.18	-379.57	642.18	2.50	-2.50	0.99	177.35
	NORMAL	3,311.00	5.04	215.57	3,228.85	-526.50	-384.32	651.72	2.09	-1.78	10.94	152.83
	NORMAL	3,406.00	3.54	237.33	3,323.58	-531.48	-389.21	658.61	2.30	-1.58	22.91	143.17
	NORMAL	3,500.00	1.81	268.49	3,417.48	-533.09	-393.14	662.18	2.34	-1.84	33.15	154.80
	NORMAL	3,595.00	0.25	306.11	3,512.46	-533.01	-394.81	663.07	1.70	-1.64	39.60	174.59
	NORMAL	3,689.00	1.81	354.74	3,606.45	-531.41	-395.11	661.93	1.76	1.66	51.73	55.14
	NORMAL	3,784.00	1.69	351.11	3,701.40	-528.53	-395.46	659.78	0.17	-0.13	-3.82	-139.07
	NORMAL	3,878.00	1.38	345.74	3,795.37	-526.06	-395.96	658.04	0.36	-0.33	-5.71	-157.78
	NORMAL	3,973.00	0.94	328.49	3,890.35	-524.29	-396.65	656.98	0.59	-0.46	-18.16	-149.97
	NORMAL	4,067.00	1.31	322.36	3,984.33	-522.78	-397.70	656.35	0.41	0.39	-6.52	-21.10
	NORMAL	4,162.00	1.06	299.61	4,079.31	-521.49	-399.13	656.11	0.56	-0.26	-23.95	-129.04
	NORMAL	4,257.00	1.13	348.74	4,174.29	-520.13	-400.08	655.55	0.96	0.07	51.72	110.56
	NORMAL	4,351.00	1.44	11.24	4,268.27	-518.07	-400.03	653.83	0.62	0.33	23.94	70.01
	NORMAL	4,446.00	0.94	9.86	4,363.25	-516.13	-399.66	652.03	0.53	-0.53	-1.45	-177.41
	NORMAL	4,540.00	0.56	21.86	4,457.24	-514.94	-399.36	650.88	0.44	-0.40	12.77	163.47
	NORMAL	4,635.00	0.25	54.49	4,552.24	-514.39	-399.02	650.24	0.39	-0.33	34.35	158.91
11/19/2011	NORMAL	4,729.00	0.94	185.74	4,646.24	-515.04	-398.93	650.72	1.19	0.73	139.63	140.90
	NORMAL	4,824.00	1.13	164.99	4,741.22	-516.72	-398.76	652.00	0.44	0.20	-21.84	-73.75
	NORMAL	4,918.00	1.69	166.24	4,835.19	-518.96	-398.19	653.51	0.60	0.60	1.33	3.77

2.2.2 Survey Stations (Continued)

Date	Type	MD (usft)	Inc (°)	Azi (°)	TVD (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)	Build (°/100usft)	Turn (°/100usft)	TFace (°)
11/19/2011	NORMAL	5,013.00	2.06	154.99	4,930.14	-521.87	-397.14	655.28	0.55	0.39	-11.84	-50.57
	NORMAL	5,107.00	2.13	157.99	5,024.08	-525.02	-395.77	657.08	0.14	0.07	3.19	58.96
	NORMAL	5,202.00	1.31	122.36	5,119.04	-527.24	-394.19	657.99	1.38	-0.86	-37.51	-144.38
	NORMAL	5,296.00	1.38	107.74	5,213.01	-528.16	-392.21	657.80	0.37	0.07	-15.55	-85.84
	NORMAL	5,390.00	1.38	113.86	5,306.98	-528.96	-390.09	657.05	0.16	0.00	6.51	93.06
	NORMAL	5,485.00	0.56	31.86	5,401.97	-529.03	-388.80	656.36	1.49	-0.86	-86.32	-156.93
	NORMAL	5,579.00	0.38	31.98	5,495.97	-528.37	-388.39	655.59	0.19	-0.19	0.13	179.75
	NORMAL	5,674.00	0.25	54.23	5,590.97	-527.98	-388.06	655.08	0.19	-0.14	23.42	147.50
	NORMAL	5,768.00	0.25	48.74	5,684.97	-527.73	-387.74	654.69	0.03	0.00	-5.84	-92.74
	NORMAL	5,863.00	0.25	44.61	5,779.97	-527.45	-387.44	654.29	0.02	0.00	-4.35	-92.06
	NORMAL	5,957.00	0.38	24.86	5,873.97	-527.02	-387.16	653.78	0.18	0.14	-21.01	-50.03
	NORMAL	6,052.00	0.31	69.86	5,968.96	-526.64	-386.79	653.25	0.29	-0.07	47.37	126.26
	NORMAL	6,146.00	0.44	75.36	6,062.96	-526.46	-386.20	652.77	0.14	0.14	5.85	18.24
	NORMAL	6,241.00	0.31	141.36	6,157.96	-526.57	-385.69	652.57	0.45	-0.14	69.47	137.94
	NORMAL	6,335.00	0.44	133.30	6,251.96	-527.02	-385.26	652.69	0.15	0.14	-8.57	-26.15
	NORMAL	6,430.00	0.88	132.61	6,346.95	-527.76	-384.46	652.84	0.46	0.46	-0.73	-1.38
	NORMAL	6,524.00	1.06	137.36	6,440.94	-528.89	-383.34	653.12	0.21	0.19	5.05	26.46
	NORMAL	6,619.00	0.19	323.08	6,535.93	-529.41	-382.84	653.26	1.31	-0.92	-183.45	-179.13
	NORMAL	6,713.00	0.19	356.36	6,629.93	-529.13	-382.94	653.09	0.12	0.00	35.40	106.64
	NORMAL	6,807.00	0.06	255.49	6,723.93	-528.99	-383.00	653.00	0.22	-0.14	-107.31	-163.69
	NORMAL	6,902.00	0.13	214.49	6,818.93	-529.09	-383.11	653.15	0.10	0.07	-43.16	-65.92
	NORMAL	6,996.00	0.06	156.24	6,912.93	-529.22	-383.15	653.28	0.12	-0.07	-61.97	-152.60
	NORMAL	7,091.00	0.25	125.11	7,007.93	-529.39	-382.96	653.31	0.21	0.20	-32.77	-40.01
	NORMAL	7,185.00	0.44	142.49	7,101.93	-529.79	-382.58	653.42	0.23	0.20	18.49	37.72
	NORMAL	7,280.00	0.50	136.61	7,196.93	-530.38	-382.07	653.61	0.08	0.06	-6.19	-41.76
	NORMAL	7,374.00	0.75	67.86	7,290.92	-530.45	-381.22	653.18	0.78	0.27	-73.14	-108.08
	NORMAL	7,468.00	0.94	153.86	7,384.92	-530.91	-380.31	653.03	1.24	0.20	91.49	126.12
	NORMAL	7,563.00	0.63	331.61	7,479.91	-531.15	-380.21	653.17	1.65	-0.33	187.11	179.10
11/20/2011	NORMAL	7,657.00	1.94	337.61	7,573.89	-529.22	-381.06	652.08	1.40	1.39	6.38	8.87
	NORMAL	7,752.00	1.94	345.11	7,668.83	-526.18	-382.09	650.18	0.27	0.00	7.89	93.75
	NORMAL	7,847.00	1.75	347.36	7,763.78	-523.21	-382.82	648.17	0.21	-0.20	2.37	160.25
	NORMAL	7,941.00	1.69	346.26	7,857.74	-520.47	-383.46	646.29	0.07	-0.06	-1.17	-151.73
	NORMAL	8,035.00	1.19	357.86	7,951.71	-518.14	-383.83	644.60	0.61	-0.53	12.34	155.47
	NORMAL	8,130.00	1.00	356.24	8,046.69	-516.33	-383.92	643.16	0.20	-0.20	-1.71	-171.55
	NORMAL	8,224.00	0.50	281.61	8,140.69	-515.43	-384.38	642.69	1.06	-0.53	-79.39	-150.93
	NORMAL	8,318.00	0.44	254.99	8,234.68	-515.44	-385.13	643.13	0.24	-0.06	-28.32	-118.41
	NORMAL	8,413.00	0.38	229.74	8,329.68	-515.74	-385.72	643.71	0.20	-0.06	-26.58	-120.72
	NORMAL	8,507.00	0.50	221.99	8,423.68	-516.24	-386.23	644.42	0.14	0.13	-8.24	-30.29
	NORMAL	8,602.00	0.63	189.24	8,518.67	-517.07	-386.59	645.30	0.36	0.14	-34.47	-84.99
11/21/2011	NORMAL	8,696.00	1.13	203.49	8,612.66	-518.43	-387.04	646.67	0.58	0.53	15.16	30.87
	NORMAL	8,791.00	0.88	194.86	8,707.65	-519.99	-387.61	648.28	0.31	-0.26	-9.08	-153.07
	NORMAL	8,886.00	1.44	197.11	8,802.63	-521.84	-388.14	650.10	0.59	0.59	2.37	5.78
	NORMAL	8,980.00	1.31	171.99	8,896.60	-524.03	-388.34	652.01	0.65	-0.14	-26.72	-114.54
	NORMAL	9,074.00	1.31	199.24	8,990.58	-526.11	-388.55	653.83	0.66	0.00	28.99	103.62
	NORMAL	9,169.00	1.31	204.36	9,085.55	-528.12	-389.35	655.94	0.12	0.00	5.39	92.56
	NORMAL	9,263.00	1.44	192.74	9,179.53	-530.26	-390.06	658.09	0.33	0.14	-12.36	-70.89
	NORMAL	9,358.00	1.38	180.24	9,274.50	-532.56	-390.32	660.13	0.33	-0.06	-13.16	-107.24
	NORMAL	9,452.00	1.31	167.86	9,368.47	-534.75	-390.10	661.79	0.32	-0.07	-13.17	-109.68
	NORMAL	9,546.00	1.19	161.24	9,462.45	-536.72	-389.56	663.10	0.20	-0.13	-7.04	-133.00
	NORMAL	9,641.00	1.31	150.49	9,557.43	-538.60	-388.71	664.15	0.28	0.13	-11.32	-68.34
11/22/2011	NORMAL	9,735.00	1.19	147.49	9,651.41	-540.36	-387.66	664.99	0.15	-0.13	-3.19	-152.89
	NORMAL	9,830.00	0.88	153.86	9,746.39	-541.84	-386.80	665.72	0.35	-0.33	6.71	162.80
	NORMAL	9,924.00	0.75	122.86	9,840.38	-542.83	-385.97	666.04	0.48	-0.14	-32.98	-121.54
	NORMAL	10,019.00	1.19	126.61	9,935.37	-543.75	-384.66	666.05	0.47	0.46	3.95	10.09
	NORMAL	10,113.00	1.31	132.24	10,029.35	-545.06	-383.08	666.21	0.18	0.13	5.99	48.50

2.2.2 Survey Stations (Continued)

Date	Type	MD (usft)	Inc (°)	Azi (°)	TVD (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)	Build (°/100usft)	Turn (°/100usft)	TFace (°)
11/22/2011	NORMAL	10,239.00	0.17	143.86	10,155.33	-546.18	-381.90	666.45	0.91	-0.90	9.22	178.28
11/23/2011	NORMAL	10,314.00	0.17	143.86	10,230.33	-546.36	-381.77	666.52	0.00	0.00	0.00	0.00