

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 921-17B		
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 <input type="checkbox"/> Coalbed Methane Well: NO <input type="checkbox"/>				5. UNIT or COMMUNITIZATION AGREEMENT NAME NATURAL BUTTES		
6. NAME OF OPERATOR KERR-MCGEE OIL & GAS ONSHORE, L.P.				7. OPERATOR PHONE 720 929-6587		
8. ADDRESS OF OPERATOR P.O. Box 173779, Denver, CO, 80217				9. OPERATOR E-MAIL mary.mondragon@anadarko.com		
10. MINERAL LEASE NUMBER (FEDERAL, INDIAN, OR STATE) UTU 0575		11. MINERAL OWNERSHIP FEDERAL <input checked="" type="checkbox"/> INDIAN <input type="checkbox"/> STATE <input type="checkbox"/> FEE <input type="checkbox"/>		12. SURFACE OWNERSHIP FEDERAL <input type="checkbox"/> INDIAN <input checked="" type="checkbox"/> STATE <input type="checkbox"/> FEE <input type="checkbox"/>		
13. NAME OF SURFACE OWNER (if box 12 = 'fee')				14. SURFACE OWNER PHONE (if box 12 = 'fee')		
15. ADDRESS OF SURFACE OWNER (if box 12 = 'fee')				16. SURFACE OWNER E-MAIL (if box 12 = 'fee')		
17. INDIAN ALLOTTEE OR TRIBE NAME (if box 12 = 'INDIAN') Ute Tribe		18. INTEND TO COMMINGLE PRODUCTION FROM MULTIPLE FORMATIONS YES <input checked="" type="checkbox"/> (Submit Commingling Application) NO <input type="checkbox"/>		19. SLANT VERTICAL <input checked="" type="checkbox"/> DIRECTIONAL <input type="checkbox"/> HORIZONTAL <input type="checkbox"/>		
20. LOCATION OF WELL	FOOTAGES	QTR-QTR	SECTION	TOWNSHIP	RANGE	MERIDIAN
LOCATION AT SURFACE	492 FNL 1966 FEL	NWNE	17	9.0 S	21.0 E	S
Top of Uppermost Producing Zone	492 FNL 1966 FEL	NWNE	17	9.0 S	21.0 E	S
At Total Depth	492 FNL 1966 FEL	NWNE	17	9.0 S	21.0 E	S
21. COUNTY UINTAH		22. DISTANCE TO NEAREST LEASE LINE (Feet) 492		23. NUMBER OF ACRES IN DRILLING UNIT 1600		
		25. DISTANCE TO NEAREST WELL IN SAME POOL (Applied For Drilling or Completed) 1300		26. PROPOSED DEPTH MD: 10500 TVD: 10500		
27. ELEVATION - GROUND LEVEL 4827		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 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 10/01/2009	EMAIL danielle.piernot@anadarko.com
API NUMBER ASSIGNED 43047507760000	APPROVAL  Permit Manager	

Proposed Hole, Casing, and Cement

String	Hole Size	Casing Size	Top (MD)	Bottom (MD)		
Prod	7.875	4.5	0	10500		
Pipe	Grade	Length	Weight			
	Grade HCP-110 LT&C	900	11.6			
	Grade I-80 Buttress	9600	11.6			

Proposed Hole, Casing, and Cement

String	Hole Size	Casing Size	Top (MD)	Bottom (MD)		
Surf	12.25	9.625	0	2830		
Pipe	Grade	Length	Weight			
	Grade J-55 LT&C	2830	36.0			

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

Found 2006
Aluminum Cap
in Pile of Stones.

S89°57.0'W - 40.075 (G.L.O.)
N89°58'32"W - 2645.06' (Meas.)

N89°50.1'W - 40.073 (G.L.O.)
N89°45'51"W - 2644.91' (Meas.)

Found 2006
Aluminum Cap in
Pile of Stones

N0°02.1'W - 39.975 (G.L.O.)
N00°02'23"E - 2638.47' (Meas.)

Found 2006
Aluminum Cap in
Pile of Stones with T
Post on East edge.



N00°09'03"E (Basis of Bearings)
2649.93' (Measured)
N0°05.1'E - 40.148 (G.L.O.)

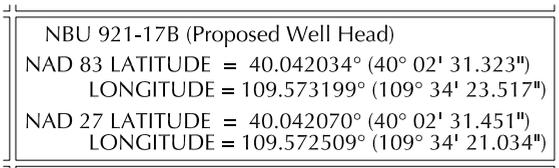
WELL LOCATION:
NBU 921-17B
ELEV. UNGRADED GROUND = 4826.8'

Found 2006
Aluminum Cap
in Pile of Stones.

17

Found 2006
Aluminum Cap
in Pile of Stones.

N0°08.6'W - 40.320 (G.L.O.)
N00°03'52"W - 2661.19' (Meas.)



N00°01'53"W - 2647.25' (Meas.)
N0°06.0'W - 40.110 (G.L.O.)

Found 2006
Aluminum Cap
in Pile of Stones

Found 2006
Aluminum Cap
in Pile of Stones

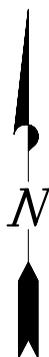
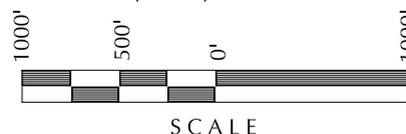
Found 2006
Aluminum Cap
with Set Stone
North of Cap

N89°54'13"W - 2634.82' (Meas.)
N89°58.7'W - 39.921 (G.L.O.)

N89°53'24"W - 2648.44' (Meas.)
N89°57.5'W - 40.129 (G.L.O.)

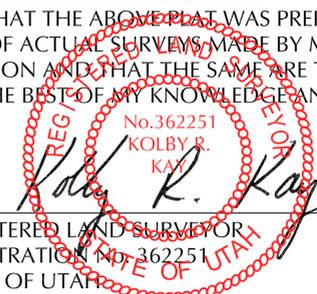
NOTES:

- ▲ = Section Corners Located
- 1. Well footages are measured at right angles to the Section Lines.
- 2. G.L.O. distances are shown in feet or chains.
1 chain = 66 feet.
- 3. Bearings are based on Global Positioning Satellite observations.
- 4. 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

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

WELL PAD - NBU 921-17B

**NBU 921-17B
WELL PLAT
492' FNL, 1966' FEL
NW ¼ NE ¼ OF SECTION 17, 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

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

DATE SURVEYED: 04-15-09	SURVEYED BY: D.J.S.	SHEET NO: 1 1 OF 9
DATE DRAWN: 04-16-09	DRAWN BY: K.K.O.	
SCALE: 1" = 1000'		

NBU 921-17B

Surface: 492' FNL 1,966' FEL (NW/4NE/4)
Sec. 17 T9S R21E

Uintah, Utah
Mineral Lease: UTU 0575

ONSHORE ORDER NO. 1

DRILLING PROGRAM

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

<u>Formation</u>	<u>Depth</u>	<u>Resource</u>
Uinta	0 – Surface	
Green River	1,794'	
Birds Nest	2,105'	Water
Mahogany	2,630'	Water
Wasatch	5,227'	Gas
Mesaverde	8,251'	Gas
MVU2	9,267'	Gas
MVL1	9,835'	Gas
TD	10,500'	

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 10,500' TD, approximately equals 6,542 psi (calculated at 0.62 psi/foot).

Maximum anticipated surface pressure equals approximately 4,232 psi (bottomhole pressure minus the pressure of a partially evacuated hole calculated at 0.22 psi/foot).

8. Anticipated Starting Dates:

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

9. Variances:

Please refer to the attached Drilling Program.

Onshore Order #2 – Air Drilling Variance

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

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

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

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

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

Background

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

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

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

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

Variance for BOPE Requirements

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

Variance for Mud Material Requirements

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

Variance for Special Drilling Operation (surface equipment placement) Requirements

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

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

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

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

Variance for FIT Requirements

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

Conclusion

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

10. Other Information:

Please refer to the attached Drilling Program.



**KERR-McGEE OIL & GAS ONSHORE LP
DRILLING PROGRAM**

CASING PROGRAM

	SIZE	INTERVAL	WT.	GR.	CPLG.	DESIGN FACTORS		
						BURST	COLLAPSE	TENSION
CONDUCTOR	14"	0-40'				3,520	2,020	453,000
SURFACE	9-5/8"	0 to 2830	36.00	J-55	LTC	0.81*	1.53	4.45
PRODUCTION	4-1/2"	0 to 9600	11.60	I-80	BTC	7,780	6,350	278,000
		9600 to 10500	11.60	HCP-110	LTC	1.79	1.04	2.81
						10,690	8,650	279,000
						2.46	1.30	32.85

*Burst on surface casing is controlled by fracture gradient as shoe with gas gradient above. D.F. = 1.97

- 1) Max Anticipated Surf. Press.(MASP) (Surf Csg) = (Pore Pressure at next csg point-(0.22 psi/ft-partial evac grad x TVD of next csg point))
 (Burst Assumptions: TD = 12.2 ppg) 0.22 psi/ft = gradient for partially evac wellbore
 (Collapse Assumption: Fully Evacuated Casing, Max MW) (Tension Assumptions: Air Weight of Casing*Buoy.Fact. of water)
MASP 4,232 psi
- 2) MASP (Prod Casing) = Pore Pressure at TD - (0.22 psi/ft-partial evac gradient x TD)
 (Burst Assumptions: TD = 12.2 ppg) 0.62 psi/ft = bottomhole gradient
 (Collapse Assumption: Fully Evacuated Casing, Max MW) (Tension Assumptions: Air Weight of Casing*Buoy.Fact. of water)
MABHP 6,542 psi

CEMENT PROGRAM

	FT. OF FILL	DESCRIPTION	SACKS	EXCESS	WEIGHT	YIELD
SURFACE LEAD	500'	Premium cmt + 2% CaCl + 0.25 pps flocele	215	60%	15.60	1.18
Option 1 TOP OUT CMT (6 jobs)	1,200'	20 gals sodium silicate + Premium cmt + 2% CaCl + 0.25 pps flocele Premium cmt + 2% CaCl	380	0%	15.60	1.18
NOTE: If well will circulate water to surface, option 2 will be utilized						
SURFACE LEAD	2,330'	Prem cmt + 16% Gel + 10 pps gilsonite + 0.25 pps Flocele + 3% salt BWOC	260	35%	11.00	3.82
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	4,720'	Premium Lite II + 0.25 pps celloflake + 5 pps gilsonite + 10% gel ' + 1% Retarder	450	40%	11.00	3.38
TAIL	5,780'	50/50 Poz/G + 10% salt + 2% gel + 0.1% R-3	1420	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. Centralize first 3 joints & every third joint for a total of 15 bow spring centralizers.

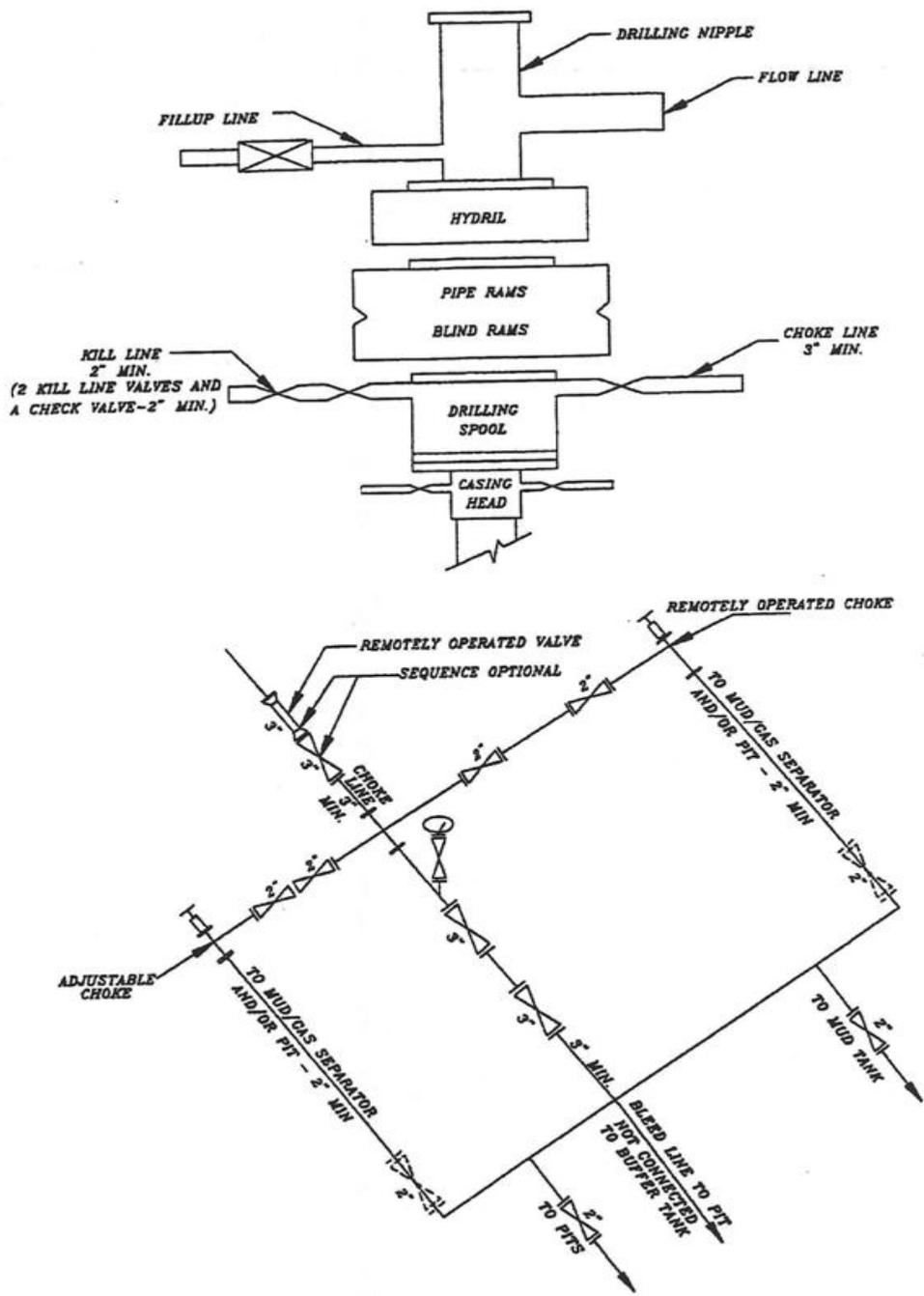
ADDITIONAL INFORMATION

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.
 Drop Totco surveys every 2000'. Maximum allowable hole angle is 5 degrees.
 Most rigs have PVT Systems for mud monitoring. If no PVT is available, visual monitoring will be utilized.

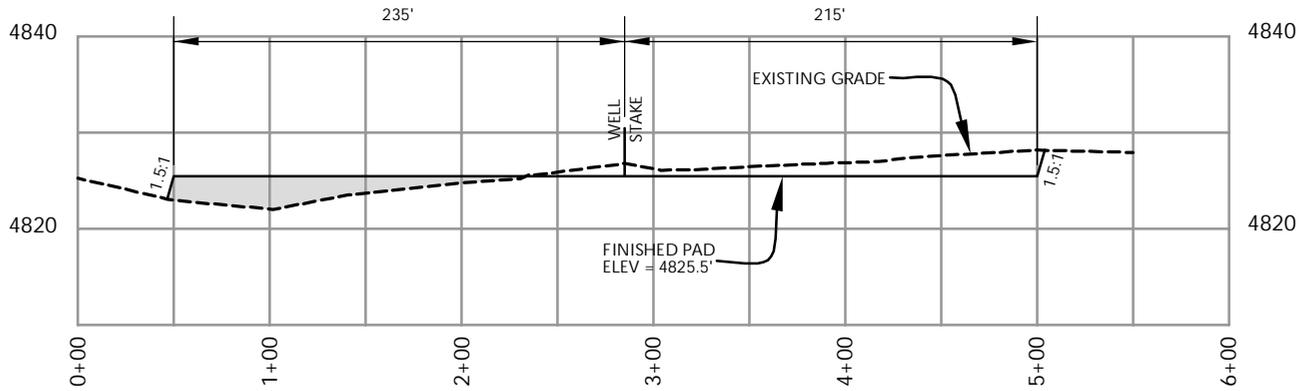
DRILLING ENGINEER: _____ **DATE:** _____
 John Huycke / Emile Goodwin

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

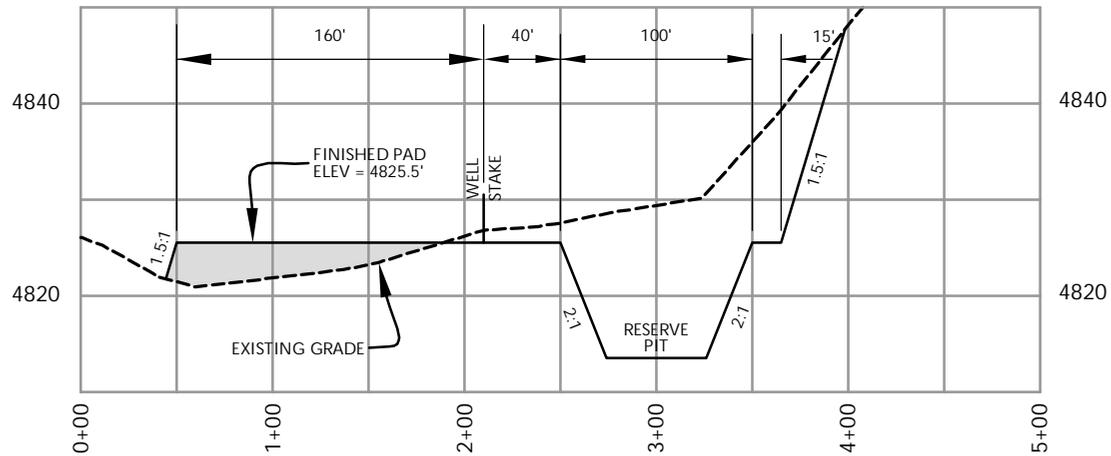
EXHIBIT A NBU 921-17B



SCHMATIC DIAGRAM OF 5,000 PSI BOP STACK



CROSS SECTION A-A'



CROSS SECTION B-B'

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

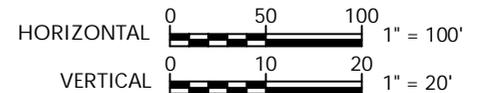
WELL PAD - NBU 921-17B

WELL PAD - CROSS SECTIONS
NBU 921-17B
492' FNL, 1966' FEL

NW1/4 NE1/4 OF SECTION 17, T.9S., R.21E.
S.L.B.&M., Uintah County, Utah



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



Scale: 1"=100'	Date: 4/21/09	SHEET NO:
REVISED:		3 3 OF 9

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

APIWellNo:43047507760000
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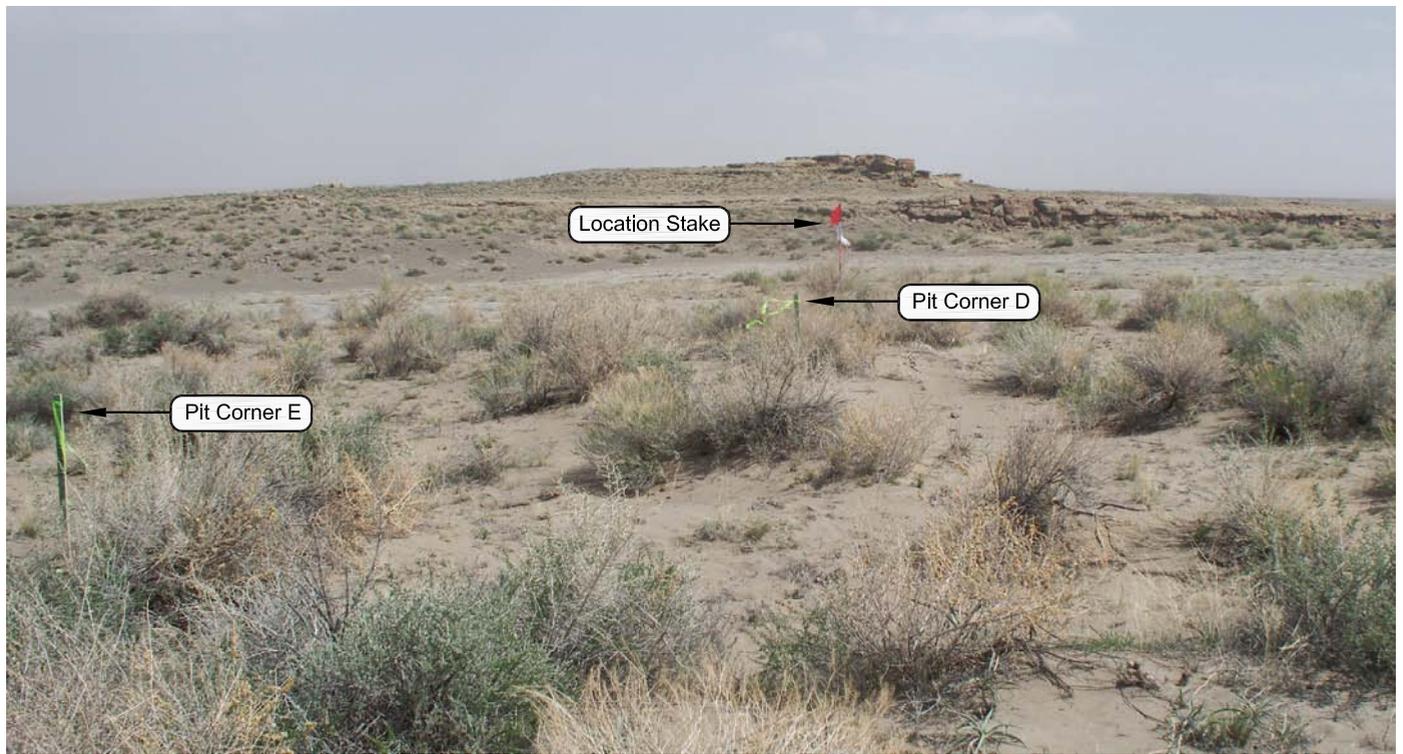


PHOTO VIEW: FROM PIT CORNER D TO LOCATION STAKE

CAMERA ANGLE: NORTHEASTERLY



PHOTO VIEW: FROM BEGINNING OF PROPOSED ROAD

CAMERA ANGLE: SOUTHEASTERLY

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

Well Pad - NBU 921-17B

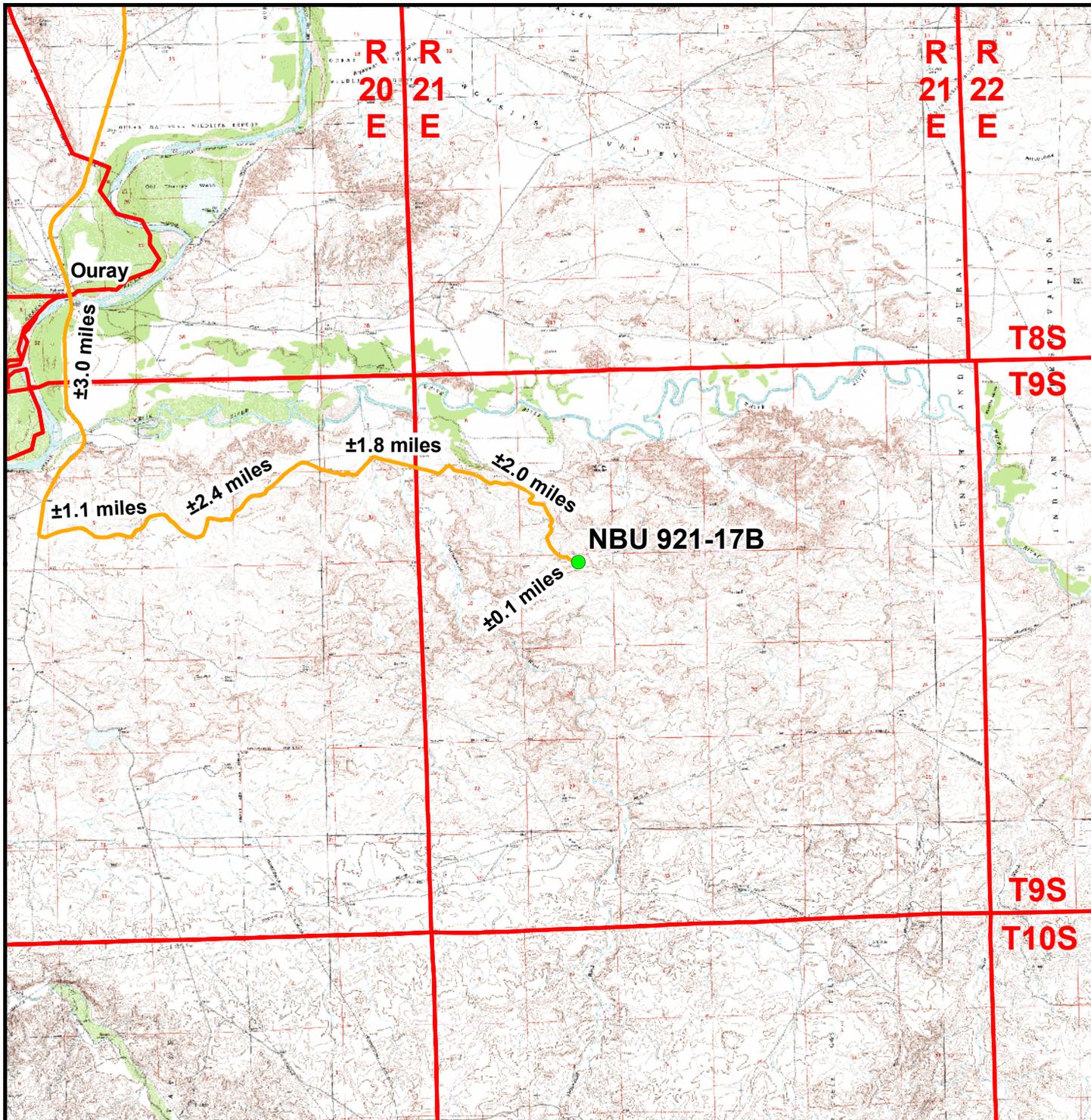
NBU 921-17B
LOCATION PHOTOS
492' FNL, 1966' FEL
NW 1/4 NE 1/4 OF SECTION 17, T9S, R21E,
S.L.B.&M., UINTAH COUNTY, UTAH.



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

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

DATE PHOTOS TAKEN: 04-15-09	PHOTOS TAKEN BY: D.J.S.	SHEET NO: 4 4 OF 9
DATE DRAWN: 04-16-09	DRAWN BY: K.K.O.	
Date Last Revised:		



Legend

- Proposed NBU 921-17B Well Location
- Access Route - Proposed

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

Well Pad - NBU 921-17B

NBU 921-17B

Topo A

492' FNL, 1966' FEL

NW¼ NE¼, Section 17, T9S, R21E
S.L.B.&M., Uintah County, Utah

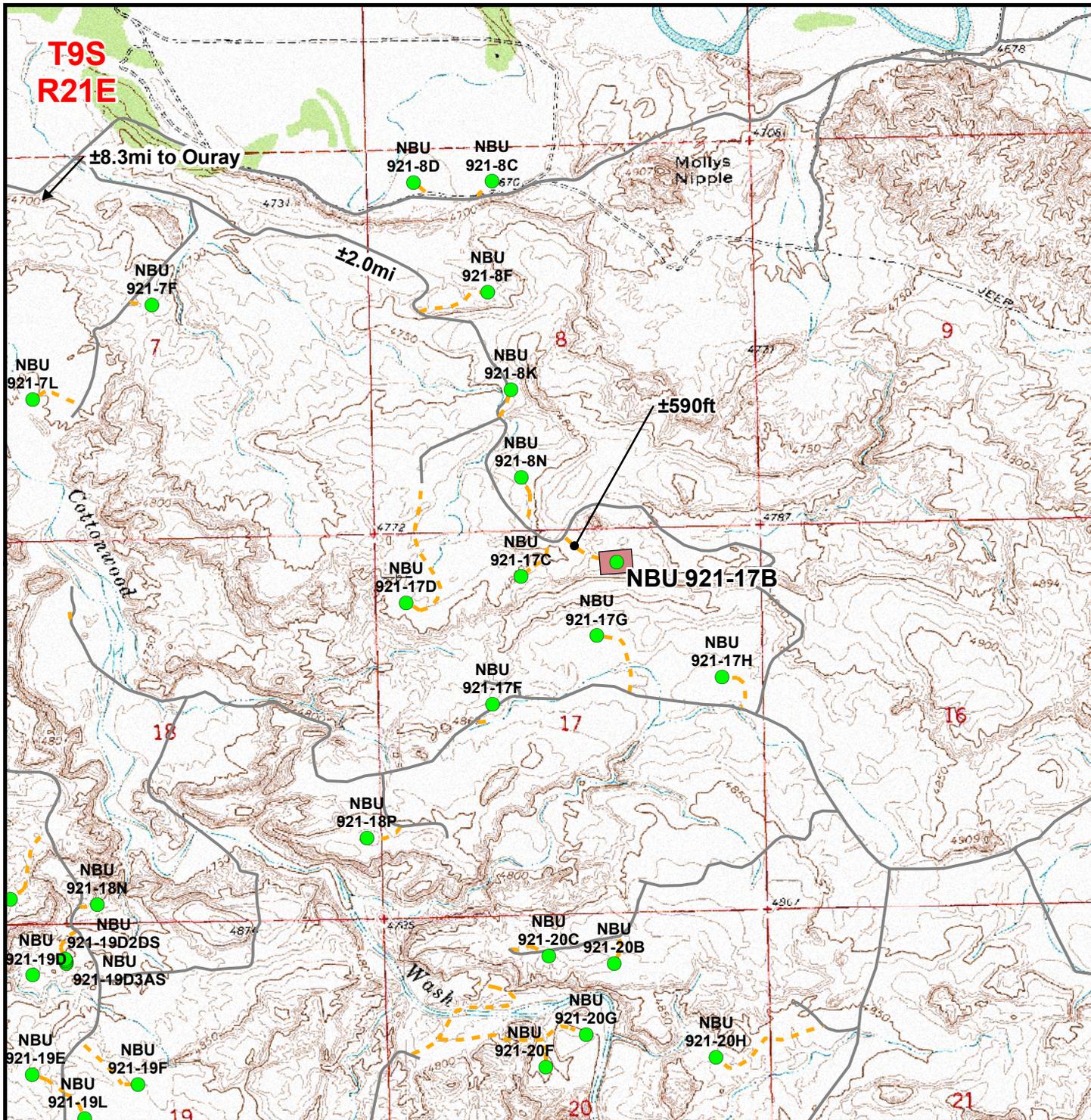


CONSULTING, LLC
 371 Coffeen Avenue
 Sheridan, WY 82801
 Phone (307) 674-0609
 Fax (307) 674-0182



Scale: 1:100,000	NAD83 USP Central
Drawn: JELO	Date: 13 April 2009
Revised: TL	Date: 25 Sept 2009

Sheet No:
5
5 of 9



Legend

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

Total Proposed Road Length: ±590ft

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

Well Pad - NBU 921-17B

NBU 921-17B

Topo B

492' FNL, 1966' FEL

NW¼ NE¼, Section 17, T9S, R21E
S.L.B.&M., Uintah County, Utah

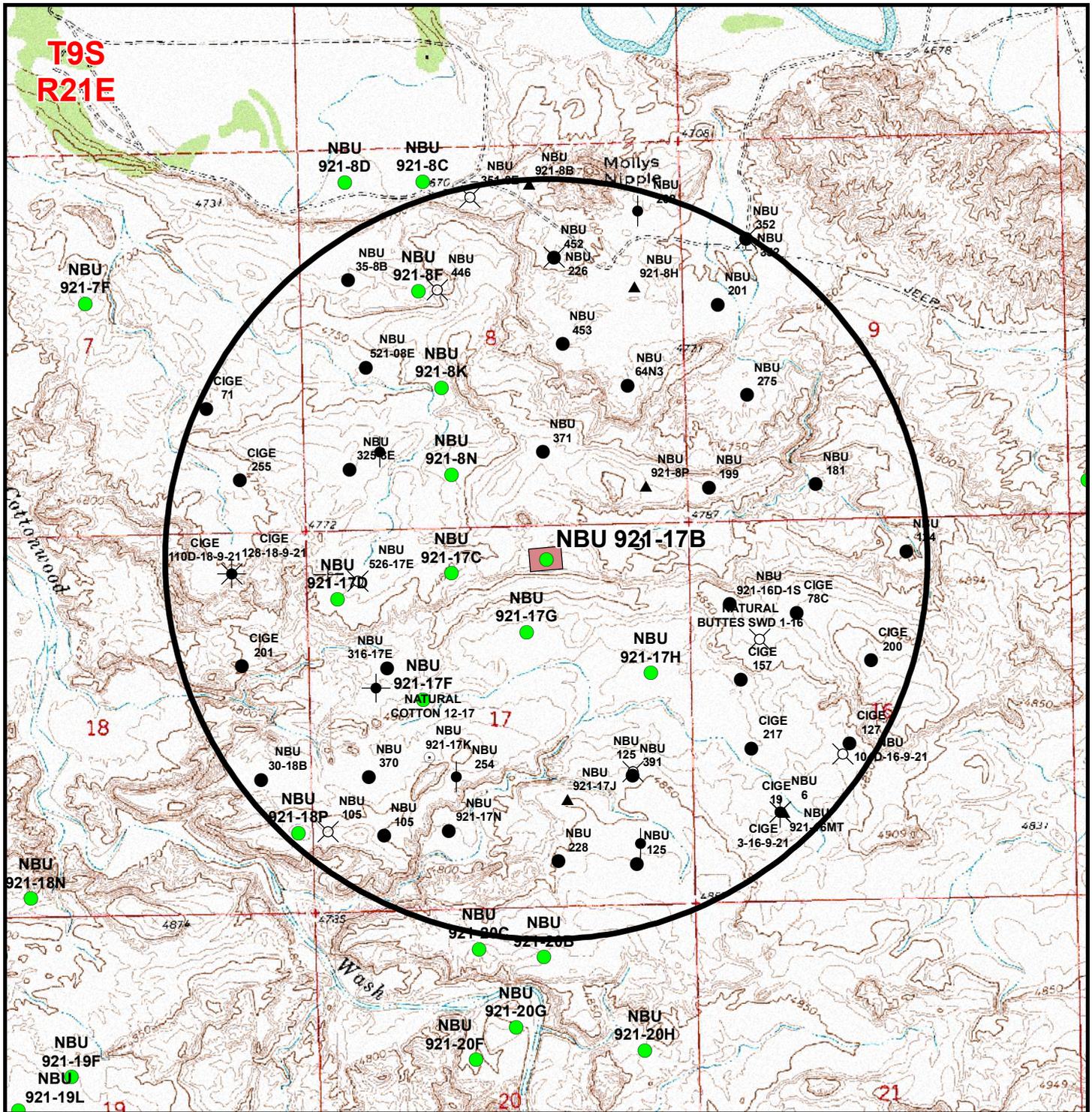


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 371 Coffeen Avenue
 Sheridan, WY 82801
 Phone (307) 674-0609
 Fax (307) 674-0182



Scale: 1" = 2,000ft	NAD83 USP Central
Drawn: JELo	Date: 13 April 2009
Revised: TL	Date: 25 Sept 2009

Sheet No: 6	6 of 9
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Legend

- Well - Proposed
- Well - 1 Mile Radius
- Producing
- ▲ Approved permit (APD); not yet spudded
- Spudded (Drilling commenced: Not yet comple
- ⊗ Location Abandoned
- Shut-In
- Temporarily-Abandoned
- Plugged and Abandoned

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

Well Pad - NBU 921-17B

NBU 921-17B

Topo C

492' FNL, 1966' FEL

NW¼ NE¼, Section 17, 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" = 2,000ft NAD83 USP Central

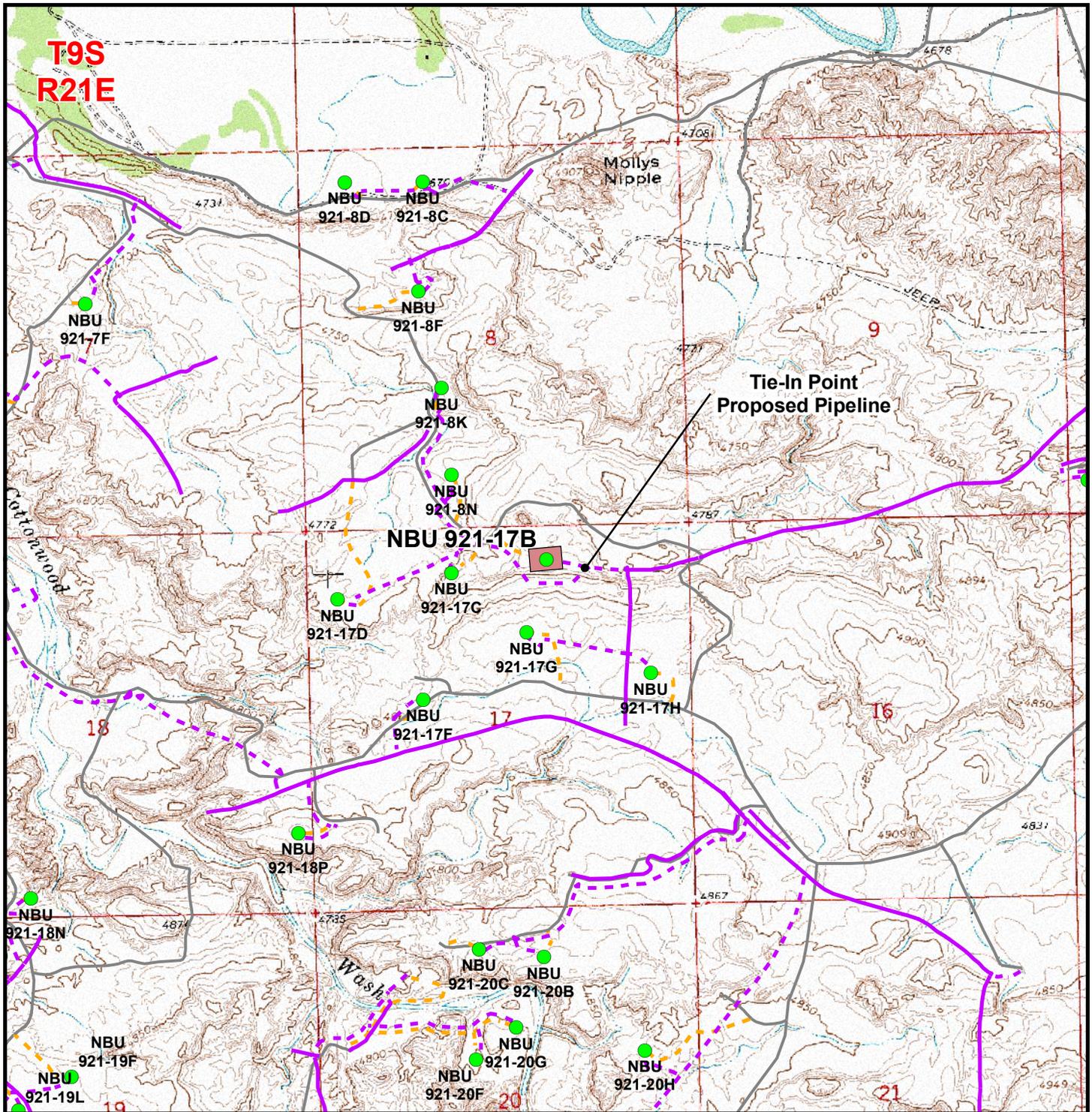
Drawn: JELO Date: 13 April 2009

Revised: TL Date: 25 Sept 2009

Sheet No:

7

7 of 9



Legend

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

Proposed Pipeline Length From Tie-In Point To Edge Of Pad: ±360ft
 Proposed Pipeline Length Around Pad: ±660ft

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

Well Pad - NBU 921-17B

NBU 921-17B

Topo D

492' FNL, 1966' FEL

NW¼ NE¼, Section 17, T9S, R21E
S.L.B.&M., Uintah County, Utah



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



Scale: 1" = 2,000ft	NAD83 USP Central	Sheet No:
Drawn: JELO	Date: 13 April 2009	8
Revised: TL	Date: 25 Sept 2009	

8 of 9

Kerr-McGee Oil & Gas Onshore, LP
WELL PAD – NBU 921-17B
WELL - NBU 921-17B
Section 17, 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 3.0 MILES TO A SERVICE ROAD TO THE EAST. EXIT LEFT AND PROCEED IN AN EASTERLY DIRECTION ALONG THE SERVICE ROAD APPROXIMATELY 1.1 MILES TO A SECOND SERVICE ROAD TO THE NORTHEAST. EXIT LEFT AND PROCEED IN A NORTHEASTERLY DIRECTION ALONG THE SECOND SERVICE ROAD APPROXIMATELY 2.4 MILES TO A THIRD SERVICE ROAD TO THE EAST. EXIT RIGHT AND PROCEED IN AN EAST BY SOUTHEAST DIRECTION ALONG THE THIRD SERVICE ROAD APPROXIMATELY 1.8 MILES TO A FOURTH SERVICE ROAD TO THE SOUTHEAST. EXIT RIGHT AND PROCEED IN A SOUTHEASTERLY DIRECTION ALONG THE FOURTH SERVICE ROAD APPROXIMATELY 2.0 MILES TO THE PROPOSED ACCESS ROAD. FOLLOW ROAD FLAGS IN A SOUTHEASTERLY DIRECTION APPROXIMATELY 590 FEET TO THE PROPOSED WELL LOCATION.

TOTAL DISTANCE FROM VERNAL, UTAH TO THE PROPOSED WELL LOCATION IS APPROXIMATELY 41.1 MILES IN A SOUTHERLY DIRECTION.

NBU 921-17B

Surface: 492' FNL 1,966' FEL (NW/4NE/4)
Sec. 17 T9S R21E

Uintah, Utah
Mineral Lease: UTU 0575

Surface Owner: Ute Indian Tribe

ONSHORE ORDER NO. 1

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

This Application for Permit to Drill (APD) is filed under the Notice of Staking (NOS) process as stated in Onshore Order No. 1 (OSO #1) and supporting Bureau of Land Management (BLM) and Bureau of Indian Affairs (BIA) documents. An NOS was submitted showing the surface location in NW/4 NE/4 of Section 17 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.

An on-site meeting was held on September 1, 2009.

A. 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.

B. Planned Access Roads:

See MDP for additional details on road construction.

Approximately $\pm 590'$ (± 0.11 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.

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

Please refer to Topo Map C.

D. 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 $\pm 1,020'$ (± 0.19 miles) of new pipeline is proposed for this well. Please refer to the attached Topo Map D for 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

E. 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.

F. Source of Construction Materials:

See MDP for additional details on Source of Construction Materials.

G. 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

H. Ancillary Facilities:

See MDP for additional details on Ancillary Facilities.

None are anticipated.

I. 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.

J. 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.

K. 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

L. Other Information:

See MDP for additional details on Other Information.

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

Kathy Schneebeck Dulnoan
Staff 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

October 1, 2009

Date

CLASS I REVIEW OF KERR-MCGEE OIL & GAS
ONSHORE LP'S 51 PROPOSED WELL LOCATIONS
(T9S, R21E, SECTIONS 7, 8, 10, 11, 12,
17, 18, 19, 20, 23, 25, AND 30)
IN 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. 09-39

May 11, 2009

United States Department of Interior (FLPMA)
Permit No. 09-UT-60122

Public Lands Policy Coordination Office
Archaeological Survey Permit No. 117

Ute Tribal Permit No. A09-363

IPC #09-79

Paleontological Reconnaissance Survey Report

**Survey of Kerr McGee's Proposed Well Pads, Access Roads and
Pipelines for "NBU #921-7D, 8C, D, F & 17B" (Sec. 12,
T 9 S, R 20 E) & (Sec. 6-8 & 17, T 9 S, R 21 E)**

Ouray SE
Topographic Quadrangle
Uintah County, Utah

June 22, 2009

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



Grasslands Consulting, Inc.

4800 Happy Canyon Road, Suite 110, Denver, CO 80237
(303) 759-5377 Office (303) 759-5324 Fax

SPECIAL STATUS PLANT AND WILDLIFE SPECIES REPORT

Report #: GCI #61

Operator: Kerr-McGee Oil & Gas Onshore LP

Wells: NBU 921-17B, NBU 921-17C, NBU921-17D, NBU 921-17F, NBU921-17G, NBU921-17H

Pipelines: Associated pipelines to proposed well pads

Access Roads: Associated access roads to proposed well pads

Location: Section 17, Township 9 South, Range 21 East; Uintah County, Utah

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

Date: 06/24/2009

Observer(s): Grasslands Consulting, Inc. Biologists: Dan Hamilton, Jay Slocum, Matt Kelahan, and Jonathan Sexauer. Technician: Chad Johnson

Weather: Partly cloudy, 75-90°F, 0-15 mph winds with no precipitation.

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)

October 2, 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)		
43-047-50769	NBU 1022-35K4CS	Sec 35 T10S R22E 0636 FSL 2186 FEL
	BHL	Sec 35 T10S R22E 1325 FSL 2100 FWL
43-047-50770	NBU 1022-35N1CS	Sec 35 T10S R22E 0638 FSL 2206 FEL
	BHL	Sec 35 T10S R22E 0965 FSL 2100 FWL
43-047-50771	NBU 1022-35O1BS	Sec 35 T10S R22E 0634 FSL 2166 FEL
	BHL	Sec 35 T10S R22E 1030 FSL 1800 FEL
43-047-50772	NBU 1022-35O1CS	Sec 35 T10S R22E 0631 FSL 2146 FEL
	BHL	Sec 35 T10S R22E 0670 FSL 1800 FEL
43-047-50773	NBU 922-32P1BS	Sec 32 T09S R22E 1723 FSL 0195 FEL
	BHL	Sec 32 T09S R22E 1203 FSL 0537 FEL
43-047-50774	NBU 922-32P1CS	Sec 32 T09S R22E 1748 FSL 0164 FEL
	BHL	Sec 32 T09S R22E 0857 FSL 0571 FEL
43-047-50775	NBU 922-32P3AS	Sec 32 T09S R22E 1735 FSL 0179 FEL
	BHL	Sec 32 T09S R22E 0588 FSL 0733 FEL

Page 2

API #	WELL NAME	LOCATION
(Proposed PZ WASATCH-MESA VERDE)		
43-047-50776	NBU 921-17B	Sec 17 T09S R21E 0492 FNL 1966 FEL
43-047-50777	NBU 921-8F	Sec 08 T09S R21E 2003 FNL 1636 FWL
43-047-50778	NBU 921-8K	Sec 08 T09S R21E 1918 FSL 1923 FWL
43-047-50779	NBU 920-32C	Sec 32 T09S R20E 0605 FNL 2077 FWL
43-047-50780	NBU 920-32F	Sec 32 T09S R20E 1884 FNL 2131 FWL

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:10-2-09

WORKSHEET APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 10/1/2009

API NO. ASSIGNED: 43047507760000

WELL NAME: NBU 921-17B

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

PHONE NUMBER: 720 929-6156

CONTACT: Danielle Piernot

PROPOSED LOCATION: NWNE 17 090S 210E

Permit Tech Review:

SURFACE: 0492 FNL 1966 FEL

Engineering Review:

BOTTOM: 0492 FNL 1966 FEL

Geology Review:

COUNTY: UINTAH

LATITUDE: 40.04197

LONGITUDE: -109.57247

UTM SURF EASTINGS: 621784.00

NORTHINGS: 4433181.00

FIELD NAME: NATURAL BUTTES

LEASE TYPE: 1 - Federal

LEASE NUMBER: UTU 0575

PROPOSED PRODUCING FORMATION(S): WASATCH-MESA VERDE

SURFACE OWNER: 2 - Indian

COALBED METHANE: NO

RECEIVED AND/OR REVIEWED:

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

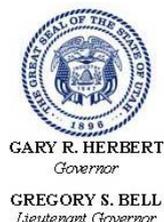
Commingle Approved

LOCATION AND SITING:

- R649-2-3.
Unit: NATURAL BUTTES
- R649-3-2. General
- R649-3-3. Exception
- Drilling Unit
Board Cause No: Cause 173-14
Effective Date: 10/25/2006
Siting: 460' fr u bdry & uncomm. tract
- R649-3-11. Directional Drill

Comments: Presite Completed

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



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 921-17B
API Well Number: 43047507760000
Lease Number: UTU 0575
Surface Owner: INDIAN
Approval Date: 10/14/2009

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

Commingle:

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

General:

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

Conditions of Approval:

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

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

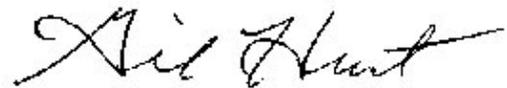
submit an electronic sundry notice (pre-registration required) via the Utah Oil & Gas website at <https://oilgas.ogm.utah.gov>

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:

A handwritten signature in black ink, appearing to read "Gil Hunt", with a stylized flourish at the end.

Gil Hunt
Associate Director, Oil & Gas

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	FORM 9 5. LEASE DESIGNATION AND SERIAL NUMBER: UTU 0575
---	---

SUNDRY NOTICES AND REPORTS ON WELLS Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		6. IF INDIAN, ALLOTTEE OR TRIBE NAME: Ute Tr
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 921-17B	
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779	PHONE NUMBER: 720 929-6007 Ext	9. API NUMBER: 43047507760000
4. LOCATION OF WELL FOOTAGES AT SURFACE: 0492 FNL 1966 FEL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NWNE Section: 17 Township: 09.0S Range: 21.0E Meridian: S	9. FIELD and POOL or WILDCAT: NATURAL BUTTES	
		COUNTY: UINTAH
		STATE: UTAH

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

TYPE OF SUBMISSION	TYPE OF ACTION		
<input checked="" type="checkbox"/> NOTICE OF INTENT Approximate date work will start: 10/14/2010	<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: October 11, 2010

By:

NAME (PLEASE PRINT) Danielle Piernot	PHONE NUMBER 720 929-6156	TITLE Regulatory Analyst
SIGNATURE N/A	DATE 10/11/2010	



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 43047507760000

API: 43047507760000

Well Name: NBU 921-17B

Location: 0492 FNL 1966 FEL QTR NWNE SEC 17 TWNP 090S RNG 210E MER S

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

Date Original Permit Issued: 10/14/2009

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: 10/11/2010

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

Date: October 11, 2010

By: [Signature]

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

RECEIVED

OCT 06 2009

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

APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of Work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. UTU0575
1b. Type of Well: <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input type="checkbox"/> Single Zone <input checked="" type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name
2. Name of Operator KERR MCGEE OIL & GAS ONSHORE		7. If Unit or CA Agreement, Name and No. UTU63047A
3a. Address 1368 SOUTH 1200 EAST VERNAL, UT 84078		8. Lease Name and Well No. NBU 921-17B
3b. Phone No. (include area code) Ph: 720-929-6156 Fx: 720-929-7156		9. API Well No. 43 047 50776
4. Location of Well (Report location clearly and in accordance with any State requirements.)* At surface NWNE 492FNL 1966FEL 40.04203 N Lat, 109.57320 W Lon At proposed prod. zone NWNE 492FNL 1966FEL 40.04203 N Lat, 109.57320 W Lon		10. Field and Pool, or Exploratory NATURAL BUTTES
14. Distance in miles and direction from nearest town or post office* APPROXIMATELY 10 MILES SOUTHEAST OF OURAY, UTAH		11. Sec., T., R., M., or Blk. and Survey or Area Sec 17 T9S R21E Mer SLB
15. Distance from proposed location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 492 FEET	16. No. of Acres in Lease	12. County or Parish UINTAH
18. Distance from proposed location to nearest well, drilling, completed, applied for, on this lease, ft. APPROXIMATELY 1300 FEET	19. Proposed Depth 10500 MD 10500 TVD	13. State UT
21. Elevations (Show whether DF, KB, RT, GL, etc.) 4827 GL	22. Approximate date work will start 10/20/2009	17. Spacing Unit dedicated to this well
		20. BLM/BIA Bond No. on file WYB000291
		23. Estimated duration 60-90 DAYS

24. Attachments

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

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

25. Signature (Electronic Submission)	Name (Printed/Typed) DANIELLE E PIERNOT Ph: 720-929-6156	Date 10/01/2009
Title REGULATORY ANALYST		
Approved by Signature	Name (Printed/Typed) James H. Sparger	Date NOV 05 2010
Title Acting Assistant Field Manager Lands & Mineral Resources	Office VERNAL FIELD OFFICE	

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

CONDITIONS OF APPROVAL ATTACHED

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

Additional Operator Remarks (see next page)

Electronic Submission #75071 verified by the BLM Well Information System DIV. OF OIL, GAS & MINING
For KERR MCGEE OIL & GAS ONSHORE L, sent to the Vernal
Committed to AFMSS for processing by ROBIN R. HANSEN on 10/02/2009 (10RRH0002AE)

NOTICE OF APPROVAL

UDOGM

NOS and posted 10-07-09

AFMSS#

** BLM REVISED **

10RRH0002AE

110 1105

RECEIVED
NOV 17 2010



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

170 South 500 East

VERNAL, UT 84078

(435) 781-4400



CONDITIONS OF APPROVAL FOR APPLICATION FOR PERMIT TO DRILL

Company:	Kerr McGee Oil & Gas Onshore	Location:	Sec. 17, T9S, R21E
Well No:	NBU 921-17B	Lease No:	UTU-0575
API No:	43-047-50776	Agreement:	Natural Buttes Unit

OFFICE NUMBER: (435) 781-4400

OFFICE FAX NUMBER: (435) 781-3420

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

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

NOTIFICATION REQUIREMENTS

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

***SURFACE USE PROGRAM
CONDITIONS OF APPROVAL (COAs)***

- Paint new and old (existing) facilities "Shadow Gray."
- Re-route storm water from runoff around the well pad.
- Construct low water crossings on the access road.
- Monitor by a permitted archaeologist during the construction process.
- Monitor by a permitted paleontologist during the construction process
- In accordance with the guidelines specified in the Utah Guidelines for Raptor Protection from Human and Land Use Disturbances, a raptor survey shall be conducted prior to construction of the proposed location, pipeline, or access road if construction will take place during raptor nesting season (January 01 through September 30). If active raptor nests are identified during a new survey, KMG shall conduct its operations according to the seasonal restrictions detailed in the Uintah Basin-specific RMP guidelines and spatial offsets specified by the USFWS Utah Raptor Guidelines (see Appendix D). The USFWS and BLM recommend a ¼-mile avoidance buffer surrounding active burrowing owl nest between March 1 and Aug 31.
- If project construction operations are not initiated before June 24, 2010, KMG shall conduct additional biological surveys in accordance with the guidelines specified in the USFWS Rare Plant Conservation Measures for Uinta Basin hookless cactus (See Appendix D) and conduct its operation according to its specifications.

BIA Standard Conditions of Approval:

- Soil erosion will be mitigated by reseeding all disturbed areas.
- The gathering pipelines will be constructed to lie on the surface. The surface pipelines will not be bladed or cleared of vegetation. Where pipelines are constructed parallel to roads they may be welded on the road and then lifted from the road onto the right-of-way. Where pipelines do not parallel roads but cross-country between sites, they shall be welded in place at well sites or on access roads and then pulled between stations with a suitable piece of equipment. Traffic will be restricted along these areas so that the pipeline right-of-way will not be used as an access road.
- An open drilling system shall be used, unless otherwise specified in 10.0 Additional Stipulations of this document and in the Application for Permit to Drill. A closed drilling system shall be used in all flood plain areas, and other highly sensitive areas, recommended by the Ute Tribe Technician, BIA, and other agencies involved.
- The reserve pit shall be lined with a synthetic leak proof liner. After the drilling operation is complete, excess fluids shall be removed from the reserve pit and either hauled to an approved disposal site or shall be used to drill other wells. When the fluids are removed the pit shall be backfilled a minimum of 3.0' below the soil surface elevation.

- A closed production system shall be used. This means all produced water and oil field fluid wastes shall be contained in leak proof tanks. These fluids shall be disposed of in either approved injection wells or disposal pits.
- Major low water crossings will be armored with pit run material to protect them from erosion.
- All personnel shall refrain from collecting any paleontological fossils and from disturbing any fossil resources in the area.
- If fossils are exposed or identified during construction, all construction must cease and immediate notification to the Energy and Minerals Department and the Cultural Rights Protection Officer.
- Before the site is abandoned the company will be required to restore the right-of-way to near its original state. The disturbed area will be reseeded with desirable perennial vegetation. If necessary, the Bureau of Indian Affairs or Bureau of Land Management will provide a suitable seed mixture.
- Noxious weeds will be controlled on all surface disturbances within the project area. If noxious weeds spread from the project area onto adjoining land, the company will also be responsible for their control.
- If project construction operations are scheduled to occur after December 31, 2009, KMG shall conduct annual raptor surveys in accordance with the guidelines specified in the Utah Field Office Guidelines for Raptor Protection from Human and Land Use Disturbances, 2002. If active raptor nest are identified during a new survey, KMG shall conduct its operations according to the seasonal restrictions detailed in the Uinta basin-specific RMP guidelines and spatial offsets specified by the USFWS Utah Raptor Guidelines (See Appendix D).
- USFWS threatened and endangered plant and animal conservation measures will be followed, as appropriate to the species identified by the biological resource survey (See Appendix D).
- All personnel shall refrain from collecting artifacts and from disturbing any significant cultural resources in the area.
- If artifacts or any culturally sensitive materials are exposed or identified during construction, all construction must cease and immediate notification to the Energy and Minerals Department and the Cultural Rights Protection Officer.

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

SITE SPECIFIC DOWNHOLE COAs:

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

Variations Granted:

Air Drilling:

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

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

DRILLING/COMPLETION/PRODUCING OPERATING STANDARDS

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

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

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

OPERATING REQUIREMENT REMINDERS:

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

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

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

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		FORM 9
SUNDRY NOTICES AND REPORTS ON WELLS		5. LEASE DESIGNATION AND SERIAL NUMBER: UTU 0575
Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		6. IF INDIAN, ALLOTTEE OR TRIBE NAME: Ute Tr
		7. UNIT or CA AGREEMENT NAME: NATURAL BUTTES
1. TYPE OF WELL Gas Well	8. WELL NAME and NUMBER: NBU 921-17B	
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.	9. API NUMBER: 43047507760000	
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: 0492 FNL 1966 FEL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NWNE Section: 17 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: 4/11/2011 <input type="checkbox"/> DRILLING REPORT Report Date:	<input type="checkbox"/> ACIDIZE <input type="checkbox"/> CHANGE TO PREVIOUS PLANS <input type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> DEEPEN <input type="checkbox"/> OPERATOR CHANGE <input type="checkbox"/> PRODUCTION START OR RESUME <input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> WATER SHUTOFF <input type="checkbox"/> WILDCAT WELL DETERMINATION <input type="checkbox"/> ALTER CASING <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input type="checkbox"/> FRACTURE TREAT <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> SI TA STATUS EXTENSION <input type="checkbox"/> OTHER	
<input type="checkbox"/> CASING REPAIR <input type="checkbox"/> CHANGE WELL NAME <input type="checkbox"/> CONVERT WELL TYPE <input type="checkbox"/> NEW CONSTRUCTION <input type="checkbox"/> PLUG BACK <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION <input type="checkbox"/> TEMPORARY ABANDON <input type="checkbox"/> WATER DISPOSAL <input type="checkbox"/> APD EXTENSION OTHER: <input style="width: 100px;" type="text"/>		
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.		
MIRU PETE MARTIN BUCKET RIG. DRILLED 20" CONDUCTOR HOLE TO 40'. RAN 14" 36.7# SCHEDULE PIPE. CMT W/28 SX READY MIX. SPUD WELL ON 04/11/2011 AT 9:00 AM.		
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 4/11/2011	

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	FORM 9 5. LEASE DESIGNATION AND SERIAL NUMBER: UTU 0575
SUNDRY NOTICES AND REPORTS ON WELLS Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.	6. IF INDIAN, ALLOTTEE OR TRIBE NAME: Ute Tr
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 921-17B
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779	9. API NUMBER: 43047507760000
4. LOCATION OF WELL FOOTAGES AT SURFACE: 0492 FNL 1966 FEL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NWNE Section: 17 Township: 09.0S Range: 21.0E Meridian: S	9. FIELD and POOL or WILDCAT: NATURAL BUTTES
	COUNTY: UINTAH
	STATE: UTAH

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

TYPE OF SUBMISSION	TYPE OF ACTION		
<input checked="" type="checkbox"/> NOTICE OF INTENT Approximate date work will start: 4/11/2011	<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
<input type="checkbox"/> DRILLING REPORT Report Date:	<input checked="" type="checkbox"/> DEEPEN	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> NEW CONSTRUCTION
	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> PLUG BACK
	<input type="checkbox"/> PRODUCTION START OR RESUME	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION
	<input type="checkbox"/> REPERFORATE CURRENT FORMATION	<input type="checkbox"/> SIDETRACK TO REPAIR WELL	<input type="checkbox"/> TEMPORARY ABANDON
	<input type="checkbox"/> TUBING REPAIR	<input type="checkbox"/> VENT OR FLARE	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> WATER SHUTOFF	<input type="checkbox"/> SI TA STATUS EXTENSION	<input type="checkbox"/> APD EXTENSION
	<input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> OTHER	OTHER: <input style="width: 50px;" type="text"/>

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

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

Approved by the Utah Division of Oil, Gas and Mining

Date: 04/14/2011

By:

NAME (PLEASE PRINT) Andy Lytle	PHONE NUMBER 720 929-6100	TITLE Regulatory Analyst
SIGNATURE N/A	DATE 4/8/2011	



KERR-McGEE OIL & GAS ONSHORE LP
DRILLING PROGRAM

CASING PROGRAM

						DESIGN FACTORS				
	SIZE	INTERVAL		WT.	GR.	CPLG.	BURST	COLLAPSE	LTC	BTC
		TENSION								
CONDUCTOR	14"	0-40'								
							3,390	1,880	348,000	N/A
SURFACE	8-5/8"	0	to 2,870	28.00	IJ-55	LTC	1.88	1.40	4.95	N/A
							10,690	8,650	279,000	367,000
PRODUCTION	4-1/2"	0	to 11,661	11.60	HCP-110	LTC or BTC	1.19	1.10	2.57	3.39

Surface casing:

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

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

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

Production casing:

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

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

CEMENT PROGRAM

		FT. OF FILL	DESCRIPTION	SACKS	EXCESS	WEIGHT	YIELD
SURFACE	LEAD	500'	Premium cmt + 2% CaCl	180	60%	15.80	1.15
			+ 0.25 pps flocele				
	TOP OUT CMT (6 jobs)	1,200'	20 gals sodium silicate + Premium cmt	270	0%	15.80	1.15
			+ 2% CaCl + 0.25 pps flocele				
SURFACE		NOTE: If well will circulate water to surface, option 2 will be utilized					
	LEAD	2,370'	65/35 Poz + 6% Gel + 10 pps gilsonite	220	35%	11.00	3.82
			+ 0.25 pps Flocele + 3% salt BWOW				
	TAIL	500'	Premium cmt + 2% CaCl	150	35%	15.80	1.15
			+ 0.25 pps flocele				
	TOP OUT CMT	as required	Premium cmt + 2% CaCl	as req.		15.80	1.15
PRODUCTION	LEAD	4,751'	Premium Lite II +0.25 pps	340	10%	11.00	3.38
			celloflake + 5 pps gilsonite + 10% gel				
			+ 0.5% extender				
	TAIL	6,910'	50/50 Poz/G + 10% salt + 2% gel	1,330	10%	14.30	1.31
			+ 0.1% R-3				

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

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

FLOAT EQUIPMENT & CENTRALIZERS

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

ADDITIONAL INFORMATION

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

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

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

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

DRILLING ENGINEER:

Nick Spence / Emile Goodwin

DATE:

DRILLING SUPERINTENDENT:

Kenny Gathings / Lovel Young

DATE:

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		FORM 9
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1. TYPE OF WELL Gas Well	8. WELL NAME and NUMBER: NBU 921-17B	
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.	9. API NUMBER: 43047507760000	
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: 0492 FNL 1966 FEL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NWNE Section: 17 Township: 09.0S Range: 21.0E Meridian: S	COUNTY: UINTAH	
		STATE: UTAH
11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA		
TYPE OF SUBMISSION	TYPE OF ACTION	
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start: <input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion: <input type="checkbox"/> SPUD REPORT Date of Spud: <input checked="" type="checkbox"/> DRILLING REPORT Report Date: 4/21/2011	<input type="checkbox"/> ACIDIZE <input type="checkbox"/> CHANGE TO PREVIOUS PLANS <input type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> DEEPEN <input type="checkbox"/> OPERATOR CHANGE <input type="checkbox"/> PRODUCTION START OR RESUME <input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> WATER SHUTOFF <input type="checkbox"/> WILDCAT WELL DETERMINATION	
	<input type="checkbox"/> ALTER CASING <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input type="checkbox"/> FRACTURE TREAT <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> SI TA STATUS EXTENSION <input type="checkbox"/> OTHER	<input type="checkbox"/> CASING REPAIR <input type="checkbox"/> CHANGE WELL NAME <input type="checkbox"/> CONVERT WELL TYPE <input type="checkbox"/> NEW CONSTRUCTION <input type="checkbox"/> PLUG BACK <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION <input type="checkbox"/> TEMPORARY ABANDON <input type="checkbox"/> WATER DISPOSAL <input type="checkbox"/> APD EXTENSION OTHER: <input style="width: 100px;" type="text"/>
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.		
MIRU AIR RIG ON APRIL 19, 2011. DRILLED 11" SURFACE HOLE TO 2860'. RAN 8 5/8" 28# IJ55 SURFACE CASING. CEMENTED SURFACE CASING. WELL IS WAITING ON ROTARY RIG. DETAILS OF CEMENT JOB WILL BE INCLUDED WITH WELL COMPLETION REPORT.		
Accepted by the Utah Division of Oil, Gas and Mining FOR RECORD ONLY		
NAME (PLEASE PRINT) Andy Lytle	PHONE NUMBER 720 929-6100	TITLE Regulatory Analyst
SIGNATURE N/A	DATE 4/25/2011	

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

FORM 6

ENTITY ACTION FORM

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

Well 1

API Number	Well Name		QQ	Sec	Twp	Rng	County
4304751355	NBU 921-35F1BS		SEnw	35	9S	21E	UINTAH
Action Code	Current Entity Number	New Entity Number	Spud Date		Entity Assignment Effective Date		
<u>B</u>	99999	<u>2900</u>	4/8/2011		<u>4/25/11</u>		
Comments: MIRU PETE MARTIN BUCKET RIG. <u>W5MVD</u> SPUD WELL ON 04/08/2011 AT 3:00 PM. <u>BHL=SEnw</u>							

Well 2

API Number	Well Name		QQ	Sec	Twp	Rng	County
4304750776	NBU 921-17B		NWNE	17	9S	21E	UINTAH
Action Code	Current Entity Number	New Entity Number	Spud Date		Entity Assignment Effective Date		
<u>B</u>	99999	<u>2900</u>	4/11/2011		<u>4/25/11</u>		
Comments: MIRU PETE MARTIN BUCKET RIG. <u>W5MVD</u> SPUD WELL ON 04/11/2011 AT 0900 HRS.							

Well 3

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

ACTION CODES:

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

SHEILA WOPSOCK

Name (Please Print)

Signature

REGULATORY ANALYST

Title

4/11/2011

Date

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APR 11 2011

DIV. OF OIL, GAS & MINING

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		FORM 9
SUNDRY NOTICES AND REPORTS ON WELLS Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		5. LEASE DESIGNATION AND SERIAL NUMBER: UTU 0575
1. TYPE OF WELL Gas Well		6. IF INDIAN, ALLOTTEE OR TRIBE NAME: Ute Tr
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 921-17B
4. LOCATION OF WELL FOOTAGES AT SURFACE: 0492 FNL 1966 FEL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NWNE Section: 17 Township: 09.0S Range: 21.0E Meridian: S		9. API NUMBER: 43047507760000
PHONE NUMBER: 720 929-6515 Ext		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"/> 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"/> SUBSEQUENT REPORT Date of Work Completion:	<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"/> SPUD REPORT Date of Spud:	<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"/>	
<input checked="" type="checkbox"/> DRILLING REPORT Report Date: 5/31/2011		
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc. MIRU ROTARY RIG. FINISHED DRILLING FROM 2860' TO 11,685' ON MAY 28, 2011. RAN 4-1/2" 11.6# P-110 PRODUCTION CASING. CEMENTED PRODUCTION CASING. RELEASED H&P RIG 298 ON MAY 31, 2011 @ 06:00 HRS. DETAILS OF CEMENT JOB WILL BE INCLUDED WITH THE WELL COMPLETION REPORT. WELL IS WAITING ON FINAL COMPLETION ACTIVITIES.		
NAME (PLEASE PRINT) Andy Lytle		PHONE NUMBER 720 929-6100
SIGNATURE N/A		TITLE Regulatory Analyst
DATE 5/31/2011		

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

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		FORM 9
SUNDRY NOTICES AND REPORTS ON WELLS		5. LEASE DESIGNATION AND SERIAL NUMBER: UTU 0575
Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		6. IF INDIAN, ALLOTTEE OR TRIBE NAME: Ute Tr
		7. UNIT or CA AGREEMENT NAME: NATURAL BUTTES
1. TYPE OF WELL Gas Well	8. WELL NAME and NUMBER: NBU 921-17B	
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.	9. API NUMBER: 43047507760000	
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: 0492 FNL 1966 FEL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NWNE Section: 17 Township: 09.0S Range: 21.0E Meridian: S	COUNTY: UINTAH	
		STATE: UTAH
11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA		
TYPE OF SUBMISSION	TYPE OF ACTION	
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start:	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> ALTER CASING
<input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion:	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> CHANGE TUBING
<input type="checkbox"/> SPUD REPORT Date of Spud:	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS
<input checked="" type="checkbox"/> DRILLING REPORT Report Date: 7/18/2011	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> FRACTURE TREAT
	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> PLUG AND ABANDON
	<input checked="" type="checkbox"/> PRODUCTION START OR RESUME	<input type="checkbox"/> RECLAMATION OF WELL SITE
	<input type="checkbox"/> REPERFORATE CURRENT FORMATION	<input type="checkbox"/> SIDETRACK TO REPAIR WELL
	<input type="checkbox"/> TUBING REPAIR	<input type="checkbox"/> VENT OR FLARE
	<input type="checkbox"/> WATER SHUTOFF	<input type="checkbox"/> SI TA STATUS EXTENSION
	<input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> OTHER
		<input type="checkbox"/> CASING REPAIR
		<input type="checkbox"/> CHANGE WELL NAME
		<input type="checkbox"/> CONVERT WELL TYPE
		<input type="checkbox"/> NEW CONSTRUCTION
		<input type="checkbox"/> PLUG BACK
		<input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION
		<input type="checkbox"/> TEMPORARY ABANDON
		<input type="checkbox"/> WATER DISPOSAL
		<input type="checkbox"/> APD EXTENSION
		OTHER: <input 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 07/18/2011 AT 7:30 PM. THE CHRONOLOGICAL WELL HISTORY WILL BE SUBMITTED WITH THE WELL COMPLETION REPORT.		
Accepted by the Utah Division of Oil, Gas and Mining FOR RECORD ONLY		
NAME (PLEASE PRINT) Sheila Wopsock	PHONE NUMBER 435 781-7024	TITLE Regulatory Analyst
SIGNATURE N/A	DATE 7/20/2011	

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

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 MCGREE OIL & GAS ONSHORE** Contact: **ANDREW LYTLE**
 Email: **andrew.lytle@anadarko.com**

3. Address **P.O. BOX 173779 DENVER, CO 80217** 3a. Phone No. (include area code) **Ph: 720-929-6100**

4. Location of Well (Report location clearly and in accordance with Federal requirements)*
 At surface **NWNE 492FNL 1966FEL 40.042034 N Lat, 109.573199 W Lon**
 At top prod interval reported below **NWNE 492FNL 1966FEL 40.042034 N Lat, 109.573199 W Lon**
 At total depth **NWNE 492FNL 1966FEL 40.042034 N Lat, 109.573199 W Lon**

5. Lease Serial No. **UTU0575**

6. If Indian, Allottee or Tribe Name _____

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

8. Lease Name and Well No. **NBU 921-17B**

9. API Well No. **43-047-50776**

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

11. Sec., T., R., M., or Block and Survey or Area **Sec 17 T9S R21E Mer SLB**

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

14. Date Spudded **04/11/2011** 15. Date T.D. Reached **05/28/2011** 16. Date Completed D & A Ready to Prod. **07/18/2011**

17. Elevations (DF, KB, RT, GL)* **4826 GL**

18. Total Depth: MD **11685** TVD **11677** 19. Plug Back T.D.: MD **11677** TVD **11669** 20. Depth Bridge Plug Set: MD **MD** TVD **TVD**

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

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

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

Hole Size	Size/Grade	Wt. (#/ft.)	Top (MD)	Bottom (MD)	Stage Cementer Depth	No. of Sk. & Type of Cement	Slurry Vol. (BBL)	Cement Top*	Amount Pulled
20.000	14.000 STL	36.7		40		28			
11.000	8.625 IJ-55	28.0		2863		660		0	
7.875	4.500 P-110	11.6		11648		1940		1432	

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	10990							

25. Producing Intervals

Formation	Top	Bottom	Perforated Interval	Size	No. Holes	Perf. Status
A) WASATCH	8250	8272	8250 TO 8272	0.360	12	OPEN
B) MESAVERDE	8352	11404	8352 TO 11404	0.360	177	OPEN
C)						
D)						

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

Depth Interval	Amount and Type of Material
8250 TO 11404	PUMP 11,978 BBLs SLICK H2O & 255,619 LBS SAND.

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DIV OF OIL, GAS & MINING

28. Production - Interval A

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
07/18/2011	07/23/2011	24	→	0.0	3385.0	329.0			FLOWS FROM WELL
Choke Size	Tbg. Press. Flwg.	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status	
16/64	4524 SI	2965.0	→	0	3385	329		PGW	

28a. Production - Interval B

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

**US ROCKIES REGION
Operation Summary Report**

Well: NBU 921-17B Spud Conductor: 4/11/2011 Spud Date: 4/19/2011
 Project: UTAH-UINTAH Site: NBU 921-17B Rig Name No: PROPETRO 11/11, H&P 298/298
 Event: DRILLING Start Date: 4/3/2011 End Date: 5/31/2011
 Active Datum: RKB @4,852.00ft (above Mean Sea Level) UWI: NW/NE/0/9/S/21/E/17/O/0/26/PM/N/492/E/O/1966/O/0

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
4/19/2011	9:30 - 16:00	6.50	MIRU	01	A	P		MOVE RIG IN OFF THE NBU 921-35F1BS
	16:00 - 21:00	5.00	MIRU	01	B	P		UNLOAD TRUCKS,RIG UP PREPARE TO SPUD WELL
	21:00 - 21:30	0.50	DRLSUR	06	A	P		P/U 1.83 DEG BENT HOUSING HUNTING MTR SN 8017 . 7/8 LOBE .17 RPM. M/U 12.25" Q507 SN 7133231 5TH RUN, W/ 7-18'S. INSTALL RUBBER
	21:30 - 22:30	1.00	DRLSUR	02	B	P		SPUD SURFACE 04/17/2011 @ 21:30 HRS. DRILL 12.25" SURFACE HOLE F/40'-210' (170' @ 170'/HR) PSI ON/ OFF 710/450, UP/ DOWN/ ROT 27/22/25. 500 GPM, 45 RPM ON TOP DRIVE, 15-18K WOB
4/20/2011	22:30 - 0:00	1.50	DRLSUR	06	A	P		TOH L/D 12 1/4" BIT
	0:00 - 1:00	1.00	DRLSUR	06	A	P		M/U 11" BIT,P/U DIR TOOLS,TIH T/210'
	1:00 - 5:30	4.50	DRLSUR	02	B	P		DRILL 11" SURFACE HOLE F/ 210'-1030' (820' @ 182'/HR) PSI ON/ OFF 1200/1000, UP/ DOWN/ ROT 56/48/50 136 SPM, 532 GPM, 18-22K WOB, 45 RPM ON TOP DRIVE,90 RPM ON MM, CIRC RESERVE PIT
	5:30 - 15:30	10.00	DRLSUR	02	B	P		DRILL 11" SURFACE HOLE F/1030'-2080' (1050' @ 105'/HR) PSI ON/ OFF 1800/1600, UP/ DOWN/ ROT 70/65/68 136 SPM, 532 GPM, 18-22K WOB, 45 RPM ON TOP DRIVE,90 RPM ON MM, CIRC RESERVE PIT
4/21/2011	15:30 - 0:00	8.50	DRLSUR	02	B	P		DRILL 11" SURFACE HOLE F/2080'-2770' (690' @ 81'/HR) PSI ON/ OFF 1730/1590, UP/ DOWN/ ROT 80/74/78 136 SPM, 532 GPM, 18-22K WOB, 45 RPM ON TOP DRIVE,90 RPM ON MM, CIRC RESERVE PIT
	0:00 - 1:30	1.50	DRLSUR	02	B	P		DRILL 11" SURFACE HOLE F/2770'-2860' (90' @ 60'/HR) PSI ON/ OFF 1730/1590, UP/ DOWN/ ROT 82/74/78 136 SPM, 532 GPM, 18-22K WOB, 45 RPM ON TOP DRIVE,90 RPM ON MM, CIRC RESERVE PIT(TD 11" SURF. HOLE)
	1:30 - 3:30	2.00	DRLSUR	05	C	P		CIRC & COND HOLE F/L/D & 8 5/8" 28# SURF. CSG RUN
	3:30 - 8:00	4.50	DRLSUR	06	D	P		L/D DRILLSTRING,11" BHA & DIR TOOLS
4/21/2011	8:00 - 9:00	1.00	DRLSUR	12	A	P		R/U T/RUN 8 5/8" 28# SURF. CSG
	9:00 - 11:30	2.50	CSG	12	C	P		HOLD SAFTEY MEETING,RUN FLOAT SHOE ,SHOE JNT,BAFFLE & 63 JNTS 8 5/8" 28# J-55 LT&C CSG W/THE SHOE SET @2841' & THE BAFFLE @ @ 2795'
	11:30 - 12:00	0.50	CSG	12	A	P		RUN 200' 1" PIPE DOWN ANNULUS,INSTALL CEMENTING HEAD,R/U PRO PETRO CEMENTING EQUIP
	12:00 - 13:00	1.00	CSG	12	E	P		HOLD SAFETY MEETING. PSI TEST TO 2000 PSI. PUMP 90 BBLS OF 8.4# H2O AHEAD. FULL CIRC. PUMP 20 BBLS OF 8.4# GEL WATER AHEAD. FULL CIRC. PUMP 220 SX(149.6 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/174 BBLS OF 8.4# H2O.FULL CIRC. THRU OUT JOB,FINAL LIFT PRESS. 600 PSI, BUMP PLUG AND HOLD 1100 PSI FOR 5 MIN. FLOAT HELD,30 BBLS LEAD CEMENT TO SURF.,CEMENT FELL BACK

**US ROCKIES REGION
Operation Summary Report**

Well: NBU 921-17B Spud Conductor: 4/11/2011 Spud Date: 4/19/2011
 Project: UTAH-UINTAH Site: NBU 921-17B Rig Name No: PROPETRO 11/11, H&P 298/298
 Event: DRILLING Start Date: 4/3/2011 End Date: 5/31/2011
 Active Datum: RKB @4,852.00ft (above Mean Sea Level) UWI: NW/NE/0/9/S/21/E/17/0/0/26/PM/N/492/E/0/1966/0/0

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
	13:00 - 13:30	0.50	CSG	12	F	P		TOP OUT THRU 1" PIPE W/125 SKS 15.8 PPG CLASS "G" CEMENT W/4% CACL2 & 1/4#/SK FLOCELE,NO CEMENT TO SURF
	13:30 - 15:00	1.50	CSG	13	A	P		WAIT ON CEMENT
	15:00 - 15:30	0.50	CSG	12	F	P		TOP OUT W/115 SKS 15.8 PPG CLASS "G" CEMENT W/4% CACL2 & 1/4#/SK FLOCELE,W/ CEMENT TO SURF(RELEASE RIG @ 15:30 04/21/2011)
	15:30 - 15:30	0.00	CSG					CONDUCTOR CASING: Cond. Depth set: 40' Cement sx used: 28
								SPUD DATE/TIME: 4/19/2011 21:30
								SURFACE HOLE: Surface From depth: 40' Surface To depth: 2860' Total SURFACE hours: 25.50 Surface Casing size: 8 5/8" # of casing joints ran: 64 Casing set MD: 2,841.0 # sx of cement: 220/200/240 Cement blend (ppg): 11.0/15.8/15.8 Cement yield (ft3/sk): 3.82/1.15/1.15 # of bbls to surface: Describe cement issues: NONE Describe hole issues: NONE
5/18/2011	0:00 - 6:00	6.00	RDMO	01	E	P		RIG DOWN ROTARY TOOLS / PREP RIG FOR TRUCKS
	6:00 - 19:00	13.00	RDMO	01	A	P		SAFETY MEETING WITH RIG CREWS, TRUCKING CREW & CRANE CREW / 7 BED TRUCKS 6 HAUL TRUCKS, TWO FORKLIFTS & ONE CRANE ON LOCATION @ 06:00 /,MOVE CAMPS TO NEW LOC & RIG UP/ LOAD OUT & MOVE BACK YARD./ SET IN BACK YARD & R/U PUMPS MCC HOUSE,WATER TANK ,VFD, GENS & DIESELTANK / SHAKERS / PLUG IN ELECTRIC CORDS / START #1 GEN LOWER DERRICK SPLIT & LOAD OUT / LOWER SUB / NFTN @ 1900 HRS DUE TO HEAVY RAIN / RIG 85% MOVED 35% RIGGED UP/ H&P 12 MEN 13 HRS
	19:00 - 0:00	5.00	RDMO	21	C	P		WAIT ON DAY LIGHT
5/19/2011	0:00 - 6:00	6.00	MIRU	21	C	P		WAIT ON DAYLIGHT
	6:00 - 0:00	18.00	MIRU	01	B	P		HSM / FINISH HAULING LAST LOADS TO LOC / SET DRAWWORKS SET & PIN SUB STRUCTURE+COMPONENTS / SUB UP @ 10:15 HRS,RAISE SHAKERS SET & RAISE DOGHOUSE,SET IN GAS BUSTER/ RELEASED 5 HAUL TRUCKS /5 BED TRUCKS @1230/ SET IN DERRICK & REASSEMBLE / PURGE & PIN CYLINDERS TO DERRICK / RAISE DERRICK TO RIG FLOOR & PIN /MOVE CYLINDERS TO RAISE POSITION, RAISE DERRICK UP @ 1500 / FINISH SET IN RIG, ,BOP HANDLER,FRAC TANKS CMT SILOS/ CAT WALK & STAIRS/ SET IN FLOW LINE / FLARE LINES/TRUCKS GONE @1530 CRANE @ 1830/ SPOOL DRILL LINE, UNPIN TOP DRIVE/ DRESS FLOOR,ELECTRIC,WATER,AIR,IN STALL BAILS & ELEVATORS
5/20/2011	0:00 - 6:00	6.00	PRSPD	14	A	P		NIPPLE UP BOP,CHOKE LINE,KILL LINE,FLOW LINE,HYD LINES,SUPER CHOKE

**US ROCKIES REGION
Operation Summary Report**

Well: NBU 921-17B Spud Conductor: 4/11/2011 Spud Date: 4/19/2011
 Project: UTAH-UINTAH Site: NBU 921-17B Rig Name No: PROPETRO 11/11, H&P 298/298
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 Active Datum: RKB @4,852.00ft (above Mean Sea Level) UWI: NW/NE/0/9/S/21/E/17/O/0/26/PM/N/492/E/0/1966/0/0

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
	6:00 - 10:30	4.50	PRSPD	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 - SET WEAR BUSHING
	10:30 - 11:00	0.50	PRSPD	14	B	P		PRE SPUD INSPECTION
	11:00 - 11:30	0.50	PRSPD	23		P		
	11:30 - 17:00	5.50	PRSPD	06	A	P		HSM / W/ WEATHERFORD PICK UP BHA & DIR TOOLS, ORIENT & SURFACE TEST, PICK UP 56 JOINTS DP /R/D SAME, CHECK DERRICK FOR LEVEL/INSTALL ROTATING HEAD
	17:00 - 18:00	1.00	DRLPRO	02	F	P		TAG CMT @2750' DRILL FLOAT TRAC., BAFFLE @ 2816, SHOE @ 2862 OPEN HOLE TO 2882'
	18:00 - 0:00	6.00	DRLPRO	02	D	P		DRILL / SLIDE / SURVEY F/2882' TO 3653' =771 @ 128.5 FPH // WOB 15K-18K / TOP DRIVE RPM 40-60 / PUMP 122 SPM = 550 GPM / PUMP PRESSURE ON/OFF BOTTOM 1575/1350 PSI / MUD MOTOR RPM 115 / PU/SO/ROT WT102/91/98/ TORQUE ON/OFF BOTTOM 6K/3K / SLIDE 20' IN 10 MIN 2.5% OF FOOTAGE DRILLED 2.0% OF HRS DRILLED H2O + POLYMER W/ WEIGHTED SWEEPS +/- 2.0 PPG
5/21/2011	0:00 - 6:00	6.00	DRLPRO	02	D	P		DRILL / SLIDE / SURVEY F/3653' TO 4415 =762' @ 127 FPH // WOB 16K-21K / TOP DRIVE RPM 40-60 / PUMP 122 SPM = 550 GPM / PUMP PRESSURE ON/OFF BOTTOM 2040/1760 PSI / MUD MOTOR RPM 115 / PU/SO/ROT WT134/108/118/ TORQUE ON/OFF BOTTOM 7K/2K / SLIDE 35' IN 30 MIN 4% OF FOOTAGE DRILLED 6% OF HRS DRILLED H2O + POLYMER W/ WEIGHTED SWEEPS +/- 2.0 PPG
	6:00 - 15:00	9.00	DRLPRO	02	D	P		DRILL / SLIDE / SURVEY F/ 4415 TO 5437 =1022' @ 113.5 FPH // WOB 16K-21K / TOP DRIVE RPM 40-60 / PUMP 122 SPM = 550 GPM / PUMP PRESSURE ON/OFF BOTTOM 2100/1800 PSI / MUD MOTOR RPM 115 / PU/SO/ROT WT148/121/133 TORQUE ON/OFF BOTTOM 6K/2K / SLIDE 70' IN 100 MIN 6.8% OF FOOTAGE DRILLED 18.5% OF HRS DRILLED H2O + POLYMER W/ WEIGHTED SWEEPS +/- 2.0 PPG
	15:00 - 15:30	0.50	DRLPRO	07	A	P		RIG SERVICE
	15:30 - 0:00	8.50	DRLPRO	02	D	P		DRILL / SLIDE / SURVEY F/ 5437 TO 6477 =1040' @ 122.3 FPH // WOB 16K-22K / TOP DRIVE RPM 40-60 / PUMP 120 SPM = 540 GPM / PUMP PRESSURE ON/OFF BOTTOM 2140/1870 PSI / MUD MOTOR RPM 115 / PU/SO/ROT WT174/143/154 TORQUE ON/OFF BOTTOM 7K4K / SLIDE 20' IN 20 MIN 5% OF FOOTAGE DRILLED 2% OF HRS DRILLED H2O + POLYMER W/ WEIGHTED SWEEPS +/- 2.0 PPG
5/22/2011	0:00 - 6:00	6.00	DRLPRO	02	D	P		DRILL / SURVEY F/ 6477 TO 7050 =573' @ 95.5 FPH // WOB 16K-22K / TOP DRIVE RPM 40-60 / PUMP 120 SPM = 540 GPM / PUMP PRESSURE ON/OFF BOTTOM 2160/1880 PSI / MUD MOTOR RPM 115 / PU/SO/ROT WT186/146/163 TORQUE ON/OFF BOTTOM 7K4K / H2O + POLYMER W/ WEIGHTED SWEEPS +/- 2.0 PPG / LIGHT MUD UP

**US ROCKIES REGION
Operation Summary Report**

Well: NBU 921-17B	Spud Conductor: 4/11/2011	Spud Date: 4/19/2011
Project: UTAH-UINTAH	Site: NBU 921-17B	Rig Name No: PROPETRO 11/11, H&P 298/298
Event: DRILLING	Start Date: 4/3/2011	End Date: 5/31/2011
Active Datum: RKB @4,852.00ft (above Mean Sea Level)		UWI: NW/NE/09/S/21/E/17/0/0/26/PM/N/492/E/0/1966/0/0

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
	6:00 - 15:30	9.50	DRLPRO	02	D	P		DRILL/ SURVEY F/ 7050 TO 7612 =562'@ 59.1 FPH // WOB 16K-22K / TOP DRIVE RPM 40-60 / PUMP 120 SPM = 540 GPM / PUMP PRESSURE ON/OFF BOTTOM 2250/2000 PSI / MUD MOTOR RPM 115 / PU/SO/ROT WT197/152/167 TORQUE ON/OFF BOTTOM 9K/5K / SLIDE 20' IN 30 MIN 3.5% OF FOOTAGE DRILLED 5.2% OF HRS DRILLED MUD WY 9.5 VIS 34 / NO MUD LOSS RIG SERVICE
	15:30 - 16:00	0.50	DRLPRO	07	A	P		
	16:00 - 0:00	8.00	DRLPRO	02	D	P		DRILL/ SURVEY F/ 7612 TO 7995 =383@47.8 FPH // WOB 16K-24K / TOP DRIVE RPM 40-60 / PUMP 120 SPM = 540 GPM / PUMP PRESSURE ON/OFF BOTTOM 2580/2260 PSI / MUD MOTOR RPM 115 / PU/SO/ROT WT205/158/173 TORQUE ON/OFF BOTTOM 6K/5K / MUD WT 10.1 VIS 34 / NO MUD LOSS
5/23/2011	0:00 - 6:00	6.00	DRLPRO	02	D	P		DRILL / SURVEY F/ 7995 TO 8200 =205@34.1 FPH / WOB 16K-24K / TOP DRIVE RPM 40-60 / PUMP 110 SPM = 495 GPM / PUMP PRESSURE ON/OFF BOTTOM 2350/2120 PSI / MUD MOTOR RPM 104 / PU/SO/ROT WT 200/160/178 / TORQUE ON/OFF BOTTOM 7K/6K / MUD WT 10.2 VIS 35 / NO MUD LOSS
	6:00 - 15:30	9.50	DRLPRO	02	D	P		DRILL / SURVEY F/ 8200 TO 8650 =450@47.3 FPH / WOB 16K-24K / TOP DRIVE RPM 40-60 / PUMP 110 SPM = 495 GPM / PUMP PRESSURE ON/OFF BOTTOM 2550/2220 PSI / MUD MOTOR RPM 104 / PU/SO/ROT WT 196/164/180 / TORQUE ON/OFF BOTTOM 7K/6K / MUD WT 10.7 VIS 35 / NO MUD LOSS
	15:30 - 16:00	0.50	DRLPRO	07	A	P		RIG SERVICE / BOP DRILL
	16:00 - 0:00	8.00	DRLPRO	02	D	P		DRILL / SURVEY F/8650 TO 9005 =355@44.3 FPH / WOB 16K-24K / TOP DRIVE RPM 40-60 / PUMP 110 SPM = 495 GPM / PUMP PRESSURE ON/OFF BOTTOM 2680/2425 PSI / MUD MOTOR RPM 104 / PU/SO/ROT WT 218/166/186 TORQUE ON/OFF BOTTOM 6K/6K / MUD WT 11.5 VIS 40 / MUD LOSS SEEPAGE TO HOLE 40 BBLs BYPASS SHAKERS @ 9000' LCM 5%
5/24/2011	0:00 - 6:00	6.00	DRLPRO	02	D	P		DRILL / SURVEY F/9005 TO 9275 =270@45 FPH / WOB 16K-24K / TOP DRIVE RPM 40-60 / PUMP 110 SPM = 495 GPM / PUMP PRESSURE ON/OFF BOTTOM 2800/2640 PSI / MUD MOTOR RPM 104 / PU/SO/ROT WT 218/166/186 TORQUE ON/OFF BOTTOM 6K/6K / MUD WT 11.5 VIS 40 LCM 5%
	6:00 - 17:00	11.00	DRLPRO	02	D	P		DRILL / SURVEY F/9275 TO 9790 =515@46.8 FPH / WOB 16K-24K / TOP DRIVE RPM 40-60 / PUMP 110 SPM = 495 GPM / PUMP PRESSURE ON/OFF BOTTOM 2900/2730 PSI / MUD MOTOR RPM 104 / PU/SO/ROT WT 215/171/198 TORQUE ON/OFF BOTTOM 7K/5K / MUD WT 11.8 VIS 40 LCM 12% /60 BBL MUD LOSS
	17:00 - 17:30	0.50	DRLPRO	07	A	P		RIG SERVICE
	17:30 - 0:00	6.50	DRLPRO	02	D	P		DRILL / SURVEY F/9790 TO 9976 =186@28.6 FPH / WOB 16K-24K / TOP DRIVE RPM 40-60 / PUMP 110 SPM = 495 GPM / PUMP PRESSURE ON/OFF BOTTOM 2925/2750 PSI / MUD MOTOR RPM 104 / PU/SO/ROT WT 218/172/198 TORQUE ON/OFF BOTTOM 5K/4K / MUD WT 11.9 VIS 42 LCM 12% / NO MUD LOSS
5/25/2011	0:00 - 1:00	1.00	DRLPRO	05	C	P		CIRC BTM'S UP @ 9,976' FOR BIT TRIP

**US ROCKIES REGION
Operation Summary Report**

Well: NBU 921-17B Spud Conductor: 4/11/2011 Spud Date: 4/19/2011
 Project: UTAH-UINTAH Site: NBU 921-17B Rig Name No: PROPETRO 11/11, H&P 298/298
 Event: DRILLING Start Date: 4/3/2011 End Date: 5/31/2011
 Active Datum: RKB @4,852.00ft (above Mean Sea Level) UWI: NW/NE/O/S/21/E/17/O/O/26/PM/N/492/E/O/1966/O/O

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
	1:00 - 6:00	5.00	DRLPRO	06	A	P		PULL 5 STDS / PUMP SLUG TOH / TIGHT SPOT @ 5175 / FLOW CHECK @ CSG SHOE/ PULL ROTATING RUBBER / TOH W/ BHA # 1 / FUNCTION BOP'S
	6:00 - 11:00	5.00	DRLPRO	06	A	P		C/O BIT & MUD MTR / SCRIBE / ORIENTATE & TEST SAME / TIH W/ BIT # 2 FILL @ SHOE 2,863' / 5,000' & 7,500' / WASH LAST 2 STDS TO BTM F/ 9,800' TO 9,976' / NO FILL / CHECK RIG FOR ALIEGNMENT/ TRIP DRILL
	11:00 - 15:00	4.00	DRLPRO	02	B	P		DRILL / SURVEY F/9,976' TO 10,164' = 188' @ 47 FPH / WOB 18K-23K / TOP DRIVE RPM 40-50 / PUMP 110/100 SPM = 495/450 GPM / PUMP PRESSURE ON/OFF BOTTOM 2725/2400 PSI / MUD MOTOR RPM 79/ 72 / PU/SO/ROT WT 218/187/200 TORQUE ON/OFF BOTTOM 5K/4K / MUD WT 12.0 VIS 46 LCM 12% / 100 BBL MUD LOSS / 3000 UNITS GAS BTMS UP AFTER TRIP / NO FLARE
	15:00 - 15:30	0.50	DRLPRO	07	A	P		SERVICE RIG @ 10,164'
	15:30 - 0:00	8.50	DRLPRO	02	B	P		DRILL / SURVEY F/10,164' TO 10,547' = 383' @ 45.05 FPH / WOB 18K-23K / TOP DRIVE RPM 40-50 / PUMP 110/100 SPM = 495/450 GPM / PUMP PRESSURE ON/OFF BOTTOM 2725/2400 PSI / MUD MOTOR RPM 79/ 72 / PU/SO/ROT WT 260/185/210 TORQUE ON/OFF BOTTOM 5K/4K / MUD WT 12.2 VIS 46 LCM 18% / 75 BBL MUD LOSS / MAX GAS 4015 UNITS / NO FLARE
5/26/2011	0:00 - 9:30	9.50	DRLPRO	02	B	P		DRILL / SURVEY F/10,547' TO 10,737' = 190' @ 20 FPH / WOB 20K-23K / TOP DRIVE RPM 35-45 / PUMP 90 SPM = 405 GPM / PUMP PRESSURE ON/OFF BOTTOM 2350/2150 PSI / MUD MOTOR RPM 65 / PU/SO/ROT WT 240/185/210 TORQUE ON/OFF BOTTOM 6K/5K / MUD WT 12.2 VIS 46 LCM 18% / MAX GAS 5,415 UNITS / NO FLARE / NO MUD LOSE
	9:30 - 10:00	0.50	DRLPRO	07	A	P		SERVICE RIG @ 10,737'
	10:00 - 0:00	14.00	DRLPRO	02	B	P		DRILL / SURVEY F/10,737' TO 10,935' = 198' @ 14.14 FPH / WOB 20K-23K / TOP DRIVE RPM 35-40 / PUMP 90 SPM = 405 GPM / PUMP PRESSURE ON/OFF BOTTOM 2200/2050 PSI / MUD MOTOR RPM 65 / PU/SO/ROT WT 250/205/215 TORQUE ON/OFF BOTTOM 5K/4K / MUD WT 12.4 VIS 46 LCM 18% / / MAX GAS 2160 UNITS / NO FLARE / NO MUD LOSE
5/27/2011	0:00 - 13:30	13.50	DRLPRO	02	B	P		DRILL / SURVEY F/10,935' TO 11,114' = 179' @13.25 FPH / WOB 20K-23K / TOP DRIVE RPM 35-40 / PUMP 90 SPM = 405 GPM / PUMP PRESSURE ON/OFF BOTTOM 2300/2050 PSI / MUD MOTOR RPM 65 / PU/SO/ROT WT 245/205/215 TORQUE ON/OFF BOTTOM 5K/4K / MUD WT 12.4 VIS 46 LCM 18% / / MAX GAS 3960 UNITS / NO FLARE / NO MUD LOSE
	13:30 - 14:00	0.50	DRLPRO	07	A	P		SERVICE RIG @ 11,114'
	14:00 - 15:30	1.50	DRLPRO	02	B	P		DRILL / SURVEY F/11,114' TO 11,137' = 23' @15.33 FPH / WOB 20K-24K / TOP DRIVE RPM 35-45 / PUMP 110 SPM = 495 GPM / PUMP PRESSURE ON/OFF BOTTOM 2950/2750 PSI / MUD MOTOR RPM 79 / PU/SO/ROT WT 245/205/215 TORQUE ON/OFF BOTTOM 5K/4K / MUD WT 12.4 VIS 46 LCM 18% / NO MUD LOSE
	15:30 - 21:30	6.00	DRLPRO	06	A	P		TOOH W/ BIT # 2 F/ 11,137' TO BIT / W NO PROBLEMS

US ROCKIES REGION
Operation Summary Report

Well: NBU 921-17B Spud Conductor: 4/11/2011 Spud Date: 4/19/2011
 Project: UTAH-UINTAH Site: NBU 921-17B Rig Name No: PROPETRO 11/11, H&P 298/298
 Event: DRILLING Start Date: 4/3/2011 End Date: 5/31/2011
 Active Datum: RKB @4,852.00ft (above Mean Sea Level) UWI: NW/NE/0/9/S/21/E/17/0/0/26/PM/N/492/E/0/1966/0/0

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation	
5/28/2011	21:30 - 23:30	2.00	DRLPRO	06	A	P		L/D BHA & P/U BIT # 3	
	23:30 - 0:00	0.50	DRLPRO	06	A	P		TIH W/ BIT # 3 TO 915'	
	0:00 - 5:00	5.00	DRLPRO	06	A	P		TIH W/ BIT # 3 F/ 915' TO 10,900' WASH TO BTM @ 11,137' / NO FILL W/ NO PROBLEMS	
	5:00 - 15:00	10.00	DRLPRO	02	B	P		DRILL F/ 11,137' TO 11,620' = 483' @ 48.3 FPH / WOB 22K-24K / TOP DRIVE RPM 40-45 / PUMP 110 SPM = 495 GPM / PUMP PRESSURE ON/OFF BOTTOM 2950/2750 PSI / MUD MOTOR RPM 79 / PU/SO/ROT WT 253/213/221 TORQUE ON/OFF BOTTOM 7K/5K / MUD WT 12.4 VIS 45 LCM 18% / NO MUD LOSE	
5/29/2011	15:00 - 15:30	0.50	DRLPRO	07	A	P		SERVICE RIG @ 11,620'	
	15:30 - 16:30	1.00	DRLPRO	02	B	P		DRILL / SURVEY F/11,620' TO 11,685 TD' = 65' @ 65 FPH / WOB 22K-24K / TOP DRIVE RPM 40-45 / PUMP 110 SPM = 495 GPM / PUMP PRESSURE ON/OFF BOTTOM 3100/2750 PSI / MUD MOTOR RPM 79 / PU/SO/ROT WT 255/215/220 TORQUE ON/OFF BOTTOM 7K/5K / MUD WT 12.5 VIS 45 LCM 20% / 100 BBL MUD LOSE / MAX GAS 6380 UNITS 2 /10 MUD CUT 20' FLARE	
	16:30 - 18:30	2.00	DRLPRO	05	A	P		CIRC & COND MUD @ 11,685' TD / MAX GAS 4650 UNITS / MUD CUT 2 /10'S / 15' FLARE	
	18:30 - 0:00	5.50	DRLPRO	06	E	P		WIPER TRIP F/ 11,685' TO 4,800' / TIH TO 9,550' TIGHT HOLE @ 5,450' / WORK THROUGH SAME	
	0:00 - 1:30	1.50	DRLPRO	06	E	P		TIH F/ 9,550' TO 11,685' / NO FILL / 100 BBL MUD LOSE / CHECK RIG ALIGNMENT	
	1:30 - 4:30	3.00	DRLPRO	05	A	P		CIRC & COND MUD @ 11,685' MAX GAS ON BTM'S UP ON TRIP 1830 UNITS / NO FLARE / NO MUD CUT / MUD WT 12.6 / VIS 48 / LCM 23%	
	4:30 - 9:30	5.00	DRLPRO	06	A	P		TOOH TO RUN OPEN HOLE LOGS W/ NO PROBLEMS	
	9:30 - 17:30	8.00	DRLPRO	11	D	P		PJSM / RU & RUN TRIPPLE COMBO W/ HALLIBURTON WIRE LINE LOGGING UNIT F/ 11,686' TO 100' / WORK TIGHT HOLE F/ 9,350' TO 9,500'	
	17:30 - 23:00	5.50	DRLPRO	06	A	P		TIH W/ BIT # 3 TO 11,500' / WASH LAST 2 STDS TO BTM @ 11,685' / NO FILL / NO PROBLEMS / TRIP DRILL	
	23:00 - 0:00	1.00	DRLPRO	05	A	P		CIRC & COND MUD @ 11,685' / BTM'S UP GAS 1555 UNITS / NO FLARE / NO MUD CUT	
	5/30/2011	0:00 - 2:00	2.00	DRLPRO	05	A	P		CIRC & COND MUD @ 11,685'
		2:00 - 12:00	10.00	DRLPRO	06	A	P		TOOH LD TUBULARS TO RUN 4 1/2" PROD CSG. W/ NO PROBLEMS
		12:00 - 12:30	0.50	DRLPRO	14	B	P		PULL WEAR BUSHING / C/O BAILS
		12:30 - 13:30	1.00	COMP	12	A	P		PJSM RU WEATHERFORD CSG EQUIPMENT
13:30 - 22:00		8.50	COMP	12	C	P		PJSM RUN 270 JTS OF 4 1/2" 11.60# BTC P-110 CSG / SHOE @ 11675' / FLOAT COLLAR @ 11,629' Wasatch Marker @ 5,281' Mverde Marker @ 8,326'	
22:00 - 23:30		1.50	COMP	05	A	P		CIRC & COND MUD @ 11,675' / 25 BBL MUD LOSE / MAX GAS 650 UNITS	
23:30 - 0:00	0.50	COMP	12	E	P		TEST BJ CEMENTING PUMPS & LINES TO 5000 PSI / PUMP 40 BBL H2O SPACER		

**US ROCKIES REGION
Operation Summary Report**

Well: NBU 921-17B		Spud Conductor: 4/11/2011		Spud Date: 4/19/2011	
Project: UTAH-UINTAH			Site: NBU 921-17B		Rig Name No: PROPETRO 11/11, H&P 298/298
Event: DRILLING			Start Date: 4/3/2011		End Date: 5/31/2011
Active Datum: RKB @4,852.00ft (above Mean Sea Level)			UWI: NW/NE/0/9/S/21/E/17/0/0/26/PM/N/492/E/0/1966/0/0		

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
5/31/2011	0:00 - 3:00	3.00	COMP	12	E	P		CONT. CMT JOB W/ 625 SX LEAD CEMENT @ 12.7 ppg (PREM LITE II) 145.1 BBLS FRESH WATER / (9.75 gal/sx, 1.89 yield) +1315SX TAIL @ 14.3 ppg (CLS G 50/50 POZ 184.7 BBLS H2O / (5.90 gal/sx, 1.31 yield) / DROP PLUG & DISPLACE W/ 180.8 BBLS H2O + ADDITIVES / PLUG DOWN @ 02:15 LIFT PRESSURE @ 3620 PSI BUMP PRESSURE @4258 W/ 5 BBLCMT BACK TO PIT / FLOATS HELD W/ 2 BBLS H2O RETURNED TO INVENTORY / TOP OF TAIL CEMENT CALCULATED @ 4767' FULL RETURNS THROUGH OUT JOB, RD CMT EQUIP
	3:00 - 6:00	3.00	COMP	14	A	P		RAISE BOP / SET SLIPS W/ 100K / ND BOP'S / CLEAN PITS / RELEASE RIG @ 06:00 5/31/11

US ROCKIES REGION
Operation Summary Report

Well: NBU 921-17B	Spud Conductor: 4/11/2011	Spud Date: 4/19/2011
Project: UTAH-UINTAH	Site: NBU 921-17B	Rig Name No: PROPETRO 11/11, H&P 298/298
Event: DRILLING	Start Date: 4/3/2011	End Date: 5/31/2011
Active Datum: RKB @4,852.00ft (above Mean Sea Level)		UWI: NW/NE/0/9/S/21/E/17/0/0/26/PM/N/492/E/0/1966/0/0

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
	6:00 - 6:00	0.00	COMP					<p>CONDUCTOR CASING: Cond. Depth set: 40 Cement sx used: 28</p> <p>SPUD DATE/TIME: 4/19/2011 21:30</p> <p>SURFACE HOLE: Surface From depth: 40 Surface To depth: 2,860 Total SURFACE hours: 25.50 Surface Casing size: 8-5/8" # of casing joints ran: 64 Casing set MD: 2,841.0 # sx of cement: 220/200/240 Cement blend (ppg): 11.0/15.8/15.8 Cement yield (ft3/sk): 3.83/1.15/1.15 # of bbls to surface: 0 Describe cement issues: NO CMT TO SURFACE Describe hole issues: NONE</p> <p>PRODUCTION: Rig Move/Skid start date/time: 5/17/2011 0:00 Rig Move/Skid finish date/time: 5/19/2011 0:00 Total MOVE hours: 48.0 Prod Rig Spud date/time: 5/20/2011 17:00 Rig Release date/time: 5/31/2011 6:00 Total SPUD to RR hours: 253.0 Planned depth MD 11,663 Planned depth TVD 11661 Actual MD: 11,685 Actual TVD: 11,676 Open Wells \$: AFE \$: Open wells \$/ft:</p> <p>PRODUCTION HOLE: Prod. From depth: 2882 Prod. To depth: 11,685 Total PROD hours: 162 Log Depth: 11,688 Production Casing size: 4 1/2 # of casing joints ran: 272 Casing set MD: 11,675.0 # sx of cement: 1,940 Cement blend (ppg): 12.7 / 14.3 Cement yield (ft3/sk): 1.89 / 1.31 Est. TOC (Lead & Tail) or 2 Stage : 4767 Describe cement issues: 5 BBL CMT BACK Describe hole issues: FULL RETURNS THROUGH JOB</p> <p>DIRECTIONAL INFO: DIRECTIONAL KOP: 0 Max angle: 2.65 Departure: 0.00 Max dogleg MD: 2.00</p>

1 General

1.1 Customer Information

Company	US ROCKIES REGION
Representative	
Address	

1.2 Well Information

Well	NBU 921-17B		
Common Name	NBU 921-17B		
Well Name	NBU 921-17B	Wellbore No.	OH
Report No.	1	Report Date	7/11/2011
Project	UTAH-UINTAH	Site	NBU 921-17B
Rig Name/No.		Event	COMPLETION
Start Date	7/18/2011	End Date	7/18/2011
Spud Date	4/19/2011	Active Datum	RKB @4,852.00ft (above Mean Sea Level)
UWI	NW/NE/0/9/S/21/E/17/0/0/26/PM/N/492/E/0/1966/0/0		

1.3 General

Contractor	CASED HOLE	Job Method	PERFORATE	Supervisor	STEVE WALL, SR.
Perforated Assembly	PRODUCTION CASING	Conveyed Method	WIRELINE		

1.4 Initial Conditions

1.5 Summary

Fluid Type		Fluid Density		Gross Interval	8,250.0 (ft)-11,404.0 (ft)	Start Date/Time	7/13/2011 12:00AM
Surface Press		Estimate Res Press		No. of Intervals	28	End Date/Time	7/15/2011 12:00AM
TVD Fluid Top		Fluid Head		Total Shots	189	Net Perforation Interval	51.00 (ft)
Hydrostatic Press		Press Difference		Avg Shot Density	3.71 (shot/ft)	Final Surface Pressure	
Balance Cond	NEUTRAL					Final Press Date	

2 Intervals

2.1 Perforated Interval

Date	Formation/Reservoir	CCL@ (ft)	CCL-T S (ft)	MD Top (ft)	MD Base (ft)	Shot Density (shot/ft)	Misfires/Add. Shot	Diameter (in)	Carr Type /Carr Manuf	Carr Size (in)	Phasing (°)	Charge Desc /Charge Manufacturer	Charge Weight (gram)	Reason	Misrun
12:00AM	WASATCH/			8,250.0	8,252.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO	N

2.1 Perforated Interval (Continued)

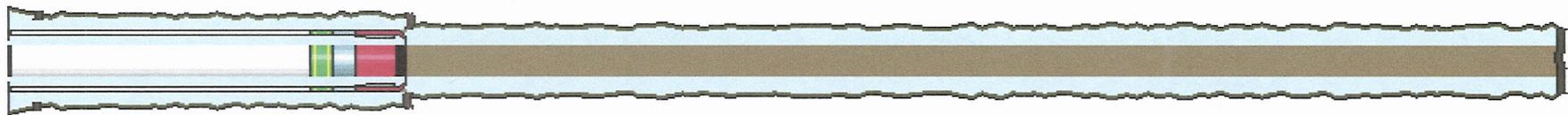
Date	Formation/ Reservoir	CCL@ (ft)	CCL-T S (ft)	MD Top (ft)	MD Base (ft)	Shot Density (shot/ft)	Misfires/ Add. Shot	Diamete r (in)	Carr Type /Carr Manuf	Carr Size (in)	Phasing (°)	Charge Desc /Charge Manufacturer	Charge Weight (gram)	Reason	Misrun
12:00AM	WASATCH/			8,271.0	8,272.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
12:00AM	MESAVERDE/			8,352.0	8,355.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
12:00AM	MESAVERDE/			8,418.0	8,419.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
12:00AM	MESAVERDE/			8,426.0	8,427.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
12:00AM	MESAVERDE/			8,462.0	8,464.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
12:00AM	MESAVERDE/			8,485.0	8,486.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
12:00AM	MESAVERDE/			8,534.0	8,535.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
12:00AM	MESAVERDE/			8,618.0	8,620.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
12:00AM	MESAVERDE/			8,772.0	8,774.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
12:00AM	MESAVERDE/			8,850.0	8,852.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
12:00AM	MESAVERDE/			9,198.0	9,200.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
12:00AM	MESAVERDE/			9,249.0	9,251.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
12:00AM	MESAVERDE/			9,352.0	9,354.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
12:00AM	MESAVERDE/			9,462.0	9,464.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
12:00AM	MESAVERDE/			9,853.0	9,855.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
12:00AM	MESAVERDE/			9,931.0	9,933.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
12:00AM	MESAVERDE/			9,962.0	9,964.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
12:00AM	MESAVERDE/			10,206.0	10,207.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
12:00AM	MESAVERDE/			10,315.0	10,316.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
12:00AM	MESAVERDE/			10,399.0	10,401.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
12:00AM	MESAVERDE/			10,418.0	10,420.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	

2.1 Perforated Interval (Continued)

Date	Formation/ Reservoir	CCL@ (ft)	CCL-T S (ft)	MD Top (ft)	MD Base (ft)	Shot Density (shot/ft)	Misfires/ Add. Shot	Diamete r (in)	Carr Type /Carr Manuf	Carr Size (in)	Phasing (°)	Charge Desc /Charge Manufacturer	Charge Weight (gram)	Reason	Misrun
12:00AM	MESAVERDE/			11,104.0	11,107.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
12:00AM	MESAVERDE/			11,168.0	11,171.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
12:00AM	MESAVERDE/			11,195.0	11,196.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
12:00AM	MESAVERDE/			11,262.0	11,264.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
12:00AM	MESAVERDE/			11,281.0	11,283.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
12:00AM	MESAVERDE/			11,402.0	11,404.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	

3 Plots

3.1 Wellbore Schematic



**US ROCKIES REGION
Operation Summary Report**

Well: NBU 921-17B Spud Conductor: 4/11/2011 Spud Date: 4/19/2011
 Project: UTAH-UINTAH Site: NBU 921-17B Rig Name No: SWABBCO 1/1
 Event: COMPLETION Start Date: 7/18/2011 End Date: 7/18/2011
 Active Datum: RKB @4,852.00ft (above Mean Sea Level) UWI: NW/NE/0/9/S/21/E/17/0/0/26/PM/N/492/E/0/1966/0/0

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
7/12/2011	7:00 - 7:30	0.50	COMP	48		P		HSM, RIGGING DWN EQUIP
	7:30 - 15:00	7.50	COMP	30	A	P		RD OFF NBU 921-17G, MIRU, ND WH NU FRAC VALVES, TEST 4 1/2 CSG TO 1,000 PSI FOR 15 MIN LOST 10 PSI, TEST TO 3500 PSI FOR 15 MIN LOST 20 PSI, TEST TO 9,000# FOR 30 MIN LOST 84 PSI, REPRESSURE TO 9,000 PSI LOST 64 PSI GOOD TEST, OK'D BT JEFF SAMUELS, RD B&C SWI PREP TO PERF IN AM SDFN.
7/13/2011	7:00 - 7:30	0.50	COMP	48		P		HSM, RIGGING UP WIRE LINE.
	7:30 - 15:00	7.50	COMP	34	H	P		RU CASED HOLE SOLUTIONS, RIH W/ 31/8 EXP GNS, 23 GRM .36" HOLES 90 DEG PHASING, PERF 1ST STG AS OF PRCDURE, RU SUPERIOR, TEST PUMPS & LINES TO 9500 PSI, LOST 250 PSI IN 15 MIN. SET KICK OUTS ON TRUCKS, #1 3,000 PSI, #2 4500 PSI, #3 5500 PSI, #4 6800 PSI, #5 7500 PSI, #6 9400 PSI, SDFN PREP TO FRAC IN AM.
7/14/2011	5:00 - 15:00	10.00	COMP	36	E	P		HSM W/ SUPERIOR, TRYED TO START FRACING FOUND, LIGHTNING BURN'T COMPUTER PANELS IN BLEANDER & 6 PUMP TRUCKS, WILL HAVE TO GET NEW PANELS FOUND TO GET FIXED.SHUT DWN WAIT ON SUPERIOR.PREP TO FRAC IN AM IF EQUIP GETS FIXED.
7/15/2011	5:00 - 8:03	3.05	COMP	36	E	P		HSM W/ SUPERIOR, SET KICK OUTS, #1 8600 PSI, #2 8750 PSI, #3 8800 PSI, #4 8800 PSI, #5 8800 PSI, #6 8800 PSI.
	8:03 - 11:27	3.40	COMP	36	E	P		(STG #1) WHP 1420 PSI, BRK @ 4490 PSI, @ 4.6 BPM, ISIP 3725 PSI, FG .77. SPOT ACID ON PERFS, SHUT DWN LET ACID SOAK FOR 15 MIN.HAD TO REPAIR DENSITY OUT PUT CARD,GOT PAD PUMPED HAD TROUBLE GETTING SAND GOING.GOT GOING AGAIN. PUMP 100 BBLS @ 49.0 BPM, @ 7788 PSI = 75 % PERFS OPEN. MP 9800 PSI, MR 51.0 BPM, AP 6904 PSI, AR 49.3 BPM, ISIP 4199 PSI, FG .81. NPI 474 PSI, PMPD 3780 BBLS OF SW & 98,150 LBS OF 30/50 TLC SND. SREENED OUT 20 BBLS LEFT IN FLUSH FLOW WELL BACK FOR 15 MIN, REFLUSH 180 BBLS. TOTAL PROP 98,150 LBS.
								(STG #2) RIH W/ 41/2 HAL 10-K CBP & 31/8 EXP GNS, 23 GM, .36" HOLES 90 & 120 DEG PHASING, SET HAL 10-K CBP @ 11,226', PERF WELL AS OF PROCEDURE. WHP 1294 PSI, BRK @ 4997 PSI, @ 4.7 BPM, ISIP 3670 PSI, FG .77. PUMP 100 BBLS @ 37 BPM, @ 6928 PSI = 60 % PERFS OPEN. MP 8660 PSI, MR 50.8 BPM, AP 7867 PSI, AR 43.1 BPM, ISIP 4187 PSI, FG .81. NPI 517 PSI, PMPD 3732 BBLS OF SW & 78,082 LBS OF 30/50 TLC SND.HAD TO CUT JOB SHORT SCREENING OUT @ 8691 PSI @ 38 BPM.SHORT BY 56,093 LBS SND. TOTAL PROP 78,082 LBS.

**US ROCKIES REGION
Operation Summary Report**

Well: NBU 921-17B		Spud Conductor: 4/11/2011		Spud Date: 4/19/2011	
Project: UTAH-UINTAH		Site: NBU 921-17B		Rig Name No: SWABBCO 1/1	
Event: COMPLETION		Start Date: 7/18/2011		End Date: 7/18/2011	
Active Datum: RKB @4,852.00ft (above Mean Sea Level)		UWI: NW/NE/0/9/S/21/E/17/0/0/26/PM/N/492/E/0/1966/0/0			

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
	11:27 - 13:19	1.87	COMP	36	E	P		(STG #3) RIH W/ 41/2 HAL 8-K CBP & 31/8 EXP GNS, 23 GM, .36" HOLES 90 DEG PHASING, SET HAL 8-K CBP @ 10,450', PERF WELL AS OF PROCEDURE. RESET PUMP KICK OUTS, #1 6650 PSI, #2 6400 PSI, #3 6800 PSI, #4 6800 PSI, #5 6800 PSI, #6 6800 PSI. WHP 1386 PSI, BRK @ 3341 PSI, @ 4.8 BPM, ISIP 2631 PSI, FG .69. PUMP 100 BBLS @ 33.6 BPM, @ 6158 PSI = 60 % PERFS OPEN. MP 6495 PSI, MR 37.4 BPM, AP 6218 PSI, AR 35.2 BPM, ISIP 3322 PSI, FG .76. NPI 691 PSI, PMPD 746 BBLS OF SW & 12,989 LBS OF 30/50 OTTAWA SND. TOTAL PROP 12,989 LBS.
	13:19 - 15:00	1.68	COMP	36	E	P		(STG#4) RIH W/ 41/2 HAL 8-K CBP & 31/8 EXP GNS, 23 GM, .36" HOLES 90 & 120 DEG PHASING, SET HAL 8-K CBP @ 9994', PERF WELL AS OF PROCEDURE. WHP 1031 PSI, BRK @ 3312 PSI, @ 4.7 BPM, ISIP 3014 PSI, FG .74. PUMP 100 BBLS @ 28.1 BPM, @ 5515 PSI = 60 % PERFS OPEN. MP 6588 PSI, MR 33.6 BPM, AP 6334 PSI, AR 32.1 BPM, ISIP 3510 PSI, FG .79. NPI 496 PSI, PMPD 643 BBLS OF SW & 10,469 LBS OF 30/50 OTTAWA SND. TOTAL PROP 10,469 LBS.
	15:00 - 16:41	1.68	COMP	36	E	P		(STG#5) RIH W/ 41/2 HAL 8-K CBP & 31/8 EXP GNS, 23 GM, .36" HOLES 120 DEG PHASING, SET HAL 8-K CBP @ 9494', PERF WELL AS OF PROCEDURE. WHP 935 PSI, BRK @ 3560 PSI, @ 4.7 BPM, ISIP 2651 PSI, FG .72. PUMP 100 BBLS @ 23.4 BPM, @ 5609 PSI = 60 % PERFS OPEN. MP 6611 PSI, MR 32.0 BPM, AP 6150 PSI, AR 28.9 BPM, ISIP 3342 PSI, FG .80. NPI 691 PSI, PMPD 628 BBLS OF SW & 10,779 LBS OF 30/50 OTTAWA SND. TOTAL PROP 10,779 LBS.
	16:41 - 18:08	1.45	COMP	36	E	P		(STG # 6) RIH W/ 41/2 HAL 8-K CBP & 31/8 EXP GNS, 23 GM, .36" HOLES 90 DEG PHASING, SET HAL 8-K CBP @ 8882', PERF WELL AS OF PROCEDURE. WHP 705 PSI, BRK @ 3304 PSI, @ 6.6 BPM, ISIP 3068 PSI, FG .79. PUMP 100 BBLS @ 37.3 BPM, @ 6305 PSI = 60 % PERFS OPEN. MP 6371 PSI, MR 51.3 BPM, AP 5958 PSI, AR 43.6 BPM, ISIP 3088 PSI, FG .79. NPI 20 PSI, PMPD 638 BBLS OF SW & 11,015 LBS OF 30/50 OTTAWA SND. TOTAL PROP 11,015 LBS.

**US ROCKIES REGION
Operation Summary Report**

Well: NBU 921-17B		Spud Conductor: 4/11/2011		Spud Date: 4/19/2011	
Project: UTAH-UINTAH			Site: NBU 921-17B		Rig Name No: SWABBCO 1/1
Event: COMPLETION			Start Date: 7/18/2011		End Date: 7/18/2011
Active Datum: RKB @4,852.00ft (above Mean Sea Level)			UWI: NW/NE/O9/S/21/E/17/O0/26/PM/N/492/E/0/1966/O/0		

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
	18:08 - 19:39	1.52	COMP	36	E	P		(STG # 7) RIH W/ 41/2 HAL 8-K CBP & 31/8 EXP GNS, 23 GM, .36" HOLES 90 &120 DEG PHASING, SET HAL 8-K CBP @ 8565', PERF WELL AS OF PROCEDURE. WHP 974 PSI, BRK @ 3347 PSI, @ 4.7 BPM, ISIP 2225 PSI, FG .70. PUMP 100 BBLS @ 49.9 BPM, @ 6050 PSI = 77 % PERFS OPEN. MP 6613 PSI, MR 51.1 BPM, AP 5698 PSI, AR 47.4 BPM, ISIP 2582 PSI, FG .74. NPI 357 PSI, PMPD 1035 BBLS OF SW & 20,035 LBS OF 30/50 OTTAWA SND. TOTAL PROP 20,035 LBS.
	19:39 - 21:02	1.38	COMP	36	E	P		(STG # 8) RIH W/ 41/2 HAL 8-K CBP & 31/8 EXP GNS, 23 GM, .36" HOLES 90 DEG PHASING, SET HAL 8-K CBP @ 8385', PERF WELL AS OF PROCEDURE. WHP 668 PSI, BRK @ 3022 PSI, @ 4.4 BPM, ISIP 1851 PSI, FG .66. PUMP 100 BBLS @ 40.9 BPM, @ 5183 PSI = 62 % PERFS OPEN. MP 6505 PSI, MR 50.6 BPM, AP 5614 PSI, AR 48.1 BPM, ISIP 2814 PSI, FG .78. NPI 963 PSI, PMPD 776 BBLS OF SW & 14,100 LBS OF 30/50 OTTAWA SND. TOTAL PROP 14,100 LBS.
	21:02 - 23:00	1.97	COMP	34	I	P		176,232 LBS 30/50 TLC 79,387 LBS 30/50 WHITE (1812 BBLS WTR LEFT IN TANKS) TOTAL 255,619 LBS SAND USED TOTAL WATER 11,978 BBLS 251 GALS BIOCIDE 1328 GALS SCALE INH
7/18/2011	7:00 - 7:30	0.50	COMP	48		P		(KILL PLUG) RIH W/ 41/2 8-K CBP & SET @ 8200' POOH SWI, RD WL & FRAC CREW, SDFWE HS, ND FV NU BOPS & FUNTION TEST.
	7:30 - 12:30	5.00	COMP	31	I	P		ND FV, NU 10-K BOPS & HYD, RU FLOOR & TBG EQUIP, PU 37/8 BIT, POBS, 1.875 X/N & 258 JTS 23/8 L-80 TBG OFF FLOAT, TAG UP @ 8191' RU DRLG EQUIP.

**US ROCKIES REGION
Operation Summary Report**

Well: NBU 921-17B		Spud Conductor: 4/11/2011	Spud Date: 4/19/2011
Project: UTAH-UINTAH		Site: NBU 921-17B	Rig Name No: SWABBCO 1/1
Event: COMPLETION		Start Date: 7/18/2011	End Date: 7/18/2011
Active Datum: RKB @4,852.00ft (above Mean Sea Level)		UWI: NW/NE/O/S/21/E/17/O/O/26/PM/N/492/E/O/1966/O/O	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
	12:30 - 19:00	6.50	COMP	44	C	P		<p>BROKE CIRC CONVENTIONAL TEST BOPS TO 3,000 PSI FOR 15 MIN, NO PSI LOSS, RIH.</p> <p>C/O 15' SAND TAG 1ST PLUG @ 8200' DRL PLG IN 18 MIN 600# PSI INCREASE RIH.</p> <p>C/O 15' SAND TAG 2ND PLUG @ 8385' DRL PLG IN 5 MIN 1000# PSI INCREASE RIH</p> <p>C/O 45' SAND TAG 3RD PLUG @ 8565' DRL PLG IN 4 MIN 400# PSI INCREASE RIH</p> <p>C/O 25' SAND TAG 4TH PLUG @ 8882' DRL PLG IN 4 MIN 600# PSI INCREASE RIH</p> <p>C/O 25' SAND TAG 5TH PLUG @ 9494' DRL PLG IN 4 MIN 400# PSI INCREASE RIH</p> <p>C/O 30' SAND TAG 6TH PLUG @ 9994' DRL PLG IN 5 MIN 1300# PSI INCREASE RIH</p> <p>C/O 25' SAND TAG 7TH PLUG @ 10,450' DRL PLG IN 5 MIN 900# PSI INCREASE. RIH</p> <p>C/O 30' SAND TAG 8TH PLUG @ 11,226' DRL PLG IN 17 MIN 700# PSI INCREASE. RIH</p> <p>C/O TO @ 11,520.54' CIRC CLEAN, RACK OUT SWIVEL. L/D 17 JTS, LAND TBG ON 346 JTS 23/8 L-80. RD FLOOR, ND BOPS NU WH. PUMP OFF BIT, LET WELL SET FOR 30 MIN FOR BIT TO FALL. TURN WELL OVER TO FB CREW. SDFN SICIP = 2700 FTP = 100</p> <p>KB = 26' HANGER 41/16 = .83' 346 JTS 23/8 L-80 = 10,960.72' (SURFAC VALVE OPEN W/ POP OFF ASSEMBLY) 1.875 X/N & POBS = 2.20' EOT @ 10,989.75'</p> <p>TWTR = 12,278 BBLs TWR = 1800 BBLs TWLTR = 10,478 BBLs</p> <p>372 JTS HAULED OUT 346 LANDED 26 TO RETURN</p>
	19:30 - 14:15		PROD	50				WELL TURNED TO SALES @ 1930 HR ON 7/18/11 - 3768 MCFD, 2160 BWPD, CP 2550#, FTP 2300#, CK 20/46"
7/19/2011	7:00 -			33	A			7 AM FLBK REPORT: CP 3200#, TP 2500#, 20/64" CK, 50 BWPH, LIGHT SAND, 3.2 GAS TTL BBLs RECOVERED: 2466 BBLs LEFT TO RECOVER: 9812
7/20/2011	7:00 -			33	A			7 AM FLBK REPORT: CP 3600#, TP 2725#, 16/64" CK, 21 BWPH, light SAND, 3 GAS TTL BBLs RECOVERED: 3204 BBLs LEFT TO RECOVER: 9074
7/21/2011	7:00 -			33	A			7 AM FLBK REPORT: CP 3300#, TP 2550#, 16/64" CK, 17 BWPH, LIGHT SAND, 3.3 GAS TTL BBLs RECOVERED: 3715 BBLs LEFT TO RECOVER: 8563

US ROCKIES REGION
Operation Summary Report

Well: NBU 921-17B		Spud Conductor: 4/11/2011	Spud Date: 4/19/2011
Project: UTAH-UINTAH		Site: NBU 921-17B	Rig Name No: SWABBCO 1/1
Event: COMPLETION		Start Date: 7/18/2011	End Date: 7/18/2011
Active Datum: RKB @4,852.00ft (above Mean Sea Level)		UWI: NW/NE/0/9/S/21/E/17/0/0/26/PM/N/492/E/0/1966/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
7/22/2011	7:00 -			33	A			7 AM FLBK REPORT: CP 3100#, TP 2375#, 16/64" CK, 15 BWPH, LIGHT SAND, 3.4 GAS TTL BBLS RECOVERED: 4121 BBLS LEFT TO RECOVER: 8157
7/23/2011	7:00 -			33	A			7 AM FLBK REPORT: CP 2950#, TP 2250#, 16/64" CK, 9 BWPH, LIGHT SAND, 3.4 GAS TTL BBLS RECOVERED: 4450 BBLS LEFT TO RECOVER: 7828
	7:00 -			50				WELL IP'D ON 7/23/11- 3385 MCFD, 0 BOPD, 329 BWPD, CP 2965#, FTP 4524#, CK 16/64", LP 180#, 24 HRS

1 General

1.1 Customer Information

Company	US ROCKIES REGION
Representative	
Address	

1.2 Well Information

Well	NBU 921-17B	Wellbore No.	OH
Well Name	NBU 921-17B	Common Name	NBU 921-17B
Project	UTAH-UINTAH	Site	NBU 921-17B
Vertical Section Azimuth	0.00 (°)	North Reference	True
Origin N/S		Origin E/W	
Spud Date	4/19/2011	UWI	NW/NE/O/S/21/E/17/O/O/26/PM/N/492/E/O/196 6/O/O
Active Datum	RKB @4,852.00ft (above Mean Sea Level)		

2 Survey Name

2.1 Survey Name: SURF. DEVIATION

Survey Name	SURF. DEVIATION	Company	SCIENTIFIC
Started	4/19/2011	Ended	
Tool Name	MWD	Engineer	Anadarko

2.1.1 Tie On Point

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

2.1.2 Survey Stations

Date	Type	MD (ft)	Inc (°)	Azi (°)	TVD (ft)	N/S (ft)	E/W (ft)	V. Sec (ft)	DLeg (°/100ft)	Build (°/100ft)	Turn (°/100ft)	TFace (°)
4/19/2011	Tie On	22.00	0.00	0.00	22.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4/19/2011	NORMAL	177.00	0.44	175.92	177.00	-0.59	0.04	-0.59	0.28	0.28	0.00	175.92
4/20/2011	NORMAL	259.00	0.44	136.20	259.00	-1.13	0.28	-1.13	0.36	0.00	-48.44	-109.86
	NORMAL	343.00	0.53	136.37	342.99	-1.65	0.77	-1.65	0.11	0.11	0.20	1.00
	NORMAL	427.00	0.53	157.91	426.99	-2.29	1.19	-2.29	0.24	0.00	25.64	100.77
	NORMAL	517.00	0.70	153.25	516.98	-3.17	1.59	-3.17	0.20	0.19	-5.18	-18.73
	NORMAL	607.00	0.62	156.94	606.98	-4.11	2.03	-4.11	0.10	-0.09	4.10	153.85
	NORMAL	697.00	0.53	136.90	696.97	-4.86	2.51	-4.86	0.24	-0.10	-22.27	-123.91
	NORMAL	787.00	0.53	150.00	786.97	-5.52	3.00	-5.52	0.13	0.00	14.56	96.55
	NORMAL	877.00	0.79	149.91	876.96	-6.42	3.52	-6.42	0.29	0.29	-0.10	-0.27
	NORMAL	967.00	0.79	134.79	966.96	-7.39	4.27	-7.39	0.23	0.00	-16.80	-97.56
	NORMAL	1,057.00	0.18	254.32	1,056.95	-7.87	4.57	-7.87	0.99	-0.68	132.81	169.89
	NORMAL	1,147.00	0.00	174.78	1,146.95	-7.91	4.44	-7.91	0.20	-0.20	0.00	-180.00
	NORMAL	1,237.00	0.09	344.32	1,236.95	-7.84	4.42	-7.84	0.10	0.10	0.00	344.32
	NORMAL	1,327.00	0.09	47.60	1,326.95	-7.72	4.45	-7.72	0.10	0.00	70.31	121.64
	NORMAL	1,562.00	0.09	126.00	1,561.95	-7.71	4.74	-7.71	0.05	0.00	33.36	129.20
	NORMAL	1,597.00	0.18	148.24	1,596.95	-7.77	4.79	-7.77	0.29	0.26	63.54	41.65
	NORMAL	1,687.00	0.18	216.18	1,686.95	-8.00	4.78	-8.00	0.22	0.00	75.49	123.97
	NORMAL	1,777.00	0.26	202.12	1,776.95	-8.31	4.62	-8.31	0.11	0.09	-15.62	-41.18
	NORMAL	1,867.00	0.44	200.36	1,866.95	-8.82	4.42	-8.82	0.20	0.20	-1.96	-4.30
	NORMAL	2,077.00	0.44	203.70	2,076.94	-10.32	3.82	-10.32	0.01	0.00	1.59	91.67

2.1.2 Survey Stations (Continued)

Date	Type	MD (ft)	Inc (°)	Azi (°)	TVD (ft)	N/S (ft)	E/W (ft)	V. Sec (ft)	DLeg (°/100ft)	Build (°/100ft)	Turn (°/100ft)	TFace (°)
4/20/2011	NORMAL	2,192.00	0.79	199.92	2,191.94	-11.46	3.37	-11.46	0.31	0.30	-3.29	-8.50
	NORMAL	2,317.00	0.70	213.81	2,316.93	-12.91	2.65	-12.91	0.16	-0.07	11.11	123.32
	NORMAL	2,527.00	0.88	196.40	2,526.91	-15.52	1.48	-15.52	0.14	0.09	-8.29	-62.05
	NORMAL	2,587.00	0.97	205.90	2,586.90	-16.42	1.13	-16.42	0.30	0.15	15.83	64.40
	NORMAL	2,677.00	0.88	194.03	2,676.89	-17.78	0.63	-17.78	0.23	-0.10	-13.19	-121.01
4/21/2011	NORMAL	2,767.00	0.70	172.23	2,766.88	-18.99	0.54	-18.99	0.39	-0.20	-24.22	-131.51
	NORMAL	2,827.00	0.79	181.81	2,826.87	-19.77	0.57	-19.77	0.26	0.15	15.97	59.00

2.2 Survey Name: Survey #1

Survey Name	Survey #1	Company	WEATHERFORD
Started	5/20/2011	Ended	
Tool Name	MWD	Engineer	Anadarko

2.2.1 Tie On Point

MD (ft)	Inc (°)	Azi (°)	TVD (ft)	N/S (ft)	E/W (ft)
2,805.00	0.79	181.81	2,804.37	-19.96	0.70

2.2.2 Survey Stations

Date	Type	MD (ft)	Inc (°)	Azi (°)	TVD (ft)	N/S (ft)	E/W (ft)	V. Sec (ft)	DLeg (°/100ft)	Build (°/100ft)	Turn (°/100ft)	TFace (°)	
5/20/2011	Tie On	2,805.00	0.79	181.81	2,804.37	-19.96	0.70	-19.96	0.00	0.00	0.00	0.00	
5/20/2011	NORMAL	2,937.00	0.31	200.53	2,936.36	-21.20	0.55	-21.20	0.38	-0.36	14.18	168.67	
	NORMAL	2,937.00	0.31	200.53	2,936.36	-21.20	0.55	-21.20	0.00	0.00	0.00	0.00	
	NORMAL	3,031.00	0.65	205.71	3,030.36	-21.92	0.23	-21.92	0.36	0.36	5.51	9.87	
	NORMAL	3,125.00	0.69	206.15	3,124.35	-22.91	-0.26	-22.91	0.04	0.04	0.47	7.55	
	NORMAL	3,220.00	1.00	209.15	3,219.34	-24.15	-0.91	-24.15	0.33	0.33	3.16	9.62	
	NORMAL	3,314.00	0.88	356.53	3,313.34	-24.14	-1.35	-24.14	1.92	-0.13	156.79	164.76	
	NORMAL	3,408.00	1.00	338.03	3,407.33	-22.66	-1.70	-22.66	0.35	0.13	-19.68	-77.85	
	NORMAL	3,503.00	0.94	317.78	3,502.31	-21.32	-2.54	-21.32	0.36	-0.06	-21.32	-109.95	
	NORMAL	3,597.00	0.88	299.65	3,596.30	-20.39	-3.68	-20.39	0.31	-0.06	-19.29	-110.74	
	5/21/2011	NORMAL	3,691.00	1.06	276.65	3,690.29	-19.93	-5.18	-19.93	0.45	0.19	-24.47	-76.98
		NORMAL	3,786.00	1.50	326.90	3,785.27	-18.79	-6.73	-18.79	1.22	0.46	52.89	94.99
		NORMAL	3,880.00	1.13	301.65	3,879.24	-17.27	-8.19	-17.27	0.72	-0.39	-26.86	-134.76
		NORMAL	3,974.00	1.00	284.40	3,973.23	-16.58	-9.77	-16.58	0.37	-0.14	-18.35	-120.54
		NORMAL	4,068.00	1.19	259.00	4,067.21	-16.56	-11.52	-16.56	0.55	0.20	-27.02	-81.64
		NORMAL	4,163.00	1.44	248.15	4,162.18	-17.20	-13.60	-17.20	0.37	0.26	-11.42	-50.39
NORMAL		4,257.00	0.88	344.28	4,256.17	-16.94	-14.89	-16.94	1.88	-0.60	102.27	150.30	
NORMAL		4,351.00	0.38	0.00	4,350.17	-15.93	-15.09	-15.93	0.56	-0.53	16.72	168.68	
NORMAL		4,446.00	0.63	310.40	4,445.16	-15.28	-15.49	-15.28	0.51	0.26	-52.21	-86.62	
NORMAL		4,540.00	1.69	326.40	4,539.14	-13.79	-16.65	-13.79	1.17	1.13	17.02	25.10	
NORMAL		4,634.00	1.31	302.65	4,633.11	-12.06	-18.32	-12.06	0.77	-0.40	-25.27	-132.94	
NORMAL		4,729.00	1.25	269.65	4,728.09	-11.48	-20.27	-11.48	0.77	-0.06	-34.74	-111.02	
NORMAL		4,823.00	1.56	285.90	4,822.06	-11.13	-22.52	-11.13	0.53	0.33	17.29	60.43	
NORMAL		4,917.00	1.81	268.53	4,916.02	-10.82	-25.24	-10.82	0.60	0.27	-18.48	-72.77	
NORMAL		5,012.00	2.00	318.28	5,010.97	-9.62	-27.84	-9.62	1.70	0.20	52.37	108.72	
NORMAL	5,106.00	1.69	308.03	5,104.93	-7.54	-30.03	-7.54	0.48	-0.33	-10.90	-138.26		
NORMAL	5,200.00	1.44	285.28	5,198.89	-6.38	-32.26	-6.38	0.71	-0.27	-24.20	-123.03		
NORMAL	5,295.00	1.38	294.65	5,293.86	-5.59	-34.45	-5.59	0.25	-0.06	9.86	109.24		
NORMAL	5,389.00	1.31	291.28	5,387.84	-4.72	-36.48	-4.72	0.11	-0.07	-3.59	-133.18		
NORMAL	5,483.00	2.63	341.15	5,481.78	-2.29	-38.18	-2.29	2.18	1.40	53.05	79.14		
NORMAL	5,578.00	2.06	336.40	5,576.70	1.33	-39.56	1.33	0.63	-0.60	-5.00	-163.54		
NORMAL	5,672.00	1.69	329.28	5,670.65	4.07	-40.95	4.07	0.46	-0.39	-7.57	-151.33		

2.2.2 Survey Stations (Continued)

Date	Type	MD (ft)	Inc (°)	Azi (°)	TVD (ft)	N/S (ft)	E/W (ft)	V. Sec (ft)	DLeg (°/100ft)	Build (°/100ft)	Turn (°/100ft)	TFace (°)
5/21/2011	NORMAL	5,766.00	1.19	309.28	5,764.63	5.88	-42.41	5.88	0.75	-0.53	-21.28	-144.56
	NORMAL	5,861.00	1.00	301.40	5,859.61	6.94	-43.88	6.94	0.25	-0.20	-8.29	-145.50
	NORMAL	5,955.00	0.63	279.65	5,953.60	7.45	-45.09	7.45	0.51	-0.39	-23.14	-150.63
	NORMAL	6,143.00	0.50	268.65	6,141.59	7.61	-46.93	7.61	0.09	-0.07	-5.85	-145.57
	NORMAL	6,238.00	0.50	245.65	6,236.59	7.43	-47.72	7.43	0.21	0.00	-24.21	-101.50
	NORMAL	6,332.00	1.31	354.28	6,330.58	8.33	-48.20	8.33	1.64	0.86	115.56	126.49
	NORMAL	6,427.00	1.63	357.27	6,425.55	10.76	-48.38	10.76	0.35	0.34	3.15	14.98
5/22/2011	NORMAL	6,521.00	1.31	351.27	6,519.51	13.16	-48.60	13.16	0.38	-0.34	-6.38	-157.29
	NORMAL	6,615.00	1.06	345.78	6,613.49	15.06	-48.98	15.06	0.29	-0.27	-5.84	-158.30
	NORMAL	6,710.00	0.94	354.65	6,708.48	16.69	-49.27	16.69	0.21	-0.13	9.34	132.16
	NORMAL	6,804.00	0.75	345.27	6,802.47	18.05	-49.50	18.05	0.25	-0.20	-9.98	-148.57
	NORMAL	6,899.00	0.25	331.78	6,897.47	18.83	-49.75	18.83	0.54	-0.53	-14.20	-173.44
	NORMAL	6,993.00	0.19	319.90	6,991.47	19.13	-49.95	19.13	0.08	-0.06	-12.64	-148.60
	NORMAL	7,088.00	0.19	187.90	7,086.47	19.10	-50.07	19.10	0.37	0.00	-138.95	-156.00
	NORMAL	7,182.00	1.25	353.28	7,180.46	19.96	-50.22	19.96	1.53	1.13	175.94	167.30
	NORMAL	7,277.00	1.25	355.40	7,275.44	22.03	-50.42	22.03	0.05	0.00	2.23	91.06
	NORMAL	7,372.00	1.06	0.90	7,370.42	23.94	-50.49	23.94	0.23	-0.20	5.79	152.47
	NORMAL	7,466.00	0.94	354.65	7,464.40	25.57	-50.55	25.57	0.17	-0.13	-6.65	-140.83
	NORMAL	7,561.00	0.94	358.03	7,559.39	27.13	-50.65	27.13	0.06	0.00	3.56	91.69
	NORMAL	7,656.00	0.69	20.03	7,654.38	28.44	-50.48	28.44	0.42	-0.26	23.16	139.27
	NORMAL	7,750.00	0.56	31.40	7,748.37	29.37	-50.04	29.37	0.19	-0.14	12.10	141.94
	NORMAL	7,845.00	0.44	53.40	7,843.37	29.98	-49.51	29.98	0.24	-0.13	23.16	132.69
	NORMAL	7,940.00	0.63	75.53	7,938.37	30.33	-48.71	30.33	0.29	0.20	23.29	58.82
5/23/2011	NORMAL	8,034.00	0.63	84.90	8,032.36	30.51	-47.70	30.51	0.11	0.00	9.97	94.68
	NORMAL	8,129.00	0.50	117.78	8,127.36	30.36	-46.81	30.36	0.36	-0.14	34.61	127.74
	NORMAL	8,224.00	0.75	124.40	8,222.35	29.81	-45.93	29.81	0.27	0.26	6.97	19.44
	NORMAL	8,318.00	1.00	143.28	8,316.34	28.81	-44.93	28.81	0.40	0.27	20.09	58.77
	NORMAL	8,413.00	1.19	139.90	8,411.32	27.39	-43.80	27.39	0.21	0.20	-3.56	-20.47
	NORMAL	8,508.00	1.44	146.53	8,506.30	25.64	-42.51	25.64	0.31	0.26	6.98	34.67
	NORMAL	8,602.00	1.44	144.78	8,600.27	23.69	-41.17	23.69	0.05	0.00	-1.86	-90.87
	NORMAL	8,697.00	1.75	145.90	8,695.23	21.51	-39.67	21.51	0.33	0.33	1.18	6.30
	NORMAL	8,793.00	2.13	148.65	8,791.18	18.78	-37.92	18.78	0.41	0.40	2.86	15.14
	NORMAL	8,886.00	2.25	147.78	8,884.11	15.76	-36.05	15.76	0.13	0.13	-0.94	-15.92
	NORMAL	8,981.00	2.63	148.03	8,979.02	12.33	-33.90	12.33	0.40	0.40	0.26	1.73
5/24/2011	NORMAL	9,075.00	3.00	149.03	9,072.91	8.39	-31.49	8.39	0.40	0.39	1.06	8.06
	NORMAL	9,170.00	3.13	150.65	9,167.77	4.00	-28.94	4.00	0.16	0.14	1.71	34.49
	NORMAL	9,265.00	3.38	151.28	9,262.62	-0.72	-26.33	-0.72	0.27	0.26	0.66	8.46
	NORMAL	9,359.00	3.50	150.90	9,356.45	-5.66	-23.60	-5.66	0.13	0.13	-0.40	-10.95
	NORMAL	9,453.00	3.63	148.28	9,450.27	-10.69	-20.64	-10.69	0.22	0.14	-2.79	-52.72
	NORMAL	9,548.00	3.63	147.90	9,545.08	-15.80	-17.46	-15.80	0.03	0.00	-0.40	-90.19
	NORMAL	9,643.00	3.75	148.15	9,639.88	-20.99	-14.22	-20.99	0.13	0.13	0.26	7.76
	NORMAL	9,737.00	3.94	148.03	9,733.67	-26.34	-10.89	-26.34	0.20	0.20	-0.13	-2.49
	NORMAL	9,831.00	3.81	150.90	9,827.45	-31.81	-7.66	-31.81	0.25	-0.14	3.05	125.26
	NORMAL	9,926.00	3.44	152.15	9,922.26	-37.08	-4.80	-37.08	0.40	-0.39	1.32	168.57
5/25/2011	NORMAL	10,022.00	3.50	160.03	10,018.09	-42.38	-2.45	-42.38	0.50	0.06	8.21	86.77
	NORMAL	10,116.00	3.63	160.53	10,111.91	-47.89	-0.48	-47.89	0.14	0.14	0.53	13.70
	NORMAL	10,211.00	3.69	162.03	10,206.71	-53.63	1.47	-53.63	0.12	0.06	1.58	58.68
	NORMAL	10,305.00	3.63	161.28	10,300.52	-59.33	3.36	-59.33	0.08	-0.06	-0.80	-141.79
	NORMAL	10,399.00	3.88	160.15	10,394.32	-65.14	5.39	-65.14	0.28	0.27	-1.20	-17.05
	NORMAL	10,494.00	3.69	163.03	10,489.11	-71.08	7.37	-71.08	0.28	-0.20	3.03	136.41
	NORMAL	10,588.00	4.06	157.78	10,582.90	-77.06	9.52	-77.06	0.54	0.39	-5.59	-46.44
5/26/2011	NORMAL	10,682.00	4.38	163.03	10,676.64	-83.57	11.82	-83.57	0.53	0.34	5.59	53.00
	NORMAL	10,777.00	4.44	164.40	10,771.36	-90.58	13.87	-90.58	0.13	0.06	1.44	61.02
	NORMAL	10,871.00	4.50	160.03	10,865.08	-97.55	16.11	-97.55	0.37	0.06	-4.65	-82.19
5/27/2011	NORMAL	10,965.00	4.56	157.40	10,958.78	-104.47	18.80	-104.47	0.23	0.06	-2.80	-75.20
5/28/2011	NORMAL	11,685.00	4.56	157.40	11,676.50	-157.31	40.80	-157.31	0.00	0.00	0.00	0.00