

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

FORM 3

AMENDED REPORT **APPLICATION FOR PERMIT TO DRILL**

<b>2. TYPE OF WORK</b> DRILL NEW WELL <input checked="" type="checkbox"/> REENTER P&A WELL <input type="checkbox"/> DEEPEN WELL <input type="checkbox"/>		<b>1. WELL NAME and NUMBER</b> NBU 920-241	
<b>4. TYPE OF WELL</b> Gas Well Coalbed Methane Well: NO		<b>3. FIELD OR WILDCAT</b> NATURAL BUTTES	
<b>6. NAME OF OPERATOR</b> KERR-MCGEE OIL & GAS ONSHORE, L.P.		<b>5. UNIT or COMMUNITIZATION AGREEMENT NAME</b> NATURAL BUTTES	
<b>8. ADDRESS OF OPERATOR</b> P.O. Box 173779, Denver, CO, 80217		<b>7. OPERATOR PHONE</b> 720 929-6587	
<b>10. MINERAL LEASE NUMBER (FEDERAL, INDIAN, OR STATE)</b> UTU-0579		<b>9. OPERATOR E-MAIL</b> mary.mondragon@anadarko.com	
<b>11. MINERAL OWNERSHIP</b> FEDERAL <input checked="" type="checkbox"/> INDIAN <input type="checkbox"/> STATE <input type="checkbox"/> FEE <input type="checkbox"/>		<b>12. SURFACE OWNERSHIP</b> FEDERAL <input type="checkbox"/> INDIAN <input checked="" type="checkbox"/> STATE <input type="checkbox"/> FEE <input type="checkbox"/>	
<b>13. NAME OF SURFACE OWNER (if box 12 = 'fee')</b>		<b>14. SURFACE OWNER PHONE (if box 12 = 'fee')</b>	
<b>15. ADDRESS OF SURFACE OWNER (if box 12 = 'fee')</b>		<b>16. SURFACE OWNER E-MAIL (if box 12 = 'fee')</b>	
<b>17. INDIAN ALLOTTEE OR TRIBE NAME (if box 12 = 'INDIAN')</b> Ute		<b>18. INTEND TO COMMINGLE PRODUCTION FROM MULTIPLE FORMATIONS</b> YES <input type="checkbox"/> (Submit Commingling Application) NO <input checked="" type="checkbox"/>	
<b>19. SLANT</b> VERTICAL <input checked="" type="checkbox"/> DIRECTIONAL <input type="checkbox"/> HORIZONTAL <input type="checkbox"/>			
<b>20. LOCATION OF WELL</b>	<b>FOOTAGES</b>	<b>QTR-QTR</b>	<b>SECTION</b>
<b>LOCATION AT SURFACE</b>	1983 FSL 829 FEL	NESE	24
<b>Top of Uppermost Producing Zone</b>	1983 FSL 829 FEL	NESE	24
<b>At Total Depth</b>	1983 FSL 829 FEL	NESE	24
<b>21. COUNTY</b> UINTAH	<b>22. DISTANCE TO NEAREST LEASE LINE (Feet)</b> 829	<b>23. NUMBER OF ACRES IN DRILLING UNIT</b> 1920	
	<b>25. DISTANCE TO NEAREST WELL IN SAME POOL (Applied For Drilling or Completed)</b> 1000	<b>26. PROPOSED DEPTH</b> MD: 10300 TVD:	
<b>27. ELEVATION - GROUND LEVEL</b> 4807	<b>28. BOND NUMBER</b> WYB000291	<b>29. SOURCE OF DRILLING WATER / WATER RIGHTS APPROVAL NUMBER IF APPLICABLE</b> 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

<b>NAME</b> Kevin McIntyre	<b>TITLE</b> Regulatory Analyst I	<b>PHONE</b> 720 929-6226
<b>SIGNATURE</b>	<b>DATE</b> 09/25/2008	<b>EMAIL</b> Kevin.McIntyre@anadarko.com
<b>API NUMBER ASSIGNED</b> 43047501460000	<b>APPROVAL</b>  Permit Manager	

**Proposed Hole, Casing, and Cement**

<b>String</b>	<b>Hole Size</b>	<b>Casing Size</b>	<b>Top (MD)</b>	<b>Bottom (MD)</b>		
Surf	12.25	9.625	0	2800		
<b>Pipe</b>	<b>Grade</b>	<b>Length</b>	<b>Weight</b>			
	Grade J-55 LT&C	2800	36.0			
	<b>Cement Interval</b>	<b>Top (MD)</b>	<b>Bottom (MD)</b>			
		0	2800			
		<b>Cement Description</b>	<b>Class</b>	<b>Sacks</b>	<b>Yield</b>	<b>Weight</b>
			Premium Foamed Cement	215	1.18	15.6

**Proposed Hole, Casing, and Cement**

<b>String</b>	<b>Hole Size</b>	<b>Casing Size</b>	<b>Top (MD)</b>	<b>Bottom (MD)</b>		
Prod	7.875	4.5	0	10300		
<b>Pipe</b>	<b>Grade</b>	<b>Length</b>	<b>Weight</b>			
	Grade I-80 LT&C	10300	11.6			
	<b>Cement Interval</b>	<b>Top (MD)</b>	<b>Bottom (MD)</b>			
		0	10300			
		<b>Cement Description</b>	<b>Class</b>	<b>Sacks</b>	<b>Yield</b>	<b>Weight</b>
			Premium Lite High Strength	490	3.38	11.0
			Pozzuolanic Cement	1620	1.31	14.3



**DRILLING PROGRAM**

**CASING PROGRAM**

	SIZE	INTERVAL	WT.	GR.	CPLG.	DESIGN FACTORS		
						BURST	COLLAPSE	TENSION
CONDUCTOR	14"	0-40'				3520	2020	453000
SURFACE	9-5/8"	0 to 2,800'	38.00	J-85	LTC	0.79	1.54	5.13
PRODUCTION	4-1/2"	0 to 10300	11.60	I-80	LTC	1.70	0.95	1.93

- 1) Max Anticipated Surf. Press.(MASP) (Surface Casing) = (Pore Pressure at next csg point - (0.22 psi/ft - partial evac gradient x TVD of next csg point))  
 2) MASP (Prod Casing) = Pore Pressure at TD - (.22 psi/ft - partial evac gradient x TD)  
 (Burst Assumptions: TD = 12.5 ppg) .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 4120 psi

**CEMENT PROGRAM**

		FT. OF FILL	DESCRIPTION	SACKS	EXCESS	WEIGHT	YIELD
SURFACE	LEAD	500	Premium cmt + 2% CaCl + .25 pps floccle	215	80%	15.60	1.18
Option 1	TOP OUT CMT (1)	250	20 gals sodium silicate + Premium cmt + 2% CaCl + .25 pps floccle	100		15.60	1.18
	TOP OUT CMT (2)	as required	Premium cmt + 2% CaCl	as req.		15.60	1.18
SURFACE		<b>NOTE: If well will circulate water to surface, option 2 will be utilized</b>					
Option 2	LEAD	2000	Prem cmt + 16% Gel + 10 pps gilsonite + .25 pps Floccle + 3% salt BWOC	230	35%	11.00	3.82
	TAI	500	Premium cmt + 2% CaCl + .25 pps floccle	180	35%	15.60	1.18
	TOP OUT CMT	as required	Premium cmt + 2% CaCl	as req.		15.60	1.18
PRODUCTION	LEAD	4,490'	Premium Lite II + 3% KCl + 0.25 pps celloflake + 5 pps gilsonite + 10% gel + 0.5% extender	490	60%	11.00	3.38
	TAIL	5,810'	50/50 Poz/G + 10% salt + 2% gel + .1% R-3	1620	60%	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 to top of tail cement with 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. Test to 5,000 psi (annular to 2,500 psi) prior to drilling out. Record on chart recorder & tour sheet. Function test rams on each trip. Maintain safety valve & inside BOP on rig floor at all times. Kelly to be equipped with upper & 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: \_\_\_\_\_  
 Brad Laney  
 DRILLING SUPERINTENDENT: \_\_\_\_\_  
 Randy Bayne

DATE: \_\_\_\_\_  
 DATE: \_\_\_\_\_

**NBU 920-24I  
NESE Sec. 24, T9S,R20E  
UINTAH COUNTY, UTAH  
UTU-0579**

**ONSHORE ORDER NO. 1**

***DRILLING PROGRAM***

**1. Estimated Tops of Important Geologic Markers:**

<u>Formation</u>	<u>Depth</u>
Uinta	0- Surface
Green River	1632'
Bird's Nest	1879'
Mahogany	2393'
Wasatch	4993'
Mesaverde	8129'
MVU2	9062'
MVL1	9523'
TD	10,300'

**2. Estimated Depths of Anticipated Water, Oil, Gas, or Mineral Formations:**

<u>Substance</u>	<u>Formation</u>	<u>Depth</u>
	Green River	1632'
	Bird's Nest	1879'
	Mahogany	2393'
Gas	Wasatch	4993'
Gas	Mesaverde	8129'
Gas	MVU2	9062'
Gas	MVL1	9523'
Water	N/A	
Other Minerals	N/A	

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

*Please see the Natural Buttes Unit Standard Operating Procedure (SOP).*

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

*Please see the Natural Buttes Unit SOP. See attached drilling diagram.*

**5. Drilling Fluids Program:**

*Please see the Natural Buttes Unit SOP.*

6. **Evaluation Program:**

*Please see the Natural Buttes Unit SOP.*

7. **Abnormal Conditions:**

Maximum anticipated bottomhole pressure calculated at 10,300' TD, approximately equals 6386 psi (calculated at 0.62 psi/foot).

Maximum anticipated surface pressure equals approximately 4120 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 see Natural Buttes Unit SOP 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 blowline. The air rig does not utilize an igniter as the surface hole drilling operation does not encounter productive formations.*

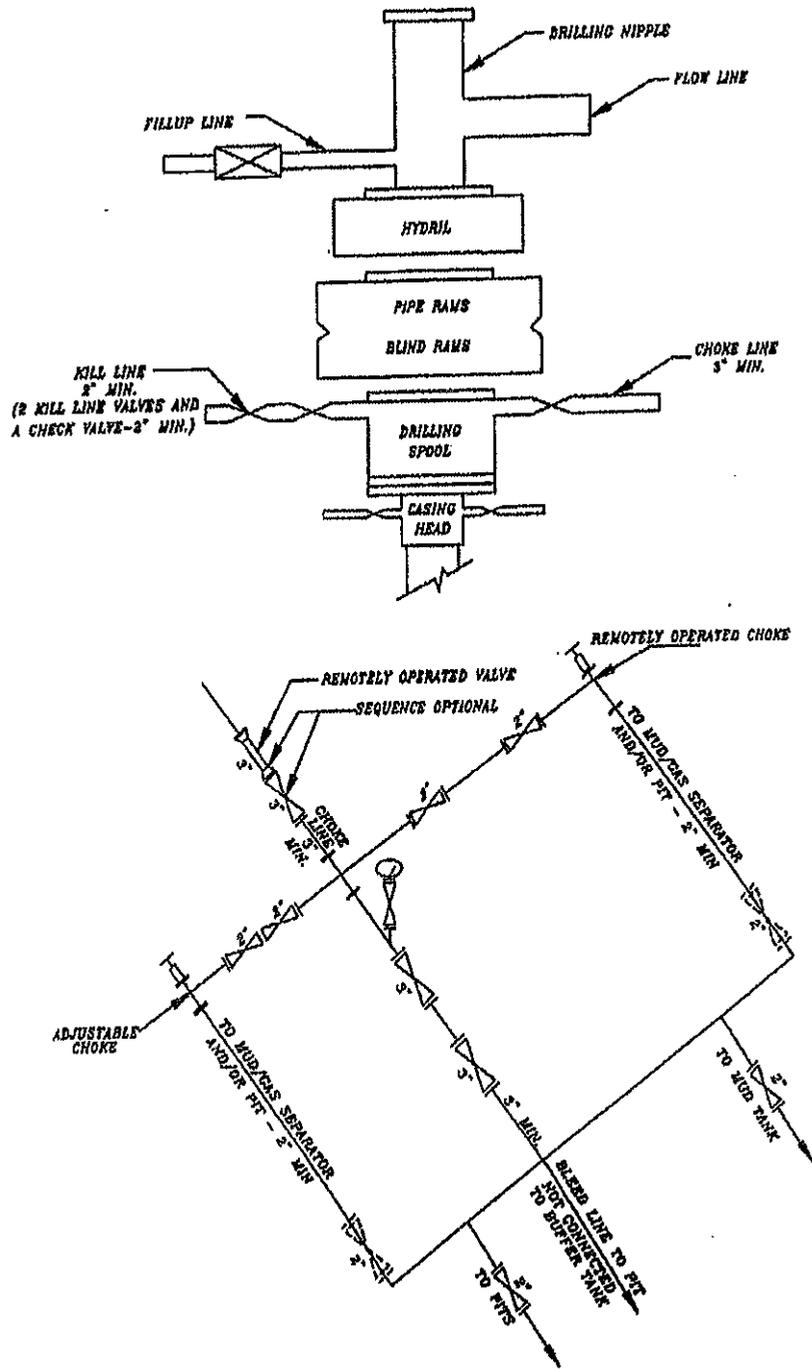
*Conclusion*

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

10. **Other Information:**

*Please see Natural Buttes Unit SOP.*

EXHIBIT A



**SCHEMATIC DIAGRAM OF 5,000 PSI BOP STACK**

**NBU 920-24I  
NESE Sec. 24 ,T9S,R20E  
UINTAH COUNTY, UTAH  
UTU-0579**

**ONSHORE ORDER NO. 1**

***MULTI-POINT SURFACE USE & OPERATIONS PLAN***

**1. Existing Roads:**

Refer to the attached location directions.

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

**2. Planned Access Roads:**

Approximately 770' +/- of new access road is proposed. Refer to Topo Map B.

*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.*

*Please see the Natural Buttes Unit Standard Operating Procedure (SOP).*

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

Please refer to Topo Map C.

**4. Location of Existing & Proposed Facilities:**

*Please see the Natural Buttes Unit SOP.*

Refer to Topo Map D for the location of the proposed pipelines.

**A right-of-way is required for the pipeline. The pipeline is approximately 2,044' in length and 30' in width. A 4" surface steel pipeline will be constructed utilizing existing disturbance where possible. The pipeline will be butt-welded together and pulled into place with a rubber tired tractor.**

**Variations to Best Management Practices (BMPs) Requested:**

Approximately 2,044' of 4" steel pipeline will be installed on surface within the access corridor for the well location. As a Best Management Practice (BMP), the pipeline would be buried within the access road corridor if possible. The construction of pipelines requires the corridor of 30 feet.

This exception to the BMP should be granted by the BLM Authorized Officer because indurated bedrock, such as sandstone, is at or within 2 feet of the surface and the soil has a poor history for successful rehabilitation.

All facilities will be painted within six months of installation. Facilities required to comply with the Occupational Safety and Health Act (OSHA) will be excluded. The requested color is Shadow gray (2.5Y 6/2), a non-reflective earthtone.

**Interim Surface Reclamation Plan:**

This exception is requested due to the current twin and multi-well program. If determined that this well will not be a candidate for either twinning &/or multi-well the operator shall spread the topsoil pile on the location up to the rig anchor points. The location will be reshaped to the original contour to the extent possible. The operator will reseed the area using the BLM recommended seed mixture and reclamation methods.

**5. Location and Type of Water Supply:**

*Please see the Natural Buttes SOP.*

**6. Source of Construction Materials:**

*Please see the Natural Buttes SOP.*

**7. Methods of Handling Waste Materials:**

*Please see the Natural Buttes SOP.*

A plastic reinforced liner is to be used as discussed during on-site inspection. It will be a minimum of 20 mil thick and felt, with sufficient bedding used to cover any rocks. The liner will overlap the pit walls and be covered with dirt and/or rocks to hold it in place. No trash or scrap that could puncture the liner will be disposed of in the pit.

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, Sec. 5, T9S, R22E, NBU #159, Sec. 35, T9S R21E, Ace Oilfield, Sec. 2, T6S, R20E, MC&MC, Sec. 12, T6S, R19E, Pipeline Facility Sec. 36, T9S, R20E, Goat Pasture Evaporation Pond SW/4 Sec. 16, T10S, R22E, Bonanza Evaporation Pond Sec. 2, T10S, R23E (*Request is in lieu of filing Form 3160-5, after initial production*).

**8. Ancillary Facilities:**

*Please see the Natural Buttes SOP.*

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

The attached Location Layout Diagram describes drill pad cross-sections, cuts and fills, and locations of the mud tanks, reserve pit, flare pit, pipe racks, trailer parking, spoil dirt stockpile(s), and surface material stockpile(s).

Please see the attached diagram to describe rig orientation, parking areas, and access roads.

Location size may change prior to the drilling of the well due to the current rig availability. If the proposed location is not large enough to accommodate the drilling rig. The location will be re-surveyed and a form 3160-5 will be submitted.

10. **Plans for Reclamation of the Surface:**

*Please see the Natural Buttes SOP.*

Upon reclamation of the pit the following seed mixture will be used. A total of 12 lbs/acre will be used if the seeds are drilled (24 lbs/acre if the seeds are broadcast). The per acre requirements for *drilled* seed are:

Crested Wheatgrass      12 lbs.

Operator shall call the BLM for the seed mixture when final reclamation occurs.

11. **Surface/Mineral Ownership:**

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

Ute Indian Tribe  
P.O. Box 70  
Fort Duchesne, Utah 84026  
(435) 722-5141

The mineral ownership is listed below:

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

**12. Stipulations/Notices/Mitigation:**

There are no stipulations or notices for this location.

**13. Other Information:**

A Class III archaeological survey and a paleontological survey have been performed and will be submitted.

This location is not within 460' from the boundary of the Natural Buttes Unit, nor is it within 460' of any non-committed tract lying within the boundaries of the Unit.

**14. Lessee's or Operator's Representative & Certification:**

Kevin McIntyre  
Regulatory Analyst  
Kerr-McGee Oil & Gas Onshore LP  
P.O. Box 173779  
Denver, CO 80217-3779  
(720) 929-6226

Randy Bayne  
Drilling Manager  
Kerr-McGee Oil & Gas Onshore LP  
1368 South 1200 East  
Vernal, UT 84078  
(435) 781-7018

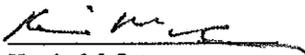
Certification: All lease and/or unit operations will be conducted in such a manner that full compliance is made with all applicable laws, regulations, Onshore Oil and Gas Orders, the approved Plan of Operations, and any applicable Notice to Lessees.

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 the terms and conditions of the lease for the operations conducted upon leased lands.

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.

Bond coverage pursuant to 43 CFR 3104 for lease activities is being provided by Bureau of Land Management Nationwide Bond #WYB000291.

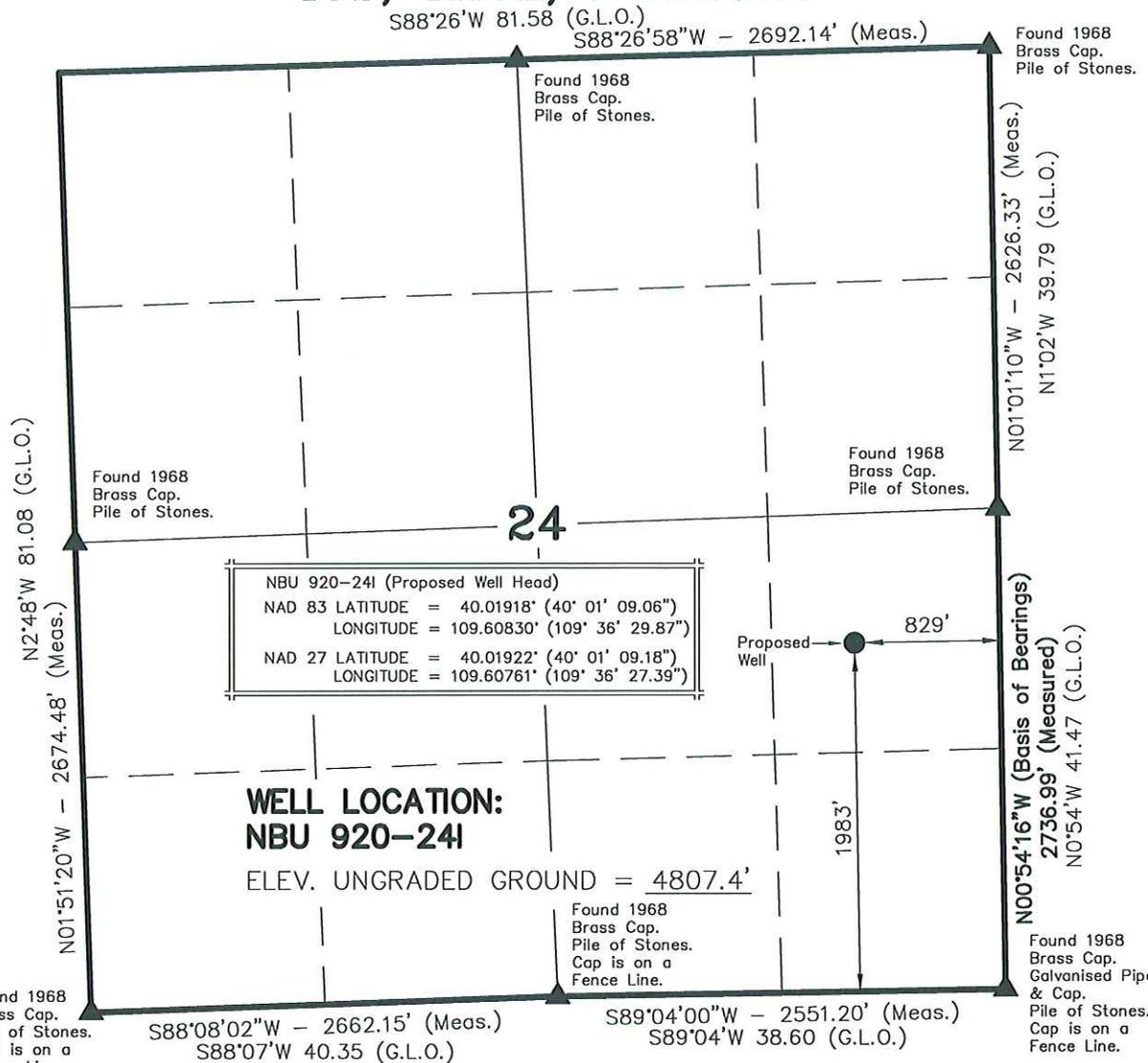
I hereby certify that I, or persons under my supervision, have inspected the proposed drill site and access route, that I am familiar with the conditions that currently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and the work associated with the operations proposed herein will be performed by the Operator, its contractors, and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

  
Kevin McIntyre

9/10/2008

Date

# T9S, R20E, S.L.B.&M.



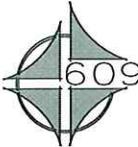
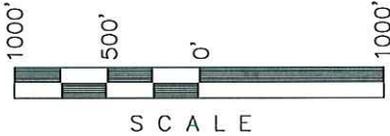
NBU 920-24I (Proposed Well Head)  
 NAD 83 LATITUDE = 40.01918' (40° 01' 09.06")  
 LONGITUDE = 109.60830' (109° 36' 29.87")  
 NAD 27 LATITUDE = 40.01922' (40° 01' 09.18")  
 LONGITUDE = 109.60761' (109° 36' 27.39")

**WELL LOCATION:  
 NBU 920-24I**

ELEV. UNGRADED GROUND = 4807.4'

**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 the Northwest Corner of Section 12, T9S, R20E, S.L.B.&M. The elevation of this Section Corner is shown on the Ouray SE 7.5 Min. Quadrangle as being 4676'.



**SURVEYOR'S CERTIFICATE**

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

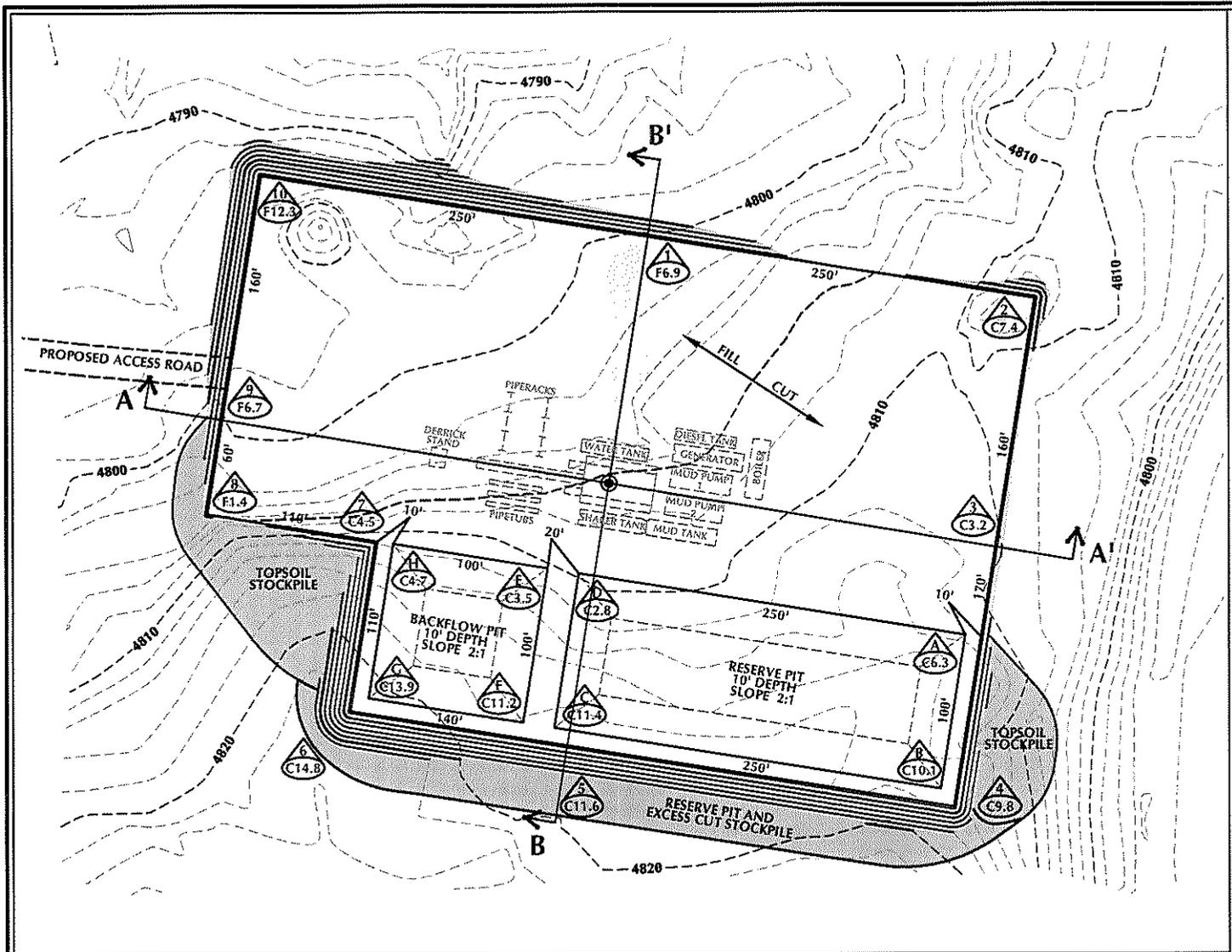
*John R. Slauch*  
 REGISTERED LAND SURVEYOR  
 REGISTRATION No. 6028691  
 STATE OF UTAH

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

NBU 920-24I  
 WELL PLAT  
 1983' FSL, 829' FEL  
 NE ¼ SE ¼ OF SECTION 24, T9S, R20E,  
 S.L.B.&M. UTAH COUNTY, UTAH.

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

<b>TIMBERLINE</b> (435) 789-1365		
ENGINEERING & LAND SURVEYING, INC.		
38 WEST 100 NORTH - VERNAL, UTAH 84078		
DATE SURVEYED: 7-31-08	SURVEYED BY: M.S.B.	SHEET <b>1</b>
DATE DRAWN: 8-4-08	DRAWN BY: B.R.B.	
SCALE: 1" = 1000'	Date Last Revised:	OF 9



**WELL PAD LEGEND**

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

**WELL PAD NBU 920-241 QUANTITIES**

EXISTING GRADE @ LOC. STAKE = 4,807.4'  
 FINISHED GRADE ELEVATION = 4,807.0'  
 CUT SLOPES = 1.5:1  
 FILL SLOPES = 1.5:1

TOTAL CUT FOR WELL PAD = 20,115 C.Y.  
 TOTAL FILL FOR WELL PAD = 18,026 C.Y.  
 TOPSOIL @ 6" DEPTH = 3,230 C.Y.  
 TOTAL DISTURBANCE = 4.00 ACRES  
 SHRINKAGE FACTOR = 1.15  
 SWELL FACTOR = 1.00  
 RESERVE PIT CAPACITY (2' OF FREEBOARD)  
 +/- 25,880 BARRELS  
 RESERVE PIT VOLUME  
 +/- 7,185 CY  
 BACKFLOW PIT CAPACITY (2' OF FREEBOARD)  
 +/- 8,780 BARRELS  
 BACKFLOW PIT VOLUME  
 +/- 2,520 CY



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

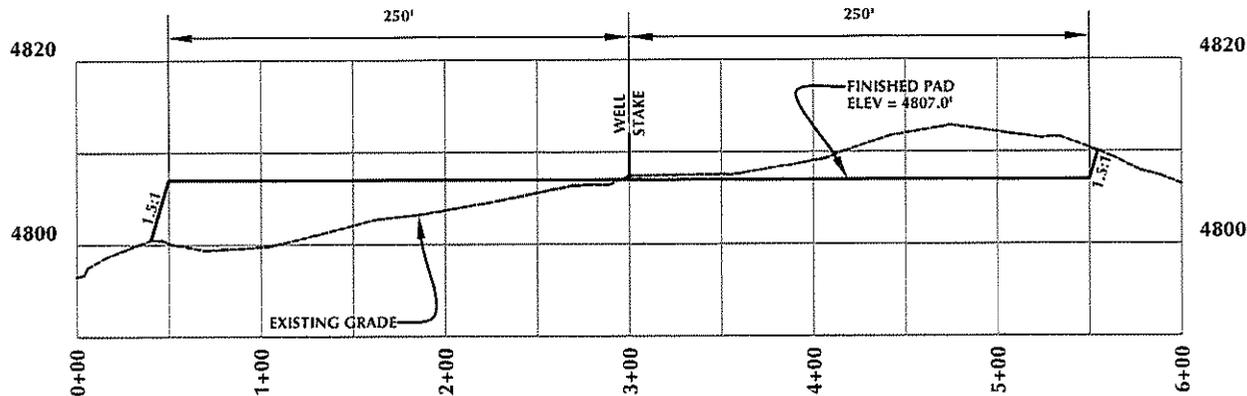


**CONSULTING, LLC**  
 371 Coffeen Avenue  
 Sheridan WY 82801  
 Phone 307-674-0609  
 Fax 307-674-0182

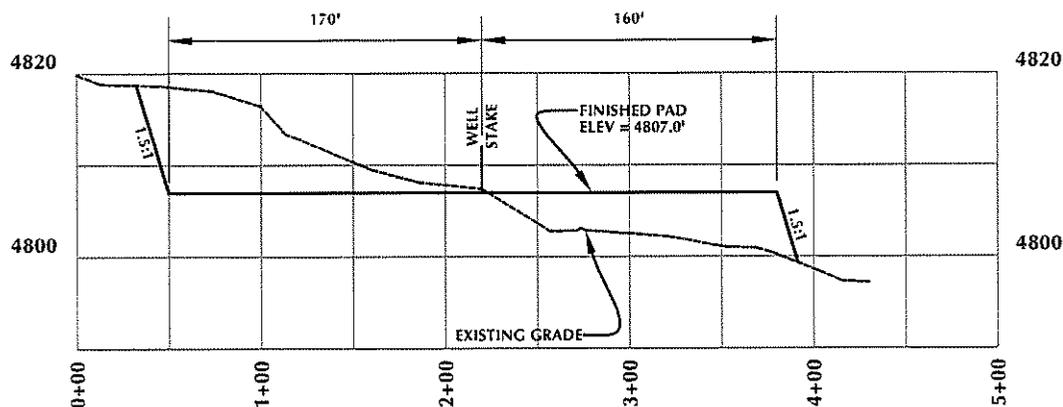
**NBU 920-241  
 WELL PAD - LOCATION LAYOUT  
 1983' FSL, 829' FEL  
 NE1/4SE1/4, SECTION 24, T.9S., R.20E.  
 S.L.B.&M., UINTAH COUNTY, UTAH**

Scale: 1"=100'	Date: 8/18/08	SHEET NO:
REVISED:	BY DATE	<b>2</b> 2 OF 9

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



**CROSS SECTION A-A'**



**CROSS SECTION B-B'**

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

**NBU 920-241  
WELL PAD - CROSS SECTIONS  
1983' FSL, 829' FEL  
NE1/4SE1/4, SECTION 24, T.9S., R.20E.  
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: 8/18/08	SHEET NO:
REVISED:	BY DATE	<b>3</b> 3 OF 9



HORIZONTAL 0 50 100 1" = 100'  
VERTICAL 0 10 20 1" = 20'

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

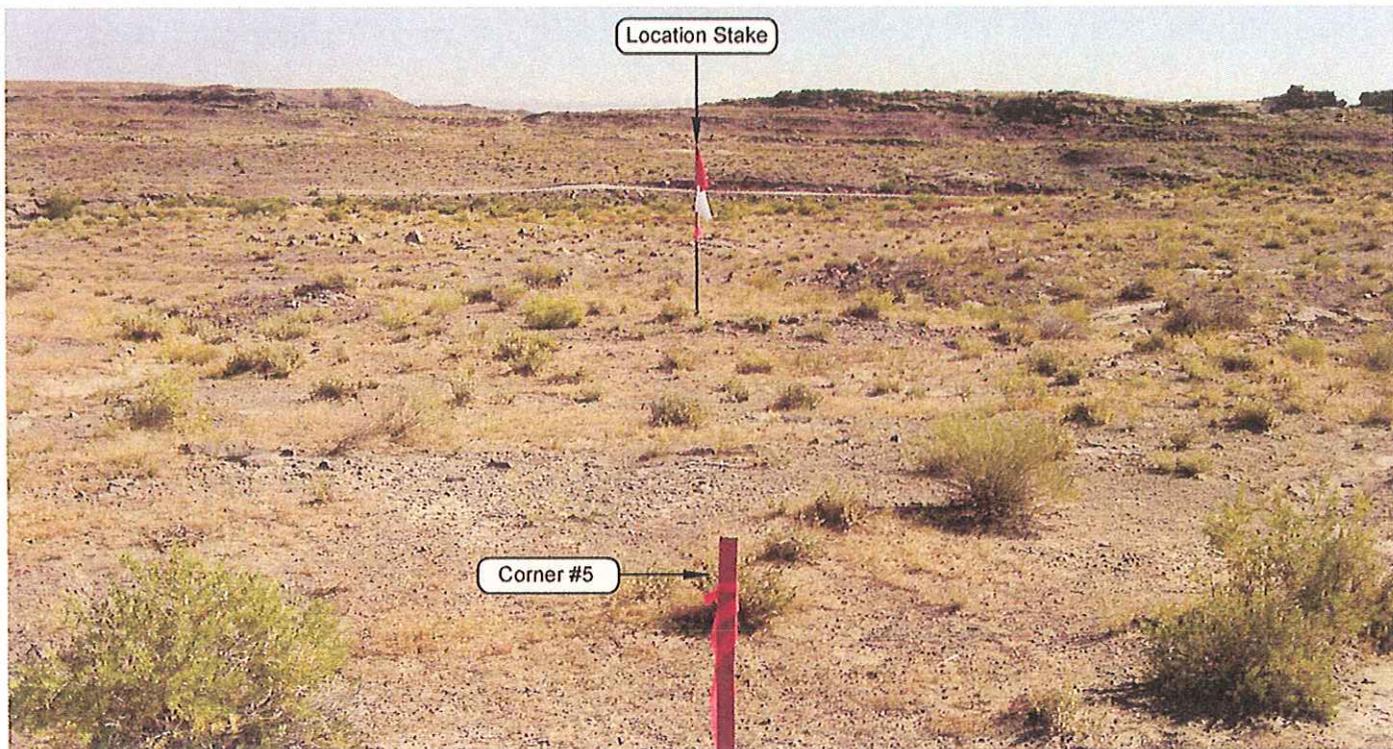


PHOTO VIEW: FROM CORNER #5 TO LOCATION STAKE

CAMERA ANGLE: NORTHEASTERLY

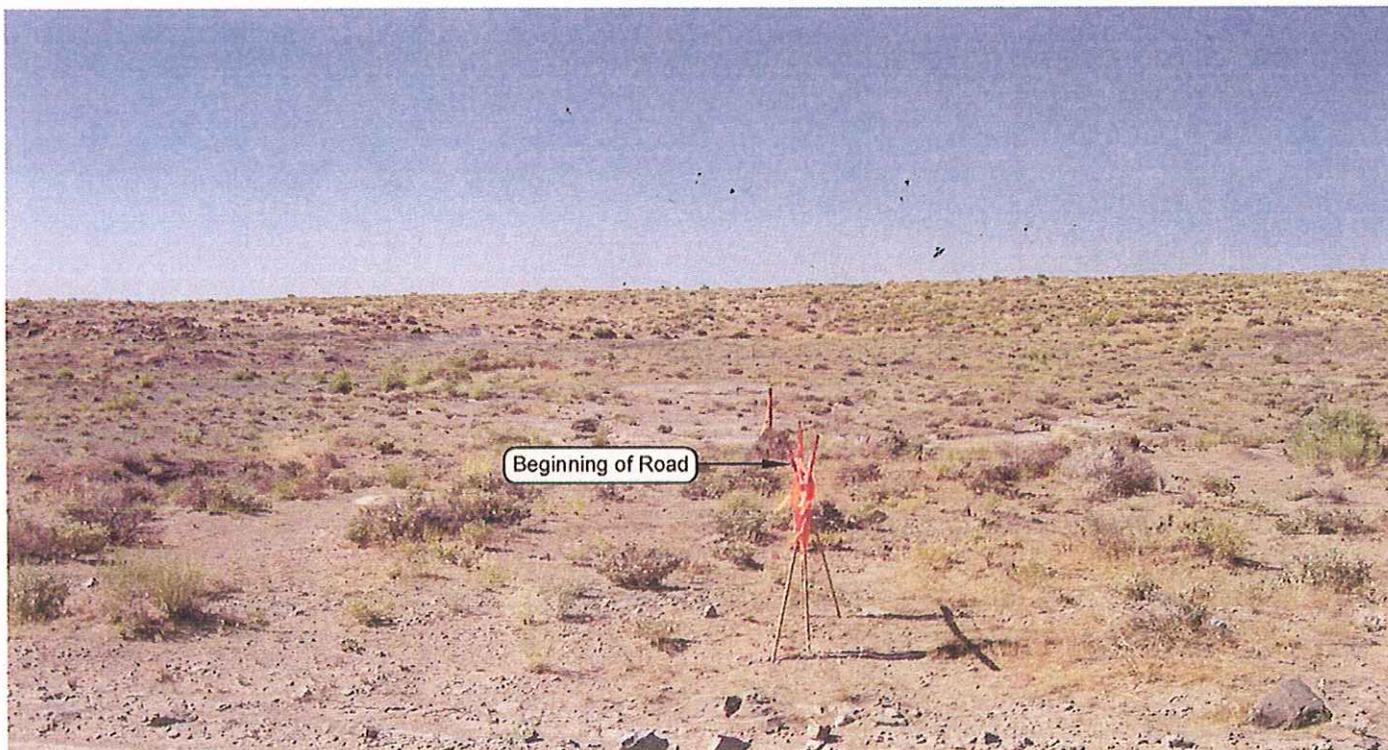


PHOTO VIEW: FROM BEGINNING OF PROPOSED ROAD

CAMERA ANGLE: SOUTHERLY

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

NBU 920-24I  
 1983' FSL, 829' FEL  
 NE ¼ SE ¼ OF SECTION 24, T9S, R20E,  
 S.L.B.&M. UINTAH COUNTY, UTAH.



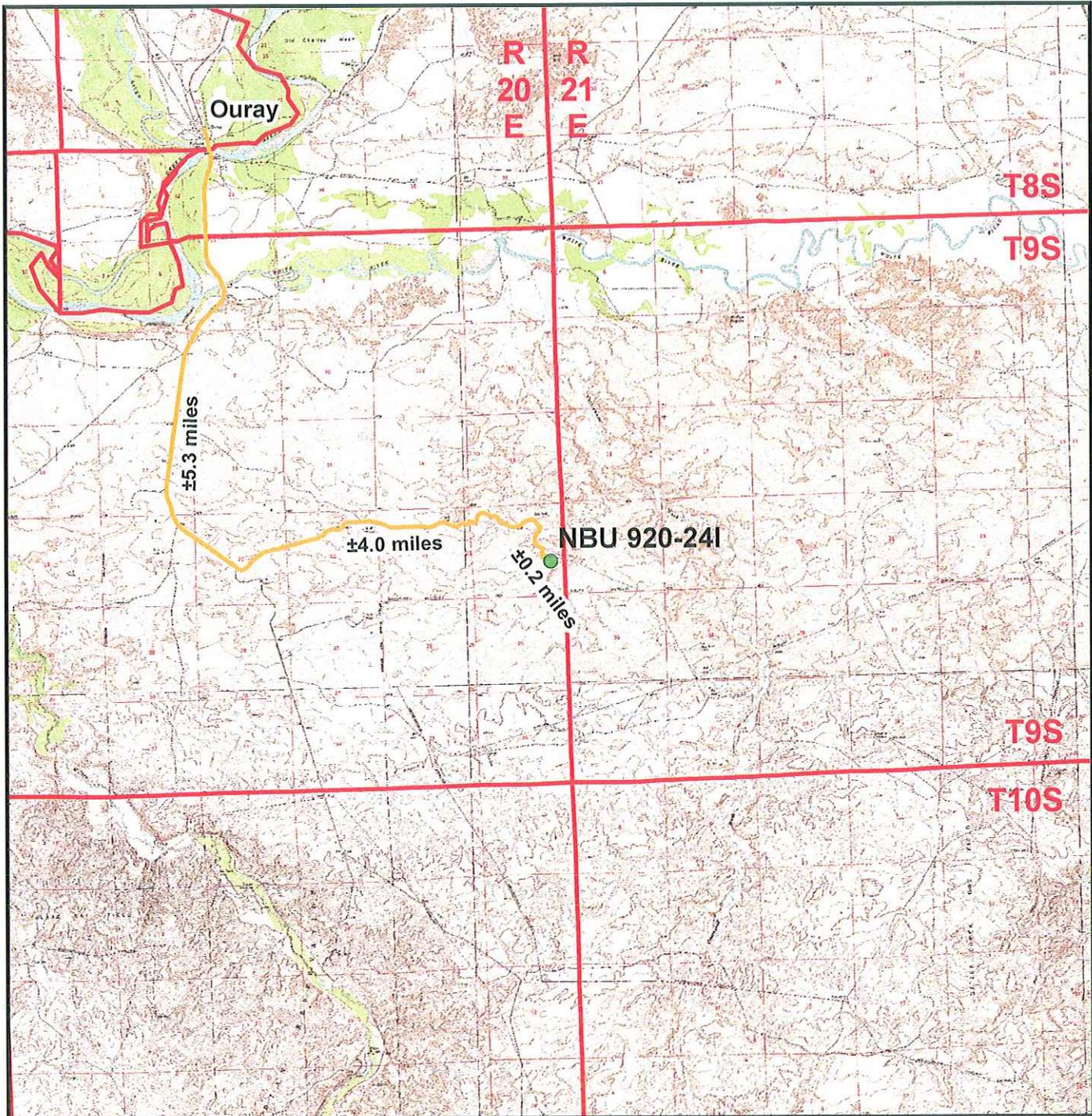
CONSULTING, LLC  
 371 Coffeen Avenue  
 Sheridan WY 82801  
 Phone 307-674-0609  
 Fax 307-674-0182

<b>LOCATION PHOTOS</b>		DATE TAKEN: 07-31-08
		DATE DRAWN: 08-04-08
TAKEN BY: M.S.B.	DRAWN BY: M.W.W.	REVISED:
<b>Timberline</b> Engineering & Land Surveying, Inc.		(435) 789-1365
38 WEST 100 NORTH VERNAL, UTAH 84078		<b>SHEET</b> 4 <b>OF 9</b>

**Kerr-McGee Oil & Gas Onshore, LP**  
**NBU 920-24I**  
**Section 24, T9S, R20E, S.L.B.&M.**

PROCEED IN A WESTERLY DIRECTION FROM VERNAL, UTAH ALONG U.S. HIGHWAY 40 APPROXIMATELY 13.9 MILES TO THE JUNCTION OF STATE HIGHWAY 88. EXIT LEFT AND PROCEED IN A SOUTHERLY DIRECTION ALONG STATE HIGHWAY 88 APPROXIMATELY 16.8 MILES TO OURAY, UTAH. FROM OURAY, PROCEED IN A SOUTHERLY DIRECTION ALONG THE SEEP RIDGE ROAD (COUNTY B ROAD 2810) APPROXIMATELY 5.3 MILES TO THE INTERSECTION OF AN EXISTING ROAD TO THE EAST. EXIT LEFT AND PROCEED IN A NORTHEASTERLY THEN SOUTHERLY DIRECTION ALONG EXISTING ROAD APPROXIMATELY 4.0 MILES TO THE PROPOSED ACCESS ROAD. FOLLOW ROAD FLAGS IN A SOUTHERLY THEN SOUTHEASTERLY DIRECTION APPROXIMATELY 770 FEET TO THE PROPOSED ACCESS ROAD.

TOTAL DISTANCE FROM VERNAL, UTAH TO THE PROPOSED WELL LOCATION IS APPROXIMATELY 40.2 MILES IN A SOUTHERLY DIRECTION.



**Legend**

- Proposed NBU 920-24I Well Location
- Access Route - Proposed

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

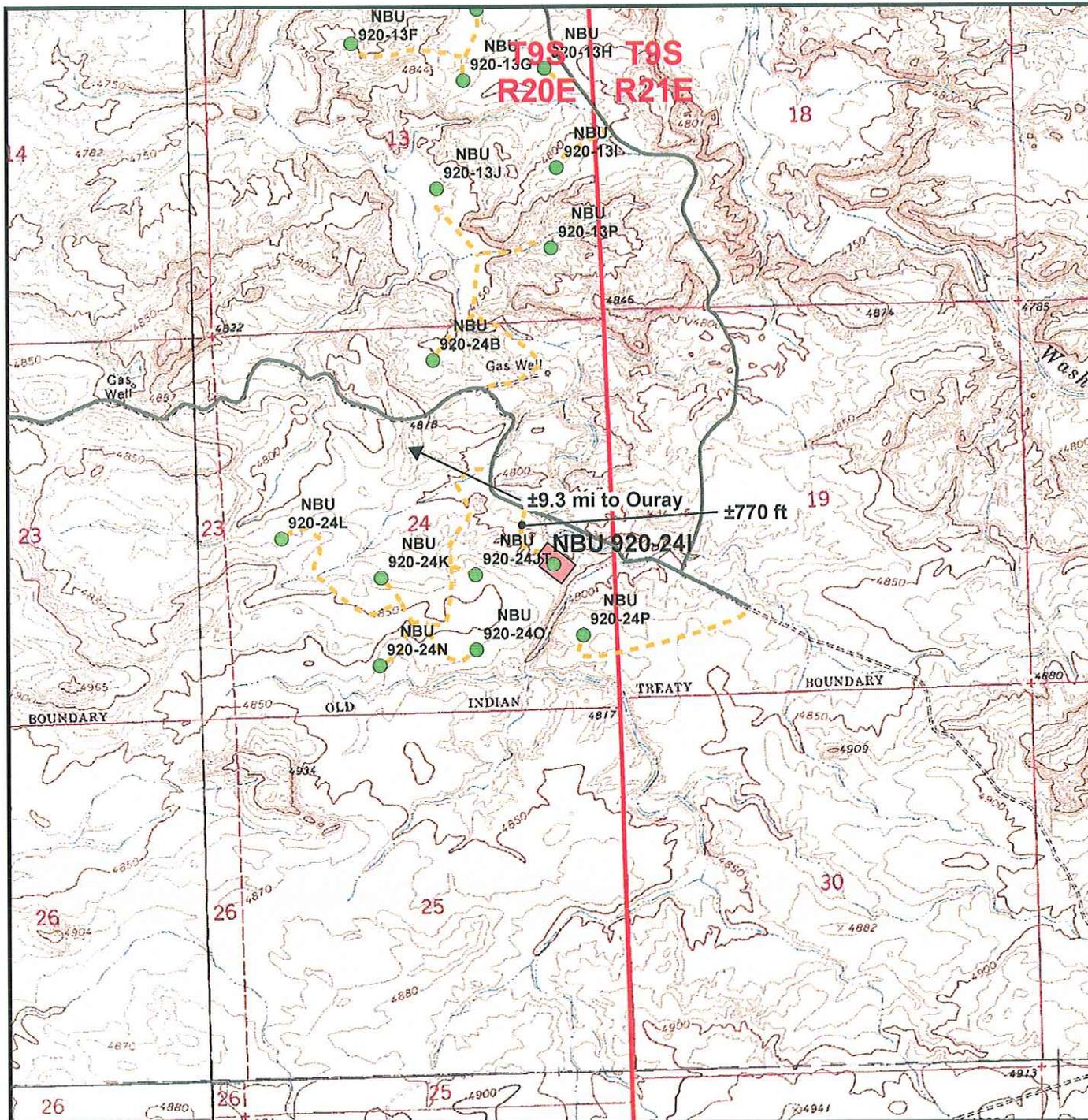
**NBU 920-24I**  
**Topo A**  
 1983' FSL, 829' FEL  
 NE¼ SE¼, Section 24, T9S, R20E  
 S.L.B.&M., Uintah County, Utah



**CONSULTING, I.L.C.**  
 371 Colfeen Avenue  
 Sheridan, WY 82801  
 Phone (307) 674-0609  
 Fax (307) 674-0182



Scale: 1:100,000	NAD83 USP Central	Sheet No:
Drawn: JELo	Date: 18 Aug 2008	<b>5</b>
Revised:	Date:	5 of 9



**Legend**

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

Total Proposed Road Length = ±770ft

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

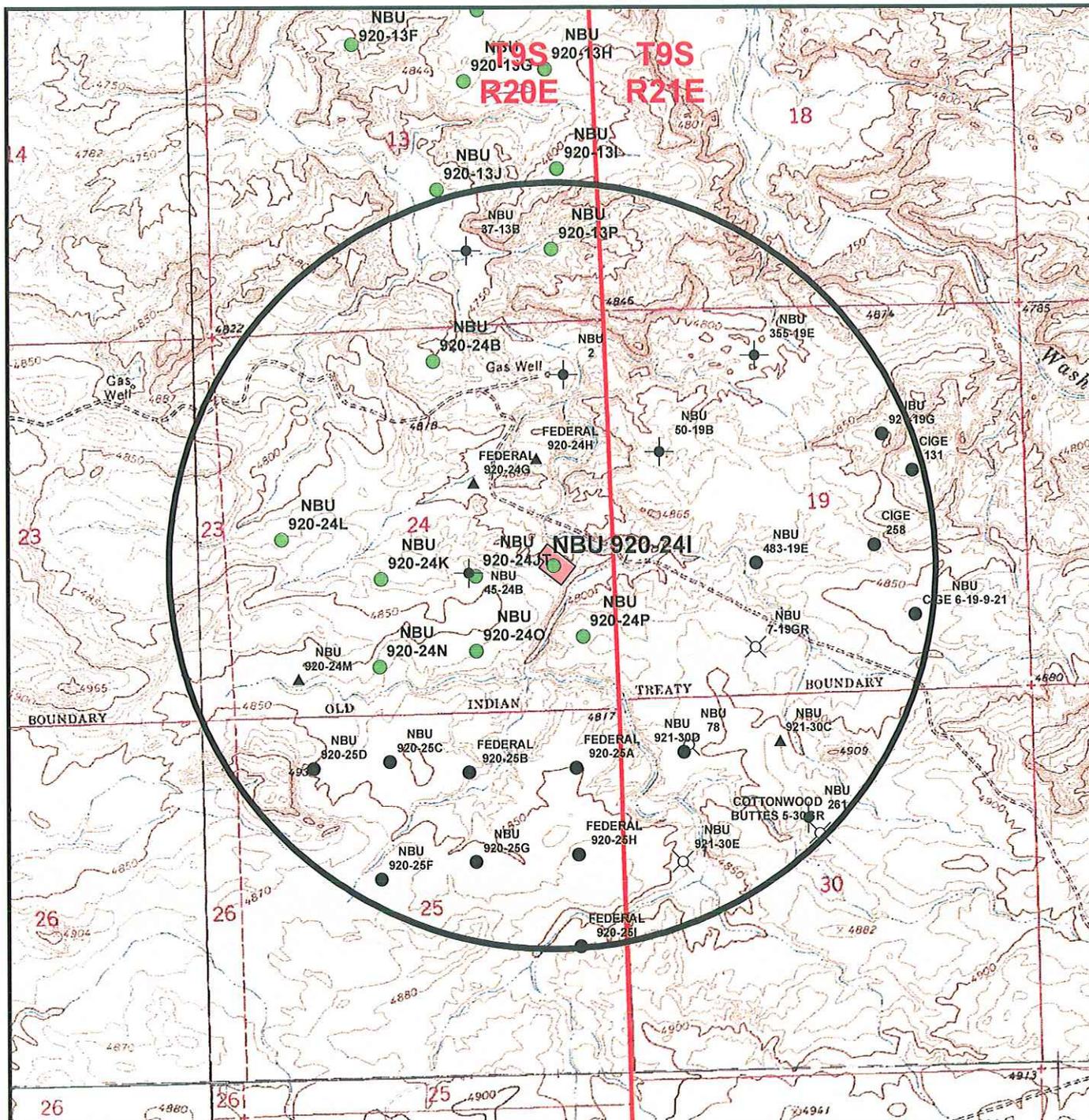
**NBU 920-24I**  
**Topo B**  
**1983' FSL, 829' FEL**  
**NE¼ SE¼, Section 24, T9S, R20E**  
**S.L.B.&M., Uintah County, Utah**



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



Scale: 1" = 2000ft	NAD83 USP Central	Sheet No:
Drawn: JELo	Date: 18 Aug 2008	<b>6</b>
Revised:	Date:	



**Legend**

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

Well locations derived from State of Utah, Dept. of Natural Resources, Division of Oil, Gas and Mining

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

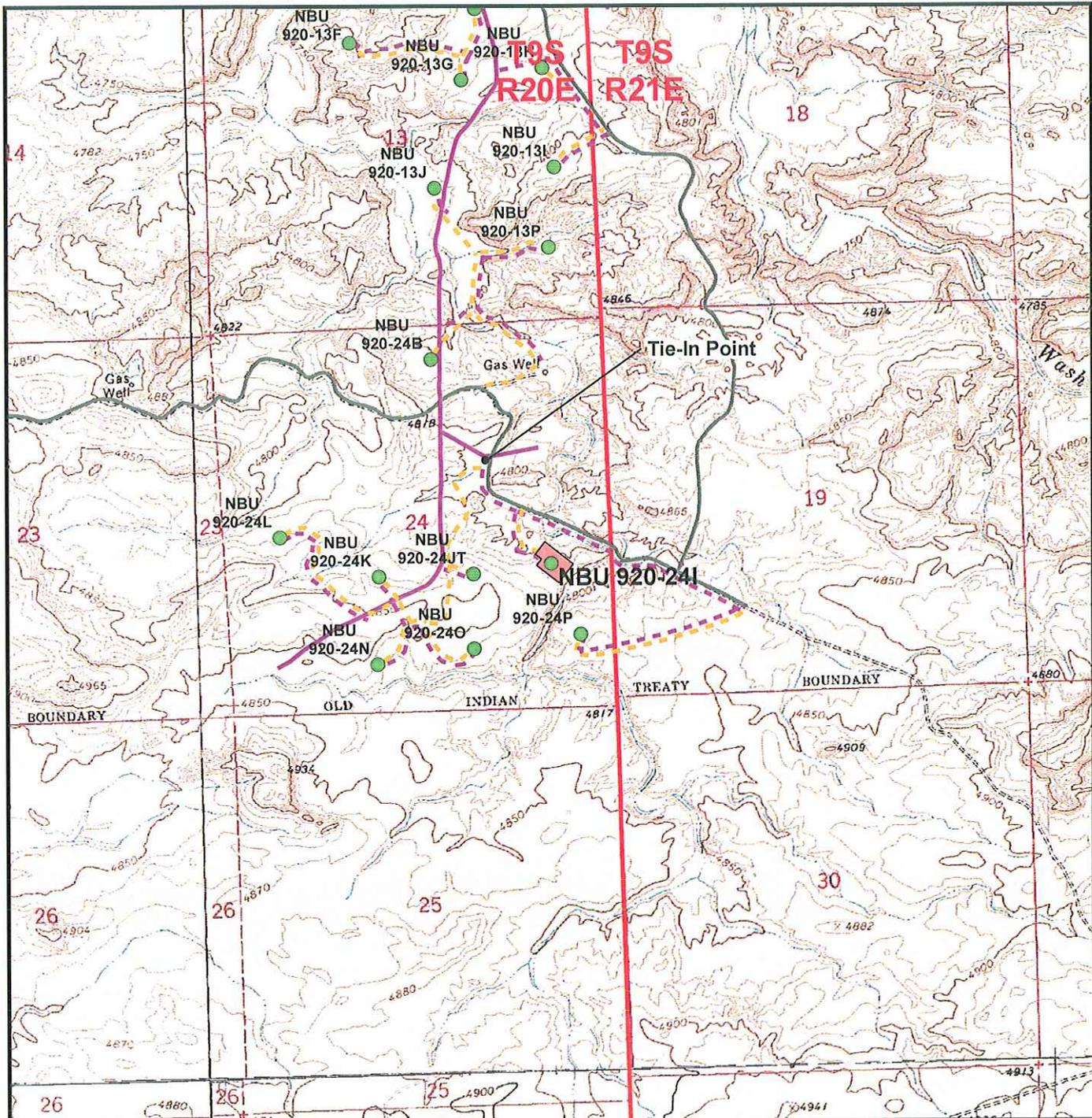
**NBU 920-24I**  
**Topo C**  
**1983' FSL, 829' FEL**  
**NE¼ SE¼, Section 24, T9S, R20E**  
**S.L.B.&M., Uintah County, Utah**



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



Scale: 1" = 2000ft	NAD83 USP Central	Sheet No:
Drawn: JELo	Date: 18 Aug 2008	<b>7</b>
Revised:	Date:	7 of 9



**Legend**

Total Proposed Pipeline Length: ±2,044ft

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

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

**NBU 920-241**  
**Topo D**  
 1983' FSL, 829' FEL  
 NE¼ SE¼, Section 24, T9S, R20E  
 S.L.B.&M., Uintah County, Utah



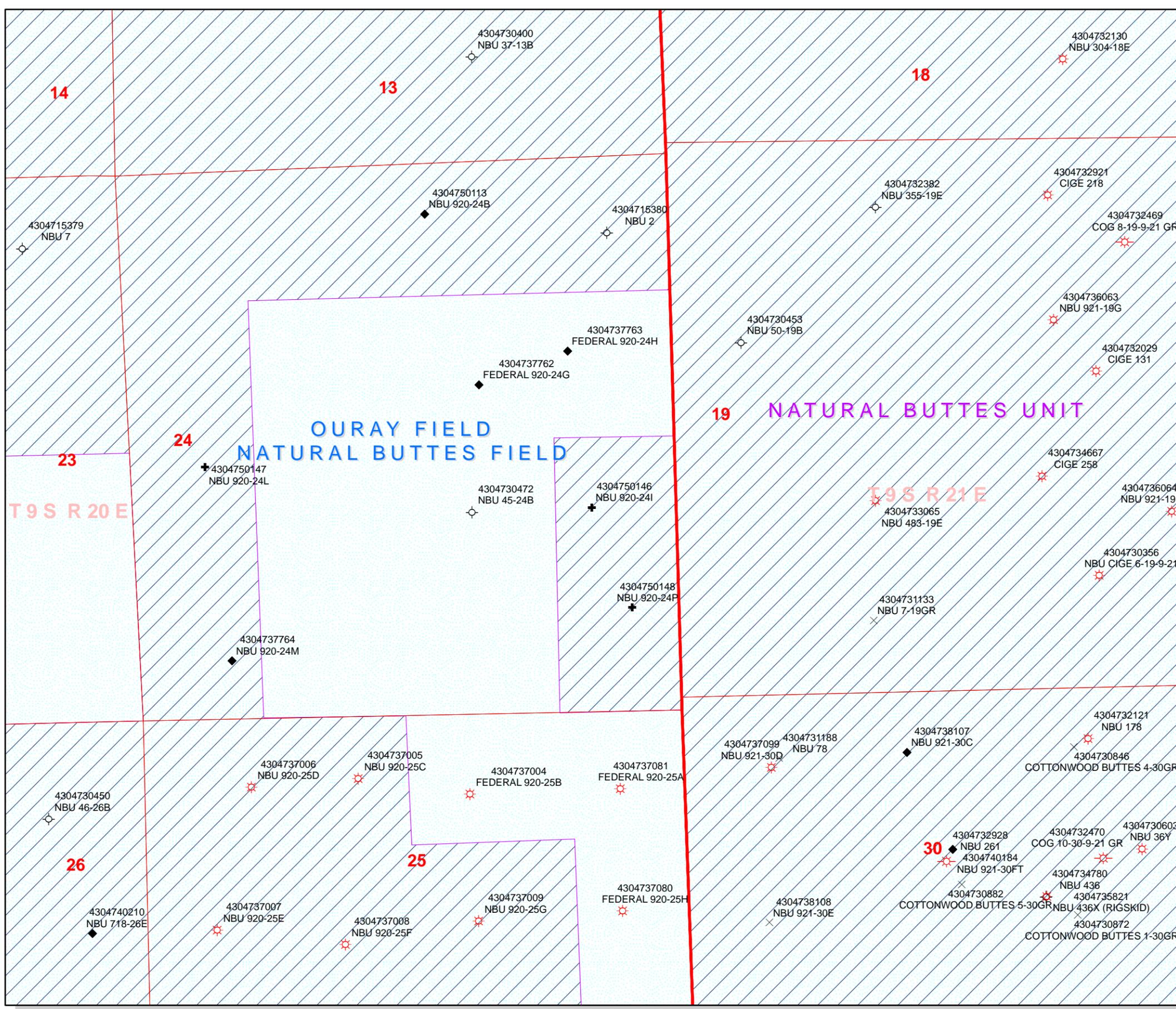
**CONSULTING, LLC**  
 371 Coffeen Avenue  
 Sheridan, WY 82801  
 Phone (307) 674-0609  
 Fax (307) 674-0182



Scale: 1" = 2000ft	NAD83 USP Central
Drawn: JELo	Date: 18 Aug 2008
Revised:	Date:

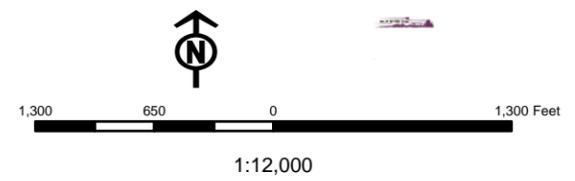
Sheet No: <b>8</b>	8 of 9
-----------------------	--------

API Number:  
Well Name: NBU 920-24I  
Township 09.0 S Range 20.0 E Section 24  
Meridian: SLBM  
Operator: KERR-MCGEE OIL & GAS ONSHORE, L.P.



Map Prepared:  
Map Produced by Diana Mason

<b>Units</b>	<b>Wells Query Events</b>
STATUS	✕ <all other values>
ACTIVE	GIS_STAT_TYPE
EXPLORATORY	<Null>
GAS STORAGE	◆ APD
NF PP OIL	○ DRL
NF SECONDARY	○ GI
PI OIL	★ GS
PP GAS	✕ LA
PP GEOTHERML	✕ NEW
PP OIL	✕ OPS
SECONDARY	○ PA
TERMINATED	☀ PGW
<b>Fields</b>	● POW
STATUS	⊙ RET
ACTIVE	⊙ SGW
COMBINED	○ SOW
Sections	○ TA
Township	○ TW
	○ WD
	○ WI
	● WS
	○ Bottom Hole Location



# 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)

September 25, 2008

Memorandum

To: Assistant District Manager Minerals, Vernal District  
From: Michael Coulthard, Petroleum Engineer  
Subject: 2008 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 2008 within the Natural Buttes Unit, Uintah County, Utah.

API #	WELL NAME	LOCATION
(Proposed PZ WASATCH-MESA VERDE)		
43-047-50148	NBU 920-24P Sec 24	T09S R20E 0992 FSL 0462 FEL
43-047-50149	NBU 921-12AT Sec 12	T09S R21E 0643 FNL 0670 FEL
43-047-50147	NBU 920-24L Sec 24	T09S R20E 2519 FSL 0698 FWL
43-047-50146	NBU 920-24I Sec 24	T09S R20E 1983 FSL 0829 FEL

(Proposed PZ MESA VERDE)		
43-047-50145	NBU 920-14D Sec 14	T09S R20E 0590 FNL 0835 FWL
43-047-50144	NBU 920-13I Sec 13	T09S R20E 2095 FSL 0549 FEL
43-047-50143	NBU 920-13J Sec 13	T09S R20E 1884 FSL 2217 FEL
43-047-50150	NBU 920-13H Sec 13	T09S R20E 1786 FNL 0658 FEL
43-047-50152	NBU 920-13B Sec 13	T09S R20E 0925 FNL 1555 FEL
43-047-50153	NBU 920-12P Sec 12	T09S R20E 0659 FSL 0471 FEL
43-047-40368	NBU 921-12DT Sec 12	T09S R21E 0905 FNL 0671 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:9-25-08

# WORKSHEET APPLICATION FOR PERMIT TO DRILL

**APD RECEIVED:** 9/23/2008

**API NO. ASSIGNED:** 43047501460000

**WELL NAME:** NBU 920-24I

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

**PHONE NUMBER:** 720 929-6226

**CONTACT:** Kevin McIntyre

**PROPOSED LOCATION:** NESE 24 090S 200E

**Permit Tech Review:**

**SURFACE:** 1983 FSL 0829 FEL

**Engineering Review:**

**BOTTOM:** 1983 FSL 0829 FEL

**Geology Review:**

**COUNTY:** UINTAH

**LATITUDE:** 40.01910

**LONGITUDE:** -109.60757

**UTM SURF EASTINGS:** 618830.00

**NORTHINGS:** 4430596.00

**FIELD NAME:** NATURAL BUTTES

**LEASE TYPE:** 1 - Federal

**LEASE NUMBER:** UTU-0579

**PROPOSED FORMATION:** WSMVD

**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**

## LOCATION AND SITING:

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

**Comments:** Presite Completed

**Stipulations:** 4 - Federal Approval - dmason  
17 - Oil Shale 190-5(b) - dmason



JON M. HUNTSMAN, JR.  
*Governor*

GARY R. HERBERT  
*Lieutenant Governor*

# State of Utah

DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER  
*Executive Director*

Division of Oil, Gas and Mining

JOHN R. BAZA  
*Division Director*

## Permit To Drill

\*\*\*\*\*

**Well Name:** NBU 920-24I  
**API Well Number:** 43047501460000  
**Lease Number:** UTU-0579  
**Surface Owner:** INDIAN  
**Approval Date:** 9/25/2008

**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.

**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

**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:**

Notify the Division with 24 hours of spudding the well.

- Contact Carol Daniels at (801) 538-5284.

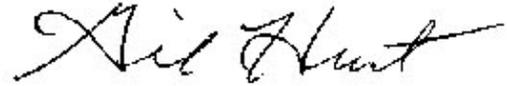
Notify the Division prior to commencing operations to plug and abandon the well.

- Contact Dustin Doucet at (801) 538-5281 office (801) 733-0983 home

**Reporting Requirements:**

All required reports, forms and submittals will be promptly filed with the Division, including but not limited to the Entity Action Form (Form 6), Report of Water Encountered During Drilling (Form 7), Weekly Progress Reports for drilling and completion operations, and Sundry Notices and Reports on Wells requesting approval of change of plans or other operational actions.

**Approved By:**

A handwritten signature in black ink, appearing to read "Gil Hunt". The signature is written in a cursive, flowing style with a long horizontal stroke extending to the right.

Gil Hunt  
Associate Director, Oil & Gas

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

FORM 3  
AMENDED REPORT

<b>APPLICATION FOR PERMIT TO DRILL</b>		<b>1. WELL NAME and NUMBER</b> NBU 920-241
<b>2. TYPE OF WORK</b> DRILL NEW WELL <input checked="" type="checkbox"/> REENTER P&A WELL <input type="checkbox"/> DEEPEN WELL <input type="checkbox"/>		<b>3. FIELD OR WILDCAT</b> NATURAL BUTTES
<b>4. TYPE OF WELL</b> Gas Well Coalbed Methane Well: NO		<b>5. UNIT or COMMUNITIZATION AGREEMENT NAME</b> NATURAL BUTTES
<b>6. NAME OF OPERATOR</b> KERR-MCGEE OIL & GAS ONSHORE, L.P.		<b>7. OPERATOR PHONE</b> 720 929-6587
<b>8. ADDRESS OF OPERATOR</b> P.O. Box 173779, Denver, CO, 80217		<b>9. OPERATOR E-MAIL</b> mary.mondragon@anadarko.com
<b>10. MINERAL LEASE NUMBER (FEDERAL, INDIAN, OR STATE)</b> UTU-0579	<b>11. MINERAL OWNERSHIP</b> FEDERAL <input checked="" type="checkbox"/> INDIAN <input type="checkbox"/> STATE <input type="checkbox"/> FEE <input type="checkbox"/>	
<b>13. NAME OF SURFACE OWNER (if box 12 = 'fee')</b>		<b>12. SURFACE OWNERSHIP</b> FEDERAL <input type="checkbox"/> INDIAN <input checked="" type="checkbox"/> STATE <input type="checkbox"/> FEE <input type="checkbox"/>
<b>15. ADDRESS OF SURFACE OWNER (if box 12 = 'fee')</b>		<b>14. SURFACE OWNER PHONE (if box 12 = 'fee')</b>
<b>17. INDIAN ALLOTTEE OR TRIBE NAME (if box 12 = 'INDIAN')</b> Ute		<b>16. SURFACE OWNER E-MAIL (if box 12 = 'fee')</b>
<b>18. INTEND TO COMMINGLE PRODUCTION FROM MULTIPLE FORMATIONS</b> YES <input type="checkbox"/> (Submit Commingling Application) NO <input checked="" type="checkbox"/>		<b>19. SLANT</b> 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	1983 FSL 829 FEL	NESE	24	9.0 S	20.0 E	S
Top of Uppermost Producing Zone	1983 FSL 829 FEL	NESE	24	9.0 S	20.0 E	S
At Total Depth	1983 FSL 829 FEL	NESE	24	9.0 S	20.0 E	S

<b>21. COUNTY</b> UINTAH	<b>22. DISTANCE TO NEAREST LEASE LINE (Feet)</b> 829	<b>23. NUMBER OF ACRES IN DRILLING UNIT</b> 1920
	<b>25. DISTANCE TO NEAREST WELL IN SAME POOL (Applied For Drilling or Completed)</b> 1000	<b>26. PROPOSED DEPTH</b> MD: 10300 TVD:
<b>27. ELEVATION - GROUND LEVEL</b> 4807	<b>28. BOND NUMBER</b> WYB000291	<b>29. SOURCE OF DRILLING WATER / WATER RIGHTS APPROVAL NUMBER IF APPLICABLE</b> Permit #43-8496

**ATTACHMENTS**

**VERIFY THE FOLLOWING ARE ATTACHED IN ACCORCANCE 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

<b>NAME</b> Kevin McIntyre	<b>TITLE</b> Regulatory Analyst I	<b>PHONE</b> 720 929-6226
<b>SIGNATURE</b>	<b>DATE</b> 09/25/2008	<b>EMAIL</b> Kevin.McIntyre@anadarko.com
<b>API NUMBER ASSIGNED</b> 43047501460000	<b>APPROVAL</b>   Permit Manager	





GARY R. HERBERT  
Governor

GREGORY S. BELL  
Lieutenant Governor

# State of Utah

## DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER  
Executive Director

### Division of Oil, Gas and Mining

JOHN R. BAZA  
Division Director

September 25, 2008  
Amended May 11, 2010

Kerr-McGee Oil & Gas  
P.O. Box 173779  
Denver, CO 80217

Subject: NBU 920-24I Well, 1983' FSL, 829" FEL, NE SE, Sec. 24, T. 9 South, R. 20 East, Uintah County, Utah

Ladies and Gentlemen:

Pursuant to the provisions and requirements of Utah Code Ann. § 40-6-1 *et seq.*, Utah Administrative Code R649-3-1 *et seq.*, and the attached Conditions of Approval, approval to drill the referenced well is granted.

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

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. The API identification number assigned to this well is 43-047-50146.

Sincerely,

Gil Hunt  
Associate Director

GLH/ js  
Enclosures

cc: Uintah County Assessor  
Bureau of Land Management, Vernal Office



**Operator:** Kerr-McGee Oil & Gas  
**Well Name & Number** NBU 920-24I  
**API Number:** 43-047-50146  
**Lease:** UTU-0579

**Location:** NE SE    **Sec.** 24    **T.** 9 South    **R.** 20 East

### Conditions of Approval

#### 1. 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.

#### 2. 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 let a voicemail message if not available)

OR

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

Notify the Division prior to commencing operations to plug and abandon the well.

- Contact Dustin Doucet at (801) 538-5281 office  
(801) 733-0983 after office hours

#### 3. 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:

- Entity Action Form (Form 6) – due within 5 days of spudding the well
- Monthly Status Report (Form 9) – due by 5<sup>th</sup> 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

- #### 4. State approval of this well does not supersede the required federal approval, which must be obtained prior to drilling.

Page 2

43-047-50146

Amended May 11, 2010

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

<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	<b>FORM 9</b>  <b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> UTU-0579
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  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.	<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b> Ute  <b>7. UNIT or CA AGREEMENT NAME:</b> NATURAL BUTTES
<b>1. TYPE OF WELL</b> Gas Well	<b>8. WELL NAME and NUMBER:</b> NBU 920-241
<b>2. NAME OF OPERATOR:</b> KERR-MCGEE OIL & GAS ONSHORE, L.P.	<b>9. API NUMBER:</b> 43047501460000
<b>3. ADDRESS OF OPERATOR:</b> P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779	<b>PHONE NUMBER:</b> 720 929-6007 Ext  <b>9. FIELD and POOL or WILDCAT:</b> NATURAL BUTTES
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 1983 FSL 0829 FEL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: NESE Section: 24 Township: 09.0S Range: 20.0E Meridian: S	<b>COUNTY:</b> UINTAH  <b>STATE:</b> UTAH

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

TYPE OF SUBMISSION	TYPE OF ACTION		
<input checked="" type="checkbox"/> <b>NOTICE OF INTENT</b> Approximate date work will start: 9/28/2009  <input type="checkbox"/> <b>SUBSEQUENT REPORT</b> Date of Work Completion:  <input type="checkbox"/> <b>SPUD REPORT</b> Date of Spud:  <input type="checkbox"/> <b>DRILLING REPORT</b> Report Date:	<input type="checkbox"/> ACIDIZE <input type="checkbox"/> CHANGE TO PREVIOUS PLANS <input type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> DEEPEN <input type="checkbox"/> OPERATOR CHANGE <input type="checkbox"/> PRODUCTION START OR RESUME <input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> WATER SHUTOFF <input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> ALTER CASING <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input type="checkbox"/> FRACTURE TREAT <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> SI TA STATUS EXTENSION <input type="checkbox"/> OTHER	<input type="checkbox"/> CASING REPAIR <input type="checkbox"/> CHANGE WELL NAME <input type="checkbox"/> CONVERT WELL TYPE <input type="checkbox"/> NEW CONSTRUCTION <input type="checkbox"/> PLUG BACK <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION <input type="checkbox"/> TEMPORARY ABANDON <input type="checkbox"/> WATER DISPOSAL <input checked="" type="checkbox"/> APD EXTENSION OTHER:

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: September 30, 2009

By: 

<b>NAME (PLEASE PRINT)</b> Danielle Piernot	<b>PHONE NUMBER</b> 720 929-6156	<b>TITLE</b> Regulatory Analyst
<b>SIGNATURE</b> N/A	<b>DATE</b> 9/24/2009	



**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 43047501460000**

**API:** 43047501460000

**Well Name:** NBU 920-24I

**Location:** 1983 FSL 0829 FEL QTR NESE SEC 24 TWNP 090S RNG 200E MER S

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

**Date Original Permit Issued:** 9/29/2008

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

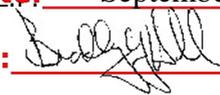
**Approved by the Utah Division of Oil, Gas and Mining**

**Signature:** Danielle Piernot

**Date:** 9/24/2009

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

**Date:** September 30, 2009

**By:** 

<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	<b>FORM 9</b>  <b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> UTU-0579
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  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.	<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b> Ute  <b>7. UNIT or CA AGREEMENT NAME:</b> NATURAL BUTTES
<b>1. TYPE OF WELL</b> Gas Well	<b>8. WELL NAME and NUMBER:</b> NBU 920-241
<b>2. NAME OF OPERATOR:</b> KERR-MCGEE OIL & GAS ONSHORE, L.P.	<b>9. API NUMBER:</b> 43047501460000
<b>3. ADDRESS OF OPERATOR:</b> P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779	<b>PHONE NUMBER:</b> 720 929-6007 Ext
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 1983 FSL 0829 FEL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: NESE Section: 24 Township: 09.0S Range: 20.0E Meridian: S	<b>9. FIELD and POOL or WILDCAT:</b> NATURAL BUTTES  <b>COUNTY:</b> UINTAH  <b>STATE:</b> UTAH

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

TYPE OF SUBMISSION	TYPE OF ACTION		
<input checked="" type="checkbox"/> <b>NOTICE OF INTENT</b> Approximate date work will start: 9/30/2010  <input type="checkbox"/> <b>SUBSEQUENT REPORT</b> Date of Work Completion:  <input type="checkbox"/> <b>SPUD REPORT</b> Date of Spud:  <input type="checkbox"/> <b>DRILLING REPORT</b> Report Date:	<input type="checkbox"/> ACIDIZE <input type="checkbox"/> CHANGE TO PREVIOUS PLANS <input type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> DEEPEN <input type="checkbox"/> OPERATOR CHANGE <input type="checkbox"/> PRODUCTION START OR RESUME <input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> WATER SHUTOFF <input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> ALTER CASING <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input type="checkbox"/> FRACTURE TREAT <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> SI TA STATUS EXTENSION <input type="checkbox"/> OTHER	<input type="checkbox"/> CASING REPAIR <input type="checkbox"/> CHANGE WELL NAME <input type="checkbox"/> CONVERT WELL TYPE <input type="checkbox"/> NEW CONSTRUCTION <input type="checkbox"/> PLUG BACK <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION <input type="checkbox"/> TEMPORARY ABANDON <input type="checkbox"/> WATER DISPOSAL <input checked="" type="checkbox"/> APD EXTENSION OTHER: <input style="width: 100px;" type="text"/>

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

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

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

Date: October 06, 2010  
 By: 

<b>NAME (PLEASE PRINT)</b> Danielle Piernot	<b>PHONE NUMBER</b> 720 929-6156	<b>TITLE</b> Regulatory Analyst
<b>SIGNATURE</b> N/A		<b>DATE</b> 9/29/2010



**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 43047501460000**

**API:** 43047501460000

**Well Name:** NBU 920-24I

**Location:** 1983 FSL 0829 FEL QTR NESE SEC 24 TWP 090S RNG 200E MER S

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

**Date Original Permit Issued:** 9/29/2008

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:** 9/29/2010

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

**Date:** October 06, 2010

**By:** 

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

RECEIVED  
VERNAL FIELD OFFICE

APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		7. If Unit or CA Agreement, Name and No. 4208900A 63047A	
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		8. Lease Name and Well No. NBU 920-241	
2. Name of Operator Kerr-McGee Oil & Gas Onshore, LP		9. API Well No. 43-047-50146	
3a. Address P.O. Box 173779, Denver, CO 80217-3779	3b. Phone No. (include area code) 720.929.6226	10. Field and Pool, or Exploratory Natural Buttes Field	
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface NESE 1983' FSL & 829' FEL LAT 40.01922 LON -109.60761 (NAD 27) At proposed prod. zone N/A		11. Sec., T. R. M. or Blk. and Survey or Area Sec. 24, T 9S, R 20E	
14. Distance in miles and direction from nearest town or post office* 9.3 miles southeast of Ouray, Utah		12. County or Parish Uintah	13. State UT
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 829'	16. No. of acres in lease 1920	17. Spacing Unit dedicated to this well Unit Well	
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 1,000'	19. Proposed Depth 10,300'	20. BLM/BIA Bond No. on file WYB000291	
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 4,807.4' GL	22. Approximate date work will start*	23. Estimated duration 10 days	

24. Attachments

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

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

25. Signature 	Name (Printed/Typed) Kevin McIntyre	Date 09/10/2008
-------------------	----------------------------------------	--------------------

Title  
Regulatory Analyst I

Approved by (Signature) 	Name (Printed/Typed) Jerry Kenczka	Date APR 19 2011
-----------------------------	---------------------------------------	---------------------

Title  
Office  
VERNAL FIELD OFFICE

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

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

(Continued on page 2)

\*(Instructions on page 2)

NOS and posted 9/17/08 mcall  
AFMSS# 09/m00224

NOTICE OF APPROVAL

CONDITIONS OF APPROVAL ATTACHED

UDOGM

RECEIVED  
MAY 02 2011  
DIV. OF OIL, GAS & MINING



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

170 South 500 East

VERNAL, UT 84078

(435) 781-4400



**CONDITIONS OF APPROVAL FOR APPLICATION FOR PERMIT TO DRILL**

Company: Kerr McGee Oil & Gas Onshore LP      Location: NESE, Sec. 24, T9S R20E  
Well No: NBU 920-241      Lease No: UTU-0579  
API No: 43-047-50146      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: <a href="mailto:ut_vn_opreport@blm.gov">ut_vn_opreport@blm.gov</a> .
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 facilities “Shadow Gray.”
- Monitor by a permitted paleontologist during the construction process.
- Monitor location by a permitted archaeologist during construction Avoid site 42Un5151.
- Follow the procedures specified in the LM’s Hydraulic Considerations for Pipe line Crossings of Stream Channels where the gathering line would cross a drainage (BLM, 2007a). Span drainage at pipeline tie-in point.
- In accordance with the guidelines specified in the Utah BLM Field Office Guidelines for Raptor Protection from Human and Land Use Disturbances, 2002 (See Appendix D), a raptor survey would take place during raptor nesting season (January 1 through September 30) and conduct its operations according to specifications in the guidelines. The USFWS recommends a 1/4-mile avoidance buffer surrounding active sorrowing owl nest between March 1 and August 31.
- If project construction operations are not initiated before June 20, 2010, Kerr McGee should conduct additional biological surveys in accordance with the guidelines specified in the USFWS Rare Plant Conservation Measurements for Uinta Basin Hookless cactus (See Appendix D) and conduct its operations according to its specifications.

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

**SITE SPECIFIC DOWNHOLE COAs:**

- Kerr McGee and their contractors shall strictly adhere to all operating practices in the SOP (approved July 28, 2008) along with all Oil and Gas rules and requirements listed in the Code of Federal Regulations and all Federal Onshore Oil and Gas Orders except where variances have been granted.

**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](mailto:UT_VN_Welllogs@BLM.gov). This submission will supersede the requirement for submittal of paper logs to the BLM.**
- There shall be no deviation from the proposed drilling, completion, and/or workover program as approved. Safe drilling and operating practices must be observed. Any changes in operation must have prior approval from the BLM Vernal Field Office.

#### **OPERATING REQUIREMENT REMINDERS:**

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

Recompletion Report and Log" (BLM Form 3160-4) shall be submitted not later than 30 days after completion of the well or after completion of operations being performed, in accordance with 43 CFR 3162.4-1. Two copies of all logs run, core descriptions, and all other surveys or data obtained and compiled during the drilling, workover, and/or completion operations, shall be filed on BLM Form 3160-4. Submit with the well completion report a geologic report including, at a minimum, formation tops, and a summary and conclusions. Also include deviation surveys, sample descriptions, strip logs, core data, drill stem test data, and results of production tests if performed. Samples (cuttings, fluid, and/or gas) shall be submitted only when requested by the BLM, Vernal Field Office.

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

Report of Abandonment" (Form BLM 3160-5) must be submitted within 30 days after the actual plugging of the well bore, showing location of plugs, amount of cement in each, and amount of casing left in hole, and the current status of the surface restoration.

<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		<b>FORM 9</b>
		<b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> UTU-0579
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>		<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b> Ute
Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		<b>7. UNIT or CA AGREEMENT NAME:</b> NATURAL BUTTES
<b>1. TYPE OF WELL</b> Gas Well		<b>8. WELL NAME and NUMBER:</b> NBU 920-24I
<b>2. NAME OF OPERATOR:</b> KERR-MCGEE OIL & GAS ONSHORE, L.P.		<b>9. API NUMBER:</b> 43047501460000
<b>3. ADDRESS OF OPERATOR:</b> P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779	<b>PHONE NUMBER:</b> 720 929-6515 Ext	<b>9. FIELD and POOL or WILDCAT:</b> NATURAL BUTTES
<b>4. LOCATION OF WELL FOOTAGES AT SURFACE:</b> 1983 FSL 0829 FEL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: NESE Section: 24 Township: 09.0S Range: 20.0E Meridian: S		<b>COUNTY:</b> UINTAH
		<b>STATE:</b> UTAH
11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA		
<b>TYPE OF SUBMISSION</b>	<b>TYPE OF ACTION</b>	
<input checked="" type="checkbox"/> <b>NOTICE OF INTENT</b> Approximate date work will start: 8/29/2011  <input type="checkbox"/> <b>SUBSEQUENT REPORT</b> Date of Work Completion:  <input type="checkbox"/> <b>SPUD REPORT</b> Date of Spud:  <input type="checkbox"/> <b>DRILLING REPORT</b> Report Date:	<input type="checkbox"/> ACIDIZE <input type="checkbox"/> CHANGE TO PREVIOUS PLANS <input type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> DEEPEN <input type="checkbox"/> OPERATOR CHANGE <input type="checkbox"/> PRODUCTION START OR RESUME <input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> WATER SHUTOFF <input type="checkbox"/> WILDCAT WELL DETERMINATION <input type="checkbox"/> ALTER CASING <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input type="checkbox"/> FRACTURE TREAT <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> SI TA STATUS EXTENSION <input type="checkbox"/> OTHER	
	<input type="checkbox"/> CASING REPAIR <input type="checkbox"/> CHANGE WELL NAME <input type="checkbox"/> CONVERT WELL TYPE <input type="checkbox"/> NEW CONSTRUCTION <input type="checkbox"/> PLUG BACK <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION <input type="checkbox"/> TEMPORARY ABANDON <input type="checkbox"/> WATER DISPOSAL <input checked="" type="checkbox"/> APD EXTENSION OTHER: <input style="width: 100px;" type="text"/>	
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.		
<p>Kerr-McGee Oil &amp; 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.</p>		
		<p><b>Approved by the Utah Division of Oil, Gas and Mining</b></p> <p><b>Date:</b> <u>08/29/2011</u></p> <p><b>By:</b> <u></u></p>
<b>NAME (PLEASE PRINT)</b> Gina Becker	<b>PHONE NUMBER</b> 720 929-6086	<b>TITLE</b> Regulatory Analyst II
<b>SIGNATURE</b> N/A		<b>DATE</b> 8/29/2011



**The Utah Division of Oil, Gas, and Mining**

- State of Utah  
- Department of Natural Resources

Electronic Permitting System - Sundry Notices

**Request for Permit Extension Validation Well Number 43047501460000**

**API:** 43047501460000

**Well Name:** NBU 920-24I

**Location:** 1983 FSL 0829 FEL QTR NESE SEC 24 TWP 090S RNG 200E MER S

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

**Date Original Permit Issued:** 9/29/2008

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

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

**Signature:** Gina Becker

**Date:** 8/29/2011

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

<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		<b>FORM 9</b>  <b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> UTU-0579
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  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.		<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b> Ute
<b>1. TYPE OF WELL</b> Gas Well		<b>7. UNIT or CA AGREEMENT NAME:</b> NATURAL BUTTES
<b>2. NAME OF OPERATOR:</b> KERR-MCGEE OIL & GAS ONSHORE, L.P.		<b>8. WELL NAME and NUMBER:</b> NBU 920-241
<b>3. ADDRESS OF OPERATOR:</b> P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779		<b>9. API NUMBER:</b> 43047501460000
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 1983 FSL 0829 FEL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: NESE Section: 24 Township: 09.0S Range: 20.0E Meridian: S		<b>9. FIELD and POOL or WILDCAT:</b> NATURAL BUTTES
		<b>COUNTY:</b> UINTAH
		<b>STATE:</b> UTAH
11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA		
<b>TYPE OF SUBMISSION</b>	<b>TYPE OF ACTION</b>	
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start:	<input type="checkbox"/> ACIDIZE <input type="checkbox"/> ALTER CASING <input type="checkbox"/> CASING REPAIR <input type="checkbox"/> CHANGE TO PREVIOUS PLANS <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> CHANGE WELL NAME <input type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input type="checkbox"/> CONVERT WELL TYPE <input type="checkbox"/> DEEPEN <input type="checkbox"/> FRACTURE TREAT <input type="checkbox"/> NEW CONSTRUCTION <input type="checkbox"/> OPERATOR CHANGE <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> PLUG BACK <input type="checkbox"/> PRODUCTION START OR RESUME <input type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION <input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> TEMPORARY ABANDON <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> WATER DISPOSAL <input type="checkbox"/> WATER SHUTOFF <input type="checkbox"/> SI TA STATUS EXTENSION <input type="checkbox"/> WILDCAT WELL DETERMINATION <input type="checkbox"/> OTHER	
<input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion:		
<input checked="" type="checkbox"/> SPUD REPORT Date of Spud: <b>1/19/2012</b>		
<input type="checkbox"/> DRILLING REPORT Report Date:		
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.		
MIRU TRIPPLE A BUCKET RIG. DRILLED 20" CONDUCTOR HOLE TO 40'. RAN 14" 36.7# SCHEDULE 10 PIPE. CMT W/28 SX READY MIX. SPUD WELL ON 01/19/2012 AT 1200 HRS.		
<b>Accepted by the          Utah Division of          Oil, Gas and Mining          FOR RECORD ONLY          January 23, 2012</b>		
<b>NAME (PLEASE PRINT)</b> Sheila Wopsock	<b>PHONE NUMBER</b> 435 781-7024	<b>TITLE</b> Regulatory Analyst
<b>SIGNATURE</b> N/A	<b>DATE</b> 1/20/2012	

BLM - Vernal Field Office - Notification Form

Operator KERR-McGEE OIL & GAS Rig Name/# BUCKET RIG  
Submitted By SHEILA WOPSOCK Phone Number 435.781.7024  
Well Name/Number NBU 920-241  
Qtr/Qtr NE/SE Section 24 Township 9S Range 20E  
Lease Serial Number UTU-0579  
API Number 4304750146

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

Date/Time 01/19/2012 0700 HRS AM  PM

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

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

Date/Time 01/24/2012 0800 HRS AM  PM

BOPE

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

**RECEIVED**  
**JAN 16 2012**  
DIV. OF OIL, GAS & MINING

Date/Time \_\_\_\_\_ AM  PM

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

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

FORM 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
4304750146	NBU 920-24I		NESE	24	9S	20E	UINTAH
Action Code	Current Entity Number	New Entity Number	Spud Date		Entity Assignment Effective Date		
A	99999	2900	1/19/2012		1/31/12		
<b>Comments:</b> MIRU TRIPPLE A BUCKET RIG. <i>wsmvp</i> SPUD WELL ON 01/19/2012 AT 1200 HRS.							

Well 2

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

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		
<b>Comments:</b>							

**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

1/20/2012

Date

(5/2000)

**RECEIVED**

23  
JAN 22 2012

*ER*

DIV. OF OIL, GAS & MINING

<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	<b>FORM 9</b>
<b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> UTU-0579	
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>	
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.	
<b>1. TYPE OF WELL</b> Gas Well	<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b> Ute
<b>2. NAME OF OPERATOR:</b> KERR-MCGEE OIL & GAS ONSHORE, L.P.	<b>7. UNIT or CA AGREEMENT NAME:</b> NATURAL BUTTES
<b>3. ADDRESS OF OPERATOR:</b> P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779	<b>8. WELL NAME and NUMBER:</b> NBU 920-241
<b>PHONE NUMBER:</b> 720 929-6511	<b>9. API NUMBER:</b> 43047501460000
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 1983 FSL 0829 FEL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: NESE Section: 24 Township: 09.0S Range: 20.0E Meridian: S	<b>9. FIELD and POOL or WILDCAT:</b> NATURAL BUTTES
	<b>COUNTY:</b> UINTAH
	<b>STATE:</b> UTAH

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

TYPE OF SUBMISSION	TYPE OF ACTION		
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start:	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> CASING REPAIR
<input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion:	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> CHANGE WELL NAME
<input type="checkbox"/> SPUD REPORT Date of Spud:	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> CONVERT WELL TYPE
<input checked="" type="checkbox"/> DRILLING REPORT Report Date: 2/13/2012	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> NEW CONSTRUCTION
	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> PLUG BACK
	<input type="checkbox"/> PRODUCTION START OR RESUME	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION
	<input type="checkbox"/> REPERFORATE CURRENT FORMATION	<input type="checkbox"/> SIDETRACK TO REPAIR WELL	<input type="checkbox"/> TEMPORARY ABANDON
	<input type="checkbox"/> TUBING REPAIR	<input type="checkbox"/> VENT OR FLARE	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> WATER SHUTOFF	<input type="checkbox"/> SI TA STATUS EXTENSION	<input type="checkbox"/> APD EXTENSION
	<input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> OTHER	OTHER: <input style="width: 100px;" type="text"/>

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

MIRU AIR RIG ON FEBRUARY 11, 2012. DRILLED SURFACE HOLE TO 2830'. RAN SURFACE CASING AND CEMENTED. WELL IS WAITING ON ROTARY RIG. DETAILS OF CEMENT JOB WILL BE INCLUDED WITH WELL COMPLETION REPORT.

**Accepted by the**  
**Utah Division of**  
**Oil, Gas and Mining**  
**FOR RECORD ONLY**  
 February 14, 2012

<b>NAME (PLEASE PRINT)</b> Jaime Scharnowske	<b>PHONE NUMBER</b> 720 929-6304	<b>TITLE</b> Regularatory Analyst
<b>SIGNATURE</b> N/A	<b>DATE</b> 2/14/2012	

State of Utah - Notification Form

Operator Anadarko Petroleum Rig Name/# PIONEER 54  
Submitted By STUART NEILSON Phone Number 435-790-2921  
Well Name/Number NBU 920-24I  
Qtr/Qtr NE SE Section 24 Township 9S Range 20E  
Lease Serial Number UTU-0579  
API Number 4304750146

Casing – Time casing run starts, not cementing times.

- Production Casing  
 Other

Date/Time \_ \_ AM  PM

BOPE

- Initial BOPE test at surface casing point  
 Other

Date/Time 3/10/12 00:01 AM  PM

Rig Move

Location To:

Date/Time \_ \_ AM  PM

Remarks

**RECEIVED**

**MAR 09 2012**

**DIV. OF OIL, GAS & MINING**

<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	FORM 9  5. LEASE DESIGNATION AND SERIAL NUMBER: UTU-0579
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.	6. IF INDIAN, ALLOTTEE OR TRIBE NAME: Ute  7. UNIT or CA AGREEMENT NAME: NATURAL BUTTES
1. TYPE OF WELL Gas Well	8. WELL NAME and NUMBER: NBU 920-241
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.	9. API NUMBER: 43047501460000
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779	PHONE NUMBER: 720 929-6514  9. FIELD and POOL or WILDCAT: NATURAL BUTTES
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1983 FSL 0829 FEL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NESE Section: 24 Township: 09.0S Range: 20.0E Meridian: S	COUNTY: Uintah  STATE: UTAH

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

TYPE OF SUBMISSION	TYPE OF ACTION		
<input checked="" type="checkbox"/> <b>NOTICE OF INTENT</b> Approximate date work will start: 3/5/2012  <input type="checkbox"/> <b>SUBSEQUENT REPORT</b> Date of Work Completion:  <input type="checkbox"/> <b>SPUD REPORT</b> Date of Spud:  <input type="checkbox"/> <b>DRILLING REPORT</b> Report Date:	<input type="checkbox"/> ACIDIZE  <input checked="" type="checkbox"/> CHANGE TO PREVIOUS PLANS  <input type="checkbox"/> CHANGE WELL STATUS  <input type="checkbox"/> DEEPEN  <input type="checkbox"/> OPERATOR CHANGE  <input type="checkbox"/> PRODUCTION START OR RESUME  <input type="checkbox"/> REPERFORATE CURRENT FORMATION  <input type="checkbox"/> TUBING REPAIR  <input type="checkbox"/> WATER SHUTOFF  <input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> ALTER CASING  <input type="checkbox"/> CHANGE TUBING  <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS  <input type="checkbox"/> FRACTURE TREAT  <input type="checkbox"/> PLUG AND ABANDON  <input type="checkbox"/> RECLAMATION OF WELL SITE  <input type="checkbox"/> SIDETRACK TO REPAIR WELL  <input type="checkbox"/> VENT OR FLARE  <input type="checkbox"/> SI TA STATUS EXTENSION  <input type="checkbox"/> OTHER	<input type="checkbox"/> CASING REPAIR  <input type="checkbox"/> CHANGE WELL NAME  <input type="checkbox"/> CONVERT WELL TYPE  <input type="checkbox"/> NEW CONSTRUCTION  <input type="checkbox"/> PLUG BACK  <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION  <input type="checkbox"/> TEMPORARY ABANDON  <input type="checkbox"/> WATER DISPOSAL  <input type="checkbox"/> APD EXTENSION  OTHER: <input style="width: 100px;" type="text"/>

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

The operator requests approval to deepen the well to the Blackhawk formation (part of the Mesaverde Group). The Operator also requests approval for a FIT wavier, closed loop drilling option, surface casing change, and a production casing change. All other aspects of the previously approved drilling plan will not change. Please see the attachment. Thank you.

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

**Date:** March 12, 2012

**By:** 

<b>NAME (PLEASE PRINT)</b> Jaime Scharnowske	<b>PHONE NUMBER</b> 720 929-6304	<b>TITLE</b> Regulatory Analyst
<b>SIGNATURE</b> N/A	<b>DATE</b> 3/5/2012	

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

**NBU 920-24I**

Surface: 1983 FSL / 829 FEL      NESE

Section 24 T9S R20E

Unitah County, Utah  
Mineral Lease: UTU-0579

**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	1,599'	
Birds Nest	1,854'	Water
Mahogany	2,338'	Water
Wasatch	4,968'	Gas
Mesaverde	8,127'	Gas
Sego	10,370'	Gas
Castlegate	10,474'	Gas
Blackhawk	10,795'	Gas
TVD	11,395'	
TD	11,395'	

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

Please refer to the attached Drilling Program

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

Please refer to the attached Drilling Program

**5. Drilling Fluids Program:**

Please refer to the attached Drilling Program

**6. Evaluation Program:**

Please refer to the attached Drilling Program

**7. Abnormal Conditions:**

Maximum anticipated bottom hole pressure calculated at 11395' TVD, approximately equals  
7,521 psi (0.66 psi/ft = actual bottomhole gradient)

---

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

Maximum anticipated surface pressure equals approximately 5,066 psi (bottom hole pressure  
minus the pressure of a partially evacuated hole calculated at 0.22 psi/foot, per Onshore Order No. 2).

---

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

**8. Anticipated Starting Dates:**

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

**9. Variances:**

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

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

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

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

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

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

### **Background**

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

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

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

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

### **Variance for BOPE Requirements**

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

### **Variance for Mud Material Requirements**

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

**Variance for Special Drilling Operation (surface equipment placement) Requirements**

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

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

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

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

**Variance for FIT Requirements**

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

**Conclusion**

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

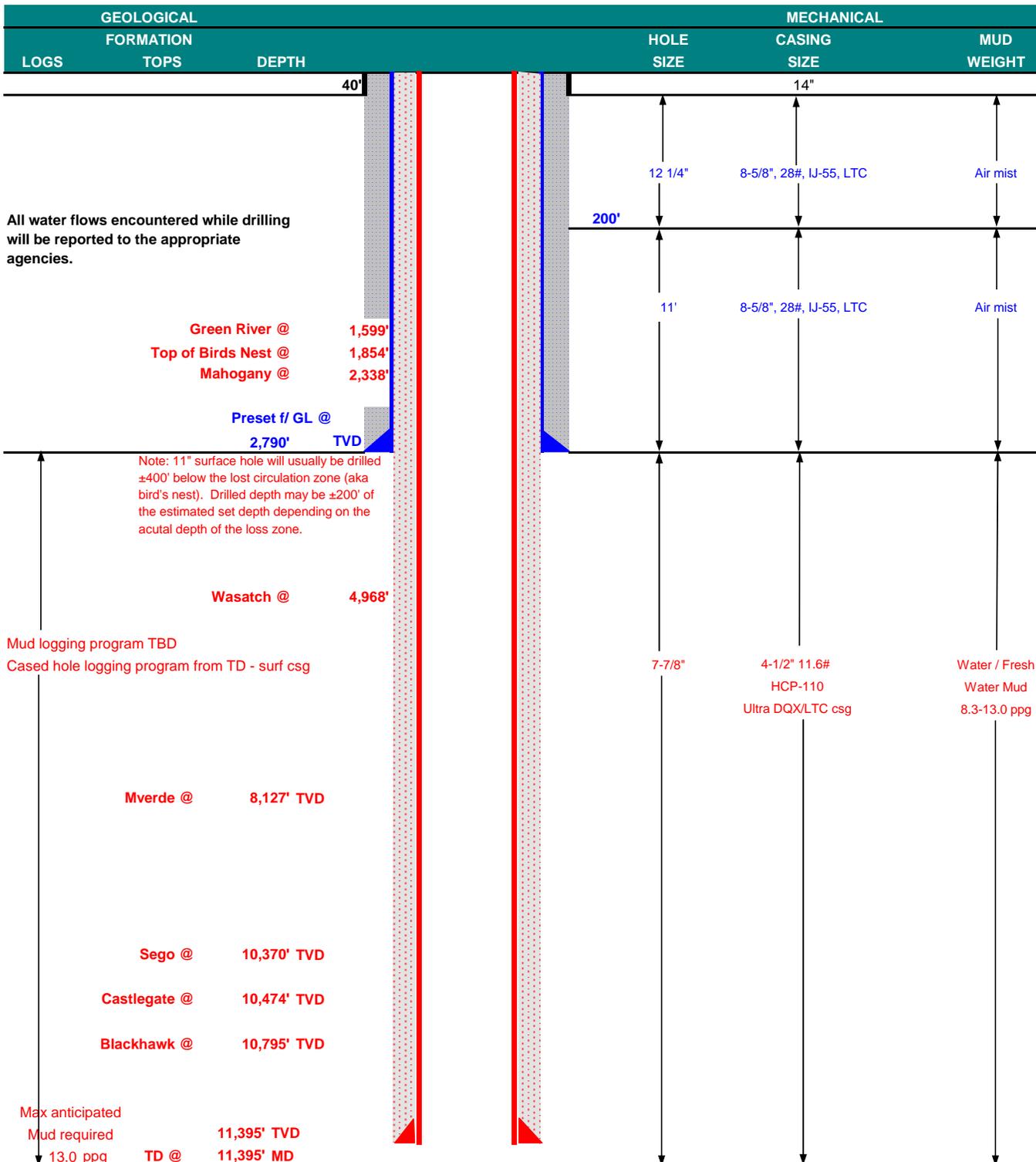
**10. Other Information:**

Please refer to the attached Drilling Program.



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

COMPANY NAME	KERR-McGEE OIL & GAS ONSHORE LP		DATE	March 5, 2012			
WELL NAME	<b>NBU 920-24I</b>		TD	11,395' TVD	11,395' MD		
FIELD	Natural Buttes	COUNTY	Uintah	STATE	Utah	FINISHED ELEVATION	4,807'
SURFACE LOCATION	NESE	1983 FSL	829 FEL	Sec 24	T 9S	R 20E	
	Latitude:	40.019180	Longitude:	-109.608300	NAD 83		
OBJECTIVE ZONE(S)	BLACKHAWK (Part of the Mesaverde Group)						
ADDITIONAL INFO	Regulatory Agencies: BLM (Minerals), Tribe (Surface), UDOGM Tri-County Health Dept.						





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

**CASING PROGRAM**

							DESIGN FACTORS			
							LTC		DQX	
	SIZE	INTERVAL		WT.	GR.	CPLG.	BURST	COLLAPSE	TENSION	
CONDUCTOR	14"	0-40'								
							3,390	1,880	348,000	N/A
SURFACE	8-5/8"	0	to 2,790	28.00	IJ-55	LTC	1.93	1.44	5.09	N/A
							10,690	8,650	279,000	367,000
PRODUCTION	4-1/2"	0	to 5,000	11.60	HCP-110	DQX	1.19	1.12		3.46
	4-1/2"	5,000	to 11,395'	11.60	HCP-110	LTC	1.19	1.12	4.69	

**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 + 0.25 pps flocele	180	60%	15.80	1.15
Option 1							
	TOP OUT CMT (6 jobs)	1,200'	20 gals sodium silicate + Premium cmt + 2% CaCl + 0.25 pps flocele	270	0%	15.80	1.15
SURFACE			<b>NOTE: If well will circulate water to surface, option 2 will be utilized</b>				
Option 2	LEAD	2,290'	65/35 Poz + 6% Gel + 10 pps gilsonite + 0.25 pps Flocele + 3% salt BWOW	210	35%	11.00	3.82
	TAIL	500'	Premium cmt + 2% CaCl + 0.25 pps flocele	150	35%	15.80	1.15
	TOP OUT CMT	as required	Premium cmt + 2% CaCl	as req.		15.80	1.15
PRODUCTION	LEAD	4,465'	Premium Lite II + 0.25 pps celloflake + 5 pps gilsonite + 10% gel + 0.5% extender	350	35%	12.00	3.38
	TAIL	6,930'	50/50 Poz/G + 10% salt + 2% gel + 0.1% R-3	1,640	35%	14.30	1.31

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

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

**FLOAT EQUIPMENT & CENTRALIZERS**

SURFACE	Guide shoe, 1 jt, insert float. Centralize first 3 joints with bow spring centralizers. Thread lock guide shoe
PRODUCTION	Float shoe, 1 jt, float collar. 15 centralizers for a Mesaverde and 20 for a Blackhawk well. 1 centralizer on the first 3 joints and one every third joint thereafter.

**ADDITIONAL INFORMATION**

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

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

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

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

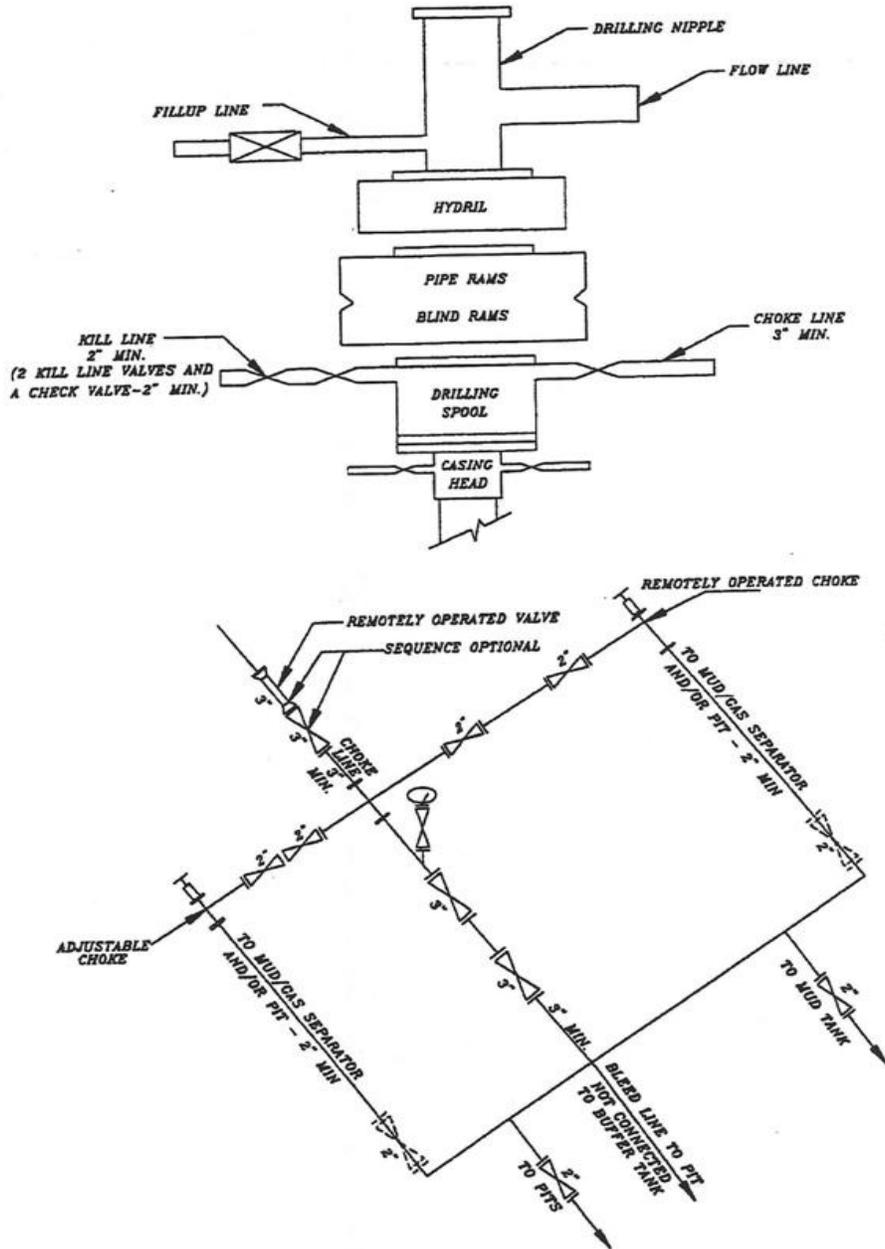
DRILLING ENGINEER: \_\_\_\_\_  
Nick Spence / Danny Showers / Chad Loesel

DATE: \_\_\_\_\_

DRILLING SUPERINTENDENT: \_\_\_\_\_  
Kenny Gathings / Lovel Young

DATE: \_\_\_\_\_

**EXHIBIT A  
NBU 920-24I**



**SCHEMATIC DIAGRAM OF 5,000 PSI BOP STACK**

Requested Drilling Options:

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

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

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		FORM 9
		<b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> UTU-0579
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>		<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b> Ute
Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		<b>7. UNIT or CA AGREEMENT NAME:</b> NATURAL BUTTES
<b>1. TYPE OF WELL</b> Gas Well		<b>8. WELL NAME and NUMBER:</b> NBU 920-241
<b>2. NAME OF OPERATOR:</b> KERR-MCGEE OIL & GAS ONSHORE, L.P.		<b>9. API NUMBER:</b> 43047501460000
<b>3. ADDRESS OF OPERATOR:</b> P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779	<b>PHONE NUMBER:</b> 720 929-6511	<b>9. FIELD and POOL or WILDCAT:</b> NATURAL BUTTES
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 1983 FSL 0829 FEL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: NESE Section: 24 Township: 09.0S Range: 20.0E Meridian: S		<b>COUNTY:</b> UINTAH  <b>STATE:</b> UTAH
11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA		
<b>TYPE OF SUBMISSION</b>	<b>TYPE OF ACTION</b>	
<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: 3/20/2012	<input type="checkbox"/> ACIDIZE  <input type="checkbox"/> CHANGE TO PREVIOUS PLANS  <input type="checkbox"/> CHANGE WELL STATUS  <input type="checkbox"/> DEEPEN  <input type="checkbox"/> OPERATOR CHANGE  <input type="checkbox"/> PRODUCTION START OR RESUME  <input type="checkbox"/> REPERFORATE CURRENT FORMATION  <input type="checkbox"/> TUBING REPAIR  <input type="checkbox"/> WATER SHUTOFF  <input type="checkbox"/> WILDCAT WELL DETERMINATION  <input type="checkbox"/> ALTER CASING  <input type="checkbox"/> CHANGE TUBING  <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS  <input type="checkbox"/> FRACTURE TREAT  <input type="checkbox"/> PLUG AND ABANDON  <input type="checkbox"/> RECLAMATION OF WELL SITE  <input type="checkbox"/> SIDETRACK TO REPAIR WELL  <input type="checkbox"/> VENT OR FLARE  <input type="checkbox"/> SI TA STATUS EXTENSION  <input type="checkbox"/> OTHER	
	<input type="checkbox"/> CASING REPAIR  <input type="checkbox"/> CHANGE WELL NAME  <input type="checkbox"/> CONVERT WELL TYPE  <input type="checkbox"/> NEW CONSTRUCTION  <input type="checkbox"/> PLUG BACK  <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION  <input type="checkbox"/> TEMPORARY ABANDON  <input type="checkbox"/> WATER DISPOSAL  <input type="checkbox"/> APD EXTENSION  OTHER: <input type="text"/>	
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.		
MIRU ROTARY RIG. FINISHED DRILLING FROM 2,830' TO 11,396' ON MARCH 16, 2012. RAN 4-1/2" 11.6# P-110 PRODUCING CASING. CEMENTED PRODUCTION CASING. RELEASED PIONEER 54 RIG ON MARCH 20, 2012 @ 08:00 HRS. DETAILS OF CEMENT JOB WILL BE INCLUDED WITH THE WELL COMPLETION REPORT. WELL IS WAITING ON FINAL COMPLETION ACTIVITIES.		<b>Accepted by the Utah Division of Oil, Gas and Mining FOR RECORD ONLY</b> March 21, 2012
<b>NAME (PLEASE PRINT)</b> Jaime Scharnowske	<b>PHONE NUMBER</b> 720 929-6304	<b>TITLE</b> Regulatory Analyst
<b>SIGNATURE</b> N/A		<b>DATE</b> 3/21/2012

State of Utah - Notification Form

Operator Anadarko Petroleum Rig Name/# PIONEER 54  
Submitted By STUART NEILSON Phone Number 435-790-2921  
Well Name/Number NBU 920-24I  
Qtr/Qtr NE SE Section 24 Township 9S Range 20E  
Lease Serial Number UTU-0579  
API Number 4304750146

Casing – Time casing run starts, not cementing times.

- Production Casing
- Other

Date/Time 3/18/12 10 AM  PM

BOPE

- Initial BOPE test at surface casing point
- Other

Date/Time \_\_\_\_\_ AM  PM

Rig Move  
Location To:

Date/Time \_ \_ AM  PM

Remarks

**RECEIVED**  
**MAR 20 2012**  
DIV. OF OIL, GAS & MINING

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		FORM 9	
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  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.		<b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> UTU-0579	
		<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b> Ute	
<b>1. TYPE OF WELL</b> Gas Well		<b>7. UNIT or CA AGREEMENT NAME:</b> NATURAL BUTTES	
<b>2. NAME OF OPERATOR:</b> KERR-MCGEE OIL & GAS ONSHORE, L.P.		<b>8. WELL NAME and NUMBER:</b> NBU 920-241	
<b>3. ADDRESS OF OPERATOR:</b> P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779		<b>9. API NUMBER:</b> 43047501460000	
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 1983 FSL 0829 FEL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: NESE Section: 24 Township: 09.0S Range: 20.0E Meridian: S		<b>9. FIELD and POOL or WILDCAT:</b> NATURAL BUTTES	
		<b>COUNTY:</b> UINTAH	
		<b>STATE:</b> 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: 4/12/2012	<input type="checkbox"/> ACIDIZE  <input type="checkbox"/> CHANGE TO PREVIOUS PLANS  <input type="checkbox"/> CHANGE WELL STATUS  <input type="checkbox"/> DEEPEN  <input type="checkbox"/> OPERATOR CHANGE  <input checked="" type="checkbox"/> PRODUCTION START OR RESUME  <input type="checkbox"/> REPERFORATE CURRENT FORMATION  <input type="checkbox"/> TUBING REPAIR  <input type="checkbox"/> WATER SHUTOFF  <input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> ALTER CASING  <input type="checkbox"/> CHANGE TUBING  <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS  <input type="checkbox"/> FRACTURE TREAT  <input type="checkbox"/> PLUG AND ABANDON  <input type="checkbox"/> RECLAMATION OF WELL SITE  <input type="checkbox"/> SIDETRACK TO REPAIR WELL  <input type="checkbox"/> VENT OR FLARE  <input type="checkbox"/> SI TA STATUS EXTENSION  <input type="checkbox"/> OTHER	<input type="checkbox"/> CASING REPAIR  <input type="checkbox"/> CHANGE WELL NAME  <input type="checkbox"/> CONVERT WELL TYPE  <input type="checkbox"/> NEW CONSTRUCTION  <input type="checkbox"/> PLUG BACK  <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION  <input type="checkbox"/> TEMPORARY ABANDON  <input type="checkbox"/> WATER DISPOSAL  <input type="checkbox"/> APD EXTENSION  OTHER: <input style="width: 100px;" type="text"/>
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.			
<p>THE SUBJECT WELL WAS PLACED ON PRODUCTION ON APRIL 12, 2012 AT 2:00 P.M. THE CHRONOLOGICAL WELL HISTORY WILL BE SUBMITTED WITH THE WELL COMPLETION REPORT.</p>			
<p><b>Accepted by the Utah Division of Oil, Gas and Mining FOR RECORD ONLY May 08, 2012</b></p>			
<b>NAME (PLEASE PRINT)</b> Jaime Scharnowske		<b>PHONE NUMBER</b> 720 929-6304	<b>TITLE</b> Regulatory Analyst
<b>SIGNATURE</b> N/A		<b>DATE</b> 4/13/2012	

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

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

**WELL COMPLETION OR RECOMPLETION REPORT AND LOG**

5. Lease Serial No.  
UTU0579

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

6. If Indian, Allottee or Tribe Name

7. Unit or CA Agreement Name and No.  
UTU63047A

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

8. Lease Name and Well No.  
NBU 920-241

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

9. API Well No.  
43-047-50146

4. Location of Well (Report location clearly and in accordance with Federal requirements)\*  
 At surface **NESE 1983FSL 829FEL 40.019185 N Lat, 109.608301 W Lon**  
 At top prod interval reported below **NESE 1983FSL 829FEL 40.019185 N Lat, 109.608301 W Lon**  
 At total depth **NESE 1983FSL 829FEL 40.019185 N Lat, 109.608301 W Lon**

10. Field and Pool, or Exploratory  
NATURAL BUTTES

11. Sec., T., R., M., or Block and Survey  
or Area **Sec 24 T9S R20E Mer SLB**

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

14. Date Spudded **01/19/2012** 15. Date T.D. Reached **03/16/2012** 16. Date Completed  
 D & A  Ready to Prod.  
**04/12/2012**

17. Elevations (DF, KB, RT, GL)\*  
4807 GL

18. Total Depth: MD **11396** TVD **11392** 19. Plug Back T.D.: MD **11333** TVD **11329** 20. Depth Bridge Plug Set: MD **MD** TVD **TVD**

21. Type Electric & Other Mechanical Logs Run (Submit copy of each)  
**HDIL/ZDL/CNGR-BHP-RSL/SM-CBL/GR/COLLARS/TEMP**

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

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

Hole Size	Size/Grade	Wt. (#/ft.)	Top (MD)	Bottom (MD)	Stage Cementer Depth	No. of Sk. & Type of Cement	Slurry Vol. (BBL)	Cement Top*	Amount Pulled
20.000	14.000 STL	36.7	0	40		28			
11.000	8.625 IJ-55	28.0	0	2816		645		0	
7.875	4.500 P-110	11.6	0	11377		2342		1020	

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	10989							

25. Producing Intervals

Formation	Top	Bottom	Perforated Interval	Size	No. Holes	Perf. Status
A) MESAVERDE	8261	11162	8261 TO 11162	0.360	264	OPEN
B)						
C)						
D)						

26. Perforation Record

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

Depth Interval	Amount and Type of Material
8261 TO 11162	PUMP 17,527 BBLs SLICK H2O & 269,266 LBS TLC SAND; 97,143 LBS 30/50 OTTAWA SAND

28. Production - Interval A

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
04/12/2012	04/16/2012	24	→	0.0	3574.0	250.0			FLOWS FROM WELL
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status	
16/64	3587	4536.0	→	0	3574	250		PGW	

28a. Production - Interval B

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

DIV. OF OIL, GAS & MINING

RECEIVED  
JUN 05 2012

28b. Production - Interval C

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

28c. Production - Interval D

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

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

30. Summary of Porous Zones (Include Aquifers):

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

31. Formation (Log) Markers

Formation	Top	Bottom	Descriptions, Contents, etc.	Name	Top
					Meas. Depth
				GREEN RIVER	1653
				BIRD'S NEST	1885
				MAHOGANY	2272
				WASATCH	5005
				MESAVERDE	8248

32. Additional remarks (include plugging procedure):

The first 210' of the surface hole was drilled with a 12 ?? bit. The remainder of surface hole was drilled with an 11? bit. DQX csg was run from surface to 5012?; LTC csg was run from 5012? to 11,377?. Attached is the chronological well history, perforation report & final survey.

33. Circle enclosed attachments:

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

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

**Electronic Submission #139276 Verified by the BLM Well Information System.  
For KERR MCGEE OIL & GAS ONSHORE L, sent to the Vernal**

Name (please print) CARA MAHLER Title AUTHORIZED REPRESENTATIVE

Signature \_\_\_\_\_ (Electronic Submission) Date 05/30/2012

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

**\*\* ORIGINAL \*\* ORIGINAL \*\* ORIGINAL \*\* ORIGINAL \*\* ORIGINAL \*\* ORIGINAL \*\* ORIGINAL \*\***

**US ROCKIES REGION**  
**Operation Summary Report**

Well: NBU 920-24I

Spud Date: 2/11/2012

Project: UTAH-UINTAH

Site: NBU 920-24I

Rig Name No: PROPETRO 10/10, PIONEER 54/54

Event: DRILLING

Start Date: 1/24/2012

End Date: 3/19/2012

Active Datum: RKB @4,826.00usft (above Mean Sea Level)

UWI: NE/SE/0/9/S/20/E/24/0/0/26/PM/S/1983/E/0/829/0/0

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
2/11/2012	3:00 - 7:00	4.00	MIRU	01	A	P		MOVE RIG 1.2 MILES TO NBU 920-24I
	7:00 - 11:00	4.00	MIRU	01	B	P		SET MUD PUMP, DIESEL TANK, RIG AND INSTALL AIR BOWL AND FLOW LINE PREPARE TO SPUD
	11:00 - 15:30	4.50	DRLSUR	08	A	Z		WORK ON MUD PUMP CHANGE OIL AND FIX CONTROL LINE
	15:30 - 17:00	1.50	DRLSUR	06	A	P		PICK UP AND STRAP BHA.
	17:00 - 18:00	1.00	DRLSUR	02	C	P		SPUD 12.25" BIT DRILL F/ 40' - 210' NO LOSSES
	18:00 - 21:00	3.00	DRLSUR	06	A	P		TOOH PICK UP 11" BIT AND DIRECTIONAL TOOLS AND INSTALL MWD TOOLS ORIENT MUD MOTOR AND TIH
	21:00 - 0:00	3.00	DRLSUR	02	C	P		DRILL 11" HOLE F/ 210' - 610' WOB 18-20 ROT 55-65 LAST SURVEY .79 DEG 3.66 AZI
2/12/2012	0:00 - 13:00	13.00	DRLSUR	02	C	P		DRILL 11" SURFACE HOLE F/ 610' - 2140' WOB 18-20 DHR 94 GPM 504 AVE ROP 117 FT HR NO LOSSES
	13:00 - 15:00	2.00	DRLSUR	08	A	Z		CHANGE OUT PACKING IN SWVEL
	15:00 - 22:00	7.00	DRLSUR	02	C	P		DRILL 11" SURFACE HOLE F/ 2140' - 2830' T.D. WOB 18-20 DHR 94 GPM 504 AVE ROP 98 FT HR NO LOSSES FINAL SURVEY .97 DEG 269.61 AZI
2/13/2012	22:00 - 0:00	2.00	DRLSUR	05	C	P		CIRCULATE AND CONDITION MUD PRIOR TO LDDS
	0:00 - 3:30	3.50	DRLSUR	06	A	P		TOOH LAYING DOWN L/D MWD TOOLS DIRECTIONAL TOOLS AND BIT
	3:30 - 5:00	1.50	DRLSUR	12	A	P		RIG UP TO RUN 8.625" CASING
	5:00 - 9:00	4.00	DRLSUR	12	C	P		RUN 63 JOINTS 8.625 28# J55 SURFACE CASING SHOE AT 2798' BAFFLE AT 2754' RUN 200' 1" PIPE FOR TOP OUT
	9:00 - 12:00	3.00	DRLSUR	12	E	P		RIG UP PRESSURE TEST LINES TO 3000 PSI PUMP 20 BBLS GEL SPACER PUMP 220 SX 150 BBLS 11LEAD PPG 3.82 YIELD 2% CaCl PREMIUM CEMENT PUMP 275 SX 56 BBLS TAIL CMNT 15.8 PPG 1.15 YIELD DROP PLUG ON FLY DISPLACE WITH 174 BBLS H2O FLOATS HELD FINAL LIFT PRESSURE 600 PSI FULL RETURNS THROUGH JOB 29 BBLS CMT TO SURFACE. RIG UP AND PUMP 150 SX 20 BBLS TAIL CMNT 15.8 PPG 1.15 YIELD CEMENT TO SURFACE RELEASE RIG 2-13-12 @ 1200
3/9/2012	6:00 - 7:00	1.00	DRLPRO	01	E	P		RIG DOWN
	7:00 - 18:00	11.00	DRLPRO	01	A	P		MOVE 2 MILES TO THE NBU 920-24I, 5 BED TRUCK, 4 HAUL TRUCK, 1 FORKLIFT, 1 CRANE, 2 OILERS, 10 EXTRA RIG HANDS, DERRICK LOWERED @ 09:00, DERRICK RAISED @ 18:00, TRUCKS & CRANE LEFT @ 19:00
	18:00 - 22:00	4.00	DRLPRO	01	B	P		RIG UP
	22:00 - 0:00	2.00	DRLPRO	14	A	P		NIPPLE UP STRATA
3/10/2012	0:00 - 2:00	2.00	DRLPRO	14	A	P		NIPPLE UP BOPE
	2:00 - 8:00	6.00	DRLPRO	15	A	P		TEST BOPE, RAMS & ALL VALVES 250 LOW 5000 HIGH, ANN 2500, SURFACE CASING 1500 FOR 30 MIN'S
	8:00 - 10:00	2.00	DRLPRO	15	A	P		TEST STRATA TO 3000 PSI

**US ROCKIES REGION  
Operation Summary Report**

Well: NBU 920-24I

Spud Date: 2/11/2012

Project: UTAH-UINTAH

Site: NBU 920-24I

Rig Name No: PROPETRO 10/10, PIONEER 54/54

Event: DRILLING

Start Date: 1/24/2012

End Date: 3/19/2012

Active Datum: RKB @4,826.00usft (above Mean Sea Level)

UWI: NE/SE/0/9/S/20/E/24/0/0/26/PM/S/1983/E/0/829/0/0

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
	10:00 - 10:30	0.50	DRLPRO	14	B	P		INSTALL WEAR BUSHING
	10:30 - 16:00	5.50	DRLPRO	06	A	P		HOLD SAFETY MEETING WITH RIG & PICKUP CREWS, RIG AND PICKUP BHA & DRILL PIPE CUT DRILLING LINE
	16:00 - 16:30	0.50	DRLPRO	09	A	P		SERVICE RIG
	16:30 - 17:00	0.50	DRLPRO	07	A	P		CUT DRILLING LINE
	17:00 - 19:00	2.00	DRLPRO	02	F	P		DRILL CEMENT FLOAT @ 2773', SHOE @ 2817', AND OPEN HOLE TO 2845
	19:00 - 0:00	5.00	DRLPRO	02	B	P		CLOSED LOOP SYSTEM DRILL F/ 2845 TO 3500', 655' @ 131' PH WOB / 20-22 RPM TOP DRIVE 55-60, MOTOR-131 SPM 200- GPM 586 MW 8.6 VIS 31 TRQ ON/OFF = 6000-5000 K PSI ON /OFF 1750-1450, DIFF 250-500 PU/SO/RT =110-95-105 SLIDE = 0 ROT = 100% STRATA - OFF LINE NOV- 2 DEWATER 24' N & 26' W OF TARGET CENTER 5" FLARE DRILLING, 5' CONN FLARE
3/11/2012	0:00 - 16:30	15.50	DRLPRO	02	B	P		CLOSED LOOP SYSTEM DRILL F/ 3500' TO 5420', 1920' @ 123.8' PH WOB / 20-22 RPM TOP DRIVE 55-60, MOTOR-135 SPM 200- GPM 586 MW 8.6 VIS 31 TRQ ON/OFF = 6000-5000 K PSI ON /OFF 1850-1450, DIFF 250-500 PU/SO/RT = 150-120-135 SLIDE = 35' IN .5 HRS = 70' PH ROT = 1885' IN 15 HRS = 125.6' PH STRATA - OFF LINE NOV- 2 - DEWATER 6' N & 31' W OF TARGET CENTER 5" FLARE DRILLING, 10' CONN FLARE
	16:30 - 17:00	0.50	DRLPRO	07	A	P		SERVICE RIG, F/T ANN & HCR VALVE, BOP DRILL 75 SEC
	17:00 - 0:00	7.00	DRLPRO					CLOSED LOOP SYSTEM DRILL F/ 5420 TO 6100', 680' @ 97.1' PH WOB / 22-24 RPM TOP DRIVE 55-60, MOTOR-135 SPM 200- GPM 586 MW 8.8 VIS 31 TRQ ON/OFF = 6000-5000 K PSI ON /OFF 2100-1600, DIFF 250-500 PU/SO/RT =150-130-140 SLIDE = 70' IN 1 HR = 70' PH ROT = 610' IN 6 HRS = 101.6' PH STRATA - OFF LINE NOV- 2 - DEWATER 18' N & 40' W OF TARGET CENTER 5" FLARE DRILLING, 10' CONN FLARE

**US ROCKIES REGION  
Operation Summary Report**

Well: NBU 920-24I

Spud Date: 2/11/2012

Project: UTAH-UINTAH

Site: NBU 920-24I

Rig Name No: PROPETRO 10/10, PIONEER 54/54

Event: DRILLING

Start Date: 1/24/2012

End Date: 3/19/2012

Active Datum: RKB @4,826.00usft (above Mean Sea Level)

UWI: NE/SE/0/9/S/20/E/24/0/0/26/PM/S/1983/E/0/829/0/0

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
3/12/2012	0:00 - 16:00	16.00	DRLPRO	02	B	P		CLOSED LOOP SYSTEM DRILL F/ 6100' TO 7500', 1400' @ 87.5' PH WOB / 22-24 RPM TOP DRIVE 55-60, MOTOR-135 SPM 200- GPM 586 MW 8.8 VIS 31 TRQ ON/OFF = 6000-5000 K PSI ON /OFF 2100-1600, DIFF 250-500 PU/SO/RT = 175-145-165 SLIDE = 32' IN .5 HRS = 64' PH ROT = 1368' IN 15.5 HRS = 88.3' PH STRATA - OFF LINE NOV- 2 - DEWATERING 59' N & 43' W OF TARGET CENTER 10' FLARE DRILLING, 10'-20' CONN FLARE SERVICE RIG
	16:00 - 16:30	0.50	DRLPRO	07	A	P		CLOSED LOOP SYSTEM DRILL F/ 7500' TO 8020', 520' @ 69.3' PH WOB / 22-24 RPM TOP DRIVE 55-60, MOTOR-135 SPM 200- GPM 586 MW 8.7 VIS 31 TRQ ON/OFF = 7000-5000 K PSI ON /OFF 2100-1600, DIFF 250-500 PU/SO/RT = 185-1165-175 SLIDE = ROT = 100% STRATA - ON LINE @ 7700' NOV- 2 - DEWATERING 72' N & 38' W OF TARGET CENTER 10' FLARE DRILLING, 10'-20' CONN FLARE
	16:30 - 0:00	7.50	DRLPRO	02	B	P		CLOSED LOOP SYSTEM DRILL F/ 8020' TO 9119', 1099' @ 68.7' PH WOB / 22-24 RPM TOP DRIVE 55-60, MOTOR-135 SPM 200- GPM 586 MW 8.7 VIS 31 TRQ ON/OFF = 7000-5000 K PSI ON /OFF 2100-1600, DIFF 250-500 PU/SO/RT = 191-170-181 SLIDE = 0 ROT = 100% STRATA - ON LINE @ 7700' ANN PSI-DRILLING 100-125, CONN 250-300 NOV- 2 - DEWATERING 76 N & 18 W OF TARGET CENTER 10' FLARE DRILLING, 10'-20' CONN FLARE SERVICE RIG
3/13/2012	0:00 - 16:00	16.00	DRLPRO	02	B	P		CLOSED LOOP SYSTEM DRILL F/ 8020' TO 9119', 1099' @ 68.7' PH WOB / 22-24 RPM TOP DRIVE 55-60, MOTOR-135 SPM 200- GPM 586 MW 8.7 VIS 31 TRQ ON/OFF = 7000-5000 K PSI ON /OFF 2100-1600, DIFF 250-500 PU/SO/RT = 191-170-181 SLIDE = 0 ROT = 100% STRATA - ON LINE @ 7700' ANN PSI-DRILLING 100-125, CONN 250-300 NOV- 2 - DEWATERING 76 N & 18 W OF TARGET CENTER 10' FLARE DRILLING, 10'-20' CONN FLARE SERVICE RIG
	16:00 - 16:30	0.50	DRLPRO	07	A	P		CLOSED LOOP SYSTEM DRILL F/ 8020' TO 9119', 1099' @ 68.7' PH WOB / 22-24 RPM TOP DRIVE 55-60, MOTOR-135 SPM 200- GPM 586 MW 8.7 VIS 31 TRQ ON/OFF = 7000-5000 K PSI ON /OFF 2100-1600, DIFF 250-500 PU/SO/RT = 191-170-181 SLIDE = 0 ROT = 100% STRATA - ON LINE @ 7700' ANN PSI-DRILLING 100-125, CONN 250-300 NOV- 2 - DEWATERING 76 N & 18 W OF TARGET CENTER 10' FLARE DRILLING, 10'-20' CONN FLARE SERVICE RIG

**US ROCKIES REGION  
Operation Summary Report**

Well: NBU 920-24I		Spud Date: 2/11/2012	
Project: UTAH-UINTAH		Site: NBU 920-24I	Rig Name No: PROPETRO 10/10, PIONEER 54/54
Event: DRILLING		Start Date: 1/24/2012	End Date: 3/19/2012
Active Datum: RKB @4,826.00usft (above Mean Sea Level)		UWI: NE/SE/0/9/S/20/E/24/0/0/26/PM/S/1983/E/0/829/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
	16:30 - 0:00	7.50	DRLPRO	02	B	P		CLOSED LOOP SYSTEM DRILL F/ 9119' TO 9614', 495' @ 66' PH WOB / 22-24 RPM TOP DRIVE 55-60, MOTOR-135 SPM 200- GPM 586 MW 8.8 VIS 31 TRQ ON/OFF = 8000-6000 K PSI ON /OFF 2300-1900, DIFF 250-500 PU/SO/RT =195-175-185 SLIDE = 0 ROT = 100% STRATA - ON LINE @ 7700' ANN PSI-DRILLING 100-125, CONN 250-300 NOV- 2 - DEWATERING 71 N & 3.5 W OF TARGET CENTER 10' FLARE DRILLING, 10'-20' CONN FLARE
3/14/2012	0:00 - 15:30	15.50	DRLPRO	02	B	P		CLOSED LOOP SYSTEM DRILL F/ 9614' TO 10446' 832'@53.6 PH WOB / 22-24 RPM TOP DRIVE 55-60, MOTOR-135 SPM 200- GPM 586 MW 8.8 VIS 31 TRQ ON/OFF = 8000-6000 K PSI ON /OFF 2300-1900, DIFF 250-500 PU/SO/RT = 210/195/204 SLIDE = 0 ROT = 100% STRATA - ON LINE @ 7700' ANN PSI-DRILLING 100-125, CONN 250-300 NOV- 2 - DEWATERING 63' N and 30.3' W OF TARGET CENTER 20' FLARE DRILLING, 25'-30' CONN FLARE
	15:30 - 16:00	0.50	DRLPRO	07	A	P		LUBRICATE RIG
	16:00 - 0:00	8.00	DRLPRO	02	B			CLOSED LOOP SYSTEM DRILL F/10446' TO 10660' 214'@26.7 PH WOB / 25-27 RPM TOP DRIVE 55-60, MOTOR-135 SPM 200- GPM 586 MW 8.8 VIS 31 TRQ ON/OFF = 8000-6000 K PSI ON /OFF 2300-1900, DIFF 250-500 PU/SO/RT = 220/195/207 SLIDE = 0 ROT = 100% STRATA - ON LINE @ 7700' ANN PSI-DRILLING 200, CONN 300-400 NOV- 2 - DEWATERING 63' N and 30.3' W OF TARGET CENTER 20' FLARE DRILLING, 25'-30' CONN FLARE

**US ROCKIES REGION  
Operation Summary Report**

Well: NBU 920-24I		Spud Date: 2/11/2012	
Project: UTAH-UINTAH		Site: NBU 920-24I	Rig Name No: PROPETRO 10/10, PIONEER 54/54
Event: DRILLING		Start Date: 1/24/2012	End Date: 3/19/2012
Active Datum: RKB @4.826.00usft (above Mean Sea Level)		UWI: NE/SE/0/9/S/20/E/24/0/0/26/PM/S/1983/E/0/829/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
3/15/2012	0:00 - 9:30	9.50	DRLPRO	02	B	P		CLOSED LOOP SYSTEM DRILL F/10660' TO 10919' 259'@27.2 PH WOB / 25-29, MOTOR-135 RPM TOP DRIVE 40-60 SPM 200- GPM 586 MW 8.8 VIS 31 TRQ ON/OFF = 8000-6000 K PSI ON /OFF 2300-1900, DIFF 250-500 PU/SO/RT = 220/195/207 SLIDE = 0 ROT = 100% STRATA - ON LINE @ 7700' ANN PSI-DRILLING 250, CONN 300-400 NOV- 2 - DEWATERING 66' N & 33' W OF TARGET CENTER 20' FLARE DRILLING, 25'-30' CONN FLARE CIRCULATE AND SPOT 70 BBL PILL ON BOTTOM
	9:30 - 10:00	0.50	DRLPRO	05	C	P		
	10:00 - 10:30	0.50	DRLPRO	06	A	P		TRIP OUT OF THE HOLE TO 9589' TO SPOT ANOTHER 70 BBL PILL
	10:30 - 11:30	1.00	DRLPRO	05	B	S		EXCESSIVE AMOUNT OF GAS AFTER PULLING 20 STANDS. CIRCULATE GAS OUT, DISPLACE MUD,RAISE MUD WEIGHT TO 10.5
	11:30 - 12:00	0.50	DRLPRO	06	A	P		TRIPPED INTO HOLE TO 10919'
	12:00 - 15:30	3.50	DRLPRO	02	B			CLOSED LOOP SYSTEM DRILL F/10919' TO 11013' 94'@26.8 PH WOB / 26-28, MOTOR-135 RPM TOP DRIVE 40-60 SPM 200- GPM 586 MW 10.5 VIS 33 TRQ ON/OFF = 8000-6000 K PSI ON /OFF 2300-1900, DIFF 250-500 PU/SO/RT = 220/195/207 SLIDE = 0 ROT = 100% STRATA - ON LINE @ 7700' ANN PSI-DRILLING 80, CONN 200 NOV ON STANDBY 66' N & 33' W OF TARGET CENTER 5' FLARE DRILLING, 5' CONN FLARE LUBRICATE RIG, SERVICE TOP DRIVE
	15:30 - 16:00	0.50	DRLPRO	07	A	P		

**US ROCKIES REGION**  
**Operation Summary Report**

Well: NBU 920-24I		Spud Date: 2/11/2012	
Project: UTAH-UINTAH		Site: NBU 920-24I	Rig Name No: PROPETRO 10/10, PIONEER 54/54
Event: DRILLING		Start Date: 1/24/2012	End Date: 3/19/2012
Active Datum: RKB @4,826.00usft (above Mean Sea Level)		UWI: NE/SE/0/9/S/20/E/24/0/0/26/PM/S/1983/E/0/829/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
	16:00 - 0:00	8.00	DRLPRO	02	B	P		CLOSED LOOP SYSTEM DRILL F/11013' TO 11290' 277'@34.6 PH WOB / 26-28, MOTOR-135 RPM TOP DRIVE 50 SPM 200- GPM 586 MW 10.5 VIS 33 TRQ ON/OFF = 8000-6000 K PSI ON /OFF 2700-2300, DIFF 150-400 PU/SO/RT = 220/195/207 SLIDE = 0 ROT = 100% STRATA - ON LINE @ 7700' ANN PSI-DRILLING 80, CONN 100 NOV ON STANDBY 66' N & 33' W OF TARGET CENTER 5' FLARE DRILLING, 5' CONN FLARE
3/16/2012	0:00 - 2:30	2.50	DRLPRO	02	B	P		CLOSED LOOP SYSTEM DRILL F/11290' TO 11396' 106'@42.4 PH WOB / 26-28, MOTOR-135 RPM TOP DRIVE 50 SPM 200- GPM 586 MW 10.5 VIS 33 TRQ ON/OFF = 8000-6000 K PSI ON /OFF 2700-2300, DIFF 150-400 PU/SO/RT = 220/195/207 SLIDE = 0 ROT = 100% STRATA - ON LINE @ 7700' ANN PSI-DRILLING 80, CONN 100 NOV ON STANDBY 66' N & 33' W OF TARGET CENTER 5' FLARE DRILLING, 5' CONN FLARE
	2:30 - 4:30	2.00	DRLPRO	05	C	P		PUMPED 2 HIGH VIS SWEEPS
	4:30 - 5:30	1.00	DRLPRO	06	E	P		SPOTTED 70 BBL HEAVY MUD ON BOTTOM, TRIPPED OUT OF HOLE 20 STANDS
	5:30 - 9:30	4.00	DRLPRO	06	E	P		TRIPPED OUT OF THE HOLE, CHANGED OUT MWD TOOL
	9:30 - 18:00	8.50	DRLPRO	06	E	P		TRIPPED IN THE HOLE AND RESURVEY FROM 10600', WASH AND REAM
	18:00 - 19:30	1.50	DRLPRO	05	C	P		CIRCULATE 1 BOTTOMS UP
	19:30 - 0:00	4.50	DRLPRO	06	B	P		TRIPPING OUT OF THE HOLE FOR LOGS
3/17/2012	0:00 - 2:00	2.00	DRLPRO	06	B	P		TRIPPING OUT OF THE HOLE FOR LOGS, LAYED DOWN DIRECTIONAL TOOLS
	2:00 - 4:00	2.00	DRLPRO	11	D	P		RIGGED UP BAKER ATLAS, SAFETY MEETING, RAN LOGS, LOGS BRIDGED OUT @ 5276', RIGGED DOWN
	4:00 - 18:00	14.00	DRLPRO	06	F	P		TRIPPED IN THE HOLE TO 11396', WASH AND REAMED THROUGH TIGHT SPOTS
	18:00 - 19:30	1.50	DRLPRO	05	C	P		CIRCULATED 1 BOTTOMS UP, SAFETY MEETING WITH KIMSEY
	19:30 - 0:00	4.50	DRLPRO	06	A	P		LAYED DOWN DRILL PIPE W/LAY DOWN TRUCK
3/18/2012	0:00 - 2:00	2.00	DRLPRO	06	A	P		LAI D DOWN DRILL PIPE AND BHA
	2:00 - 4:00	2.00	DRLPRO	05	F	P		WAITING FOR LOGGERS, CIRCULATE OUT GAS
	4:00 - 9:30	5.50	DRLPRO	11	D	P		TRIPLE COMBO LOGS FROM 9801'

**US ROCKIES REGION  
Operation Summary Report**

Well: NBU 920-24I		Spud Date: 2/11/2012	
Project: UTAH-UINTAH		Site: NBU 920-24I	Rig Name No: PROPETRO 10/10, PIONEER 54/54
Event: DRILLING		Start Date: 1/24/2012	End Date: 3/19/2012
Active Datum: RKB @4,826.00usft (above Mean Sea Level)		UWI: NE/SE/0/9/S/20/E/24/0/0/26/PM/S/1983/E/0/829/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
	9:30 - 10:00	0.50	DRLPRO	14	B	P		PULL WEAR BUSHING
	10:00 - 11:00	1.00	DRLPRO	12	A	P		RIG UP KIMZEY CASING CREW, SAFETY MEETING
	11:00 - 17:30	6.50	DRLPRO	12	C	P		RUN CASING, RUN 149 JTS P-110 LTC, 120 JTS P-110 DQX, B/H MARKER @ 10,779, MEZA MARKER @ 8128, X/O @ 5012, SHOE @ 11,376, FLOAT @ 11,332"
	17:30 - 20:00	2.50	DRLPRO	05	B	S		CIRCULATE OUT GAS, RAISE MUD WEIGHT, SPOT 100 BBL HEAVY MUD
	20:00 - 22:30	2.50	DRLPRO	12	C	P		RUN CASING
	22:30 - 0:00	1.50	DRLPRO	05	D	P		CIRCULATE BOTTOMS UP PRIOR TO CEMENT
3/19/2012	0:00 - 0:30	0.50	DRLPRO	12	B	P		RIG UP CEMENTERS, SAFETY MEETING
	0:30 - 5:00	4.50	DRLPRO	12	E	P		HPJSM W/ RIG & BJ CEMENTERS, R/U & TEST LINES TO 5247, PUMP 25 SPACER, LEAD 542 12 PPG 2.26, TAIL 1800 14.3 PPG 1.31, DROP PUMP & DISPLACE W 176.2 BBLS CLAYTREAT WATER, 10 BBLS SPACER BACK TO SURFACE, PLUG BUMPED @ 4011 PSI, FLOATS HELD
	5:00 - 6:00	1.00	DRLPRO	14	B	P		SET C-22 CASING SLIPS W/ 120K
	6:00 - 8:00	2.00	DRLPRO	14	A	P		N/D MAKE ROUGH CUT, CLEAN PITS, RELEASE RIG TO THE 920-24P @ 08:00 3/19/12

1 General

1.1 Customer Information

Company	US ROCKIES REGION
Representative	
Address	

1.2 Well/Wellbore Information

Well	NBU 920-24I	Wellbore No.	OH
Well Name	NBU 920-24I	Wellbore Name	NBU 920-24I
Report No.	1	Report Date	2/11/2012
Project	UTAH-UINTAH	Site	NBU 920-24I
Rig Name/No.		Event	COMPLETION
Start Date	4/4/2012	End Date	4/12/2012
Spud Date	2/11/2012	Active Datum	RKB @4,826.00usft (above Mean Sea Level)
UWI	NE/SE/O/S/20/E/24/O/0/26/PM/S/1983/E/O/829/O/O		

1.3 General

Contractor	JW WIRELINE	Job Method		Supervisor	STEVE WALL, SR.
Perforated Assembly		Conveyed Method			

1.4 Initial Conditions

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

1.5 Summary

Gross Interval	8,261.0 (usft)-11,162.0 (usft)	Start Date/Time	4/5/2012 12:00AM
No. of Intervals	37	End Date/Time	4/10/2012 12:00AM
Total Shots	264	Net Perforation Interval	72.00 (usft)
Avg Shot Density	3.67 (shot/ft)	Final Surface Pressure	
		Final Press Date	

2 Intervals

2.1 Perforated Interval

Date	Formation/Reservoir	CCL@ (usft)	CCL-T S (usft)	MD Top (usft)	MD Base (usft)	Shot Density (shot/ft)	Misfires/Add. Shot	Diameter (in)	Carr Type /Carr Manuf	Carr Size (in)	Phasing (°)	Charge Desc /Charge Manufacturer	Charge Weight (gram)	Reason	Misrun
4/10/2012 12:00AM	MESAVERDE/			8,261.0	8,262.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO	N

2.1 Perforated Interval (Continued)

Date	Formation/ Reservoir	CCL@ (usft)	CCL-T S (usft)	MD Top (usft)	MD Base (usft)	Shot Density (shot/ft)	Misfires/ Add. Shot	Diamete r (in)	Carr Type /Carr Manuf	Carr Size (in)	Phasing (°)	Charge Desc /Charge Manufacturer	Charge Weight (gram)	Reason	Misrun
4/10/2012 12:00AM	MESAVERDE/			8,281.0	8,282.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
4/10/2012 12:00AM	MESAVERDE/			8,430.0	8,432.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
4/10/2012 12:00AM	MESAVERDE/			8,454.0	8,456.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
4/10/2012 12:00AM	MESAVERDE/			8,535.0	8,538.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
4/10/2012 12:00AM	MESAVERDE/			8,581.0	8,584.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
4/10/2012 12:00AM	MESAVERDE/			8,838.0	8,840.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
4/10/2012 12:00AM	MESAVERDE/			8,848.0	8,850.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
4/10/2012 12:00AM	MESAVERDE/			8,892.0	8,894.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
4/10/2012 12:00AM	MESAVERDE/			9,166.0	9,168.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
4/10/2012 12:00AM	MESAVERDE/			9,196.0	9,197.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
4/10/2012 12:00AM	MESAVERDE/			9,216.0	9,217.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
4/10/2012 12:00AM	MESAVERDE/			9,286.0	9,290.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
4/10/2012 12:00AM	MESAVERDE/			9,580.0	9,582.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
4/10/2012 12:00AM	MESAVERDE/			9,606.0	9,608.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
4/10/2012 12:00AM	MESAVERDE/			9,649.0	9,651.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
4/10/2012 12:00AM	MESAVERDE/			9,690.0	9,692.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
4/10/2012 12:00AM	MESAVERDE/			9,796.0	9,798.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
4/10/2012 12:00AM	MESAVERDE/			9,820.0	9,822.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
4/10/2012 12:00AM	MESAVERDE/			9,878.0	9,880.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
4/10/2012 12:00AM	MESAVERDE/			9,940.0	9,942.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
4/10/2012 12:00AM	MESAVERDE/			9,966.0	9,968.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	

2.1 Perforated Interval (Continued)

Date	Formation/ Reservoir	CCL@ (usft)	CCL-T S (usft)	MD Top (usft)	MD Base (usft)	Shot Density (shot/ft)	Misfires/ Add. Shot	Diamete r (in)	Carr Type /Carr Manuf	Carr Size (in)	Phasing (°)	Charge Desc /Charge Manufacturer	Charge Weight (gram)	Reason	Misrun
4/10/2012 12:00AM	MESAVERDE/			10,005.0	10,007.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
4/9/2012 12:00AM	MESAVERDE/			10,226.0	10,228.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
4/9/2012 12:00AM	MESAVERDE/			10,262.0	10,264.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
4/9/2012 12:00AM	MESAVERDE/			10,301.0	10,303.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
4/9/2012 12:00AM	MESAVERDE/			10,872.0	10,874.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
4/9/2012 12:00AM	MESAVERDE/			10,917.0	10,918.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
4/9/2012 12:00AM	MESAVERDE/			10,928.0	10,930.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
4/9/2012 12:00AM	MESAVERDE/			10,949.0	10,950.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
4/9/2012 12:00AM	MESAVERDE/			10,960.0	10,962.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
4/9/2012 12:00AM	MESAVERDE/			11,016.0	11,018.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
4/9/2012 12:00AM	MESAVERDE/			11,026.0	11,028.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
4/9/2012 12:00AM	MESAVERDE/			11,044.0	11,046.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
4/5/2012 12:00AM	MESAVERDE/			11,132.0	11,134.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
4/5/2012 12:00AM	MESAVERDE/			11,148.0	11,150.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
4/5/2012 12:00AM	MESAVERDE/			11,160.0	11,162.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	

3 Plots

**US ROCKIES REGION  
Operation Summary Report**

Well: NBU 920-24I

Spud Date: 2/11/2012

Project: UTAH-UINTAH

Site: NBU 920-24I

Rig Name No:

Event: COMPLETION

Start Date: 4/4/2012

End Date: 4/12/2012

Active Datum: RKB @4,826.00usft (above Mean Sea Level)

UWI: NE/SE/0/9/S/20/E/24/0/0/26/PM/S/1983/E/0/829/0/0

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
2/11/2012	-							
4/4/2012	12:00 - 14:00	2.00	COMP	33		P		FILL SURFACE CSG. MIRU B&C QUICK TEST. PSI TEST T/ 1000 PSI. HELD FOR 15 MIN LOST 15 PSI. PSI TEST T/ 3500 PSI. HELD FOR 15 MIN LOST 21 PSI. 1ST PSI TEST T/ 9000 PSI. HELD FOR 30 MIN LOST 71 PSI. NO COMMUNICATION OR MIGRATION WITH SURFACE CSG BLEED OFF PSI. SWFN HSM, RIGGING UP RIG & EQUIP RIG UP RIG.ND WH NU FV. RU B&C INSTALL TBG HANGER TEST FV TO 9,000# FOR 10 MIN GOOD TEST, RD B&C. RU JW RIH W/ 31/8 23 GRM .36" HOLES EXP GUNS & PERF 1ST STAGE AS OF PROCEDURE, POOH SW SDFWE.
4/5/2012	7:00 - 7:30	0.50	COMP	48		P		MIRU SUPERIOR, PRIME PUMPS & LINES, TEST LINES TO 9474 PSI FOR 15 MIN LOST 10 PSI, SET POPOFF @ 8800 PSI, SET KICK OUTS ON 3 TRKS @ 8700 PSI, 3 TRKS @ 8600 PSI. HELD SAFETY MEETING. STAYING AWAY F/ HIGH PRESSURE LINES. ( STG #1 ) WHP 2027 PSI, BRK 5047 PSI @ 4.8 BPM. ISIP 3613 PSI, FG .76. SPOT ACID ON PERFS LET SOAK FOR 5 MINS. CALC HOLES OPEN @ 49.3 BPM @ 6780 PSI = 90% HOLES OPEN. MP 8204 PSI, MR 58.3 BPM, AP 6569 PSI, AR 50.5 BPM ISIP 3686 PSI, FG .77 NPI 73 PSI.
	7:30 - 8:00	0.50	COMP	30	A	P		( STG #2 )PU 41/2 HAL 8-K CBP & 31/8 EXP 23 GRM .36" HLS, 90 DEG PHASING, SET CBP @ 11,076', PERF WELL AS OF PROCEDURE. WHP 2471 PSI, BRK 5072 PSI @ 4.7 BPM. ISIP 3864 PSI, FG .79. CALC HOLES OPEN @ 50.2 BPM @ 6576 PSI = 100% HOLES OPEN. MP 7438 PSI, MR 57.6 BPM, AP 6379 PSI, AR 50.7 BPM ISIP 3697 PSI, FG .77 NPI -167 PSI.
	8:00 - 8:30	0.50	COMP	32		P		( STG #3 )PU 41/2 HAL 8-K CBP & 31/8 EXP 23 GRM .36" HLS, 120 DEG PHASING, SET CBP @ 10,990', PERF WELL AS OF PROCEDURE. WHP 3310 PSI, BRK 5636 PSI @ 4.8 BPM. ISIP 3767 PSI, FG .78. CALC HOLES OPEN @ 50.3 BPM @ 6203 PSI = 100% HOLES OPEN. MP 7030 PSI, MR 53.7 BPM, AP 6074 PSI, AR 50.8 BPM ISIP 3594 PSI, FG .77 NPI -173 PSI.
	8:30 - 15:00	6.50	COMP	37	B	P		
4/9/2012	7:00 - 11:55	4.92	COMP	36	E	P		
	11:55 - 14:12	2.28	COMP	36	E	P		
	14:12 - 17:23	3.18	COMP	36	E	P		

**US ROCKIES REGION  
Operation Summary Report**

Well: NBU 920-24I Spud Date: 2/11/2012  
 Project: UTAH-UINTAH Site: NBU 920-24I Rig Name No:  
 Event: COMPLETION Start Date: 4/4/2012 End Date: 4/12/2012  
 Active Datum: RKB @4,826.00usft (above Mean Sea Level) UWI: NE/SE/0/9/S/20/E/24/0/0/26/PM/S/1983/E/0/829/0/0

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
	17:23 - 19:00	1.62	COMP	34	H	P		( STG #4 )PU 41/2 HAL 8-K CBP & 31/8 EXP 23 GRM .36" HLS, 90 DEG PHASING, SET CBP @ 10,333', PERF WELL AS OF PROCEDURE. POOH SWI SDFN.
4/10/2012	7:00 - 7:09	0.15	COMP	36	E	P		HSM W/ SUPERIOR, TRIP HAZARDS & PPE. ( STG # 4 ) WHP 2290 PSI, BRK 4360 PSI @ 4.7 BPM. ISIP 3051 PSI, FG .74. CALC HOLES OPEN @ 45.9 BPM @ 6305 PSI = 74% HOLES OPEN. MP 7148 PSI, MR 51.2 BPM, AP 5840 PSI, AR 48.6 BPM ISIP 3184 PSI, FG .75 NPI 133 PSI.
	7:09 - 8:32	1.38	COMP	36	E	P		( STG #5 ) PU 41/2 HAL 8-K CBP & 31/8 EXP 23 GRM .36" HLS, 90 DEG PHASING, SET CBP @ 10,037', PERF WELL AS OF PROCEDURE. WHP 2244 PSI, BRK 4665 PSI @ 5.1 BPM. ISIP 3508 PSI, FG .79. CALC HOLES OPEN @ 45.2 BPM @ 5858 PSI = 100% HOLES OPEN. MP 6260 PSI, MR 51.3 BPM, AP 5925 PSI, AR 49.8 BPM ISIP 3288 PSI, FG .77 NPI -220 PSI.
	8:32 - 9:49	1.28	COMP	36	E	P		( STG # 6 )PU 41/2 HAL 8-K CBP & 31/8 EXP 23 GRM .36" HLS, 90 DEG PHASING, SET CBP @ 9910', PERF WELL AS OF PROCEDURE. WHP 1915 PSI, BRK 3289 PSI @ 5.0 BPM. ISIP 2621 PSI, FG .71. CALC HOLES OPEN @ 49.4 BPM @ 5665 PSI = 88% HOLES OPEN. MP 6068 PSI, MR 54.3 BPM, AP 5385 PSI, AR 47. BPM ISIP 3404 PSI, FG .78 NPI 783 PSI.
	9:49 - 11:03	1.23	COMP	36	E	P		( STG # 7 ) PU 41/2 HAL 8-K CBP & 31/8 EXP 23 GRM .36" HLS, 120 DEG PHASING, SET CBP @ 9722', PERF WELL AS OF PROCEDURE. WHP 1875 PSI, BRK 3307 PSI @ 4.9 BPM. ISIP 2484 PSI, FG .70. CALC HOLES OPEN @ 45.4 BPM @ 5932 PSI = 67% HOLES OPEN. MP 7033 PSI, MR 51.3 BPM, AP 5539 PSI, AR 75. BPM ISIP 2983 PSI, FG .75 NPI 499 PSI.
	11:03 - 13:07	2.07	COMP	36	E	P		( STG # 8 ) PU 41/2 HAL 8-K CBP & 31/8 EXP 23 GRM .36" HLS, 120 DEG PHASING, SET CBP @ 9314', PERF WELL AS OF PROCEDURE.HAD MISS RUN ON GUNS. START FRACING @ 15: 55 WHP 1381 PSI, BRK 3483 PSI @ 5.0 BPM. ISIP 2508 PSI, FG .71. CALC HOLES OPEN @ 50.7 BPM @ 5918 PSI = 79% HOLES OPEN. MP 6707 PSI, MR 51.0 BPM, AP 6235 PSI, AR 50.1. BPM ISIP 2898 PSI, FG .75 NPI 390 PSI.

**US ROCKIES REGION  
Operation Summary Report**

Well: NBU 920-24I

Spud Date: 2/11/2012

Project: UTAH-UINTAH

Site: NBU 920-24I

Rig Name No:

Event: COMPLETION

Start Date: 4/4/2012

End Date: 4/12/2012

Active Datum: RKB @4,826.00usft (above Mean Sea Level)

UWI: NE/SE/0/9/S/20/E/24/0/0/26/PM/S/1983/E/0/829/0/0

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
	13:07 - 14:13	1.10	COMP	36	E	P		( STG # 9 ) PU 41/2 HAL 8-K CBP & 31/8 EXP 23 GRM .36" HLS, 90 DEG PHASING, SET CBP @ 8924', PERF WELL AS OF PROCEDURE. WHP 1905 PSI, BRK 4301 PSI @ 5.1 BPM. ISIP 2320 PSI, FG .71. CALC HOLES OPEN @ 51.0 BPM @ 5858 PSI = 78% HOLES OPEN. MP 6824 PSI, MR 52.2 BPM, AP 5872 PSI, AR 50.3. BPM ISIP 3060 PSI, FG .78 NPI 653 PSI.
	14:13 - 15:19	1.10	COMP	36	E	P		( STG # 10 ) PU 41/2 HAL 8-K CBP & 31/8 EXP 23 GRM .36" HLS, 90 DEG PHASING, SET CBP @ 8614', PERF WELL AS OF PROCEDURE. WHP 1659 PSI, BRK 2788 PSI @ 5.0 BPM. ISIP 2407 PSI, FG .71. CALC HOLES OPEN @ 50.7 BPM @ 5339 PSI = 86% HOLES OPEN. MP 6453 PSI, MR 68.1 BPM, AP 4949 PSI, AR 50.3. BPM ISIP 2622 PSI, FG .75 NPI 302 PSI.
	15:19 - 16:31	1.20	COMP	36	E	P		( STG # 11 ) PU 41/2 HAL 8-K CBP & 31/8 EXP 23 GRM .36" HLS, 90 DEG PHASING, SET CBP @ 8486', PERF WELL AS OF PROCEDURE. WHP 1460 PSI, BRK 3203 PSI @ 5.1 BPM. ISIP 2322 PSI, FG .72. CALC HOLES OPEN @ 52.9 BPM @ 5294 PSI = 93% HOLES OPEN. MP 5594 PSI, MR 53.0 BPM, AP 4761 PSI, AR 51.1. BPM ISIP 2771 PSI, FG .77 NPI 449 PSI.
								TOTAL 269,266 TLC SAND TOTAL 97,143 30/50 WHITE SAND TOTAL 17,527 BBLs WATER 442 GALS SCALE INH 240 GALS BIOCIDE
	16:31 - 18:30	1.98	COMP	34	I	P		( KILL PLUG ) RIH W/ 41/2 8-K CBP & SET @ 8211' POOH SWI, RD WL & FRAC CREW SDFN. HSM, NIPPLE DWN FRAC VALVE, NU BOPS.
4/11/2012	7:00 - 7:30	0.50	COMP	48		P		SICP 0, SWAPED OUT BOPS & ACCUMULATOR, ND FV, NU 10K BOPS, RU FLOOR & EQUIP. TALLY & PU 37/8 BIT, POBS, 1,875 X/N & 259 JTS 23/8 P-110 TBG OFF FLOAT, TAG KILL PLUG @ 8211', RU DRLG EQUIP.
	7:30 - 14:30	7.00	COMP	31	I	P		BROKE CIRC CONVENTIONAL. TEST BOPS TO 4,000 PSI FOR 15 MIN OK, RIH
	14:30 - 16:30	2.00	COMP					C/O 10' SAND TAG 1ST PLUG @ 8211' DRL PLG IN 5 MIN, 800# PSI INCREASE RIH.
								C/O 15' SAND TAG 2ND PLUG @ 8486' DRL PLG IN 7 MIN, 1400# PSI INCREASE RIH. TO 1 JT BELOW PLUG WORK TBG, CIRC CLEAN SWI LOCKED RAMS, SDFN.
4/12/2012	7:00 - 7:30	0.50	COMP	48		P		HSM, DRILLING OUT PLUGS.

**US ROCKIES REGION  
Operation Summary Report**

Well: NBU 920-24I

Spud Date: 2/11/2012

Project: UTAH-UINTAH

Site: NBU 920-24I

Rig Name No:

Event: COMPLETION

Start Date: 4/4/2012

End Date: 4/12/2012

Active Datum: RKB @4,826.00usft (above Mean Sea Level)

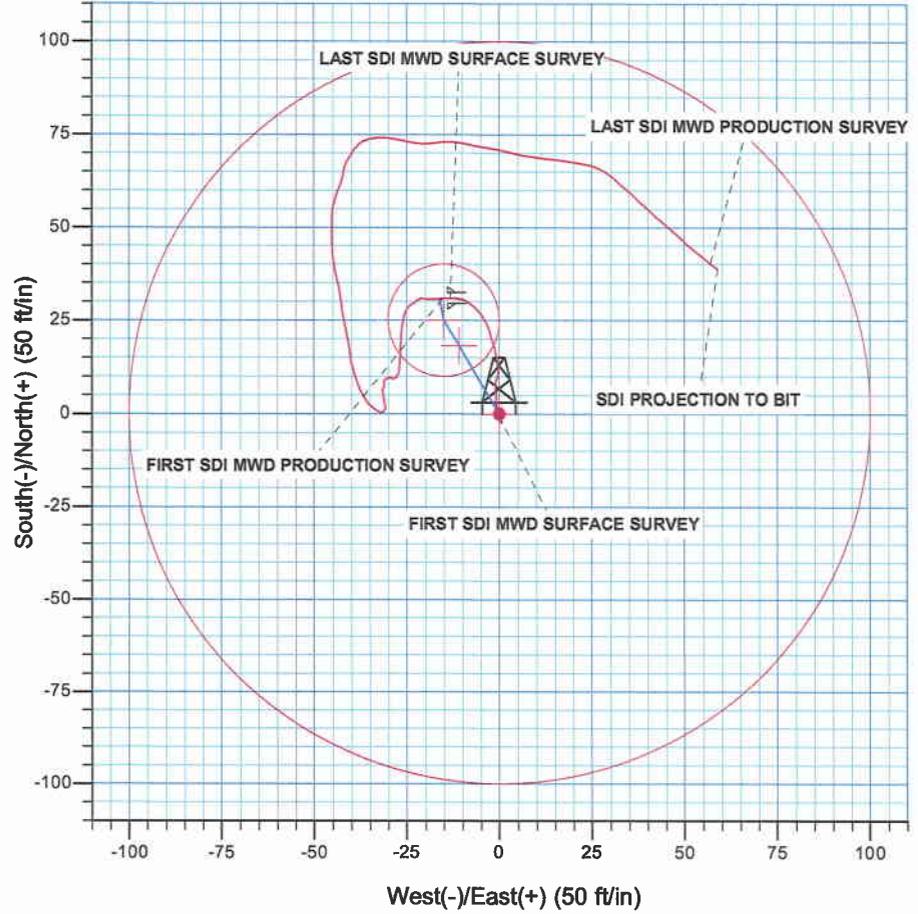
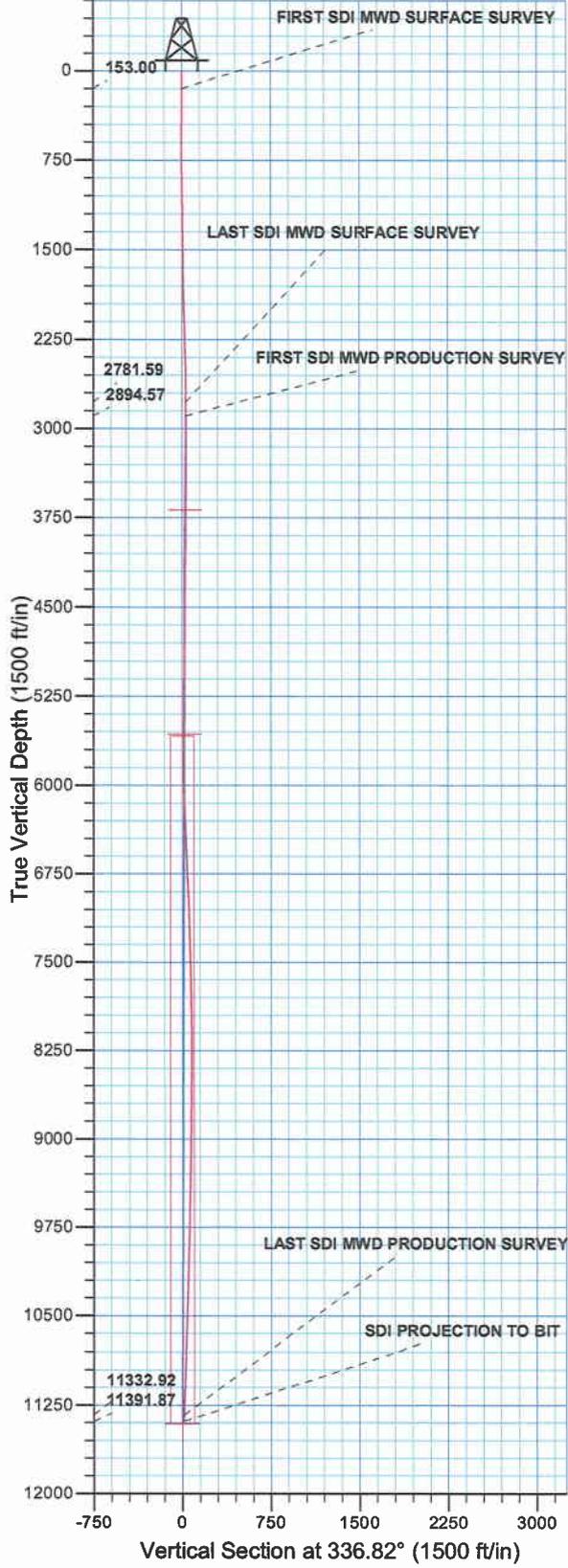
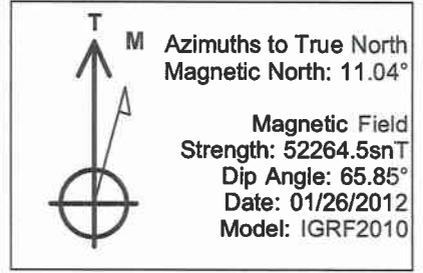
UWI: NE/SE/0/9/S/20/E/24/0/0/26/PM/S/1983/E/0/829/0/0

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
	7:30 - 15:00	7.50	COMP	44	C	P		SICP 2,000 PSI, OPEN WELL, RIH
								C/O 10' SAND TAG 3RD PLUG @ 8614' DRL PLG IN 7 MIN, 700# PSI INCREASE RIH.
								C/O 10' SAND TAG 4TH PLUG @ 8924' DRL PLG IN 10 MIN, 1000# PSI INCREASE RIH.
								C/O 15' SAND TAG 5TH PLUG @ 9314' DRL PLG IN 4 MIN, 1000# PSI INCREASE RIH.
								C/O 10' SAND TAG 6TH PLUG @ 9722' DRL PLG IN 5 MIN, 500# PSI INCREASE RIH
								C/O 10' SAND TAG 7TH PLUG @ 9910' DRL PLG IN 4 MIN, 400# PSI INCREASE RIH
								C/O 10' SAND TAG 8TH PLUG @ 10,037' DRL PLG IN 4 MIN, 600# PSI INCREASE RIH
								C/O 15' SAND TAG 9TH PLUG @ 10,333' DRL PLG IN 7 MIN, 700# PSI INCREASE RIH
								C/O 25' SAND TAG 10TH PLUG @ 10,990' DRL PLG IN 6 MIN, 200# PSI INCREASE RIH
								C/O 30' SAND TAG 11TH PLUG @ 11,076' DRL PLG IN 6 MIN, 200# PSI INCREASE RIH
								C/O TO 11,265', CIRC CLN, L/D 9 JTS. LAND TBG ON 346 JTS 23/8 P-110. ND BOPS NU WH, TEST FLOW LINE TO 4,000 PSI, PUMP OFF BIT, TURN WELL OVER TO FB CREW. WIND BLOWING TO HARD TO RIG DOWN, SDFN.
								KB= 19' ( SURFOPEN W/ POPOFF ) HANGER = .83' SICP 2500 PSI, FTP 100 PSI 346 JTS 23/8 P-110 = 10,967.33' POBS W/ 1.875 X/N = 2.20' EOT @ 10,989.36'
								TWTR 17,767 BBLS TWR 1300 BBLS TWLTR 16,467 BBLS
								362 JTS IN WELL 346 LANDED 16 TO RETURN
	14:00 -		COMP	50				WELL TURNED TO SALES AT 1400 HR ON 4/12/2012 - 385 MCFD, 2400 BWPD, FCP 2566#, FTP 2450#, CK 18/64"

**US ROCKIES REGION  
Operation Summary Report**

Well: NBU 920-24I				Spud Date: 2/11/2012				
Project: UTAH-UINTAH			Site: NBU 920-24I			Rig Name No:		
Event: COMPLETION			Start Date: 4/4/2012		End Date: 4/12/2012			
Active Datum: RKB @4,826.00usft (above Mean Sea Level)				UWI: NE/SE/0/9/S/20/E/24/0/0/26/PM/S/1983/E/0/829/0/0				
Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
4/16/2012	7:00 -			50				WELL IP'D ON 4/16/2012 - 3574 MCFD, 0 BOPD, 250 BWPD, CP 4536#, FTP 3587#, CK 16/64", LP 283#, 24 HRS
4/17/2012	-							

WELL DETAILS: NBU 920-24I					
GL 4807 & KB 19 @ 4826.00R (PIONEER 54)					
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.00	0.00	14536089.47	2030264.43	40.019220	-109.607610



<b>PROJECT DETAILS: UTAH - UTM (feet), NAD27, Zone 12N</b>
Geodetic System: Universal Transverse Mercator (US Survey Feet)
Datum: NAD 1927 (NADCON CONUS)
Ellipsoid: Clarke 1866
Zone: Zone 12N (114 W to 108 W)
Location: SECTION 24 T9S R20E
System Datum: Mean Sea Level

Design: OH (NBU 920-24/OH)
Created By: Gabe Kendall    Date: 14:05, March 19 2012



<b>Company:</b>	US ROCKIES REGION PLANNING	<b>Local Co-ordinate Reference:</b>	Well NBU 920-24I
<b>Project:</b>	UTAH - UTM (feet), NAD27, Zone 12N	<b>TVD Reference:</b>	GL 4807 & KB 19 @ 4826.00ft (PIONEER 54)
<b>Site:</b>	NBU 920-24I	<b>MD Reference:</b>	GL 4807 & KB 19 @ 4826.00ft (PIONEER 54)
<b>Well:</b>	NBU 920-24I	<b>North Reference:</b>	True
<b>Wellbore:</b>	OH	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	OH	<b>Database:</b>	EDM 5000.1 Single User Db

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

<b>Site</b>	NBU 920-24I, SECTION 24 T9S R20E				
<b>Site Position:</b>		<b>Northing:</b>	14,536,089.48 usft	<b>Latitude:</b>	40.019220
<b>From:</b>	Lat/Long	<b>Easting:</b>	2,030,264.42 usft	<b>Longitude:</b>	-109.607610
<b>Position Uncertainty:</b>	0.00 ft	<b>Slot Radius:</b>	13.200 in	<b>Grid Convergence:</b>	0.90 °

<b>Well</b>	NBU 920-24I, 1983 FSL 820 FEL					
<b>Well Position</b>	<b>+N/-S</b>	0.00 ft	<b>Northing:</b>	14,536,089.48 usft	<b>Latitude:</b>	40.019220
	<b>+E/-W</b>	0.00 ft	<b>Easting:</b>	2,030,264.42 usft	<b>Longitude:</b>	-109.607610
<b>Position Uncertainty</b>		0.00 ft	<b>Wellhead Elevation:</b>	ft	<b>Ground Level:</b>	4,807.00 ft

<b>Wellbore</b>	OH				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (mT)</b>
	IGRF2010	01/26/12	11.04	65.85	52,265

<b>Design</b>	OH				
<b>Audit Notes:</b>					
<b>Version:</b>	1.0	<b>Phase:</b>	ACTUAL	<b>Tie On Depth:</b>	0.00
<b>Vertical Section:</b>	<b>Depth From (TVD) (ft)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Direction (°)</b>	
	0.00	0.00	0.00		336.82

<b>Survey Program</b>	<b>Date</b>	03/19/12			
<b>From (ft)</b>	<b>To (ft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Description</b>	
15.00	2,782.00	Survey #1 SDI MWD PRODUCTION (OH)	SDI MWD	SDI MWD - Standard ver 1.0.1	
2,895.00	11,396.00	Survey #2 SDI MWD PRODUCTION (OH)	SDI MWD	SDI MWD - Standard ver 1.0.1	

<b>Survey</b>										
<b>Measured Depth (ft)</b>	<b>Inclination (°)</b>	<b>Azimuth (°)</b>	<b>Vertical Depth (ft)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Vertical Section (ft)</b>	<b>Dogleg Rate (°/100ft)</b>	<b>Build Rate (°/100ft)</b>	<b>Turn Rate (°/100ft)</b>	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15.00	0.00	0.00	15.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
153.00	0.26	190.69	153.00	-0.31	-0.06	-0.26	0.19	0.19	0.00	
<b>FIRST SDI MWD SURFACE SURVEY</b>										
181.00	0.55	156.40	181.00	-0.49	-0.02	-0.45	1.31	1.04	-122.46	
208.00	0.48	139.61	208.00	-0.70	0.11	-0.68	0.61	-0.26	-62.19	
236.00	0.53	175.13	236.00	-0.92	0.20	-0.92	1.11	0.18	126.86	
263.00	0.35	173.37	263.00	-1.12	0.22	-1.12	0.67	-0.67	-6.52	
292.00	0.53	174.43	292.00	-1.34	0.24	-1.33	0.62	0.62	3.66	
323.00	0.53	159.49	322.99	-1.62	0.30	-1.61	0.44	0.00	-48.19	

**Company:** US ROCKIES REGION PLANNING  
**Project:** UTAH - UTM (feet), NAD27, Zone 12N  
**Site:** NBU 920-24I  
**Well:** NBU 920-24I  
**Wellbore:** OH  
**Design:** OH

**Local Co-ordinate Reference:** Well NBU 920-24I  
**TVD Reference:** GL 4807 & KB 19 @ 4826.00ft (PIONEER 54)  
**MD Reference:** GL 4807 & KB 19 @ 4826.00ft (PIONEER 54)  
**North Reference:** True  
**Survey Calculation Method:** Minimum Curvature  
**Database:** EDM 5000.1 Single User Db

**Survey**

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Bulld Rate (°/100ft)	Turn Rate (°/100ft)
352.00	0.62	149.91	351.99	-1.88	0.43	-1.90	0.45	0.31	-33.03
442.00	0.09	259.68	441.99	-2.32	0.60	-2.37	0.73	-0.59	121.97
532.00	0.18	331.67	531.99	-2.20	0.47	-2.21	0.19	0.10	79.99
622.00	0.44	336.50	621.99	-1.76	0.26	-1.72	0.29	0.29	5.37
712.00	0.53	347.57	711.99	-1.04	0.03	-0.97	0.14	0.10	12.30
802.00	0.88	342.83	801.98	0.03	-0.26	0.13	0.39	0.39	-5.27
892.00	0.62	345.38	891.97	1.16	-0.59	1.30	0.29	-0.29	2.83
982.00	0.62	352.41	981.97	2.11	-0.77	2.25	0.08	0.00	7.81
1,072.00	0.79	358.65	1,071.96	3.21	-0.85	3.29	0.21	0.19	6.93
1,162.00	0.79	355.92	1,161.95	4.45	-0.91	4.45	0.04	0.00	-3.03
1,252.00	0.79	3.66	1,251.94	5.69	-0.92	5.59	0.12	0.00	8.60
1,342.00	0.62	350.65	1,341.94	6.79	-0.95	6.62	0.26	-0.19	-14.46
1,432.00	0.70	1.11	1,431.93	7.82	-1.02	7.59	0.16	0.09	11.62
1,522.00	0.77	12.55	1,521.92	8.96	-0.88	8.59	0.18	0.08	12.71
1,612.00	0.98	25.21	1,611.91	10.25	-0.42	9.59	0.32	0.23	14.07
1,702.00	1.49	353.64	1,701.89	12.11	-0.22	11.22	0.92	0.57	-35.08
1,792.00	1.85	348.19	1,791.85	14.69	-0.65	13.76	0.44	0.40	-6.06
1,882.00	1.67	344.58	1,881.81	17.38	-1.30	16.49	0.23	-0.20	-4.01
1,972.00	1.67	345.90	1,971.77	19.92	-1.96	19.08	0.04	0.00	1.47
2,062.00	1.49	338.78	2,061.74	22.28	-2.71	21.55	0.30	-0.20	-7.91
2,152.00	1.41	334.13	2,151.71	24.36	-3.61	23.82	0.16	-0.09	-5.17
2,242.00	1.23	328.15	2,241.69	26.18	-4.61	25.88	0.25	-0.20	-6.64
2,332.00	1.06	317.60	2,331.67	27.62	-5.68	27.62	0.30	-0.19	-11.72
2,422.00	1.06	308.37	2,421.65	28.75	-6.89	29.14	0.19	0.00	-10.26
2,512.00	1.06	301.96	2,511.64	29.71	-8.25	30.56	0.13	0.00	-7.12
2,602.00	1.06	288.83	2,601.62	30.42	-9.75	31.80	0.27	0.00	-14.59
2,692.00	1.23	275.77	2,691.60	30.78	-11.49	32.82	0.34	0.19	-14.51
2,782.00	0.97	269.61	2,781.59	30.87	-13.22	33.58	0.32	-0.29	-6.84
<b>LAST SDI MWD SURFACE SURVEY</b>									
2,895.00	1.06	262.58	2,894.57	30.73	-15.21	34.24	0.14	0.08	-6.22
<b>FIRST SDI MWD PRODUCTION SURVEY</b>									
2,990.00	0.92	274.44	2,989.56	30.68	-16.84	34.83	0.26	-0.15	12.48
3,084.00	0.88	266.45	3,083.54	30.69	-18.31	35.42	0.14	-0.04	-8.50
3,179.00	0.97	277.17	3,178.53	30.75	-19.84	36.07	0.20	0.09	11.28
3,274.00	0.44	264.17	3,273.52	30.81	-21.00	36.59	0.58	-0.56	-13.68
3,369.00	0.79	238.33	3,368.52	30.43	-21.92	36.60	0.46	0.37	-27.20
3,464.00	0.70	232.61	3,463.51	29.73	-22.94	36.36	0.12	-0.09	-6.02
3,559.00	0.88	229.18	3,558.50	28.90	-23.95	36.00	0.20	0.19	-3.61
3,654.00	0.97	218.55	3,653.49	27.80	-25.01	35.40	0.20	0.09	-11.19
3,748.00	1.23	195.96	3,747.47	26.20	-25.78	34.24	0.53	0.28	-24.03
3,843.00	0.88	183.66	3,842.46	24.50	-26.11	32.79	0.44	-0.37	-12.95
3,938.00	1.32	192.80	3,937.44	22.70	-26.40	31.26	0.50	0.46	9.62
4,033.00	1.14	173.73	4,032.42	20.69	-26.54	29.47	0.47	-0.19	-20.07

<b>Company:</b>	US ROCKIES REGION PLANNING	<b>Local Co-ordinate Reference:</b>	Well NBU 920-24I
<b>Project:</b>	UTAH - UTM (feet), NAD27, Zone 12N	<b>TVD Reference:</b>	GL 4807 & KB 19 @ 4826.00ft (PIONEER 54)
<b>Site:</b>	NBU 920-24I	<b>MD Reference:</b>	GL 4807 & KB 19 @ 4826.00ft (PIONEER 54)
<b>Well:</b>	NBU 920-24I	<b>North Reference:</b>	True
<b>Wellbore:</b>	OH	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	OH	<b>Database:</b>	EDM 5000.1 Single User Db

**Survey**

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N-S (ft)	+E-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
4,128.00	0.79	197.02	4,127.40	19.13	-26.62	28.06	0.55	-0.37	24.52
4,223.00	1.06	177.68	4,222.39	17.63	-26.78	26.74	0.43	0.28	-20.36
4,318.00	1.14	179.79	4,317.37	15.80	-26.74	25.05	0.09	0.08	2.22
4,413.00	1.32	184.89	4,412.35	13.77	-26.83	23.22	0.22	0.19	5.37
4,508.00	1.70	185.35	4,507.32	11.27	-27.06	21.01	0.40	0.40	0.48
4,603.00	0.79	241.75	4,602.30	9.56	-27.76	19.72	1.50	-0.96	59.37
4,697.00	0.44	283.15	4,696.29	9.34	-28.69	19.87	0.58	-0.37	44.04
4,792.00	0.70	283.85	4,791.29	9.56	-29.60	20.44	0.27	0.27	0.74
4,887.00	0.62	216.62	4,886.28	9.28	-30.47	20.53	0.77	-0.08	-70.77
4,982.00	0.44	239.64	4,981.28	8.69	-31.10	20.22	0.29	-0.19	24.23
5,077.00	0.53	159.40	5,076.28	8.09	-31.26	19.74	0.66	0.09	-84.46
5,172.00	0.31	172.18	5,171.27	7.43	-31.07	19.05	0.25	-0.23	13.45
5,267.00	0.53	215.91	5,266.27	6.82	-31.29	18.58	0.39	0.23	46.03
5,362.00	0.35	178.47	5,361.27	6.17	-31.54	18.08	0.35	-0.19	-39.41
5,457.00	0.76	162.24	5,456.26	5.28	-31.34	17.19	0.46	0.43	-17.08
5,552.00	0.62	191.74	5,551.26	4.18	-31.25	16.14	0.40	-0.15	31.05
5,646.00	0.97	160.54	5,645.25	2.93	-31.09	14.93	0.58	0.37	-33.19
5,741.00	0.88	176.54	5,740.24	1.44	-30.78	13.44	0.29	-0.09	16.84
5,837.00	0.79	243.16	5,836.23	0.41	-31.32	12.70	0.96	-0.09	69.40
5,931.00	1.58	300.11	5,930.21	0.76	-33.02	13.70	1.41	0.84	60.59
6,026.00	2.11	318.57	6,025.16	2.73	-35.31	16.41	0.83	0.56	19.43
6,121.00	2.81	334.21	6,120.07	6.14	-37.48	20.40	1.01	0.74	16.46
6,216.00	2.46	342.48	6,214.97	10.18	-39.11	24.75	0.54	-0.37	8.71
6,310.00	2.55	351.00	6,308.88	14.17	-40.05	28.79	0.41	0.10	9.06
6,405.00	2.29	354.34	6,403.80	18.15	-40.56	32.65	0.31	-0.27	3.52
6,501.00	2.55	343.79	6,499.71	22.11	-41.35	36.60	0.54	0.27	-10.99
6,596.00	2.64	352.23	6,594.62	26.30	-42.23	40.80	0.41	0.09	8.88
6,691.00	2.02	354.25	6,689.54	30.14	-42.70	44.51	0.66	-0.65	2.13
6,786.00	2.64	346.25	6,784.46	33.93	-43.39	48.26	0.74	0.65	-8.42
6,882.00	2.77	348.62	6,880.35	38.35	-44.37	52.72	0.18	0.14	2.47
6,977.00	2.38	352.68	6,975.26	42.56	-45.07	56.86	0.45	-0.41	4.27
7,072.00	2.20	2.95	7,070.18	46.33	-45.23	60.40	0.47	-0.19	10.81
7,166.00	2.02	357.86	7,164.12	49.79	-45.20	63.56	0.28	-0.19	-5.41
7,262.00	1.52	359.33	7,260.07	52.76	-45.28	66.32	0.52	-0.52	1.53
7,357.00	1.49	9.99	7,355.04	55.23	-45.08	68.52	0.30	-0.03	11.22
7,452.00	1.41	23.87	7,450.01	57.52	-44.39	70.35	0.38	-0.08	14.61
7,547.00	1.32	13.76	7,544.98	59.65	-43.66	72.02	0.27	-0.09	-10.64
7,641.00	1.41	26.25	7,638.96	61.74	-42.89	73.63	0.33	0.10	13.29
7,736.00	1.23	8.32	7,733.93	63.79	-42.22	75.26	0.47	-0.19	-18.87
7,831.00	1.23	14.03	7,828.91	65.79	-41.83	76.95	0.13	0.00	6.01
7,926.00	1.14	27.12	7,923.89	67.62	-41.15	78.36	0.30	-0.09	13.78
8,021.00	1.32	33.63	8,018.87	69.38	-40.11	79.56	0.24	0.19	6.85
8,115.00	0.97	32.57	8,112.85	70.95	-39.09	80.60	0.37	-0.37	-1.13
8,210.00	0.88	45.67	8,207.84	72.13	-38.13	81.32	0.24	-0.09	13.79

<b>Company:</b>	US ROCKIES REGION PLANNING	<b>Local Co-ordinate Reference:</b>	Well NBU 920-24I
<b>Project:</b>	UTAH - UTM (feet), NAD27, Zone 12N	<b>TVD Reference:</b>	GL 4807 & KB 19 @ 4826.00ft (PIONEER 54)
<b>Site:</b>	NBU 920-24I	<b>MD Reference:</b>	GL 4807 & KB 19 @ 4826.00ft (PIONEER 54)
<b>Well:</b>	NBU 920-24I	<b>North Reference:</b>	True
<b>Wellbore:</b>	OH	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	OH	<b>Database:</b>	EDM 5000.1 Single User Db

**Survey**

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N-S (ft)	+E-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
8,306.00	1.14	62.28	8,303.82	73.09	-36.76	81.66	0.41	0.27	17.30
8,401.00	1.23	70.28	8,398.80	73.88	-34.96	81.68	0.20	0.09	8.42
8,496.00	1.41	91.64	8,493.78	74.19	-32.83	81.12	0.55	0.19	22.48
8,591.00	1.41	93.39	8,588.75	74.09	-30.50	80.11	0.05	0.00	1.84
8,685.00	1.41	97.00	8,682.72	73.88	-28.20	79.01	0.09	0.00	3.84
8,780.00	1.49	107.90	8,777.69	73.35	-25.86	77.61	0.30	0.08	11.47
8,875.00	1.67	97.17	8,872.65	72.80	-23.31	76.10	0.36	0.19	-11.29
8,970.00	1.76	93.31	8,967.61	72.54	-20.48	74.75	0.15	0.09	-4.06
9,064.00	1.32	79.86	9,061.58	72.65	-17.98	73.86	0.60	-0.47	-14.31
9,159.00	1.76	86.98	9,156.54	72.92	-15.44	73.11	0.50	0.46	7.49
9,254.00	1.67	92.43	9,251.50	72.94	-12.60	72.01	0.20	-0.09	5.74
9,349.00	1.93	101.74	9,346.45	72.56	-9.65	70.50	0.41	0.27	9.80
9,444.00	1.76	99.37	9,441.40	71.99	-6.65	68.80	0.20	-0.18	-2.49
9,538.00	1.85	99.63	9,535.36	71.50	-3.73	67.20	0.10	0.10	0.28
9,633.00	1.85	100.16	9,630.31	70.98	-0.71	65.53	0.02	0.00	0.56
9,728.00	2.02	104.20	9,725.25	70.30	2.43	63.67	0.23	0.18	4.25
9,823.00	2.96	101.69	9,820.16	69.39	6.45	61.25	1.00	0.99	-2.64
9,918.00	2.90	96.56	9,915.04	68.62	11.24	58.65	0.28	-0.06	-5.40
10,013.00	2.81	95.77	10,009.92	68.11	15.95	56.34	0.10	-0.09	-0.83
10,107.00	2.90	99.19	10,103.80	67.50	20.59	53.95	0.20	0.10	3.64
10,202.00	2.20	103.85	10,198.71	66.68	24.73	51.56	0.77	-0.74	4.91
10,297.00	1.85	121.08	10,293.65	65.45	27.81	49.22	0.74	-0.37	18.14
10,391.00	2.03	131.22	10,387.60	63.57	30.36	46.49	0.41	0.19	10.79
10,486.00	2.20	129.16	10,482.53	61.31	33.04	43.35	0.20	0.18	-2.17
10,581.00	1.76	128.99	10,577.48	59.24	35.59	40.45	0.46	-0.46	-0.18
10,675.00	1.76	139.62	10,671.43	57.23	37.65	37.79	0.35	0.00	11.31
10,770.00	2.11	123.72	10,766.38	55.15	40.05	34.94	0.67	0.37	-16.74
10,864.00	2.29	142.08	10,860.31	52.71	42.64	31.67	0.77	0.19	19.53
10,958.00	2.46	123.72	10,954.23	50.10	45.47	28.16	0.83	0.18	-19.53
11,053.00	2.11	140.94	11,049.16	47.61	48.27	24.77	0.81	-0.37	18.13
11,148.00	2.37	127.67	11,144.08	45.06	50.93	21.38	0.61	0.27	-13.97
11,243.00	2.46	129.78	11,239.00	42.55	54.05	17.84	0.13	0.09	2.22
11,337.00	2.29	129.52	11,332.92	40.07	57.05	14.38	0.18	-0.18	-0.28
<b>LAST SDI MWD PRODUCTION SURVEY</b>									
11,396.00	2.29	129.52	11,391.87	38.57	58.87	12.28	0.00	0.00	0.00
<b>SDI PROJECTION TO BIT</b>									

<b>Company:</b>	US ROCKIES REGION PLANNING	<b>Local Co-ordinate Reference:</b>	Well NBU 920-24I
<b>Project:</b>	UTAH - UTM (feet), NAD27, Zone 12N	<b>TVD Reference:</b>	GL 4807 & KB 19 @ 4826.00ft (PIONEER 54)
<b>Site:</b>	NBU 920-24I	<b>MD Reference:</b>	GL 4807 & KB 19 @ 4826.00ft (PIONEER 54)
<b>Well:</b>	NBU 920-24I	<b>North Reference:</b>	True
<b>Wellbore:</b>	OH	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	OH	<b>Database:</b>	EDM 5000.1 Single User Db

Design Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment	
		+N/-S (ft)	+E/-W (ft)		
153.00	153.00	-0.31	-0.06	FIRST SDI MWD SURFACE SURVEY	
2,782.00	2,781.59	30.87	-13.22	LAST SDI MWD SURFACE SURVEY	
2,895.00	2,894.57	30.73	-15.21	FIRST SDI MWD PRODUCTION SURVEY	
11,337.00	11,332.92	40.07	57.05	LAST SDI MWD PRODUCTION SURVEY	
11,396.00	11,391.87	38.57	58.87	SDI PROJECTION TO BIT	

Checked By: \_\_\_\_\_ Approved By: \_\_\_\_\_ Date: \_\_\_\_\_



<b>Company:</b>	US ROCKIES REGION PLANNING	<b>Local Co-ordinate Reference:</b>	Well NBU 920-24I
<b>Project:</b>	UTAH - UTM (feet), NAD27, Zone 12N	<b>TVD Reference:</b>	GL 4807 & KB 19 @ 4826.00ft (PIONEER 54)
<b>Site:</b>	NBU 920-24I	<b>MD Reference:</b>	GL 4807 & KB 19 @ 4826.00ft (PIONEER 54)
<b>Well:</b>	NBU 920-24I	<b>North Reference:</b>	True
<b>Wellbore:</b>	OH	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	OH	<b>Database:</b>	EDM 5000.1 Single User Db

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

<b>Site</b>	NBU 920-24I, SECTION 24 T9S R20E				
<b>Site Position:</b>		<b>Northing:</b>	14,536,089.48 usft	<b>Latitude:</b>	40.019220
<b>From:</b>	Lat/Long	<b>Easting:</b>	2,030,264.42 usft	<b>Longitude:</b>	-109.607610
<b>Position Uncertainty:</b>	0.00 ft	<b>Slot Radius:</b>	13.200 in	<b>Grid Convergence:</b>	0.90 °

<b>Well</b>	NBU 920-24I, 1983 FSL 820 FEL					
<b>Well Position</b>	<b>+N-S</b>	0.00 ft	<b>Northing:</b>	14,536,089.48 usft	<b>Latitude:</b>	40.019220
	<b>+E-W</b>	0.00 ft	<b>Easting:</b>	2,030,264.42 usft	<b>Longitude:</b>	-109.607610
<b>Position Uncertainty</b>		0.00 ft	<b>Wellhead Elevation:</b>	ft	<b>Ground Level:</b>	4,807.00 ft

<b>Wellbore</b>	OH				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	IGRF2010	01/26/12	11.04	65.85	52,265

<b>Design</b>	OH				
<b>Audit Notes:</b>					
<b>Version:</b>	1.0	<b>Phase:</b>	ACTUAL	<b>Tie On Depth:</b>	0.00
<b>Vertical Section:</b>	<b>Depth From (TVD) (ft)</b>	<b>+N-S (ft)</b>	<b>+E-W (ft)</b>	<b>Direction (°)</b>	
	0.00	0.00	0.00	336.82	

<b>Survey Program</b>	<b>Date</b>	03/19/12			
<b>From (ft)</b>	<b>To (ft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Description</b>	
15.00	2,782.00	Survey #1 SDI MWD PRODUCTION (OH)	SDI MWD	SDI MWD - Standard ver 1.0.1	
2,895.00	11,396.00	Survey #2 SDI MWD PRODUCTION (OH)	SDI MWD	SDI MWD - Standard ver 1.0.1	

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N-S (ft)	+E-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
0.00	0.00	0.00	0.00	0.00	0.00	14,536,089.48	2,030,264.42	40.019220	-109.607610
15.00	0.00	0.00	15.00	0.00	0.00	14,536,089.48	2,030,264.42	40.019220	-109.607610
153.00	0.26	190.69	153.00	-0.31	-0.06	14,536,089.17	2,030,264.37	40.019219	-109.607610
<b>FIRST SDI MWD SURFACE SURVEY</b>									
181.00	0.55	156.40	181.00	-0.49	-0.02	14,536,088.98	2,030,264.41	40.019219	-109.607610
208.00	0.48	139.61	208.00	-0.70	0.11	14,536,088.78	2,030,264.54	40.019218	-109.607610
236.00	0.53	175.13	236.00	-0.92	0.20	14,536,088.56	2,030,264.63	40.019218	-109.607610
263.00	0.35	173.37	263.00	-1.12	0.22	14,536,088.36	2,030,264.66	40.019217	-109.607610
292.00	0.53	174.43	292.00	-1.34	0.24	14,536,088.13	2,030,264.68	40.019216	-109.607609
323.00	0.53	159.49	322.99	-1.62	0.30	14,536,087.86	2,030,264.75	40.019216	-109.607609
352.00	0.62	149.91	351.99	-1.88	0.43	14,536,087.60	2,030,264.88	40.019215	-109.607609

<b>Company:</b>	US ROCKIES REGION PLANNING	<b>Local Co-ordinate Reference:</b>	Well NBU 920-241
<b>Project:</b>	UTAH - UTM (feet), NAD27, Zone 12N	<b>TVD Reference:</b>	GL 4807 & KB 19 @ 4826.00ft (PIONEER 54)
<b>Site:</b>	NBU 920-241	<b>MD Reference:</b>	GL 4807 & KB 19 @ 4826.00ft (PIONEER 54)
<b>Well:</b>	NBU 920-241	<b>North Reference:</b>	True
<b>Wellbore:</b>	OH	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	OH	<b>Database:</b>	EDM 5000.1 Single User Db

Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude	
442.00	0.09	259.68	441.99	-2.32	0.60	14,536,087.17	2,030,265.06	40.019214	-109.607608	
532.00	0.18	331.67	531.99	-2.20	0.47	14,536,087.28	2,030,264.92	40.019214	-109.607609	
622.00	0.44	336.50	621.99	-1.76	0.26	14,536,087.72	2,030,264.71	40.019215	-109.607609	
712.00	0.53	347.57	711.99	-1.04	0.03	14,536,088.44	2,030,264.47	40.019217	-109.607610	
802.00	0.88	342.83	801.98	0.03	-0.26	14,536,089.50	2,030,264.16	40.019220	-109.607611	
892.00	0.62	345.38	891.97	1.16	-0.59	14,536,090.62	2,030,263.82	40.019223	-109.607612	
982.00	0.62	352.41	981.97	2.11	-0.77	14,536,091.57	2,030,263.62	40.019226	-109.607613	
1,072.00	0.79	358.65	1,071.96	3.21	-0.85	14,536,092.68	2,030,263.52	40.019229	-109.607613	
1,162.00	0.79	355.92	1,161.95	4.45	-0.91	14,536,093.91	2,030,263.44	40.019232	-109.607614	
1,252.00	0.79	366.00	1,251.94	5.69	-0.92	14,536,095.15	2,030,263.42	40.019236	-109.607614	
1,342.00	0.62	350.65	1,341.94	6.79	-0.95	14,536,096.25	2,030,263.36	40.019239	-109.607614	
1,432.00	0.70	361.11	1,431.93	7.82	-1.02	14,536,097.28	2,030,263.28	40.019242	-109.607614	
1,522.00	0.77	372.55	1,521.92	8.96	-0.88	14,536,098.42	2,030,263.40	40.019245	-109.607613	
1,612.00	0.98	383.21	1,611.91	10.25	-0.42	14,536,099.72	2,030,263.84	40.019248	-109.607612	
1,702.00	1.49	393.64	1,701.89	12.11	-0.22	14,536,101.58	2,030,264.01	40.019253	-109.607611	
1,792.00	1.85	403.19	1,791.85	14.69	-0.65	14,536,104.16	2,030,263.54	40.019260	-109.607613	
1,882.00	1.67	413.58	1,881.81	17.38	-1.30	14,536,106.83	2,030,262.85	40.019268	-109.607615	
1,972.00	1.67	424.90	1,971.77	19.92	-1.96	14,536,109.36	2,030,262.15	40.019275	-109.607617	
2,062.00	1.49	435.78	2,061.74	22.28	-2.71	14,536,111.71	2,030,261.37	40.019281	-109.607620	
2,152.00	1.41	446.13	2,151.71	24.36	-3.61	14,536,113.78	2,030,260.43	40.019287	-109.607623	
2,242.00	1.23	456.15	2,241.69	26.18	-4.61	14,536,115.58	2,030,259.41	40.019292	-109.607627	
2,332.00	1.06	466.60	2,331.67	27.62	-5.68	14,536,117.00	2,030,258.31	40.019296	-109.607631	
2,422.00	1.06	477.37	2,421.65	28.75	-6.89	14,536,118.11	2,030,257.08	40.019299	-109.607635	
2,512.00	1.06	488.96	2,511.64	29.71	-8.25	14,536,119.05	2,030,255.71	40.019302	-109.607640	
2,602.00	1.06	500.83	2,601.62	30.42	-9.75	14,536,119.73	2,030,254.20	40.019304	-109.607645	
2,692.00	1.23	512.77	2,691.60	30.78	-11.49	14,536,120.07	2,030,252.45	40.019305	-109.607651	
2,782.00	0.97	524.61	2,781.59	30.87	-13.22	14,536,120.14	2,030,250.72	40.019305	-109.607657	
<b>LAST SDI MWD SURFACE SURVEY</b>										
2,895.00	1.06	536.58	2,894.57	30.73	-15.21	14,536,119.97	2,030,248.73	40.019304	-109.607665	
<b>FIRST SDI MWD PRODUCTION SURVEY</b>										
2,990.00	0.92	548.44	2,989.56	30.68	-16.84	14,536,119.89	2,030,247.10	40.019304	-109.607670	
3,084.00	0.88	560.45	3,083.54	30.69	-18.31	14,536,119.88	2,030,245.63	40.019304	-109.607676	
3,179.00	0.97	572.17	3,178.53	30.75	-19.84	14,536,119.91	2,030,244.10	40.019305	-109.607681	
3,274.00	0.44	584.17	3,273.52	30.81	-21.00	14,536,119.95	2,030,242.94	40.019305	-109.607685	
3,369.00	0.79	596.33	3,368.52	30.43	-21.92	14,536,119.56	2,030,242.03	40.019304	-109.607689	
3,464.00	0.70	608.61	3,463.51	29.73	-22.94	14,536,118.85	2,030,241.02	40.019302	-109.607692	
3,559.00	0.88	620.18	3,558.50	28.90	-23.95	14,536,118.00	2,030,240.02	40.019299	-109.607696	
3,654.00	0.97	631.55	3,653.49	27.80	-25.01	14,536,116.88	2,030,238.98	40.019296	-109.607700	
3,748.00	1.23	643.96	3,747.47	26.20	-25.78	14,536,115.27	2,030,238.24	40.019292	-109.607702	
3,843.00	0.88	656.66	3,842.46	24.50	-26.11	14,536,113.56	2,030,237.93	40.019287	-109.607704	
3,938.00	1.32	669.80	3,937.44	22.70	-26.40	14,536,111.76	2,030,237.67	40.019282	-109.607705	
4,033.00	1.14	682.73	4,032.42	20.69	-26.54	14,536,109.75	2,030,237.57	40.019277	-109.607705	
4,128.00	0.79	695.02	4,127.40	19.13	-26.62	14,536,108.19	2,030,237.50	40.019273	-109.607705	
4,223.00	1.06	707.68	4,222.39	17.63	-26.78	14,536,106.68	2,030,237.37	40.019268	-109.607706	
4,318.00	1.14	720.79	4,317.37	15.80	-26.74	14,536,104.86	2,030,237.44	40.019263	-109.607706	
4,413.00	1.32	733.89	4,412.35	13.77	-26.83	14,536,102.82	2,030,237.38	40.019258	-109.607706	
4,508.00	1.70	746.35	4,507.32	11.27	-27.06	14,536,100.32	2,030,237.19	40.019251	-109.607707	
4,603.00	0.79	758.75	4,602.30	9.56	-27.76	14,536,098.60	2,030,236.51	40.019246	-109.607709	
4,697.00	0.44	771.15	4,696.29	9.34	-28.69	14,536,098.36	2,030,235.59	40.019246	-109.607713	
4,792.00	0.70	783.85	4,791.29	9.56	-29.60	14,536,098.57	2,030,234.67	40.019246	-109.607716	
4,887.00	0.62	796.62	4,886.28	9.28	-30.47	14,536,098.28	2,030,233.81	40.019246	-109.607719	
4,982.00	0.44	809.64	4,981.28	8.69	-31.10	14,536,097.68	2,030,233.19	40.019244	-109.607721	
5,077.00	0.53	822.40	5,076.28	8.09	-31.26	14,536,097.08	2,030,233.04	40.019242	-109.607722	
5,172.00	0.31	835.18	5,171.27	7.43	-31.07	14,536,096.41	2,030,233.24	40.019240	-109.607721	
5,267.00	0.53	847.91	5,266.27	6.82	-31.29	14,536,095.80	2,030,233.03	40.019239	-109.607722	

<b>Company:</b>	US ROCKIES REGION PLANNING	<b>Local Co-ordinate Reference:</b>	Well NBU 920-24I
<b>Project:</b>	UTAH - UTM (feet), NAD27, Zone 12N	<b>TVD Reference:</b>	GL 4807 & KB 19 @ 4826.00ft (PIONEER 54)
<b>Site:</b>	NBU 920-24I	<b>MD Reference:</b>	GL 4807 & KB 19 @ 4826.00ft (PIONEER 54)
<b>Well:</b>	NBU 920-24I	<b>North Reference:</b>	True
<b>Wellbore:</b>	OH	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	OH	<b>Database:</b>	EDM 5000.1 Single User Db

Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude	
5,362.00	0.35	178.47	5,361.27	6.17	-31.54	14,536,095.15	2,030,232.79	40.019237	-109.607723	
5,457.00	0.76	162.24	5,456.26	5.28	-31.34	14,536,094.26	2,030,233.00	40.019235	-109.607722	
5,552.00	0.62	191.74	5,551.26	4.18	-31.25	14,536,093.16	2,030,233.11	40.019232	-109.607722	
5,646.00	0.97	160.54	5,645.25	2.93	-31.09	14,536,091.92	2,030,233.29	40.019228	-109.607721	
5,741.00	0.88	176.54	5,740.24	1.44	-30.78	14,536,090.44	2,030,233.62	40.019224	-109.607720	
5,837.00	0.79	243.16	5,836.23	0.41	-31.32	14,536,089.39	2,030,233.09	40.019221	-109.607722	
5,931.00	1.58	300.11	5,930.21	0.76	-33.02	14,536,089.72	2,030,231.39	40.019222	-109.607728	
6,026.00	2.11	318.57	6,025.16	2.73	-35.31	14,536,091.66	2,030,229.07	40.019228	-109.607736	
6,121.00	2.81	334.21	6,120.07	6.14	-37.48	14,536,095.03	2,030,226.85	40.019237	-109.607744	
6,216.00	2.46	342.48	6,214.97	10.18	-39.11	14,536,099.04	2,030,225.16	40.019248	-109.607750	
6,310.00	2.55	351.00	6,308.88	14.17	-40.05	14,536,103.02	2,030,224.16	40.019259	-109.607753	
6,405.00	2.29	354.34	6,403.80	18.15	-40.56	14,536,106.99	2,030,223.58	40.019270	-109.607755	
6,501.00	2.55	343.79	6,499.71	22.11	-41.35	14,536,110.93	2,030,222.73	40.019281	-109.607758	
6,596.00	2.64	352.23	6,594.62	26.30	-42.23	14,536,115.11	2,030,221.78	40.019292	-109.607761	
6,691.00	2.02	354.25	6,689.54	30.14	-42.70	14,536,118.94	2,030,221.26	40.019303	-109.607763	
6,786.00	2.64	346.25	6,784.46	33.93	-43.39	14,536,122.72	2,030,220.51	40.019313	-109.607765	
6,882.00	2.77	348.62	6,880.35	38.35	-44.37	14,536,127.13	2,030,219.46	40.019325	-109.607769	
6,977.00	2.38	352.68	6,975.26	42.56	-45.07	14,536,131.32	2,030,218.69	40.019337	-109.607771	
7,072.00	2.20	2.95	7,070.18	46.33	-45.23	14,536,135.10	2,030,218.47	40.019347	-109.607772	
7,166.00	2.02	357.86	7,164.12	49.79	-45.20	14,536,138.55	2,030,218.45	40.019357	-109.607772	
7,262.00	1.52	359.33	7,260.07	52.76	-45.28	14,536,141.52	2,030,218.32	40.019365	-109.607772	
7,357.00	1.49	9.99	7,355.04	55.23	-45.08	14,536,144.00	2,030,218.49	40.019372	-109.607771	
7,452.00	1.41	23.87	7,450.01	57.52	-44.39	14,536,146.29	2,030,219.14	40.019378	-109.607769	
7,547.00	1.32	13.76	7,544.98	59.65	-43.66	14,536,148.43	2,030,219.84	40.019384	-109.607766	
7,641.00	1.41	26.25	7,638.96	61.74	-42.89	14,536,150.53	2,030,220.57	40.019390	-109.607763	
7,736.00	1.23	8.32	7,733.93	63.79	-42.22	14,536,152.60	2,030,221.21	40.019395	-109.607761	
7,831.00	1.23	14.03	7,828.91	65.79	-41.83	14,536,154.61	2,030,221.57	40.019401	-109.607760	
7,926.00	1.14	27.12	7,923.89	67.62	-41.15	14,536,156.45	2,030,222.22	40.019406	-109.607757	
8,021.00	1.32	33.63	8,018.87	69.38	-40.11	14,536,158.21	2,030,223.23	40.019411	-109.607754	
8,115.00	0.97	32.57	8,112.85	70.95	-39.09	14,536,159.80	2,030,224.23	40.019415	-109.607750	
8,210.00	0.88	45.67	8,207.84	72.13	-38.13	14,536,161.00	2,030,225.17	40.019418	-109.607746	
8,306.00	1.14	62.28	8,303.82	73.09	-36.76	14,536,161.99	2,030,226.52	40.019421	-109.607742	
8,401.00	1.23	70.28	8,398.80	73.88	-34.96	14,536,162.80	2,030,228.31	40.019423	-109.607735	
8,496.00	1.41	91.64	8,493.78	74.19	-32.83	14,536,163.14	2,030,230.43	40.019424	-109.607728	
8,591.00	1.41	93.39	8,588.75	74.09	-30.50	14,536,163.07	2,030,232.77	40.019424	-109.607719	
8,685.00	1.41	97.00	8,682.72	73.88	-28.20	14,536,162.90	2,030,235.07	40.019423	-109.607711	
8,780.00	1.49	107.90	8,777.69	73.35	-25.86	14,536,162.42	2,030,237.42	40.019422	-109.607703	
8,875.00	1.67	97.17	8,872.65	72.80	-23.31	14,536,161.90	2,030,239.97	40.019420	-109.607694	
8,970.00	1.76	93.31	8,967.61	72.54	-20.48	14,536,161.69	2,030,242.81	40.019419	-109.607683	
9,064.00	1.32	79.86	9,061.58	72.65	-17.98	14,536,161.84	2,030,245.31	40.019420	-109.607674	
9,159.00	1.76	86.98	9,156.54	72.92	-15.44	14,536,162.15	2,030,247.84	40.019420	-109.607665	
9,254.00	1.67	92.43	9,251.50	72.94	-12.60	14,536,162.21	2,030,250.68	40.019420	-109.607655	
9,349.00	1.93	101.74	9,346.45	72.56	-9.65	14,536,161.87	2,030,253.64	40.019419	-109.607645	
9,444.00	1.76	99.37	9,441.40	71.99	-6.65	14,536,161.35	2,030,256.65	40.019418	-109.607634	
9,538.00	1.85	99.63	9,535.36	71.50	-3.73	14,536,160.91	2,030,259.58	40.019416	-109.607624	
9,633.00	1.85	100.16	9,630.31	70.98	-0.71	14,536,160.43	2,030,262.61	40.019415	-109.607613	
9,728.00	2.02	104.20	9,725.25	70.30	2.43	14,536,159.80	2,030,265.75	40.019413	-109.607602	
9,823.00	2.96	101.69	9,820.16	69.39	6.45	14,536,158.96	2,030,269.79	40.019411	-109.607587	
9,918.00	2.90	96.56	9,915.04	68.62	11.24	14,536,158.26	2,030,274.59	40.019409	-109.607570	
10,013.00	2.81	95.77	10,009.92	68.11	15.95	14,536,157.82	2,030,279.30	40.019407	-109.607553	
10,107.00	2.90	99.19	10,103.80	67.50	20.59	14,536,157.28	2,030,283.95	40.019405	-109.607537	
10,202.00	2.20	103.85	10,198.71	66.68	24.73	14,536,156.53	2,030,288.10	40.019403	-109.607522	
10,297.00	1.85	121.08	10,293.65	65.45	27.81	14,536,155.35	2,030,291.21	40.019400	-109.607511	
10,391.00	2.03	131.22	10,387.60	63.57	30.36	14,536,153.51	2,030,293.79	40.019395	-109.607502	
10,486.00	2.20	129.16	10,482.53	61.31	33.04	14,536,151.29	2,030,296.50	40.019388	-109.607492	

<b>Company:</b>	US ROCKIES REGION PLANNING	<b>Local Co-ordinate Reference:</b>	Well NBU 920-24I
<b>Project:</b>	UTAH - UTM (feet), NAD27, Zone 12N	<b>TVD Reference:</b>	GL 4807 & KB 19 @ 4826.00ft (PIONEER 54)
<b>Site:</b>	NBU 920-24I	<b>MD Reference:</b>	GL 4807 & KB 19 @ 4826.00ft (PIONEER 54)
<b>Well:</b>	NBU 920-24I	<b>North Reference:</b>	True
<b>Wellbore:</b>	OH	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	OH	<b>Database:</b>	EDM 5000.1 Single User Db

Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
10,581.00	1.76	128.99	10,577.48	59.24	35.59	14,536,149.26	2,030,299.08	40.019383	-109.607483
10,675.00	1.76	139.62	10,671.43	57.23	37.65	14,536,147.29	2,030,301.17	40.019377	-109.607476
10,770.00	2.11	123.72	10,766.38	55.15	40.05	14,536,145.24	2,030,303.60	40.019372	-109.607467
10,864.00	2.29	142.08	10,860.31	52.71	42.64	14,536,142.84	2,030,306.23	40.019365	-109.607458
10,958.00	2.46	123.72	10,954.23	50.10	45.47	14,536,140.28	2,030,309.11	40.019358	-109.607448
11,053.00	2.11	140.94	11,049.16	47.61	48.27	14,536,137.84	2,030,311.94	40.019351	-109.607438
11,148.00	2.37	127.67	11,144.08	45.06	50.93	14,536,135.32	2,030,314.64	40.019344	-109.607428
11,243.00	2.46	129.78	11,239.00	42.55	54.05	14,536,132.87	2,030,317.80	40.019337	-109.607417
11,337.00	2.29	129.52	11,332.92	40.07	57.05	14,536,130.43	2,030,320.84	40.019330	-109.607407
<b>LAST SDI MWD PRODUCTION SURVEY</b>									
11,396.00	2.29	129.52	11,391.87	38.57	58.87	14,536,128.96	2,030,322.68	40.019326	-109.607400
<b>SDI PROJECTION TO BIT</b>									

Design Annotations					
Measured Depth (ft)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Comment	
153.00	153.00	-0.31	-0.06	FIRST SDI MWD SURFACE SURVEY	
2,782.00	2,781.59	30.87	-13.22	LAST SDI MWD SURFACE SURVEY	
2,895.00	2,894.57	30.73	-15.21	FIRST SDI MWD PRODUCTION SURVEY	
11,337.00	11,332.92	40.07	57.05	LAST SDI MWD PRODUCTION SURVEY	
11,396.00	11,391.87	38.57	58.87	SDI PROJECTION TO BIT	

Checked By: \_\_\_\_\_ Approved By: \_\_\_\_\_ Date: \_\_\_\_\_

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		FORM 9
		<b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> UTU-0579
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>		<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b> Ute
Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		<b>7. UNIT or CA AGREEMENT NAME:</b> NATURAL BUTTES
<b>1. TYPE OF WELL</b> Gas Well		<b>8. WELL NAME and NUMBER:</b> NBU 920-241
<b>2. NAME OF OPERATOR:</b> KERR-MCGEE OIL & GAS ONSHORE, L.P.		<b>9. API NUMBER:</b> 43047501460000
<b>3. ADDRESS OF OPERATOR:</b> P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779	<b>PHONE NUMBER:</b> 720 929-6514	<b>9. FIELD and POOL or WILDCAT:</b> NATURAL BUTTES
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 1983 FSL 0829 FEL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: NESE Section: 24 Township: 09.0S Range: 20.0E Meridian: S		<b>COUNTY:</b> UINTAH
		<b>STATE:</b> UTAH
11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA		
<b>TYPE OF SUBMISSION</b>	<b>TYPE OF ACTION</b>	
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start:  <input checked="" type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion: 7/18/2013  <input type="checkbox"/> SPUD REPORT Date of Spud:  <input type="checkbox"/> DRILLING REPORT Report Date:	<input type="checkbox"/> ACIDIZE <input type="checkbox"/> ALTER CASING <input type="checkbox"/> CASING REPAIR <input type="checkbox"/> CHANGE TO PREVIOUS PLANS <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> CHANGE WELL NAME <input type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input type="checkbox"/> CONVERT WELL TYPE <input type="checkbox"/> DEEPEN <input type="checkbox"/> FRACTURE TREAT <input type="checkbox"/> NEW CONSTRUCTION <input type="checkbox"/> OPERATOR CHANGE <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> PLUG BACK <input type="checkbox"/> PRODUCTION START OR RESUME <input type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION <input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> TEMPORARY ABANDON <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> WATER DISPOSAL <input type="checkbox"/> WATER SHUTOFF <input type="checkbox"/> SI TA STATUS EXTENSION <input type="checkbox"/> WILDCAT WELL DETERMINATION <input checked="" type="checkbox"/> OTHER	
	OTHER: <input type="text" value="Production Enhancement"/>	
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.		
<p>The operator conducted the following workover/wellbore cleanout on the subject well on 7/18/2013. Please see the attached chronological well history for details. Thank you</p>		
<p><b>Accepted by the Utah Division of Oil, Gas and Mining FOR RECORD ONLY August 19, 2013</b></p>		
<b>NAME (PLEASE PRINT)</b> Teena Paulo	<b>PHONE NUMBER</b> 720 929-6236	<b>TITLE</b> Staff Regulatory Specialist
<b>SIGNATURE</b> N/A		<b>DATE</b> 8/16/2013

**US ROCKIES REGION  
Operation Summary Report**

Well: NBU 920-24I

Spud Date: 2/11/2012

Project: UTAH-UINTAH

Site: NBU 920-24I

Rig Name No: SWABBCO 8/8

Event: WELL WORK EXPENSE

Start Date: 7/18/2013

End Date: 7/23/2013

Active Datum: RKB @4,826.00usft (above Mean Sea Level)

UWI: NE/SE/0/9/S/20/E/24/0/0/26/PM/S/1983/E/0/829/0/0

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
7/18/2013	6:45 - 7:00	0.25	MAINT	48		P		HSM, JSA
	7:00 - 9:00	2.00	MAINT	30	A	P		MIRU, 960# FCP, CONTROL WELL W/ 45 BBLs T-MAC, ND WH, NU BOP'S, RU FLOOR & TBG EQUIP
	9:00 - 15:00	6.00	MAINT	31		P		WORK STUCK TBG, COULD NOT GET TBG FREE, CALL FOR WIRELINE, DROP STANDING VALVE & FILL TBG W/ T-MAC
	15:00 - 19:00	4.00	MAINT	34	A	P		MIRU CUTTERS WIRELINE, RUN STUCK PIPE LOG, FIND TBG STUCK FROM 9840' TO 9877', POOH W/ LOGGING TOOLS, RIH W/ CHEMICAL CUTTER & CUT TBG @ 9803', POOH, RD CUTTERS, SDFN.
7/19/2013	6:45 - 7:00	0.25	MAINT	48		P		HSM, JSA
	7:00 - 10:30	3.50	MAINT	31	I	P		800# FCP, CONTROLL W/ 40 BBLs T-MAC, MIRU SCAN TECH, TOOH & SCAN 2-3/8" TBG, SCANED A TOTAL OF 308 JTS, 302 GOOD JTS & 6 JTS WERE REJECTED DUE TO WALL LOSS GREATER THAN 30%
	10:30 - 15:00	4.50	MAINT	31	I	P		P/U 3-7/8" SHOE, 6 JTS WASH PIPE, TOP SUB, 3-1/8" JAR, X OVER, 10' SUB, TIH ON 2-3/8" TBG, SDFWE W/ EOT @ 8153'
7/22/2013	6:45 - 7:00	0.25	MAINT	48		P		HSM, JSA
	7:00 - 8:00	1.00	MAINT	31	I	P		400# FCP, TIH W/ 2-3/8" TBG TAG FILL @ 9790'
	8:00 - 12:30	4.50	MAINT	31	B	P		MIRU PWR SWVL, MIRU TECH FOAM, ESTB CIRC IN 35 MINS, WASH OVER FROM 9790' TO 10,234', CIRC WELL CLEAN, RD TECH FOAM
	12:30 - 16:00	3.50	MAINT	31	I	P		TOOH W/ 2-3/8" TBG, LD 3-7/8" SHOE & 6 JTS OF WASH PIPE
	16:00 - 17:00	1.00	MAINT	31	I	P		P/U OVERSHOT & JARS, TIH W/ 50 STANDS 2-3/8" TBG, SDFN
7/23/2013	6:45 - 7:00	0.25	MAINT	48		P		HSM, JSA
	7:00 - 13:00	6.00	MAINT	31	B	P		550# FCP, TIH W/ 2-3/8" TBG, LATCH FISH @ 10,071', TOOH W/ 2-3/8" TBG, LD JARS & OVERSHOT, LD 38 JTS OF FISH
	13:00 - 18:00	5.00	MAINT	31	I	P		M/U LSN, TIH W/ 154 JTS 2-3/8" TBG, BROACH TBG W/ 1.910 BROACH TO LSN, TIH W/ REMAINING 192 JTS TBG & BROACH TOP HALF OF TBG, LAND TBG ON HANGER W/ 364 P-110 TBG
	18:00 - 19:00	1.00	MAINT	30	F	P		ND BOP'S, NU WH, SWI, SDFN
								KB 19'
								HANGER .83'
								346 JTS 2-3/8" P-110 10962.70'
								LSN 1.50'
								EOT @ 10984.03'
								WLTR 0 BBLs