

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

FORM 3

AMENDED REPORT

APPLICATION FOR PERMIT TO DRILL						1. WELL NAME and NUMBER NBU 921-21E1S	
2. TYPE OF WORK DRILL NEW WELL <input checked="" type="checkbox"/> REENTER P&A WELL <input type="checkbox"/> DEEPEN WELL <input type="checkbox"/>						3. FIELD OR WILDCAT NATURAL BUTTES	
4. TYPE OF WELL Gas Well Coalbed Methane Well: NO						5. UNIT or COMMUNITIZATION AGREEMENT NAME NATURAL BUTTES	
6. NAME OF OPERATOR KERR-MCGEE OIL & GAS ONSHORE, L.P.						7. OPERATOR PHONE 720 929-6587	
8. ADDRESS OF OPERATOR P.O. Box 173779, Denver, CO, 80217						9. OPERATOR E-MAIL mary.mondragon@anadarko.com	
10. MINERAL LEASE NUMBER (FEDERAL, INDIAN, OR STATE) UTU-0576			11. MINERAL OWNERSHIP FEDERAL <input checked="" type="checkbox"/> INDIAN <input type="checkbox"/> STATE <input type="checkbox"/> FEE <input type="checkbox"/>			12. SURFACE OWNERSHIP FEDERAL <input type="checkbox"/> INDIAN <input checked="" type="checkbox"/> STATE <input type="checkbox"/> FEE <input type="checkbox"/>	
13. NAME OF SURFACE OWNER (if box 12 = 'fee')						14. SURFACE OWNER PHONE (if box 12 = 'fee')	
15. ADDRESS OF SURFACE OWNER (if box 12 = 'fee')						16. SURFACE OWNER E-MAIL (if box 12 = 'fee')	
17. INDIAN ALLOTTEE OR TRIBE NAME (if box 12 = 'INDIAN') Ute			18. INTEND TO COMMINGLE PRODUCTION FROM MULTIPLE FORMATIONS YES <input type="checkbox"/> (Submit Commingling Application) NO <input checked="" type="checkbox"/>			19. SLANT VERTICAL <input type="checkbox"/> DIRECTIONAL <input checked="" type="checkbox"/> HORIZONTAL <input type="checkbox"/>	
20. LOCATION OF WELL	FOOTAGES	QTR-QTR	SECTION	TOWNSHIP	RANGE	MERIDIAN	
LOCATION AT SURFACE	2282 FNL 670 FWL	SWNW	21	9.0 S	21.0 E	S	
Top of Uppermost Producing Zone	1654 FNL 674 FWL	SWNW	21	9.0 S	21.0 E	S	
At Total Depth	1654 FNL 674 FWL	SWNW	21	9.0 S	21.0 E	S	
21. COUNTY UINTAH			22. DISTANCE TO NEAREST LEASE LINE (Feet) 674			23. NUMBER OF ACRES IN DRILLING UNIT 1480	
			25. DISTANCE TO NEAREST WELL IN SAME POOL (Applied For Drilling or Completed) 20			26. PROPOSED DEPTH MD: 10191 TVD: 10100	
27. ELEVATION - GROUND LEVEL 4838			28. BOND NUMBER WYB000291			29. SOURCE OF DRILLING WATER / WATER RIGHTS APPROVAL NUMBER IF APPLICABLE Permit #43-8496	
ATTACHMENTS							
VERIFY THE FOLLOWING ARE ATTACHED IN 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			
NAME Kevin McIntyre			TITLE Regulatory Analyst I			PHONE 720 929-6226	
SIGNATURE			DATE 09/17/2008			EMAIL Kevin.McIntyre@anadarko.com	
API NUMBER ASSIGNED 4304750100000			APPROVAL  Permit Manager				

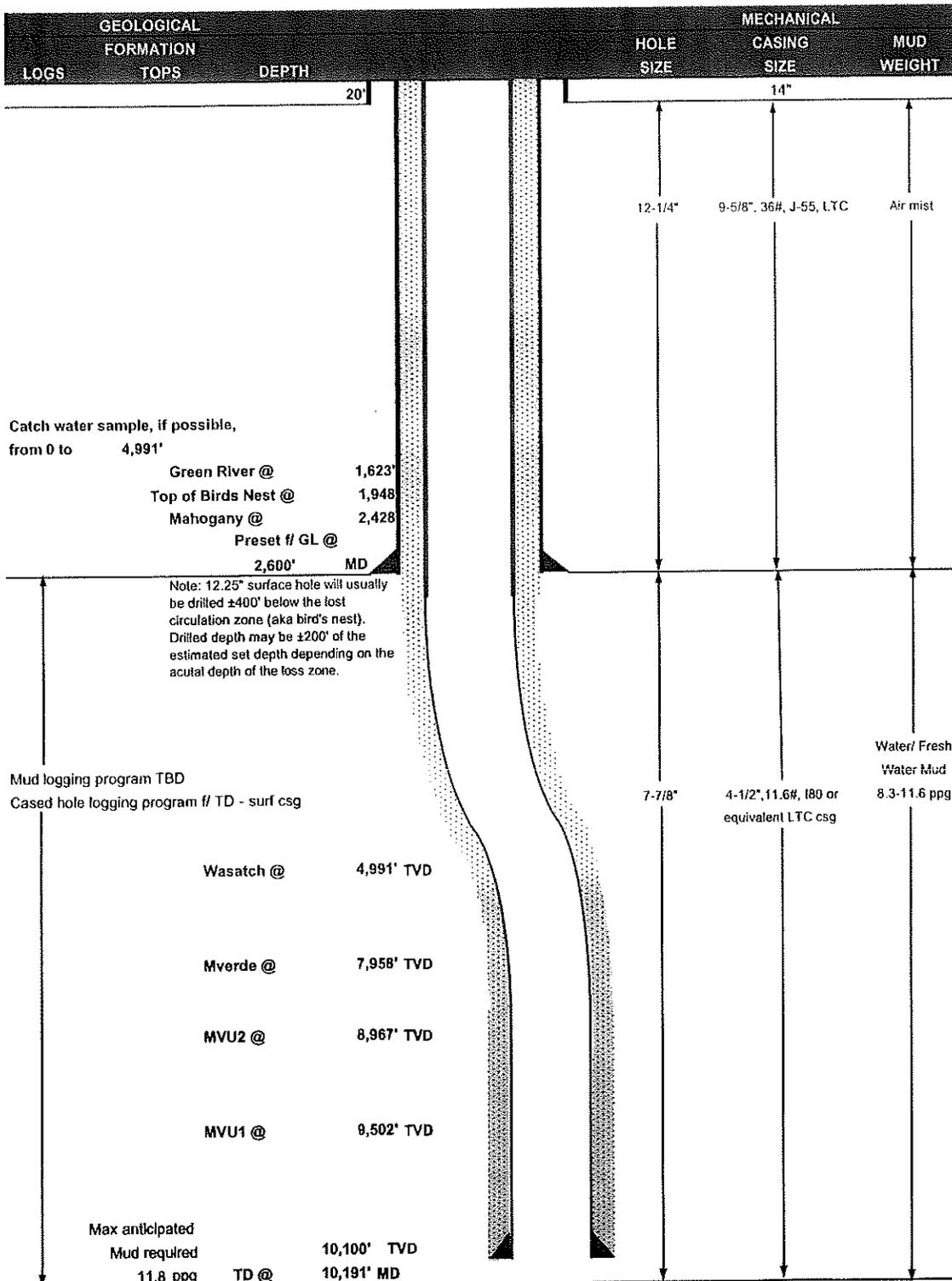
Proposed Hole, Casing, and Cement						
String	Hole Size	Casing Size	Top (MD)	Bottom (MD)		
Surf	12.25	9.625	0	2600		
Pipe	Grade	Length	Weight			
	Grade J-55 LT&C	2600	36.0			
	Cement Interval	Top (MD)	Bottom (MD)			
		0	2600			
		Cement Description	Class	Sacks	Yield	Weight
			Premium Foamed Cement	215	1.18	15.6

Proposed Hole, Casing, and Cement						
String	Hole Size	Casing Size	Top (MD)	Bottom (MD)		
Prod	7.875	4.5	0	10100		
Pipe	Grade	Length	Weight			
	Grade I-80 LT&C	10100	11.6			
	Cement Interval	Top (MD)	Bottom (MD)			
		0	10100			
		Cement Description	Class	Sacks	Yield	Weight
			Premium Lite High Strength	430	3.38	11.0
			Pozzuolanic Cement	1400	1.31	14.3



KERR-McGEE OIL & GAS ONSHORE LP DRILLING PROGRAM

COMPANY NAME	KERR-McGEE OIL & GAS ONSHORE LP		DATE	September 8, 2008	
WELL NAME	NBU 921-21E1S		TD	10,100' TVD	10,191' MD
FIELD	Natural Buttes	COUNTY	Uintah	STATE	Utah
		ELEVATION	4,838' GL	KB 4,853'	
SURFACE LOCATION	SWNW 2282' FNL & 670' FWL, Sec. 21, T 9S R 21E				
	Latitude:	40.022603	Longitude:	-109.563081	NAD 27
BTM HOLE LOCATION	SWNW 1654' FNL & 674' FWL, Sec. 21, T 9S R 21E				
	Latitude:	40.024328	Longitude:	-109.563069	NAD 27
OBJECTIVE ZONE(S)	Wasatch/Mesaverde				
ADDITIONAL INFO	Regulatory Agencies: BLM (MINERALS), BIA(SURFACE), UDOGM, Tri-County Health Dept.				





KERR-McGEE OIL & GAS ONSHORE LP
DRILLING PROGRAM

CASING PROGRAM

	SIZE	INTERVAL	WT.	GR.	CPLG.	DESIGN FACTORS		
						BURST	COLLAPSE	TENSION
CONDUCTOR	14"	0-40'				3520	2020	453000
SURFACE	9-5/8"	0 to 2600	36.00	J-55	LTC	0.89	1.66	6.16
						7780	6350	201000
PRODUCTION	4-1/2"	0 to 10100	11.60	I-80	LTC	1.96	1.02	1.95

- 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 = 11.8 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 4040 psi

CEMENT PROGRAM

		FT. OF FILL	DESCRIPTION	SACKS	EXCESS	WEIGHT	YIELD
SURFACE Option 1	LEAD	500	Premium cmt + 2% CaCl + .25 pps flocele	215	60%	15.60	1.18
	TOP OUT CMT (1)	200	20 gals sodium silicate + Premium cmt + 2% CaCl + .25 pps flocele	50		15.60	1.18
	TOP OUT CMT (2)	as required	Premium cmt + 2% CaCl	as req.		15.60	1.18
NOTE: If well will circulate water to surface, option 2 will be utilized							
SURFACE Option 2	LEAD	1500	65/35 Poz + 6% Gel + 10 pps gilsonite + .25 pps Flocele + 3% salt BWOW	360	35%	12.60	1.81
	TAIL	500	Premium cmt + 2% CaCl + .25 pps flocele	180	35%	15.60	1.18
	TOP OUT CMT	as required	Premium cmt + 2% CaCl	as req.		15.60	1.18
PRODUCTION	LEAD	4,491'	Premium Lite II + 3% KCl + 0.25 pps celloflake + 5 pps gilsonite + 10% gel + 0.5% extender	430	40%	11.00	3.38
	TAIL	5,700'	50/50 Poz/G + 10% salt + 2% gel + .1% R-3	1400	40%	14.30	1.31

*Substitute caliper hole volume plus 0% excess for LEAD if accurate caliper is obtained
 *Substitute caliper hole volume plus 10% excess for TAIL if accurate caliper is obtained

FLOAT EQUIPMENT & CENTRALIZERS

SURFACE	Guide shoe, 1 jt, insert float. Centralize first 3 joints with bow spring centralizers. Thread lock guide shoe.
PRODUCTION	Float shoe, 1 jt, float collar. Centralize first 3 joints & every third joint 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 chert 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 System for mud monitoring. If no PVT is available, visual monitoring will be utilized.

DRILLING ENGINEER: _____
 Brad Laney
 DRILLING SUPERINTENDENT: _____
 Randy Bayne

DATE: _____
 DATE: _____

**NBU 921-21E1S
Twin to NBU #127
SWNW Sec. 21, T9S,R21E
UINTAH COUNTY, UTAH
UTU-0576**

ONSHORE ORDER NO. 1

DRILLING PROGRAM

1. Estimated Tops of Important Geologic Markers:

<u>Formation</u>	<u>Depth</u>
Uinta	0- Surface
Green River	1623'
Bird's Nest	1948'
Mahogany	2428'
Wasatch	4991'
Mesaverde	7958'
MVU2	8967'
MVL1	9502'
TVD	10,100'
TD	10,191'

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

<u>Substance</u>	<u>Formation</u>	<u>Depth</u>
	Green River	1623'
	Bird's Nest	1948'
	Mahogany	2428'
Gas	Wasatch	4991'
Gas	Mesaverdc	7958'
Gas	MVU2	8967'
Gas	MVL1	9502'
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.

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 10,100' TD, approximately equals 6262 psi (calculated at 0.62 psi/foot).

Maximum anticipated surface pressure equals approximately 4040 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 blooie line. The air rig does not utilize an igniter as the surface hole drilling operation does not encounter productive formations.

Conclusion

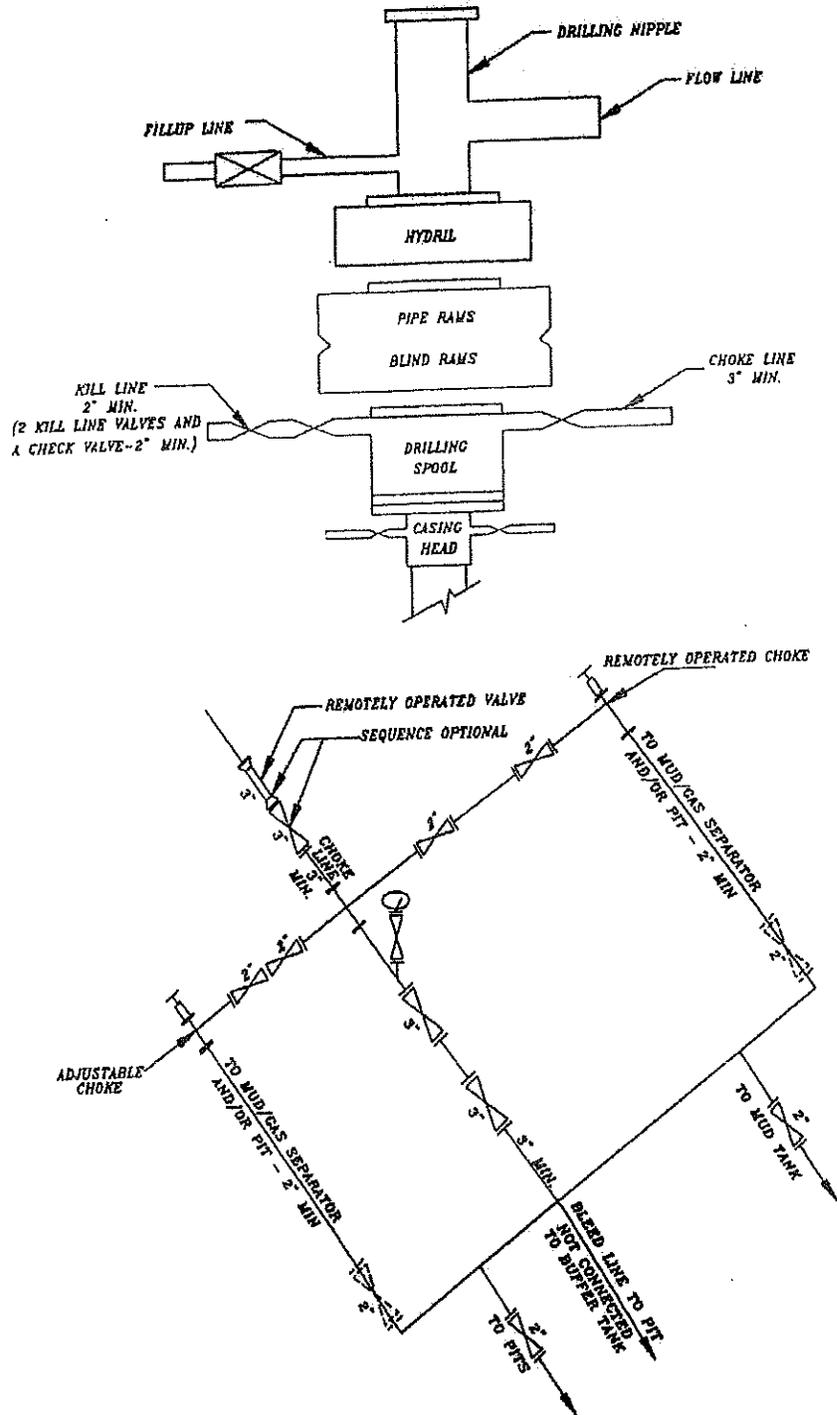
The air rig operating procedures and the attached air rig layout have effectively maintained well control while drilling the surface holes in KMG Fields. KMG respectfully requests a variance from Onshore Order 2 with respect to air drilling well control requirements as discussed above..

10. Other Information:

Please see Natural Buttes Unit SOP.

NBU 921-21E1S

EXHIBIT A



SCHEMATIC DIAGRAM OF 5,000 PSI BOP STACK

**NBU 921-21E1S
Twin to NBU #127
SWNW Sec. 21 ,T9S,R21E
UINTAH COUNTY, UTAH
UTU-0576**

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:

No new access road is planned, as this is a twin location. 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 2600' rights-of-way will be required. Approximately 2600' of 4" steel pipeline is proposed from the location to the tie-in point in Section 16, T9S, R21E. Please refer to the Topo Map D. The pipeline will be constructed utilizing existing rights were possible and pulled into place using a rubber tired tractor. The pipeline will be butt-welded together.

Variations to Best Management Practices (BMPs) Requested:

Approximately 2600' 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 Carlsbad Canyon Brown (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

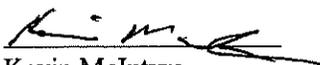
Certification: All lease and/or unit operations will be conducted in such a manner that full compliance is made with all applicable laws, regulations, Onshore Oil and Gas Orders, the approved Plan of Operations, and any applicable Notice to Lessees.

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

9/8/2008

Date

Kerr-McGee Oil & Gas Onshore LP
NBU #921-21F4S, #921-21E4T, #921-21L1S & #921-21E1S
SECTION 21, T9S, R21E, S.L.B.&M.

PROCEED IN A WESTERLY DIRECTION FROM VERNAL, UTAH ALONG U.S. HIGHWAY 40 APPROXIMATELY 14.0 MILES TO THE JUNCTION OF STATE HIGHWAY 88; EXIT LEFT AND PROCEED IN A SOUTHERLY DIRECTION APPROXIMATELY 17.0 MILES TO OURAY, UTAH; PROCEED IN A SOUTHERLY DIRECTION APPROXIMATELY 6.9 MILES ON THE SEEP RIDGE ROAD TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE EAST; TURN LEFT AND PROCEED IN AN EASTERLY DIRECTION APPROXIMATELY 5.0 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE NORTH; TURN LEFT AND PROCEED IN A NORTHERLY DIRECTION APPROXIMATELY 0.3 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE NORTHEAST; TURN RIGHT AND PROCEED IN A NORTHEASTERLY DIRECTION APPROXIMATELY 1.7 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE NORTHEAST; TURN LEFT AND PROCEED IN A NORTHEASTERLY DIRECTION APPROXIMATELY 2.5 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE SOUTHWEST; TURN LEFT AND PROCEED IN A SOUTHWESTERLY DIRECTION APPROXIMATELY 1.3 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE SOUTHWEST; TURN LEFT AND PROCEED IN A SOUTHWESTERLY DIRECTION APPROXIMATELY 0.6 MILES TO THE BEGINNING OF THE EXISTING ACCESS TO THE NORTHWEST; TURN RIGHT AND PROCEED IN A NORTHWESTERLY DIRECTION APPROXIMATELY 25' TO THE PROPOSED LOCATION.

TOTAL DISTANCE FROM VERNAL, UTAH TO THE PROPOSED WELL LOCATION IS APPROXIMATELY 49.3 MILES.

Kerr-McGee Oil & Gas Onshore LP

NBU #921-21F4S, #921-21E4T, #921-21L1S & #921-21E1S
LOCATED IN UINTAH COUNTY, UTAH
SECTION 21, T9S, R21E, S.L.B.&M.

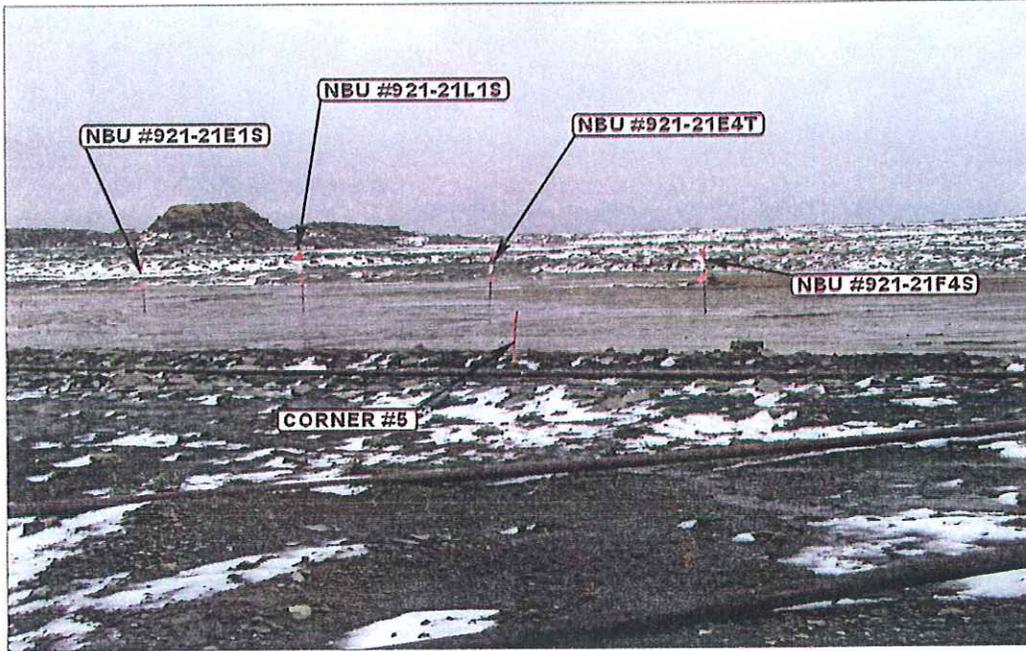


PHOTO: VIEW FROM CORNER #5 TO LOCATION STAKES

CAMERA ANGLE: NORTHEASTERLY



PHOTO: VIEW OF EXISTING ACCESS

CAMERA ANGLE: NORTHWESTERLY



Since 1964

U
E
L
S

Uintah Engineering & Land Surveying
85 South 200 East Vernal, Utah 84078
(435) 789-1017 * FAX (435) 789-1813

LOCATION PHOTOS

06 30 08
MONTH DAY YEAR

PHOTO

TAKEN BY: D.K. | DRAWN BY: J.J. | REVISED: 00-00-00

Kerr-McGee Oil & Gas Onshore LP
NBU #921-21F4S, #921-21E4T, #921-21L1S & #921-21E1S
LOCATED IN UINTAH COUNTY, UTAH
SECTION 21, T9S, R21E, S.L.B.&M.

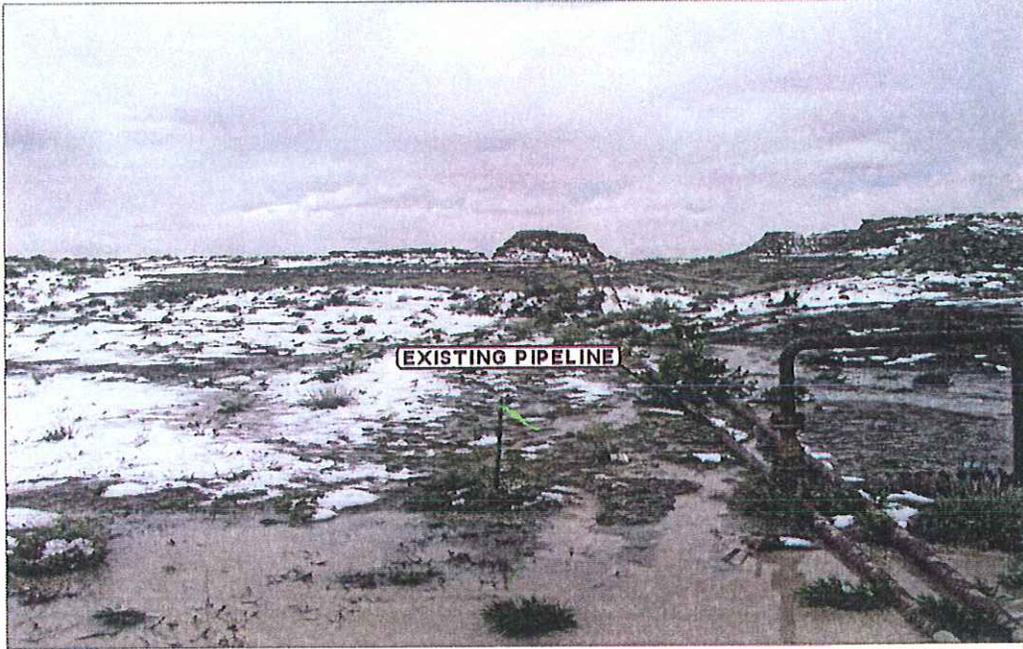


PHOTO: VIEW ALONG PIPELINE

CAMERA ANGLE: SOUTHERLY

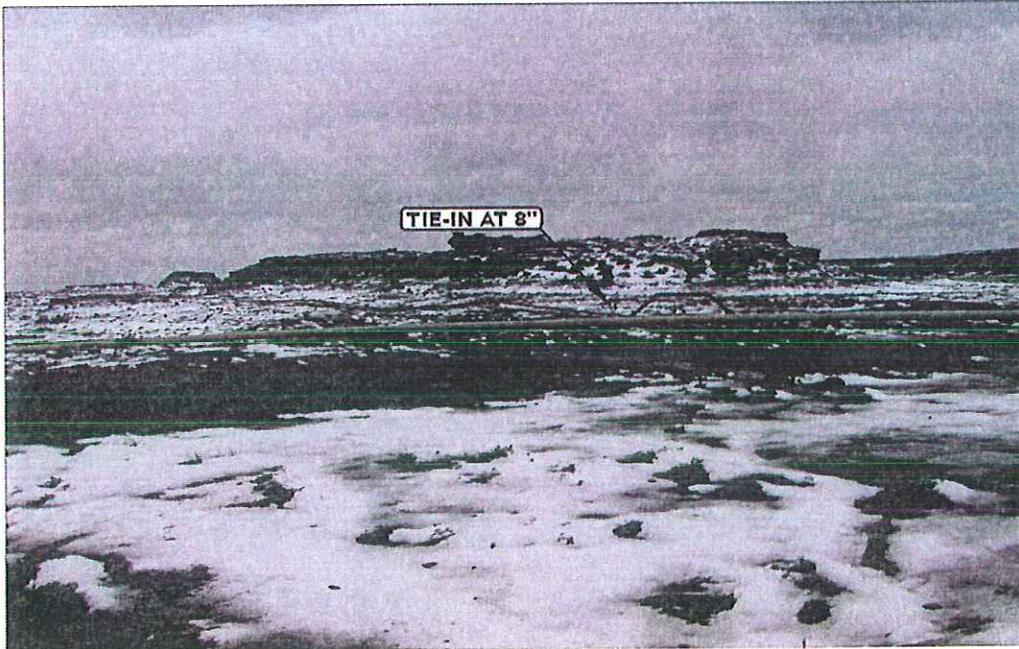


PHOTO: VIEW OF TIE-IN AT 8"

CAMERA ANGLE: SOUTHERLY



U E L S Uintah Engineering & Land Surveying
85 South 200 East Vernal, Utah 84078
(435) 789-1017 * FAX (435) 789-1813

LOCATION PHOTOS

06 30 08
MONTH DAY YEAR

PHOTO

TAKEN BY: D.K. | DRAWN BY: J.J. | REVISED: 00-00-00

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

Kerr-McGee Oil & Gas Onshore LP

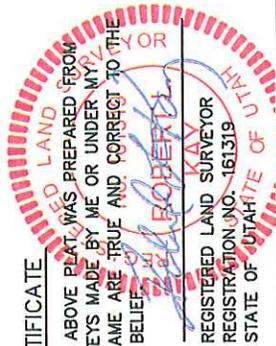
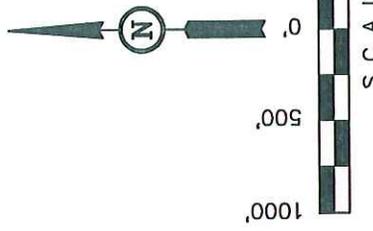
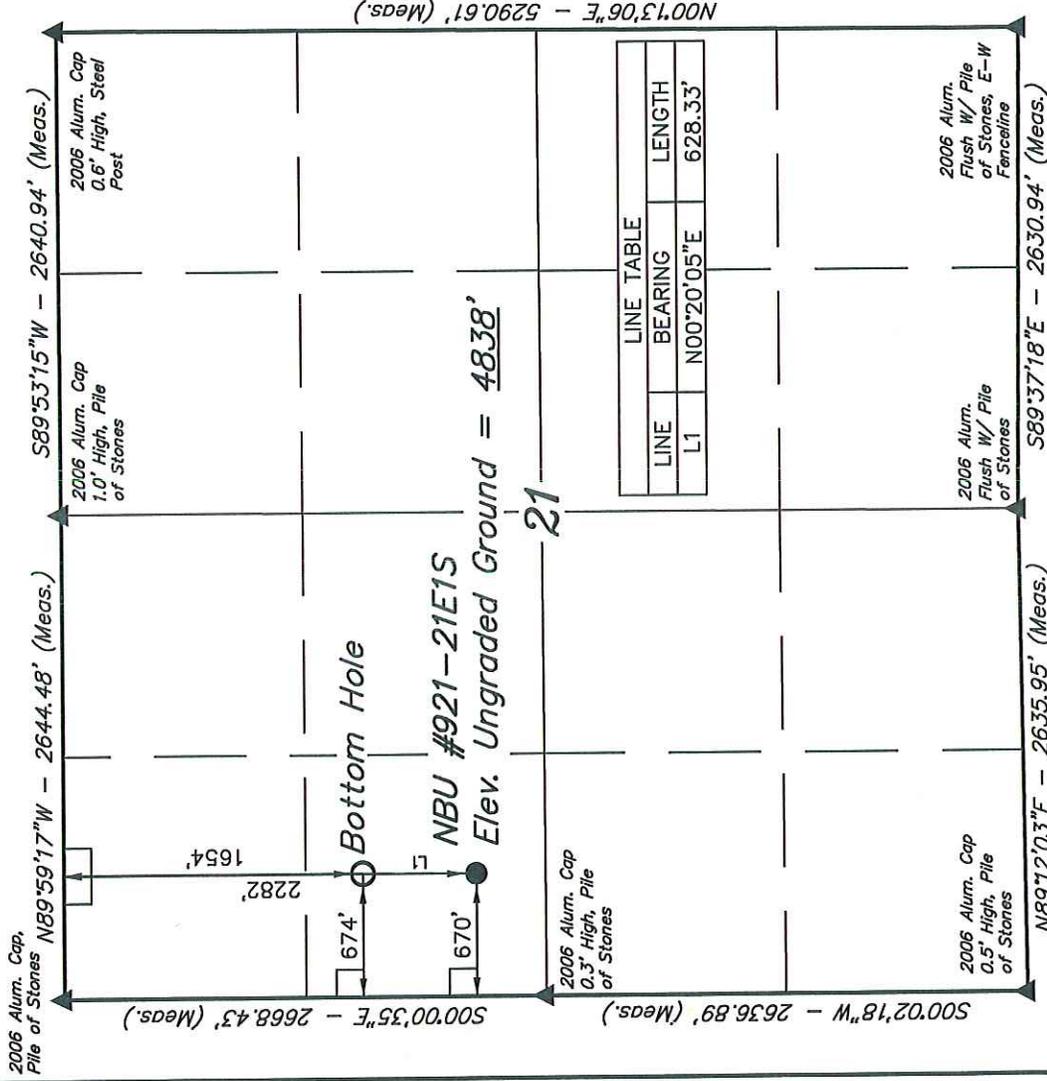
Well location, NBU #921-21E1S, located as shown in the SW 1/4 NW 1/4 of Section 21, T9S, R21E, S.L.B.&M., Uintah County, Utah.

BASIS OF ELEVATION

TWO WATER TRIANGULATION STATION LOCATED IN THE NW 1/4 OF SECTION 1, T10S, R21E, S.L.B.&M. TAKEN FROM THE BIG PACK MTN NE, QUADRANGLE, UTAH, UINTAH COUNTY, 7.5 MINUTE QUAD. (TOPOGRAPHIC MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. SAID ELEVATION IS MARKED AS BEING 5238 FEET.

BASIS OF BEARINGS

BASIS OF BEARINGS IS A G.P.S. OBSERVATION.



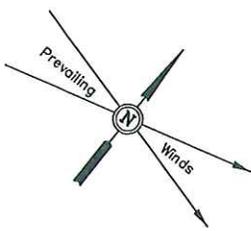
UINTAH ENGINEERING & LAND SURVEYING
 85 SOUTH 200 EAST - VERNAL, UTAH 84078
 (435) 789-1017

SCALE	1" = 1000'	DATE SURVEYED:	04-30-08	DATE DRAWN:	06-09-08
PARTY	D.K. C.K. C.C.	REFERENCES	G.L.O. PLAT		
WEATHER	WARM	FILE	Kerr-McGee Oil & Gas Onshore LP		

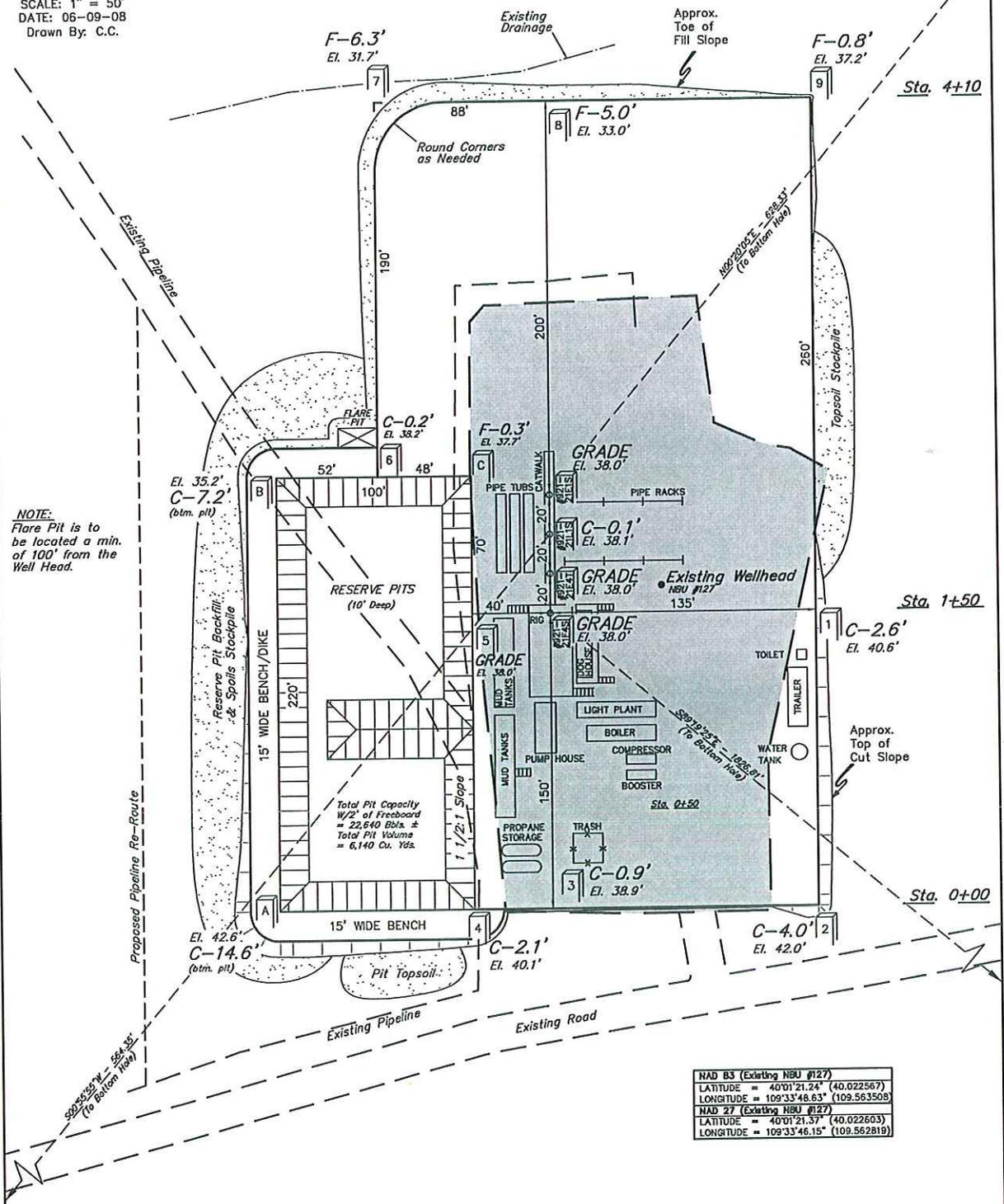
- LEGEND:**
- = 90° SYMBOL
 - = PROPOSED WELL HEAD.
 - ▲ = SECTION CORNERS LOCATED.

Kerr-McGee Oil & Gas Onshore LP
 SITE PLAN LAYOUT FOR
 NBU #921-21F4S, #921-21E4T,
 #921-21L1S & #921-21E1S
 SECTION 21, T9S, R21E, S.L.B.&M.
 SW 1/4 NW 1/4

FIGURE #1



SCALE: 1" = 50'
 DATE: 06-09-08
 Drawn By: C.C.



NOTE:
 Flare Pit is to be located a min. of 100' from the Well Head.

Total Pit Capacity
 W/2' of Freeboard
 = 22,640 Bbls. ±
 Total Pit Volume
 = 6,140 Cu. Yds.

NAD 83 (Existing NBU #127)	
LATITUDE =	40°01'21.24" (40.022567)
LONGITUDE =	109°33'48.63" (109.563508)
NAD 21 (Existing NBU #127)	
LATITUDE =	40°01'21.37" (40.022603)
LONGITUDE =	109°33'46.15" (109.562819)

NOTES:
 Elev. Ungraded Ground At #921-21F4S Loc. Stake = 4838.0'
 FINISHED GRADE ELEV. AT #921-21F4S LOC. STAKE = 4838.0'

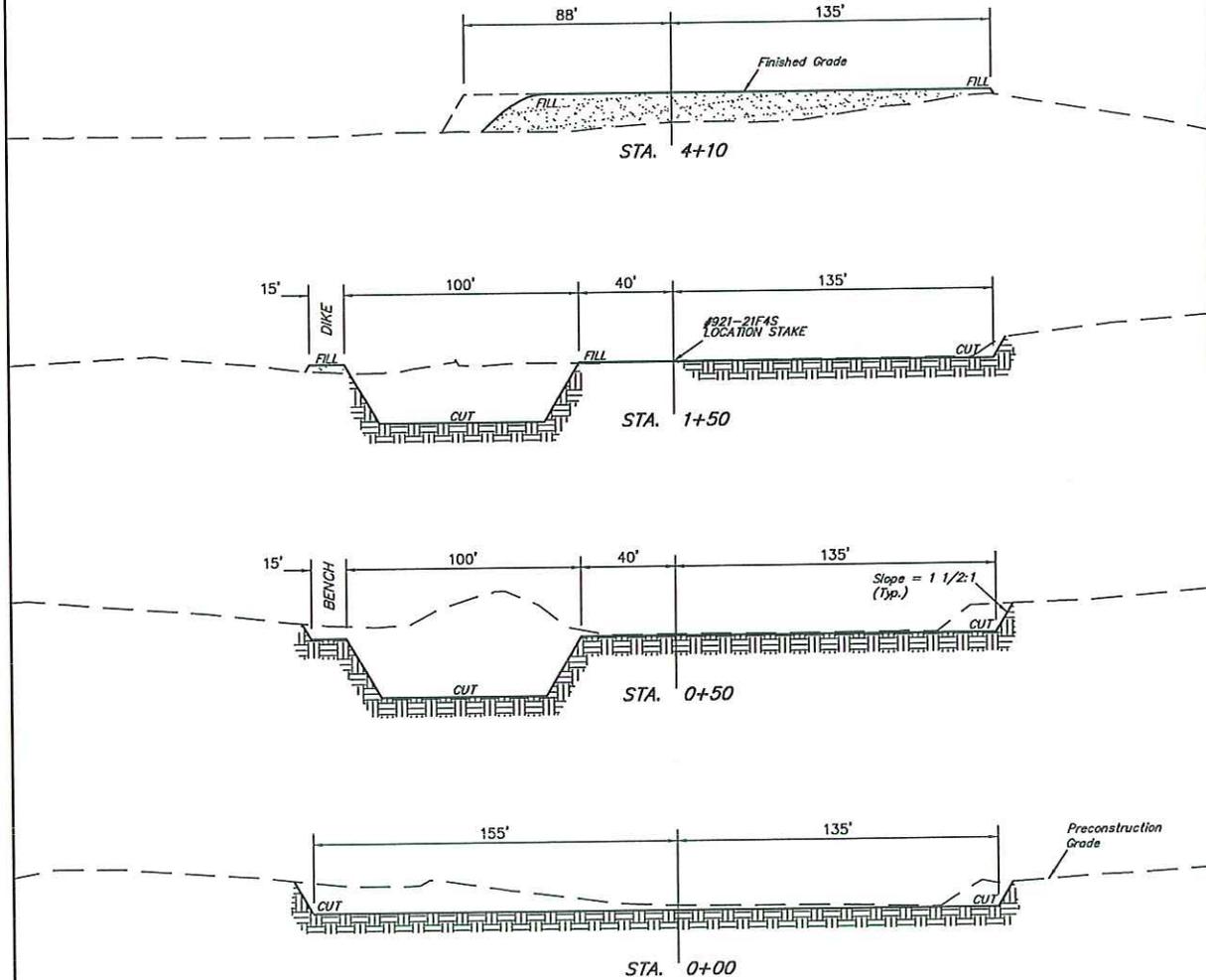
Kerr-McGee Oil & Gas Onshore LP

TYPICAL CROSS SECTIONS FOR

NBU #921-21F4S, #921-21E4T,
 #921-21L1S & #921-21E1S
 SECTION 21, T9S, R21E, S.L.B.&M.
 SW 1/4 NW 1/4

FIGURE #2

1" = 20'
 X-Section
 Scale
 1" = 50'
 DATE: 06-09-08
 Drawn By: C.C.



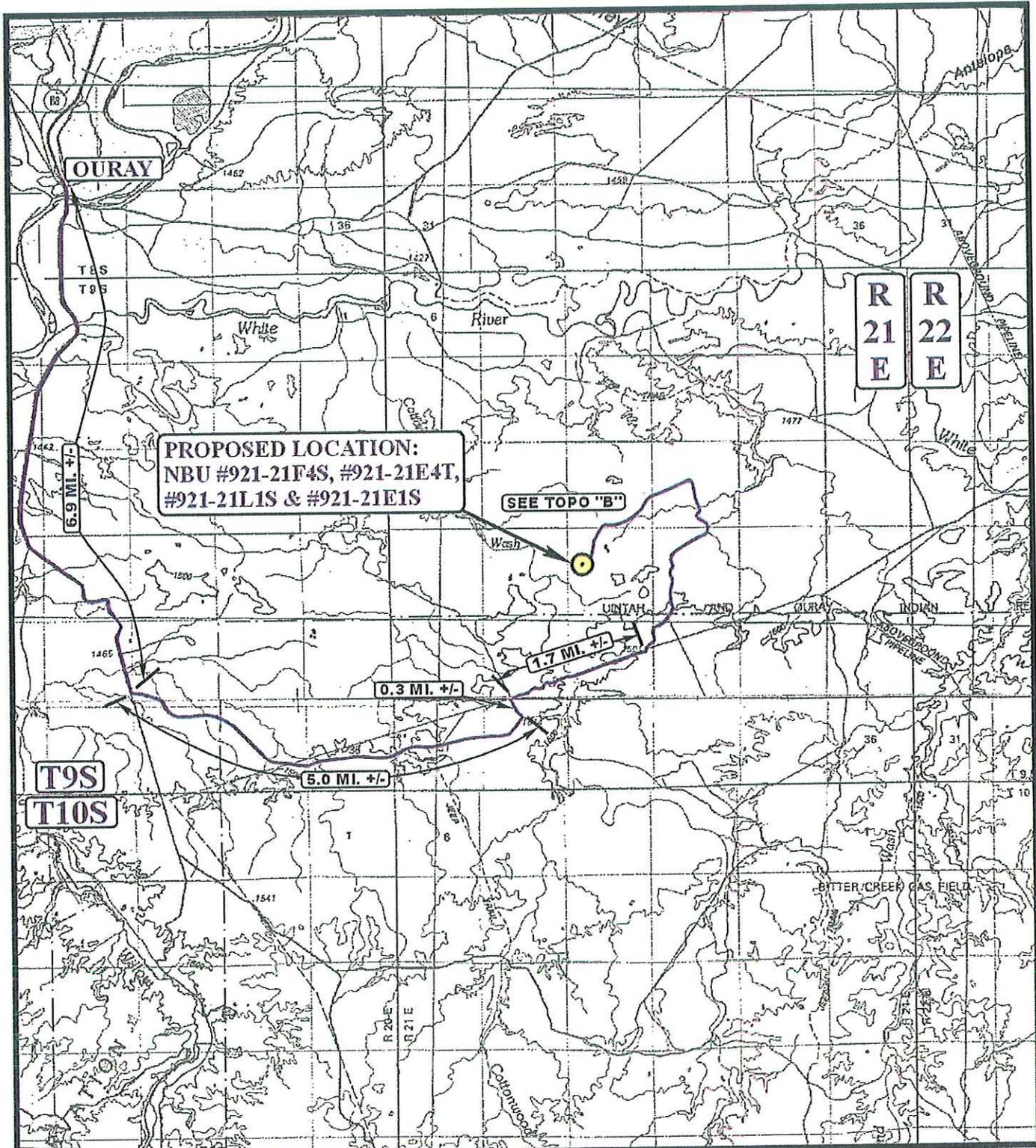
* NOTE:
 FILL QUANTITY INCLUDES
 5% FOR COMPACTION

APPROXIMATE YARDAGES

CUT
 (12") Topsoil Stripping = 2,370 Cu. Yds.
 (New Construction Only)
 Remaining Location = 7,770 Cu. Yds.

TOTAL CUT = 10,140 CU.YDS.
 FILL = 5,830 CU.YDS.

EXCESS MATERIAL = 4,310 Cu. Yds.
 Topsoil & Pit Backfill = 5,440 Cu. Yds.
 (1/2 Pit Vol.)
 DEFICIT UNBALANCE = <1,130> Cu. Yds.
 (After Interim Rehabilitation)



PROPOSED LOCATION:
 NBU #921-21F4S, #921-21E4T,
 #921-21L1S & #921-21E1S

SEE TOPO "B"

R
21
E

R
22
E

T9S
T10S

LEGEND:

● PROPOSED LOCATION

Kerr-McGee Oil & Gas Onshore LP

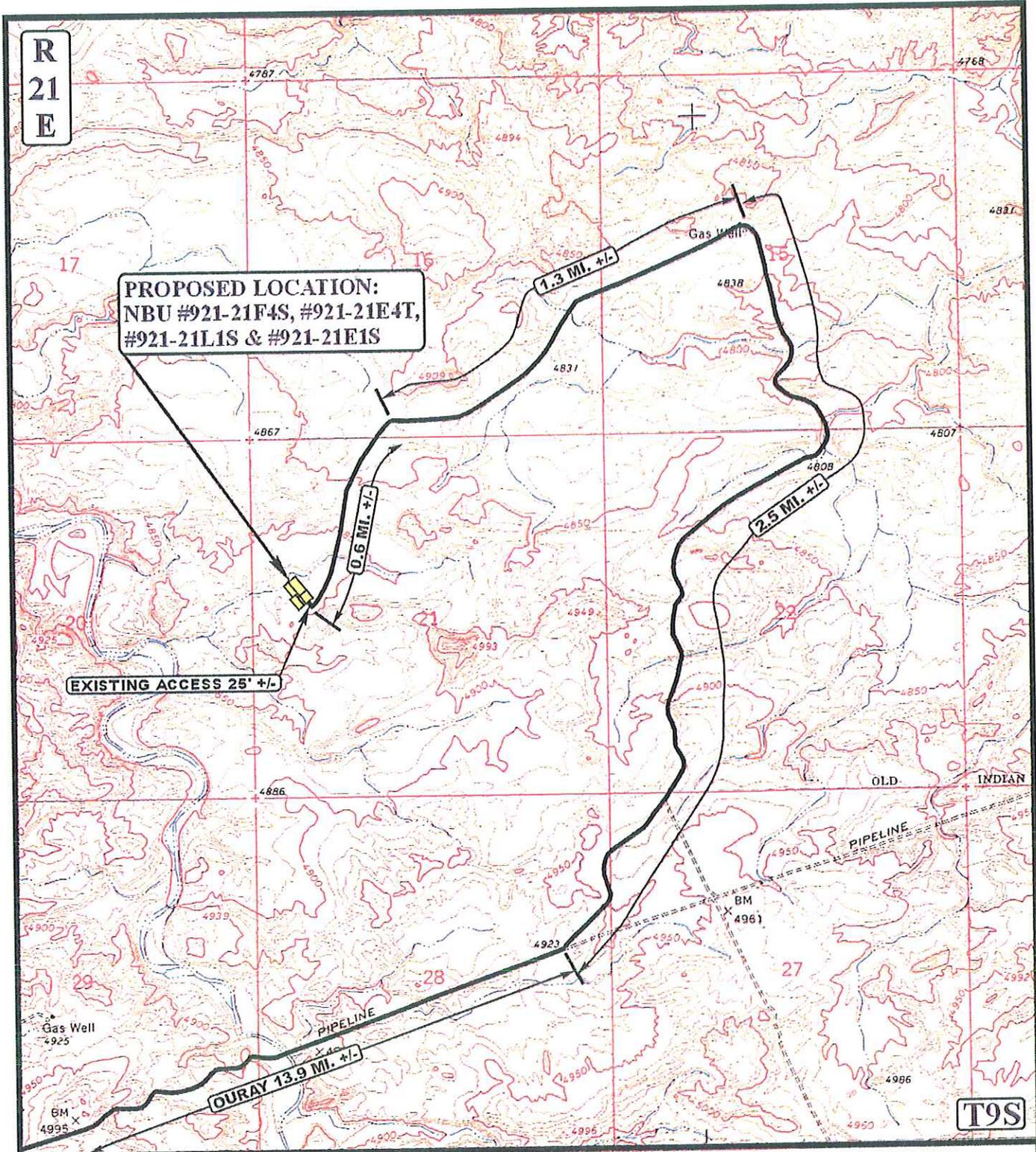
NBU #921-21F4S, #921-21E4T, #921-21L1S & #921-21E1S
 SECTION 21, T9S, R21E, S.L.B.&M.
 SW 1/4 NW 1/4

UELS
 Uintah Engineering & Land Surveying
 85 South 200 East Vernal, Utah 84078
 (435) 789-1017 * FAX (435) 789-1813



TOPOGRAPHIC MAP 06 30 08
 MONTH DAY YEAR
 SCALE: 1:100,000 | DRAWN BY: J.J. | REVISED: 00-00-00





**PROPOSED LOCATION:
NBU #921-21F4S, #921-21E4T,
#921-21L1S & #921-21E1S**

EXISTING ACCESS 25' +/-

OURAY 13.9 MI. +/-

1.3 MI. +/-

0.6 MI. +/-

2.5 MI. +/-

LEGEND:

-  EXISTING ROAD
-  PROPOSED ACCESS ROAD

Kerr-McGee Oil & Gas Onshore LP

NBU #921-21F4S, #921-21E4T, #921-21L1S & #921-21E1S
SECTION 21, T9S, R21E, S.L.B.&M.
SW 1/4 NW 1/4



Utah Engineering & Land Surveying
85 South 200 East Vernal, Utah 84078
(435) 789-1017 * FAX (435) 789-1813



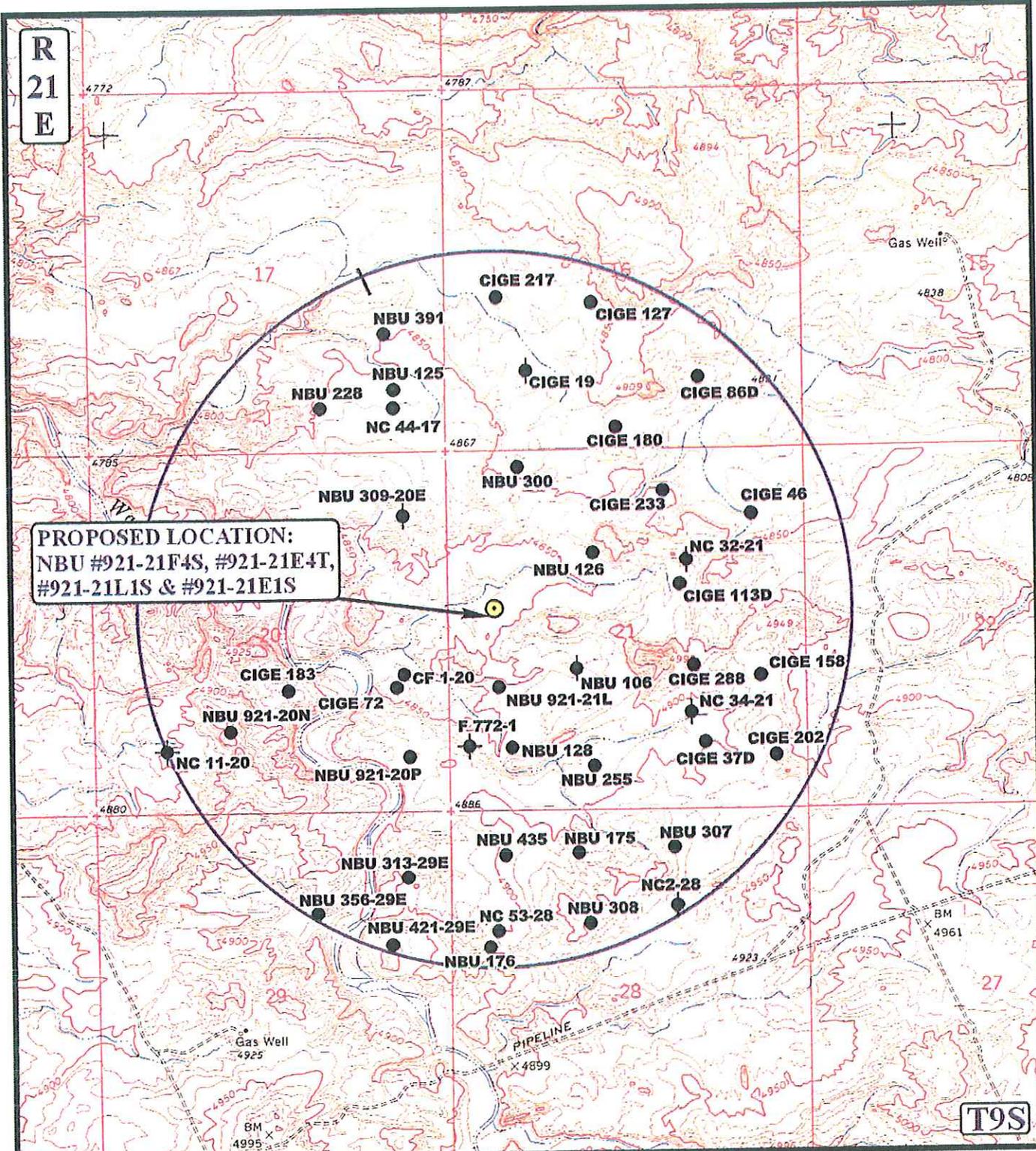
TOPOGRAPHIC MAP

SCALE: 1" = 2000' DRAWN BY: J.J. REVISED: 00-00-00

06 30 08
MONTH DAY YEAR

B
TOPO

**R
21
E**



**PROPOSED LOCATION:
NBU #921-21F4S, #921-21E4T,
#921-21L1S & #921-21E1S**

T9S

LEGEND:

- ⊘ DISPOSAL WELLS
- PRODUCING WELLS
- ⬮ SHUT IN WELLS
- ⊘ WATER WELLS
- ⬮ ABANDONED WELLS
- ⬮ TEMPORARILY ABANDONED

Kerr-McGee Oil & Gas Onshore LP

NBU #921-21F4S, #921-21E4T, #921-21L1S & #921-21E1S
SECTION 21, T9S, R21E, S.L.B.&M.
SW 1/4 NW 1/4



Uintah Engineering & Land Surveying
85 South 200 East Vernal, Utah 84078
(435) 789-1017 * FAX (435) 789-1813

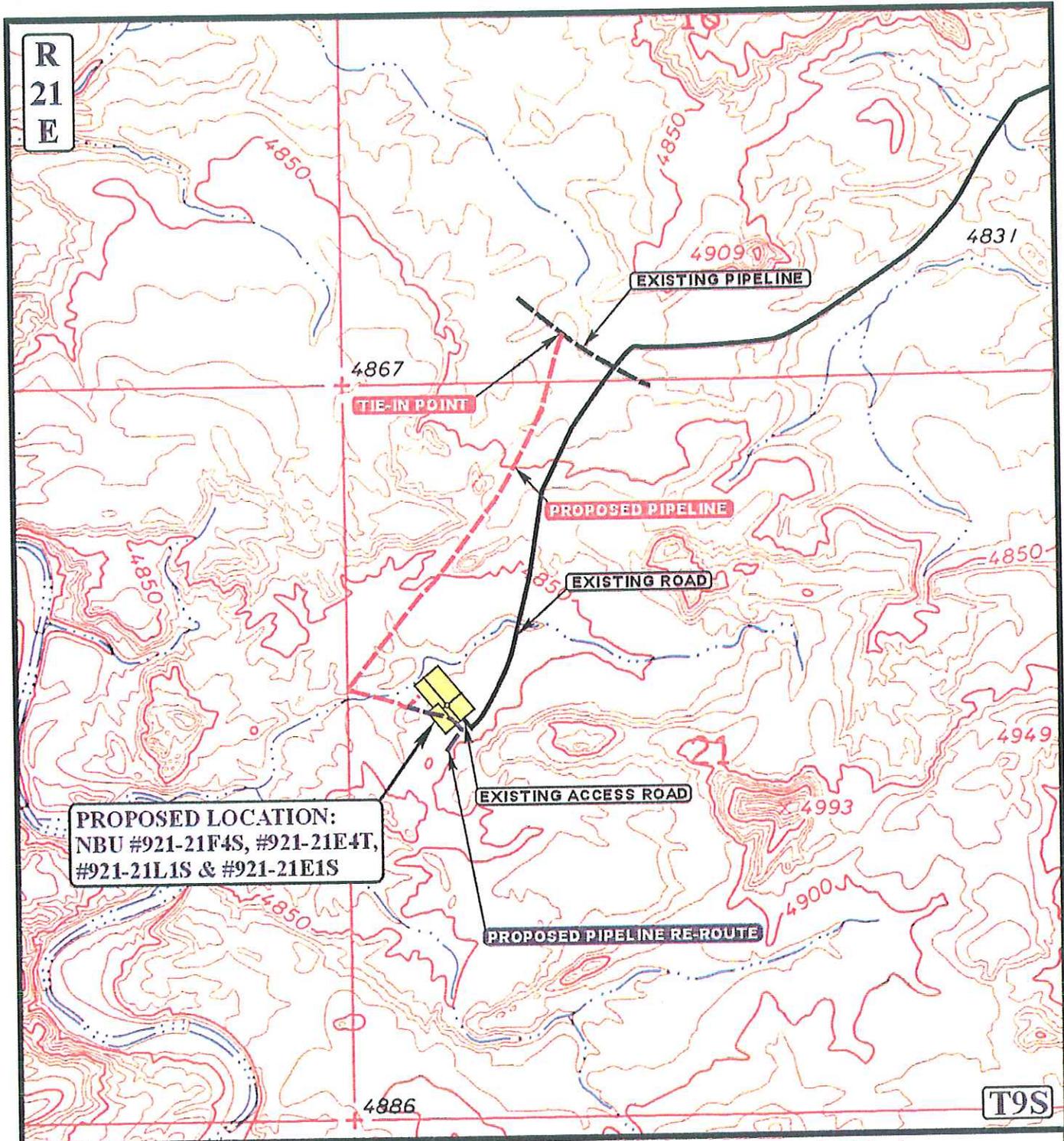


**TOPOGRAPHIC
MAP**

06 30 08
MONTH DAY YEAR



SCALE: 1" = 2000' DRAWN BY: J.J. REVISED: 00-00-00



APPROXIMATE TOTAL PIPELINE DISTANCE = 2600+/-

LEGEND:

-  EXISTING ROAD
-  EXISTING PIPELINE
-  PROPOSED PIPELINE RE-ROUTE
-  PROPOSED PIPELINE

Kerr-McGee Oil & Gas Onshore LP

NBU #921-21F4S, #921-21E4T, #921-21L1S & #921-21E1S
SECTION 21, T9S, R21E, S.L.B.&M.
SW 1/4 NW 1/4



U&L S Uintah Engineering & Land Surveying
85 South 200 East Vernal, Utah 84078
(435) 789-1017 * FAX (435) 789-1813

TOPOGRAPHIC MAP 06 30 08
MONTH DAY YEAR
SCALE: 1" = 1000' DRAWN BY: J.J. REVISED: 00-00-00 **D TOPO**

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 9, 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/MesaVerde)		
43-047-50100	NBU 921-21E1S Sec 21	T09S R21E 2282 FNL 0670 FWL BHL Sec 21 T09S R21E 1654 FNL 0674 FWL
43-047-50101	NBU 921-21L1S Sec 21	T09S R21E 2298 FNL 0683 FWL BHL Sec 21 T09S R21E 2434 FSL 0674 FWL
43-047-50102	NBU 921-27J4S Sec 27	T09S R21E 1390 FSL 1310 FEL BHL Sec 27 T09S R21E 1680 FSL 1410 FEL
43-047-50103	NBU 921-27J1S Sec 27	T09S R21E 1387 FSL 1290 FEL BHL Sec 27 T09S R21E 2175 FSL 1410 FEL
43-047-50104	NBU 921-21F4S Sec 21	T09S R21E 2329 FNL 0708 FWL BHL Sec 21 T09S R21E 2350 FNL 2535 FWL
43-047-50105	NBU 921-9E2S Sec 08	T09S R21E 0966 FNL 0602 FEL BHL Sec 09 T09S R21E 1686 FNL 0110 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:9-9-08



Kerr-McGee Oil & Gas Onshore LP
1999 Broadway, Suite 3700
Denver, CO 80205

September 9, 2008

Mrs. Diana Mason
Division of Oil, Gas and Mining
P.O. Box 145801
Salt Lake City, UT 84114-6100

Re: Directional Drilling R649-3-11
NBU 921-21E1S
T9S-R21E
Section 21: SWNW/SWNW
Surface: 2282' FNL, 670' FWL
Bottom Hole: 1654' FNL, 674' FWL
Uintah County, Utah

Dear Mrs. Mason:

Pursuant to the filing of Kerr-McGee Oil & Gas Onshore LP's (Kerr-McGee) Application for Permit to Drill regarding the above referenced well, we are hereby submitting this letter in accordance with Oil & Gas Conservation Rule R649-3-11 pertaining to the Exception to Location and Siting of Wells.

- Kerr-McGee's NBU 921-21E1S is located within the Natural Buttes Unit area.
- Kerr-McGee is permitting this well as a directional well in order to minimize surface disturbance. Locating the well at the surface location and directionally drilling from this location, Kerr-McGee will be able to utilize the existing road and pipelines in the area.
- Furthermore, Kerr-McGee certifies that it is the sole working interest owner within 460 feet of the entire directional well bore.

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

Sincerely,

KERR-MCGEE OIL & GAS ONSHORE LP



Jason K. Rayburn
Landman

RECEIVED

SEP 10 2008

DIV. OF OIL, GAS & MINING

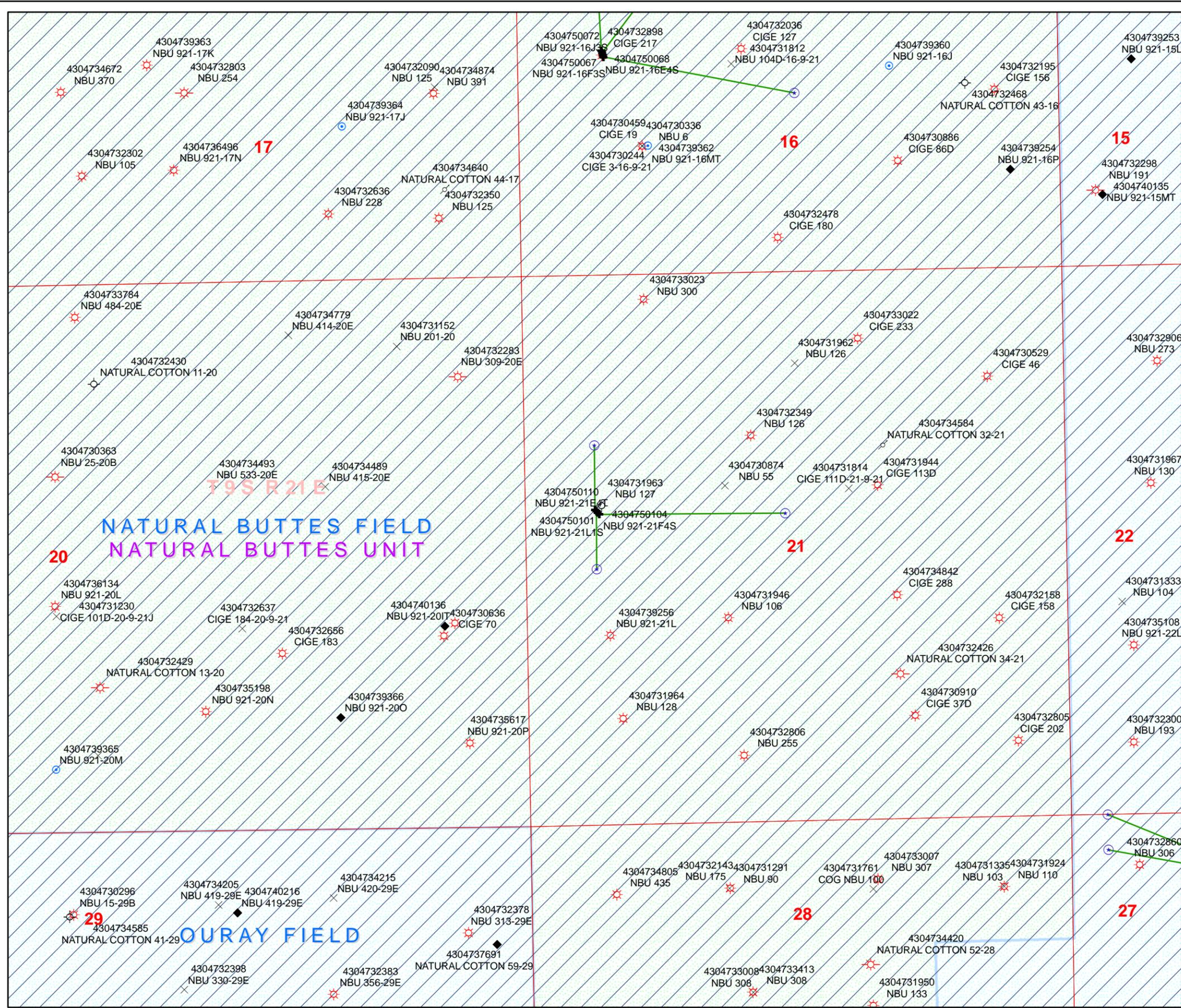
API Number: 4304750100

Well Name: NBU 921-21E1S

Township 09.0 S Range 21.0 E Section 21

Meridian: SLBM

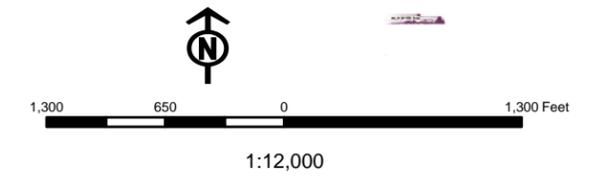
Operator: KERR-MCGEE OIL & GAS ONSHORE, L.P.



Map Prepared: Diana Mason

Map Produced by Diana Mason

Units	Wells Query Events
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
Fields	⊕ POW
STATUS	⊕ RET
ACTIVE	⊕ SGW
COMBINED	⊕ SOW
Sections	⊕ TA
Township	⊕ TW
	⊕ WD
	⊕ WI
	⊕ WS
	⊕ Bottom Hole Location



**WORKSHEET
APPLICATION FOR PERMIT TO DRILL**

APD RECEIVED: 9/8/2008

API NO. ASSIGNED: 4304750100000

WELL NAME: NBU 921-21E1S

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

PHONE NUMBER: 720 929-6226

CONTACT: Kevin McIntyre

PROPOSED LOCATION: SWNW 21 090S 210E

Permit Tech Review:

SURFACE: 2282 FNL 0670 FWL

Engineering Review:

BOTTOM: 1654 FNL 0674 FWL

Geology Review:

COUNTY: UINTAH

LATITUDE: 40.02253

LONGITUDE: -109.56307

UTM SURF EASTINGS: 622621.00

NORTHINGS: 4431036.00

FIELD NAME: NATURAL BUTTES

LEASE TYPE: 1 - Federal

LEASE NUMBER: UTU-0576

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 921-21E1S
API Well Number: 43047501000000
Lease Number: UTU-0576
Surface Owner: INDIAN
Approval Date: 9/17/2008

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.

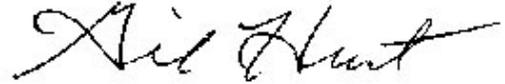
Notify the Division prior to commencing operations to plug and abandon the well.

- 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 fluid and cursive, 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 9 5. LEASE DESIGNATION AND SERIAL NUMBER: UTU-0576
SUNDRY NOTICES AND REPORTS ON WELLS Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.	6. IF INDIAN, ALLOTTEE OR TRIBE NAME: Ute 7. UNIT or CA AGREEMENT NAME: NATURAL BUTTES
1. TYPE OF WELL Gas Well	8. WELL NAME and NUMBER: NBU 921-21E1S
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.	9. API NUMBER: 43047501000000
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779	PHONE NUMBER: 720 929-6007 Ext
4. LOCATION OF WELL FOOTAGES AT SURFACE: 2282 FNL 0670 FWL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SWNW Section: 21 Township: 09.0S Range: 21.0E Meridian: S	9. FIELD and POOL or WILDCAT: NATURAL BUTTES COUNTY: UINTAH STATE: UTAH

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

TYPE OF SUBMISSION	TYPE OF ACTION		
<input checked="" type="checkbox"/> NOTICE OF INTENT Approximate date work will start: 9/14/2009	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> CASING REPAIR
<input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion:	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> CHANGE WELL NAME
<input type="checkbox"/> SPUD REPORT Date of Spud:	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> CONVERT WELL TYPE
<input type="checkbox"/> DRILLING REPORT Report Date:	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> NEW CONSTRUCTION
	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> PLUG BACK
	<input type="checkbox"/> PRODUCTION START OR RESUME	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION
	<input type="checkbox"/> REPERFORATE CURRENT FORMATION	<input type="checkbox"/> SIDETRACK TO REPAIR WELL	<input type="checkbox"/> TEMPORARY ABANDON
	<input type="checkbox"/> TUBING REPAIR	<input type="checkbox"/> VENT OR FLARE	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> WATER SHUTOFF	<input type="checkbox"/> SI TA STATUS EXTENSION	<input checked="" type="checkbox"/> APD EXTENSION
	<input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> OTHER	OTHER: _____

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 14, 2009

By:

NAME (PLEASE PRINT) Danielle Piernot	PHONE NUMBER 720 929-6156	TITLE Regulatory Analyst
SIGNATURE N/A	DATE 9/10/2009	



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 43047501000000

API: 43047501000000

Well Name: NBU 921-21E1S

Location: 2282 FNL 0670 FWL QTR SWNW SEC 21 TWNP 090S RNG 210E MER S

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

Date Original Permit Issued: 9/18/2008

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

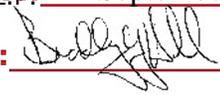
**Approved by the
Utah Division of
Oil, Gas and Mining**

Signature: Danielle Piernot

Date: 9/10/2009

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

Date: September 14, 2009

By: 

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	FORM 9 5. LEASE DESIGNATION AND SERIAL NUMBER: UTU-0576
SUNDRY NOTICES AND REPORTS ON WELLS Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.	6. IF INDIAN, ALLOTTEE OR TRIBE NAME: Ute 7. UNIT or CA AGREEMENT NAME: NATURAL BUTTES
1. TYPE OF WELL Gas Well	8. WELL NAME and NUMBER: NBU 921-21E1S
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.	9. API NUMBER: 43047501000000
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779	PHONE NUMBER: 720 929-6007 Ext
4. LOCATION OF WELL FOOTAGES AT SURFACE: 2282 FNL 0670 FWL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SWNW Section: 21 Township: 09.0S Range: 21.0E Meridian: S	9. FIELD and POOL or WILDCAT: NATURAL BUTTES COUNTY: UINTAH STATE: UTAH

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

TYPE OF SUBMISSION	TYPE OF ACTION		
<input checked="" type="checkbox"/> NOTICE OF INTENT Approximate date work will start: 9/20/2010 <input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion: <input type="checkbox"/> SPUD REPORT Date of Spud: <input type="checkbox"/> DRILLING REPORT Report Date:	<input type="checkbox"/> ACIDIZE <input type="checkbox"/> CHANGE TO PREVIOUS PLANS <input type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> DEEPEN <input type="checkbox"/> OPERATOR CHANGE <input type="checkbox"/> PRODUCTION START OR RESUME <input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> WATER SHUTOFF <input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> ALTER CASING <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input type="checkbox"/> FRACTURE TREAT <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> SI TA STATUS EXTENSION <input type="checkbox"/> OTHER	<input type="checkbox"/> CASING REPAIR <input type="checkbox"/> CHANGE WELL NAME <input type="checkbox"/> CONVERT WELL TYPE <input type="checkbox"/> NEW CONSTRUCTION <input type="checkbox"/> PLUG BACK <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION <input type="checkbox"/> TEMPORARY ABANDON <input type="checkbox"/> WATER DISPOSAL <input checked="" type="checkbox"/> APD EXTENSION OTHER: <input style="width: 100px;" type="text"/>

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

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

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

Date: September 28, 2010
 By:

NAME (PLEASE PRINT) Danielle Piernot	PHONE NUMBER 720 929-6156	TITLE Regulatory Analyst
SIGNATURE N/A	DATE 9/20/2010	



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 43047501000000

API: 43047501000000

Well Name: NBU 921-21E1S

Location: 2282 FNL 0670 FWL QTR SWNW SEC 21 TWP 090S RNG 210E MER S

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

Date Original Permit Issued: 9/18/2008

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: 9/20/2010

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

Date: September 28, 2010

By: 

RECEIVED
VERNAL FIELD OFFICE

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. UTU-0576
1b. Type of Well: <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input type="checkbox"/> Single Zone <input checked="" type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name Ute
2. Name of Operator Kerr-McGee Oil & Gas Onshore, LP		7. Unit or CA Agreement, Name and No. 891008900A
3a. Address P.O. Box 173779, Denver, CO 80217-3779	3b. Phone No. (include area code) 720.929.6226	8. Lease Name and Well No. NBU 921-21E1S
4. Location of Well (Report location clearly and in accordance with any State requirements.)* At surface SWNW 2282' FNL & 670' FWL LAT 40.022603 LON -109.563081 (NAD 27) At proposed prod. zone SWNW 1654' FNL & 674' FWL, Sec. 21, T 9S, R 21E		9. API Well No. 43 047 50100
14. Distance in miles and direction from nearest town or post office* 18.3 miles northeast of Ouray, Utah		10. Field and Pool, or Exploratory Natural Buttes Field
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 674'	16. No. of acres in lease 1480	11. Sec., T. R. M. or Blk. and Survey or Area Sec. 21, T 9S, R 21E
17. Spacing Unit dedicated to this well Unit Well	12. County or Parish Uintah	13. State UT
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 20'	19. Proposed Depth 10,191'	20. BLM/BIA Bond No. on file WYB000291
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 4,838' 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. I, must be attached to this form:

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

25. Signature 	Name (Printed Typed) Kevin McIntyre	Date 09/08/2008
-------------------	--	--------------------

Title
Regulatory Analyst I

Approved by (Signature) 	Name (Printed Typed) Jerry Kenczka	Date JUN 21 2011
Title Assistant Field Manager Lands & Mineral Resources	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 approved 9/17/08

AFMSS# 09JMO036A

RECEIVED

JUL 11 2011

DIV. OF OIL, GAS & MINING

UDOGM

NOTICE OF APPROVAL

CONDITIONS OF APPROVAL ATTACHED



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

170 South 500 East

VERNAL, UT 84078

(435) 781-4400



CONDITIONS OF APPROVAL FOR APPLICATION FOR PERMIT TO DRILL

Company:	Kerr McGee Oil & Gas Onshore LP	Location:	SWNW, Sec. 21, T9S R21E
Well No:	NBU 921-21E1S	Lease No:	UTU-0576
API No:	43-047-50100	Agreement:	Natural Buttes

OFFICE NUMBER: (435) 781-4400

OFFICE FAX NUMBER: (435) 781-3420

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

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

NOTIFICATION REQUIREMENTS

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

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

- All new and replacement internal combustion gas field engines of less than or equal to 300 design-rated horsepower must not emit more than 2 gms of NO_x per horsepower-hour. This requirement does not apply to gas field engines of less than or equal to 40 design-rated horsepower.
- All and replacement internal combustion gas field engines of greater than 300 design rated horsepower must not emit more than 1.0 gms of NO_x per horsepower-hour.

Site Specific Conditions of Approval:

- Paint all facilities "Shadow Gray."
- Monitor by a permitted paleontologist during construction operations.
- Construct diversion drainages around the west side of the well pad.
- In accordance with the guidelines specified in the Utah BLM Field Office Guidelines for Raptor Protection from Human and Land Use Disturbances, 2002, a raptor survey should be conducted prior to construction of the proposed location, pipeline, or access road if construction would take place during raptor nesting season (January 1 through September 30) and conduct its operations according to specifications in the guidelines.
- If project construction operations are not initiated before June 17, 2010, KMG should conduct additional biological surveys in accordance with the guidelines specified in the USFWS Rare Plant Conservation Measures for Uinta Basin hookless cactus (See Appendix D) and conduct its operation according to its specifications.

BIA Standard Conditions of Approval:

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

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

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

SITE SPECIFIC DOWNHOLE COAs:

- Surface casing cement shall be brought up and into the surface. Top of Cement is to reach surf. For surface casing cement program, to reach surface with Top of Cement, operator is required to pump additional cement beyond the stated amounts in application.
- The operator must notify any active gilsonite operation located within 2 miles of the location 48 hours prior to any surface blasting for this well.
- Conductor casing shall be set into competent formation.
toc_1800_operDrlgPlan#4
CsgSurf_set_2700 to 2800
KerrMcGee apd_coa Downhole
- Production casing cement shall be brought up and into the surface casing. Production casing minimum cement top is 1800 ft. The minimum cement top is approximately 0700 ft above the surface casing shoe.
Cement Top (TOC) standard will place cement behind casing across formation lost circulation zone, Birds Nest Zone.
Surface casing setting depth stated in APD is 2700 to 2800 ft.
COA specification fulfills operators performance standard stated in APD (where operators toc is calculated with an excess to reach surface).
- Operator is to notify BLM Vernal Field Office and active gilsonite mining operator (or lease holder) located within a 2 mile radius, 48 hours prior to pad explosives blasting. Well is not close to gilsonite vein, but on trend to gilsonite vein deposits.
- A copy of Kerr McGee's Standard Operating Practices (SOP version: dated 7/17/08 and approved 7/28/08) shall be on location.
- Drilling plan specifics and practices are referenced in the Kerr McGee Oil & Gas Standard Operating Procedures (SOP version: July 28, 2008). The operators drilling plan items 3 to 9 reference the SOP. Kerr McGee shall adhere to the referenced requirements in the SOP. Kerr McGee and their contractors shall adhere to 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.
- Covering air/gas drilling operations, requirements will be adhered to covering air/gas drilling operations as described in Onshore Order #2 III. E. 1. Drilling Operations, Special Drilling Operations, air/gas drilling.
- A Gamma Ray well Log shall be run from the well Total Depth to the surface.
A copy of the Gamma Ray well Log shall be submitted to the BLM Vernal Field Office.
- A variance is granted for Onshore Order #2 Drilling Operations III. E. "Blooie line discharge 100 feet from well bore and securely anchored" Blooie line can be 45 feet.
All requirements will be adhered to covering air/gas drilling operations as described in Onshore Order #2 III. E.1. Drilling Operations, Special Drilling Operations, air/gas drilling.

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

DRILLING/COMPLETION/PRODUCING OPERATING STANDARDS

- The spud date and time shall be reported orally to Vernal Field Office within 24 hours of spudding.
- Notify Vernal Field Office Supervisory Petroleum Engineering Technician at least 24 hours in advance of casing cementing operations and BOPE & casing pressure tests.
- All requirements listed in Onshore Order #2 III. E. Special Drilling Operations are applicable for air drilling of surface hole.
- Blowout prevention equipment (BOPE) shall remain in use until the well is completed or abandoned. Closing unit controls shall remain unobstructed and readily accessible at all times. Choke manifolds shall be located outside of the rig substructure.
- All BOPE components shall be inspected daily and those inspections shall be recorded in the daily drilling report. Components shall be operated and tested as required by Onshore Oil & Gas Order No. 2 to insure good mechanical working order. All BOPE pressure tests shall be performed by a test pump with a chart recorder and **NOT** by the rig pumps. Test shall be reported in the driller's log.
- BOP drills shall be initially conducted by each drilling crew within 24 hours of drilling out from under the surface casing and weekly thereafter as specified in Onshore Oil & Gas Order No. 2.
- Casing pressure tests are required before drilling out from under all casing strings set and cemented in place.
- No aggressive/fresh hard-banded drill pipe shall be used within casing.
- **Cement baskets shall not be run on surface casing.**
- The operator must report all shows of water or water-bearing sands to the BLM. If flowing water is encountered it must be sampled, analyzed, and a copy of the analyses submitted to the BLM Vernal Field Office.
- The operator must report encounters of all non oil & gas mineral resources (such as Gilsonite, tar sands, oil shale, trona, etc.) to the Vernal Field Office, in writing, within 5 working days of each encounter. Each report shall include the well name/number, well location, date and depth (from KB or GL) of encounter, vertical footage of the encounter and, the name of the person making the report (along with a telephone number) should the BLM need to obtain additional information.
- A complete set of angular deviation and directional surveys of a directional well will be submitted to the Vernal BLM office engineer within 30 days of the completion of the well.
- While actively drilling, chronologic drilling progress reports shall be filed directly with the BLM, Vernal Field Office on a weekly basis in sundry, letter format or e-mail to the Petroleum

Engineers until the well is completed.

- A cement bond log (CBL) will be run from the production casing shoe to the top of cement and shall be utilized to determine the bond quality for the production casing. Submit a field copy of the CBL to this office.
- **Please submit an electronic copy of all other logs run on this well in LAS format to UT_VN_Welllogs@BLM.gov. This submission will supersede the requirement for submittal of paper logs to the BLM.**
- There shall be no deviation from the proposed drilling, completion, and/or workover program as approved. Safe drilling and operating practices must be observed. Any changes in operation must have prior approval from the BLM Vernal Field Office.

OPERATING REQUIREMENT REMINDERS:

- All wells, whether drilling, producing, suspended, or abandoned, shall be identified in accordance with 43 CFR 3162.6. There shall be a sign or marker with the name of the operator, lease serial number, well number, and surveyed description of the well.
- For information regarding production reporting, contact the Office of Natural Resources Revenue (ONRR) at www.ONRR.gov.
- 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.

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		FORM 9
		5. LEASE DESIGNATION AND SERIAL NUMBER: UTU-0576
SUNDRY NOTICES AND REPORTS ON WELLS		6. IF INDIAN, ALLOTTEE OR TRIBE NAME: Ute
Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		7. UNIT or CA AGREEMENT NAME: NATURAL BUTTES
1. TYPE OF WELL Gas Well		8. WELL NAME and NUMBER: NBU 921-21E1S
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.		9. API NUMBER: 43047501000000
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779	PHONE NUMBER: 720 929-6515 Ext	9. FIELD and POOL or WILDCAT: NATURAL BUTTES
4. LOCATION OF WELL FOOTAGES AT SURFACE: 2282 FNL 0670 FWL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SWNW Section: 21 Township: 09.0S Range: 21.0E Meridian: S		COUNTY: UINTAH
		STATE: UTAH
11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA		
TYPE OF SUBMISSION	TYPE OF ACTION	
<input checked="" type="checkbox"/> NOTICE OF INTENT Approximate date work will start: 8/22/2011 <input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion: <input type="checkbox"/> SPUD REPORT Date of Spud: <input type="checkbox"/> DRILLING REPORT Report Date:	<input type="checkbox"/> ACIDIZE <input type="checkbox"/> CHANGE TO PREVIOUS PLANS <input type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> DEEPEN <input type="checkbox"/> OPERATOR CHANGE <input type="checkbox"/> PRODUCTION START OR RESUME <input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> WATER SHUTOFF <input type="checkbox"/> WILDCAT WELL DETERMINATION <input type="checkbox"/> ALTER CASING <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input type="checkbox"/> FRACTURE TREAT <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> SI TA STATUS EXTENSION <input type="checkbox"/> OTHER	
	<input type="checkbox"/> CASING REPAIR <input type="checkbox"/> CHANGE WELL NAME <input type="checkbox"/> CONVERT WELL TYPE <input type="checkbox"/> NEW CONSTRUCTION <input type="checkbox"/> PLUG BACK <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION <input type="checkbox"/> TEMPORARY ABANDON <input type="checkbox"/> WATER DISPOSAL <input checked="" type="checkbox"/> APD EXTENSION OTHER: <input type="text"/>	
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.		
<p>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.</p>		
		<p>Approved by the Utah Division of Oil, Gas and Mining</p> <p>Date: <u>08/22/2011</u></p> <p>By: <u></u></p>
NAME (PLEASE PRINT) Andy Lytle	PHONE NUMBER 720 929-6100	TITLE Regulatory Analyst
SIGNATURE N/A		DATE 8/22/2011



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 43047501000000

API: 43047501000000

Well Name: NBU 921-21E1S

Location: 2282 FNL 0670 FWL QTR SWNW SEC 21 TWP 090S RNG 210E MER S

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

Date Original Permit Issued: 9/18/2008

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: Andy Lytle

Date: 8/22/2011

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

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	FORM 9 5.LEASE DESIGNATION AND SERIAL NUMBER: UTU-0576
SUNDRY NOTICES AND REPORTS ON WELLS Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.	6. IF INDIAN, ALLOTTEE OR TRIBE NAME: Ute 7.UNIT or CA AGREEMENT NAME: NATURAL BUTTES
1. TYPE OF WELL Gas Well	8. WELL NAME and NUMBER: NBU 921-21E1S
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.	9. API NUMBER: 43047501000000
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779	PHONE NUMBER: 720 929-6511 9. FIELD and POOL or WILDCAT: NATURAL BUTTES
4. LOCATION OF WELL FOOTAGES AT SURFACE: 2282 FNL 0670 FWL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SWNW Section: 21 Township: 09.0S Range: 21.0E Meridian: S	COUNTY: Uintah STATE: UTAH

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

TYPE OF SUBMISSION	TYPE OF ACTION		
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start:	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> CASING REPAIR
<input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion:	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> CHANGE WELL NAME
<input checked="" type="checkbox"/> SPUD REPORT Date of Spud: 2/27/2012	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> CONVERT WELL TYPE
<input type="checkbox"/> DRILLING REPORT Report Date:	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> NEW CONSTRUCTION
	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> PLUG BACK
	<input type="checkbox"/> PRODUCTION START OR RESUME	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION
	<input type="checkbox"/> REPERFORATE CURRENT FORMATION	<input type="checkbox"/> SIDETRACK TO REPAIR WELL	<input type="checkbox"/> TEMPORARY ABANDON
	<input type="checkbox"/> TUBING REPAIR	<input type="checkbox"/> VENT OR FLARE	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> WATER SHUTOFF	<input type="checkbox"/> SI TA STATUS EXTENSION	<input 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 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 02/27/2012 AT 1800 HRS.

Accepted by the
Utah Division of
Oil, Gas and Mining
FOR RECORD ONLY
 March 02, 2012

NAME (PLEASE PRINT) Sheila Wopsock	PHONE NUMBER 435 781-7024	TITLE Regulatory Analyst
SIGNATURE N/A	DATE 3/1/2012	

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		FORM 9
SUNDRY NOTICES AND REPORTS ON WELLS Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		5. LEASE DESIGNATION AND SERIAL NUMBER: UTU-0576
		6. IF INDIAN, ALLOTTEE OR TRIBE NAME: Ute
		7. UNIT or CA AGREEMENT NAME: NATURAL BUTTES
1. TYPE OF WELL Gas Well		8. WELL NAME and NUMBER: NBU 921-21E1S
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.		9. API NUMBER: 43047501000000
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779		9. FIELD and POOL or WILDCAT: NATURAL BUTTES
4. LOCATION OF WELL FOOTAGES AT SURFACE: 2282 FNL 0670 FWL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SWNW Section: 21 Township: 09.0S Range: 21.0E Meridian: S		COUNTY: Uintah
		STATE: UTAH
11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA		
TYPE OF SUBMISSION	TYPE OF ACTION	
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start:	<input type="checkbox"/> ACIDIZE <input type="checkbox"/> ALTER CASING <input type="checkbox"/> CASING REPAIR <input type="checkbox"/> 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 type="checkbox"/> SPUD REPORT Date of Spud:		
<input checked="" type="checkbox"/> DRILLING REPORT Report Date: 3/13/2012		
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc. MIRU AIR RIG ON MARCH 11, 2012. DRILLED SURFACE HOLE TO 2,950'. 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 March 15, 2012
NAME (PLEASE PRINT) Jaime Scharnowske	PHONE NUMBER 720 929-6304	TITLE Regularatory Analyst
SIGNATURE N/A	DATE 3/13/2012	

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	FORM 9 5. LEASE DESIGNATION AND SERIAL NUMBER: UTU-0576
SUNDRY NOTICES AND REPORTS ON WELLS Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.	6. IF INDIAN, ALLOTTEE OR TRIBE NAME: Ute 7. UNIT or CA AGREEMENT NAME: NATURAL BUTTES
1. TYPE OF WELL Gas Well	8. WELL NAME and NUMBER: NBU 921-21E1S
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.	9. API NUMBER: 43047501000000
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: 2282 FNL 0670 FWL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SWNW Section: 21 Township: 09.0S Range: 21.0E Meridian: S	COUNTY: UINTAH STATE: UTAH

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

TYPE OF SUBMISSION	TYPE OF ACTION		
<input checked="" type="checkbox"/> NOTICE OF INTENT Approximate date work will start: 3/19/2012 <input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion: <input type="checkbox"/> SPUD REPORT Date of Spud: <input type="checkbox"/> DRILLING REPORT Report Date:	<input type="checkbox"/> ACIDIZE <input checked="" type="checkbox"/> CHANGE TO PREVIOUS PLANS <input type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> DEEPEN <input type="checkbox"/> OPERATOR CHANGE <input type="checkbox"/> PRODUCTION START OR RESUME <input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> WATER SHUTOFF <input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> ALTER CASING <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input type="checkbox"/> FRACTURE TREAT <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> SI TA STATUS EXTENSION <input type="checkbox"/> OTHER	<input type="checkbox"/> CASING REPAIR <input type="checkbox"/> CHANGE WELL NAME <input type="checkbox"/> CONVERT WELL TYPE <input type="checkbox"/> NEW CONSTRUCTION <input type="checkbox"/> PLUG BACK <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION <input type="checkbox"/> TEMPORARY ABANDON <input type="checkbox"/> WATER DISPOSAL <input type="checkbox"/> APD EXTENSION OTHER: <input style="width: 100px;" type="text"/>

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

The operator requests approval for changes in the drilling plan. Specifically, the Operator requests approval for a FIT waiver, a closed loop drilling option and production casing change. All other aspects of the previously approved drilling plan will not change. Please see the attachment. Thank you.

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

Date: March 20, 2012

By: *Derek Quist*

NAME (PLEASE PRINT) Jaime Scharnowske	PHONE NUMBER 720 929-6304	TITLE Regulatory Analyst
SIGNATURE N/A	DATE 3/19/2012	

Kerr-McGee Oil & Gas Onshore. L.P.**NBU 921-21E1S**

Surface: 2282 FNL / 670 FWL SWNW
 BHL: 1654 FNL / 674 FWL SWNW

Section 21 T9S R21E

Uintah County, Utah
 Mineral Lease: UTU-0576

ONSHORE ORDER NO. 1**DRILLING PROGRAM**

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

<u>Formation</u>	<u>Depth</u>	<u>Resource</u>
Uinta	0 - Surface	
Green River	1,610'	
Birds Nest	1,946'	Water
Mahogany	2,432'	Water
Wasatch	4,993'	Gas
Mesaverde	7,925'	Gas
Sego	10,199'	Gas
TVD	10,199'	
TD	10,269'	

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 10199' TVD, approximately equals
6,527 psi (0.64 psi/ft = actual bottomhole gradient)

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

Maximum anticipated surface pressure equals approximately 4,269 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 not put the booster and standby compressor opposite from the bleed line.

Lastly, Onshore Order 2 addresses the need for an automatic igniter or continuous pilot light on the bleed 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.

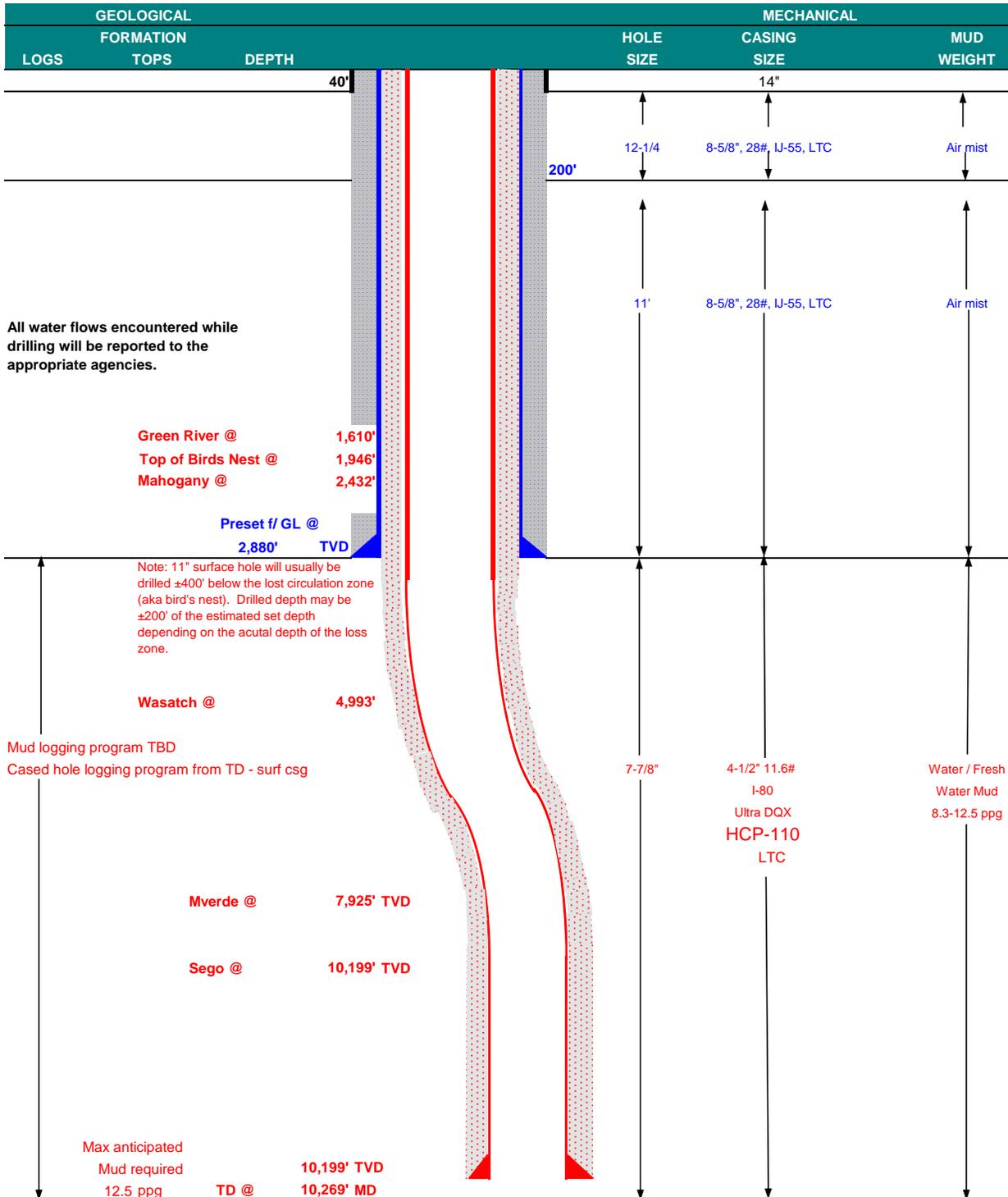
10. **Other Information:**

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 19, 2012	
WELL NAME	NBU 921-21E1S			TD	10,199'	TVD 10,269' MD
FIELD	Natural Buttes	COUNTY	Uintah	STATE	Utah	FINISHED ELEVATION 4,838'
SURFACE LOCATION	SWNW	2282 FNL	670 FWL	Sec 21	T 9S	R 21E
	Latitude: 40.022567		Longitude: -109.563769		NAD 83	
BTM HOLE LOCATION	SWNW	1654 FNL	674 FWL	Sec 21	T 9S	R 21E
	Latitude: 40.024292		Longitude: -109.563758		NAD 83	
OBJECTIVE ZONE(S)	Wasatch/Mesaverde					
ADDITIONAL INFO	Regulatory Agencies: BLM (Minerals), BIA (Surface), UDOGM Tri-County Health Dept.					





KERR-McGEE OIL & GAS ONSHORE LP
DRILLING PROGRAM

CASING PROGRAM

	SIZE	INTERVAL	WT.	GR.	CPLG.	DESIGN FACTORS			
						BURST	LTC		DQX
							COLLAPSE	TENSION	
CONDUCTOR	14"	0-40'							
SURFACE	8-5/8"	0 to 2,880	28.00	IJ-55	LTC	3,390	1,880	348,000	N/A
						7,780	6,350	223,000	267,035
PRODUCTION	4-1/2"	0 to 5,000	11.60	I-80	DQX	1.11	0.96		2.77
						10,690	8,650	279,000	367,174
	4-1/2"	5,000 to 10,269'	11.60	HCP-110	LTC	1.53	1.30	4.51	3.81

Surface Casing:

(Burst Assumptions: TD = 12.5 ppg) 0.73 psi/ft = frac gradient @ surface shoe
 Fracture at surface shoe with 0.1 psi/ft gas gradient above
 (Collapse Assumption: Fully Evacuated Casing, Max MW) (Tension Assumptions: Air Weight of Casing*Buoy.Fact. of water)

Production casing:

(Burst Assumptions: Pressure test with 8.4ppg @ 7000 psi) 0.64 psi/ft = bottomhole gradient
 (Collapse Assumption: Fully Evacuated Casing, Max MW) (Tension Assumptions: Air Weight of Casing*Buoy.Fact. of water)

CEMENT PROGRAM

		FT. OF FILL	DESCRIPTION	SACKS	EXCESS	WEIGHT	YIELD
SURFACE Option 1	LEAD	500'	Premium cmt + 2% CaCl + 0.25 pps flocele	180	60%	15.80	1.15
	TOP OUT CMT (6 jobs)	1,200'	20 gals sodium silicate + Premium cmt + 2% CaCl + 0.25 pps flocele	270	0%	15.80	1.15
NOTE: If well will circulate water to surface, option 2 will be utilized							
SURFACE Option 2	LEAD	2,380'	65/35 Poz + 6% Gel + 10 pps gilsonite + 0.25 pps Flocele + 3% salt BWOW	220	35%	11.00	3.82
	TAIL	500'	Premium cmt + 2% CaCl + 0.25 pps flocele	150	35%	15.80	1.15
	TOP OUT CMT	as required	Premium cmt + 2% CaCl	as req.		15.80	1.15
PRODUCTION	LEAD	4,489'	Premium Lite II +0.25 pps celloflake + 5 pps gilsonite + 10% gel + 0.5% extender	350	35%	12.00	3.38
	TAIL	5,780'	50/50 Poz/G + 10% salt + 2% gel + 0.1% R-3	1,370	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.

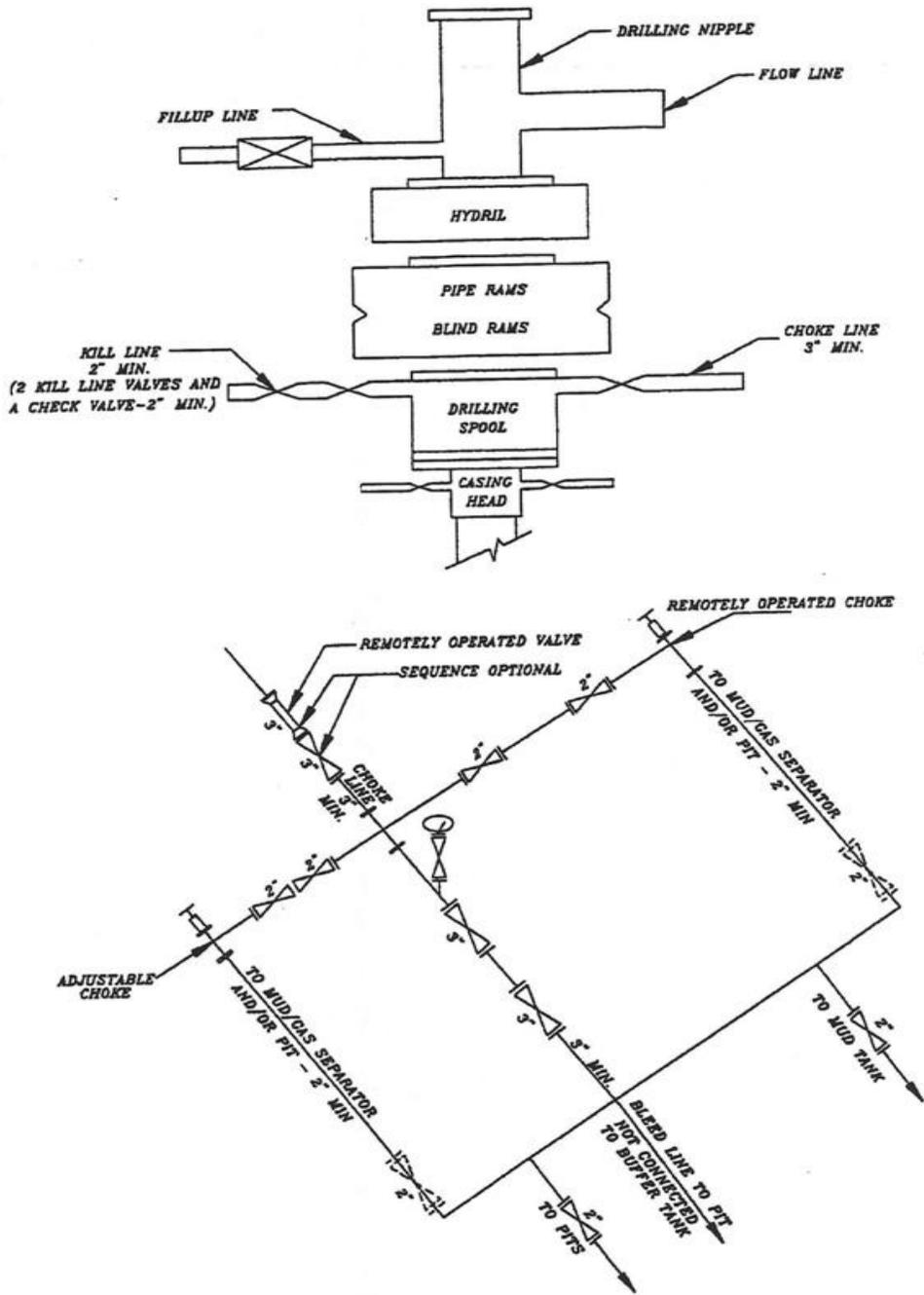
DRILLING ENGINEER: _____
 Nick Spence / Danny Showers / Chad Loesel

DATE: _____

DRILLING SUPERINTENDENT: _____
 Kenny Gathings / Lovel Young

DATE: _____

EXHIBIT A NBU 921-21E1S



SCHEMATIC DIAGRAM OF 5,000 PSI BOP STACK

Requested Drilling Options:

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

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

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

FORM 6

ENTITY ACTION FORM

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

Well 1

API Number	Well Name		QQ	Sec	Twp	Rng	County
4304750100	NBU 921-21E1S		SWNW	21	9S	21E	UINTAH
Action Code	Current Entity Number	New Entity Number	Spud Date		Entity Assignment Effective Date		
B	99999	2900	2/27/2012		3/20/2012		
Comments: MIRU TRIPPLE A BUCKET RIG. <i>WSMVD</i> SPUD WELL ON 02/27/2012 AT 1800 HRS. <i>BHL SWNW</i>							

Well 2

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

Well 3

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

ACTION CODES:

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

SHEILA WOPSOCK

Name (Please Print)

Signature

REGULATORY ANALYST

Title

3/1/2012

Date

(5/2000)

RECEIVED

MAR 01 2012

Div. of Oil, Gas & Mining

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		FORM 9
		5. LEASE DESIGNATION AND SERIAL NUMBER: UTU-0576
SUNDRY NOTICES AND REPORTS ON WELLS		6. IF INDIAN, ALLOTTEE OR TRIBE NAME: Ute
Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		7. UNIT or CA AGREEMENT NAME: NATURAL BUTTES
1. TYPE OF WELL Gas Well		8. WELL NAME and NUMBER: NBU 921-21E1S
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.		9. API NUMBER: 43047501000000
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779	PHONE NUMBER: 720 929-6511	9. FIELD and POOL or WILDCAT: NATURAL BUTTES
4. LOCATION OF WELL FOOTAGES AT SURFACE: 2282 FNL 0670 FWL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SWNW Section: 21 Township: 09.0S Range: 21.0E Meridian: S		COUNTY: UINTAH STATE: UTAH
11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA		
TYPE OF SUBMISSION	TYPE OF ACTION	
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start: <input checked="" type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion: 5/27/2012 <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	
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc. MIRU ROTARY RIG. FINISHED DRILLING FROM 2950' TO 10269' ON 5/25/2012. RAN 4-1/2" 11.6# I-80 PRODUCTION CASING. CEMENTED PRODUCTION CASING. RELEASED H&P 298 RIG ON 5/27/2012 @ 7:00 HRS. DETAILS OF CEMENT JOB WILL BE INCLUDED WITH THE WELL COMPLETION REPORT. WELL IS WAITING ON FINAL COMPLETION ACTIVITIES. THE PIT ON THIS LOCATION WILL BE REFURBISHED AND UTILIZED AS PART OF THE ACTS SYSTEM.		
		Accepted by the Utah Division of Oil, Gas and Mining FOR RECORD ONLY May 30, 2012
NAME (PLEASE PRINT) Cara Mahler	PHONE NUMBER 720 929-6029	TITLE Regulatory Analyst I
SIGNATURE N/A		DATE 5/29/2012

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	FORM 9
5. LEASE DESIGNATION AND SERIAL NUMBER: UTU-0576	
SUNDRY NOTICES AND REPORTS ON WELLS	
Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.	
6. IF INDIAN, ALLOTTEE OR TRIBE NAME: Ute	7. UNIT or CA AGREEMENT NAME: NATURAL BUTTES
1. TYPE OF WELL Gas Well	8. WELL NAME and NUMBER: NBU 921-21E1S
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.	9. API NUMBER: 43047501000000
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779	PHONE NUMBER: 720 929-6511
9. FIELD and POOL or WILDCAT: NATURAL BUTTES	4. LOCATION OF WELL FOOTAGES AT SURFACE: 2282 FNL 0670 FWL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SWNW Section: 21 Township: 09.0S Range: 21.0E Meridian: S
COUNTY: Uintah	STATE: UTAH

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

TYPE OF SUBMISSION	TYPE OF ACTION		
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start:	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> CASING REPAIR
<input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion:	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> CHANGE WELL NAME
<input type="checkbox"/> SPUD REPORT Date of Spud:	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> CONVERT WELL TYPE
<input checked="" type="checkbox"/> DRILLING REPORT Report Date: 7/6/2012	<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.

No activity for the month of June 2012. Well TD at 10,269'.

Accepted by the
Utah Division of
Oil, Gas and Mining
FOR RECORD ONLY
 July 10, 2012

NAME (PLEASE PRINT) Jaime Scharnowske	PHONE NUMBER 720 929-6304	TITLE Regularatory Analyst
SIGNATURE N/A	DATE 7/6/2012	

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	FORM 9 5.LEASE DESIGNATION AND SERIAL NUMBER: UTU-0576
SUNDRY NOTICES AND REPORTS ON WELLS Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.	6. IF INDIAN, ALLOTTEE OR TRIBE NAME: Ute 7.UNIT or CA AGREEMENT NAME: NATURAL BUTTES
1. TYPE OF WELL Gas Well	8. WELL NAME and NUMBER: NBU 921-21E1S
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.	9. API NUMBER: 43047501000000
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779	PHONE NUMBER: 720 929-6511 9. FIELD and POOL or WILDCAT: NATURAL BUTTES
4. LOCATION OF WELL FOOTAGES AT SURFACE: 2282 FNL 0670 FWL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SWNW Section: 21 Township: 09.0S Range: 21.0E Meridian: S	COUNTY: Uintah STATE: UTAH

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

TYPE OF SUBMISSION	TYPE OF ACTION		
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start:	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> CASING REPAIR
<input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion:	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> CHANGE WELL NAME
<input type="checkbox"/> SPUD REPORT Date of Spud:	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> CONVERT WELL TYPE
<input checked="" type="checkbox"/> DRILLING REPORT Report Date: 7/30/2012	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> NEW CONSTRUCTION
	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> PLUG BACK
	<input checked="" type="checkbox"/> PRODUCTION START OR RESUME	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION
	<input type="checkbox"/> REPERFORATE CURRENT FORMATION	<input type="checkbox"/> SIDETRACK TO REPAIR WELL	<input type="checkbox"/> TEMPORARY ABANDON
	<input type="checkbox"/> TUBING REPAIR	<input type="checkbox"/> VENT OR FLARE	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> WATER SHUTOFF	<input type="checkbox"/> SI TA STATUS EXTENSION	<input type="checkbox"/> APD EXTENSION
	<input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> OTHER	OTHER: <input style="width: 100px;" type="text"/>

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

THE SUBJECT WELL WAS PLACED ON PRODUCTION ON 7/30/2012. THE CHRONOLOGICAL WELL HISTORY WILL BE SUBMITTED WITH THE WELL COMPLETION REPORT.

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

FOR RECORD ONLY

July 31, 2012

NAME (PLEASE PRINT) Cara Mahler	PHONE NUMBER 720 929-6029	TITLE Regulatory Analyst I
SIGNATURE N/A	DATE 7/31/2012	

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	FORM 9 5.LEASE DESIGNATION AND SERIAL NUMBER: UTU-0576
SUNDRY NOTICES AND REPORTS ON WELLS Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.	6. IF INDIAN, ALLOTTEE OR TRIBE NAME: Ute 7.UNIT or CA AGREEMENT NAME: NATURAL BUTTES
1. TYPE OF WELL Gas Well	8. WELL NAME and NUMBER: NBU 921-21E1S
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.	9. API NUMBER: 43047501000000
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779	PHONE NUMBER: 720 929-6511 9. FIELD and POOL or WILDCAT: NATURAL BUTTES
4. LOCATION OF WELL FOOTAGES AT SURFACE: 2282 FNL 0670 FWL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SWNW Section: 21 Township: 09.0S Range: 21.0E Meridian: S	COUNTY: Uintah STATE: UTAH

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

TYPE OF SUBMISSION	TYPE OF ACTION		
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start:	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> CASING REPAIR
<input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion:	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> CHANGE WELL NAME
<input type="checkbox"/> SPUD REPORT Date of Spud:	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> CONVERT WELL TYPE
<input checked="" type="checkbox"/> DRILLING REPORT Report Date: 8/3/2012	<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.

Well was placed on production 7/30/2012.

Accepted by the
Utah Division of
Oil, Gas and Mining
FOR RECORD ONLY
 August 06, 2012

NAME (PLEASE PRINT) Jaime Scharnowske	PHONE NUMBER 720 929-6304	TITLE Regularatory Analyst
SIGNATURE N/A	DATE 8/3/2012	

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	FORM 9 5.LEASE DESIGNATION AND SERIAL NUMBER: UTU-0576
SUNDRY NOTICES AND REPORTS ON WELLS Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.	6. IF INDIAN, ALLOTTEE OR TRIBE NAME: Ute 7.UNIT or CA AGREEMENT NAME: NATURAL BUTTES
1. TYPE OF WELL Gas Well	8. WELL NAME and NUMBER: NBU 921-21E1S
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.	9. API NUMBER: 43047501000000
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779	PHONE NUMBER: 720 929-6511 9. FIELD and POOL or WILDCAT: NATURAL BUTTES
4. LOCATION OF WELL FOOTAGES AT SURFACE: 2282 FNL 0670 FWL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SWNW Section: 21 Township: 09.0S Range: 21.0E Meridian: S	COUNTY: Uintah STATE: UTAH

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

TYPE OF SUBMISSION	TYPE OF ACTION		
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start:	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> CASING REPAIR
<input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion:	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> CHANGE WELL NAME
<input type="checkbox"/> SPUD REPORT Date of Spud:	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> CONVERT WELL TYPE
<input checked="" type="checkbox"/> DRILLING REPORT Report Date: 9/5/2012	<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.

Well was completed, finishing well completion report. Well TD at 10,269.

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

NAME (PLEASE PRINT) Jaime Scharnowske	PHONE NUMBER 720 929-6304	TITLE Regularatory Analyst
SIGNATURE N/A	DATE 9/5/2012	

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

5. Lease Serial No.
UTU0576

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

6. If Indian, Allottee or Tribe Name

7. Unit or CA Agreement Name and No.
UTU83047A

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

8. Lease Name and Well No.
NBU 921-21E1S

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

9. API Well No. **43-047-50100**

4. Location of Well (Report location clearly and in accordance with Federal requirements)*
 At surface **SWNW 2282FNL 670FWL 40.022567 N Lat, 109.563769 W Lon**
 At top prod interval reported below **SWNW 1639FNL 675FWL**
 At total depth **SWNW 1676FNL 704FWL BHL by HSM**

10. Field and Pool, or Exploratory
NATURAL BUTTES

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

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

14. Date Spudded **02/27/2012** 15. Date T.D. Reached **05/25/2012**
 16. Date Completed D & A Ready to Prod. **07/30/2012**

17. Elevations (DF, KB, RT, GL)*
4838 GL

18. Total Depth: MD **10269** TVD **10202** 19. Plug Back T.D.: MD **10229** TVD **10162** 20. Depth Bridge Plug Set: MD **TVD**

21. Type Electric & Other Mechanical Logs Run (Submit copy of each)
CB/GR/CCL/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 Sks. & Type of Cement	Slurry Vol. (BBL)	Cement Top*	Amount Pulled
20.000	14.000 STL	36.7	0	40		28			
11.000	8.625 IJ-55	28.0	0	2940		590		0	
7.875	4.500 P-110	11.6	0	10252		1651		1775	

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	9379							

25. Producing Intervals			26. Perforation Record			
Formation	Top	Bottom	Perforated Interval	Size	No. Holes	Perf. Status
A) WASATCH	6878	8026	6878 TO 8026	0.360	96	OPEN
B) MESAVERDE	8068	9936	8068 TO 9936	0.360	144	OPEN
C)						
D)						

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

Depth Interval	Amount and Type of Material
6878 TO 9936	PUMP 10,879 BBLs SLICK H2O & 262,133 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
07/30/2012	08/04/2012	24	→	39.0	1497.0	629.0			FLows FROM WELL
Choke Size	Tbg. Press. Flwg.	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status	
20/64	SI 6733	2004.0	→	39	1497	629		PGW	

28a. Production - Interval B

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

(See Instructions and spaces for additional data on reverse side)

ELECTRONIC SUBMISSION #149101 VERIFIED BY THE BLM WELL INFORMATION SYSTEM

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

RECEIVED

SEP 12 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	1724
				BIRD'S NEST	2013
				MAHOGANY	2483
				WASATCH	5080
				MESAVERDE	8051

32. Additional remarks (include plugging procedure):

The first 165 ft. of the surface hole was drilled with a 12 1/4 in. bit. The remainder of the surface hole was drilled with an 11 in. bit. DQX P-110 csg was run from surface to 4,969 ft; LTC I-80 csg was run from 4,969 ft. to 10,252 ft. 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 #149101 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 09/06/2012

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 ****

INSTRUCTIONS

GENERAL: This form is designed for submitting a complete and correct well completion/recompletion report and log on all types of wells on Federal and Indian leases to a Federal agency, pursuant to applicable Federal laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from, the local Federal office. If not filed prior to the time this summary record is submitted, copies of all currently available logs (drillers, geologists, sample and core analysis, and all types electric), formation and pressure tests, and directional surveys, should be attached hereto, to the extent required by applicable Federal laws and regulations. All attachments should be listed on this form, see item 33.

ITEM 4: Locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local Federal office for specific instructions.

ITEM 17: Indicate which reported elevation is used as reference (where not otherwise shown) for depth measurements given in other spaces on this form and in any attachments.

ITEM 23: Show how reported top(s) of cement were determined, i.e. circulated (CIR), or calculated (CAL), or cement bond log (CBL), or temperature survey (TS).

NOTICES

The Privacy Act of 1974 and the regulation in 43 CFR 2.48 (d) provide that you be furnished the following information in connection with information required by this application.

AUTHORITY: 30 U.S.C. 181 et seq., 351 et seq., 25 U.S.C. et seq.; 43 CFR 3160.

PRINCIPAL PURPOSE: The information is to be used to evaluate the actual operations performed in the drilling, completing and testing of a well on a Federal or Indian lease.

ROUTINE USES: (1) Evaluate the equipment and procedures used during the drilling and completing/recompleting of a well. (2) The review of geologic zones and formation encountered during drilling. (3) Analyze future applications to drill in light of data obtained and methods used. (4)(5) Information from the record and/or the record will be transferred to appropriate Federal, State, local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecutions.

EFFECT OF NOT PROVIDING INFORMATION: Filing of this report and disclosure of the information is mandatory once a well drilled on a Federal or Indian lease is completed/recompleted.

The Paperwork Reduction Act of 1995 requires us to inform you that:

The BLM collects this information to allow evaluation of the technical, safety, and environmental factors involved with drilling and completing/recompleting wells on Federal and Indian oil and gas leases.

This information will be used to analyze operations and to compare equipment and procedures actually used with those proposed and approved.

Response to this request is mandatory only if the operator elects to initiate drilling and completing/recompleting operations on an oil and gas lease.

The BLM would like you to know that you do not have to respond to this or any other Federal agency-sponsored information collection unless it displays a currently valid OMB control number.

BURDEN HOURS STATEMENT: Public reporting burden for this form is estimated to average 8 hours per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding the burden estimate or any other aspect of this form to U.S. Department of the Interior, Bureau of Land Management (1004-0137), Bureau Information Collection Clearance Officer (WO-630), 1849 C Street, N.W., Mail Stop 401 LS, Washington, D.C. 20240.

US ROCKIES REGION
Operation Summary Report

Well: NBU 921-21E1S GREEN		Spud Date: 3/11/2012	
Project: UTAH-UINTAH		Site: NBU 921-21E PAD	Rig Name No: H&P 298/298, CAPSTAR 310/310
Event: DRILLING		Start Date: 2/26/2012	End Date: 5/27/2012
Active Datum: RKB @4,864.00usft (above Mean Sea Level)		UWI: SW/NW/0/9/S/21/E/21/0/0/26/PM/N/2282/W/0/670/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation	
3/11/2012	6:00 - 8:30	2.50	MIRU	01	C	P		MIRU /// HOWCROFT - 2 TRUCKS /// CAPSTAR - 5 MEN & 1 FORKLIFT /// DERRICK IN AIR @ 08:00 /// RELEASE TRUCKS @ 08:30	
	8:30 - 11:30	3.00	PRPSPD	14	A	P		WELD ON CONDUCTOR & RIG UP FLOW LINE	
	11:30 - 12:30	1.00	PRPSPD	06	A	P		PICK UP 12.25" BIT & 8" MUD MOTORM & TIH	
	12:30 - 14:00	1.50	DRLSUR	02	B	P		DRILL 12.25" SURFACE HOLE F/ 49'- 165'	
	14:00 - 14:30	0.50	DRLSUR	06	A	P		TOOH & LAY DOWN 12.25" BIT	
	14:30 - 15:30	1.00	DRLSUR	06	A	P		PU 11" BIT & DIR TOOLS, SCRIBE & TIH	
	15:30 - 16:00	0.50	DRLSUR	07	A	P		SERVICE RIG & EQUIPMENT	
	16:00 - 0:00	8.00	DRLSUR	02	D	P		DRLG 11" SURFACE HOLE F/ 165'- 1329 ROP= 1164' @ 145 FPH WOB= 24-28K RPM= 55/105 SPP= 1250/900 GPM= 595 TRQ=2800/2200 PU/SO/RT= 82/54/69 NO LOSSES	
	3/12/2012	0:00 - 12:00	12.00	DRLSUR	02	D	P		DRLG 11" SURFACE HOLE F/ 1329' - 2543' ROP= 1214' @ 101 FPH WOB= 24-28K RPM= 55/105 SPP= 1450/1100 GPM= 595 TRQ=2800/2200 PU/SO/RT= 82/54/69 NO LOSSES
		12:00 - 12:30	0.50	DRLSUR	07	A	P		SERVICE RIG & EQUIPMENT
12:30 - 17:00		4.50	DRLSUR	02	D	P		DRLG 11" SURFACE HOLE F/ 2543'-2950' ROP= 407' @ 90 FPH WOB= 24-28K RPM= 55/105 SPP= 1450/1100 GPM= 595 TRQ=2800/2200 PU/SO/RT= 82/54/69 NO LOSSES	
17:00 - 17:30		0.50	DRLSUR	05	A	P		LAST SURVEY @ 2894'= 13.45 INC. & 359.59 AZ	
17:30 - 21:30		4.00	DRLSUR	06	A	P		CIRC & COND HOLE FOR 8.625" CSG LAY DOWN DRILL STRING & DIR TOOLS	
21:30 - 0:00		2.50	CSG	12	C	P		PJSM /// RUN 66 JT'S, 8.625", 28#, J-55, LT&C CSG /// SHOE SET @ 2922' & BAFFLE @ 2876'	
3/13/2012		0:00 - 0:30	0.50	CSG	05	A	P	CIRC. 8.625" CSG @ 2922'	

**US ROCKIES REGION
Operation Summary Report**

Well: NBU 921-21E1S GREEN Spud Date: 3/11/2012
 Project: UTAH-UINTAH Site: NBU 921-21E PAD Rig Name No: H&P 298/298, CAPSTAR 310/310
 Event: DRILLING Start Date: 2/26/2012 End Date: 5/27/2012
 Active Datum: RKB @4,864.00usft (above Mean Sea Level) UWI: SW/NW/0/9/S/21/E/21/0/0/26/PM/N/2282/W/0/670/0/0

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
	0:30 - 2:30	2.00	CSG	12	E	P		PJSM WITH PRO PETRO CMT CREW /// TEST LINES TO 1500 PSI /// PUMP 40 BBL'S WATER AHEAD FOLLOWED BY 20 BBL'S GEL WATER FLUSH /// LEAD = 240 SX CLASS G CMT @ 11.0 WT & 3.82 YIELD /// TAIL= 200 SX CLASS G CMT @ 15.8 WT & 1.15 YIELD /// DROP PLUG & DISPLACE W/ 179 BBL'S WATER /// PLUG DN @ 01:34 03/13/2012 /// BUMP PLUG W/ 900 PSI /// FINAL LIFT = 600 PSI /// CHECK FLOATS- HELD W/ 1 BBL BACK /// FULL RETURNS THRU OUT JOB /// 30 BBL'S CMT TO SURFACE
	2:30 - 3:30	1.00	CSG	14	A	P		CUT OFF CONDUCTOR & HANG 8-5/8" CAG
	3:30 - 4:30	1.00	CSG	12	E	P		RUN 200' OF 1" DOWN BACKSIDE & CMT W/ 150 SX CLASS G CMT @ 15.8 WT & 1.15 YIELD /// CMT TO SURFACE & STAYED
	4:30 - 5:00	0.50	CSG	12	B	P		RIG DOWN CMT CREW /// RELEASE RIG @ 05:00 3/13/20'12 TO THE BONANZA 1023-6L2DS
5/21/2012	16:00 - 20:00	4.00	RDMO	01	C	P		SKID RIG 10' JUMP SKID RAILS,SKID RIG 10' & ALIGN OVER WELL
	20:00 - 0:00	4.00	MIRU	14	A	P		NIPPLE UP BOPE,ADD EXTENTIONS TO CHOKE LINE,FLOWLINE,MUD,LINE,SWACO CHOKE ,ELECTRIC CORDS
5/22/2012	0:00 - 1:00	1.00	PRPSPD	14	A	P		NIPPLE UP SWACO CHOKE LINE TO FLOWLINE
	1:00 - 6:00	5.00	PRPSPD	15	A	P		RU TESTERS /TEST SURFACE CASING / BLIND RAMS FAILED /CHANGE OUT SEALS
	6:00 - 10:00	4.00	PRPSPD	15	A	P		TEST CASING 1500 HIGH 250 LOW FOR 30 MIN / PRESSURE TEST H&P EQUIP BLIND RAMS,PIPE RAMS , FLOOR VALVE, KILL LINES & KILL LINE VALVES, BOP WING VALVES , HCR VALVE + CHOKE LINE; INNER AND OUTER CHOKE VALVES & MANIFOLD TO 250 PSI LOW @ 5 MINUTES + 5000 PSI HIGH @ 10 MINUTES / TEST ANNULAR TO 250 PSI LOW @ 5 MINUTES + 2500 PSI HIGH
	10:00 - 11:00	1.00	PRPSPD	14	B	P		INSTALL WEAR BUSHING,AND SMITH BEARING ASSEMBLY
	11:00 - 11:30	0.50	PRPSPD	15	A	P		TEST SWACO ORBIT,AND CHOKE VALVES
	11:30 - 12:30	1.00	PRPSPD	06	A	P		MAKE UP BHA,BIT ,MUD MOTOR,MWD, TEST SAME
	12:30 - 13:30	1.00	PRPSPD	06	A	P		TRIP IN HOLE TAG CMT @ 2,833
	13:30 - 14:00	0.50	PRPSPD	07	B	P		CHECK DERRICK FOR LEVEL,INSTALL ROTATING HEAD
	14:00 - 14:30	0.50	DRLPRC	02	F	P		DRILL FLOAT TRAC F/ 2,843 -BAFFLE @ 2,898 SHOE @ 2,944 OPEN HOLE TO 2,967
	14:30 - 15:30	1.00	DRLPRC	02	D	P		DRILL // SURVEY F/2,967 TO 3,091 = 124' @ 124 FPH WOB 20,000-24,000 TOP DRIVE RPM 40-70 MUD MOTOR RPM 90-115 PUMPS 110-122 SPM=495-550 GPM PUMP PRESSURE ON/OFF BTM 2,050/ 1,725 TORQUE ON/OFF BTM 10,000/ 4,000 PICK UP WT 114,000 SLACK OFF WT 96,000 ROT WT 106,000 MW 8.5 VIS 27 /NOV D-WATER

**US ROCKIES REGION
Operation Summary Report**

Well: NBU 921-21E1S GREEN		Spud Date: 3/11/2012	
Project: UTAH-UINTAH		Site: NBU 921-21E PAD	Rig Name No: H&P 298/298, CAPSTAR 310/310
Event: DRILLING		Start Date: 2/26/2012	End Date: 5/27/2012
Active Datum: RKB @4,864.00usft (above Mean Sea Level)		UWI: SW/NW/0/9/S/21/E/21/0/0/26/PM/N/2282/W/0/670/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
	15:30 - 16:00	0.50	DRLPRC	07	A	P		RIG SERVICE
	16:00 - 0:00	8.00	DRLPRC	02	D	P		DRILL / SLIDE / SURVEY F/3,091 TO 4,320 = 1229' @ 153.6 FPH WOB 20,000-28,000 TOP DRIVE RPM 40-70 MUD MOTOR RPM 90-115 PUMPS -122 SPM=-550 GPM PUMP PRESSURE ON/OFF BTM 1,900/ 1,735 TORQUE ON/OFF BTM 6,000/ 4,000 PICK UP WT 135,000 SLACK OFF WT 105,000 ROT WT 116,000 SLIDE 103' IN 65 MIN 8.3% OF FOOTAGE DRILLED,13.5%OF HRS DRILLED MW 8.5 VIS 27 / NOV D-WATER /NO FLARE
5/23/2012	0:00 - 6:00	6.00	DRLPRO	02	D	P		DRILL / SLIDE / SURVEY FROM 4,320' TO 5,200' = 880' @ 146.6 FPH WOB 20,000-28,000 TOP DRIVE RPM 40-70 MUD MOTOR RPM 90-115 PUMPS -122 SPM=-550 GPM PUMP PRESSURE ON/OFF BTM 2,170/ 1,900 TORQUE ON/OFF BTM 9,000/ 5,000 PICK UP WT 147,000 SLACK OFF WT 116,000 ROT WT 125,000 SLIDE 48' IN 46 MIN 5% OF FOOTAGE DRILLED,12%OF HRS DRILLED MW 8.5 VIS 27 / NOV D-WATER /NO FLARE
	6:00 - 14:00	8.00	DRLPRO	02	D	P		DRILL / SLIDE / SURVEY FROM 5,200' TO 6,494' = 1,294' @ 161.75 FPH WOB 20,000-28,000 TOP DRIVE RPM 40-70 MUD MOTOR RPM 90-115 PUMPS -122 SPM=-550 GPM PUMP PRESSURE ON/OFF BTM 2,350/ 2000 TORQUE ON/OFF BTM 11,000/ 8,000 PICK UP WT 172,000 SLACK OFF WT 132,000 ROT WT 149,000 SLIDE 68' IN 65 MIN 4.7% OF FOOTAGE DRILLED,12.03%OF HRS DRILLED MW 8.5 VIS 27 / NOV D-WATER /NO FLARE
	14:00 - 14:30	0.50	DRLPRO	07	A	P		SERVICE RIG @ 6,494'

US ROCKIES REGION
Operation Summary Report

Well: NBU 921-21E1S GREEN		Spud Date: 3/11/2012	
Project: UTAH-UINTAH	Site: NBU 921-21E PAD	Rig Name No: H&P 298/298, CAPSTAR 310/310	
Event: DRILLING	Start Date: 2/26/2012	End Date: 5/27/2012	
Active Datum: RKB @4,864.00usft (above Mean Sea Level)		UWI: SW/NW/0/9/S/21/E/21/0/0/26/PM/N/2282/W/0/670/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
	14:30 - 0:00	9.50	DRLPRO	02	D	P		DRILL / SURVEY FROM 6,494' TO 7,470' = 976' @ 102.73 FPH WOB 20,000-28,000 TOP DRIVE RPM 40-70 MUD MOTOR RPM 90-115 PUMPS -122 SPM=-550 GPM PUMP PRESSURE ON/OFF BTM 2,350/ 2000 TORQUE ON/OFF BTM 11,000/ 8,000 PICK UP WT 207,000 SLACK OFF WT 142,000 ROT WT 170,000 MW 8.5 VIS 27 / NOV D-WATER /NO FLARE
5/24/2012	0:00 - 6:00	6.00	DRLPRO	02	D	P		DRILL / SURVEY FROM 7,470' TO 7,945' = 475' @ 79.16 FPH WOB 20,000-28,000 TOP DRIVE RPM 40-70 MUD MOTOR RPM 90-115 PUMPS -122 SPM=-550 GPM PUMP PRESSURE ON/OFF BTM 2,350/ 2000 TORQUE ON/OFF BTM 12,000/ 10,000 PICK UP WT 210,000 SLACK OFF WT 173,000 ROT WT 142,000 MW 8.5 VIS 27 / NOV D-WATER /NO FLARE
	6:00 - 13:00	7.00	DRLPRO	02	D	P		DRILL / SURVEY FROM 7,945' TO 8,478' = 533' @ 76.14 FPH WOB 20,000-28,000 TOP DRIVE RPM 45-60 MUD MOTOR RPM 90-115 PUMPS -122 SPM=-550 GPM PUMP PRESSURE ON/OFF BTM 2,450/ 2200 TORQUE ON/OFF BTM 12,000/ 10,000 PICK UP WT 210,000 SLACK OFF WT 158,000 ROT WT 182,000 SLIDE 24' IN 55 MIN 4.4% OF FOOTAGE DRILLED,12.2%OF HRS DRILLED MW 8.8 VIS 32 / NOV RUN CONVENTIONAL / NO FLARE
	14:00 - 14:30	0.50	DRLPRO	07	A	P		SERVICE RIG @ 8,478'
	14:30 - 0:00	9.50	DRLPRO	02	D	P		DRILL / SURVEY FROM 8,478' TO 9,314' = 836' @ 88 FPH WOB 20,000-30,000 TOP DRIVE RPM 50-65 MUD MOTOR RPM 104 PUMPS -110 SPM=-495 GPM PUMP PRESSURE ON/OFF BTM 2,450/ 2200 TORQUE ON/OFF BTM 12,000/ 10,000 PICK UP WT 210,000 SLACK OFF WT 158,000 ROT WT 182,000 MW 8.8 VIS 32 / NOV RUN CONVENTIONAL / MI SWACO ON LINE @ 8,495' - 10 TO 20' FLARE

**US ROCKIES REGION
Operation Summary Report**

Well: NBU 921-21E1S GREEN Spud Date: 3/11/2012
 Project: UTAH-UINTAH Site: NBU 921-21E PAD Rig Name No: H&P 298/298, CAPSTAR 310/310
 Event: DRILLING Start Date: 2/26/2012 End Date: 5/27/2012
 Active Datum: RKB @4,864.00usft (above Mean Sea Level) UWI: SW/NW/0/9/S/21/E/21/0/0/26/PM/N/2282/W/0/670/0/0

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
5/25/2012	0:00 - 14:30	14.50	DRLPRO	02	D	P		DRILL / SURVEY FROM 9,314' TO 10,269' TD = 955' @ 65.86 FPH WOB 20,000-32,000 TOP DRIVE RPM 45-65 MUD MOTOR RPM 104 PUMPS -110 SPM=-495 GPM PUMP PRESSURE ON/OFF BTM 2,850/ 2560 TORQUE ON/OFF BTM 14,000/ 12,000 PICK UP WT 250,000 SLACK OFF WT 178,000 ROT WT 204,000 MW 11.6 VIS 38 / 10' FLARE / MI SWACO ON LINE CIRC BOTTOMS UP @ 10269' TD
	14:30 - 15:30	1.00	DRLPRO	05	C	P		CIRC BOTTOMS UP @ 10269' TD
	15:30 - 16:00	0.50	DRLPRO	06	E	P		5 STAND WIPER TRIP 1' FILL
	16:00 - 16:30	0.50	DRLPRO	07	A	P		SERVICE RIG
	16:30 - 18:30	2.00	DRLPRO	05	C	P		CIRC & CLEAN HOLE MEANWHILE RAISE MUD WT TO 11.6 PPG & PREPARE 100 BBL 12.5 PPG PILL
	18:30 - 21:00	2.50	DRLPRO	06	A	P		BACK REAM FROM 10,269' TO 10,085' SPOT 80 BBL 12.5 PILL, POOH TO 7,730' PUMP SLUG
	21:00 - 0:00	3.00	DRLPRO	06	A	P		TOOH LAYING DOWN DRILL PIPE TO 3,997'
5/26/2012	0:00 - 7:30	7.50	DRLPRO	06	A	P		CONTINUE TO LAY DOWN DRILL PIPE AND HWT DRILL PIPE
	7:30 - 9:00	1.50	DRLPRO	06	A	P		LAY DOWN DIRECTIONAL TOOLS
	9:00 - 10:00	1.00	DRLPRO	14	B	P		PULL SMITH BEARING ASSY & WEAR BUSHING INSTALL BEARING ASSY
	10:00 - 11:30	1.50	DRLPRO	12	A	P		PRE JOB SAFETY MEETING RIG UP CASING EQUIPMENT
	11:30 - 21:00	9.50	DRLPRO	12	C	P		RUN 4 1/2" PRODUCTION CASING TO 10,251' SHOE @ 10,251' / FLOAT COLLAR @ 10,229' / MVerde Marker @ 7,964' / X-O @ 4,969'
	21:00 - 22:30	1.50	DRLPRO	05	A	P		CIRCULATE & CONDITION MUD @ 10,251'
	22:30 - 0:00	1.50	DRLPRO	12	E	P		MEANWHILE RD FRANKS CASING CREW & HOLD PRE JOB SAFETY MEETING WITH BJ CEMENTERS INSTALL BJ CMT HEAD , TEST PUMP & LINES TO 5,000 PSI, ,DROP BOTTOM PLUG PUMP 25 BBLS FW PUMP 566 SKS LEAD CEMENT @ 12.5 PPG,(199.6 BBLS) (PREM LITE II + .025 pps CELLO FLAKE + 5 pps KOL SEAL + .05 lb/sx STATIC FREE + 6% bwoc BENTONITE + .2% bwoc SODIUM META SILICATE + ..3 % R-3 +0.4%bwoc FL-52 +0.002 gps FP-6L 100.1% FRESH WATER / (10.44 gal/sx, 1.98 yield)

US ROCKIES REGION
Operation Summary Report

Well: NBU 921-21E1S GREEN		Spud Date: 3/11/2012	
Project: UTAH-UINTAH		Site: NBU 921-21E PAD	Rig Name No: H&P 298/298, CAPSTAR 310/310
Event: DRILLING		Start Date: 2/26/2012	End Date: 5/27/2012
Active Datum: RKB @4,864.00usft (above Mean Sea Level)		UWI: SW/NW/0/9/S/21/E/21/0/0/26/PM/N/2282/W/0/670/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
5/27/2012	0:00 - 2:00	2.00	DRLPRO	12	E	P		CONTINUE CEMENTING WITH BJ - 1,085 SX TAIL @ 14.3 ppg(254.27 BBLS)+ (CLS G 50/50 POZ + 10% SALT + .005lbs/sx STATIC FREE + .2% R3 + .002 GPS FP-6L + 2% BENTONITE +0.5%EC-1+ 59% FW / (5.94 gal/sx, 1.32 yield) / DROP TOP PLUG & DISPLACE W/ 159 BBLS H2O + ADDITIVES / PLUG DOWN @ 01:14HOURS / FLOATS HELD W/ 2 BBLS H2O RETURNED TO INVENTORY/ GOOD RETURNS THROUGH OUT JOB / WITH NO LEAD CMT TO SURFACE / GOOD LIFT PRESSURE 100 PSI ABOVE CACULATED & COULD SEE DYE IN SPACER / LIFT PRESSURE @ 3,130 PSI / BUMP PRESSURE TO 3,819 PSI / TOP OF TAIL CEMENT CALCULATED @ 4,550 / RIG DOWN BJ
	2:00 - 7:00	5.00	DRLPRO	14	A	P		RAISE BOP / SET SLIPS WITH 100K / CUT OFF CSG & LAY DOWN SAME / ND BOP'S & EQUIPMENT / CLEAN PITS
	7:00 - 10:00	3.00	DRLPRO	01	E			CONTINUE TO CLEAN PITS & PREPARE FOR RIG MOVE. RELEASE RIG @ 10:00 5/27/12

1 General

1.1 Customer Information

Company	US ROCKIES REGION
Representative	
Address	

1.2 Well/Wellbore Information

Well	NBU 921-21E1S GREEN	Wellbore No.	OH
Well Name	NBU 921-21E1S	Wellbore Name	NBU 921-21E1S
Report No.	1	Report Date	7/9/2012
Project	UTAH-UINTAH	Site	NBU 921-21E PAD
Rig Name/No.		Event	COMPLETION
Start Date	7/9/2012	End Date	7/30/2012
Spud Date	3/11/2012	Active Datum	RKB @4,864.00usft (above Mean Sea Level)
UWI	SW/NW/0/9/S/21/E/21/0/0/26/PM/N/2282/W/0/670/0/0		

1.3 General

Contractor	CASED HOLE SOLUTIONS	Job Method	PERFORATE	Supervisor	ED GUDAC
Perforated Assembly	SURFACE CASING	Conveyed Method	WIRELINE		

1.4 Initial Conditions

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

1.5 Summary

Gross Interval	6,878.0 (usft)-9,936.0 (usft)	Start Date/Time	7/9/2012 12:00AM
No. of Intervals	59	End Date/Time	7/9/2012 12:00AM
Total Shots	240	Net Perforation Interval	78.00 (usft)
Avg Shot Density	3.08 (shot/ft)	Final Surface Pressure	
		Final Press Date	

2 Intervals

2.1 Perforated Interval

Date	Formation/Reservoir	CCL@ (usft)	CCL-T S (usft)	MD Top (usft)	MD Base (usft)	Shot Density (shot/ft)	Misfires/Add. Shot	Diameter (in)	Carr Type /Stage No	Carr Size (in)	Phasing (°)	Charge Desc /Charge Manufacturer	Charge Weight (gram)	Reason	Misrun
7/9/2012 12:00AM	WASATCH/			6,878.0	6,880.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO	N

2.1 Perforated Interval (Continued)

Date	Formation/ Reservoir	CCL@ (usft)	CCL-T S (usft)	MD Top (usft)	MD Base (usft)	Shot Density (shot/ft)	Misfires/ Add. Shot	Diamete r (in)	Carr Type /Stage No	Carr Size (in)	Phasing (°)	Charge Desc /Charge Manufacturer	Charge Weight (gram)	Reason	Misrun
7/9/2012 12:00AM	WASATCH/			6,922.0	6,924.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
7/9/2012 12:00AM	WASATCH/			6,970.0	6,972.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
7/9/2012 12:00AM	WASATCH/			7,060.0	7,062.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
7/9/2012 12:00AM	WASATCH/			7,201.0	7,202.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
7/9/2012 12:00AM	WASATCH/			7,215.0	7,216.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
7/9/2012 12:00AM	WASATCH/			7,270.0	7,271.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
7/9/2012 12:00AM	WASATCH/			7,288.0	7,289.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
7/9/2012 12:00AM	WASATCH/			7,346.0	7,350.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
7/9/2012 12:00AM	WASATCH/			7,458.0	7,459.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
7/9/2012 12:00AM	WASATCH/			7,535.0	7,536.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
7/9/2012 12:00AM	WASATCH/			7,578.0	7,579.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
7/9/2012 12:00AM	WASATCH/			7,605.0	7,606.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
7/9/2012 12:00AM	WASATCH/			7,636.0	7,637.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
7/9/2012 12:00AM	WASATCH/			7,649.0	7,650.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
7/9/2012 12:00AM	WASATCH/			7,674.0	7,676.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
7/9/2012 12:00AM	WASATCH/			7,773.0	7,774.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
7/9/2012 12:00AM	WASATCH/			7,844.0	7,845.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
7/9/2012 12:00AM	WASATCH/			7,884.0	7,886.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
7/9/2012 12:00AM	WASATCH/			7,932.0	7,933.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
7/9/2012 12:00AM	WASATCH/			7,963.0	7,964.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
7/9/2012 12:00AM	WASATCH/			7,990.0	7,991.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	

2.1 Perforated Interval (Continued)

Date	Formation/ Reservoir	CCL@ (usft)	CCL-T S (usft)	MD Top (usft)	MD Base (usft)	Shot Density (shot/ft)	Misfires/ Add. Shot	Diamete r (in)	Carr Type /Stage No	Carr Size (in)	Phasing (°)	Charge Desc /Charge Manufacturer	Charge Weight (gram)	Reason	Misrun
7/9/2012 12:00AM	WASATCH/			8,025.0	8,026.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
7/9/2012 12:00AM	MESAVERDE/			8,068.0	8,070.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
7/9/2012 12:00AM	MESAVERDE/			8,092.0	8,094.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
7/9/2012 12:00AM	MESAVERDE/			8,119.0	8,120.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
7/9/2012 12:00AM	MESAVERDE/			8,140.0	8,141.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
7/9/2012 12:00AM	MESAVERDE/			8,230.0	8,232.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
7/9/2012 12:00AM	MESAVERDE/			8,293.0	8,294.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
7/9/2012 12:00AM	MESAVERDE/			8,334.0	8,335.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
7/9/2012 12:00AM	MESAVERDE/			8,371.0	8,373.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
7/9/2012 12:00AM	MESAVERDE/			8,406.0	8,407.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
7/9/2012 12:00AM	MESAVERDE/			8,458.0	8,460.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
7/9/2012 12:00AM	MESAVERDE/			8,494.0	8,495.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
7/9/2012 12:00AM	MESAVERDE/			8,552.0	8,553.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
7/9/2012 12:00AM	MESAVERDE/			8,614.0	8,615.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
7/9/2012 12:00AM	MESAVERDE/			8,683.0	8,684.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
7/9/2012 12:00AM	MESAVERDE/			8,719.0	8,720.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
7/9/2012 12:00AM	MESAVERDE/			8,762.0	8,764.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
7/9/2012 12:00AM	MESAVERDE/			8,960.0	8,962.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
7/9/2012 12:00AM	MESAVERDE/			9,094.0	9,096.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
7/9/2012 12:00AM	MESAVERDE/			9,122.0	9,124.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
7/9/2012 12:00AM	MESAVERDE/			9,159.0	9,161.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	

2.1 Perforated Interval (Continued)

Date	Formation/ Reservoir	CCL@ (usft)	CCL-T S (usft)	MD Top (usft)	MD Base (usft)	Shot Density (shot/ft)	Misfires/ Add. Shot	Diamete r (in)	Carr Type /Stage No	Carr Size (in)	Phasing (°)	Charge Desc /Charge Manufacturer	Charge Weight (gram)	Reason	Misrun
7/9/2012 12:00AM	MESAVERDE/			9,373.0	9,374.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
7/9/2012 12:00AM	MESAVERDE/			9,412.0	9,413.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
7/9/2012 12:00AM	MESAVERDE/			9,433.0	9,434.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
7/9/2012 12:00AM	MESAVERDE/			9,536.0	9,537.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
7/9/2012 12:00AM	MESAVERDE/			9,552.0	9,553.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
7/9/2012 12:00AM	MESAVERDE/			9,575.0	9,576.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
7/9/2012 12:00AM	MESAVERDE/			9,597.0	9,598.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
7/9/2012 12:00AM	MESAVERDE/			9,619.0	9,620.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
7/9/2012 12:00AM	MESAVERDE/			9,694.0	9,695.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
7/9/2012 12:00AM	MESAVERDE/			9,715.0	9,716.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
7/9/2012 12:00AM	MESAVERDE/			9,732.0	9,733.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
7/9/2012 12:00AM	MESAVERDE/			9,771.0	9,772.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
7/9/2012 12:00AM	MESAVERDE/			9,790.0	9,791.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
7/9/2012 12:00AM	MESAVERDE/			9,821.0	9,822.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
7/9/2012 12:00AM	MESAVERDE/			9,835.0	9,836.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
7/9/2012 12:00AM	MESAVERDE/			9,935.0	9,936.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	

3 Plots

**US ROCKIES REGION
Operation Summary Report**

Well: NBU 921-21E1S GREEN		Spud Date: 3/11/2012	
Project: UTAH-UINTAH		Site: NBU 921-21E PAD	Rig Name No: ROYAL WELL SERVICE/3, ROYAL WELL SERVICE/3
Event: COMPLETION		Start Date: 7/9/2012	End Date: 7/30/2012
Active Datum: RKB @4,864.00usft (above Mean Sea Level)		UWI: SW/NW/0/9/S/21/E/21/0/0/26/PM/N/2282/W/0/670/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
3/11/2012	-							
7/10/2012	9:15 - 11:00	1.75	FRAC	33	C	P		FILL SURFACE CSG. MIRU B&C QUICK TEST. PSI TEST T/ 1000 PSI. HELD FOR 15 MIN LOST 6 PSI. PSI TEST T/ 3500 PSI. HELD FOR 15 MIN LOST 25 PSI. 1ST PSI TEST T/ 7000 PSI. HELD FOR 30 MIN LOST 69 PSI. NO COMMUNICATION OR MIGRATION WITH SURFACE CSG BLEED OFF PSI. MOVE T/ NEXT WELL. SWIFW
7/12/2012	7:00 - 7:15	0.25	COMP	48		P		HELD SAFETY MEETING: CRANES
	7:15 - 10:00	2.75	COMP	37		P		PERF STG 1)PU 3 1/8 EXP GUN, 23 GM, .36 HOLE SIZE. 90 DEG PHASING. RIH PERF AS PER PERF DESIGN. POOH. SWIFW
7/16/2012	13:30 - 18:00	4.50	COMP	36	B	P		FRAC STG 1)WHP 1760 PSI, BRK 3853 PSI @ 4.7 BPM. ISIP 3108 PSI, FG .76. CALC PERFS OPEN @ 50.7 BPM @ 5414 PSI = 100% HOLES OPEN. (24/24 HOLES OPEN) ISIP 3348 PSI, FG .78, NPI 239 PSI. MP 5995 PSI, MR 52 BPM, AP 5502 PSI, AR 50.3 BPM, PUMPED 30/50 OWATTA SAND
								PERF STG 2)PU 4 1/2 8K HAL CBP & 3 1/8 EXP GUN, 23 GM, .36 HOLE SIZE. 120 DEG PHASING. RIH SET CBP @ 9650' P/U PERF AS PER DESIGN.

US ROCKIES REGION
Operation Summary Report

Well: NBU 921-21E1S GREEN		Spud Date: 3/11/2012	
Project: UTAH-UINTAH		Site: NBU 921-21E PAD	Rig Name No: ROYAL WELL SERVICE/3, ROYAL WELL SERVICE/3
Event: COMPLETION		Start Date: 7/9/2012	End Date: 7/30/2012
Active Datum: RKB @4,864.00usft (above Mean Sea Level)		UWI: SW/NW/0/9/S/21/E/21/0/0/26/PM/N/2282/W/0/670/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
------	----------------	---------------	-------	------	----------	-----	----------------	-----------

7/17/2012	7:00 - 18:00	11.00	COMP	36	E	P		
-----------	--------------	-------	------	----	---	---	--	--

FRAC STG 2)WHP 2490 PSI, BRK 4408 PSI @ 5.1 BPM. ISIP 2781 PSI, FG .73.
CALC PERFS OPEN @ 49.4 BPM @ 5038 PSI = 100% HOLES OPEN. (24/24 HOLES OPEN)
ISIP 3041 PSI, FG .76, NPI 260 PSI.
MP 5686 PSI, MR 55.1 BPM, AP 5237 PSI, AR 52.5 BPM,
PUMPED 30/50 OWATTA SAND

PERF STG 3)PU 4 1/2 8K HAL CBP & 3 1/8 EXP GUN, 23 GM ,.36 HOLE SIZE. 120 DEG PHASING. RIH SET CBP @ 9211' P/U PERF AS PER DESIGN.

FRAC STG 3)WHP 300 PSI, BRK 4468 PSI @ 4.8 BPM. ISIP 2475 PSI, FG .71.
CALC PERFS OPEN @ 50.6 BPM @ 5771 PSI = 71% HOLES OPEN. (19/24 HOLES OPEN)
ISIP 2850 PSI, FG .75, NPI 375 PSI.
MP 6036 PSI, MR 52.5 BPM, AP 4876 PSI, AR 50.4 BPM,
PUMPED 30/50 OWATTA SAND

PERF STG 4)PU 4 1/2 8K HAL CBP & 3 1/8 EXP GUN, 23 GM ,.36 HOLE SIZE. 120 DEG PHASING. RIH SET CBP @ 8814' P/U PERF AS PER DESIGN.

FRAC STG 4)WHP 1130 PSI, BRK 5004 PSI @ 7.5 BPM. ISIP 2609 PSI, FG .74.
CALC PERFS OPEN @ 52.7 BPM @ 5514 PSI = 96% HOLES OPEN. (23/24 HOLES OPEN)
ISIP 2811 PSI, FG .76, NPI 202 PSI.
MP 6554 PSI, MR 55.3 BPM, AP 4919 PSI, AR 52.7 BPM,

PERF STG 4)PU 4 1/2 8K HAL CBP & 3 1/8 EXP GUN, 23 GM ,.36 HOLE SIZE. 120 DEG PHASING. RIH SET CBP @ 9119' P/U PERF AS PER DESIGN.

PERF STG 5)PU 4 1/2 8K HAL CBP & 3 1/8 EXP GUN, 23 GM ,.36 HOLE SIZE. 120 DEG PHASING. RIH SET CBP @ 8525' P/U PERF AS PER DESIGN.

FRAC STG 5)WHP 1015 PSI, BRK 2755 PSI @ 4.7 BPM. ISIP 1875 PSI, FG .66.
CALC PERFS OPEN @ 52.3 BPM @ 4625 PSI = 100% HOLES OPEN. (24/24 HOLES OPEN)
ISIP 2614 PSI, FG .75, NPI 739 PSI.
MP 5053 PSI, MR 55.3 BPM, AP 4631 PSI, AR 52.2 BPM,
PUMPED 30/50 OWATTA SAND

US ROCKIES REGION
Operation Summary Report

Well: NBU 921-21E1S GREEN

Spud Date: 3/11/2012

Project: UTAH-UINTAH

Site: NBU 921-21E PAD

Rig Name No: ROYAL WELL SERVICE/3, ROYAL WELL SERVICE/3

Event: COMPLETION

Start Date: 7/9/2012

End Date: 7/30/2012

Active Datum: RKB @4,864.00usft (above Mean Sea Level)

UWI: SW/NW/0/9/S/21/E/21/0/0/26/PM/N/2282/W/0/670/0/0

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
								<p>PERF STG 6)PU 4 1/2 8K HAL CBP & 3 1/8 EXP GUN, 23 GM ,.36 HOLE SIZE. 120 DEG PHASING. RIH SET CBP @ 8262' P/U PERF AS PER DESIGN.</p> <p>FRAC STG 6)WHP 740 PSI, BRK 4831 PSI @ 6.3 BPM. ISIP 1766 PSI, FG .66. CALC PERFS OPEN @ 53.2 BPM @ 4632 PSI = 96% HOLES OPEN. (23/24 HOLES OPEN) ISIP 2751 PSI, FG .78, NPI 985 PSI. MP 4954 PSI, MR 55.6 BPM, AP 4524 PSI, AR 53 BPM, PUMPED 30/50 OWATTA SAND</p> <p>PERF STG 7)PU 4 1/2 8K HAL CBP & 3 1/8 EXP GUN, 23 GM ,.36 HOLE SIZE. 120 DEG PHASING. RIH SET CBP @ 8056' P/U PERF AS PER DESIGN.</p>

US ROCKIES REGION
Operation Summary Report

Well: NBU 921-21E1S GREEN Spud Date: 3/11/2012

Project: UTAH-UINTAH Site: NBU 921-21E PAD Rig Name No: ROYAL WELL SERVICE/3, ROYAL WELL SERVICE/3

Event: COMPLETION Start Date: 7/9/2012 End Date: 7/30/2012

Active Datum: RKB @4,864.00usft (above Mean Sea Level) UWI: SW/NW/0/9/S/21/E/21/0/0/26/PM/N/2282/W/0/670/0/0

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
------	----------------	---------------	-------	------	----------	-----	----------------	-----------

7/18/2012	7:00 - 18:00	11.00	COMP	36	E	P		<p>FRAC STG 7)WHP 1035 PSI, BRK 3230 PSI @ 4.6 BPM. ISIP 2381 PSI, FG .74. CALC PERFS OPEN @ 53.1 BPM @ 4660 PSI = 100% HOLES OPEN. (24/24 HOLES OPEN) ISIP 2953 PSI, FG .81, NPI 572 PSI. MP 5803 PSI, MR 56.1 BPM, AP 5078 PSI, AR 52.7 BPM, PUMPED 30/50 OWATTA SAND</p>
-----------	--------------	-------	------	----	---	---	--	---

PERF STG 8)PU 4 1/2 8K HAL CBP & 3 1/8 EXP GUN, 23 GM ,.36 HOLE SIZE. 120 DEG PHASING. RIH SET CBP @ 7716' P/U PERF AS PER DESIGN.

FRAC STG 8)WHP 630 PSI, BRK 2667 PSI @ 4.7 BPM. ISIP 2016 PSI, FG .71.
 CALC PERFS OPEN @ 52.9 BPM @ 4658 PSI = 100% HOLES OPEN. (24/24 HOLES OPEN)
 ISIP 2530 PSI, FG .77, NPI 514 PSI.
 MP 5326 PSI, MR 54.6 BPM, AP 4800 PSI, AR 52.8 BPM,
 PUMPED 30/50 OWATTA SAND

PERF STG 9)PU 4 1/2 8K HAL CBP & 3 1/8 EXP GUN, 23 GM ,.36 HOLE SIZE. 120 DEG PHASING. RIH SET CBP @ 7400' P/U PERF AS PER DESIGN.

FRAC STG 9)WHP 415 PSI, BRK 2358 PSI @ 4.7 BPM. ISIP 1766 PSI, FG .68.
 CALC PERFS OPEN @ 52.7 BPM @ 3470 PSI = 100% HOLES OPEN. (24/24 HOLES OPEN)
 ISIP 2125 PSI, FG .73, NPI 349 PSI.
 MP 4494 PSI, MR 55.6 BPM, AP 3882 PSI, AR 52.9 BPM,
 PUMPED 30/50 OWATTA SAND

PERF STG 10)PU 4 1/2 8K HAL CBP & 3 1/8 EXP GUN, 23 GM ,.36 HOLE SIZE. 120 DEG PHASING. RIH SET CBP @ 7112' P/U PERF AS PER DESIGN.

FRAC STG 10)WHP 430 PSI, BRK 2163 PSI @ 4.7 BPM. ISIP 1789 PSI, FG .70.
 CALC PERFS OPEN @ 52.3 BPM @ 3632 PSI = 100% HOLES OPEN. (24/24 HOLES OPEN)
 ISIP 1976 PSI, FG .72, NPI 187 PSI.
 MP 4060 PSI, MR 57.1 BPM, AP 3677 PSI, AR 52.9 BPM,
 PUMPED 30/50 OWATTA SAND

**US ROCKIES REGION
Operation Summary Report**

Well: NBU 921-21E1S GREEN Spud Date: 3/11/2012

Project: UTAH-UINTAH Site: NBU 921-21E PAD Rig Name No: ROYAL WELL SERVICE/3, ROYAL WELL SERVICE/3

Event: COMPLETION Start Date: 7/9/2012 End Date: 7/30/2012

Active Datum: RKB @4,864.00usft (above Mean Sea Level) UWI: SW/NW/0/9/S/21/E/21/0/0/26/PM/N/2282/W/0/670/0/0

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
7/19/2012	-							KILL PLUG) P/U 4 1/2 " HAL 8K CBP, RIH SET @ 6828', R/D FRAC AND WIRELINE, TOTAL WATER = 10,,879 BBL TOTAL SAND = 262,133 LBS SAFETY = JSA.
7/27/2012	7:00 - 7:15	0.25	COMP	48			P	
	7:15 - 14:00	6.75	COMP	30			P	
7/30/2012	7:00 - 7:15	0.25	COMP	48			P	MIRU. NDWH. NUBOP. REMOVE WASHINGTON HEAD. ADD SET OF SINGLE PIPE RAMS TO BOP. RE-INSTALL WASHINGTON HEAD. PRESSURE TEST BLIND RAMS GOOD @ 3000#. P/U & RIH W/ 45 JTS 2-3/8" TBNG + BHA. SWIFN. SAFETY = JSA.

**US ROCKIES REGION
Operation Summary Report**

Well: NBU 921-21E1S GREEN		Spud Date: 3/11/2012	
Project: UTAH-UINTAH		Site: NBU 921-21E PAD	Rig Name No: ROYAL WELL SERVICE/3, ROYAL WELL SERVICE/3
Event: COMPLETION		Start Date: 7/9/2012	End Date: 7/30/2012
Active Datum: RKB @4,864.00usft (above Mean Sea Level)		UWI: SW/NW/09/S/21/E/21/0/0/26/PM/N/2282/N/0/670/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
	7:15 - 21:00	13.75	COMP	30		P		<p>0# ON WELL. FINISH RIH W/ 2-3/8" P-110 TBNG + XN+POBS+ 3-7/8" BIT. T/U ON CBP (KILL PLUG) @ 6828'. INSTALL NEW WASHINGTON HEAD & SPOOL PIECE ON BOPS. TEST BOP GOOD @ 4000#. R/D TBNG EQUIP. R/U POWER SWIVEL. BREAK CIRC. D/O 10 CBP'S AS FOLLOWS:</p> <p>CBP #1) DRLG OUT BAKER 8K CBP @ 6828' IN 11MIN. 0 LBS DIFF. PSI. RIH, TAG SND @ 7064'. C/O 28' OF SND. FCP = 0 PSI.</p> <p>CBP #2) DRLG OUT BAKER 8K CBP @ 7112' IN 10 MIN. 300 LBS DIFF. PSI. RIH, TAG SND @ 7350'. C/O 30' OF SND. FCP = 0 PSI.</p> <p>CBP #3) DRLG OUT BAKER 8K CBP @ 7400' IN 9 MIN. 200 LBS DIFF. PSI. RIH, TAG SND @ 7690'. C/O 16' OF SND. FCP = 0 PSI.</p> <p>CBP #4) DRLG OUT BAKER 8K CBP @ 7716' IN 7 MIN. 400 LBS DIFF. PSI. RIH, TAG SND @ 8032'. C/O 17' OF SND. FCP = 100 PSI.</p> <p>CBP #5) DRLG OUT BAKER 8K CBP @ 8056' IN 7 MIN. 450 LBS DIFF. PSI. RIH, TAG SND @ 8258'. C/O 4' OF SND. FCP = 25 PSI.</p> <p>CBP #6) DRLG OUT BAKER 8K CBP @ 8262' IN 6 MIN. 500 LBS DIFF. PSI. RIH, TAG SND @ 8495'. C/O 30' OF SND. FCP = 180 PSI.</p> <p>CBP #7) DRLG OUT BAKER 8K CBP @ 8525' IN 6 MIN. 500 LBS DIFF. PSI. RIH, TAG SND @ 8763'. C/O 27' OF SND. FCP = 200 PSI.</p> <p>CBP #8) DRLG OUT BAKER 8K CBP @ 8814' IN 6 MIN. 400 LBS DIFF. PSI. RIH, TAG SND @ 9173'. C/O 21' OF SND. FCP = 400 PSI.</p> <p>CBP #9) DRLG OUT BAKER 8K CBP @ 9211' IN 6 MIN. 600 LBS DIFF. PSI. RIH, TAG SND @ 9621'. C/O 29' OF SND. FCP = 450 PSI.</p> <p>CBP #10) DRLG OUT BAKER 8K CBP @ 9650' IN 5 MIN. 700 LBS DIFF. PSI. CONT RIH W/ TOTAL OF 319 JTS 2-3/8" P-110 +</p>

**US ROCKIES REGION
Operation Summary Report**

Well: NBU 921-21E1S GREEN		Spud Date: 3/11/2012	
Project: UTAH-UINTAH		Site: NBU 921-21E PAD	Rig Name No: ROYAL WELL SERVICE/3, ROYAL WELL SERVICE/3
Event: COMPLETION		Start Date: 7/9/2012	End Date: 7/30/2012
Active Datum: RKB @4,864.00usft (above Mean Sea Level)		UWI: SW/NW/0/9/S/21/E/21/0/0/26/PM/N/2282/W/0/670/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
								<p>BHA. DID NOT TAG SAND. C/O TO DEPTH OF 10,122'. CIRC WELL. CLEAN. R/D POWER SWIVEL. R/U TBNG EQUIP. L/D 24 JTS TBNG. LAND WELL ON HANGER. R/D FLOOR. NDBOP. NUWH. PRESSURE TEST FLOWLINES GOOD @ 4000#. PUMP OFF BIT. WELL LANDED AS FOLLOWS:</p> <p>KB= 26' HANGER= .83' 295 JTS 2-3/8" P-110 4.7# TBNG = 9348.14' XN= 1.34' POBS= 2.40' EOT @ 9378.71'</p> <p>TURN WELL OVER TO FLOWBACK CREW @ 2030. SICP = 1830#. SITP = 1250#. TWLTR= 9679BBLS</p> <p>WELL TURNED TO SALES @ 2110 HR ON 7/30/2012, 700 MCFD, 1920 BWP, FCP 1800#, FTP 1500#, 20/64" CK.</p>
	21:00 - 21:00	0.00	COMP	50				

Project: UTAH - UTM (feet), NAD27, Zone 12N
 Site: UINTAH_NBU 921-21E PAD
 Well: NBU 921-21E1S
 Wellbore: NBU 921-21E1S
 Section:
 SHL:
 Design: NBU 921-21E1S (wp01)
 Latitude: 40.022603
 Longitude: -109.563081
 GL: 4838.00
 KB: 4838' GL + 26' RKB @ 4864.00ft (H&P 298)

FORMATION TOP DETAILS

TVDPath	MDPath	Formation
4993.00	5060.29	WASATCH
5593.00	5660.29	top of cylinder
7925.00	7992.32	MESAVERDE
10199.00	10266.35	SEGO

WELL DETAILS: NBU 921-21E1S

+N/-S	+E/-W	Northing	Ground Level: Easting	4838.00 Latitude	Longitude	Slot
0.00	0.00	14537519.40	2042712.44	40.022603	-109.563081	

CASING DETAILS

TVD	MD	Name	Size
2881.95	2939.68	8-5/8"	8-5/8



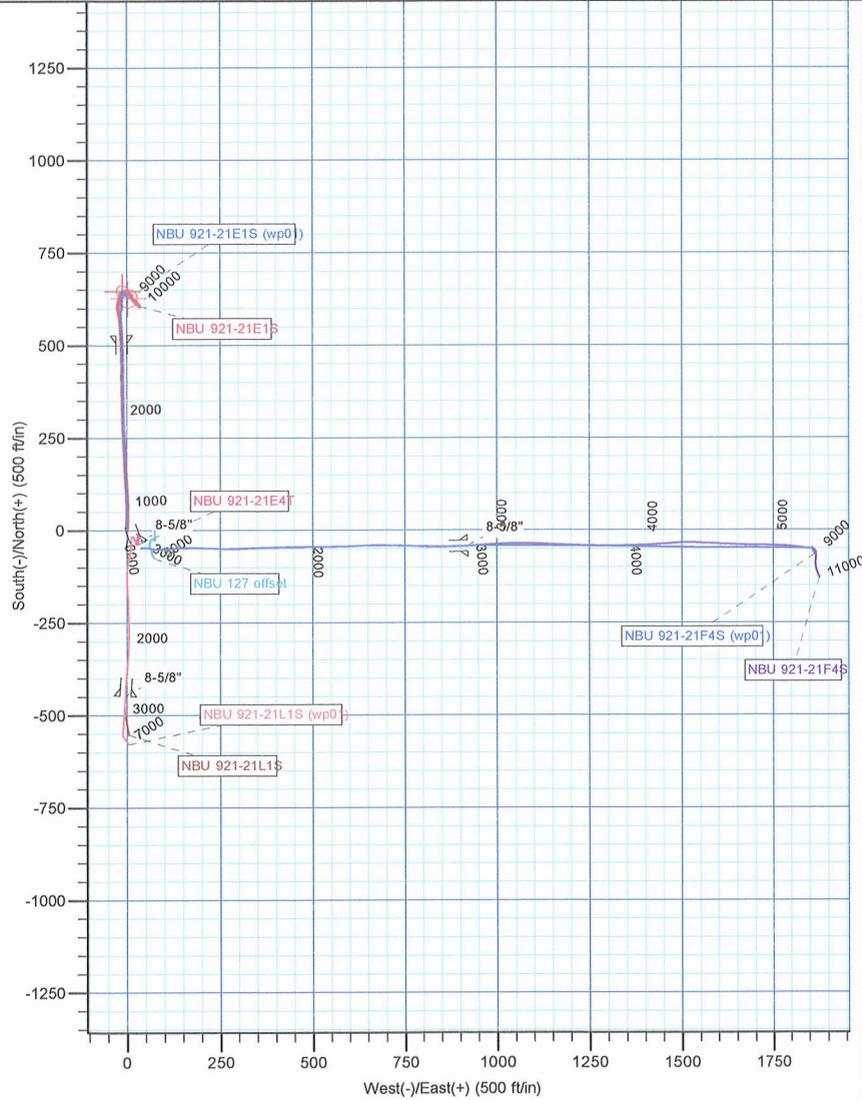
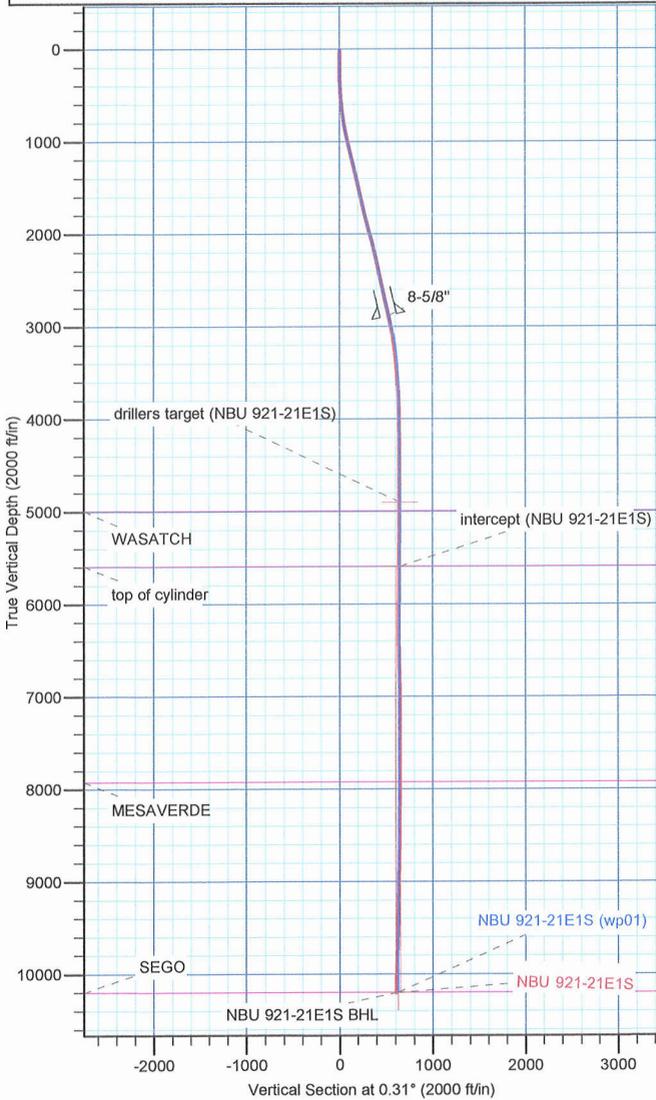
Azimuths to True North
 Magnetic North: 11.00°
 Magnetic Field
 Strength: 52253.8snT
 Dip Angle: 65.85°
 Date: 4/3/2012
 Model: IGRF2010

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
drillers target (NBU 921-21E1S)	4899.00	648.25	-12.36	14538167.37	2042689.62	40.024383	-109.563125	Circle (Radius: 15.00)
Intercept (NBU 921-21E1S)	5593.00	645.78	-10.42	14538164.93	2042691.60	40.024376	-109.563118	Point
NBU 921-21E1S BHL	10199.00	628.25	3.36	14538147.62	2042705.67	40.024328	-109.563069	Circle (Radius: 25.00)

SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	V Sect
2911.00	13.45	359.59	2854.06	521.62	-13.82	0.00	0.00	521.54
3061.00	13.45	359.59	2999.95	556.51	-14.07	0.00	0.00	556.42
3702.89	0.62	7.62	3635.67	634.92	-14.14	2.00	179.61	634.83
4930.93	0.62	7.62	4863.65	648.06	-12.39	0.00	0.00	647.99
4966.29	0.00	0.00	4899.00	648.25	-12.36	1.75	180.00	648.17
5058.76	0.28	141.83	4991.47	648.07	-12.22	0.30	141.83	648.00
10266.35	0.28	141.83	10199.00	628.25	3.36	0.00	0.00	628.26



US ROCKIES REGION PLANNING

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

UINTAH_NBU 921-21E PAD

NBU 921-21E1S

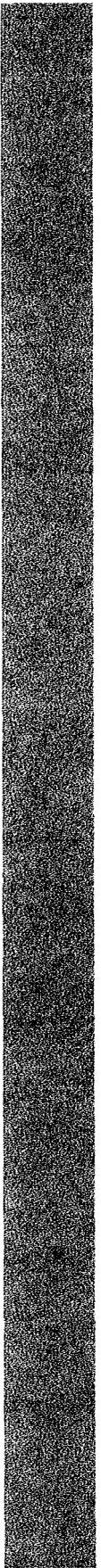
NBU 921-21E1S

Design: NBU 921-21E1S

Standard Survey Report

30 May, 2012

UTAH - UTM (feet), NAD27, Zone 12N
UINTAH_NBU 921-21E PAD
NBU 921-21E1S
NBU 921-21E1S
Design: NBU 921-21E1S
Standard Survey Report
30 May, 2012



Anadarko Petroleum Corp

Survey Report

Company: US ROCKIES REGION PLANNING	Local Co-ordinate Reference: Well NBU 921-21E1S
Project: UTAH - UTM (feet), NAD27, Zone 12N	TVD Reference: 4838' GL + 26' RKB @ 4864.00ft (H&P 298)
Site: UINTAH_NBU 921-21E PAD	MD Reference: 4838' GL + 26' RKB @ 4864.00ft (H&P 298)
Well: NBU 921-21E1S	North Reference: True
Wellbore: NBU 921-21E1S	Survey Calculation Method: Minimum Curvature
Design: NBU 921-21E1S	Database: edmp

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

Site	UINTAH_NBU 921-21E PAD		
Site Position:		Northing: 14,537,473.41 usft	Latitude: 40.022475
From: Lat/Long		Easting: 2,042,751.54 usft	Longitude: -109.562944
Position Uncertainty: 0.00 ft		Slot Radius: 13-3/16 "	Grid Convergence: 0.92 °

Well	NBU 921-21E1S		
Well Position	+N/-S 0.00 ft	Northing: 14,537,519.41 usft	Latitude: 40.022603
	+E/-W 0.00 ft	Easting: 2,042,712.43 usft	Longitude: -109.563081
Position Uncertainty	0.00 ft	Wellhead Elevation: ft	Ground Level: 4,838.00 ft

Wellbore	NBU 921-21E1S				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	4/3/2012	11.00	65.85	52,254

Design	NBU 921-21E1S			
Audit Notes:		Phase: ACTUAL	Tie On Depth: 17.00	
Version: 1.0				
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.00	0.00	0.00	3.24

Survey Program	Date 5/30/2012			
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description
247.00	2,911.00	Survey #1 (NBU 921-21E1S)	MWD	MWD - STANDARD
3,033.00	10,269.00	Survey #2 (NBU 921-21E1S)	MWD	MWD - STANDARD

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
17.00	0.00	0.00	17.00	0.00	0.00	0.00	0.00	0.00	0.00
247.00	0.26	13.74	247.00	0.51	0.12	0.51	0.11	0.11	0.00
338.00	1.85	6.00	337.98	2.17	0.33	2.18	1.75	1.75	-8.51
428.00	3.34	4.77	427.89	6.23	0.70	6.26	1.66	1.66	-1.37
522.00	5.01	359.41	521.63	13.06	0.88	13.09	1.82	1.78	-5.70
616.00	6.51	0.47	615.16	22.49	0.88	22.51	1.60	1.60	1.13
710.00	7.83	2.14	708.42	34.22	1.17	34.23	1.42	1.40	1.78
805.00	9.67	359.76	802.31	48.67	1.37	48.67	1.97	1.94	-2.51
899.00	11.52	358.97	894.70	65.95	1.17	65.91	1.97	1.97	-0.84
992.00	13.37	357.48	985.51	85.98	0.53	85.87	2.02	1.99	-1.60

Anadarko Petroleum Corp

Survey Report

Company: US ROCKIES REGION PLANNING
Project: UTAH - UTM (feet), NAD27, Zone 12N
Site: UINTAH_NBU 921-21E PAD
Well: NBU 921-21E1S
Wellbore: NBU 921-21E1S
Design: NBU 921-21E1S

Local Co-ordinate Reference: Well NBU 921-21E1S
TVD Reference: 4838' GL + 26' RKB @ 4864.00ft (H&P 298)
MD Reference: 4838' GL + 26' RKB @ 4864.00ft (H&P 298)
North Reference: True
Survey Calculation Method: Minimum Curvature
Database: edmp

Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N-S (ft)	+E-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
1,085.00	14.25	357.48	1,075.83	108.15	-0.44	107.96	0.95	0.95	0.00
1,178.00	14.77	356.07	1,165.86	131.42	-1.76	131.11	0.68	0.56	-1.52
1,272.00	13.72	355.89	1,256.97	154.49	-3.38	154.05	1.12	-1.12	-0.19
1,366.00	12.22	358.80	1,348.57	175.56	-4.39	175.03	1.74	-1.60	3.10
1,462.00	12.05	358.44	1,442.42	195.73	-4.87	195.14	0.19	-0.18	-0.38
1,556.00	12.22	356.25	1,534.32	215.47	-5.79	214.80	0.52	0.18	-2.33
1,652.00	13.01	358.71	1,628.00	236.41	-6.70	235.65	1.00	0.82	2.56
1,747.00	13.45	356.42	1,720.48	258.13	-7.63	257.28	0.72	0.46	-2.41
1,843.00	14.07	355.28	1,813.73	280.90	-9.29	279.93	0.70	0.65	-1.19
1,936.00	14.18	358.36	1,903.92	303.55	-10.54	302.47	0.82	0.12	3.31
2,031.00	14.86	359.06	1,995.88	327.36	-11.07	326.22	0.74	0.72	0.74
2,125.00	14.16	359.23	2,086.88	350.91	-11.43	349.71	0.75	-0.74	0.18
2,219.00	13.54	359.67	2,178.15	373.41	-11.64	372.16	0.67	-0.66	0.47
2,314.00	12.75	358.09	2,270.66	395.01	-12.06	393.70	0.91	-0.83	-1.66
2,409.00	11.61	1.26	2,363.52	415.05	-12.20	413.70	1.39	-1.20	3.34
2,503.00	12.05	0.99	2,455.53	434.31	-11.82	432.95	0.47	0.47	-0.29
2,599.00	12.16	359.19	2,549.39	454.44	-11.79	453.05	0.41	0.11	-1.88
2,694.00	12.13	357.83	2,642.27	474.42	-12.31	472.97	0.30	-0.03	-1.43
2,786.00	12.40	357.39	2,732.17	493.95	-13.13	492.42	0.31	0.29	-0.48
2,880.00	12.93	359.15	2,823.88	514.55	-13.74	512.95	0.70	0.56	1.87
2,911.00	13.45	359.59	2,854.06	521.62	-13.82	520.01	1.71	1.68	1.42
3,033.00	11.37	355.47	2,973.21	547.80	-14.87	546.08	1.85	-1.70	-3.38
3,127.00	10.03	352.74	3,065.57	565.16	-16.64	563.31	1.52	-1.43	-2.90
3,222.00	8.25	345.54	3,159.36	579.96	-19.38	577.94	2.22	-1.87	-7.58
3,316.00	6.81	346.79	3,252.55	591.92	-22.34	589.71	1.54	-1.53	1.33
3,411.00	6.31	359.67	3,346.93	602.63	-23.66	600.33	1.63	-0.53	13.56
3,505.00	5.31	7.67	3,440.45	612.10	-23.11	609.82	1.37	-1.06	8.51
3,600.00	5.13	13.42	3,535.06	620.59	-21.54	618.38	0.58	-0.19	6.05
3,694.00	3.38	11.17	3,628.79	627.40	-20.02	625.27	1.87	-1.86	-2.39
3,788.00	2.25	7.54	3,722.68	631.94	-19.24	629.85	1.22	-1.20	-3.86
3,883.00	1.69	52.04	3,817.63	634.66	-17.89	632.63	1.66	-0.59	46.84
3,977.00	1.69	57.54	3,911.59	636.25	-15.63	634.35	0.17	0.00	5.85
4,072.00	1.31	44.54	4,006.55	637.78	-13.69	635.99	0.53	-0.40	-13.68
4,166.00	0.75	47.92	4,100.54	638.96	-12.48	637.23	0.60	-0.60	3.60
4,261.00	0.88	45.42	4,195.53	639.88	-11.50	638.21	0.14	0.14	-2.63
4,355.00	0.38	47.79	4,289.52	640.60	-10.75	638.97	0.53	-0.53	2.52
4,450.00	0.19	22.79	4,384.52	640.96	-10.46	639.34	0.23	-0.20	-26.32
4,544.00	1.19	345.17	4,478.51	642.05	-10.65	640.42	1.11	1.06	-40.02
4,638.00	0.63	305.67	4,572.50	643.29	-11.32	641.62	0.86	-0.60	-42.02
4,733.00	0.50	262.92	4,667.50	643.54	-12.15	641.83	0.45	-0.14	-45.00
4,828.00	0.63	222.29	4,762.49	643.11	-12.92	641.35	0.43	0.14	-42.77
4,922.00	0.56	281.17	4,856.49	642.81	-13.71	641.01	0.63	-0.07	62.64
5,017.00	0.81	228.42	4,951.48	642.46	-14.67	640.60	0.68	0.26	-55.53

Anadarko Petroleum Corp

Survey Report

Company: US ROCKIES REGION PLANNING
Project: UTAH - UTM (feet), NAD27, Zone 12N
Site: UINTAH_NBU 921-21E PAD
Well: NBU 921-21E1S
Wellbore: NBU 921-21E1S
Design: NBU 921-21E1S

Local Co-ordinate Reference: Well NBU 921-21E1S
TVD Reference: 4838' GL + 26' RKB @ 4864.00ft (H&P 298)
MD Reference: 4838' GL + 26' RKB @ 4864.00ft (H&P 298)
North Reference: True
Survey Calculation Method: Minimum Curvature
Database: edmp

Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
5,111.00	0.38	288.04	5,045.48	642.11	-15.47	640.21	0.74	-0.46	63.43
5,206.00	0.63	237.04	5,140.48	641.93	-16.20	639.99	0.52	0.26	-53.68
5,300.00	1.00	86.17	5,234.47	641.70	-15.82	639.78	1.68	0.39	-160.50
5,395.00	0.89	104.43	5,329.46	641.57	-14.28	639.74	0.34	-0.12	19.22
5,489.00	0.75	142.42	5,423.45	640.90	-13.19	639.13	0.59	-0.15	40.41
5,584.00	0.75	171.67	5,518.44	639.79	-12.72	638.05	0.40	0.00	30.79
5,678.00	0.94	169.67	5,612.43	638.43	-12.50	636.70	0.20	0.20	-2.13
5,773.00	0.19	166.54	5,707.43	637.51	-12.32	635.79	0.79	-0.79	-3.29
5,867.00	0.25	178.04	5,801.43	637.15	-12.28	635.44	0.08	0.06	12.23
5,962.00	0.56	163.29	5,896.42	636.50	-12.14	634.80	0.34	0.33	-15.53
6,057.00	0.69	142.92	5,991.42	635.60	-11.66	633.92	0.27	0.14	-21.44
6,151.00	0.81	139.42	6,085.41	634.64	-10.89	633.01	0.14	0.13	-3.72
6,246.00	1.00	19.29	6,180.40	634.91	-10.17	633.33	1.65	0.20	-126.45
6,340.00	0.94	23.67	6,274.39	636.39	-9.59	634.84	0.10	-0.06	4.66
6,435.00	0.75	39.04	6,369.38	637.59	-8.89	636.07	0.31	-0.20	16.18
6,529.00	0.69	70.17	6,463.37	638.26	-7.97	636.79	0.42	-0.06	33.12
6,624.00	0.69	84.29	6,558.37	638.51	-6.86	637.11	0.18	0.00	14.86
6,718.00	1.44	20.92	6,652.35	639.67	-5.88	638.32	1.37	0.80	-67.42
6,812.00	1.31	358.67	6,746.33	641.85	-5.48	640.51	0.58	-0.14	-23.67
6,907.00	0.81	0.67	6,841.31	643.61	-5.50	642.27	0.53	-0.53	2.11
7,002.00	0.44	8.67	6,936.30	644.64	-5.44	643.30	0.40	-0.39	8.42
7,096.00	0.13	74.54	7,030.30	645.02	-5.28	643.70	0.43	-0.33	70.07
7,191.00	0.25	113.42	7,125.30	644.97	-4.98	643.66	0.18	0.13	40.93
7,285.00	0.63	113.17	7,219.30	644.68	-4.32	643.41	0.40	0.40	-0.27
7,379.00	0.94	115.92	7,313.29	644.14	-3.15	642.94	0.33	0.33	2.93
7,474.00	1.06	121.29	7,408.28	643.35	-1.70	642.22	0.16	0.13	5.65
7,568.00	0.88	56.92	7,502.27	643.29	-0.35	642.24	1.11	-0.19	-68.48
7,663.00	0.75	70.92	7,597.26	643.89	0.85	642.91	0.25	-0.14	14.74
7,757.00	0.56	87.29	7,691.25	644.11	1.89	643.19	0.28	-0.20	17.41
7,852.00	0.19	21.79	7,786.25	644.28	2.41	643.39	0.54	-0.39	-68.95
7,947.00	0.19	53.04	7,881.25	644.52	2.59	643.64	0.11	0.00	32.89
8,041.00	0.19	51.79	7,975.25	644.71	2.84	643.84	0.00	0.00	-1.33
8,136.00	0.75	329.92	8,070.24	645.35	2.65	644.47	0.79	0.59	-86.18
8,230.00	0.56	25.79	8,164.24	646.29	2.54	645.41	0.68	-0.20	59.44
8,325.00	0.31	299.42	8,259.24	646.84	2.52	645.95	0.66	-0.26	-90.92
8,419.00	0.25	187.16	8,353.24	646.76	2.28	645.86	0.50	-0.06	-119.43
8,514.00	0.56	158.67	8,448.23	646.12	2.42	645.23	0.38	0.33	-29.99
8,608.00	0.94	152.54	8,542.23	645.01	2.94	644.15	0.41	0.40	-6.52
8,703.00	1.19	146.04	8,637.21	643.50	3.85	642.69	0.29	0.26	-6.84
8,797.00	1.06	146.04	8,731.19	641.97	4.88	641.22	0.14	-0.14	0.00
8,892.00	1.19	132.17	8,826.17	640.58	6.10	639.90	0.32	0.14	-14.60
8,986.00	1.38	135.17	8,920.15	639.12	7.63	638.53	0.21	0.20	3.19
9,081.00	1.13	132.42	9,015.13	637.68	9.12	637.17	0.27	-0.26	-2.89

Anadarko Petroleum Corp

Survey Report

Company: US ROCKIES REGION PLANNING
Project: UTAH - UTM (feet), NAD27, Zone 12N
Site: UINTAH_NBU 921-21E PAD
Well: NBU 921-21E1S
Wellbore: NBU 921-21E1S
Design: NBU 921-21E1S

Local Co-ordinate Reference: Well NBU 921-21E1S
TVD Reference: 4838' GL + 26' RKB @ 4864.00ft (H&P 298)
MD Reference: 4838' GL + 26' RKB @ 4864.00ft (H&P 298)
North Reference: True
Survey Calculation Method: Minimum Curvature
Database: edmp

Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
9,175.00	1.19	141.17	9,109.11	636.29	10.42	635.86	0.20	0.06	9.31
9,269.00	1.63	148.67	9,203.08	634.39	11.73	634.04	0.51	0.47	7.98
9,364.00	1.69	153.29	9,298.04	631.98	13.06	631.71	0.15	0.06	4.86
9,458.00	1.94	142.17	9,391.99	629.49	14.66	629.31	0.46	0.27	-11.83
9,553.00	2.00	143.29	9,486.94	626.89	16.64	626.83	0.08	0.06	1.18
9,742.00	2.06	137.54	9,675.82	621.74	20.90	621.93	0.11	0.03	-3.04
9,836.00	2.06	142.42	9,769.76	619.15	23.07	619.47	0.19	0.00	5.19
9,931.00	2.31	137.91	9,864.69	616.38	25.40	616.83	0.32	0.26	-4.75
10,025.00	2.19	138.04	9,958.61	613.64	27.87	614.23	0.13	-0.13	0.14
10,120.00	2.31	138.04	10,053.54	610.87	30.36	611.61	0.13	0.13	0.00
10,209.00	2.25	138.04	10,142.47	608.23	32.73	609.11	0.07	-0.07	0.00
10,269.00	2.25	138.04	10,202.42	606.48	34.30	607.45	0.00	0.00	0.00

Checked By: _____ Approved By: _____ Date: _____