

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

FORM 3

AMENDED REPORT   
(highlight changes)

<b>APPLICATION FOR PERMIT TO DRILL</b>				5. MINERAL LEASE NO: <b>M23612</b>	6. SURFACE: State
1A. TYPE OF WORK: DRILL <input checked="" type="checkbox"/> REENTER <input type="checkbox"/> DEEPEN <input type="checkbox"/>				7. IF INDIAN, ALLOTTEE OR TRIBE NAME:	
B. TYPE OF WELL: OIL <input type="checkbox"/> GAS <input checked="" type="checkbox"/> OTHER _____ SINGLE ZONE <input type="checkbox"/> MULTIPLE ZONE <input checked="" type="checkbox"/>				8. UNIT or CA AGREEMENT NAME: <b>UNIT #891008900A</b>	
2. NAME OF OPERATOR: <b>KERR MCGEE OIL &amp; GAS ONSHORE L.P.</b>				9. WELL NAME and NUMBER: <b>NBU 1021-10</b>	
3. ADDRESS OF OPERATOR: <b>1368 S 1200 E</b> CITY <b>VERNAL</b> STATE <b>UT</b> ZIP <b>84078</b>			PHONE NUMBER: <b>(435) 781-7024</b>	10. FIELD AND POOL, OR WILDCAT: <b>NATURAL BUTTES</b>	
4. LOCATION OF WELL (FOOTAGES) AT SURFACE: <b>245'FSL, 2619'FEL</b> AT PROPOSED PRODUCING ZONE:				11. QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: <b>SWSE 1 10S 21E</b>	
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE: <b>20 MILES SOUTH OF OURAY, UTAH</b>				12. COUNTY: <b>UINTAH</b>	13. STATE: <b>UTAH</b>
15. DISTANCE TO NEAREST PROPERTY OR LEASE LINE (FEET) <b>245'</b>		16. NUMBER OF ACRES IN LEASE: <b>571.28</b>		17. NUMBER OF ACRES ASSIGNED TO THIS WELL: <b>40.00</b>	
18. DISTANCE TO NEAREST WELL (DRILLING, COMPLETED, OR APPLIED FOR) ON THIS LEASE (FEET) <b>REFER TO TOPO C</b>		19. PROPOSED DEPTH: <b>9,340</b>		20. BOND DESCRIPTION: <b>RLB0005237</b>	
21. ELEVATIONS (SHOW WHETHER DF, RT, GR, ETC.): <b>5224'GL</b>		22. APPROXIMATE DATE WORK WILL START:		23. ESTIMATED DURATION:	

24. **PROPOSED CASING AND CEMENTING PROGRAM**

SIZE OF HOLE	CASING SIZE, GRADE, AND WEIGHT PER FOOT			SETTING DEPTH	CEMENT TYPE, QUANTITY, YIELD, AND SLURRY WEIGHT		
12 1/4"	9 5/8	H-40	32.3#	2,200	265 SX CLASS G	1.18 YIELD	15.6 PPG
7 7/8"	4 1/2	I-80	11.6#	9,340	1920 SX 50/50 POZ	1.31 YIELD	14.3 PPG

25. **ATTACHMENTS**

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

<input checked="" type="checkbox"/> WELL PLAT OR MAP PREPARED BY LICENSED SURVEYOR OR ENGINEER	<input checked="" type="checkbox"/> COMPLETE DRILLING PLAN
<input checked="" type="checkbox"/> EVIDENCE OF DIVISION OF WATER RIGHTS APPROVAL FOR USE OF WATER	<input type="checkbox"/> FORM 5, IF OPERATOR IS PERSON OR COMPANY OTHER THAN THE LEASE OWNER

NAME (PLEASE PRINT) SHEILA UPCHEGO TITLE SENIOR LAND ADMIN SPECIALIST  
 SIGNATURE *Sheila Upchego* DATE 1/23/2007

(This space for State use only)  
 API NUMBER ASSIGNED: 43047-39002

Approved by the  
 Utah Division of  
 Oil, Gas and Mining  
 APPROVAL: \_\_\_\_\_

**RECEIVED**  
**FEB 02 2007**

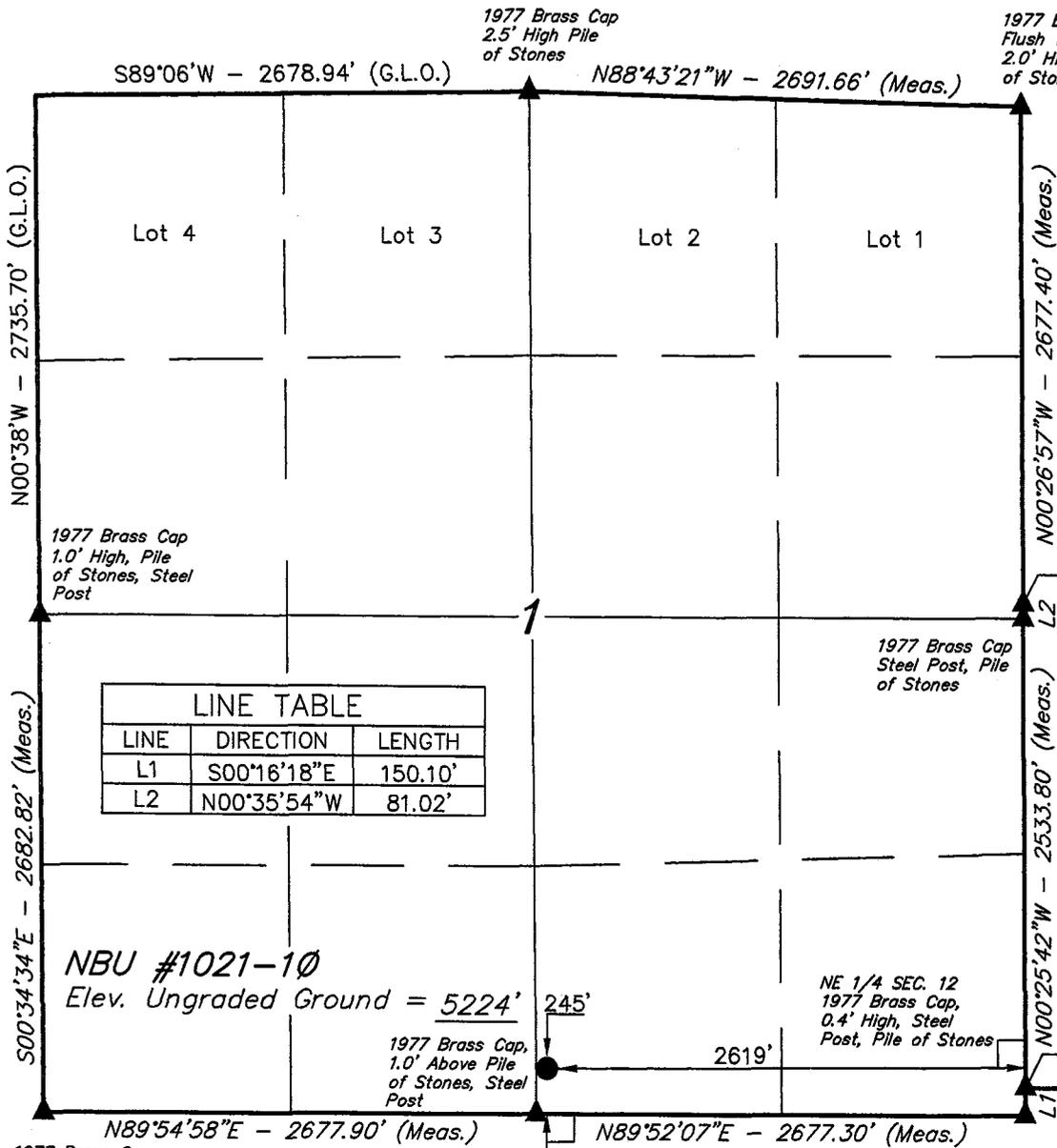
DIV. OF OIL, GAS & MINING

Date: 02-28-07  
 By: *Sheila Upchego*

# T10S, R21E, S.L.B.&M.

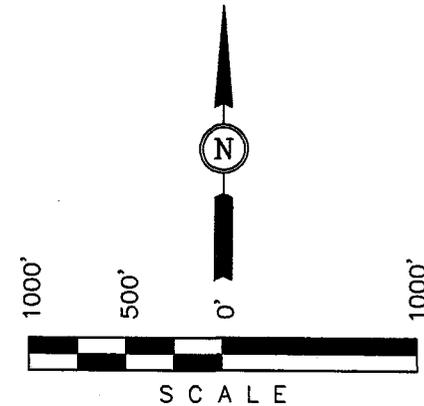
# Kerr-McGee Oil & Gas Onshore LP

Well location, NBU #1021-10, located as shown in the SW 1/4 SE 1/4 of Section 1, T10S, R21E, S.L.B.&M., Uintah County, Utah.



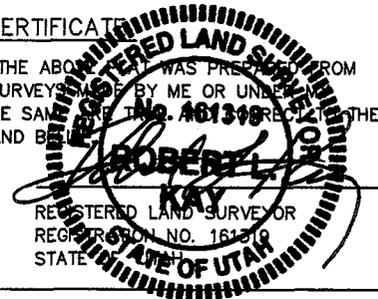
## BASIS OF ELEVATION

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.



## CERTIFICATE

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



## LEGEND:

- └─┘ = 90° SYMBOL
- = PROPOSED WELL HEAD.
- ▲ = SECTION CORNERS LOCATED.

(NAD 83)  
 LATITUDE = 39°58'15.59" (39.970997)  
 LONGITUDE = 109°29'59.49" (109.499858)  
 (NAD 27)  
 LATITUDE = 39°58'15.72" (39.971033)  
 LONGITUDE = 109°29'57.02" (109.499172)

## UINTAH ENGINEERING & LAND SURVEYING

85 SOUTH 200 EAST - VERNAL, UTAH 84078

(435) 789-1017

SCALE 1" = 1000'	DATE SURVEYED: 10-06-06	DATE DRAWN: 10-12-06
PARTY L.K. G.O. C.H.	REFERENCES G.L.O. PLAT	
WEATHER WARM	FILE Kerr-McGee Oil & Gas Onshore LP	

**NBU 1021-10  
SW/SE SEC. 1, T10S, R21E  
UINTAH COUNTY, UTAH  
ML-23612**

**ONSHORE ORDER NO. 1**

***DRILLING PROGRAM***

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

<u>Formation</u>	<u>Depth</u>
Uinta	0- Surface
Green River	1357'
Top of Birds Nest Water	1667'
Mahogany	2290'
Wasatch	4603'
Mesaverde	7222'
MVU2	8164'
MVL1	8783'
TD	9340'

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

<u>Substance</u>	<u>Formation</u>	<u>Depth</u>
Water	Green River	1357'
	Top of Birds Nest Water	1667'
	Mahogany	2290'
Gas	Wasatch	4603'
Gas	Mesaverde	7222'
Gas	MVU2	8164'
Gas	MVL1	8783'
Water	N/A	
Other Minerals	N/A	

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

*Please refer to the attached Drilling Program.*

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

*Please refer to the attached Drilling Program.*

**5. Drilling Fluids Program:**

*Please refer to the attached Drilling Program.*

**6. Evaluation Program:**

*Please refer to the attached Drilling Program.*

7. **Abnormal Conditions:**

Maximum anticipated bottomhole pressure calculated at 9340' TD, approximately equals 5791 psi (calculated at 0.62 psi/foot).

Maximum anticipated surface pressure equals approximately 3736 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. **Variations:**

*Please refer to the attached Drilling Program.*

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 January 23, 2007  
 WELL NAME NBU 1021-10 TD 9,340' MD/TVD  
 FIELD Natural Buttes COUNTY Uintah STATE Utah ELEVATION 5,224' GL KB 5,239'  
 SURFACE LOCATION SW/SE SEC. 1, T10S, R21E 245'FSL, 2619'FEL BHL Straight Hole  
 Latitude: 39.970997 Longitude: 109.499858  
 OBJECTIVE ZONE(S) Wasatch/Mesaverde  
 ADDITIONAL INFO Regulatory Agencies: UDOGM (SURF & MINERALS), BLM, Tri-County Health Dept.

LOGS	GEOLOGICAL FORMATION TOPS	DEPTH	MECHANICAL HOLE SIZE	CASING SIZE	MUD WEIGHT
		40'		14"	
			12-1/4"	9-5/8", 32.3#, H-40, STC	Air mist
<p>Catch water sample, if possible, from 0 to 4,603'</p> <p style="margin-left: 40px;">Green River @ 1,357'</p> <p style="margin-left: 40px;">Top of Birds Nest Water @ 1667'</p> <p style="margin-left: 40px;">Preset f/ GL @ 2,200' MD</p> <p>Note: 12.25" surface hole will usually be drilled ±400' below the bottom of lost circulation zone. Drilled depth may be ±200' of the estimated set depth depending on the actual depth of the loss zone.</p>					
	Mahogany @	2,290'			Water/Fresh Water Mud 8.3-11.5 ppg
<p>Mud logging program TBD</p> <p>Open hole logging program f/ TD - surf csg</p>			7-7/8"	4-1/2", 11.6#, I-80 or equivalent LTC casing	
	Wasatch @	4,603'			
	Mverde @	7,222'			
	MVU2 @	8,164'			
	MVL1 @	8,783'			
		TD @ 9,340'			Max anticipated Mud required 11.5 ppg



# KERR-McGEE OIL & GAS ONSHORE LP DRILLING PROGRAM

## CASING PROGRAM

	SIZE	INTERVAL	WT.	GR.	CPLG.	DESIGN FACTORS		
						BURST	COLLAPSE	TENSION
CONDUCTOR	14"	0-40'				2270	1370	254000
SURFACE	9-5/8"	0 to 2200	32.30	H-40	STC	0.64*****	1.33	4.08
PRODUCTION	4-1/2"	0 to 9340	11.60	I-80	LTC	2.20	1.14	201000

- 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 = 11.5 ppg) .22 psi/ft = gradient for partially evac wellbore  
 (Collapse Assumption: Fully Evacuated Casing, Max MW) (Tension Assumptions: Air Weight of Casing \* Buoy. Fact. of water)  
 MASP 3531 psi

\*\*\*\*\* Burst SF is low but csg is much stronger than formation at 2000'. EMW @ 2000' for 2270# is 21.8 ppg or 1.13 psi/ft

## CEMENT PROGRAM

		FT. OF FILL	DESCRIPTION	SACKS	EXCESS	WEIGHT	YIELD
SURFACE	LEAD	500	Premium cmt + 2% CaCl + .25 pps flocele	215	60%	15.60	1.18
<b>Option 1</b>	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
SURFACE		<b>NOTE: If well will circulate water to surface, option 2 will be utilized</b>					
<b>Option 2</b>	LEAD	1500	Prem cmt + 16% Gel + 10 pps gilsonite + .25 pps Flocele + 3% salt BWOC	170	35%	11.00	3.82
	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	4,100'	Premium Lite II + 3% KCl + 0.25 pps celloflake + 5 pps gilsonite + 10% gel + 0.5% extender	450	60%	11.00	3.38
	TAIL	5,240'	50/50 Poz/G + 10% salt + 2% gel + .1% R-3	1470	60%	14.30	1.31

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

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

## FLOAT EQUIPMENT & CENTRALIZERS

SURFACE	Guide shoe, 1 jt, insert float. Centralize first 3 joints with bow spring centralizers. Thread lock guide shoe.
PRODUCTION	Float shoe, 1 jt, float collar. Centralize first 3 joints & every third joint to top of tail cement with bow spring centralizers.

## ADDITIONAL INFORMATION

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

BOPE: 11" 5M with one annular and 2 rams. Test to 5,000 psi (annular to 2,500 psi) prior to drilling out. Record on chart recorder & tour sheet. Function test rams on each trip. Maintain safety valve & inside BOP on rig floor at all times. Kelly to be equipped with upper & lower kelly valves.

Drop Totco surveys every 2000'. Maximum allowable hole angle is 5 degrees.

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

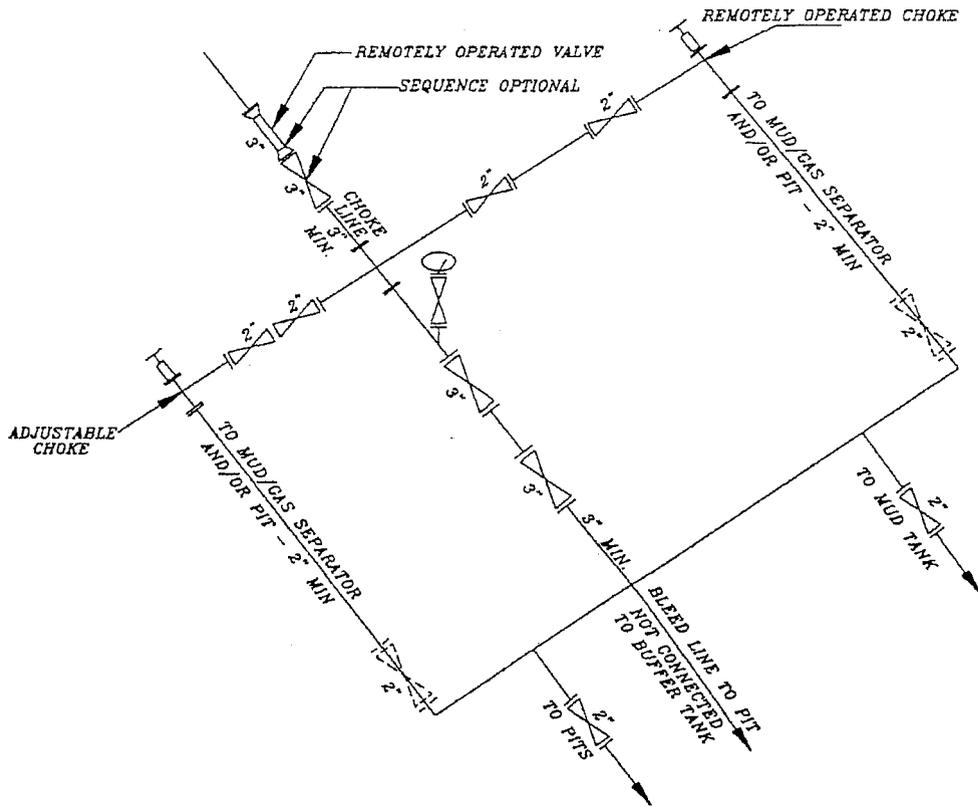
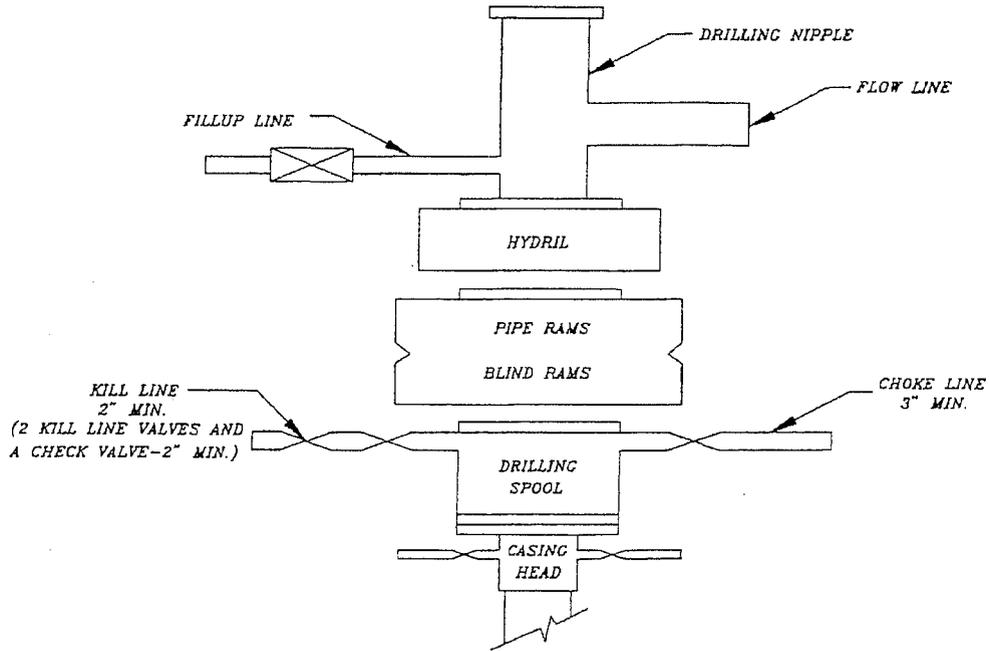
DRILLING ENGINEER: \_\_\_\_\_  
Brad Laney

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

DRILLING SUPERINTENDENT: \_\_\_\_\_  
Randy Bayne

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

# 5M BOP STACK and CHOKE MANIFOLD SYSTEM



NBU 1021-10  
SW/SE SEC. 1, T10S, R21E  
Uintah County, UT  
ML-23612

ONSHORE ORDER NO. 1

*MULTI-POINT SURFACE USE & OPERATIONS PLAN*

1. **Existing Roads:**

Refer to Topo Map A for directions to the location.

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

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

All existing roads will be maintained and kept in good repair during all drilling and completion operations associated with this well.

2. **Planned Access Roads:**

Approximately 324' +/- of new access road is proposed. Refer to Topo Map B for the location of the proposed access road.

The upgraded and new portions of the access road will be crowned and ditched with a running surface of 18 feet and a maximum disturbed width of 30 feet. Appropriate water control will be installed to control erosion.

*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.*

The access road was centerline flagged during time of staking.

Surfacing material may be necessary, depending upon weather conditions.

Surface disturbance and vehicular traffic will be limited to the approved location and approved access route. Any additional area needed will be approved in advance.

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

Please refer to Topo Map C.

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

*The following guidelines will apply if the well is productive.*

All production facilities will be located on the disturbed portion of the well pad and at a minimum of 25 feet from the toe of the back slope or the top of the fill slope.

A dike will be constructed completely around those production facilities which contain

fluids (i.e., production tanks, produced water tanks, and/or heater/treater). These dikes will be constructed of compacted subsoil, be impervious, hold 100% of the capacity of the largest tank, and be independent of the back cut.

All permanent (on-site six months or longer) above the ground structures constructed or installed, including pumping units, will be painted a flat, non-reflective, earthtone color to match one of the standard environmental colors, as determined by the five state Rocky Mountain Inter-Agency Committee.

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 required color is Carlsbad Canyon, standard color number 2.5Y 6/2.

Any necessary pits will be properly fenced to protect livestock and prevent wildlife entry.

Approximately 901' +/- of 4" pipeline is proposed from the location to an tie-in point. Refer to Topo Map D.

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

Water for drilling purposes will be obtained from Dalbo Inc.'s underground well located in Ouray, Utah, Sec. 32, T4S, R3E, Water User Claim #43-8496, Application #53617.

Water will be hauled to location over the roads marked on Maps A and B.

No water well is to be drilled on this lease.

**6. Source of Construction Materials:**

Surface and subsoil materials in the immediate area will be utilized.

Any gravel will be obtained from a commercial source.

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

Drill cuttings will be contained and buried in the reserve pit.

Drilling fluids, including salts and chemicals, will be contained in the reserve pit. Upon termination of drilling and completion operations, the liquid contents of the reserve pit will be removed and disposed of at an approved waste disposal facility within 120 days after drilling is terminated.

The reserve pit will be constructed on the location and will not be located within natural drainage, where a flood hazard exists or surface runoff will destroy or damage the pit walls. The reserve pit will be constructed so that it will not leak, break, or allow discharge of liquids.

A plastic reinforced liner and felt will be used, it will be a minimum of 20 mil thick, 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 spills of oil, gas, salt water, or other noxious fluids will be immediately cleaned up and removed to an approved disposal site.

A chemical porta-toilet will be furnished with the drilling rig.

Garbage, trash, and other waste materials will be collected in a portable, self-contained, fully enclosed trash cage during operations. No trash will be burned on location.

All debris and other waste material not contained in the trash cage will be cleaned up and removed from the location immediately after removal of the drilling rig.

Any open pits will be fenced during the operations. The fencing will be maintained until such time as the pits are backfilled.

No chemicals subject to reporting under SARA Title III (hazardous materials) in an amount greater than 10,000 pounds will be used, produced, stored, transported, or disposed of annually in association with the drilling of this well. Furthermore, no extremely hazardous substances, as defined in 40 CFR 355, in threshold planning quantities, will be used, produced, stored, transported, or disposed of in association with the drilling of this well.

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.

8. **Ancillary Facilities:**

None are anticipated.

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.

The reserve pit will be lined, and when the reserve pit is closed, the pit liner will be buried below plow depth.

All pits will be fenced according to the following minimum standards:

39 inch net wire will be used with at least one strand of barbed wire on top of the net wire. Barbed wire is not necessary if pipe or some type of reinforcement rod is attached to the top of the entire fence.

The net wire shall be no more than two inches above the ground. The barbed wire shall be three inches over the net wire. Total height of the fence shall be at least 42 inches.

Corner posts shall be cemented and/or braced in such a manner to keep the fence tight at all times.

Standard steel, wood, or pipe posts shall be used between the corner braces. Maximum distance

between any 2 fence posts shall be no greater than 16 feet.

All wire shall be stretched, by using a stretching device, before it is attached to corner posts.

The reserve pit fencing will be on three sides during drilling operations, and on the fourth side when the rig moves off location. Pits will be fenced and maintained until cleanup.

Location size may change prior to the drilling of the well due to 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 9 shall be submitted.

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

*Producing Location:*

Immediately upon well completion, the location and surrounding area will be cleared of all unused tubing, materials, trash, and debris not required for production.

Immediately upon well completion, any hydrocarbons in the pit shall be removed in accordance with 43 CFR 3162.7-1.

A plastic, nylon reinforced liner will be used, it shall be torn and perforated before backfilling of the reserve pit.

Before any dirt work associated with location restoration takes place, the reserve pit shall be as dry as possible. All debris in it will be removed. Other waste and spoil materials will be disposed of immediately upon completion of operations.

The reserve pit and that portion of the location not needed for production facilities/operations will be recontoured to the approximate natural contours. The reserve pit will be reclaimed within 90 days from the date of well completion, weather permitting.

To prevent surface water (s) from standing (ponding) on the reclaimed reserve pit area, final reclamation of the reserve pit will consist of "mounding" the surface three feet above surrounding ground surface to allow the reclaimed pit area to drain effectively.

Upon completion of backfilling, leveling, and recontouring, the stockpiled topsoil will be spread evenly over the reclaimed area(s).

*Dry Hole/Abandoned Location:*

Abandoned well sites, roads, and other disturbed areas will be restored as near as practical to their original condition. Where applicable, these conditions include the re-establishment of irrigation systems, the re-establishment of appropriate soil conditions, and re-establishment of vegetation as specified.

All disturbed surfaces will be recontoured to the approximate natural contours, with reclamation of the well pad and access road to be performed as soon as practical after final abandonment. Reseeding operations will be performed after completion of other reclamation operations.

11. **Surface Ownership:**

SITLA  
675 East 500 South, Suite 500  
Salt Lake City, UT 84102

12. **Other Information:**

All lease and/or unit operations will be conducted in such a manner that full compliance is made with all applicable laws, regulations, the approved Plan of Operations, and any applicable Notice of Lessees. The Operator is fully responsible for the actions of his subcontractors. A copy of these conditions will be furnished to the field representative to ensure compliance.

The Operator will control noxious weeds along Rights-Of-Way for roads, pipelines, well sites, or other applicable facilities.

A Class III archaeological survey will be submitted when report becomes available.

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.

13. **Lessee's or Operators's Representative & Certification:**

Sheila Upchego  
Senior Land Admin Specialist  
Kerr-McGee Oil & Gas Onshore LP  
1368 South 1200 East.  
Vernal, UT 84078  
(435) 781-7024

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.

The Operator will be fully responsible for the actions of its subcontractors. A complete copy of the approved "Application for Permit to Drill" will be furnished to the field representative(s) to ensure compliance and shall be on location during all construction and drilling operations.

Kerr-McGee Oil & Gas Onshore LP is considered to be the operator of the subject well. Kerr-McGee Oil & Gas Onshore LP agrees to be responsible under terms and conditions of the lease for the operations conducted upon leased lands.

Bond coverage pursuant to 43 CFR 3104 for lease activities is being provided by State Surety Bond #RLB0005237.

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.

  
Sheila Upchego

1/23/2007

Date

# Kerr-McGee Oil & Gas Onshore LP

NBU #1021-10

SECTION 1, T10S, R21E, S.L.B.&M.

PROCEED WESTERLY FROM VERNAL ON U.S. HIGHWAY 40 APPROXIMATELY 14.0 MILES TO THE JUNCTION OF STATE HIGHWAY 88; EXIT LEFT AND PROCEED SOUTH APPROXIMATELY 17.0 MILES ON STATE HIGHWAY 88 TO OURAY, UTAH; PROCEED SOUTH FROM OURAY APPROXIMATELY 6.9 MILES ON THE SEEP RIDGE ROAD TO THE JUNCTION OF THIS ROAD AND AN EXISTING OILFIELD SERVICE 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 3.8 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE SOUTH; TURN RIGHT AND PROCEED IN A SOUTHERLY DIRECTION APPROXIMATELY 1.8 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE SOUTH; TURN LEFT AND PROCEED IN A SOUTHERLY, THEN SOUTHWESTERLY DIRECTION APPROXIMATELY 1.4 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE SOUTHEAST; TURN LEFT AND PROCEED IN A SOUTHEASTERLY, THEN SOUTHERLY DIRECTION APPROXIMATELY 0.2 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE SOUTHEAST; TURN LEFT AND PROCEED IN A SOUTHEASTERLY DIRECTION APPROXIMATELY 0.2 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE NORTHWEST; TURN LEFT AND PROCEED IN A NORTHWESTERLY DIRECTION APPROXIMATELY 0.4 MILES TO THE BEGINNING OF THE PROPOSED ACCESS TO THE EAST; FOLLOW ROAD FLAGS IN AN EASTERLY DIRECTION APPROXIMATELY 324' TO THE PROPOSED LOCATION.

TOTAL DISTANCE FROM VERNAL, UTAH TO THE PROPOSED WELL LOCATION IS APPROXIMATELY 52.4 MILES.

# Kerr-McGee Oil & Gas Onshore LP

## NBU #1021-10

LOCATED IN UINTAH COUNTY, UTAH  
SECTION 1, T10S, R21E, S.L.B.&M.

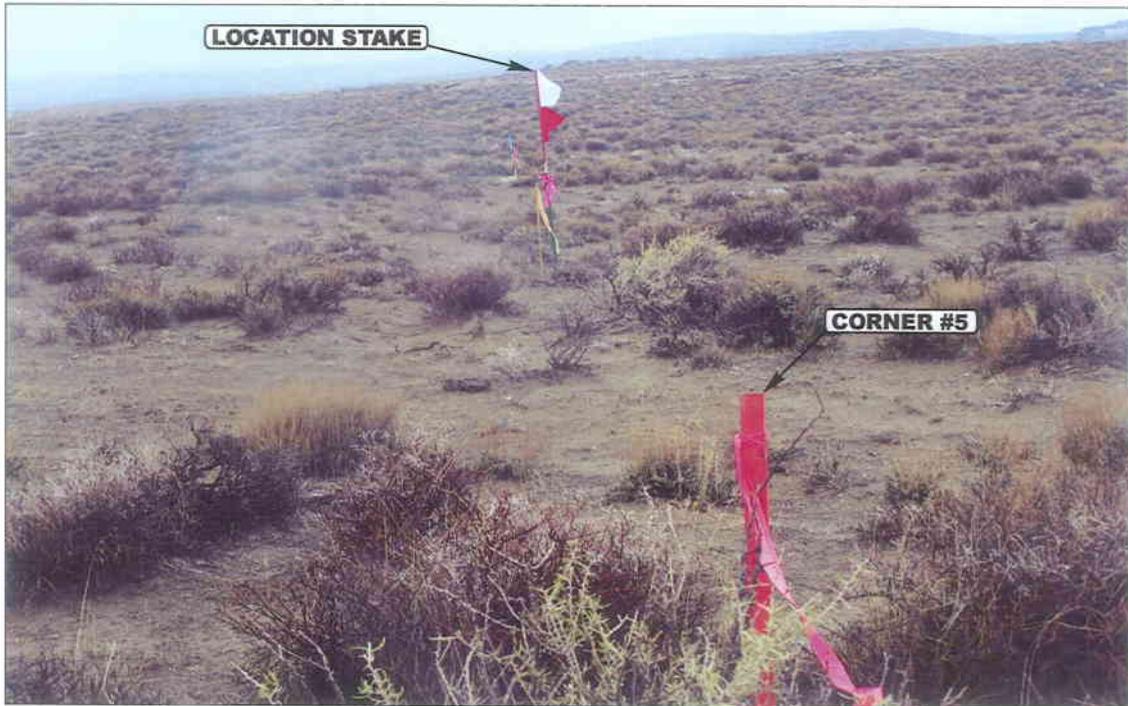


PHOTO: VIEW FROM CORNER #5 TO LOCATION STAKE

CAMERA ANGLE: NORTHWESTERLY



PHOTO: VIEW FROM BEGINNING OF PROPOSED ACCESS

CAMERA ANGLE: EASTERLY



- Since 1964 -

Uintah Engineering & Land Surveying  
85 South 200 East Vernal, Utah 84078  
435-789-1017 uels@uelsinc.com

LOCATION PHOTOS

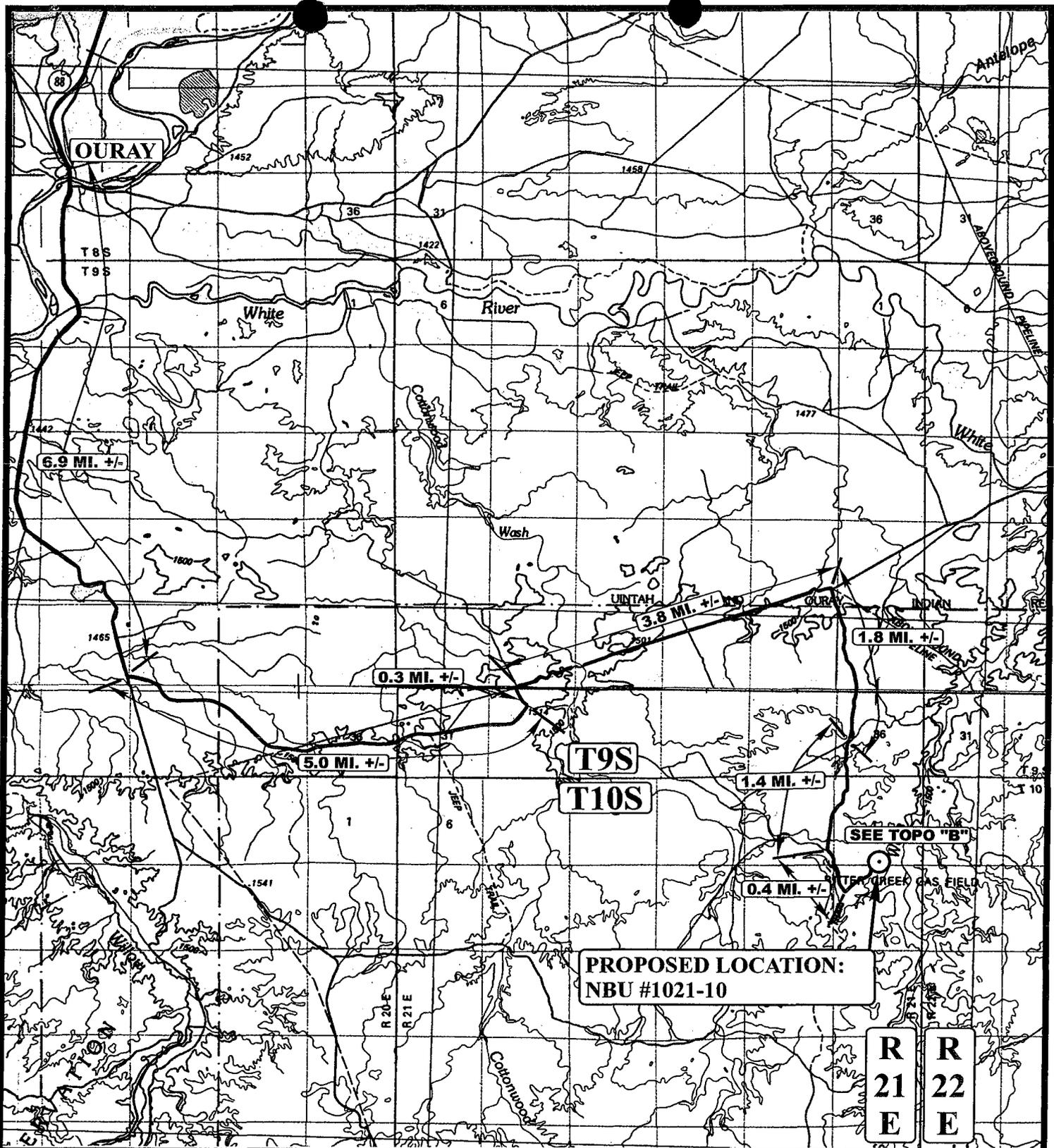
10 12 06  
MONTH DAY YEAR

PHOTO

TAKEN BY: L.K.

DRAWN BY: A.A.

REVISED: 00-00-00



**LEGEND:**

○ PROPOSED LOCATION



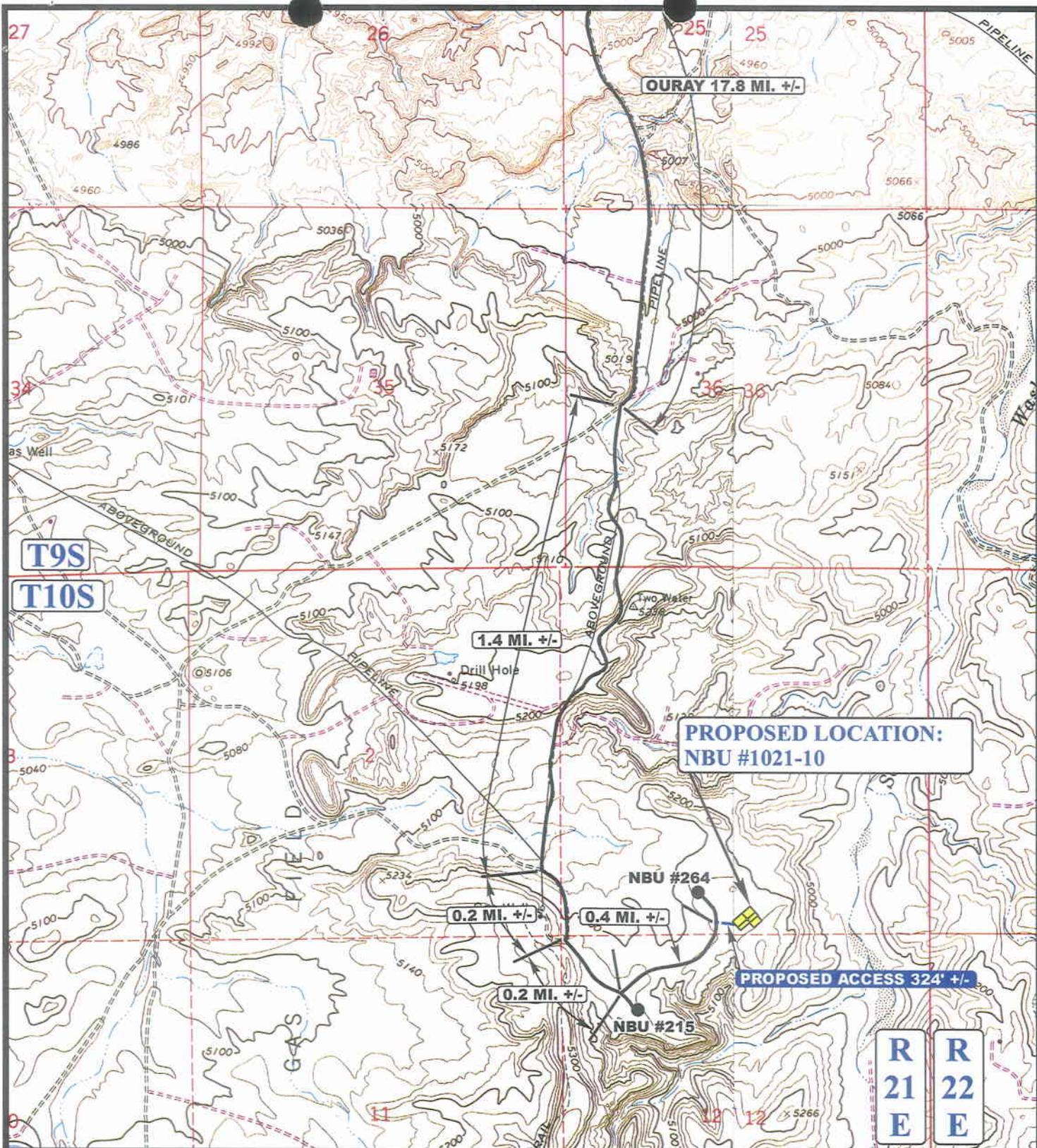
**Kerr-McGee Oil & Gas Onshore LP**

NBU #1021-10  
SECTION 1, T10S, R21E, S.L.B.&M.  
245' FSL 2619' FEL

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

**TOPOGRAPHIC** 10 12 06  
**MAP** MONTH DAY YEAR  
SCALE: 1:100,000 DRAWN BY: A.A. REVISED: 00-00-00





**LEGEND:**

- EXISTING ROAD
- PROPOSED ACCESS ROAD



**Kerr-McGee Oil & Gas Onshore LP**

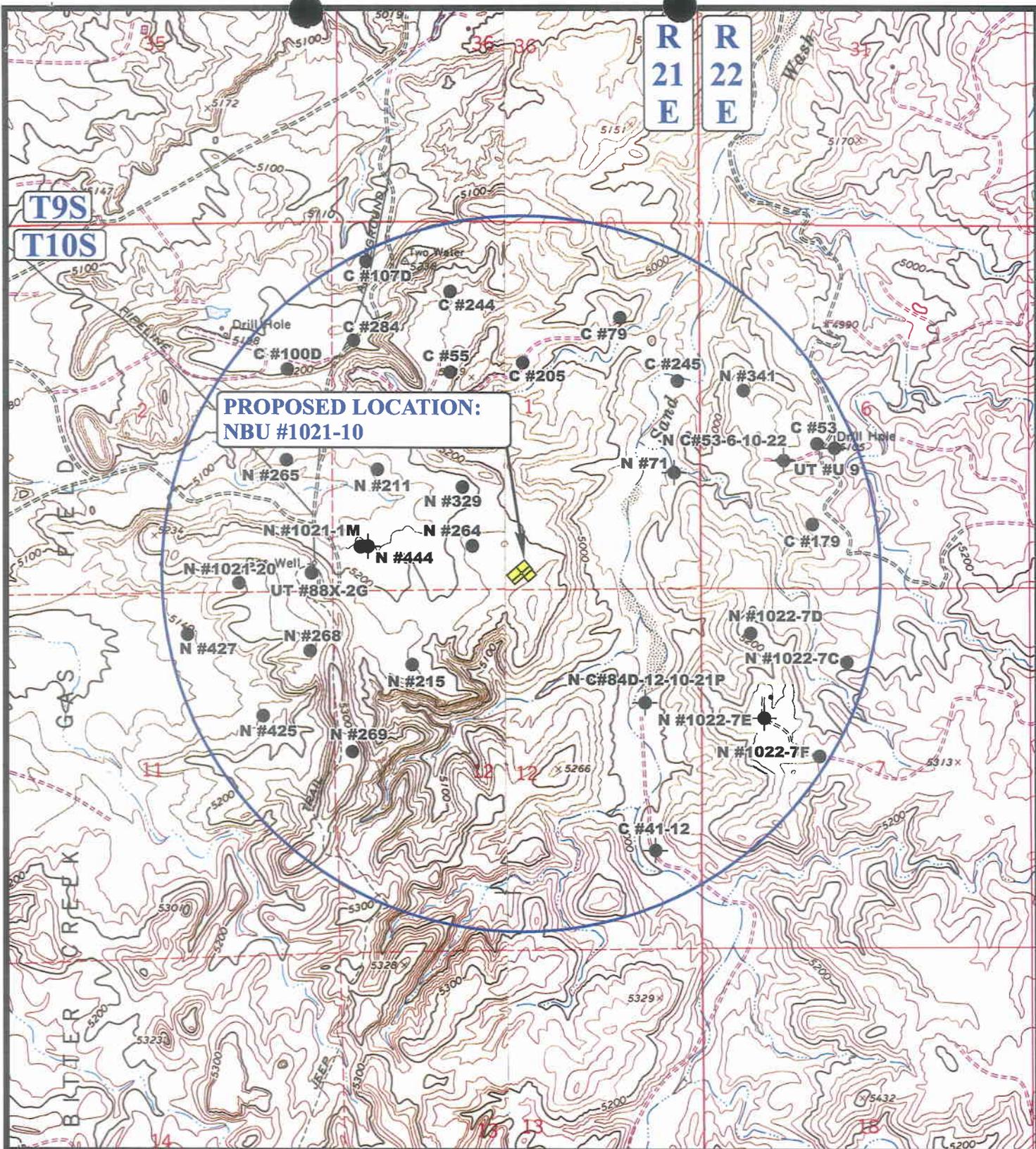
**NBU #1021-10**  
**SECTION 1, T10S, R21E, S.L.B.&M.**  
**245' FSL 2619' FEL**



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

**TOPOGRAPHIC** **10 12 06**  
**MAP** MONTH DAY YEAR  
 SCALE: 1" = 2000' DRAWN BY: A.A. REVISED: 00-00-00





**PROPOSED LOCATION:  
NBU #1021-10**

**LEGEND:**

- ⊗ DISPOSAL WELLS
- PRODUCING WELLS
- SHUT IN WELLS
- ⊗ WATER WELLS
- ABANDONED WELLS
- TEMPORARILY ABANDONED

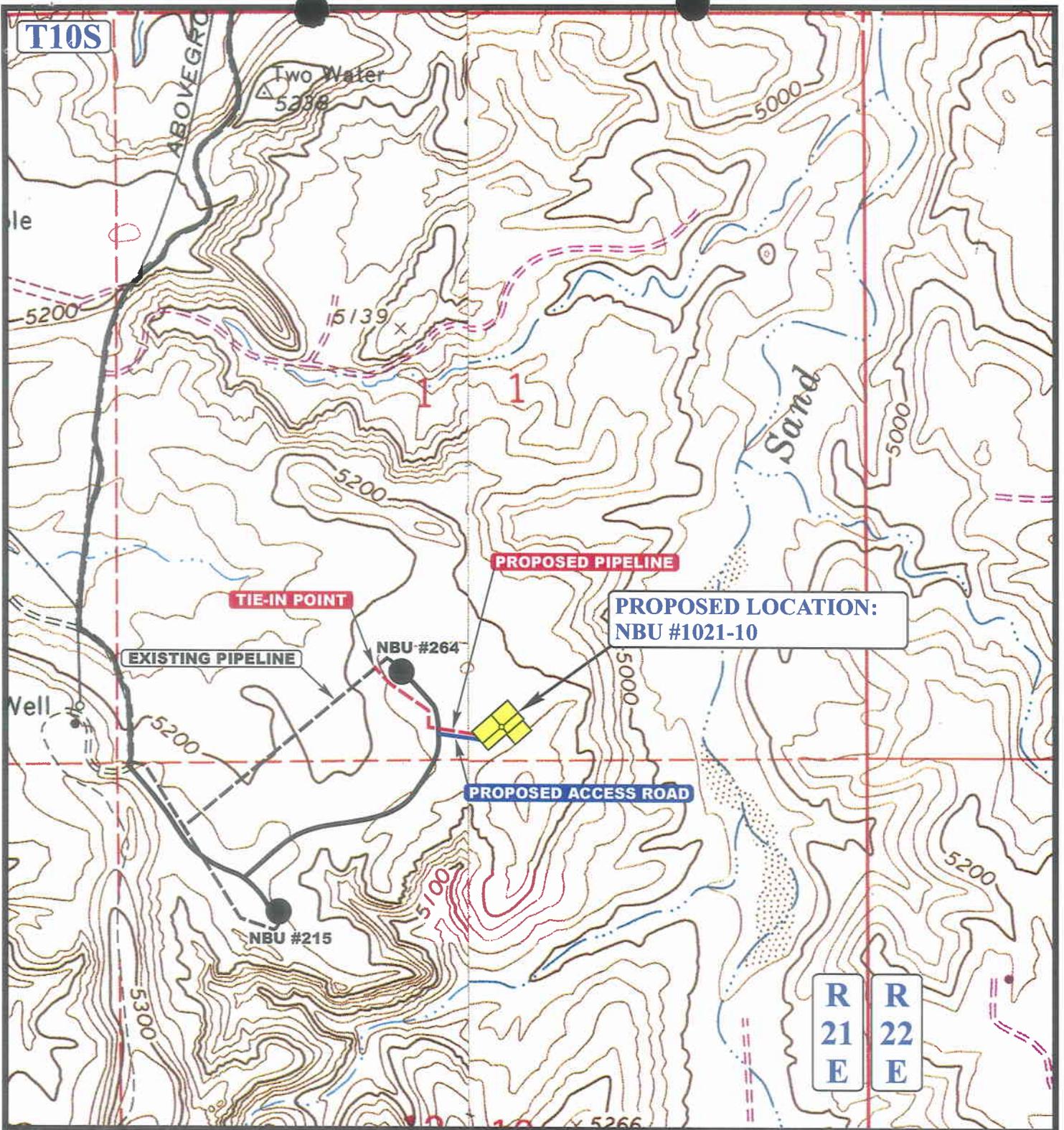
**Kerr-McGee Oil & Gas Onshore LP**

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

**TOPOGRAPHIC MAP** 10 12 06  
MONTH DAY YEAR  
SCALE: 1" = 2000' DRAWN BY: A.A. REVISED: 00-00-00 **TOPO**





**APPROXIMATE TOTAL PIPELINE DISTANCE = 901' +/-**

**LEGEND:**

- PROPOSED ACCESS ROAD
- EXISTING PIPELINE
- PROPOSED PIPELINE



**Kerr-McGee Oil & Gas Onshore LP**

**NBU #1021-10  
SECTION 1, T10S, R21E, S.L.B.&M.  
245' FSL 2619' FEL**



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

**TOPOGRAPHIC** 10 12 06  
**MAP** MONTH DAY YEAR

SCALE: 1" = 1000' DRAWN BY: A.A. REVISED: 00-00-00



# Kerr-McGee Oil & Gas Onshore LP

**NBU #1021-10**

**PIPELINE ALIGNMENT**

**LOCATED IN UINTAH COUNTY, UTAH**

**SECTION 1, T10S, R21E, S.L.B.&M.**



**PHOTO: VIEW FROM TIE-IN POINT**

**CAMERA ANGLE: SOUTHYEASTERLY**



**PHOTO: VIEW OF PIPELINE FROM LOCATION**

**CAMERA ANGLE: NORTHWESTERLY**



**UELS** Uintah Engineering & Land Surveying  
85 South 200 East Vernal, Utah 84078  
435-789-1017 uels@uelsinc.com

- Since 1964 -

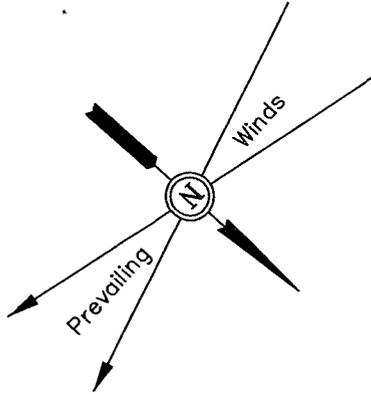
<b>PIPELINE PHOTOS</b>	<b>10</b>	<b>12</b>	<b>06</b>	<b>PHOTO</b>
	MONTH	DAY	YEAR	
TAKEN BY: L.K.	DRAWN BY: A.A.		REVISED: 00-00-00	

Herr-McGee Oil & Gas Onshore LP

FIGURE #1

LOCATION LAYOUT FOR

NBU#1021-1Ø  
SECTION 1, T10S, R21E, S.L.B.&M.  
245' FSL 2619' FEL Proposed Access Road

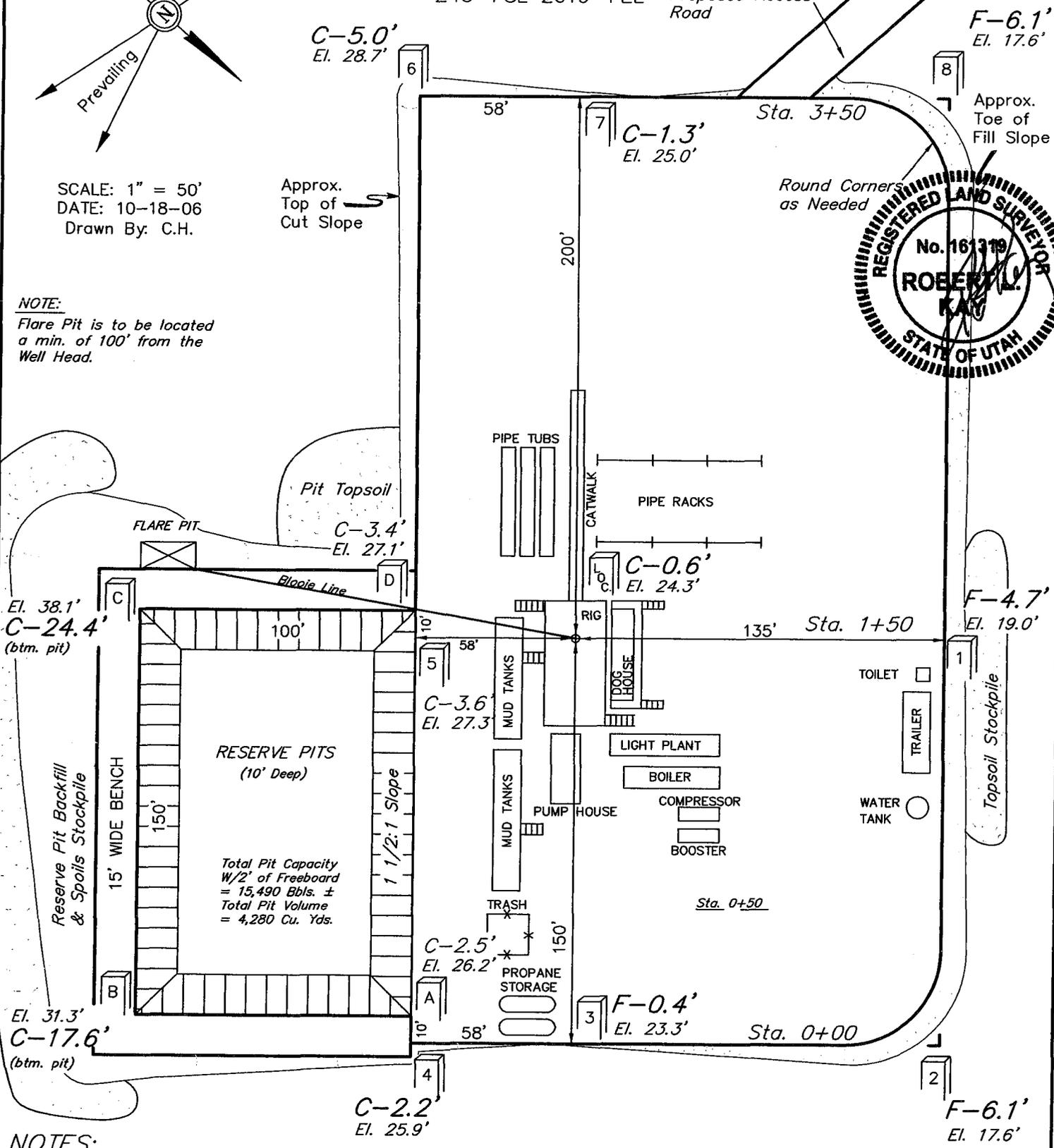
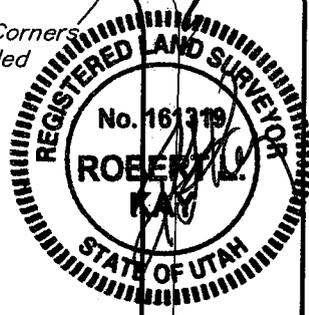


SCALE: 1" = 50'  
DATE: 10-18-06  
Drawn By: C.H.

Approx. Top of Cut Slope

NOTE:

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



NOTES:

Elev. Ungraded Ground At Loc. Stake = 5224.3'  
FINISHED GRADE ELEV. AT LOC. STAKE = 5223.7'

Kerr-McGee Oil & Gas Onshore LP

FIGURE #2

TYPICAL CROSS SECTIONS FOR

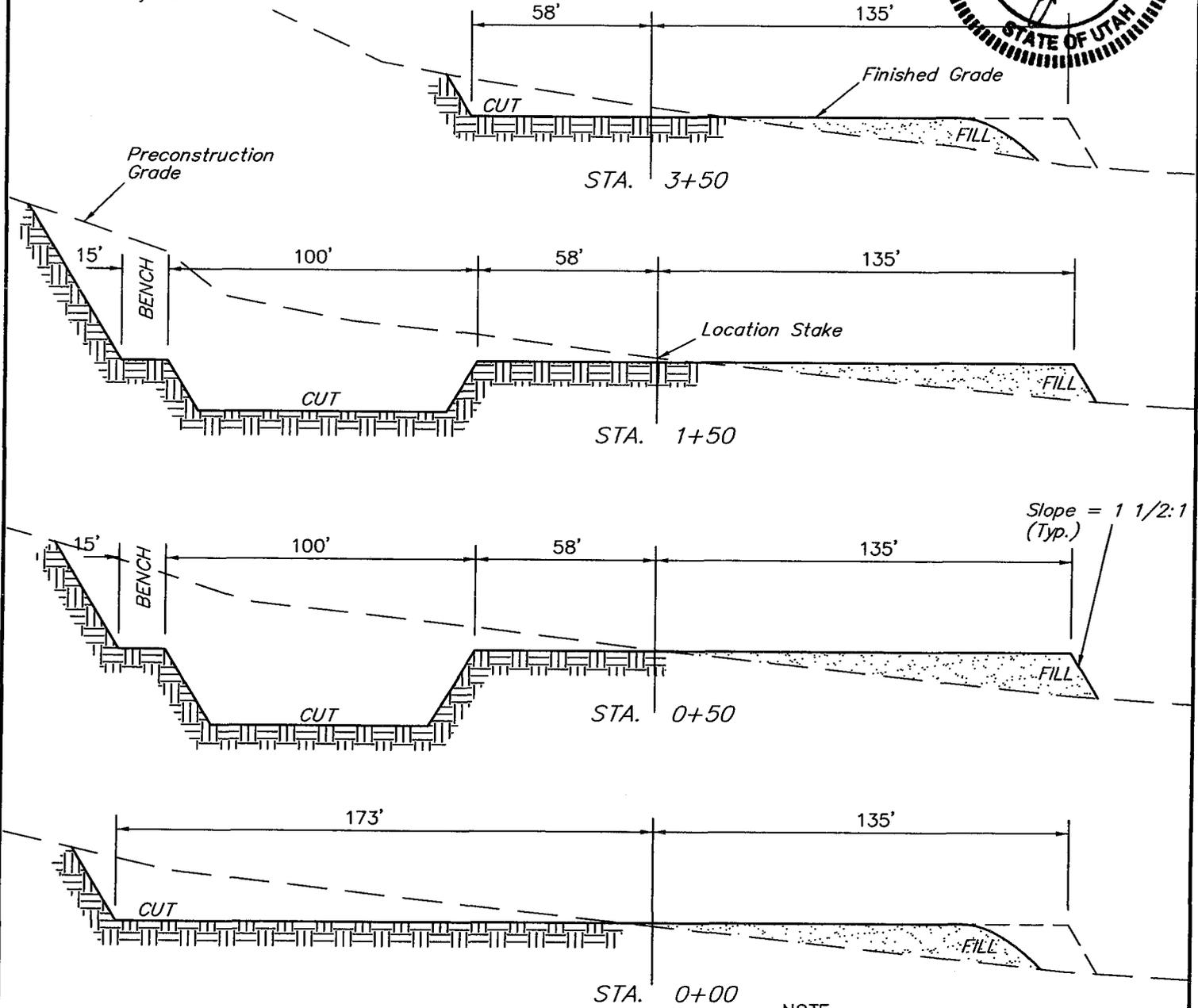
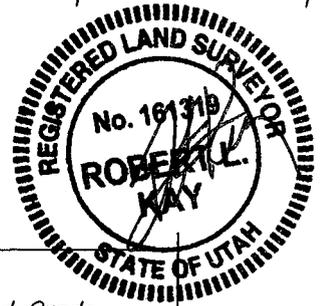
NBU #1021-1Ø

SECTION 1, T10S, R21E, S.L.B.&M.

245' FSL 2619' FEL

1" = 20'  
X-Section Scale  
1" = 50'

DATE: 10-18-06  
Drawn By: C.H.



\* NOTE:  
FILL QUANTITY INCLUDES  
5% FOR COMPACTION

APPROXIMATE YARDAGES

CUT	
(6") Topsoil Stripping	= 1,930 Cu. Yds.
Remaining Location	= 12,040 Cu. Yds.
<b>TOTAL CUT</b>	<b>= 13,970 CU.YDS.</b>
<b>FILL</b>	<b>= 5,600 CU.YDS.</b>

NOTE:  
Topsoil should not be  
Stripped Below Finished  
Grade on Substructure Area.

EXCESS MATERIAL	= 8,370 Cu. Yds.
Topsoil & Pit Backfill (1/2 Pit Vol.)	= 4,070 Cu. Yds.
EXCESS UNBALANCE (After Interim Rehabilitation)	= 4,300 Cu. Yds.

UINTAH ENGINEERING & LAND SURVEYING  
85 So. 200 East \* Vernal, Utah 84078 \* (435) 789-1017

**WORKSHEET  
APPLICATION FOR PERMIT TO DRILL**

APD RECEIVED: 02/02/2007

API NO. ASSIGNED: 43-047-39002

WELL NAME: NBU 1021-10  
 OPERATOR: KERR-MCGEE OIL & GAS ( N2995 )  
 CONTACT: SHEILA UPCHEGO

PHONE NUMBER: 435-781-7024

PROPOSED LOCATION:

SWSE 01 100S 210E  
 SURFACE: 0245 FSL 2619 FEL  
 BOTTOM: 0245 FSL 2619 FEL  
 COUNTY: UINTAH  
 LATITUDE: 39.97102 LONGITUDE: -109.4990  
 UTM SURF EASTINGS: 628183 NORTHINGS: 4425409  
 FIELD NAME: NATURAL BUTTES ( 630 )

INSPECT LOCATN BY: / /		
Tech Review	Initials	Date
Engineering	DAD	2/28/07
Geology		
Surface		

LEASE TYPE: 3 - State  
 LEASE NUMBER: ML-23612  
 SURFACE OWNER: 3 - State

PROPOSED FORMATION: WSMVD  
 COALBED METHANE WELL? NO

RECEIVED AND/OR REVIEWED:

- Plat
- Bond: Fed[] Ind[] Sta[] Fee[]  
(No. 22013542 )
- Potash (Y/N)
- Oil Shale 190-5 (B) or 190-3 or 190-13
- Water Permit  
(No. 43-8496 )
- RDCC Review (Y/N)  
(Date: \_\_\_\_\_ )
- Fee Surf Agreement (Y/N)
- Intent to Commingle (Y/N)

LOCATION AND SITING:

- R649-2-3.
- Unit: NATURAL BUTTES
- R649-3-2. General  
Siting: 460' From Qtr/Qtr & 920' Between Wells
- R649-3-3. Exception
- Drilling Unit  
Board Cause No: 173-14  
Eff Date: 12-2-1999  
Siting: 460' by 460' & 920' min. Dist
- R649-3-11. Directional Drill

COMMENTS: Needs Permit (02-14-07)

STIPULATIONS: 1- STATEMENT OF BASIS  
2- OIL SHALE  
3- Surface Csg Cont step

T9S R21E

T9S R22E  
T10S R22E

T10S R21E

# NATURAL BUTTES FIELD NATURAL BUTTES UNIT

CAUSE: 173-14 / 12-2-1999

CIGE 107D

CIGE 244

CIGE 79D

CIGE 284

CIGE 55

CIGE 205

CIGE 245

NBU 1021-1G

NBU 211

NBU 71

NBU 329

NBU 1021-1P

NBU 444

NBU 264

NBU 1021-1O

NBU 1021-1M (RIGSKID)

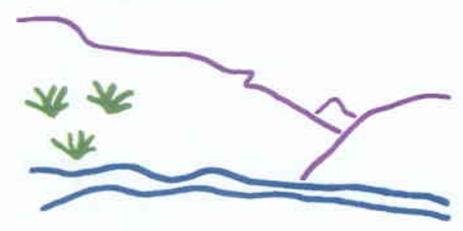
OPERATOR: KERR MCGEE O&G (N2995)

SEC: 1 T.10S R. 21E

FIELD: NATURAL BUTTES (630)

COUNTY: UINTAH

CAUSE: 173-14 / 12-2-1999



Utah Oil Gas and Mining



PREPARED BY: DIANA MASON  
DATE: 7-FEBRUARY-2007

- Wells Status**
- ⊗ GAS INJECTION
  - ⊗ GAS STORAGE
  - ⊗ LOCATION ABANDONED
  - ⊙ NEW LOCATION
  - ⊗ PLUGGED & ABANDONED
  - ⊗ PRODUCING GAS
  - PRODUCING OIL
  - ⊗ SHUT-IN GAS
  - ⊗ SHUT-IN OIL
  - ⊗ TEMP. ABANDONED
  - TEST WELL
  - ⊙ WATER INJECTION
  - ⊙ WATER SUPPLY
  - ⊙ WATER DISPOSAL
  - ⊙ DRILLING

- Field Status**
- ▣ ABANDONED
  - ▣ ACTIVE
  - ▣ COMBINED
  - ▣ INACTIVE
  - ▣ PROPOSED
  - ▣ STORAGE
  - ▣ TERMINATED

- Unit Status**
- ▣ EXPLORATORY
  - ▣ GAS STORAGE
  - ▣ NF PP OIL
  - ▣ NF SECONDARY
  - ▣ PENDING
  - ▣ PI OIL
  - ▣ PP GAS
  - ▣ PP GEOTHERML
  - ▣ PP OIL
  - ▣ SECONDARY
  - ▣ TERMINATED

# Application for Permit to Drill

## Statement of Basis

2/22/2007

Utah Division of Oil, Gas and Mining

Page 1

APD No	API WellNo	Status	Well Type	Surf Ownr	CBM
228	43-047-39002-00-00		GW	S	No
<b>Operator</b>	KERR-MCGEE OIL & GAS ONSHORE, LP		<b>Surface Owner-APD</b>		
<b>Well Name</b>	NBU 1021-10		<b>Unit</b>		
<b>Field</b>	UNDESIGNATED		<b>Type of Work</b>		
<b>Location</b>	SWSE 1 10S 21E S 0 FL 0 FL GPS Coord (UTM) 628183E 4425409N				

### Geologic Statement of Basis

Kerr McGee proposes to set 2,200' of surface casing at this location. The depth to the base of the moderately saline water at this location is estimated to be at a depth of 3,700'. A search of Division of Water Rights records shows one water well within a 10,000 foot radius of the center of Section 1. The well is located approximately 1 mile west of the proposed well site. The well is owned by the DeKalb Agricultural, has a depth of 2,640 feet, and its listed use is for oilfield drilling. The surface formation at this site is the Uinta Formation. The Uinta Formation is made up of interbedded shales and sandstones. The sandstones are mostly lenticular and discontinuous and should not be a significant source of useable ground water. Production casing cement should be brought up above the base of the moderately saline ground water to isolate it from fresher waters uphole.

Brad Hill  
APD Evaluator

2/22/2007  
Date / Time

### Surface Statement of Basis

The general area is the Sand Wash Drainage of Uintah, County. Sand Wash is approximately 36 air miles south of Vernal, Utah and approximately 18 miles southeast of Ouray, Utah. Access is by State of Utah Highways, Uintah County and oilfield development roads a distance of 20 miles from Ouray, UT. All roads are in-place except approximately 324 feet, which will be constructed.

Topography of the Sand Wash area is characterized by broad open flats dissected by numerous sub-drainages, which often become steep with ridges and draws with exposed sandstone layers. No perennial streams occur in drainage. Individual draws or washes are ephemeral with spring runoff or flows from sometimes-intense summer rainstorms. No springs exist in the area. An occasional constructed pond occurs furnishing water for antelope or livestock.

The NBU 1021-10 proposed gas well is located in on a flat which extends south to the toe of the slope of a hummocky rocky ridge. The flat slopes gently to the north. No drainages intersect the location.. The White River is approximately 5 mile down drainage.

Both the surface and minerals are owned by SITLA. Jim Davis represented SITLA at the pre-site investigation. Mr. Davis had no concerns pertaining to this location. The selected location appears to be the best site for drilling and operating a well in the immediate area.

Floyd Bartlett  
Onsite Evaluator

2/14/2007  
Date / Time

### Conditions of Approval / Application for Permit to Drill

Category	Condition
Pits	A synthetic liner with a minimum thickness of 20 mils with a felt subliner shall be properly installed and maintained in the reserve pit.

# ON-SITE PREDRILL EVALUATION

## Utah Division of Oil, Gas and Mining

Operator KERR-MCGEE OIL & GAS ONSHORE, LP  
Well Name NBU 1021-10  
API Number 43-047-39002-0 APD No 228 Field/Unit UNDESIGNATED  
Location: 1/4,1/4 SWSE Sec 1 Tw 10S Rng 21E 0 FL 0 FL  
GPS Coord (UTM) 628173 4425411 Surface Owner

### Participants

Floyd Bartlett (DOGM), Jim Davis (SITLA), Carroll Estes, Tony Kznick, and Clay Einerson (Kerr McGee), David Kay (Uintah Engineering and Land Surveying), and Ben Williams (UDWR)

### Regional/Local Setting & Topography

The general area is the Sand Wash Drainage of Uintah, County. Sand Wash is approximately 36 air miles south of Vernal, Utah and approximately 18 miles southeast of Ouray, Utah. Access is by State of Utah Highways, Uintah County and oilfield development roads a distance of 20 miles from Ouray, UT. All roads are in-place except approximately 324 feet, which will be constructed.

Topography of the Sand Wash area is characterized by broad open flats dissected by numerous sub-drainages, which often become steep with ridges and draws with exposed sandstone layers. No perennial streams occur in drainage. Individual draws or washes are ephemeral with spring runoff or flows from sometimes-intense summer rainstorms. No springs exist in the area. An occasional constructed pond occurs furnishing water for antelope or livestock.

The NBU 1021-10 proposed gas well is located in on a flat which extends south to the toe of the slope of a hummocky rocky ridge top. The flat slopes gently to the north. No drainages intersect the location.. The White River is approximately 5 mile down drainage.

### Surface Use Plan

#### Current Surface Use

Grazing  
Recreational  
Wildlfe Habitat

#### New Road

Miles	Well Pad	Src Const Material	Surface Formation
0.05	Width 308	Length 350	Onsite
			UNTA

Ancillary Facilities N

### Waste Management Plan Adequate? Y

### Environmental Parameters

Affected Floodplains and/or Wetland N

#### Flora / Fauna

Snow covered the vegetation on the area. Identifiable vegetation consisted of shadscale greasewood, black sage, horsebrush and spiny hopsage. Vegetation cover is sparse.

Antelope, sheep during the winter, rabbits, coyotes, and small mammals, birds and raptors.

**Soil Type and Characteristics**

Deep sandy loam.

**Erosion Issues** N

**Sedimentation Issues** N

**Site Stability Issues** N

**Drainage Diversion Required** N

**Berm Required?** N

**Erosion Sedimentation Control Required?** N

**Paleo Survey Run?** Y    **Paleo Potential Observed?** N    **Cultural Survey Run?** Y    **Cultural Resources?** N

**Reserve Pit**

**Site-Specific Factors**

		<b>Site Ranking</b>
<b>Distance to Groundwater (feet)</b>	>200	0
<b>Distance to Surface Water (feet)</b>	>1000	0
<b>Dist. Nearest Municipal Well (ft)</b>	>5280	0
<b>Distance to Other Wells (feet)</b>	300 to 1320	10
<b>Native Soil Type</b>	Mod permeability	10
<b>Fluid Type</b>	Fresh Water	5
<b>Drill Cuttings</b>	Normal Rock	0
<b>Annual Precipitation (inches)</b>	<10	0
<b>Affected Populations</b>	<10	0
<b>Presence Nearby Utility Conduits</b>	Not Present	0

**Final Score**    25    1    **Sensitivity Level**

**Characteristics / Requirements**

The proposed reserve pit is 100' x 150' x 10' deep located in a cut on the southeast corner of the location. A 20 mil liner with a felt sub-liner is planned by Kerr McGee

**Closed Loop Mud Required?** N    **Liner Required?**    **Liner Thickness** 20    **Pit Underlayment Required?** Y

**Other Observations / Comments**

Ben Williams representing the UDWR stated the area is classified as yearlong critical habitat for antelope. He stated that the lack of water not forage is the limiting factor affecting the herd in the area. He recommended no restrictions for antelope. No other wildlife is expected to be significantly affected. He gave Jim Davis of SITLA and Carroll Estes of Kerr McGee a copy of his wildlife evaluation and a UDWR recommended seed mix to be used when re-vegetating the location.

The area was covered with snow. ATV's were used to access the site.

Floyd Bartlett  
**Evaluator**

2/14/2007  
**Date / Time**

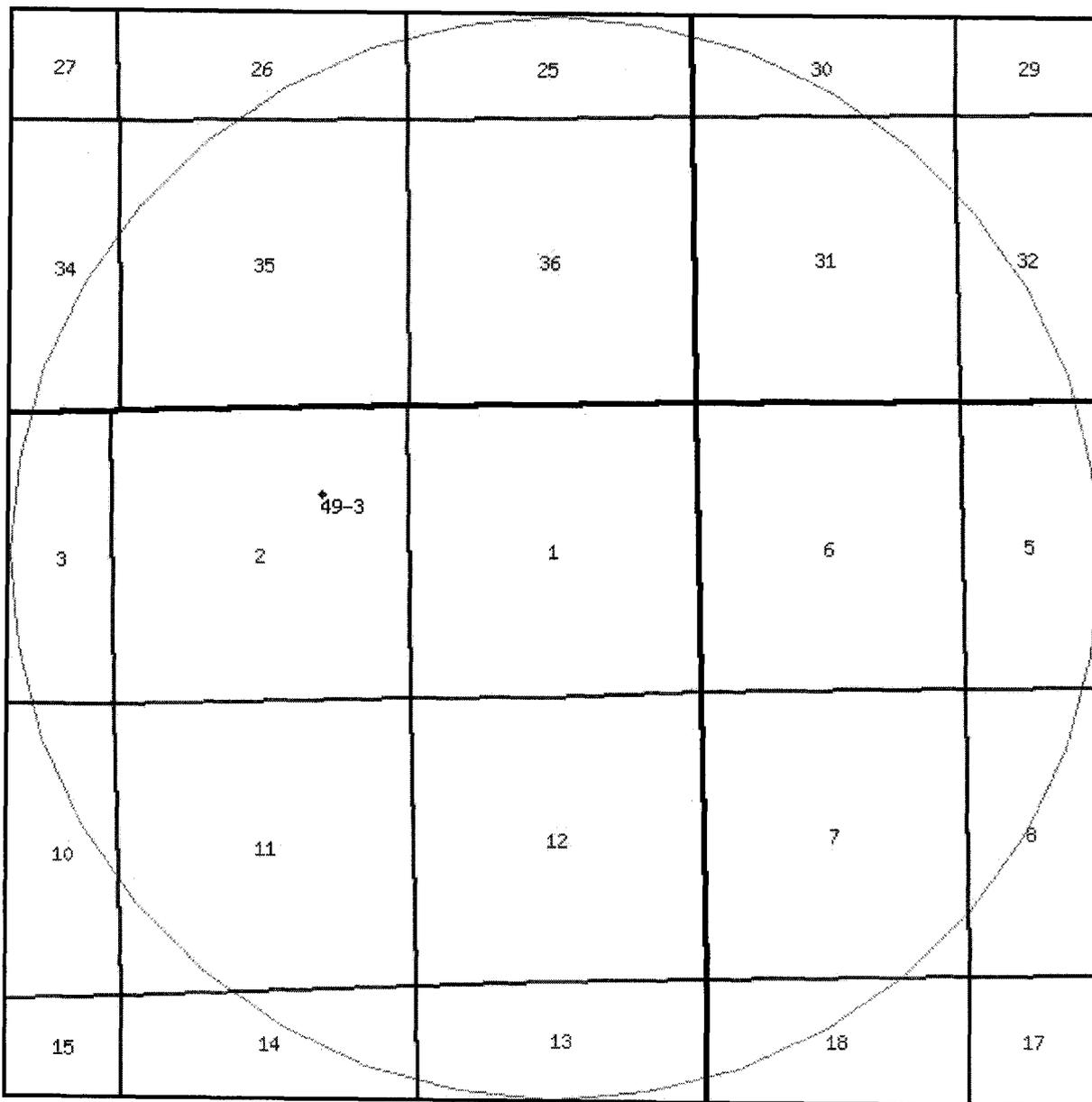
[utah gov](#)
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[Agency List](#)
[Business](#)
[Google](#)

# Utah Division of Water Rights

## WRPLAT Program Output Listing

Version: 2006.11.17.00    Rundate: 02/22/2007 01:42 PM

Radius search of 10000 feet from a point N2640 E2640 from the SW corner, section 01, Township 10S, Range 21E, SL b&m Criteria:wrtypes=W,C,E podtypes=U status=U,A,P usetypes=all



0    1300    2600    3900    5200 ft

**Water Rights**

<b>WR Number</b>	<b>Diversion Type/Location</b>	<b>Well Log</b>	<b>Status</b>	<b>Priority</b>	<b>Uses</b>	<b>CFS</b>	<b>ACFT</b>	<b>Owner</b>
<u>49-3</u>	Underground S1650 W1564 NE 02 10S 21E SL		P	19590617	O	0.026	0.000	DEKALB AGRICULT ASSOCIATION INCC BOX 523

[Natural Resources](#) | [Contact](#) | [Disclaimer](#) | [Privacy Policy](#) | [Accessibility Policy](#)

Casing Schematic

BHP  $0.052(9340)11.5 = 5585 \text{ psi}$   
Anticipate 5991 psi

Gas  $.12(9340) = 1121$   
 $5585 - 1121 = 4464 \text{ psi, MASP}$

BOPE = 5M ✓

9-5/8"  
MW 8.4  
Frac 19.3

Burst 2270  
70% 1589 psi

Max P @ surf shoe  
 $(.22)(7140) = 1571$   
 $5585 - 1571 = 4014 \text{ psi}$

Test to 1589 psi ✓

Stop surf cmt. ✓

✓ Adequate DUD 2/20/07



4-1/2"  
MW 11.5

Surface

12%  
18%

TOC @ Winta

-1201' TOC w/0% w/o  
-1357' Green River

-1667' Birds Nest Water  
TOC @ 1707.

Optimal - Topout

2290' Surface  
2200. MD

Mahegan ✓ o.k.

4603' Wasatch



7222' Mesaverde

8164' MV 42

8783' MV L1

Production  
9340. MD

Well name:	<b>2007-02 Kerr McGee NBU 1021-10</b>		
Operator:	<b>Kerr McGee Oil &amp; Gas Onshore L.P.</b>		
String type:	Production	Project ID:	43-047-39002
Location:	Uintah County, Utah		

**Design parameters:**

**Collapse**

Mud weight: 11.500 ppg  
 Design is based on evacuated pipe.

**Minimum design factors:**

**Collapse:**

Design factor 1.125

**Burst:**

Design factor 1.00

**Environment:**

H2S considered? No  
 Surface temperature: 75 °F  
 Bottom hole temperature: 206 °F  
 Temperature gradient: 1.40 °F/100ft  
 Minimum section length: 1,500 ft

Cement top: Surface

**Burst**

Max anticipated surface pressure: 3,525 psi  
 Internal gradient: 0.220 psi/ft  
 Calculated BHP 5,580 psi

No backup mud specified.

**Tension:**

8 Round STC: 1.80 (J)  
 8 Round LTC: 1.80 (J)  
 Buttress: 1.60 (J)  
 Premium: 1.50 (J)  
 Body yield: 1.50 (B)

**Non-directional string.**

Tension is based on buoyed weight.  
 Neutral point: 7,734 ft

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Internal Capacity (ft³)
1	9340	4.5	11.60	I-80	LT&C	9340	9340	3.875	815.1

Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (Kips)	Tension Strength (Kips)	Tension Design Factor
1	5580	6360	1.140	5580	7780	1.39	90	212	2.36 J

Prepared by: Helen Sadik-Macdonald  
 Div of Oil, Gas & Minerals

Phone: (801) 538-5357  
 FAX: (801) 359-3940

Date: February 26, 2007  
 Salt Lake City, Utah

**Remarks:**

Collapse is based on a vertical depth of 9340 ft, a mud weight of 11.5 ppg. The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

Well name:	<b>2007-02 Kerr McGee NBU 1021-10</b>	
Operator:	<b>Kerr McGee Oil &amp; Gas Onshore L.P.</b>	
String type:	Surface	Project ID: 43-047-39002
Location:	Uintah County, Utah	

**Design parameters:**

**Collapse**  
Mud weight: 8.400 ppg  
Design is based on evacuated pipe.

**Minimum design factors:**

**Collapse:**  
Design factor 1.125

**Environment:**

H2S considered? No  
Surface temperature: 75 °F  
Bottom hole temperature: 106 °F  
Temperature gradient: 1.40 °F/100ft  
Minimum section length: 1,400 ft

**Burst**

Max anticipated surface pressure: 1,936 psi  
Internal gradient: 0.120 psi/ft  
Calculated BHP 2,200 psi

**Burst:**

Design factor 1.00

Cement top: 1,707 ft

No backup mud specified.

**Tension:**

8 Round STC: 1.80 (J)  
8 Round LTC: 1.80 (J)  
Buttress: 1.60 (J)  
Premium: 1.50 (J)  
Body yield: 1.50 (B)

**Non-directional string.**

Tension is based on buoyed weight.  
Neutral point: 1,929 ft

**Re subsequent strings:**

Next setting depth: 9,340 ft  
Next mud weight: 11,500 ppg  
Next setting BHP: 5,580 psi  
Fracture mud wt: 19,250 ppg  
Fracture depth: 2,200 ft  
Injection pressure: 2,200 psi

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Internal Capacity (ft³)
1	2200	9.625	32.30	H-40	ST&C	2200	2200	8.876	972.1
Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (Kips)	Tension Strength (Kips)	Tension Design Factor
1	960	1370	1.427	2200	2270	1.03	62	254	4.08 J

Prepared by: Helen Sadik-Macdonald  
Div of Oil, Gas & Minerals

Phone: (801) 538-5357  
FAX: (801) 359-3940

Date: February 26, 2007  
Salt Lake City, Utah

Remarks:  
Collapse is based on a vertical depth of 2200 ft, a mud weight of 8.4 ppg. The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

# 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)

February 7, 2007

### Memorandum

To: Assistant District Manager Minerals, Vernal District  
From: Michael Coulthard, Petroleum Engineer  
Subject: 2007 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 2007 within the Natural Buttes Unit, Uintah County, Utah.

API #	WELL NAME	LOCATION
(Proposed PZ Wasatch/MesaVerde)		
43-047-39004	NBU 1021-19C Sec. 19 T. 10S R. 21E 0620 FNL 1904 FWL	
43-047-39005	NBU 1021-19D Sec. 19 T. 10S R. 21E 0637 FNL 0755 FWL	
43-047-39006	NBU 1021-19E Sec. 19 T. 10S R. 21E 2146 FNL 0879 FWL	
43-047-39007	NBU 1021-19K Sec. 19 T. 10S R. 21E 2181 FSL 2092 FWL	
43-047-39008	NBU 1021-19N Sec. 19 T. 10S R. 21E 0462 FSL 1845 FWL	
43-047-39009	NBU 1021-29L Sec. 29 T. 10S R. 21E 1398 FSL 0190 FWL	
43-047-39010	NBU 1021-29O Sec. 29 T. 10S R. 21E 0615 FSL 2115 FEL	
43-047-39011	NBU 1021-29N Sec. 29 T. 10S R. 21E 0250 FSL 1764 FWL	
43-047-39012	NBU 1021-29J Sec. 29 T. 10S R. 21E 1532 FSL 2192 FEL	
43-047-39013	NBU 1021-29K Sec. 29 T. 10S R. 21E 1804 FSL 2143 FWL	
43-047-39014	NBU 1021-29I Sec. 29 T. 10S R. 21E 2060 FSL 0962 FEL	
43-047-39015	NBU 1021-29G Sec. 29 T. 10S R. 21E 2090 FNL 1960 FEL	
43-047-39016	NBU 1021-29F Sec. 29 T. 10S R. 21E 1718 FNL 1529 FWL	
43-047-39017	NBU 1021-29E Sec. 29 T. 10S R. 21E 2635 FNL 1010 FWL	
43-047-39018	NBU 1021-29C Sec. 29 T. 10S R. 21E 0476 FNL 2501 FWL	
43-047-39019	NBU 1021-29A Sec. 29 T. 10S R. 21E 0170 FNL 0627 FEL	
43-047-39020	NBU 1021-30I Sec. 30 T. 10S R. 21E 2131 FSL 0387 FEL	
43-047-39021	NBU 1021-30J Sec. 30 T. 10S R. 21E 1901 FSL 1827 FEL	
43-047-39022	NBU 1021-30K Sec. 30 T. 10S R. 21E 1398 FSL 2686 FWL	
43-047-39023	NBU 1021-30L Sec. 30 T. 10S R. 21E 1602 FSL 0980 FWL	
43-047-39024	NBU 1021-30M Sec. 30 T. 10S R. 21E 0612 FSL 0462 FWL	

Page 2

43-047-39025 NBU 1021-30N Sec. 30 T. 10S R. 21E 0942 FSL 1876 FWL  
43-047-39026 NBU 1021-32A Sec. 32 T. 10S R. 21E 0646 FNL 0955 FEL  
43-047-39027 NBU 1021-32B Sec. 32 T. 10S R. 21E 0837 FNL 2117 FEL  
43-047-39028 NBU 1021-32C Sec. 32 T. 10S R. 21E 0664 FNL 1840 FWL  
43-047-39029 NBU 1021-32F Sec. 32 T. 10S R. 21E 1909 FNL 2165 FWL  
43-047-39001 NBU 1021-01G Sec. 01 T. 10S R. 21E 2660 FSL 1765 FEL  
43-047-39002 NBU 1021-01O Sec. 01 T. 10S R. 21E 0245 FSL 2619 FEL  
43-047-39003 NBU 1021-01P Sec. 01 T. 10S R. 21E 0888 FSL 1309 FEL  
43-047-39030 NBU 1022-18A Sec. 18 T. 10S R. 22E 1007 FNL 0512 FEL  
43-047-39031 NBU 1022-24I Sec. 24 T. 10S R. 22E 2045 FSL 1166 FEL  
43-047-39032 NBU 1022-25B Sec. 25 T. 10S R. 22E 0403 FNL 1971 FEL  
43-047-39033 NBU 1022-25H Sec. 25 T. 10S R. 22E 2604 FNL 0825 FEL

Our records indicate the NBU 1022-25H is closer than 460 feet from the Natural Buttes Unit boundary (approximately 36 feet).

We have no objections to permitting the wells so long as the unit operator receives an exception to the locating and siting requirements of the State of Utah (R649-3-2).

/s/ Michael L. Coulthard

bcc: File – Natural Buttes Unit  
Division of Oil Gas and Mining  
Central Files  
Agr. Sec. Chron  
Fluid Chron

MCoulthard:mc:2-7-07

**From:** Ed Bonner  
**To:** Mason, Diana  
**Date:** 2/14/2007 9:50 AM  
**Subject:** The following wells have been given cultural resource clearance by the Trust Lands Cultural Resource

**CC:** Davis, Jim; Garrison, LaVonne; Hill, Brad; Hunt, Gil; sheila.upchego...  
The following wells have been given cultural resource clearance by the Trust Lands Cultural Resources Group:

- Kerr McGee Oil & Gas Onshore LP
- NBU 1022-7H-4 (API 43 047 38570)
  - NBU 1021-2E (API 43 047 38838)
  - NBU 1021-2F (API 43 047 38839)
  - NBU 1021-2M (API 43 047 38841)
  - NBU 1021-2K (API 43 047 38842)
  - NBU 1021-2L (API 43 047 38843)
  - NBU 1021-2J (API 43 047 38844)
  - NBU 1021-36D (API 43 047 38845)
  - NBU 1021-36E (API 43 047 38846)
  - NBU 1021-36F (API 43 047 38847)
  - NBU 1021-36N (API 43 047 38848)
  - NBU 1021-36K (API 43 047 38849)
  - NBU 1021-36C (API 43 047 38850)
  - NBU 1021-1G (API 43 047 39001)
  - NBU 1021-1O (API 43 047 39002)
  - NBU 1021-1P (API 43 047 39003)
  - NBU 1021-30I (API 43 047 39020)
  - NBU 1021-30J (API 43 047 39021)
  - NBU 1021-30K (API 43 047 39022)
  - NBU 1021-30L (API 43 047 39023)
  - NBU 1021-30M (API 43 047 39024)
  - NBU 1021-30N (API 43 047 39025)

If you have any questions regarding this matter please give me a call.



**State of Utah**

**Department of  
Natural Resources**

MICHAEL R. STYLER  
*Executive Director*

**Division of  
Oil, Gas & Mining**

JOHN R. BAZA  
*Division Director*

JON M. HUNTSMAN, JR.  
*Governor*

GARY R. HERBERT  
*Lieutenant Governor*

February 28, 2007

Kerr-McGee Oil & Gas Onshore LP  
1368 S 1200 E  
Vernal, UT 84078

Re: Natural Buttes Unit 1021-10 Well, 245' FSL, 2619' FEL, SW SE, Sec. 1,  
T. 10 South, R. 21 East, Uintah County, Utah

Gentlemen:

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

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date. The API identification number assigned to this well is 43-047-39002.

Sincerely,

Gil Hunt  
Associate Director

pab  
Enclosures

cc: Uintah County Assessor (via e-mail)  
SITLA  
Bureau of Land Management, Vernal District Office



4. Compliance with the State of Utah Antiquities Act forbids disturbance of archeological, historical, or paleontological remains. Should archeological, historical or paleontological remains be encountered during your operations, you are required to immediately suspend all operations and immediately inform the Trust Lands Administration and the Division of State History of the discovery of such remains.
5. Compliance with the Conditions of Approval/Application for Permit to Drill outlined in the Statement of Basis. (Copy Attached)
6. In accordance with Order in Cause No. 190-5(b) dated October 28, 1982, the Operator shall comply with requirements of Rules R649-3-31 and R649-3-27 pertaining to Designated Oil Shale Areas. Additionally, the operator shall ensure that the surface and/or production casing is properly cemented over the entire oil shale interval as defined by Rule R649-3-31. The Operator shall report the actual depth the oil shale is encountered to the Division.
7. Surface casing shall be cemented to the surface.

# DIVISION OF OIL, GAS AND MINING

## SPUDDING INFORMATION

Name of Company: KERR-McGEE OIL & GAS ONSHORE, LP

Well Name: NBU 1021-10

Api No: 43-047-39002 Lease Type: STATE

Section 01 Township 10S Range 21E County UINTAH

Drilling Contractor PETE MARTIN DRLG RIG # RATHOLE

### SPUDDED:

Date 10/13/07

Time 9:30 AM

How DRY

**Drilling will Commence:** \_\_\_\_\_

Reported by LOU WELDON

Telephone # (435) 828-7035

Date 10/16/07 Signed CHD

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
4304738219	BONANZA 1023-8E		SWNW	8	10S	23E	UINTAH
Action Code	Current Entity Number	New Entity Number	Spud Date			Entity Assignment Effective Date	
A	99999	16397	10/13/2007			10/17/07	
Comments: <u>WSMVD</u> MIRU PETE MARTIN BUCKET RIG. SPUD WELL LOCATION ON 10/13/2007 @ 1100HRS.							

Well 2

API Number	Well Name		QQ	Sec	Twp	Rng	County
4304738306	BONANZA 1023-9D		NWNW	9	10S	23E	UINTAH
Action Code	Current Entity Number	New Entity Number	Spud Date			Entity Assignment Effective Date	
A	99999	16398	10/14/2007			10/17/07	
Comments: <u>WSMVD</u> MIRU PETE MARTIN BUCKET RIG. SPUD WELL LOCATION ON 10/14/2007 @ 1100HRS.							

Well 3

API Number	Well Name		QQ	Sec	Twp	Rng	County
4304739002	NBU 1021-1O		SWSE	1	10S	21E	UINTAH
Action Code	Current Entity Number	New Entity Number	Spud Date			Entity Assignment Effective Date	
B	99999	2900	10/13/2007			10/17/07	
Comments: <u>WSMVD</u> MIRU PETE MARTIN BUCKET RIG. SPUD WELL LOCATION ON 10/13/2007 @ 0930HRS.							

**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 UPCHEGO

Name (Please Print)

*Sheila Upchego*  
Signature

SENIOR LAND SPECIALIST

10/17/2007

Title

Date

**RECEIVED**

**OCT 17 2007**

DIV. OF OIL, GAS & MINING

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

FORM 9

<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>		5. LEASE DESIGNATION AND SERIAL NUMBER: <b>ML-23612</b>
		6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
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: <b>#891008900A</b>
		8. WELL NAME and NUMBER: <b>NBU 1021-10</b>
1. TYPE OF WELL OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER _____	9. API NUMBER: <b>4304739002</b>	
2. NAME OF OPERATOR: <b>KERR-McGEE OIL &amp; GAS ONSHORE LP</b>	10. FIELD AND POOL, OR WILDCAT: <b>NATURAL BUTTES</b>	
3. ADDRESS OF OPERATOR: <b>1368 SOUTH 1200 EAST</b> CITY <b>VERNAL</b> STATE <b>UT</b> ZIP <b>84078</b>	PHONE NUMBER: <b>(435) 781-7024</b>	
4. LOCATION OF WELL FOOTAGES AT SURFACE: <b>245'FSL-2619'FEL</b>	COUNTY: <b>UINTAH</b>	
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: <b>SWSE 1 10S 21E</b>	STATE: <b>UTAH</b>	

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 (Submit in Duplicate) Approximate date work will start: _____	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> REPERFORATE CURRENT FORMATION
	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> SIDETRACK TO REPAIR WELL
	<input type="checkbox"/> CASING REPAIR	<input type="checkbox"/> NEW CONSTRUCTION	<input type="checkbox"/> TEMPORARILY ABANDON
	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> TUBING REPAIR
	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> VENT OR FLARE
<input checked="" type="checkbox"/> SUBSEQUENT REPORT (Submit Original Form Only) Date of work completion: _____	<input type="checkbox"/> CHANGE WELL NAME	<input type="checkbox"/> PLUG BACK	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> PRODUCTION (START/RESUME)	<input type="checkbox"/> WATER SHUT-OFF
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> OTHER: <u>WELL SPUD</u>
	<input type="checkbox"/> CONVERT WELL TYPE	<input type="checkbox"/> RECOMPLETE - DIFFERENT FORMATION	

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

**MIRU PETE MARTIN DRILLING BUCKET RIG. DRILLED 20" CONDUCTOR HOLE TO 40". RAN 14" 36.7# SCHEDULE 10 PIPE. CMT W/28 SX READY MIX. SPUD WELL LOCATION @ 0930 HRS ON 10/13/2007.**

NAME (PLEASE PRINT) <b>SHEILA UPCHEGO</b>	TITLE <b>SENIOR LAND ADMIN SPECIALIST</b>
SIGNATURE	DATE <b>10/17/2007</b>

(This space for State use only)

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**OCT 24 2007**  
**DIV. OF OIL, GAS & MINING**

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

FORM 9

**SUNDRY NOTICES AND REPORTS ON WELLS**

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

		5. LEASE DESIGNATION AND SERIAL NUMBER: <b>ML-23612</b>
		6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
		7. UNIT or CA AGREEMENT NAME: <b>#891008900A</b>
1. TYPE OF WELL OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER _____		8. WELL NAME and NUMBER: <b>NBU 1021-10</b>
2. NAME OF OPERATOR: <b>KERR MCGEE OIL AND GAS ONSHORE LP</b>		9. API NUMBER: <b>4304739002</b>
3. ADDRESS OF OPERATOR: <b>1368 SOUTH 1200 EAST</b> CITY <b>VERNAL</b> STATE <b>UT</b> ZIP <b>84078</b>		10. FIELD AND POOL, OR WLDCAT: <b>NATURAL BUTTES</b>
4. LOCATION OF WELL FOOTAGES AT SURFACE: <b>245'FSL-2619'FEL</b>		COUNTY: <b>UINTAH</b>
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: <b>SWSE 1 10S 21E</b>		STATE: <b>UTAH</b>

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 (Submit in Duplicate) Approximate date work will start: _____	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> REPERFORATE CURRENT FORMATION
	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> SIDETRACK TO REPAIR WELL
<input checked="" type="checkbox"/> SUBSEQUENT REPORT (Submit Original Form Only) Date of work completion: _____	<input type="checkbox"/> CASING REPAIR	<input type="checkbox"/> NEW CONSTRUCTION	<input type="checkbox"/> TEMPORARILY ABANDON
	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> TUBING REPAIR
	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> VENT OR FLARE
	<input type="checkbox"/> CHANGE WELL NAME	<input type="checkbox"/> PLUG BACK	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> PRODUCTION (START/RESUME)	<input type="checkbox"/> WATER SHUT-OFF
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input checked="" type="checkbox"/> OTHER: <u>SET SURFACE</u>
	<input type="checkbox"/> CONVERT WELL TYPE	<input type="checkbox"/> RECOMPLETE - DIFFERENT FORMATION	<u>CSG</u>

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

MIRU BILL MARTIN AIR RIG ON 10/16/2007. DRILLID 12 1/4" SURFACE TO 2250. RAN 9 5/8 OF 55 JTS OF 32.3# H-40 AND 2 JTS OF 36# J-55 SURFACE CSG. LEAD CMT W/225 SX PREM CLASS G @ 15.8 PPG 1.15 YLD. TAILED W/100 SX PREM CLASS g @ 15.8 PPG 1.15 YLD. DOWN BACKSIDE. TOP OUT W/125 SX PREM CLASS G @ 15.8 PPG 1.15 YLD. DOWN BACKSIDE. 2ND TOP OUT W/225 SX PREM CLASS G @ 15.8 PPG 1.15 YLD. 3RD TOP OUT W/225 PREM CLASS G @ 15.8 PPG 1.15 YLD. DOWN BACKSIDE. 4TH TOP OUT W/175 SX PREM CLASS G @ 15.8 1.15 YLD. DOWN BACKSIDE. GOOD CMT TO SURFACE AND STAYED AT SURFACE. WORT.

**RECEIVED**  
**OCT 24 2007**  
**DIV. OF OIL, GAS & MINING**

NAME (PLEASE PRINT) <b>SHEILA UPCHEGO</b>	TITLE <b>SENIOR LAND ADMIN SPECIALIST</b>
SIGNATURE	DATE <b>10/19/2007</b>

(This space for State use only)

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

FORM 9

<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>		5. LEASE DESIGNATION AND SERIAL NUMBER: <b>ML-23612</b>
Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
1. TYPE OF WELL OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER _____		7. UNIT or CA AGREEMENT NAME: <b>UNIT #891008900A</b>
2. NAME OF OPERATOR: <b>KERR MCGEE OIL &amp; GAS ONSHORE LP</b>		8. WELL NAME and NUMBER: <b>NBU 1021-10</b>
3. ADDRESS OF OPERATOR: 1368 SOUTH 1200 EAST CITY <b>VERNAL</b> STATE <b>UT</b> ZIP <b>84078</b>		9. API NUMBER: <b>4304739002</b>
4. LOCATION OF WELL FOOTAGES AT SURFACE: <b>245'FSL, 2619'FEL</b> QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: <b>SWSE 1 10S 21E</b>		10. FIELD AND POOL, OR WILDCAT: <b>NATURAL BUTTES</b> COUNTY: <b>UINTAH</b> STATE: <b>UTAH</b>

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 (Submit in Duplicate)  Approximate date work will start: _____  <input checked="" type="checkbox"/> SUBSEQUENT REPORT (Submit Original Form Only)  Date of work completion: _____	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> REPERFORATE CURRENT FORMATION
	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> SIDETRACK TO REPAIR WELL
	<input type="checkbox"/> CASING REPAIR	<input type="checkbox"/> NEW CONSTRUCTION	<input type="checkbox"/> TEMPORARILY ABANDON
	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> TUBING REPAIR
	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> VENT OR FLARE
	<input type="checkbox"/> CHANGE WELL NAME	<input type="checkbox"/> PLUG BACK	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> PRODUCTION (START/RESUME)	<input type="checkbox"/> WATER SHUT-OFF
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input checked="" type="checkbox"/> OTHER: <b>FINAL DRILLING OPERATIONS</b>
	<input type="checkbox"/> CONVERT WELL TYPE	<input type="checkbox"/> RECOMPLETE - DIFFERENT FORMATION	

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

FINISHED DRILLING FROM 2250' TO 9065' IN 11/17/2007. RAN 4 1/2" 11.6# I-80 PRODUCTION CSG. LEAD CMT W/390 SX PREM LITE II @11.7 PPG 2.60 YIELD. TAILED CMT W/1150 SX 50/50 POZ @14.3 PPG 1.31 YIELD. DISPLACE W/FRESH WATER 140 BBL LAND PLUG PLUG AND PLUG HOLDING RETURNS THROUGHOUT JOB LAND CSG. FUSH STACK W/WATER TEST MANDREL TO 5000 PSI FOR 10 MIN NIPPLE DOWN BOP AND SET BACK CLEAN PITS.

RELEASED PIONEER RIG 53 ON 11/18/2007 AT 0600 HRS.

**RECEIVED**  
**NOV 26 2007**  
DIV. OF OIL, GAS & MINING

NAME (PLEASE PRINT) <b>SHEILA UPCHEGO</b>	TITLE <b>SENIOR LAND ADMIN SPECIALIST</b>
SIGNATURE	DATE <b>11/19/2007</b>

(This space for State use only)

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

FORM 9

<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>		5. LEASE DESIGNATION AND SERIAL NUMBER: <b>ML-23612</b>
Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
1. TYPE OF WELL OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER _____		7. UNIT or CA AGREEMENT NAME: <b>UNIT #891008900A</b>
2. NAME OF OPERATOR: <b>KERR MCGEE OIL &amp; GAS ONSHORE LP</b>		8. WELL NAME and NUMBER: <b>NBU 1021-10</b>
3. ADDRESS OF OPERATOR: <b>1368 SOUTH 1200 EAST</b> CITY <b>VERNAL</b> STATE <b>UT</b> ZIP <b>84078</b>		9. API NUMBER: <b>4304739002</b>
4. LOCATION OF WELL FOOTAGES AT SURFACE: <b>245'FSL, 2619'FEL</b>		10. FIELD AND POOL, OR WILDCAT: <b>NATURAL BUTTES</b>
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: <b>SWSE 1 10S 21E</b>		COUNTY: <b>UINTAH</b>
		STATE: <b>UTAH</b>

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 (Submit in Duplicate)  Approximate date work will start: _____  <input checked="" type="checkbox"/> SUBSEQUENT REPORT (Submit Original Form Only)  Date of work completion: _____	<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/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"/> TEMPORARILY ABANDON <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> WATER DISPOSAL <input type="checkbox"/> WATER SHUT-OFF <input checked="" type="checkbox"/> OTHER: <b>PRODUCTION START-UP</b>

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

**THE SUBJECT WELL LOCATION WAS PLACED ON PRODUCTION ON 12/27/2007 AT 10:15 AM.**

**PLEASE REFER TO THE ATTACHED CHRONOLOGICAL WELL HISTORY.**

NAME (PLEASE PRINT) <b>SHEILA UPCHEGO</b>	TITLE <b>SENIOR LAND ADMIN SPECIALIST</b>
SIGNATURE	DATE <b>12/27/2007</b>

(This space for State use only)

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**DEC 31 2007**  
DIV. OF OIL, GAS & MINING



Anadarko Petroleum Corporation  
 1368 S. 1200 East  
 Vernal, UT 84078

## CHRONOLOGICAL WELL HISTORY

### NBU 1021-10

LOCATION SWSE SEC.1, T10S, R21E  
 UINTAH COUNTY, UT

DATE	ACTIVITY	STATUS
09/25/07	LOCATION STARTED	PIONEER 53
10/12/07	LOCATION COMPLETED	PIONEER 53 P/L IN, WOBR
10/13/07	SET CONDUCTOR	PIONEER 53 WOAR
10/15/07	SET AIR RIG	PIONEER 53 WORT
10/22/07	9-5/8" @ 2223'	PIONEER 53 WORT
11/06/07	TD: 2250' Csg. 9 5/8" @ 2223' MW: 8.4 SD: 11/xx/07 DSS: 0 Move to NBU 1021-10. Spot rig and RURT. Rig on repair.	
11/07/07	TD: 2250' Csg. 9 5/8" @ 2223' MW: 8.4 SD: 11/xx/07 DSS: 0 Repaired crown walk around and installed new traction motor. Rig on repair @ report time.	
11/08/07	TD: 2250' Csg. 9 5/8" @ 2223' MW: 8.4 SD: 11/xx/07 DSS: 0 Raise derrick. Continue RURT @ report time.	
11/09/07	TD: 2250' Csg. 9 5/8" @ 2223' MW: 8.4 SD: 11/xx/07 DSS: 0 RURT. NU and test BOPE. PUDS. Remove and replace swivel packing @ report time.	
11/12/07	TD: 6460' Csg. 9 5/8" @ 2223' MW: 10.1 SD: 11/9/07 DSS: 3 Drill cmt and FE. Rotary spud @ 0830 on 11/9/07. Drill f/ 2250'-2771' with poor returns. POOH, stand back BHA, TIH open ended to 2307', and spot 30 bbl balance plug across loss zone. POOH, WOC, TIH. Tagged cmt at 2146' and drilled to 2324'. TIH to 2771'. Drill to 5608' and lost 60 bbls. Added 5% LCM and drilled to 6460' with full returns. DA	
11/13/07	TD: 7258' Csg. 9 5/8" @ 2223' MW: 10.4 SD: 11/9/07 DSS: 4 Drill from 6460'-7258' with 5% LCM and full returns. DA @ report time.	
11/14/07	TD: 7641' Csg. 9 5/8" @ 2223' MW: 10.7 SD: 11/9/07 DSS: 4 Drill from 7258'-7546'. TFNB. Wash through bridge @ 7074'. Work on generators. FIH and drill from 7546'-7641'. DA @ report time.	
11/15/07	TD: 8495' Csg. 9 5/8" @ 2223' MW: 10.95 SD: 11/9/07 DSS: 5 Drill from 7641'-8495'. DA @ report time.	
11/16/07	TD: 8779' Csg. 9 5/8" @ 2223' MW: 11.7 SD: 11/9/07 DSS: 6 Drill from 8495'-8653'. Repair generator. Drill from 8653' -8722'. TFNB. Drill from 8722'-8779'. DA @ report time.	

**11/19/07** TD: 9065' Csg. 9 5/8" @ 2223' MW: 11.9 SD: 11/9/07 DSS: 8  
 Drill from 8779'-9065' TD. Short trip and LDDS. Run Triple Combo. Run and cement 4 1/2" Production Casing. Set slips and release rig @ 0600 hrs 11/18/07. RDRT. Will move to NBU 1021-2J this am.

**11/20/07** TD: 9065' Csg. 9 5/8" @ 2223' MW: 11.9 SD: 11/9/07 DSS: 8  
 Will move to NBU 1021-2J this am.

**12/18/07** **PREP TO PERF**  
 Days On Completion: 1  
 Remarks: 7:00 a.m. HSM. POOH W/ TBG F/ 7200'. L/D BIT & BIT SUB. ND BOPE. NU FRAC VLV'S. PREP TO PERF. (COULD NOT GET ELEC. LINE TRUCK.). SWI. SDFD

**12/19/07** **ON STAND BY**  
 Days On Completion: 2  
 Remarks: RIG ON STAND BY. WAITING ON FRAC CREW.

**12/20/07** **Perf & Frac**  
 Days On Completion: 4  
 Remarks: 9:00 a.m. MIRU CUTTERS. (WEATHERFORD FRAC BEGIN TO ARRIVE 9:00 am). P/U 3 3/8" EXP PERF GUNS & RIH. SHOOT STG W/ 12 HOLES F/ 8840' - 43', P/U SHOOT 9 HOLES F/ 8773' - 76' (3 SPF), P/U SHOOT 16 HOLES F/ 8684' - 88', P/U SHOOT 9 HOLES F/ 8582' - 85'. POOH. WEATHERFORD BEGIN TO R/U @ 10:00 A.M. PRIME PMP'S & PSI TST LINES TO 8500# (HELD). ALL STAGES SHOT W/ 3 3/8" EXP PERF GUNS LOADED W/ 23 GM CHARGES, 3 & 4 SPF, 90 & 120 DEG PHASING. ALL STAGES INCLUDE NALCO DVE-005 SCALE INHIB, 3 GPT IN PAD & 1/2 RAMP, 10 GPT IN FLUSH & PRE PAD. ALL STAGES TREATED W/ 30/50 SAND. ALL CBP'S ARE BAKER 8K CBP'S. BEGIN PMP @ 3:45 P.M.  
  
 STG 1: BRK DWN PERF'S @ 3934#, EST INJ RT @ 50.8 BPM @ 4136#, ISIP 2613#, FG .74, TREAT STG 1 W/ 145,700# 30/50 SAND, TAILED IN W/ 5000# TLC SAND W/ SLK WTR. TOT CL FL 3916 BBLs. ISIP 2645#, NPI 32#, FG .74  
  
 STG 2: P/U 3 3/8" PERF GUNS & 4 1/2" CBP & RIH. SET CBP @ 8470', P/U SHOOT 20 HOLES

**12/21/07** **CONT TO FRAC**  
 Days On Completion: 5  
 Remarks: 7:00 A.M. HSM (HEAVY SNOW STORM, LATE START) CONT TO FRAC.  
  
 STG 2: BRK DWN PERF'S @ 3415#, EST INJ RT @ 40 BPM @ 3738#, ISIP 2482#, FG .74, TREAT STG 2 W/ 19000# SAND, TAILED IN W/ 5000# TLC. W/ SLK WTR. TOT CL FL 620 BBLs. ISIP 2361#, NPI -121#, FG .72  
  
 STG 3: P/U 3 3/8" PERF GUNS @ 4 1/2" CBP & RIH. SET CBP @ 8059', P/U SHOOT 12 HOLES F/ 8026' - 29', P/U SHOOT 16 HOLES F/ 7986' - 90', P/U SHOOT 12 HOLES F/ 7868' - 71'. POOH. BRK DWN PERF'S @ 4328#, EST INJ RT @ 50.2 BPM @ 6000#, ISIP 2258#, FG .72, TREAT STG 3 W/ 54,725# SAND, TAILED IN W/ 5000# TLC SAND. W/ SLK WTR. TOT CL FL 1603#, ISIP 3103#, NPI 845#, FG .83  
  
 STG 4: P/U 3 3/8" PERF GUNS & 4 1/2" CBP & RIH. SET CBP @ 7801'. P/U SHOOT 12 HOLES F/ 7768' - 71', P/U SHOOT 16 HOLES F/ 7734' - 38', P/U SHOOT 16 HOLES F/ 7639' - 43'. POOH, BRK DWN PERF'S @ 5273#, EST INJ RT @ 47.8 BPM @ 4300#, ISIP 2671#, FG .78, TREAT STG 4 W/ 39,470# SAND, TAILED IN W/ 5000# TLC SAND W/ SLK WTR. TOT CL FL 1138 BBLs. ISIP 2780#, NPI 109#, FG .80

STG 5: P/U 3 3/8" PERF GUNS & 4 1/2" CBP & RIH. SET CBP @ 7520'. P/U SHOOT 12 HOLES F/ 7487' - 90', P/U SHOOT 12 HOLES F/ 7371' - 74', P/U SHOOT 16 HOLES F/ 7306' - 10', P/U SHOOT 6 HOLES F/ 7189' - 91' (3 SPF). POOH. BRK DWN PERF'S @ 2495#, EST INJ RT @ 51.8 BPM @ 4220#, ISIP 1689#, FG .67, TREAT STG 5 W/85,880# SAND TAILED IN W/ 5000# TLC SAND. TOT CL FL 2175 BBLs. ISIP 2250#, NPI 561#, FG .74

P/U 4 1/2" BAK 8K CBP & RIH. SET KILL PLUG @ 7139'. POOH. RDMO CUTTERS. RDMO WEATHERFORD. ND FRAC VLV'S. NU BOPE. P/U 3 7/8" BIT. POBS & RIH. TAG KILL PLUG @ 7139'. PREP TO DRL IN A.M. WINTERIZE W.H. SWI. SDFN

12/22/07

**DRILL CBP'S**

Days On Completion: 6

Remarks: 7:00 a.m. HSM -5 DEG R/U DRL EQUIP. R/U PMP & LINES. DETHAW PMP & W.H. BRK CONV CIRC W/ 2% KCL & BEG TO DRL.

DRL UP 1ST CBP @ 7139' IN MIN. (700# PSI INC). CONT TO RIH. TAG CBP @ 7520' (0' FILL). C/O TO 2ND CBP @ 7520'. DRL UP 2ND CBP IN MIN. (300# PSI INC). CONT TO RIH. TAG FILL @ 7771. (30' FILL) C/O TO 3RD CBP @ 7801'. DRL UP 3RD CBP IN MIN. (300# PSI INC). CONT TO RIH. TAG FILL @ 8014'. (45' FILL). C/O TO 4TH CBP @ 8059'. DRL UP 4TH CBP IN MIN. (800# PSI INC). CONT TO RIH. TAG FILL @ 8440'. (30' FILL) C/O TO 5TH CBP @ 8470'. DRL UP 5TH CBP IN MIN. (600# PSI INC). CONT TO RIH. TAG FILL @ 8824'. (192' FILL). C/O TO PBTD @ 9016'. CIRC WELL CLEAN. R/D DRL EQUIP. POOH. L/D 42 JTS ON TRAILER. LUBRICATE TBG HANGER INTO WELL. LAND TBG W/ EOT @ 8407' ND BOPE. DROP BALL. R/U W.H. POBS @ 2500#. R/U FLOW BACK LINES. RACK OUT EQUIP. RIG DWN. SDFD

SICP 1550#  
FTP 100#  
48/64 CHOKE

TBG ON LOC	302 JTS
TBG IN WELL	260 JTS
TBG LEFT ON TRAILER	42 JTS

- 12/23/07 **FLOWBACK REPORT:** CP 1850#, TP 1600#, CK 20/64", 55 BWPH, LOAD REC'D 995 BBLs, TTL LOAD REC'D 6157 BBLs
- 12/24/07 **FLOWBACK REPORT:** CP 1500#, TP 1625#, CK 20/64", 38 BWPH, LOAD REC'D 2017 BBLs, TTL LOAD REC'D 5135 BBLs
- 12/25/07 **FLOWBACK REPORT:** CP 1325#, TP 1600#, CK 20/64", 32 BWPH, LOAD REC'D 2836 BBLs, TTL LOAD REC'D 4289 BBLs
- 12/26/07 **FLOWBACK REPORT:** CP 1950#, TP 1475#, CK 20/64", 20 BWPH, LOAD REC'D 3388 BBLs, TTL LOAD REC'D 3764 BBLs

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

AMENDED REPORT  FORM 8  
(highlight changes)

**WELL COMPLETION OR RECOMPLETION REPORT AND LOG**

5. LEASE DESIGNATION AND SERIAL NUMBER:  
**M-23612**

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT or CA AGREEMENT NAME  
**UNIT #891008900A**

8. WELL NAME and NUMBER:  
**NBU 1021-10**

9. API NUMBER:  
**4304739002**

10. FIELD AND POOL, OR WILDCAT  
**NATURAL BUTTES**

11. QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:  
**SWSE 1 10S 21E**

12. COUNTY  
**UINTAH**

13. STATE  
**UTAH**

14. DATE SPUDED: **10/13/2007**

15. DATE T.D. REACHED: **11/17/2007**

16. DATE COMPLETED: **12/27/2007**

17. ELEVATIONS (DF, RKB, RT, GL):  
**5224'GL**

18. TOTAL DEPTH: MD **9,065**

19. PLUG BACK T.D.: MD **9,016**

20. IF MULTIPLE COMPLETIONS, HOW MANY? \*

21. DEPTH BRIDGE MD  
PLUG SET: TVD

22. TYPE ELECTRIC AND OTHER MECHANICAL LOGS RUN (Submit copy of each)  
**CBL-CCL-GR, COMP 2, CD, CN, HDI**

23.  
WAS WELL CORED? NO  YES  (Submit analysis)  
WAS DST RUN? NO  YES  (Submit report)  
DIRECTIONAL SURVEY? NO  YES  (Submit copy)

24. CASING AND LINER RECORD (Report all strings set in well)

HOLE SIZE	SIZE/GRADE	WEIGHT (#/ft.)	TOP (MD)	BOTTOM (MD)	STAGE CEMENTER DEPTH	CEMENT TYPE & NO. OF SACKS	SLURRY VOLUME (BBL)	CEMENT TOP **	AMOUNT PULLED
20"	14" STL	36.7#		40		28			
12 1/4"	9 5/8 H-40	32.3# 36#		2,250		1075			
7 7/8"	4 1/2 I-80	11.6#		9,065		1540			

25. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)
2 3/8"	8,407							

26. PRODUCING INTERVALS

FORMATION NAME	TOP (MD)	BOTTOM (MD)	TOP (TVD)	BOTTOM (TVD)	INTERVAL (Top/Bot - MD)	SIZE	NO. HOLES	PERFORATION STATUS
(A) MESAVERDE	7,189	8,843			7,189 8,843	0.36	216	Open <input checked="" type="checkbox"/> Squeezed <input type="checkbox"/>
(B) <b>WSMVD</b>								Open <input type="checkbox"/> Squeezed <input type="checkbox"/>
(C)								Open <input type="checkbox"/> Squeezed <input type="checkbox"/>
(D)								Open <input type="checkbox"/> Squeezed <input type="checkbox"/>

28. ACID, FRACTURE, TREATMENT, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL	AMOUNT AND TYPE OF MATERIAL
7189'-8843'	PMP 9452 BBLS SLICK H2O & 344,775# 30/50 SD

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29. ENCLOSED ATTACHMENTS:

ELECTRICAL/MECHANICAL LOGS       GEOLOGIC REPORT       DST REPORT       DIRECTIONAL SURVEY

SUNDRY NOTICE FOR PLUGGING AND CEMENT VERIFICATION       CORE ANALYSIS       OTHER: \_\_\_\_\_

30. WELL STATUS:  
**PROD**

31. INITIAL PRODUCTION

INTERVAL A (As shown in item #26)

DATE FIRST PRODUCED: 12/27/2007		TEST DATE: 1/7/2008		HOURS TESTED: 24		TEST PRODUCTION RATES: →	OIL - BBL: 5	GAS - MCF: 1,557	WATER - BBL: 362	PROD. METHOD: FLOWING
CHOKE SIZE: 22/64	TBG. PRESS. 477	CSG. PRESS. 1,028	API GRAVITY	BTU - GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL - BBL: 5	GAS - MCF: 1,557	WATER - BBL: 362	INTERVAL STATUS: PROD

INTERVAL B (As shown in item #26)

DATE FIRST PRODUCED:		TEST DATE:		HOURS TESTED:		TEST PRODUCTION RATES: →	OIL - BBL:	GAS - MCF:	WATER - BBL:	PROD. METHOD:
CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU - GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL - BBL:	GAS - MCF:	WATER - BBL:	INTERVAL STATUS:

INTERVAL C (As shown in item #26)

DATE FIRST PRODUCED:		TEST DATE:		HOURS TESTED:		TEST PRODUCTION RATES: →	OIL - BBL:	GAS - MCF:	WATER - BBL:	PROD. METHOD:
CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU - GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL - BBL:	GAS - MCF:	WATER - BBL:	INTERVAL STATUS:

INTERVAL D (As shown in item #26)

DATE FIRST PRODUCED:		TEST DATE:		HOURS TESTED:		TEST PRODUCTION RATES: →	OIL - BBL:	GAS - MCF:	WATER - BBL:	PROD. METHOD:
CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU - GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL - BBL:	GAS - MCF:	WATER - BBL:	INTERVAL STATUS:

32. DISPOSITION OF GAS (Sold, Used for Fuel, Vented, Etc.)

SOLD

33. 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.

34. FORMATION (Log) MARKERS:

Formation	Top (MD)	Bottom (MD)	Descriptions, Contents, etc.	Name	Top (Measured Depth)
WASATCH MESAVERDE	4,633 7,179	7,179			

35. ADDITIONAL REMARKS (Include plugging procedure)

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records.

NAME (PLEASE PRINT) SHEILA UPCHEGO

TITLE SENIOR LAND ADMIN SPECIALIST

SIGNATURE 

DATE 1/15/2008

This report must be submitted within 30 days of

- completing or plugging a new well
- drilling horizontal laterals from an existing well bore
- recompleting to a different producing formation
- reentering a previously plugged and abandoned well
- significantly deepening an existing well bore below the previous bottom-hole depth
- drilling hydrocarbon exploratory holes, such as core samples and stratigraphic tests

\* ITEM 20: Show the number of completions if production is measured separately from two or more formations.

\*\* ITEM 24: Cement Top - Show how reported top(s) of cement were determined (circulated (CIR), calculated (CAL), cement bond log (CBL), temperature survey (TS)).

Send to: Utah Division of Oil, Gas and Mining  
1594 West North Temple, Suite 1210  
Box 145801  
Salt Lake City, Utah 84114-5801

Phone: 801-538-5340  
Fax: 801-359-3940

**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: ML-23612
		6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
		7. UNIT or CA AGREEMENT NAME: UNIT #891008900A
1. TYPE OF WELL OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER _____		8. WELL NAME and NUMBER: NBU 1021-10
2. NAME OF OPERATOR: KERR MCGEE OIL & GAS ONSHORE LP		9. API NUMBER: 4304739002
3. ADDRESS OF OPERATOR: 1368 SOUTH 1200 EAST CITY VERNAL STATE UT ZIP 84078		10. FIELD AND POOL, OR WILDCAT: NATURAL BUTTES
4. LOCATION OF WELL FOOTAGES AT SURFACE: 245'FSL, 2619'FEL		COUNTY: UINTAH
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: SWSE 1 10S 21E		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 (Submit in Duplicate) Approximate date work will start: _____	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> REPERFORATE CURRENT FORMATION
	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> SIDETRACK TO REPAIR WELL
<input type="checkbox"/> SUBSEQUENT REPORT (Submit Original Form Only) Date of work completion: _____	<input type="checkbox"/> CASING REPAIR	<input type="checkbox"/> NEW CONSTRUCTION	<input type="checkbox"/> TEMPORARILY ABANDON
	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> TUBING REPAIR
	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> VENT OR FLARE
	<input type="checkbox"/> CHANGE WELL NAME	<input type="checkbox"/> PLUG BACK	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> PRODUCTION (START/RESUME)	<input type="checkbox"/> WATER SHUT-OFF
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> OTHER: _____
	<input type="checkbox"/> CONVERT WELL TYPE	<input checked="" type="checkbox"/> RECOMPLETE - DIFFERENT FORMATION	

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

THE OPERATOR REQUESTS AUTHORIZATION TO RECOMPLETE THE SUBJECT WELL LOCATION. THE OPERATOR PROPOSES TO COMPLETE THE WASATCH FORMATION. THE OPERATOR REQUESTS TO COMMINGLE THE NEWLY WASATCH FORMATION ALONG WITH THE EXISTING MESAVERDE FORMATION.

PLEASE REFER TO THE ATTACHED RECOMPLETION PROCEDURE.

*New Perfs 5582' to 6360'*

COPY SENT TO OPERATOR

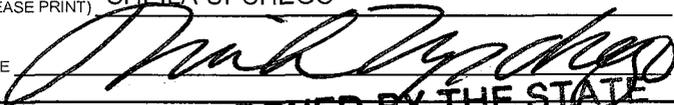
Date: 1.8.2009

Initials: KS

NAME (PLEASE PRINT) SHEILA UPCHEGO

TITLE REGULATORY ANALYST

SIGNATURE



DATE 1/2/2009

(This space for State use only)

**APPROVED BY THE STATE**  
**OF UTAH DIVISION OF**  
**OIL, GAS, AND MINING**  
DATE: 1/6/09  
BY: [Signature]  
\* Cause 173-14 (See Instructions on Reverse Side)

**RECEIVED**

**JAN 05 2009**

DIV. OF OIL, GAS & MINING

**Name:** NBU 1021-10  
**Location:** SWSE Sec 1 T10S R21E  
**Uintah County, UT**  
**Date:** 1/02/2009

**ELEVATIONS:** 5224 GL 5248 KB

**TOTAL DEPTH:** 9061 **PBTD:** 9016  
**SURFACE CASING:** 9 5/8", 36# J-55 ST&C @ 2223'  
**PRODUCTION CASING:** 4 1/2", 11.6#, I-80 LT&C @ 9061'  
 Marker Joint 4564-4585'

**TUBULAR PROPERTIES:**

	BURST (psi)	COLLAPSE (psi)	DRIFT DIA. (in.)	CAPACITIES	
				(bbl/ft)	(gal/ft)
2 3/8" 4.7# J-55 tbg	7,700	8,100	1.901"	0.00387	0.1624
4 1/2" 11.6# I-80 (See above)	7780	6350	3.875"	0.0155	0.6528
2 3/8" by 4 1/2" Annulus				0.0101	0.4227

**TOPS:**

1384' Green River  
 1617' Birds Nest  
 2156' Mahogany  
 4633' Wasatch  
 7186' Mesaverde  
 Estimated T.O.C. from CBL @2600

**GENERAL:**

- A minimum of **14** tanks (cleaned lined 500 bbl) of recycled water will be required. Note: Use biocide in tanks and the water needs to be at least 45°F at pump time.
- All perforation depths are from Bakers Induction-Density-Neutron log dated 11/17/2007
- **3** fracturing stages required for coverage.
- Procedure calls for 3 CBP's (**8000** psi) and 1 Flow Through Plug
- Calculate open perforations after each breakdown. If less than 60% of the perforations appear to be open, ball out with 15% HCl.
- Put scale inhibitor 3 gals/1000 gals (in pad and 1/2 the ramp) and 10 gals/1000 gals in all flushes except the final stage. Remember to pre-load the casing with scale inhibitor for the very first stage with 10 gpt.
- 30/50 mesh Ottawa sand, **Slickwater frac.**
- Maximum surface pressure **6200** psi.
- Flush volumes are the sum of slick water and acid used during displacement (include scale inhibitor as mentioned above). **DO NOT OVERDISPLACE.** Stage acid and scale inhibitor if necessary to cover the next perforated interval.

- Service companies need to provide surface/production annulus pop-offs to be set for 1500 psi for each frac.
- Pump 20/40mesh **resin coated sand** last 5,000# of all frac stages
- Tubing Currently Landed @~8407
- Originally completed on 12/20/2007

**Existing Perforations:**

Mesaverde	7189	7191	3	6
Mesaverde	7306	7310	4	16
Mesaverde	7371	7374	4	12
Mesaverde	7487	7490	4	12
# of Perfs/stage				46
Mesaverde	7639	7643	4	16
Mesaverde	7734	7738	4	16
Mesaverde	7768	7771	4	12
# of Perfs/stage				44
Mesaverde	7868	7871	4	12
Mesaverde	7986	7990	4	16
Mesaverde	8026	8029	4	12
# of Perfs/stage				40
Mesaverde	8254	8259	4	20
Mesaverde	8366	8371	4	20
# of Perfs/stage				40
Mesaverde	8582	8585	3	9
Mesaverde	8684	8688	4	16
Mesaverde	8773	8776	3	9
Mesaverde	8840	8843	4	12
# of Perfs/stage				46

**PROCEDURE:**

1. MIRU. Control well with recycled water and biocide as required. ND WH, NU BOP's and test.
2. TOOH with 2-3/8", 4.7#, J-55 (or N-80) tubing (currently landed at ~8407'). Visually inspect for scale and consider replacing if needed.
3. If tbg looks ok consider running a gauge ring to 6440 (50' below proposed flow through plug). Otherwise P/U a mill and C/O to 6440 (50' below proposed flow through plug).
4. Set 8000 psi Flow Through Plug at ~ 6390'. Pressure test BOP and casing to 6000 psi. .
5. Perf the following with 3-3/8" gun, 23 gm, 0.36"hole:
 

Zone	From	To	spf	# of shots
WASATCH	6350	6360	4	40

6. Breakdown perfs and establish injection rate (include scale inhibitor in fluid). Spot 250 gals of 15% HCL and let soak 5-10 min. Fracture as outlined in Stage 1 on attached listing. Under-displace to ~6300' and trickle 250gal 15%HCL w/ scale inhibitor in flush .
7. Set 8000 psi CBP at ~6104'. Perf the following 3-3/8" gun, 23 gm, 0.36"hole:
 

Zone	From	To	spf	# of shots
WASATCH	6064	6074	4	40
8. Breakdown perfs and establish injection rate. Fracture as outlined in Stage 2 on attached listing. Under-displace to ~6014' and trickle 250gal 15%HCL w/ scale inhibitor in flush.
9. Set 8000 psi CBP at ~5642'. Perf the following with 3-3/8" gun, 23 gm, 0.36" hole:
 

Zone	From	To	spf	# of shots
WASATCH	5585	5590	3	15
WASATCH	5602	5612	3	30
10. Breakdown perfs and establish injection rate. Fracture as outlined in Stage 3 on attached listing. Under-displace to ~5535' flush only with recycled water.
11. Set 8000 psi CBP at ~5535'.
12. TIH with 3 7/8" mill, sliding sleeve, SN and tubing.
13. Mill plugs (DO NOT DRILL FLOW THROUGH PLUG @ 6390') and clean out to 6390. Land tubing at ±6034' and open sleeve unless indicated otherwise by the well's behavior. This well will be commingled at this time.
14. RDMO
15. Clean out well with foam and/or swabbing unit until steady flow has been established from recomplete.
16. MIRU
17. Mill Flow through plug and commingle well. Land tubing at ~8224'
18. RDMO

**For design questions, please call**  
**Curtis Caile, Denver, CO**  
**(406)-490-2742 (Cell)**  
**(720)-929-6194 (Office)**

**For field implementation questions, please call**  
**Robert Miller, Vernal, UT**  
**4350781 7041 (Office)**

**NOTES:**

The design of this well was reduced from 6 stages to 3 due to budget constraints. This was done with Karen M. and Ben K. by high grading the pay based on gas shows rock quality and offset wells. The final design was deemed to be the best completion given the limitations

Fracturing Schedules  
 NBU 1021-10 Recomplete  
 Slickwater Frac

Stage	Zone	Feet		SPF	Holes	Rate BPM	Fluid Type	Initial ppg	Final ppg	Fluid	Volume gals	Cum Vol gals	Volume BBLs	Cum Vol BBLs	Fluid % of frac	Sand % of frac	Sand lbs	Cum. Sand lbs	Footage from CBP to Flush	Scale Inhib., gal.	
		of Pay	Perfs Top, ft. Bot. ft.																		
1	WASATCH	1	6350 6360	4	40	Varied	Pump-in test			Slickwater		0	0	0							
	WASATCH	1	No Perfs			0	ISIP and 5 min ISIP														40
	WASATCH	2	No Perfs			50	Slickwater Pad			Slickwater	4,313	4,313	103	103	15.0%	0.0%	0	0			13
	WASATCH	8	No Perfs			50	Slickwater Ramp	0.25	1	Slickwater	8,146	12,458	194	297	28.3%	17.2%	5,091	5,091			12
	WASATCH	0				50	SW Sweep	0	0	Slickwater	0	12,458	0	297	0.0%	0.0%	0	5,091			0
	WASATCH	0				50	Slickwater Ramp	1	1.5	Slickwater	8,146	20,604	194	491	28.3%	34.5%	10,182	15,273			12
	WASATCH	0				50	SW Sweep	0	0	Slickwater	0	20,604	0	491	0.0%	0.0%	0	15,273			0
	WASATCH	0				50	Slickwater Ramp	0.5	1.5	Slickwater	0	20,604	0	491	0.0%	0.0%	0	15,273			0
	WASATCH	0				50	Slickwater Ramp	1.5	2	Slickwater	8,146	28,750	194	685	28.3%	48.3%	14,255	29,529			0
	WASATCH	0				50	Flush (4-1/2")				4,113	32,863	98	782				29,529			40
	WASATCH	0					ISDP and 5 min ISDP														117
	WASATCH	0								Sand laden Volume		28,750									
		12	# of Perfs/stage		40												gal/ft 2,500	2,568 lbs sand/ft			
													Flush depth	6300			CBP depth	6,104		196	
2	WASATCH	2	6064 6074	4	40	Varied	Pump-in test			Slickwater		0	0	0							
	WASATCH	2	No Perfs			0	ISIP and 5 min ISIP														
	WASATCH	12	No Perfs			50	Slickwater Pad			Slickwater	13,313	13,313	317	317	15.0%	0.0%	0	0			40
	WASATCH	1	No Perfs			50	Slickwater Ramp	0.25	1	Slickwater	25,146	38,458	599	916	28.3%	17.2%	15,716	15,716			38
	WASATCH	7	No Perfs			50	SW Sweep	0	0	Slickwater	0	38,458	0	916	0.0%	0.0%	0	15,716			0
	WASATCH	2	No Perfs			50	Slickwater Ramp	1	1.5	Slickwater	25,146	63,604	599	1,514	28.3%	34.5%	31,432	47,148			38
	WASATCH	13	No Perfs			50	SW Sweep	0	0	Slickwater	0	63,604	0	1,514	0.0%	0.0%	0	47,148			0
	WASATCH	0				50	Slickwater Ramp	0.5	1.5	Slickwater	0	63,604	0	1,514	0.0%	0.0%	0	47,148			0
	WASATCH	0				50	Slickwater Ramp	1.5	2	Slickwater	25,146	88,750	599	2,113	28.3%	48.3%	44,006	91,154			0
	WASATCH	0				50	Flush (4-1/2")				3,926	92,676	93	2,207				91,154			37
	WASATCH	0					ISDP and 5 min ISDP														152
	WASATCH	0								Sand laden Volume		88,750									
		36	# of Perfs/stage		40												gal/ft 2,500	2,568 lbs sand/ft			
													Flush depth	6014			CBP depth	5,642		372	
3	WASATCH	1	5585 5590	3	15	Varied	Pump-in test			Slickwater		0	0	0							
	WASATCH	2	5602 5612	3	30	0	ISIP and 5 min ISIP														
	WASATCH	2	No Perfs			50	Slickwater Pad			Slickwater	16,125	16,125	384	384	15.0%	0.0%	0	0			48
	WASATCH	3	No Perfs			50	Slickwater Ramp	0.25	1	Slickwater	30,458	46,583	725	1,109	28.3%	17.2%	19,036	19,036			46
	WASATCH	1	No Perfs			50	SW Sweep	0	0	Slickwater	0	46,583	0	1,109	0.0%	0.0%	0	19,036			0
	WASATCH	7	No Perfs			50	Slickwater Ramp	1	1.5	Slickwater	30,458	77,042	725	1,834	28.3%	34.5%	38,073	57,109			46
	WASATCH	6	No Perfs			50	SW Sweep	0	0	Slickwater	0	77,042	0	1,834	0.0%	0.0%	0	57,109			0
	WASATCH	2	No Perfs			50	Slickwater Ramp	0.5	1.5	Slickwater	0	77,042	0	1,834	0.0%	0.0%	0	57,109			0
	WASATCH	19	No Perfs			50	Slickwater Ramp	1.5	2	Slickwater	30,458	107,500	725	2,580	28.3%	48.3%	53,302	110,411			0
	WASATCH	2	No Perfs			50	Flush (4-1/2")				3,613	111,113	86	2,646				110,411			0
	WASATCH	1	No Perfs				ISDP and 5 min ISDP														140
	WASATCH	0								Sand laden Volume		107,500									
		43	# of Perfs/stage		45												gal/ft 2,500	2,568 lbs sand/ft			
													Flush depth	5535			CBP depth	5,535		0	LOOK
						51.2	<< Above pump time (min)														
Totals		90			125						Total Fluid	236,652	gals	5,635	bbls		Total Sand	231,034			
						1.8	Estimated Total Completion Cost					\$226,550		12.5	tanks			Total Scale Inhib. =	408		

NBU 1021.

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Perforation and CBP Summary

Stage	Zones	Perforations		SPF	Holes	Fracture Coverage		
		Top, ft	Bottom, ft					
1	WASATCH	6350	6360	4	40	6309.25	to	6310.25
	WASATCH		No Perfs			6321.25	to	6322.25
	WASATCH		No Perfs			6348.75	to	6350.75
	WASATCH		No Perfs			6352.75	to	6360.25
	WASATCH							
	WASATCH							
	WASATCH							
	WASATCH							
	# of Perfs/stage				40	CBP DEPTH	6,104	
2	WASATCH	6064	6074	4	40	6028.75	to	6030.25
	WASATCH		No Perfs			6038.25	to	6039.75
	WASATCH		No Perfs			6040.25	to	6051.75
	WASATCH		No Perfs			6052.25	to	6052.75
	WASATCH		No Perfs			6053.25	to	6059.75
	WASATCH		No Perfs			6060.25	to	6061.75
	WASATCH		No Perfs			6062.25	to	6074.75
	# of Perfs/stage				40	CBP DEPTH	5,642	
	3	WASATCH	5585	5590	3	15	5567.25	to
WASATCH		5602	5612	3	30	5568.75	to	5570.75
WASATCH			No Perfs			5571.25	to	5573.25
WASATCH			No Perfs			5574.75	to	5577.25
WASATCH			No Perfs			5578.25	to	5578.75
WASATCH			No Perfs			5579.25	to	5585.75
WASATCH			No Perfs			5586.25	to	5592.25
WASATCH			No Perfs			5592.75	to	5594.25
WASATCH			No Perfs			5598.25	to	5616.75
WASATCH			No Perfs			5628.25	to	5629.75
WASATCH			No Perfs			5637.25	to	5638.25
# of Perfs/stage					45	CBP DEPTH	5,535	
Totals				125				



**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.

<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>			5. LEASE DESIGNATION AND SERIAL NUMBER: ML-23612
			6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
			7. UNIT or CA AGREEMENT NAME: UNIT #891008900A
			8. WELL NAME and NUMBER: NBU 1021-10
1. TYPE OF WELL      OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER _____			9. API NUMBER: 4304739002
2. NAME OF OPERATOR: KERR MCGEE OIL & GAS ONSHORE LP			10. FIELD AND POOL, OR WILDCAT: NATURAL BUTTES
3. ADDRESS OF OPERATOR: 1368 SOUTH 1200 EAST      CITY VERNAL      STATE UT      ZIP 84078		PHONE NUMBER: (435) 781-7024	
4. LOCATION OF WELL FOOTAGES AT SURFACE: 245'FSL, 2619'FEL			COUNTY: UINTAH
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: SWSE 1 10S 21E			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 (Submit in Duplicate)  Approximate date work will start: _____	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> REPERFORATE CURRENT FORMATION
	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> SIDETRACK TO REPAIR WELL
<input checked="" type="checkbox"/> SUBSEQUENT REPORT (Submit Original Form Only)  Date of work completion: _____	<input type="checkbox"/> CASING REPAIR	<input type="checkbox"/> NEW CONSTRUCTION	<input type="checkbox"/> TEMPORARILY ABANDON
	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> TUBING REPAIR
	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> VENT OR FLARE
	<input type="checkbox"/> CHANGE WELL NAME	<input type="checkbox"/> PLUG BACK	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> PRODUCTION (START/RESUME)	<input type="checkbox"/> WATER SHUT-OFF
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> OTHER: _____
	<input type="checkbox"/> CONVERT WELL TYPE	<input checked="" type="checkbox"/> RECOMPLETE - DIFFERENT FORMATION	

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

THE OPERATOR HAS PERFORMED THE RECOMPLETE THE SUBJECT WELL LOCATION. THE OPERATOR HAS COMPLETED THE WASATCH FORMATION. THE OPERATOR HAS COMMINGLE THE NEWLY WASATCH FORMATION ALONG WITH THE EXISTING MESAVERDE FORMATION. THE OPERATOR HAS PLACED THE SUBJECT WELL LOCATION ON PRODUCTION ON 02/15/2009 AT 10:30 AM.

PLEASE REFER TO THE ATTACHED RECOMPLETION CHRONOLOGICAL WELL HISTORY.

NAME (PLEASE PRINT) SHEILA UPCHEGO	TITLE REGULATORY ANALYST
SIGNATURE	DATE 3/4/2009

(This space for State use only)

**RECEIVED**  
**MAR 05 2009**

**ROCKIES**  
**Operation Summary Report**

Well: NBU 1021-10

Spud Date: 11/10/2007

Project: UTAH

Site: UINTAH

Rig Name No: GWS 1/1

Event: RECOMPLETION

Start Date: 2/9/2009

End Date: 2/12/2009

Active Datum: RKB @5,247.99ft (above Mean Sea Level)

UWI: NBU 1021-10

Date	Time Start-End	Duration (hr)	Phase	Code	Subcode2	P/U	MD From (ft)	Operation
2/9/2009	7:00 - 7:30	0.50	COMP	48		P		HSM
	7:30 - 15:00	7.50	COMP	31	I	P		WELL PSI 60#. OPEN WELL T/ PROD TANK. RIG PUMP T/ TBG, PUMP 30 BBLs 2% KCL T/ CONTROL TBG. NDWH. NUBOP. RIG PUMP T/ CSG PUMP 20 BBLs 2% KCL. UNLAND TBG. LD 4 1/16 HNGR. POOH STD BACK 198 JTS 2 3/8, J-55 TBG IN THE DERRICK & LD 62 JTS OF 2 3/8, J-55 ON THE GROUND FOR PROD AFTER NEXT RIG COMES T/ DRL OUT FRAC PLUG T/ COMMINGLE WELL. LD XN-NIPPLE & POBS. ND BOP, NU FRAC VALVES. PUT WELL DOWN SALES. SDFN.
2/10/2009	7:00 - 7:30	0.50	COMP	48		P		HSM.
	7:30 - 15:00	7.50	COMP	34		P		FLOWING WELL PSI 60#. BLOW WELL T/ PROD TANK. MIRU CUTTERS W.L.. PU 4 1/2 GR. RIH T/ 6440'. POOH, LD GR. PU 4 1/2 FRAC PLUG. RIH SET FRAC PLUG @ 6380'. POOH. RIG PUMP CSG, FILL CSG W/ 85 BBLs 2% KSL, PSI T/ 2000# W/ RIG PUMP. CONT PSI TEST W/ B&C QUICK TEST. PUMP T/ 5500# THEN LOST ALL PSI. PU 4 1/2 GR. RIH W/ W.L. T/ TAG 1ST FRAC PLUG. TAG FRAC PLUG @ 6380' IT DID NOT MOVE. POOH. CALL FOR 2ND FRAC PLUG. PU 2ND 4 1/2, 8-K BAKER FRAC PLUG. RIH SET @ 6374'. POOH. RIG PUMP T/ CSG, FILL CSG W/ 80 BBLs 2% KCL. PSI T/ 2500# W/ RIG PUMP. CONT PSI TEST W/ B&C QUICK TEST T/ 6200#. GOOD TEST ON THE CSG, FRAC PLUG & FRAC VALVES. BLEED OFF PSI. RDMO B&C QUICK TEST. PU 3 3/8 EXP GUN, 23 GM, .36 HOLE SIZE. RIH PERF F/ 6350'-60', 4 SPF, 40 HOLES. POOH. RDMO CUTTERS W.L.. SWI, PREP T/ FRAC IN THE :AM W/ BJ SERV CO. SDFN.
2/11/2009	7:00 - 7:30	0.50	COMP	48		P		HSM.

ROCKIES

Operation Summary Report

Well: NBU 1021-10

Spud Date: 11/10/2007

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UWI: NBU 1021-10

Date	Time Start-End	Duration (hr)	Phase	Code	Subcode2	P/U	MD From (ft)	Operation
	7:30 - 17:00	9.50	COMP	36	B	P		<p>MIRU BJ FRAC SERV &amp; CUTTERS W.L.. PSI TEST LINES T/ 7500#. GOOD TEST. BLEED PSI T/ 1000#. OPEN WELL 400#.</p> <p>STG 1)BEG PUMP. BRK @ 3416# @ 3.4 BPM. SD ISIP 1416#, FG .67. BEG FRAC PUMP 24,802# 30/50 WHITE &amp; 5,000# 20/40 TLC. SD ISIP 1946#, FG .75. SWI, X-OVER FOR W.L.</p> <p>STG 2)PU 4 1/2, 8K BAKER CBP &amp; 3 3/8 EXP GUN, 23 GM, .36 HOLE SIZE. RIH T/ 450' W.L. TRUCK ENG DIED. CHANGE OUT FUEL FILTER STILL WOULD NOT RUN. CALL FOR MECH &amp; NEW TRUCK. MECH MADE TRUCK RUN, POOH W/ GUN &amp; CBP. RD W.L. TRUCK. RU NEW W.L. TRUCK. PU CBP &amp; 3 3/8 GUN. RIH SET CBP @ 6104', P/U PERF F/ 6064'-74', 4 SPF, 40 HOLES. POOH. X-OVER FOR FRAC CREW. OPEN WELL 244#. BEG PUMP, BRK @ 3384# @ 4.5 BPM. SD ISIP 1150#, FG .64. BEG FRAC, PUMP 86,423# 30/50 WHITE &amp; TAIL IN W/ 5,000# 20/40 TLC. SD ISIP 1720#, FG .73.. SWI. X-OVER FOR W.L..</p> <p>STG 3)PU 4 1/2, 8K BAKER CBP &amp; 3 3/8 EXP GUN, 23 GM, .36 HOLE SIZE. RIH SET CBP @ 5634', P/U PERF F/ 5602'-12', 3 SPF, 30 HOLES. 5585'-90', 3 SPF, 15 HOLES. POOH, X-OVER FOR FRAC CREW. OPEN WELL 175#. BEG PUMP, BRK @ 2448# @ 5.3 BPM. SD ISIP 875#, FG .60. BEG FRAC, PUMP 101,764# 30/50 WHITE &amp; TAIL IN W/ 5,000# 20/40 TLC. SD ISIP 1720#, FG .75. SWI, X-OVER FOR W.L..</p> <p>PU 4 1/2, 8K BAKER CBP. RIH SET KILL PLUG @ 5535'. POOH, RDMO BJ FRAC SERV &amp; CUTTERS W.L.. BLEED OFF WELL. ND FRAC VALVES, NU BOP. RU RIG FLOOR &amp; TBG EQUIP. SWI, SDFN. HSM.</p>
2/12/2009	7:00 - 7:30	0.50	COMP	48		P		

ROCKIES

Operation Summary Report

Well: NBU 1021-10

Spud Date: 11/10/2007

Project: UTAH

Site: UINTAH

Rig Name No: GWS 1/1

Event: RECOMPLETION

Start Date: 2/9/2009

End Date: 2/12/2009

Active Datum: RKB @5,247.99ft (above Mean Sea Level)

UWI: NBU 1021-10

Date	Time Start-End	Duration (hr)	Phase	Code	Subcode2	P/U	MD From (ft)	Operation								
	7:30 - 18:00	10.50	COMP	44	C	P		<p>OPEN WELL 0#. PU 3 7/8 BIT + X-DART + SLIDE OPEN SLEEVE BIT SUB. RIH W/ TBG TAG FILL @ 5530'. RU DRL EQUIP. BRK CONV CIRC, BEG DRL OUT.</p> <p>CBP 1)TAG FILL @ 5530' = 5' FILL. C/O SAND, DRL OUT CBP @ 5535' IN 5 MIN. WENT ON VACCUM. CONT RIH.</p> <p>CBP 2)TAG FILL @ 5584' = 50' FILL. ATTM T/ GET CIRC W/ RIG PUMP, COULD NOT CATCH CIRC. RU WEATHERFORD FOAM UNIT. BRK CONV CIRC IN 1 HR. DRL OUT CBP @ 5634' IN 12 MIN. 800# INCR. SD W/ FU. TBG WOULD NOT STOP FLOWING. WORK PIPE UP &amp; DOWN, TBG WOULD NOT STOP FLOWING. LET WELL DIE DOWN T/150#. BRK OUT POWER SWIVEL. TBG WAS FLOWING STAB TIW VALVE. CALL DELSCO FOR TBG PLUG. WAIT 30 MIN, CHECK TBG FOR FLOW. TBG WAS DEAD. CONT RIH W/ TBG.</p> <p>CBP 3)TAG FILL @ 6064' =40' FILL. C/O FILL, DRL OUT CBP @ 6104' IN 8 MIN. 100# INCR. BRK OUT POWER SWIVEL, TBG WAS FLOWING, STAB TIW VALVE, WAIT 30 MIN. CHECK TBG FOR FLOW. TBG WAS DEAD. RIH C/O T/ TOP OF FRAC PLUG @ 6374'. POOH, LD EXCESS TBG. PU 4 1/16 TBG HNGR. LAND TBG W/</p> <table border="0"> <tr> <td>KB</td> <td>24.00</td> </tr> <tr> <td>HNGR</td> <td>.83</td> </tr> <tr> <td>192 JTS, J-55</td> <td>6021.41</td> </tr> <tr> <td>SLIDE OPEN B.S.</td> <td>3.10</td> </tr> </table> <p>EOT @ 6049.34</p> <p>ND BOP, NU WH. DROP BALL. RIG PUMP T/ TBG. PUMP BIT OFF W/ 20 BBLS 2% KCL. RD DELSCO. DID NOT RUN TBG PLUG. OPEN WELL T/ FB TANK. TURN WELL OVER T/ FBC. SICP 200#, FTP 50#. RACK OUT RIG EQUIP. RD RIG.</p> <p>TOTAL JTS ON LOC 260 JTS TOTAL JTS IN WELL 192 JTS. 66 JTS ON THE GROUND .</p> <p>DURING DRL OUT, DART VALVES WERE LEAKING. (((( FRAC PLUG @ 6374' ))))))))</p>	KB	24.00	HNGR	.83	192 JTS, J-55	6021.41	SLIDE OPEN B.S.	3.10
KB	24.00															
HNGR	.83															
192 JTS, J-55	6021.41															
SLIDE OPEN B.S.	3.10															
2/13/2009	7:00 -			33	A			<p>7 AM FLBK REPORT: CP 250#, TP 25#, OPEN/64" CK, - BWPH, TRACE SAND, - GAS TTL BBLS RECOVERED: 66 BBLS LEFT TO RECOVER: 5834</p>								
2/14/2009	7:00 -			33	A			<p>7 AM FLBK REPORT: CP 250#, TP 25#, OPEN/64" CK, - BWPH, TRACE SAND, - GAS TTL BBLS RECOVERED: 66 BBLS LEFT TO RECOVER: 5834</p>								
2/15/2009	7:00 -			33	A			<p>7 AM FLBK REPORT: CP 1200#, TP 300#, 32/64" CK, 22.5 BWPH, TRACE SAND, - GAS TTL BBLS RECOVERED: 599.5 BBLS LEFT TO RECOVER: 5300.5</p>								
	10:30 -		PROD					<p>WELL TURNED TO SALES @ 1030 HR ON 2/15/2009 - FTP 375#, CP 900#, CK 32/64", 431 MCFD, 360 BWPD</p>								

ROCKIES

Operation Summary Report

Well: NBU 1021-10

Spud Date: 11/10/2007

Project: UTAH

Site: UINTAH

Rig Name No: GWS 1/1

Event: RECOMPLETION

Start Date: 2/9/2009

End Date: 2/12/2009

Active Datum: RKB @5,247.99ft (above Mean Sea Level)

UWI: NBU 1021-10

Date	Time Start-End	Duration (hr)	Phase	Code	Subcode2	P/U	MD From (ft)	Operation
2/16/2009	7:00 -			33	A			7 AM FLBK REPORT: CP 1000#, TP 500#, 32/64" CK, 19 BWPH, TRACE SAND, - GAS TTL BBLS RECOVERED: 1101 BBLS LEFT TO RECOVER: 4799
2/17/2009	7:00 -			33	A			7 AM FLBK REPORT: CP 900#, TP 375#, 32/64" CK, 15.5 BWPH, TRACE SAND, 431 GAS TTL BBLS RECOVERED: 1515 BBLS LEFT TO RECOVER: 4385
2/18/2009	7:00 -			33	A			7 AM FLBK REPORT: CP 800#, TP 300#, 32/64" CK, 10 BWPH, TRACE SAND, 381 GAS TTL BBLS RECOVERED: 1782.5 BBLS LEFT TO RECOVER: 4117.5

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

AMENDED REPORT  FORM 8  
(highlight changes)

**WELL COMPLETION OR RECOMPLETION REPORT AND LOG**

5. LEASE DESIGNATION AND SERIAL NUMBER: **M-23612**

6. IF INDIAN, ALLOTTEE OR TRIBE NAME: \_\_\_\_\_

7. UNIT or CA AGREEMENT NAME: **UNIT #891008900A**

8. WELL NAME and NUMBER: **NBU 1021-10**

9. API NUMBER: **4304739002**

10. FIELD AND POOL, OR WILDCAT NATURAL BUTTES: \_\_\_\_\_

11. QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: **SWSE 1 10S 21E**

12. COUNTY: **UINTAH** 13. STATE: **UTAH**

14. DATE SPURRED: **10/13/2007** 15. DATE T.D. REACHED: **11/17/2007** 16. DATE COMPLETED: **2/15/2009** ABANDONED  READY TO PRODUCE

17. ELEVATIONS (DF, RKB, RT, GL): **5224'GL**

18. TOTAL DEPTH: MD **9,065** TVD \_\_\_\_\_ 19. PLUG BACK T.D.: MD **6,374** TVD \_\_\_\_\_ 20. IF MULTIPLE COMPLETIONS, HOW MANY? \* \_\_\_\_\_ 21. DEPTH BRIDGE MD PLUG SET: \_\_\_\_\_ TVD \_\_\_\_\_

22. TYPE ELECTRIC AND OTHER MECHANICAL LOGS RUN (Submit copy of each): **N/A**

23. WAS WELL CORED? NO  YES  (Submit analysis)  
WAS DST RUN? NO  YES  (Submit report)  
DIRECTIONAL SURVEY? NO  YES  (Submit copy)

**24. CASING AND LINER RECORD (Report all strings set in well)**

HOLE SIZE	SIZE/GRADE	WEIGHT (#ft.)	TOP (MD)	BOTTOM (MD)	STAGE CEMENTER DEPTH	CEMENT TYPE & NO. OF SACKS	SLURRY VOLUME (BBL)	CEMENT TOP **	AMOUNT PULLED
20"	14" STL	36.7#		40		28			
12 1/4"	9 5/8 H-40	32.3# 36#		2,250		1075			
7 7/8"	4 1/2 I-80	11.6#		9,065		1540			

**25. TUBING RECORD**

SIZE	DEPTH SET (MD)	PACKER SET (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)
2 3/8"	6,049							

**26. PRODUCING INTERVALS**

FORMATION NAME	TOP (MD)	BOTTOM (MD)	TOP (TVD)	BOTTOM (TVD)	INTERVAL (Top/Bot - MD)	SIZE	NO. HOLES	PERFORATION STATUS
(A) WASATCH	5,585	6,360			5,585 6,360	0.36	125	Open <input checked="" type="checkbox"/> Squeezed <input type="checkbox"/>
(B)								Open <input type="checkbox"/> Squeezed <input type="checkbox"/>
(C)								Open <input type="checkbox"/> Squeezed <input type="checkbox"/>
(D)								Open <input type="checkbox"/> Squeezed <input type="checkbox"/>

**27. PERFORATION RECORD**

**28. ACID, FRACTURE, TREATMENT, CEMENT SQUEEZE, ETC.**

DEPTH INTERVAL	AMOUNT AND TYPE OF MATERIAL
5585'-6360	PMP 5900 BBLs SLICK H2O & 227,989# 30/50 OTTOWA SD

29. ENCLOSED ATTACHMENTS:  ELECTRICAL/MECHANICAL LOGS  GEOLOGIC REPORT  DST REPORT  DIRECTIONAL SURVEY  
 SUNDRY NOTICE FOR PLUGGING AND CEMENT VERIFICATION  CORE ANALYSIS  OTHER: \_\_\_\_\_

30. WELL STATUS: **PROD**

**RECEIVED**

31. INITIAL PRODUCTION

INTERVAL A (As shown in item #26)

DATE FIRST PRODUCED: 2/15/2009		TEST DATE: 3/7/2009		HOURS TESTED: 24		TEST PRODUCTION RATES: →		OIL - BBL: 0	GAS - MCF: 432	WATER - BBL: 80	PROD. METHOD: FLOWING
CHOKE SIZE: 32/64	TBG. PRESS. 144	CSG. PRESS. 498	API GRAVITY	BTU - GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL - BBL: 0	GAS - MCF: 432	WATER - BBL: 80	INTERVAL STATUS: PROD	

INTERVAL B (As shown in item #26)

DATE FIRST PRODUCED:		TEST DATE:		HOURS TESTED:		TEST PRODUCTION RATES: →		OIL - BBL:	GAS - MCF:	WATER - BBL:	PROD. METHOD:
CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU - GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL - BBL:	GAS - MCF:	WATER - BBL:	INTERVAL STATUS:	

INTERVAL C (As shown in item #26)

DATE FIRST PRODUCED:		TEST DATE:		HOURS TESTED:		TEST PRODUCTION RATES: →		OIL - BBL:	GAS - MCF:	WATER - BBL:	PROD. METHOD:
CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU - GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL - BBL:	GAS - MCF:	WATER - BBL:	INTERVAL STATUS:	

INTERVAL D (As shown in item #26)

DATE FIRST PRODUCED:		TEST DATE:		HOURS TESTED:		TEST PRODUCTION RATES: →		OIL - BBL:	GAS - MCF:	WATER - BBL:	PROD. METHOD:
CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU - GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL - BBL:	GAS - MCF:	WATER - BBL:	INTERVAL STATUS:	

32. DISPOSITION OF GAS (Sold, Used for Fuel, Vented, Etc.)

SOLD

33. 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.

34. FORMATION (Log) MARKERS:

Formation	Top (MD)	Bottom (MD)	Descriptions, Contents, etc.	Name	Top (Measured Depth)
GREEN RIVER	1,384				
BIRDS NEST	1,617				
MAHOGANY	2,156				
WASATCH	4,633	7,172			
MESAVERDE	7,186	8,884			

35. ADDITIONAL REMARKS (Include plugging procedure)

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records.

NAME (PLEASE PRINT) SHEILA UPCHEGO

TITLE REGULATORY ANALYST

SIGNATURE 

DATE 3/12/2009

This report must be submitted within 30 days of

- completing or plugging a new well
- drilling horizontal laterals from an existing well bore
- recompleting to a different producing formation
- reentering a previously plugged and abandoned well
- significantly deepening an existing well bore below the previous bottom-hole depth
- drilling hydrocarbon exploratory holes, such as core samples and stratigraphic tests

\* ITEM 20: Show the number of completions if production is measured separately from two or more formations.

\*\* ITEM 24: Cement Top - Show how reported top(s) of cement were determined (circulated (CIR), calculated (CAL), cement bond log (CBL), temperature survey (TS)).

Send to: Utah Division of Oil, Gas and Mining  
1594 West North Temple, Suite 1210  
Box 145801  
Salt Lake City, Utah 84114-5801

Phone: 801-538-5340  
Fax: 801-359-3940

<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	<b>FORM 9</b>  <b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> ML-23612
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.	<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b>  <b>7. UNIT or CA AGREEMENT NAME:</b> NATURAL BUTTES
<b>1. TYPE OF WELL</b> Gas Well	<b>8. WELL NAME and NUMBER:</b> NBU 1021-10
<b>2. NAME OF OPERATOR:</b> KERR-MCGEE OIL & GAS ONSHORE, L.P.	<b>9. API NUMBER:</b> 43047390020000
<b>3. ADDRESS OF OPERATOR:</b> P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779	<b>PHONE NUMBER:</b> 720 929-6007 Ext
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 0245 FSL 2619 FEL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: SWSE Section: 01 Township: 10.0S Range: 21.0E Meridian: S	<b>9. FIELD and POOL or WILDCAT:</b> NATURAL BUTTES  <b>COUNTY:</b> UINTAH  <b>STATE:</b> UTAH

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

TYPE OF SUBMISSION	TYPE OF ACTION		
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start:	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> CASING REPAIR
<input checked="" type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion: 5/7/2010	<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 type="checkbox"/> APD EXTENSION
	<input type="checkbox"/> WILDCAT WELL DETERMINATION	<input checked="" type="checkbox"/> OTHER	OTHER: WORKOVER

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

THIS WELL WAS RECOMPLETED TO THE WASATCH FORMATION AND PLACED ON PRODUCTION ON 2/15/2009. AT THE TIME OF THE RECOMPLETION, 2 BRIDGE PLUGS WERE PLACED IN THE HOLE, THE SECOND PLUG LANDED AT 6374'. THESE PLUGS ISOLATED THE MESAVERDE PERFORATIONS. ON 5/7/2010 THE TWO BRIDGE PLUGS WERE DRILLED OUT AND 2-3/8" TUBING WAS LANDED AT 7139'. THE WASATCH AND MESAVERDE FORMATIONS ARE NOW PRODUCING TOGETHER. PLEASE SEE ATTACHED CHRONOLOGICAL WELL HISTORY.

**Accepted by the**  
**Utah Division of**  
**Oil, Gas and Mining**  
**FOR RECORD ONLY**  
 May 12, 2010

<b>NAME (PLEASE PRINT)</b> Andy Lytle	<b>PHONE NUMBER</b> 720 929-6100	<b>TITLE</b> Regulatory Analyst
<b>SIGNATURE</b> N/A		<b>DATE</b> 5/11/2010

**US ROCKIES REGION  
Operation Summary Report**

Well: NBU 1021-10 Spud Date: 11/10/2007  
 Project: UTAH-UINTAH Site: NBU 1021-10 PAD Rig Name No: LEED 698/698, MILES-GRAY 1/1  
 Event: WELL WORK EXPENSE Start Date: 2/2/2010 End Date:  
 Active Datum: RKB @5,247.99ft (above Mean Sea Level) UWI: NBU 1021-10

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
2/2/2010	7:00 - 15:00	8.00	WO/REP	30	A	P		ROAD RIG FROM NBU 922-29 M4DS TO LOC, WAIT FOR LOC TO BE CLEAN OFF, CHANGE IN ORDERS, MOVE RIG OFF LOC,
5/6/2010	7:00 - 17:00	10.00	WO/REP	30	A	P		7AM[DAY 1] JSA R/U IN WIND  EOT @ 6049'. SPOT EQUIPMENT. FCP=275#. BLEW WELL DN. WAIT ON WIND TO DIE DOWN. R/U RIG. KILL TBG W/ 10 BBLS 2% KCL WATER. NDWH, NUBOP. R/U FLOOR & TBG EQUIPMENT. UNLAND TBG. L/D HANGER. POOH STDG BACK 82 STDS 2-3/8" J-55 TBG. L/D BTM 30 JTS PITTED & SCALE ON ID OF TBG. P/U BO BAKER MILL & RIH ON TBG. EOT @ 6365'. LTR= 00 BBLS. PREP TO D/O CBP'S IN AM & LAND TBG.  5 PM SWI-SDFN. PREP TO DRILL OUT CBP'S IN AM.
5/7/2010	7:00 - 7:15	0.25	MAINT	48		P		JSA- SAFETY MEETING #2,
	7:15 - 14:00	6.75	MAINT	44	C	P		550# ON WELL, BLOWED DN TO TK, KILL TBG W/ 10 BBLS WTR, RIH TAG CBP @ 6374', ESTB CIRC W/ FOAM N2 UNIT, MILL OUT 2 BAKER 8K CBP IN 7 MIN EACH, NO INCREASE IN PRESSURE, CIRC WELL CLEAN W/ CIRC VERY WEAK, TIH W/ TBG TAG FILL @ 8917', ESTB CIRC W/ FOAM N2 UNIT, CLEAN OUT FILL FROM 8917' TO 8940' W/ PUSHING POBS DN HOLE, CIRC WELL CLEAN, R/D POWER SWIVEL,
	14:00 - 20:00	6.00	MAINT	31	I	P		TOOH W/ LAYING DN 57 JTS ON TRAILER, TOOH W/ 113 STANDS, P/U XN-NIPPLE W/ NOTCH END, TIH W/ 2 3/8" TBG TO @ 4000', R/U SAND LINE RIH W/ TBG BROCH, RIH W/ TBG LANDED TBG @ 7139.62', RIH W/ SAND LINE AND BROCH TO 4000', N/D BOPS, N/U WH, HOOK UP FLOW LINES TO PRODUCTION UNIT, SHUT WELL IN, EOT @ 7139.62', R/D UNIT, SDFWE.  KB = 24.00' HANGER = .83' 226 JTS 2 3/8" J-55 TBG = 7113.49' XN-NIPPLE 1.875 = 1.30'  EOT = 7139.62'