

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

5. Lease Serial No. UTU-011336	
6. If Indian, Allottee or Tribe Name N/A	
7. If Unit or CA Agreement, Name and No. 891008900A	
8. Lease Name and Well No. NBU 1022-01CT	
9. API Well No. 43047-40190	
1a. Type of Work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER	
1b. Type of Well: <input type="checkbox"/> <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input type="checkbox"/> Single Zone <input checked="" type="checkbox"/> Multiple Zones	
2. Name of Operator Kerr-McGee Oil & Gas Onshore, LP	
3a. Address P.O. Box 173779 Denver, CO 80217-3779	3b. Phone No. (include area code) 720.929.6226
10. Field and Pool, or Exploratory Natural Buttes Field	
4. Location of well (Report location clearly and in accordance with any State requirements. *) At surface 819 FNL 2106 637508X NE NW Lat. 39.983028 Long. -109.38951 At proposed prod. zone N/A 44269054 -109.389537 NAD 27	
11. Sec., T., R., M., or Blk. and Survey or Area Sec 1 T 10S R 22E	
14. Distance in miles and direction from the nearest town or post office* 46.6 miles southwest of Vernal, Utah	
12. Cou State Uintah Utah	
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drlg. unit line, if any) 819	16. No. of acres in lease 522.84
17. Spacing Unit dedicated to this well 40	
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 30'	19. Proposed Depth 8500'
20. BLM/ BIA Bond No. on file WYB000291	
21. Elevations (Show whether DF, RT, GR, etc.) 4989' GR	22. Aproximate date work will start* Upon Approval Esti mat 10 days
24. Attachments	

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

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

25. Signature 	Name (Printed/ Typed) Kevin McIntyre	<b>RECEIVED</b> <b>JUN 27 2008</b>
Title Regulatory Analyst		
Approved By (Signature) 	Name (Printed/ Typed) BRADLEY G. HILL	DIV. OF OIL, GAS & MINING 07-16-08
Title Regulatory Analyst	Office ENVIRONMENTAL MANAGER	

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

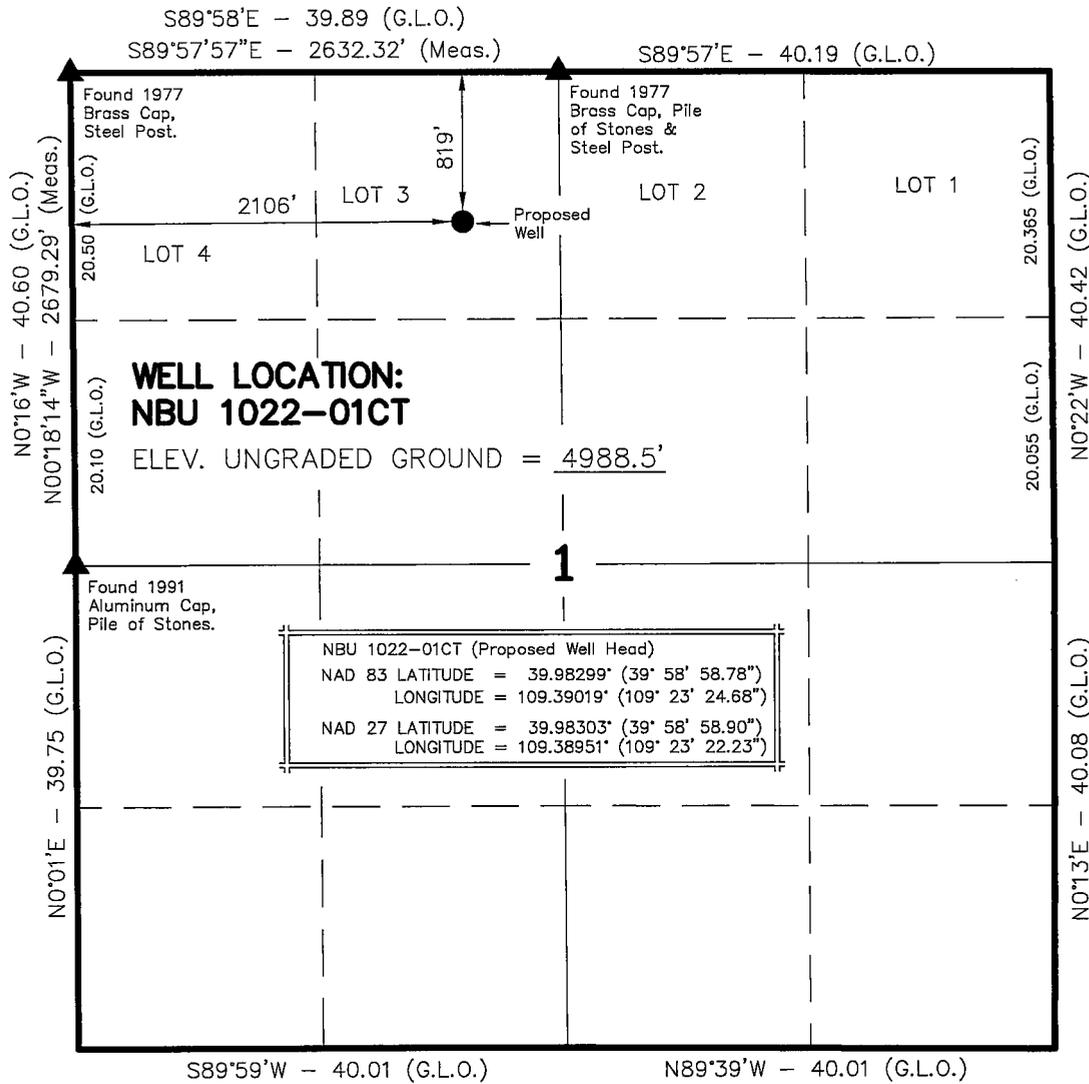
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Continued on page 2)

\* (Instructions on page 2)

**Federal Approval of this  
Action is Necessary**

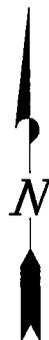
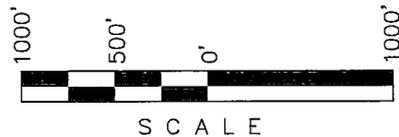
# T10S, R22E, S.L.B.&M.



NBU 1022-01CT (Proposed Well Head)  
 NAD 83 LATITUDE = 39.98299' (39° 58' 58.78")  
 LONGITUDE = 109.39019' (109° 23' 24.68")  
 NAD 27 LATITUDE = 39.98303' (39° 58' 58.90")  
 LONGITUDE = 109.38951' (109° 23' 22.23")

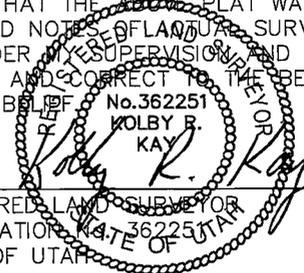
**NOTES:**

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



**SURVEYOR'S CERTIFICATE**

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



REGISTERED LAND SURVEYOR  
 REGISTRATION No. 362251  
 STATE OF UTAH

**Kerr-McGee**  
**Oil & Gas Onshore, LP**  
 1099 18th Street, Suite 1200 - Denver, Colorado 80202

NBU 1022-01CT  
 WELL PLAT  
 819' FNL, 2106' FWL  
 LOT 3 OF SECTION 1, T10S, R22E,  
 S.L.B.&M. UINTAH COUNTY, UTAH.

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

**TIMBERLINE** (435) 789-1365  
**ENGINEERING & LAND SURVEYING, INC.**  
 38 WEST 100 NORTH - VERNAL, UTAH 84078

DATE SURVEYED: 06-03-08	SURVEYED BY: K.R.K.	SHEET <b>2</b>
DATE DRAWN: 06-05-08	DRAWN BY: M.W.W.	
SCALE: 1" = 1000'		Date Last Revised: <b>OF 7</b>

**NBU 1022-01CT  
NENW Sec. 1, T10S, R22E  
UINTAH COUNTY, UTAH  
UTU-011336**

**ONSHORE ORDER NO. 1**

***DRILLING PROGRAM***

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

<u>Formation</u>	<u>Depth</u>
Uinta	0- Surface
Green River	1092'
Bird's Nest	1355'
Mahogany	1871'
Wasatch	4131'
Mesaverde	6401'
MVU2	7311'
MVL1	7901'
TD	8500'

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

<u>Substance</u>	<u>Formation</u>	<u>Depth</u>
	Green River	1092'
	Bird's Nest	1355'
	Mahogany	1871'
Gas	Wasatch	4131'
Gas	Mesaverde	6401'
Gas	MVU2	7311'
Gas	MVL1	7901'
Water	N/A	
Other Minerals	N/A	

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

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

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

*Please see the Natural Buttes Unit SOP.*

**5. Drilling Fluids Program:**

*Please see the Natural Buttes Unit SOP.*

**6. Evaluation Program:**

*Please see the Natural Buttes Unit SOP.*

7. **Abnormal Conditions:**

Maximum anticipated bottomhole pressure calculated at 8500' TD, approximately equals 5270 psi (calculated at 0.62 psi/foot).

Maximum anticipated surface pressure equals approximately 3400 psi (bottomhole pressure minus the pressure of a partially evacuated hole calculated at 0.22 psi/foot).

8. **Anticipated Starting Dates:**

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

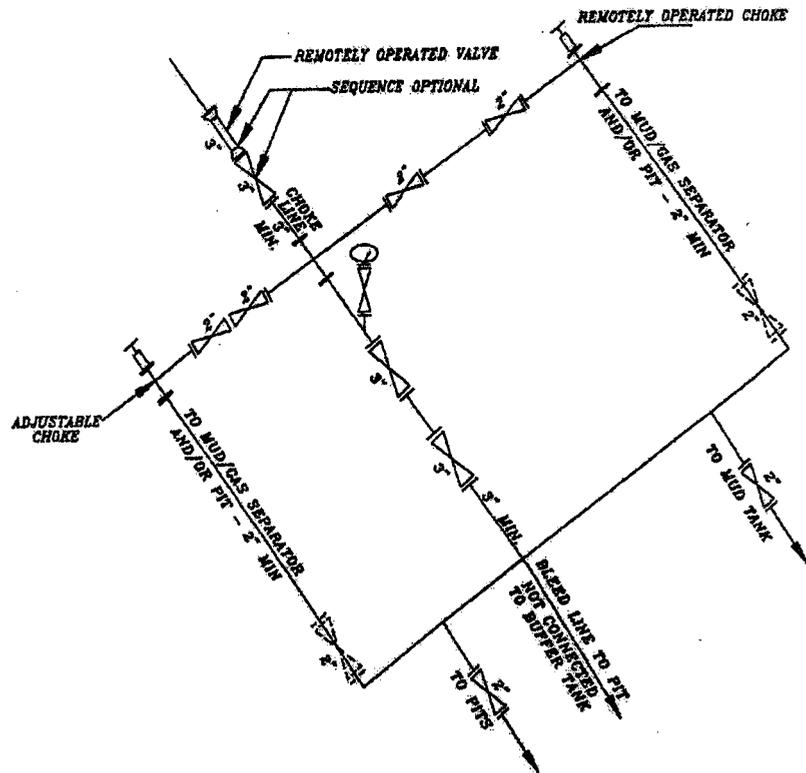
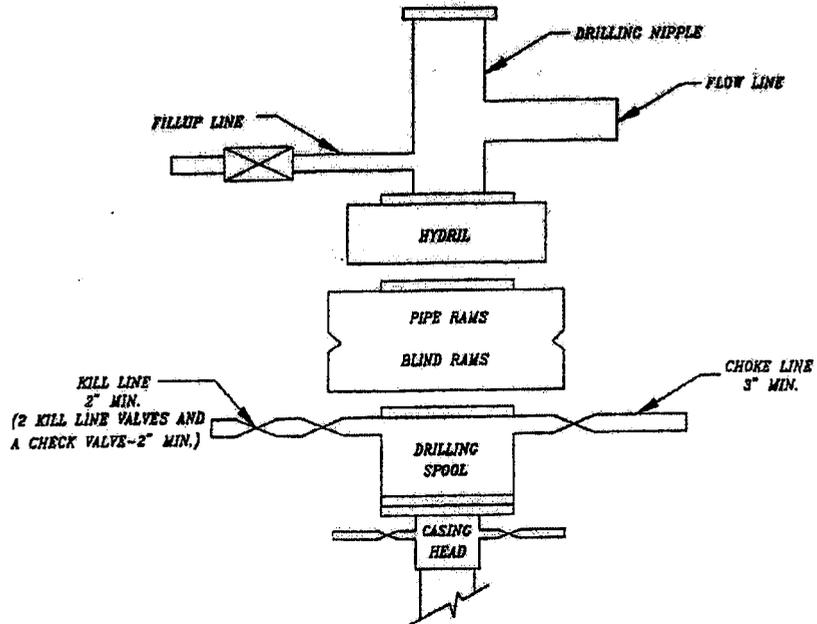
9. **Variances:**

*Please see Natural Buttes Unit SOP. Please see Kerr McGee's sundry regarding variance request to Onshore Order #2 regarding Air drilling for surface casing.*

10. **Other Information:**

*Please see Natural Buttes Unit SOP.*

EXHIBIT A



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

**NBU 1022-01CT  
NENW Sec. 1 ,T10S,R22E  
UINTAH COUNTY, UTAH  
UTU-011336**

**ONSHORE ORDER NO. 1**

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

**1. Existing Roads:**

Refer to the attached location directions.

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

**2. Planned Access Roads:**

No new access road is planned, as this is a twin location. Refer to Topo Map B.

*Existence of pipelines; maximum grade; turnouts; major cut and fills, culverts, or bridges; gates, cattle guards, fence cuts, or modifications to existing facilities were determined at the on-site.*

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

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

Please refer to Topo Map C.

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

**No new pipeline, as we will be utilizing the existing CIGE #105D pipeline. No TOPO D attached.**

*Please see the Natural Buttes Unit SOP.*

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

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

**Interim Surface Reclamation Plan:**

This exception is requested due to the current twin and multi-well program. If determined that this well will not be a candidate for either twinning &/or multi-well the operator shall spread the topsoil pile on the location up to the rig anchor points. The location will be reshaped to the

original contour to the extent possible. The operator will reseed the area using the BLM recommended seed mixture and reclamation methods.

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

*Please see the Natural Buttes SOP.*

6. **Source of Construction Materials:**

*Please see the Natural Buttes SOP.*

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

*Please see the Natural Buttes SOP.*

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

Any produced water from the proposed well will be contained in a water tank and will then be hauled by truck to one of the pre-approved disposal sites: RNI, Sec. 5, T9S, R22E, NBU #159, Sec. 35, T9S R21E, Ace Oilfield, Sec. 2, T6S, R20E, MC&MC, Sec. 12, T6S, R19E, Pipeline Facility Sec. 36, T9S, R20E, Goat Pasture Evaporation Pond SW/4 Sec. 16, T10S, R22E, Bonanza Evaporation Pond Sec. 2, T10S, R23E (*Request is in lieu of filing Form 3160-5, after initial production*).

8. **Ancillary Facilities:**

*Please see the Natural Buttes SOP.*

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

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

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

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

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

*Please see the Natural Buttes SOP.*

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

Crested Wheatgrass      12 lbs.

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

**11. Surface/Mineral Ownership:**

The well pad, access road, pipeline and mineral ownership are listed below:

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

**12. Stipulations****Wildlife Stipulations:**

- Antelope Stipulations:  
No construction from May 15 through June 20.

**Critical Soils Stipulations:**

No construction when wet.

**13. Other Information:**

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

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

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

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

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

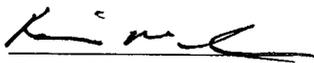
Certification: All lease and/or unit operations will be conducted in such a manner that full compliance is made with all applicable laws, regulations, Onshore Oil and Gas Orders, the approved Plan of Operations, and any applicable Notice to Lessees.

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

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

Bond coverage pursuant to 43 CFR 3104 for lease activities is being provided by BLM Nationwide Bond #WYB000291.

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

  
Kevin McIntyre

6/24/2008

Date



# KERR-McGEE OIL & GAS ONSHORE LP DRILLING PROGRAM

COMPANY NAME KERR-McGEE OIL & GAS ONSHORE LP DATE June 24, 2008  
 WELL NAME NBU 1022-01CT TD 8,500' MD/TVD \_\_\_\_\_  
 FIELD Natural Buttes COUNTY Uintah STATE Utah ELEVATION 4,989' GL KB 5,004'  
 SURFACE LOCATION NENW 819' FNL & 2106' FWL, SEC. 1, T10S, R22E BHL Straight Hole  
 Latitude: 39.983030 Longitude: -109.389510 NAD 27 \_\_\_\_\_  
 OBJECTIVE ZONE(S) Wasatch/Mesaverde  
 ADDITIONAL INFO Regulatory Agencies: BLM (SURF & MINERALS), UDOGM, Tri-County Health Dept.

GEOLOGICAL FORMATION			MECHANICAL		
LOGS	TOPS	DEPTH	HOLE SIZE	CASING SIZE	MUD WEIGHT
		40'		14"	
			12-1/4"	9-5/8", 36#, J-55, LTC	Air mist
Catch water sample, if possible, from 0 to 4,131' Green River @ 1,092' Top of Birds Nest Water @ 1355' Mahogany @ 1,871' Preset f/ GL @ 2,000' MD					
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 acutal depth of the loss zone.					
Mud logging program TBD Open hole logging program f/ TD - surf csg			7-7/8"	4-1/2", 11.6#, I-80 or equivalent LTC casing	Water/Fresh Water Mud 8.3-10.0 ppg
	Wasatch @	4,131'			
	Mverde @	6,401'			
	MVU2 @	7,311'			
	MVL1 @	7,901'			
		TD @ 8,500'			Max anticipated Mud required 11.5 ppg



# KerrMcGee OIL & GAS ONSHORE L DRILLING PROGRAM

## CASING PROGRAM

	SIZE	INTERVAL	WT.	GR.	CPLG.	DESIGN FACTORS		
						BURST	COLLAPSE	TENSION
CONDUCTOR	14"	0-40'						
SURFACE	9-5/8"	0 to 2000	36.00	J-55	LTC	3520 1.10	2020 2.16	453000 8.01
PRODUCTION	4-1/2"	0 to 8500	11.60	I-80	LTC	7780 2.42	6350 1.25	201000 2.34

- 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 3400 psi

## 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
Option 1	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	Option 2	<b>NOTE: If well will circulate water to surface, option 2 will be utilized</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	3,630'	Premium Lite II + 3% KCl + 0.25 pps celloflake + 5 pps gilsonite + 10% gel + 0.5% extender	400	60%	11.00	3.38
	TAIL	4,870'	50/50 Poz/G + 10% salt + 2% gel +.1% R-3	1360	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 & four 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:

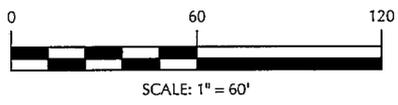
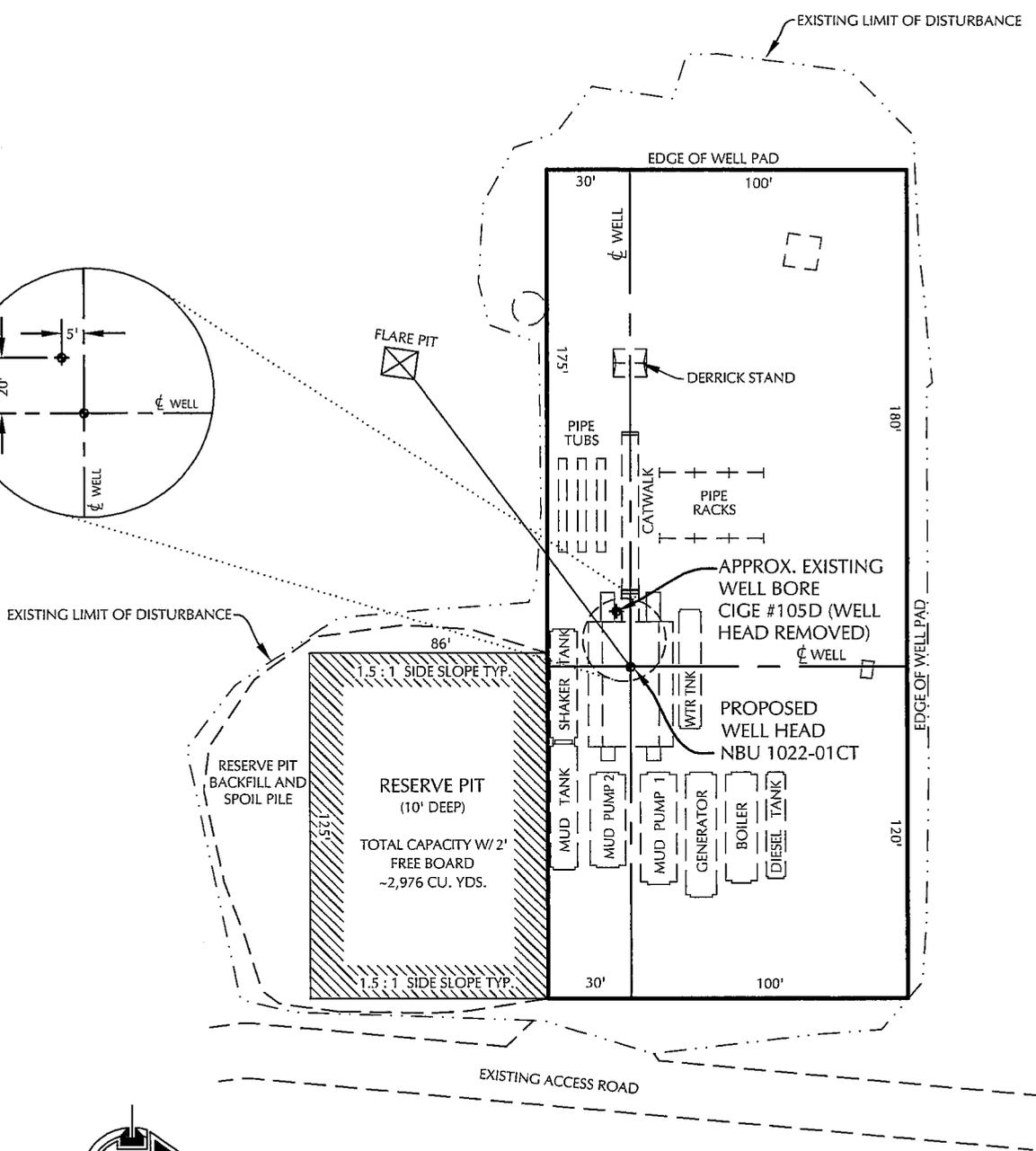
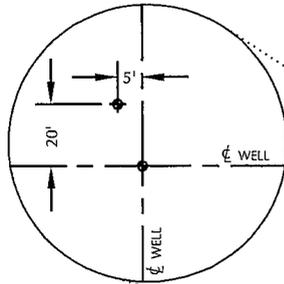
Randy Bayne NBU 1022-01CT.xls

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

**Kerr-McGee Oil & Gas Onshore, LP**  
**NBU #1022-01CT**  
**SECTION 1, T10S, R22E, S.L.B.&M.**

PROCEED IN A SOUTHEASTERLY DIRECTION FROM VERNAL, UTAH, ALONG U.S. HIGHWAY 40 APPROXIMATELY 3.1 MILES TO THE JUNCTION OF THE BONANZA HIGHWAY; EXIT RIGHT AND PROCEED IN A SOUTHERLY DIRECTION APPROXIMATELY 20.3 MILES TO THE JUNCTION OF THE BONANZA HIGHWAY AND GLEN BENCH ROAD; EXIT RIGHT AND PROCEED IN A SOUTHWESTERLY DIRECTION FOR APPROXIMATELY 14.4 MILES TO THE JUNCTION OF GLEN BENCH ROAD AND CHIPETA WELLS ROAD; TURN LEFT AND PROCEED IN AN EASTERLY DIRECTION FOR APPROXIMATELY 4.5 MILES TO THE JUNCTION OF CHIPETA WELLS ROAD AND ATCHEE ROAD; TURN RIGHT AND PROCEED IN A SOUTHERLY DIRECTION APPROXIMATELY 3.9 MILES TO THE JUNCTION OF ATCHEE ROAD AND AN EXISTING ROAD TO THE WEST; TURN RIGHT AND PROCEED IN A WESTERLY DIRECTION APPROXIMATELY 0.2 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE NORTH; TURN RIGHT AND PROCEED IN A NORTHERLY DIRECTION APPROXIMATELY 0.3 MILES TO THE JUNCTION OF THIS ROAD AND THE PROPOSED NBU 1022-01CT WELL LOCATION.

TOTAL DISTANCE FROM VERNAL, UTAH, TO THE PROPOSED NBU 1022-01CT WELL LOCATION IS APPROXIMATELY 46.7 MILES.



**NOTES:**

1. FLARE PIT IS TO BE LOCATED A MIN. OF 100' FROM THE WELL HEAD
2. ELEVATION BASED ON TRI-STA "TWO WATERS" LOCATED IN THE NW1/4 OF SEC. 1, T.10S., R.21E., S.L.B. & M. (THE ELEVATION OF THIS TRI-STA IS SHOWN ON THE BIG PACK MTN. NE 7.5 MIN. QUADRANGLE AS BEING 5,238')
3. NBU 1022-01CT EXISTING GROUND ELEVATION = 4,988.5'

**KERR-MCGEE OIL & GAS  
ONSHORE, LP**

1099 18th Street, Suite 1200 - Denver, Colorado 80202



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

NBU 1022-01CT  
LOCATION LAYOUT  
819' FNL - 2,106' FWL  
LOT 3, SEC. 1, T.10S., R.22E.  
S.L.B. & M., UTAH COUNTY, UTAH

Scale: 1"=60'	Date: 6/9/08	SHEET NO: <b>3</b> 3 OF 7
REVISID:	BY DATE	

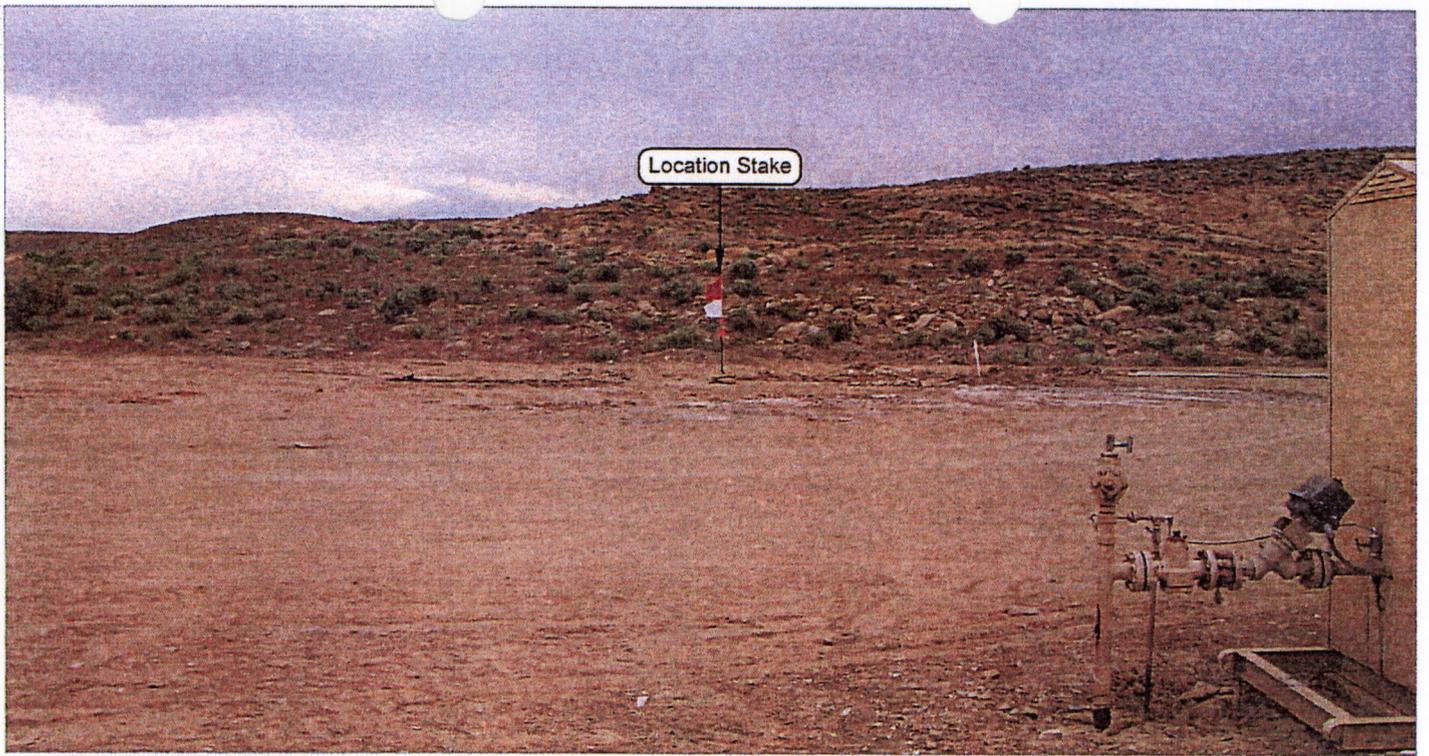


PHOTO VIEW: LOCATION STAKE

CAMERA ANGLE: SOUTHERLY

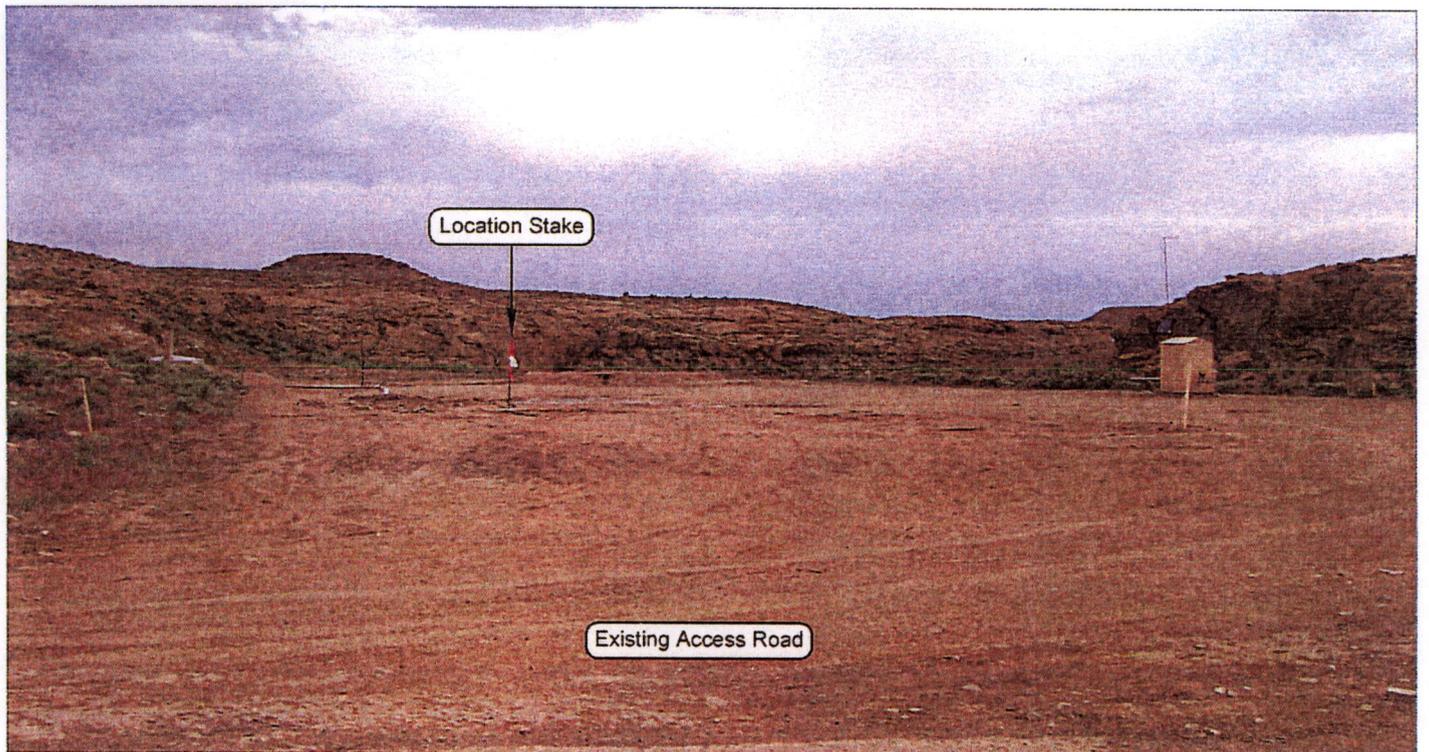


PHOTO VIEW: EXISTING ROAD

CAMERA ANGLE: WESTERLY

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

1099 18th Street, Suite 1200 - Denver, Colorado 80202

NBU 1022-01CT  
819' FNL, 2106' FWL  
LOT 3 OF SECTION 1, T10S, R22E,  
S.L.B.&M. UINTAH COUNTY, UTAH.



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

**LOCATION PHOTOS**

TAKEN BY: K.R.K.

DRAWN BY: M.W.W.

REVISED:

DATE TAKEN: 06-03-08

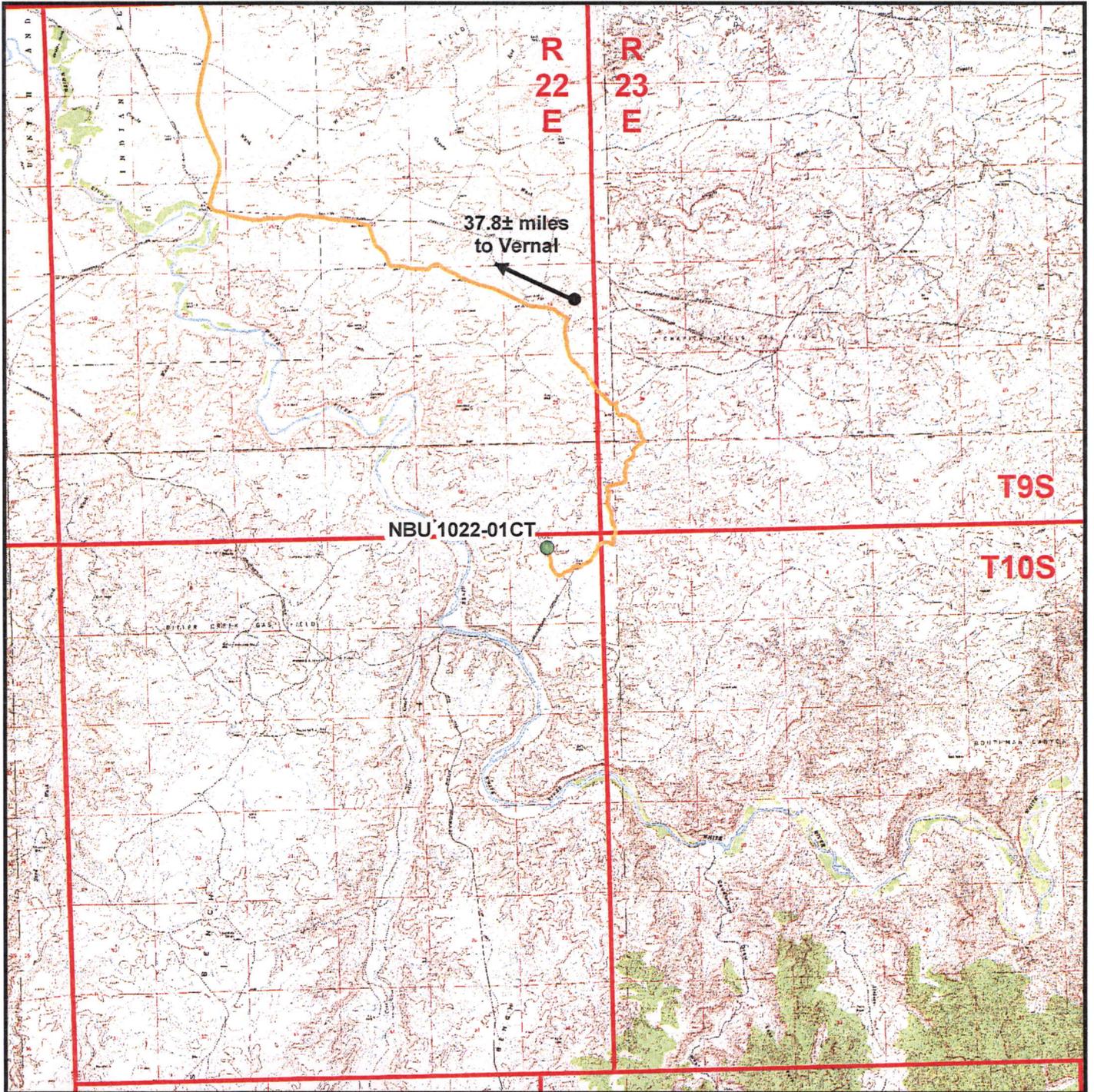
DATE DRAWN: 06-05-08

**Timberline**

Engineering & Land Surveying, Inc.  
38 WEST 100 NORTH VERNAL, UTAH 84078

(435) 789-1365

SHEET  
4  
OF 7



### Legend

- Proposed NBU 1022-01CT Well Location
- Existing Access Roads

**Kerr-McGee Oil & Gas Onshore, LP**  
 1099 18th Street, Suite 1200 - Denver, Colorado 80202

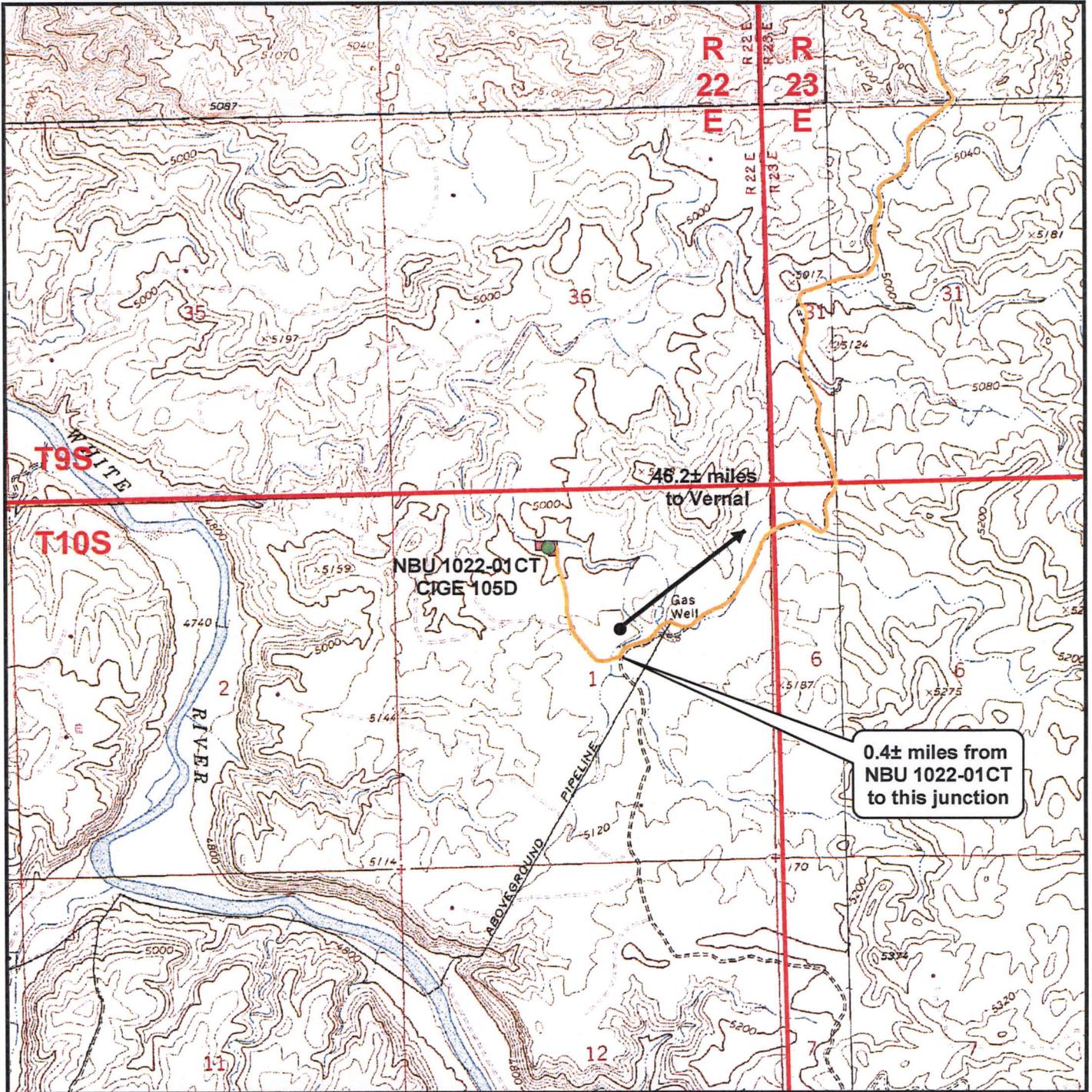
**NBU 1022-01CT**  
**Topo A**  
**819' FNL, 2106' FWL**  
**Lot 3, Section 1, T10S, R22E**  
**S.L.B.&M., Uintah County, Utah**

**CONSULTING, LLC**  
 371 Coffeen Avenue  
 Sheridan, WY 82801  
 Phone (307) 673-0036  
 Fax (307) 674-0182



Scale: 1:100,000	NAD83 USP Central
Drawn: JELO	Date: 12 June 2008
Revised:	Date:

Sheet No:  
**5** 5 of 7



**Legend**

- Proposed NBU 1022-01CT Well Location
- Existing Access Roads

**Kerr-McGee Oil & Gas Onshore, LP**  
 1099 18th Street, Suite 1200 - Denver, Colorado 80202

**NBU 1022-01CT**  
**Topo B**  
**819' FNL, 2106' FWL**  
**Lot 3, Section 1, T10S, R22E**  
**S.L.B.&M., Uintah County, Utah**

**CONSULTING, LLC**  
 371 Coffee Avenue  
 Sheridan, WY 82801  
 Phone (307) 673-0036  
 Fax (307) 674-0182



Scale: 1" = 2000ft	NAD83 US P Centra
Drawn: JELo	Date: 12 June 2008
Revised:	Date:

Sheet No:  
**6**  
 6 of 7



**WORKSHEET  
APPLICATION FOR PERMIT TO DRILL**

APD RECEIVED: 06/27/2008

API NO. ASSIGNED: 43-047-40190

WELL NAME: NBU 1022-01CT  
 OPERATOR: KERR-MCGEE OIL & GAS ( N2995 )  
 CONTACT: KEVIN MCINTYRE

PHONE NUMBER: 720-929-6226

PROPOSED LOCATION:

NENW 01 100S 220E  
 SURFACE: 0819 FNL 2106 FWL  
 BOTTOM: 0819 FNL 2106 FWL  
 COUNTY: UINTAH  
 LATITUDE: 39.98303 LONGITUDE: -109.3896  
 UTM SURF EASTINGS: 637508 NORTHINGS: 4426905  
 FIELD NAME: NATURAL BUTTES ( 630 )

INSPECT LOCATN BY: / /		
Tech Review	Initials	Date
Engineering		
Geology		
Surface		

LEASE TYPE: 1 - Federal  
 LEASE NUMBER: UTU-011336  
 SURFACE OWNER: 1 - Federal

PROPOSED FORMATION: WSMVD  
 COALBED METHANE WELL? NO

RECEIVED AND/OR REVIEWED:

- Plat
- Bond: Fed[1] Ind[] Sta[] Fee[]  
(No. WYB000291 )
- 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: 17314  
Eff Date: 12-2-1999  
Siting: 460' to u/burg & uncomm track
- R649-3-11. Directional Drill

COMMENTS: \_\_\_\_\_

STIPULATIONS: \_\_\_\_\_

*1 - Federal Approval*  
*2 - OIL SHALE*



# United States Department of the Interior

## BUREAU OF LAND MANAGEMENT

Utah State Office

P.O. Box 45155

Salt Lake City, Utah 84145-0155

IN REPLY REFER TO:

3160

(UT-922)

July 15, 2008

Memorandum

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

Pursuant to email between Diana Whitney, Division of Oil, Gas and Mining, and Mickey Coulthard, Utah State Office, Bureau of Land Management, the following wells are planned for calendar year 2008 within the Natural Buttes Unit, Uintah County, Utah.

API #	WELL NAME	LOCATION
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(Proposed PZ Wasatch/MesaVerde)

43-047-40184	NBU 921-30FT	Sec 30 T09S R21E 1585 FNL 2614 FWL
43-047-40185	NBU 921-31BT	Sec 31 T09S R21E 0670 FNL 2008 FEL
43-047-40170	NBU 921-27KT	Sec 27 T09S R21E 1527 FSL 1821 FWL
43-047-40171	NBU 921-27MT	Sec 27 T09S R21E 0634 FSL 0931 FWL
43-047-40172	NBU 921-27OT	Sec 27 T09S R21E 0646 FSL 2211 FEL
43-047-40173	NBU 921-27HT	Sec 27 T09S R21E 2025 FNL 0623 FEL
43-047-40174	NBU 921-27LT	Sec 27 T09S R21E 1954 FSL 0641 FWL
43-047-40175	NBU 921-33K	Sec 33 T09S R21E 2066 FSL 1926 FWL
43-047-40227	NBU 921-27C2D	Sec 27 T09S R21E 0650 FNL 1730 FWL
43-047-40203	NBU 921-27D2DS	Sec 27 T09S R21E 0660 FNL 1713 FWL
	BHL	Sec 27 T09S R21E 0395 FNL 0350 FWL
43-047-40202	NBU 921-27D2AS	Sec 27 T09S R21E 0640 FNL 1747 FWL
	BHL	Sec 27 T09S R21E 0050 FNL 0350 FWL
43-047-40201	NBU 921-27C2AS	Sec 27 T09S R21E 0630 FNL 1765 FWL
	BHL	Sec 27 T09S R21E 0300 FNL 1730 FWL
43-047-40169	NBU 921-26IT	Sec 26 T09S R21E 1964 FSL 0674 FEL
43-047-40176	NBU 922-29NT	Sec 29 T09S R22E 0845 FSL 1627 FWL
43-047-40177	NBU 922-29KT	Sec 29 T09S R22E 1795 FSL 1936 FWL
43-047-40178	NBU 922-31BT	Sec 31 T09S R22E 0888 FNL 2191 FEL

43-047-40179	NBU 922-32ET	Sec 32	T09S	R22E	2477	FNL	0094	FWL
43-047-40186	NBU 922-33OT	Sec 33	T09S	R22E	0692	FSL	1465	FEL
43-047-40187	NBU 922-33NT	Sec 33	T09S	R22E	0890	FSL	2291	FWL
43-047-40188	NBU 922-33IT	Sec 33	T09S	R22E	2115	FSL	0579	FEL
43-047-40191	NBU 1022-04GT	Sec 04	T10S	R22E	1897	FNL	1861	FEL
43-047-40189	NBU 922-35IT	Sec 35	T09S	R22E	2133	FSL	0627	FEL
43-047-40190	NBU 1022-01CT	Sec 01	T10S	R22E	0819	FNL	2106	FWL
43-047-40192	NBU 1022-08IT	Sec 08	T10S	R22E	1757	FSL	0323	FEL
43-047-40193	NBU 1022-08GT	Sec 08	T10S	R22E	2313	FNL	1922	FEL
43-047-40194	NBU 1022-09AT	Sec 09	T10S	R22E	0472	FNL	0582	FEL
43-047-40195	NBU 1022-10HT	Sec 10	T10S	R22E	1798	FNL	0297	FEL
43-047-40196	NBU 1022-10FT	Sec 10	T10S	R22E	2200	FNL	2094	FWL
43-047-40204	NBU 1022-32D1S	Sec 32	T10S	R22E	0205	FNL	2058	FWL
	BHL	Sec 32	T10S	R22E	0270	FNL	1310	FWL
43-047-40205	NBU 1022-32D4AS	Sec 32	T10S	R22E	0198	FNL	2077	FWL
	BHL	Sec 32	T10S	R22E	0760	FNL	1180	FWL
43-047-40206	NBU 1022-32B3S	Sec 32	T10S	R22E	0185	FNL	2114	FWL
	BHL	Sec 32	T10S	R22E	1150	FNL	2130	FEL
43-047-40207	NBU 1022-32D4DS	Sec 32	T10S	R22E	0192	FNL	2096	FWL
	BHL	Sec 32	T10S	R22E	1240	FNL	1050	FWL

This office has no objection to permitting the wells at this time.

/s/ Michael L. Coulthard

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

MCoulthard:mc:7-15-08



JON M. HUNTSMAN, JR.  
Governor

GARY R. HERBERT  
Lieutenant Governor

# State of Utah

## DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER  
Executive Director

### Division of Oil, Gas and Mining

JOHN R. BAZA  
Division Director

July 16, 2008

Kerr-McGee Oil & Gas Onshore, LP  
P O Box 173779  
Denver, CO 80217-3779

Re: NBU 1022-01CT Well, 819' FNL, 2106' FWL, NE NW, Sec. 1, T. 10 South, R. 22 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 43-047-40190.

Sincerely,

Gil Hunt  
Associate Director

pab  
Enclosures

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

**Operator:** Kerr-McGee Oil & Gas Onshore, LP

**Well Name & Number** NBU 1022-01CT

**API Number:** 43-047-40190

**Lease:** UTU-011336

**Location:** NE NW      **Sec.** 1      **T.** 10 South      **R.** 22 East

### Conditions of Approval

1. General

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

2. Notification Requirements

Notify the Division within 24 hours of spudding the well.

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

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

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

3. Reporting Requirements

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

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

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

**RECEIVED**

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

JUL 16 2008

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

RECEIVED  
VERNAL FIELD OFFICE

**BLM**

UTU-011336

**APPLICATION FOR PERMIT TO DRILL OR REENTER**

1a. Type of Work:  DRILL  REENTER  
1b. Type of Well:   Gas Well  Other  Single Zone  Multiple Zone

6. Indian, Allottee or Tribe Name  
N/A  
7. If Unit or CA Agreement, Name and No.  
1008900A

2. Name of Operator  
Kerr-McGee Oil & Gas Onshore, LP

8. Lease Name and Well No.  
NBU 1022-01CT

9. API Well No.  
43 047 40190

3a. Address  
P.O. Box 173779  
Denver, CO 80217-3779

3b. Phone No. (include area code)  
720.929.6226

10. Field and Pool, or Exploratory  
Natural Buttes Field

4. Location of well (Report location clearly and in accordance with any State requirements. \*)  
At surface 819 FNL 2106 NE NW Lat. 39.98303 Long. -109.38951  
At proposed prod. zone N/A Lot 3 NAD 27

11. Sec., T., R., M., or Blk. and Survey or Area  
Sec 1 T 10S R 22E

14. Distance in miles and direction from the nearest town or post office\*  
46.6 miles southwest of Vernal, Utah

12. Cou State  
Utah

15. Distance from proposed\* location to nearest property or lease line, ft.  
(Also to nearest drlg. unit line, if any)  
819

16. No. of acres in lease  
522.84

17. Spacing Unit dedicated to this well  
40

18. Distance from proposed location\* to nearest well, drilling, completed, applied for, on this lease, ft.  
30'

19. Proposed Depth  
8500'

20. BLM/ BIA Bond No. on file  
WYB000291

21. Elevations (Show whether DF, RT, GR, etc.)  
4989' GR

22. Approximate date work will start\*  
Upon Approval

Esti mat  
10 days  
**RECEIVED**  
NOV 24 2008

24. Attachments

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

DIV. OF OIL, GAS & MINING

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

25. Signature  
*Kevin McIntyre*  
Title Regulatory Analyst

Name (Printed/ Typed) Kevin McIntyre

Approved By (Signature)  
*John Kenna*  
Title Assistant Field Manager  
Lands & Mineral Resources

Name (Printed/ Typed) John Kenna  
Office VERNAL FIELD OFFICE  
NOV 19 2008

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Conditions of approval, if any, are attached.

**CONDITIONS OF APPROVAL ATTACHED**

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

(Continued on page 2)

**NOTICE OF APPROVAL**

\*(Instructions on page 2)

No 005  
08PP1021A

**UDOGM**



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

170 South 500 East

VERNAL, UT 84078

(435) 781-4400



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

<b>Company:</b>	<b>Kerr McGee Oil &amp; Gas Onshore, LP</b>	<b>Location:</b>	<b>Lot 3, Sec. 1, T10S, R22E</b>
<b>Well No:</b>	<b>NBU 1022-01CT</b>	<b>Lease No:</b>	<b>UTU-011336</b>
<b>API No:</b>	<b>43-047-40190</b>	<b>Agreement:</b>	<b>Natural Buttes Unit</b>

<b>Title</b>	<b>Name</b>	<b>Office Phone Number</b>	<b>Cell Phone Number</b>
Petroleum Engineer:	Matt Baker	(435) 781-4490	(435) 828-4470
Petroleum Engineer:	Michael Lee	(435) 781-4432	(435) 828-7875
Petroleum Engineer:	Ryan Angus	(435) 781-4430	(435) 828-7368
Supervisory Petroleum Technician:	Jamie Sparger	(435) 781-4502	(435) 828-3913
Supervisory NRS:	Karl Wright	(435) 781-4484	
NRS/Enviro Scientist:	Holly Villa	(435) 781-4404	(435) 828-3544
NRS/Enviro Scientist:	James Hereford	(435) 781-3412	(435) 828-3546
NRS/Enviro Scientist:	Chuck Macdonald	(435) 781-4441	(435) 828-7481
NRS/Enviro Scientist:	Dan Emmett	(435) 781-3414	(435) 828-4029
NRS/Enviro Scientist:	Paul Percival	(435) 781-4493	(435) 828-7381
NRS/Enviro Scientist:	Anna Figueroa	(435) 781-3407	(435) 828-3548
NRS/Enviro Scientist:	Verlyn Pindell	(435) 781-3402	(435) 828-3547
NRS/Enviro Scientist:	Nathan Packer	(435) 781-3405	(435) 828-3545
NRS/Enviro Scientist:	David Gordon	(435) 781-4424	

**Fax: (435) 781-3420**

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

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

**NOTIFICATION REQUIREMENTS**

Location Construction (Notify Environmental Scientist)	- Forty-Eight (48) hours prior to construction of location and access roads.
Location Completion (Notify Environmental Scientist)	- Prior to moving on the drilling rig.
Spud Notice (Notify Petroleum Engineer)	- Twenty-Four (24) hours prior to spudding the well.
Casing String & Cementing (Notify Supv. Petroleum Tech.)	- Twenty-Four (24) hours prior to running casing and cementing all casing strings.
BOP & Related Equipment Tests (Notify Supv. Petroleum Tech.)	- Twenty-Four (24) hours prior to initiating pressure tests.
First Production Notice (Notify Petroleum Engineer)	- Within Five (5) business days after new well begins or production resumes after well has been off production for more than ninety (90) days.

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

- If there is an active Gilsonite mining operation within 2 miles of the well location, operator shall notify the Gilsonite operator at least 48 hours prior to any blasting during construction.
- If paleontological materials are uncovered during construction, the operator is to immediately stop work and contact the Authorized Officer (AO). A determination will be made by the AO as to what mitigation may be necessary for the discovered paleontologic material before construction can continue.

**SITE SPECIFIC COAs:**

Golden Eagle - January 1 through August 31  
No drilling or construction during the above indicated dates unless nest is not active.  
Per recommendation of the BLM authorized agent.

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

### **SITE SPECIFIC DOWNHOLE COAs:**

- A copy of Kerr McGee's Standard Operating Practices (SOP version: dated 7/17/08 and approved 7/28/08) shall be on location.
- Drilling plan specifics and practices are referenced in the Kerr McGee Oil & Gas Standard Operating Procedures (SOP version: July 28, 2008). The operators drilling plan items 3 to 9 reference the SOP. Kerr McGee shall adhere to the referenced requirements in the SOP. Kerr McGee and their contractors shall adhere to all Oil and Gas rules and requirements listed in the Code of Federal Regulations and all Federal Onshore Oil and Gas Orders except where variances have been granted.
- Covering air/gas drilling operations, requirements will be adhered to covering air/gas drilling operations as described in Onshore Order #2 III. E. 1. Drilling Operations, Special Drilling Operations, air/gas drilling.
- Production casing cement shall be brought up and into the surface casing. Production casing minimum cement top is 1200 ft. The minimum cement top is approximately 800 ft above the surface casing shoe.  
Cmnt Top (TOC) standard will place cmnt behind casing across formation lost circulation zone, Birds Nest Zone.  
COA specification fulfills operators performance standard stated in APD (where operators toc is calc'd with an excess to reach surface).
- A Gamma Ray well Log shall be run from the well Total Depth to the surface.  
A copy of the Gamma Ray well Log shall be submitted to the BLM Vernal Field Office.

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

### **DRILLING/COMPLETION/PRODUCING OPERATING STANDARDS**

- The spud date and time shall be reported orally to Vernal Field Office within 24 hours of spudding.
- Notify Vernal Field Office Supervisory Petroleum Engineering Technician at least 24 hours in advance of casing cementing operations and BOPE & casing pressure tests.
- All requirements listed in Onshore Order #2 III. E. Special Drilling Operations are applicable for air drilling of surface hole.
- Blowout prevention equipment (BOPE) shall remain in use until the well is completed or abandoned. Closing unit controls shall remain unobstructed and readily accessible at all times. Choke manifolds shall be located outside of the rig substructure.

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

## OPERATING REQUIREMENT REMINDERS:

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

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

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

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
OMB NO. 1004-0135  
Expires: July 31, 2010

**SUNDRY NOTICES AND REPORTS ON WELLS**  
*Do not use this form for proposals to drill or to re-enter an abandoned well. Use form 3160-3 (APD) for such proposals.*

5. Lease Serial No.  
UTU011336

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.  
891008900A

8. Well Name and No.  
NBU 1022-01CT

9. API Well No.  
43-047-40190

10. Field and Pool, or Exploratory  
NATURAL BUTTES

11. County or Parish, and State  
UINTAH COUNTY, UT

**SUBMIT IN TRIPLICATE - Other instructions on reverse side.**

1. Type of Well  
 Oil Well  Gas Well  Other

2. Name of Operator  
KERR-MCGEE OIL&GAS ONSHORE LP  
Contact: KATHY SCHNEEBECK DULNOAN  
Email: kathy.schneebeckdulnoan@anadarko.com

3a. Address  
PO BOX 173779  
DENVER, CO 80123

3b. Phone No. (include area code)  
Ph: 720-929-6007  
Fx: 720-929-7007

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)  
Sec 1 T10S R22E NENW 819FNL 2106FWL  
39.98303 N Lat, 109.38956 W Lon

**12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA**

TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other Change to Original A PD
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

Kerr-McGee Oil & Gas Onshore LP (KMG) respectfully requests a change to the surface location of this well to accommodate the new drilling rigs.

The surface location is changing  
FROM: 819' FNL 2106' FWL  
TO: 819' FNL 2066' FWL

637496X 39.983027  
44269054 -109.389699

Please see the attached revised survey plats and interference diagram reflecting this change in surface location. All other information remains the same, including the amount of disturbance.

If you have any questions, please contact the undersigned. Thank you.

COPY SENT TO OPERATOR  
Date: 4.14.2009  
Initials: KS

**Federal Approval of this  
Action is Necessary**

14. I hereby certify that the foregoing is true and correct.

**Electronic Submission #68694 verified by the BLM Well Information System  
For KERR-MCGEE OIL&GAS ONSHORE LP, sent to the Vernal**

Name (Printed/Typed) KATHY SCHNEEBECK DULNOAN Title STAFF REGULATORY ANALYST

Signature *Kathy Schneebek Dulnoan* (Electronic Submission) Date 04/05/2009

**THIS SPACE FOR FEDERAL OR STATE OFFICE USE**

Approved By *[Signature]* Title **BRADLEY G. HILL** Date **04-09-09**

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

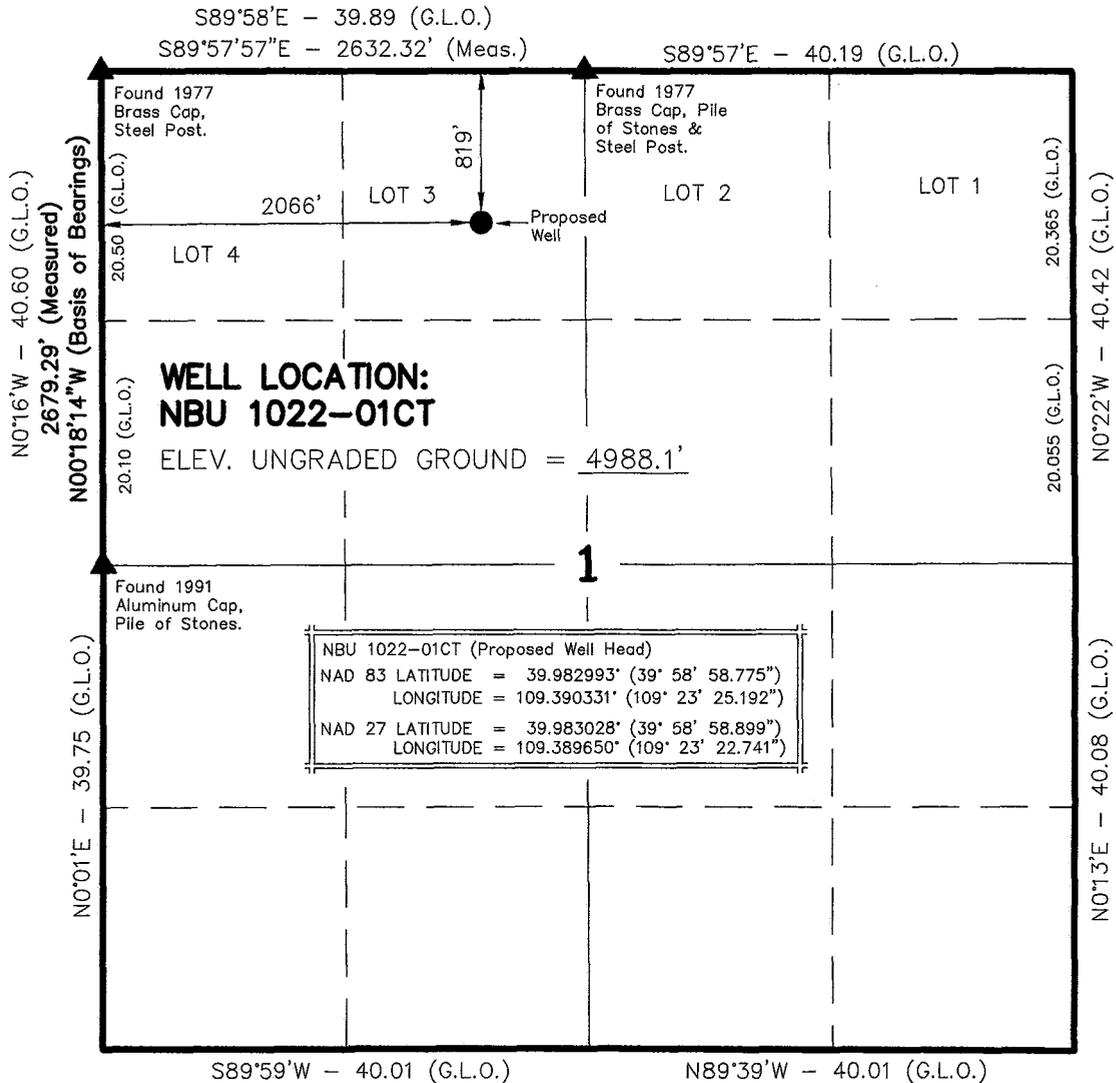
Office ENVIRONMENTAL MANAGER

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

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

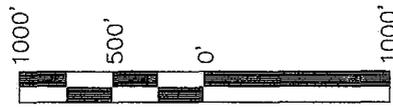
**RECEIVED**  
**APR 09 2009**

# T10S, R22E, S.L.B.&M.



**NOTES:**

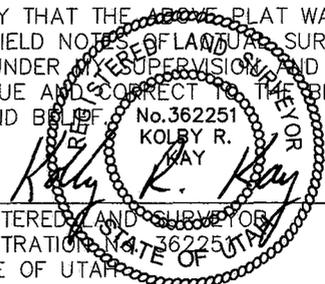
- ▲ = Section Corners Located
- 1. Well footages are measured at right angles to the Section Lines.
- 2. G.L.O. distances are shown in feet or chains. 1 chain = 66 feet.
- 3. Bearings are based on Global Positioning Satellite observations.
- 4. Basis of elevation is Tri-Sta "Two Water" located in the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



SCALE

**SURVEYOR'S CERTIFICATE**

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



REGISTERED LAND SURVEYOR  
REGISTRATION NO. 362251  
STATE OF UTAH

**Kerr-McGee**  
**Oil & Gas Onshore, LP**  
1099 18th Street, Suite 1200 - Denver, Colorado 80202

**NBU 1022-01CT**  
**WELL PLAT**  
819' FNL, 2066' FWL  
LOT 3 OF SECTION 1, T10S, R22E,  
S.L.B.&M. UINTAH COUNTY, UTAH.

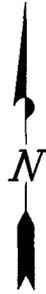
CONSULTING, LLC  
371 Coffeen Avenue  
Sheridan WY 82801  
Phone 307-674-0609  
Fax 307-674-0182

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

DATE SURVEYED: 06-03-08	SURVEYED BY: K.R.K.	<b>SHEET</b> <b>2</b> <b>OF 7</b>
DATE DRAWN: 06-05-08	DRAWN BY: M.W.W.	
SCALE: 1" = 1000'	Date Last Revised: 03-23-09	

# WELL PAD INTERFERENCE PLAT

## NBU 1022-01CT



BASIS OF BEARINGS IS THE WEST LINE OF THE NW 1/4 OF SECTION 1, T10S, R22E, S.L.B.&M. WHICH IS TAKEN FROM GLOBAL POSITIONING SATELLITE OBSERVATIONS TO BEAR  $N00^{\circ}18'14''W$ .

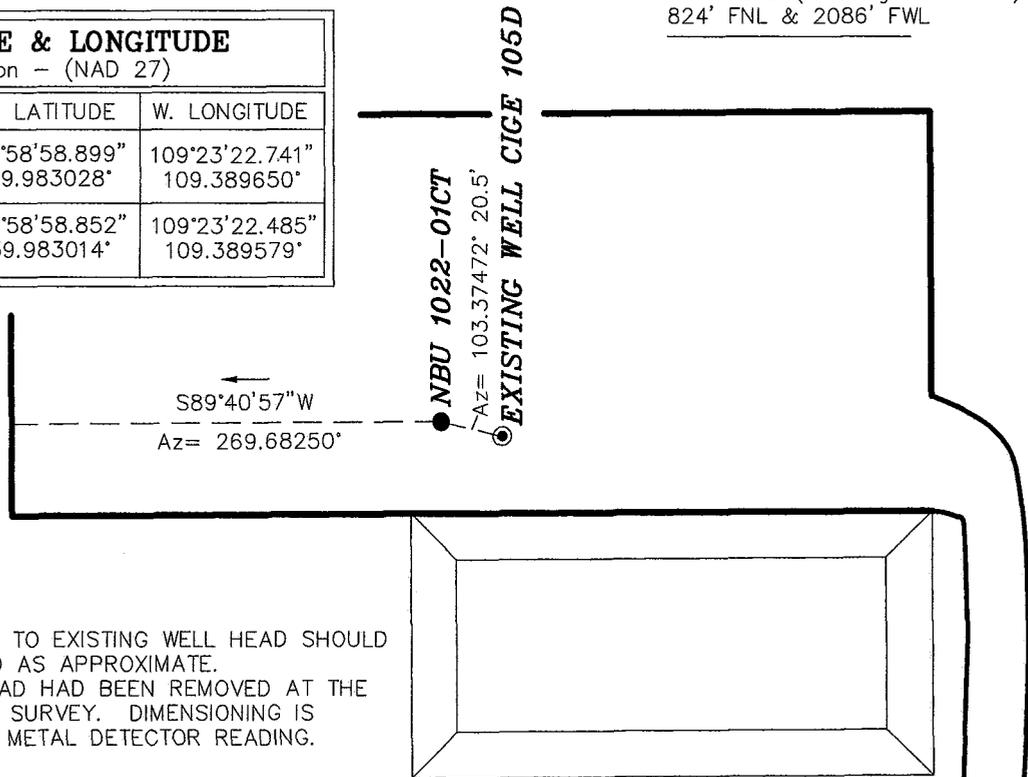
LATITUDE & LONGITUDE		
Surface Position - (NAD 83)		
WELL	N. LATITUDE	W. LONGITUDE
1022-01CT	39°58'58.775" 39.982993°	109°23'25.192" 109.390331°
Existing Well CIGE 105D	39°58'58.728" 39.982980°	109°23'24.936" 109.390260°

**SURFACE FOOTAGES:**

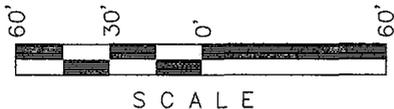
NBU 1022-01CT  
819' FNL & 2066' FWL

CIGE 105D (Existing Well Head)  
824' FNL & 2086' FWL

LATITUDE & LONGITUDE		
Surface Position - (NAD 27)		
WELL	N. LATITUDE	W. LONGITUDE
1022-01CT	39°58'58.899" 39.983028°	109°23'22.741" 109.389650°
Existing Well CIGE 105D	39°58'58.852" 39.983014°	109°23'22.485" 109.389579°



NOTE:  
DIMENSIONING TO EXISTING WELL HEAD SHOULD BE REGARDED AS APPROXIMATE. THE WELL HEAD HAD BEEN REMOVED AT THE TIME OF THIS SURVEY. DIMENSIONING IS SHOWN TO A METAL DETECTOR READING.



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



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

DATE SURVEYED: 06-03-08	SURVEYED BY: K.R.K.
DATE DRAWN: 11-17-08	DRAWN BY: M.W.W.
	REVISED: 03-23-09

NBU 1022-01CT  
LOCATED IN SECTION 1, T10S, R22E,  
S.L.B.&M. Uintah County, Utah.

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

SHEET  
**2b**  
OF 7

<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	<b>FORM 9</b>  <b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> UTU-011336
<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 1022-01CT
<b>2. NAME OF OPERATOR:</b> KERR-MCGEE OIL & GAS ONSHORE, L.P.	<b>9. API NUMBER:</b> 43047401900000
<b>3. ADDRESS OF OPERATOR:</b> P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779	<b>PHONE NUMBER:</b> 720 929-6587 Ext
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 0819 FNL 2066 FWL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: NENW Section: 01 Township: 10.0S Range: 22.0E Meridian: S	<b>9. FIELD and POOL or WILDCAT:</b> NATURAL BUTTES  <b>COUNTY:</b> UINTAH  <b>STATE:</b> UTAH

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

TYPE OF SUBMISSION	TYPE OF ACTION		
<input checked="" type="checkbox"/> <b>NOTICE OF INTENT</b> Approximate date work will start: 5/17/2009	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> CASING REPAIR
<input type="checkbox"/> <b>SUBSEQUENT REPORT</b> Date of Work Completion:	<input checked="" type="checkbox"/> <b>CHANGE TO PREVIOUS PLANS</b>	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> CHANGE WELL NAME
<input type="checkbox"/> <b>SPUD REPORT</b> Date of Spud:	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> CONVERT WELL TYPE
<input type="checkbox"/> <b>DRILLING REPORT</b> Report Date:	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> NEW CONSTRUCTION
	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> PLUG BACK
	<input type="checkbox"/> PRODUCTION START OR RESUME	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION
	<input type="checkbox"/> REPERFORATE CURRENT FORMATION	<input type="checkbox"/> SIDETRACK TO REPAIR WELL	<input type="checkbox"/> TEMPORARY ABANDON
	<input type="checkbox"/> TUBING REPAIR	<input type="checkbox"/> VENT OR FLARE	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> WATER SHUTOFF	<input type="checkbox"/> SI TA STATUS EXTENSION	<input type="checkbox"/> APD EXTENSION
	<input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> OTHER	OTHER: _____

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

Kerr-McGee Oil & Gas Onshore LP respectfully requests to change the surface casing for this well from 2,000' to 2,075'. Please see the attached drilling diagram for additional details. Please contact the undersigned if you have any questions and/or comments. Thank you.

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

Date: May 18, 2009

By: *Danielle Piernot*

<b>NAME (PLEASE PRINT)</b> Danielle Piernot	<b>PHONE NUMBER</b> 720 929-6156	<b>TITLE</b> Regulatory Analyst
<b>SIGNATURE</b> N/A	<b>DATE</b> 5/14/2009	





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

### CASING PROGRAM

	SIZE	INTERVAL	WT.	GR.	CPLG.	DESIGN FACTORS		
						BURST	COLLAPSE	TENSION
CONDUCTOR	14"	0-40'				3,520	2,020	453,000
SURFACE	9-5/8"	0 to 2075	36.00	J-55	LTC	1.07*	2.08	6.06
PRODUCTION	4-1/2"	0 to 8500	11.60	I-80	LTC	2.36	1.23	2.48

\*Burst on surface casing is controlled by fracture gradient as shoe with gas gradient above. D.F. = 2.69

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

2) MASP (Prod Casing) = Pore Pressure at TD - (0.22 psi/ft-partial evac gradient x TD)  
 (Burst Assumptions: TD = 11.7 ppg) 0.22 psi/ft = gradient for partially evac wellbore  
 (Collapse Assumption: Fully Evacuated Casing, Max MW) (Tension Assumptions: Air Weight of Casing\*Buoy.Fact. of water)  
**MASP 3,205 psi**

3) Maximum Anticipated Bottom Hole Pressure (MABHP) = Pore Pressure at TD  
 (Burst Assumptions: TD = 11.7 ppg) 0.6 psi/ft = bottomhole gradient  
 (Collapse Assumption: Fully Evacuated Casing, Max MW) (Tension Assumptions: Air Weight of Casing\*Buoy.Fact. of water)  
**MABHP 5,075 psi**

### 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	3,630'	Premium Lite II + 0.25 pps celloflake + 5 pps gilsonite + 10% gel + 1% Retarder	350	40%	11.00	3.38
	TAIL	4,870'	50/50 Poz/G + 10% salt + 2% gel + .1% R-3	1190	40%	14.30	1.31

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

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

### FLOAT EQUIPMENT & CENTRALIZERS

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

### ADDITIONAL INFORMATION

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

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

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

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

DRILLING ENGINEER:

John Huycke / Grant Schluender

DATE:

DRILLING SUPERINTENDENT:

John Merkel / Level Young

DATE:

<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	<b>FORM 9</b>  <b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> UTU-011336
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<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 1022-01CT
------------------------------------	--

<b>2. NAME OF OPERATOR:</b> KERR-MCGEE OIL & GAS ONSHORE, L.P.	<b>9. API NUMBER:</b> 43047401900000
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<b>3. ADDRESS OF OPERATOR:</b> P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779	<b>PHONE NUMBER:</b> 720 929-6587 Ext	<b>9. FIELD and POOL or WILDCAT:</b> NATURAL BUTTES
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<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 0819 FNL 2066 FWL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: NENW Section: 01 Township: 10.0S Range: 22.0E Meridian: S	<b>COUNTY:</b> UINTAH  <b>STATE:</b> UTAH
---	---

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

TYPE OF SUBMISSION	TYPE OF ACTION		
<input type="checkbox"/> <b>NOTICE OF INTENT</b> Approximate date work will start:	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> CASING REPAIR
<input type="checkbox"/> <b>SUBSEQUENT REPORT</b> Date of Work Completion:	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> CHANGE WELL NAME
<input checked="" type="checkbox"/> <b>SPUD REPORT</b> Date of Spud: 6/4/2009	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> CONVERT WELL TYPE
<input type="checkbox"/> <b>DRILLING REPORT</b> Report Date:	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> NEW CONSTRUCTION
	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> PLUG BACK
	<input type="checkbox"/> PRODUCTION START OR RESUME	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION
	<input type="checkbox"/> REPERFORATE CURRENT FORMATION	<input type="checkbox"/> SIDETRACK TO REPAIR WELL	<input type="checkbox"/> TEMPORARY ABANDON
	<input type="checkbox"/> TUBING REPAIR	<input type="checkbox"/> VENT OR FLARE	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> WATER SHUTOFF	<input type="checkbox"/> SI TA STATUS EXTENSION	<input type="checkbox"/> APD EXTENSION
	<input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> OTHER	OTHER: _____

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.  
 MIRU PETE MARTIN BUCKET RIG. DRILLED 20" CONDUCTOR HOLE TO 40'.  
 RAN 14" 36.7# SCHEDULE 10 PIPE. CMT W/28 SX READY MIX. SPUD WELL LOCATION ON 06/04/2009 AT 1600 HRS.

**Accepted by the**  
**Utah Division of**  
**Oil, Gas and Mining**  
**FOR RECORD ONLY**  
 June 09, 2009

<b>NAME (PLEASE PRINT)</b> Sheila Upchego	<b>PHONE NUMBER</b> 435 781-7024	<b>TITLE</b> Regulatory Analyst
<b>SIGNATURE</b> N/A		<b>DATE</b> 6/9/2009

<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	<b>FORM 9</b>  <b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> UTU-011336
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<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 1022-01CT
------------------------------------	--

<b>2. NAME OF OPERATOR:</b> KERR-MCGEE OIL & GAS ONSHORE, L.P.	<b>9. API NUMBER:</b> 43047401900000
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<b>3. ADDRESS OF OPERATOR:</b> P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779	<b>PHONE NUMBER:</b> 720 929-6587 Ext	<b>9. FIELD and POOL or WILDCAT:</b> NATURAL BUTTES
---	--	--

<b>4. LOCATION OF WELL FOOTAGES AT SURFACE:</b> 0819 FNL 2066 FWL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: NENW Section: 01 Township: 10.0S Range: 22.0E Meridian: S	<b>COUNTY:</b> UINTAH  <b>STATE:</b> UTAH
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11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
<input type="checkbox"/> <b>NOTICE OF INTENT</b> Approximate date work will start:	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> CASING REPAIR
<input type="checkbox"/> <b>SUBSEQUENT REPORT</b> Date of Work Completion:	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> CHANGE WELL NAME
<input type="checkbox"/> <b>SPUD REPORT</b> Date of Spud:	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> CONVERT WELL TYPE
<input checked="" type="checkbox"/> <b>DRILLING REPORT</b> Report Date: 6/12/2009	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> NEW CONSTRUCTION
	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> PLUG BACK
	<input type="checkbox"/> PRODUCTION START OR RESUME	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION
	<input type="checkbox"/> REPERFORATE CURRENT FORMATION	<input type="checkbox"/> SIDETRACK TO REPAIR WELL	<input type="checkbox"/> TEMPORARY ABANDON
	<input type="checkbox"/> TUBING REPAIR	<input type="checkbox"/> VENT OR FLARE	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> WATER SHUTOFF	<input type="checkbox"/> SI TA STATUS EXTENSION	<input type="checkbox"/> APD EXTENSION
	<input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> OTHER	OTHER: _____

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

MIRU PROPETRO AIR RIG ON 06/08/2009. DRILLED 12 1/4" SURFACE HOLE TO 2090'. RAN 9 5/8 #36 J55. PUMP 300SX PREM CLASS G @15.8# 1.15 YIELD DISPLACE 154 BBLs DID NOT BUMP PLUG, FINAL LIFT PSI 165. PMP 500SX PREM CLASS G @ 15.8# 1.15 YIELD. DOWN BACKSIDE CMT TO SURFACE HOLE STAYED FULL. WORT.

Accepted by the  
 Utah Division of  
 Oil, Gas and Mining  
**FOR RECORD ONLY**  
 June 10, 2009

<b>NAME (PLEASE PRINT)</b> Sheila Upchego	<b>PHONE NUMBER</b> 435 781-7024	<b>TITLE</b> Regulatory Analyst
<b>SIGNATURE</b> N/A	<b>DATE</b> 6/15/2009	

<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	<b>FORM 9</b>  <b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> UTU-011336
<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 1022-01CT
<b>2. NAME OF OPERATOR:</b> KERR-MCGEE OIL & GAS ONSHORE, L.P.	<b>9. API NUMBER:</b> 43047401900000
<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> 0819 FNL 2066 FWL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: NENW Section: 01 Township: 10.0S Range: 22.0E 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"/> <b>NOTICE OF INTENT</b> Approximate date work will start:	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> CASING REPAIR
<input type="checkbox"/> <b>SUBSEQUENT REPORT</b> Date of Work Completion:	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> CHANGE WELL NAME
<input type="checkbox"/> <b>SPUD REPORT</b> Date of Spud:	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> CONVERT WELL TYPE
<input checked="" type="checkbox"/> <b>DRILLING REPORT</b> Report Date: 11/13/2009	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> NEW CONSTRUCTION
	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> PLUG BACK
	<input checked="" type="checkbox"/> <b>PRODUCTION START OR RESUME</b>	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION
	<input type="checkbox"/> REPERFORATE CURRENT FORMATION	<input type="checkbox"/> SIDETRACK TO REPAIR WELL	<input type="checkbox"/> TEMPORARY ABANDON
	<input type="checkbox"/> TUBING REPAIR	<input type="checkbox"/> VENT OR FLARE	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> WATER SHUTOFF	<input type="checkbox"/> SI TA STATUS EXTENSION	<input type="checkbox"/> APD EXTENSION
	<input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> OTHER	OTHER: _____

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.  
 THE SUBJECT WELL WAS PLACED ON PRODUCTION ON 11/13/2009 AT 12:00 P.M. PLEASE REFER TO THE ATTACHED CHRONOLOGICAL WELL HISTORY.

Accepted by the  
 Utah Division of  
 Oil, Gas and Mining  
**FOR RECORD ONLY**  
 November 17, 2009

<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> 11/16/2009

**US ROCKIES REGION  
Operation Summary Report**

Well: NBU 1022-1CT	Spud Conductor: 6/4/2009	Spud Date: 6/8/2009
Project: UTAH-UINTAH	Site: NBU 1022-1CT	Rig Name No: PIONEER 69/69, PROPETRO/
Event: DRILLING	Start Date: 3/12/2009	End Date: 7/17/2009
Active Datum: RKB @5,007.00ft (above Mean Sea Level)	UWI: 0/10/S/22/E/1/0/NENW/6/PM/N/819.00/W/0/2, 106.00/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
6/8/2009	8:00 - 13:30	5.50	DRLSUR	02	A	P		AIR SPUD SURFACE 08:00 7/8/2009. DRILL 40'-510'. W/ AIR HAMMER AND AIR MIST
	13:30 - 14:00	0.50	DRLSUR	10	B	P		MULTISHOT WIRELINE SURVEY 500'=. 3 DEG, 204.7 RAW AZI, CENTER TO CENTER 14.35', SF= 20.35
	14:00 - 23:30	9.50	DRLSUR	02	A	P		DRILL 510'- 1050' W/ AIR HAMMER AND AIR MIST.
	23:30 - 0:00	0.50	DRLSUR	10	B	P		MULTISHOT WIRELINE SURVEY 1020'=. 1 DEG 94.4 RAW AZI, CENTER TO CENTER 16.54, SF 4.41.
6/9/2009	0:00 - 7:00	7.00	DRLSUR	02	A	P		DRILL W/ AIR HAMMER 1050'-1270' MAKING SMALL AMOUNTS OF WATER.
	7:00 - 7:30	0.50	DRLSUR	05	F	P		CLEAN HOLE.
	7:30 - 8:00	0.50	DRLSUR	10	B	P		MULTISHOT SURVEY 1220'=. 2 DEG 133 RAW AZI. CENTER TO CENTER 14.26', SF= 3.1
	8:00 - 12:00	4.00	DRLSUR	06	A	P		TRIP OUT OF HOLE FOR TRICONE BIT. TRIP IN HOLE.
6/10/2009	12:00 - 0:00	12.00	DRLSUR	02	A	P		DRILL 1270'- 1500'. W/ TRICONE. DRILL W/ AERATED WATER.
	0:00 - 0:00	24.00	DRLSUR	02	A	P		DRILL & SURVEY F/1500 TO 1950
6/11/2009	0:00 - 6:30	6.50	DRLSUR	02	A	P		DRILL TD 2090'
	6:30 - 7:00	0.50	DRLSUR	05	A	P		CIRC & COND F/LDDP
	7:00 - 10:00	3.00	DRLSUR	06	E	P		LDDP & BHA
	10:00 - 14:00	4.00	CSG	12	C	P		RUN 47 JTS 9.625 CSG #36-J55 TO 2046
7/10/2009	14:00 - 15:00	1.00	CSG	12	E	P		PUMP
	6:00 - 19:00	13.00	PROD	01	A	P		MOVE RIG 3.7 MILS TO NBU 1022-1CT, 4 BED & 4 HAUL TRUCKS, 2 FORKLIFTS, 1 CRANE, 1 EXTRA RIG HAND, RELEASE TRUCKS & CRANE @ 17:00 HRS
	19:00 - 22:00	3.00	PROD	01	B	P		RURT
	22:00 - 23:00	1.00	PROD	01	B	P		RIG INSPECTION
7/11/2009	23:00 - 0:00	1.00	PROD	14	A	P		N/U BOP
	0:00 - 3:00	3.00	DRLPRO	14	B	P		N/U BOP
	3:00 - 8:30	5.50	DRLPRO	15	A	P		TEST, TEST RAMS & ALL VALVES 250 LOW - 5000 HIGH, ANN 250 LOW - 2500 HIGH, CASING 1500 F/ 30 MIN ALL TESTS GOOD
	8:30 - 14:00	5.50	DRLPRO	06	A	P		P/U BIT, MM DIR TOOLS BHA & D/P
	14:00 - 16:00	2.00	DRLPRO	09	A	P		CUT DRLG LINE
	16:00 - 18:00	2.00	DRLPRO	02	F	P		DRLG CEMENT & F/E
	18:00 - 0:00	6.00	DRLPRO	02	B	P		SPUD WELL @ 18:00 HRS 7/11/09, DRLG & SLIDE F/ 2108' TO 2754', WOB 16-18, MW 8.3, VIS 26, RPM 55, MM 105, SPM 125, GPM 473, PU/SO/ROT 85-75-80, ON/OFF 1000-780, DIFF 150-300, PUMPING EZ MUD & GEL SWEEPS, SLIDES 2116-2228, 2311-2324, 2406-2418, 2501-2519 @ 75' PH, @ 2913' 73.06' SEPERATION F/ EX WELL
7/12/2009	0:00 - 7:00	7.00	DRLPRO	02	B	P		DRLG & SLIDE F/ 2754' TO 3469', 715' @ 102' PH, WOB 18, MW 8.3, VIS 26, RPM 50, MM 105, SPM 125, GPM 473, PU/SO/ROT 90-85-88, ON/OFF 1150-950, DIFF 150-300, SLIDES 3356-3372, 3451-3466
	7:00 - 7:30	0.50	DRLPRO	07	A	P		SERVICE RIG

**RECEIVED** November 16, 2009

**US ROCKIES REGION  
Operation Summary Report**

Well: NBU 1022-1CT	Spud Conductor: 6/4/2009	Spud Date: 6/8/2009
Project: UTAH-UINTAH	Site: NBU 1022-1CT	Rig Name No: PIONEER 69/69, PROPETRO/
Event: DRILLING	Start Date: 3/12/2009	End Date: 7/17/2009
Active Datum: RKB @5,007.00ft (above Mean Sea Level)	UWI: 0/10/S/22/E/1/0/NENW/6/PM/N/819.00/W/O/2,106.00/O/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
	7:30 - 0:00	16.50	DRLPRO	02	B	P		DRLG & SLIDE F/ 3469 TO 5318', 1849' @ 112' PH, GEL SWEEPS, WOB 18, MW 8.4, VIS 27, RPM 50, MM 105, SPM 125, GPM 473, PU/SO/ROT 130-120-110, DIFF 150-300, SLIDES 3545-3561, 3641-3661, 4432-4452, 4462-4674, 4685-4705, 4977-4992
7/13/2009	0:00 - 9:00	9.00	DRLPRO	02	B	P		DRLG F/ 5318' TO 6070', 752' @ 83.5' PH, WOB 18, MW 8.4, VIS 27, RPM 50, MM 105, SPM 125, GPM 473, PU/SO/ROT 140-120-130, ON/OFF 1450-1200, DIFF 150-300,
	9:00 - 9:30	0.50	DRLPRO	08	B	P		TUBO LEAKING OIL, TROUBLE SHOOT PROB
	9:30 - 11:30	2.00	DRLPRO	02	B	P		DRLG F/ 6070' TO 6205', 135' @ 67.5' PH, WOB 18, MW 8.4, VIS 27, RPM 50, MM 105, SPM 125, GPM 473, PU/SO/ROT 145-125-135, ON/OFF 1450-1200, DIFF 150-300
	11:30 - 12:00	0.50	DRLPRO	07	A	P		SERVICE RIG
	12:00 - 0:00	12.00	DRLPRO	02	B	P		DRLG F/ 6205' TO 7099', 894' @ 74.5' PH, WOB 18, MW 9.4, VIS 36, RPM 50, MM 105, SPM 125, GPM 473, PU/SO/ROT 150-130-140, ON/OFF 1900-1600, DIFF 150-300
7/14/2009	0:00 - 1:30	1.50	DRLPRO	08	B	Z		REPLACE TURBO ON ROT MOTOR
	1:30 - 2:00	0.50	DRLPRO	02	B	P		DRLG F/ 7099 TO 7120' 21' @ 42' PH, WOB 20, MW 10, VIS 37, RPM 50, MM 105, SPM 125, GPM 473, PU/SO/ROT 150-130-140, ON/OFF 2000-1800, DIFF 150-250
	2:00 - 2:30	0.50	DRLPRO	08	B	Z		CLEAN BREATHER ON ROT MOTOR
	2:30 - 15:00	12.50	DRLPRO	02	B	P		DRLG F/7120' TO 7691' 571' @ 45.7' PH, WOB 20, MW 10.3, VIS 37, RPM 50, SPM 125, GPM 473, PU/SO/ROT 165-140-155, ON/OFF 2200-2000, DIFF 150-250
	15:00 - 15:30	0.50	DRLPRO	07	A	P		SERVICE RIG
	15:30 - 0:00	8.50	DRLPRO	02	B	P		DRLG F/ 7691' TO 8099', 408' @ 48' PH, WOB 20-22, MW 10.5, VIS 37, RPM 50, MM 105, SPM 125, GPM 473, PU/SO/ROT 174-145-162, ON/OFF 2400-2200, DIFF 150-250
7/15/2009	0:00 - 11:30	11.50	DRLPRO	02	B	P		DRLG F/ 8099' TO 8610', TD WELL @ 11:30 7/15/09, 511' @ 44.4' PH, MW 11.2, VIS 40, WOB 22-24, RPM 50, MM 105, SPM 125, GPM 473, PU/SO/ROT 185-155-165, ON/OFF 2400-2200, DIFF 150-300
	11:30 - 13:00	1.50	DRLPRO	05	C	P		C&C HOLE F/ SHORT TRIP, LOST 130 BBLS @ TD
	13:00 - 19:00	6.00	DRLPRO	06	E	P		SHORT TRIP TO SHOE WASH & REAM 70' TO BOTTOM, 10' FILL, TIGHT @ 4200' OUT, 5200 IN, LOST 20 BBLS ON TRIP
	19:00 - 21:00	2.00	DRLPRO	05	C	P		C&C HOLE TO LDDS, NO LOSSES
	21:00 - 0:00	3.00	DRLPRO	06	A	P		HPJSM W/ L/D & RIG CREWS, R/U & LDDS
7/16/2009	0:00 - 3:30	3.50	DRLPRO	06	A	P		FINISH LDDP, BREAK KELLY, L/D BHA & DIR TOOLS, PULL WEAR BUSHING
	3:30 - 13:00	9.50	DRLPRO	11	D	P		HPJSM W/ RIG & LOGGING CREWS, R/U & RUN TRIPLE COMBO TO 8523' LOG OUT, R/D
	13:00 - 20:00	7.00	DRLPRO	12	C	P		HPJSM W/ RIG & CASING CREWS, R/U & RUN 203 JTS I-80, 4 1/2" WASH LAST 70' TO BOTTOM, L/D TAG JT P/U MANDREL & LANDING JT, SET PIPE @ 8607', FLOAT @ 8563'
	20:00 - 22:00	2.00	DRLPRO	05	A	P		C&C HOLE TO CEMENT PROD CASING

**RECEIVED** November 16, 2009

**US ROCKIES REGION**

**Operation Summary Report**

Well: NBU 1022-1CT		Spud Conductor: 6/4/2009	Spud Date: 6/8/2009
Project: UTAH-UINTAH		Site: NBU 1022-1CT	Rig Name No: PIONEER 69/69, PROPETRO/
Event: DRILLING		Start Date: 3/12/2009	End Date: 7/17/2009
Active Datum: RKB @5,007.00ft (above Mean Sea Level)		UWI: 0/10/S/22/E/1/0/NENW/6/PM/N/819.00/W/0/2,106.00/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
	22:00 - 0:00	2.00	DRLPRO	12	E	P		HPJSM W/ RIG & CEMENTING CREWS, R/U & PSI TEST LINES TO 4000 PSI, POP OFF @ 4200, PUMP 40 BBLS WATER SPACER, LEAD 372 SXS 11.2 PPG, 2.99 YLD, TAIL 1378 SXS, 14.3 PPG, 1.31 YLD, DROP PLUG & DISPLACE W/ 133.1 BBLS CLAYTREAT WATER, BUMP PLUG @ 3300, 690 OVER FINAL PSI OF 2680 , FULL RETURNS THOUGHOUT JOB W/ 40 BBLS WATER & 48 BBLS CEMENT TO PIT, 2 BBLS BACK TO TRUCK, FLUSH STACK & LAND CASING W/ 88,000
7/17/2009	0:00 - 1:00	1.00	DRLPRO	12	E	P		FINISH CEMENTING, R/D CEMENTERS
	1:00 - 5:00	4.00	DRLPRO	14	A	P		N/D BOP, CLEAN PITS, RELEASE RIG @ 05:00 7/17/09

**RECEIVED** November 16, 2009

**US ROCKIES REGION  
Operation Summary Report**

Well: NBU 1022-1CT	Spud Conductor: 6/4/2009	Spud Date: 6/8/2009
Project: UTAH-UINTAH	Site: NBU 1022-1CT	Rig Name No: GWS 1/1
Event: COMPLETION	Start Date: 11/5/2009	End Date: 11/15/2009
Active Datum: RKB @5,007.00ft (above Mean Sea Level)	UWI: 0/10/S/22/E/1/0/NENW/6/PM/N/819.00/W/0/2, 106.00/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
11/5/2009	7:00 - 7:30	0.50	COMP	48		P		HSM. RIGGING UP. PINCH POINTS
	7:30 - 16:00	8.50	COMP	31	I	P		MIRU RIG & SPOT IN RIG EQUIPMENT. ND WELL HEAD NU BOP. PU 3 7/8" MIL & SUB. DRIFT & TALLY & RIH W/ 204 JTS OF 2 3/8" J-55 4.7# TBG. 6,444' POOH W/ 102 STANDS. SWI SDFN
11/6/2009	7:00 - 7:30	0.50	COMP	48		P		HSM. PRESSURE TESTING CASING & FRAC VALVES
	7:30 - 15:00	7.50	COMP	37	C	P		ND BOP NU FRAC VALVES. MIRU B&C QUICK TEST. PRESSURE TEST CASING & FRAC VALVES TO 7,000 PSI. GOOD TEST. RDMO B&C QUICK TEST. MIRU CASED HOLE SOLUTIONS. STG 1) PU 3 3/8" EXP GNS, 23 GRM, .36 HOLES, 90 & 120 DEG PHASING. RIH PERF 8,484' - 86' 4SPF, 8,402' - 06' 4SPF, 8,358' - 60' 4SPF, 8,330' - 32' 3SPF, 8,270' - 72' 3SPF, 44 HOLES. POOH W/ WIRE LINE. PREPED TO FRAC MONDAY AM.
11/9/2009	7:00 - 7:30	0.50	COMP	48		P		HSM, WORKING W/ WIRELINE AND WATCHING PRESSURE LINES.
	7:30 - 9:35	2.08	COMP	36	E	P		MIRU SUPERIOR, PRIME UP PUMPS AND LINES. PRESSURE TEST SURFACE LINES TO 8,500 PSI. ( STG 1 ) WHP 1650 PSI, BRK @ 3458 PSI, @ 4.7 BPM, ISIP 2655, FG .76. PUMP 100 BBLs @ 50 BPM @ 5310 PS=100% PERFS OPEN. MP 5559 PSI, MR 50.9 BPM, AP 4626 PSI, AR 50 BPM, ISIP 2609 PSI, FG .75. NPI -46 PSI, PUMPED 2047 BBLs SW, & 67, 677 LBS OF 30/50 SND & 5,000 LBS OF 20/40 RESIN SND. TOTAL PROP 72, 677 LBS.
	9:35 - 11:15	1.67	COMP	36	E	P		( STG 2 ) PU 4 1/2" CBP & 3 1/8" EXP GNS, 23 GRM, .36" HOLES, 90 DEG PHASING. SET HAL 8K CBP @ 8172' & PERF 8140'-8142' 4 SPF, 8 HLS. 8114'-8116' 4 SPF 8 HLS. 8082'-8085' 4 SPF 12 HLS. 8030'-8033' 4 SPF 12 HLS. TOTAL 40 HOLES. WHP 950 PSI, BRK 3570 PSI @ 4.0 BPM, ISIP 2451 PSI, FG .74. PUMPED 100 BBLs @ 52 BPM @ 5,072 PS= 100% PERFS OPEN. MP 6042 PSI, MR 53.9, AP 5179 PSI, AR 52, ISIP 2667 PSI, FG .77. NPI 216 PSI, PUMPED 692 BBLs SW & 17,083 LBS 30/50 SND & 5,000 LBS 20/40 RESIN SAND. TOTAL PROP 22,083.

**RECEIVED** November 16, 2009

US ROCKIES REGION

**Operation Summary Report**

Well: NBU 1022-1CT	Spud Conductor: 6/4/2009	Spud Date: 6/8/2009
Project: UTAH-UINTAH	Site: NBU 1022-1CT	Rig Name No: GWS 1/1
Event: COMPLETION	Start Date: 11/5/2009	End Date: 11/15/2009
Active Datum: RKB @5,007.00ft (above Mean Sea Level)	UWI: 0/10/S/22/E/1/0/NENW/6/PM/N/819.00/W/0/2,106.00/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	PAU	MD From (ft)	Operation
	11:15 - 14:58	3.72	COMP	36	E	P		( STG 3 ) PU 41/2" CBP & 31/8" EXP GNS, 23 GRM, .36" HOLES, 90 DEG PHASING. SET HAL 8K CBP @ 7950' & PERF 7918'-7920' 4 SPF 8 HLS, 7898'-7902' 4 SPF 16 HLS, 7884'-7886' 4 SPF, 8 HLS. 7860'-7862' 4 SPF 8 HLS. TOTAL 40 HOLES. WHP 985 PSI, BRK 3603 PSI @ 4.4 BPM, ISIP 2492 PSI, FG .76. PUMPED 100 BBLS @ 49.6 BPM @ 5,018 PS= 100% PERFS OPEN PUMPED 4721 LBS OF .8 PPGAL 30/50 SND. MOTOR QUIT ON BLENDER RAN OUT OF FUEL . FLUSHED W/ 122.2 BBLS, ISIP 2580 PSI. WENT DWN 12:47 PM GOT BLENDER RUNNIG AGAIN @ 13:45.CONTINED W/ JOB. PUMPED ADDITIONAL 52,416 LBS SAND AND 1336 BBLS SW. MP 7362 PSI, MR 50.9, AP 5323 PSI, AR 44.8, ISIP 2330 PSI, FG .74. NPI -162 PSI, PUMPED 1896 BBLS SW & 57,137 LBS 30/50 SND SCREENED OUT W/ 47,901 LBS SAND IN FORM. FLOWED WELL BACK FOR 25 MIN. RELUSH W/ 2 BBLS WTR, 6 BBLS ACID, 116.3 BBLS WTR @ 12.4 BPM @ 4145 PSI, ISIP 3040 PSI.
	14:58 - 16:40	1.70	COMP	36	E	P		( STG 4 ) PU 41/2" CBP & 31/8" EXP GNS, 23 GRM, .36" HOLES, 90 DEG PHASING. SET HAL 8K CBP @ 7792' & PERF 7765'-7768' 4SPF, 12 HLS. 7714'-7716' 4 SPF, 8 HLS. 7676'-7678' 4 SPF, 8 HLS. 7642'-7644' 4 SPF, 8 HLS. 7606'-7608' 4 SPF, 8 HLS. TOTAL 44 HOLES. WHP 530 PSI, BRK 6800 PSI @ 7.9 BPM, ISIP 2407 PSI, FG .75. PUMPED 100 BBLS @ 49.5 BPM @ 5,158 PS= 100% PERFS OPEN MP 5332 PSI, MR 50.9, AP 4383 PSI, AR 49.1, ISIP 2483 PSI, FG .76. NPI 76 PSI, PUMPED 1223 BBLS SW & 39,695 LBS 30/50 SND & 5,000 LBS 20/40 RESIN. TOTAL PROP 44,695.
	16:40 - 18:00	1.33	COMP	36	E	P		( STG 5 ) PU 41/2" CBP & 31/8" EXP GNS, 23 GRM, .36" HOLES, 90 DEG PHASING. SET HAL 8K CBP @ 7564' & PERF 7532'-7534' 4 SPF, 8 HLS, 7511'-7512' 4 SPF, 4 HLS. 7462'-7464' 4 SPF 8 HLS. 7432'-7434' 4 SPF 8 HLS. 7390'-7392' 4 SPF, 8 HLS. 7360'-7362' 4 SPF, 8 HLS. TOTAL 44 HOLES. POOH SWI SDFN.
11/10/2009	6:30 - 6:50	0.33	COMP	48		P		HSM, WORKING W/ FRAC AND WIRE LINE CREWS.
	6:50 - 7:16	0.43	COMP	36	E	P		TEST PUMP AND LINES TO 8,000 PSI. ( STG 5 ) WHP 878 PSI, BRK 3743 PSI @ 4.7 BPM, ISIP 1399 PSI, FG .63. PUMPED 100 BBLS @ 50 BPM @ 4,550 PS= 90% PERFS OPEN. MP 5788 PSI, MR 51.1, AP 4091 PSI, AR 49.9, ISIP 1942 PSI, FG .70. NPI 543 PSI, PUMPED 1102 BBLS SW & 37,973 LBS 30/50 SND & 5,000 LBS 20/40 RESIN SAND. TOTAL PROP 42,973.

RECEIVED November 16, 2009

**US ROCKIES REGION  
Operation Summary Report**

Well: NBU 1022-1CT Spud Conductor: 6/4/2009 Spud Date: 6/8/2009  
 Project: UTAH-UINTAH Site: NBU 1022-1CT Rig Name No: GWS 1/1  
 Event: COMPLETION Start Date: 11/5/2009 End Date: 11/15/2009  
 Active Datum: RKB @5,007.00ft (above Mean Sea Level) UWI: 0/10/S/22/E/1/0/NENW/6/PM/N/819.00/W/0/2,106.00/O/0

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
	7:16 - 8:52	1.60	COMP	36	E	P		(STG 6 ) PU 41/2" CBP & 31/8" EXP GNS, 23 GRM, .36" HOLES, 90 DEG PHASING. SET HAL 8K CBP @ 7270' & PERF 7238'-7240' 4 SPF 8 HLS, 7208'-7210' 4 SPF, 8 HLS. 7146'-7150' 4 SPF 16 HLS, 7104'-7106' 4 SPF 8 HLS. TOTAL 40 HOLES. WHP 584 PSI, BRK 4524 PSI @ 4.9 BPM, ISIP 2222 PSI, FG .75. PUMPED 100 BBLS @ 50 BPM @ 4,956 PS= 100% PERFS OPEN. MP 5273 PSI, MR 50.7, AP 4748 PSI, AR 48.6, ISIP 2257 PSI, FG .76. NPI 35 PSI, PUMPED 701 BBLS SW & 17,742 LBS 30/50 SND & 5,000 LBS 20/40 RESIN SAND. TOTAL PROP 22,743.
	8:52 - 10:46	1.90	COMP	36	E	P		( STG 7 ) PU 41/2" CBP & 31/8" EXP GNS, 23 GRM, .36" HOLES, 90 DEG PHASING. SET HAL 8K CBP @ 7076' & PERF 7049'-7052' 4 SPF 12 HLS. 7009'-7012' 4 SPF 12 HLS. 6978'-6980' 4 SPF 8 HLS. 6922'-6924' 4 SPF 8 HLS. TOTAL 40 HOLES. WHP 633 PSI, BRK 5289 PSI @ 6.1 BPM, ISIP 2637 PSI, FG .82. PUMPED 100 BBLS @ 50.1 BPM @ 4,704 PS= 100% PERFS OPEN. MP 4716 PSI, MR 51.2, AP 4176 PSI, AR 49.8, ISIP 2290 PSI, FG .77. NPI -347 PSI, PUMPED 877 BBLS SW & 27,673 LBS 30/50 SND & 5,300 LBS 20/40 RESIN SAND. TOTAL PROP 32,973.EXTRA RESIN F/ STAGE 3 SREEN OUT.
	10:46 - 12:43	1.95	COMP	36	E	P		( STG 8 ) PU 41/2" CBP & 31/8" EXP GNS, 23 GRM, .36" HOLES, 90 & 120 DEG PHASING. SET HAL 8K CBP @ 6894' & PERF 6860'-6864' 4 SPF 16 HLS. 6826'-6828' 3 SPF 6 HLS. 6778'-6782' 4 SPF 16 HLS.6742'-6744' 3 SPF 6 HLS. TOTAL 44 HOLES. WHP 345 PSI, BRK 2128 PSI @ 6.3 BPM, ISIP 1433 PSI, FG .65. PUMPED 100 BBLS @ 50.3 BPM @ 4,499 PS= 88% PERFS OPEN. MP 4569 PSI, MR 50.9, AP 3709 PSI, AR 49.8, ISIP 2217 PSI, FG .77. NPI 784 PSI, PUMPED 1613 BBLS SW & 61,738 LBS 30/50 SND & 5,200 LBS 20/40 RESIN SAND. TOTAL PROP 66,938.EXTRA RESIN F/ STAGE 3 SREEN OUT.
	12:43 - 14:45	2.03	COMP	36	E	P		( STG 9 ) PU 41/2" CBP & 31/8" EXP GNS, 23 GRM, .36" HOLES, 90 & 120 DEG PHASING. SET HAL 8K CBP @ 6678' & PERF 6644'-6648' 4 SPF 16 HLS. 6606'-6610' 3 SPF 12 HLS. 6562'-6566' 4 SPF 16 HLS. TOTAL 44 HOLES. WHP 54 PSI, BRK 1599 PSI @ 5 BPM, ISIP 170 PSI, FG .47. PUMPED 100 BBLS @ 50 BPM @ 2817 PS= 100% PERFS OPEN. MP 3593 PSI, MR 53.6, AP 2892 PSI, AR 48.7, ISIP 1927 PSI, FG .73. NPI 1757 PSI, PUMPED 3051 BBLS SW & 122,908 LBS 30/50 SND & 7,500 LBS 20/40 RESIN SAND. TOTAL PROP 130,408. EXTRA RESIN F/ STAGE 3 SREEN OUT.

**RECEIVED** November 16, 2009

**US ROCKIES REGION  
Operation Summary Report**

Well: NBU 1022-1CT      Spud Conductor: 6/4/2009      Spud Date: 6/8/2009  
 Project: UTAH-UINTAH      Site: NBU 1022-1CT      Rig Name No: GWS 1/1  
 Event: COMPLETION      Start Date: 11/5/2009      End Date: 11/15/2009  
 Active Datum: RKB @5,007.00ft (above Mean Sea Level)      UWI: 0/10/S/22/E/1/0/NENW/6/PM/N/819.00/W/0/2,106.00/0/0

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
	14:45 - 17:30	2.75	COMP	34	I	P		( KILL PLUG ) RIH 41/2" HAL CBP AND SET @ 6512', POOH RD CASED HOLE SOLUTIONS AND SUPERIOR FRAC CREW.
11/11/2009	6:30 - 7:00	0.50	COMP	48		P		HSM, WORKING W/ POWER SWIVEL AND WATCHING PSI ON WELL.
	7:00 - 18:00	11.00	COMP	31	I	P		SICP 0 PSI,RIH W/ 37/8 HURRICAN MILL AND POBS, AND 200 JTS 23/8 J-55 TBG TAG UP @ 6308' RU SWIVEL AND BROKE CIRC W/ 2% KCL, DRILL TROUGH SAND BRIDGE, RIH TAG UP ON KILL PLUG @ 6512' BROKE CIRC.
								C/O 0' SAND TAG 1ST PLUG @ 6512' DRL PLG IN 4 MIN. 100# PSI INCREASE. RIH.
								C/O 0' SAND TAG 2ND PLUG @ 6678' DRL PLG IN 8 MIN. 600# PSI INCREASE. RIH.
								C/O 30' SAND TAG 3RD PLUG @ 6894' DRL PLG IN 6 MIN. 700# PSI INCREASE. RIH.
								C/O 20' SAND TAG 4TH PLUG @ 7076' DRL PLG IN 5 MIN. 400# PSI INCREASE. RIH.
								C/O 15' SAND TAG 5TH PLUG @ 7270' DRL PLG IN 4 MIN. 300# PSI INCREASE. RIH.
								C/O 60' SAND TAG 6TH PLUG @ 7564' DRL PLG IN 9 MIN. 800# PSI INCREASE. RIH.
								C/O 20' SAND TAG 7TH PLUG @ 7792' DRL PLG IN 10 MIN. 500# PSI INCREASE. RIH.
								C/O 20' SAND TAG 8TH PLUG @ 7950' DRL PLG IN 10 MIN. 400# PSI INCREASE. RIH.
								C/O 30' SAND TAG 9TH PLUG @ 8172' DRL PLG IN 9 MIN. 600# PSI INCREASE. RIH.
								C/O TO PBTD @ 8563' CIRC WELL CLEAN W/ 2% KCL.
								L/D 18 JTS 23/8 J-55 TBG. EOT @ 7994.87'W/ 253 JTS 23/8 J-55 4.7# TBG.
								LAND TBG ON HANGER, ND BOPS NU WH, DROP BALL TO SHEAR POBS.
								PUMP OFF BIT, WAIT 30 MIN FOR BIT TO FALL TO BTM.
								TURN WELL OVER TO FLOW BACK CREW. RDMOL.
								284 JTS TO LOCATION      KB 18'
								253 JTS LANDED      HANGER 71/16 .80'
								31 JTS RETURNED.      253 JT2 23/8 J-55
								7973.87'
								1.875 X/N W/ POBS
								2.20'
								TWTR 13,611 BBLs      EOT @ 7994.87'
								TWR 2,000 BBLs
								TWLTR 11,611 BBLs
11/12/2009	7:00 -			33	A			7 AM FLBK REPORT: CP 2700#, TP 2050#, 20/64" CK, 50 BWPH, MEDIUM SAND, - GAS
								TTL BBLs RECOVERED: 2850
								BBLs LEFT TO RECOVER: 10761

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**US ROCKIES REGION  
Operation Summary Report**

Well: NBU 1022-1CT	Spud Conductor: 6/4/2009	Spud Date: 6/8/2009
Project: UTAH-UINTAH	Site: NBU 1022-1CT	Rig Name No: GWS 1/1
Event: COMPLETION	Start Date: 11/5/2009	End Date: 11/15/2009
Active Datum: RKB @5,007.00ft (above Mean Sea Level)		UWI: 0/10/S/22/E/1/0/NENW/6/PM/N/819.00/W/0/2,106.00/0/0

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
11/13/2009	7:00 -			33	A			7 AM FLBK REPORT: CP 2650#, TP 1850#, 20/64" CK, 35 BWPH, MEDIUM SAND, - GAS TTL BBLS RECOVERED: 3745 BBLS LEFT TO RECOVER: 9866
	12:00 -		PROD	50				WELL TURNED TO SALE @ 1200 HE ON 11/13/09 - FTP 1750#, CP 2600#, 1650 MCFD, 30 BWPD, 18/64 CK
11/14/2009	7:00 -			33	A			7 AM FLBK REPORT: CP 2300#, TP 1775#, 18/64" CK, 25 BWPH, LIGHT SAND, HEAVY GAS TTL BBLS RECOVERED: 4410 BBLS LEFT TO RECOVER: 9201
11/15/2009	7:00 -			33	A			7 AM FLBK REPORT: CP 2450#, TP 1750#, 18/64" CK, 20 BWPH, LIGHT SAND, 2163 GAS TTL BBLS RECOVERED: 5055 BBLS LEFT TO RECOVER: 8556
	7:00 -			33	A			7 AM FLBK REPORT: CP 2200#, TP 1725#, 18/64" CK, 20 BWPH, LIGHT SAND, - GAS TTL BBLS RECOVERED: 4955 BBLS LEFT TO RECOVER: 8656

**RECEIVED** November 16, 2009

<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	<b>FORM 9</b>  <b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> UTU-011336
<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 1022-01CT
<b>2. NAME OF OPERATOR:</b> KERR-MCGEE OIL & GAS ONSHORE, L.P.	<b>9. API NUMBER:</b> 43047401900000
<b>3. ADDRESS OF OPERATOR:</b> P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779	<b>PHONE NUMBER:</b> 720 929-6587 Ext
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 0819 FNL 2066 FWL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: NENW Section: 01 Township: 10.0S Range: 22.0E Meridian: S	<b>9. FIELD and POOL or WILDCAT:</b> NATURAL BUTTES  <b>COUNTY:</b> UINTAH  <b>STATE:</b> UTAH

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

TYPE OF SUBMISSION	TYPE OF ACTION		
<input checked="" type="checkbox"/> <b>NOTICE OF INTENT</b> Approximate date work will start: 5/17/2009  <input type="checkbox"/> <b>SUBSEQUENT REPORT</b> Date of Work Completion:  <input type="checkbox"/> <b>SPUD REPORT</b> Date of Spud:  <input type="checkbox"/> <b>DRILLING REPORT</b> Report Date:	<input type="checkbox"/> ACIDIZE <input checked="" type="checkbox"/> CHANGE TO PREVIOUS PLANS <input type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> DEEPEN <input type="checkbox"/> OPERATOR CHANGE <input type="checkbox"/> PRODUCTION START OR RESUME <input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> WATER SHUTOFF <input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> ALTER CASING <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input type="checkbox"/> FRACTURE TREAT <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> SI TA STATUS EXTENSION <input type="checkbox"/> OTHER	<input type="checkbox"/> CASING REPAIR <input type="checkbox"/> CHANGE WELL NAME <input type="checkbox"/> CONVERT WELL TYPE <input type="checkbox"/> NEW CONSTRUCTION <input type="checkbox"/> PLUG BACK <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION <input type="checkbox"/> TEMPORARY ABANDON <input type="checkbox"/> WATER DISPOSAL <input type="checkbox"/> APD EXTENSION OTHER: _____

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

Kerr-McGee Oil & Gas Onshore LP respectfully requests to change the surface casing for this well from 2,000' to 2,075'. Please see the attached drilling diagram for additional details. Please contact the undersigned if you have any questions and/or comments. Thank you.

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

Date: May 18, 2009

By: *Danielle Piernot*

<b>NAME (PLEASE PRINT)</b> Danielle Piernot	<b>PHONE NUMBER</b> 720 929-6156	<b>TITLE</b> Regulatory Analyst
<b>SIGNATURE</b> N/A	<b>DATE</b> 5/14/2009	





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

**CASING PROGRAM**

	SIZE	INTERVAL	WT.	GR.	CPLG.	DESIGN FACTORS		
						BURST	COLLAPSE	TENSION
CONDUCTOR	14"	0-40'				3,520	2,020	453,000
SURFACE	9-5/8"	0 to 2075	36.00	J-55	LTC	1.07*	2.08	6.06
PRODUCTION	4-1/2"	0 to 8500	11.60	I-80	LTC	2.36	1.23	2.48

\*Burst on surface casing is controlled by fracture gradient as shoe with gas gradient above. D.F. = 2.69

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

2) MASP (Prod Casing) = Pore Pressure at TD - (0.22 psi/ft-partial evac gradient x TD)  
 (Burst Assumptions: TD = 11.7 ppg) 0.22 psi/ft = gradient for partially evac wellbore  
 (Collapse Assumption: Fully Evacuated Casing, Max MW) (Tension Assumptions: Air Weight of Casing\*Buoy.Fact. of water)  
**MASP 3,205 psi**

3) Maximum Anticipated Bottom Hole Pressure (MABHP) = Pore Pressure at TD  
 (Burst Assumptions: TD = 11.7 ppg) 0.6 psi/ft = bottomhole gradient  
 (Collapse Assumption: Fully Evacuated Casing, Max MW) (Tension Assumptions: Air Weight of Casing\*Buoy.Fact. of water)  
**MABHP 5,075 psi**

**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
Option 1 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
<b>NOTE: If well will circulate water to surface, option 2 will be utilized</b>						
SURFACE LEAD	1500	Prem cmt + 16% Gel + 10 pps gilsonite + .25 pps Flocele + 3% salt BWOC	170	35%	11.00	3.82
Option 2 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	3,630'	Premium Lite II + 0.25 pps celloflake + 5 pps gilsonite + 10% gel + 1% Retarder	350	40%	11.00	3.38
TAIL	4,870'	50/50 Poz/G + 10% salt + 2% gel + .1% R-3	1190	40%	14.30	1.31

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

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

**FLOAT EQUIPMENT & CENTRALIZERS**

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

**ADDITIONAL INFORMATION**

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

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

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

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

DRILLING ENGINEER: \_\_\_\_\_  
John Huycke / Grant Schluender

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

DRILLING SUPERINTENDENT: \_\_\_\_\_  
John Merkel / Level Young

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

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

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

**WELL COMPLETION OR RECOMPLETION REPORT AND LOG**

5. Lease Serial No.  
UTU011336

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

2. Name of Operator **KERR-MCGEE OIL&GAS ONSHORE** Contact: **ANDY LYTLE**  
 Email: **andrew.lytle@anadarko.com**

3. Address **P.O. BOX 173779 DENVER, CO 80217** 3a. Phone No. (include area code) **8563**  
 Ph: **720-929-6100**

4. Location of Well (Report location clearly and in accordance with Federal requirements)\*  
 At surface **NENW 819FNL 2066FWL 39.98299 N Lat, 109.39033 W Lon**  
 At top prod interval reported below **NENW 819FNL 2066FWL 39.98299 N Lat, 109.39033 W Lon**  
**905 FNL 2125 FWL**  
 At total depth **NENW 819FNL 2066FWL 39.98299 N Lat, 109.39033 W Lon**

6. If Indian, Allottee or Tribe Name \_\_\_\_\_  
 7. Unit or CA Agreement Name and No. **891008900A**  
 8. Lease Name and Well No. **NBU 1022-01CT**  
 9. API Well No. **43-047-40190**  
 10. Field and Pool, or Exploratory **NATURAL BUTTES**  
 11. Sec., T., R., M., or Block and Survey or Area **Sec 1 T10S R22E Mer**  
 12. County or Parish **UINTAH** 13. State **UT**  
 14. Date Spudded **06/04/2009** 15. Date T.D. Reached **07/15/2009** 16. Date Completed **11/13/2009**  
 D & A  Ready to Prod.  
 17. Elevations (DF, KB, RT, GL)\* **4989 GL**  
 18. Total Depth: MD **8610** TVD **8607** 19. Plug Back T.D.: MD **8563** TVD **8560** 20. Depth Bridge Plug Set: MD **8563** TVD **8560**  
 21. Type Electric & Other Mechanical Logs Run (Submit copy of each)  
**FDIL-ZDL-CN-GR BHP, CBL-GR** 22. Was well cored?  No  Yes (Submit analysis)  
 Was DST run?  No  Yes (Submit analysis)  
 Directional Survey?  No  Yes (Submit analysis)

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

Hole Size	Size/Grade	Wt. (#/ft.)	Top (MD)	Bottom (MD)	Stage Cementer Depth	No. of Sk. & Type of Cement	Slurry Vol. (BBL)	Cement Top*	Amount Pulled
20.000	14.000 STEEL	36.7		40		28			
12.250	9.625 J-55	36.0		2065		800			
7.875	4.500 I-80	11.6		8606		1750			

24. Tubing Record

Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)
2.375	7994							

25. Producing Intervals

Formation	Top	Bottom	Perforated Interval	Size	No. Holes	Perf. Status
A) MESAVERDE	6562	8486	6562 TO 8486	0.360	380	OPEN
B)						
C)						
D)						

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

Depth Interval	Amount and Type of Material
6562 TO 8486	PMP 13,201 BBLs SLICK H2O & 483,391 LBS 30/50 SD.

28. Production - Interval A

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
11/13/2009	11/22/2009	24	→		2158.0	100.0			FLows FROM WELL
Choke Size	Tbg. Press. Flwg.	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status	
18/64	349 SI	2058.0	→		2158	100		PGW	

28a. Production - Interval B

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

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28b. Production - Interval C

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

28c. Production - Interval D

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

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

30. Summary of Porous Zones (Include Aquifers):

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

31. Formation (Log) Markers

Formation	Top	Bottom	Descriptions, Contents, etc.	Name	Top
					Meas. Depth
GREEN RIVER	1091				
MAHOGANY	1868				
WASATCH	4194	6271			
MESAVERDE	6360	8511			

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

32. Additional remarks (include plugging procedure):

ATTACHED TO THIS COMPLETION REPORT IS THE CHRONOLOGICAL WELL HISTORY AND END OF WELL REPORT.

33. Circle enclosed attachments:

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

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

**Electronic Submission #78731 Verified by the BLM Well Information System.  
For KERR-MCGEE OIL&GAS ONSHORE, LP, sent to the Vernal**

Name (please print) ANDY LYTLE Title REGULATORY ANALYST

Signature  (Electronic Submission) Date 12/10/2009

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

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

**US ROCKIES REGION  
Operation Summary Report**

Well: NBU 1022-1CT      Spud Conductor: 6/4/2009      Spud Date: 6/8/2009  
 Project: UTAH-UINTAH      Site: NBU 1022-1CT      Rig Name No: PIONEER 69/69, PROPETRO/  
 Event: DRILLING      Start Date: 3/12/2009      End Date: 7/17/2009  
 Active Datum: RKB @5,007.00ft (above Mean Sea Level)      UWI: NE/NW/0/10/S/22/E/1/0/0/6/PM/N/819.00/W/0/2,066.00/0/0

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
6/8/2009	8:00 - 13:30	5.50	DRLSUR	02	A	P		AIR SPUD SURFACE 08:00 7/8/2009. DRILL 40'-510'. W/ AIR HAMMER AND AIR MIST
	13:30 - 14:00	0.50	DRLSUR	10	B	P		MULTISHOT WIRELINE SURVEY 500'= .3 DEG, 204.7 RAW AZI, CENTER TO CENTER 14.35', SF= 20.35
	14:00 - 23:30	9.50	DRLSUR	02	A	P		DRILL 510'- 1050' W/ AIR HAMMER AND AIR MIST.
	23:30 - 0:00	0.50	DRLSUR	10	B	P		MULTISHOT WIRELINE SURVEY 1020'= .1 DEG 94.4 RAW AZI, CENTER TO CENTER 16.54, SF 4.41.
6/9/2009	0:00 - 7:00	7.00	DRLSUR	02	A	P		DRILL W/ AIR HAMMER 1050'-1270' MAKING SMALL AMOUNTS OF WATER.
	7:00 - 7:30	0.50	DRLSUR	05	F	P		CLEAN HOLE.
	7:30 - 8:00	0.50	DRLSUR	10	B	P		MULTISHOT SURVEY 1220'= .2 DEG 133 RAW AZI. CENTER TO CENTER 14.26', SF= 3.1
	8:00 - 12:00	4.00	DRLSUR	06	A	P		TRIP OUT OF HOLE FOR TRICONE BIT. TRIP IN HOLE.
	12:00 - 0:00	12.00	DRLSUR	02	A	P		DRILL 1270'- 1500'. W/ TRICONE. DRILL W/ AERATED WATER.
6/10/2009	0:00 - 0:00	24.00	DRLSUR	02	A	P		DRILL & SURVEY F/1500 TO 1950
6/11/2009	0:00 - 6:30	6.50	DRLSUR	02	A	P		DRILL TD 2090'
	6:30 - 7:00	0.50	DRLSUR	05	A	P		CIRC & COND F/LDDP
	7:00 - 10:00	3.00	DRLSUR	06	E	P		LDDP & BHA
	10:00 - 14:00	4.00	CSG	12	C	P		RUN 47 JTS 9.625 CSG #36-J55 TO 2046
	14:00 - 15:00	1.00	CSG	12	E	P		PUMP
7/10/2009	6:00 - 19:00	13.00	PROD	01	A	P		MOVE RIG 3.7 MILS TO NBU 1022-1CT, 4 BED & 4 HAUL TRUCKS, 2 FORKLIFTS, 1 CRANE, 1 EXTRA RIG HAND, RELEASE TRUCKS & CRANE @ 17:00 HRS
	19:00 - 22:00	3.00	PROD	01	B	P		RURT
	22:00 - 23:00	1.00	PROD	01	B	P		RIG INSPECTION
	23:00 - 0:00	1.00	PROD	14	A	P		N/U BOP
7/11/2009	0:00 - 3:00	3.00	DRLPRO	14	B	P		N/U BOP
	3:00 - 8:30	5.50	DRLPRO	15	A	P		TEST, TEST RAMS & ALL VALVES 250 LOW - 5000 HIGH, ANN 250 LOW - 2500 HIGH, CASING 1500 F/ 30 MIN ALL TESTS GOOD
	8:30 - 14:00	5.50	DRLPRO	06	A	P		P/U BIT, MM DIR TOOLS BHA & D/P
	14:00 - 16:00	2.00	DRLPRO	09	A	P		CUT DRLG LINE
	16:00 - 18:00	2.00	DRLPRO	02	F	P		DRLG CEMENT & F/E
	18:00 - 0:00	6.00	DRLPRO	02	B	P		SPUD WELL @ 18:00 HRS 7/11/09, DRLG & SLIDE F/ 2108' TO 2754', WOB 16-18, MW 8.3, VIS 26, RPM 55, MM 105, SPM 125, GPM 473, PU/SO/ROT 85-75-80, ON/OFF 1000-780, DIFF 150-300, PUMPING EZ MUD & GEL SWEEPS, SLIDES 2116-2228, 2311-2324, 2406-2418, 2501-2519 @ 75' PH, @ 2913' 73.06' SEPERATION F/ EX WELL
7/12/2009	0:00 - 7:00	7.00	DRLPRO	02	B	P		DRLG & SLIDE F/ 2754' TO 3469', 715' @ 102' PH, WOB 18, MW 8.3, VIS 26, RPM 50, MM 105, SPM 125, GPM 473, PU/SO/ROT 90-85-88, ON/OFF 1150-950, DIFF 150-300, SLIDES 3356-3372, 3451-3466
	7:00 - 7:30	0.50	DRLPRO	07	A	P		SERVICE RIG

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

Well: NBU 1022-1CT      Spud Conductor: 6/4/2009      Spud Date: 6/8/2009  
 Project: UTAH-UINTAH      Site: NBU 1022-1CT      Rig Name No: PIONEER 69/69, PROPETRO/  
 Event: DRILLING      Start Date: 3/12/2009      End Date: 7/17/2009  
 Active Datum: RKB @5,007.00ft (above Mean Sea Level)      UWI: NE/NW/0/10/S/22/E/1/0/0/6/PM/N/819.00/W/0/2,066.00/0/0

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
	7:30 - 0:00	16.50	DRLPRO	02	B	P		DRLG & SLIDE F/ 3469 TO 5318', 1849' @ 112' PH, GEL SWEEPS, WOB 18, MW 8.4, VIS 27, RPM 50, MM 105, SPM 125, GPM 473, PU/SO/ROT 130-120-110, DIFF 150-300, SLIDES 3545-3561, 3641-3661, 4432-4452, 4462-4674, 4685-4705, 4977-4992
7/13/2009	0:00 - 9:00	9.00	DRLPRO	02	B	P		DRLG F/ 5318' TO 6070', 752' @ 83.5' PH, WOB 18, MW 8.4, VIS 27, RPM 50, MM 105, SPM 125, GPM 473, PU/SO/ROT 140-120-130, ON/OFF 1450-1200, DIFF 150-300,
	9:00 - 9:30	0.50	DRLPRO	08	B	P		TUBO LEAKING OIL, TROUBLE SHOOT PROB
	9:30 - 11:30	2.00	DRLPRO	02	B	P		DRLG F/ 6070' TO 6205', 135' @ 67.5' PH, WOB 18, MW 8.4, VIS 27, RPM 50, MM 105, SPM 125, GPM 473, PU/SO/ROT 145-125-135, ON/OFF 1450-1200, DIFF 150-300
	11:30 - 12:00	0.50	DRLPRO	07	A	P		SERVICE RIG
	12:00 - 0:00	12.00	DRLPRO	02	B	P		DRLG F/ 6205' TO 7099', 894' @ 74.5' PH, WOB 18, MW 9.4, VIS 36, RPM 50, MM 105, SPM 125, GPM 473, PU/SO/ROT 150-130-140, ON/OFF 1900-1600, DIFF 150-300
7/14/2009	0:00 - 1:30	1.50	DRLPRO	08	B	Z		REPLACE TURBO ON ROT MOTOR
	1:30 - 2:00	0.50	DRLPRO	02	B	P		DRLG F/ 7099 TO 7120' 21' @ 42' PH, WOB 20, MW 10, VIS 37, RPM 50, MM 105, SPM 125, GPM 473, PU/SO/ROT 150-130-140, ON/OFF 2000-1800, DIFF 150-250
	2:00 - 2:30	0.50	DRLPRO	08	B	Z		CLEAN BREATHER ON ROT MOTOR
	2:30 - 15:00	12.50	DRLPRO	02	B	P		DRLG F/7120' TO 7691' 571' @ 45.7' PH, WOB 20, MW 10.3, VIS 37, RPM 50, SPM 125, GPM 473, PU/SO/ROT 165-140-155, ON/OFF 2200-2000, DIFF 150-250
	15:00 - 15:30	0.50	DRLPRO	07	A	P		SERVICE RIG
	15:30 - 0:00	8.50	DRLPRO	02	B	P		DRLG F/ 7691' TO 8099', 408' @ 48' PH, WOB 20-22, MW 10.5, VIS 37, RPM 50, MM 105, SPM 125, GPM 473, PU/SO/ROT 174-145-162, ON/OFF 2400-2200, DIFF 150-250
7/15/2009	0:00 - 11:30	11.50	DRLPRO	02	B	P		DRLG F/ 8099' TO 8610', TD WELL @ 11:30 7/15/09, 511' @ 44.4' PH, MW 11.2, VIS 40, WOB 22-24, RPM 50, MM 105, SPM 125, GPM 473, PU/SO/ROT 185-155-165, ON/OFF 2400-2200, DIFF 150-300
	11:30 - 13:00	1.50	DRLPRO	05	C	P		C&C HOLE F/ SHORT TRIP, LOST 130 BBLS @ TD
	13:00 - 19:00	6.00	DRLPRO	06	E	P		SHORT TRIP TO SHOE WASH & REAM 70' TO BOTTOM, 10' FILL, TIGHT @ 4200' OUT, 5200 IN, LOST 20 BBLS ON TRIP
	19:00 - 21:00	2.00	DRLPRO	05	C	P		C&C HOLE TO LDDS, NO LOSSES
	21:00 - 0:00	3.00	DRLPRO	06	A	P		HPJSM W/ L/D & RIG CREWS, R/U & LDDS
7/16/2009	0:00 - 3:30	3.50	DRLPRO	06	A	P		FINISH LDDP, BREAK KELLY, L/D BHA & DIR TOOLS, PULL WEAR BUSHING
	3:30 - 13:00	9.50	DRLPRO	11	D	P		HPJSM W/ RIG & LOGGING CREWS, R/U & RUN TRIPLE COMBO TO 8523' LOG OUT, R/D
	13:00 - 20:00	7.00	DRLPRO	12	C	P		HPJSM W/ RIG & CASING CREWS, R/U & RUN 203 JTS I-80, 4 1/2" WASH LAST 70' TO BOTTOM, L/D TAG JT P/U MANDREL & LANDING JT, SET PIPE @ 8607', FLOAT @ 8563'
	20:00 - 22:00	2.00	DRLPRO	05	A	P		C&C HOLE TO CEMENT PROD CASING

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

Well: NBU 1022-1CT		Spud Conductor: 6/4/2009	Spud Date: 6/8/2009
Project: UTAH-UINTAH		Site: NBU 1022-1CT	Rig Name No: PIONEER 69/69, PROPETRO/
Event: DRILLING		Start Date: 3/12/2009	End Date: 7/17/2009
Active Datum: RKB @5,007.00ft (above Mean Sea Level)		UWI: NE/NW/0/10/S/22/E/1/0/0/6/PM/N/819.00/W/0/2,066.00/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
	22:00 - 0:00	2.00	DRLPRO	12	E	P		HPJSM W/ RIG & CEMENTING CREWS, R/U & PSI TEST LINES TO 4000 PSI, POP OFF @ 4200, PUMP 40 BBLS WATER SPACER, LEAD 372 SXS 11.2 PPG, 2.99 YLD, TAIL 1378 SXS, 14.3 PPG, 1.31 YLD, DROP PLUG & DISPLACE W/ 133.1 BBLS CLAYTREAT WATER, BUMP PLUG @ 3300, 690 OVER FINAL PSI OF 2680 , FULL RETURNS THOUGHOUT JOB W/ 40 BBLS WATER & 48 BBLS CEMENT TO PIT, 2 BBLS BACK TO TRUCK, FLUSH STACK & LAND CASING W/ 88,000
7/17/2009	0:00 - 1:00	1.00	DRLPRO	12	E	P		FINISH CEMENTING, R/D CEMENTERS
	1:00 - 5:00	4.00	DRLPRO	14	A	P		N/D BOP, CLEAN PITS, RELEASE RIG @ 05:00 7/17/09

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**US ROCKIES REGION  
Operation Summary Report**

Well: NBU 1022-1CT      Spud Conductor: 6/4/2009      Spud Date: 6/8/2009  
 Project: UTAH-UINTAH      Site: NBU 1022-1CT      Rig Name No: GWS 1/1  
 Event: COMPLETION      Start Date: 11/5/2009      End Date: 11/15/2009  
 Active Datum: RKB @5,007.00ft (above Mean Sea Level)      UWI: NE/NW/0/10/S/22/E/1/0/0/6/PM/N/819.00/W/0/2,066.00/0/0

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
11/5/2009	7:00 - 7:30	0.50	COMP	48		P		HSM. RIGGING UP. PINCH POINTS
	7:30 - 16:00	8.50	COMP	31	I	P		MIRU RIG & SPOT IN RIG EQUIPMENT. ND WELL HEAD NU BOP. PU 3 7/8" MIL & SUB. DRIFT & TALLY & RIH W/ 204 JTS OF 2 3/8" J-55 4.7# TBG. 6,444' POOH W/ 102 STANDS. SWI SDFN
11/6/2009	7:00 - 7:30	0.50	COMP	48		P		HSM. PRESSURE TESTING CASING & FRAC VALVES
	7:30 - 15:00	7.50	COMP	37	C	P		ND BOP NU FRAC VALVES. MIRU B&C QUICK TEST. PRESSURE TEST CASING & FRAC VALVES TO 7,000 PSI. GOOD TEST. RDMO B&C QUICK TEST. MIRU CASED HOLE SOLUTIONS. STG 1) PU 3 3/8" EXP GNS, 23 GRM, .36 HOLES, 90 & 120 DEG PHASING. RIH PERF 8,484' - 86' 4SPF, 8,402' - 06' 4SPF, 8,358' - 60' 4SPF, 8,330' - 32' 3SPF, 8,270' - 72' 3SPF, 44 HOLES. POOH W/ WIRE LINE. PREPED TO FRAC MONDAY AM.
11/9/2009	7:00 - 7:30	0.50	COMP	48		P		HSM. WORKING W/ WIRELINE AND WATCHING PRESSURE LINES.
	7:30 - 9:35	2.08	COMP	36	E	P		MIRU SUPERIOR, PRIME UP PUMPS AND LINES. PRESSURE TEST SURFACE LINES TO 8,500 PSI. ( STG 1 ) WHP 1650 PSI, BRK @ 3458 PSI, @ 4.7 BPM, ISIP 2655, FG .76. PUMP 100 BBLS @ 50 BPM @ 5310 PSI=100% PERFS OPEN. MP 5559 PSI, MR 50.9 BPM, AP 4626 PSI, AR 50 BPM, ISIP 2609 PSI, FG .75. NPI -46 PSI, PUMPED 2047 BBLS SW, & 67, 677 LBS OF 30/50 SND & 5,000 LBS OF 20/40 RESIN SND. TOTAL PROP 72, 677 LBS.
	9:35 - 11:15	1.67	COMP	36	E	P		( STG 2 ) PU 41/2" CBP & 31/8" EXP GNS, 23 GRM, .36" HOLES, 90 DEG PHASING. SET HAL 8K CBP @ 8172' & PERF 8140'-8142' 4 SPF, 8 HLS. 8114'-8116' 4 SPF 8 HLS. 8082'-8085' 4 SPF 12 HLS. 8030'-8033' 4 SPF 12 HLS. TOTAL 40 HOLES. WHP 950 PSI, BRK 3570 PSI @ 4.0 BPM, ISIP 2451 PSI, FG .74. PUMPED 100 BBLS @ 52 BPM @ 5,072 PSI= 100% PERFS OPEN. MP 6042 PSI, MR 53.9, AP 5179 PSI, AR 52, ISIP 2667 PSI, FG .77. NPI 216 PSI, PUMPED 692 BBLS SW & 17,083 LBS 30/50 SND & 5,000 LBS 20/40 RESIN SAND. TOTAL PROP 22,083.

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DIV. OF OIL, GAS & MINES

**US ROCKIES REGION**

**Operation Summary Report**

Well: NBU 1022-1CT		Spud Conductor: 6/4/2009		Spud Date: 6/8/2009	
Project: UTAH-UINTAH		Site: NBU 1022-1CT		Rig Name No: GWS 1/1	
Event: COMPLETION		Start Date: 11/5/2009		End Date: 11/15/2009	
Active Datum: RKB @5,007.00ft (above Mean Sea Level)		UWI: NE/NW/0/10/S/22/E/1/0/0/6/PM/N/819.00/W/0/2,066.00/0/0			

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
	11:15 - 14:58	3.72	COMP	36	E	P		( STG 3 ) PU 41/2" CBP & 31/8" EXP GNS, 23 GRM, .36" HOLES, 90 DEG PHASING. SET HAL 8K CBP @ 7950' & PERF 7918'-7920' 4 SPF 8 HLS, 7898'-7902' 4 SPF 16 HLS, 7884'-7886' 4 SPF, 8 HLS. 7860'-7862' 4 SPF 8 HLS. TOTAL 40 HOLES. WHP 985 PSI, BRK 3603 PSI @ 4.4 BPM, ISIP 2492 PSI, FG .76. PUMPED 100 BBLS @ 49.6 BPM @ 5,018 PSI= 100% PERFS OPEN PUMPED 4721 LBS OF .8 PPGAL 30/50 SND. MOTOR QUIT ON BLENDER RAN OUT OF FUEL . FLUSHED W/ 122.2 BBLS, ISIP 2580 PSI. WENT DWN 12:47 PM GOT BLENDER RUNNING AGAIN @ 13:45. CONTINUED W/ JOB. PUMPED ADDITIONAL 52,416 LBS SAND AND 1336 BBLS SW. MP 7362 PSI, MR 50.9, AP 5323 PSI, AR 44.8, ISIP 2330 PSI, FG .74. NPI -162 PSI, PUMPED 1896 BBLS SW & 57,137 LBS 30/50 SND SCREENED OUT W/ 47,901 LBS SAND IN FORM. FLOWED WELL BACK FOR 25 MIN. RELUSH W/ 2 BBLS WTR, 6 BBLS ACID, 116.3 BBLS WTR @ 12.4 BPM @ 4145 PSI, ISIP 3040 PSI.
	14:58 - 16:40	1.70	COMP	36	E	P		( STG 4 ) PU 41/2" CBP & 31/8" EXP GNS, 23 GRM, .36" HOLES, 90 DEG PHASING. SET HAL 8K CBP @ 7792' & PERF 7765'-7768' 4SPF, 12 HLS. 7714'-7716' 4 SPF, 8 HLS. 7676'-7678' 4 SPF, 8 HLS. 7642'-7644' 4 SPF, 8 HLS. 7606'-7608' 4 SPF, 8 HLS. TOTAL 44 HOLES. WHP 530 PSI, BRK 6800 PSI @ 7.9 BPM, ISIP 2407 PSI, FG .75. PUMPED 100 BBLS @ 49.5 BPM @ 5,158 PSI= 100% PERFS OPEN MP 5332 PSI, MR 50.9, AP 4383 PSI, AR 49.1, ISIP 2483 PSI, FG .76. NPI 76 PSI, PUMPED 1223 BBLS SW & 39,695 LBS 30/50 SND & 5,000 LBS 20/40 RESIN. TOTAL PROP 44,695.
	16:40 - 18:00	1.33	COMP	36	E	P		( STG 5 ) PU 41/2" CBP & 31/8" EXP GNS, 23 GRM, .36" HOLES, 90 DEG PHASING. SET HAL 8K CBP @ 7564' & PERF 7532'-7534' 4 SPF, 8 HLS, 7511'-7512' 4 SPF, 4 HLS. 7462'-7464' 4 SPF 8 HLS. 7432'-7434' 4 SPF 8 HLS. 7390'-7392' 4 SPF, 8 HLS. 7360'-7362' 4 SPF, 8 HLS. TOTAL 44 HOLES. POOH SWI SDFN. HSM, WORKING W/ FRAC AND WIRE LINE CREWS.
11/10/2009	6:30 - 6:50	0.33	COMP	48		P		TEST PUMP AND LINES TO 8,000 PSI.
	6:50 - 7:16	0.43	COMP	36	E	P		( STG 5 ) WHP 878 PSI, BRK 3743 PSI @ 4.7 BPM, ISIP 1399 PSI, FG .63. PUMPED 100 BBLS @ 50 BPM @ 4,550 PSI= 90% PERFS OPEN. MP 5788 PSI, MR 51.1, AP 4091 PSI, AR 49.9, ISIP 1942 PSI, FG .70. NPI 543 PSI, PUMPED 1102 BBLS SW & 37,973 LBS 30/50 SND & 5,000 LBS 20/40 RESIN SAND. TOTAL PROP 42,973.

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Well: NBU 1022-1CT		Spud Conductor: 6/4/2009	Spud Date: 6/8/2009
Project: UTAH-UINTAH		Site: NBU 1022-1CT	Rig Name No: GWS 1/1
Event: COMPLETION		Start Date: 11/5/2009	End Date: 11/15/2009
Active Datum: RKB @5,007.00ft (above Mean Sea Level)		UWI: NE/NW/0/10/S/22/E/1/0/0/6/PM/N/819.00/W/0/2,066.00/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
	7:16 - 8:52	1.60	COMP	36	E	P		(STG 6 ) PU 41/2" CBP & 31/8" EXP GNS, 23 GRM, .36" HOLES, 90 DEG PHASING. SET HAL 8K CBP @ 7270' & PERF 7238'-7240' 4 SPF 8 HLS, 7208'-7210' 4 SPF, 8 HLS. 7146'-7150' 4 SPF 16 HLS, 7104'-7106' 4 SPF 8 HLS. TOTAL 40 HOLES. WHP 584 PSI, BRK 4524 PSI @ 4.9 BPM, ISIP 2222 PSI, FG .75. PUMPED 100 BBLS @ 50 BPM @ 4,956 PS= 100% PERFS OPEN. MP 5273 PSI, MR 50.7, AP 4748 PSI, AR 48.6, ISIP 2257 PSI, FG .76. NPI 35 PSI, PUMPED 701 BBLS SW & 17,742 LBS 30/50 SND & 5,000 LBS 20/40 RESIN SAND. TOTAL PROP 22,743.
	8:52 - 10:46	1.90	COMP	36	E	P		( STG 7 ) PU 41/2" CBP & 31/8" EXP GNS, 23 GRM, .36" HOLES, 90 DEG PHASING. SET HAL 8K CBP @ 7076' & PERF 7049'-7052' 4 SPF 12 HLS. 7009'-7012' 4 SPF 12 HLS. 6978'-6980' 4 SPF 8 HLS. 6922'-6924' 4 SPF 8 HLS. TOTAL 40 HOLES. WHP 633 PSI, BRK 5289 PSI @ 6.1 BPM, ISIP 2637 PSI, FG .82. PUMPED 100 BBLS @ 50.1 BPM @ 4,704 PS= 100% PERFS OPEN. MP 4716 PSI, MR 51.2, AP 4176 PSI, AR 49.8, ISIP 2290 PSI, FG .77. NPI -347 PSI, PUMPED 877 BBLS SW & 27,673 LBS 30/50 SND & 5,300 LBS 20/40 RESIN SAND. TOTAL PROP 32,973.EXTRA RESIN F/ STAGE 3 SREEN OUT.
	10:46 - 12:43	1.95	COMP	36	E	P		( STG 8 ) PU 41/2" CBP & 31/8" EXP GNS, 23 GRM, .36" HOLES, 90 & 120 DEG PHASING. SET HAL 8K CBP @ 6894' & PERF 6860'-6864' 4 SPF 16 HLS. 6826'-6828' 3 SPF 6 HLS. 6778'-6782' 4 SPF 16 HLS.6742'-6744' 3 SPF 6 HLS. TOTAL 44 HOLES. WHP 345 PSI, BRK 2128 PSI @ 6.3 BPM, ISIP 1433 PSI, FG .65. PUMPED 100 BBLS @ 50.3 BPM @ 4,499 PS= 88% PERFS OPEN. MP 4569 PSI, MR 50.9, AP 3709 PSI, AR 49.8, ISIP 2217 PSI, FG .77. NPI 784 PSI, PUMPED 1613 BBLS SW & 61,738 LBS 30/50 SND & 5,200 LBS 20/40 RESIN SAND. TOTAL PROP 66,938.EXTRA RESIN F/ STAGE 3 SREEN OUT.
	12:43 - 14:45	2.03	COMP	36	E	P		( STG 9 ) PU 41/2" CBP & 31/8" EXP GNS, 23 GRM, .36" HOLES, 90 & 120 DEG PHASING. SET HAL 8K CBP @ 6678' & PERF 6644'-6648' 4 SPF 16 HLS. 6606'-6610' 3 SPF 12 HLS. 6562'-6566' 4 SPF 16 HLS. TOTAL 44 HOLES. WHP 54 PSI, BRK 1599 PSI @ 5 BPM, ISIP 170 PSI, FG .47. PUMPED 100 BBLS @ 50 BPM @ 2817 PS= 100% PERFS OPEN. MP 3593 PSI, MR 53.6, AP 2892 PSI, AR 48.7, ISIP 1927 PSI, FG .73. NPI 1757 PSI, PUMPED 3051 BBLS SW & 122,908 LBS 30/50 SND & 7,500 LBS 20/40 RESIN SAND. TOTAL PROP 130,408. EXTRA RESIN F/ STAGE 3 SREEN OUT.

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Well: NBU 1022-1CT		Spud Conductor: 6/4/2009	Spud Date: 6/8/2009
Project: UTAH-UINTAH		Site: NBU 1022-1CT	Rig Name No: GWS 1/1
Event: COMPLETION		Start Date: 11/5/2009	End Date: 11/15/2009
Active Datum: RKB @5,007.00ft (above Mean Sea Level)		UWI: NE/NW/0/10/S/22/E/1/0/0/6/PM/N/819.00/W/0/2,066.00/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
	14:45 - 17:30	2.75	COMP	34	I	P		( KILL PLUG ) RIH 41/2" HAL CBP AND SET @ 6512', POOH RD CASED HOLE SOLUTIONS AND SUPERIOR FRAC CREW.
11/11/2009	6:30 - 7:00	0.50	COMP	48		P		HSM, WORKING W/ POWER SWIVEL AND WATCHING PSI ON WELL.
	7:00 - 18:00	11.00	COMP	31	I	P		SICP 0 PSI,RIH W/ 37/8 HURRICAN MILL AND POBS, AND 200 JTS 23/8 J-55 TBG TAG UP @ 6308' RU SWIVEL AND BROKE CIRC W/ 2% KCL, DRILL TROUGH SAND BRIDGE, RIH TAG UP ON KILL PLUG @ 6512' BROKE CIRC.
								C/O 0' SAND TAG 1ST PLUG @ 6512' DRL PLG IN 4 MIN. 100# PSI INCREASE. RIH.
								C/O 0' SAND TAG 2ND PLUG @ 6678' DRL PLG IN 8 MIN. 600# PSI INCREASE. RIH.
								C/O 30' SAND TAG 3RD PLUG @ 6894' DRL PLG IN 6 MIN. 700# PSI INCREASE. RIH.
								C/O 20' SAND TAG 4TH PLUG @ 7076' DRL PLG IN 5 MIN. 400# PSI INCREASE. RIH.
								C/O 15' SAND TAG 5TH PLUG @ 7270' DRL PLG IN 4 MIN. 300# PSI INCREASE. RIH.
								C/O 60' SAND TAG 6TH PLUG @ 7564' DRL PLG IN 9 MIN. 800# PSI INCREASE. RIH.
								C/O 20' SAND TAG 7TH PLUG @ 7792' DRL PLG IN 10 MIN. 500# PSI INCREASE. RIH.
								C/O 20' SAND TAG 8TH PLUG @ 7950' DRL PLG IN 10 MIN. 400# PSI INCREASE. RIH.
								C/O 30' SAND TAG 9TH PLUG @ 8172' DRL PLG IN 9 MIN. 600# PSI INCREASE. RIH.
								C/O TO PBDT @ 8563 ' CIRC WELL CLEAN W/ 2% KCL.
								L/D 18 JTS 23/8 J-55 TBG. EOT @ 7994.87'W/ 253 JTS 23/8 J-55 4.7# TBG.
								LAND TBG ON HANGER, ND BOPS NU WH, DROP BALL TO SHEAR POBS.
								PUMP OFF BIT, WAIT 30 MIN FOR BIT TO FALL TO BTM.
								TURN WELL OVER TO FLOW BACK CREW.
								RDMOL.
								284 JTS TO LOCATION KB 18'
								253 JTS LANDED HANGER 71/16 .80'
								31 JTS RETURNED. 253 JT2 23/8 J-55
								7973.87'
								1.875 X/N W/ POBS
								2.20'
								TWTR 13,611 BBLS EOT @ 7994.87'
								TWR 2,000 BBLS
								TWLTR 11,611 BBLS
								7 AM FLBK REPORT: CP 2700#, TP 2050#, 20/64"
								CK, 50 BWPH, MEDIUM SAND, - GAS
								TTL BBLS RECOVERED: 2850
								BBLS LEFT TO RECOVER: 10761
11/12/2009	7:00 -			33	A			

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

Well: NBU 1022-1CT		Spud Conductor: 6/4/2009	Spud Date: 6/8/2009
Project: UTAH-UINTAH		Site: NBU 1022-1CT	Rig Name No: GWS 1/1
Event: COMPLETION		Start Date: 11/5/2009	End Date: 11/15/2009
Active Datum: RKB @5,007.00ft (above Mean Sea Level)		UWI: NE/NW/0/10/S/22/E/1/0/0/6/PM/N/819.00/W/0/2,066.00/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
11/13/2009	7:00 -			33	A			7 AM FLBK REPORT: CP 2650#, TP 1850#, 20/64" CK, 35 BWPH, MEDIUM SAND, - GAS TTL BBLS RECOVERED: 3745 BBLS LEFT TO RECOVER: 9866
	12:00 -		PROD	50				WELL TURNED TO SALE @ 1200 HE ON 11/13/09 - FTP 1750#, CP 2600#, 1650 MCFD, 30 BWPD, 18/64 CK
11/14/2009	7:00 -			33	A			7 AM FLBK REPORT: CP 2300#, TP 1775#, 18/64" CK, 25 BWPH, LIGHT SAND, HEAVY GAS TTL BBLS RECOVERED: 4410 BBLS LEFT TO RECOVER: 9201
11/15/2009	7:00 -			33	A			7 AM FLBK REPORT: CP 2450#, TP 1750#, 18/64" CK, 20 BWPH, LIGHT SAND, 2163 GAS TTL BBLS RECOVERED: 5055 BBLS LEFT TO RECOVER: 8556
	7:00 -			33	A			7 AM FLBK REPORT: CP 2200#, TP 1725#, 18/64" CK, 20 BWPH, LIGHT SAND, - GAS TTL BBLS RECOVERED: 4955 BBLS LEFT TO RECOVER: 8656
11/22/2009	7:00 -		PROD	50				WELL IP'D 11/22/09 - 2158 MCFD, 0 BOPD, 100 BWPD, CP 2058#, FTP 349#, CK 18/64", LP 111#, 24 HRS

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**Scientific  
Drilling**

## Directional Survey Certification

7327 West Barton Road  
Casper, WY 82604  
(307)-472-6621 Fax (307) 472-5439

<b>Operator</b>	<u>Kerr McGee Oil and Gas Onshore LP</u>
<b>Well Name &amp; No.</b>	<u>NBU 1022-01CT</u>
<b>County &amp; State</b>	<u>Uintah County, UT</u>
<b>SDI Job No.</b>	<u>42EF0907339</u>
<b>Rig</b>	<u>Pioneer 69</u>

I, Julie Cruse, having personal knowledge of all the facts, hereby certify that the attached directional survey run from a measured depth of 2153 feet to a measured depth of 8503.76 feet is true and correct as determined from all available records.

Julie Cruse  
Signature

23-Jul-09  
Date

**Julie Cruse**  
Rockies Region Engineer  
Scientific Drilling - Rocky Mountain District

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# **Kerr McGee Oil and Gas Onshore LP**

Uintah County, UT NAD27  
NBU 1022-01CT  
NBU 1022-01CT  
OH

Design: OH

## **Standard Survey Report**

23 July, 2009

**Company:** Kerr McGee Oil and Gas Onshore LP  
**Project:** Uintah County, UT NAD27  
**Site:** NBU 1022-01CT  
**Well:** NBU 1022-01CT  
**Wellbore:** OH  
**Design:** OH

**Local Co-ordinate Reference:** Well NBU 1022-01CT  
**TVD Reference:** GL 4988' & RKB 18' @ 5006.00ft (Pioneer 69)  
**MD Reference:** GL 4988' & RKB 18' @ 5006.00ft (Pioneer 69)  
**North Reference:** True  
**Survey Calculation Method:** Minimum Curvature  
**Database:** EDM 2003.16 Multi User Db

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<b>Project</b>	Uintah County, UT NAD27		
<b>Map System:</b>	US State Plane 1927 (Exact solution)	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	NAD 1927 (NADCON CONUS)		
<b>Map Zone:</b>	Utah Central 4302		

<b>Site</b>	NBU 1022-01CT, Sec 1 T10S R22E				
<b>Site Position:</b>		<b>Northing:</b>	607,838.96 ft	<b>Latitude:</b>	39° 58' 58.899 N
<b>From:</b>	Lat/Long	<b>Easting:</b>	2,591,291.09 ft	<b>Longitude:</b>	109° 23' 22.741 W
<b>Position Uncertainty:</b>	0.00 ft	<b>Slot Radius:</b>	in	<b>Grid Convergence:</b>	1.35 °

<b>Well</b>	NBU 1022-01CT, 819' FNL 2066' FWL					
<b>Well Position</b>	<b>+N/-S</b>	0.00 ft	<b>Northing:</b>	607,838.95 ft	<b>Latitude:</b>	39° 58' 58.899 N
	<b>+E/-W</b>	0.00 ft	<b>Easting:</b>	2,591,291.09 ft	<b>Longitude:</b>	109° 23' 22.741 W
<b>Position Uncertainty</b>	0.00 ft		<b>Wellhead Elevation:</b>	ft	<b>Ground Level:</b>	4,988.00 ft

<b>Wellbore</b>	OH				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	IGRF200510	2009-06-05	11.27	65.93	52,564

<b>Design</b>	OH				
<b>Audit Notes:</b>					
<b>Version:</b>	1.0	<b>Phase:</b>	ACTUAL	<b>Tie On Depth:</b>	0.00
<b>Vertical Section:</b>		<b>Depth From (TVD) (ft)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Direction (°)</b>
		0.00	0.00	0.00	157.20

<b>Survey Program</b>	<b>Date</b>	2009-07-23			
<b>From (ft)</b>	<b>To (ft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Description</b>	
514.00	1,994.00	Survey #1 - Surface (OH)	EMS	EMS - Standard	
2,153.00	8,503.76	Survey #2 - Production (OH)	MWD SDI	MWD - Standard ver 1.0.1	

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
514.00	0.30	215.97	514.00	-1.09	-0.79	0.70	0.06	0.06	0.00
1,034.00	0.10	105.67	1,034.00	-2.31	-1.15	1.69	0.07	-0.04	-21.21
1,234.00	0.20	144.27	1,233.99	-2.64	-0.78	2.13	0.07	0.05	19.30
1,544.00	0.20	226.17	1,543.99	-3.46	-0.86	2.86	0.08	0.00	26.42
1,694.00	0.30	40.47	1,693.99	-3.34	-0.79	2.77	0.33	0.07	116.20
1,884.00	0.40	112.67	1,883.99	-3.22	0.15	3.02	0.22	0.05	38.00
1,994.00	0.30	137.07	1,993.99	-3.58	0.70	3.57	0.16	-0.09	22.18
2,153.00	0.97	130.69	2,152.98	-4.76	2.00	5.16	0.42	0.42	-4.01
<b>First SDI MWD Survey</b>									
2,248.00	0.53	90.18	2,247.97	-5.28	3.05	6.05	0.70	-0.46	-42.64
2,343.00	0.70	355.87	2,342.97	-4.71	3.45	5.67	0.96	0.18	-99.27

**Company:** Kerr McGee Oil and Gas Onshore LP  
**Project:** Uintah County, UT NAD27  
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**North Reference:** True  
**Survey Calculation Method:** Minimum Curvature  
**Database:** EDM 2003.16 Multi User Db

### Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
2,438.00	0.97	351.83	2,437.96	-3.33	3.29	4.35	0.29	0.28	-4.25
2,533.00	1.58	355.96	2,532.93	-1.23	3.08	2.33	0.65	0.64	4.35
2,723.00	0.79	312.28	2,722.89	2.26	1.93	-1.34	0.60	-0.42	-22.99
2,913.00	0.53	262.97	2,912.88	3.04	0.09	-2.77	0.32	-0.14	-25.95
3,102.00	0.88	209.00	3,101.87	1.66	-1.48	-2.11	0.38	0.19	-28.56
3,293.00	1.49	182.46	3,292.83	-2.10	-2.30	1.05	0.42	0.32	-13.90
3,388.00	0.44	170.60	3,387.81	-3.70	-2.29	2.52	1.12	-1.11	-12.48
3,482.00	0.00	85.08	3,481.81	-4.05	-2.23	2.87	0.47	-0.47	0.00
3,578.00	0.70	332.58	3,577.81	-3.53	-2.50	2.29	0.73	0.73	0.00
3,673.00	0.97	333.02	3,672.80	-2.30	-3.14	0.90	0.28	0.28	0.46
3,958.00	0.62	205.31	3,957.79	-1.54	-4.89	-0.47	0.50	-0.12	-44.81
4,243.00	1.23	183.08	4,242.75	-5.99	-5.71	3.31	0.24	0.21	-7.80
4,496.00	0.79	108.98	4,495.72	-9.27	-4.21	6.92	0.50	-0.17	-29.29
4,591.00	0.88	109.78	4,590.71	-9.73	-2.90	7.85	0.10	0.09	0.84
4,717.00	1.49	6.68	4,716.69	-8.43	-1.80	7.07	1.50	0.48	-81.83
4,907.00	1.06	7.38	4,906.64	-4.24	-1.29	3.40	0.23	-0.23	0.37
5,097.00	1.67	1.32	5,096.59	0.28	-1.00	-0.64	0.33	0.32	-3.19
5,287.00	1.23	26.89	5,286.53	4.86	-0.01	-4.49	0.41	-0.23	13.46
5,604.00	0.88	99.76	5,603.49	7.48	3.92	-5.38	0.41	-0.11	22.99
5,826.00	1.23	129.20	5,825.45	5.69	7.45	-2.36	0.29	0.16	13.26
6,362.00	2.02	152.31	6,361.24	-6.31	16.30	12.13	0.19	0.15	4.31
6,805.00	2.55	162.07	6,803.88	-22.60	22.96	29.73	0.15	0.12	2.20
7,311.00	2.55	149.68	7,309.39	-43.03	32.11	52.11	0.11	0.00	-2.45
7,818.00	2.37	151.08	7,815.92	-61.94	42.87	73.71	0.04	-0.04	0.28
8,325.00	2.11	138.78	8,322.53	-78.14	54.09	92.99	0.11	-0.05	-2.43
8,503.76	2.02	141.42	8,501.18	-83.07	58.22	99.14	0.07	-0.05	1.48

Last SDI MWD Survey

3  
2.00  
59

### Design Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
2,153.00	2,152.98	-4.76	2.00	First SDI MWD Survey
8,503.76	8,501.18	-83.07	58.22	Last SDI MWD Survey

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

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