

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

FORM APPROVED  
OMB No. 1004-0136  
Expires November 30, 2000

5. Lease Serial No.  
**UTU-0474**

6. If Indian, Allottee or Tribe Name

1a. Type of Work:  DRILL  REENTER

b. Type of Well:  Oil Well  Gas Well  Other  Single Zone  Multiple Zone

7. If Unit or CA Agreement, Name and No.  
**UNIT #891008900A INBU**

8. Lease Name and Well No.  
**NBU 1022-28B**

2. Name of Operator  
**KERR MCGEE OIL & GAS ONSHORE LP**

9. API Well No.  
**43-047-3876p**

3A. Address  
**1368 SOUTH 1200 EAST VERNAL, UT 84078**

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

3b. Phone No. (include area code)  
**(435) 781-7024**

4. Location of Well (Report location clearly and in accordance with any State requirements. \*)  
At surface **NWNE 643'FNL, 1812'FEL 633225X**  
At proposed prod. Zone **4420427Y 39.925360 -109.441026**

11. Sec., T., R., M., or Blk, and Survey or Area  
**SEC 28, T10S, R22E**

14. Distance in miles and direction from nearest town or post office\*  
**33.3 MILES SOUTHEAST OF OURAY, UTAH**

12. County or Parish  
**UINTAH**

13. State  
**UTAH**

15. Distance from proposed\* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)  
**643'**

16. No. of Acres in lease  
**640.00**

17. Spacing Unit dedicated to this well  
**40.00**

18. Distance from proposed location\* to nearest well, drilling, completed, applied for, on this lease, ft.  
**REFER TO TOPO C**

19. Proposed Depth  
**8420'**

20. BLM/BIA Bond No. on file  
**BOND NO. 2971100-2533**

21. Elevations (Show whether DF, KDB, RT, GL, etc.)  
**5381'GL**

22. Approximate date work will start\*

23. Estimated duration

24. Attachments

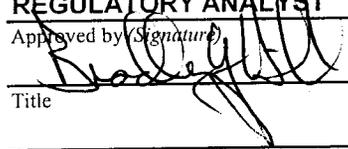
The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, shall be attached to this form:

- Well plat certified by a registered surveyor.
- A Drilling Plan.
- A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office.

- Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
- Operator certification.
- Such other site specific information and/or plans as may be required by the authorized office.

25. Signature:  Name (Printed/Typed): **SHEILA UPCHEGO** Date: **5/24/2006**

Title: **REGULATORY ANALYST**

Approved by (Signature):  Name (Printed/Typed): **BRADLEY G. HILL** Date: **06-05-06**

Title: **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.

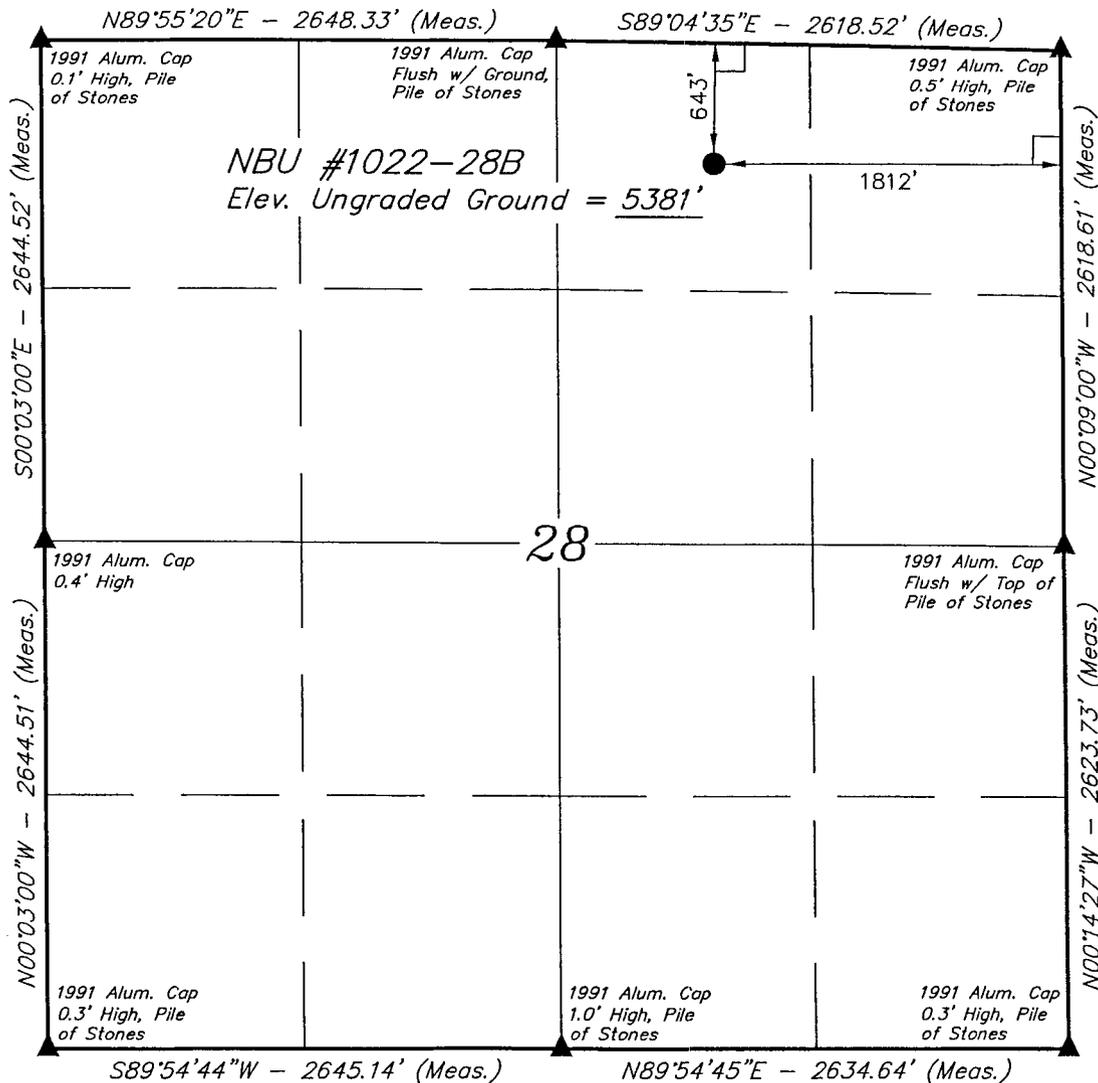
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

\*(Instructions on reverse)

Federal Approval of this  
Action is Necessary

RECEIVED  
MAY 30 2006  
DIV. OF OIL, GAS & MINING

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



### LEGEND:

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

(NAD 83)  
 LATITUDE = 39°55'31.46" (39.925406)  
 LONGITUDE = 109°26'30.40" (109.441778)  
 (NAD 27)  
 LATITUDE = 39°55'31.58" (39.925439)  
 LONGITUDE = 109°26'27.94" (109.441094)

## Kerr-McGee Oil & Gas Onshore LP

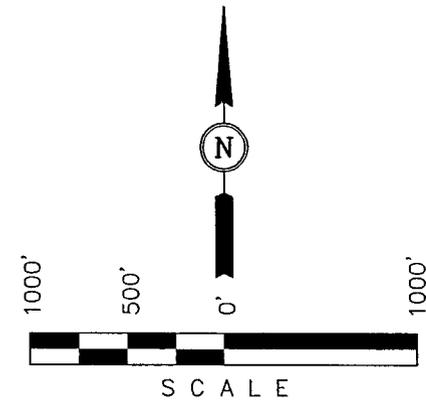
Well location, NBU #1022-28B, located as shown in the NW 1/4 NE 1/4 of Section 28, T10S, R22E, S.L.B.&M. Uintah County, Utah.

### BASIS OF ELEVATION

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

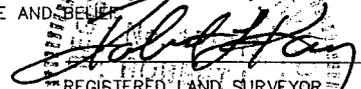
### BASIS OF BEARINGS

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



### CERTIFICATE

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

  
 REGISTERED LAND SURVEYOR  
 REGISTRATION NO. 161319  
 STATE OF UTAH

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

SCALE 1" = 1000'	DATE SURVEYED: 02-08-06	DATE DRAWN: 02-17-06
PARTY D.R. A.H. P.M.	REFERENCES G.L.O. PLAT	
WEATHER COLD	FILE Kerr-McGee Oil & Gas Onshore LP	

# 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)

June 5, 2006

### Memorandum

To: Assistant District Manager Minerals, Vernal District

From: Michael Coulthard, Petroleum Engineer

Subject: 2006 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 2006 within the Natural Buttes Unit, Uintah County, Utah.

API #	WELL NAME	LOCATION
(Proposed PZ Wasatch/MesaVerde)		
43-047-38159	NBU 1022-20B Sec 20 T10S R22E 0526 FNL 1964 FEL	
43-047-38160	NBU 1022-21F Sec 21 T10S R22E 2074 FNL 2135 FWL	
43-047-38161	NBU 1022-21B Sec 21 T10S R22E 0661 FNL 1987 FEL	
43-047-38162	NBU 1022-21H Sec 21 T10S R22E 1760 FNL 1123 FEL	
43-047-38163	NBU 1022-21D Sec 21 T10S R22E 0410 FNL 0921 FWL	
43-047-38164	NBU 1022-22D Sec 22 T10S R22E 0692 FNL 0642 FWL	
43-047-38165	NBU 1022-22L Sec 22 T10S R22E 1944 FSL 0941 FWL	
43-047-38166	NBU 1022-28B Sec 28 T10S R22E 0643 FNL 1812 FEL	
43-047-38171	NBU 1022-28C Sec 28 T10S R22E 0490 FNL 2456 FWL	
43-047-38167	NBU 1022-28J Sec 28 T10S R22E 1990 FSL 2161 FEL	
43-047-38168	NBU 1022-28H Sec 28 T10S R22E 2515 FNL 0461 FEL	
43-047-38169	NBU 1022-28I Sec 28 T10S R22E 1780 FSL 0859 FEL	
43-047-38172	NBU 1022-33P Sec 33 T10S R22E 0860 FSL 1067 FEL	
43-047-38158	NBU 1022-6J Sec 06 T10S R22E 2208 FSL 1796 FEL	
43-047-38150	NBU 1021-19M Sec 19 T10S R21E 0650 FSL 0772 FWL	

Our records indicate the 1022-33P is closer than 460 feet from the Natural Buttes Unit boundary.

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

/s/ Michael L. Coulthard

**NBU #1022-28B  
NW/NE Sec. 28, T10S,R22E  
UINTAH COUNTY, UTAH  
UTU-0474**

**ONSHORE ORDER NO. 1**

***DRILLING PROGRAM***

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

<u>Formation</u>	<u>Depth</u>
Uinta	0- Surface
Green River	1062'
Mahogany	1808'
Wasatch	4061'
Mesaverde	6431'
MVU2	7432'
MVL1	7995'
TD	8420'

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

<u>Substance</u>	<u>Formation</u>	<u>Depth</u>
	Green River	1062'
	Mahogany	1808'
Gas	Wasatch	4061'
Gas	Mesaverde	6431'
Gas	MVU2	7432'
Gas	MVL1	7995'
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 8420' TD, approximately equals 5220 psi (calculated at 0.62 psi/foot).

Maximum anticipated surface pressure equals approximately 3368psi (bottomhole pressure minus the pressure of a partially evacuated hole calculated at 0.22 psi/foot).

8. **Anticipated Starting Dates:**

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

9. **Variations:**

*Please see Natural Buttes Unit SOP.*

10. **Other Information:**

*Please see Natural Buttes Unit SOP.*



# KERR-McGEE OIL & GAS ONSHORE LP DRILLING PROGRAM

COMPANY NAME KERR-McGEE OIL & GAS ONSHORE LP DATE May 23, 2006  
 WELL NAME NBU 1022-28B TD 8,420' MD/TVD \_\_\_\_\_  
 FIELD Natural Buttes COUNTY Uintah STATE Utah ELEVATION 5,381' GL KB 5,396'  
 SURFACE LOCATION NWNE SECTION 28, T10S, R22E 643'FNL, 1812'FEL BHL Straight Hole  
 Latitude: 39.925406 Longitude: 109.441778  
 OBJECTIVE ZONE(S) Wasatch/Mesaverde  
 ADDITIONAL INFO Regulatory Agencies: BLM (SURF & MINERALS), UDOGM, Tri-County Health Dept.

GEOLOGICAL			MECHANICAL		
LOGS	FORMATION TOPS	DEPTH	HOLE SIZE	CASING SIZE	MUD WEIGHT
		40'		14"	
			12-1/4"	9-5/8", 32.3#, H-40, STC	Air mist
<p>Catch water sample, if possible, from 0 to 4,061'</p> <p style="text-align: right;">Green River @ 1,062'</p> <p style="text-align: right;">Mahogany @ 1,808'</p> <p style="text-align: right;">Preset f/ GL @ 1,900' MD</p> <p>Note: 12.25" surface hole will usually be drilled ±400' below the lost circulation zone (aka bird's nest). Drilled depth may be ±200' of the estimated set depth depending on the actual depth of the loss zone.</p> <p>Mud logging program TBD Open hole logging program f/ TD - surf csg</p>					
			7-7/8"	4-1/2", 11.6#, I-80 or equivalent LTC casing	Water/Fresh Water Mud 8.3-11.0 ppg
	Wasatch @	4,061'			
	Mverde @	6,431'			
	MVU2 @	7,432'			
	MVL1 @	7,995'			
		TD @ 8,420'			Max anticipated Mud required 11.0 ppg



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

**CASING PROGRAM**

	SIZE	INTERVAL	WT.	GR.	CPLG.	DESIGN FACTORS		
						BURST	COLLAPSE	TENSION
CONDUCTOR	14"	0-40'				2270	1370	254000
SURFACE	9-5/8"	0 to 1900	32.30	H-40	STC	0.77*****	1.54	4.73
PRODUCTION	4-1/2"	0 to 8420	11.60	I-80	LTC	7780	6350	201000
						2.62	1.32	2.36

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 = 11.0 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 2964 psi  
 \*\*\*\*\* Burst SF is low but csg is much stronger than formation at 2000'. EMW @ 2000' for 2270# is 21.8 ppg or 1.13 psi/ft

**CEMENT PROGRAM**

		FT. OF FILL	DESCRIPTION	SACKS	EXCESS	WEIGHT	YIELD
SURFACE	LEAD	500	Premium cmt + 2% CaCl + .25 pps flocele	215	60%	15.60	1.18
<b>Option 1</b>	TOP OUT CMT (1)	200	20 gals sodium silicate + Premium cmt + 2% CaCl + .25 pps flocele	50		15.60	1.18
	TOP OUT CMT (2)	as required	Premium cmt + 2% CaCl	as req.		15.60	1.18
SURFACE		<b>NOTE: If well will circulate water to surface, option 2 will be utilized</b>					
<b>Option 2</b>	LEAD	1500	Prem cmt + 16% Gel + 10 pps gilsonite + .25 pps Flocele + 3% salt BWOC	170	35%	11.00	3.82
	TAIL	500	Premium cmt + 2% CaCl + .25 pps flocele	180	35%	15.60	1.18
	TOP OUT CMT	as required	Premium cmt + 2% CaCl	as req.		15.60	1.18
PRODUCTION	LEAD	3,560'	Premium Lite II + 3% KCl + 0.25 pps celloflake + 5 pps gilsonite + 10% gel + 0.5% extender	390	60%	11.00	3.38
	TAIL	4,860'	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 Tolco surveys every 2000'. Maximum allowable hole angle is 5 degrees.  
 Most rigs have PVT Systems for mud monitoring. If no PVT is available, visual monitoring will be utilized.

DRILLING ENGINEER: \_\_\_\_\_  
 Brad Laney  
 DRILLING SUPERINTENDENT: \_\_\_\_\_  
 Randy Bayne

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



**NBU #1022-28B  
NWNE SEC 28-T10S-R22E  
UINTAH COUNTY, UTAH  
UTU-0474**

**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:**

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

Approximately 85' +/- of new access road is proposed. Refer to Topo Map B.

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

Please refer to Topo Map C.

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

*Please see the Natural Buttes Unit SOP.*

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

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

A 30' of rights-of-way will be required for the following pipeline. Approximately 2000' of 4" steel pipeline will be installed from the location to an existing pipeline in Section 28, T10S, R22E. Approximately 3500' +/- of 4" steel pipeline shall be installed from the proposed location to tie-in point in Section 28, T10S, R22E, then the pipeline will go into Section 21, T10S, R21E to the tie-in point. Approximately 7150' +/- of 8" pipeline shall be installed from the tie-in point in Section 28, T10S, R22E, the pipeline shall travel through Section 21, T10S, R22E onto State lease into Section 16, T10S, R22E. The pipeline(s) shall be installed on surface within the access corridor for the well location.

As a Best Management Practice (BMP), the pipeline would be buried within the access road corridor if possible. The construction of pipelines requires the corridor of 30 feet.

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

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

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.*

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 (*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).

The operator shall round corner 6 to keep out of drainage. As discussed at the on-site inspection.

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

A 20 mil reserve pit liner with felt (Double Layer) will be used. As discussed at the on-site inspection.

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.*

When the pit is backfilled, the topsoil pile shall be spread on the location up to the rig anchor points. The location will be reshaped to the original contour to the extent possible. The following seed mixture will be used to reclaim the surface for interim reclamation using appropriate reclamation methods. 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 Wheat Grass	4 lbs.
Indian Rice Grass	4 lbs.

Needle and Thread Grass 4 lbs.

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

**11. Surface Ownership:**

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

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

**12. Other Information:**

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

**WILDLIFE STIPS:**

**ANTELOPE:** - No Construction or Drilling May 15<sup>th</sup> – June 20<sup>th</sup>.

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

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

Sheila Ucphego  
Regulatory Analyst  
Kerr-McGee Oil & Gas Onshore LP  
1368 South 1200 East  
Vernal, UT 84078  
(435) 781-7024

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

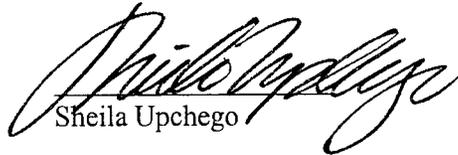
Certification: All lease and/or unit operations will be conducted in such a manner that full compliance is made with all applicable laws, regulations, Onshore Oil and Gas Orders, the approved Plan of Operations, and any applicable Notice to Lessees.

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 Bold #2971100-2533.

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

  
Sheila Upchego

5/24/2006

Date

Kerr-McGee Oil & Gas Onshore LP  
NBU #1022-28B  
SECTION 28, T10S, R22E, S.L.B.&M.

PROCEED IN A WESTERLY DIRECTION FROM VERNAL, UTAH ALONG U.S. HIGHWAY 40 APPROXIMATELY 14.0 MILES TO THE JUNCTION OF STATE HIGHWAY 88; EXIT LEFT AND PROCEED IN A SOUTHERLY DIRECTION APPROXIMATELY 17.0 MILES TO OURAY, UTAH; PROCEED IN A SOUTHERLY, THEN SOUTHEASTERLY DIRECTION APPROXIMATELY 11.2 MILES ON THE SEEP RIDGE ROAD TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE EAST; TURN LEFT AND PROCEED IN AN EASTERLY, THEN SOUTHEASTERLY DIRECTION APPROXIMATELY 10.7 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE NORTHEAST; TURN LEFT AND PROCEED IN A NORTHEASTERLY DIRECTION APPROXIMATELY 0.4 MILES TO THE BEGINNING OF THE PROPOSED ACCESS FOR THE #1022-28A TO THE EAST; FOLLOW ROAD FLAGS IN AN EASTERLY, THEN NORTHERLY DIRECTION APPROXIMATELY 0.2 MILES TO THE BEGINNING OF THE PROPOSED ACCESS TO THE SOUTHEAST; FOLLOW ROAD FLAGS IN A SOUTHEASTERLY DIRECTION APPROXIMATELY 85' TO THE PROPOSED LOCATION.

TOTAL DISTANCE FROM VERNAL, UTAH TO THE PROPOSED WELL LOCATION IS APPROXIMATELY 53.5 MILES.

# Kerr-McGee Oil & Gas Onshore LP

NBU #1022-28B

LOCATED IN UINTAH COUNTY, UTAH

SECTION 28, T10S, R22E, S.L.B.&M.

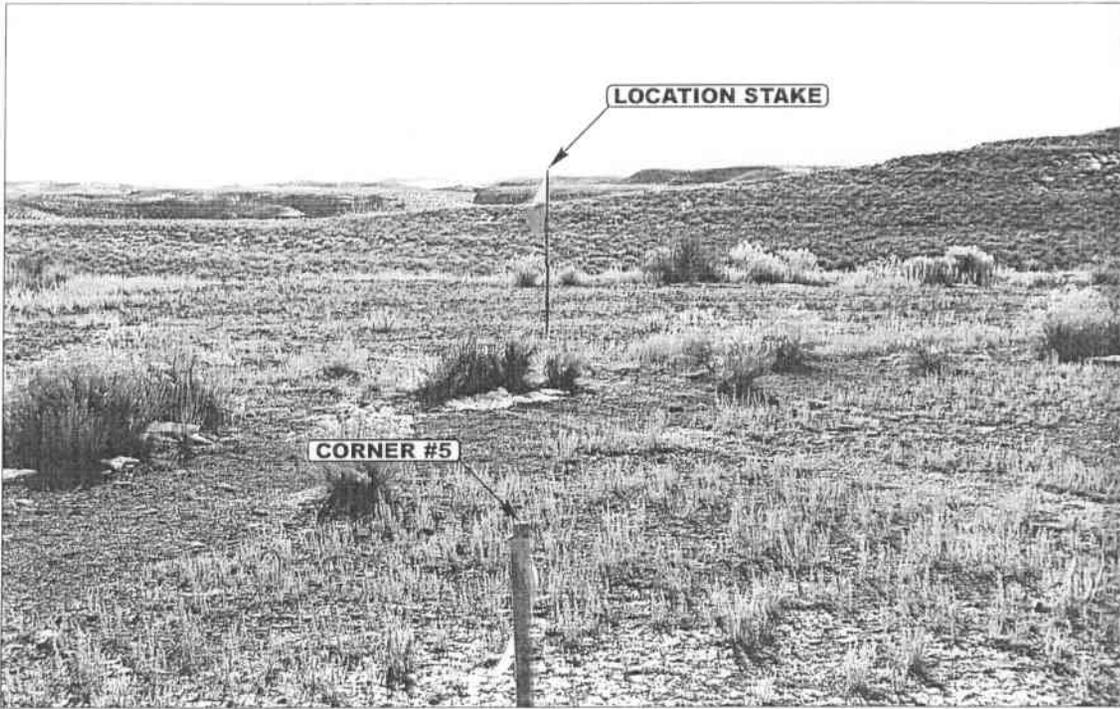


PHOTO: VIEW FROM CORNER #5 TO LOCATION STAKE

CAMERA ANGLE: SOUTHWESTERLY



PHOTO: VIEW FROM BEGINNING OF PROPOSED ACCESS

CAMERA ANGLE: SOUTHEASTERLY



- Since 1964 -

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

LOCATION PHOTOS	02	10	06	PHOTO
	MONTH	DAY	YEAR	
TAKEN BY: P.J.	DRAWN BY: B.C.	REVISED: 00-00-00		

# Kerr-McGee Oil & Gas Onshore LP

NBU #1022-28B

PIPELINE ALIGNMENT

LOCATED IN UTAH COUNTY, UTAH

SECTION 28, T10S, R22E, S.L.B.&M.



PHOTO: VIEW OF TIE-IN POINT

CAMERA ANGLE: SOUTHEASTERLY



PHOTO: VIEW OF PIPELINE ALIGNMENT

CAMERA ANGLE: SOUTHEASTERLY



- Since 1964 -

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

PIPELINE PHOTOS	02	10	06	PHOTO
	MONTH	DAY	YEAR	
TAKEN BY: P.J.	DRAWN BY: B.C.		REVISED: 00-00-00	



**LEGEND:**

⊙ PROPOSED LOCATION



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

NBU #1022-28B

SECTION 28, T10S, R22E, S.L.B.&M.

643' FNL 1812' FEL



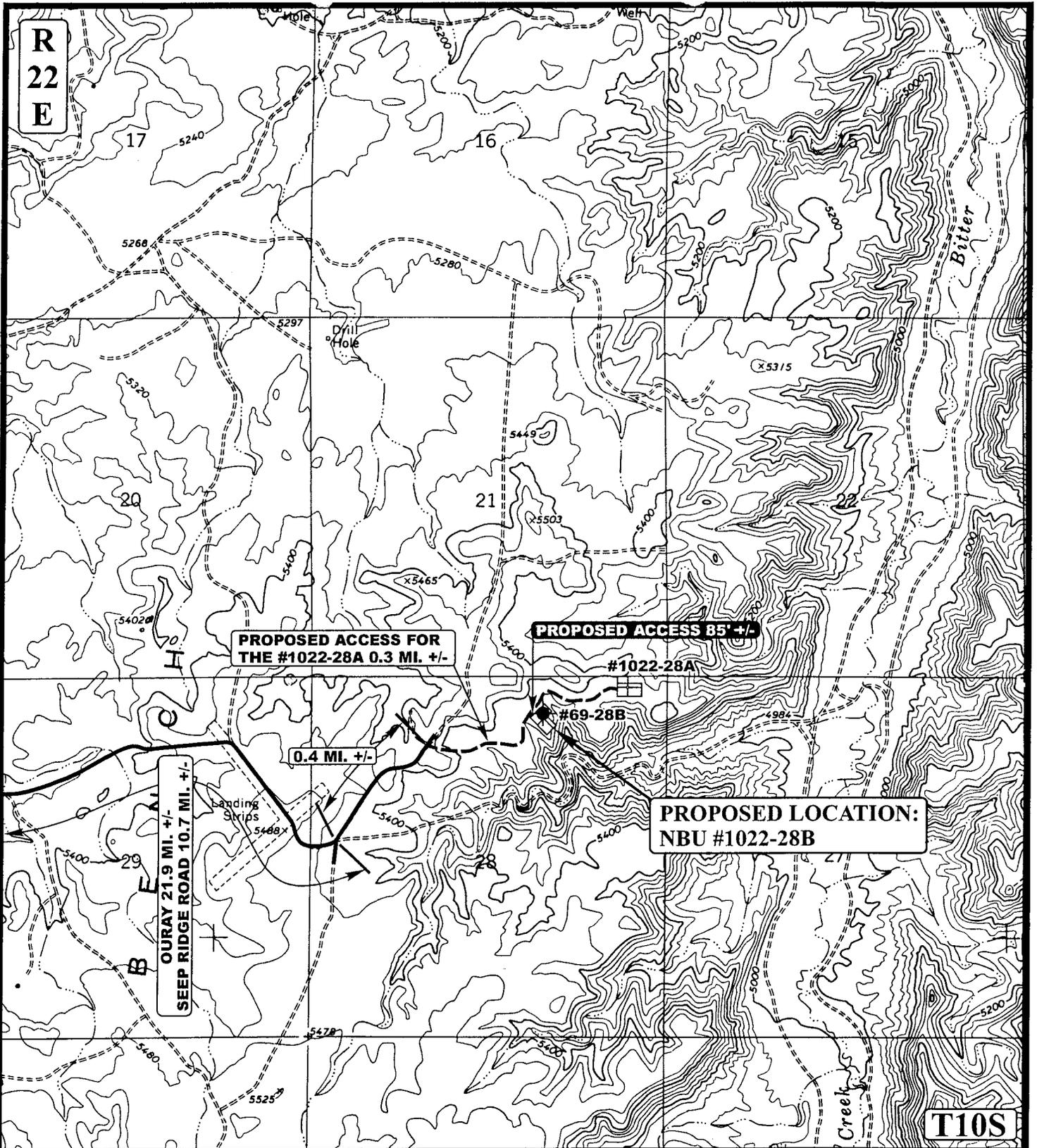
Utah Engineering & Land Surveying  
 85 South 200 East Vernal, Utah 84078  
 (435) 789-1017 \* FAX (435) 789-1813

TOPOGRAPHIC  
 MAP

02	10	06
MONTH	DAY	YEAR

SCALE: 1:100,000 | DRAWN BY: B.C. | REVISED: 00-00-00





**LEGEND:**

- EXISTING ROAD
- - - - - PROPOSED ACCESS ROAD



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

**NBU #1022-28B**

**SECTION 28, T10S, R22E, S.L.B.&M.**

**643' FNL 1812' FEL**



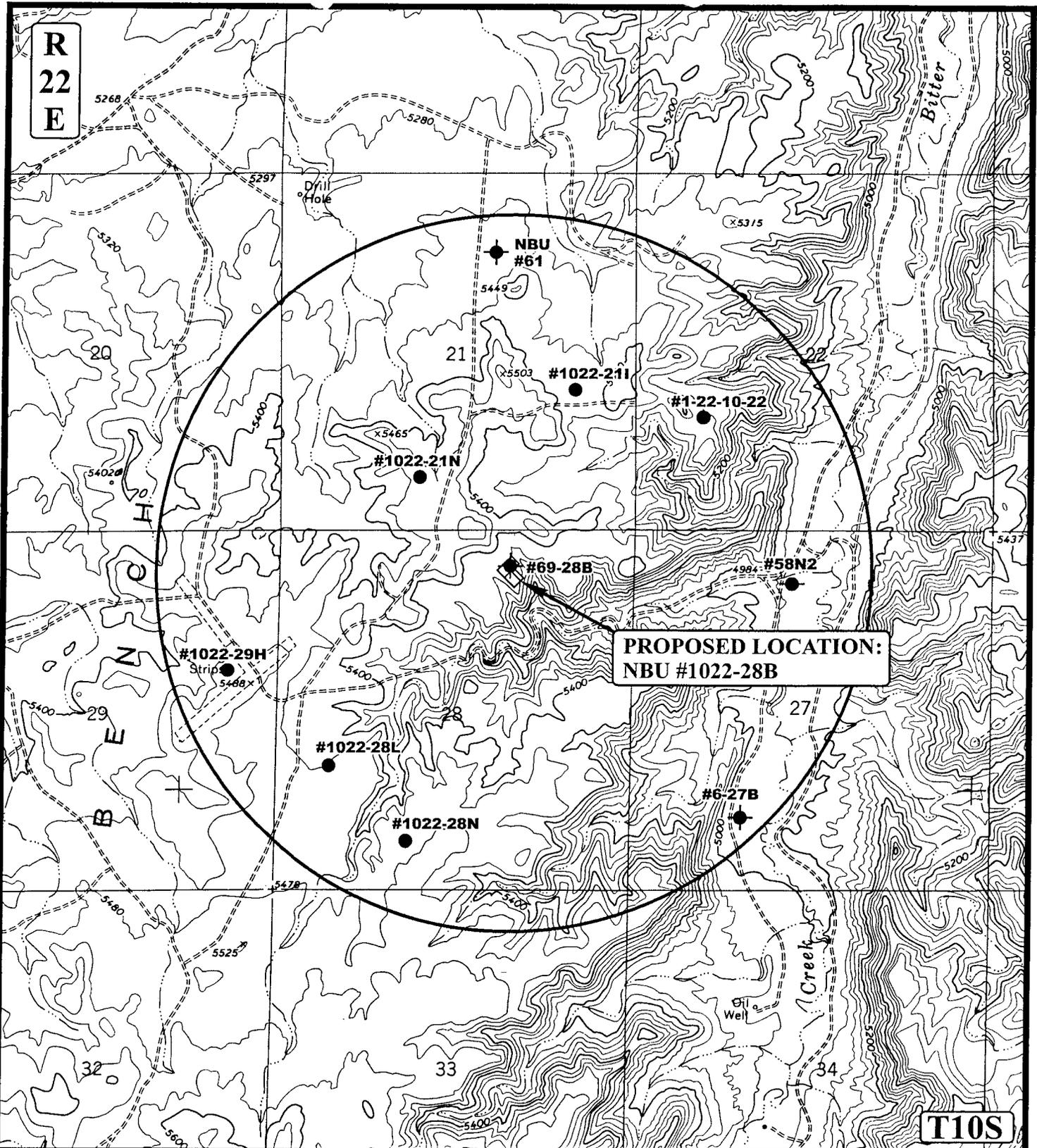
**Uintah Engineering & Land Surveying**  
 85 South 200 East Vernal, Utah 84078  
 (435) 789-1017 \* FAX (435) 789-1813

**TOPOGRAPHIC**  
**MAP**

**02 10 06**  
 MONTH DAY YEAR

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





**LEGEND:**

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



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

**NBU #1022-28B**  
**SECTION 28, T10S, R22E, S.L.B.&M.**  
**643' FNL 1812' FEL**



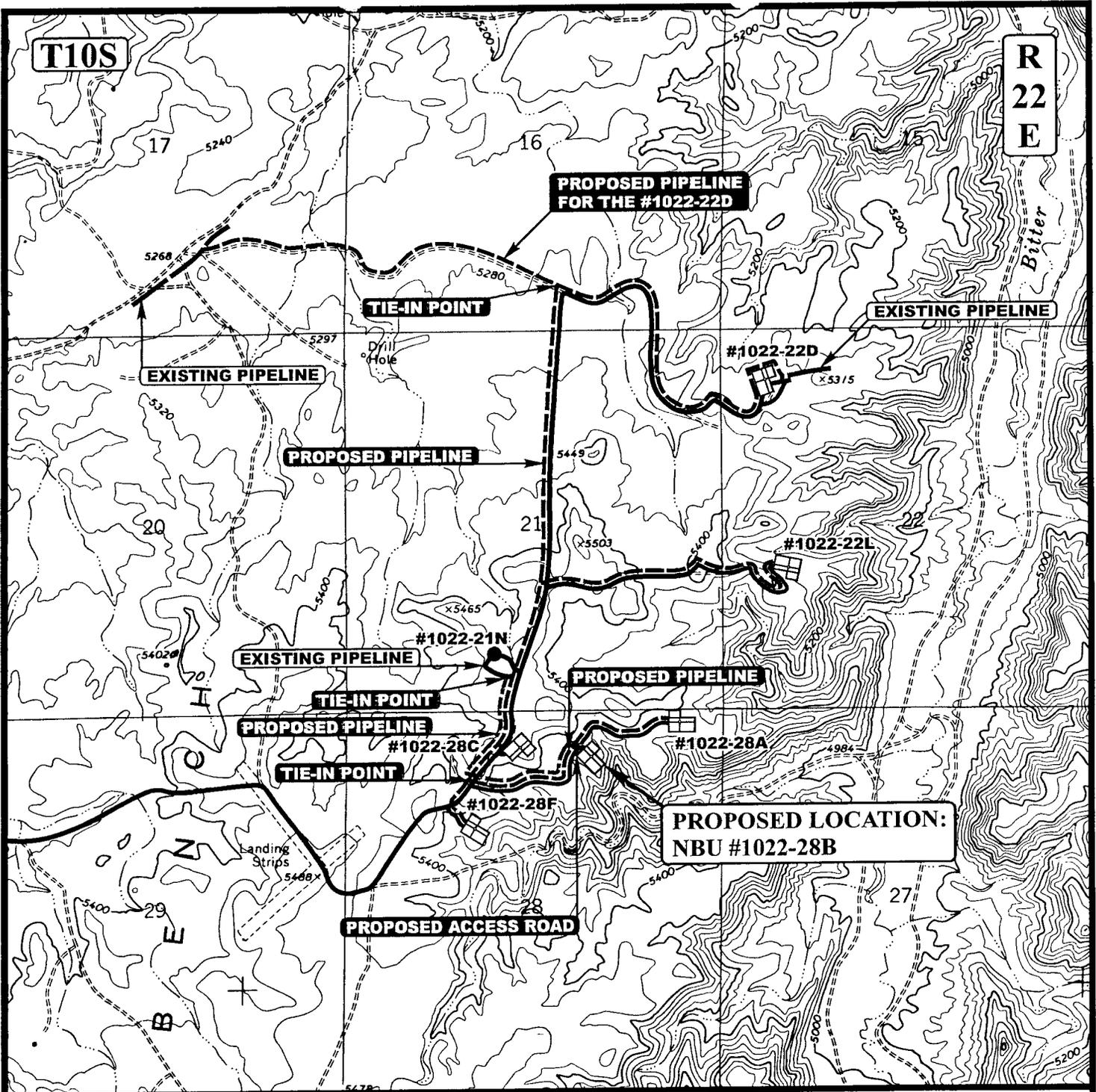
**Utah Engineering & Land Surveying**  
 85 South 200 East Vernal, Utah 84078  
 (435) 789-1017 \* FAX (435) 789-1813

**TOPOGRAPHIC**  
**M A P**

<b>02</b>	<b>10</b>	<b>06</b>
MONTH	DAY	YEAR

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



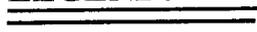
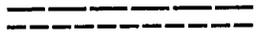
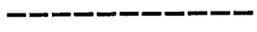
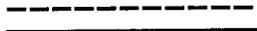


APPROXIMATE TOTAL 8" PIPELINE DISTANCE = 7,150' +/-

APPROXIMATE TOTAL 4" PIPELINE DISTANCE = 3,500' +/-

APPROXIMATE TOTAL 4" PIPELINE DISTANCE = 2,000' +/-

**LEGEND:**

-  PROPOSED ACCESS ROAD
-  EXISTING PIPELINE
-  PROPOSED 8" PIPELINE
-  PROPOSED 4" PIPELINE
-  PROPOSED PIPELINE (SERVICING OTHER WELLS)



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

NBU #1022-28B

SECTION 28, T10S, R22E, S.L.B.&M.

643' FNL 1812' FEL



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

TOPOGRAPHIC MAP 02 10 06  
MONTH DAY YEAR

SCALE: 1" = 2000' DRAWN BY: B.C. REVISED: 05-18-06.C.P.



# Kerr-McGee Oil & Gas Onshore LP

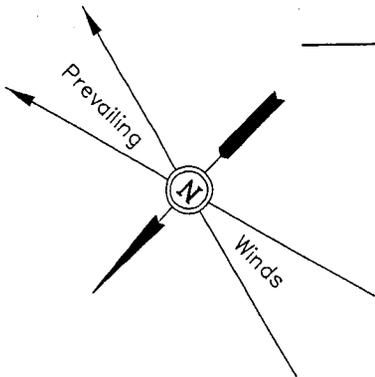
FIGURE #1

## LOCATION LAYOUT FOR

NBU #1022-28B  
SECTION 28, T10S, R22E, S.L.B.&M.  
643' FNL 1812' FEL

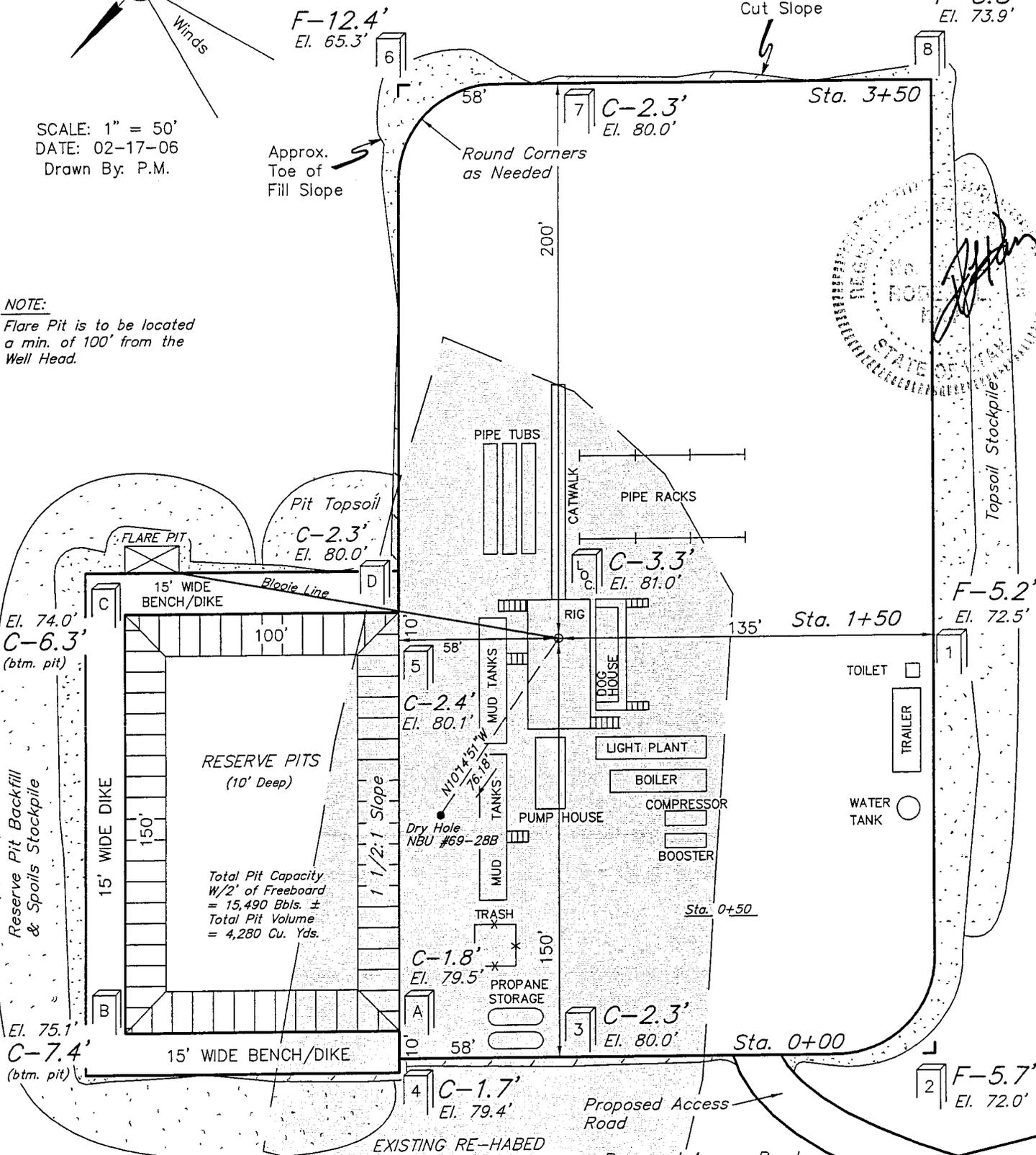
Approx.  
Top of  
Cut Slope

F-3.8'  
El. 73.9'



SCALE: 1" = 50'  
DATE: 02-17-06  
Drawn By: P.M.

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



**NOTES:**

Elev. Ungraded Ground At Loc. Stake = 5381.0'  
FINISHED GRADE ELEV. AT LOC. STAKE = 5377.7'

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

Kerr-McGee Oil & Gas Onshore LP

FIGURE #2

TYPICAL CROSS SECTIONS FOR

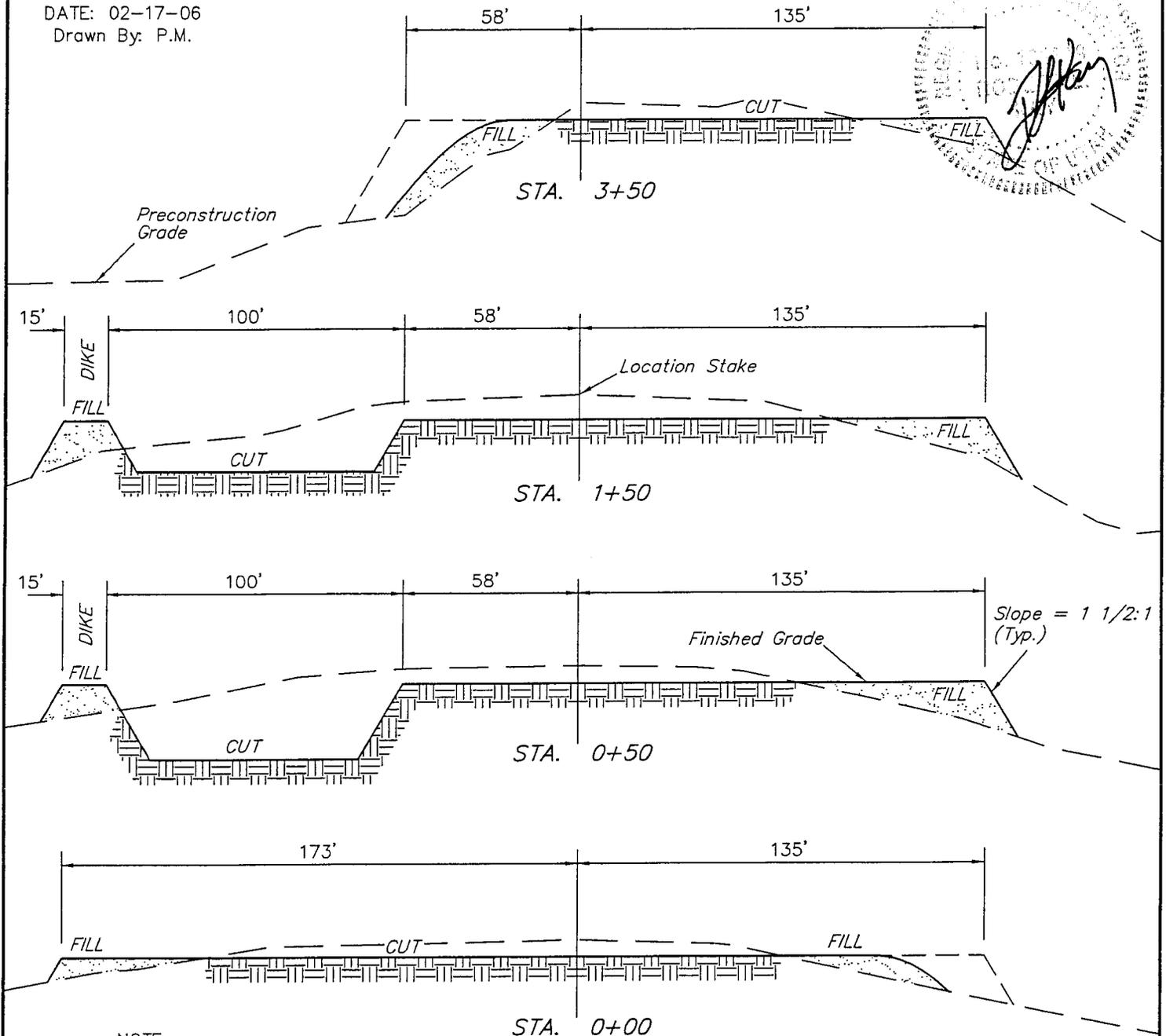
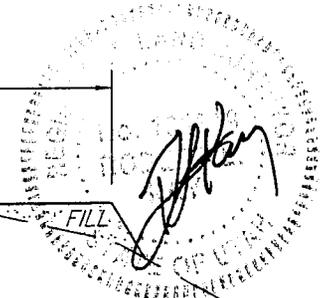
NBU #1022-28B

SECTION 28, T10S, R22E, S.L.B.&M.

643' FNL 1812' FEL

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

DATE: 02-17-06  
Drawn By: P.M.



NOTE:

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

\* NOTE:

FILL QUANTITY INCLUDES 5% FOR COMPACTION

APPROXIMATE YARDAGES

CUT	
(6") Topsoil Stripping	= 1,860 Cu. Yds.
Remaining Location	= 6,710 Cu. Yds.
<b>TOTAL CUT</b>	<b>= 8,570 CU.YDS.</b>
<b>FILL</b>	<b>= 4,570 CU.YDS.</b>

EXCESS MATERIAL	= 4,000 Cu. Yds.
Topsoil & Pit Backfill (1/2 Pit Vol.)	= 4,000 Cu. Yds.
EXCESS UNBALANCE (After Rehabilitation)	= 0 Cu. Yds.

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

**WORKSHEET  
APPLICATION FOR PERMIT TO DRILL**

APD RECEIVED: 05/30/2006

API NO. ASSIGNED: 43-047-38166

WELL NAME: NBU 1022-28B

OPERATOR: KERR-MCGEE OIL & GAS ( N2995 )

PHONE NUMBER: 435-781-7024

CONTACT: SHEILA UPCHEGO

**PROPOSED LOCATION:**

NWNE 28 100S 220E  
 SURFACE: 0643 FNL 1812 FEL  
 BOTTOM: 0643 FNL 1812 FEL  
 COUNTY: UINTAH  
 LATITUDE: 39.92536 LONGITUDE: -109.4410  
 UTM SURF EASTINGS: 633225 NORTHINGS: 4420427  
 FIELD NAME: NATURAL BUTTES ( 630 )

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

LEASE TYPE: 1 - Federal  
 LEASE NUMBER: UTU-0474  
 SURFACE OWNER: 1 - Federal

PROPOSED FORMATION: WSMVD  
 COALBED METHANE WELL? NO

**RECEIVED AND/OR REVIEWED:**

- Plat
- Bond: Fed[1] Ind[] Sta[] Fee[]  
(No. 2971100-2533 )
- Potash (Y/N)
- Oil Shale 190-5 (B) or 190-3 or 190-13
- Water Permit  
(No. 43-8496 )
- RDCC Review (Y/N)  
(Date: \_\_\_\_\_ )
- Fee Surf Agreement (Y/N)
- Intent to Commingle (Y/N)

**LOCATION AND SITING:**

- R649-2-3.
- Unit: NATURAL BUTTES
- R649-3-2. General  
Siting: 460 From Qtr/Qtr & 920' Between Wells
- R649-3-3. Exception
- Drilling Unit  
Board Cause No: 173-14  
Eff Date: 12-2-1999  
Siting: 440' by Wbdrq Flucmm. trace
- R649-3-11. Directional Drill

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

STIPULATIONS: 1- Federal Approved

2- Oil SHALE





**State of Utah**

**Department of  
Natural Resources**

MICHAEL R. STYLER  
*Executive Director*

**Division of  
Oil, Gas & Mining**

JOHN R. BAZA  
*Division Director*

JON M. HUNTSMAN, JR.  
*Governor*

GARY R. HERBERT  
*Lieutenant Governor*

June 5, 2006

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

Re: Natural Buttes Unit 1022-28B Well, 643' FNL, 1812' FEL, NW NE, Sec. 28,  
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.

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

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date. The API identification number assigned to this well is 43-047-38166.

Sincerely,

Gil Hunt  
Associate Director

pab  
Enclosures

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

**Operator:** Kerr-McGee Oil & Gas Onshore LP  
**Well Name & Number** Natural Buttes Unit 1022-28B  
**API Number:** 43-047-38166  
**Lease:** UTU-0474

**Location:** NW NE                      **Sec.** 28                      **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 Dan Jarvis at (801) 538-5338

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. 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.

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



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*

August 9, 2007

Whitney Morton  
Kerr-McGee O&G Onshore LP  
1368 S 1200 E  
Vernal, UT 84078

Re: APDs Rescinded at the request of Kerr-McGee O&G Onshore LP

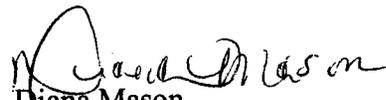
Dear Ms. Morton:

Enclosed find the list of APDs that you requested to be rescinded to Kerr – McGee O&G. No drilling activity at these locations has been reported to the division. Therefore, approval to drill these wells is hereby rescinded, effective August 8, 2007.

A new APD must be filed with this office for approval prior to the commencement of any future work on the subject locations.

If any previously unreported operations have been performed on this well location, it is imperative that you notify the Division immediately.

Sincerely,

  
Diana Mason  
Environmental Scientist

cc:

Well File  
Bureau of Land Management, Vernal

Page 2  
August 9, 2007  
Subject:

Mulligan 822-12L

Mulligan 822-12M

Mulligan 822-13D

Mulligan 822-13L

Mulligan 822-13E

Mulligan 823-7M

Mulligan 823-7I

Mulligan 823-8H

Mulligan 823-10O

Mulligan 823-15F

Mulligan 823-21K

NBU 1021-14M

NBU 1022-28B

NBU 1022-28H

NBU 1022-28C

NBU 1022-28A

Federal 1022-30M

Federal 1022-28P