

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

1a. Type of Work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. <b>UTU-01393-D</b>
b. Type of Well: <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input type="checkbox"/> Single Zone <input checked="" type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name
2. Name of Operator <b>KERR MCGEE OIL &amp; GAS ONSHORE LP</b>		7. If Unit or CA Agreement, Name and No. <b>UNIT #891008900A</b>
3A. Address <b>1368 SOUTH 1200 EAST VERNAL, UT 84078</b>	3b. Phone No. (include area code) <b>(435) 781-7024</b>	8. Lease Name and Well No. <b>NBU 1021-05MT</b>
4. Location of Well (Report location clearly and in accordance with any State requirements.)* At surface <b>SW/SW 745'FSL, 529'FWL 621005X 39.971591</b> At proposed prod. Zone <b>4425355Y -109.583062</b>		9. API Well No. <b>43-04739375</b>
14. Distance in miles and direction from nearest town or post office* <b>12.1 +/- MILES SOUTH OF OURAY, UTAH</b>		10. Field and Pool, or Exploratory <b>NATURAL BUTTES</b>
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) <b>529'</b>	16. No. of Acres in lease <b>562.5</b>	11. Sec., T., R., M., or Blk, and Survey or Area <b>SEC. 5, T10S, R21E</b>
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. <b>REFER TO TOPO C</b>	19. Proposed Depth <b>9850'</b>	12. County or Parish <b>UINTAH</b>
20. BLM/BIA Bond No. on file <b>BOND NO: WYB000291</b>	13. State <b>UTAH</b>	
21. Elevations (Show whether DF, KDB, RT, GL, etc.) <b>5041'GL</b>	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:

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

25. Signature 	Name (Printed/Typed) <b>SHEILA UPCHEGO</b>	Date <b>6/4/2007</b>
Title <b>SENIOR LAND ADMIN SPECIALIST</b>		
Approved by (Signature) 	Name (Printed/Typed) <b>BRADLEY G. HILL</b>	Date <b>06-19-07</b>
Title <b>ENVIRONMENTAL MANAGER</b>		

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

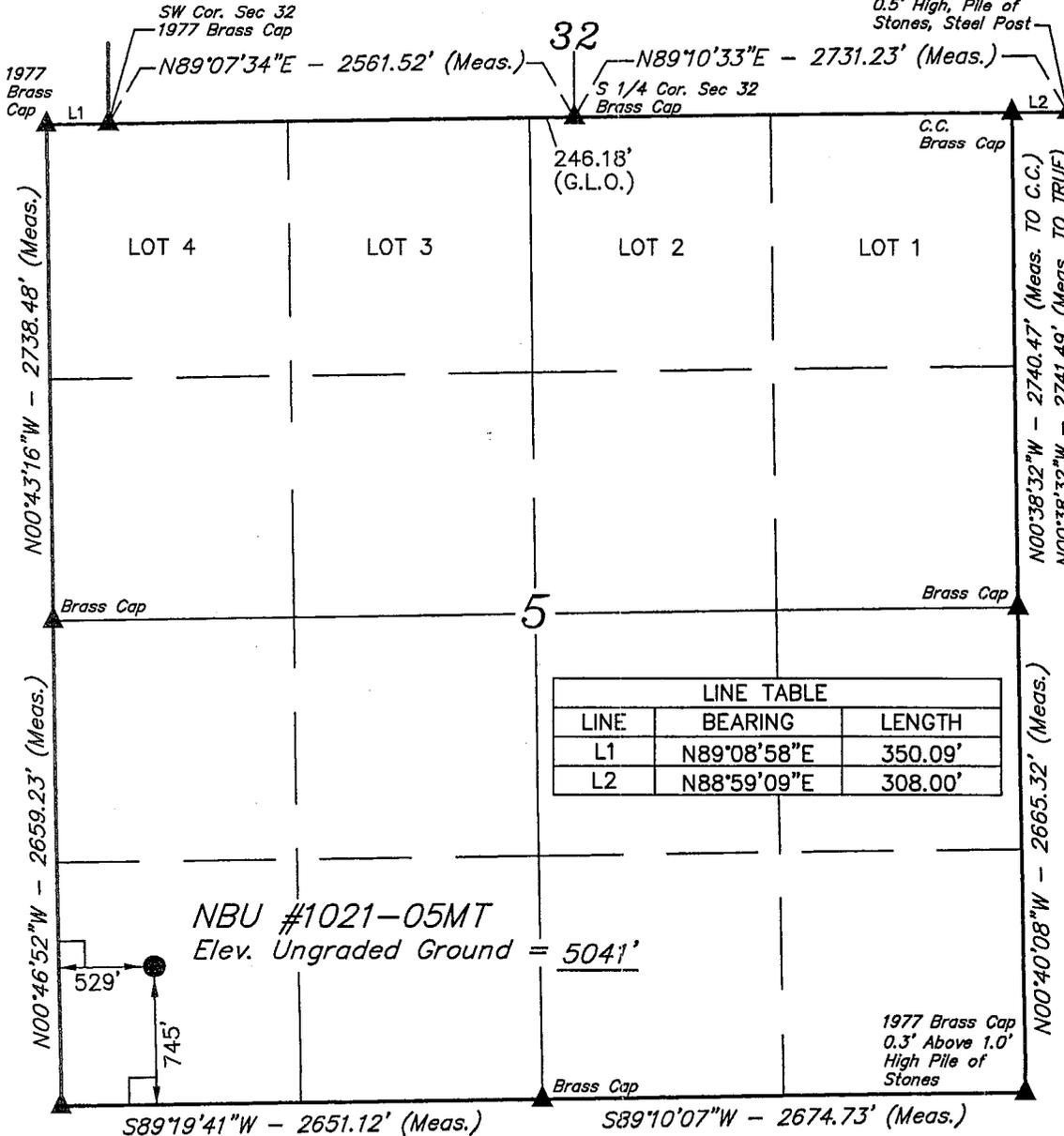
RECEIVED  
JUN 11 2007  
DIV. OF OIL, GAS & MINING

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

SE Cor. Sec 32  
1977 Brass Cap  
0.5' High, Pile of  
Stones, Steel Post

Kerr-McGee Oil & Gas Onshore LP

Well location, NBU #1021-05MT, located as shown in the SW 1/4 SW 1/4 of Section 5, T10S, R21E, S.L.B.&M., Uintah County, Utah.

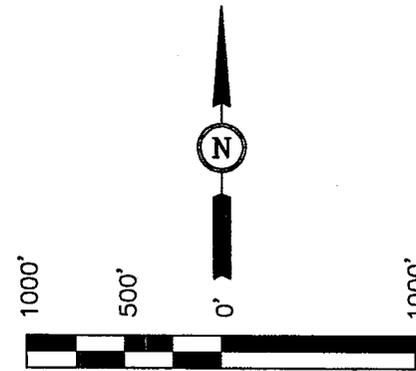


BASIS OF ELEVATION

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

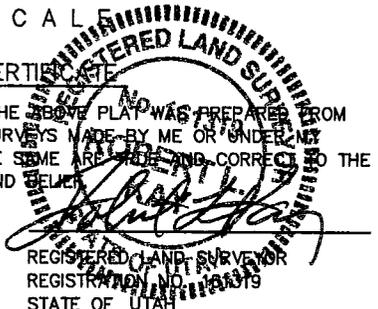
BASIS OF BEARINGS

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



SCALE  
CERTIFIED

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. 104015  
STATE OF UTAH

REV: 05-18-07

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

1977 Brass Cap  
Pile of Stones

LEGEND:

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

(NAD 83)  
LATITUDE = 39°58'17.99" (39.971664)  
LONGITUDE = 109°35'01.56" (109.583767)  
(NAD 27)  
LATITUDE = 39°58'18.12" (39.971700)  
LONGITUDE = 109°34'59.08" (109.583078)

SCALE 1" = 1000'	DATE SURVEYED: 03-30-07	DATE DRAWN: 04-11-07
PARTY D.S. M.B. C.H.	REFERENCES G.L.O. PLAT	
WEATHER WARM	FILE Kerr-McGee Oil & Gas Onshore LP	

NBU #1021-05MT  
SW/SW SEC 5, T10S, R21E  
UINTAH COUNTY, UTAH  
UTU-~~04485~~  
01393-D  
ONSHORE ORDER NO. 1

***DRILLING PROGRAM***

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

<u>Formation</u>	<u>Depth</u>
Uinta	0- Surface
Green River	1472'
Top of Birds Nest Water	1668'
Mahogany	2042'
Wasatch	4701'
Mesaverde	7703'
MVU2	8664'
MVL1	9205'
TD	9850'

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

<u>Substance</u>	<u>Formation</u>	<u>Depth</u>
	Green River	1472'
	Top of Birds Nest Water	1668'
	Mahogany	2042'
Gas	Wasatch	4701'
Gas	Mesaverde	7703'
Gas	MVU2	8664'
Gas	MVL1	9205'
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 9850' TD, approximately equals 6107 psi (calculated at 0.62 psi/foot).

Maximum anticipated surface pressure equals approximately 3940 psi (bottomhole pressure minus the pressure of a partially evacuated hole calculated at 0.22 psi/foot).

8. **Anticipated Starting Dates:**

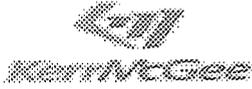
*Drilling is planned to commence immediately upon approval of this application.*

9. **Variations:**

*Please see Natural Buttes Unit SOP.*

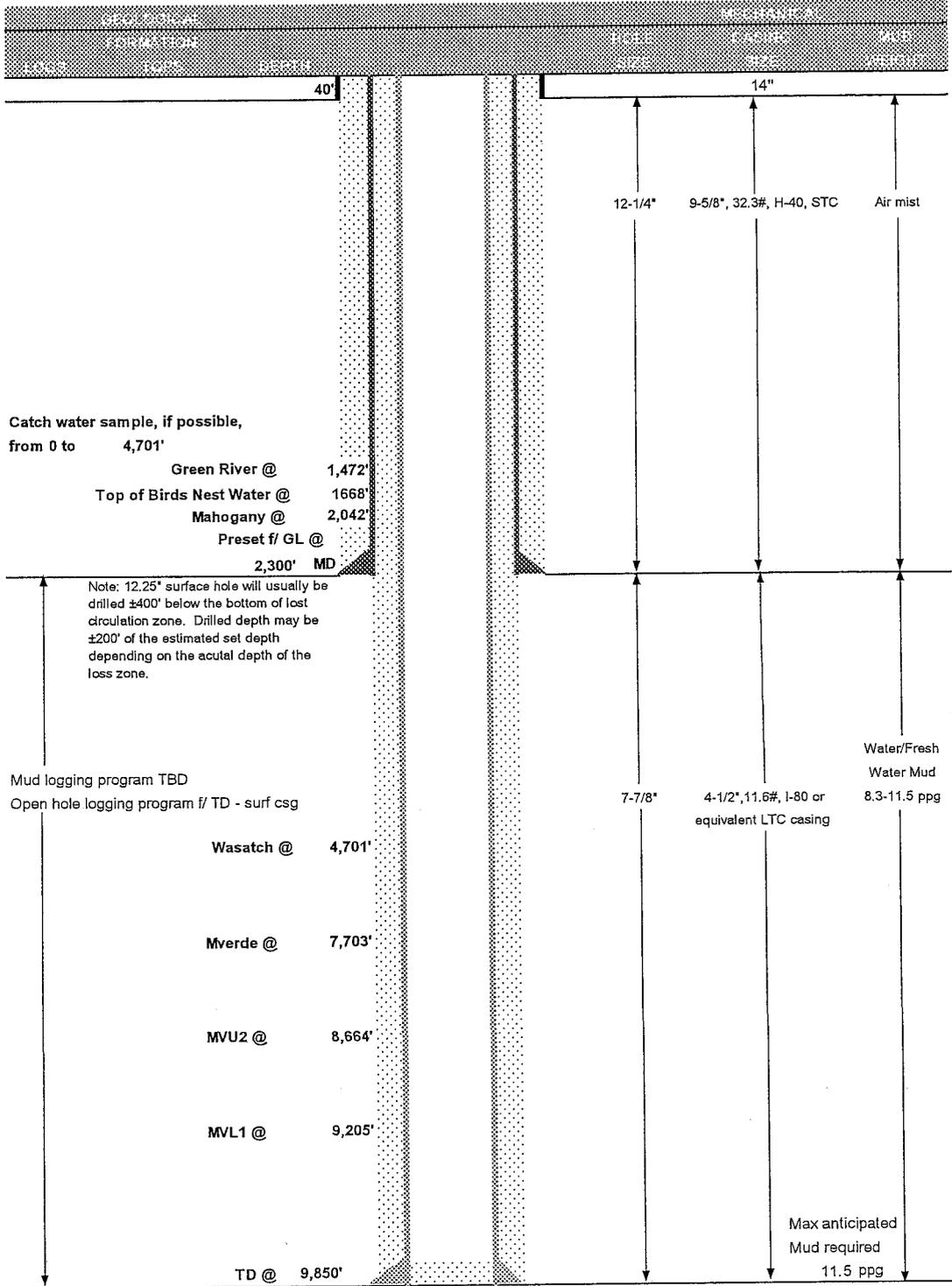
10. **Other Information:**

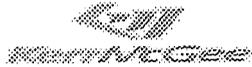
*Please see Natural Buttes Unit SOP.*



# KERR-McGEE OIL & GAS ONSHORE LP DRILLING PROGRAM

COMPANY NAME KERR-McGEE OIL & GAS ONSHORE LP DATE May 31, 2007  
 WELL NAME NBU 1021-05MT TD 9,850' MD/TVD  
 FIELD Natural Buttes COUNTY Uintah STATE Utah ELEVATION 5,041' GL KB 5,056'  
 SURFACE LOCATION SWSW, SEC 5-T10S-R21E, 745' FSL 529' FWL BHL Straight Hole  
 Latitude: 39.971664 Longitude: 109.583767  
 OBJECTIVE ZONE(S) Wasatch/Mesaverde  
 ADDITIONAL INFO Regulatory Agencies: BLM (SURF & MINERALS), UDOGM, Tri-County Health Dept.





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

**CASING PROGRAM**

CONDUCTOR	14"	0-40'						
						2270	1370	254000
SURFACE	9-5/8"	0 to 2300	32.30	H-40	STC	0.61*****	1.27	3.90
						7780	6350	201000
PRODUCTION	4-1/2"	0 to 9850	11.60	I-80	LTC	2.09	1.08	2.02

- 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 3723 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**

SURFACE	LEAD	500	Premium cmt + 2% CaCl + .25 pps floccle	215	60%	15.60	1.18
Option 1	TOP OUT CMT (1)	200	20 gals sodium silicate + Premium cmt + 2% CaCl + .25 pps floccle	50		15.60	1.18
	TOP OUT CMT (2)	as required	Premium cmt + 2% CaCl	as req.		15.60	1.18
SURFACE		NOTE: If well will circulate water to surface, option 2 will be utilized					
Option 2	LEAD	1500	Prem cmt + 16% Gel + 10 pps gilsonite + .25 pps Floccle + 3% salt BWOC	170	35%	11.00	3.82
	TAIL	500	Premium cmt + 2% CaCl + .25 pps floccle	180	35%	15.60	1.18
	TOP OUT CMT	as required	Premium cmt + 2% CaCl	as req.		15.60	1.18
PRODUCTION	LEAD	4,200'	Premium Lite II + 3% KCl + 0.25 pps celluloflake + 5 pps gilsonite + 10% gel + 0.5% extender	460	60%	11.00	3.38
	TAIL	5,650'	50/50 Poz/G + 10% salt + 2% gel + 1% R-3	1580	60%	14.30	1.31

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

**FLOAT EQUIPMENT & CENTRALIZERS**

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

**ADDITIONAL INFORMATION**

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

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

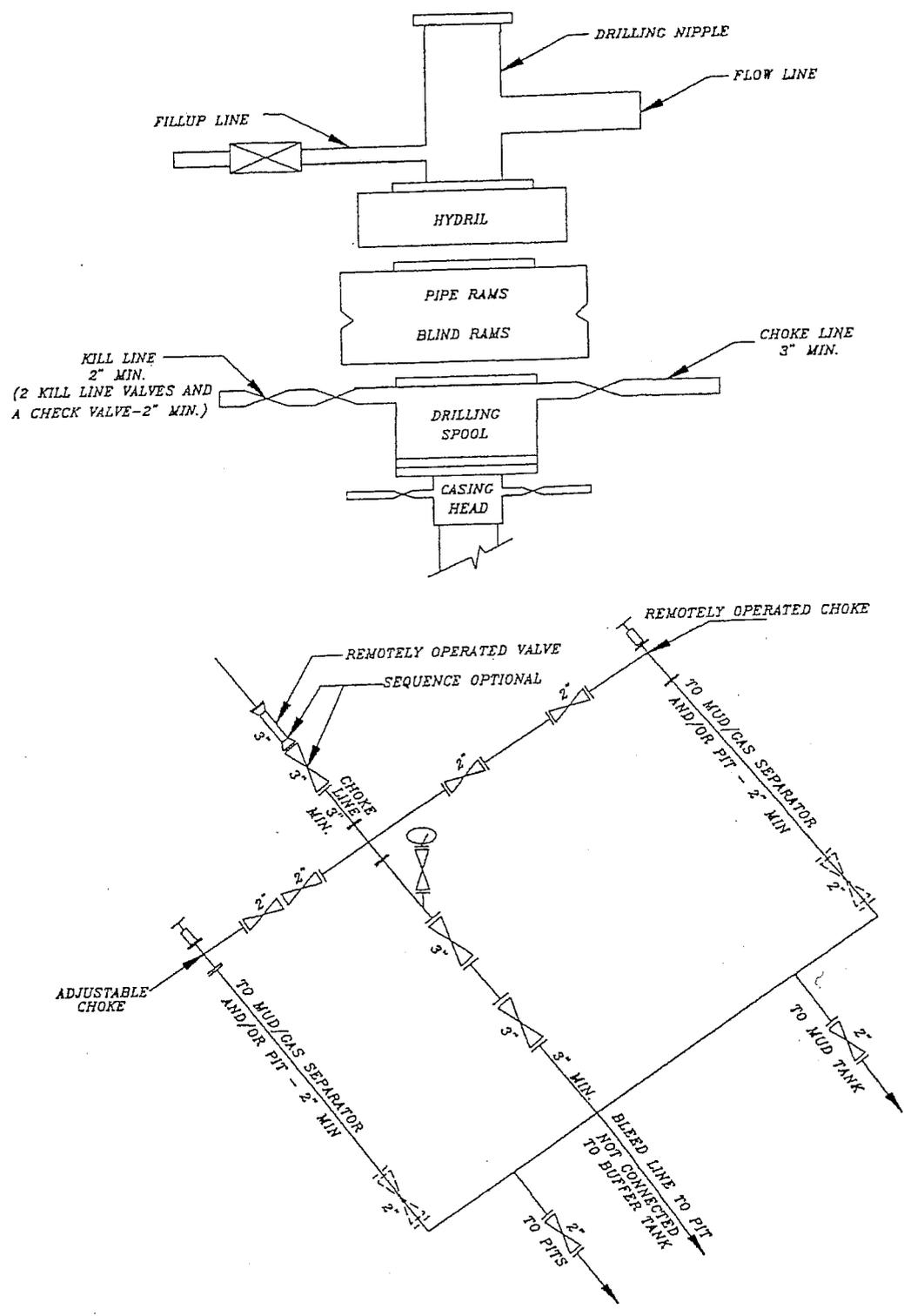
Drop Totco surveys every 2000'. Maximum allowable hole angle is 5 degrees.

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

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

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

# 5M BOP STACK and CHOKE MANIFOLD SYSTEM



NBU #1021-05MT  
SW/SW SEC 5, T10S, R21E  
UINTAH COUNTY, UTAH  
UTU-01393-D

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 50' +/- miles of access road is proposed. Please refer to the attached 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.*

The operator will utilize an existing pipeline.

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

The pipeline 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).

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

A 20 mil reserve pit liner with felt 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:

Indian Rice Grass	6 lbs.
Needle & Thread Grass	6 lbs.
Crested Wheatgrass	6 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 Report No. 06-218, completed and will be submitted when report becomes available.

The paleontological survey have been performed and will be submitted when report becomes available.

**WILDLIFE STIPULATIONS:**

**ANTELOPE:** No construction or drilling from May 15<sup>th</sup> – June 20<sup>th</sup>. –Waived by BLM on 05/15/2007.

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 with the boundaries of the unit.

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

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

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

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

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.

  
Sheila Upchego

6/4/2007

Date

# Kerr-McGee Oil & Gas Onshore LP

NBU #1021-05MT

SECTION 5, T10S, R21E, S.L.B.&M.

PROCEED IN A WESTERLY DIRECTION FROM VERNAL, UTAH ALONG U.S. HIGHWAY 40 APPROXIMATELY 14.0 MILES TO THE JUNCTION OF STATE HIGHWAY 88; EXIT LEFT AND PROCEED IN A SOUTHERLY DIRECTION APPROXIMATELY 17.0 MILES TO OURAY, UTAH; PROCEED IN A SOUTHERLY DIRECTION APPROXIMATELY 6.9 MILES ON THE SEEP RIDGE ROAD TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE EAST; TURN LEFT AND PROCEED IN AN EASTERLY DIRECTION APPROXIMATELY 3.7 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE SOUTHEAST; TURN RIGHT AND PROCEED IN A SOUTHEASTERLY DIRECTION APPROXIMATELY 1.5 MILES TO THE BEGINNING OF THE PROPOSED ACCESS TO THE NORTHEAST; FOLLOW ROAD FLAGS IN A NORTHEASTERLY DIRECTION APPROXIMATELY 100' TO THE PROPOSED LOCATION.

TOTAL DISTANCE FROM VERNAL, UTAH TO THE PROPOSED WELL LOCATION IS APPROXIMATELY 43.1 MILES.

# Kerr-McGee Oil & Gas Onshore LP

NBU #1021-05MT  
LOCATED IN UINTAH COUNTY, UTAH  
SECTION 5, T10S, R21E, S.L.B.&M.

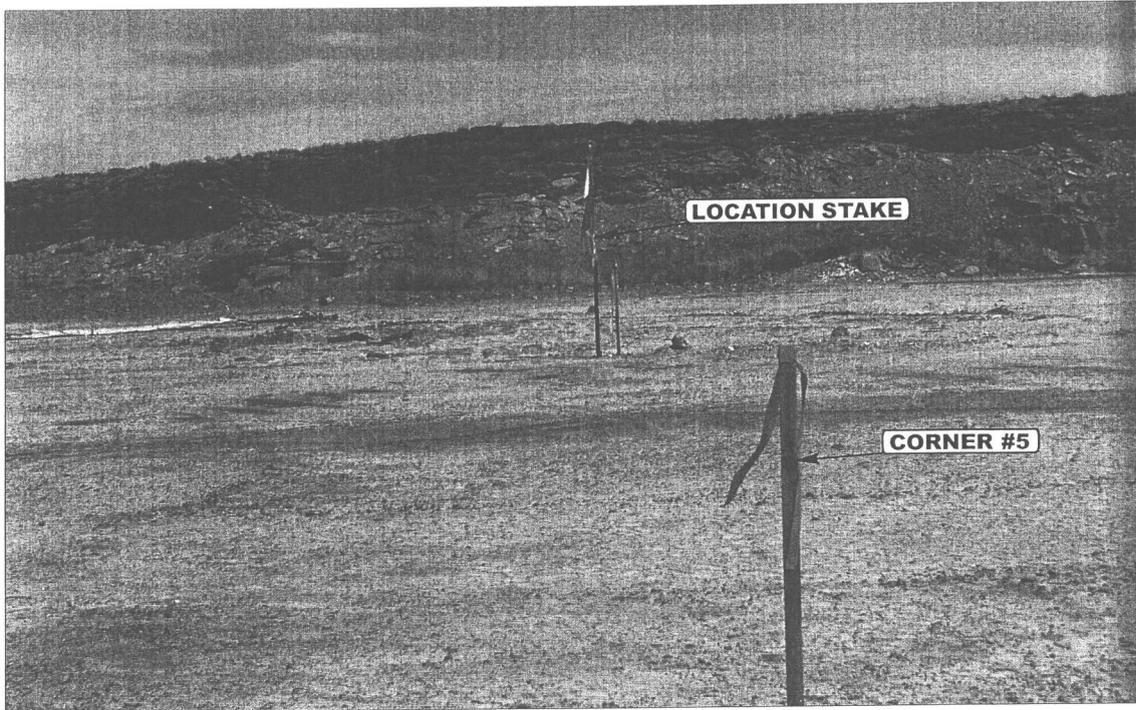


PHOTO: VIEW FROM CORNER #5 TO LOCATION STAKE

CAMERA ANGLE: NORTHEASTERLY



PHOTO: VIEW FROM BEGINNING OF PROPOSED ACCESS

CAMERA ANGLE: NORTHEASTERLY



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

LOCATION PHOTOS

04 09 07  
MONTH DAY YEAR

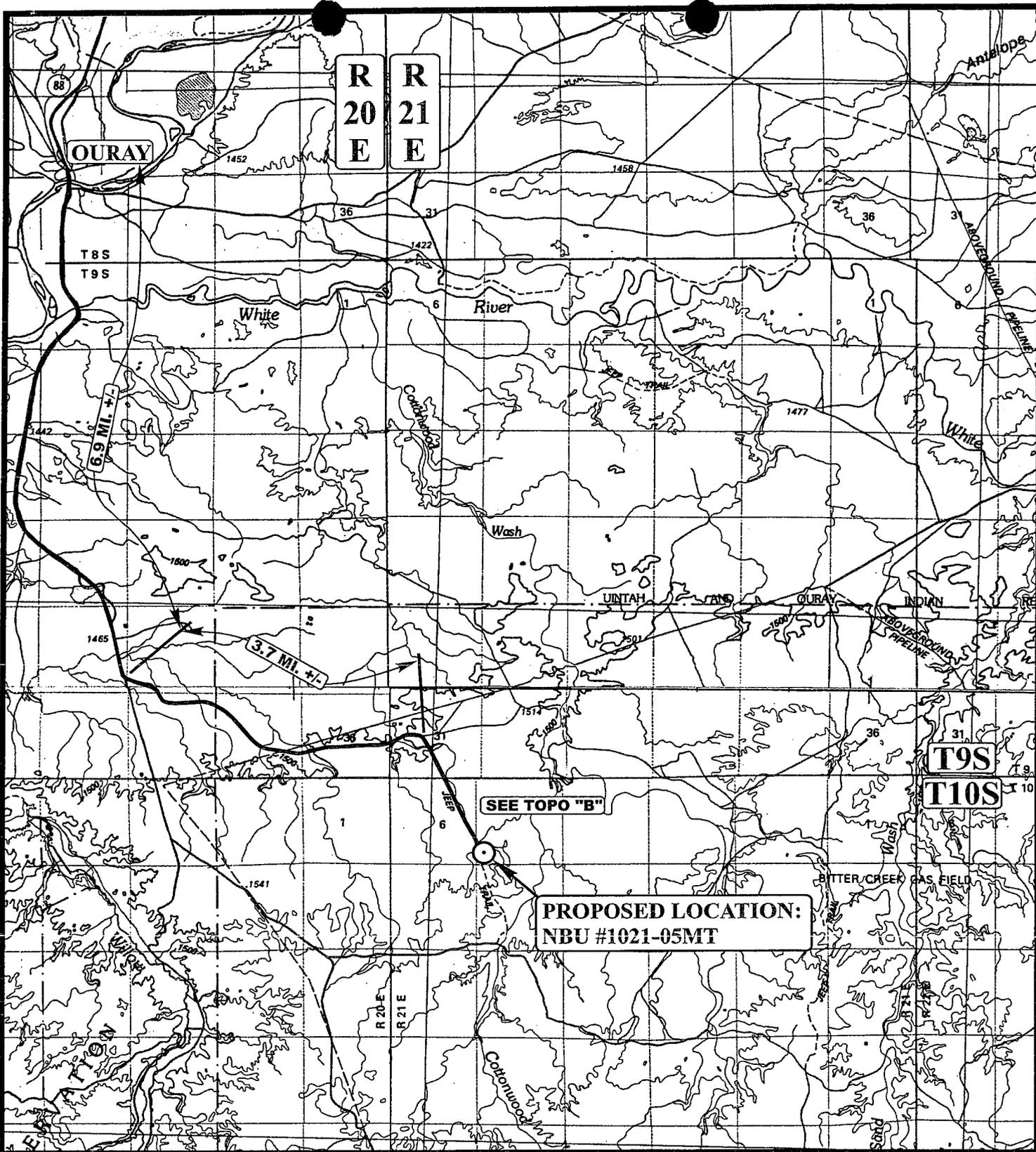
PHOTO

TAKEN BY: D.S.

DRAWN BY: C.P.

REVISED: 05-18-07

- Since 1964 -



**LEGEND:**

○ PROPOSED LOCATION



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

**NBU #1021-05MT**  
**SECTION 5, T10S, R21E, S.L.B.&M.**  
**745' FSL 529' FWL**



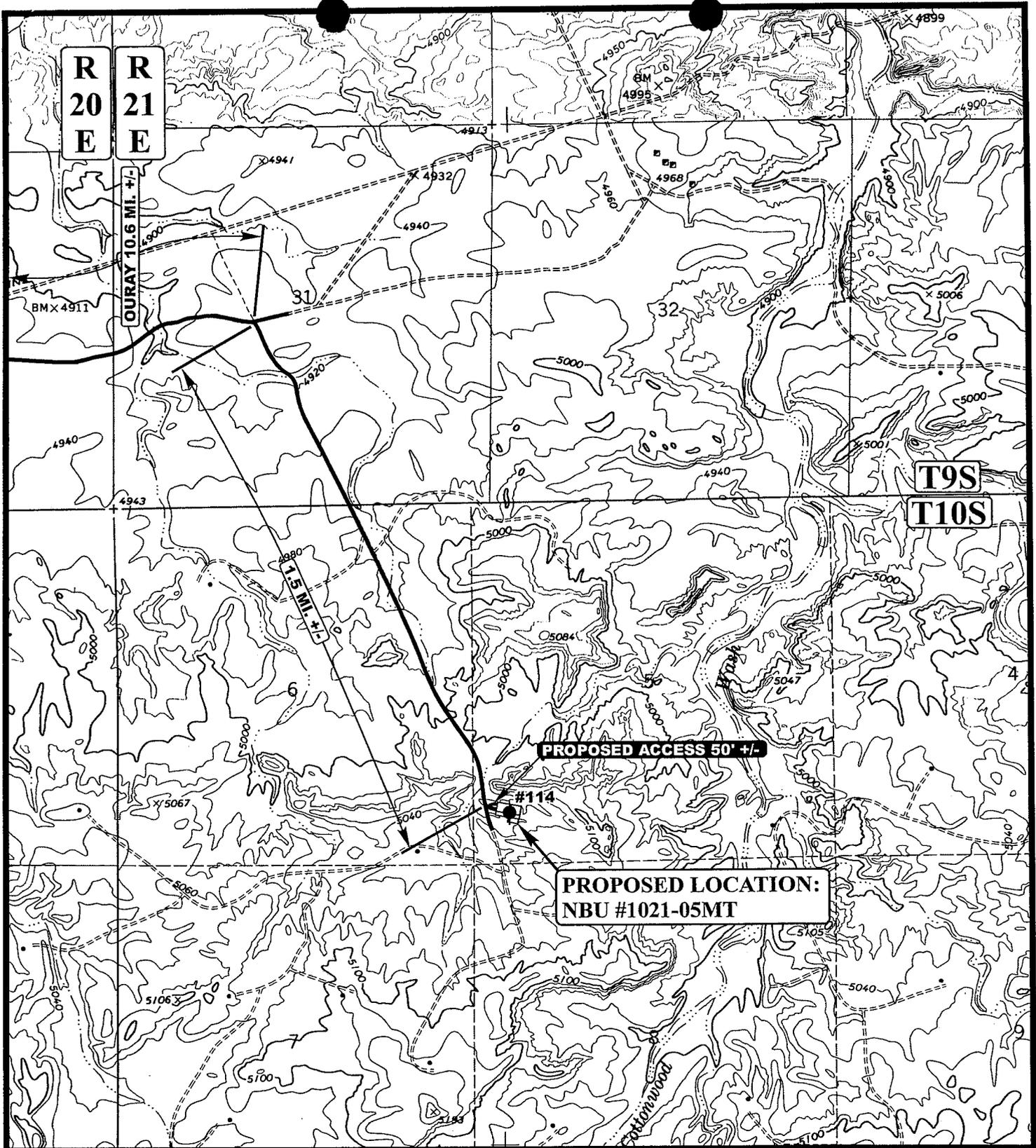
**Uintah Engineering & Land Surveying**  
 85 South 200 East Vernal, Utah 84078  
 (435) 789-1017 \* FAX (435) 789-1813

**TOPOGRAPHIC**  
**MAP**

**04 09 07**  
 MONTH DAY YEAR

SCALE: 1:100,000 DRAWN BY: C.P. REVISED: 05-18-07





**LEGEND:**

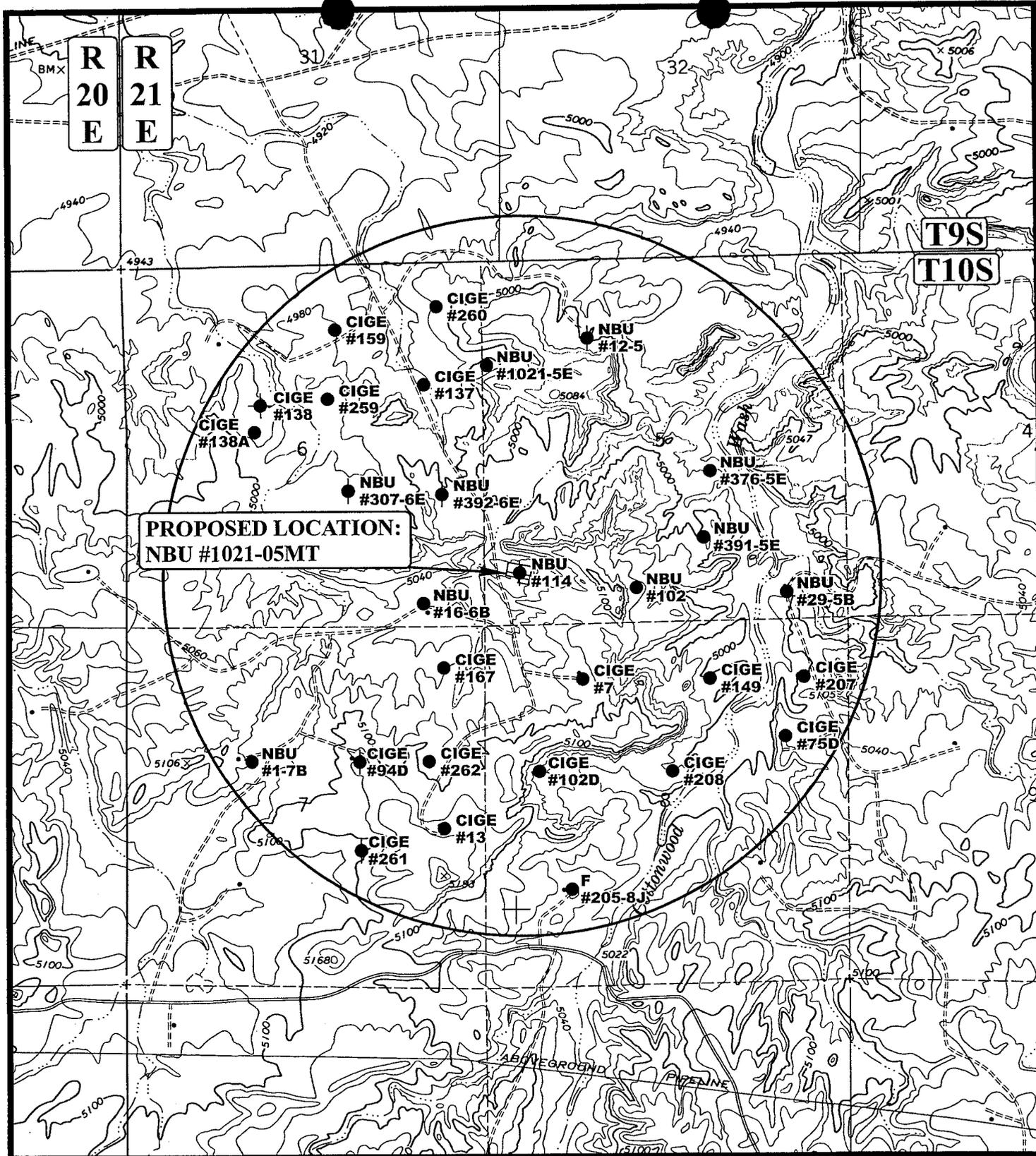
- EXISTING ROAD
- PROPOSED ACCESS ROAD

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

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

**NBU #1021-05MT**  
**SECTION 5, T10S, R21E, S.L.B.&M.**  
**745' FSL 529' FWL**

TOPOGRAPHIC	04	09	07	<b>B</b>
MAP	MONTH	DAY	YEAR	
SCALE: 1" = 2000'	DRAWN BY: C.P.	REVISED: 05-18-07		



**PROPOSED LOCATION:  
NBU #1021-05MT**

**LEGEND:**

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

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

**NBU #1021-05MT  
SECTION 5, T10S, R21E, S.L.B.&M.  
745' FSL 529' FWL**



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

**TOPOGRAPHIC  
MAP**

**04 09 07**  
MONTH DAY YEAR

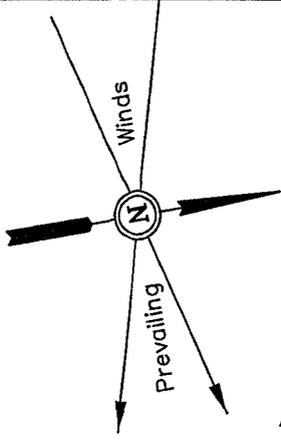
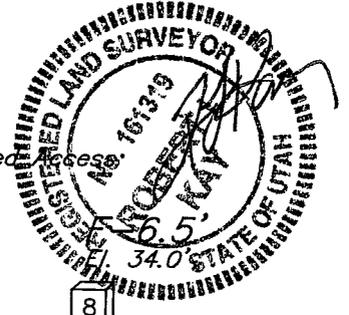


SCALE: 1" = 2000' DRAWN BY: C.P. REVISED: 05-18-07

# Kerr-McGee Oil & Gas Onshore LP

## LOCATION LAYOUT FOR

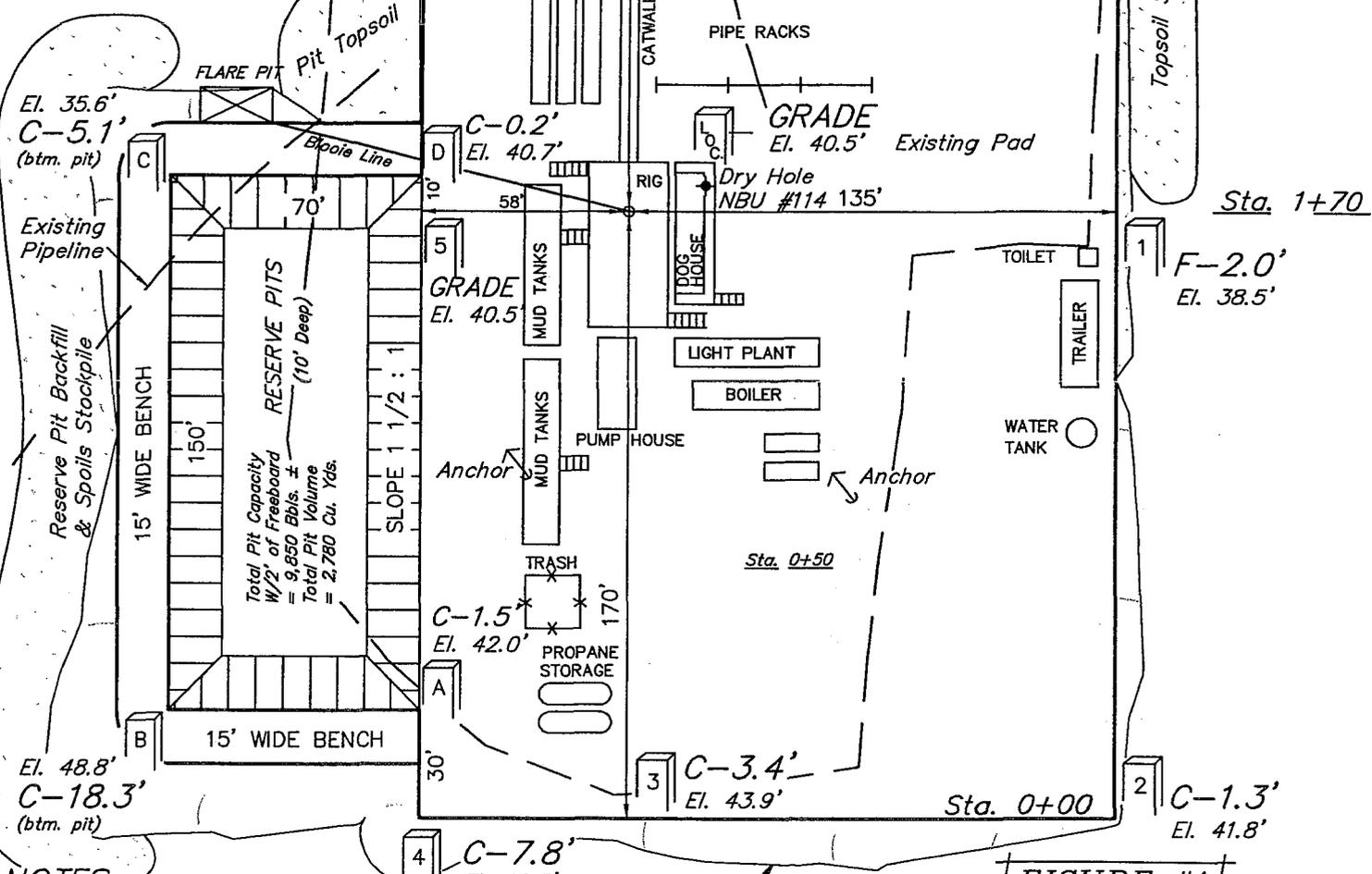
NBU #1021-05MT  
SECTION 5, T10S, R21E, S.L.B.&M.  
745' FSL 529' FWL



SCALE: 1" = 50'  
DATE: 04-11-07  
Drawn By: C.H.  
REV: 05-23-07 C.H.

**NOTE:**

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



**NOTES:**

Elev. Ungraded Ground At Loc. Stake = 5040.5'  
FINISHED GRADE ELEV. AT LOC. STAKE = 5040.5'

Approx. Top of Cut Slope

**FIGURE #1**

# Kerr-McGee Oil & Gas Onshore LP

FIGURE #2

## TYPICAL CROSS SECTIONS FOR

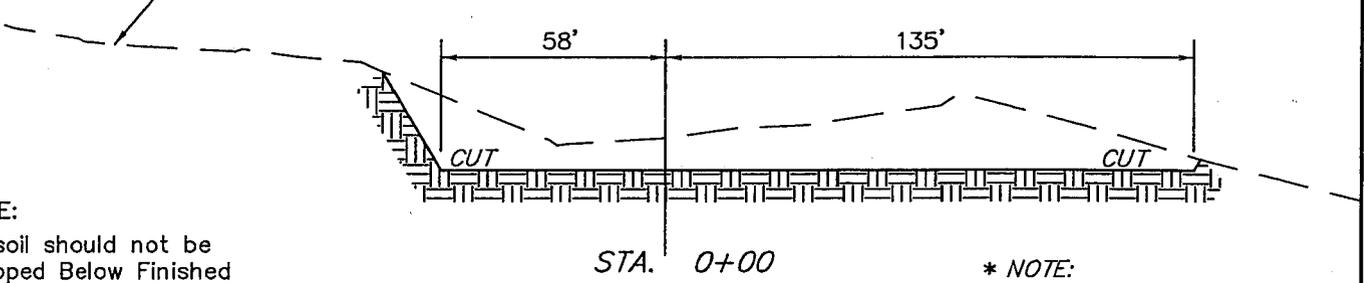
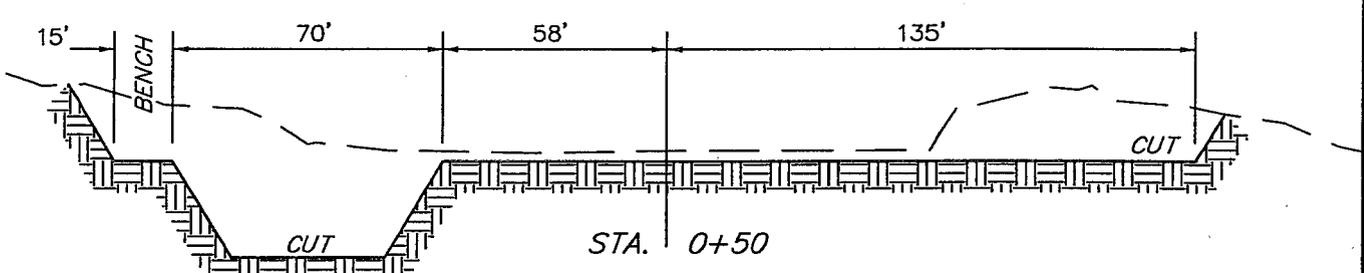
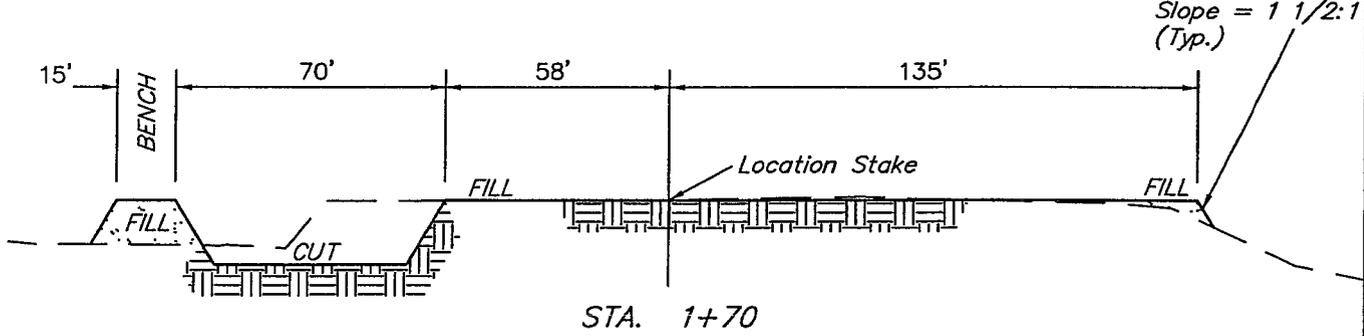
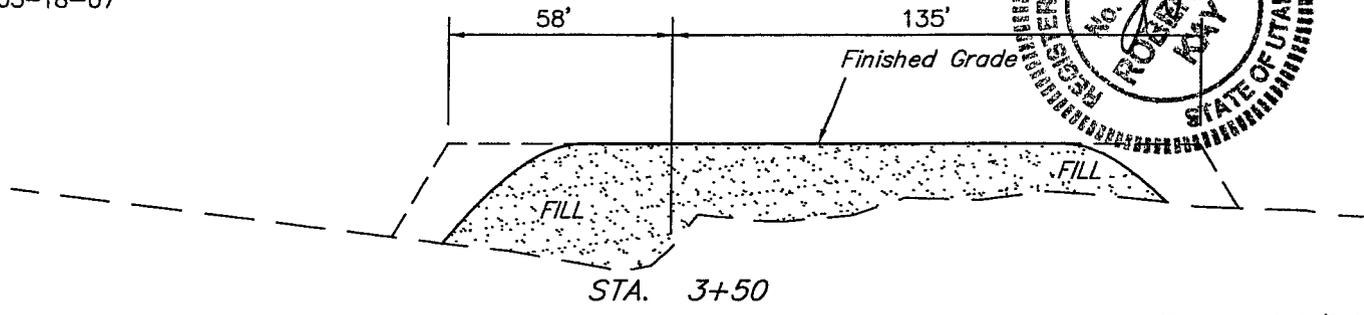
NBU #1021-05MT

SECTION 5, T10S, R21E, S.L.B.&M.

745' FSL 529' FWL

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

DATE: 04-11-07  
Drawn By: C.H.  
REV: 05-18-07



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	= 540 Cu. Yds.
Remaining Location	= 6,240 Cu. Yds.
<b>TOTAL CUT</b>	<b>= 6,780 CU.YDS.</b>
<b>FILL</b>	<b>= 2,650 CU.YDS.</b>

EXCESS MATERIAL	= 4,130 Cu. Yds.
Topsoil & Pit Backfill (1/2 Pit Vol.)	= 1,930 Cu. Yds.
EXCESS UNBALANCE (After Interim Rehabilitation)	= 2,200 Cu. Yds.

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

**WORKSHEET  
APPLICATION FOR PERMIT TO DRILL**

APD RECEIVED: 06/11/2007

API NO. ASSIGNED: 43-047-39375

WELL NAME: NBU 1021-05MT  
 OPERATOR: KERR-MCGEE OIL & GAS ( N2995 )  
 CONTACT: SHEILA UPCHEGO

PHONE NUMBER: 435-781-7024

PROPOSED LOCATION:

SWSW 05 100S 210E  
 SURFACE: 0745 FSL 0529 FWL  
 BOTTOM: 0745 FSL 0529 FWL  
 COUNTY: UINTAH  
 LATITUDE: 39.97159 LONGITUDE: -109.5831  
 UTM SURF EASTINGS: 621005 NORTHINGS: 4425355  
 FIELD NAME: NATURAL BUTTES ( 630 )

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

LEASE TYPE: 1 - Federal  
 LEASE NUMBER: UTU-01393-D  
 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: 173-14  
Eff Date: 12-2-99  
Siting: 460' fr u b ar g E u r r o n m. T r e c t s
- \_\_\_ R649-3-11. Directional Drill

COMMENTS: SOP, Separate file

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)

June 18, 2007

**Memorandum**

To: Assistant District Manager Minerals, Vernal District

From: Michael Coulthard, Petroleum Engineer

Subject: 2007 Plan of Development Natural Buttes Unit Uintah County, Utah.

Pursuant to email between Diana Whitney, Division of Oil, Gas and Mining, and Mickey Coulthard, Utah State Office, Bureau of Land Management, the following wells are planned for calendar year 2007 within the Natural Buttes Unit, Uintah County, Utah.

API #	WELL NAME	LOCATION
(Proposed PZ Wasatch/MesaVerde)		
43-047-39375	NBU 1021-05MT	Sec 05 T10S R21E 0745 FSL 0529 FWL
43-047-39376	NBU 1021-11I	Sec 11 T10S R21E 2387 FSL 1247 FEL
43-047-39377	NBU 1021-11O	Sec 11 T10S R21E 1192 FSL 2437 FEL
43-047-39378	NBU 1021-11N	Sec 11 T10S R21E 1258 FSL 1861 FWL
43-047-39379	NBU 1021-11P	Sec 11 T10S R21E 0232 FSL 1170 FEL
43-047-39380	NBU 1021-11M	Sec 11 T10S R21E 0425 FSL 1318 FWL
43-047-39381	NBU 1021-11J	Sec 11 T10S R21E 2252 FSL 2402 FEL
43-047-39383	NBU 1021-12A	Sec 12 T10S R21E 0835 FNL 0781 FEL
43-047-39382	NBU 1021-12M	Sec 12 T10S R21E 1022 FSL 0329 FWL
43-047-39384	NBU 1021-12N	Sec 12 T10S R21E 0677 FSL 2302 FWL
43-047-39385	NBU 1021-12K	Sec 12 T10S R21E 1532 FSL 1952 FWL
43-047-39386	NBU 1021-12L	Sec 12 T10S R21E 1580 FSL 0196 FWL
43-047-39360	NBU 921-16J	Sec 16 T09S R21E 1994 FSL 1660 FEL
43-047-39361	NBU 921-16HT	Sec 16 T09S R21E 1858 FNL 1013 FEL
43-047-39362	NBU 921-16MT	Sec 16 T09S R21E 1261 FSL 1248 FWL
43-047-39363	NBU 921-17K	Sec 17 T09S R21E 2147 FSL 1635 FWL
43-047-39364	NBU 921-17J	Sec 17 T09S R21E 1508 FSL 1748 FEL
43-047-39365	NBU 921-20M	Sec 20 T09S R21E 0568 FSL 0586 FWL
43-047-39366	NBU 921-20O	Sec 20 T09S R21E 1026 FSL 1859 FEL
43-047-39367	NBU 921-23C	Sec 23 T09S R21E 0817 FNL 1945 FWL
43-047-39368	NBU 921-25NT	Sec 25 T09S R21E 1150 FSL 2607 FWL
43-047-39369	NBU 922-18O	Sec 18 T09S R22E 1255 FSL 2083 FEL

Page 2

43-047-39370 NBU 922-18I Sec 18 T09S R22E 1600 FSL 0901 FEL  
43-047-39371 NBU 922-18G Sec 18 T09S R22E 2009 FNL 1936 FEL  
43-047-39372 NBU 922-20E Sec 20 T09S R22E 2182 FNL 0452 FWL  
43-047-39387 NBU 1022-6B-2 Sec 06 T10S R22E 0160 FNL 2289 FEL  
43-047-39389 NBU 1022-24B Sec 24 T10S R22E 1035 FNL 1619 FEL  
43-047-39374 NBU 1020-24BT Sec 24 T10S R20E 0914 FNL 1966 FEL  
43-047-39373 NBU 1020-01KT Sec 01 T10S R20E 1731 FSL 1834 FWL

Our records indicate the NBU 1022-24B 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

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

MCoulthard:mc:6-18-07



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

June 19, 2007

Kerr-McGee Oil & Gas  
1368 S 1200 East  
Vernal, UT 84078

Re: Natural Buttes Unit 1021-05MT Well, 745' FSL, 529' FWL, SW SW, Sec. 5, T. 10 South, R. 21 East, Uintah County, Utah

Gentlemen:

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

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date. The API identification number assigned to this well is 43-047-39375.

Sincerely,

Gil Hunt  
Associate Director

pab  
Enclosures

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



Operator: Kerr-McGee Oil & Gas  
Well Name & Number Natural Buttes Unit 1021-05MT  
API Number: 43-047-39375  
Lease: UTU-01393-D

Location: SW SW                      Sec. 5                      T. 10 South                      R. 21 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 with 24 hours of spudding the well.

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

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

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

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.



# United States Department of the Interior

## BUREAU OF LAND MANAGEMENT

Vernal Field Office

170 South 500 East

Vernal, UT 84078

(435) 781-4400 Fax: (435) 781-4410



IN REPLY REFER TO:

3160

UT08300

February 25, 2008

Raleen White  
Kerr McGee Oil & Gas Onshore LP  
1368 South 1200 East  
Vernal, UT 84078

43-047-39375

Re: Well No. NBU 1021-05MT  
SWSW, Sec. 5, T10S, R21E  
Uintah County, Utah  
Lease No. UTU-01393-D  
Natural Buttes Unit

Dear Ms. White:

The Application for Permit to Drill (APD) the above referenced well submitted June 7, 2007, is being returned unapproved per your request to this office in an email message to Natural Resource Specialist Verlyn Pindell on February 13, 2008. If you intend to drill at this location at a future date, a new APD must be submitted.

If you have any questions regarding this matter, please contact me at (435) 781-4455.

Sincerely,

*Cindy Severson*

Cindy Severson  
Land Law Examiner

Enclosures

cc: UDOGM – Diana Mason

RECEIVED

MAR 10 2008

DIV. OF OIL, GAS & MINING



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

March 11, 2008

Raleen White  
Kerr McGee O&G Onshore LP  
1368 South 1200 East  
Vernal UT 84078

NBU 10Z1-05MT  
43 047 39375  
10S 21E 5

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

Dear Ms. White:

Enclosed find the list of APDs that you requested to be rescinded to Kerr-McGee O&G Onshore LP. No drilling activity at these locations has been reported to the division. Therefore, approval to drill these wells is hereby rescinded, effective March 10, 2008.

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

Federal 920-35M  
Federal 1021-34L  
Federal 1021-34O  
Federal 1021-23I  
Federal 1021-23H  
NBU 1021-3I  
NBU 1021-6E  
NBU 1021-5MT  
NBU 1021-12M  
NBU 1021-12K  
NBU 1021-11J  
NBU 1021-11N  
NBU 1021-11O  
NBU 1021-14B  
NBU 1021-14F  
NBU 1021-15J  
NBU 1021-15K  
NBU 1021-15O  
NBU 1021-23C  
NBU 1021-23D  
NBU 1021-23E  
NBU 1021-23B  
NBU 1021-23J  
NBU 1021-23K  
NBU 1021-23N  
NBU 1021-23M  
NBU 1021-22E  
NBU 1021-22C  
NBU 1021-22L  
NBU 1021-22K  
NBU 1021-22D  
LOVE UNIT 1122-18F  
LOVE UNIT 1122-18O  
LOVE UNIT 1122-18N  
LOVE UNIT 1122-19F  
LOVE UNIT 1122-15J  
LOVE 1121-2B  
LOVE 1121-7J  
LOVE 1121-14J  
LOVE 1121-14L  
LOVE 1121-15J