

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

5. Lease Serial No.  
**UTU-01198-B**

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**

8. Lease Name and Well No.  
**NBU 1022-220**

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

9. API Well No.  
**43-047-38793**

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

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

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

4. Location of Well (Report location clearly and in accordance with any State requirements. \*)  
At surface **SWSE 576'FSL, 1798'FEL**  
At proposed prod. Zone **634830X 39.928714  
4420827Y -109.422171**

11. Sec., T., R., M., or Blk, and Survey or Area  
**SEC. 22, T10S, R22E**

14. Distance in miles and direction from nearest town or post office\*  
**34.6 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) **576'**

16. No. of Acres in lease **2040.00**

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 **7930**

20. BLM/BIA Bond No. on file  
**BOND NO: WY-2357**

21. Elevations (Show whether DF, KDB, RT, GL, etc.)  
**4957'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 **10/26/2006**

Title **REGULATORY ANALYST**

Approved by (Signature)  Name (Printed/Typed) **BRADLEY G. HILL** Date **11-07-06**

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  
NOV 01 2006  
DIV. OF OIL, GAS & MINING

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

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

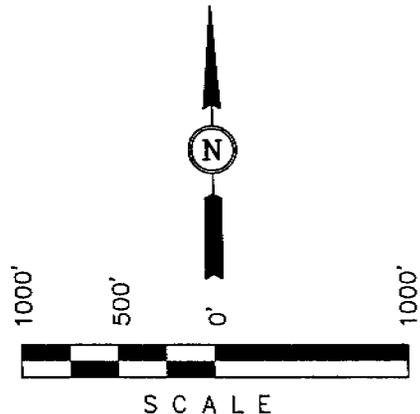
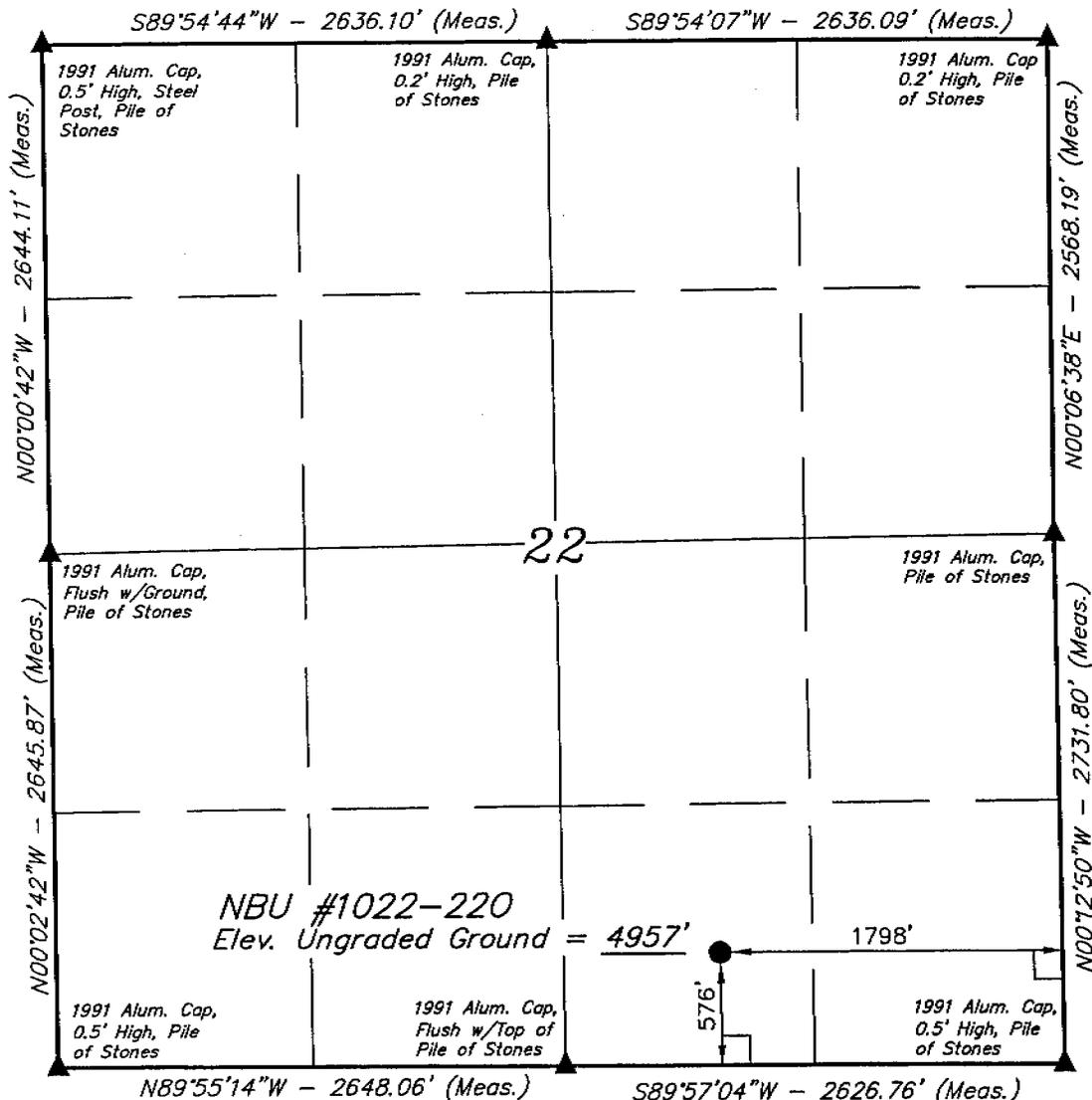
Well location, NBU #1022-220, located as shown in the SW 1/4 SE 1/4 of Section 22, T10S, R22E, S.L.B.&M., Uintah County, Utah.

**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, UINTAH COUNTY, 7.5 MINUTE SERIES (TOPOGRAPHICAL 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.



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

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

(NAD 83)  
 LATITUDE = 39°55'43.17" (39.928658)  
 LONGITUDE = 109°25'22.59" (109.422942)  
 (NAD 27)  
 LATITUDE = 39°55'43.29" (39.928692)  
 LONGITUDE = 109°25'20.14" (109.422261)

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

SCALE 1" = 1000'	DATE SURVEYED: 08-03-06	DATE DRAWN: 08-04-06
PARTY T.A. B.C. D.R.B.	REFERENCES G.L.O. PLAT	
WEATHER WARM	FILE Kerr-McGee Oil & Gas Onshore LP	

NBU #1022-22O  
SWSE SEC 22, T10S, R22E  
UINTAH COUNTY, UTAH  
UTU-01198-B

ONSHORE ORDER NO. 1

***DRILLING PROGRAM***

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

<u>Formation</u>	<u>Depth</u>
Uinta	0- Surface
Green River	702'
Top of Birds Nest Water	873'
Mahogany	1394'
Wasatch	3604'
Mesaverde	5887'
MVU2	6836'
MVL1	7373'
TD	7930'

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

<u>Substance</u>	<u>Formation</u>	<u>Depth</u>
	Green River	702'
	Top of Birds Nest Water	873'
	Mahogany	1394'
Gas	Wasatch	3604'
Gas	Mesaverde	5887'
Gas	MVU2	6836'
Gas	MVL1	7373'
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 7930' TD, approximately equals 4917 psi (calculated at 0.62 psi/foot).

Maximum anticipated surface pressure equals approximately 3172 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 October 25, 2006  
 WELL NAME NBU 1022-220 TD 7,930' MD/TVD  
 FIELD Natural Buttes COUNTY Uintah STATE Utah ELEVATION 4,957' GL KB 4,972'  
 SURFACE LOCATION SWSE SEC. 22, T10S, R22E 576'FSL, 1798'FEL BHL Straight Hole  
 Latitude: 39.928658 Longitude: 109.422942  
 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", 32.3#, H-40, STC	Air mist
Catch water sample, if possible, from 0 to 3,604' Green River @ 0,702' Top of Birds Nest Water @ 873' Mahogany @ 1,394' Preset f/ GL @ 1,430' 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 actual 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 8.3-11.5 ppg
	Wasatch @	3,604'			
	Mverde @	5,887'			
	MVU2 @	6,836'			
	MVL1 @	7,373'			
		TD @ 7,930'			Max anticipated Mud required 11.5 ppg



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

**CASING PROGRAM**

	SIZE	INTERVAL	WT.	GR.	CPLG.	DESIGN FACTORS		
						BURST	COLLAPSE	TENSION
CONDUCTOR	14"	0-40'				2270	1370	254000
SURFACE	9-5/8"	0 to 1430	32.30	H-40	STC	0.76	2.05	6.28
PRODUCTION	4-1/2"	0 to 7930	11.60	I-80	LTC	2.60	1.34	2.50

- 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 2998 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 Option 1	LEAD	500	Premium cmt + 2% CaCl + .25 pps flocele	215	60%	15.60	1.18
	TOP OUT CMT (1)	200	20 gals sodium silicate + Premium cmt + 2% CaCl + .25 pps flocele	50		15.60	1.18
	TOP OUT CMT (2)	as required	Premium cmt + 2% CaCl	as req.		15.60	1.18
SURFACE Option 2	LEAD	1500	NOTE: If well will circulate water to surface, option 2 will be utilized: 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	3,100'	Premium Lite II + 3% KCl + 0.25 pps celloflake + 5 pps gilsonite + 10% gel + 0.5% extender	340	60%	11.00	3.38
	TAIL	4,830'	50/50 Poz/G + 10% salt + 2% gel +.1% R-3	1350	60%	14.30	1.31

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

**FLOAT EQUIPMENT & CENTRALIZERS**

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

**ADDITIONAL INFORMATION**

- Test casing head to 750 psi after installing. Test surface casing to 1,500 psi prior to drilling out.  
 BOPE: 11" 5M with one annular and 2 rams. Test to 5,000 psi (annular to 2,500 psi) prior to drilling out. Record on chart recorder & tour sheet. Function test rams on each trip. Maintain safety valve & inside BOP on rig floor at all times. Kelly to be equipped with upper & lower kelly valves.  
 Drop Totco surveys every 2000'. Maximum allowable hole angle is 5 degrees.  
 Most rigs have PVT Systems for mud monitoring. If no PVT is available, visual monitoring will be utilized.

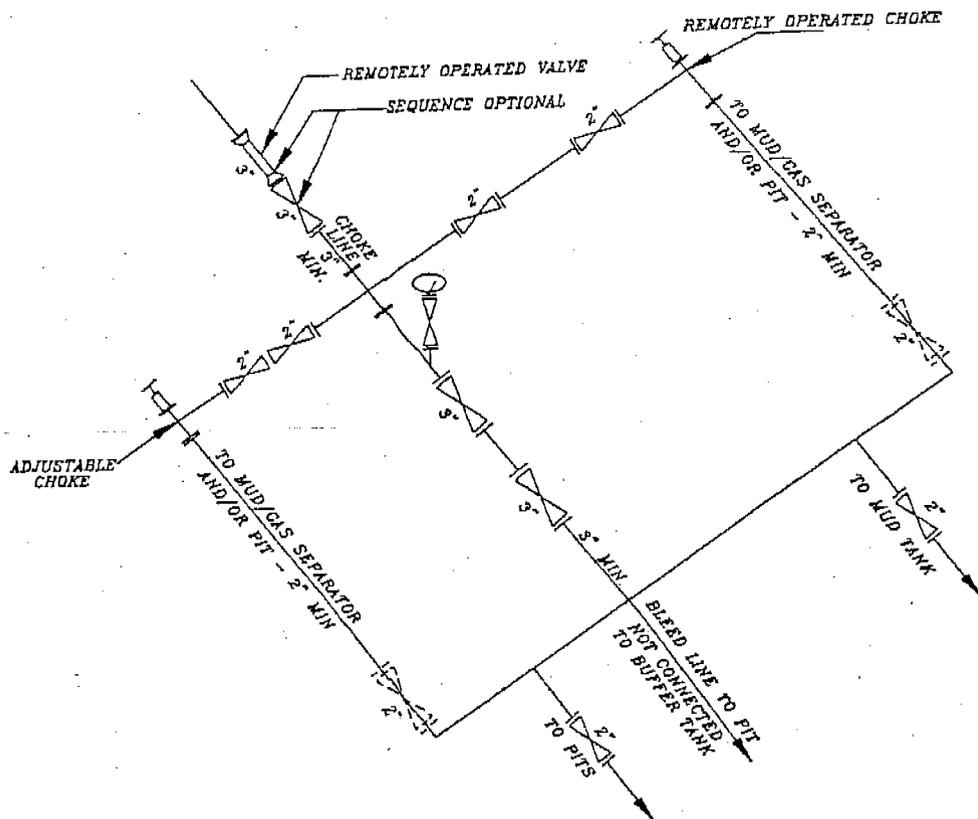
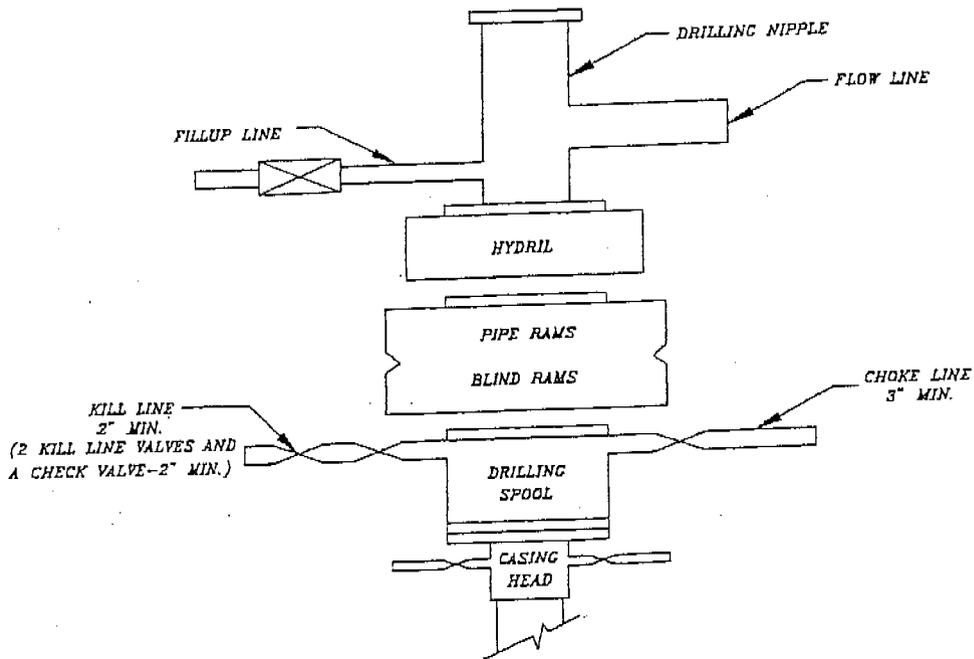
DRILLING ENGINEER: \_\_\_\_\_  
 Brad Laney

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

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

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

# 5M BOP STACK and CHOKE MANIFOLD SYSTEM



NBU #1022-22O  
SWSE SEC 22, T10S, R22E  
UINTAH COUNTY, UTAH  
UTU-01198-B

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 0.1 +/- miles of new access road. 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.*

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

Approximately 500' +/- of 4" steel pipeline and approximately 500' +/- of 4" pipeline is proposed from the location to an existing pipeline. 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:

Galleta Grass                      20 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. 06-428, completed on October 4, 2006 for the well location; The paleontological Survey Report No. 06-255 completed on September 8, 2006; these reports are being submitted along with the Application for Permit to Drill (APD).

**WILDLIFE STIPULATIONS:**

**GOLDEN EAGLE:** No construction or drilling from February 1<sup>st</sup> – July 15<sup>th</sup>. – Inactive nest if it becomes active with a two year delay. The operator will check with the BLM Biologist.

**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 Bond #WY-2357.

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

10/26/2006

Date

Kerr McGee Oil & Gas Onshore LP  
NBU #1022-220  
SECTION 22, 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 EAST; PROCEED IN AN EASTERLY DIRECTION APPROXIMATELY 1.7 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE NORTHEAST; TURN RIGHT AND PROCEED IN A NORTHEASTERLY, THEN SOUTHEASTERLY DIRECTION APPROXIMATELY 0.2 MILES TO THE BEGINNING OF THE PROPOSED ACCESS TO THE NORTH; FOLLOW ROAD FLAGS IN A NORTHERLY DIRECTION APPROXIMATELY 0.1 MILES TO THE PROPOSED LOCATION.

TOTAL DISTANCE FROM VERNAL, UTAH TO THE PROPOSED WELL LOCATION IS APPROXIMATELY 54.9 MILES.

# Kerr-McGee Oil & Gas Onshore LP

FEDERAL #1022-220  
 LOCATED IN UINTAH COUNTY, UTAH  
 SECTION 22, T10S, R22E, S.L.B.&M.

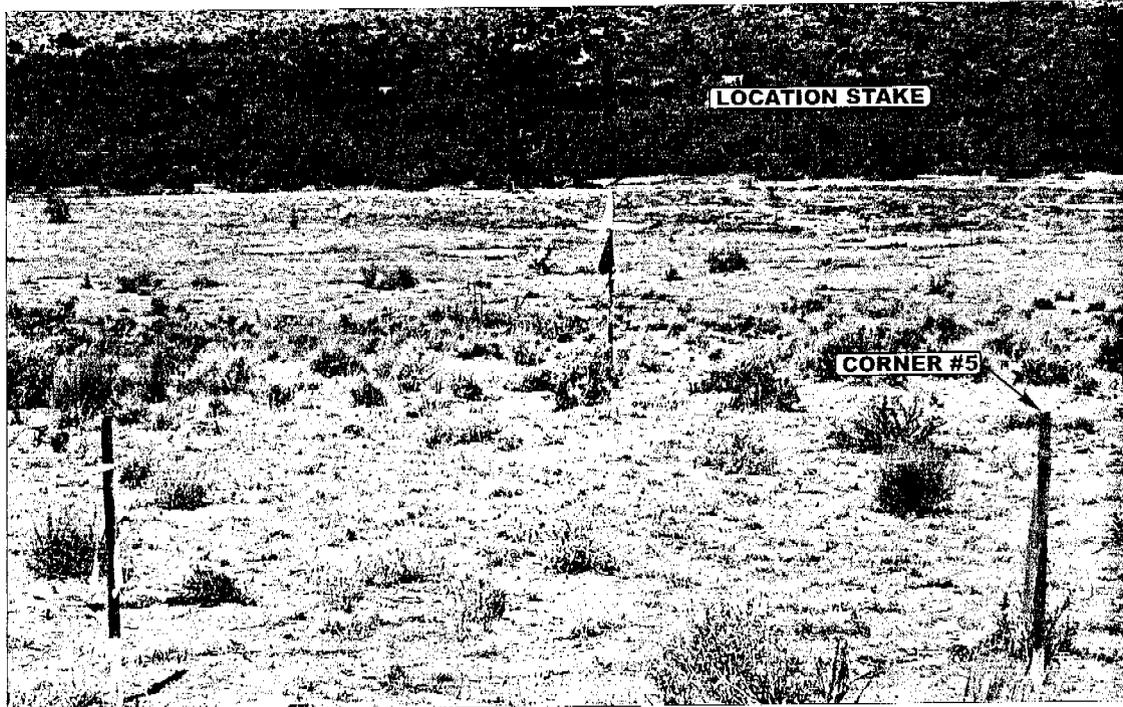


PHOTO: VIEW FROM CORNER #5 TO LOCATION STAKE

CAMERA ANGLE: NORTHWESTERLY



PHOTO: VIEW FROM BEGINNING OF PROPOSED ACCESS

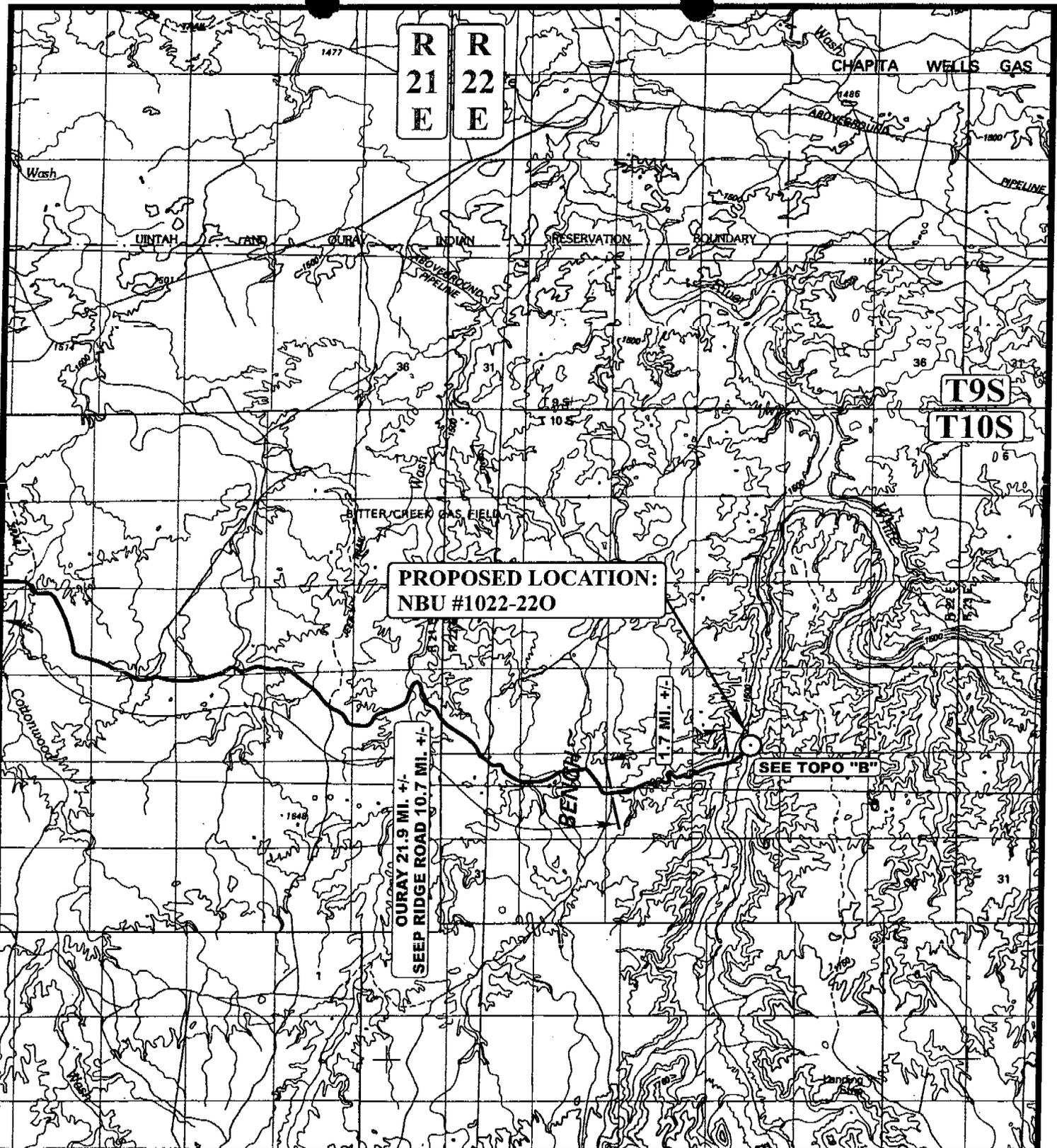
CAMERA ANGLE: NORTHEASTERLY



- Since 1964 -

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

LOCATION PHOTOS	08	07	06	PHOTO
	MONTH	DAY	YEAR	
TAKEN BY: B.H.	DRAWN BY: L.K.	REVISED: 00-00-00		



**LEGEND:**

○ PROPOSED LOCATION



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

NBU #1022-220  
SECTION 22, T10S, R22E, S.L.B.&M.  
576' FSL 1798' FEL



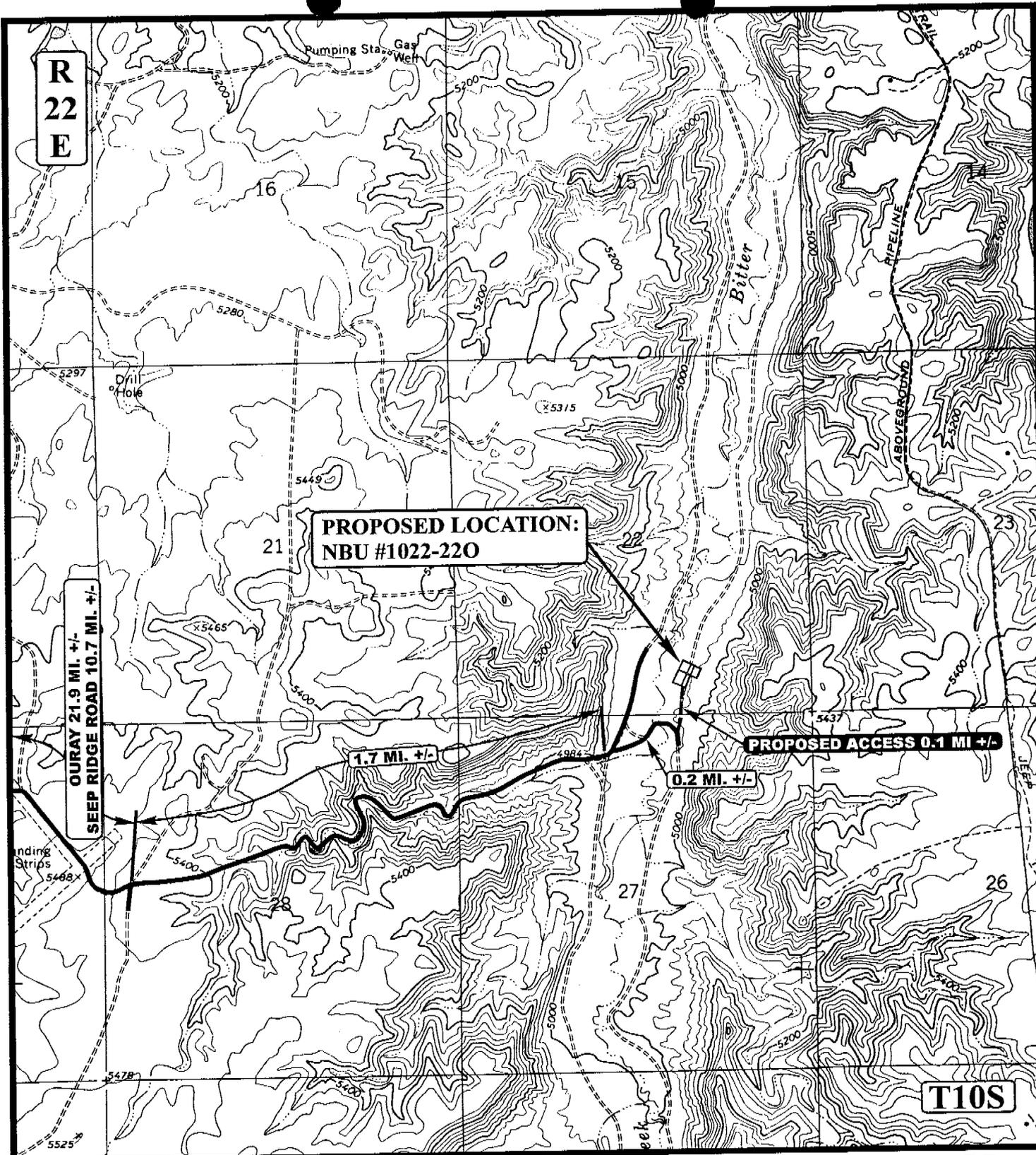
Uintah Engineering & Land Surveying  
85 South 200 East Vernal, Utah 84078  
(435) 789-1017 \* FAX (435) 789-1813

TOPOGRAPHIC  
MAP

08 07 06  
MONTH DAY YEAR

SCALE: 1:100,000 | DRAWN BY: L.K. | REVISED: 00-00-00





**PROPOSED LOCATION:  
NBU #1022-220**

**OURAY 21.9 MI +/-  
SEEP RIDGE ROAD 10.7 MI +/-**

**1.7 MI +/-**

**PROPOSED ACCESS 0.1 MI +/-**

**0.2 MI +/-**

**T10S**

**LEGEND:**

- EXISTING ROAD
- PROPOSED ACCESS ROAD



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

**NBU #1022-220**

**SECTION 22, T10S, R22E, S.L.B.&M.**

**576' FSL 1798' FEL**



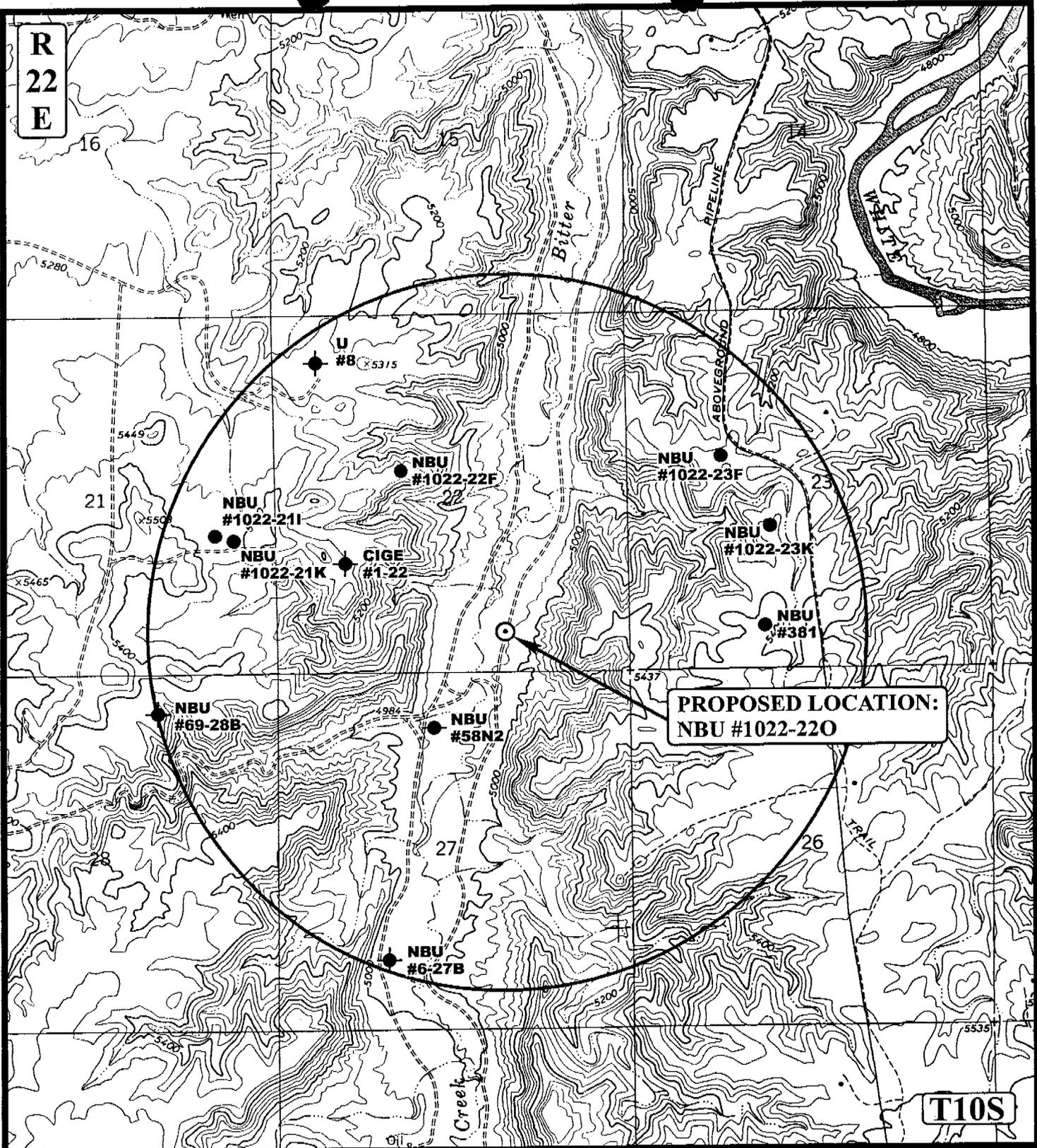
**Uintah Engineering & Land Surveying**  
85 South 200 East Vernal, Utah 84078  
(435) 789-1017 \* FAX (435) 789-1813

**TOPOGRAPHIC  
MAP**

<b>08</b>	<b>07</b>	<b>06</b>
MONTH	DAY	YEAR

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

**B  
TOPO**



R  
22  
E

T10S

**LEGEND:**

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

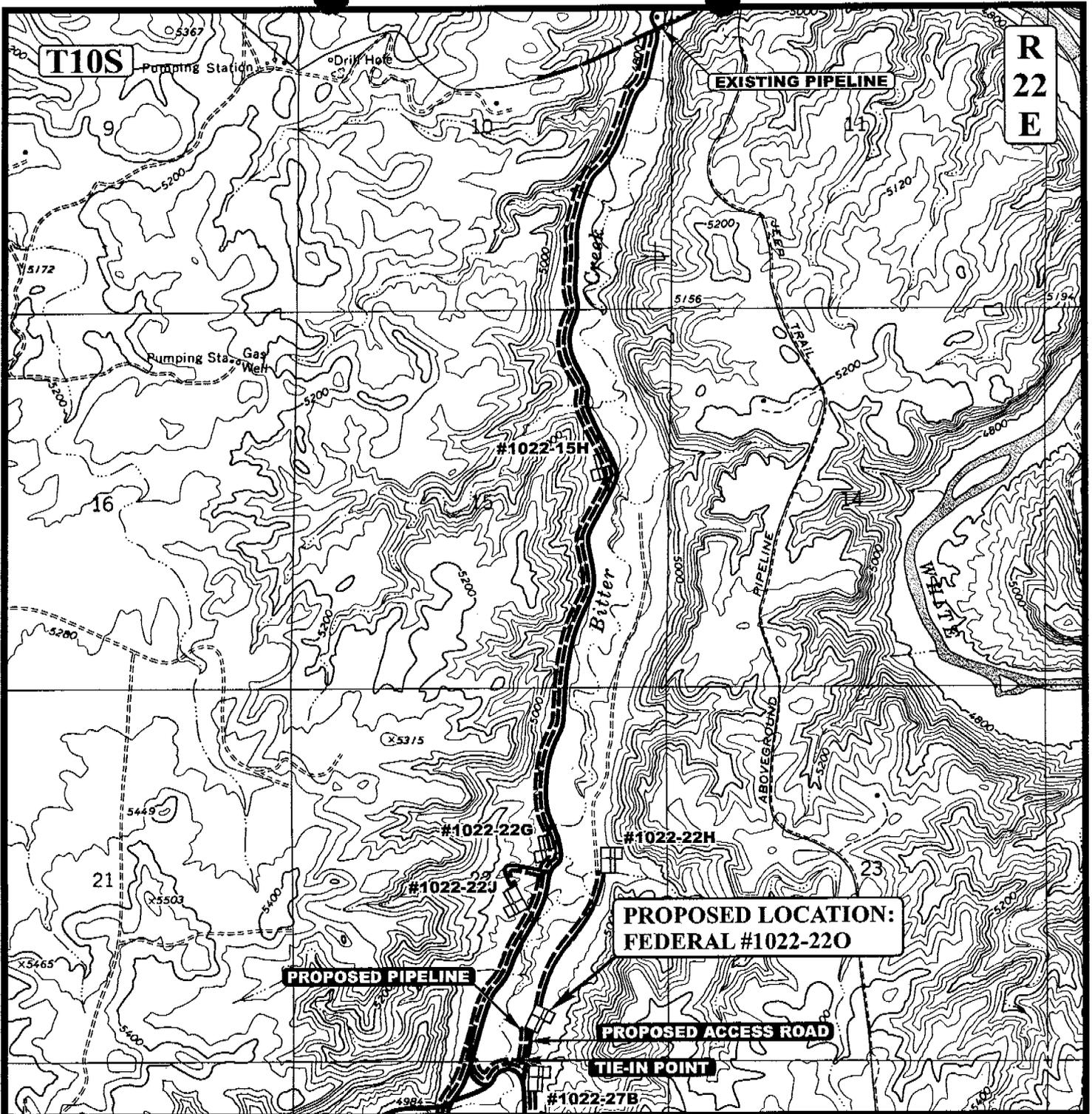


**Kerr-McGee Oil & Gas Onshore LP**

**NBU #1022-220**  
**SECTION 22, T10S, R22E, S.L.B.&M.**  
**576' FSL 1798' FEL**

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

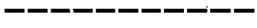
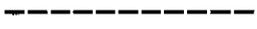
**TOPOGRAPHIC** 08 07 06  
**MAP** MONTH DAY YEAR  
 SCALE: 1" = 2000' DRAWN BY: L.K. REVISED: 00-00-00 **C**  
**TOPO**



APPROXIMATE TOTAL PIPELINE DISTANCE = 500' +/-

APPROXIMATE TOTAL PIPELINE DISTANCE = 500' +/-

**LEGEND:**

-  PROPOSED ACCESS ROAD
-  EXISTING PIPELINE
-  PROPOSED PIPELINE
-  PROPOSED PIPELINE (SERVICING OTHER WELLS)



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

NBU #1022-220

SECTION 22, T10S, R22E, S.L.B.&M.

576' FSL 1798' FEL



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

**TOPOGRAPHIC  
 MAP**

08	07	06
MONTH	DAY	YEAR

SCALE: 1" = 2000' DRAWN BY: L.K. REVISED: 10-18-06C.P.

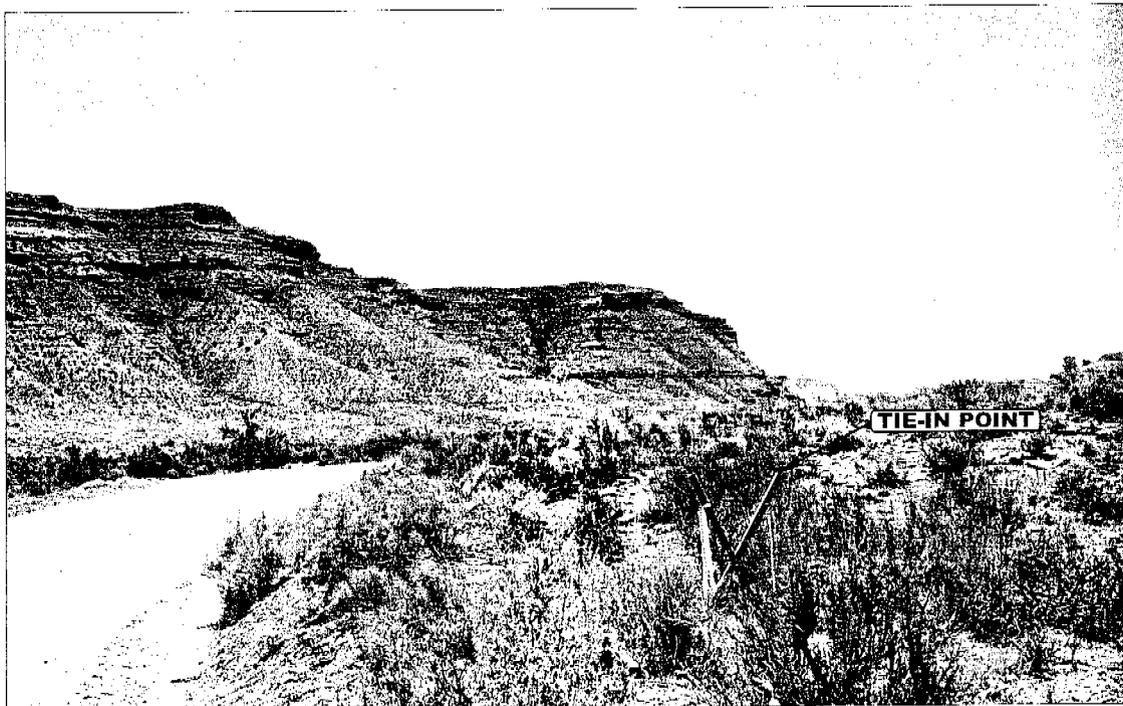


**Kerr-McGee Oil & Gas Onshore LP**  
**NBU #1022-220**  
**PIPELINE ALIGNMENT**  
**LOCATED IN UINTAH COUNTY, UTAH**  
**SECTION 22, T10S, R22E, S.L.B.&M.**



**PHOTO: VIEW OF PIPELINE ALIGNMENT**

**CAMERA ANGLE: SOUTHERLY**



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

**CAMERA ANGLE: SOUTHERLY**



- Since 1964 -

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

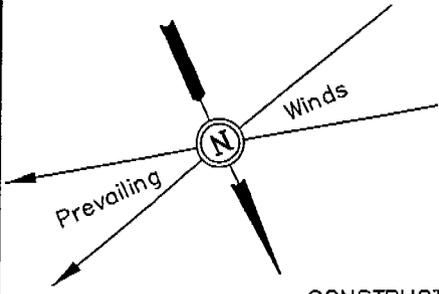
<b>LOCATION PHOTOS</b>			<b>08</b>	<b>07</b>	<b>06</b>	<b>PHOTO</b>
			<small>MONTH</small>	<small>DAY</small>	<small>YEAR</small>	
<b>TAKEN BY: B.I.L.</b>	<b>DRAWN BY: L.K.</b>	<b>REVISED: 00-00-00</b>				

Kerr-McGee Oil & Gas Onshore LP

FIGURE #1

LOCATION LAYOUT FOR

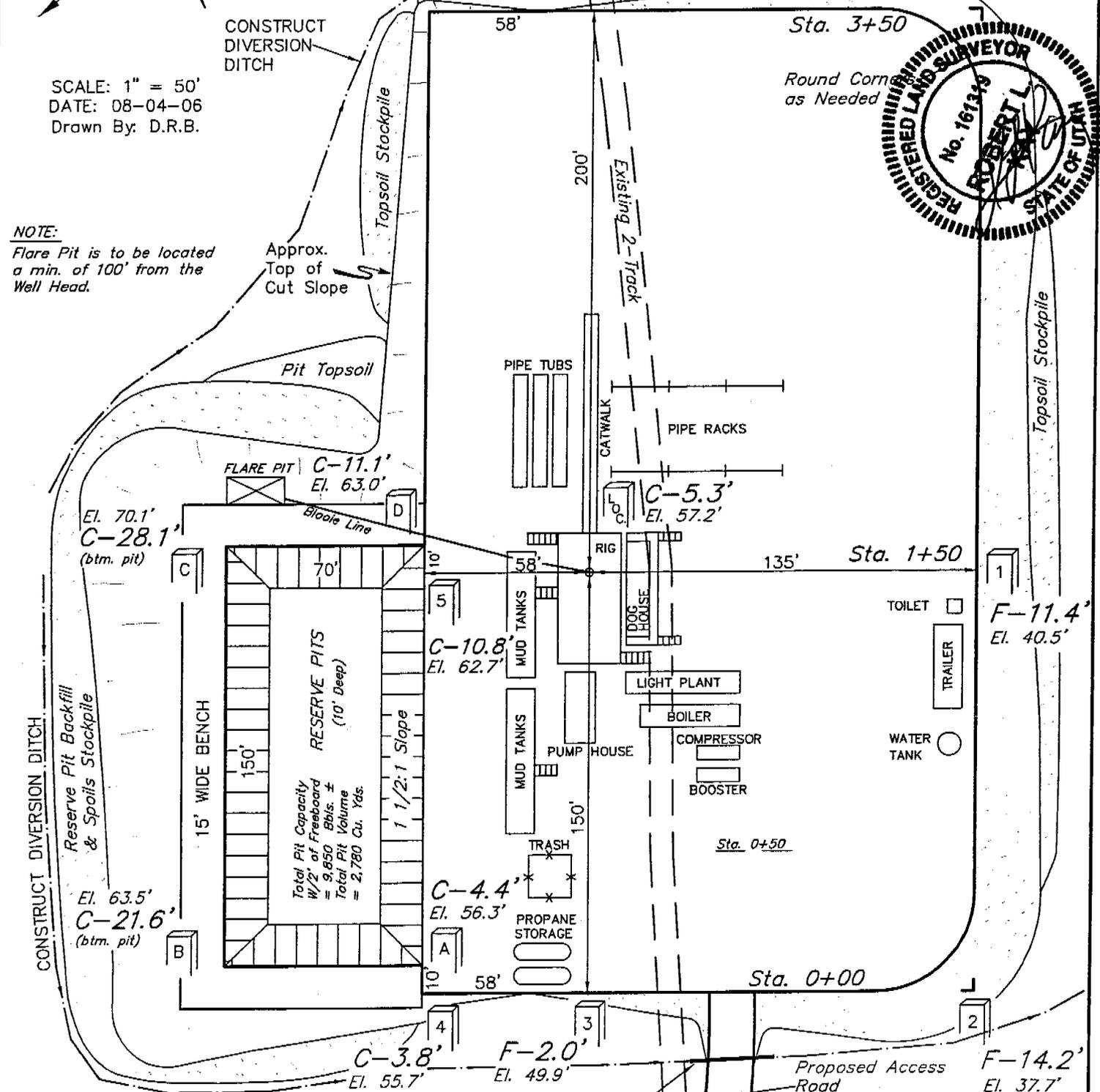
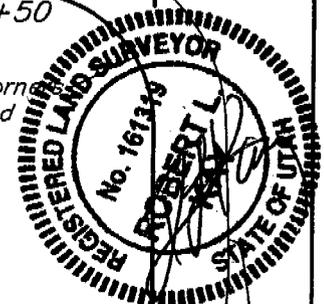
NBU #1022-220  
SECTION 22, T10S, R22E, S.L.B.&M.  
576' FSL 1798' FEL



SCALE: 1" = 50'  
DATE: 08-04-06  
Drawn By: D.R.B.

Approx. Toe of Fill Slope El. 41.0' F-10.9'

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



NOTES:  
Elev. Ungraded Ground At Loc. Stake = 4957.2'  
FINISHED GRADE ELEV. AT LOC. STAKE = 4951.9'

# Kerr-McGee Oil & Gas Onshore LP

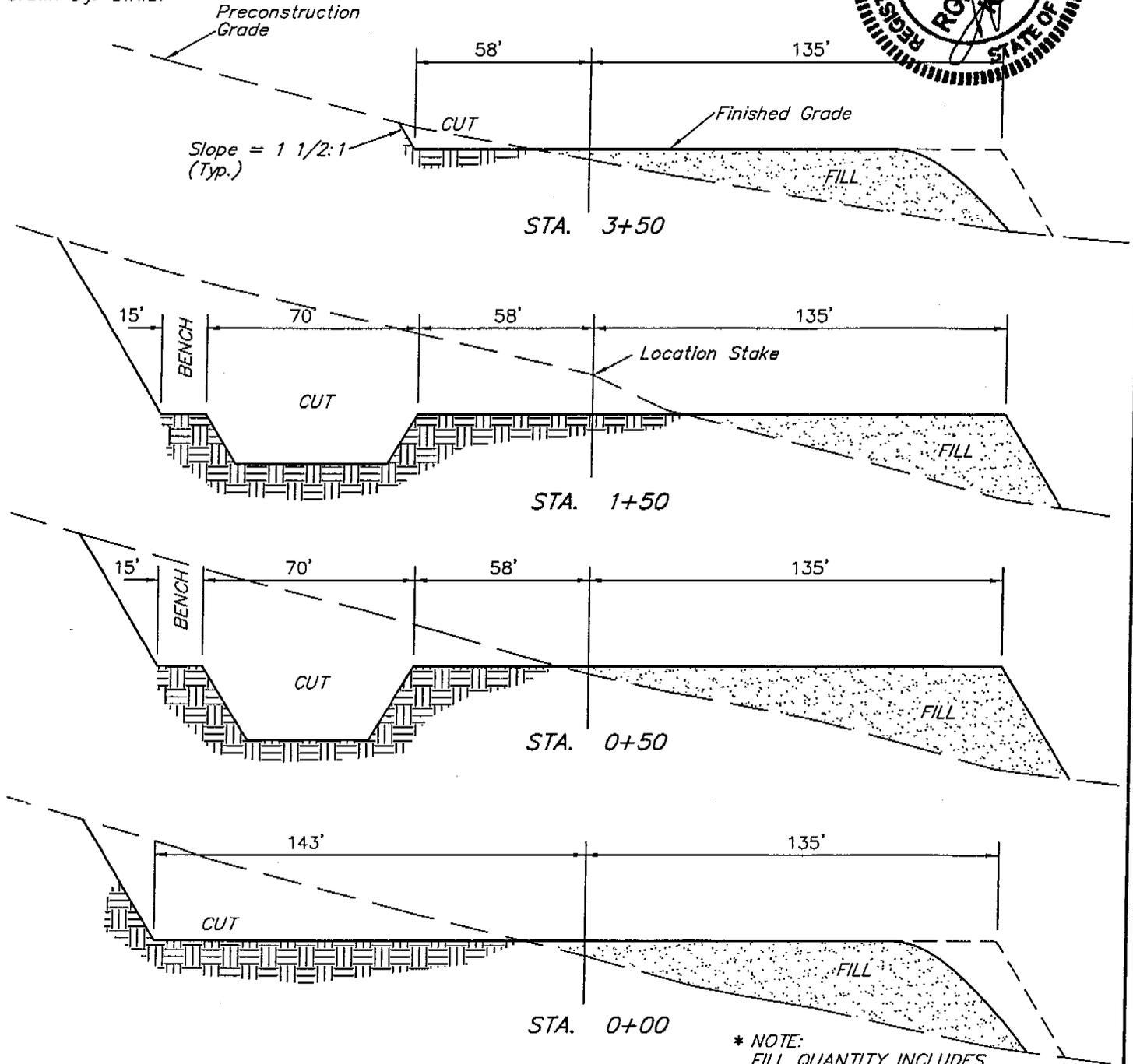
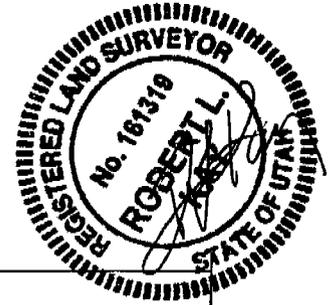
FIGURE #2

## TYPICAL CROSS SECTIONS FOR

NBU #1022-220  
SECTION 22, T10S, R22E, S.L.B.&M.  
576' FSL 1798' FEL

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

DATE: 08-04-06  
Drawn By: D.R.B.



\* NOTE:  
FILL QUANTITY INCLUDES  
5% FOR COMPACTION

### APPROXIMATE YARDAGES

<b>CUT</b>	
(6") Topsoil Stripping	= 2,020 Cu. Yds.
Remaining Location	= 14,790 Cu. Yds.
<b>TOTAL CUT</b>	<b>= 16,810 CU.YDS.</b>
<b>FILL</b>	<b>= 13,400 CU.YDS.</b>

EXCESS MATERIAL	= 3,410 Cu. Yds.
Topsoil & Pit Backfill (1/2 Pit Vol.)	= 3,410 Cu. Yds.
EXCESS UNBALANCE (After Interim 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: 11/01/2006

API NO. ASSIGNED: 43-047-38793

WELL NAME: NBU 1022-220  
 OPERATOR: KERR-MCGEE OIL & GAS ( N2995 )  
 CONTACT: SHEILA UPCHEGO

PHONE NUMBER: 435-781-7024

PROPOSED LOCATION:

SWSE 22 100S 220E  
 SURFACE: 0576 FSL 1798 FEL  
 BOTTOM: 0576 FSL 1798 FEL  
 COUNTY: UINTAH  
 LATITUDE: 39.92871 LONGITUDE: -109.4222  
 UTM SURF EASTINGS: 634830 NORTHINGS: 4420827  
 FIELD NAME: NATURAL BUTTES ( 630 )

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

LEASE TYPE: 1 - Federal  
 LEASE NUMBER: UTU-01198-B  
 SURFACE OWNER: 1 - Federal

PROPOSED FORMATION: WSMVD  
 COALBED METHANE WELL? NO

RECEIVED AND/OR REVIEWED:

- Plat
- Bond: Fed[1] Ind[] Sta[] Fee[]  
(No. WY-2357 )
- 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:

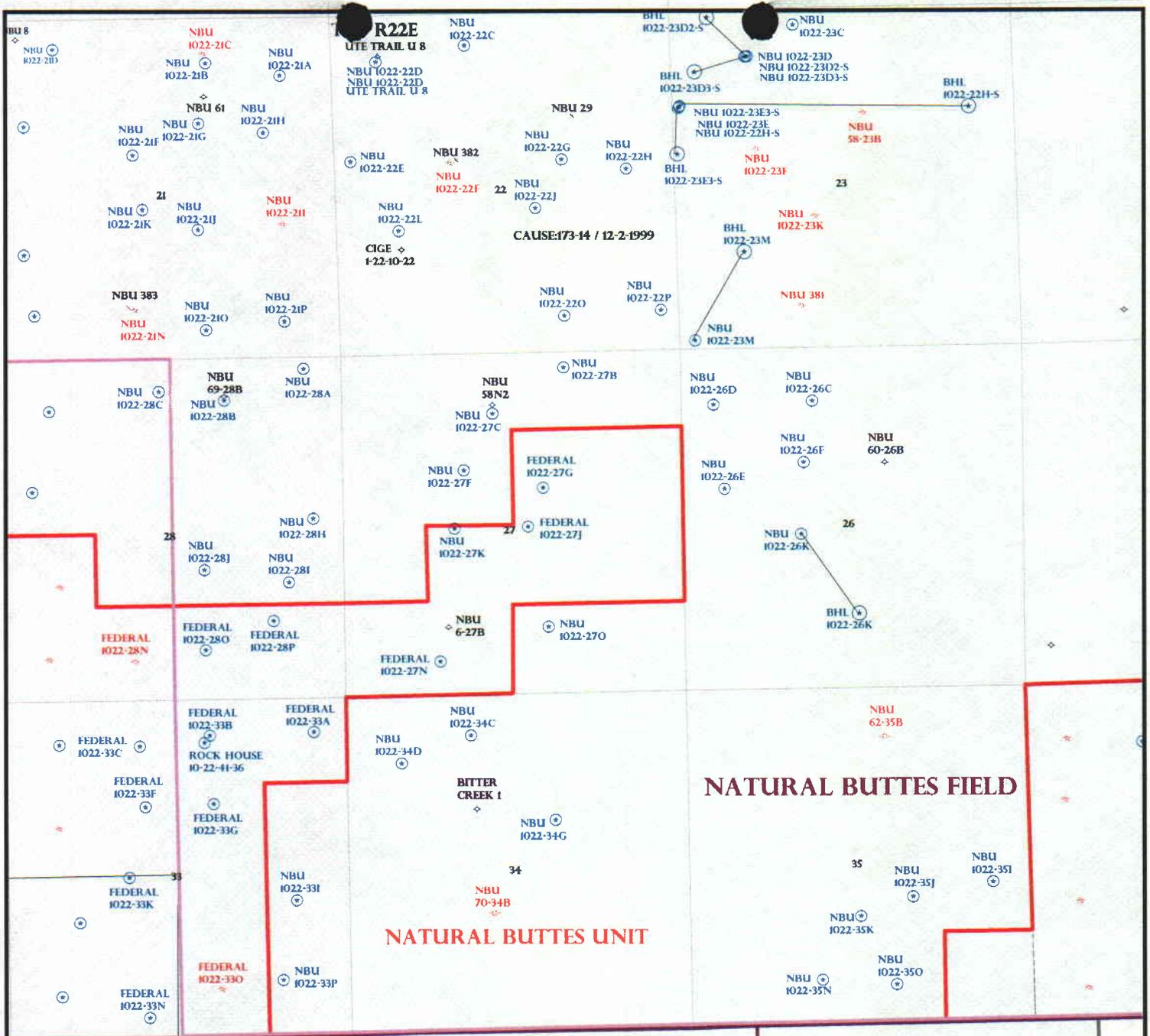
- R649-2-3.
- Unit: NATURAL BUTTES
- R649-3-2. General  
Siting: 460' From Qtr/Qtr & 920' Between Wells
- R649-3-3. Exception
- Drilling Unit  
Board Cause No: 173-14  
Eff Date: 12-2-99  
Siting: 460' for Utdy & unknown tracts
- R649-3-11. Directional Drill

COMMENTS:

(See Separate file)

STIPULATIONS:

1- Federal Approval  
2- OIL SHALE



OPERATOR: KERR MCGEE O&G (N2995)

SEC: 22,27,34 T.10S R. 22E

FIELD: NATURAL BUTTES (630)

COUNTY: UINTAH

CAUSE:173-14 / 12-2-1999

**Wells Status**

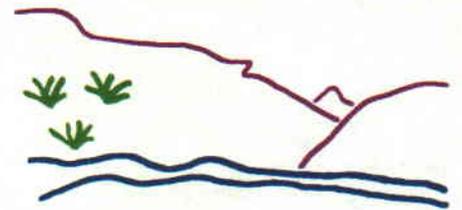
- GAS INJECTION
- GAS STORAGE
- LOCATION ABANDONED
- NEW LOCATION
- PLUGGED & ABANDONED
- PRODUCING GAS
- PRODUCING OIL
- SHUT-IN GAS
- SHUT-IN OIL
- TEMP. ABANDONED
- TEST WELL
- WATER INJECTION
- WATER SUPPLY
- WATER DISPOSAL
- DRILLING

**Field Status**

- ABANDONED
- ACTIVE
- COMBINED
- INACTIVE
- PROPOSED
- STORAGE
- TERMINATED

**Unit Status**

- EXPLORATORY
- GAS STORAGE
- NF PP OIL
- NF SECONDARY
- PENDING
- PI OIL
- PP GAS
- PP GEOTHERML
- PP OIL
- SECONDARY
- TERMINATED



Utah Oil Gas and Mining



PREPARED BY: DIANA MASON

DATE: 3-NOVEMBER-2006

# 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)

November 6, 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)

43-047-38799	NBU 1022-27F Sec 27 T10S R22E 1809 FNL 1878 FWL	
43-047-38795	NBU 1022-270 Sec 27 T10S R22E 1016 FSL 2127 FEL	
43-047-38808	NBU 1022-34C Sec 34 T10S R22E 0655 FNL 1908 FWL	
43-047-38807	NBU 1022-34D Sec 34 T10S R22E 1067 FNL 0825 FWL	
43-047-38802	NBU 1022-22H Sec 22 T10S R22E 2442 FNL 0792 FEL	
43-047-38803	NBU 1022-22P Sec 22 T10S R22E 0636 FSL 0296 FEL	
43-047-38792	NBU 1022-22J Sec 22 T10S R22E 2257 FSL 2209 FEL	
43-047-38793	NBU 1022-22O Sec 22 T10S R22E 0576 FSL 1798 FEL	
43-047-38794	NBU 1022-22G Sec 22 T10S R22E 2277 FNL 1791 FEL	
43-047-38806	NBU 1022-34G Sec 34 T10S R22E 1991 FNL 2080 FEL	
43-047-38804	NBU 1022-27B Sec 27 T10S R22E 0228 FNL 1825 FEL	
43-047-38880	NBU 1022-9K-2T Sec 09 T10S R22E 2126 FSL 1483 FWL	

Our records indicate the 1022-270 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:11-6-06



**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*

November 7, 2006

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

Re: Natural Buttes Unit 1022-22O Well, 576' FSL, 1798' FEL, SW SE, Sec. 22,  
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 43-047-38793.

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 1022-22O

**API Number:** 43-047-38793

**Lease:** UTU-01198-B

**Location:** SW SE                      Sec. 22                      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.



**State of Utah**

**Department of  
Natural Resources**

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JON M. HUNTSMAN, JR.  
*Governor*

GARY R. HERBERT  
*Lieutenant Governor*

October 26, 2007

Sheila Upchego  
Kerr-McGee O&G Onshore LP  
1368 South 1200 East  
Vernal, UT 84078

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

Dear Ms. Upchego:

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 October 25, 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  
October 26, 2007  
Subject:

Lizzard 1122-21H  
Lizzard 1122-21I  
NBU 1022-34C  
NBU 1022-21L  
NBU 1021-27C  
NBU 1022-27B  
NBU 1022-22O  
NBU 1022-22J  
NBU 1022-22H  
NBU 1022-27F  
Federal 1022-27J  
Federal 1022-27N  
Federal 1022-27G  
Love 1121-17H