

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

FORM 3

AMENDED REPORT   
(highlight changes)

<b>APPLICATION FOR PERMIT TO DRILL</b>			5. MINERAL LEASE NO: <b>ML-48758</b>	6. SURFACE: State
1A. TYPE OF WORK: DRILL <input checked="" type="checkbox"/> REENTER <input type="checkbox"/> DEEPEN <input type="checkbox"/>			7. IF INDIAN, ALLOTTEE OR TRIBE NAME:	
B. TYPE OF WELL: OIL <input type="checkbox"/> GAS <input checked="" type="checkbox"/> OTHER _____ SINGLE ZONE <input type="checkbox"/> MULTIPLE ZONE <input checked="" type="checkbox"/>			8. UNIT or CA AGREEMENT NAME:	
2. NAME OF OPERATOR: <b>KERR McGEE OIL &amp; GAS OIL ONSHORE LP</b>			9. WELL NAME and NUMBER: <b>STATE 921-32I</b>	
3. ADDRESS OF OPERATOR: <b>1368 S. 1200 E.</b>		CITY <b>VERNAL</b> STATE <b>UT</b> ZIP <b>84078</b>	PHONE NUMBER: <b>(435) 781-7024</b>	10. FIELD AND POOL, OR WILDCAT: <b>NATURAL BUTTES</b>
4. LOCATION OF WELL (FOOTAGES) AT SURFACE: <b>2011'FSL, 766'FEL</b>			11. QTR/GTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: <b>NESE 32 9S 21E</b>	
AT PROPOSED PRODUCING ZONE: <b>622247X 29.989954</b> <b>4427414Y -109.567902</b>				
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE: <b>17.9 MILES SOUTHEAST OF OURAY, UTAH</b>			12. COUNTY: <b>UINTAH</b>	13. STATE: <b>UTAH</b>
15. DISTANCE TO NEAREST PROPERTY OR LEASE LINE (FEET) <b>766'</b>	16. NUMBER OF ACRES IN LEASE: <b>348.80</b>	17. NUMBER OF ACRES ASSIGNED TO THIS WELL: <b>40.00</b>		
18. DISTANCE TO NEAREST WELL (DRILLING, COMPLETED, OR APPLIED FOR) ON THIS LEASE (FEET) <b>REFER TO TOPO C</b>	19. PROPOSED DEPTH: <b>9,830</b>	20. BOND DESCRIPTION: <b>RLB0005238</b>		
21. ELEVATIONS (SHOW WHETHER DF, RT, GR, ETC.): <b>4919'GL</b>	22. APPROXIMATE DATE WORK WILL START:	23. ESTIMATED DURATION:		

24. **PROPOSED CASING AND CEMENTING PROGRAM**

SIZE OF HOLE	CASING SIZE, GRADE, AND WEIGHT PER FOOT			SETTING DEPTH	CEMENT TYPE, QUANTITY, YIELD, AND SLURRY WEIGHT		
12 1/4"	9 5/8	H-40	32.3#	2,230	315 SX CLASS G	1.18 YIELD	15.6 PPG
7 7/8"	4 1/2"	I-80	11.6#	9,830	2020 SX 50/50 POZ	1.31 YIELD	14.3 PPG

25. **ATTACHMENTS**

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

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

NAME (PLEASE PRINT) SHEILA UPCHEGO TITLE REGULATORY ANALYST

SIGNATURE *Sheila Upchego* DATE 5/8/2006

(This space for State use only)

**RECEIVED**

**MAY 15 2006**

API NUMBER ASSIGNED: 43-047-35104

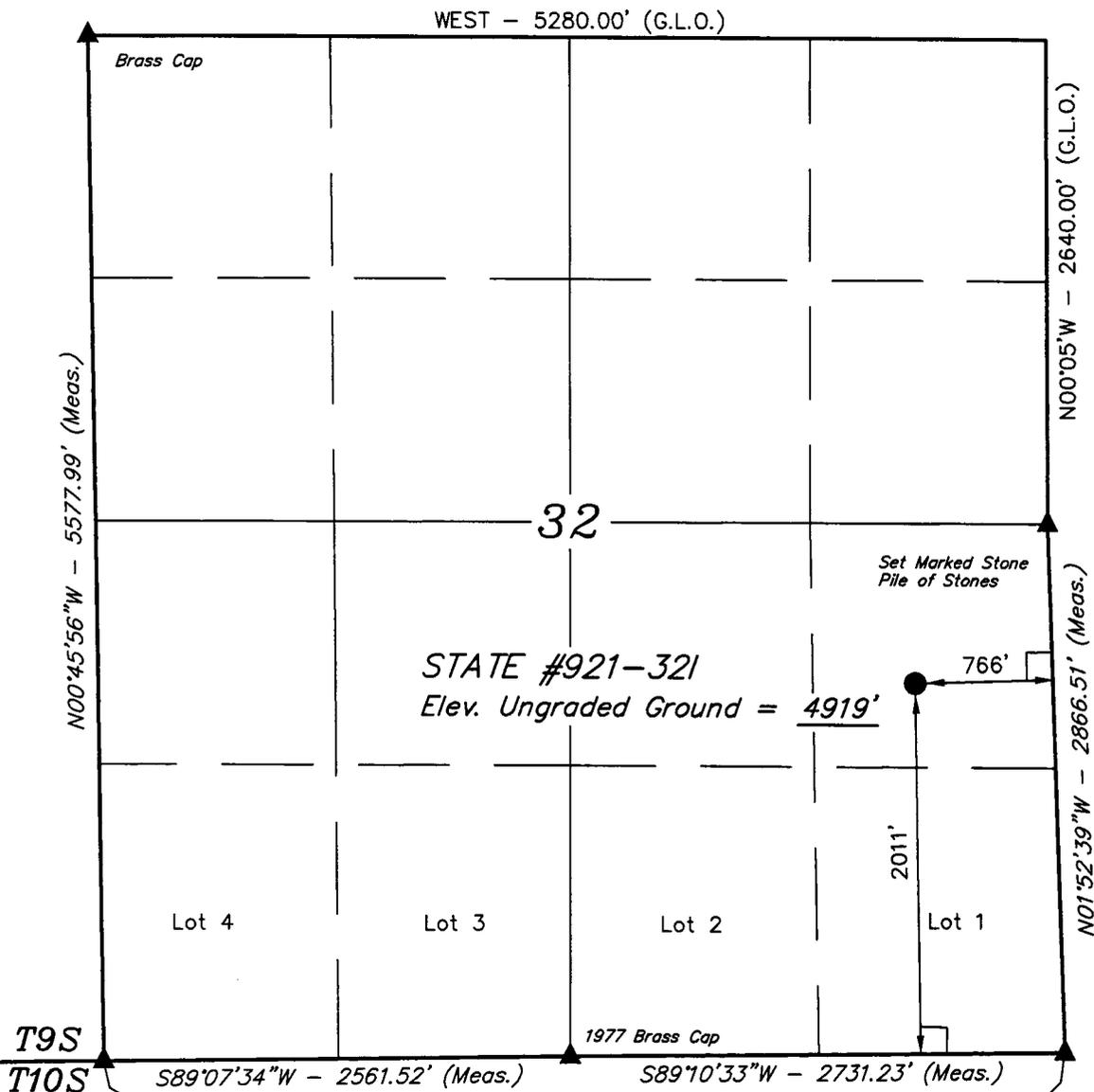
APPROVAL:

DIV. OF OIL, GAS & MINING

# T9S, R21E, S.L.B.&M.

## Kerr McGee Oil & Gas Onshore LP

Well location, STATE #921-32I, located as shown in the NE 1/4 SE 1/4 of Section 32, T9S, R21E, S.L.B.&M. Uintah County, Utah.

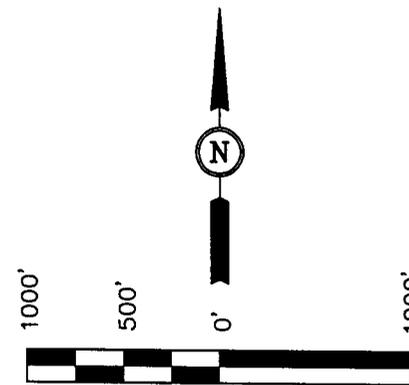


### BASIS OF ELEVATION

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

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.

*John H. ...*  
REGISTERED LAND SURVEYOR  
REGISTRATION NO. 161319  
STATE OF UTAH

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

(NAD 83)  
LATITUDE = 39°59'24.52" (39.990144)  
LONGITUDE = 109°34'07.47" (109.568742)

(NAD 27)  
LATITUDE = 39°59'24.65" (39.990181)  
LONGITUDE = 109°34'04.99" (109.568053)

<b>UINTAH ENGINEERING &amp; LAND SURVEYING</b>		
85 SOUTH 200 EAST - VERNAL, UTAH 84078		
(435) 789-1017		
SCALE 1" = 1000'	DATE SURVEYED: 02-22-06	DATE DRAWN: 03-20-06
PARTY P.J. N.F. S.L.	REFERENCES G.L.O. PLAT	
WEATHER COLD	FILE Kerr McGee Oil & Gas Onshore LP	

**STATE 921-32I  
NESE SEC 32-T9S-R21E  
UINTAH COUNTY, UTAH  
ML-48758**

**ONSHORE ORDER NO. 1**

***DRILLING PROGRAM***

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

<u>Formation</u>	<u>Depth</u>
Uinta	0- Surface
Green River	1481'
Top of Birds Nest Water	1728'
Mahogany	2371'
Wasatch	4745'
Mesaverde	7710'
MVU2	8619'
MVL1	9252'
TD	9830'

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

<u>Substance</u>	<u>Formation</u>	<u>Depth</u>
Water	Green River	1481'
	Top of Birds Nest Water	1728'
	Mahogany	2371'
Gas	Wasatch	4745'
	Mesaverde	7710'
Gas	MVU2	8619'
Gas	MVL1	9252'
Water	N/A	
Other Minerals	N/A	

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

*Please refer to the attached Drilling Program.*

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

*Please refer to the attached Drilling Program.*

**5. Drilling Fluids Program:**

*Please refer to the attached Drilling Program.*

**6. Evaluation Program:**

*Please refer to the attached Drilling Program.*

7. **Abnormal Conditions:**

Maximum anticipated bottomhole pressure calculated at 9830' TD, approximately equals 6095 psi (calculated at 0.62 psi/foot).

Maximum anticipated surface pressure equals approximately 3932 psi (bottomhole pressure minus the pressure of a partially evacuated hole calculated at 0.22 psi/foot).

8. **Anticipated Starting Dates:**

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

9. **Variations:**

*Please refer to the attached Drilling Program.*

10. **Other Information:**

*Please refer to the attached Drilling Program.*





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

**CASING PROGRAM**

	SIZE	INTERVAL	WT.	GR.	CPLG.	DESIGN FACTORS		
						BURST	COLLAPSE	TENSION
CONDUCTOR	14"	0-40'						
SURFACE	9-5/8"	0 to 1830	32.30	H-40	STC	2270	1370	254000
						0.56*****	1.60	4.03
PRODUCTION	4-1/2"	1830 to 2230	36.00	J-55	STC	3520	2020	564000
						1.06*****	1.94	8.94
						7780	6350	201000
						1.91	1.02	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 = 12.2 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 4074 psi
- \*\*\*\*\* Burst SF is low but csg is stronger than formation at 2230 feet
- \*\*\*\*\* EMW @ 2230 for 2270# is 19.6 ppg or 1.0 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)	250	20 gals sodium silicate + Premium cmt + 2% CaCl + .25 pps flocele	100		15.60	1.18
	TOP OUT CMT (2)	as required	Premium cmt + 2% CaCl	as req.		15.60	1.18
SURFACE Option 2	LEAD	2000	<b>NOTE: If well will circulate water to surface, option 2 will be utilized</b> Prem cmt + 16% Gel + 10 pps gilsonite + .25 pps Flocele + 3% salt BWOC	230	35%	11.00	3.82
	TAIL	500	Premium cmt + 2% CaCl + .25 pps flocele	180	35%	15.60	1.18
	TOP OUT CMT	as required	Premium cmt + 2% CaCl	as req.		15.60	1.18
	PRODUCTION	LEAD	4,240'	Premium Lite II + 3% KCl + 0.25 pps celloflake + 5 pps gilsonite + 10% gel + 0.5% extender	460	60%	11.00
	TAIL	5,590'	50/50 Poz/G + 10% salt + 2% gel +.1% R-3	1560	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.

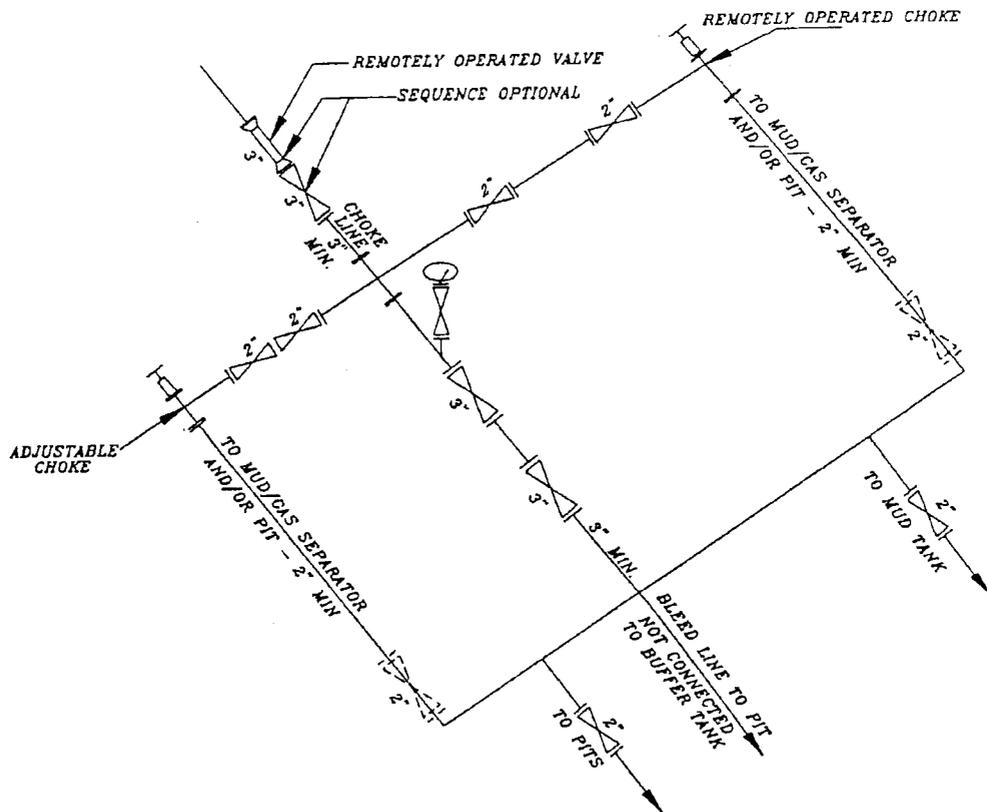
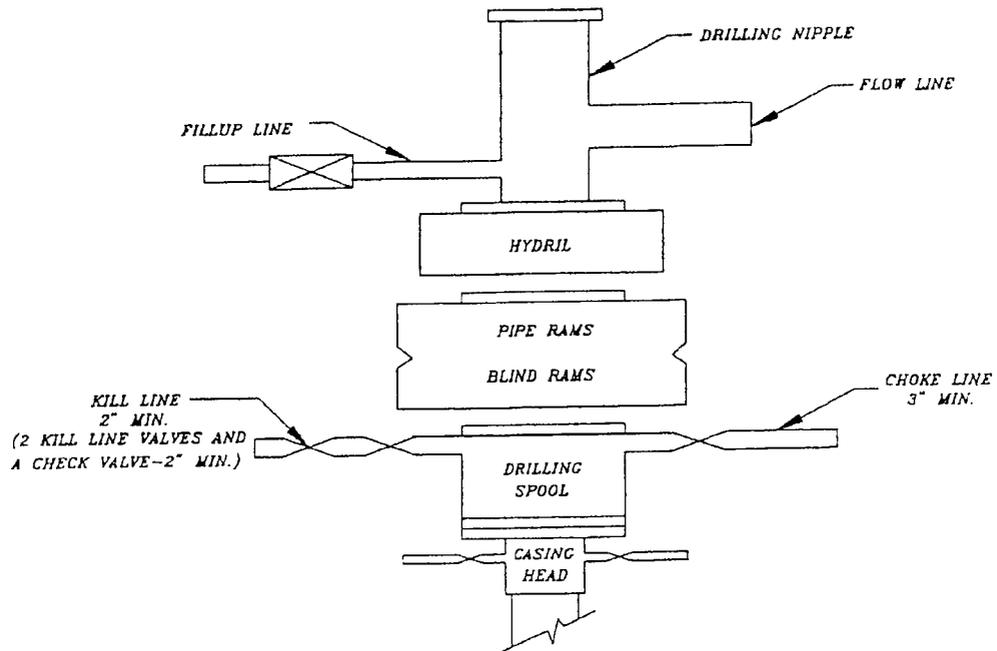
Drop Totco surveys every 2000'. Maximum allowable hole angle is 5 degrees.

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 STATE921-32I APD.xls

# 5M BOP STACK and CHOKE MANIFOLD SYSTEM



**STATE 921-32I  
NESE SEC 32-T9S-R21E  
Uintah County, UT  
ML-48758**

**ONSHORE ORDER NO. 1**

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

**1. Existing Roads:**

Refer to Topo Map A for directions to the location.

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

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

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

**2. Planned Access Roads:**

Approximately 150' +/- of new access road is proposed. Refer to Topo Map B for the location of the proposed access road.

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

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

The access road was centerline flagged during time of staking.

Surfacing material may be necessary, depending upon weather conditions.

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

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

Please refer to Topo Map C.

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

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

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

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

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

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

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

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

Approximately 1450' of pipeline is proposed. Refer to Topo D for the proposed pipeline.

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

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

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

No water well is to be drilled on this lease.

**6. Source of Construction Materials:**

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

Any gravel will be obtained from a commercial source.

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

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

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

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

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

Any spills of oil, gas, salt water, or other noxious fluids will be immediately cleaned up and removed to an approved disposal site.

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

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

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

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

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

Any produced water from the proposed well will be contained in a water tank and will then be hauled by truck to one of the pre-approved disposal sites: RNI, Sec. 5, T9S, R22E, NBU #159, Sec. 35, T9S, R21E, Ace Oilfield, Sec. 2, T6S, R20E, MC&MC, Sec. 12, T6S, R19E.

**8. Ancillary Facilities:**

None are anticipated.

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

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

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

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

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

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

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

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

Standard steel, wood, or pipe posts shall be used between the corner braces. Maximum distance between any 2 fence posts shall be no greater than 16 feet.

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

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

Location size may change prior to the drilling of the well due to current rig availability. If the proposed location is not large enough to accommodate the drilling rig the location will be re-surveyed and a Form 9 shall be submitted.

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

*Producing Location:*

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

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

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

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

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

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

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

*Dry Hole/Abandoned Location:*

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

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

11. **Surface Ownership:**

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

12. **Other Information:**

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

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

A Class III archaeological survey has been completed by MOAC on 04/28/2006, Archaeological Report No. 06-94.

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

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

Sheila Upchego  
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.

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

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

Bond coverage pursuant to 43 CFR 3104 for lease activities is being provided by State Surety Bond #RLB0005236.

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

5/8/2006

Date

# Kerr-McGee Oil & Gas Onshore LP

STATE #921-32I

SECTION 32, T9S, 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; TURN 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 5.0 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE EAST; TURN RIGHT AND PROCEED IN AN EASTERLY, THEN SOUTHERLY DIRECTION APPROXIMATELY 0.9 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE SOUTHWEST; TURN RIGHT AND PROCEED IN A SOUTHWESTERLY DIRECTION APPROXIMATELY 0.1 MILES TO THE BEGINNING OF THE PROPOSED ACCESS TO THE SOUTHWEST; FOLLOW ROAD FLAGS IN A SOUTHWESTERLY DIRECTION APPROXIMATELY 150' TO THE PROPOSED LOCATION.

TOTAL DISTANCE FROM VERNAL, UTAH TO THE PROPOSED WELL LOCATION IS APPROXIMATELY 43.9 MILES.

# Kerr-McGee Oil & Gas Onshore LP

## STATE #921-32I

LOCATED IN UINTAH COUNTY, UTAH  
SECTION 32, T9S, R21E, S.L.B.&M.

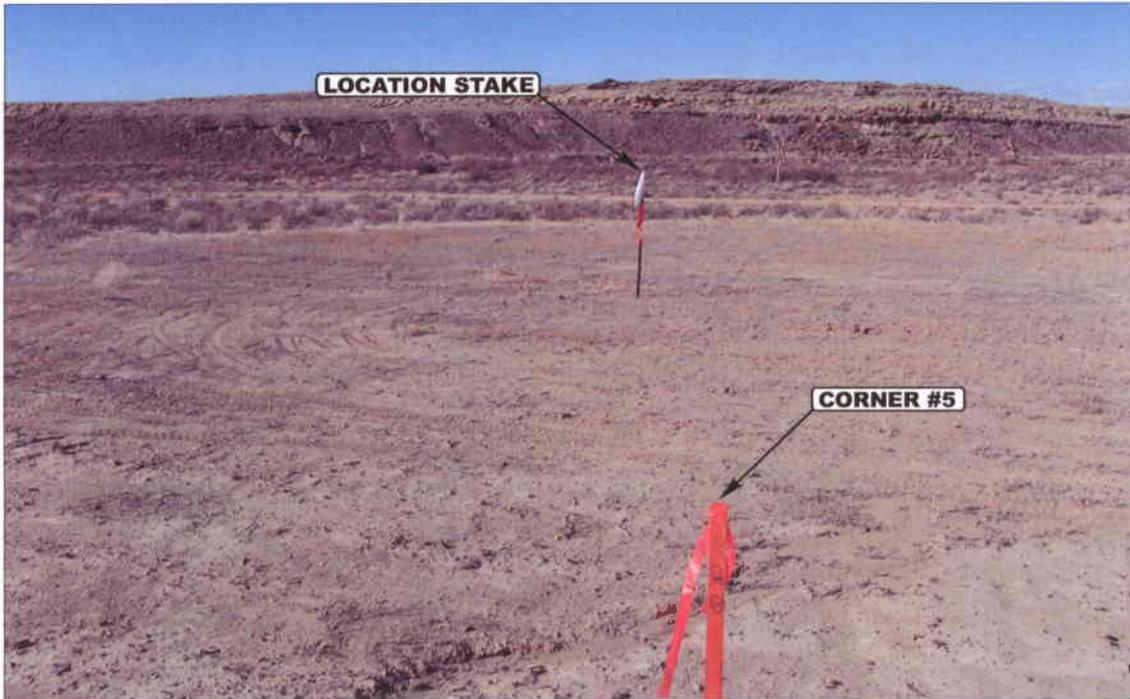


PHOTO: VIEW FROM CORNER #5 TO LOCATION STAKE

CAMERA ANGLE: NORTHWESTERLY

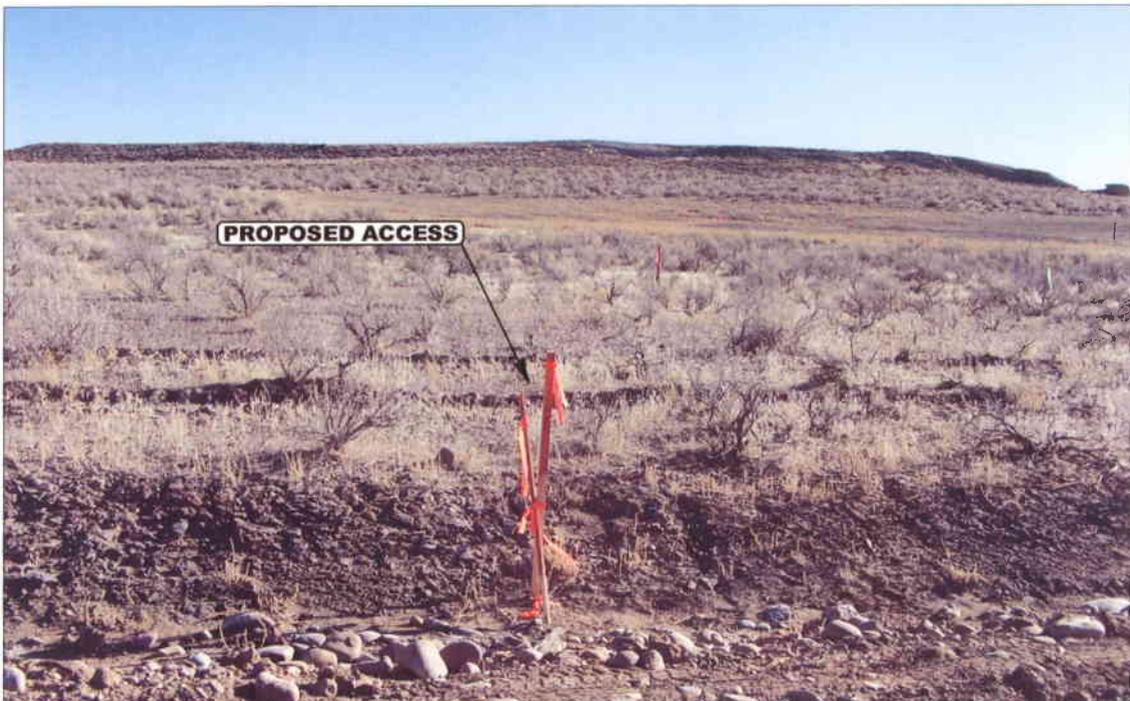


PHOTO: VIEW FROM BEGINNING OF PROPOSED ACCESS

CAMERA ANGLE: SOUTHWESTERLY



- Since 1964 -

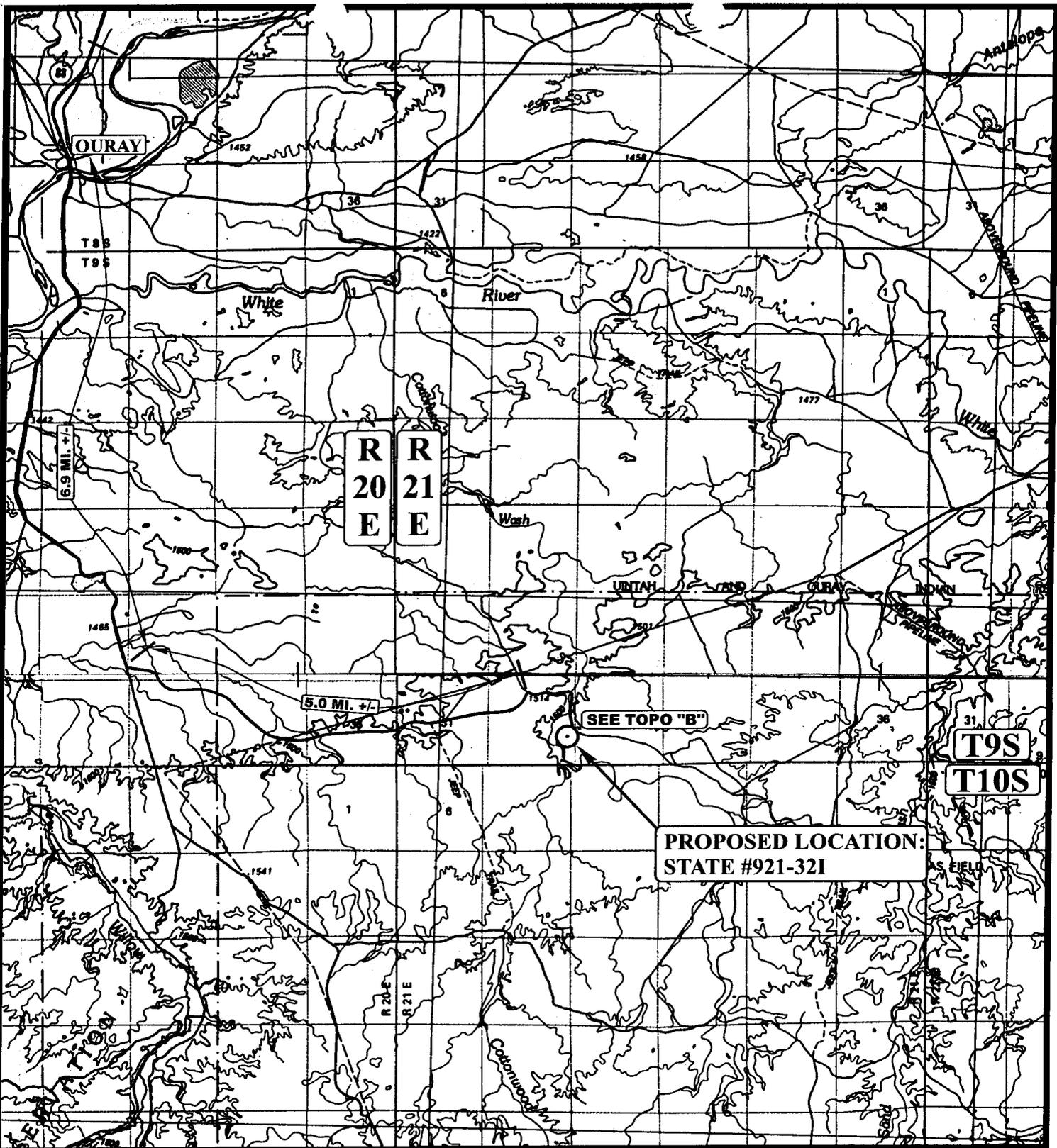
U  
E  
L  
S  
Uintah Engineering & Land Surveying  
85 South 200 East Vernal, Utah 84078  
435-789-1017 uels@uelsinc.com

LOCATION PHOTOS

03 21 06  
MONTH DAY YEAR

PHOTO

TAKEN BY: P.J. DRAWN BY: LDK REVISED: 00-00-00



**LEGEND:**

⊙ PROPOSED LOCATION



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

**STATE #921-32I  
SECTION 32, T9S, R21E, S.L.B.&M.  
2011' FSL 766' FEL**



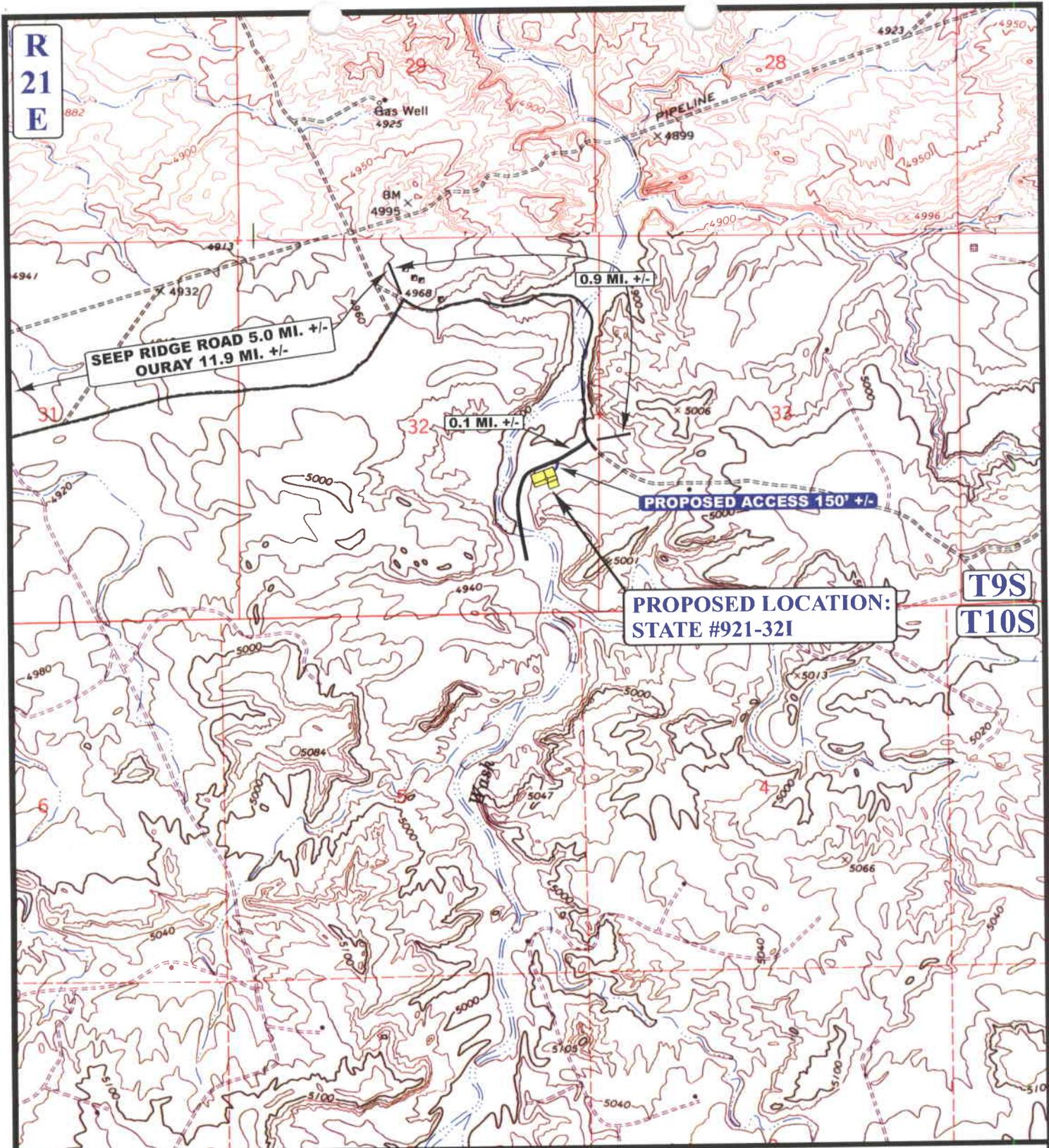
**Utah Engineering & Land Surveying**  
85 South 200 East Vernal, Utah 84078  
(435) 789-1017 \* FAX (435) 789-1813

**TOPOGRAPHIC  
MAP**

<b>03</b>	<b>21</b>	<b>06</b>
MONTH	DAY	YEAR

SCALE: 1:100,000 | DRAWN BY: LDK | REVISED: 00-00-00





**LEGEND:**

- PROPOSED ACCESS ROAD
- EXISTING ROAD



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

**STATE #921-32I**  
**SECTION 32, T9S, R21E, S.L.B.&M.**  
**2011' FSL 766' FEL**



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

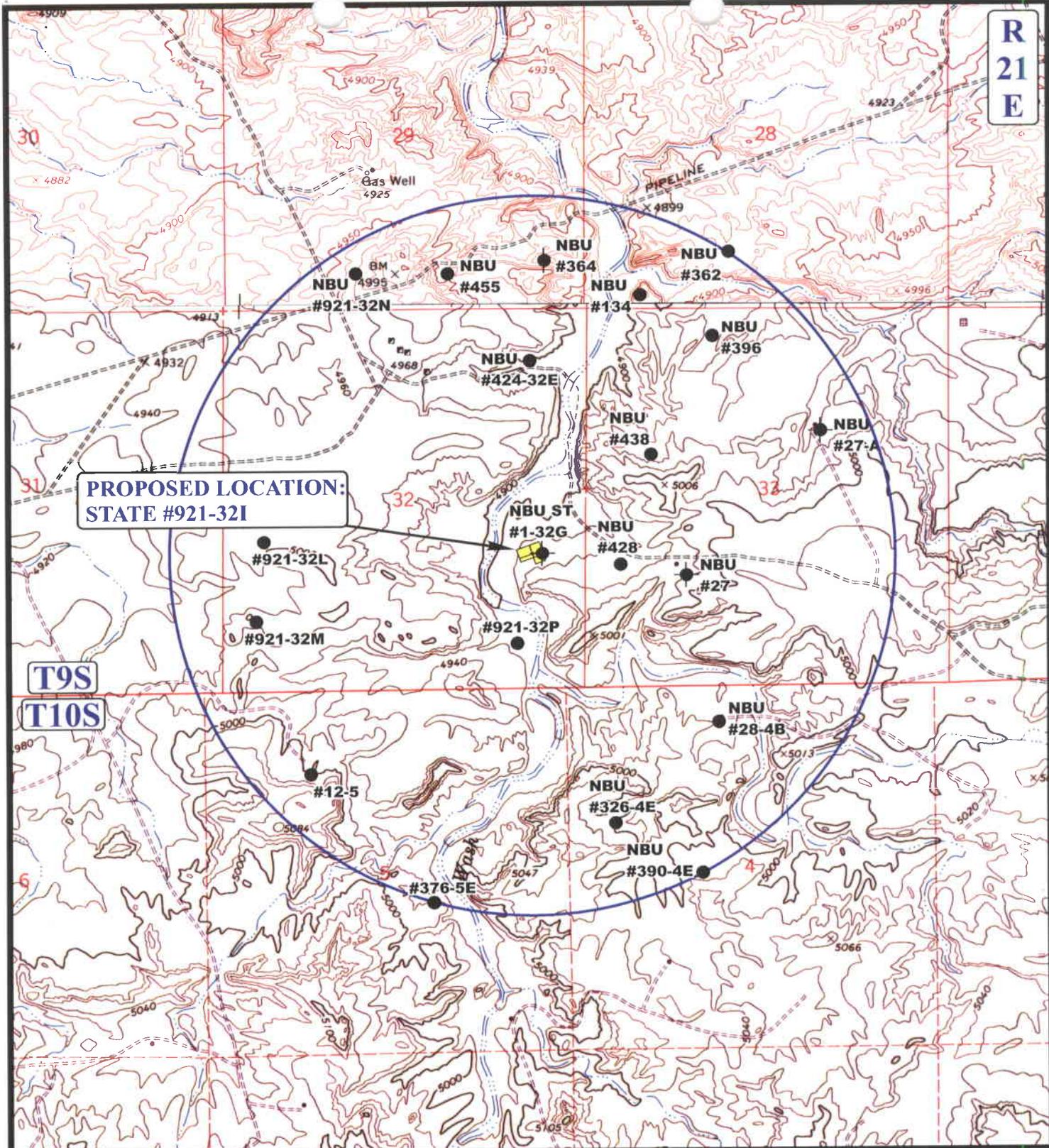
**TOPOGRAPHIC**  
**MAP**

<b>03</b>	<b>21</b>	<b>06</b>
MONTH	DAY	YEAR

SCALE: 1" = 2000' DRAWN BY: LDK REVISED: 00-00-00



R  
21  
E



**PROPOSED LOCATION:  
STATE #921-32I**

T9S  
T10S

**LEGEND:**

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



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

**STATE #921-32I  
SECTION 32, T9S, R21E, S.L.B.&M.  
2011' FSL 766' FEL**



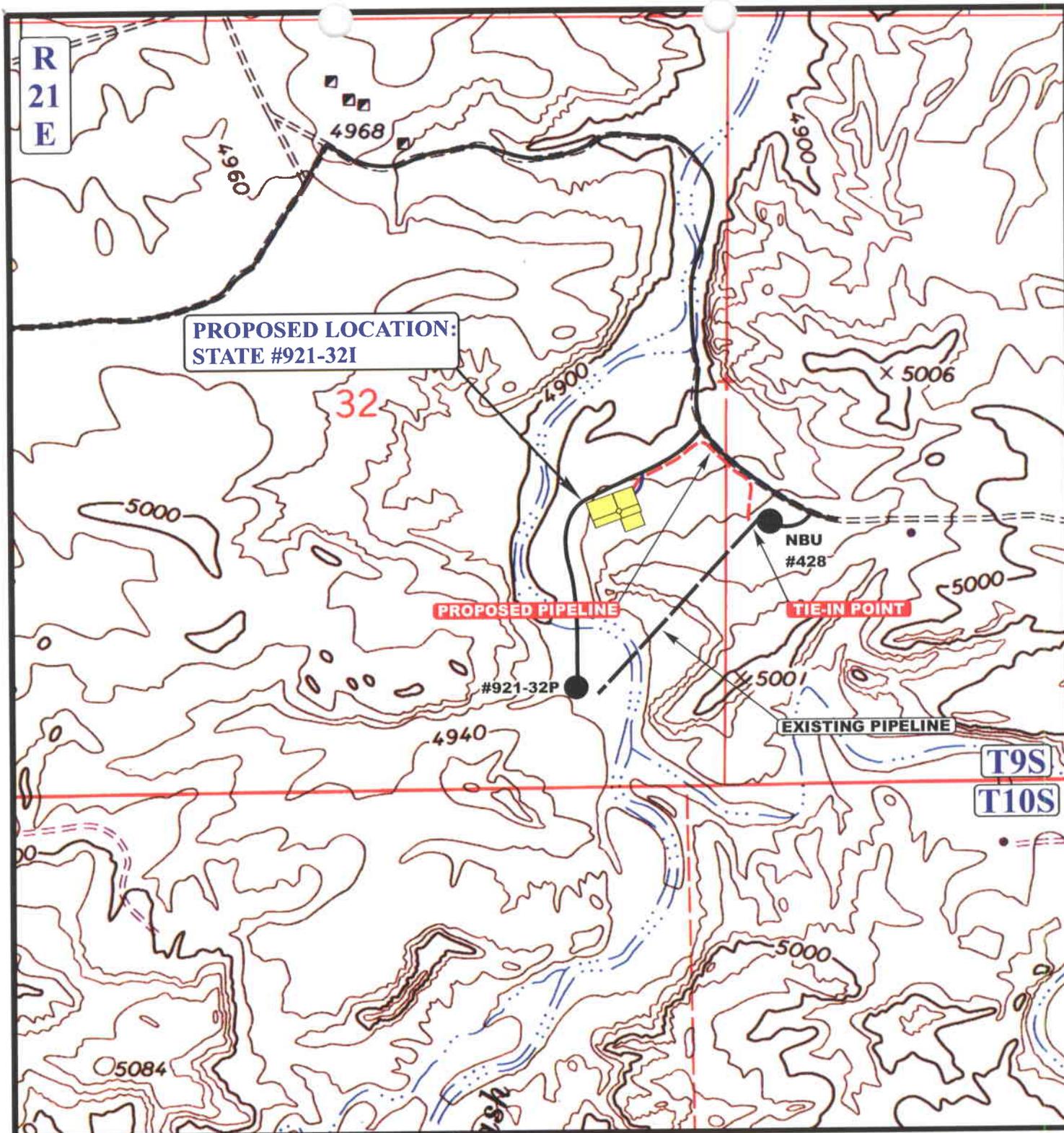
**Uintah Engineering & Land Surveying**  
85 South 200 East Vernal, Utah 84078  
(435) 789-1017 \* FAX (435) 789-1813

**TOPOGRAPHIC  
MAP**

**03 21 06**  
MONTH DAY YEAR

SCALE: 1" = 2000' DRAWN BY: LDK REVISED: 00-00-00





**APPROXIMATE TOTAL PIPELINE DISTANCE = 1,450' +/-**

**LEGEND:**

-  PROPOSED ACCESS
-  EXISTING PIPELINE
-  PROPOSED PIPELINE

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

**STATE #921-32I  
SECTION 32, T9S, R21E, S.L.B.&M.  
2011' FSL 766' FEL**



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

**TOPOGRAPHIC  
MAP**

<b>03</b>	<b>21</b>	<b>06</b>
MONTH	DAY	YEAR

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



# Kerr-McGee Oil & Gas Onshore LP

STATE #921-32I

PIPELINE ALIGNMENT

LOCATED IN UINTAH COUNTY, UTAH

SECTION 32, T9S, R21E, S.L.B.&M.



PHOTO: VIEW OF TIE-IN POINT

CAMERA ANGLE: NORTHWESTERLY



PHOTO: VIEW OF PIPELINE ALIGNMENT

CAMERA ANGLE: NORTHWESTERLY



- Since 1964 -

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

**PIPELINE PHOTOS**

**03 21 06**  
MONTH DAY YEAR

**PHOTO**

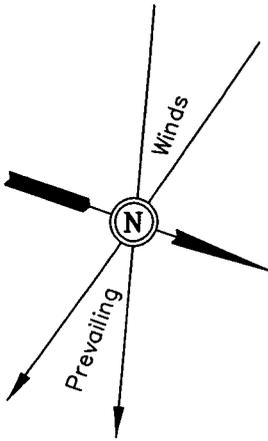
TAKEN BY: P.J.

DRAWN BY: LDK

REVISED: 00-00-00

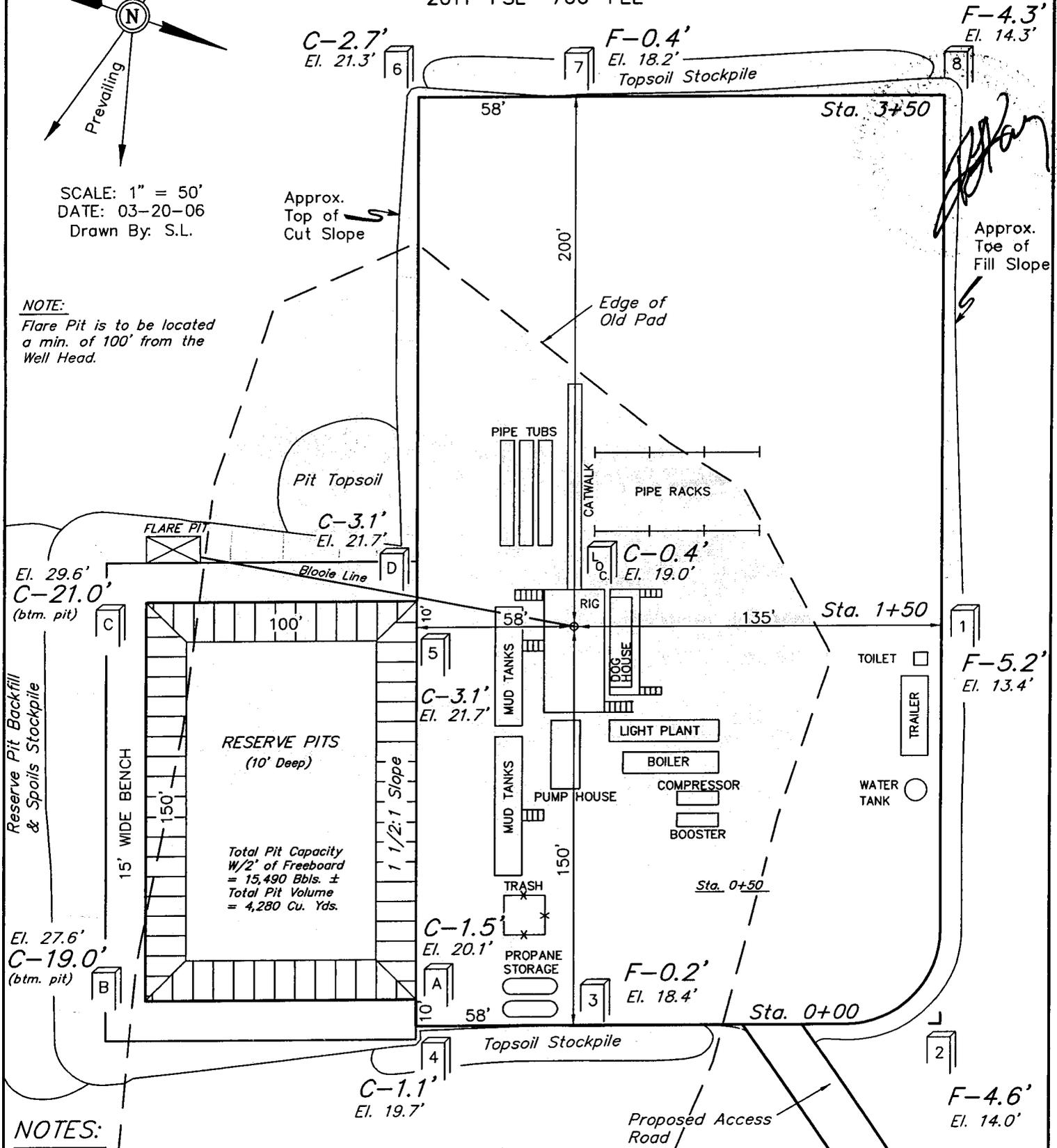
LOCATION LAYOUT FOR

STATE #921-32I  
SECTION 32, T9S, R21E, S.L.B.&M.  
2011' FSL 766' FEL



SCALE: 1" = 50'  
DATE: 03-20-06  
Drawn By: S.L.

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



**NOTES:**

Elev. Ungraded Ground At Loc. Stake = 4919.0'  
FINISHED GRADE ELEV. AT LOC. STAKE = 4918.6'

Kerr-McGee Oil & Gas Onshore LP

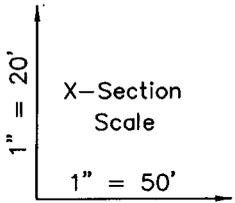
FIGURE #2

TYPICAL CROSS SECTIONS FOR

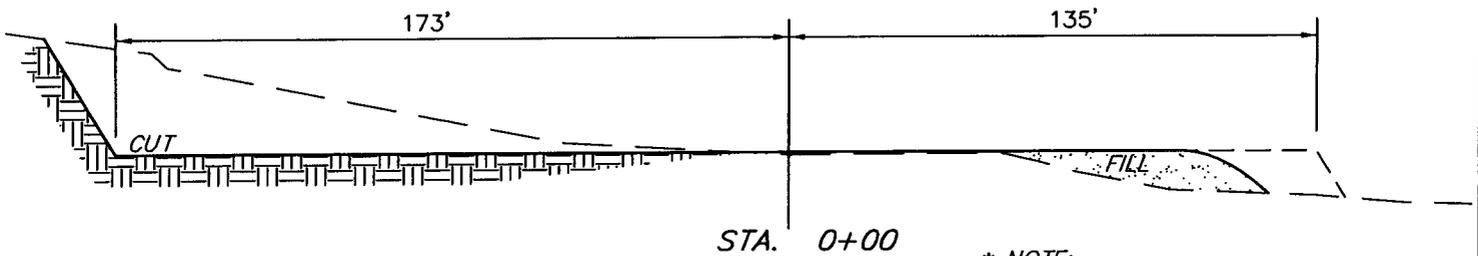
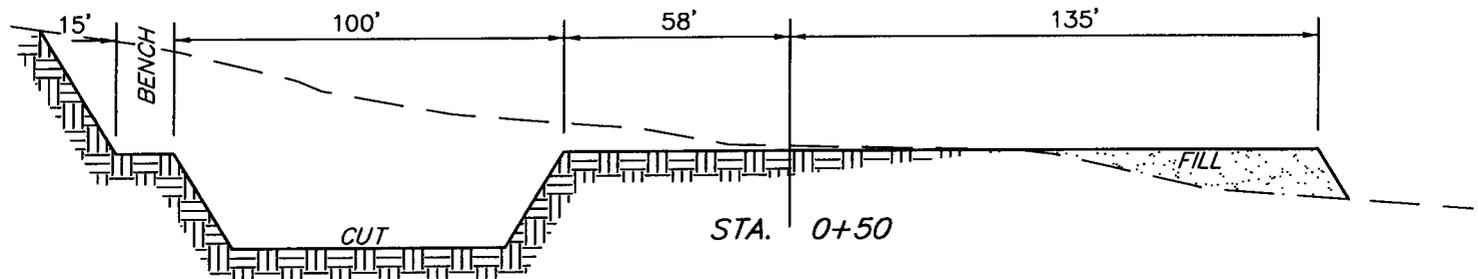
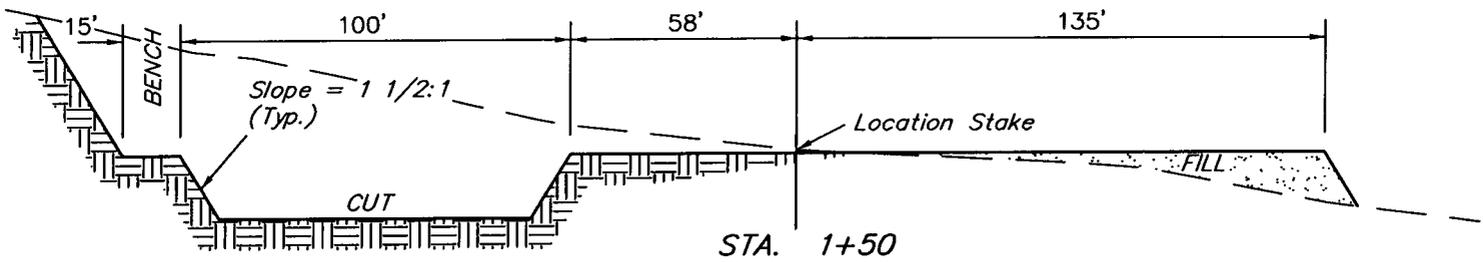
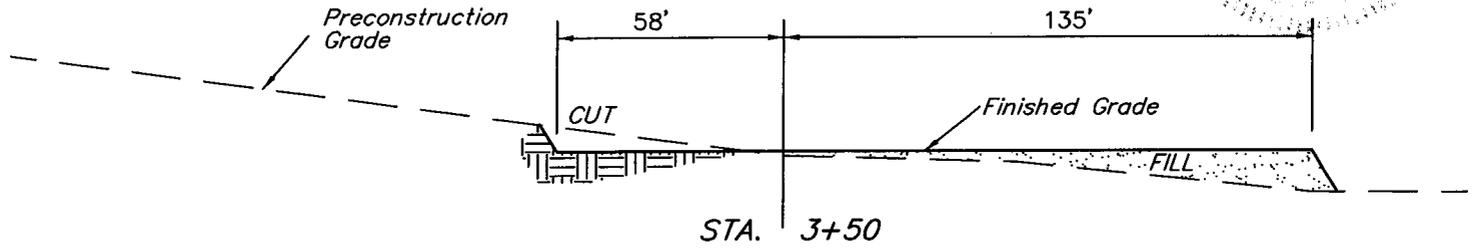
STATE #921-32I

SECTION 32, T9S, R21E, S.L.B.&M.

2011' FSL 766' FEL



DATE: 03-20-06  
Drawn By: S.L.



\* NOTE:  
FILL QUANTITY INCLUDES  
5% FOR COMPACTION

APPROXIMATE YARDAGES

CUT	
(6") Topsoil Stripping	= 1,900 Cu. Yds.
Remaining Location	= 12,650 Cu. Yds.
<b>TOTAL CUT</b>	<b>= 14,550 CU.YDS.</b>
<b>FILL</b>	<b>= 3,270 CU.YDS.</b>

EXCESS MATERIAL	= 11,280 Cu. Yds.
Topsoil & Pit Backfill (1/2 Pit Vol.)	= 4,040 Cu. Yds.
EXCESS UNBALANCE (After Interim Rehabilitation)	= 7,240 Cu. Yds.

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

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

FORM 3

AMENDED REPORT   
(highlight changes)

<b>APPLICATION FOR PERMIT TO DRILL</b>				5. MINERAL LEASE NO: ML-48758	6. SURFACE: State
1A. TYPE OF WORK: DRILL <input checked="" type="checkbox"/> REENTER <input type="checkbox"/> DEEPEN <input type="checkbox"/>				7. IF INDIAN, ALLOTTEE OR TRIBE NAME:	
B. TYPE OF WELL: OIL <input type="checkbox"/> GAS <input checked="" type="checkbox"/> OTHER _____ SINGLE ZONE <input type="checkbox"/> MULTIPLE ZONE <input checked="" type="checkbox"/>				8. UNIT or CA AGREEMENT NAME:	
2. NAME OF OPERATOR: KERR MCGEE OIL & GAS OIL ONSHORE LP				9. WELL NAME and NUMBER: STATE 921-321	
3. ADDRESS OF OPERATOR: 1368 S. 1200 E. CITY VERNAL STATE UT ZIP 84078			PHONE NUMBER: (435) 781-7024	10. FIELD AND POOL, OR WILDCAT: NATURAL BUTTES	
4. LOCATION OF WELL (FOOTAGES) AT SURFACE: 2011'FSL, 766'FEL AT PROPOSED PRODUCING ZONE:				11. QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: NESE 32 9S 21E	
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE: 17.9 MILES SOUTHEAST OF OURAY, UTAH				12. COUNTY: UINTAH	13. STATE: UTAH
15. DISTANCE TO NEAREST PROPERTY OR LEASE LINE (FEET) 766'		16. NUMBER OF ACRES IN LEASE: 348.80		17. NUMBER OF ACRES ASSIGNED TO THIS WELL: 40.00	
18. DISTANCE TO NEAREST WELL (DRILLING, COMPLETED, OR APPLIED FOR) ON THIS LEASE (FEET) REFER TO TOPO C		19. PROPOSED DEPTH: 9,830		20. BOND DESCRIPTION: RLB0005238	
21. ELEVATIONS (SHOW WHETHER DF, RT, GR, ETC.): 4919'GL		22. APPROXIMATE DATE WORK WILL START:		23. ESTIMATED DURATION:	

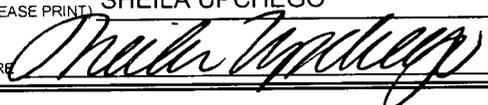
**PROPOSED CASING AND CEMENTING PROGRAM**

SIZE OF HOLE	CASING SIZE, GRADE, AND WEIGHT PER FOOT			SETTING DEPTH	CEMENT TYPE, QUANTITY, YIELD, AND SLURRY WEIGHT		
12 1/4"	9 5/8	H-40	32.3#	2,230	315 SX CLASS G	1.18 YIELD	15.6 PPG
7 7/8"	4 1/2"	I-80	11.6#	9,830	2020 SX 50/50 POZ	1.31 YIELD	14.3 PPG

**ATTACHMENTS**

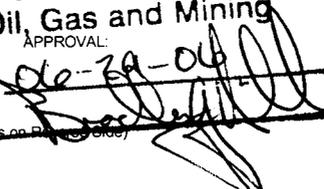
VERIFY THE FOLLOWING ARE ATTACHED IN ACCORDANCE WITH THE UTAH OIL AND GAS CONSERVATION GENERAL RULES:

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

NAME (PLEASE PRINT) SHEILA UPCHEGO TITLE REGULATORY ANALYST  
 SIGNATURE  DATE 5/8/2006

(This space for State use only)

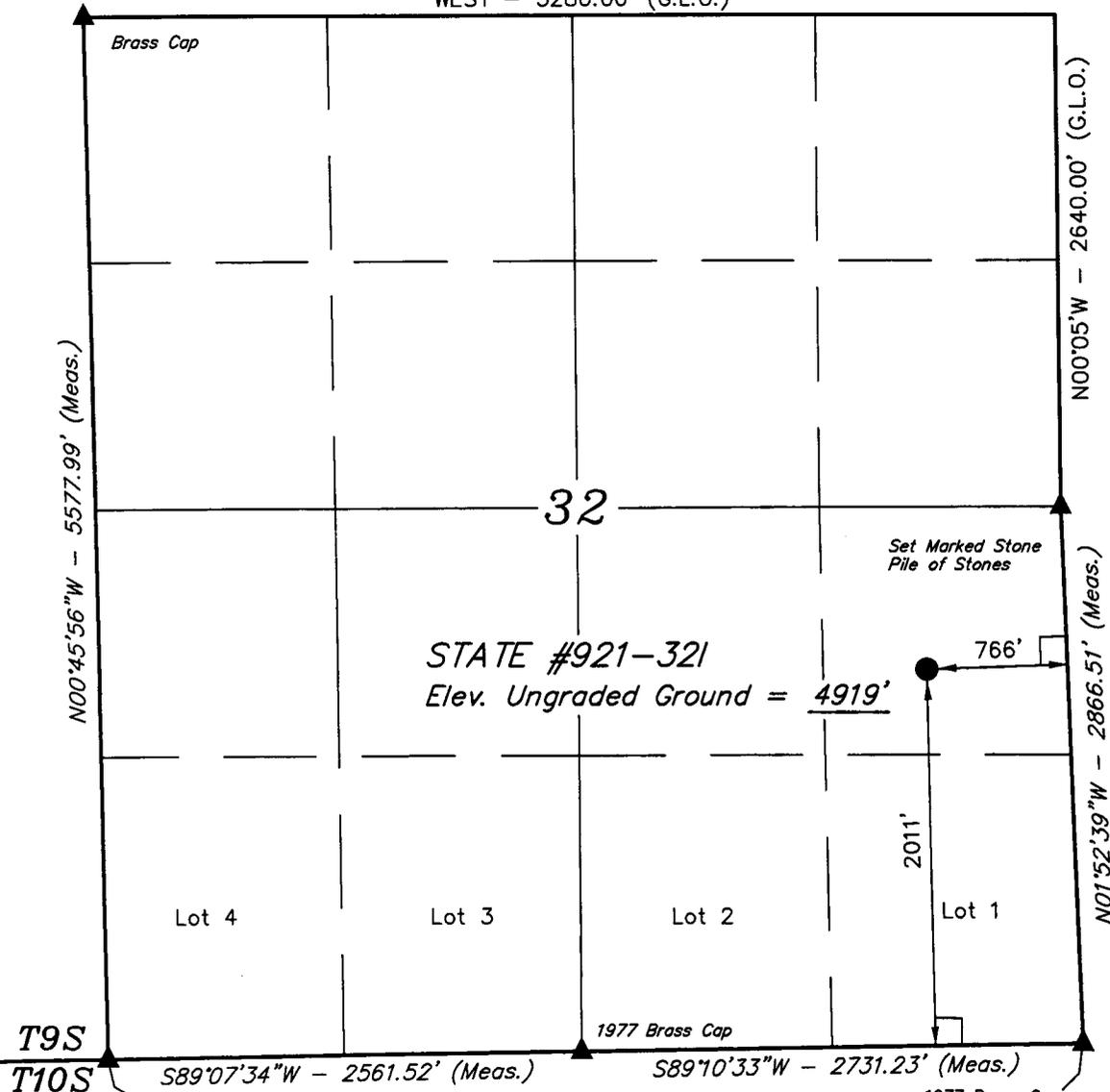
API NUMBER ASSIGNED: 43-047-35104

**Approved by the  
Utah Division of  
Oil, Gas and Mining**  
 APPROVAL:  
 Date: 06-30-06  
 BY: 

**RECEIVED**  
**MAY 15 2006**  
 DIV. OF OIL, GAS & MINING

# T9S, R21E, S.L.B.&M.

WEST - 5280.00' (G.L.O.)



STATE #921-321  
Elev. Ungraded Ground = 4919'

T9S  
T10S  
S89°07'34"W - 2561.52' (Meas.)  
1977 Brass Cap  
1.2' High, Pile of Stones  
S89°10'33"W - 2731.23' (Meas.)  
1977 Brass Cap  
0.5' High, Pile of Stones, Steel Post

**LEGEND:**

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

(NAD 83)  
LATITUDE = 39°59'24.52" (39.990144)  
LONGITUDE = 109°34'07.47" (109.568742)  
(NAD 27)  
LATITUDE = 39°59'24.65" (39.990181)  
LONGITUDE = 109°34'04.99" (109.568053)

## Kerr McGee Oil & Gas Onshore LP

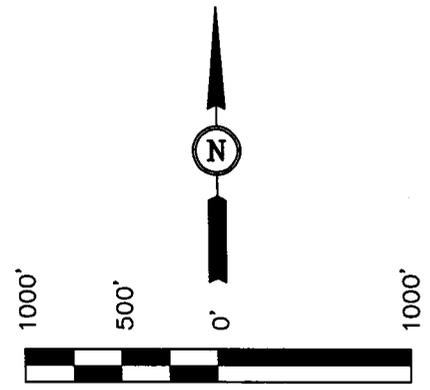
Well location, STATE #921-321, located as shown in the NE 1/4 SE 1/4 of Section 32, T9S, R21E, S.L.B.&M. Uintah County, Utah.

### 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, 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.



SCALE

### 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.

*John H. ...*  
REGISTERED LAND SURVEYOR  
REGISTRATION NO. 161319  
STATE OF UTAH

<b>UINTAH ENGINEERING &amp; LAND SURVEYING</b>		
85 SOUTH 200 EAST - VERNAL, UTAH 84078		
(435) 789-1017		
SCALE 1" = 1000'	DATE SURVEYED: 02-22-06	DATE DRAWN: 03-20-06
PARTY P.J. N.F. S.L.	REFERENCES G.L.O. PLAT	
WEATHER COLD	FILE Kerr McGee Oil & Gas Onshore LP	

**WORKSHEET  
APPLICATION FOR PERMIT TO DRILL**

APD RECEIVED: 05/15/2006

API NO. ASSIGNED: 43-047-38104

WELL NAME: STATE 921-32I  
 OPERATOR: KERR-MCGEE OIL & GAS ( N2995 )  
 CONTACT: SHEILA UPCHEGO

PHONE NUMBER: 435-781-7024

PROPOSED LOCATION:  
 NESE 32 090S 210E  
 SURFACE: 2011 FSL 0766 FEL  
 BOTTOM: 2011 FSL 0766 FEL  
 COUNTY: UINTAH  
 LATITUDE: 39.98995 LONGITUDE: -109.5679  
 UTM SURF EASTINGS: 622267 NORTHINGS: 4427414  
 FIELD NAME: NATURAL BUTTES ( 630 )

INSPECT LOCATN BY: / /		
Tech Review	Initials	Date
Engineering	<i>D KED</i>	6/29/06
Geology		
Surface		

LEASE TYPE: 3 - State  
 LEASE NUMBER: ML-48758  
 SURFACE OWNER: 3 - State

PROPOSED FORMATION: WSMVD  
 COALBED METHANE WELL? NO

RECEIVED AND/OR REVIEWED:

Plat

Bond: Fed[] Ind[] Sta[] Fee[]  
 (No. RLB0005236 )

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 *Non PH*

R649-3-2. General  
 Siting: 460 From Qtr/Qtr & 920' Between Wells

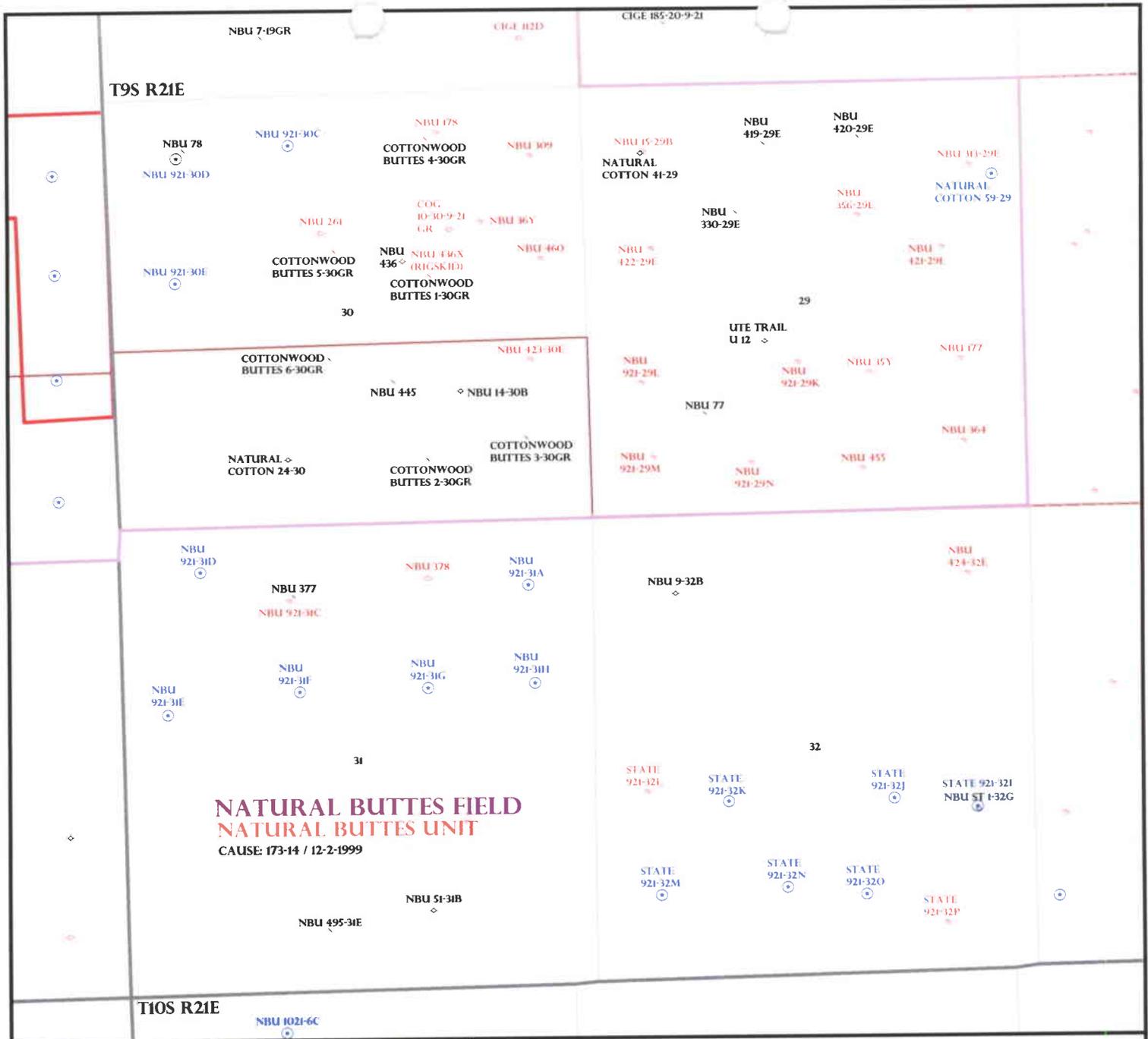
\_\_\_\_ R649-3-3. Exception

\_\_\_\_ Drilling Unit  
 Board Cause No: \_\_\_\_\_  
 Eff Date: \_\_\_\_\_  
 Siting: \_\_\_\_\_

\_\_\_\_ R649-3-11. Directional Drill

COMMENTS: Needs Permit (05-31-06)

STIPULATIONS: 1- Spacing Strip  
2- OIL SHALE  
3- STATEMENT OF BASIS  
4- Surface cty Cont strip



OPERATOR: KERR-MCGEE O&G (N2995)

SEC: 32 T. 9S R. 21E

FIELD: NATURAL BUTTES (630)

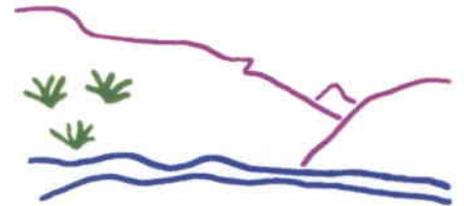
COUNTY: UINTAH

SPACING: R649-3-2 / GENERAL SITING

- 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

- 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



Utah Oil Gas and Mining



PREPARED BY: DIANA WHITNEY  
DATE: 19-MAY-2006

**DIVISION OF OIL, GAS AND MINING  
APPLICATION FOR PERMIT TO DRILL  
STATEMENT OF BASIS**

OPERATOR: \_\_\_\_\_ KERR McGEE OIL & GAS ONSHORE LP  
WELL NAME & NUMBER: \_\_\_\_\_ STATE 921-32I  
API NUMBER: \_\_\_\_\_ 43-047-38104  
LOCATION: 1/4,1/4 NESE Sec: 32 TWP: 9S RNG: 21E 2011' FSL 766' FEL

**Geology/Ground Water:**

Kerr McGee proposes to set 2,230' of surface casing at this location. The depth to the base of the moderately saline water at this location is estimated to be at a depth of 4,000'. A search of Division of Water Rights records shows one water well within a 10,000 foot radius of the center of section 35. The well is approximately .25 miles from the proposed location. It produces from a depth of 200 feet and is listed as being used for oil field drilling water. The surface formation at this site is the Uinta Formation. The Uinta Formation is made up of interbedded shales and sandstones. The sandstones are mostly lenticular and discontinuous and should not be a significant source of useable ground water. The proposed surface casing and cement should adequately protect ground water in this area.

Reviewer: Brad Hill Date: 06/07/06

**Surface:**

The pre-site investigation of the surface was performed on 05/31/2006. This site is on State surface, and appears to be a good site for a well in this drilling window. This proposed well location is also the site of the NBU ST 1-32G (API# 43-047-30315), which is a plugged and abandoned well. The old location has been re-contoured, but is nearly barren of vegetation except for halogeton. Ed Bonner of SITLA was invited to attend this surface inspection but was not present. Ben Williams from DWR stated that this site is classified as critical yearlong pronghorn habitat, but made no requests and had no concerns with drilling on this location.

Reviewer: Richard Powell Date: 05/31/2006

**Conditions of Approval/Application for Permit to Drill:**

1. A synthetic liner with a minimum thickness of 12 mils shall be properly installed and maintained in the reserve pit.

**ON-SITE PREDRILL EVALUATION**  
**Division of Oil, Gas and Mining**

**OPERATOR:** KERR MCGEE OIL & GAS ONSHORE LP  
**WELL NAME & NUMBER:** State 921-32I  
**API NUMBER:** 43-047-38104  
**LEASE:** ML-48758 **FIELD/UNIT:** NATURAL BUTTES  
**LOCATION:** 1/4,1/4 NESE Sec: 32 TWP: 9S RNG: 21E 2011' FSL 766' FEL  
**LEGAL WELL SITING:** 460 F SEC. LINE; 460 F 1/4,1/4 LINE; 920 F ANOTHER WELL.  
**GPS COORD (UTM):** 0622255 4427442 **SURFACE OWNER:** SITLA.

**PARTICIPANTS**

Richard Powell (DOGM), Ben Williams (DWR), Carroll Estes, Clay Einerson and Tony Kazeck (WESTPORT), David Kay (UELS)

**REGIONAL/LOCAL SETTING & TOPOGRAPHY**

This well is staked on the site of a PA'd well location. The Former well is the NBU ST 1-32G (43-047-30315). The old location has been recontoured and slopes gradually to the north. There is a low-lying hill on the south side of the location. There are no drainages to be affected by this location.

**SURFACE USE PLAN**

**CURRENT SURFACE USE:** Livestock and Wildlife Grazing.

**PROPOSED SURFACE DISTURBANCE:** Location as proposed will be 350' by 308'. Proposed new access road approximately 150'.

**LOCATION OF EXISTING WELLS WITHIN A 1-MILE RADIUS:** See attached map from GIS database.

**LOCATION OF PRODUCTION FACILITIES AND PIPELINES:** All production facilities will be on location and added after drilling well. Pipeline will follow access road.

**SOURCE OF CONSTRUCTION MATERIAL:** All construction material will be borrowed from site during construction of location.

**ANCILLARY FACILITIES:** None required.

**WILL DRILLING AT THIS LOCATION GENERATE PUBLIC INTEREST OR CONCERNS? (EXPLAIN):** Unlikely.

**WASTE MANAGEMENT PLAN:**

Drilled cuttings will be settled into reserve pit. Liquids from pit will be allowed to evaporate. Formation water will be confined to storage tanks. Portable toilets, sewage holding tanks, and onsite sewage treatment equipment will be handled by commercial contractors and regulated by the appropriate health authority. Trash will be contained

in trash baskets and disposed of at an approved landfill.

### **ENVIRONMENTAL PARAMETERS**

AFFECTED FLOODPLAINS AND/OR WETLANDS: None.

FLORA/FAUNA: The area surrounding location contains sagebrush, greasewood, sparse grasses, salt brush, halogeton, rabbit brush and prickly pear, but the old location contains mainly halogeton and little if any other vegetation. Wildlife found in this area may include: Rodents, Raptors, Coyote, Pronghorn, Prairie Dogs and Rabbits.

SOIL TYPE AND CHARACTERISTICS: Brown silty clay soil.

EROSION/SEDIMENTATION/STABILITY: It does not appear that construction will affect erosion or the potential of sediment leaving the site.

PALEONTOLOGICAL POTENTIAL: Per Carroll Estes study has been done by IPC Paleontological consultants.

### **RESERVE PIT**

CHARACTERISTICS: 150' by 100' and ten feet deep. Reserve pit to be placed in cut.

LINER REQUIREMENTS (Site Ranking Form attached): A liner will be required for reserve pit. Site ranking score is 25.

### **SURFACE RESTORATION/RECLAMATION PLAN**

As per SITLA

SURFACE AGREEMENT: As per SITLA

CULTURAL RESOURCES/ARCHAEOLOGY: Per Carroll Estes a study has been done by Montgomery Archaeology Consultants.

### **OTHER OBSERVATIONS/COMMENTS**

### **ATTACHMENTS**

PHOTOS OF THIS SITE WERE TAKEN AND PLACED ON FILE.

RICHARD POWELL  
DOGM REPRESENTATIVE

05/31/2006 1:00 PM  
DATE/TIME

**Evaluation Ranking Criteria and Ranking  
For Reserve and Onsite Pit Liner Requirements**

<u>Site-Specific Factors</u>	<u>Ranking</u>	<u>Site Ranking</u>
Distance to Groundwater (feet)		
>200	0	
100 to 200	5	
75 to 100	10	
25 to 75	15	
<25 or recharge area	20	<u>0</u>
Distance to Surf. Water (feet)		
>1000	0	
300 to 1000	2	
200 to 300	10	
100 to 200	15	
< 100	20	<u>0</u>
Distance to Nearest Municipal Well (feet)		
>5280	0	
1320 to 5280	5	
500 to 1320	10	
<500	20	<u>0</u>
Distance to Other Wells (feet)		
>1320	0	
300 to 1320	10	
<300	20	<u>0</u>
Native Soil Type		
Low permeability	0	
Mod. permeability	10	
High permeability	20	<u>20</u>
Fluid Type		
Air/mist	0	
Fresh Water	5	
TDS >5000 and <10000	10	
TDS >10000 or Oil Base Mud Fluid	15	
containing significant levels of hazardous constituents	20	<u>5</u>
Drill Cuttings		
Normal Rock	0	
Salt or detrimental	10	<u>0</u>
Annual Precipitation (inches)		
<10	0	
10 to 20	5	
>20	10	<u>0</u>
Affected Populations		
<10	0	
10 to 30	6	
30 to 50	8	
>50	10	<u>0</u>
Presence of Nearby Utility		
Conduits		
Not Present	0	
Unknown	10	
Present	15	<u>0</u>

**Final Score**            25            (Level I Sensitivity)

Sensitivity Level I = 20 or more; total containment is required.

Sensitivity Level II = 15-19; lining is discretionary.

Sensitivity Level III = below 15; no specific lining is required.

# 06-06 Kerr McGee State 9 1/2 -32I

## Casing Schematic

Uinta

Surface

9-5/8"  
MW 8.4  
Frac 19.3

TOC @ 0.  
TOC @ 0.

1481 Green River

1792  
TOC Tail

Surface  
2230. MD

✓ w/ 10% Washout  
# surface stop

BHP

$$(0.052)(12.2)(9830) = 6236$$

Anticipate 6095

Gas

$$(6.12)(9830) = 1174$$

MASP = 4916

BOPE = 5,000 ✓

Seal csg = 2270

10% = 1589

Max pressure to Seal csg shoe = 4564

Test to 1589# (1500#) ✓

✓ Adequate 6/29/06

4003 Bmsw

4162  
TOC Tail

✓ w/ 18% Washout

4745 Washout

7710 Mesaverde

4-1/2"  
MW 12.2

Production  
9830. MD

Well name:	<b>06-06 Keer McGee State 921-32I</b>	
Operator:	<b>Kerr McGee Oil &amp; Gas</b>	Project ID:
String type:	Surface	43-047-38104
Location:	Uintah County	

**Design parameters:**

**Collapse**

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

**Minimum design factors:**

**Collapse:**

Design factor 1.125

**Burst:**

Design factor 1.00

**Environment:**

H2S considered? No  
 Surface temperature: 65 °F  
 Bottom hole temperature: 96 °F  
 Temperature gradient: 1.40 °F/100ft  
 Minimum section length: 185 ft

Cement top: Surface

**Burst**

Max anticipated surface pressure: 1,234 psi  
 Internal gradient: 0.447 psi/ft  
 Calculated BHP 2,230 psi

No backup mud specified.

**Tension:**

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

Tension is based on air weight.  
 Neutral point: 1,977 ft

Non-directional string.

**Re subsequent strings:**

Next setting depth: 9,830 ft  
 Next mud weight: 12.200 ppg  
 Next setting BHP: 6,230 psi  
 Fracture mud wt: 19.250 ppg  
 Fracture depth: 2,230 ft  
 Injection pressure 2,230 psi

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Internal Capacity (ft³)
2	1800	9.625	32.30	H-40	ST&C	1800	1800	8.876	114.1
1	430	9.625	36.00	J-55	LT&C	2230	2230	8.796	30.6

Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (Kips)	Tension Strength (Kips)	Tension Design Factor
2	785	1354	1.724	2038	2270	1.11	74	254	3.45 J
1	973	2020	2.076	2230	3520	1.58	15	453	29.26 J

Prepared by: Clinton Dworshak  
 Utah Div. of Oil & Mining

Phone: 801-538-5280

Date: June 13,2006  
 Salt Lake City, Utah

**ENGINEERING STIPULATIONS: NONE**

Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.  
 Collapse is based on a vertical depth of 2230 ft, a mud weight of 8.4 ppg The casing is considered to be evacuated for collapse purposes.  
 Burst strength is not adjusted for tension.

*Engineering responsibility for use of this design will be that of the purchaser.*

Well name:	<b>06-06 Keer McGee State 921-321</b>		
Operator:	<b>Kerr McGee Oil &amp; Gas</b>	Project ID:	43-047-38104
String type:	Production		
Location:	Uintah County		

**Design parameters:**

**Collapse**

Mud weight: 12.200 ppg  
 Design is based on evacuated pipe.

**Minimum design factors:**

**Collapse:**

Design factor 1.125

**Burst:**

Design factor 1.00

**Environment:**

H2S considered? No  
 Surface temperature: 65 °F  
 Bottom hole temperature: 203 °F  
 Temperature gradient: 1.40 °F/100ft  
 Minimum section length: 368 ft

Cement top: Surface

**Burst**

Max anticipated surface pressure: 1,838 psi  
 Internal gradient: 0.447 psi/ft  
 Calculated BHP 6,230 psi

No backup mud specified.

**Tension:**

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

Non-directional string.

Tension is based on air weight.  
 Neutral point: 8,037 ft

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Internal Capacity (ft <sup>3</sup> )
1	9830	4.5	11.60	N-80	LT&C	9830	9830	3.875	227.9
Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (Kips)	Tension Strength (Kips)	Tension Design Factor
1	6230	6350	1.019	6230	7780	1.25	114	223	1.96 J

Prepared by: Clinton Dworshak  
 Utah Div. of Oil & Mining

Phone: 801-538-5280

Date: June 13,2006  
 Salt Lake City, Utah

**ENGINEERING STIPULATIONS: NONE**

Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.  
 Collapse is based on a vertical depth of 9830 ft, a mud weight of 12.2 ppg. The casing is considered to be evacuated for collapse purposes.  
 Burst strength is not adjusted for tension.

*Engineering responsibility for use of this design will be that of the purchaser.*

**From:** Ed Bonner  
**To:** Whitney, Diana  
**Date:** 5/24/2006 9:24:01 AM  
**Subject:** Well Clearance

The following wells have been given cultural resource clearance by the Trust Lands Cultural Resources Group:

Enduring Resources, LLC  
Buck Camp 12-22-33-2  
Rock House 11-23-24-2  
Rock House 11-23-33-2  
Rock House 11-23-34-2  
Rock House 11-23-41-2  
Rock House 11-23-31-2  
Rock House 11-23-43-2  
Rock House 11-23-21-2  
Rock House 11-23-44-2

EOG Resources, Inc  
Petes Wash 10-36

Gasco Production Company  
Uteland State 34-2-10-18  
Uteland State 14-2-10-18

Kerr McGee Oil & Gas Onshore LP  
NBU 921-32I  
NBU 921-32J  
NBU 921-32K (1 significant site which must be avoided,  
operator must follow recommendation of arch consultant)

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

**CC:** Davis, Jim; Garrison, LaVonne; Hill, Brad; Hunt, Gil



**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 29, 2006

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

Re: State 921-32I Well, 2011' FSL, 766' FEL, NE SE, Sec. 32, T. 9 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 43-047-38104.

Sincerely,

*For*

Gil Hunt  
Associate Director

pab  
Enclosures

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

Operator: Kerr-McGee Oil & Gas Onshore LP  
Well Name & Number State 921-32I  
API Number: 43-047-38104  
Lease: ML-48758

Location: NE SE                      Sec. 32                      T. 9 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**

The operator is required to notify the Division of Oil, Gas and Mining of the following actions during drilling of this well:

- 24 hours prior to cementing or testing casing
- 24 hours prior to testing blowout prevention equipment
- 24 hours prior to spudding the well
- within 24 hours of any emergency changes made to the approved drilling program
- prior to commencing operations to plug and abandon the well

The following are Division of Oil, Gas and Mining contacts and their work telephone numbers (please leave a voice mail message if the person is not available to take the call):

- Dan Jarvis at (801) 538-5338
- Carol Daniels at (801) 538-5284 (spud)

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. Compliance with the State of Utah Antiquities Act forbids disturbance of archeological, historical, or paleontological remains. Should archeological, historical or paleontological remains be encountered during your operations, you are required to immediately suspend all operations and immediately inform the Trust Lands Administration and the Division of State History of the discovery of such remains.

5. This proposed well is located in an area for which drilling units (well spacing patterns) have not been established through an order of the Board of Oil, Gas and Mining (the "Board"). In order to avoid the possibility of waste or injury to correlative rights, the operator is requested, once the well has been drilled, completed, and has produced, to analyze geological and engineering data generated therefrom, as well as any similar data from surrounding areas if available. As soon as is practicable after completion of its analysis, and if the analysis suggests an area larger than the quarter-quarter section upon which the well is located is being drained, the operator is requested to seek an appropriate order from the Board establishing drilling and spacing units in conformance with such analysis by filing a Request for Agency Action with the Board.
6. Compliance with the Conditions of Approval/Application for Permit to Drill outlined in the Statement of Basis. (Copy Attached)
7. Surface casing shall be cemented to the surface.
8. 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.

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

FORM 9

<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>		5. LEASE DESIGNATION AND SERIAL NUMBER: <b>ML-48758</b>
Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
		7. UNIT or CA AGREEMENT NAME:
1. TYPE OF WELL OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER _____	8. WELL NAME and NUMBER: <b>STATE 921-321</b>	
2. NAME OF OPERATOR: <b>KERR MCGEE OIL AND GAS ONSHORE LP</b>		9. API NUMBER: <b>4304738104</b>
3. ADDRESS OF OPERATOR: <b>1368 S. 1200 E.</b> CITY <b>VERNAL</b> STATE <b>UT</b> ZIP <b>84078</b>	PHONE NUMBER: <b>(435) 781-7003</b>	10. FIELD AND POOL, OR WILDCAT: <b>NATURAL BUTTES</b>
4. LOCATION OF WELL FOOTAGES AT SURFACE: <b>2011' FSL, 766' FEL</b>		COUNTY: <b>UINTAH</b>
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: <b>NESE 32 9S 21E</b>		STATE: <b>UTAH</b>

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

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

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

THE OPERATOR REQUESTS AUTHORIZATION FOR A ONE YEAR EXTENSION FOR THE SUBJECT WELL LOCATION SO THAT THE DRILLING OPERATIONS MAY BE COMPLETED. THE ORIGINAL APD WAS APPROVED BY THE DIVISION OF OIL, GAS AND MINING ON JUNE 29, 2006.

Approved by the  
Utah Division of  
Oil, Gas and Mining

Date: 05-30-07  
By: [Signature]

3-31-07  
RM

NAME (PLEASE PRINT) <b>RAMEY HOOPES</b>	TITLE <b>REGULATORY CLERK</b>
SIGNATURE <u>Ramey Hoopes</u>	DATE <b>5/22/2007</b>

(This space for State use only)

**RECEIVED**  
**MAY 29 2007**  
DIV. OF OIL, GAS & MINING

**Application for Permit to Drill  
Request for Permit Extension  
Validation**

(this form should accompany the Sundry Notice requesting permit extension)

**API:** 4304738104  
**Well Name:** STATE 921-32I  
**Location:** NESE, SEC 32-T9S-R21E  
**Company Permit Issued to:** KERR MCGEE OIL AND GAS ONSHORE LP  
**Date Original Permit Issued:** 6/29/2006

The undersigned as owner with legal rights to drill on the property as permitted above, hereby verifies that the information as submitted in the previously approved application to drill, remains valid and does not require revision.

Following is a checklist of some items related to the application, which should be verified.

If located on private land, has the ownership changed, if so, has the surface agreement been updated? Yes  No

Have any wells been drilled in the vicinity of the proposed well which would affect the spacing or siting requirements for this location? Yes  No

Has there been any unit or other agreements put in place that could affect the permitting or operation of this proposed well? Yes  No

Have there been any changes to the access route including ownership, or right-of-way, which could affect the proposed location? Yes  No

Has the approved source of water for drilling changed? Yes  No

Have there been any physical changes to the surface location or access route which will require a change in plans from what was discussed at the onsite evaluation? Yes  No

Is bonding still in place, which covers this proposed well? Yes  No

Ramey Hoopes  
Signature

5/22/2007  
Date

**Title:** REGULATORY CLERK

**Representing:** Kerr McGee Oil and Gas Onshore LP

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

FORM 9

<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>		5. LEASE DESIGNATION AND SERIAL NUMBER: <b>ML-48758</b>
Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		6. IF INDIAN, ALLOTTEE OR TRIBE NAME: <b>NA</b>
		7. UNIT or CA AGREEMENT NAME:
1. TYPE OF WELL OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER _____	8. WELL NAME and NUMBER: <b>State 921-32I</b>	
2. NAME OF OPERATOR: <b>Kerr-McGee Oil &amp; Gas Onshore, LP</b>		9. API NUMBER: <b>4304738104</b>
3. ADDRESS OF OPERATOR: <b>PO Box 173779</b> CITY <b>Denver</b> STATE <b>CO</b> ZIP <b>80217-3779</b>	PHONE NUMBER: <b>(720) 929-6171</b>	10. FIELD AND POOL, OR WILDCAT: <b>Natural Buttes Field</b>
4. LOCATION OF WELL FOOTAGES AT SURFACE: <b>2011 FSL &amp; 766 FEL</b>		COUNTY: <b>Uintah</b>
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: <b>NESE 32 9S 21E</b>		STATE: <b>UTAH</b>

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

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

Kerr-McGee Oil and Gas Onshore, LP, respectfully requests a one year extension for State 921-32I, in order to complete drilling operations. The Utah Division of Oil, Gas, and Mining initially approved this APD on 06/29/2006.

Approved by the  
Utah Division of  
Oil, Gas and Mining

Date: 05-27-08  
By: [Signature]

**COPY SENT TO OPERATOR**

Date: 5.28.2008  
Initials: KS

NAME (PLEASE PRINT) <u>Victoria Marques</u>	TITLE <u>Regulatory Intern</u>
SIGNATURE <u>[Signature]</u>	DATE <u>5/15/2008</u>

(This space for State use only)

**RECEIVED RECEIVED**

**MAY 23 2008    MAY 19 2008**

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

**Application for Permit to Drill  
Request for Permit Extension  
Validation**

(this form should accompany the Sundry Notice requesting permit extension)

**API:** 4304738104  
**Well Name:** State 921-32I  
**Location:** NESE 2011' FSL 766' FEL Sec. 32 T 9S R 21E  
**Company Permit Issued to:** Kerr-McGee Oil & Gas Onshore, LP  
**Date Original Permit Issued:** 6/29/2006

The undersigned as owner with legal rights to drill on the property as permitted above, hereby verifies that the information as submitted in the previously approved application to drill, remains valid and does not require revision.

Following is a checklist of some items related to the application, which should be verified.

If located on private land, has the ownership changed, if so, has the surface agreement been updated? Yes  No

Have any wells been drilled in the vicinity of the proposed well which would affect the spacing or siting requirements for this location? Yes  No

Has there been any unit or other agreements put in place that could affect the permitting or operation of this proposed well? Yes  No

Have there been any changes to the access route including ownership, or right-of-way, which could affect the proposed location? Yes  No

Has the approved source of water for drilling changed? Yes  No

Have there been any physical changes to the surface location or access route which will require a change in plans from what was discussed at the onsite evaluation? Yes  No

Is bonding still in place, which covers this proposed well? Yes  No

Victoria Mungall  
Signature

5/22/2008  
Date

**Title:** Regulatory Intern

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

RECEIVED  
MAY 23 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

June 2, 2009

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

Re: APD Rescinded – State 921-32I, Sec. 32, T. 9S, R. 21E  
Uintah County, Utah API No. 43-047-38104

Ladies and Gentlemen:

The Application for Permit to Drill (APD) for the subject well was approved by the Division of Oil, Gas and Mining (Division) on June 29, 2006. On May 30, 2007 and on May 27, 2008, the Division granted a one-year APD extension. No drilling activity at this location has been reported to the division. Therefore, approval to drill the well is hereby rescinded, effective June 2, 2009.

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

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  
Ed Bonner, SITLA