



Kerr-McGee Oil & Gas Onshore LP  
1999 Broadway, Suite 3700  
Denver, CO 80205

September 19, 2007

Mrs. Diana Mason  
Division of Oil, Gas and Mining  
P.O. Box 145801  
Salt Lake City, UT 84114-6100

Re: Directional Drilling R649-3-11  
NBU 922-18L2BS  
T9S R22E  
Section 18: NWSW  
NESW, 2513' FSL, 1273' FWL (surface)  
NWSW, Lot 3, 2344' FSL, 223' FWL (bottom hole)  
Uintah County, Utah

Dear Mrs. Mason:

Pursuant to the filing of Kerr-McGee Oil & Gas Onshore LP's (Kerr-McGee) Application for Permit to Drill regarding the above referenced well, we are hereby submitting this letter in accordance with Oil & Gas Conservation Rule R649-3-11 pertaining to the Exception to Location and Siting of Wells.

- Kerr-McGee's NBU 922-18L2BS is located within the Natural Buttes Unit area.
- Kerr-McGee is permitting this well as a directional well in order to minimize surface disturbance. Locating the well at the surface location and directionally drilling from this location, Kerr-McGee will be able to utilize the existing road and pipelines in the area.
- Furthermore, Kerr-McGee certifies that it is the sole working interest owner within 460 feet of the entire directional well bore and the W/2, W/2NE/4 and SE/4 of Section 18 (federal leases USA UTU-0359, USA-UTU 0359-A and USA-UTU 0461).

Therefore, based on the above stated information Kerr-McGee Oil & Gas Onshore LP requests the permit be granted pursuant to R649-3-11.

Sincerely,

KERR-MCGEE OIL & GAS ONSHORE LP

James C. Colligan III  
Landman

RECEIVED  
NOV 20 2007  
DIV. OF OIL, GAS & MINING

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

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

1a. Type of Work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. <b>UTU-0359</b>
b. Type of Well: <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input type="checkbox"/> Single Zone <input checked="" type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name <b>TRIBAL SURFACE</b>
2. Name of Operator <b>KERR MCGEE OIL AND GAS ONSHORE LP</b>		7. If Unit or CA Agreement, Name and No. <b>UNIT #891008900A</b>
3A. Address <b>1368 SOUTH 1200 EAST VERNAL, UT 84078</b>		8. Lease Name and Well No. <b>NBU 922-18L2BS</b>
3b. Phone No. (include area code) <b>(435) 781-7024</b>		9. API Well No. <b>4304239840</b>
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface <b>NE/SW 2513'FSL, 1273'FWL</b> At proposed prod. Zone <b>NW/SW 2344'FSL, 223'FWL (LOT 3)</b>		10. Field and Pool, or Exploratory <b>NATURAL BUTTES</b>
14. Distance in miles and direction from nearest town or post office* <b>27.95 +/- MILES FROM OURAY, UTAH</b>		11. Sec., T., R., M., or Blk, and Survey or Area <b>SEC. 18, T9S, R22E</b>
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) <b>1273'</b>	16. No. of Acres in lease <b>162.39</b>	17. Spacing Unit dedicated to this well <b>40.00</b>
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. <b>REFER TO TOPO C</b>	19. Proposed Depth <b>10,042'</b>	20. BLM/BIA Bond No. on file <b>RLB0005239</b>
21. Elevations (Show whether DF, KDB, RT, GL, etc.) <b>4899'GL</b>	22. Approximate date work will start* <b>UPON APPROVAL</b>	23. Estimated duration <b>TO BE DETERMINED</b>

24. Attachments

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

- |   |  |
|---|--|
| <ul style="list-style-type: none"> <li>1. Well plat certified by a registered surveyor.</li> <li>2. A Drilling Plan.</li> <li>3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office.</li> </ul> | <ul style="list-style-type: none"> <li>4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).</li> <li>5. Operator certification.</li> <li>6. Such other site specific information and/or plans as may be required by the authorized office.</li> </ul> |
|---|--|

25. Signature 	Name (Printed/Typed) <b>SHEILA UPCHEGO</b>	Date <b>11/16/2007</b>
Title <b>SENIOR LAND ADMIN SPECIALIST</b>		
Approved by (Signature) 	Name (Printed/Typed) <b>BRADLEY G. HILL</b>	Date <b>11-20-07</b>
Title <b>ENVIRONMENTAL MANAGER</b>		

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

Conditions of approval, if any, are attached.

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

\*(Instructions on reverse)

**RECEIVED**

**NOV 20 2007**

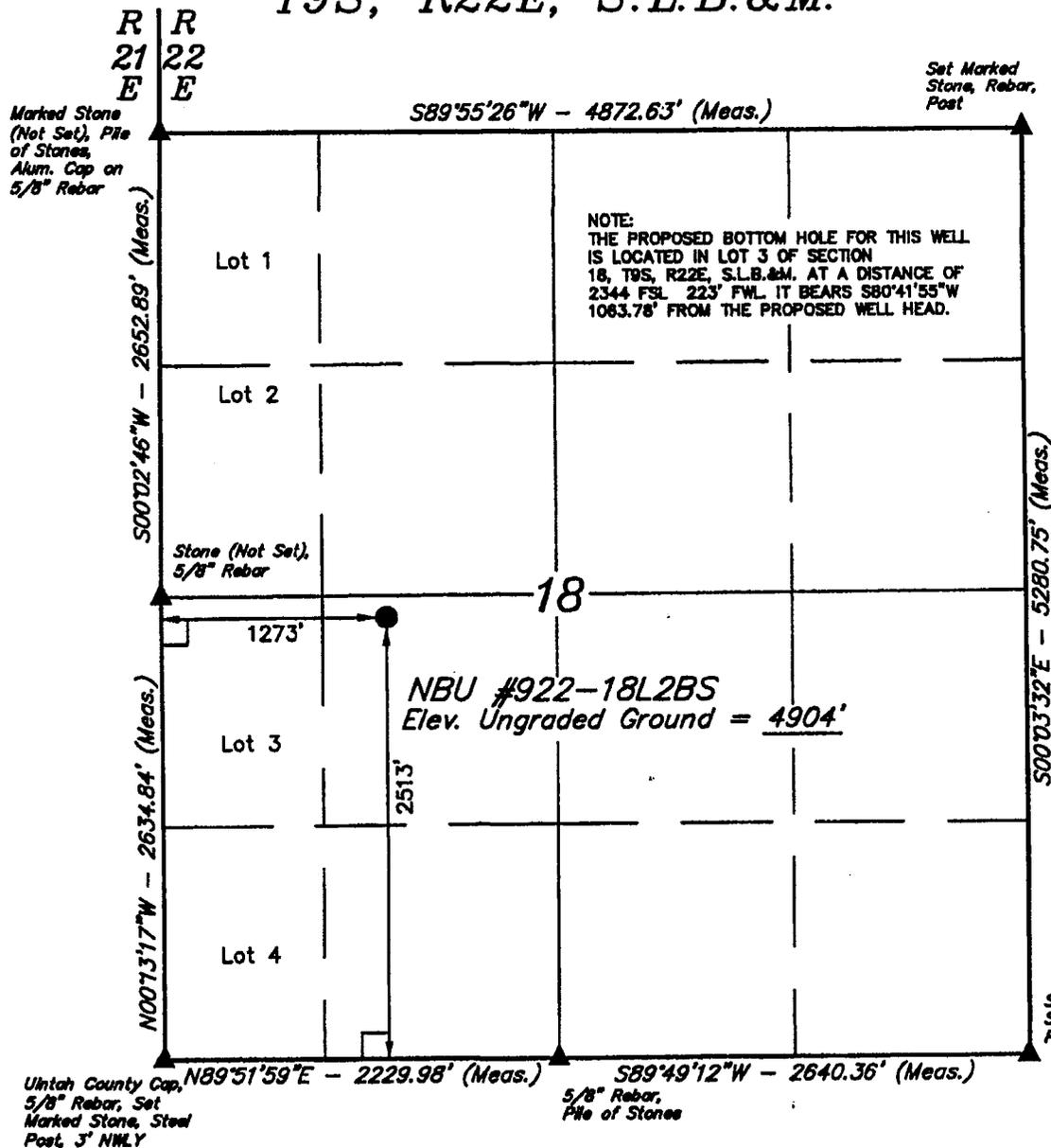
**DIV. OF OIL, GAS & MINING**

**Federal Approval of this Action is Necessary**

Surf  
629 229X  
443 26024  
40.035642  
-109.485346

Bill  
628910X  
44325444  
40.035167  
-109.489092

T9S, R22E, S.L.B.&M.



NOTE:  
THE PROPOSED BOTTOM HOLE FOR THIS WELL IS LOCATED IN LOT 3 OF SECTION 18, T9S, R22E, S.L.B.&M. AT A DISTANCE OF 2344 FSL 223' FWL. IT BEARS S80°41'55\"/>

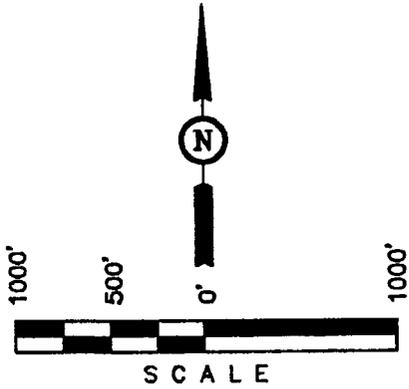
**Kerr-McGee Oil & Gas Onshore LP**  
Well location, NBU #922-18L2BS, located as shown in the NE 1/4 SW 1/4 of Section 18, T9S, R22E, S.L.B.&M., Uintah County, Utah.

**BASIS OF ELEVATION**

BENCH MARK (20EAM) LOCATED IN THE SE 1/4 OF SECTION 35, T8S, R21E, S.L.B.&M. TAKEN FROM THE OURAY SE 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 4697 FEET.

**BASIS OF BEARINGS**

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



**CERTIFICATE**  
THIS IS TO CERTIFY THAT THE ABOVE WAS PREPARED 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.  
*ROBERT E. RAY*  
REGISTERED LAND SURVEYOR  
REGISTRATION NO. 181519  
STATE OF UTAH

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

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

(NAD 83)  
LATITUDE = 40°02'08.30" (40.035639)  
LONGITUDE = 109°29'10.26" (109.486183)  
(NAD 27)  
LATITUDE = 40°02'08.43" (40.035675)  
LONGITUDE = 109°29'07.79" (109.485497)

SCALE 1" = 1000'	DATE SURVEYED: 05-07-07	DATE DRAWN: 05-21-07
PARTY D.K. L.K. C.H.	REFERENCES G.L.O. PLAT	
WEATHER WARM	FILE Kerr-McGee Oil & Gas Onshore LP	

NBU 922-18L2BS  
NE/SW SEC. 18, T9S, R22E  
UINTAH COUNTY, UTAH  
UTU-0359

ONSHORE ORDER NO. 1

***DRILLING PROGRAM***

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

<u>Formation</u>	<u>Depth</u>
Uinta	0- Surface
Green River	1695'
Top of Birds Nest Water	1997'
Mahogany	2365'
Wasatch	4973'
Mesaverde	7723'
MVU2	8639'
MVL1	9165'
TVD	9850'
TD (MD)	10,042'

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

<u>Substance</u>	<u>Formation</u>	<u>Depth</u>
	Green River	1695'
	Top of Birds Nest Water	1997'
	Mahogany	2365'
Gas	Wasatch	4973'
Gas	Mesaverde	7723'
Gas	MVU2	8639'
Gas	MVL1	9165'
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 10,042' TD, approximately equals 6226 psi (calculated at 0.62 psi/foot).

Maximum anticipated surface pressure equals approximately 4017 psi (bottomhole pressure minus the pressure of a partially evacuated hole calculated at 0.22 psi/foot).

8. **Anticipated Starting Dates:**

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

9. **Variances:**

*Please see Natural Buttes Unit SOP.*

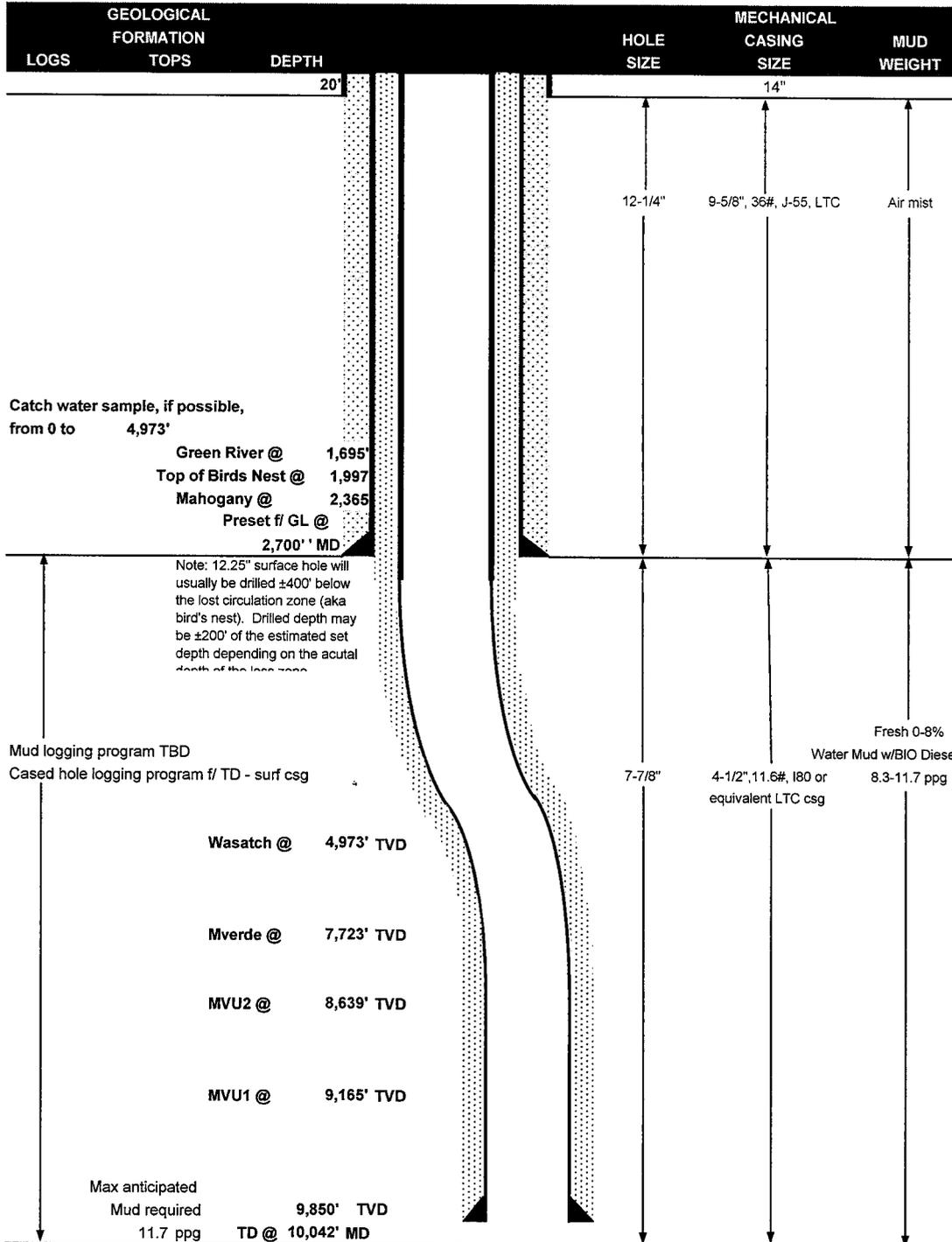
10. **Other Information:**

*Please see Natural Buttes Unit SOP.*



# KERR-McGEE OIL & GAS ONSHORE LP DRILLING PROGRAM

COMPANY NAME KERR-McGEE OIL & GAS ONSHORE LP DATE November 16, 2007  
 WELL NAME NBU 922-18L2BS TD 10,042' MD 9,850' TVD  
 FIELD Natural Buttes COUNTY Uintah STATE Utah ELEVATION 4,899' GL KB 4,914'  
 SURFACE LOCATION NE/SW SEC. 18, T9S, R22E 2513'FSL, 1273'FWL  
 Latitude: 40.35639 Longitude: 109.486183  
 BTM HOLE LOCATION NW/SW LOT 3, SEC. 18, T9S, R22E 2344'FSL, 223'FWL  
 OBJECTIVE ZONE(S) Wasatch/Mesaverde  
 ADDITIONAL INFO Regulatory Agencies: TRIBAL SURFACE, BLM MINERALS, UDOGM, Tri-County Health Dept.





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

**CASING PROGRAM**

	SIZE	INTERVAL	WT.	GR.	CPLG.	DESIGN FACTORS		
						BURST	COLLAPSE	TENSION
CONDUCTOR	14"	0-40'				3520	2020	453000
SURFACE	9-5/8"	0 to 2700	36.00	J-55	LTC	0.90	1.60	5.93
						7780	6350	201000
PRODUCTION	4-1/2"	0 to 10042	11.60	I-80	LTC	1.99	1.04	1.98

- 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 = 0.0 ppg) .22 psi/ft = gradient for partially evac wellbore  
 (Collapse Assumption: Fully Evacuated Casing, Max MW) (Tension Assumptions: Air Weight of Casing\*Buoy.Fact. of water)  
 MASP 3900 psi

**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 65/35 Poz + 6% Gel + 10 pps gilsonite + .25 pps Flocele + 3% salt BWCW	360	35%	12.60	1.81
	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	7,222'	Premium Lite II + 3% KCl + 0.25 pps celloflake + 5 pps gilsonite + 10% gel + 0.5% extender	790	60%	11.00	3.38
	TAIL	2,820'	50/50 Poz/G + 10% salt + 2% gel +.1% R-3	790	60%	14.30	1.31

\*Substitute caliper hole volume plus 15% excess if accurate caliper is obtained

**FLOAT EQUIPMENT & CENTRALIZERS**

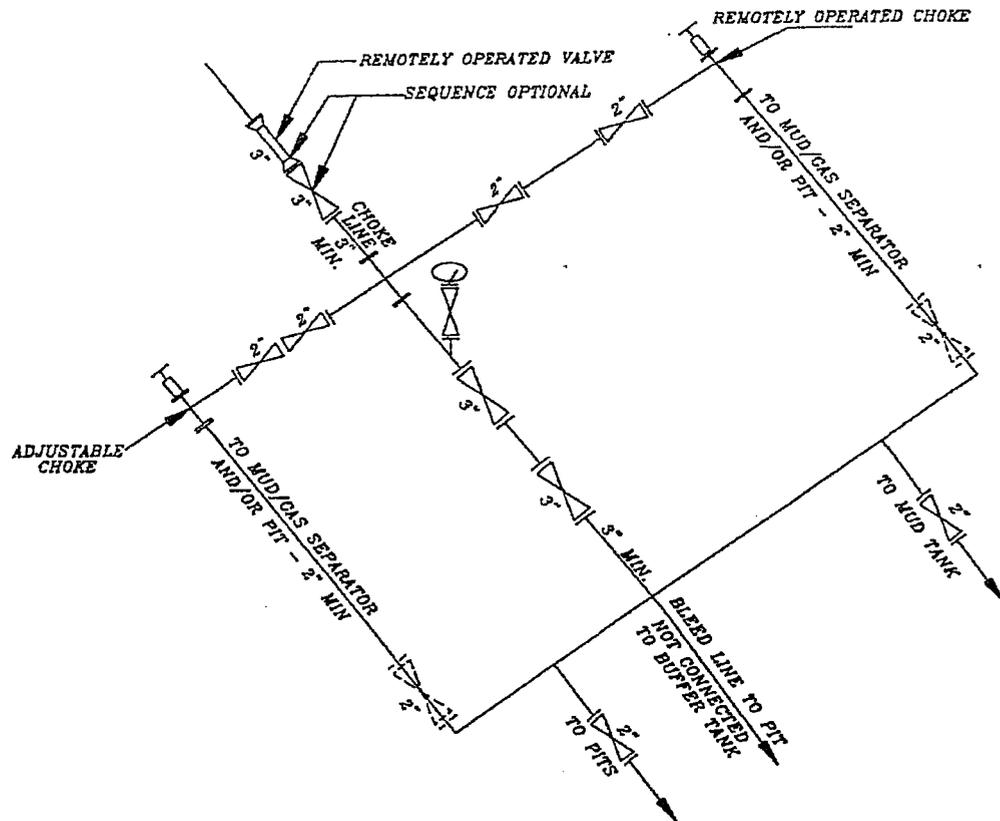
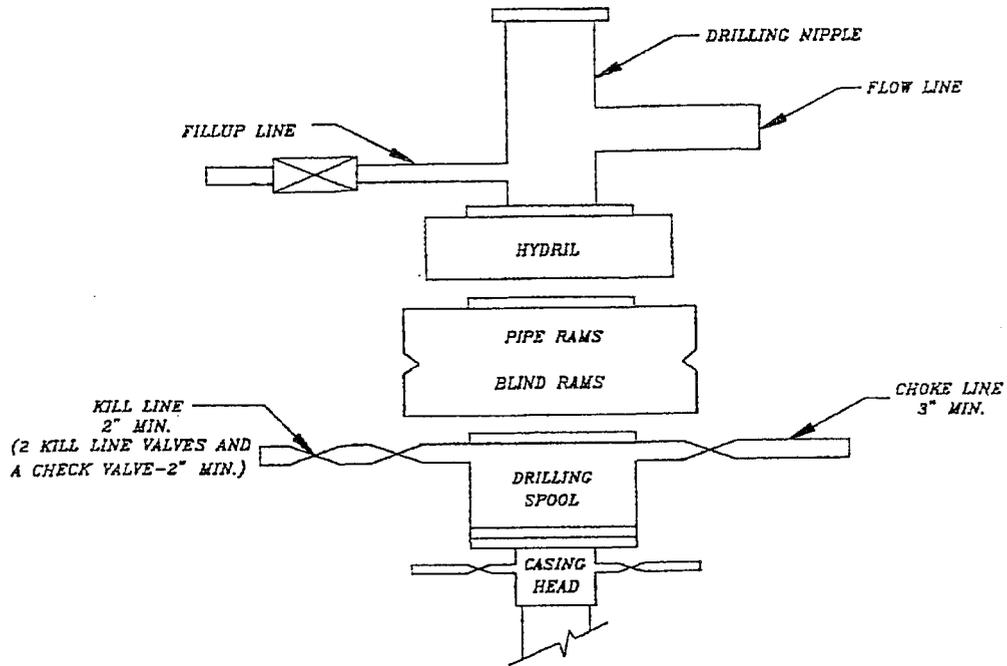
SURFACE	Guide shoe, 1 jt, insert float. Centralize first 3 joints with bow spring centralizers. Thread lock guide shoe.
PRODUCTION	Float shoe, 1 jt, float collar. Centralize first 3 joints & every third joint to top of tail cement with bow spring centralizers.

**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 System for mud monitoring. If no PVT is available, visual monitoring will be utilized.

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

# 5M BOP STACK and CHOKE MANIFOLD SYSTEM





**Weatherford™**

**Drilling Services**

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**Proposal**

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**ANADARKO - KERR MCGEE**

NBU 922-18F4CS

UINTAH COUNTY, UTAH

WELL FILE: PLAN 1

DATE: SEPTEMBER 26, 2007

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**Weatherford International, Ltd.**

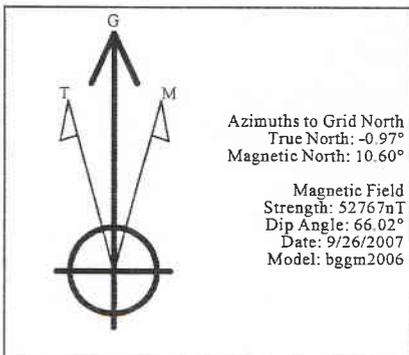
15710 John F. Kennedy Blvd

Houston, Texas 77032 USA

+1.281.260.1300 Main

+1.281.260.4730 Fax

[www.weatherford.com](http://www.weatherford.com)



SECTION DETAILS										
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.00	0.00	60.48	0.00	0.00	0.00	0.00	0.00	0.00	
2	2800.00	0.00	60.48	2800.00	0.00	0.00	0.00	0.00	0.00	
3	3665.81	22.17	60.48	3664.85	83.48	147.45	2.50	60.48	169.44	
4	4435.94	22.17	60.48	4358.59	222.76	393.45	0.00	0.00	452.14	
5	5913.96	0.00	60.48	5800.00	361.90	639.20	1.50	180.00	734.54	
6	9943.96	0.00	60.48	9830.00	361.90	639.20	0.00	60.48	734.54	PBHL

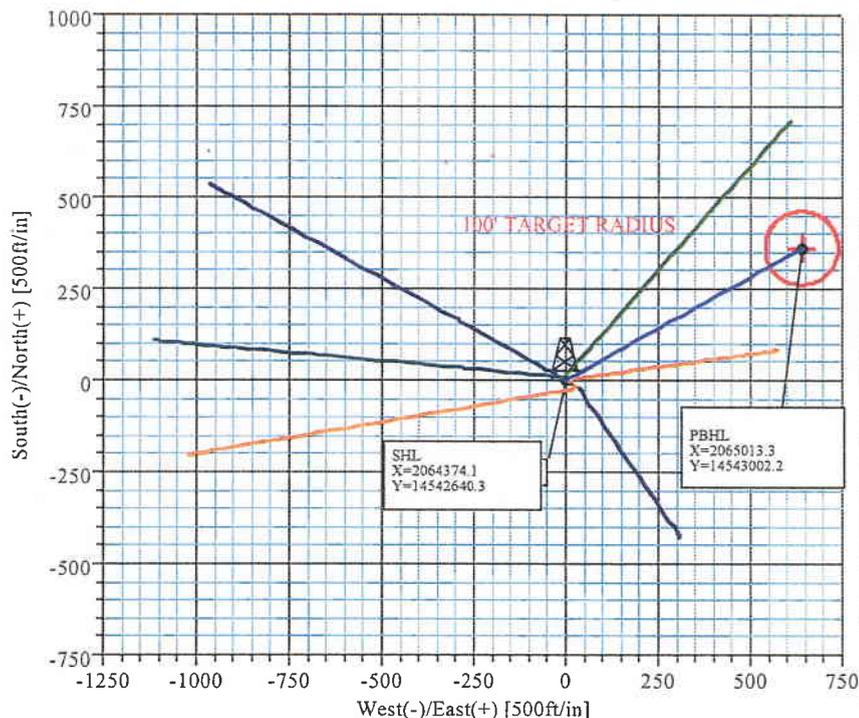
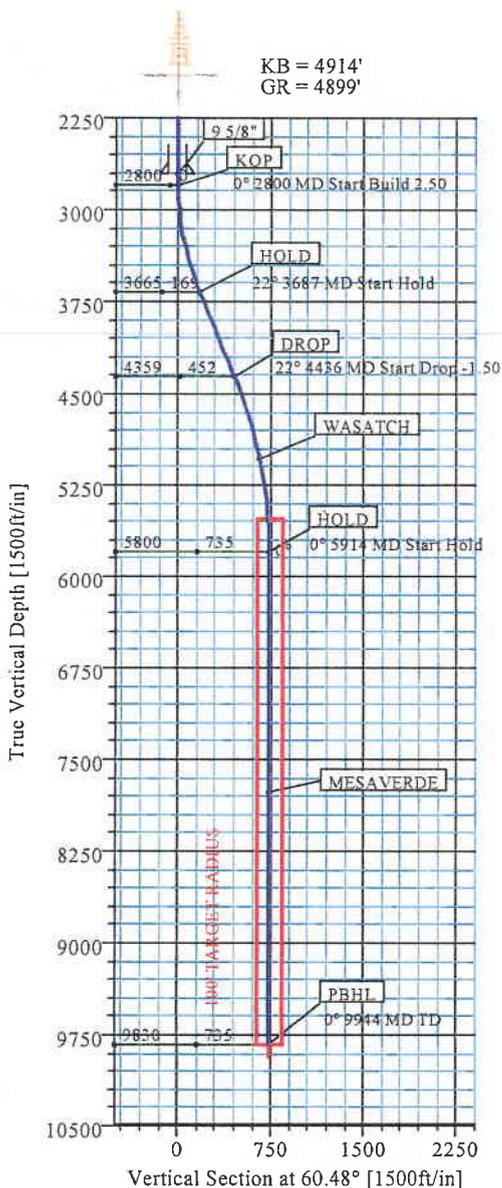
WELL DETAILS							
Name	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
18F4CS	0.00	0.00	14542640.30	2064374.10	40°02'08.434N	109°29'07.526W	N/A

CASING DETAILS				
No.	TVD	MD	Name	Size
1	2700.00	2700.00	9 5/8"	9.62

FORMATION TOP DETAILS			
No.	TVDPath	MDPath	Formation
1	5033.00	5141.71	WASATCH
2	7766.00	7879.96	MESAVERDE

**FIELD DETAILS**  
 UTAH COUNTY, UTAH (UTM Zone 12N-NAD 27)  
 Geodetic System: Universal Transverse Mercator (USfeet)  
 Ellipsoid: NAD27 (Clarke 1866)  
 Zone: UTM Zone 12, North 114W to 108W  
 Magnetic Model: bggm2006  
 System Datum: Mean Sea Level  
 Local North: Grid North

LEGEND	
	18E3BS (1)
	18E3CS (1)
	18F4BS (1)
	18K1BS (1)
	18K2 (1)
	18K2DS (1)
	18L2BS (1)
	Plan #1 18F4CS



# Weatherford Drilling Services

## DIRECTIONAL PLAN REPORT



<b>Company:</b> Anadarko-Kerr-McGee	<b>Date:</b> 9/28/2007	<b>Time:</b> 09:21:40	<b>Page:</b> 1
<b>Field:</b> UINTAH COUNTY, UTAH (UTM Zone 12N-NAD 27)	<b>Co-ordinate(NE) Reference:</b> Site: NBU 922-18F4CS PAD EFKL, Grid Nort		
<b>Site:</b> NBU 922-18F4CS PAD EFKL	<b>Vertical (TVD) Reference:</b> SITE 4914.0		
<b>Well:</b> 18F4CS	<b>Section (VS) Reference:</b> Well (0.00N,0.00E,60.48Azi)		
<b>Wellpath:</b> 1	<b>Survey Calculation Method:</b> Minimum Curvature	<b>Db:</b> Sybase	

<b>Plan:</b> Plan #1 18F4CS	<b>Date Composed:</b> 9/26/2007	
<b>Principal:</b> Yes	<b>Version:</b> 1	<b>Tied-to:</b> From Surface

**Field:** UINTAH COUNTY, UTAH (UTM Zone 12N-NAD 27)

<b>Map System:</b> Universal Transverse Mercator (USfeet)	<b>Map Zone:</b> UTM Zone 12, North 114W to 108W
<b>Geo Datum:</b> NAD27 (Clarke 1866)	<b>Coordinate System:</b> Site Centre
<b>Sys Datum:</b> Mean Sea Level	<b>Geomagnetic Model:</b> bggm2006

**Site:** NBU 922-18F4CS PAD EFKL

2529 FSL, 1248 FWL - SEC18 T9S R22E

<b>Site Position:</b>	<b>Northing:</b> 14542640.30 ft	<b>Latitude:</b> 40 2 8.434 N
<b>From:</b> Map	<b>Easting:</b> 2064374.10 ft	<b>Longitude:</b> 109 29 7.526 W
<b>Position Uncertainty:</b> 0.00 ft		<b>North Reference:</b> Grid
<b>Ground Level:</b> 4899.00 ft		<b>Grid Convergence:</b> 0.97 deg

<b>Well:</b> 18F4CS	<b>Slot Name:</b>	
<b>Well Position:</b> +N/-S 0.00 ft	<b>Northing:</b> 14542640.30 ft	<b>Latitude:</b> 40 2 8.434 N
+E/-W 0.00 ft	<b>Easting:</b> 2064374.10 ft	<b>Longitude:</b> 109 29 7.526 W
<b>Position Uncertainty:</b> 0.00 ft		

<b>Wellpath:</b> 1	<b>Drilled From:</b> Surface	
<b>Current Datum:</b> SITE	<b>Tie-on Depth:</b> 0.00 ft	
<b>Magnetic Data:</b> 9/26/2007	<b>Above System Datum:</b> Mean Sea Level	
<b>Field Strength:</b> 52767 nT	<b>Declination:</b> 11.57 deg	
<b>Vertical Section:</b> Depth From (TVD)	<b>Mag Dip Angle:</b> 66.02 deg	
ft	+N/-S ft	+E/-W ft
0.00	0.00	0.00
		Direction deg
		60.48

**Plan Section Information**

MD ft	Incl deg	Azim deg	TVD ft	+N-S ft	+E-W ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	TFO deg	Target
0.00	0.00	60.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2800.00	0.00	60.48	2800.00	0.00	0.00	0.00	0.00	0.00	0.00	
3686.81	22.17	60.48	3664.85	83.48	147.45	2.50	2.50	0.00	60.48	
4435.94	22.17	60.48	4358.59	222.76	393.45	0.00	0.00	0.00	0.00	
5913.96	0.00	60.48	5800.00	361.90	639.20	1.50	-1.50	0.00	180.00	
9943.96	0.00	60.48	9830.00	361.90	639.20	0.00	0.00	0.00	60.48	PBHL

**Survey**

MD ft	Incl deg	Azim deg	TVD ft	N/S ft	E/W ft	VS ft	DLS deg/100ft	MapN ft	MapE ft	Comment
2800.00	0.00	60.48	2800.00	0.00	0.00	0.00	0.00	14542640.30	2064374.10	KOP
2900.00	2.50	60.48	2899.97	1.07	1.90	2.18	2.50	14542641.37	2064376.00	
3000.00	5.00	60.48	2999.75	4.30	7.59	8.72	2.50	14542644.60	2064381.69	
3100.00	7.50	60.48	3099.14	9.66	17.06	19.61	2.50	14542649.96	2064391.16	
3200.00	10.00	60.48	3197.97	17.15	30.30	34.82	2.50	14542657.45	2064404.40	
3300.00	12.50	60.48	3296.04	26.77	47.27	54.33	2.50	14542667.07	2064421.37	
3400.00	15.00	60.48	3393.17	38.48	67.96	78.09	2.50	14542678.78	2064442.06	
3500.00	17.50	60.48	3489.17	52.26	92.31	106.07	2.50	14542692.56	2064466.41	
3600.00	20.00	60.48	3583.85	68.10	120.27	138.21	2.50	14542708.40	2064494.37	
3686.81	22.17	60.48	3664.85	83.48	147.45	169.44	2.50	14542723.78	2064521.55	HOLD
3700.00	22.17	60.48	3677.06	85.93	151.78	174.42	0.00	14542726.23	2064525.88	
3800.00	22.17	60.48	3769.67	104.53	184.62	212.16	0.00	14542744.83	2064558.72	
3900.00	22.17	60.48	3862.27	123.12	217.46	249.89	0.00	14542763.42	2064591.56	
4000.00	22.17	60.48	3954.88	141.71	250.30	287.63	0.00	14542782.01	2064624.40	
4100.00	22.17	60.48	4047.49	160.30	283.13	325.36	0.00	14542800.60	2064657.23	

# Weatherford Drilling Services

## DIRECTIONAL PLAN REPORT



<b>Company:</b> Anadarko-Kerr-McGee	<b>Date:</b> 9/28/2007	<b>Time:</b> 09:21:40	<b>Page:</b> 2
<b>Field:</b> Uintah County, Utah (UTM Zone 12N-NAD 27)	<b>Co-ordinate(NE) Reference:</b>	<b>Site:</b> NBU 922-18F4CS PAD EFKL, Grid Nort	
<b>Site:</b> NBU 922-18F4CS PAD EFKL	<b>Vertical (TVD) Reference:</b>	<b>SITE</b> 4914.0	
<b>Well:</b> 18F4CS	<b>Section (VS) Reference:</b>	<b>Well</b> (0.00N,0.00E,60.48Azi)	
<b>Wellpath:</b> 1	<b>Survey Calculation Method:</b>	<b>Minimum Curvature</b>	<b>Db:</b> Sybase

**Survey**

MD ft	Incl deg	Azim deg	TVD ft	N/S ft	E/W ft	VS ft	DLS deg/100ft	MapN ft	MapE ft	Comment
4200.00	22.17	60.48	4140.09	178.90	315.97	363.10	0.00	14542819.20	2064690.07	
4300.00	22.17	60.48	4232.70	197.49	348.81	400.84	0.00	14542837.79	2064722.91	
4400.00	22.17	60.48	4325.31	216.08	381.65	438.57	0.00	14542856.38	2064755.75	
4435.94	22.17	60.48	4358.59	222.76	393.45	452.14	0.00	14542863.06	2064767.55	DROP
4500.00	21.21	60.48	4418.11	234.43	414.05	475.81	1.50	14542874.73	2064788.15	
4600.00	19.71	60.48	4511.80	251.65	444.47	510.76	1.50	14542891.95	2064818.57	
4700.00	18.21	60.48	4606.38	267.65	472.74	543.25	1.50	14542907.95	2064846.84	
4800.00	16.71	60.48	4701.77	282.44	498.85	573.25	1.50	14542922.74	2064872.95	
4900.00	15.21	60.48	4797.91	295.98	522.77	600.75	1.50	14542936.28	2064896.87	
5000.00	13.71	60.48	4894.74	308.28	544.50	625.72	1.50	14542948.58	2064918.60	
5100.00	12.21	60.48	4992.19	319.33	564.02	648.14	1.50	14542959.63	2064938.12	
5141.71	11.58	60.48	5033.00	323.57	571.50	656.74	1.50	14542963.87	2064945.60	WASATCH
5200.00	10.71	60.48	5090.19	329.12	581.31	668.01	1.50	14542969.42	2064955.41	
5300.00	9.21	60.48	5188.68	337.64	596.35	685.30	1.50	14542977.94	2064970.45	
5400.00	7.71	60.48	5287.59	344.89	609.16	700.01	1.50	14542985.19	2064983.26	
5500.00	6.21	60.48	5386.85	350.86	619.70	712.13	1.50	14542991.16	2064993.80	
5600.00	4.71	60.48	5486.40	355.55	627.98	721.64	1.50	14542995.85	2065002.08	
5700.00	3.21	60.48	5586.15	358.95	633.99	728.55	1.50	14542999.25	2065008.09	
5800.00	1.71	60.48	5686.06	361.06	637.72	732.84	1.50	14543001.36	2065011.82	
5900.00	0.21	60.48	5786.04	361.89	639.18	734.51	1.50	14543002.19	2065013.28	
5913.96	0.00	60.48	5800.00	361.90	639.20	734.54	1.50	14543002.20	2065013.30	HOLD
6000.00	0.00	60.48	5886.04	361.90	639.20	734.54	0.00	14543002.20	2065013.30	
6100.00	0.00	60.48	5986.04	361.90	639.20	734.54	0.00	14543002.20	2065013.30	
6200.00	0.00	60.48	6086.04	361.90	639.20	734.54	0.00	14543002.20	2065013.30	
6300.00	0.00	60.48	6186.04	361.90	639.20	734.54	0.00	14543002.20	2065013.30	
6400.00	0.00	60.48	6286.04	361.90	639.20	734.54	0.00	14543002.20	2065013.30	
6500.00	0.00	60.48	6386.04	361.90	639.20	734.54	0.00	14543002.20	2065013.30	
6600.00	0.00	60.48	6486.04	361.90	639.20	734.54	0.00	14543002.20	2065013.30	
6700.00	0.00	60.48	6586.04	361.90	639.20	734.54	0.00	14543002.20	2065013.30	
6800.00	0.00	60.48	6686.04	361.90	639.20	734.54	0.00	14543002.20	2065013.30	
6900.00	0.00	60.48	6786.04	361.90	639.20	734.54	0.00	14543002.20	2065013.30	
7000.00	0.00	60.48	6886.04	361.90	639.20	734.54	0.00	14543002.20	2065013.30	
7100.00	0.00	60.48	6986.04	361.90	639.20	734.54	0.00	14543002.20	2065013.30	
7200.00	0.00	60.48	7086.04	361.90	639.20	734.54	0.00	14543002.20	2065013.30	
7300.00	0.00	60.48	7186.04	361.90	639.20	734.54	0.00	14543002.20	2065013.30	
7400.00	0.00	60.48	7286.04	361.90	639.20	734.54	0.00	14543002.20	2065013.30	
7500.00	0.00	60.48	7386.04	361.90	639.20	734.54	0.00	14543002.20	2065013.30	
7600.00	0.00	60.48	7486.04	361.90	639.20	734.54	0.00	14543002.20	2065013.30	
7700.00	0.00	60.48	7586.04	361.90	639.20	734.54	0.00	14543002.20	2065013.30	
7800.00	0.00	60.48	7686.04	361.90	639.20	734.54	0.00	14543002.20	2065013.30	
7879.96	0.00	60.48	7766.00	361.90	639.20	734.54	0.00	14543002.20	2065013.30	MESAVERDE
7900.00	0.00	60.48	7786.04	361.90	639.20	734.54	0.00	14543002.20	2065013.30	
8000.00	0.00	60.48	7886.04	361.90	639.20	734.54	0.00	14543002.20	2065013.30	
8100.00	0.00	60.48	7986.04	361.90	639.20	734.54	0.00	14543002.20	2065013.30	
8200.00	0.00	60.48	8086.04	361.90	639.20	734.54	0.00	14543002.20	2065013.30	
8300.00	0.00	60.48	8186.04	361.90	639.20	734.54	0.00	14543002.20	2065013.30	
8400.00	0.00	60.48	8286.04	361.90	639.20	734.54	0.00	14543002.20	2065013.30	
8500.00	0.00	60.48	8386.04	361.90	639.20	734.54	0.00	14543002.20	2065013.30	
8600.00	0.00	60.48	8486.04	361.90	639.20	734.54	0.00	14543002.20	2065013.30	
8700.00	0.00	60.48	8586.04	361.90	639.20	734.54	0.00	14543002.20	2065013.30	
8800.00	0.00	60.48	8686.04	361.90	639.20	734.54	0.00	14543002.20	2065013.30	
8900.00	0.00	60.48	8786.04	361.90	639.20	734.54	0.00	14543002.20	2065013.30	
9000.00	0.00	60.48	8886.04	361.90	639.20	734.54	0.00	14543002.20	2065013.30	

# Weatherford Drilling Services

## DIRECTIONAL PLAN REPORT



<b>Company:</b> Anadarko-Kerr-McGee	<b>Date:</b> 9/28/2007	<b>Time:</b> 09:21:40	<b>Page:</b> 3
<b>Field:</b> UINTAH COUNTY, UTAH (UTM Zone 12N-NAD 27)	<b>Co-ordinate(NE) Reference:</b> 14543002.20	<b>Site:</b> NBU 922-18F4CS PAD EFKL, Grid Nort	
<b>Site:</b> NBU 922-18F4CS PAD EFKL	<b>Vertical (TVD) Reference:</b> 2065013.30	<b>SITE</b> 4914.0	
<b>Well:</b> 18F4CS	<b>Section (VS) Reference:</b> Well (0.00N,0.00E,60.48Azi)		
<b>Wellpath:</b> 1	<b>Survey Calculation Method:</b> Minimum Curvature	<b>Db:</b> Sybase	

### Survey

MD ft	Incl deg	Azim deg	TVD ft	N/S ft	E/W ft	VS ft	DLS deg/100ft	MapN ft	MapE ft	Comment
9100.00	0.00	60.48	8986.04	361.90	639.20	734.54	0.00	14543002.20	2065013.30	
9200.00	0.00	60.48	9086.04	361.90	639.20	734.54	0.00	14543002.20	2065013.30	
9300.00	0.00	60.48	9186.04	361.90	639.20	734.54	0.00	14543002.20	2065013.30	
9400.00	0.00	60.48	9286.04	361.90	639.20	734.54	0.00	14543002.20	2065013.30	
9500.00	0.00	60.48	9386.04	361.90	639.20	734.54	0.00	14543002.20	2065013.30	
9600.00	0.00	60.48	9486.04	361.90	639.20	734.54	0.00	14543002.20	2065013.30	
9700.00	0.00	60.48	9586.04	361.90	639.20	734.54	0.00	14543002.20	2065013.30	
9800.00	0.00	60.48	9686.04	361.90	639.20	734.54	0.00	14543002.20	2065013.30	
9900.00	0.00	60.48	9786.04	361.90	639.20	734.54	0.00	14543002.20	2065013.30	
9943.96	0.00	60.48	9830.00	361.90	639.20	734.54	0.00	14543002.20	2065013.30	PBHL

### Targets

Name	Description Dip. Dir.	TVD ft	+N/-S ft	+E/-W ft	Map Northing ft	Map Easting ft	<--- Latitude --->			<--- Longitude --->				
							Deg	Min	Sec	Deg	Min	Sec		
PBHL		9830.00	361.90	639.20	14543002.20	2065013.30	40	2	11.903	N	109	28	59.229	W
-Circle (Radius: 100)														
-Plan hit target														

### Casing Points

MD ft	TVD ft	Diameter in	Hole Size in	Name
2700.00	2700.00	9.62	12.25	9 5/8"

### Annotation

MD ft	TVD ft	
2800.00	2800.00	KOP
3686.81	3664.85	HOLD
4435.94	4358.59	DROP
5913.96	5800.00	HOLD
9943.96	9830.00	PBHL

### Formations

MD ft	TVD ft	Formations	Lithology	Dip Angle deg	Dip Direction deg
5141.71	5033.00	WASATCH		0.00	0.00
7879.96	7766.00	MESAVERDE		0.00	0.00



**Weatherford**

**Weatherford Drilling Services**

GeoDec v4.1.130

Report Date: September 26, 2007  
 Job Number: \_\_\_\_\_  
 Customer: ANADARKO-KERR McGEE  
 Well Name: NBU 922-18F4CS  
 API Number: \_\_\_\_\_  
 Rig Name: \_\_\_\_\_  
 Location: UNITAH COUNTY, UTAH  
 Block: \_\_\_\_\_  
 Engineer: R JOYNER

Universal Transverse Mercator	Geodetic Latitude / Longitude
System: Zone 12N (114 W to 108 W)	System: Latitude / Longitude
Projection: Transverse Mercator/Gauss Kruger	Projection: Geodetic Latitude and Longitude
Datum: NAD 1927 (NADCON CONUS)	Datum: NAD 1927 (NADCON CONUS)
Ellipsoid: Clarke 1866	Ellipsoid: Clarke 1866
North/South 14542640.300 USFT	Latitude 40 2 8.4339876 DMS
East/West 2064374.100 USFT	Longitude -109 29 7.5258515 DMS
Grid Convergence: .97446538°	
Total Correction: +10.5945°	

Geodetic Location WGS84                      Elevation = 1493.0 Meters  
 Latitude =        40.03568° N        40° 2 min 8.434 sec  
 Longitude =      109.48542° W      109° 29 min 7.526 sec

Magnetic Declination =	+11.5690°	[True North Offset]	
Local Gravity =	.9995 g		
Local Field Strength=	52728 nT	Mag Vector X =	20993 nT
Dip =	66.0210°	Mag Vector Y =	4297 nT
Model File:	bggm2006	Mag Vector Z =	48177 nT
Spud Date:	Sep 26, 2007	Mag Vector H =	21428 nT

Signed: \_\_\_\_\_ Date: \_\_\_\_\_

NBU 922-18L2BS  
NE/SW SEC. 18, T9S, R22E  
UINTAH COUNTY, UTAH  
UTU-0359

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 0.15 +/- miles of access road is proposed. Please refer to the attached Topo Map B.

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

Please refer to Topo Map C.

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

*Please see the Natural Buttes Unit SOP.*

Approximately 3394' +/- of 10" steel pipeline is proposed from the location to an existing pipeline. Refer to the attached Topo Map D.

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.

Culverts will be installed where needed.

A run off diversion for drainage will be constructed where needed.

The reserve pit will be lined. When the reserve pit is closed the pit liner will be buried below plow depth.

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.*

11. **Surface Ownership:**

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

Ute Indian Tribe  
P.O. Box 70  
Fort Duchesne, Utah 84026  
(435) 722-5141

12. **Other Information:**

A Class III Archaeological Survey Report has been conducted for this location and submitted to the Ute Indian Tribe prior to the on-site inspection.

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 boundaries of the unit.

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

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

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

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

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

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

Bond coverage pursuant to 43 CFR 3104 for lease activities is being provided by Bureau of Indian Affairs Nationwide Bond #RLB0005239, Bureau of Land Management Nationwide Bond #WYB000291 and State of Utah Bond #RLB0005237.

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 Uphego

11/16/2007

Date

**Kerr-McGee Oil & Gas Onshore LP**  
**NBU #922-18K2,K2DS, K1BS, E3CS, E3S, K2BS,**  
**F4CS, & F4BS**  
**SECTION 18, T9S, 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 DIRECTION APPROXIMATELY 6.9 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE SOUTHEAST; TURN LEFT AND PROCEED IN A SOUTHEASTERLY, THEN EASTERLY DIRECTION APPROXIMATELY 5.0 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE NORTHWEST; TURN LEFT AND PROCEED IN A NORTHWESTERLY DIRECTION APPROXIMATELY 0.3 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE NORTHEAST; TURN RIGHT AND PROCEED IN A NORTHEASTERLY DIRECTION APPROXIMATELY 3.9 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE NORTHEAST; PROCEED IN A NORTHEASTERLY DIRECTION APPROXIMATELY 1.6 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE NORTHWEST; TURN LEFT AND PROCEED IN A NORTHWESTERLY DIRECTION APPROXIMATELY 0.8 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE NORTHEAST; TURN RIGHT AND PROCEED IN A NORTHEASTERLY DIRECTION APPROXIMATELY 0.1 MILES TO THE BEGINNING OF THE PROPOSED ACCESS FOR THE #922-18E2 TO THE SOUTHEAST; FOLLOW ROAD FLAGS IN A SOUTHEASTERLY DIRECTION APPROXIMATELY 150' TO THE PROPOSED #922-18E2 AND THE BEGINNING OF THE PROPOSED ACCESS TO THE SOUTHEAST; FOLLOW ROAD FLAGS IN A SOUTHEASTERLY DIRECTION APPROXIMATELY 0.15 MILES TO THE PROPOSED LOCATION.

TOTAL DISTANCE FROM VERNAL, UTAH TO THE PROPOSED WELL LOCATION IS APPROXIMATELY 49.75 MILES.

Orig.

# Kerr-McGee Oil & Gas Onshore LP

NBU #922-18K2, K2DS, K1BS, E3CS, E3S, K2BS, F4CS, & F4BS

LOCATED IN UINTAH COUNTY, UTAH

SECTION 18, T9S, R22E, S.L.B.&M.

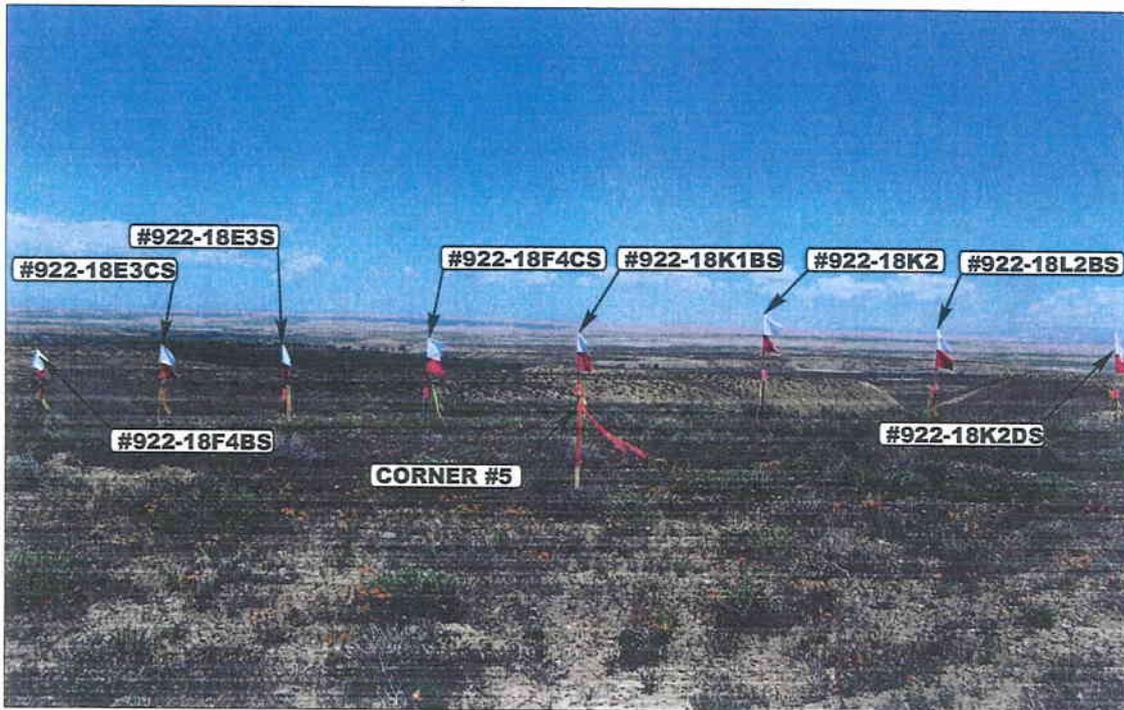


PHOTO: VIEW FROM CORNER #5 TO LOCATION STAKES

CAMERA ANGLE: NORTHEASTERLY



PHOTO: VIEW FROM BEGINNING OF PROPOSED ACCESS

CAMERA ANGLE: SOUTHEASTERLY



- 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

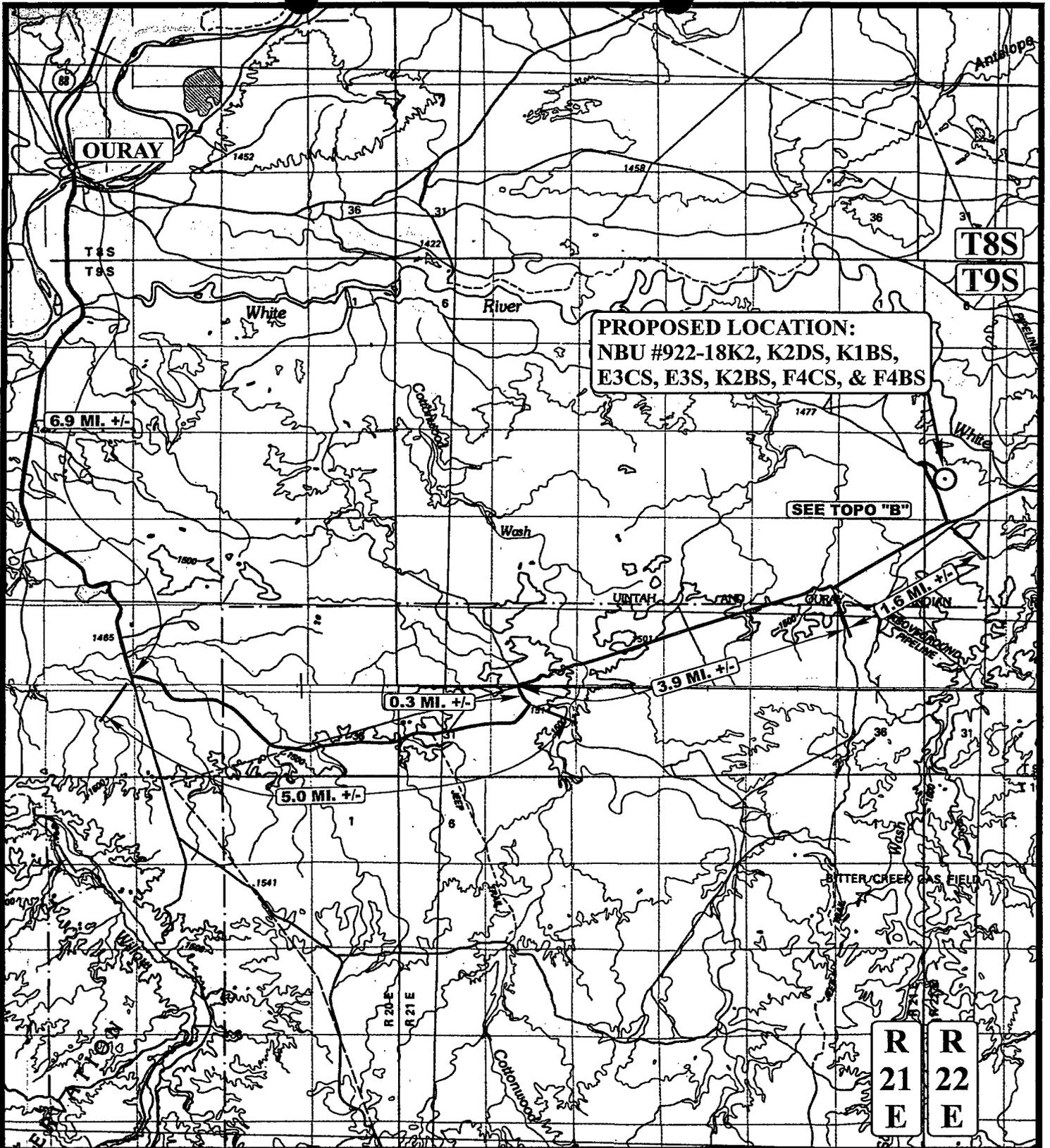
05	16	07
MONTH	DAY	YEAR

PHOTO

TAKEN BY: L.K.

DRAWN BY: B.C.

REVISED: 00-00-00



**PROPOSED LOCATION:**  
 NBU #922-18K2, K2DS, K1BS,  
 E3CS, E3S, K2BS, F4CS, & F4BS

SEE TOPO "B"

**R R**  
**21 22**  
**E E**

**LEGEND:**

⊙ PROPOSED LOCATION



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

NBU #922-18K2, K2DS, K1BS, E3CS,  
 E3S, K2BS, F4CS, & F4BS  
 SECTION 18, T9S, R22E, S.L.B.&M.  
 NE 1/4 SW 1/4



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

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

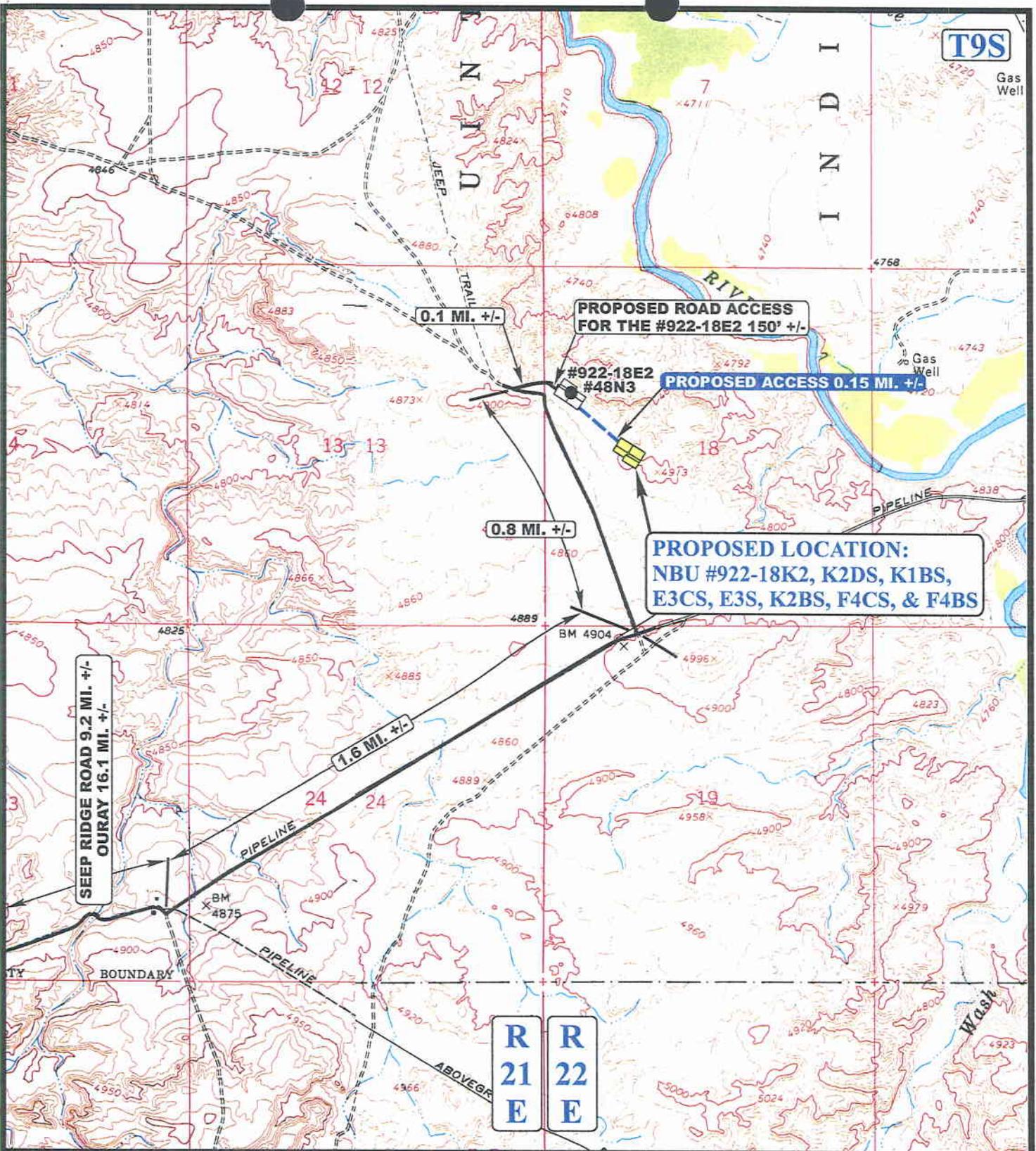
**05 16 07**  
 MONTH DAY YEAR

SCALE: 1:100,000

DRAWN BY: B.C.

REVISED: 00-00-00





**LEGEND:**

- EXISTING ROAD
- PROPOSED ACCESS ROAD

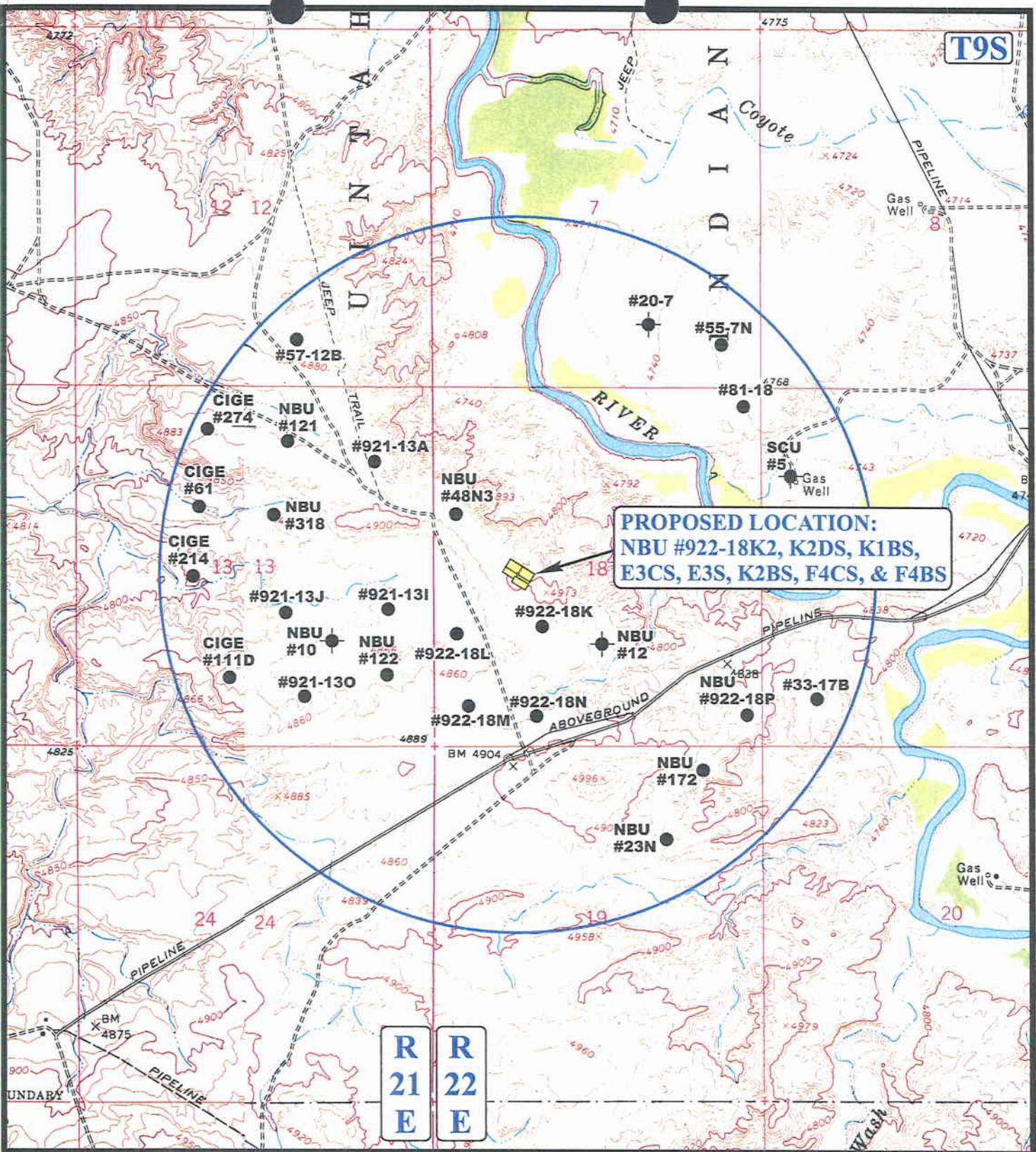
**Kerr-McGee Oil & Gas Onshore LP**

NBU #922-18K2, K2DS, K1BS, E3CS,  
E3S, K2BS, F4CS, & F4BS  
SECTION 18, T9S, R22E, S.L.B.&M.  
NE 1/4 SW 1/4

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



**TOPOGRAPHIC MAP** 05 16 07  
MONTH DAY YEAR  
SCALE: 1" = 2000' DRAWN BY: B.C. REVISED: 00-00-00 **B TOPO**



**LEGEND:**

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

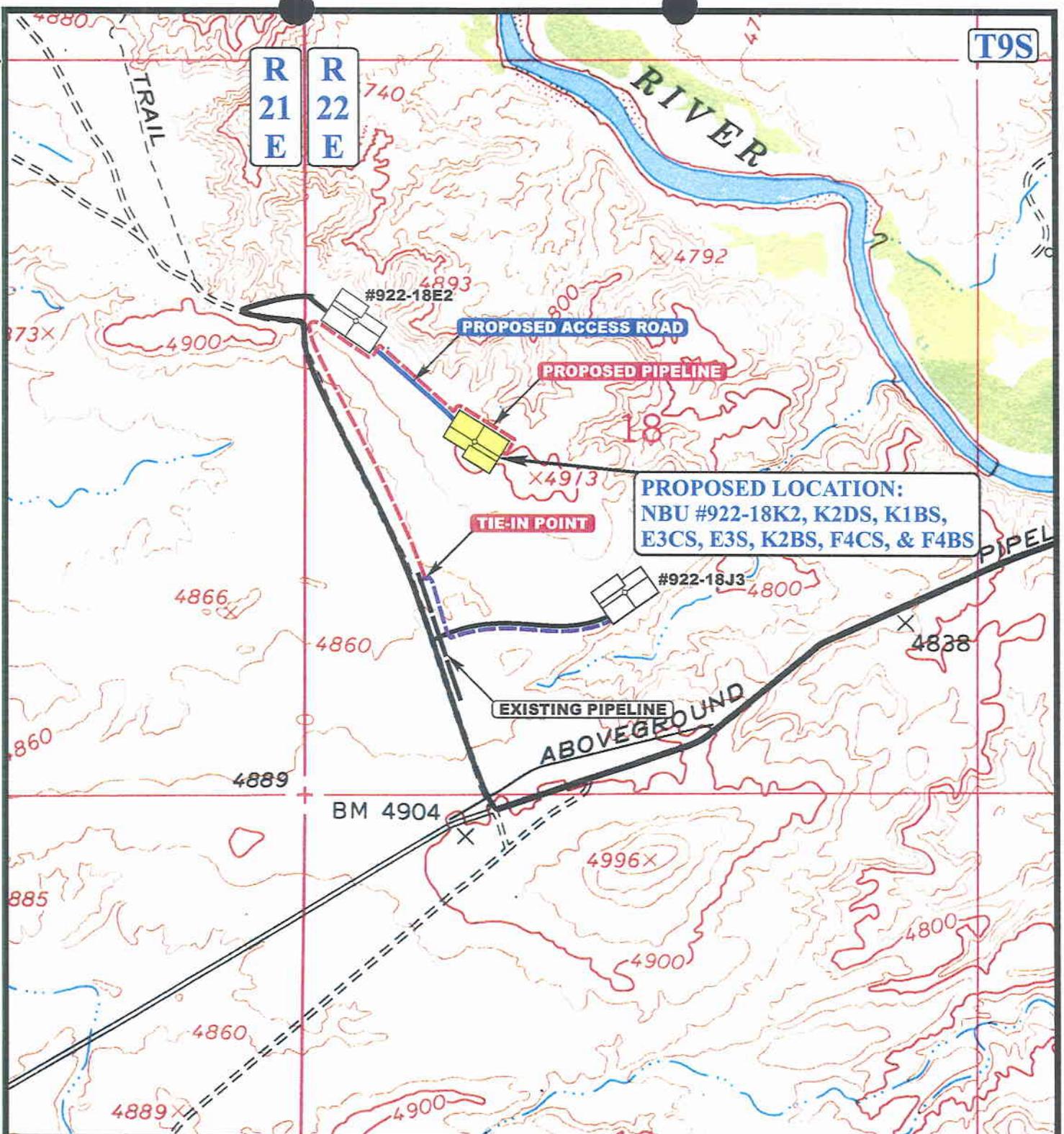
**Kerr-McGee Oil & Gas Onshore LP**

NBU #922-18K2, K2DS, K1BS, E3CS,  
 E3S, K2BS, F4CS, & F4BS  
 SECTION 18, T9S, R22E, S.L.B.&M.  
 NE 1/4 SW 1/4

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

**TOPOGRAPHIC MAP** 05 16 07  
 MONTH DAY YEAR  
 SCALE: 1" = 2000' DRAWN BY: B.C. REVISED: 00-00-00





APPROXIMATE TOTAL 10" PIPELINE DISTANCE = 3,394' +/-

**LEGEND:**

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

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

NBU #922-18K2, K2DS, K1BS, E3CS,  
E3S, K2BS, F4CS, & F4BS  
SECTION 18, T9S, R22E, S.L.B.&M.  
NE 1/4 SW 1/4



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



**TOPOGRAPHIC MAP** 05 16 07  
MONTH DAY YEAR  
SCALE: 1" = 1000' DRAWN BY: B.C. REVISED: 10-23-07C.P.



# Kerr-McGee Oil & Gas Onshore LP

NBU #922-18K2, K2DS, K1BS, E3CS, E3S, K2BS, F4CS, & F4BS  
PIPELINE ALIGNMENT

LOCATED IN UINTAH COUNTY, UTAH  
SECTION 18, T9S, R22E, S.L.B.&M.



PHOTO: VIEW OF TIE-IN POINT

CAMERA ANGLE: SOUTHEASTERLY



PHOTO: VIEW OF PIPELINE ALIGNMENT

CAMERA ANGLE: SOUTHEASTERLY



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

PIPELINE PHOTOS

05 16 07  
MONTH DAY YEAR

PHOTO

TAKEN BY: L.K.

DRAWN BY: B.C.

REVISED: 00-00-00



Kerr-McGee Oil & Gas Onshore LP

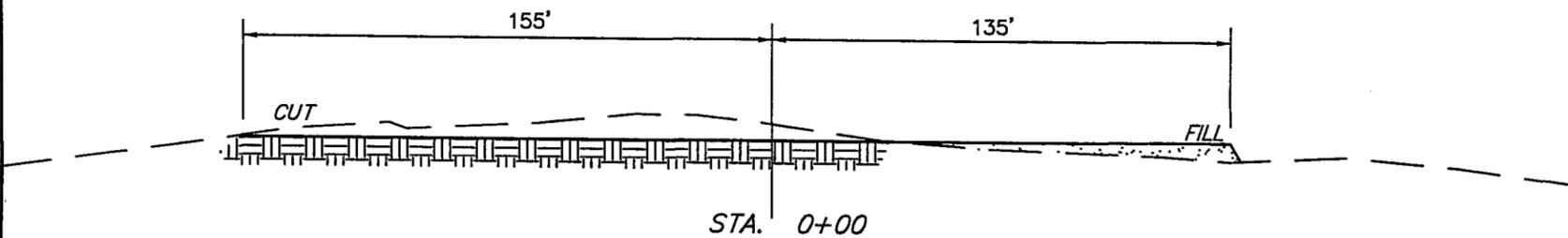
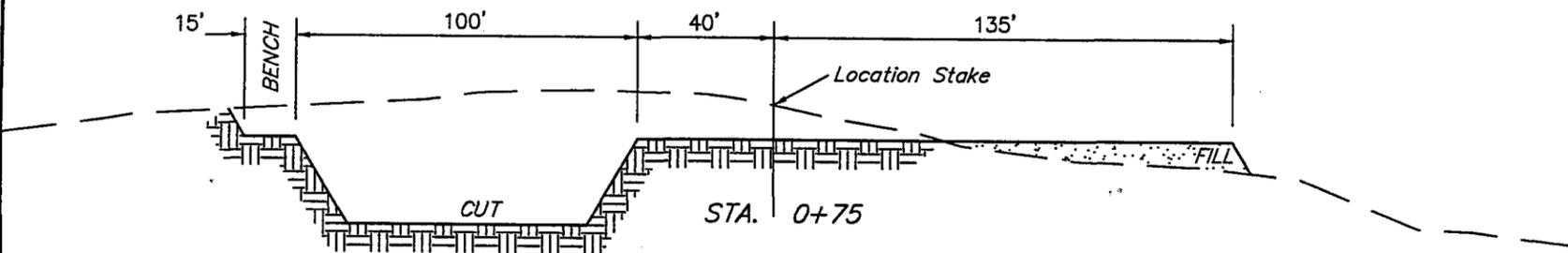
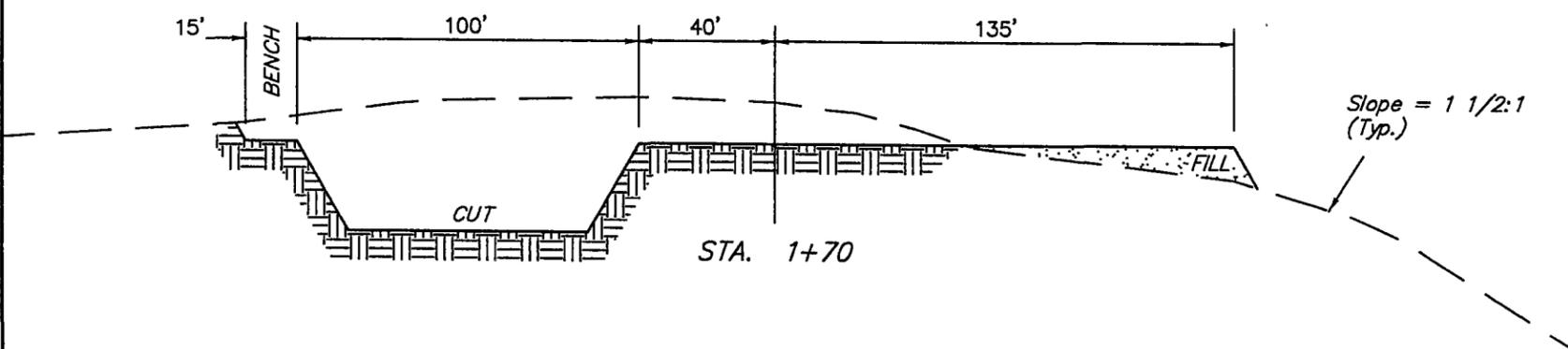
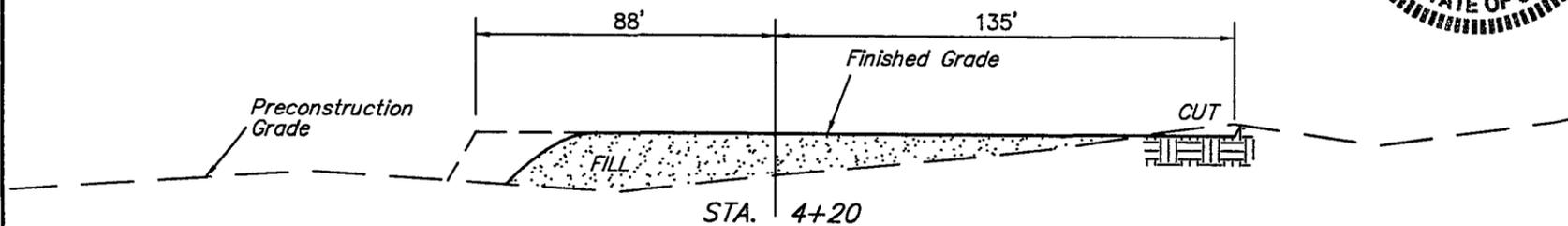
TYPICAL CROSS SECTIONS FOR

NBU #922-18K2, K2DS, K1BS, E3CS, E3S, K2BS, F4CS, & F4BS  
SECTION 18, T9S, R22E, S.L.B.&M.  
NE 1/4 SW 1/4

FIGURE #2

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

DATE: 05-22-07  
Drawn By: C.H.



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

\* NOTE:  
FILL QUANTITY INCLUDES 5% FOR COMPACTION

APPROXIMATE YARDAGES

CUT	
(12") Topsoil Stripping	= 4,490 Cu. Yds.
Remaining Location	= 11,170 Cu. Yds.
<b>TOTAL CUT</b>	<b>= 15,660 CU.YDS.</b>
<b>FILL</b>	<b>= 7,940 CU.YDS.</b>

EXCESS MATERIAL	= 7,720 Cu. Yds.
Topsoil & Pit Backfill (1/2 Pit Vol.)	= 7,720 Cu. Yds.
EXCESS UNBALANCE (After Interim Rehabilitation)	= 0 Cu. Yds.

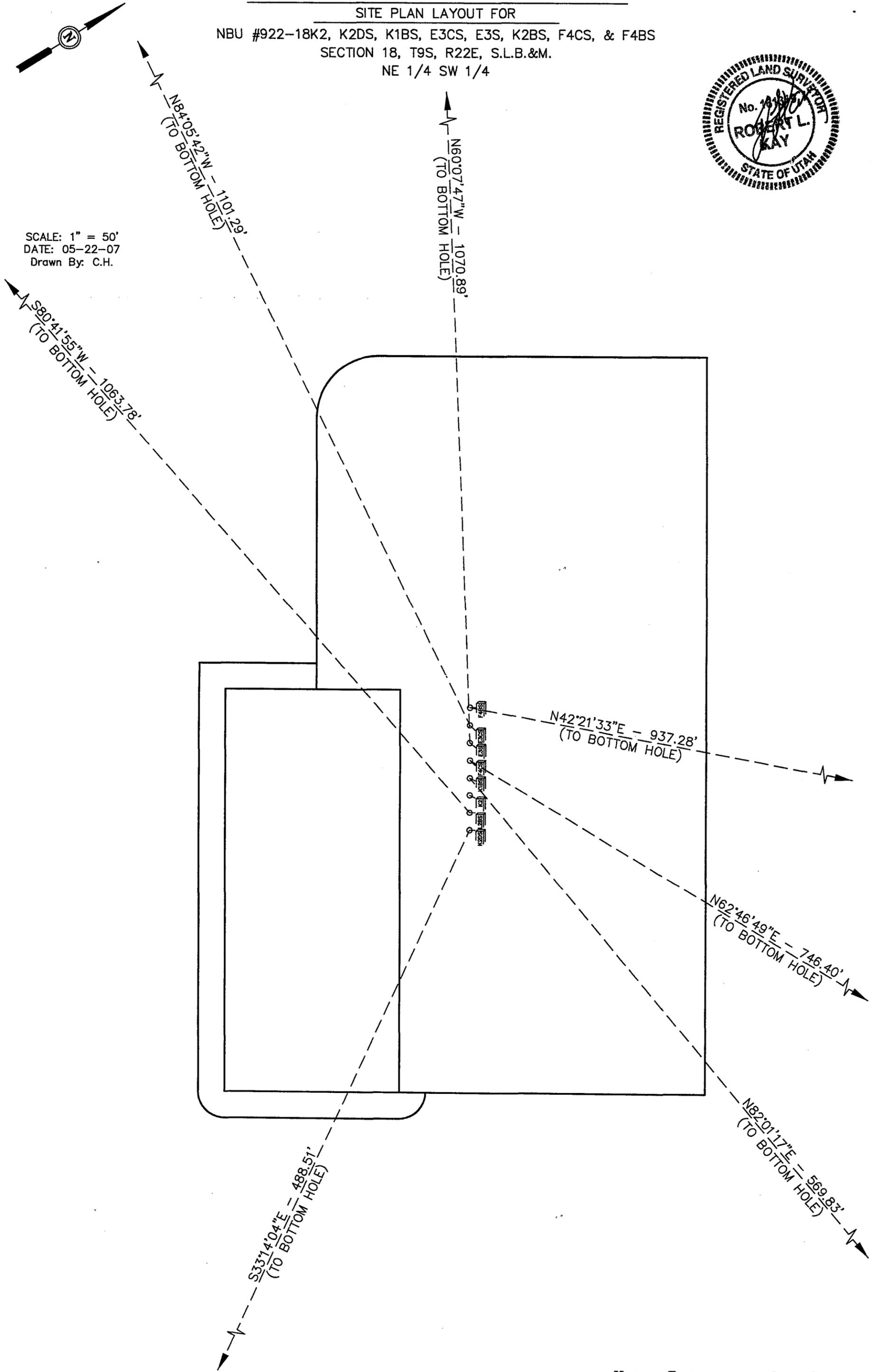
Kerr-McGee Oil & Gas Onshore LP

SITE PLAN LAYOUT FOR

NBU #922-18K2, K2DS, K1BS, E3CS, E3S, K2BS, F4CS, & F4BS  
SECTION 18, T9S, R22E, S.L.B.&M.  
NE 1/4 SW 1/4



SCALE: 1" = 50'  
DATE: 05-22-07  
Drawn By: C.H.



**WORKSHEET  
APPLICATION FOR PERMIT TO DRILL**

APD RECEIVED: 11/20/2007

API NO. ASSIGNED: 43-047-39840

WELL NAME: NBU 922-18L2BS  
 OPERATOR: KERR-MCGEE OIL & GAS ( N2995 )  
 CONTACT: SHEILA UPCHEGO

PHONE NUMBER: 435-781-7024

PROPOSED LOCATION:

NESW 18 090S 220E  
 SURFACE: 2513 FSL 1273 FWL  
 BOTTOM: 2344 FSL 0223 FWL  
 COUNTY: UINTAH  
 LATITUDE: 40.03564 LONGITUDE: -109.4854  
 UTM SURF EASTINGS: 629229 NORTHINGS: 4432602  
 FIELD NAME: NATURAL BUTTES ( 630 )

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

LEASE TYPE: 1 - Federal  
 LEASE NUMBER: UTU-0359  
 SURFACE OWNER: 2 - Indian

PROPOSED FORMATION: WSMVD  
 COALBED METHANE WELL? NO

RECEIVED AND/OR REVIEWED:

- Plat
- Bond: Fed[1] Ind[] Sta[] Fee[]  
(No. RLB0005239 )
- 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: 123-14  
Eff Date: 12-2-1999  
Siting: 460' w large uncomm. Tracts
- R649-3-11. Directional Drill

COMMENTS:

*See Separate HW*

STIPULATIONS:

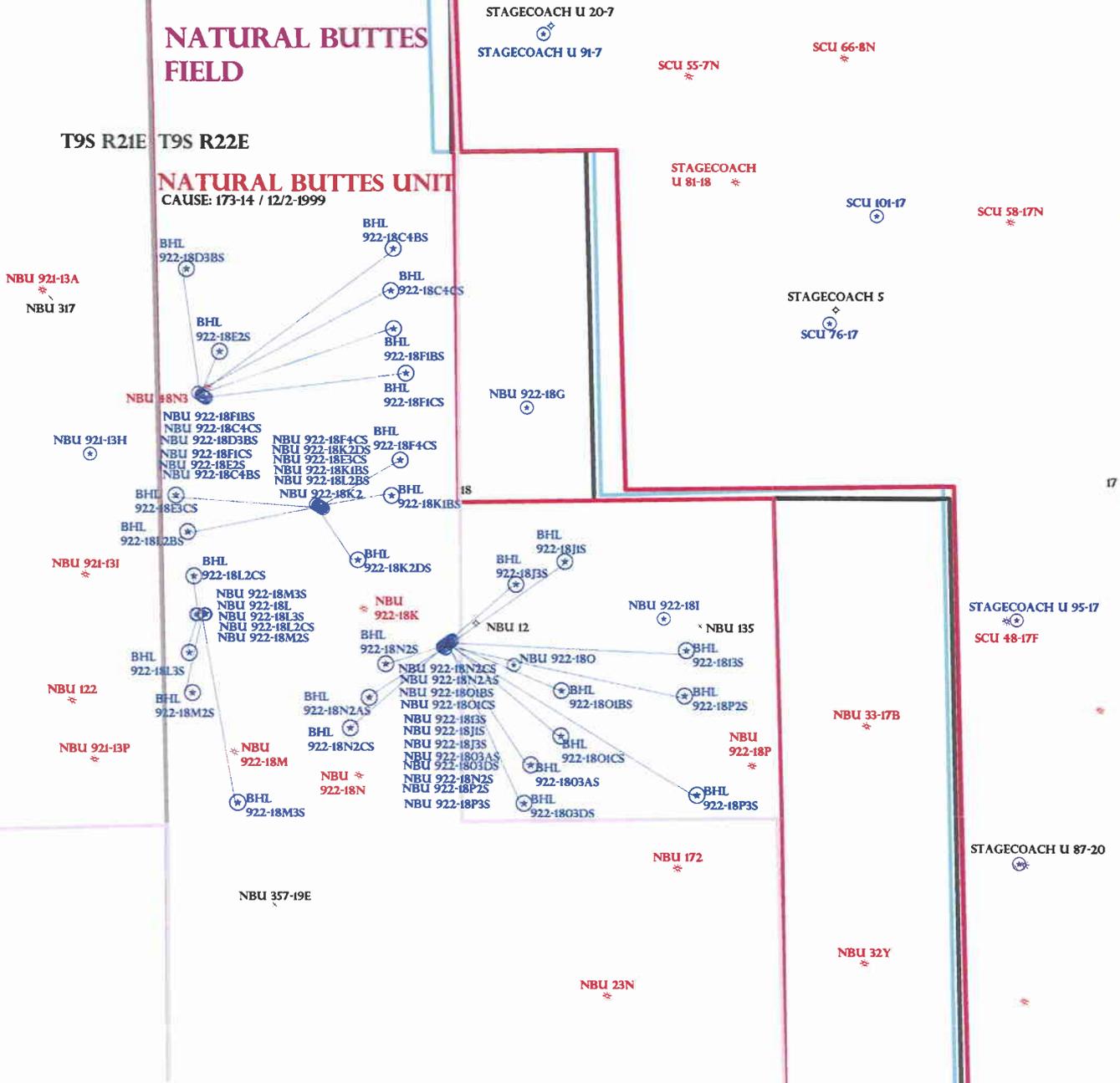
*1- Federal Approval  
2- Oil Shale*

# NATURAL BUTTES FIELD

## NATURAL BUTTES UNIT

CAUSE: 173-14 / 12/2-1999

T9S R21E T9S R22E



OPERATOR: KERR MCGEE O&G (N2995)

SEC: 18 T.9S R. 22E

FIELD: NATURAL BUTTES (630)

COUNTY: UINTAH

CAUSE: 173-14 / 12/2-1999

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



PREPARED BY: DIANA MASON  
DATE: 29-NOVEMBER-2007

# 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 30, 2007

Memorandum

To: Assistant District Manager Minerals, Vernal District

From: Michael Coulthard, Petroleum Engineer

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

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

API#	WELL NAME	LOCATION
(Proposed PZ Wasatch/MesaVerde)		
43-047-39821	NBU 922-18F4CS Sec 18	T09S R22E 2529 FSL 1248 FWL BHL Sec 18 T09S R22E 2406 FNL 1895 FWL
43-047-39822	NBU 922-18K2DS Sec 18	T09S R22E 2508 FSL 1282 FWL BHL Sec 18 T09S R22E 2099 FSL 1548 FWL
43-047-39823	NBU 922-18E3CS Sec 18	T09S R22E 2540 FSL 1231 FWL BHL Sec 18 T09S R22E 2632 FSL 0136 FWL
43-047-39824	NBU 922-18K1BS Sec 18	T09S R22E 2524 FSL 1256 FWL BHL Sec 18 T09S R22E 2602 FSL 1821 FWL
43-047-39825	NBU 922-18M3S Sec 18	T09S R22E 1688 FSL 0334 FWL BHL Sec 18 T09S R22E 0203 FSL 0571 FWL
43-047-39826	NBU 922-18L3S Sec 18	T09S R22E 1689 FSL 0274 FWL BHL Sec 18 T09S R22E 1390 FSL 0214 FWL
43-047-39827	NBU 922-18L2CS Sec 18	T09S R22E 1687 FSL 0344 FWL BHL Sec 18 T09S R22E 1994 FSL 0262 FWL

43-047-39828 NBU 922-18M2S Sec 18 T09S R22E 1689 FSL 0284 FWL  
BHL Sec 18 T09S R22E 1075 FSL 0232 FWL

43-047-39829 NBU 922-18P3S Sec 18 T09S R22E 1424 FSL 2605 FEL  
BHL Sec 18 T09S R22E 0203 FSL 0668 FEL

43-047-39830 NBU 922-18P2S Sec 18 T09S R22E 1436 FSL 2588 FEL  
BHL Sec 18 T09S R22E 0988 FSL 0745 FEL

43-047-39831 NBU 922-18N2S Sec 18 T09S R22E 1402 FSL 2637 FEL  
BHL Sec 18 T09S R22E 1278 FSL 1753 FWL

43-047-39832 NBU 922-18O3DS Sec 18 T09S R22E 1407 FSL 2629 FEL  
BHL Sec 18 T09S R22E 0165 FSL 2024 FEL

43-047-39833 NBU 922-18O3AS Sec 18 T09S R22E 1413 FSL 2621 FEL  
BHL Sec 18 T09S R22E 0465 FSL 1965 FEL

43-047-39834 NBU 922-18O1CS Sec 18 T09S R22E 1419 FSL 2613 FEL  
BHL Sec 18 T09S R22E 0687 FSL 1723 FEL

43-047-39835 NBU 922-18O1BS Sec 18 T09S R22E 1430 FSL 2596 FEL  
BHL Sec 18 T09S R22E 1046 FSL 1714 FEL

43-047-39836 NBU 922-18C4BS Sec 18 T09S R22E 1875 FNL 0362 FWL  
BHL Sec 18 T09S R22E 0745 FNL 1878 FWL

43-047-39837 NBU 922-18E2S Sec 18 T09S R22E 1870 FNL 0354 FWL  
BHL Sec 18 T09S R22E 1529 FNL 0503 FWL

43-047-39838 NBU 922-18F1CS Sec 18 T09S R22E 1892 FNL 0387 FWL  
BHL Sec 18 T09S R22E 1724 FNL 1956 FWL

43-047-39839 NBU 922-18N2AS Sec 18 T09S R22E 1396 FSL 2228 FWL  
BHL Sec 18 T09S R22E 1016 FSL 1617 FWL

43-047-39840 NBU 922-18L2BS Sec 18 T09S R22E 2513 FSL 1273 FWL  
BHL Sec 18 T09S R22E 2344 FSL 0223 FWL

43-047-39841 NBU 922-18D3BS Sec 18 T09S R22E 1853 FNL 0329 FWL  
BHL Sec 18 T09S R22E 0877 FNL 0256 FWL

43-047-39842 NBU 922-18J3S Sec 18 T09S R22E 1453 FSL 2564 FEL  
BHL Sec 18 T09S R22E 1888 FSL 2052 FEL

43-047-39843 NBU 922-18J1S Sec 18 T09S R22E 1447 FSL 2572 FEL  
BHL Sec 18 T09S R22E 2062 FSL 1665 FEL

43-047-39844 NBU 922-18I3S Sec 18 T09S R022E 1442 FSL 2580 FEL  
BHL Sec 18 T09S R022E 1346 FSL 0726 FEL

43-047-39845 NBU 922-18C4CS Sec 18 T09S R22E 1881 FNL 0370 FWL  
BHL Sec 18 T09S R22E 1075 FNL 1849 FWL

43-047-39846 NBU 922-18F1BS Sec 18 T09S R22E 1886 FNL 0379 FWL  
BHL Sec 18 T09S R22E 1375 FNL 1868 FWL

43-047-39847 NBU 922-18N2CS Sec 18 T09S R22E 1390 FSL 2220 FWL  
BHL Sec 18 T09S R22E 0775 FSL 1462 FWL

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

/s/ Michael L. Coulthard

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

MCoulthard:mc:11-30-07



JON M. HUNTSMAN, JR.  
Governor

GARY R. HERBERT  
Lieutenant Governor

# State of Utah

## DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER  
Executive Director

### Division of Oil Gas and Mining

JOHN R. BAZA  
Division Director

December 3, 2007

Kerr McKee Oil and Gas Onshore LP  
1368 South 1200 East  
Vernal, UT 84078

Re: NBU 922-18L2BS Well, Surface Location 2513' FSL, 1273' FWL, NE SW, Sec. 18, T. 9 South, R. 22 East, Bottom Location 2344' FSL, 223' FWL, NW SW, Sec. 18, T. 9 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 43-047-39840.

Sincerely,

Gil Hunt  
Associate Director

pab  
Enclosures

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

Operator: Kerr McKee Oil and Gas Onshore LP  
Well Name & Number NBU 922-18L2BS  
API Number: 43-047-39840  
Lease: UTU-0359

Surface Location: NE SW      Sec. 18      T. 9 South      R. 22 East  
Bottom Location: NW SW      Sec. 18      T. 9 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 with 24 hours of spudding the well.

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

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

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

#### 3. Reporting Requirements

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

4. State approval of this well does not supersede the required federal approval, which must be obtained prior to drilling.
5. In accordance with Utah Admin. R.649-3-11, Directional Drilling, the operator shall submit a complete angular deviation and directional survey report to the Division within 30 days following completion of the well.
6. In accordance with Order in Cause No. 190-5(b) dated October 28, 1982, the Operator shall comply with requirements of Rules R649-3-31 and R649-3-27 pertaining to Designated Oil Shale Areas. Additionally, the operator shall ensure that the surface and/or production casing is properly cemented over the entire oil shale interval as defined by Rule R649-3-31. The Operator shall report the actual depth the oil shale is encountered to the Division.

RECEIVED

NOV - 7 2007

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

Form 3160-3  
(August 1999)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

5. Lease Serial No. **UTU-0359**  
6. If Indian, Allottee or Tribe Name  
**TRIBAL SURFACE**

7. If Unit or CA Agreement, Name and No.  
**UNIT #891008900A**  
8. Name and Well No.  
**NBU 922-18L2BS**

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

2. Name of Operator  
**KERR MCGEE OIL AND GAS ONSHORE LP**  
3A. Address  
**1368 SOUTH 1200 EAST VERNAL, UT 84078**  
3b. Phone No. (include area code)  
**(435) 781-7024**

9. API Well No.  
**43 047 39840**  
10. Field and Pool, or Exploratory  
**NATURAL BUTTES**

4. Location of Well (Report location clearly and in accordance with any State requirements. \*)  
At surface **NE/SW 2513'FSL, 1273'FWL**  
At proposed prod. Zone **NW/SW 2344'FSL, 223'FWL (LOT 3)**

11. Sec., T., R., M., or Blk, and Survey or Area  
**SEC. 18, T9S, R22E**

14. Distance in miles and direction from nearest town or post office\*  
**27.95 +/- MILES FROM 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)  
**1273'**

16. No. of Acres in lease  
**162.39**

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  
**10,042'**

20. BLM/BIA Bond No. on file  
**RLB0005239**

21. Elevations (Show whether DF, KDB, RT, GL, etc.)  
**4899'GL**

22. Approximate date work will start\*  
**UPON APPROVAL**

23. Estimated duration  
**TO BE DETERMINED**

24. Attachments

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

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

25. Signature *Sheila Upchego* Name (Printed/Typed) **SHEILA UPCHEGO** Date **11/16/2007**  
Title **SENIOR LAND ADMIN SPECIALIST**

Approved by (Signature) *Jerry Kencels* Name (Printed/Typed) **JERRY KENCELS** Date **SEP 08 2008**  
Title **Assistant Field Manager** Office **VERNAL FIELD OFFICE**  
**Lands & Mineral Resources**

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 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)

**NOTICE OF APPROVAL**

**RECEIVED**

**SEP 16 2008**

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

**UDOGM**

No Nos  
087MIC0086A

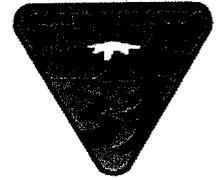


**UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT  
VERNAL FIELD OFFICE**

170 South 500 East

VERNAL, UT 84078

(435) 781-4400



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

**Company:** Kerr-McGee Oil & Gas Onshore, LP      **Location:** NESW, Sec. 18, T9S, R22E (S)  
**Well No:** NBU 922-18L2BS      **Lease No:** UTU-0359  
**API No:** 43-047-39840      **Agreement:** Natural Buttes Unit

Title	Name	Office Phone Number	Cell Phone Number
Petroleum Engineer:	Matt Baker	(435) 781-4490	(435) 828-4470
Petroleum Engineer:	Michael Lee	(435) 781-4432	(435) 828-7875
Petroleum Engineer:	James Ashley	(435) 781-4470	(435) 828-7874
Petroleum Engineer:	Ryan Angus	(435) 781-4430	(435) 828-7368
Supervisory Petroleum Technician:	Jamie Sparger	(435) 781-4502	(435) 828-3913
Supervisory NRS:	Karl Wright	(435) 781-4484	(435) 828-7381
NRS/Enviro Scientist:	Holly Villa	(435) 781-4404	(435) 828-3544
NRS/Enviro Scientist:	James Hereford	(435) 781-3412	
NRS/Enviro Scientist:	Chuck Macdonald	(435) 781-4441	(435) 828-7481
NRS/Enviro Scientist:	Dan Emmett	(435) 781-3414	
NRS/Enviro Scientist:	Paul Percival	(435) 781-4493	
NRS/Enviro Scientist:	Michael Cutler	(435) 781-3401	(435) 828-3546
NRS/Enviro Scientist:	Anna Figueroa	(435) 781-3407	(435) 828-3548
NRS/Enviro Scientist:	Verlyn Pindell	(435) 781-3402	(435) 828-3547
NRS/Enviro Scientist:	Darren Williams	(435) 781-4447	(435) 828-4029
NRS/Enviro Scientist:	Nathan Packer	(435) 781-3405	(435) 828-3545

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

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

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

**NOTIFICATION REQUIREMENTS**

Construction Activity	-	The Ute Tribe Energy & Minerals Dept. shall be notified in writing 48 hours in advance of any construction activity. The Ute Tribal office is open Monday through Thursday.
Construction Completion	-	Upon completion of the pertinent APD/ROW construction, notify the Ute Tribe Energy & Minerals Dept. for a Tribal Technician to verify the Affidavit of Completion.
Spud Notice (Notify Petroleum Engineer)	-	Twenty-Four (24) hours prior to spudding the well.
Casing String & Cementing (Notify Supv. Petroleum Tech.)	-	Twenty-Four (24) hours prior to running casing and cementing all casing strings.
BOP & Related Equipment Tests (Notify Supv. Petroleum Tech.)	-	Twenty-Four (24) hours prior to initiating pressure tests.
First Production Notice (Notify Petroleum Engineer)	-	Within Five (5) business days after new well begins or production resumes after well has been off production for more than ninety (90) days.

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

***Surface COAs:***

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

**SITE SPECIFIC COAs:**

**Additional Stipulations:**

- Paint equipment Carlsbad Canyon.
- Contrary to paleo report – the moving of paleo effects is not authorized, per Tribal C.P.O.

**General Conditions of Approval**

- A 30' foot corridor right-of-way shall be approved. Upon completion of each pipeline in corridor, they shall be identified and filed with the Ute Tribe.
- A qualified Archaeologist accompanied by a Tribal Technician will monitor trenching construction of pipeline.
- The Ute Tribe Energy & Minerals Department is to be notified, in writing 48 hours prior to construction of pipeline.
- Construction Notice shall be given to the department on the Ute Tribe workdays, which are Monday through Thursday. The Company understands that they may be responsible for costs incurred by the Ute Tribe after hours.
- The Company shall inform contractors to maintain construction of pipelines within the approved ROW's.
- The Company shall assure the Ute Tribe that "ALL CONTRACTORS, INCLUDING SUB-CONTRACTORS, LEASING CONTRACTORS, AND ETC." have acquired a current and valid Ute Tribal Business License and have "Access Permits" prior to construction, and will have these permits in all vehicles at all times.
- You are hereby notified that working under the "umbrella" of a company does not allow you to be in the field, and can be subject to those fines of the Ute Tribe Severance Tax Ordinance.

- Any deviation of submitted APD's and ROW applications the Companies will notify the Ute Tribe and BIA in writing and will receive written authorization of any such change with appropriate authorization.
- The Company will implement "Safety and Emergency Plan." The Company's safety director will ensure its compliance.
- All Company employees and/or authorized personnel (sub-contractors) in the field will have approved applicable APD's and/or ROW permits/authorizations on their person(s) during all phases of construction.
- All vehicular traffic, personnel movement, construction/restoration operations shall be confined to the area examined and approved, and to the existing roadways and/or evaluated access routes.
- All personnel shall refrain from collecting artifacts, any paleontological fossils, and from disturbing any significant cultural resources in the area.
- The personnel from the Ute Tribe Energy & Minerals Department shall be notified should cultural remains from subsurface deposits be exposed or identified during construction. All construction will cease.
- All mitigative stipulations contained in the Bureau of Indian Affairs Site Specific Environmental Assessment (EA) will be strictly adhered.

**Upon completion of Application for Corridor Right-Way, the company will notify the Ute Tribe Energy & Minerals Department, so that a Tribal Technician can verify Affidavit of Completion.**

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

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

- A surface casing shoe integrity test shall be performed.
- Production casing cement top shall be at a minimum of 200' above the surface casing shoe.

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

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

- The spud date and time shall be reported orally to Vernal Field Office within 24 hours of spudding.
- Notify Vernal Field Office Supervisory Petroleum Engineering Technician at least 24 hours in advance of casing cementing operations and BOPE & casing pressure tests.
- Blowout prevention equipment (BOPE) shall remain in use until the well is completed or abandoned. Closing unit controls shall remain unobstructed and readily accessible at all times. Choke manifolds shall be located outside of the rig substructure.
- All BOPE components shall be inspected daily and those inspections shall be recorded in the daily drilling report. Components shall be operated and tested as required by Onshore Oil & Gas Order No. 2 to insure good mechanical working order. All BOPE pressure tests shall be performed by a test pump with a chart recorder and **NOT** by the rig pumps. Test shall be reported in the driller's log.
- BOP drills shall be initially conducted by each drilling crew within 24 hours of drilling out from under the surface casing and weekly thereafter as specified in Onshore Oil & Gas Order No. 2.
- Casing pressure tests are required before drilling out from under all casing strings set and cemented in place.
- No aggressive/fresh hard-banded drill pipe shall be used within casing.
- **Cement baskets shall not be run on surface casing.**
- The operator must report all shows of water or water-bearing sands to the BLM. If flowing water is encountered it must be sampled, analyzed, and a copy of the analyses submitted to the BLM Vernal Field Office.
- The operator must report encounters of all non oil & gas mineral resources (such as Gilsonite, tar sands, oil shale, trona, etc.) to the Vernal Field Office, in writing, within 5 working days of each

encounter. Each report shall include the well name/number, well location, date and depth (from KB or GL) of encounter, vertical footage of the encounter and, the name of the person making the report (along with a telephone number) should the BLM need to obtain additional information.

- A complete set of angular deviation and directional surveys of a directional well will be submitted to the Vernal BLM office engineer within 30 days of the completion of the well.
- Chronologic drilling progress reports shall be filed directly with the BLM, Vernal Field Office on a weekly basis in sundry, letter format or e-mail to the Petroleum Engineers until the well is completed.
- A cement bond log (CBL) will be run from the production casing shoe to the top of cement and shall be utilized to determine the bond quality for the production casing. Submit a field copy of the CBL to this office.
- **Please submit an electronic copy of all other logs run on this well in LAS format to UT\_VN\_Welllogs@BLM.gov. This submission will supersede the requirement for submittal of paper logs to the BLM.**
- There shall be no deviation from the proposed drilling, completion, and/or workover program as approved. Safe drilling and operating practices must be observed. Any changes in operation must have prior approval from the BLM Vernal Field Office.

**OPERATING REQUIREMENT REMINDERS:**

- All wells, whether drilling, producing, suspended, or abandoned, shall be identified in accordance with 43 CFR 3162.6. There shall be a sign or marker with the name of the operator, lease serial number, well number, and surveyed description of the well.
- In accordance with 43 CFR 3162.4-3, this well shall be reported on the "Monthly Report of Operations" (Oil and Gas Operations Report ((OGOR)) starting with the month in which operations commence and continue each month until the well is physically plugged and abandoned. This report shall be filed in duplicate, directly with the Minerals Management Service, P.O. Box 17110, Denver, Colorado 80217-0110, or call 1-800-525-7922 (303) 231-3650 for reporting information.
- Should the well be successfully completed for production, the BLM Vernal Field office must be notified when it is placed in a producing status. Such notification will be by written communication and must be received in this office by not later than the fifth business day following the date on which the well is placed on production. The notification shall provide, as a minimum, the following informational items:
  - Operator name, address, and telephone number.
  - Well name and number.
  - Well location (¼¼, Sec., Twn, Rng, and P.M.).
  - Date well was placed in a producing status (date of first production for which royalty will be paid).
  - The nature of the well's production, (i.e., crude oil, or crude oil and casing head gas, or natural gas and entrained liquid hydrocarbons).
  - The Federal or Indian lease prefix and number on which the well is located; otherwise the non-Federal or non-Indian land category, i.e., State or private.
  - Unit agreement and/or participating area name and number, if applicable.
  - Communitization agreement number, if applicable.
- Any venting or flaring of gas shall be done in accordance with Notice to Lessees (NTL) 4A and needs prior approval from the BLM Vernal Field Office.
- All undesirable events (fires, accidents, blowouts, spills, discharges) as specified in NTL 3A will be reported to the BLM, Vernal Field Office. Major events, as defined in NTL3A, shall be reported verbally within 24 hours, followed by a written report within 15 days. "Other than Major Events" will be reported in writing within 15 days. "Minor Events" will be reported on the Monthly Report of Operations and Production.

- Whether the well is completed as a dry hole or as a producer, "Well Completion and Recompletion Report and Log" (BLM Form 3160-4) shall be submitted not later than 30 days after completion of the well or after completion of operations being performed, in accordance with 43 CFR 3162.4-1. Two copies of all logs run, core descriptions, and all other surveys or data obtained and compiled during the drilling, workover, and/or completion operations, shall be filed on BLM Form 3160-4. Submit with the well completion report a geologic report including, at a minimum, formation tops, and a summary and conclusions. Also include deviation surveys, sample descriptions, strip logs, core data, drill stem test data, and results of production tests if performed. Samples (cuttings, fluid, and/or gas) shall be submitted only when requested by the BLM, Vernal Field Office.
- All off-lease storage, off-lease measurement, or commingling on-lease or off-lease, shall have prior written approval from the BLM Vernal Field Office.
- Oil and gas meters shall be calibrated in place prior to any deliveries. The BLM Vernal Field Office Petroleum Engineers will be provided with a date and time for the initial meter calibration and all future meter proving schedules. A copy of the meter calibration reports shall be submitted to the BLM Vernal Field Office. All measurement facilities will conform to the API standards for liquid hydrocarbons and the AGA standards for natural gas measurement. All measurement points shall be identified as the point of sale or allocation for royalty purposes.
- A schematic facilities diagram as required by Onshore Oil & Gas Order No. 3 shall be submitted to the BLM Vernal Field Office within 30 days of installation or first production, whichever occurs first. All site security regulations as specified in Onshore Oil & Gas Order No. 3 shall be adhered to. All product lines entering and leaving hydrocarbon storage tanks will be effectively sealed in accordance with Onshore Oil & Gas Order No. 3.
- Any additional construction, reconstruction, or alterations of facilities, including roads, gathering lines, batteries, etc., which will result in the disturbance of new ground, shall require the filing of a suitable plan and need prior approval of the BLM Vernal Field Office. Emergency approval may be obtained orally, but such approval does not waive the written report requirement.
- No location shall be constructed or moved, no well shall be plugged, and no drilling or workover equipment shall be removed from a well to be placed in a suspended status without prior approval of the BLM Vernal Field Office. If operations are to be suspended for more than 30 days, prior approval of the BLM Vernal Field Office shall be obtained and notification given before resumption of operations.
- Pursuant to Onshore Oil & Gas Order No. 7, this is authorization for pit disposal of water produced from this well for a period of 90 days from the date of initial production. A permanent disposal method must be approved by this office and in operation prior to the end of this 90-day period. In order to meet this deadline, an application for the proposed permanent disposal method shall be submitted along with any necessary water analyses, as soon as possible, but no later than 45 days after the date of first production. Any method of disposal which has not been approved prior to the end of the authorized 90-day period will be considered as an Incident of Noncompliance and will be grounds for issuing a shut-in order until an acceptable manner for disposing of said water is provided and approved by this office.

- Unless the plugging is to take place immediately upon receipt of oral approval, the Field Office Petroleum Engineers must be notified at least 24 hours in advance of the plugging of the well, in order that a representative may witness plugging operations. If a well is suspended or abandoned, all pits must be fenced immediately until they are backfilled. The "Subsequent Report of Abandonment" (Form BLM 3160-5) must be submitted within 30 days after the actual plugging of the well bore, showing location of plugs, amount of cement in each, and amount of casing left in hole, and the current status of the surface restoration.

# DIVISION OF OIL, GAS AND MINING

## SPUDDING INFORMATION

Name of Company: KERR-McGEE OIL & GAS ONSHORE, L.P.

Well Name: NBU 922-18L2BS

Api No: 43-047-39840 Lease Type: FEDERAL

Section 18 Township 09S Range 22E County UINTAH

Drilling Contractor PETE MARTIN DRLG RIG # RATHOLE

### SPUDDED:

Date 11/03/08

Time 11:00 AM

How DRY

**Drilling will Commence:** \_\_\_\_\_

Reported by LEW WELDON

Telephone # (435) 828-7035

Date 11/04/08 Signed CHD

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

FORM 6

ENTITY ACTION FORM

Operator: KERR MCGEE OIL & GAS ONSHORE LP Operator Account Number: N 2995  
Address: 1368 SOUTH 1200 EAST  
city VERNAL  
state UT zip 84078 Phone Number: (435) 781-7024

Well 1

22E

API Number	Well Name		QQ	Sec	Twp	Rng	County
4304739821	NBU 922-18F4CS		NESW	18	9S	22E	UINTAH
Action Code	Current Entity Number	New Entity Number	Spud Date			Entity Assignment Effective Date	
B	99999	2900	11/4/2008			11/10/08	
Comments: MIRU PETE MARTIN BUCKET RIG. <u>WSMVD</u> SPUD WELL LOCATION ON 11/4/2008 AT 0800 HRS. <u>BHL = SENW</u>							

Well 2

API Number	Well Name		QQ	Sec	Twp	Rng	County
4304739840	NBU 922-18L2BS		NESW	18	9S	22E	UINTAH
Action Code	Current Entity Number	New Entity Number	Spud Date			Entity Assignment Effective Date	
B	99999	2900	11/3/2008			11/10/08	
Comments: MIRU PETE MARTIN BUCKET RIG. <u>WSMVD</u> SPUD WELL LOCATION ON 11/3/2008 AT 1100 HRS. <u>BHL = NWSW</u>							

Well 3

API Number	Well Name		QQ	Sec	Twp	Rng	County
4304739822	NBU 922-18K2DS		NESW	18	9S	22E	UINTAH
Action Code	Current Entity Number	New Entity Number	Spud Date			Entity Assignment Effective Date	
B	99999	2900	11/4/2008			11/10/08	
Comments: MIRU PETE MARTIN BUCKET RIG. <u>WSMVD</u> SPUD WELL LOCATION ON 11/4/2008 AT 0800 HRS. <u>BHL = NESW</u>							

ACTION CODES:

- A - Establish new entity for new well (single well only)
- B - Add new well to existing entity (group or unit well)
- C - Re-assign well from one existing entity to another existing entity
- D - Re-assign well from one existing entity to a new entity
- E - Other (Explain in 'comments' section)

SHEILA UPCHEGO

Name (Please Print)

Signature

REGULATORY ANALYST

Title

11/5/2008

Date

RECEIVED

NOV 05 2008

DIV. OF OIL, GAS & MINING



UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

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

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

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

1. Type of Well <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other		5. Lease Serial No. <b>UTU-0359</b>
2. Name of Operator <b>Kerr-McGee Oil &amp; Gas Onshore, LP</b>		6. If Indian, Allottee, or Tribe Name <b>Ute Tribe</b>
3a. Address <b>P.O. Box 173779, Denver, CO 80217-3779</b>	3b. Phone No. (include area code) <b>720.929.6226</b>	7. If Unit or CA. Agreement Name and/or No. <b>UTU-63047A</b>
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) <b>NE SW Sec. 18 T 9S R 22E 2540 FSL 1231 FWL</b>		8. Well Name and No. <b>NBU 922-18L2BS</b>
		9. API Well No. <b>43-047-39840</b>
		10. Field and Pool, or Exploratory Area <b>Natural Buttes</b>
		11. County or Parish, State <b>Utah</b>

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

TYPE OF SUBMISSION	TYPE OF ACTION			
<input type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production ( Start/ Resume)	<input type="checkbox"/> Water Shut-off
<input checked="" type="checkbox"/> Subsequent Report	<input type="checkbox"/> Altering Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other <u>Surface Location</u>
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and abandon	<input type="checkbox"/> Temporarily Abandon	
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug back	<input type="checkbox"/> Water Disposal	

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

Kerr-McGee Oil & Gas Onshore, LP, respectfully notifies that the center stakes for the surface location have been moved to NESW 2540' FSL & 1231' FWL. The location has not been changed.

Approved by the  
Utah Division of  
Oil, Gas and Mining

COPY SENT TO OPERATOR 629216X 40.035714  
Date: 12.4.2008 4432610Y -109.485499  
Initials: KS

Date: 12-04-08  
By: [Signature]

**Federal Approval of this  
Action is Necessary**

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

Name (Printed/ Typed) <b>Kevin McIntyre</b>	Title <b>Regulatory Analyst</b>
Signature <u>[Signature]</u>	Date <b>11/12/08</b>

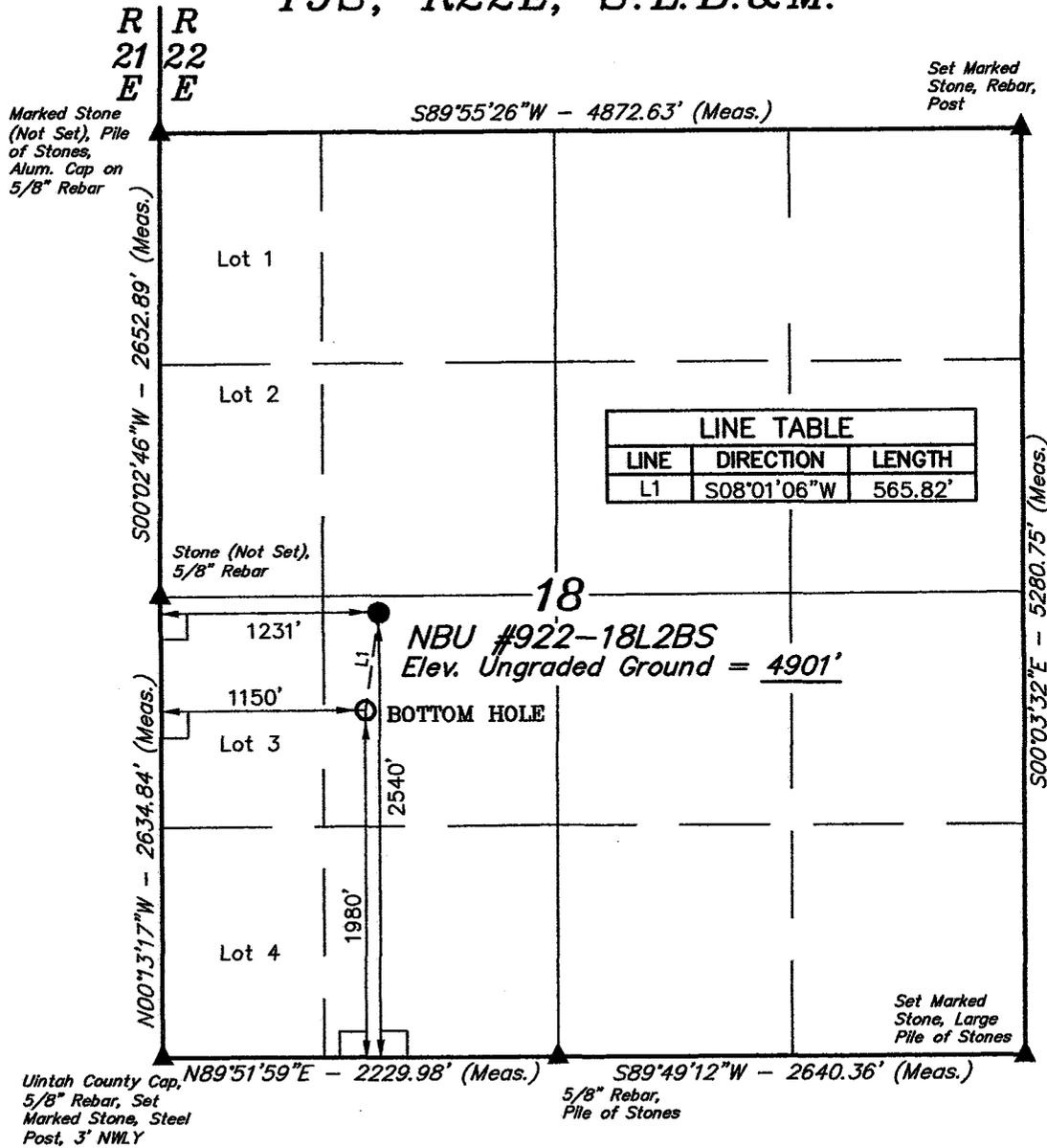
**THIS SPACE FOR FEDERAL OR STATE OFFICE USE**

Approved by Conditions of approval, if any are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.	Title  	Date  
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 any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.	Office  	

**RECEIVED**  
**NOV 17 2008**

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

# T9S, R22E, S.L.B.&M.



## Kerr-McGee Oil & Gas Onshore LP

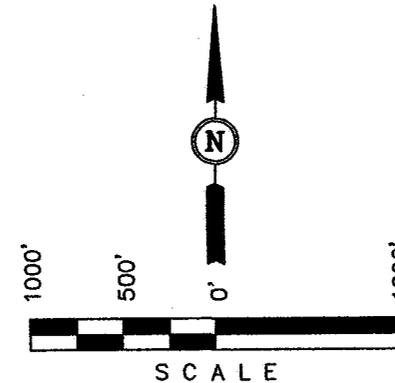
Well location, NBU #922-18L2BS, located as shown in the NE 1/4 SW 1/4 of Section 18, T9S, R22E, S.L.B.&M., Uintah County, Utah.

### BASIS OF ELEVATION

BENCH MARK (20EAM) LOCATED IN THE SE 1/4 OF SECTION 35, T8S, R21E, S.L.B.&M. TAKEN FROM THE OURAY SE 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 4697 FEET.

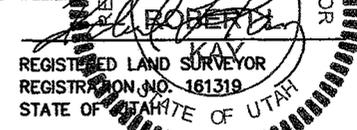
### BASIS OF BEARINGS

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



### CERTIFICATE

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



REVISED: 11-06-08  
REVISED: 10-29-08

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

### LEGEND:

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

NAD 83 (TARGET BOTTOM HOLE)	NAD 83 (SURFACE LOCATION)
LATITUDE = 40°02'03.02" (40.034172)	LATITUDE = 40°02'08.56" (40.035711)
LONGITUDE = 109°29'11.82" (109.486617)	LONGITUDE = 109°29'10.80" (109.486333)
NAD 27 (TARGET BOTTOM HOLE)	NAD 27 (SURFACE LOCATION)
LATITUDE = 40°02'03.15" (40.034208)	LATITUDE = 40°02'08.69" (40.035747)
LONGITUDE = 109°29'09.35" (109.485931)	LONGITUDE = 109°29'08.33" (109.485647)

SCALE 1" = 1000'	DATE SURVEYED: 05-07-07	DATE DRAWN: 05-21-07
PARTY D.K. L.K. C.H.	REFERENCES G.L.O. PLAT	
WEATHER WARM	FILE Kerr-McGee Oil & Gas Onshore LP	



Kerr-McGee Oil & Gas Onshore LP  
1999 Broadway, Suite 3700  
Denver, CO 80205

November 24, 2008

Mrs. Diana Mason  
Division of Oil, Gas and Mining  
P.O. Box 145801  
Salt Lake City, UT 84114-6100

Re: Directional Drilling R649-3-11  
NBU 922-18L2BS  
T9S-R22E  
Section 18: Lot 3 (NWSW)  
Surface: 2540' FSL, 1231' FWL  
Bottom Hole: 2344' FSL, 223' FWL  
Uintah County, Utah

Dear Mrs. Mason:

Pursuant to the filing of Kerr-McGee Oil & Gas Onshore LP's (Kerr-McGee) Application for Permit to Drill regarding the above referenced well, we are hereby submitting this letter in accordance with Oil & Gas Conservation Rule R649-3-11 pertaining to the Exception to Location and Siting of Wells.

- Kerr-McGee's NBU 922-18L2BS is located within the Natural Buttes Unit area.
- Kerr-McGee is permitting this well as a directional well in order to minimize surface disturbance. Locating the well at the surface location and directionally drilling from this location, Kerr-McGee will be able to utilize the existing road and pipelines in the area.
- Furthermore, Kerr-McGee certifies that it is the sole working interest owner within 460 feet of the entire directional well bore.

Therefore, based on the above stated information Kerr-McGee Oil & Gas Onshore LP requests the permit be granted pursuant to R649-3-11.

Sincerely,

KERR-MCGEE OIL & GAS ONSHORE LP



Jason K. Rayburn  
Landman

**RECEIVED**

**NOV 26 2008**

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

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

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

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

5. Lease Serial No.  
UTU-0359

6. If Indian, Allottee or Tribe Name

TRIBAL SURFACE

**SUBMIT IN TRIPLICATE – Other instructions on page 2.**

1. Type of Well

Oil Well     Gas Well     Other

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

8. Well Name and No.  
NBU 922-18L2BS

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

9. API Well No.  
4304739840

3a. Address  
1368 SOUTH 1200 EAST VERNAL, UTAH 84078

3b. Phone No. (include area code)  
435.781.7024

10. Field and Pool or Exploratory Area  
NATURAL BUTTES

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)  
SURFACE HOLE: NE/SW SEC. 18, T9S, R22E 2513'FSL, 1273'FWL  
BOTTOM HOLE: NW/SW SEC. 18, T9S, R22E 2344'FSL, 223'FWL (LOT 3)

11. Country or Parish, State  
UINTAH COUNTY, UTAH

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

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

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

MIRU H&P 298 RIG ON 12/16/2008. DRILLED 12 1/4" SURFACE HOLE TO 2855'. RAN 9 5/8" 40# J-55 SURFACE CSG. LEAD CMT W/300 SX LEAD PREM LITE II @11.0 PPG 3.38 YIELD. 20.52 GALLONS WATER. TAILED CMT W/200 SX PREM CLASS G @15.8 PPG 1.17 YEILD. 5 GALLONS OF WATER. DISPLACE W/211.5 BBLs FRESH WATER. BUMPED PLUG 540/1019 PSI. FLOATS HELD. LOST CIRCULATION 203 BBLs INTO DISPLACEMENT. RU RUN 120' OF 1" PIPE (COULD NOT GET DEEPER) PMP 100 SX PREM CLASS G @15.8 PPG 1.15 YIELD W/2% CALCIUM CHLORIDE PULL 1" NO VISUAL SIGN OF CMT. WOC. RUN 120' OF 1" PIPE AND PMP 100 SX PREM CLASS G @15.8 PPG 1.15 YIELD. PULL 1" PIPE WOC TO SET AND MORE CMT. RUN 120' OF 1" PIPE PMP 50 SX PREM CLASS G @15.8 PPG 1.15 YIELD. CMT TO SURFACE. DRILLING AHEAD.

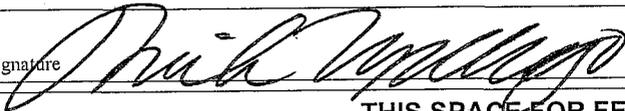
14. I hereby certify that the foregoing is true and correct.

Name (Printed/Typed)

SHEILA UPCHEGO

Title REGULATORY ANALYST

Signature



Date 12/23/2008

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

Approved by

Title

Date

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

Office

**RECEIVED**

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.

**DEC 31 2008**

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

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

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

5. Lease Serial No.  
UTU-0359

6. If Indian, Allottee or Tribe Name  
TRIBAL SURFACE

*SUBMIT IN TRIPLICATE - Other instructions on page 2.*

1. Type of Well

Oil Well     Gas Well     Other

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

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

8. Well Name and No.  
NBU 922-18L2BS

3a. Address  
1368 SOUTH 1200 EAST VERNAL, UTAH 84078

3b. Phone No. (include area code)  
435.781.7024

9. API Well No.  
4304739840

10. Field and Pool or Exploratory Area  
NATURAL BUTTES

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)  
SURFACE HOLE: NE/SW SEC. 18, T9S, R22E 2513'FSL, 1273'FWL  
BOTTOM HOLE: NW/SW SEC. 18, T9S, R22E 2344'FSL, 223'FWL (LOT 3)

11. Country or Parish, State  
UINTAH COUNTY, UTAH

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

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

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

FINISHED DRILLING FROM 2855' TO 10,071' ON 01/12/2009. RAN 4 1/2" 11.6# I-80 PRODUCTION CSG. LEAD CMT W/435 SX PREM LITE II @11.0 PPG 3.38 YIELD. TAILED CMT W/1290 SX 50/50 POZ @14.3 PPG 1.31 YIELD. WASH PUMP AND LINES DROP TOP PLUG DISPLACE W/155.7 BBLS FRESH WATER + CLAYREAT + MAGNACIDE BUMP PLUG W/3880# 500 OVER FLOATS OK. LOST RETURNS ON DISPLACEMENT CHANGE OUT CSG BAILS TO DP BAILS SET PACK OFF AND TEST TO 5000. NIPPLE DOWN BOP EQUIP CLEAN MUD PITS.

RELEASED H&P 298 RIG ON 01/14/2009 AT 0000 HRS.

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

Name (Printed/Typed)

SHEILA UPCHEGO

Title REGULATORY ANALYST

Signature



Date 01/16/2009

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

Approved by

Title

Date

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

Office

**RECEIVED**

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.

JAN 20 2009

(Instructions on page 2)

DIV. OF OIL, GAS & MINING

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

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

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

5. Lease Serial No.  
UTU-0359

6. If Indian, Allottee or Tribe Name  
TRIBAL SURFACE

**SUBMIT IN TRIPLICATE** – Other instructions on page 2.

1. Type of Well  
 Oil Well     Gas Well     Other

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

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

8. Well Name and No.  
NBU 922-18L2BS

3a. Address  
1368 SOUTH 1200 EAST VERNAL, UTAH 84078

3b. Phone No. (include area code)  
435.781.7024

9. API Well No.  
4304739840

10. Field and Pool or Exploratory Area  
NATURAL BUTTES

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)  
SURFACE HOLE: NE/SW SEC. 18, T9S, R22E 2513'FSL, 1273'FWL  
BOTTOM HOLE: NW/SW SEC. 18, T9S, R22E 2344'FSL, 223'FWL (LOT 3)

11. Country or Parish, State  
UINTAH COUNTY, UTAH

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

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

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

FINISHED DRILLING FROM 2855' TO 10,071' ON 01/12/2009. RAN 4 1/2" 11.6# I-80 PRODUCTION CSG. LEAD CMT W/435 SX PREM LITE II @11.0 PPG 3.38 YIELD. TAILED CMT W/1290 SX 50/50 POZ @14.3 PPG 1.31 YIELD. WASH PUMP AND LINES DROP TOP PLUG DISPLACE W/155.7 BBLS FRESH WATER + CLAYREAT + MAGNACIDE BUMP PLUG W/3880# 500 OVER FLOATS OK. LOST RETURNS ON DISPLACEMENT CHANGE OUT CSG BAILS TO DP BAILS SET PACK OFF AND TEST TO 5000. NIPPLE DOWN BOP EQUIP CLEAN MUD PITS.

RELEASED H&P 298 RIG ON 01/14/2009 AT 0000 HRS.

14. I hereby certify that the foregoing is true and correct.  
Name (Printed/Typed)  
SHEILA UPCHEGO

Title REGULATORY ANALYST

Signature 

Date 01/16/2009

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

Approved by \_\_\_\_\_ Title \_\_\_\_\_ Date \_\_\_\_\_

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

Office \_\_\_\_\_

**RECEIVED**  
JAN 20 2009

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

<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	<b>FORM 9</b>  <b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> UTU-0359
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.	<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b> UTE  <b>7. UNIT or CA AGREEMENT NAME:</b> NATURAL BUTTES
<b>1. TYPE OF WELL</b> Gas Well	<b>8. WELL NAME and NUMBER:</b> NBU 922-18L2BS
<b>2. NAME OF OPERATOR:</b> KERR-MCGEE OIL & GAS ONSHORE, L.P.	<b>9. API NUMBER:</b> 43047398400000
<b>3. ADDRESS OF OPERATOR:</b> P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779	<b>PHONE NUMBER:</b> 720 929-6007 Ext
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 2540 FSL 1231 FWL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: NESW Section: 18 Township: 09.0S Range: 22.0E Meridian: S	<b>9. FIELD and POOL or WILDCAT:</b> NATURAL BUTTES  <b>COUNTY:</b> UINTAH  <b>STATE:</b> UTAH

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

TYPE OF SUBMISSION	TYPE OF ACTION		
<input type="checkbox"/> <b>NOTICE OF INTENT</b> Approximate date work will start:	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> CASING REPAIR
<input type="checkbox"/> <b>SUBSEQUENT REPORT</b> Date of Work Completion:	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> CHANGE WELL NAME
<input type="checkbox"/> <b>SPUD REPORT</b> Date of Spud:	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> CONVERT WELL TYPE
<input checked="" type="checkbox"/> <b>DRILLING REPORT</b> Report Date: 11/6/2009	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> NEW CONSTRUCTION
	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> PLUG BACK
	<input checked="" type="checkbox"/> <b>PRODUCTION START OR RESUME</b>	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION
	<input type="checkbox"/> REPERFORATE CURRENT FORMATION	<input type="checkbox"/> SIDETRACK TO REPAIR WELL	<input type="checkbox"/> TEMPORARY ABANDON
	<input type="checkbox"/> TUBING REPAIR	<input type="checkbox"/> VENT OR FLARE	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> WATER SHUTOFF	<input type="checkbox"/> SI TA STATUS EXTENSION	<input type="checkbox"/> APD EXTENSION
	<input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> OTHER	OTHER: _____

**12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.**  
 THE SUBJECT WELL WAS PLACED ON PRODUCTION ON 11/06/2009 AT 2:00 P.M. PLEASE REFER TO THE ATTACHED CHRONOLOGICAL WELL HISTORY.

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

<b>NAME (PLEASE PRINT)</b> Andy Lytle	<b>PHONE NUMBER</b> 720 929-6100	<b>TITLE</b> Regulatory Analyst
<b>SIGNATURE</b> N/A		<b>DATE</b> 11/9/2009

**US ROCKIES REGION  
Operation Summary Report**

Well: NBU 922-18L2BS (YELLOW WELL) Spud Date: 12/18/2008  
 Project: UTAH-UINTAH Site: NBU 922-18L PAD Rig Name No: H&P 298/298, H&P 298/298  
 Event: DRILLING Start Date: 12/15/2008 End Date: 1/14/2009  
 Active Datum: RKB @4,925.00ft (above Mean Sea Level) UWI: NE/SW/0/9/S/22/E/18/0/0/6/PM/S/2,540.99/W/0/1,231.00/0/0

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
12/16/2008	0:00 - 7:30	7.50	MIRU	01	C	P		WAIT ON DAYLIGHTS. PREPARE RIG TO SKID.
	7:30 - 9:00	1.50	MIRU	01	C	P		SKID RIG
	9:00 - 0:00	15.00	MIRU	01	B	X		REFAB ALL OF THE SKID PACKAGE TO MAKE EVERYTHING FIT. FLOW LINE, MUD LINES AND DRILLING NIPPLE.
12/17/2008	0:00 - 6:00	6.00	MIRU	01	B	X		REFAB ALL OF THE SKID PACKAGE TO MAKE EVERYTHING FIT. FLOW LINE, MUD LINES AND DRILLING NIPPLE.
	6:00 - 7:30	1.50	MIRU	01	B	X		Review JSA. Dock top drive, cut drilling line and undock top drive. Check C.O.M., calibrate top drive while welder modified mud line
	7:30 - 12:00	4.50	MIRU	01	B	X		Strap BHA, make up bit, mud motor, double pine and MWD carrier. Filled v-door with remainder of BHA while welder modified mud line
	12:00 - 17:00	5.00	MIRU	01	B	X		Finish with modification of mud line, x-ray mud line, installed mud line. Per spud safety inspection
	17:00 - 19:30	2.50	MIRU	06	A	P		Install MWD and finish picking up directional tools
	19:30 - 20:00	0.50	MIRU	01	B	P		Pressure test mud pumps to 3500 psi, #2 tested good, #1 would not test.
	20:00 - 0:00	4.00	MIRU	01	G	S		Change out valves and seats and liner gasket on #1 pump due to high LCM on last well
12/18/2008	0:00 - 1:00	1.00	DRLSUR	01	G	S		Change out valves, seats and liner gasket on #1 pump due to high LCM on last well
	1:00 - 1:30	0.50	DRLSUR	01	B	P		Pressure test #1 pump to 3500 psi, tested good
	1:30 - 3:30	2.00	DRLSUR	02	D	P		Drill cement 97' - 111'. Drill 111' - 196', WOB 7-10k, GPM 404, Pump #1, SPM 90, RPM 50, Motor RPM 65, PSI On/Off Bottom 428/300, Torque On/Off Bottom 5/1, Footage 85', FPH 42.5 SPUD WELL WITH 12 1/4" BIT AT 01:30 ON 12/18/08
	3:30 - 4:00	0.50	DRLSUR	07	A	S		Blow down mud lines
	4:00 - 4:30	0.50	DRLSUR	07	A	X		Rig service, change dies on grabber
	4:30 - 5:00	0.50	DRLSUR	10	D	P		Survey 138' Inc .63 Azm 246.21
	5:00 - 5:30	0.50	DRLSUR	02	D	P		Drill slide 196' - 214', WOB 9k, GPM 503, Pump #1, SPM 112, RPM 0, Motor RPM 81, SPP On/Off Bottom 580/460, Torque On/Off Bottom 0/0, Footage 18, FPH 36
	5:30 - 7:30	2.00	DRLSUR	02	D	P		Drill rotate 214' - 315', WOB 10k, GPM 503, Pump #1, SPM 112, RPM 50, Motor RPM 80, SPP On/Off Bottom 580/460, Torque On/Off Bottom 3/1, Footage 101, FPH 50.5, Mud Wt 9, Viscosity 28
	7:30 - 8:00	0.50	DRLSUR	07	A	S		Tighten mud line on floor and test to 3500 psi
	8:00 - 0:00	16.00	DRLSUR	02	D	P		Drill 315' - 1645', WOB 10-25k, GPM 719, Pump #1 SPM 80, Pump #2 SPM 80, RPM 50, Motor RPM 115, SPP On/Off Bottom 2130/1800, Torque On/Off Bottom 7/2, Footage 1330, FPH 83.1
							Sliding parameters depths: (315' - 335'), (377' - 397'), (471' - 491'), (501' - 517'), (563' - 586'), (745' - 766'), (928' - 961'), (1021' - 1040'), (1298' - 1332'), (1581' - 1620'), 1773' - 1795', WOB 20k, GPM 719, Pump #1SPM 80, Pump #2 SPM 80, RPM 0, Motor RPM 115, SPP On/Off Bottom 2050/1790,	

**RECEIVED** November 09, 2009

**US ROCKIES REGION  
Operation Summary Report**

Well: NBU 922-18L2BS (YELLOW WELL)

Spud Date: 12/18/2008

Project: UTAH-UINTAH

Site: NBU 922-18L PAD

Rig Name No: H&P 298/298, H&P 298/298

Event: DRILLING

Start Date: 12/15/2008

End Date: 1/14/2009

Active Datum: RKB @4,925.00ft (above Mean Sea Level)

UWI: NE/SW/0/9/S/22/E/18/0/0/6/PM/S/2,540.99/W/0/1,231.00/0/0

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
12/19/2008	0:00 - 2:00	2.00	DRLSUR	02	D	P		Drill 1645' - 1795', WOB 10-25k, GPM 720, Pump #1 SPM 80, Pump #2 SPM 80, RPM 50, Motor RPM 115, SPP On/Off Bottom 2130/1800, Torque On/Off Bottom 7/2, Mud Wt 9.2, Viscosity 33, Footage 150, FPH 75
	2:00 - 6:00	4.00	DRLSUR	22	G	X		Slide Parameters: Depth (1298'-1332'), (1581'-1620'), (1773'-1795'), WOB 20, GPM 720, Pump #1 SPM 80, Pump #2 SPM 80, Motor RPM 115, SPP On/Off Bottom 2050/1790' Lost returns at 1795'. Lost 200 Bbls mud, Mix LCM pills and pump, gain partial returns, continue to circulate while mixing LCM and building volume
	6:00 - 18:30	12.50	DRLSUR	02	D	P		Drill 1795' - 2626', WOB 25k, GPM 540 - 720, Pump #1 SPM 80 - 110, Pump #2 SPM 0 - 80, RPM 50, Motor RPM 86 - 115, SPP On/Off Bottom 2130/1800, Torque On/Off Bottom 7/2, Mud Wt 9.2, Viscosity 33, Footage 150, FPH 75
	18:30 - 21:00	2.50	DRLSUR	22	G	X		Slide Parameters: Depth (1795'-1801'), (1963'-1984'), (2061'-2085'), (2153'-2178'), (2345'-2375'), (2535'-2555'), WOB 22, GPM 540 - 720, Pump #1 SPM 80 - 110, Pump #2 SPM 0 - 80, Motor RPM 86 - 115, SPP On/Off Bottom 2050/1790' Lost 80 Bbls mud from 1985' - 2035' Made connection, kicked pump on, pressured up and blowed pop-off, repaired pop-off and could not get pumps to pump. Fill settled in bottom of hole, could not get down low enough to break stand with ST-80, finally managed to manual break stand and set in mouse hole.
	21:00 - 22:30	1.50	DRLSUR	06	J	X		TOOH 10 stands above loss zone at 1795', tight 130' off bottom. Blow out mud line and kelly hose
	22:30 - 0:00	1.50	DRLSUR	08	B	X		Work on #2 pumps, pump was full of shale and LCM. Change out broken valve on trip tank, valve on conductor and fill trip tank. Working pipe slow while trouble shooting problems.
12/20/2008	0:00 - 1:30	1.50	DRLSUR	06	H	X		TOOH with plugged drill string
	1:30 - 4:00	2.50	DRLSUR	06	H	X		Lay down Monel DC, attempt to pull MWD tool with winch, not successful. Lay down MWD tool with carrier sub and emitter sub
	4:00 - 5:00	1.00	DRLSUR	06	H	X		Attempt to drain mud motor, not successful. Break bit and lay down mud motor
	5:00 - 0:00	19.00	DRLSUR	24		X		Clean shale and LCM out of both pumps, pulsation dampers, suction lines all full of shale and LCM. Dump and clean sand trap and 1st settling tank. Transfer mud to sand trap and 1st settling tank. Clean settling tanks 3 and 4 Transfer mud from active system to slugging tank, trip tanks and settling tanks 3 and 4. Dump and clean active system. Transferred mud from slugging tank and trip tanks back to active system. Clean slugging tank and trip tanks. Sand and settling tanks shale levels was 75% to 100% full, active system was 30% full of shale and LCM, mostly shale

**RECEIVED** November 09, 2009

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

Well: NBU 922-18L2BS (YELLOW WELL) Spud Date: 12/18/2008  
 Project: UTAH-UINTAH Site: NBU 922-18L PAD Rig Name No: H&P 298/298, H&P 298/298  
 Event: DRILLING Start Date: 12/15/2008 End Date: 1/14/2009  
 Active Datum: RKB @4,925.00ft (above Mean Sea Level) UWI: NE/SW/0/9/S/22/E/18/0/0/6/PM/S/2,540.99/W/0/1,231.00/0/0

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
12/21/2008	0:00 - 5:00	5.00	DRLSUR	24		X		Clean shale and LCM out of both pumps, pulsation dampers, suction lines all full of shale and LCM. Dump and clean sand trap and 1st settling tank. Transfer mud to sand trap and 1st settling tank. Clean settling tanks 3 and 4 Transfer mud from active system to slugging tank, trip tanks and settling tanks 3 and 4. Dump and clean active system. Transferred mud from slugging tank and trip tanks back to active system. Clean slugging tank and trip tanks. Sand and settling tanks shale levels was 75% to 100% full, active system was 30% full of shale and LCM, mostly shale
	5:00 - 5:30	0.50	DRLSUR	05		X		Start building volume from reserve pit while thawing out up right. Circulated both pumps at 100 spm to make sure mud line was cleaned out
	5:30 - 6:00	0.50	DRLSUR	07	A	X		Blow down mud line and winterize
	6:00 - 9:30	3.50	DRLSUR	06	A	P		Pickup mud motor and directional tools while building volume
	9:30 - 11:00	1.50	DRLSUR	05		X		Continue to build volume
	11:00 - 14:30	3.50	DRLSUR	06	A	P		Install MWD and TIH. Wash (1826'-1922'), (2551'-2626')
	14:30 - 18:30	4.00	DRLSUR	02	D	P		Drill 2626' - 2855', WOB 25, GPM 630, Pump #1 SPM 70, Pump #2 SPM 70, RPM 50, Motor RPM 100, SPP On/Off Bottom 2050/1780, Torque On/Off Bottom 9/3, Mud Wt 9.1, Viscosity 36
	18:30 - 20:00	1.50	DRLSUR	05	A	P		Pump 50 bbls high viscosity sweep and condition hole. Mix and pump slug and filled trip tanks.
	20:00 - 22:00	2.00	DRLSUR	06	D	P		TOOH 5 stands blow down mud lines and continue to TOOH
	22:00 - 23:00	1.00	DRLSUR	06	D	P		Pull MWD tool. Drain mud motor and break bit
	23:00 - 0:00	1.00	DRLSUR	12	A	P		HSM w/ Weatherford casing's crew & rig crew. Rig up casing equipment
12/22/2008	0:00 - 1:00	1.00	DRLSUR	12	A	P		HSM with crews and rig up same
	1:00 - 6:30	5.50	DRLSUR	12	C	P		HSM with crew and run 65 joints 9 5/8" 40 #/ft J55 LT&C casing. Landed at 2831.67. Float Collar at 2786.51'
	6:30 - 8:30	2.00	DRLSUR	12	A	P		HSM w/ Weatherford and rig down casing crew and lay down machine, while circulating down casing
	8:30 - 9:30	1.00	DRLSUR	12	E	P		HSM w/ BJ and rig up while circulating
	9:30 - 13:30	4.00	DRLSUR	12	E	P		Rig up cementing head, pressure test lines to 2000 psi. Cement casing in place w/ 20 bbls mud flush followed by 300 sks, 180 bbls, Lead Premium Lite II, weight 11 ppg, yeild 3.38, water 20.52 gallons/sack. Tailed in w/ 200 sks class "G" cement, weight 15.8 ppg, yeild 1.17, water 5 gallons/ sack. Displaced w/ 211.5 bbls freah water. Bumped plug 540/1019 psi. Floats held. Lost circulation 203 bbls in to displacement. Rig up and run 120' of 1" pipe (could not get deeper) and pump 100 sks class "G" cement w/ 2% Calcium Chloride, weight 15.8 ppg. Pull 1" pipe no visual sign of cement
	13:30 - 16:00	2.50	DRLSUR	13	A	S		Wait on cement
	16:00 - 16:30	0.50	DRLSUR	12	E	S		Run 120' 1" pipe and pump 100 sks class "G" cement w/ 2% Calcium Chloride, weight 15.8 ppg. Pull 1" pipe
	16:30 - 22:00	5.50	DRLSUR	13	A	S		Wait on cement to set and more cement
	22:00 - 23:00	1.00	DRLSUR	12	E	S		Run 120' of 1" and pump 50 sack class "G" cement w/ 2% Calcium Chloride
	23:00 - 0:00	1.00	DRLSUR	13	A	S		Wait on cement
12/23/2008	0:00 - 2:00	2.00	DRLSUR	13	A	S		Wait on cement

**RECEIVED** November 09, 2009

**US ROCKIES REGION  
Operation Summary Report**

Well: NBU 922-18L2BS (YELLOW WELL) Spud Date: 12/18/2008  
 Project: UTAH-UINTAH Site: NBU 922-18L PAD Rig Name No: H&P 298/298, H&P 298/298  
 Event: DRILLING Start Date: 12/15/2008 End Date: 1/14/2009  
 Active Datum: RKB @4,925.00ft (above Mean Sea Level) UWI: NE/SW/0/9/S/22/E/18/0/0/6/PM/S/2,540.99/W/0/1,231.00/0/0

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
1/3/2009	2:00 - 3:30	1.50	DRLSUR	12	E	S		Run 1" pipe and perform cement top job w/ 85 sacks, 17 bbls, class "G" cement, weighth 15.8, yeild 1.15, water ratio 5 gallon/sack
	3:30 - 4:00	0.50	DRLSUR	12	E	P		Drain conductor and wash out
	4:00 - 5:00	1.00	DRLSUR	12	E	P		Rig down BJ Services
	5:00 - 6:00	1.00	DRLSUR	13	A	P		Wait on cement
	6:00 - 9:00	3.00	DRLSUR	14	A	P		Drain and cut off casing. Laid down casing, remove conductor from sub
	9:00 - 9:00	0.00	DRLSUR					RIG RELEASED AT 09:00 ON 12/23/08
	0:00 - 4:30	4.50	MIRU	01	C	P		FINISH CLEANING MUD PITS, PREP RIG FOR SKID. ALSO WORKING ON THAWING OUT RIG RIG FLOOR, SUB AND MATTING BOARDS.
	4:30 - 6:00	1.50	MIRU	01	C	P		SKID RIG FROM NBU 922-18K1BS TO THE NBU 922-18K2BS
	6:00 - 13:00	7.00	MIRU	01	B	P		SUCK OUT CELLAR, COVER OTHER WELL WITH 1" PLATE.BOLT FLOWLINE TO FLOWLINE MANIFOLD. GET CELLAR READY FOR WELL HEAD.
	13:00 - 14:30	1.50	MIRU	24	A	P		WELL ON WELL HEAD.
14:30 - 15:30	1.00	MIRU	01	B	P		CENTER RIG OVER WELL. INSTALL STAIRS TO RIG FLOOR.3 SIDES.	
15:30 - 22:00	6.50	MIRU	14	A	P		HELD SAFETY MEETING WITH RIG CREW AND START NIPPLE UP BOPE.	
22:00 - 0:00	2.00	MIRU	15	A	P		HELD SAFETY MTG WITH SINGLE JACK TESTING. RIG UP TO TEST BOPE,	
1/4/2009	0:00 - 5:30	5.50	DRLPRO	15	A	P		TEST BOPE, TESTED ALL RAM, VALVES FLOOR VALVES CHOKE MANIFOLD TO 250 PSI LOW FOR 5 MINS, 5000 PSI FOR HIGH FOR 10 MINS. TESTED ANNULAR TO 2500 PSI AND CASING TO 1500 PSI FOR 30 MINS.
	5:30 - 6:00	0.50	DRLPRO	14	B	P		INSTALL WEAR BUSHING.
	6:00 - 8:00	2.00	DRLPRO	09	A	P		SLIP AND CUT DRILLING LINE, CALIBRATE TOPDRIVE TO FLOOR AND CROWN STOPS. LEVEL DERRICK.
	8:00 - 9:00	1.00	DRLPRO	07	B	P		NIPPLE UP ROTATING HEAD, FLOWLINE WORK WITH WELDER ON WELDING FLANGE ON FLOWLINE TO CHANGE PITCH ON FLOWLINE.
	9:00 - 15:00	6.00	DRLPRO	14	A	P		INSTALL LADDERS IN SUB. HOOK UP TURN BUCKLES ON STACK AND INSTALL DRIP PAN. L/D 3 JTS OF 6 1/2 DC's OUT OF DERRICK AND STRAP BHA ON RACK.
	15:00 - 16:00	1.00	DRLPRO	06	A	P		PICK UP DIRECTIONAL TOOLS.
	16:00 - 18:30	2.50	DRLPRO	06	A	P		TRIP IN HOLE. PICK UP JARS. INSTALL ROTATING RUBBER. TAGGED CMT @2776'
	18:30 - 22:00	3.50	DRLPRO	06	A	P		DRILL CMT @2776, FLOAT@2786 DRILL CMT IN CASING TO 2800'
1/5/2009	0:00 - 0:30	0.50	DRLPRO	02	F	P		DRILL CMT 2800-2831, DRILL SHOE AT 2831' CLEAN OUT HOLE TO 2855'
	0:30 - 16:30	16.00	DRLPRO	02	D	P		DRILL F/ 2855-4076', WOB 10-25k, GPM 450, PUMP #1 SPM 50, PUMP #2 SPM 50, RPM 60, MOTOR RPM 72, SPP ON/OFF BOTTOM 1872/1553, TORQUE ON/OFF 9/3, UP/DOWN/ROTATE, 125/107/114, MUD WT 9.2, VIS 33, FTG 1221', FPH 76.3
	16:30 - 18:00	1.50	DRLPRO	10	D	P		SURVEYS, SLIDES AND CONN

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**US ROCKIES REGION  
Operation Summary Report**

Well: NBU 922-18L2BS (YELLOW WELL)			Spud Date: 12/18/2008		
Project: UTAH-UINTAH		Site: NBU 922-18L PAD		Rig Name No: H&P 298/298, H&P 298/298	
Event: DRILLING		Start Date: 12/15/2008		End Date: 1/14/2009	
Active Datum: RKB @4,925.00ft (above Mean Sea Level)			UWI: NE/SW/0/9/S/22/E/18/0/0/6/PM/S/2,540.99/W/0/1,231.00/0/0		

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
	18:00 - 0:00	6.00	DRLPRO	02	D	P		DRILL F/4076-4518, WOB 10-25k, GPM 450, PUMP #1 SPM 50, PUMP #2 SPM 50, RPM 60, MOTOR RPM 72, SPP ON/OFF BOTTOM 1880/1610, TORQUE ON/OFF 9/3, UP/DOWN/ROTATE, 128/102/117, MUD WT 9.2, VIS 33, FTG 442', FPH 73.6
1/6/2009	0:00 - 8:30	8.50	DRLPRO	02	D	P		DRILL F/4518-5175, WOB 10-25k, GPM 450, PUMP #1 SPM 50, PUMP #2 SPM 50, RPM 60, MOTOR RPM 72, SPP ON/OFF BOTTOM 1880/1610, TORQUE ON/OFF 9/3, UP/DOWN/ROTATE, 160/130/145, MUD WT 9.2, VIS 33, FTG 657', FPH 77.2
	8:30 - 9:30	1.00	DRLPRO	22		Z		TROUBLE SHOOT MWD PROBLEM, WORK ON SENSOR ON STANDPIPE.
	9:30 - 17:00	7.50	DRLPRO	02	D	P		DRILL F/5175-5650, WOB 10-25k, GPM 450, PUMP #1 SPM 50, PUMP #2 SPM 50, RPM 60, MOTOR RPM 72, SPP ON/OFF BOTTOM 1880/1610, TORQUE ON/OFF 9/3, UP/DOWN/ROTATE, 165/140/155, MUD WT 9.4, VIS 36, FTG 475', FPH 63.3
	17:00 - 17:30	0.50	DRLPRO	07	A	P		RIG SERVICE
	17:30 - 0:00	6.50	DRLPRO	02	D	P		DRILL F/5650-6054, WOB 10-25k, GPM 450, PUMP #1 SPM 50, PUMP #2 SPM 50, RPM 50-60, MOTOR RPM 72, SPP ON/OFF BOTTOM 2150/1800, TORQUE ON/OFF 10/5, UP/DOWN/ROTATE, 175/130/154, MUD WT 9.4, VIS 36, FTG 404', FPH 62.1
1/7/2009	0:00 - 17:00	17.00	DRLPRO	02	D	P		DRILL F/6054-6783, WOB 10-25k, GPM 450, PUMP #1 SPM 50, PUMP #2 SPM 50, RPM 50-60, MOTOR RPM 72, SPP ON/OFF BOTTOM 2150/1800, TORQUE ON/OFF 10/5, UP/DOWN/ROTATE, 180/136/158, MUD WT 9.4, VIS 36, FTG 729', FPH 42.8
	17:00 - 17:30	0.50	DRLPRO	08	B	P		CHANGE OUT ROTATING RUBBER.
	17:30 - 18:00	0.50	DRLPRO	07	A	P		RIG SERVICE
	18:00 - 0:00	6.00	DRLPRO	02	D	P		DRILL F/6783-7050, WOB 10-25k, GPM 450, PUMP #1 SPM 50, PUMP #2 SPM 50, RPM 45-60, MOTOR RPM 72, SPP ON/OFF BOTTOM 2150/1840, TORQUE ON/OFF 10/5, UP/DOWN/ROTATE, 190/145/165, MUD WT 9.4, VIS 39, FTG 267', FPH 44.5
1/8/2009	0:00 - 5:30	5.50	DRLPRO	02	D	P		DRILL F/7050-7221, WOB 10-25k, GPM 450, PUMP #1 SPM 50, PUMP #2 SPM 50, RPM 45-60, MOTOR RPM 72, SPP ON/OFF BOTTOM 2150/1840, TORQUE ON/OFF 10/5, UP/DOWN/ROTATE, 190/145/165, MUD WT 9.4, VIS 39, FTG 171', FPH 31.0
	5:30 - 7:00	1.50	DRLPRO	05	C	P		CIRC AND COND HOLE FOR BIT TRIP.
	7:00 - 7:30	0.50	DRLPRO	06	A	P		TRIP OUT 5 STDS.
	7:30 - 8:00	0.50	DRLPRO	07	C	P		BLOW DOWN MUD LINES, PUMPS, CLEAN SHAKERS FOR TRIP. PULL ROTATING RUBBER.
	8:00 - 12:00	4.00	DRLPRO	06	A	P		TRIP OUT OF HOLE, TIGHT SPOT @ 5040-5060 WORKED THRU OK. L/D JARS, MUD MOTOR AND BIT.
	12:00 - 17:30	5.50	DRLPRO	06	A	P		PICK UP BIT AND MOTOR #3, CHECK DIRECTIONAL TOOLS AND TRIP IN HOLE FILL PIPE 2 TIMES ON THE WAY IN, HIT AND WASHED THRU TIGHT SPOT @ 5060' FINISH TRIP IN.

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**US ROCKIES REGION  
Operation Summary Report**

Well: NBU 922-18L2BS (YELLOW WELL) Spud Date: 12/18/2008  
 Project: UTAH-UINTAH Site: NBU 922-18L PAD Rig Name No: H&P 298/298, H&P 298/298  
 Event: DRILLING Start Date: 12/15/2008 End Date: 1/14/2009  
 Active Datum: RKB @4,925.00ft (above Mean Sea Level) UWI: NE/SW/0/9/S/22/E/18/0/0/6/PM/S/2,540.99/W/0/1,231.00/0/0

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
	17:30 - 0:00	6.50	DRLPRO	02	D	P		DRILL F/7221-7428, WOB 10-25k, GPM 450, PUMP #1 SPM 100, RPM 45-55, MOTOR RPM 72, SPP ON/OFF BOTTOM 2200/1900, TORQUE ON/OFF 11/7, UP/DOWN/ROTATE, 200/150/170, MUD WT 9.9, VIS 39, FTG 207', FPH 31.8
1/9/2009	0:00 - 9:30	9.50	DRLPRO	02	D	P		DRILL F/7428-7860, WOB 10-25k, GPM 404, PUMP #1 SPM 80, RPM 30, MOTOR RPM 65, SPP ON/OFF BOTTOM 1600/1450, TORQUE ON/OFF 12/5, UP/DOWN/ROTATE, 210/155/176, MUD WT 9.9, VIS 39, FTG 432', FPH 45.4
	9:30 - 10:00	0.50	DRLPRO	07	A	P		RIG SERVICE
	10:00 - 17:00	7.00	DRLPRO	02	D	P		DRILL F/7860-8198, WOB 10-25k, GPM 450, PUMP #1 SPM 100, RPM 30, MOTOR RPM 72, SPP ON/OFF BOTTOM 2350/2050, TORQUE ON/OFF 12/5, UP/DOWN/ROTATE, 220/155/172, MUD WT 9.9, VIS 44, FTG 338', FPH 48.2
	17:00 - 18:00	1.00	DRLPRO	10	D	P		SURVEYS, SLIDES AND CONN.
	18:00 - 0:00	6.00	DRLPRO	02	D	P		DRILL F/8198-8545, WOB 10-25k, GPM 450, PUMP #1 SPM 100, RPM 30, MOTOR RPM 72, SPP ON/OFF BOTTOM 2350/2050, TORQUE ON/OFF 13/8, UP/DOWN/ROTATE, 220/150/172, MUD WT 10.2, VIS 44, FTG 347, FPH 57.8
1/10/2009	0:00 - 12:00	12.00	DRLPRO	02	D	P		DRILL F/8545-9085, WOB 10-25k, GPM 450, PUMP #1 SPM 100, RPM 30, MOTOR RPM 72, SPP ON/OFF BOTTOM 2350/2050, TORQUE ON/OFF 13/8, UP/DOWN/ROTATE, 220/150/172, MUD WT 10.4, VIS 47, FTG 540, FPH 45.0
	12:00 - 13:30	1.50	DRLPRO	05	C	P		TORQUE AND HOLE DRAG IS GOING UP CIRC AND COND HOLE FOR TRIP. PUMP SLUG.
	13:30 - 14:00	0.50	DRLPRO	06	A	P		TRIP OUT 10 STDS.
	14:00 - 14:30	0.50	DRLPRO	06	A	P		BLOW DOWN MUD LINES AND CHECK FOR FLOW.
	14:30 - 17:00	2.50	DRLPRO	06	A	P		TRIP OUT TO BHA. NO TIGHT SPOTS.
	17:00 - 22:00	5.00	DRLPRO	06	A	P		TRIPPING OUT AND INSPECT BHA AND DIRECTIONAL TOOLS. PICK UP BIT #4
	22:00 - 23:30	1.50	DRLPRO	06	A	P		TEST DIRECTIONAL TOOLS, TRIP IN HOLE TO SHOE.
	23:30 - 0:00	0.50	DRLPRO	07	A	P		FILL PIPE, BLOW DOWN MUD LINES AND RIG SERVICE. CHANGE OIL IN TOP DRIVE.
1/11/2009	0:00 - 3:00	3.00	DRLPRO	06	A	P		TRIP IN HOLE TO 9085' NO TIGHT SPOTS.
	3:00 - 0:00	21.00	DRLPRO	02	D	P		DRILL F/9085-9657, WOB 18k, GPM 450, PUMP #1 SPM 100, RPM 30, MOTOR RPM 72, SPP ON/OFF BOTTOM 2550/2300, TORQUE ON/OFF 15/8, UP/DOWN/ROTATE, 240/160/202, MUD WT 10.7, VIS 43, FTG 572, FPH 27.2
1/12/2009	0:00 - 11:30	11.50	DRLPRO	02	D	P		DRILL F/9657-9993, WOB 18k, GPM 427, PUMP #1 SPM 95, RPM 35, MOTOR RPM 68, SPP ON/OFF BOTTOM 2550/2300, TORQUE ON/OFF 14/11, UP/DOWN/ROTATE, 260/165/206, MUD WT 11.4, VIS 44, FTG 336, FPH 29.2
	11:30 - 12:00	0.50	DRLPRO	07	A	P		RIG SERVICE
	12:00 - 16:30	4.50	DRLPRO	02	D	P		DRILL F/9993-10071, WOB 18k, GPM 427, PUMP #1 SPM 95, RPM 35, MOTOR RPM 68, SPP ON/OFF BOTTOM 2550/2300, TORQUE ON/OFF 14/11, UP/DOWN/ROTATE, 260/165/206, MUD WT 11.4, VIS 44, FTG 78, FPH 17.3
	16:30 - 18:00	1.50	DRLPRO	05	C	P		STARTING TO LOSE MUD AT 9950' PUMP LCM SWEEP. LOST 200 BBLs. CIRC. AND COND. MUD AND HOLE.

**RECEIVED** November 09, 2009

**US ROCKIES REGION  
Operation Summary Report**

Well: NBU 922-18L2BS (YELLOW WELL) Spud Date: 12/18/2008  
 Project: UTAH-UINTAH Site: NBU 922-18L PAD Rig Name No: H&P 298/298, H&P 298/298  
 Event: DRILLING Start Date: 12/15/2008 End Date: 1/14/2009  
 Active Datum: RKB @4,925.00ft (above Mean Sea Level) UWI: NE/SW/0/9/S/22/E/18/0/0/6/PM/S/2,540.99/W/0/1,231.00/0/0

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
1/13/2009	18:00 - 20:30	2.50	DRLPRO	06	E	P		SHORT TRIP 25 STDS. NO TIGHT SPOTS.
	20:30 - 22:30	2.00	DRLPRO	05	C	P		CIRC AND COND MUD AND HOLE.
	22:30 - 0:00	1.50	DRLPRO	06	B	P		TRIP OUT TO LOG.
	0:00 - 4:30	4.50	DRLPRO	06	B	P		TRIP OUT OF HOLE, NO TIGHT SPOTS.
	4:30 - 10:30	6.00	EVALPR	11	G	P		SAFETY MEETING, RIG UP RUN IN HOLE WITH TRIPLE COMBO LOGS. LOGGERS DEPTH 10,053' HIT BRIDGE AT 6030, 6500' WORKED THRU AND LOG FROM 10,053'
	10:30 - 11:30	1.00	DRLPRO	06	A	P		PICK UP BIT AND BIT SUB.
	11:30 - 12:00	0.50	DRLPRO	07	A	P		RIG SERVICE
	12:00 - 13:00	1.00	DRLPRO	06	A	P		TRIP IN TO SHOE.
	13:00 - 14:00	1.00	DRLPRO	09	A	P		SLIP AND CUT DRILLING LINE.
	14:00 - 18:00	4.00	DRLPRO	06	A	P		TRIP IN HOLE, WASHED 71' TO BTM. 16' OF FILL. NO TIGHT SPOTS ON TRIP.
1/14/2009	18:00 - 21:00	3.00	DRLPRO	22	G	P		CIRC AND COND HOLE. BUILD VOL. LOSING CIRC. MIXING 15% LCM. BTMS UP GAS 15' FLARE. 5900 UNITS
	21:00 - 0:00	3.00	CSG	06	D	P		TRIP OUT TO RUN CASING.
	0:00 - 1:00	1.00	CSG	06	D	P		TRIP OUT TO RUN CASING.
	1:00 - 1:30	0.50	CSG	14	B	P		PULL WEAR BUSHING.
	1:30 - 11:00	9.50	CSG	12	C	P		HELD SAFETY MTG. WITH RIG&CSG CREWS RIG UP AND RUN 237 JTS OF 41/2,11.6#,I-80 LTC CSG ,LAND CSG SET @10,036'
	11:00 - 12:30	1.50	CSG	05	D	P		RIG UP & CIRC CSG
	12:30 - 16:00	3.50	CSG	12	E	P		SM W/ BJ & RIG CREWS,TEST LINES,PUMP 20 BBLS MUD CLEAN,20 SKS(30 BBLS)SCAVENGER @9.5#,435 SKS(261.9 BBLS)LEAD@11.4#,1290 SKS(301BBLS TAIL@14.3#,WASH PUMP & LINES,DROP TOP PLUG DISP W/ 155.7 BBLS FW+CLAYTREAT+MAGNACIDE,BUMP PLUG W/3880#,500 OVER,FLOATS OK,LOST RETURNS ON DISPLACEMENT,RD CEMENTERS
	16:00 - 18:00	2.00	CSG	12	D	P		CHANGE OUT CSG BAILS TO DP BAILS,SET PACKOFF & TEST TO 5000
18:00 - 0:00	6.00	CSG	14	A	P		ND BOP EQUIP,CLEAN MUD PITS RELEASE RIG @ 00:00 01/14/2009 TO NBU 922 18K	

**RECEIVED** November 09, 2009

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

Well: NBU 922-18L2BS (YELLOW WELL)		Spud Date: 12/18/2008	
Project: UTAH-UINTAH		Site: NBU 922-18L PAD	Rig Name No: MILES 2/2
Event: COMPLETION		Start Date: 11/3/2009	End Date: 11/4/2009
Active Datum: RKB @4,925.00ft (above Mean Sea Level)		UWI: NE/SW/0/9/S/22/E/18/0/0/6/PM/S/2,540.99/W/0/1,231.00/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
10/22/2009	15:30 - 20:30	5.00	COMP	31	I	P		MOVE OVER FROM 922-18K2BS. RUSU. ND WH. NU BOP. RU FLOOR AND TBG EQUIP. MU 3-7/8" BIT AND BIT SUB. RIH AS MEAS AND PU 2-3/8" J-55 TBG.
10/23/2009	7:00 - 7:30	0.50	COMP	48		P		JSA- D/O FC. LD TBG. SYM OPS-- P-TEST AND PERF.
	7:30 - 20:00	12.50	COMP	44	A	P		CONT PU 2-3/8" L-80 TBG AS RIH W/ 3-7/8" BIT. TAG AT 10,005' W/ 315-JTS IN. RU PWR SWIVEL.  (CSG HEAD AND FRAC VALVE BLEW OFF OF 18K2 AS P-TESTING. TAKE CARE OF INCIDENT)  CONT RU PWR SWIVEL. EST REV CIRC. D/O 10' CMT TO FC AT 10,014'. D/O 10' MORE CMT TO 10,024'. CIRC CLEAN. RD PWR SWIVEL. POOH AS LD 5-JTS TBG. P-TEST CSG TO 2500 PSI. GOOD. CONT POOH AS LD TBG AND BIT. RD FLOOR. ND BOP. NU FRAC VALVES. FILL CSG. SHUT IN. RDSU. RACK OUT PUMP AND EQUIP. MOVE EQUIP OFF LOCATION. SDFN X-OUT FMC TBG HEAD. (( DUE T/ TBG HEAD FAILLER ON THE 18K2 WELL.))
10/24/2009	7:00 - 10:00	3.00	COMP	47	C	P		HSM. SIME OPS.
10/26/2009	7:00 - 7:30	0.50	COMP	48		P		PSI TEST CSG & BOTH FRAC VALVES T/ 7000#.
	7:30 - 17:00	9.50	COMP	37	B	P		GOOD TEST. BLEED OFF PSI. B&C QUICK TEST MOVE OVER T/ GREEN WELL. MIRU CUTTERS WL & SCHLUMBERGER FRAC SERV. STG 1) PU 3 3/8 EXP GUN, 23 GM, .36 HOLE SIZE. 90 & 120 DEG PHASING. RIH PERF F/ 9986'-90', 4 SPF, 16 HOLES. 9900'-04', 3 SPF, 12 HOLES. 9792'-94', 3 SPF, 6 HOLES. 9752'-55', 3 SPF, 9 HOLES. POOH. SWI. WINTERIZE WELL HEAD.

**RECEIVED** November 09, 2009

**US ROCKIES REGION  
Operation Summary Report**

Well: NBU 922-18L2BS (YELLOW WELL) Spud Date: 12/18/2008  
 Project: UTAH-UINTAH Site: NBU 922-18L PAD Rig Name No: MILES 2/2  
 Event: COMPLETION Start Date: 11/3/2009 End Date: 11/4/2009  
 Active Datum: RKB @4,925.00ft (above Mean Sea Level) UWI: NE/SW/0/9/S/22/E/18/0/0/6/PM/S/2,540.99/W/0/1,231.00/0/0

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
10/27/2009	7:00 - 23:59	16.98	COMP	36	B	P		<p>BSTG 1) OPEN WELL            BEG PUMP, BRK @ 4006# @ 6.4 BPM. SD ISIP 3122#, FG .75. BEG FRAC, BULL HEAD 250 GAL 15% ACID IN PAD. EST INJT RT @ 51.4 BPM @ 5100# = 100% PERFS OPEN. PUMP 78,214# 30/50 WHITE &amp; TAIL IN W/ 5,000# 20/40 TLC. SWI. X-OVER T/ BLUE WELL.</p> <p>STG 2) PU 4 1/2 8K HAL CBP &amp; 3 3/8 EXP GUN, 23 GM, .36 HOLE SIZE. 90, 120 &amp; 180 DEG PHASING. RIH SET CBP @ 9694' P/U PERF F/ 9660'-64', 4 SPF, 16 HOLES. 9464'-70', 2 SPF, 12 HOLES. 9440'-44', 3 SPF, 12 HOLES. POOH. READ T/ FRAC. OPEN WELL 2620#. BEG PUMPING, BRK @ 2989# @ 6.4 BPM. SD ISIP 2543# FG .70. BEG FRAC, EST INJT RT @ 51.5 BPM @ 5000# = 100% PERFS OPEN. PUMP 38,272# 30/50 WHITE &amp; TAIL IN W/ 5,000# 20/40 TLC. SD ISIP 2989# FG .74. SWI. X-OVER T/ BLUE WELL.</p> <p>STG 3)PU 4 1/2 8K HAL CBP &amp; 3 3/8 EXP GUN, 23 GM, .36 HOLE SIZE. 90 &amp; 120 DEG PHASING. RIH SET CBP 9086' P/U PERF F/ 9330'-34', 4 SPF, 16 HOLES. 9280'-82', 3 SPF, 6 HOLES. 9241'-43', 3 SPF, 6 HOLES. 9132'-34', 3 SPF, 6 HOLES. 9100'-02', 3 SPF, 6 HOLES. POOH. OPEN WELL 1,956 PSI, BRK 3,041 PSI @ 6.3 BPM, ISIP 2,310 PSI, FG .68 PUMP 100 BBLS @ 51.5 BPM @ 5,400 PSI = 77% HOLES OPEN. MP 5,875 PSI, MR 51.8 BPM, AP 4,849 PSI, AR 50.5 BPM, ISIP 2,979 PSI, FG .76, NPI 669 PSI. PUMP 2,854 BBLS OF SW &amp; 111,979 LBS OF 30/50 SND &amp; 5,000 LBS OF 20/40 RESIN SND. TOTAL PROP 116,979 LBS.,.</p> <p>STGT 4) PU 4 1/2 HAL CBP &amp; 3 3/8" EXP GNS, 23 GRM, .36 HOLES. 90 &amp; 120 DEG PHASING. RIH SET CBP @ 9,086' &amp; PERF 9,054' - 56' 4SPF, 8,938' - 42' 3SPF, 8,904' - 06' 3SPF, 8,886' - 88' 3SPF, 8,808' - 10 3SPF, 38 HOLES. WHP 2,346 PSI, BRK 2,647 PSI @ 4.2 BPM, ISIP 2,418 PSI, FG .71 PUMP 100 BBLS @ 51.5 BPM @ 4,700 PSI = 100% HOLES OPEN. MP 5,563 PSI, MR 51.7 BPM, AP 4,503 PSI, AR 49.3 BPM, ISIP 2,690 PSI, FG .73, NPI 272 PSI. PUMP 1,263 BBLS OF SW &amp; 45,059 LBS OF 30/50 SND &amp; 5,000 LBS OF 20/40 RESIN SND. TOTAL PROP 50,059 LBS.,.</p> <p>STGT 5) PU 4 1/2 HAL CBP &amp; 3 3/8" EXP GNS, 23 GRM, .36 HOLES. 120 DEG PHASING. RIH SET CBP @ 8,756' &amp; PERF 8,722' - 26' 3SPF, 8,648' - 52' 3SPF, 8,597' - 8,600' 3SPF, 8,574' - 76' 3SPF, 39 HOLES.</p>

**RECEIVED** November 09, 2009

**US ROCKIES REGION  
Operation Summary Report**

Well: NBU 922-18L2BS (YELLOW WELL)

Spud Date: 12/18/2008

Project: UTAH-UINTAH

Site: NBU 922-18L PAD

Rig Name No: MILES 2/2

Event: COMPLETION

Start Date: 11/3/2009

End Date: 11/4/2009

Active Datum: RKB @4,925.00ft (above Mean Sea Level)

UWI: NE/SW/0/9/S/22/E/18/0/0/6/PM/S/2,540.99/W/0/1,231.00/0/0

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
								<p>WHP 925 PSI, BRK 3,077 PSI @ 6.3 BPM, ISIP 2,113 PSI, FG .67            PUMP 100 BBLS @ 51.4 BPM @ 4,700 PSI = 98% HOLES OPEN.            MP 5,492 PSI, MR 51.8 BPM, AP 4,331 PSI, AR 48.3 BPM, ISIP 2,664 PSI, FG .74, NPI 551 PSI.            PUMP 1,172 BBLS OF SW &amp; 41,156 LBS OF 30/50 SND &amp; 5,000 LBS OF 20/40 RESIN SND. TOTAL PROP 46,156 LBS,.</p> <p>STGT 6) PU 4 1/2 HAL CBP &amp; 3 3/8" EXP GNS, 23 GRM, .36 HOLES. 120 DEG PHASING. RIH SET CBP @ 8,480' &amp; PERF 8,445' - 50' 3SPF, 8,418' - 20' 3SPF, 8,252' - 56' 3SPF, 8,234' - 36' 3SPF, 39 HOLES .            WHP 1,575 PSI, BRK 2,909 PSI @ 6.3 BPM, ISIP 2,256 PSI, FG .70            PUMP 100 BBLS @ 51.5 BPM @ 4,700 PSI = 93% HOLES OPEN.            MP 5,442 PSI, MR 51.7 BPM, AP 4,458 PSI, AR 48.3 BPM, ISIP 2,659 PSI, FG .75, NPI 403 PSI.            PUMP 992 BBLS OF SW &amp; 33,495 LBS OF 30/50 SND &amp; 5,000 LBS OF 20/40 RESIN SND. TOTAL PROP 38,495 LBS,.</p> <p>STGT 7) PU 4 1/2 HAL CBP &amp; 3 3/8" EXP GNS, 23 GRM, .36 HOLES. 90 DEG PHASING. RIH SET CBP @ 7,958' &amp; PERF 7,922' - 28' 4SPF, 7,822' - 26' 4SPF, 40 HOLES .            SWI SDFN.</p>
10/28/2009	6:30 - 7:00	0.50	COMP	48		P		HSM. FRACING & PERFORATING
	7:00 - 7:00	0.00	COMP	36	B	P		<p>STG 7 ) WHP 1156 PSI, BRK 2622 PSI @ 6.4 BPM. ISIP 1931 PSI, FG .68.            PUMP 100 BBLS @ 51.4 BPM @ 4300 PSI = 99% HOLES OPEN.            MP 4782 PSI, MR 51.7 BPM, AP 4038 PSI, AR 47.4 BPM, ISIP 2432 PSI, FG .74, NPI 501 PSI.            PMP 987 BBLS SW &amp; 33,686 LBS OF 30/50 SND &amp; 5,000 LBS OF 20/40 RESIN SND. TOTAL PROP 38,686 LBS,            SWI, X-OVER T/ BLUE WELL.</p>
11/3/2009	13:00 - 17:00	4.00	COMP	44		P		<p>PU 4 1/2 8K HAL CBP . RIH SET KILL PLUG @ 7772'. POOH SWI.            MIRU, ND FRAC VALVE, NU BOP'S, TEST TO 3000#, PU TBG RIH 29 JTS, SWIFN</p>
11/4/2009	7:00 - 7:30	0.50	COMP	48		P		PICK UP TBG

**RECEIVED** November 09, 2009

**US ROCKIES REGION  
Operation Summary Report**

Well: NBU 922-18L2BS (YELLOW WELL) Spud Date: 12/18/2008  
 Project: UTAH-UINTAH Site: NBU 922-18L PAD Rig Name No: MILES 2/2  
 Event: COMPLETION Start Date: 11/3/2009 End Date: 11/4/2009  
 Active Datum: RKB @4,925.00ft (above Mean Sea Level) UWI: NE/SW/0/9/S/22/E/18/0/0/6/PM/S/2,540.99/W/0/1,231.00/0/0

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
	7:30 - 7:30	0.00	COMP	44		P		RIH TBG TO 7772' MILL PLUGS. PLUG #1 7772' 0 SAND 5 MIN 300# KICK PLUG #2 7985' 15' SAND 5 MIN 400# KICK PLUG #3 8480' 30' SAND 15 MIN 300# KICK PLUG #4 8756' 30' SAND 5 MIN 300# KICK PLUG #5 9086' 30' SAND 5 MIN 200# KICK PLUG #6 9364' 20' SAND 5 MIN 500# KICK PLUG #7 9694' 20' SAND 5 MIN 400# KICK CLEAN OUT TO 10006' 40' FILL 315 JTS,CIRC BTMS UP, LAY DWN 35 JTS TO 9410' LAND TBG, 296 JTS 2 3/8' 4.73 L-80 TBG 9410'.XN SN 1.875" ND BOP'S, NU WH, PUMP OFF BIT SUB. TURN WELL TO FLOW BACK CREW @ 6:00 PM RDMO TO GREEN PAD WELL.
11/5/2009	7:00 -			33	A			7 AM FLBK REPORT: CP 2400#, TP 1750#, 20/64" CK, 48 BWPH, LIGHT SAND, LIGHT GAS TTL BBLs RECOVERED: 2635 BBLs LEFT TO RECOVER: 8493
11/6/2009	7:00 -			33	A			7 AM FLBK REPORT: CP 3100#, TP 1775#, 20/64" CK, 38 BWPH, LIGHTSAND MEDIUM GAS TTL BBLs RECOVERED: 3656 BBLs LEFT TO RECOVER: 7472
	13:00 -		PRSPD	50				WELL TURNED TO SALE @ 1300 HR ON 11/6/09 - FTP 1750#, CP 3250#, 3.1 MCFD, 38 BWPD, 20/64 CK
11/7/2009	7:00 -			33	A			7 AM FLBK REPORT: CP 2925#, TP 1700#, 20/64" CK, 30 BWPH, LIGHT SAND, - GAS TTL BBLs RECOVERED: 4450 BBLs LEFT TO RECOVER: 6678
11/8/2009	7:00 -			33	A			7 AM FLBK REPORT: CP 2650#, TP 1550#, 20/64" CK, 25 BWPH, LIGHT SAND, - GAS TTL BBLs RECOVERED: 5107 BBLs LEFT TO RECOVER: 6021
11/9/2009	7:00 -			33	A			7 AM FLBK REPORT: CP 2425#, TP 1400#, 20/64" CK, 18 BWPH, LIGHT SAND, - GAS TTL BBLs RECOVERED: 5604 BBLs LEFT TO RECOVER: 5524

**RECEIVED** November 09, 2009

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

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

**WELL COMPLETION OR RECOMPLETION REPORT AND LOG**

5. Lease Serial No.  
UTU0359

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

6. If Indian, Allottee or Tribe Name

7. Unit or CA Agreement Name and No.  
891008900A

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

8. Lease Name and Well No.  
NBU 922-18L2BS

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

9. API Well No.  
43-047-39840

4. Location of Well (Report location clearly and in accordance with Federal requirements)\*  
 At surface NESW 2540FSL 1231FWL 40.03575 N Lat, 109.48633 W Lon  
 At top prod interval reported below NESW 1977FSL 1148FWL  
 At total depth NESW 1966FSL 1162FWL **NESW 5-18 T095 R22E**

10. Field and Pool, or Exploratory  
NATURAL BUTTES

11. Sec., T., R., M., or Block and Survey  
or Area Sec 18 T9S R22E Mer

12. County or Parish  
UINTAH  
13. State  
UT

14. Date Spudded  
11/03/2008  
15. Date T.D. Reached  
01/12/2009  
16. Date Completed  
 D & A  Ready to Prod.  
11/06/2009  
17. Elevations (DF, KB, RT, GL)\*  
4899 GL

18. Total Depth: MD 10071 TVD 10034  
19. Plug Back T.D.: MD 10015 TVD **9978**  
20. Depth Bridge Plug Set: MD TVD

21. Type Electric & Other Mechanical Logs Run (Submit copy of each)  
GR BHV-HRI-SDL-DSN  
22. Was well cored?  No  Yes (Submit analysis)  
Was DST run?  No  Yes (Submit analysis)  
Directional Survey?  No  Yes (Submit analysis)

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

Hole Size	Size/Grade	Wt. (#/ft.)	Top (MD)	Bottom (MD)	Stage Cementer Depth	No. of Sks. & Type of Cement	Slurry Vol. (BBL)	Cement Top*	Amount Pulled
20.000	14.000 STEEL	36.7		40		28			
12.250	9.625 J-55	40.0		2837		750			
7.875	4.500 I-80	11.6		10058		1725			

24. Tubing Record

Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)
2.375	9410							

25. Producing Intervals **W.S.M.V.D.**

Formation	Top	Bottom	Perforated Interval	Size	No. Holes	Perf. Status
A) MESAVERDE	7822	9990	7822 TO 9990	0.360	279	OPEN
B)						
C)						
D)						

26. Perforation Record

Formation	Top	Bottom	Perforated Interval	Size	No. Holes	Perf. Status
A) MESAVERDE	7822	9990	7822 TO 9990	0.360	279	OPEN

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

Depth Interval	Amount and Type of Material
7822 TO 9990	PMP 10,627 BBLs SLICK H2O & 416,861 LBS 30/50 SD.

28. Production - Interval A

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
11/06/2009	11/09/2009	24	→		1689.0	412.0			FLOWS FROM WELL
Choke Size	Tbg. Press. Flwg.	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status	
20/64	SI 1325	2300.0	→		1689	412		PGW	

28a. Production - Interval B

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

(See Instructions and spaces for additional data on reverse side)  
 ELECTRONIC SUBMISSION #78268 VERIFIED BY THE BLM WELL INFORMATION SYSTEM  
**\*\* OPERATOR-SUBMITTED \*\* OPERATOR-SUBMITTED \*\* OPERATOR-SUBMITTED \*\***

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**DEC 07 2009**

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

28b. Production - Interval C

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

28c. Production - Interval D

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

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

30. Summary of Porous Zones (Include Aquifers):

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

31. Formation (Log) Markers

Formation	Top	Bottom	Descriptions, Contents, etc.	Name	Top
					Meas. Depth
GREEN RIVER	1789				
MAHOGANY	2553				
WASATCH	5106	7803			
MESAVERDE	7918	10007			

32. Additional remarks (include plugging procedure):

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

33. Circle enclosed attachments:

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

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

**Electronic Submission #78268 Verified by the BLM Well Information System.  
For KERR-MCGEE OIL&GAS ONSHORE, LP, sent to the Vernal**

Name (please print) ANDY LYTLE Title REGULATORY ANALYST

Signature  (Electronic Submission) Date 12/02/2009

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

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

Well: NBU 922-18L2BS (YELLOW WELL)		Spud Date: 12/18/2008	
Project: UTAH-UINTAH		Site: NBU 922-18L PAD	Rig Name No: H&P 298/298, H&P 298/298
Event: DRILLING		Start Date: 12/15/2008	End Date: 1/14/2009
Active Datum: RKB @4,925.00ft (above Mean Sea Level)		UWI: NE/SW/0/9/S/22/E/18/0/0/6/PM/S/2,540.99/W/0/1,231.00/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
12/16/2008	0:00 - 7:30	7.50	MIRU	01	C	P		WAIT ON DAYLIGHTS. PREPARE RIG TO SKID.
	7:30 - 9:00	1.50	MIRU	01	C	P		SKID RIG
	9:00 - 0:00	15.00	MIRU	01	B	X		REFAB ALL OF THE SKID PACKAGE TO MAKE EVERYTHING FIT. FLOW LINE, MUD LINES AND DRILLING NIPPLE.
12/17/2008	0:00 - 6:00	6.00	MIRU	01	B	X		REFAB ALL OF THE SKID PACKAGE TO MAKE EVERYTHING FIT. FLOW LINE, MUD LINES AND DRILLING NIPPLE.
	6:00 - 7:30	1.50	MIRU	01	B	X		Review JSA. Dock top drive, cut drilling line and undock top drive. Check C.O.M., calibrate top drive while welder modified mud line
	7:30 - 12:00	4.50	MIRU	01	B	X		Strap BHA, make up bit, mud motor, double pine and MWD carrier. Filled v-door with remainder of BHA while welder modified mud line
	12:00 - 17:00	5.00	MIRU	01	B	X		Finish with modification of mud line, x-ray mud line, installed mud line. Per spud safety inspection
	17:00 - 19:30	2.50	MIRU	06	A	P		Install MWD and finish picking up directional tools
	19:30 - 20:00	0.50	MIRU	01	B	P		Pressure test mud pumps to 3500 psi, #2 tested good, #1 would not test.
	20:00 - 0:00	4.00	MIRU	01	G	S		Change out valves and seats and liner gasket on #1 pump due to high LCM on last well
12/18/2008	0:00 - 1:00	1.00	DRLSUR	01	G	S		Change out valves, seats and liner gasket on #1 pump due to high LCM on last well
	1:00 - 1:30	0.50	DRLSUR	01	B	P		Pressure test #1 pump to 3500 psi, tested good
	1:30 - 3:30	2.00	DRLSUR	02	D	P		Drill cement 97' - 111'. Drill 111' - 196', WOB 7-10k, GPM 404, Pump #1, SPM 90, RPM 50, Motor RPM 65, PSI On/Off Bottom 428/300, Torque On/Off Bottom 5/1, Footage 85', FPH 42.5 SPUD WELL WITH 12 1/4" BIT AT 01:30 ON 12/18/08
	3:30 - 4:00	0.50	DRLSUR	07	A	S		Blow down mud lines
	4:00 - 4:30	0.50	DRLSUR	07	A	X		Rig service, change dies on grabber
	4:30 - 5:00	0.50	DRLSUR	10	D	P		Survey 138' Inc .63 Azm 246.21
	5:00 - 5:30	0.50	DRLSUR	02	D	P		Drill slide 196' - 214', WOB 9k, GPM 503, Pump #1, SPM 112, RPM 0, Motor RPM 81, SPP On/Off Bottom 580/460, Torque On/Off Bottom 0/0, Footage 18, FPH 36
	5:30 - 7:30	2.00	DRLSUR	02	D	P		Drill rotate 214' - 315', WOB 10k, GPM 503, Pump #1, SPM 112, RPM 50, Motor RPM 80, SPP On/Off Bottom 580/460, Torque On/Off Bottom 3/1, Footage 101, FPH 50.5, Mud Wt 9, Viscosity 28
	7:30 - 8:00	0.50	DRLSUR	07	A	S		Tighten mud line on floor and test to 3500 psi
	8:00 - 0:00	16.00	DRLSUR	02	D	P		Drill 315' - 1645', WOB 10-25k, GPM 719, Pump #1 SPM 80, Pump #2 SPM 80, RPM 50, Motor RPM 115, SPP On/Off Bottom 2130/1800, Torque On/Off Bottom 7/2, Footage 1330, FPH 83.1
Sliding parameters depths: (315' - 335'), (377' - 397'), (471' - 491'), (501' - 517'), (563' - 586'), (745' - 766'), (928' - 961'), (1021' - 1040'), (1298' - 1332'), (1581' - 1620'), 1773' - 1795', WOB 20k, GPM 719, Pump #1SPM 80, Pump #2 SPM 80, RPM 0, Motor RPM 115, SPP On/Off Bottom 2050/1790,								

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

Well: NBU 922-18L2BS (YELLOW WELL)		Spud Date: 12/18/2008	
Project: UTAH-UINTAH		Site: NBU 922-18L PAD	Rig Name No: H&P 298/298, H&P 298/298
Event: DRILLING		Start Date: 12/15/2008	End Date: 1/14/2009
Active Datum: RKB @4,925.00ft (above Mean Sea Level)		UWI: NE/SW/0/9/S/22/E/18/0/0/6/PM/S/2,540.99/W/0/1,231.00/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
12/19/2008	0:00 - 2:00	2.00	DRLSUR	02	D	P		Drill 1645' - 1795', WOB 10-25k, GPM 720, Pump #1 SPM 80, Pump #2 SPM 80, RPM 50, Motor RPM 115, SPP On/Off Bottom 2130/1800, Torque On/Off Bottom 7/2, Mud Wt 9.2, Viscosity 33, Footage 150, FPH 75
	2:00 - 6:00	4.00	DRLSUR	22	G	X		Slide Parameters: Depth (1298'-1332'), (1581'-1620'), (1773'-1795'), WOB 20, GPM 720, Pump #1 SPM 80, Pump #2 SPM 80, Motor RPM 115, SPP On/Off Bottom 2050/1790' Lost returns at 1795'. Lost 200 Bbls mud, Mix LCM pills and pump, gain partial returns, continue to circulate while mixing LCM and building volume
	6:00 - 18:30	12.50	DRLSUR	02	D	P		Drill 1795' - 2626', WOB 25k, GPM 540 - 720, Pump #1 SPM 80 - 110, Pump #2 SPM 0 - 80, RPM 50, Motor RPM 86 - 115, SPP On/Off Bottom 2130/1800, Torque On/Off Bottom 7/2, Mud Wt 9.2, Viscosity 33, Footage 150, FPH 75
	18:30 - 21:00	2.50	DRLSUR	22	G	X		Slide Parameters: Depth (1795'-1801'), (1963'-1984'), (2061'-2085'), (2153'-2178'), (2345'-2375'), (2535'-2555'), WOB 22, GPM 540 - 720, Pump #1 SPM 80 - 110, Pump #2 SPM 0 - 80, Motor RPM 86 - 115, SPP On/Off Bottom 2050/1790' Lost 80 Bbls mud from 1985' - 2035'
	21:00 - 22:30	1.50	DRLSUR	06	J	X		Made connection, kicked pump on, pressured up and blowed pop-off, repaired pop-off and could not get pumps to pump. Fill settled in bottom of hole, could not get down low enough to break stand with ST-80, finally managed to manual break stand and set in mouse hole.
12/20/2008	22:30 - 0:00	1.50	DRLSUR	08	B	X		TOOH 10 stands above loss zone at 1795', tight 130' off bottom. Blow out mud line and kelly hose
	0:00 - 1:30	1.50	DRLSUR	06	H	X		Work on #2 pumps, pump was full of Shale and LCM. Change out broken valve on trip tank, valve on conductor and fill trip tank. Working pipe slow while trouble shooting problems.
	1:30 - 4:00	2.50	DRLSUR	06	H	X		TOOH with plugged drill string
	4:00 - 5:00	1.00	DRLSUR	06	H	X		Lay down Monel DC, attempt to pull MWD tool with winch, not successful. Lay down MWD tool with carrier sub and emitter sub
	5:00 - 0:00	19.00	DRLSUR	24		X		Attempt to drain mud motor, not successful. Break bit and lay down mud motor Clean shale and LCM out of both pumps, pulsation dampers, suction lines all full of shale and LCM. Dump and clean sand trap and 1st settling tank. Transfer mud to sand trap and 1st settling tank. Clean settling tanks 3 and 4 Transfer mud from active system to slugging tank, trip tanks and settling tanks 3 and 4. Dump and clean active system. Transferred mud from slugging tank and trip tanks back to active system. Clean slugging tank and trip tanks. Sand and settling tanks shale levels was 75% to 100% full, active system was 30% full of shale and LCM, mostly shale

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

Well: NBU 922-18L2BS (YELLOW WELL)

Spud Date: 12/18/2008

Project: UTAH-UINTAH

Site: NBU 922-18L PAD

Rig Name No: H&P 298/298, H&P 298/298

Event: DRILLING

Start Date: 12/15/2008

End Date: 1/14/2009

Active Datum: RKB @4,925.00ft (above Mean Sea Level)

UWI: NE/SW/0/9/S/22/E/18/0/0/6/PM/S/2,540.99/W/0/1,231.00/0/0

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
12/21/2008	0:00 - 5:00	5.00	DRLSUR	24		X		Clean shale and LCM out of both pumps, pulsation dampers, suction lines all full of shale and LCM. Dump and clean sand trap and 1st settling tank. Transfer mud to sand trap and 1st settling tank. Clean settling tanks 3 and 4 Transfer mud from active system to slugging tank, trip tanks and settling tanks 3 and 4. Dump and clean active system. Transferred mud from slugging tank and trip tanks back to active system. Clean slugging tank and trip tanks. Sand and settling tanks shale levels was 75% to 100% full, active system was 30% full of shale and LCM, mostly shale
	5:00 - 5:30	0.50	DRLSUR	05		X		Start building volume from reserve pit while thawing out up right. Circulated both pumps at 100 spm to make sure mud line was cleaned out
	5:30 - 6:00	0.50	DRLSUR	07	A	X		Blow down mud line and winterize
	6:00 - 9:30	3.50	DRLSUR	06	A	P		Pickup mud motor and directional tools while building volume
	9:30 - 11:00	1.50	DRLSUR	05		X		Continue to build volume
	11:00 - 14:30	3.50	DRLSUR	06	A	P		Install MWD and TIH. Wash (1826'-1922'), (2551'-2626')
	14:30 - 18:30	4.00	DRLSUR	02	D	P		Drill 2626' - 2855', WOB 25, GPM 630, Pump #1 SPM 70, Pump #2 SPM 70, RPM 50, Motor RPM 100, SPP On/Off Bottom 2050/1780, Torque On/Off Bottom 9/3, Mud Wt 9.1, Viscosity 36
	18:30 - 20:00	1.50	DRLSUR	05	A	P		Pump 50 bbls high viscosity sweep and condition hole. Mix and pump slug and filled trip tanks.
	20:00 - 22:00	2.00	DRLSUR	06	D	P		TOOH 5 stands blow down mud lines and continue to TOOH
	22:00 - 23:00	1.00	DRLSUR	06	D	P		Pull MWD tool. Drain mud motor and break bit
	23:00 - 0:00	1.00	DRLSUR	12	A	P		HSM w/ Weatherford casing's crew & rig crew. Rig up casing equipment
12/22/2008	0:00 - 1:00	1.00	DRLSUR	12	A	P		HSM with crews and rig up same
	1:00 - 6:30	5.50	DRLSUR	12	C	P		HSM with crew and run 65 joints 9 5/8" 40 #/ft J55 LT&C casing. Landed at 2831.67. Float Collar at 2786.51'
	6:30 - 8:30	2.00	DRLSUR	12	A	P		HSM w/ Weatherford and rig down casing crew and lay down machine, while circulating down casing
	8:30 - 9:30	1.00	DRLSUR	12	E	P		HSM w/ BJ and rig up while circulating
	9:30 - 13:30	4.00	DRLSUR	12	E	P		Rig up cementing head, pressure test lines to 2000 psi. Cement casing in place w/ 20 bbls mud flush followed by 300 sks, 180 bbls, Lead Premium Lite II, weight 11 ppg, yeild 3.38, water 20.52 gallons/sack. Tailed in w/ 200 sks class "G" cement, weight 15.8 ppg, yeild 1.17, water 5 gallons/ sack. Displaced w/ 211.5 bbls fresh water. Bumped plug 540/1019 psi. Floats held. Lost circulation 203 bbls in to displacement. Rig up and run 120' of 1" pipe (could not get deeper) and pump 100 sks class "G" cement w/ 2% Calcium Chloride, weight 15.8 ppg. Pull 1" pipe no visual sign of cement
	13:30 - 16:00	2.50	DRLSUR	13	A	S		Wait on cement
	16:00 - 16:30	0.50	DRLSUR	12	E	S		Run 120' 1" pipe and pump 100 sks class "G" cement w/ 2% Calcium Chloride, weight 15.8 ppg. Pull 1" pipe
	16:30 - 22:00	5.50	DRLSUR	13	A	S		Wait on cement to set and more cement
	22:00 - 23:00	1.00	DRLSUR	12	E	S		Run 120' of 1" and pump 50 sack class "G" cement w/ 2% Calcium Chloride
	23:00 - 0:00	1.00	DRLSUR	13	A	S		Wait on cement
12/23/2008	0:00 - 2:00	2.00	DRLSUR	13	A	S		Wait on cement

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

Well: NBU 922-18L2BS (YELLOW WELL)

Spud Date: 12/18/2008

Project: UTAH-UINTAH

Site: NBU 922-18L PAD

Rig Name No: H&P 298/298, H&P 298/298

Event: DRILLING

Start Date: 12/15/2008

End Date: 1/14/2009

Active Datum: RKB @4,925.00ft (above Mean Sea Level)

UWI: NE/SW/0/9/S/22/E/18/0/0/6/PM/S/2,540.99/W/0/1,231.00/0/0

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
	2:00 - 3:30	1.50	DRLSUR	12	E	S		Run 1" pipe and perform cement top job w/ 85 sacks, 17 bbls, class "G" cement, weighth 15.8, yeild 1.15, water ratio 5 gallon/sack
	3:30 - 4:00	0.50	DRLSUR	12	E	P		Drain conductor and wash out
	4:00 - 5:00	1.00	DRLSUR	12	E	P		Rig down BJ Services
	5:00 - 6:00	1.00	DRLSUR	13	A	P		Wait on cement
	6:00 - 9:00	3.00	DRLSUR	14	A	P		Drain and cut off casing. Laid down casing, remove conductor from sub
	9:00 - 9:00	0.00	DRLSUR					RIG RELEASED AT 09:00 ON 12/23/08
1/3/2009	0:00 - 4:30	4.50	MIRU	01	C	P		FINISH CLEANING MUD PITS, PREP RIG FOR SKID. ALSO WORKING ON THAWING OUT RIG RIG FLOOR, SUB AND MATTING BOARDS.
	4:30 - 6:00	1.50	MIRU	01	C	P		SKID RIG FROM NBU 922-18K1BS TO THE NBU 922-18K2BS
	6:00 - 13:00	7.00	MIRU	01	B	P		SUCK OUT CELLAR, COVER OTHER WELL WITH 1" PLATE.BOLT FLOWLINE TO FLOWLINE MANIFOLD. GET CELLAR READY FOR WELL HEAD.
	13:00 - 14:30	1.50	MIRU	24	A	P		WELL ON WELL HEAD.
	14:30 - 15:30	1.00	MIRU	01	B	P		CENTER RIG OVER WELL. INSTALL STAIRS TO RIG FLOOR.3 SIDES.
	15:30 - 22:00	6.50	MIRU	14	A	P		HELD SAFETY MEETING WITH RIG CREW AND START NIPPLE UP BOPE.
	22:00 - 0:00	2.00	MIRU	15	A	P		HELD SAFETY MTG WITH SINGLE JACK TESTING. RIG UP TO TEST BOPE,
1/4/2009	0:00 - 5:30	5.50	DRLPRO	15	A	P		TEST BOPE, TESTED ALL RAM, VALVES FLOOR VALVES CHOKE MANIFOLD TO 250 PSI LOW FOR 5 MINS, 5000 PSI FOR HIGH FOR 10 MINS. TESTED ANNULAR TO 2500 PSI AND CASING TO 1500 PSI FOR 30 MINS.
	5:30 - 6:00	0.50	DRLPRO	14	B	P		INSTALL WEAR BUSHING.
	6:00 - 8:00	2.00	DRLPRO	09	A	P		SLIP AND CUT DRILLING LINE, CALIBRATE TOPDRIVE TO FLOOR AND CROWN STOPS.
	8:00 - 9:00	1.00	DRLPRO	07	B	P		LEVEL DERRICK.
	9:00 - 15:00	6.00	DRLPRO	14	A	P		NIPPLE UP ROTATING HEAD, FLOWLINE WORK WITH WELDER ON WELDING FLANGE ON FLOWLINE TO CHANGE PITCH ON FLOWLINE. INSTALL LADDERS IN SUB. HOOK UP TURN BUCKLES ON STACK AND INSTALL DRIP PAN.
	15:00 - 16:00	1.00	DRLPRO	06	A	P		L/D 3 JTS OF 6 1/2 DC's OUT OF DERRICK AND STRAP BHA ON RACK.
	16:00 - 18:30	2.50	DRLPRO	06	A	P		PICK UP DIRECTIONAL TOOLS.
	18:30 - 22:00	3.50	DRLPRO	06	A	P		TRIP IN HOLE. PICK UP JARS. INSTALL ROTATING RUBBER. TAGGED CMT @2776'
	22:00 - 0:00	2.00	DRLPRO	02	F	P		DRILL CMT @2776, FLOAT@2786 DRILL CMT IN CASING TO 2800'
1/5/2009	0:00 - 0:30	0.50	DRLPRO	02	F	P		DRILL CMT 2800-2831, DRILL SHOE AT 2831' CLEAN OUT HOLE TO 2855'
	0:30 - 16:30	16.00	DRLPRO	02	D	P		DRILL F/ 2855-4076', WOB 10-25k, GPM 450, PUMP #1 SPM 50, PUMP #2 SPM 50, RPM 60, MOTOR RPM 72, SPP ON/OFF BOTTOM 1872/1553, TORQUE ON/OFF 9/3, UP/DOWN/ROTATE, 125/107/114, MUD WT 9.2, VIS 33, FTG 1221', FPH 76.3
	16:30 - 18:00	1.50	DRLPRO	10	D	P		SURVEYS, SLIDES AND CONN

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

Well: NBU 922-18L2BS (YELLOW WELL)		Spud Date: 12/18/2008	
Project: UTAH-UINTAH		Site: NBU 922-18L PAD	Rig Name No: H&P 298/298, H&P 298/298
Event: DRILLING		Start Date: 12/15/2008	End Date: 1/14/2009
Active Datum: RKB @4,925.00ft (above Mean Sea Level)		UWI: NE/SW/0/9/S/22/E/18/0/0/6/PM/S/2,540.99/W/0/1,231.00/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
	18:00 - 0:00	6.00	DRLPRO	02	D	P		DRILL F/4076-4518, WOB 10-25k, GPM 450, PUMP #1 SPM 50, PUMP #2 SPM 50, RPM 60, MOTOR RPM 72, SPP ON/OFF BOTTOM 1880/1610, TORQUE ON/OFF 9/3, UP/DOWN/ROTATE, 128/102/117, MUD WT 9.2, VIS 33, FTG 442', FPH 73.6
1/6/2009	0:00 - 8:30	8.50	DRLPRO	02	D	P		DRILL F/4518-5175, WOB 10-25k, GPM 450, PUMP #1 SPM 50, PUMP #2 SPM 50, RPM 60, MOTOR RPM 72, SPP ON/OFF BOTTOM 1880/1610, TORQUE ON/OFF 9/3, UP/DOWN/ROTATE, 160/130/145, MUD WT 9.2, VIS 33, FTG 657', FPH 77.2
	8:30 - 9:30	1.00	DRLPRO	22		Z		TROUBLE SHOOT MWD PROBLEM, WORK ON SENSOR ON STANDPIPE.
	9:30 - 17:00	7.50	DRLPRO	02	D	P		DRILL F/5175-5650, WOB 10-25k, GPM 450, PUMP #1 SPM 50, PUMP #2 SPM 50, RPM 60, MOTOR RPM 72, SPP ON/OFF BOTTOM 1880/1610, TORQUE ON/OFF 9/3, UP/DOWN/ROTATE, 165/140/155, MUD WT 9.4, VIS 36, FTG 475', FPH 63.3
	17:00 - 17:30	0.50	DRLPRO	07	A	P		RIG SERVICE
	17:30 - 0:00	6.50	DRLPRO	02	D	P		DRILL F/5650-6054, WOB 10-25k, GPM 450, PUMP #1 SPM 50, PUMP #2 SPM 50, RPM 50-60, MOTOR RPM 72, SPP ON/OFF BOTTOM 2150/1800, TORQUE ON/OFF 10/5, UP/DOWN/ROTATE, 175/130/154, MUD WT 9.4, VIS 36, FTG 404', FPH 62.1
1/7/2009	0:00 - 17:00	17.00	DRLPRO	02	D	P		DRILL F/6054-6783, WOB 10-25k, GPM 450, PUMP #1 SPM 50, PUMP #2 SPM 50, RPM 50-60, MOTOR RPM 72, SPP ON/OFF BOTTOM 2150/1800, TORQUE ON/OFF 10/5, UP/DOWN/ROTATE, 180/136/158, MUD WT 9.4, VIS 36, FTG 729', FPH 42.8
	17:00 - 17:30	0.50	DRLPRO	08	B	P		CHANGE OUT ROTATING RUBBER.
	17:30 - 18:00	0.50	DRLPRO	07	A	P		RIG SERVICE
	18:00 - 0:00	6.00	DRLPRO	02	D	P		DRILL F/6783-7050, WOB 10-25k, GPM 450, PUMP #1 SPM 50, PUMP #2 SPM 50, RPM 45-60, MOTOR RPM 72, SPP ON/OFF BOTTOM 2150/1840, TORQUE ON/OFF 10/5, UP/DOWN/ROTATE, 190/145/165, MUD WT 9.4, VIS 39, FTG 267', FPH 44.5
1/8/2009	0:00 - 5:30	5.50	DRLPRO	02	D	P		DRILL F/7050-7221, WOB 10-25k, GPM 450, PUMP #1 SPM 50, PUMP #2 SPM 50, RPM 45-60, MOTOR RPM 72, SPP ON/OFF BOTTOM 2150/1840, TORQUE ON/OFF 10/5, UP/DOWN/ROTATE, 190/145/165, MUD WT 9.4, VIS 39, FTG 171', FPH 31.0
	5:30 - 7:00	1.50	DRLPRO	05	C	P		CIRC AND COND HOLE FOR BIT TRIP.
	7:00 - 7:30	0.50	DRLPRO	06	A	P		TRIP OUT 5 STDS.
	7:30 - 8:00	0.50	DRLPRO	07	C	P		BLOW DOWN MUD LINES, PUMPS, CLEAN SHAKERS FOR TRIP. PULL ROTATING RUBBER.
	8:00 - 12:00	4.00	DRLPRO	06	A	P		TRIP OUT OF HOLE, TIGHT SPOT @ 5040-5060 WORKED THRU OK. L/D JARS, MUD MOTOR AND BIT.
	12:00 - 17:30	5.50	DRLPRO	06	A	P		PICK UP BIT AND MOTOR #3, CHECK DIRECTIONAL TOOLS AND TRIP IN HOLE FILL PIPE 2 TIMES ON THE WAY IN, HIT AND WASHED THRU TIGHT SPOT @ 5060' FINISH TRIP IN.

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

Well: NBU 922-18L2BS (YELLOW WELL)

Spud Date: 12/18/2008

Project: UTAH-UINTAH

Site: NBU 922-18L PAD

Rig Name No: H&P 298/298, H&P 298/298

Event: DRILLING

Start Date: 12/15/2008

End Date: 1/14/2009

Active Datum: RKB @4,925.00ft (above Mean Sea Level)

UWI: NE/SW/0/9/S/22/E/18/0/0/6/PM/S/2,540.99/W/0/1,231.00/0/0

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
	17:30 - 0:00	6.50	DRLPRO	02	D	P		DRILL F/7221-7428, WOB 10-25k, GPM 450, PUMP #1 SPM 100, RPM 45-55, MOTOR RPM 72, SPP ON/OFF BOTTOM 2200/1900, TORQUE ON/OFF 11/7, UP/DOWN/ROTATE, 200/150/170, MUD WT 9.9, VIS 39, FTG 207', FPH 31.8
1/9/2009	0:00 - 9:30	9.50	DRLPRO	02	D	P		DRILL F/7428-7860, WOB 10-25k, GPM 404, PUMP #1 SPM 80, RPM 30, MOTOR RPM 65, SPP ON/OFF BOTTOM 1600/1450, TORQUE ON/OFF 12/5, UP/DOWN/ROTATE, 210/155/176, MUD WT 9.9, VIS 39, FTG 432', FPH 45.4
	9:30 - 10:00	0.50	DRLPRO	07	A	P		RIG SERVICE
	10:00 - 17:00	7.00	DRLPRO	02	D	P		DRILL F/7860-8198, WOB 10-25k, GPM 450, PUMP #1 SPM 100, RPM 30, MOTOR RPM 72, SPP ON/OFF BOTTOM 2350/2050, TORQUE ON/OFF 12/5, UP/DOWN/ROTATE, 220/155/172, MUD WT 9.9, VIS 44, FTG 338', FPH 48.2
	17:00 - 18:00	1.00	DRLPRO	10	D	P		SURVEYS, SLIDES AND CONN.
	18:00 - 0:00	6.00	DRLPRO	02	D	P		DRILL F/8198-8545, WOB 10-25k, GPM 450, PUMP #1 SPM 100, RPM 30, MOTOR RPM 72, SPP ON/OFF BOTTOM 2350/2050, TORQUE ON/OFF 13/8, UP/DOWN/ROTATE, 220/150/172, MUD WT 10.2, VIS 44, FTG 347, FPH 57.8
1/10/2009	0:00 - 12:00	12.00	DRLPRO	02	D	P		DRILL F/8545-9085, WOB 10-25k, GPM 450, PUMP #1 SPM 100, RPM 30, MOTOR RPM 72, SPP ON/OFF BOTTOM 2350/2050, TORQUE ON/OFF 13/8, UP/DOWN/ROTATE, 220/150/172, MUD WT 10.4, VIS 47, FTG 540, FPH 45.0
	12:00 - 13:30	1.50	DRLPRO	05	C	P		TORQUE AND HOLE DRAG IS GOING UP
	13:30 - 14:00	0.50	DRLPRO	06	A	P		CIRC AND COND HOLE FOR TRIP. PUMP SLUG.
	14:00 - 14:30	0.50	DRLPRO	06	A	P		TRIP OUT 10 STDs.
	14:30 - 17:00	2.50	DRLPRO	06	A	P		BLOW DOWN MUD LINES AND CHECK FOR FLOW.
	17:00 - 22:00	5.00	DRLPRO	06	A	P		TRIP OUT TO BHA. NO TIGHT SPOTS.
	22:00 - 23:30	1.50	DRLPRO	06	A	P		TRIPPING OUT AND INSPECT BHA AND DIRECTIONAL TOOLS. PICK UP BIT #4
	23:30 - 0:00	0.50	DRLPRO	07	A	P		TEST DIRECTIONAL TOOLS, TRIP IN HOLE TO SHOE.
1/11/2009	0:00 - 3:00	3.00	DRLPRO	06	A	P		FILL PIPE, BLOW DOWN MUD LINES AND RIG SERVICE. CHANGE OIL IN TOP DRIVE.
	3:00 - 0:00	21.00	DRLPRO	02	D	P		TRIP IN HOLE TO 9085' NO TIGHT SPOTS.
								DRILL F/9085-9657, WOB 18k, GPM 450, PUMP #1 SPM 100, RPM 30, MOTOR RPM 72, SPP ON/OFF BOTTOM 2550/2300, TORQUE ON/OFF 15/8, UP/DOWN/ROTATE, 240/160/202, MUD WT 10.7, VIS 43, FTG 572, FPH 27.2
1/12/2009	0:00 - 11:30	11.50	DRLPRO	02	D	P		DRILL F/9657-9993, WOB 18k, GPM 427, PUMP #1 SPM 95, RPM 35, MOTOR RPM 68, SPP ON/OFF BOTTOM 2550/2300, TORQUE ON/OFF 14/11, UP/DOWN/ROTATE, 260/165/206, MUD WT 11.4, VIS 44, FTG 336, FPH 29.2
	11:30 - 12:00	0.50	DRLPRO	07	A	P		RIG SERVICE
	12:00 - 16:30	4.50	DRLPRO	02	D	P		DRILL F/9993-10071, WOB 18k, GPM 427, PUMP #1 SPM 95, RPM 35, MOTOR RPM 68, SPP ON/OFF BOTTOM 2550/2300, TORQUE ON/OFF 14/11, UP/DOWN/ROTATE, 260/165/206, MUD WT 11.4, VIS 44, FTG 78, FPH 17.3
								STARTING TO LOSE MUD AT 9950' PUMP LCM SWEEP. LOST 200 BBLs.
	16:30 - 18:00	1.50	DRLPRO	05	C	P		CIRC. AND COND. MUD AND HOLE.

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

Well: NBU 922-18L2BS (YELLOW WELL)		Spud Date: 12/18/2008	
Project: UTAH-UINTAH		Site: NBU 922-18L PAD	Rig Name No: H&P 298/298, H&P 298/298
Event: DRILLING		Start Date: 12/15/2008	End Date: 1/14/2009
Active Datum: RKB @4,925.00ft (above Mean Sea Level)		UWI: NE/SW/0/9/S/22/E/18/0/0/6/PM/S/2,540.99/W/0/1,231.00/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
1/13/2009	18:00 - 20:30	2.50	DRLPRO	06	E	P		SHORT TRIP 25 STDS. NO TIGHT SPOTS.
	20:30 - 22:30	2.00	DRLPRO	05	C	P		CIRC AND COND MUD AND HOLE.
	22:30 - 0:00	1.50	DRLPRO	06	B	P		TRIP OUT TO LOG.
	0:00 - 4:30	4.50	DRLPRO	06	B	P		TRIP OUT OF HOLE, NO TIGHT SPOTS.
	4:30 - 10:30	6.00	EVALPR	11	G	P		SAFETY MEETING, RIG UP RUN IN HOLE WITH TRIPLE COMBO LOGS. LOGGERS DEPTH 10,053' HIT BRIDGE AT 6030, 6500' WORKED THRU AND LOG FROM 10,053'
	10:30 - 11:30	1.00	DRLPRO	06	A	P		PICK UP BIT AND BIT SUB.
	11:30 - 12:00	0.50	DRLPRO	07	A	P		RIG SERVICE
	12:00 - 13:00	1.00	DRLPRO	06	A	P		TRIP IN TO SHOE.
	13:00 - 14:00	1.00	DRLPRO	09	A	P		SLIP AND CUT DRILLING LINE.
	14:00 - 18:00	4.00	DRLPRO	06	A	P		TRIP IN HOLE, WASHED 71' TO BTM. 16' OF FILL. NO TIGHT SPOTS ON TRIP.
1/14/2009	18:00 - 21:00	3.00	DRLPRO	22	G	P		CIRC AND COND HOLE. BUILD VOL. LOSING CIRC. MIXING 15% LCM. BTMS UP GAS 15' FLARE. 5900 UNITS
	21:00 - 0:00	3.00	CSG	06	D	P		TRIP OUT TO RUN CASING.
	0:00 - 1:00	1.00	CSG	06	D	P		TRIP OUT TO RUN CASING.
	1:00 - 1:30	0.50	CSG	14	B	P		PULL WEAR BUSHING.
	1:30 - 11:00	9.50	CSG	12	C	P		HELD SAFETY MTG. WITH RIG&CSG CREWS RIG UP AND RUN 237 JTS OF 41/2,11.6#,I-80 LTC CSG ,LAND CSG SET @10,036'
	11:00 - 12:30	1.50	CSG	05	D	P		RIG UP & CIRC CSG
	12:30 - 16:00	3.50	CSG	12	E	P		SM W/ BJ & RIG CREWS,TEST LINES,PUMP 20 BBLS MUD CLEAN,20 SKS(30 BBLS)SCAVENGER @9.5#,435 SKS(261.9 BBLS)LEAD@11.4#,1290 SKS(301BBLS TAIL@14.3#,WASH PUMP & LINES,DROP TOP PLUG DISP W/ 155.7 BBLS FW+CLAYTREAT+MAGNACIDE,BUMP PLUG W/3880#,500 OVER,FLOATS OK,LOST RETURNS ON DISPLACEMENT,RD CEMENTERS
	16:00 - 18:00	2.00	CSG	12	D	P		CHANGE OUT CSG BAILS TO DP BAILS,SET PACKOFF & TEST TO 5000
	18:00 - 0:00	6.00	CSG	14	A	P		ND BOP EQUIP,CLEAN MUD PITS RELEASE RIG @ 00:00 01/14/2009 TO NBU 922 18K

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

Well: NBU 922-18L2BS (YELLOW WELL)

Spud Date: 12/18/2008

Project: UTAH-UINTAH

Site: NBU 922-18L PAD

Rig Name No: MILES 2/2

Event: COMPLETION

Start Date: 11/3/2009

End Date: 11/12/2009

Active Datum: RKB @4,925.00ft (above Mean Sea Level)

UWI: NE/SW/0/9/S/22/E/18/0/0/6/PM/S/2,540.99/W/0/1,231.00/0/0

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
10/22/2009	15:30 - 20:30	5.00	COMP	31	I	P		MOVE OVER FROM 922-18K2BS. RUSU. ND WH. NU BOP. RU FLOOR AND TBG EQUIP. MU 3-7/8" BIT AND BIT SUB. RIH AS MEAS AND PU 2-3/8" J-55 TBG.
10/23/2009	7:00 - 7:30	0.50	COMP	48		P		JSA- D/O FC. LD TBG. SYM OPS-- P-TEST AND PERF.
	7:30 - 20:00	12.50	COMP	44	A	P		CONT PU 2-3/8" L-80 TBG AS RIH W/ 3-7/8" BIT. TAG AT 10,005' W/ 315-JTS IN. RU PWR SWIVEL.  (CSG HEAD AND FRAC VALVE BLEW OFF OF 18K2 AS P-TESTING. TAKE CARE OF INCIDENT)  CONT RU PWR SWIVEL. EST REV CIRC. D/O 10' CMT TO FC AT 10,014'. D/O 10' MORE CMT TO 10,024'. CIRC CLEAN. RD PWR SWIVEL. POOH AS LD 5-JTS TBG. P-TEST CSG TO 2500 PSI. GOOD. CONT POOH AS LD TBG AND BIT. RD FLOOR. ND BOP. NU FRAC VALVES. FILL CSG. SHUT IN. RDSU. RACK OUT PUMP AND EQUIP. MOVE EQUIP OFF LOCATION. SDFN
10/24/2009	7:00 - 10:00	3.00	COMP	47	C	P		X-OUT FMC TBG HEAD. (( DUE T/ TBG HEAD FAILER ON THE 18K2 WELL.))
10/26/2009	7:00 - 7:30	0.50	COMP	48		P		HSM. SIME OPS.
	7:30 - 17:00	9.50	COMP	37	B	P		PSI TEST CSG & BOTH FRAC VALVES T/ 7000#. GOOD TEST. BLEED OFF PSI. B&C QUICK TEST MOVE OVER T/ GREEN WELL. MIRU CUTTERS WL & SCHLUMBERGER FRAC SERV. STG 1) PU 3 3/8 EXP GUN, 23 GM, .36 HOLE SIZE. 90 & 120 DEG PHASING. RIH PERF F/ 9986'-90', 4 SPF, 16 HOLES. 9900'-04', 3 SPF, 12 HOLES. 9792'-94', 3 SPF, 6 HOLES. 9752'-55', 3 SPF, 9 HOLES. POOH. SWI. WINTERIZE WELL HEAD.

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

Well: NBU 922-18L2BS (YELLOW WELL)

Spud Date: 12/18/2008

Project: UTAH-UINTAH

Site: NBU 922-18L PAD

Rig Name No: MILES 2/2

Event: COMPLETION

Start Date: 11/3/2009

End Date: 11/12/2009

Active Datum: RKB @4,925.00ft (above Mean Sea Level)

UWI: NE/SW/0/9/S/22/E/18/0/0/6/PM/S/2,540.99/W/0/1,231.00/0/0

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
10/27/2009	7:00 - 23:59	16.98	COMP	36	B	P		<p>BSTG 1) OPEN WELL BEG PUMP, BRK @ 4006# @ 6.4 BPM. SD ISIP 3122#, FG .75. BEG FRAC, BULL HEAD 250 GAL 15% ACID IN PAD. EST INJT RT @ 51.4 BPM @ 5100# = 100% PERFS OPEN. PUMP 78,214# 30/50 WHITE &amp; TAIL IN W/ 5,000# 20/40 TLC. SWI. X-OVER T/ BLUE WELL.</p> <p>STG 2) PU 4 1/2 8K HAL CBP &amp; 3 3/8 EXP GUN, 23 GM, .36 HOLE SIZE. 90, 120 &amp; 180 DEG PHASING. RIH SET CBP @ 9694' P/U PERF F/ 9660'-64', 4 SPF, 16 HOLES. 9464'-70', 2 SPF, 12 HOLES. 9440'-44', 3 SPF, 12 HOLES. POOH. READ T/ FRAC. OPEN WELL 2620#. BEG PUMPING, BRK @ 2989# @ 6.4 BPM. SD ISIP 2543# FG .70. BEG FRAC, EST INJT RT @ 51.5 BPM @ 5000# =100% PERF'S OPEN. PUMP 38,272# 30/50 WHITE &amp; TAIL IN W/ 5,000# 20/40 TLC. SD ISIP 2989# FG .74. SWI. X-OVER T/ BLUE WELL.</p> <p>STG 3)PU 4 1/2 8K HAL CBP &amp; 3 3/8 EXP GUN, 23 GM, .36 HOLE SIZE. 90 &amp; 120 DEG PHASING. RIH SET CBP 9086' P/U PERF F/ 9330'-34', 4 SPF, 16 HOLES. 9280'-82', 3 SPF, 6 HOLES. 9241'-43', 3 SPF, 6 HOLES. 9132'-34', 3 SPF, 6 HOLES. 9100'-02', 3 SPF, 6 HOLES. POOH. OPEN WELL 1,956 PSI, BRK 3,041 PSI @ 6.3 BPM, ISIP 2,310 PSI, FG .68 PUMP 100 BBLS @ 51.5 BPM @ 5,400 PSI = 77% HOLES OPEN. MP 5,875 PSI, MR 51.8 BPM, AP 4,849 PSI, AR 50.5 BPM, ISIP 2,979 PSI, FG .76, NPI 669 PSI. PUMP 2,854 BBLS OF SW &amp; 111,979 LBS OF 30/50 SND &amp; 5,000 LBS OF 20/40 RESIN SND. TOTAL PROP 116,979 LBS.,.</p> <p>STGT 4) PU 4 1/2 HAL CBP &amp; 3 3/8" EXP GNS, 23 GRM, .36 HOLES. 90 &amp; 120 DEG PHASING. RIH SET CBP @ 9,086' &amp; PERF 9,054' - 56' 4SPF, 8,938' - 42' 3SPF, 8,904' - 06' 3SPF, 8,886' - 88' 3SPF, 8,808' - 10 3SPF, 38 HOLES. WHP 2,346 PSI, BRK 2,647 PSI @ 4.2 BPM, ISIP 2,418 PSI, FG .71 PUMP 100 BBLS @ 51.5 BPM @ 4,700 PSI = 100% HOLES OPEN. MP 5,563 PSI, MR 51.7 BPM, AP 4,503 PSI, AR 49.3 BPM, ISIP 2,690 PSI, FG .73, NPI 272 PSI. PUMP 1,263 BBLS OF SW &amp; 45,059 LBS OF 30/50 SND &amp; 5,000 LBS OF 20/40 RESIN SND. TOTAL PROP 50,059 LBS.,.</p> <p>STGT 5) PU 4 1/2 HAL CBP &amp; 3 3/8" EXP GNS, 23 GRM, .36 HOLES. 120 DEG PHASING. RIH SET CBP @ 8,756' &amp; PERF 8,722' - 26' 3SPF, 8,648' - 52' 3SPF, 8,597' - 8,600' 3SPF, 8,574' - 76' 3SPF, 39 HOLES .</p>

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

Well: NBU 922-18L2BS (YELLOW WELL)		Spud Date: 12/18/2008	
Project: UTAH-UINTAH		Site: NBU 922-18L PAD	Rig Name No: MILES 2/2
Event: COMPLETION		Start Date: 11/3/2009	End Date: 11/12/2009
Active Datum: RKB @4,925.00ft (above Mean Sea Level)		UWI: NE/SW/0/9/S/22/E/18/0/0/6/PM/S/2,540.99/W/0/1,231.00/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
								<p>WHP 925 PSI, BRK 3,077 PSI @ 6.3 BPM, ISIP 2,113 PSI, FG .67            PUMP 100 BBLS @ 51.4 BPM @ 4,700 PSI = 98% HOLES OPEN.            MP 5,492 PSI, MR 51.8 BPM, AP 4,331 PSI, AR 48.3 BPM, ISIP 2,664 PSI, FG .74, NPI 551 PSI.            PUMP 1,172 BBLS OF SW &amp; 41,156 LBS OF 30/50 SND &amp; 5,000 LBS OF 20/40 RESIN SND. TOTAL PROP 46,156 LBS.,.</p> <p>STGT 6) PU 4 1/2 HAL CBP &amp; 3 3/8" EXP GNS, 23 GRM, .36 HOLES. 120 DEG PHASING. RIH SET CBP @ 8,480' &amp; PERF 8,445' - 50' 3SPF, 8,418' - 20' 3SPF, 8,252' - 56' 3SPF, 8,234' - 36' 3SPF, 39 HOLES .            WHP 1,575 PSI, BRK 2,909 PSI @ 6.3 BPM, ISIP 2,256 PSI, FG .70            PUMP 100 BBLS @ 51.5 BPM @ 4,700 PSI = 93% HOLES OPEN.            MP 5,442 PSI, MR 51.7 BPM, AP 4,458 PSI, AR 48.3 BPM, ISIP 2,659 PSI, FG .75, NPI 403 PSI.            PUMP 992 BBLS OF SW &amp; 33,495 LBS OF 30/50 SND &amp; 5,000 LBS OF 20/40 RESIN SND. TOTAL PROP 38,495 LBS.,.</p> <p>STGT 7) PU 4 1/2 HAL CBP &amp; 3 3/8" EXP GNS, 23 GRM, .36 HOLES. 90 DEG PHASING. RIH SET CBP @ 7,958' &amp; PERF 7,922' - 28' 4SPF, 7,822' - 26' 4SPF, 40 HOLES .            SWI SDFN.            HSM. FRACING &amp; PERFORATING</p>
10/28/2009	6:30 - 7:00	0.50	COMP	48		P		
	7:00 - 7:00	0.00	COMP	36	B	P		<p>STG 7 ) WHP 1156 PSI, BRK 2622 PSI @ 6.4 BPM. ISIP 1931 PSI, FG .68.            PUMP 100 BBLS @ 51.4 BPM @ 4300 PSI = 99% HOLES OPEN.            MP 4782 PSI, MR 51.7 BPM, AP 4038 PSI, AR 47.4 BPM, ISIP 2432 PSI, FG .74, NPI 501 PSI.            PMP 987 BBLS SW &amp; 33,686 LBS OF 30/50 SND &amp; 5,000 LBS OF 20/40 RESIN SND. TOTAL PROP 38,686 LBS,            SWI, X-OVER T/ BLUE WELL.</p>
11/3/2009	13:00 - 17:00	4.00	COMP	44		P		<p>PU 4 1/2 8K HAL CBP . RIH SET KILL PLUG @ 7772'. POOH SWI.            MIRU, ND FRAC VALVE, NU BOP'S, TEST TO 3000#, PU TBG RIH 29 JTS, SWIFN            PICK UP TBG</p>
11/4/2009	7:00 - 7:30	0.50	COMP	48		P		

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

Well: NBU 922-18L2BS (YELLOW WELL)

Spud Date: 12/18/2008

Project: UTAH-UINTAH

Site: NBU 922-18L PAD

Rig Name No: MILES 2/2

Event: COMPLETION

Start Date: 11/3/2009

End Date: 11/12/2009

Active Datum: RKB @4,925.00ft (above Mean Sea Level)

UWI: NE/SW/0/9/S/22/E/18/0/0/6/PM/S/2,540.99/W/0/1,231.00/0/0

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
	7:30 - 7:30	0.00	COMP	44		P		RIH TBG TO 7772' MILL PLUGS. PLUG #1 7772' 0 SAND 5 MIN 300# KICK PLUG #2 7985' 15' SAND 5 MIN 400# KICK PLUG #3 8480' 30' SAND 15 MIN 300# KICK PLUG #4 8756' 30' SAND 5 MIN 300# KICK PLUG #5 9086' 30' SAND 5 MIN 200# KICK PLUG #6 9364' 20' SAND 5 MIN 500# KICK PLUG #7 9694' 20' SAND 5 MIN 400# KICK CLEAN OUT TO 10006' 40' FILL 315 JTS,CIRC BTMS UP, LAY DWN 35 JTS TO 9410' LAND TBG, 296 JTS 2 3/8' 4.73 L-80 TBG 9410'.XN SN 1.875" ND BOP'S, NU WH, PUMP OFF BIT SUB. TURN WELL TO FLOW BACK CREW @ 6:00 PM RDMO TO GREEN PAD WELL.
11/5/2009	7:00 -			33	A			7 AM FLBK REPORT: CP 2400#, TP 1750#, 20/64" CK, 48 BWPH, LIGHT SAND, LIGHT GAS TTL BBLs RECOVERED: 2635 BBLs LEFT TO RECOVER: 8493
11/6/2009	7:00 -			33	A			7 AM FLBK REPORT: CP 3100#, TP 1775#, 20/64" CK, 38 BWPH, LIGHTSAND MEDIUM GAS TTL BBLs RECOVERED: 3656 BBLs LEFT TO RECOVER: 7472
	13:00 -		PRPSPD	50				WELL TURNED TO SALE @ 1300 HR ON 11/6/09 - FTP 1750#, CP 3250#, 3.1 MCFD, 38 BWPD, 20/64 CK
11/7/2009	7:00 -			33	A			7 AM FLBK REPORT: CP 2925#, TP 1700#, 20/64" CK, 30 BWPH, LIGHT SAND, - GAS TTL BBLs RECOVERED: 4450 BBLs LEFT TO RECOVER: 6678
11/8/2009	7:00 -			33	A			7 AM FLBK REPORT: CP 2650#, TP 1550#, 20/64" CK, 25 BWPH, LIGHT SAND, - GAS TTL BBLs RECOVERED: 5107 BBLs LEFT TO RECOVER: 6021
11/9/2009	7:00 -			33	A			7 AM FLBK REPORT: CP 2425#, TP 1400#, 20/64" CK, 18 BWPH, LIGHT SAND, - GAS TTL BBLs RECOVERED: 5604 BBLs LEFT TO RECOVER: 5524
	7:30 -		PROD	50				WELL IP'D 11/9/09 - 1689 MCFD, 412 BWPD, CP 2300#, FTP 1325#, CK 20/64", LP 124#, 24 HRS
11/10/2009	7:00 -			33	A			7 AM FLBK REPORT: CP 2250#, TP 1275#, 20/64" CK, 16 BWPH, LIGHT SAND, - GAS TTL BBLs RECOVERED: 6016 BBLs LEFT TO RECOVER: 5112
11/11/2009	7:00 -			33	A			7 AM FLBK REPORT: CP 2100#, TP 1175#, 20/64" CK, 13 BWPH, LIGHT SAND, - GAS TTL BBLs RECOVERED: 6350 BBLs LEFT TO RECOVER: 4778
11/12/2009	7:00 -			33	A			7 AM FLBK REPORT: CP 2000#, TP 1100#, 20/64" CK, 8 BWPH, LIGHT SAND, - GAS TTL BBLs RECOVERED: 6596 BBLs LEFT TO RECOVER: 4532
	7:00 -			33	A			7 AM FLBK REPORT: CP 2250#, TP 1175#, 20/64" CK, 8 BWPH, TRACE SAND, 1300 GAS TTL BBLs RECOVERED: 6636 BBLs LEFT TO RECOVER: 4492



# **ANADARKO PETROLEUM CORP.**

**UINTAH COUNTY, UTAH (nad 27)**

**NBU 922-18 PAD EFKL**

**NBU 922-18L2BS**

**1**

**Survey: FINAL**

## **Standard Survey Report**

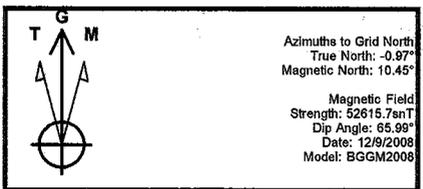
**13 January, 2009**



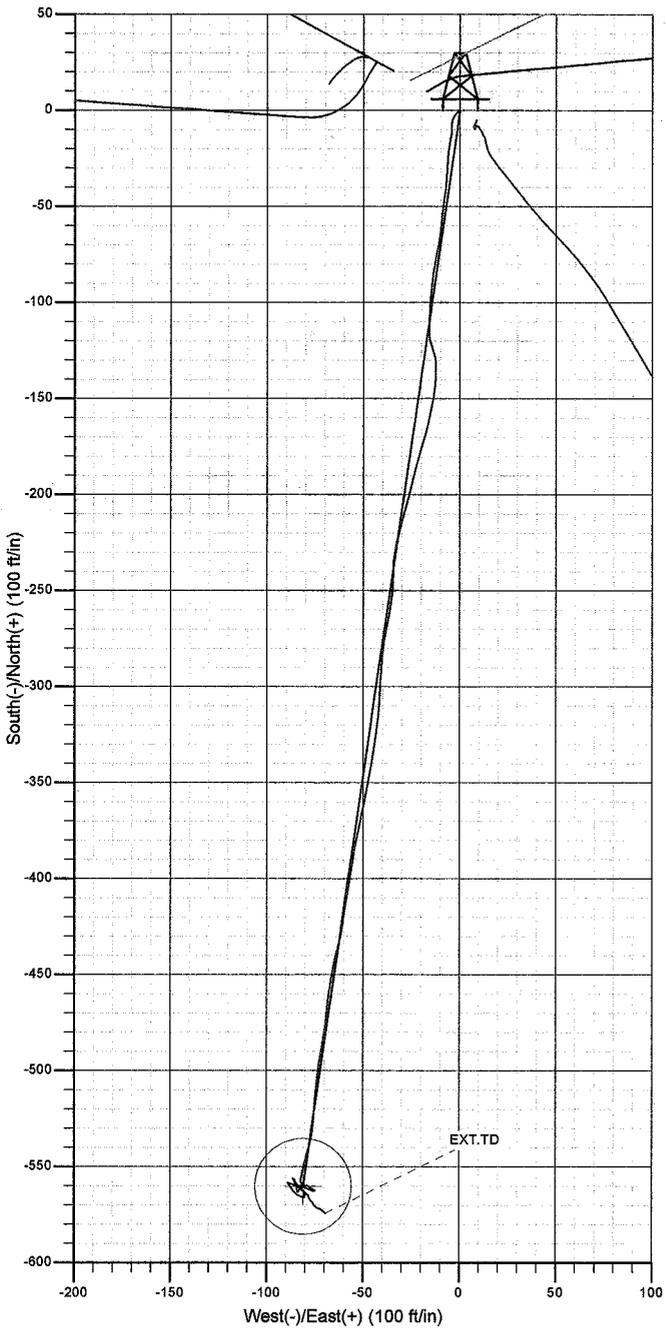
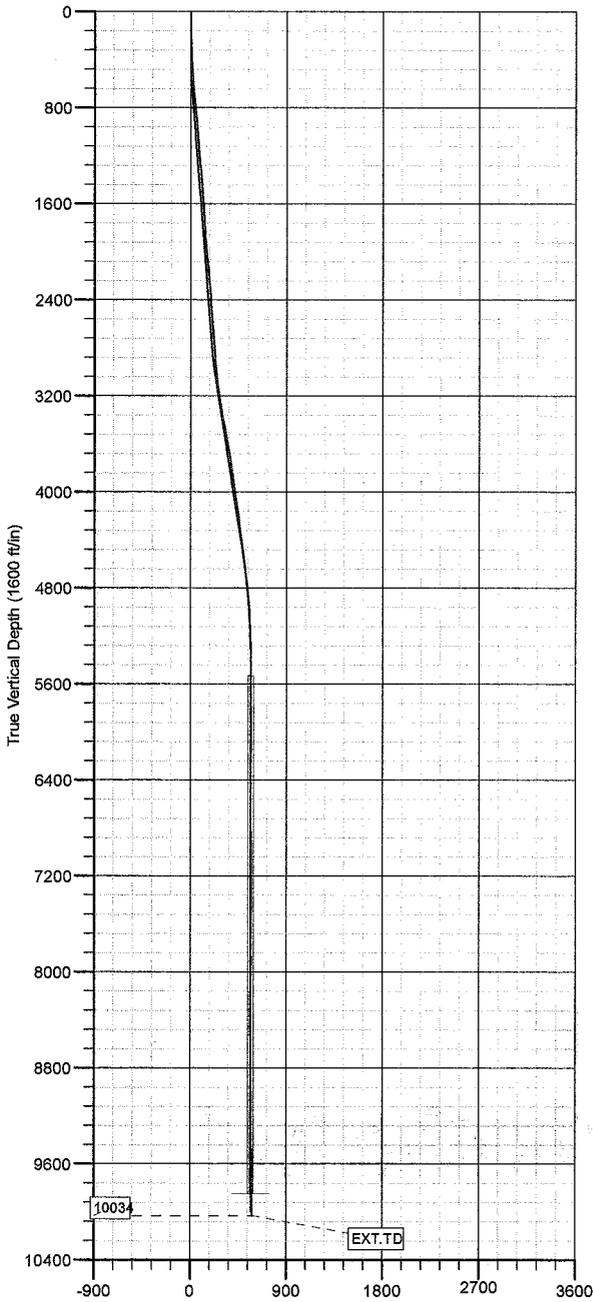
**Weatherford®**

WELL DETAILS: NBU 922-18L2BS						
+N/-S	+E/-W	Northing	Ground Level: Easting	4899.00	Latitude	Slot
0.00	0.00	14542665.13	2064311.13	40° 2' 8.690 N	109° 29' 8.330 W	

Survey: Survey #1 (NBU 922-18L2BS/1)									
MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	
10071.00	.91	137.34	10033.86	-574.23	-69.59	0.00	0.00	578.28	



KB ELEV: KB ELEVATION @ 4925.50ft (HP 298)  
 GRD ELEV: 4899.00



**Company:** ANADARKO PETROLEUM CORP.  
**Project:** UINTAH COUNTY, UTAH (nad 27)  
**Site:** NBU 922-18 PAD EFKL\_ALL TGTS SET @ 25' rad  
**Well:** NBU 922-18L2BS  
**Wellbore:** 1  
**Design:** 1

**Local Co-ordinate Reference:** Well NBU 922-18L2BS  
**TVD Reference:** KB ELEVATION @ 4925.50ft (HP 298)  
**MD Reference:** KB ELEVATION @ 4925.50ft (HP 298)  
**North Reference:** Grid  
**Survey Calculation Method:** Minimum Curvature  
**Database:** EDM 2003.21 Single User Db

<b>Project</b>	UINTAH COUNTY, UTAH (nad 27),		
<b>Map System:</b>	Universal Transverse Mercator (US Survey Fee	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	NAD 1927 - Western US		
<b>Map Zone:</b>	Zone 12N (114 W to 108 W)		

**Site** NBU 922-18 PAD EFKL\_ALL TGTS SET @ 25' rad, SEC 18 T9S R22E

<b>Site Position:</b>		<b>Northing:</b>	14,542,660.22 ft	<b>Latitude:</b>	40° 2' 8.640 N
<b>From:</b>	Lat/Long	<b>Easting:</b>	2,064,319.77 ft	<b>Longitude:</b>	109° 29' 8.220 W
<b>Position Uncertainty:</b>	0.00 ft	<b>Slot Radius:</b>	0.00 in	<b>Grid Convergence:</b>	0.97 °

**Well** NBU 922-18L2BS,

<b>Well Position</b>	<b>+N/-S</b>	0.00 ft	<b>Northing:</b>	14,542,665.13 ft	<b>Latitude:</b>	40° 2' 8.690 N
	<b>+E/-W</b>	0.00 ft	<b>Easting:</b>	2,064,311.13 ft	<b>Longitude:</b>	109° 29' 8.330 W
<b>Position Uncertainty</b>		0.00 ft	<b>Wellhead Elevation:</b>	ft	<b>Ground Level:</b>	4,899.00 ft

**Wellbore** 1

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	BGGM2008	12/9/2008	11.42	65.99	52,616

**Design** 1

**Audit Notes:**

**Version:** 1.0      **Phase:** ACTUAL      **Tie On Depth:** 0.00

Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.00	0.00	0.00	188.22

**Survey Program**      **Date** 1/13/2009

From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description
138.00	10,071.00	Survey #1 (1)	MWD	MWD - Standard

**Survey**

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
138.00	0.63	246.21	138.00	-0.31	-0.69	0.40	0.46	0.46	0.00
203.00	1.44	224.46	202.99	-1.03	-1.59	1.25	1.36	1.25	-33.46
265.00	2.19	213.34	264.95	-2.58	-2.79	2.95	1.33	1.21	-17.94
327.00	2.63	200.59	326.90	-4.90	-3.94	5.41	1.11	0.71	-20.56
388.00	2.50	184.84	387.84	-7.54	-4.55	8.11	1.17	-0.21	-25.82
449.00	3.13	176.59	448.77	-10.52	-4.56	11.07	1.23	1.03	-13.52
511.00	4.25	191.46	510.64	-14.47	-4.91	15.02	2.36	1.81	23.98
603.00	5.50	186.71	602.30	-22.19	-6.11	22.83	1.43	1.36	-5.16
695.00	6.31	180.96	693.82	-31.62	-6.71	32.25	1.09	0.88	-6.25
787.00	5.75	188.71	785.31	-41.23	-7.49	41.88	1.07	-0.61	8.42
880.00	6.31	187.46	877.79	-50.90	-8.86	51.65	0.62	0.60	-1.34

**Company:** ANADARKO PETROLEUM CORP.  
**Project:** UINTAH COUNTY, UTAH (nad 27)  
**Site:** NBU 922-18 PAD EFKL\_ALL TGTS SET @ 25' rad  
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**Wellbore:** 1  
**Design:** 1

**Local Co-ordinate Reference:** Well NBU 922-18L2BS  
**TVD Reference:** KB ELEVATION @ 4925.50ft (HP 298)  
**MD Reference:** KB ELEVATION @ 4925.50ft (HP 298)  
**North Reference:** Grid  
**Survey Calculation Method:** Minimum Curvature  
**Database:** EDM 2003.21 Single User Db

**Survey**

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
972.00	4.99	182.44	969.34	-59.91	-9.69	60.68	1.53	-1.43	-5.46
1,064.00	4.81	191.46	1,061.01	-67.69	-10.62	68.52	0.86	-0.20	9.80
1,157.00	5.31	191.71	1,153.65	-75.73	-12.27	76.70	0.54	0.54	0.27
1,250.00	5.94	187.59	1,246.20	-84.71	-13.78	85.81	0.80	0.68	-4.43
1,346.00	4.94	185.09	1,341.77	-93.75	-14.80	94.91	1.07	-1.04	-2.60
1,441.00	5.19	183.59	1,436.39	-102.11	-15.43	103.27	0.30	0.26	-1.58
1,536.00	5.75	183.09	1,530.96	-111.16	-15.96	112.29	0.59	0.59	-0.53
1,630.00	4.06	169.84	1,624.62	-119.13	-15.63	120.14	2.15	-1.80	-14.10
1,725.00	3.88	157.71	1,719.39	-125.42	-13.81	126.10	0.90	-0.19	-12.77
1,820.00	4.31	179.59	1,814.15	-131.96	-12.57	132.40	1.69	0.45	23.03
1,914.00	5.06	180.96	1,907.84	-139.64	-12.61	140.01	0.81	0.80	1.46
2,009.00	6.25	190.71	2,002.38	-148.91	-13.64	149.33	1.61	1.25	10.26
2,103.00	5.69	189.96	2,095.87	-158.53	-15.40	159.10	0.60	-0.60	-0.80
2,198.00	5.19	197.46	2,190.44	-167.26	-17.51	168.05	0.91	-0.53	7.89
2,293.00	5.94	195.84	2,284.99	-176.09	-20.14	177.16	0.81	0.79	-1.71
2,388.00	4.81	195.21	2,379.57	-184.66	-22.52	185.99	1.19	-1.19	-0.66
2,483.00	5.06	192.09	2,474.22	-192.60	-24.45	194.12	0.39	0.26	-3.28
2,577.00	4.75	195.96	2,567.88	-200.40	-26.38	202.11	0.48	-0.33	4.12
2,672.00	4.94	193.71	2,662.54	-208.16	-28.44	210.08	0.28	0.20	-2.37
2,767.00	4.80	196.46	2,757.19	-215.94	-30.53	218.09	0.29	-0.15	2.89
2,890.00	5.00	190.71	2,879.75	-226.14	-32.99	228.54	0.43	0.16	-4.67
2,953.00	4.86	188.67	2,942.51	-231.48	-33.90	233.95	0.36	-0.22	-3.24
3,049.00	6.69	180.09	3,038.02	-241.09	-34.52	243.55	2.10	1.91	-8.94
3,142.00	8.56	186.09	3,130.20	-253.39	-35.26	255.83	2.18	2.01	6.45
3,236.00	9.94	192.59	3,222.98	-268.27	-37.77	270.91	1.84	1.47	6.91
3,330.00	10.63	184.71	3,315.47	-284.83	-40.25	287.66	1.67	0.73	-8.38
3,427.00	12.56	182.59	3,410.49	-304.28	-41.46	307.08	2.04	1.99	-2.19
3,519.00	12.00	187.84	3,500.38	-323.75	-43.22	326.60	1.36	-0.61	5.71
3,614.00	10.69	190.09	3,593.53	-342.21	-46.11	345.29	1.46	-1.38	2.37
3,708.00	10.56	190.84	3,685.91	-359.25	-49.26	362.60	0.20	-0.14	0.80
3,801.00	9.50	193.84	3,777.49	-375.08	-52.70	378.76	1.27	-1.14	3.23
3,896.00	9.50	187.21	3,871.19	-390.47	-55.56	394.40	1.15	0.00	-6.98
3,991.00	9.01	191.01	3,964.96	-405.55	-57.96	409.67	0.82	-0.52	4.00
4,085.00	9.13	186.71	4,057.78	-420.18	-60.24	424.47	0.73	0.13	-4.57
4,180.00	9.56	193.71	4,151.52	-435.33	-62.99	439.86	1.28	0.45	7.37
4,274.00	7.94	191.96	4,244.43	-449.26	-66.19	454.11	1.75	-1.72	-1.86
4,369.00	7.69	185.46	4,338.55	-462.01	-68.15	467.01	0.97	-0.26	-6.84
4,464.00	9.00	186.46	4,432.54	-475.72	-69.59	480.78	1.39	1.38	1.05
4,559.00	8.63	190.84	4,526.42	-490.11	-71.77	495.33	0.81	-0.39	4.61
4,654.00	7.69	186.71	4,620.45	-503.42	-73.85	508.81	1.17	-0.99	-4.35
4,748.00	7.75	184.59	4,713.60	-515.98	-75.09	521.42	0.31	0.06	-2.26
4,843.00	6.75	184.46	4,807.84	-527.93	-76.04	533.38	1.05	-1.05	-0.14
4,936.00	5.13	194.09	4,900.34	-537.42	-77.48	542.97	2.04	-1.74	10.35
5,031.00	4.56	195.96	4,995.00	-545.17	-79.55	550.94	0.62	-0.60	1.97
5,124.00	3.06	191.71	5,087.79	-551.15	-81.07	557.08	1.64	-1.61	-4.57
5,219.00	2.28	194.01	5,182.69	-555.47	-82.04	561.49	0.83	-0.82	2.42
5,313.00	0.81	152.59	5,276.66	-557.87	-82.19	563.89	1.87	-1.56	-44.06
5,407.00	1.19	150.84	5,370.64	-559.31	-81.41	565.21	0.41	0.40	-1.86
5,502.00	0.94	70.46	5,465.63	-559.92	-80.19	565.63	1.46	-0.26	-84.61
5,596.00	0.75	107.71	5,559.62	-559.84	-78.88	565.37	0.61	-0.20	39.63
5,691.00	0.88	128.48	5,654.61	-560.49	-77.72	565.84	0.34	0.14	21.86
5,785.00	0.88	123.46	5,748.60	-561.33	-76.55	566.51	0.08	0.00	-5.34
5,880.00	1.00	118.71	5,843.59	-562.14	-75.21	567.11	0.15	0.13	-5.00

**Company:** ANADARKO PETROLEUM CORP.  
**Project:** UINTAH COUNTY, UTAH (nad 27)  
**Site:** NBU 922-18 PAD EFKL\_ALL TGTS SET @ 25' rad  
**Well:** NBU 922-18L2BS  
**Wellbore:** 1  
**Design:** 1

**Local Co-ordinate Reference:** Well NBU 922-18L2BS  
**TVD Reference:** KB ELEVATION @ 4925.50ft (HP 298)  
**MD Reference:** KB ELEVATION @ 4925.50ft (HP 298)  
**North Reference:** Grid  
**Survey Calculation Method:** Minimum Curvature  
**Database:** EDM 2003.21 Single User Db

### Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
5,973.00	0.63	282.96	5,936.58	-562.41	-75.00	567.36	1.74	-0.40	176.61
6,068.00	0.50	257.46	6,031.58	-562.38	-75.91	567.46	0.29	-0.14	-26.84
6,163.00	1.75	296.59	6,126.56	-561.82	-77.62	567.15	1.47	1.32	41.19
6,257.00	1.69	293.09	6,220.52	-560.64	-80.17	566.34	0.13	-0.06	-3.72
6,351.00	2.19	279.84	6,314.46	-559.79	-83.22	565.93	0.71	0.53	-14.10
6,445.00	1.50	283.96	6,408.41	-559.18	-86.18	565.76	0.75	-0.73	4.38
6,539.00	1.25	295.71	6,502.39	-558.44	-88.30	565.33	0.40	-0.27	12.50
6,634.00	0.38	154.21	6,597.38	-558.28	-89.10	565.28	1.65	-0.92	-148.95
6,729.00	0.50	138.21	6,692.38	-558.87	-88.68	565.81	0.18	0.13	-16.84
6,824.00	0.81	137.71	6,787.37	-559.67	-87.96	566.50	0.33	0.33	-0.53
6,918.00	1.38	155.46	6,881.35	-561.20	-87.04	567.87	0.70	0.61	18.88
7,013.00	1.25	135.34	6,976.33	-562.97	-85.83	569.46	0.50	-0.14	-21.18
7,108.00	0.69	124.21	7,071.32	-564.03	-84.63	570.34	0.62	-0.59	-11.72
7,201.00	1.06	127.21	7,164.30	-564.87	-83.48	571.00	0.40	0.40	3.23
7,296.00	1.37	103.94	7,259.28	-565.67	-81.68	571.54	0.61	0.33	-24.49
7,391.00	0.63	60.84	7,354.27	-565.69	-80.12	571.34	1.06	-0.78	-45.37
7,486.00	1.50	336.96	7,449.26	-564.29	-80.15	569.96	1.65	0.92	-88.29
7,579.00	1.06	341.83	7,542.23	-562.36	-80.90	568.14	0.49	-0.47	5.24
7,674.00	0.69	310.96	7,637.22	-561.15	-81.61	567.05	0.62	-0.39	-32.49
7,768.00	0.69	230.71	7,731.22	-561.13	-82.47	567.16	0.95	0.00	-85.37
7,862.00	1.25	201.09	7,825.20	-562.45	-83.28	568.58	0.78	0.60	-31.51
7,957.00	0.54	335.34	7,920.20	-563.01	-83.84	569.21	1.76	-0.75	141.32
8,052.00	1.88	352.96	8,015.17	-561.05	-84.22	567.33	1.45	1.41	18.55
8,146.00	1.31	345.71	8,109.14	-558.48	-84.67	564.85	0.64	-0.61	-7.71
8,241.00	0.94	314.71	8,204.12	-556.88	-85.49	563.38	0.74	-0.39	-32.63
8,335.00	0.38	341.71	8,298.11	-556.04	-86.14	562.65	0.67	-0.60	28.72
8,430.00	0.19	171.46	8,393.11	-555.90	-86.21	562.52	0.60	-0.20	-179.21
8,523.00	0.38	164.71	8,486.11	-556.35	-86.11	562.95	0.21	0.20	-7.26
8,618.00	0.63	155.71	8,581.11	-557.13	-85.81	563.68	0.28	0.26	-9.47
8,713.00	0.69	142.59	8,676.10	-558.06	-85.25	564.52	0.17	0.06	-13.81
8,808.00	1.25	147.84	8,771.09	-559.39	-84.35	565.71	0.60	0.59	5.53
8,902.00	1.50	130.34	8,865.06	-561.06	-82.87	567.14	0.52	0.27	-18.62
8,997.00	1.44	132.46	8,960.03	-562.67	-81.04	568.47	0.09	-0.06	2.23
9,091.00	1.53	124.08	9,054.00	-564.17	-79.13	569.68	0.25	0.10	-8.91
9,186.00	0.19	229.09	9,148.99	-564.98	-78.20	570.36	1.67	-1.41	110.54
9,280.00	0.25	173.71	9,242.99	-565.29	-78.29	570.67	0.22	0.06	-58.91
9,374.00	0.31	148.21	9,336.99	-565.71	-78.13	571.07	0.15	0.06	-27.13
9,461.00	0.69	162.84	9,423.98	-566.41	-77.86	571.72	0.46	0.44	16.82
9,564.00	0.94	129.46	9,526.97	-567.54	-77.02	572.72	0.51	0.24	-32.41
9,657.00	1.00	150.96	9,619.96	-568.73	-76.04	573.76	0.39	0.06	23.12
9,753.00	0.88	147.46	9,715.95	-570.09	-75.23	574.99	0.14	-0.12	-3.65
9,847.00	1.13	124.34	9,809.93	-571.22	-74.08	575.94	0.50	0.27	-24.60
9,942.00	1.13	99.09	9,904.91	-571.89	-72.38	576.37	0.52	0.00	-26.58
10,019.00	1.91	137.34	9,981.89	-572.96	-70.76	577.19	1.61	1.01	49.68
<b>EXT.TD</b>									
10,071.00	1.91	137.34	10,033.86	-574.23	-69.59	578.28	0.00	0.00	0.00

**Company:** ANADARKO PETROLEUM CORP.  
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**Survey Calculation Method:** Minimum Curvature  
**Database:** EDM 2003.21 Single User Db

**Survey Annotations**

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
10,071.00	10,033.86	-574.23	-69.59	EXT.TD

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



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