KerrMcGee

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 922-18L2CS
T9S R22E
Section 18: NWSW
NWSW, Lot 3, 1687' FSL, 344' FWL (surface)
NWSW, Lot 3, 1994' FSL, 262' 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 922-18L2CS 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

Form 3160-3
(August 1999)

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

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

1a. Type of Work: [X] DRILL [ ] REENTER

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

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

8. Lease Name and Well No.
NBU 922-18L2CS

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

9. API Well No.
43-047-39827

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

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

10. Field and Pool, or Exploratory
NATURAL BUTTES

4. Location of Well *(Report location clearly and in accordance with any State requirements.*)*
At surface **NW/SW 1687'FSL, 344'FWL (LOT 3)**
At proposed prod. Zone **NW/SW 1994'FSL, 262'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*
27.4 +/- 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)
344'

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
9811'

20. BLM/BIA Bond No. on file
RLB0005239

21. Elevations (Show whether DF, KDB, RT, GL, etc.)
4852'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
Name *(Printed/Typed)* **SHEILA UPCHEGO**
Date **11/16/2007**

Title
SENIOR LAND ADMIN SPECIALIST

Approved by *(Signature)*
Name *(Printed/Typed)* **BRADLEY G. HILL**
Date **12-03-07**

Title
Office **ENVIRONMENTAL MANAGER**

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

Title 18 U.S.C. Section 1001and 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)*

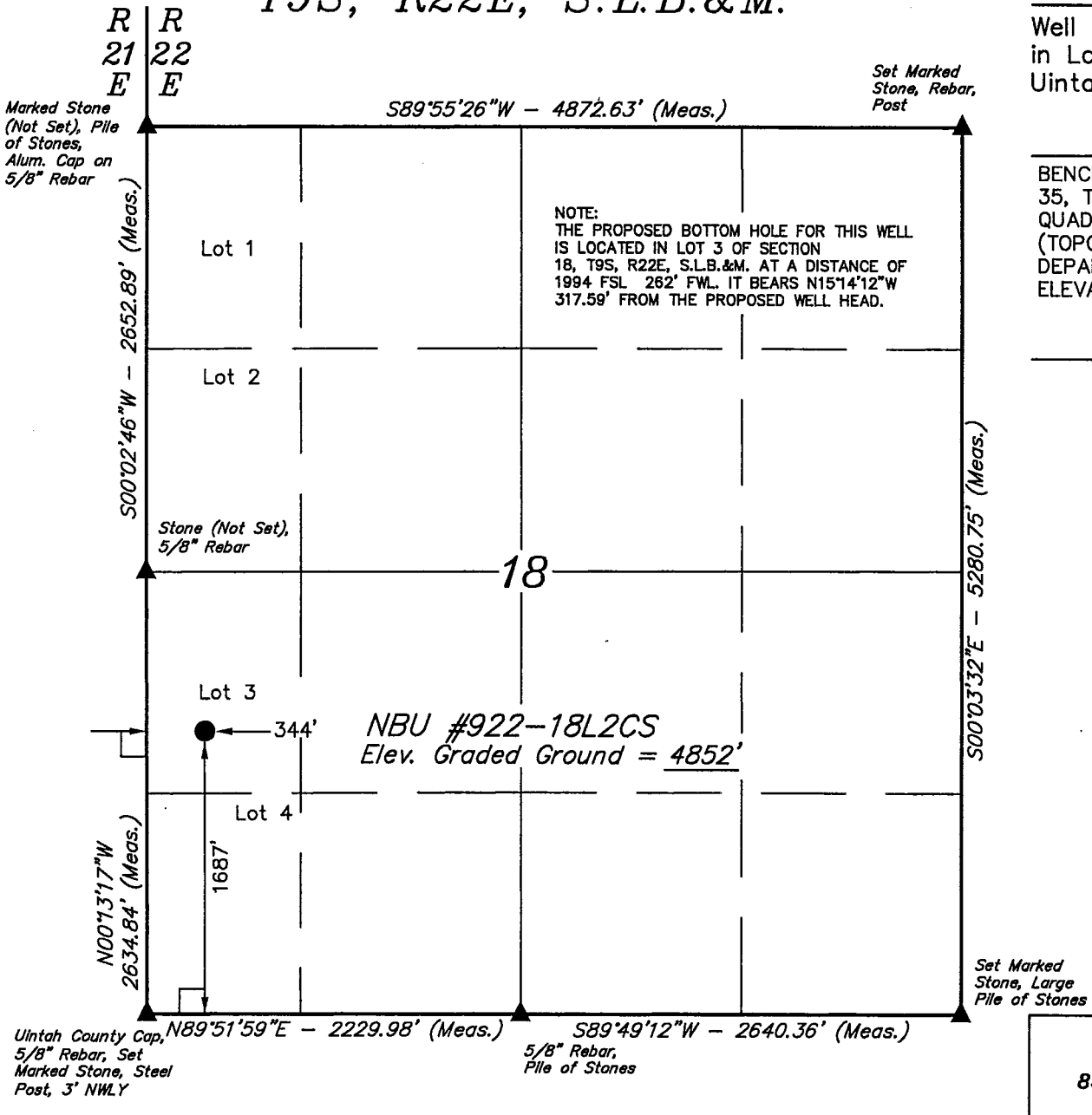
Surf 628952X
4432345Y
40.033367
-109.488647

BHL 628925X
4432437Y
40.034204
-109.488945

Federal Approval of this Action is Necessary

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

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



Kerr–McGee Oil & Gas Onshore LP

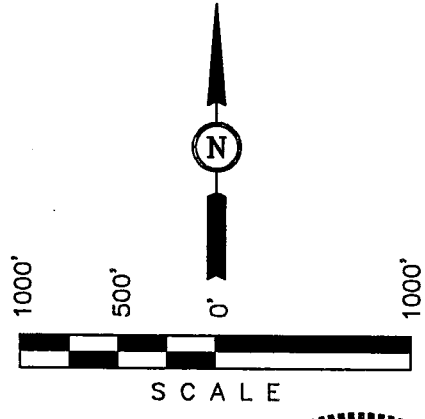
Well location, NBU #922–18L2CS, located as shown in Lot 3 of Section 18, T9S, R22E, S.L.B.&M., Uintah County, Utah.

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.

REGISTERED LAND SURVEYOR
REGISTRATION NO. 161319
STATE OF UTAH

REGISTERED LAND SURVEYOR No. 161319 STATE OF UTAH ROBERT L. KAY

LEGEND:

└ = 90° SYMBOL

● = PROPOSED WELL HEAD.

▲ = SECTION CORNERS LOCATED.

(NAD 83)
LATITUDE = 40°02'00.12" (40.033367)
LONGITUDE = 109°29'22.16" (109.489489)
(NAD 27)
LATITUDE = 40°02'00.25" (40.033403)
LONGITUDE = 109°29'19.69" (109.488803)

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

SCALE	DATE SURVEYED:	DATE DRAWN:
1" = 1000'	05–07–07	05–22–07
PARTY: D.K. L.K. C.H.	REFERENCES: G.L.O. PLAT	
WEATHER: WARM	FILE: Kerr–McGee Oil & Gas Onshore LP	

NBU 922-18L2CS
NW/SW Lot 3, Sec. 18, T9S, R22E
UINTAH COUNTY, UTAH
UTU-0359

ONSHORE ORDER NO. 1

DRILLING PROGRAM

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

Formation	Depth
Uinta	0- Surface
Green River	1695'
Top of Birds Nest Water	1997'
Mahogany	2365'
Wasatch	4973'
Mesaverde	7723'
MVU2	8639'
MVL1	9165'
TVD	9790'
TD (MD)	9811'

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

Substance	Formation	Depth
	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 9811' TD, approximately equals 6083 psi (calculated at 0.62 psi/foot).

Maximum anticipated surface pressure equals approximately 3925 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.

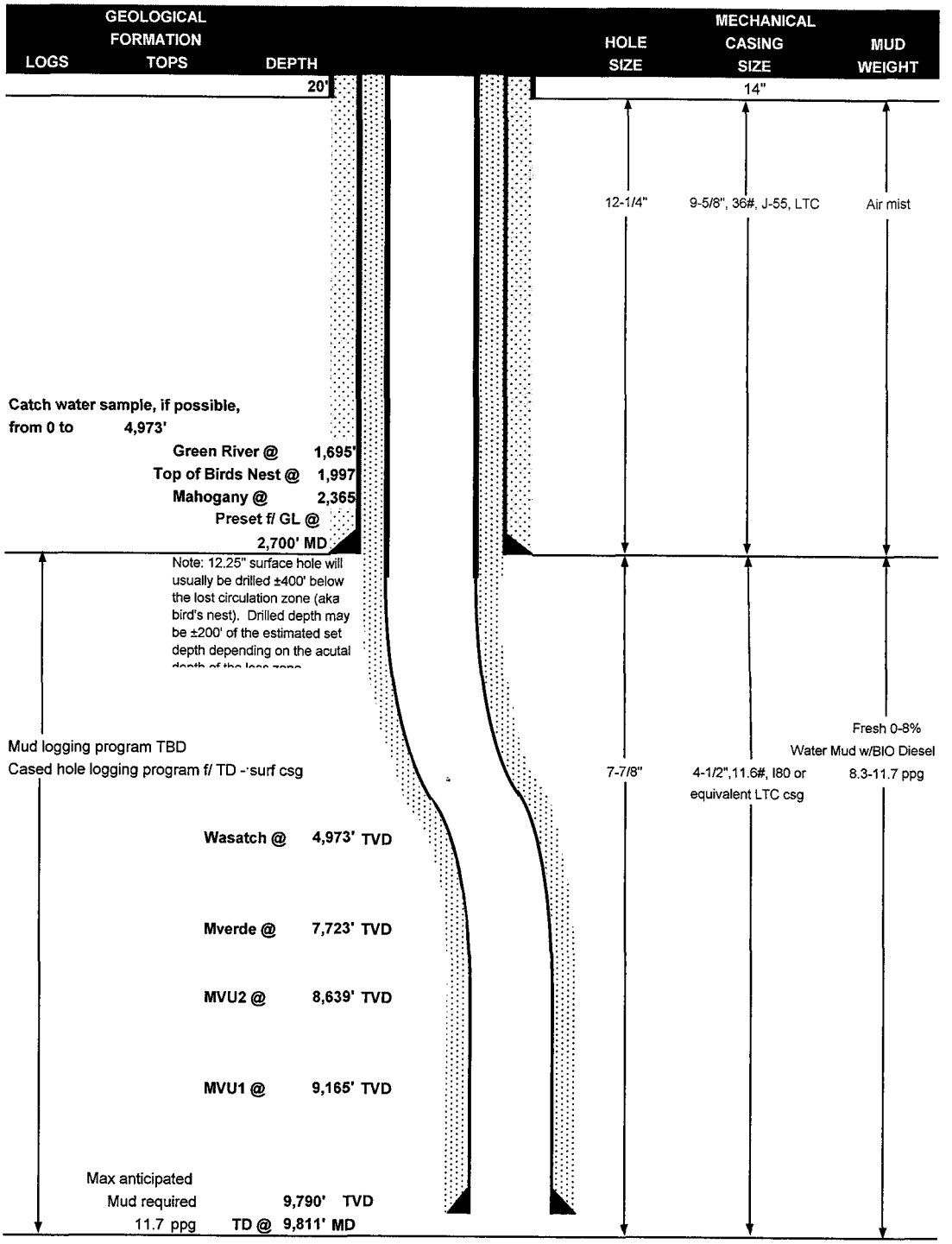
10. **Other Information:**

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 922-18L2CS**		TD	9,811' MD	9,790' TVD
FIELD	Natural Buttes	COUNTY Uintah STATE Utah	ELEVATION	4,852' GL	KB 4,867'
SURFACE LOCATION	NW/SW LOT 3, SEC, 18, T9S, R22E 1687'FSL, 344'FWL				
	Latitude: 40.033367 Longitude: 109.489489				
BTM HOLE LOCATION	NW/SW LOT 3, SEC, 18, T9S, R22E 1994'FSL, 262'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	0.92	1.60	5.93
						7780	6350	201000
PRODUCTION	4-1/2"	0 to 9811	11.60	I-80	LTC	2.04	1.06	2.02

1) Max Anticipated Surf. Press.(MASP) (Surface Casing) = (Pore Pressure at next csg point-(0.22 psi/ft-partial evac gradient x TVD of next csg point)

2) MASP (Prod Casing) = Pore Pressure at TD - (.22 psi/ft-partial evac gradient x TD)

(Burst Assumptions: TD = 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 3811 psi

CEMENT PROGRAM

		FT. OF FILL	DESCRIPTION	SACKS	EXCESS	WEIGHT	YIELD
SURFACE	LEAD	500	Premium cmt + 2% CaCl + .25 pps flocele	215	60%	15.60	1.18
Option 1							
	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			NOTE: If well will circulate water to surface, option 2 will be utilized				
Option 2	LEAD	1500	65/35 Poz + 6% Gel + 10 pps gilsonite + .25 pps Flocele + 3% salt BWOW	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	7,221'	Premium Lite II + 3% KCl + 0.25 pps celloflake + 5 pps gilsonite + 10% gel + 0.5% extender	790	60%	11.00	3.38
	TAIL	2,590'	50/50 Poz/G + 10% salt + 2% gel +.1% R-3	730	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.

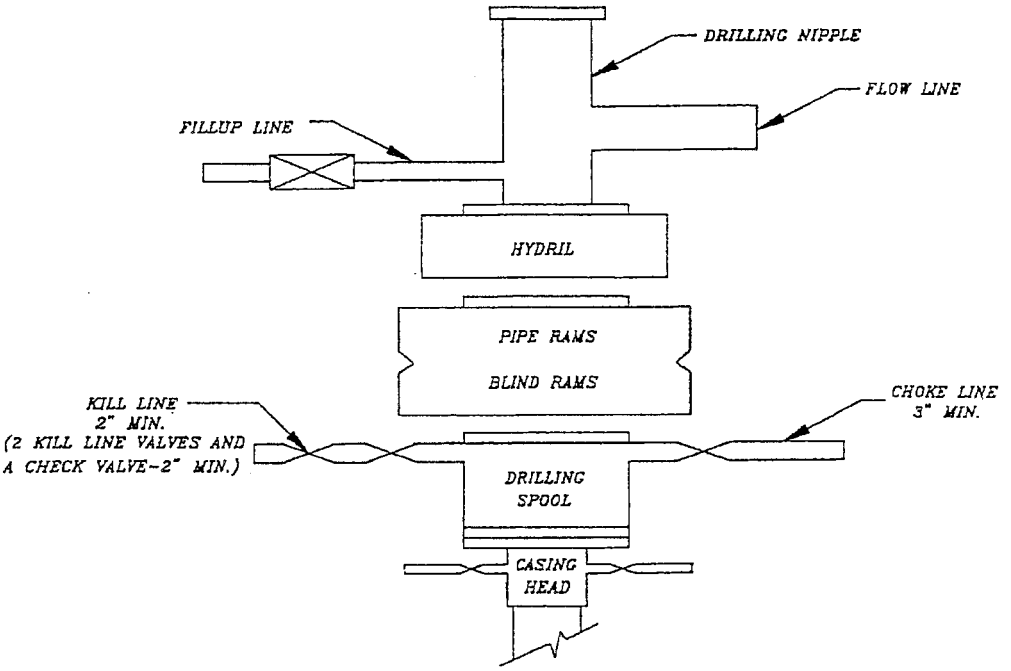
DRILLING ENGINEER: _____ **DATE:** _____

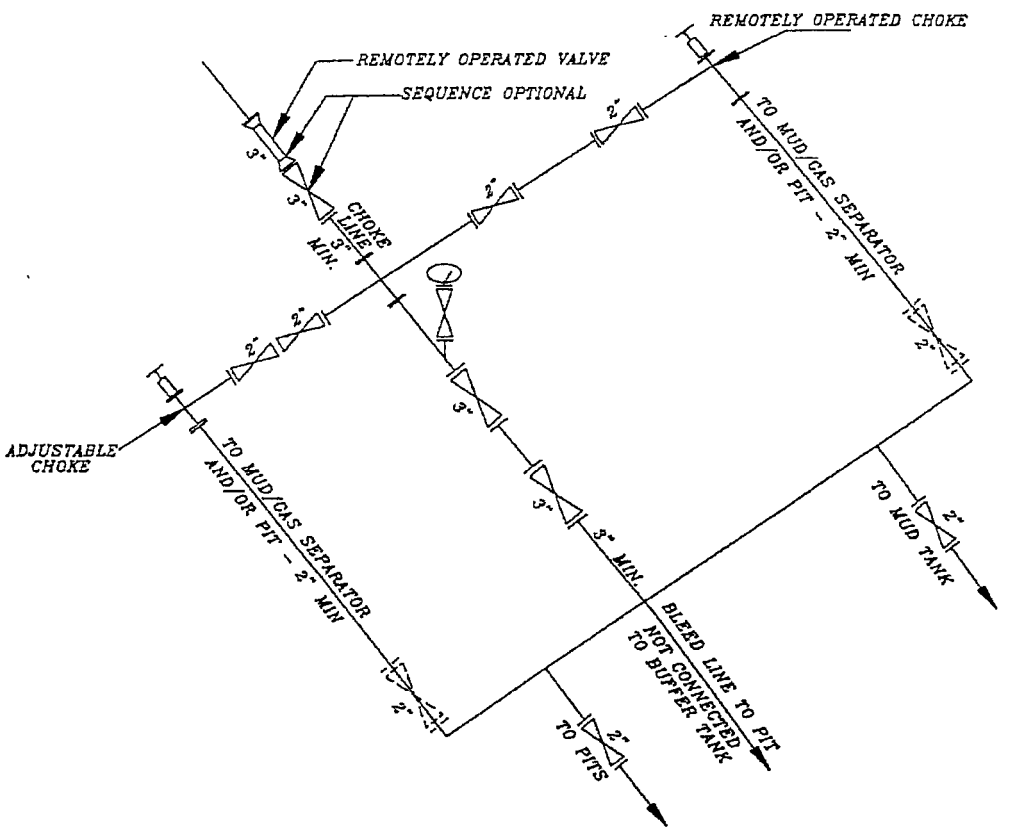
Brad Laney

DRILLING SUPERINTENDENT: _____ **DATE:** _____

Randy Bayne

5M BOP STACK and CHOKE MANIFOLD SYSTEM





Weatherford

Drilling Services

Proposal

Anadarko KerrMcGee

ANADARKO - KERR McGEE

NBU 922-18L2CS

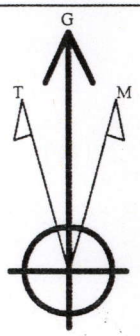
UINTAH COUNTY, UTAH

WELL FILE: PLAN 1

DATE: SEPTEMBER 26, 2007

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

ANADARKO KERR MCGEE OIL & GAS
NBU 922-18L2CS
UINTAH COUNTY, UTAH



Azimuths to Grid North
True North: -0.97°
Magnetic North: 10.60°

Magnetic Field
Strength: 52765nT
Dip Angle: 66.02°
Date: 9/26/2007
Model: bggm2006

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.00	0.00	343.83	0.00	0.00	0.00	0.00	0.00	0.00	
2	2800.00	0.00	343.83	2800.00	0.00	0.00	0.00	0.00	0.00	
3	3123.07	8.08	343.83	3122.00	21.83	-6.33	2.50	343.83	22.73	
4	4955.58	8.08	343.83	4936.33	269.11	-78.05	0.00	0.00	280.20	
5	5494.03	0.00	343.83	5473.00	305.50	-88.60	1.50	180.00	318.09	
6	9811.03	0.00	343.83	9790.00	305.50	-88.60	0.00	343.83	318.09	PBHL

WELL DETAILS

Name	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
18L2CS	0.00	0.00	14541783.10	2063488.50	40°02'00.111N	109°29'19.099W	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	4973.00	4992.59	WASATCH
2	7723.00	7744.03	MESAVERDE

FIELD DETAILS

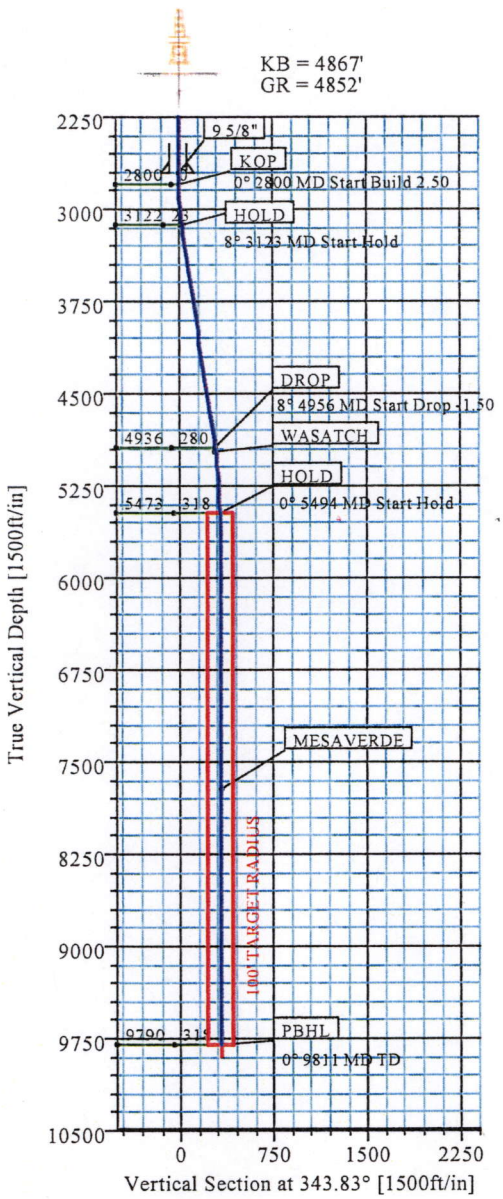
UINTAH COUNTY, UTAH (UTM Zone 12N-NAD 27)

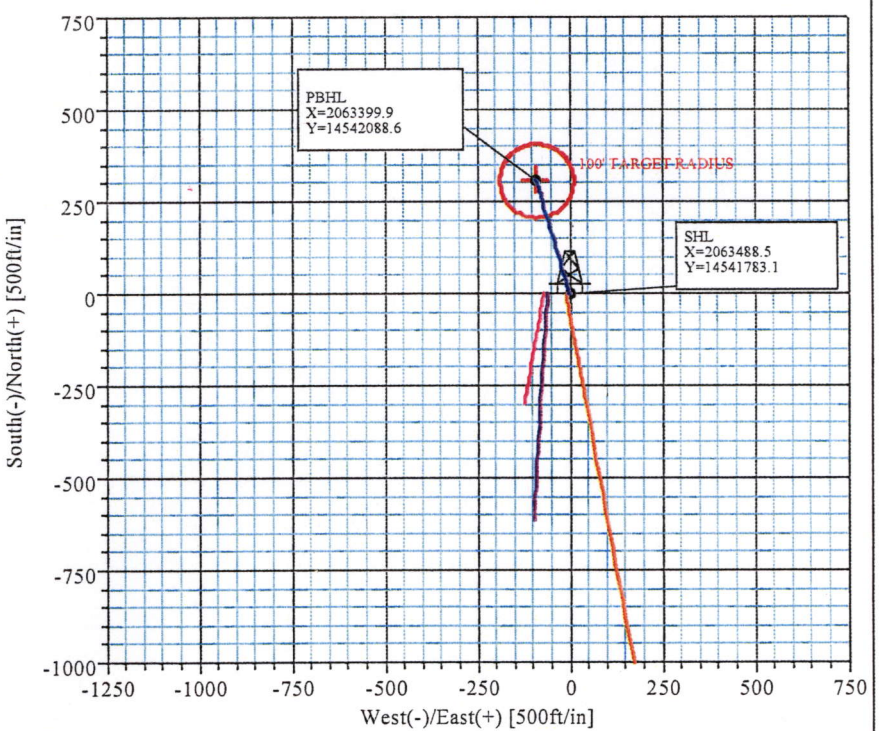
Geodetic System: Universal Transverse Mercator (USfeet)
Ellipsoid: NAD27 (Clarke 1866)
Zone: UTM Zone 12, North 114W to 108W
Magnetic Model: bggm2006

System Datum: Mean Sea Level
Local North: Grid North

LEGEND

18L3S (1)
18M2S (1)
18M3S (1)
Plan #1 18L2CS





Plan: Plan #1 18L2CS (18L2CS/1)
Created By: R. JOYNER
Date: 9/27/2007

Weatherford Drilling Services
DIRECTIONAL PLAN REPORT

Weatherford

Company:	Anadarko-Kerr-McGee	**Date:**	9/28/2007	**Time:** 09:49:49	**Page:** 1
Field:	UINTAH COUNTY, UTAH (UTM Zone 12N-NAD 27)	**Co-ordinate(NE) Reference:**	Site: NBU 922-18L2CS PAD LM, Grid North		
Site:	NBU 922-18L2CS PAD LM	**Vertical (TVD) Reference:**	SITE 4867.0		
Well:	18L2CS	**Section (VS) Reference:**	Well (0.00N,0.00E,343.83Azi)		
Wellpath:	1	**Survey Calculation Method:**	Minimum Curvature	**Db:**	Sybase

Plan:	Plan #1 18L2CS	**Date Composed:**	9/26/2007
		Version:	1
Principal:	Yes	**Tied-to:**	From Surface

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

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

Site: NBU 922-18L2CS PAD LM

1687 FSL, 344 FWL - SEC18 T9S R22E

Site Position:		**Northing:**	14541783.10 ft	**Latitude:**	40	2	0.111 N
From:	Map	**Easting:**	2063488.50 ft	**Longitude:**	109	29	19.099 W
Position Uncertainty:	0.00 ft			**North Reference:**			Grid
Ground Level:	4852.00 ft			**Grid Convergence:**			0.97 deg

Well: 18L2CS **Slot Name:**

Well Position:	+N/-S 0.00 ft	**Northing:**	14541783.10 ft	**Latitude:**	40	2	0.111 N
	+E/-W 0.00 ft	**Easting:**	2063488.50 ft	**Longitude:**	109	29	19.099 W
Position Uncertainty:	0.00 ft						

Wellpath: 1

				Drilled From:	Surface
				Tie-on Depth:	0.00 ft
Current Datum:	SITE	**Height**	4867.00 ft	**Above System Datum:**	Mean Sea Level
Magnetic Data:	9/26/2007			**Declination:**	11.57 deg
Field Strength:	52765 nT			**Mag Dip Angle:**	66.02 deg

Vertical Section:	Depth From (TVD) ft	+N/-S ft	+E/-W ft	Direction deg
	0.00	0.00	0.00	343.83

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	343.83	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2800.00	0.00	343.83	2800.00	0.00	0.00	0.00	0.00	0.00	0.00	
3123.07	8.08	343.83	3122.00	21.83	-6.33	2.50	2.50	0.00	343.83	
4955.58	8.08	343.83	4936.33	269.11	-78.05	0.00	0.00	0.00	0.00	
5494.03	0.00	343.83	5473.00	305.50	-88.60	1.50	-1.50	0.00	180.00	
9811.03	0.00	343.83	9790.00	305.50	-88.60	0.00	0.00	0.00	343.83	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	343.83	2800.00	0.00	0.00	0.00	0.00	14541783.10	2063488.50	KOP
2900.00	2.50	343.83	2899.97	2.09	-0.61	2.18	2.50	14541785.19	2063487.89	
3000.00	5.00	343.83	2999.75	8.38	-2.43	8.72	2.50	14541791.48	2063486.07	
3100.00	7.50	343.83	3099.14	18.83	-5.46	19.61	2.50	14541801.93	2063483.04	
3123.07	8.08	343.83	3122.00	21.83	-6.33	22.73	2.50	14541804.93	2063482.17	HOLD
3200.00	8.08	343.83	3198.17	32.21	-9.34	33.54	0.00	14541815.31	2063479.16	
3300.00	8.08	343.83	3297.18	45.71	-13.26	47.59	0.00	14541828.81	2063475.24	
3400.00	8.08	343.83	3396.18	59.20	-17.17	61.64	0.00	14541842.30	2063471.33	
3500.00	8.08	343.83	3495.19	72.70	-21.08	75.69	0.00	14541855.80	2063467.42	
3600.00	8.08	343.83	3594.20	86.19	-25.00	89.74	0.00	14541869.29	2063463.50	
3700.00	8.08	343.83	3693.21	99.68	-28.91	103.79	0.00	14541882.78	2063459.59	
3800.00	8.08	343.83	3792.22	113.18	-32.82	117.84	0.00	14541896.28	2063455.68	
3900.00	8.08	343.83	3891.22	126.67	-36.74	131.89	0.00	14541909.77	2063451.76	
4000.00	8.08	343.83	3990.23	140.17	-40.65	145.94	0.00	14541923.27	2063447.85	
4100.00	8.08	343.83	4089.24	153.66	-44.56	159.99	0.00	14541936.76	2063443.94	

Weatherford Drilling Services
DIRECTIONAL PLAN REPORT

Weatherford

Company:	Anadarko-Kerr-McGee	**Date:** 9/28/2007 **Time:** 09:49:49	**Page:** 2
Field:	UINTAH COUNTY, UTAH (UTM Zone 12N-NAD 27)	**Co-ordinate(NE) Reference:**	Site: NBU 922-18L2CS PAD LM, Grid North
Site:	NBU 922-18L2CS PAD LM	**Vertical (TVD) Reference:**	SITE 4867.0
Well:	18L2CS	**Section (VS) Reference:**	Well (0.00N,0.00E,343.83Azi)
Wellpath:	1	**Survey Calculation Method:**	Minimum Curvature **Db:** 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	8.08	343.83	4188.25	167.15	-48.48	174.04	0.00	14541950.25	2063440.02	
4300.00	8.08	343.83	4287.26	180.65	-52.39	188.09	0.00	14541963.75	2063436.11	
4400.00	8.08	343.83	4386.26	194.14	-56.30	202.14	0.00	14541977.24	2063432.20	
4500.00	8.08	343.83	4485.27	207.64	-60.22	216.19	0.00	14541990.74	2063428.28	
4600.00	8.08	343.83	4584.28	221.13	-64.13	230.24	0.00	14542004.23	2063424.37	
4700.00	8.08	343.83	4683.29	234.62	-68.04	244.29	0.00	14542017.72	2063420.46	
4800.00	8.08	343.83	4782.30	248.12	-71.96	258.34	0.00	14542031.22	2063416.54	
4900.00	8.08	343.83	4881.31	261.61	-75.87	272.39	0.00	14542044.71	2063412.63	
4955.58	8.08	343.83	4936.33	269.11	-78.05	280.20	0.00	14542052.21	2063410.45	DROP
4992.59	7.52	343.83	4973.00	273.93	-79.45	285.22	1.50	14542057.03	2063409.05	WASATCH
5000.00	7.41	343.83	4980.35	274.86	-79.71	286.19	1.50	14542057.96	2063408.79	
5100.00	5.91	343.83	5079.67	286.00	-82.94	297.78	1.50	14542069.10	2063405.56	
5200.00	4.41	343.83	5179.26	294.64	-85.45	306.78	1.50	14542077.74	2063403.05	
5300.00	2.91	343.83	5279.06	300.77	-87.23	313.16	1.50	14542083.87	2063401.27	
5400.00	1.41	343.83	5378.98	304.39	-88.28	316.93	1.50	14542087.49	2063400.22	
5494.03	0.00	343.83	5473.00	305.50	-88.60	318.09	1.50	14542088.60	2063399.90	HOLD
5500.00	0.00	343.83	5478.97	305.50	-88.60	318.09	0.00	14542088.60	2063399.90	
5600.00	0.00	343.83	5578.97	305.50	-88.60	318.09	0.00	14542088.60	2063399.90	
5700.00	0.00	343.83	5678.97	305.50	-88.60	318.09	0.00	14542088.60	2063399.90	
5800.00	0.00	343.83	5778.97	305.50	-88.60	318.09	0.00	14542088.60	2063399.90	
5900.00	0.00	343.83	5878.97	305.50	-88.60	318.09	0.00	14542088.60	2063399.90	
6000.00	0.00	343.83	5978.97	305.50	-88.60	318.09	0.00	14542088.60	2063399.90	
6100.00	0.00	343.83	6078.97	305.50	-88.60	318.09	0.00	14542088.60	2063399.90	
6200.00	0.00	343.83	6178.97	305.50	-88.60	318.09	0.00	14542088.60	2063399.90	
6300.00	0.00	343.83	6278.97	305.50	-88.60	318.09	0.00	14542088.60	2063399.90	
6400.00	0.00	343.83	6378.97	305.50	-88.60	318.09	0.00	14542088.60	2063399.90	
6500.00	0.00	343.83	6478.97	305.50	-88.60	318.09	0.00	14542088.60	2063399.90	
6600.00	0.00	343.83	6578.97	305.50	-88.60	318.09	0.00	14542088.60	2063399.90	
6700.00	0.00	343.83	6678.97	305.50	-88.60	318.09	0.00	14542088.60	2063399.90	
6800.00	0.00	343.83	6778.97	305.50	-88.60	318.09	0.00	14542088.60	2063399.90	
6900.00	0.00	343.83	6878.97	305.50	-88.60	318.09	0.00	14542088.60	2063399.90	
7000.00	0.00	343.83	6978.97	305.50	-88.60	318.09	0.00	14542088.60	2063399.90	
7100.00	0.00	343.83	7078.97	305.50	-88.60	318.09	0.00	14542088.60	2063399.90	
7200.00	0.00	343.83	7178.97	305.50	-88.60	318.09	0.00	14542088.60	2063399.90	
7300.00	0.00	343.83	7278.97	305.50	-88.60	318.09	0.00	14542088.60	2063399.90	
7400.00	0.00	343.83	7378.97	305.50	-88.60	318.09	0.00	14542088.60	2063399.90	
7500.00	0.00	343.83	7478.97	305.50	-88.60	318.09	0.00	14542088.60	2063399.90	
7600.00	0.00	343.83	7578.97	305.50	-88.60	318.09	0.00	14542088.60	2063399.90	
7700.00	0.00	343.83	7678.97	305.50	-88.60	318.09	0.00	14542088.60	2063399.90	
7744.03	0.00	343.83	7723.00	305.50	-88.60	318.09	0.00	14542088.60	2063399.90	MESAVERDE
7800.00	0.00	343.83	7778.97	305.50	-88.60	318.09	0.00	14542088.60	2063399.90	
7900.00	0.00	343.83	7878.97	305.50	-88.60	318.09	0.00	14542088.60	2063399.90	
8000.00	0.00	343.83	7978.97	305.50	-88.60	318.09	0.00	14542088.60	2063399.90	
8100.00	0.00	343.83	8078.97	305.50	-88.60	318.09	0.00	14542088.60	2063399.90	
8200.00	0.00	343.83	8178.97	305.50	-88.60	318.09	0.00	14542088.60	2063399.90	
8300.00	0.00	343.83	8278.97	305.50	-88.60	318.09	0.00	14542088.60	2063399.90	
8400.00	0.00	343.83	8378.97	305.50	-88.60	318.09	0.00	14542088.60	2063399.90	
8500.00	0.00	343.83	8478.97	305.50	-88.60	318.09	0.00	14542088.60	2063399.90	
8600.00	0.00	343.83	8578.97	305.50	-88.60	318.09	0.00	14542088.60	2063399.90	
8700.00	0.00	343.83	8678.97	305.50	-88.60	318.09	0.00	14542088.60	2063399.90	
8800.00	0.00	343.83	8778.97	305.50	-88.60	318.09	0.00	14542088.60	2063399.90	
8900.00	0.00	343.83	8878.97	305.50	-88.60	318.09	0.00	14542088.60	2063399.90	
9000.00	0.00	343.83	8978.97	305.50	-88.60	318.09	0.00	14542088.60	2063399.90	

Weatherford Drilling Services
DIRECTIONAL PLAN REPORT

Weatherford

Company:	Anadarko-Kerr-McGee	**Date:** 9/28/2007	**Time:** 09:49:49	**Page:**	3
Field:	UINTAH COUNTY, UTAH (UTM Zone 12N-NAD 27)	**Co-ordinate(NE) Reference:**	Site: NBU 922-18L2CS PAD LM, Grid North		
Site:	NBU 922-18L2CS PAD LM	**Vertical (TVD) Reference:**	SITE 4867.0		
Well:	18L2CS	**Section (VS) Reference:**	Well (0.00N,0.00E,343.83Azi)		
Wellpath:	1	**Survey Calculation Method:**	Minimum Curvature	**Db:**	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	343.83	9078.97	305.50	-88.60	318.09	0.00	14542088.60	2063399.90	
9200.00	0.00	343.83	9178.97	305.50	-88.60	318.09	0.00	14542088.60	2063399.90	
9300.00	0.00	343.83	9278.97	305.50	-88.60	318.09	0.00	14542088.60	2063399.90	
9400.00	0.00	343.83	9378.97	305.50	-88.60	318.09	0.00	14542088.60	2063399.90	
9500.00	0.00	343.83	9478.97	305.50	-88.60	318.09	0.00	14542088.60	2063399.90	
9600.00	0.00	343.83	9578.97	305.50	-88.60	318.09	0.00	14542088.60	2063399.90	
9700.00	0.00	343.83	9678.97	305.50	-88.60	318.09	0.00	14542088.60	2063399.90	
9800.00	0.00	343.83	9778.97	305.50	-88.60	318.09	0.00	14542088.60	2063399.90	
9811.03	0.00	343.83	9790.00	305.50	-88.60	318.09	0.00	14542088.60	2063399.90	PBHL

Targets

Name	Description Dip.	Dir.	TVD ft	+N/-S ft	+E/-W ft	Map Northing ft	Map Easting ft	<--- Latitude ---> Deg	Min	Sec	<--- Longitude ---> Deg	Min	Sec
PBHL -Circle (Radius: 100) -Plan hit target			9790.00	305.50	-88.60	14542088.60	2063399.90	40	2	3.145 N	109	29	20.171 W

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
3123.07	3122.00	HOLD
4955.58	4936.33	DROP
5494.03	5473.00	HOLD
9811.03	9790.00	PBHL

Formations

MD ft	TVD ft	Formations	Lithology	Dip Angle deg	Dip Direction deg
4992.59	4973.00	WASATCH		0.00	0.00
7744.03	7723.00	MESAVERDE		0.00	0.00

Weatherford Drilling Services

GeoDec v4.1.130

Report Date:	September 27, 2007
Job Number:	
Customer:	ANADARKO-KERR McGEE
Well Name:	NBU 922-18L2CS
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 14541783.100 USFT	Latitude 40 2 0.1110172 DMS
East/West 2063488.500 USFT	Longitude -109 29 19.0987608 DMS
Grid Convergence: .97234982°	
Total Correction: +10.5973°	

Geodetic Location WGS84		Elevation = 1479.0 Meters
Latitude =	40.03336° N	40° 2 min .111 sec
Longitude =	109.48864° W	109° 29 min 19.099 sec

Magnetic Declination =	+11.5700° [True North Offset]		
Local Gravity =	.9995 g		
Local Field Strength=	52726 nT	Mag Vector X =	20994 nT
Dip =	66.0190°	Mag Vector Y =	4298 nT
Model File:	bggm2006	Mag Vector Z =	48174 nT
Spud Date:	Sep 27, 2007	Mag Vector H =	21430 nT

Signed:_____ Date:_____

NBU 922-18L2CS
NW/SW Lot 3, 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 0.1 +/- miles of access road needs to be re-routed. 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 21' +/- of 6" pipeline is proposed from the location to an existing pipeline.

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

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

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

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

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

Bond coverage pursuant to 43 CFR 3104 for lease activities is being provided by Bureau of Indian Affairs Nationwide Bond #RLB0005239, Bureau of Land Management Nationwide Bold #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 Upchego

11/1/2007
Date

Kerr-McGee Oil & Gas Onshore LP
NBU #922-18M2S, L2CS, M3S, & L3S
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 0.4 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE WEST; TURN LEFT AND PROCEED IN A WESTERLY DIRECTION APPROXIMATELY 200' TO THE EXISTING #922-18L AND THE PROPSED LOCATION.

TOTAL DISTANCE FROM VERNAL, UTAH TO THE PROPOSED WELL LOCATION IS APPROXIMATELY 49.1 MILES.

Kerr-McGee Oil & Gas Onshore LP

NBU #922-18M2S, L2CS, M3S & L3S

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

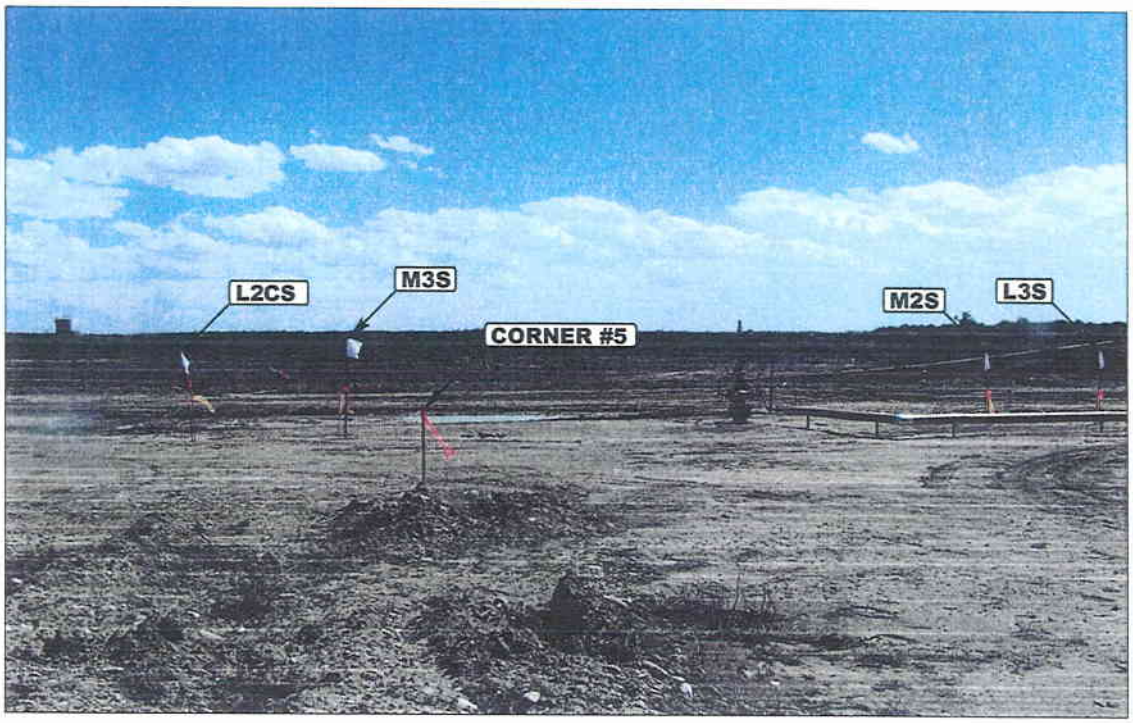
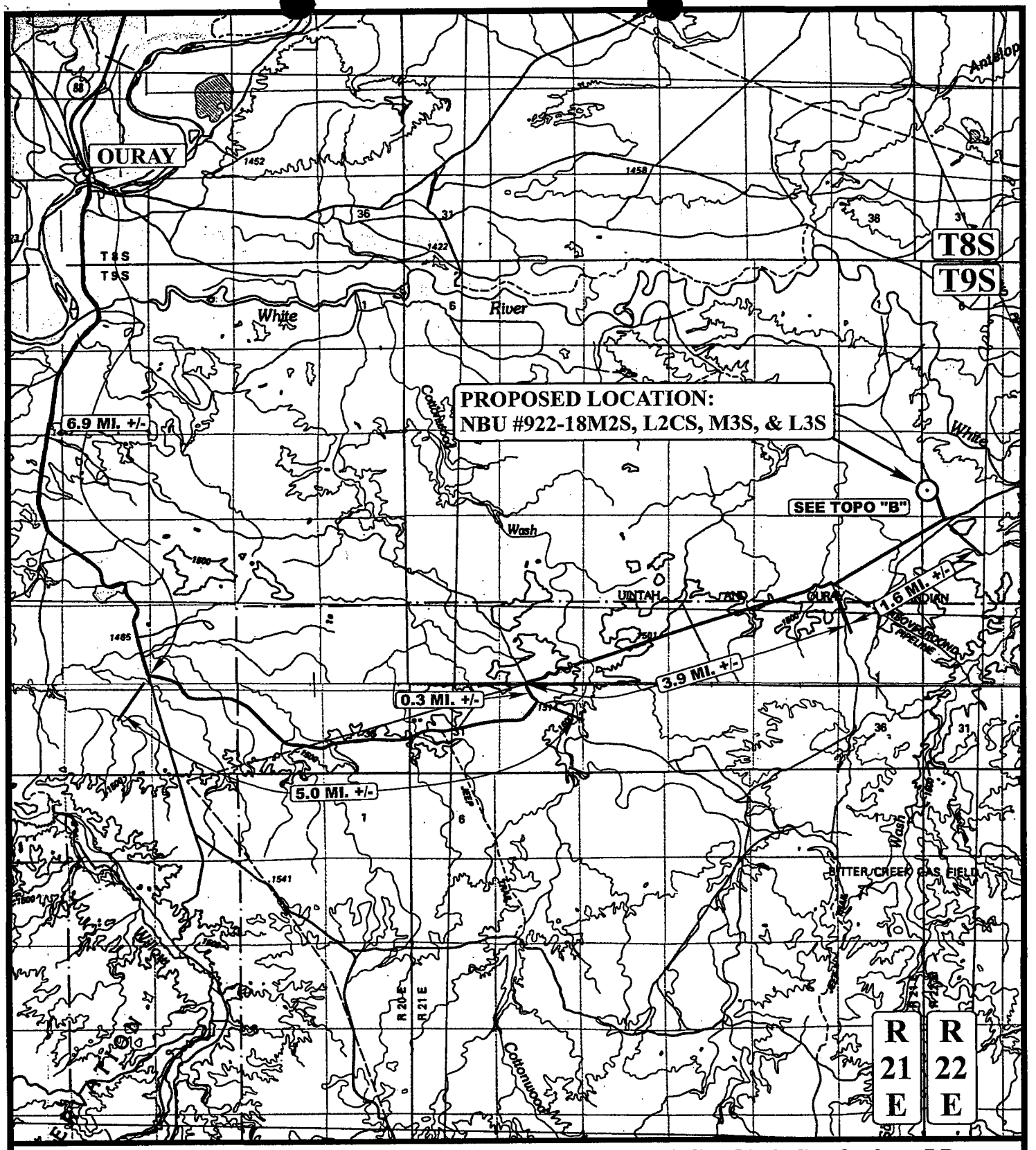


PHOTO: VIEW FROM CORNER #5 TO LOCATION STAKES **CAMERA ANGLE: SOUTHERLY**

PHOTO: VIEW OF EXISTING ACCESS **CAMERA ANGLE: WESTERLY**

- Since 1964 -
Uintah Engineering & Land Surveying
85 South 200 East Vernal, Utah 84078
435-789-1017 uels@uelsinc.com

LOCATION PHOTOS	05 MONTH	16 DAY	07 YEAR	PHOTO
TAKEN BY: L.K.	DRAWN BY: B.C.	REVISED: 00-00-00		



LEGEND:

⊙ PROPOSED LOCATION

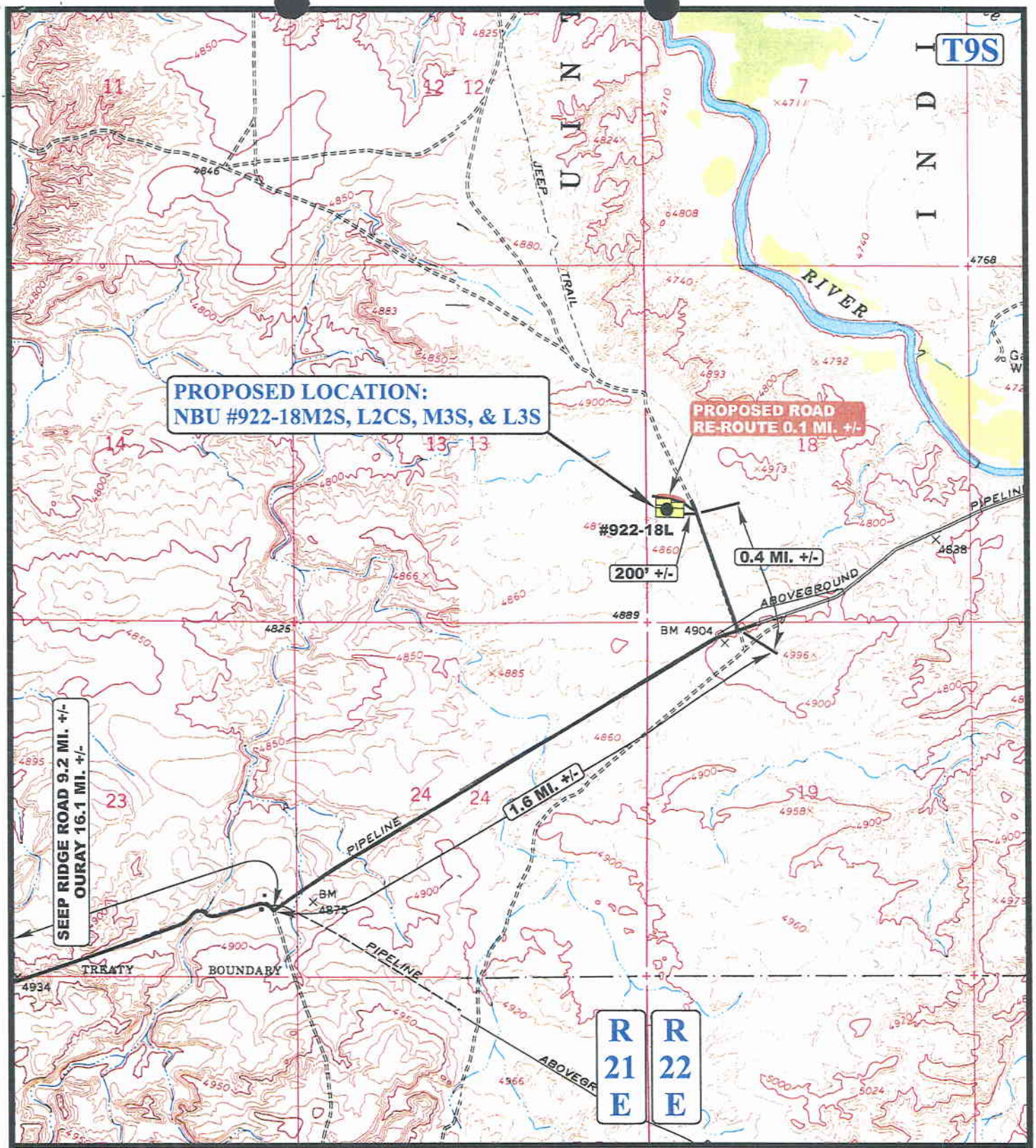
N

Kerr-McGee Oil & Gas Onshore LP

NBU #922-18M2S, L2CS, M3S, & L3S
SECTION 18, T9S, R22E, S.L.B.&M.
LOT 3

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

TOPOGRAPHIC MAP	05 MONTH	16 DAY	07 YEAR	A TOPO
SCALE: 1:100,000	DRAWN BY: B.C.	REVISED: 00-00-00		



LEGEND:

EXISTING ROAD
PROPOSED ACCESS ROAD
PROPOSED ROAD RE-ROUTE

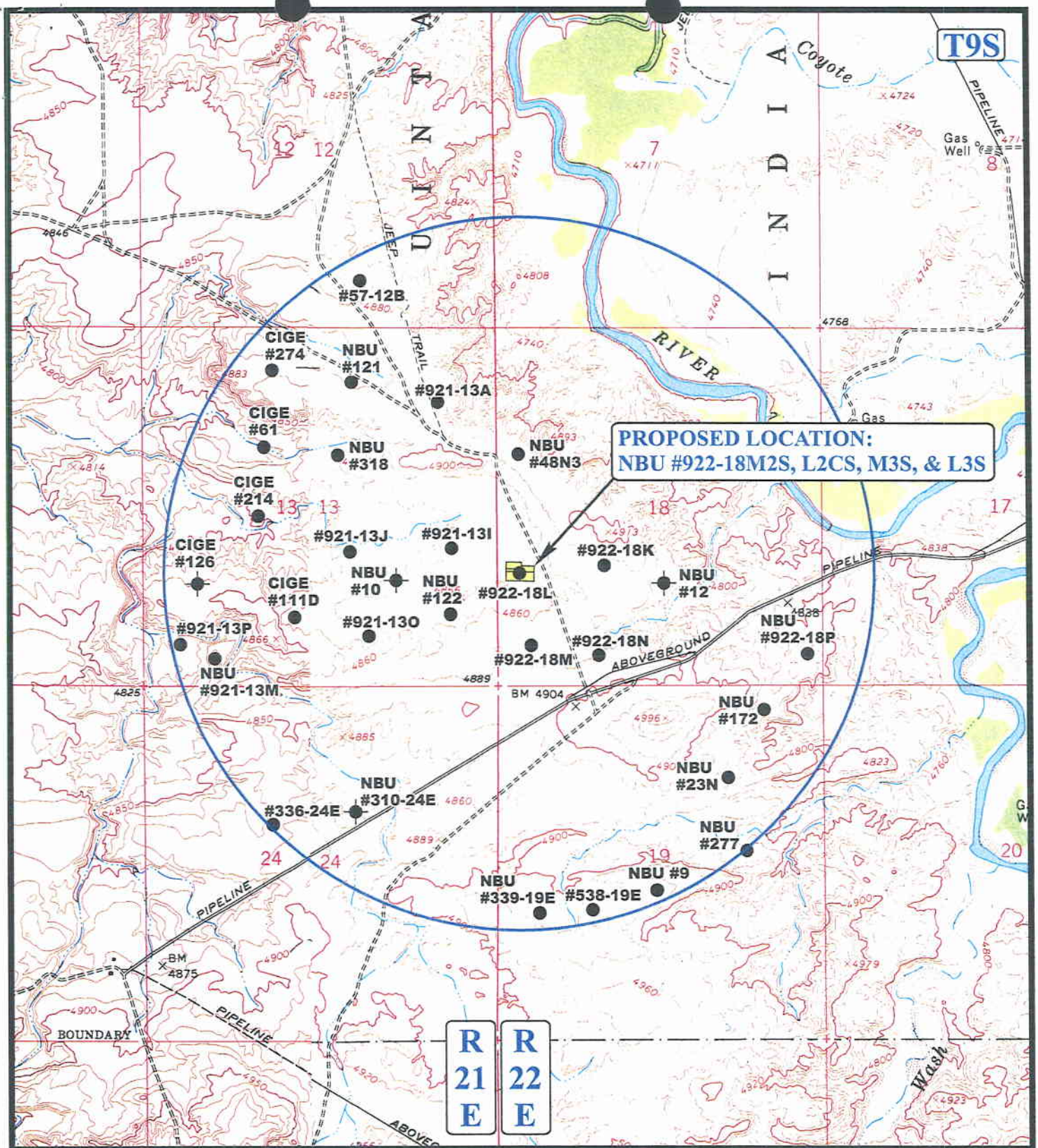
N

Kerr-McGee Oil & Gas Onshore LP

NBU #922-18M2S, L2CS, M3S, & L3S
SECTION 18, T9S, R22E, S.L.B.&M.
LOT 3

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

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



LEGEND:

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

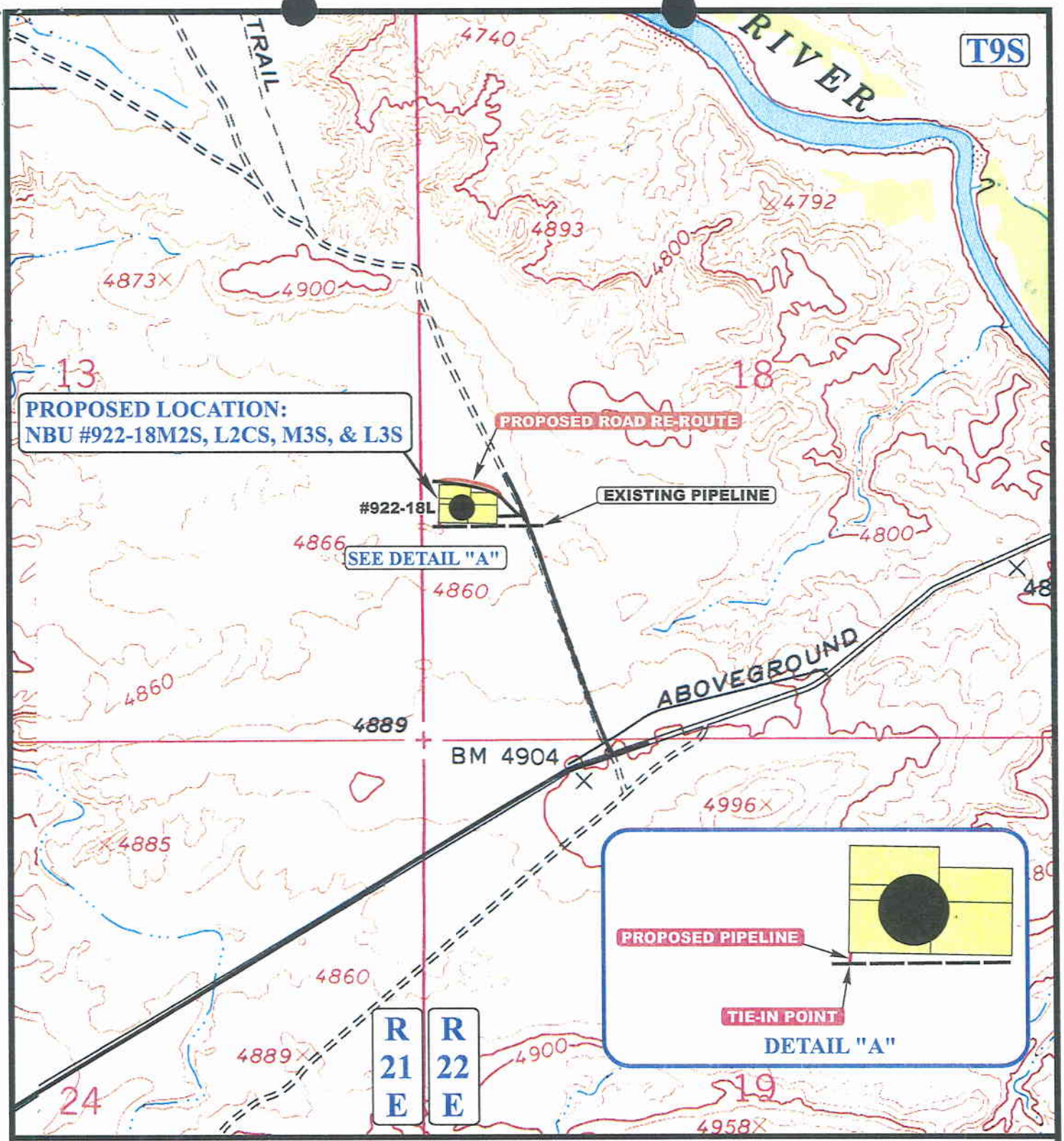
N

Kerr-McGee Oil & Gas Onshore LP

NBU #922-18M2S, L2CS, M3S, & L3S
SECTION 18, T9S, R22E, S.L.B.&M.
LOT 3

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

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



APPROXIMATE TOTAL PIPELINE DISTANCE = 21' +/-

LEGEND:

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

N

Kerr-McGee Oil & Gas Onshore LP

NBU #922-18M2S, L2CS, M3S, & L3S
SECTION 18, T9S, R22E, S.L.B.&M.
LOT 3

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

TOPOGRAPHIC MAP	05 MONTH	16 DAY	07 YEAR	D TOPO
SCALE: 1" = 1000'	DRAWN BY: B.C.	REVISED: 00-00-00		

Kerr–McGee Oil & Gas Onshore LP

SITE PLAN LAYOUT FOR

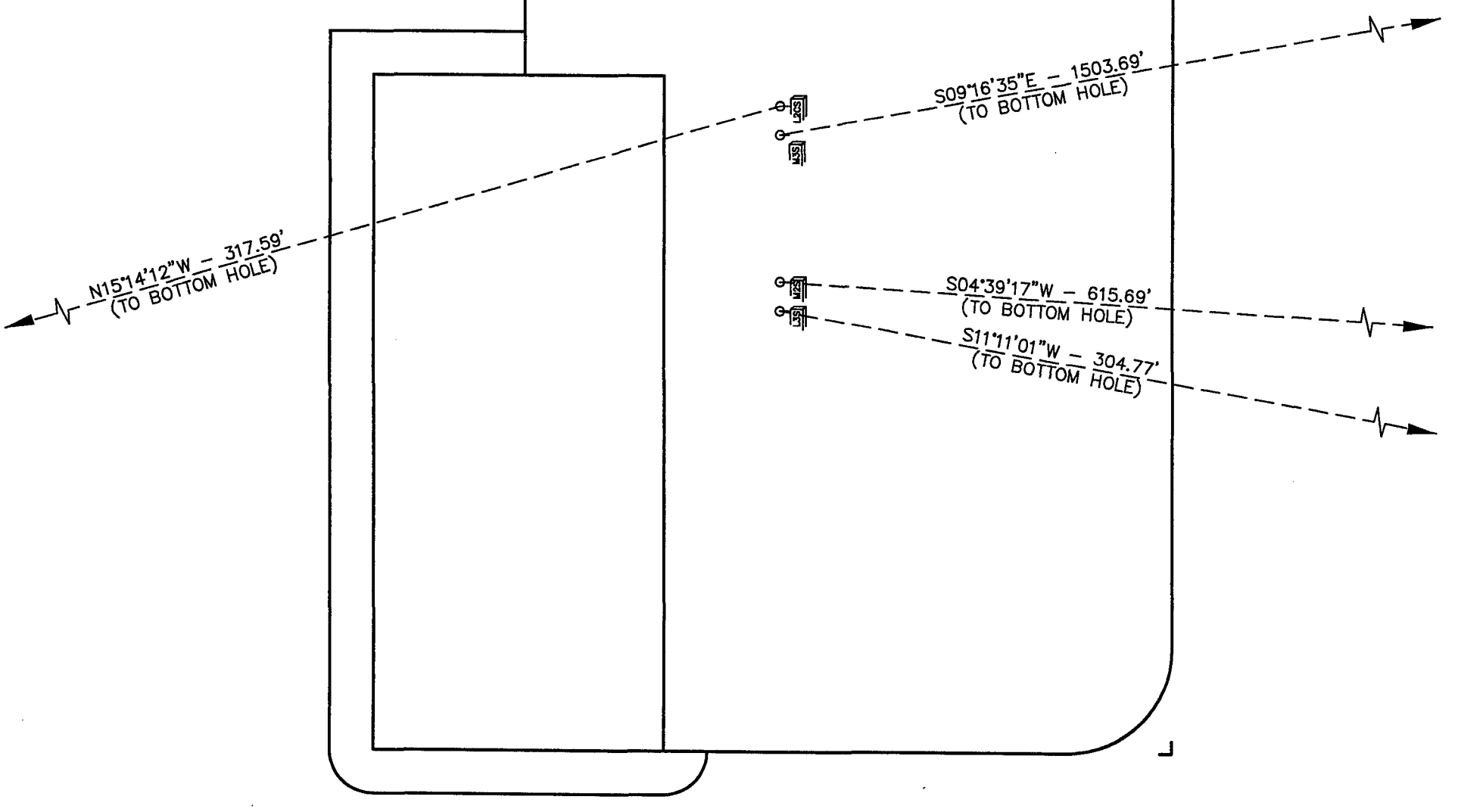
NBU #922–18M2S, L2CS, M3S, & L3S

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

LOT 3

SCALE: 1" = 50'
DATE: 08–07–07
Drawn By: C.H.

REGISTERED LAND SURVEYOR
No. 161319
ROBERT KAY
STATE OF UTAH



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

Kerr-McGee Oil & Gas Onshore LP

TYPICAL CROSS SECTIONS FOR

NBU #922-18M2S, L2CS, M3S, & L3S

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

LOT 3

FIGURE #2

1" = 20'

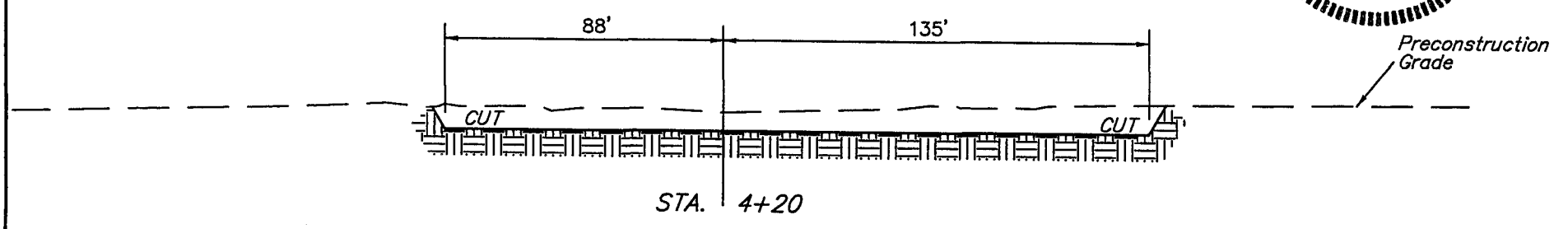
X-Section Scale

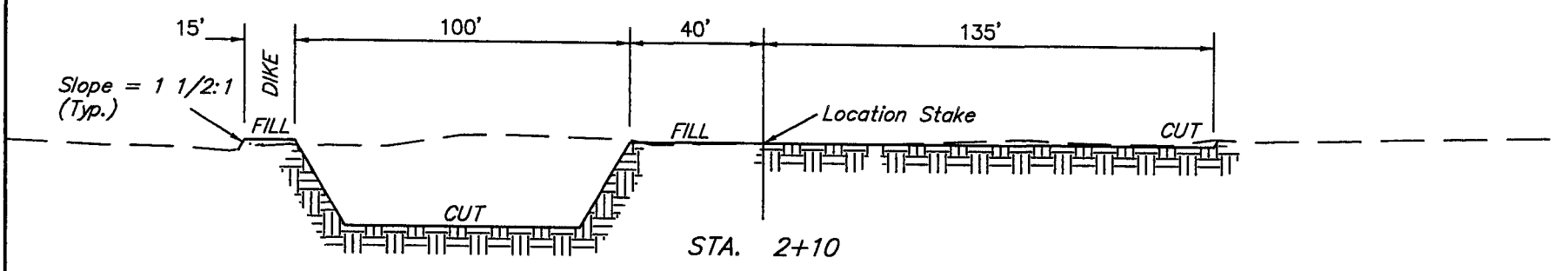
1" = 50'

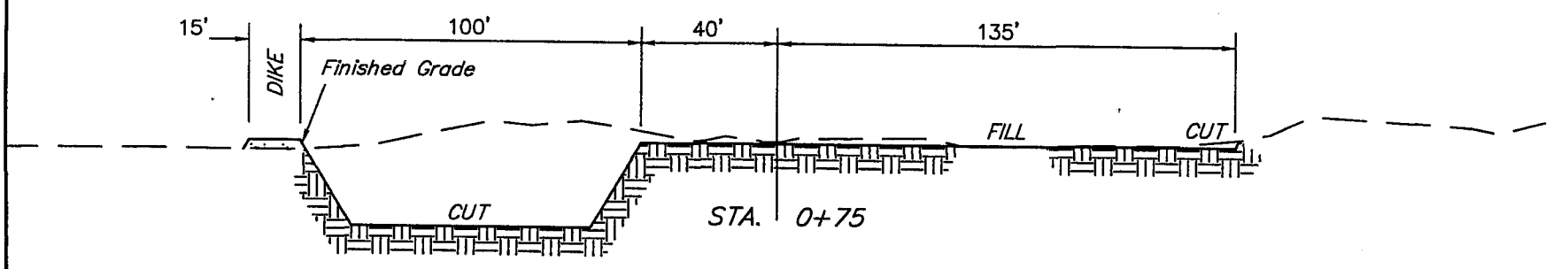
DATE: 08-07-07

Drawn By: C.H.

REGISTERED LAND SURVEYOR No. 161319 ROBERT L. KAY STATE OF UTAH







NOTE:

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

APPROXIMATE YARDAGES

CUT

(12") Topsoil Stripping = *2,370* Cu. Yds.
(New Consruction Only)

Remaining Location = *8,190* Cu. Yds.

TOTAL CUT = *10,560* CU.YDS.

FILL = *960* CU.YDS.

* *NOTE:*
FILL QUANTITY INCLUDES 5% FOR COMPACTION

EXCESS MATERIAL = *9,600* Cu. Yds.

Topsoil & Pit Backfill = *5,600* Cu. Yds.
(1/2 Pit Vol.)

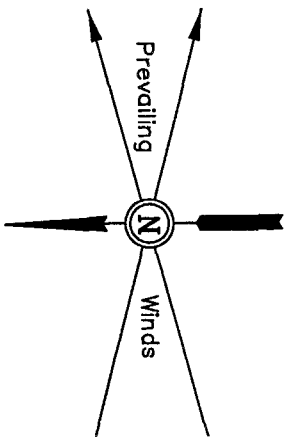
EXCESS UNBALANCE = *4,000* Cu. Yds.
(After Interim Rehabilitation)

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

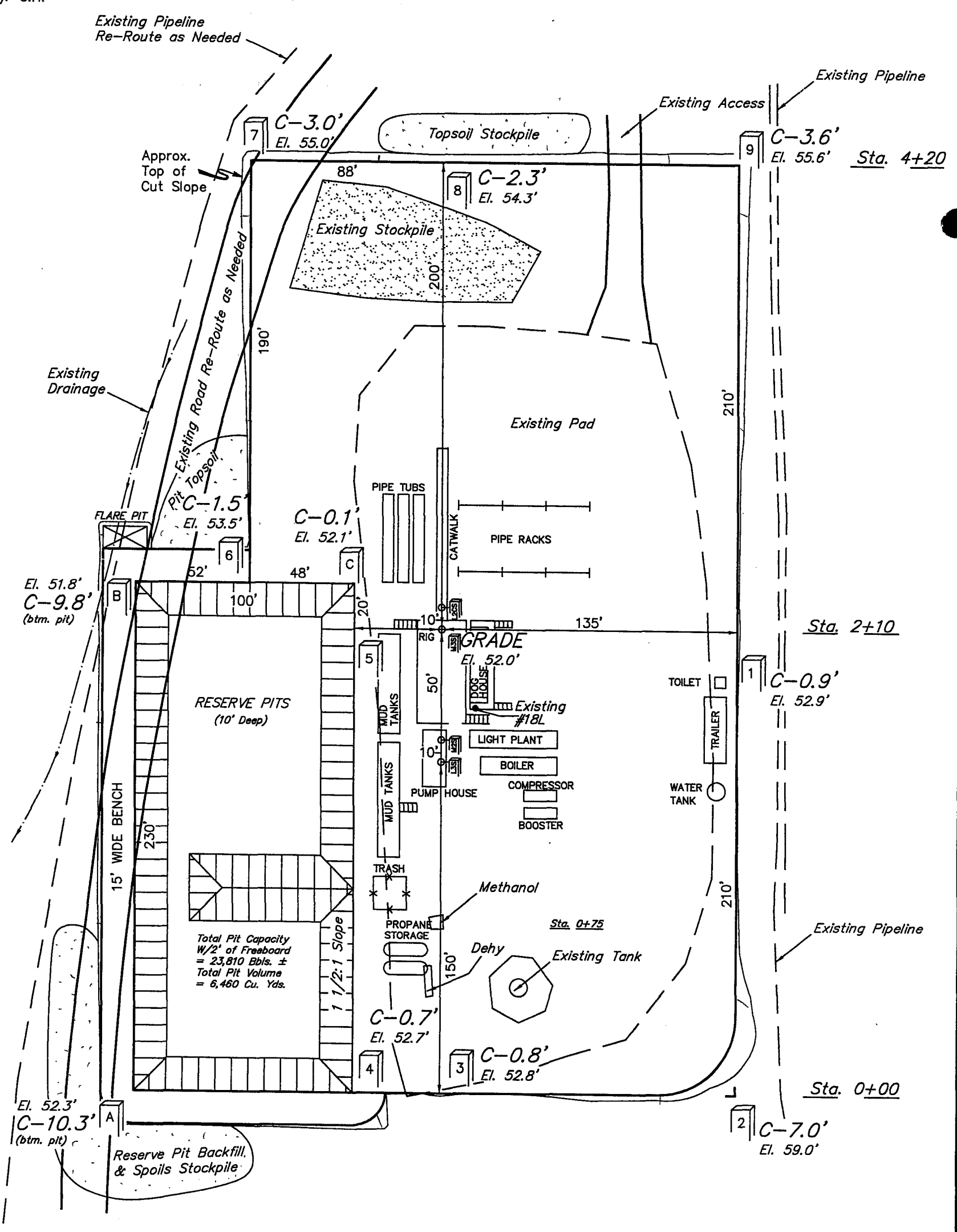
Kerr-McGee Oil & Gas Onshore LP

SITE PLAN LAYOUT FOR

NBU #922-18M2S, L2CS, M3S, & L3S
SECTION 18, T9S, R22E, S.L.B.&M.
LOT 3



SCALE: 1" = 50'
DATE: 08-07-07
Drawn By: C.H.



NOTES:

Elev. Ungraded Ground At M3S Loc. Stake = 4852.0'
FINISHED GRADE ELEV. AT M3S LOC. STAKE = 4852.0'

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

WORKSHEET

APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 11/20/2007

API NO. ASSIGNED: 43-047-39827

WELL NAME: NBU 922-18L2CS

OPERATOR: KERR-MCGEE OIL & GAS (N2995)

PHONE NUMBER: 435-781-7024

CONTACT: SHEILA UPCHEGO

PROPOSED LOCATION:

NWSW 18 090S 220E

SURFACE: 1687 FSL 0344 FWL

BOTTOM: 1994 FSL 0262 FWL

COUNTY: UINTAH

LATITUDE: 40.03337 LONGITUDE: -109.4887

UTM SURF EASTINGS: 628952 NORTHINGS: 4432345

FIELD NAME: NATURAL BUTTES (630)

INSPECT LOCATN BY: / /

Tech Review	Initials	Date
Engineering		
Geology		
Surface		

LEASE TYPE: 1 - Federal

LEASE NUMBER: UTU-0359

PROPOSED FORMATION: WSMVD

SURFACE OWNER: 2 - Indian

COALBED METHANE WELL? NO

RECEIVED AND/OR REVIEWED:

✓ Plat

✓ Bond: Fed[1] Ind[] Sta[] Fee[]
(No. RLB0005239)

N Potash (Y/N)

Y Oil Shale 190-5 (B) or 190-3 or 190-13

✓ Water Permit
(No. 43-8496)

N RDCC Review (Y/N)
(Date:)

N/A Fee Surf Agreement (Y/N)

N/A Intent to Commingle (Y/N)

LOCATION AND SITING:

___ R649-2-3.

Unit: NATURAL BUTTES

___ R649-3-2. General

Siting: 460 From Qtr/Qtr & 920' Between Wells

___ R649-3-3. Exception

✓ Drilling Unit

Board Cause No: 173-14

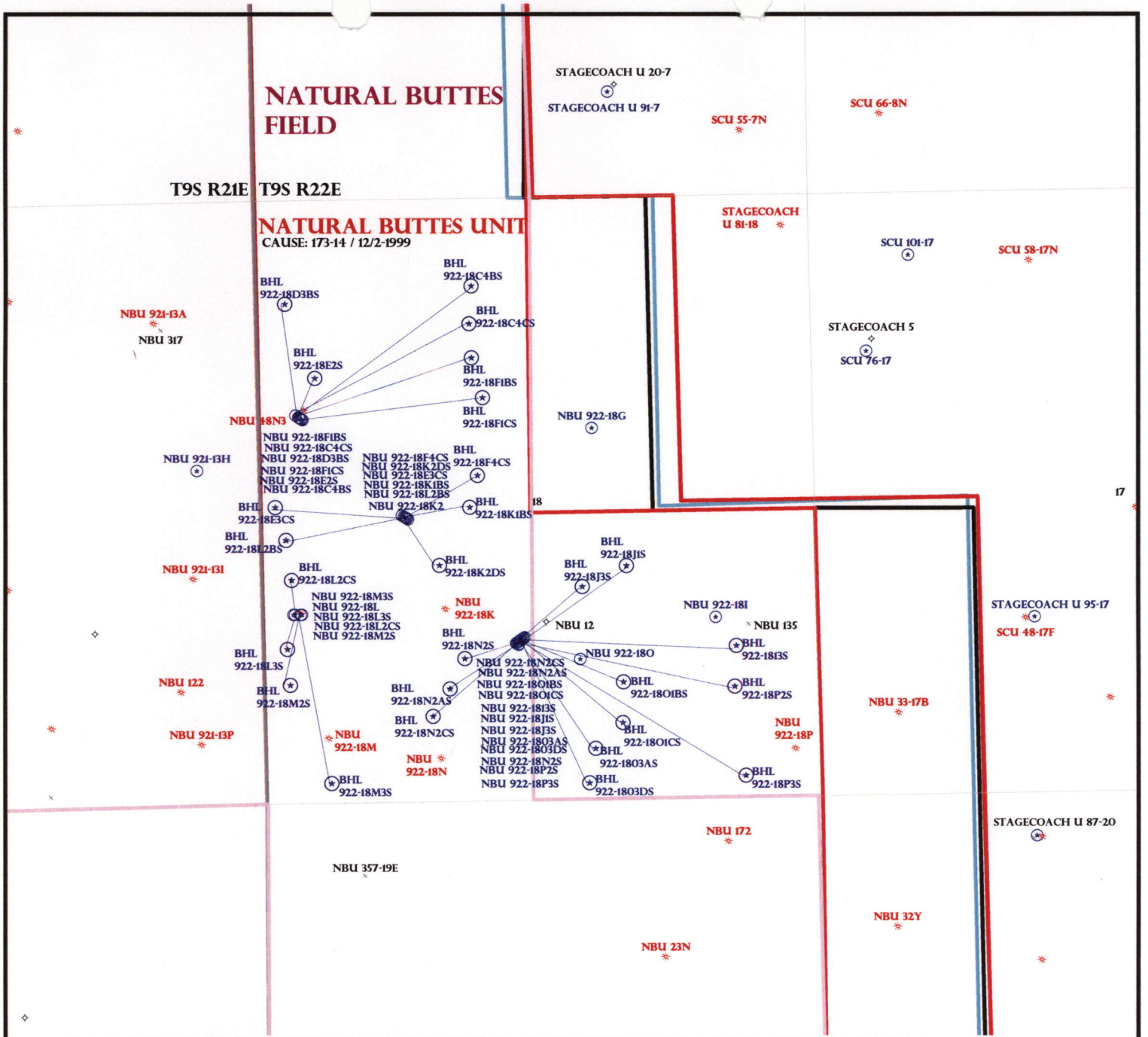
Eff Date: 12-2-1999

Siting: 460' fr u bdry & uncomm. Tract

✓ R649-3-11. Directional Drill

COMMENTS: Sop, Separate Sile

STIPULATIONS: 1- Federal Approval
2- Oil Shale



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

UTAH DNR
OIL, GAS & MINING

N
W E
S

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 922-18L2CS Well, Surface Location 1687' FSL, 344' FWL, NW SW, Sec. 18, T. 9 South, R. 22 East, Bottom Location 1994' FSL, 262' 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 43-047-39827.

Sincerely,

Gil Hunt
Associate Director

pab
Enclosures

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

1594 West North Temple, Suite 1210, PO Box 145801, Salt Lake City, UT 84114-5801
telephone (801) 538-5340 • facsimile (801) 359-3940 • TTY (801) 538-7458 • *www.ogm.utah.gov*

UTAH DNR OIL, GAS & MINING

Operator: Kerr McKee Oil and Gas Onshore LP

Well Name & Number NBU 922-18L2CS

API Number: 43-047-39827

Lease: UTU-0359

Surface Location: NW 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 - 5 2007

RECEIVED

2007 NOV 19 P 12:

Form 3160-3
(August 1999)

BLM

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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

APPLICATION FOR PERMIT TO DRILL OR REENTER

5. Lease Serial No.
UTU-0359

6. If Indian, Allottee or Tribe Name
TRIBAL SURFACE

1a. Type of Work: [X] DRILL [ ] REENTER

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

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

8. Lease Name and Well No.
NBU 922-18L2CS

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

9. API Well No.
43 047 39827

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

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

10. Field and Pool, or Exploratory
NATURAL BUTTES

4. Location of Well *(Report location clearly and in accordance with any State requirements.*)*
At surface **NW/SW 1687'FSL, 344'FWL (LOT 3)**
At proposed prod. Zone **NW/SW 1994'FSL, 262'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*
27.4 +/- 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)
344'

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
9811'

20. BLM/BIA Bond No. on file
RLB0005239

21. Elevations (Show whether DF, KDB, RT, GL, etc.)
4852'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)*: Matt Baker — Name *(Printed/Typed)*: MATT BAKER — Date: MAY 22 2008

Title: Acting Assistant Field Manager Lands & Mineral Resources — Office: VERNAL FIELD OFFICE

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. **CONDITIONS OF APPROVAL ATTACHED**

Title 18 U.S.C. Section 1001and 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

UDOGM

RECEIVED

JUN 02 2008

DIV. OF OIL, GAS & MINING

No Nos
08SXS0085A

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 O&G Onshore, LP.**	**Location:**	**LOT 3, NWSW, Sec 18, T9S, R22E(S)** **LOT 3,NWSW, Sec 18,T9S, R22E (B)**
Well No:	**NBU 922-18L2CS**	**Lease No:**	**UTU-0359**
API No:	**43-047-39827**	**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
NRS/Enviro Scientist:		(435) 781-4475	(435) 828-4029
NRS/Enviro Scientist:	Karl Wright	(435) 781-4484	(435) 828-7381
NRS/Enviro Scientist:	Holly Villa	(435) 781-4404	(435) 828-3544
NRS/Enviro Scientist:		(435) 781-4476	
NRS/Enviro Scientist:	Chuck Macdonald	(435) 781-4441	(435) 828-7482
NRS/Enviro Scientist:		(435) 781-3400	(435) 828-3544
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:

None

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 CONDIIONS OF APPROVAL (COAs):

SITE SPECIFIC DOWNHOLE COAs:

- A mist system is approved in lieu of deduster equipment. All other equipment for air/gas drilling shall meet specifications in Onshore Order #2, III.Requirements, E. Special Drilling Operations.

- A formation integrity test shall be performed at the surface casing shoe before drilling more than twenty feet.

- Logging program: Gamma Ray shall be run from TD to surface.

The conductor pipe shall be set and cemented in a competent formation.

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, LP**

Well Name: **NBU 922-18L2CS**

Api No: **43-047-39827** Lease Type: **FEDERAL**

Section **18** Township **09S** Range **22E** County **UINTAH**

Drilling Contractor **PETE MARTIN DRLG** RIG # **BUCKET**

SPUDDED:

Date **06/04/08**

Time **10:00 AM**

How **DRY**

Drilling will Commence:

Reported by **LEW WELDON**

Telephone # **(435) 828-7035**

Date 06/06//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

API Number	Well Name		QQ	Sec	Twp	Rng	County
4304739827	NBU 922-18L2CS		NWSW	18	9S	22E	UINTAH
Action Code	**Current Entity Number**	**New Entity Number**	**Spud Date**			**Entity Assignment Effective Date**	
B	99999	2900	6/4/2008			6/19/08	

Comments: MIRU PETE MARTIN BUCKET RIG. WSMVD
SPUD WELL LOCATION ON 06/04/2008 AT 1000 HRS. BHL = NWSW

Well 2

API Number	Well Name		QQ	Sec	Twp	Rng	County
Action Code	**Current Entity Number**	**New Entity Number**	**Spud Date**			**Entity Assignment Effective Date**	

Comments:

Well 3

API Number	Well Name		QQ	Sec	Twp	Rng	County
Action Code	**Current Entity Number**	**New Entity Number**	**Spud Date**			**Entity Assignment Effective Date**	

Comments:

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

SENIOR LAND SPECIALIST 6/4/2008
Title Date

(5/2000)

RECEIVED
JUN 04 2008
DIV. OF OIL, GAS & MINING

Form 3160-5
(August 1999)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB No. 1004-0135
Expires November 30, 2000

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or reenter an abandoned well. Use Form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE – Other instructions on reverse side

5. Lease Serial No.
UTU-0359

6. If Indian, Allottee or Tribe Name
TRIBAL SURFACE

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

1. Type of Well
☐ Oil Well ☒ Gas Well ☐ Other

8. Well Name and No.
NBU 922-18L2CS

2. Name of Operator
KERR-McGEE OIL & GAS ONSHORE LP

9. API Well No.
4304739827

3a. Address
1368 SOUTH 1200 EAST VERNAL, UT 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: NW/SW LOT 3, SEC. 18, T9S, R22E 1687'FSL, 344'FWL
BOTTOM HOLE: NW/SW LOT 3, SEC, 18, T9S, R22E 1994'FSL, 262'FWL

11. County or Parish, State
UINTAH COUNTY, UTAH

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

TYPE OF SUBMISSION	TYPE OF ACTION			
☐ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
☒ Subsequent Report	☐ Alter Casing	☐ Fracture Treat	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☒ Other WELL SPUD
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	
	☐ Convert to Injection	☐ Plug Back	☐ Water Disposal	

13. Describe Proposed or Completed Operations (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 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 Notices 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.

MIRU PETE MARTIN BUCKET RIG. DRILLED 20" CONDUCTOR HOLE TO 40'. RAN 14" 36.7# SCHEDULE 10 PIPE. CMT W/28 SX READY MIX.

SPUD WELL LOCATION ON 06/04/2008 AT 1000 HRS.

RECEIVED
JUN 09 2008
DIV. OF OIL, GAS & MINING

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

Name *(Printed/Typed)*
SHEILA UPCHEGO

Title
SENIOR LAND ADMIN SPECIALIST

Signature

Date
June 4, 2008

THIS SPACE FOR FEDERAL OR STATE 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	

Title 18 U.S.C. Section 1001, 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)

Form 3160-5
(August 1999)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB No. 1004-0135
Expires November 30, 2000

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or reenter an abandoned well. Use Form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE – Other instructions on reverse side

5. Lease Serial No.
UTU-0359

6. If Indian, Allottee or Tribe Name
TRIBAL SURFACE

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

1. Type of Well
☐ Oil Well ☒ Gas Well ☐ Other

8. Well Name and No.
NBU 922-18L2CS

2. Name of Operator
KERR-McGEE OIL & GAS ONSHORE LP

9. API Well No.
4304739827

3a. Address
1368 SOUTH 1200 EAST VERNAL, UT 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: NW/SW LOT 3, SEC. 18, T9S, R22E 1687'FSL, 344'FWL
BOTTOM HOLE: NW/SW LOT 3, SEC, 18, T9S, R22E 1994'FSL, 262'FWL

11. County or Parish, State
UINTAH COUNTY, UTAH

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

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

13. Describe Proposed or Completed Operations (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 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 Notices 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.

MIRU PROPETRO AIR RIG ON 06/10/2008. DRILLED 12 1/4" SURFACE HOLE TO 2760'. RAN 9 5/8" 36# J-55 SURFACE CSG. LEAD CMT W/250 SX HIFILL CLASS G @11.0 PPG 3.82 YIELD. TAILED CMT W/ 200 SX PREM CLASS G @15.8 PPG 1.15 YIELD. GOOD RETURNS THROUGH OUT JOB 20 +/- BBLS LEAD CMT TO PIT. RAN 200' OF 1" PIPE. CMT W/150 SX PREM CLASS G @15.8 PPG 1.15 YIELD. DOWN BACKSIDE GOOD CMT TO SURFACE AND FELL BACK. TOP OUT W/100 SX PREM CLASS G @15.8 PPG 1.15 YEILD. DOWN BACKSIDE GOOD CMT TO SURFACE HOLE STAYED FULL.

WORT.

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

Name *(Printed/Typed)*
SHEILA UPCHEGO

Title
SENIOR LAND ADMIN SPECIALIST

Signature

Date
June 16, 2008

THIS SPACE FOR FEDERAL OR STATE 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
JUN 18 2008
DIV. OF OIL, GAS & MINING

Title 18 U.S.C. Section 1001, 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)

Form 3160-5
(August 1999)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB No. 1004-0135
Expires November 30, 2000

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or reenter an abandoned well. Use Form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE – Other instructions on reverse side

5. Lease Serial No.
UTU-0359

6. If Indian, Allottee or Tribe Name
TRIBAL SURFACE

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

1. Type of Well
☐ Oil Well ☒ Gas Well ☐ Other

8. Well Name and No.
NBU 922-18L2CS

2. Name of Operator
KERR-McGEE OIL & GAS ONSHORE LP

9. API Well No.
4304739827

3a. Address
1368 SOUTH 1200 EAST VERNAL, UT 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: NW/SW LOT 3, SEC. 18, T9S, R22E 1687'FSL, 344'FWL
BOTTOM HOLE: NW/SW LOT 3, SEC, 18, T9S, R22E 1994'FSL, 262'FWL

11. County or Parish, State
UINTAH COUNTY, UTAH

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

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

13. Describe Proposed or Completed Operations (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 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 Notices 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.

FINISHED DRILLING FROM 2760' TO 9885' ON 08/09/2008. RAN 4 1/2" 11.6# I-80 PRODUCTION CSG. LEAD CMT W/493 SX PREM LITE II @11.5 PPG 2.82 YIELD. TAILED CMT W/1352 SX 50/50 POZ @ 14.3 PPG 1.31 YIELD. DROP PLUG DISPLACE W/153 BBLS LOST RETURNS @140 BBLS INTO DISPLACEMENT BUMP PLUG @3500 PSI (500 OVER PSI OF 2980) FLOATS HELD W/2 BBLS BACK TO TRUCK. CLEAN PITS.

RELEASED ENSIGN RIGN 83 ON 08/11/2008 AT MIDNIGHT.

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

Name *(Printed/Typed)*
SHEILA UPCHEGO

Title
REGULATORY ANALYST

Signature

Date
August 11, 2008

THIS SPACE FOR FEDERAL OR STATE 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	

Title 18 U.S.C. Section 1001, 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
AUG 13 2008
DIV. OF OIL, GAS & MINING

Form 3160-5
(August 1999)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB No. 1004-0135
Expires November 30, 2000

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or reenter an abandoned well. Use Form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE – Other instructions on reverse side

5. Lease Serial No.
UTU-0359

6. If Indian, Allottee or Tribe Name
TRIBAL SURFACE

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

1. Type of Well
☐ Oil Well ☒ Gas Well ☐ Other

8. Well Name and No.
NBU 922-18L2CS

2. Name of Operator
KERR-McGEE OIL & GAS ONSHORE LP

9. API Well No.
4304739827

3a. Address
1368 SOUTH 1200 EAST VERNAL, UT 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: NW/SW LOT 3, SEC. 18, T9S, R22E 1687'FSL, 344'FWL
BOTTOM HOLE: NW/SW LOT 3, SEC, 18, T9S, R22E 1994'FSL, 262'FWL

11. County or Parish, State
UINTAH COUNTY, UTAH

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

TYPE OF SUBMISSION	TYPE OF ACTION			
☐ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
	☐ Alter Casing	☐ Fracture Treat	☐ Reclamation	☐ Well Integrity
☒ Subsequent Report	☐ Casing Repair	☐ New Construction	☐ Recomplete	☒ Other PRODUCTION START-UP
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	
☐ Final Abandonment Notice	☐ Convert to Injection	☐ Plug Back	☐ Water Disposal	

13. Describe Proposed or Completed Operations (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 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 Notices 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.

THE SUBJECT WELL LOCATION WAS PLACED ON PRODUCTION ON 09/14/2008 AT 1:15 PM.

PLEASE REFER TO THE ATTACHED CHRONOLOGICAL WELL HISTORY.

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

Name *(Printed/Typed)*
SHEILA UPCHEGO

Title
REGULATORY ANALYST

Signature

Date
September 19, 2008

THIS SPACE FOR FEDERAL OR STATE 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	

Title 18 U.S.C. Section 1001, 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
SEP 22 2008
DIV OF OIL, GAS & MINING

Wins No.: 99148

NBU 922-18L2CS

Well Operations Summary Long

Operator	FIELD NAME	SPUD DATE	GL	KB	ROUTE
KERR MCGEE OIL & GAS ONSHORE LP	NATURAL BUTTES	06/04/2008	4,867	4884	

API	STATE	COUNTY	DIVISION
4304739827	UTAH	UINTAH	ROCKIES

Long/Lat.: 40.03337 / -109.48949 **Q-Q/Sect/Town/Range:** NWSW / 18 / 9S / 22E **Footages:** 1,687.00' FSL 344.00' FWL

Wellbore: NBU 922-18L2S

MTD	TVD	PBMD	PBTVD
9,885	14,642		

EVENT INFORMATION:
EVENT ACTIVITY: DRILLING
OBJECTIVE: DEVELOPMENT
OBJECTIVE 2: DIRECTIONAL WELL
REASON:
START DATE: 6/4/2008
END DATE:
DATE WELL STARTED PROD.:
Event End Status:
AFE NO.: 2013219

RIG OPERATIONS:	Begin Mobilization	Rig On Location	Rig Charges	Rig Operation Start	Finish Drilling	Rig Release	Rig Off Location
ENSIGN 83 / 83	07/27/2008	07/27/2008	07/27/2008	07/31/2008	08/09/2008	08/11/2008	08/11/2008

Date	Time Start-End	Duration (hr)	Phase	Code	Subcode	P/U	Operation
6/4/2008	SUPERVISOR: LEW WELDON						MD: 57
	10:00 - 16:00	6.00	DRLCON	02		P	MOVE IN AND RIG UP BUCKET RIG SPUD WELL @ 1000 HR 6/4/08 DRILL AND SET 40' OF SCHEDULE 10 PIPE DRILL RODENT HOLES FOR RIG 83 BLM AND STATE NOTFIED OF SPUD
6/10/2008	SUPERVISOR: LEW WELDON						MD: 810
	10:00 - 12:00	2.00	DRLSUR	02		P	MOVE IN AND RIG UP AIR RIG SPUD WELL @ 1000 HR 6/10/08 DA AT REPORT TIME 210'
	12:00 - 0:00	12.00	DRLSUR	02		P	RIG DRILLING AHEAD NO WATER 810'
6/11/2008	SUPERVISOR: LEW WELDON						MD: 1,530
	0:00 - 12:00	12.00	DRLSUR	02		P	RIG DRILLING AHEAD NO WATER 1140'
	12:00 - 0:00	12.00	DRLSUR	02		P	RIG DRILLING AHEAD NO WATER 1530'
6/12/2008	SUPERVISOR: LEW WELDON						MD: 2,340
	0:00 - 12:00	12.00	DRLSUR	02		P	RIG DRILLING AHEAD NO WATER 1980'
	12:00 - 0:00	12.00	DRLSUR	02		P	RIG DRILLING AHEAD NO WATER 2340'
6/13/2008	SUPERVISOR: LEW WELDON						MD: 2,760
	0:00 - 12:00	12.00	DRLSUR	02		P	RIG T/D @ 2760' CONDITION HOLE 1 HR RUN SURVEY 2 DEGREES @ 2760'
	12:00 - 16:00	4.00	DRLSUR	05		P	TRIP DP OUT OF HOLE
	16:00 - 20:30	4.50	DRLSUR	11		P	RUN 2703' OF 9 5/8 CSG AND 200' OF 1" PIPE RIG DOWN AIR RIG

	16:00 - 20:30	4.50	DRLSUR	11		P	RUN 2703' OF 9 5/8 CSG AND 200' OF 1" PIPE RIG DOWN AIR RIG
	20:30 - 21:30	1.00	DRLSUR	15		P	CEMENT 1ST STAGE WITH 250 SKS LEAD @ 11# 3.82 23 GAL/SK AND 200 SKS TAIL @ 15.8# 1.15 5.0 GAL/SK GOOD RETURNS THRU OUT JOB + - 20 BBL LEAD CMT TO PIT
	21:30 - 22:00	0.50	DRLSUR	15		P	1ST TOP JOB 150 SKS DOWN 1" PIPE GOOD CMT TO SURFACE AND FELL BACK WOC
	22:00 - 23:00	1.00	DRLSUR	15		P	2ND TOP JOB 100 SKS DOWN BS GOOD CMT TO SURFACE AND STAYED AT SURFACE
	23:00 - 23:00	0.00	DRLSUR				NO VISIBLE LEAKS PIT 1/2 FULL WORT
7/29/2008	SUPERVISOR: O'NEAL COYNE						MD: 2,760
	6:00 - 0:00	18.00	RDMO	01	E	P	PREPARE RIG FOR MOVE
7/30/2008	SUPERVISOR: O'NEAL COYNE						MD: 2,760
	0:00 - 20:00	20.00	DRLPRO	01	B	P	SKID RIG AND RIG UP - CHANGE KELLY HOSE
	20:00 - 0:00	4.00	DRLPRO	13	C	P	TEST BOP'S, UPPER & LOWER KELLY VALVES, HCR'S, AND CHOKE MAN. TO 250 LO AND 5000 PSI HI - TEST ANN. TO 2500 PSI - TEST CAS. TO 1500 PSI
7/31/2008	SUPERVISOR: O'NEAL COYNE						MD: 3,360
	0:00 - 7:30	7.50	DRLPRO	05	A	P	P/U BHA AND DRILL PIPE - TAG CEMENT @ 2618' RIG DOWN CALIBER TRUCK
	7:30 - 11:00	3.50	DRLPRO	02	C	P	INSTALL DRIVE BUSHING, ROT RUBBER, SPINNER MOTORS, TEST #1, #2 MUD PUMPS, ADJUST KELLY HOSE
	11:00 - 13:30	2.50	DRLPRO	02	C	P	DRILL CEMENT, FLOAT, AND SHOE F/ 2618' TO 2720'
	13:30 - 15:30	2.00	DRLPRO	02	C	P	DRILL F/ 2720' TO 2849' (129') 64.5' HR -MW 8.4 VIS-28
	15:30 - 16:00	0.50	DRLPRO	06	A	P	SER. RIG
	16:00 - 0:00	8.00	DRLPRO	02	C	P	DRILL F/ 2849' TO 3360' (511') 64' HR WOB - 12 RPM - 50 MW- 8.4 VIS - 28
8/1/2008	SUPERVISOR: O'NEAL COYNE						MD: 4,637
	0:00 - 8:00	8.00	DRLPRO	02	C	P	DRILL F/3360'-3865' (505') 63.1'HR
	8:00 - 8:30	0.50	DRLPRO	06	A	P	SERVICE RIG
	8:30 - 0:00	15.50	DRLPRO	02	C	P	DRILL F/3865'-4637' (772') 49.8'HR MW-9.6 VIS-42 WOB 20 - RPM 50

	8:30 - 0:00	15.50	DRLPRO	02	C	P	DRILL F/3865'-4637' (772') 49.8'HR MW-9.6 VIS-42 WOB 20 - RPM 50	
8/2/2008	SUPERVISOR: O'NEAL COYNE							MD: 5,905
	0:00 - 13:30	13.50	DRLPRO	02	C	P	DRILL F/4637'-5378' (741') 55'HR	
	13:30 - 14:00	0.50	DRLPRO	06	A	P	SERVICE RIG	
	14:00 - 0:00	10.00	DRLPRO	02	C	P	DRILL F/5378'-5905' (527')52.7'HR MW-10.1 VIS-42 WOB-15 RPM-60	
8/3/2008	SUPERVISOR: O'NEAL COYNE							MD: 6,925
	0:00 - 11:30	11.50	DRLPRO	02	C	P	DRILL F/5905'-6555' (650') 56.5' HR MW-10.3 VIS-40 WOB-14 RPM-50	
	11:30 - 12:00	0.50	DRLPRO	06	A	P	SERVICE RIG	
	12:00 - 21:00	9.00	DRLPRO	02	C	P	DRILL F/6555'-6875' (320') 35.5' HR MW-10.4 VIS-41 WOB-18 RPM-50	
	21:00 - 22:00	1.00	DRLPRO	07	B	S	REPAIR ROTARY CHAIN	
	22:00 - 0:00	2.00	DRLPRO	02	C	P	DRILL F/6875'-6925' (50') 25' HR MW-10.5 VIS-43 WOB-20 RPM-60	
8/4/2008	SUPERVISOR: O'NEAL COYNE							MD: 7,356
	0:00 - 7:30	7.50	DRLPRO	02	C	P	DRILL F/6925'-7111' (186') 24.8' HR MW-10.5 VIS-41 WOB-20 RPM-50	
	7:30 - 8:00	0.50	DRLPRO	04	A	P	CIRC. BTMS UP	
	8:00 - 12:30	4.50	DRLPRO	05	A	P	POOH - NO PROBLEMS - CHANGE MTR & BIT	
	12:30 - 15:00	2.50	DRLPRO	05	A	P	RIH FILL P[IPE @ SHOE - WASH LAST 45' TO BTM 5' FILL	
	15:00 - 16:00	1.00	DRLPRO	02	C	P	DRILL F/7111'-7142' (31') 31'HR	
	16:00 - 16:30	0.50	DRLPRO	06	A	P	SERVICE RIG	
	16:30 - 0:00	7.50	DRLPRO	02	C	P	DRILL F/7142'-7356' (214') 28.5' HR MW-10.6 VIS-42 WOB-18 RPM-50	
8/5/2008	SUPERVISOR: STUART NEILSON							MD: 8,048
	0:00 - 10:00	10.00	DRLPRO	02	C	P	DRLG F/ 7356 TO 7657 301' @ 30.1' PH W/ 10.6 PPG - 42 VIS - 3% LCM	

	0:00 - 10:00	10.00	DRLPRO	02	C	P	DRLG F/ 7356 TO 7657 301' @ 30.1' PH W/ 10.6 PPG - 42 VIS - 3% LCM
	10:00 - 10:30	0.50	DRLPRO	07	B	P	REPAIR POP OFF
	10:30 - 13:30	3.00	DRLPRO	02	C	P	DRLG F/ 7657 TO 7761 104' @ 34.6' PH W/ 10.6 PPG - 40 VIS - 3% LCM
	13:30 - 14:00	0.50	DRLPRO	06	A	P	SERVICE RIG
	14:00 - 0:00	10.00	DRLPRO	02	C	P	DRLG F/ 7761 TO 8048 287' @ 28.7' PH W/ 10.6 PPG - 40 VIS - 3% LCM
8/6/2008	SUPERVISOR: STUART NEILSON						MD: 8,743
	0:00 - 14:00	14.00	DRLPRO	02	C	P	DRLG F/ 8048 TO 8472 424' @ 30.2' PH W/ 10.8 PPG - 42 VIS
	14:00 - 14:30	0.50	DRLPRO	06	A	P	SERVICE RIG
	14:30 - 0:00	9.50	DRLPRO	02	C	P	DRLG F/ 8472 TO 8743 271' @ 28.5' PH W/ 11.2 PPG - 42 VIS
8/7/2008	SUPERVISOR: STUART NEILSON						MD: 9,182
	0:00 - 14:00	14.00	DRLPRO	02	D	P	DRLG F/ 8743 TO 9059 316' @ 22.6' PH W/ 11.2 PPG - 42 VIS
	14:00 - 14:30	0.50	DRLPRO	06	A	P	SERVICE RIG
	14:30 - 19:30	5.00	DRLPRO	02	D	P	DRLG F/ 9059 TO 9182 123' @ 24.6' PH W/ 11.2 PPG - 42 VIS
	19:30 - 0:00	4.50	DRLPRO	05	A	P	TFNB
8/8/2008	SUPERVISOR: STUART NEILSON						MD: 9,675
	0:00 - 6:00	6.00	DRLPRO	05	A	P	TFNB, TIGHT @ 5000' OUT, WASH 30 ' TO BOTTOM 10' FILL
	6:00 - 14:00	8.00	DRLPRO	02	D	P	DRLG F/ 9182 TO 9399 217' @ 27.1' PH W/ 11.6 PPG - 42 VIS
	14:00 - 14:30	0.50	DRLPRO	06	A	P	SERVICE RIG
	14:30 - 0:00	9.50	DRLPRO	02	D	P	DRLG F/ 9399 TO 9675 276' @ 29' PH W/ 11.6 PPG - 42 VIS
8/9/2008	SUPERVISOR: STUART NEILSON						MD: 9,885
	0:00 - 6:00	6.00	DRLPRO	02	D	P	DRLG F/ 9675 TO 9885 210' @ 35' PH W/ 11.7 PPG - 42 VIS TD WELL @ 06:00 8/9/08 TVD 9858
	6:00 - 8:00	2.00	DRLPRO	04	C	P	CCH, RAISE WT TO 11.8

	6:00 - 8:00	2.00	DRLPRO	04	C	P	CCH, RAISE WT TO 11.8
	8:00 - 13:00	5.00	DRLPRO	05	E	P	SHORT TRIP 57 STDS TO 4700'
	13:00 - 14:30	1.50	DRLPRO	04	C	P	CCH F/ LDDS
	14:30 - 0:00	9.50	DRLPRO	05	A	P	HPJSM W/ RIG & L/D CREWS - R/U & L/DDS
8/10/2008	SUPERVISOR: STUART NEILSON						MD: 9,885
	0:00 - 1:30	1.50	DRLPRO	05	A	P	BREAK KELLY, SPINNER MOTORS,ROT RUBBER,L/D BHA, PULL WEAR BUSHING
	1:30 - 9:30	8.00	DRLPRO	10	C	P	HPJSM W/ RIG & LOGGING CREWS, R/U & RUN TRIPLE COMBO TO 6800 HIT BRIDGE, LOG OUT, RERUN LOGS W/O BOW SPRING, R/D
	9:30 - 17:00	7.50	DRLPRO	11	B	P	HPJSM W/ RIG & CASING CREWS, R/U & RUN PROD CASINGTO 9876',LAND CASING,R/D
	17:00 - 18:30	1.50	DRLPRO	04	E	P	CCH
	18:30 - 21:00	2.50	DRLPRO	15	A	P	HPJSM W/ RIG & CEMENT CREWS, R/U & PSI TEST LINES TO 5000#, START MUD CLEAN 20 BBLS, SCAV - 20 SKS, 9.5 PPG - 8.45 YLD, LEAD 493 SKS 11.5 PPG 2.82 YLD, TAIL 1352 SKS 14.3 PPG 1.31 YLD, DROP PLUG & DISPLACE W/ 153 BBLS, LOST RETURNS @ 140 BBLS INTO DISPLACMENT, BUMP PLUG @ 3500 PSI (500 OVER DIFF PSI OF 2980) FLOATS HELD W/ 2 BBLS BACK TO TRUCK
	21:00 - 22:00	1.00	DRLPRO	18	A	P	SET PACK OFF & TEST
	22:00 - 0:00	2.00	DRLPRO	01	E	P	CLEAN PITS - RIG RELEASED @ 00:00 8/11/08 RESERVE PIT 2/3rds FULL, NO LEAKS, LINER OK

Wins No.: 99148	NBU 922-18L2CS	API No.: 4304739827

EVENT INFORMATION:	EVENT ACTIVITY: COMPLETION	START DATE: 9/5/2008	AFE NO.: 2013219
	OBJECTIVE: DEVELOPMENT	END DATE:	
	OBJECTIVE 2: ORIGINAL	DATE WELL STARTED PROD.:	
	REASON: MV	Event End Status:	

RIG OPERATIONS:	Begin Mobilization	Rig On Location	Rig Charges	Rig Operation Start	Finish Drilling	Rig Release	Rig Off Location

MILES 2 / 2

Date	Time Start-End	Duration (hr)	Phase	Code	Subcode	P/U	Operation
9/5/2008	SUPERVISOR: JEFF SAMUELS						MD:
	7:00 - 13:00	6.00	COMP	34	H	P	9:00 A.M. MIRU B&C QUICK TST. FILL CSG & PSI TST CSG & FRAC VLV'S TO 7500# HELD. RDMO B&C. MIRU CUTTERS. P/U 3 3/8" PERF GUNS LOADED W/ 23 GM CHARGES. 3 & 4 SPF, 90 & 120 DEG PHASING & RIH. SHOOT STG 1 PERF'S W/ 8 HOLES F 9692' - 94', P/U SHOOT 12 HOLES F/ 9660' - 64'. P/U SHOOT 8 HOLES F/ 9606' - 08', P/U SHOOT 12 HOLES F/ 9540' - 44'. POOH. RDMO CUTTERS. PREP TO FRAC
9/8/2008	SUPERVISOR: JEFF SAMUELS						MD:
	7:00 - 18:00	11.00	COMP	36	B	P	7:00 A.M. HSM MIRU CUTTERS W.L. SVC. MIRU WEATHERFORD FRAC SVC. PRIME PMP'S, PSI TST LINES TO 8500# (HELD). PREP TO FRAC NOTE: ALL STAGES SHOT W/ 3 3/8" EXP PERF GUNS LOADED W/ 23 GM CHARGES, 3 & 4 SPF, 90 & 120 DEG PHASING. ALL CBP'S ARE 4 1/2" BAKER 8K CBP'S. ALL FLUID TREATED W/ NALCO DVE-005 SCALE INHIB @ 3 GPT IN PAD & 1/2 RAMP. 10 GPT IN FLUSH & PRE PAD. ALL CLEAN FLUID TREATED W/ NALCO BIOCIDE @ .5 GPT. STG 1: BRK DWN PERF'S @ 4019#, EST INJ RT @ 51.2 BPM @ 4830#, ISIP 2536#, FG .70, TREAT STG 1 W/ 62,314# SAND TAILED IN W/ 5000# TLC SAND W/ SLK WTR. TOT CL FL 1719 BBLS. ISIP 2815#, NPI 279#, FG .73 STG 2: P/U 3 3/8" PERF GUNS & 4 1/2" CBP & RIH. SET CBP @ 9454', P/U SHOOT 12 HOLES F/ 9420' - 24', P/U SHOOT 8 HOLES F/ 9384' - 86', P/U SHOOT 8 HOLES F/ 9354' - 56', P/U SHOOT 12 HOLES F/ 9302' - 06'. POOH. BRK DWN PERF'S @ 104,168# SAND TAILED IN W/ 5000# TLC SAND. W/ SLK WTR. TOT CL FL 2682 BBLS. ISIP 2956#, NPI 246#, FG .76 STG 3: P/U 3 3/8" PERF GUNS & 4 1/2" CBP & RIH. SET CBP @ 9242', P/U SHOOT 8 HOLES F/ 9204' - 08', P/U SHOOT 8 HOLES F/ 9166' - 68', P/U SHOOT 16 HOLES F/ 9128' - 32', P/U SHOOT 8 HOLES F/ 9088' - 90'. POOH. BRK DWN PERF'S @ 2884#, EST INJ RT @ 51.1 BPM @ 4730#, NPI 2618#, FG .73, TREAT STG 3 W/ 115,558# SAND TAILED IN W/ 5000# TLC SAND W/ SLK WTR. TOT CL FL 2935 BBLS. ISIP 3096#, NPI 478#, FG .78 SWI. SDFN
9/9/2008	SUPERVISOR: JEFF SAMUELS						MD:

	7:00 - 17:00	10.00	COMP	36	B	P	7:00 A.M. HSM CONT TO FRAC MESA VERDE STAGES. (WAITING ON SAND 2 HRS) STG 4: P/U 3 3/8" PERF GUNS & 4 1/2" CBP & RIH. SET CBP @ 9038', P/U SHOOT 8 HOLES F/ 8006' - 08', P/U SHOOT 12 HOLES F/ 8946' - 50', P/U SHOOT 6 HOLES F/ 8890' - 92', P/U SHOOT 8 HOLES F/ 8844' - 46', P/U SHOOT 6 HOLES F/ 8876' - 78'. POOH. WAIT ON SAND 1 HR. BEGIN PMP @ 10:30 A.M. BRK DWN PERF'S @ 2504#, EST INJ RT @ 51 BPM @ 4130#, ISIP 2036#, FG .67, TREAT STG 4 W/ 195,009# SAND TAILED IN W/ 5000# TLC SAND W/ SLK WTR. TOT CL FL 5011 BBLS. ISIP 2717#, NPI 681#, FG .75 (WAITING ON SAND 2 HRS) STG 5: P/U 3 3/8" PERF GUNS & 4 1/2" CBP & RIH. SET CBP @ 8694', P/U SHOOT 12 HOLES F/ 8660' - 64', P/U SHOOT 12 HOLES F/ 8616' - 20', P/U SHOOT 8 HOLES F/ 8556' - 58', P/U SHOOT 8 HOLES F/ 8496' - 98'. POOH. BRK DWN PERF'S @ 4047#, EST INJ RT @ 51.1 BPM @ 4000#, ISIP 2111#, FG .69, TREAT STG 5 W/ 173,368# SAND TAILED IN W/ TLC SAND W/ SLK WTR. TOT CL FL 4503 BBLS. ISIP 2603#, NPI 492#, FG .74 STG 6: P/U 3 3/8" PERF GUNS & 4 1/2" CBP & RIH. SET CBP @ 8110', P/U SHOOT 12 HOLES F/ 8022' - 26', P/U SHOOT 8 HOLES F/ 7984' - 86', P/U SHOOT 12 HOLES F/ 7908' - 12', P/U SHOOT 8 HOLES F/ 7846' - 48', POOH. SWI. SDFN WAITING ON SAND
9/10/2008	SUPERVISOR: JEFF SAMUELS						MD:
	7:00 - 17:00	10.00	COMP	36	B	P	7:00 A.M. HSM CONT TO PERF & FRAC STG 6: BRK DWN PERF'S @ 3096#, EST INJ RT @ 51.1 BPM @ 3800#, ISIP 1702#, FG .66, TREAT STG 6 W/ 123,539# SAND TAILED IN W/ 5000# TLC SAND W/ SLK WTR. TOT CL FL 3463 BBLS. ISIP 2660#, NPI 958#, FG .78 P/U 4 1/2" CBP & RIH. SET KILL PLUG @ 7796'. POOH. RDMO CUTTERS. RDMO WEATHERFORD. MIRU MILES 2 COMPLETION RIG. ND FRAC VLV'S. NU BOPE. PREP & TALLY 2 3/8" L-80 8RD 4.7# TBG. P/U 3 7/8" BIT, POBS & BEG TO RIH P/U TBG OFF TRAILER. EOT @ 2800'.
9/11/2008	SUPERVISOR: JEFF SAMUELS						MD:
	7:00 - 17:00	10.00	COMP	44	C	P	7:00 A.M. HSM CONT TO RIH W/ TBG F/ 2800'. TAG KILL PLUG @ 7796'. R/U DRL EQUIP. R/U PMP & LINES. BRK CONV CIRC & BEG TO DRL. DRL UP 1ST CBP (700# PSI INC). CONT TO RIH. TAG FILL @ 8080', (30' FILL). C/O TO 2ND CBP @ 8110'. DRL UP 2ND CBP (700# PSI INC). CONT TO RIH. TAG FILL @ 8664', (30' FILL). C/O TO 3RD CBP @ 8694'. DRL UP 3RD CBP (800# PSI INC). CONT TO RIH. TAG FILL @ 9008', (30' FILL). C/O TO 4TH CBP @ 9038'. DRL UP 4TH CBP (400# PSI INC). CONT TO RIH. TAG FILL @ 9206', (30' FILL). C/O TO 5TH CBP @ 9236'. DRL UP 5TH CBP (300# PSI INC). CONT TO RIH. TAG FILL @ 9424', (30' FILL). C/O TO 6TH CBP @ 9454'. DRL UP 6TH CBP (300# PSI INC). CONT TO RIH, TAG FILL @ 9788', (45' FILL). C/O TO PBTD @ 9833'. CICR WELL CLEAN. POOH L/D 45 JTS ON TRAILER. LUBRICATE TBG HANGER INTO WELL. LAND TBG W/ EOT @ 9697'. NDBOPE. DROP BALL, NUWH. PMP OFF THE BIT SUB @ 2800#. R/U FLOW BACK EQUIP. TURN OVER TO FLOW BACK CREW SICP 2200 FTP 100 48/64 CHOKE TBG IN WELL 243 JTS

Wins No.: 99148		NBU 922-18L2CS		API No.: 4304739827
9/12/2008	SUPERVISOR: JEFF SAMUELS			MD:
	7:00 -	33	A	7 AM FLBK REPORT: CP 1750#, TP 1475#, 20/64" CK, 80 BWPH, TRACE SAND, - GAS TTL BBLS RECOVERED: 4540 BBLS LEFT TO RECOVER: 15773
9/13/2008	SUPERVISOR: JEFF SAMUELS			MD:
	7:00 -	33	A	7 AM FLBK REPORT: CP 2500#, TP 1750#, 20/64" CK, 75 BWPH, TRACE SAND, - GAS TTL BBLS RECOVERED: 6376 BBLS LEFT TO RECOVER: 13937
9/14/2008	SUPERVISOR: JEFF SAMUELS			MD:
	7:00 -	33	A	7 AM FLBK REPORT: CP 3350#, TP 1900#, 20/64" CK, 50 BWPH, TRACE SAND, - GAS TTL BBLS RECOVERED: 7626 BBLS LEFT TO RECOVER: 12687
9/15/2008	SUPERVISOR: JEFF SAMUELS			MD:
	7:00 -	33	A	7 AM FLBK REPORT: CP 3175#, TP 1950#, 20/64" CK, 42 BWPH, TRACE SAND, - GAS TTL BBLS RECOVERED: 8706 BBLS LEFT TO RECOVER: 11607
9/16/2008	SUPERVISOR: JEFF SAMUELS			MD:
	7:00 -	33	A	7 AM FLBK REPORT: CP 2950#, TP 1875#, 20/64" CK, 37 BWPH, TRACE SAND, - GAS TTL BBLS RECOVERED: 9684 BBLS LEFT TO RECOVER: 10629
9/17/2008	SUPERVISOR: JEFF SAMUELS			MD:
	7:00 -	33	A	7 AM FLBK REPORT: CP 2800#, TP 1800#, 20/64" CK, 40 BWPH, TRACE SAND, - GAS TTL BBLS RECOVERED: 10590 BBLS LEFT TO RECOVER: 9723
9/18/2008	SUPERVISOR: JEFF SAMUELS			MD:
	7:00 -	33	A	7 AM FLBK REPORT: CP 2600#, TP 1750#, 20/64" CK, 33 BWPH, L TRACE SAND, - GAS TTL BBLS RECOVERED: 11382 BBLS LEFT TO RECOVER: 8931

Form 3160-4
(August 1999)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB NO. 1004-0137
Expires: November 30, 2000

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

5. Lease Serial No.: UTU-0359

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

6. If Indian, Allottee or Tribe Name: TRIBAL SURFACE

7. Unit or CA Agreement Name and No.: UNIT #891008900A

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

8. Lease Name and Well No.: **NBU 922-18L2CS**

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

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

9. API Well No.: 4304739827

4. Location of Well *(Report locations clearly and in accordance with Federal requirements)** per HSM review

At surface: NW/SW 1687'FSL, 344'FWL (LOT 3)

10. Field and Pool, or Exploratory: NATURAL BUTTES

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

At top prod. interval reported below

1959 fsl 254 fwl

At total depth: NW/SW ~~1994'FSL, 262'FWL (LOT 3)~~

12. County or Parish: UINTAH

13. State: UTAH

14. Date Spudded: 06/04/08

15. Date T.D. Reached: 08/09/08

16. Date Completed ☐ D & A ☒ Ready to Prod.: 09/14/08

17. Elevations (DF, RKB, RT, GL)*: 4852'GL

18. Total Depth: MD 9885' TVD 9859

19. Plug Back T.D.: MD 9833' TVD 9806

20. Depth Bridge Plug Set: MD TVD

21. Type Electric & Other Mechanical Logs Run (Submit copy of each)

CBL-CCL-GR

22. Was well cored? ☒ No ☐ Yes (Submit copy)
Was DST run? ☒ No ☐ Yes (Submit copy)
Directional Survey? ☐ No ☒ Yes (Submit copy)

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"	14"	36.7#		40'		28 SX			
12 1/4"	9 5/8"	36#		2760'		700 SX			
7 7/8"	4 1/2"	11.6#		9885'		1845 SX			

24. Tubing Record

Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Set (MD)
2 3/8"	9697'							

25. Producing Intervals / 26. Perforation Record

	Formation	Top	Bottom	Perforated Interval	Size	No. Holes	Perf. Status
A)	MESAVERDE	7846'	9694'	7846'-9694'	0.36	240	OPEN
B)							
C)							
D)							

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

Depth Interval	Amount and type of Material
7846'-9694'	PMP 20,313 BBLS SLICK H2O & 773,956# 30/50 OTTOWA 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
09/14/08	09/22/08	24	→	0	2,062	912			FLOWS FROM WELL

Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Well Status
20/64	1387#	2125#	→	0	2062	912		PRODUCING GAS WELL

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. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Well Status
			→					

(See instructions and spaces for additional data on reverse side)

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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	1709'				
MAHOGANY	2487'				
WASATCH	5021'	7839'			
MESAVERDE	7839'	9759'			

32. Additional remarks (include plugging procedure):

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
5. Core Analysis
7. Other:

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

Name *(please print)* SHEILA UPCHEGO Title REGULATORY ANALYST

Signature Sheila Upchego WR Date 10/06/08

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.

☼ U.S. GPO: 1999-573-624

Weatherford®

Drilling Services

Completion

Anadarko® KerrMcGee

ANADARKO - KERR McGEE

NBU 922-18L2CS

UINTAH COUNTY, UTAH

WELL FILE: 4014968C

DATE: DECEMBER 3, 2008

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

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ANADARKO KERR MCGEE OIL & GAS
NBU 922-18L2CS
UINTAH COUNTY, UTAH

Azimuths to True North
Magnetic North: 11.48°

Magnetic Field
Strength: 52677nT
Dip Angle: 65.97°
Date: 6/24/2008
Model: bggm2007

EXT. TD WFT SVY (18L2CS/1)

No	MD	Inc	Az	TVD	+N/-S	+E/-W	DLeg	TFace	VSec
88	9885.00	0.56	228.35	9858.04	271.84	-90.01	0.00	0.00	286.35

WELL DETAILS

Name	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
18L2CS	-2.01	70.00	625558.39	2563102.60	40°02'00.400N	109°29'19.680W	N/A

CASING DETAILS

No.	TVD	MD	Name	Size
1	2703.00	2703.38	CSG	0.00

FORMATION TOP DETAILS

No.	TVDPath	MDPath	Formation
1	4973.00	4998.21	WASATCH
2	7723.00	7749.81	MESAVERDE

FIELD DETAILS

UINTAH COUNTY, UTAH (NAD 27)

Geodetic System: US State Plane Coordinate System 1927
Ellipsoid: NAD27 (Clarke 1866)
Zone: Utah, Central Zone
Magnetic Model: bggm2007

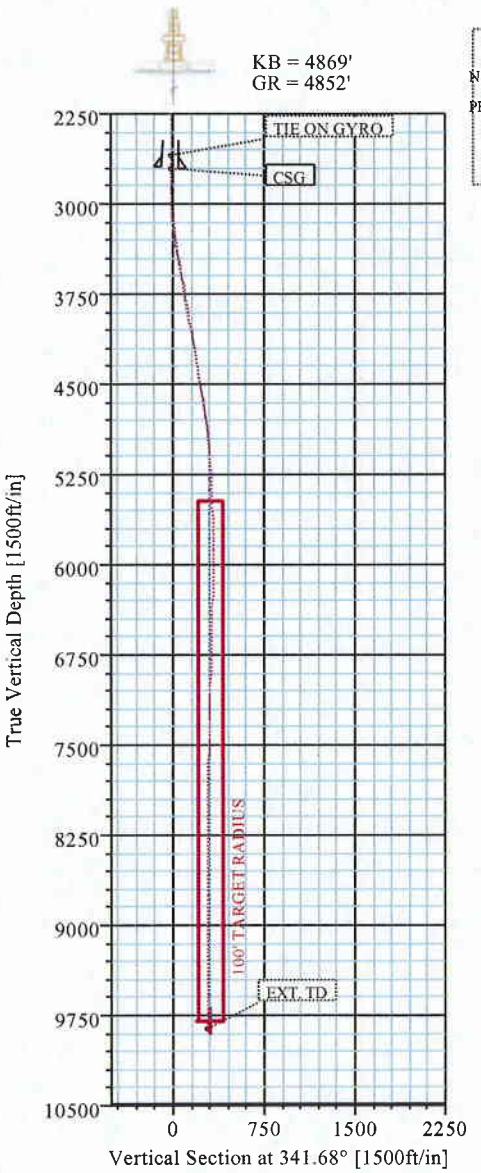
System Datum: Mean Sea Level
Local North: True North

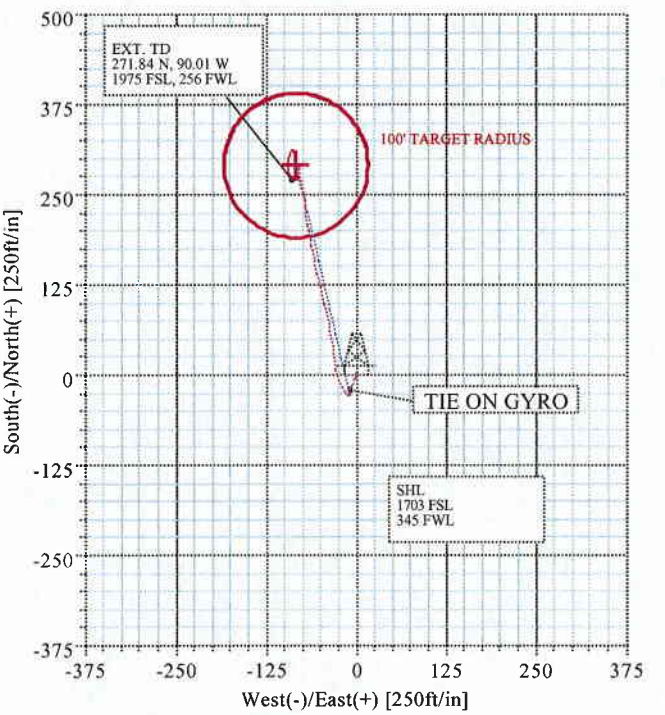
TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Shape
PBHL 18L2CS	9790.00	290.97	-84.11	Circle (Radius: 100)

LEGEND

PLAN 2
GYRO
WFT SVY





Survey: WFT SVY (18L2CS/1)

Created By: Russell Joyner Date: 12/3/2008

Weatherford
SURVEY REPORT

Company:	Anadarko-Kerr-McGee	**Date:**	12/3/2008	**Time:** 13:56:29	**Page:** 1
Field:	UINTAH COUNTY, UTAH (NAD 27)	**Co-ordinate(NE) Reference:**	Well: 18L2CS, True North		
Site:	NBU #922-18L3S (PAD)	**Vertical (TVD) Reference:**	SITE 4869.0		
Well:	18L2CS	**Section (VS) Reference:**	Well (0.00N,0.00E,341.68Azi)		
Wellpath:	1	**Survey Calculation Method:**	Minimum Curvature	**Db:**	Sybase

Survey:	WFT SVY	**Start Date:**	12/3/2008
Company:	WEATHERFORD DRILLING SERVICES	**Engineer:**	Russell Joyner
Tool:	MWD;MWD - Standard	**Tied-to:**	From: Definitive Path

Field:	UINTAH COUNTY, UTAH (NAD 27)		
Map System:	US State Plane Coordinate System 1927	**Map Zone:**	Utah, Central Zone
Geo Datum:	NAD27 (Clarke 1866)	**Coordinate System:**	Well Centre
Sys Datum:	Mean Sea Level	**Geomagnetic Model:**	bggm2007

Site:	NBU #922-18L3S (PAD)				
Site Position:		**Northing:**	625558.83 ft	**Latitude:**	40 2 0.420 N
From:	Geographic	**Easting:**	2563032.57 ft	**Longitude:**	109 29 20.580 W
Position Uncertainty:	0.00 ft			**North Reference:**	True
Ground Level:	4852.00 ft			**Grid Convergence:**	1.29 deg

Well:	18L2CS				**Slot Name:**	
Well Position:	+N/-S	-2.01 ft	**Northing:**	625558.39 ft	**Latitude:**	40 2 0.400 N
	+E/-W	70.00 ft	**Easting :**	2563102.60 ft	**Longitude:**	109 29 19.680 W
Position Uncertainty:		0.00 ft				

Wellpath:	1			**Drilled From:**	Surface
				Tie-on Depth:	0.00 ft
Current Datum:	SITE	**Height**	4869.00 ft	**Above System Datum:**	Mean Sea Level
Magnetic Data:	6/24/2008			**Declination:**	11.48 deg
Field Strength:	52677 nT			**Mag Dip Angle:**	65.97 deg

Vertical Section:	**Depth From (TVD)**	**+N/-S**	**+E/-W**	**Direction**
	ft	ft	ft	deg
	0.00	0.00	0.00	341.68

Survey

MD ft	Incl deg	Azim deg	TVD ft	N/S ft	E/W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	Comment
2600.00	1.75	179.28	2599.67	-21.21	-9.90	-17.02	0.00	0.00	0.00	TIE ON GYRO
2703.38	1.81	191.71	2703.00	-24.39	-10.21	-19.94	0.38	0.06	12.02	CSG
2759.00	1.88	197.90	2758.59	-26.12	-10.67	-21.44	0.38	0.12	11.13	
2822.00	1.69	220.10	2821.57	-27.81	-11.58	-22.76	1.13	-0.30	35.24	
2914.00	3.56	308.60	2913.49	-27.06	-14.69	-21.08	4.24	2.03	96.20	
2976.00	4.69	328.10	2975.33	-23.71	-17.53	-17.00	2.88	1.82	31.45	
3038.00	5.50	328.97	3037.09	-19.01	-20.40	-11.64	1.31	1.31	1.40	
3100.00	6.31	337.35	3098.76	-13.32	-23.25	-5.34	1.90	1.31	13.52	
3162.00	6.69	344.35	3160.36	-6.70	-25.53	1.67	1.42	0.61	11.29	
3223.00	7.25	346.22	3220.91	0.46	-27.41	9.05	0.99	0.92	3.07	
3285.00	7.94	350.10	3282.37	8.48	-29.08	17.19	1.39	1.11	6.26	
3347.00	9.56	351.97	3343.64	17.79	-30.53	26.49	2.65	2.61	3.02	
3409.00	10.81	353.85	3404.67	28.67	-31.88	37.24	2.09	2.02	3.03	
3470.00	10.19	352.10	3464.64	39.71	-33.23	48.14	1.14	-1.02	-2.87	
3531.00	10.06	349.35	3524.69	50.29	-34.96	58.73	0.82	-0.21	-4.51	
3593.00	9.94	348.60	3585.75	60.85	-37.02	69.40	0.29	-0.19	-1.21	
3654.00	9.13	348.97	3645.91	70.76	-38.98	79.43	1.33	-1.33	0.61	
3716.00	8.81	347.85	3707.15	80.23	-40.92	89.03	0.59	-0.52	-1.81	
3777.00	9.94	344.35	3767.34	89.87	-43.33	98.93	2.07	1.85	-5.74	
3838.00	9.69	349.35	3827.44	99.99	-45.69	109.28	1.46	-0.41	8.20	
3900.00	9.94	350.60	3888.54	110.39	-47.53	119.74	0.53	0.40	2.02	
3961.00	10.69	347.22	3948.55	121.11	-49.64	130.57	1.58	1.23	-5.54	
4022.00	9.63	346.35	4008.59	131.58	-52.10	141.29	1.76	-1.74	-1.43	
4084.00	10.00	342.85	4069.69	141.76	-54.91	151.84	1.13	0.60	-5.65	

Anadarko Kerr McGee

Weatherford
SURVEY REPORT

Weatherford

Company:	Anadarko-Kerr-McGee	**Date:** 12/3/2008	**Time:** 13:56:29	**Page:**	2
Field:	UINTAH COUNTY, UTAH (NAD 27)	**Co-ordinate(NE) Reference:**	Well: 18L2CS, True North		
Site:	NBU #922-18L3S (PAD)	**Vertical (TVD) Reference:**	SITE 4869.0		
Well:	18L2CS	**Section (VS) Reference:**	Well (0.00N,0.00E,341.68Azi)		
Wellpath:	1	**Survey Calculation Method:**	Minimum Curvature	**Db:**	Sybase

Survey

MD ft	Incl deg	Azim deg	TVD ft	N/S ft	E/W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	Comment
4146.00	9.25	349.97	4130.82	151.82	-57.37	162.15	2.27	-1.21	11.48	
4207.00	9.25	350.60	4191.02	161.48	-59.02	171.85	0.17	0.00	1.03	
4268.00	8.31	347.97	4251.31	170.63	-60.74	181.07	1.68	-1.54	-4.31	
4330.00	7.94	343.72	4312.68	179.12	-62.87	189.81	1.14	-0.60	-6.85	
4392.00	10.06	349.35	4373.92	188.55	-65.08	199.45	3.70	3.42	9.08	
4455.00	10.19	351.22	4435.94	199.47	-66.94	210.40	0.56	0.21	2.97	
4517.00	8.19	349.60	4497.14	209.23	-68.58	220.19	3.25	-3.23	-2.61	
4610.00	9.19	354.97	4589.07	223.15	-70.43	233.97	1.38	1.08	5.77	
4703.00	9.94	351.97	4680.78	238.49	-72.20	249.10	0.97	0.81	-3.23	
4796.00	9.25	351.35	4772.48	253.83	-74.44	264.37	0.75	-0.74	-0.67	
4888.00	7.50	350.10	4863.49	267.06	-76.59	277.60	1.91	-1.90	-1.36	
4981.00	5.69	346.72	4955.87	277.52	-78.69	288.19	1.99	-1.95	-3.63	
5073.00	4.56	345.10	5047.50	285.50	-80.68	296.39	1.24	-1.23	-1.76	
5166.00	4.00	347.97	5140.25	292.24	-82.31	303.30	0.64	-0.60	3.09	
5258.00	3.25	347.35	5232.06	297.93	-83.55	309.09	0.82	-0.82	-0.67	
5351.00	2.44	347.85	5324.95	302.43	-84.54	313.68	0.87	-0.87	0.54	
5444.00	1.94	340.22	5417.88	305.85	-85.49	317.22	0.62	-0.54	-8.20	
5537.00	1.63	336.85	5510.83	308.55	-86.54	320.11	0.35	-0.33	-3.62	
5630.00	1.50	340.47	5603.80	310.91	-87.47	322.65	0.18	-0.14	3.89	
5723.00	1.13	340.60	5696.77	312.92	-88.18	324.78	0.40	-0.40	0.14	
5816.00	0.75	229.35	5789.77	313.39	-88.95	325.47	1.68	-0.41	-119.62	
5908.00	0.94	229.47	5881.76	312.51	-89.98	324.95	0.21	0.21	0.13	
6001.00	0.75	213.72	5974.75	311.51	-90.89	324.29	0.32	-0.20	-16.94	
6094.00	0.81	216.60	6067.74	310.47	-91.62	323.54	0.08	0.06	3.10	
6188.00	0.88	206.60	6161.73	309.29	-92.34	322.64	0.17	0.07	-10.64	
6279.00	1.19	196.85	6252.71	307.77	-92.93	321.38	0.39	0.34	-10.71	
6373.00	1.19	183.10	6346.69	305.86	-93.27	319.67	0.30	0.00	-14.63	
6466.00	1.50	187.60	6439.67	303.69	-93.48	317.68	0.35	0.33	4.84	
6559.00	1.56	193.10	6532.63	301.25	-93.93	315.50	0.17	0.06	5.91	
6651.00	1.69	187.47	6624.60	298.68	-94.39	313.21	0.22	0.14	-6.12	
6744.00	1.75	189.47	6717.55	295.92	-94.80	310.72	0.09	0.06	2.15	
6836.00	1.88	185.10	6809.51	293.03	-95.16	308.09	0.21	0.14	-4.75	
6929.00	2.00	180.72	6902.45	289.89	-95.32	305.16	0.21	0.13	-4.71	
7022.00	1.88	180.60	6995.40	286.74	-95.36	302.18	0.13	-0.13	-0.13	
7115.00	1.75	184.35	7088.35	283.80	-95.48	299.43	0.19	-0.14	4.03	
7208.00	1.50	172.47	7181.32	281.18	-95.43	296.92	0.45	-0.27	-12.77	
7302.00	0.94	118.97	7275.30	279.58	-94.59	295.15	1.28	-0.60	-56.91	
7394.00	1.25	131.72	7367.28	278.55	-93.18	293.72	0.43	0.34	13.86	
7486.00	1.25	139.72	7459.26	277.12	-91.79	291.92	0.19	0.00	8.70	
7579.00	1.25	136.85	7552.24	275.60	-90.44	290.06	0.07	0.00	-3.09	
7672.00	1.63	148.22	7645.21	273.74	-89.05	287.85	0.51	0.41	12.23	
7765.00	0.94	136.35	7738.18	272.06	-87.82	285.88	0.79	-0.74	-12.76	
7859.00	0.50	80.85	7832.18	271.57	-86.89	285.12	0.82	-0.47	-59.04	
7952.00	0.44	59.72	7925.17	271.81	-86.18	285.13	0.20	-0.06	-22.72	
8044.00	0.56	90.72	8017.17	271.99	-85.42	285.05	0.32	0.13	33.70	
8136.00	0.94	108.35	8109.16	271.74	-84.26	284.45	0.48	0.41	19.16	
8229.00	1.31	78.22	8202.15	271.72	-82.49	283.88	0.74	0.40	-32.40	
8321.00	0.75	40.47	8294.13	272.39	-81.07	284.07	0.93	-0.61	-41.03	
8414.00	0.56	42.97	8387.13	273.19	-80.37	284.60	0.21	-0.20	2.69	
8506.00	0.44	82.22	8479.12	273.57	-79.71	284.76	0.39	-0.13	42.66	
8599.00	0.69	40.72	8572.12	274.04	-78.99	284.98	0.50	0.27	-44.62	
8691.00	0.69	328.22	8664.11	274.93	-78.92	285.80	0.89	0.00	-78.80	

Weatherford
SURVEY REPORT

Company:	Anadarko-Kerr-McGee	**Date:** 12/3/2008	**Time:** 13:56:29	**Page:**	3
Field:	UINTAH COUNTY, UTAH (NAD 27)	**Co-ordinate(NE) Reference:**	Well: 18L2CS, True North		
Site:	NBU #922-18L3S (PAD)	**Vertical (TVD) Reference:**	SITE 4869.0		
Well:	18L2CS	**Section (VS) Reference:**	Well (0.00N,0.00E,341.68Azi)		
Wellpath:	1	**Survey Calculation Method:**	Minimum Curvature	**Db:**	Sybase

Survey

MD ft	Incl deg	Azim deg	TVD ft	N/S ft	E/W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	Comment
8784.00	0.81	305.60	8757.11	275.79	-79.75	286.88	0.34	0.13	-24.32	
8877.00	0.63	264.47	8850.10	276.12	-80.79	287.52	0.57	-0.19	-44.23	
8970.00	0.56	260.47	8943.09	276.00	-81.75	287.70	0.09	-0.08	-4.30	
9062.00	0.38	248.97	9035.09	275.81	-82.48	287.76	0.22	-0.20	-12.50	
9155.00	0.38	221.22	9128.09	275.47	-82.97	287.59	0.20	0.00	-29.84	
9248.00	0.56	213.10	9221.09	274.86	-83.42	287.15	0.21	0.19	-8.73	
9341.00	0.69	218.10	9314.08	274.04	-84.02	286.56	0.15	0.14	5.38	
9434.00	0.88	251.22	9407.07	273.37	-85.04	286.24	0.52	0.20	35.61	
9527.00	0.88	271.35	9500.06	273.15	-86.43	286.47	0.33	0.00	21.65	
9619.00	0.69	256.72	9592.05	273.04	-87.67	286.76	0.30	-0.21	-15.90	
9710.00	0.56	254.35	9683.05	272.80	-88.63	286.83	0.15	-0.14	-2.60	
9803.00	0.56	228.35	9776.04	272.37	-89.41	286.67	0.27	0.00	-27.96	
9885.00	0.56	228.35	9858.04	271.84	-90.01	286.35	0.00	0.00	0.00	EXT. TD

Annotation

MD ft	TVD ft	
2600.00	2599.67	TIE ON GYRO
9885.00	9858.04	EXT. TD

Sundry Number: 50536 API Well Number: 43047398270000

FEDERAL APPROVAL OF THIS ACTION IS NECESSARY

FORM 9

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

5.LEASE DESIGNATION AND SERIAL NUMBER:
UTU-0359

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
UTE

7.UNIT or CA AGREEMENT NAME:
NATURAL BUTTES

1. TYPE OF WELL
Gas Well

8. WELL NAME and NUMBER:
NBU 922-18L2CS

2. NAME OF OPERATOR:
KERR-MCGEE OIL & GAS ONSHORE, L.P.

9. API NUMBER:
43047398270000

3. ADDRESS OF OPERATOR:
P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779

PHONE NUMBER:
720 929-6100

9. FIELD and POOL or WILDCAT:
NATURAL BUTTES

4. LOCATION OF WELL
FOOTAGES AT SURFACE:
1687 FSL 0344 FWL
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:
Qtr/Qtr: NWSW Section: 18 Township: 09.0S Range: 22.0E Meridian: S

COUNTY:
UINTAH

STATE:
UTAH

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

TYPE OF SUBMISSION	TYPE OF ACTION		
✓ NOTICE OF INTENT Approximate date work will start: 5/1/2014	☐ ACIDIZE	☐ ALTER CASING	☐ CASING REPAIR
	☐ CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	☐ CHANGE WELL NAME
	☐ CHANGE WELL STATUS	☐ COMMINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE
☐ SUBSEQUENT REPORT Date of Work Completion:	☐ DEEPEN	☐ FRACTURE TREAT	☐ NEW CONSTRUCTION
	☐ OPERATOR CHANGE	☐ PLUG AND ABANDON	☐ PLUG BACK
	☐ PRODUCTION START OR RESUME	☐ RECLAMATION OF WELL SITE	✓ RECOMPLETE DIFFERENT FORMATION
☐ SPUD REPORT Date of Spud:	☐ REPERFORATE CURRENT FORMATION	☐ SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON
	☐ TUBING REPAIR	☐ VENT OR FLARE	☐ WATER DISPOSAL
☐ DRILLING REPORT Report Date:	☐ WATER SHUTOFF	☐ SI TA STATUS EXTENSION	☐ APD EXTENSION
	☐ WILDCAT WELL DETERMINATION	☐ OTHER	OTHER:

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

The operator requests authorization to conduct recompletion operations on the subject well location. Please see the attached procedure. This is a Federal well and State courtesy copy. Thank you.

Accepted by the Utah Division of Oil, Gas and Mining
May 05, 2014
Date:
By: Dark K Dunt

NAME (PLEASE PRINT)	PHONE NUMBER	TITLE
Matthew P Wold	720 929-6993	Regulatory Analyst I
SIGNATURE		**DATE**
N/A		5/1/2014

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Greater Natural Buttes Unit

NBU 922-18L2CS
RE-COMPLETIONS PROCEDURE
NBU 922-18L PAD
FIELD ID: YELLOW WELL

DATE: **3/24/2014**
AFE#:
API#: **4304739827**
USER ID: **SNT239** (Frac Invoices Only)

COMPLETIONS ENGINEER: **Jamie Berghorn, Denver, CO**
(720) 929-6230 (Office)
(303) 909-3417 (Cell)

REMEMBER SAFETY FIRST!

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Name: **NBU 922-18L2CS**
Location: **SW NW NW SW Sec 18 T9S R22E**
LAT: 40.033409 **LONG:** -109.489487 **COORDINATE:** NAD83 *(Surface Location)*
Uintah County, UT

ELEVATIONS: 4,867' GL 4,884' KB *Frac Registry TVD: 9,858'*

TOTAL DEPTH: 9,885' **PBTD:** 9,833'
SURFACE CASING: 9 5/8", 36# J-55 8RD @ 2,725'
PRODUCTION CASING: 4 1/2", 11.6#, I-80 LTC @ 9,878'
Marker Joint **none**'

TUBULAR PROPERTIES:

	BURST (psi)	COLLAPSE (psi)	DRIFT DIA. (in.)	CAPACITIES (bbl./ft)	(gal/ft)
2 3/8" 4.7# L-80 tbg	11,200	11,780	1.901"	0.00387	0.1624
4 ½" 11.6# I-80 (See above)	7780	6350	3.875"	0.0155	0.6528
4 ½" 11.6# P-110	10691	7580	3.875"	0.0155	0.6528
2 3/8" by 4 ½" Annulus				0.0101	0.4227

TOPS: **BOTTOMS:**

1,659' Green River Top
1,950' Bird's Nest Top
2,495' Mahogany Top
5,023' Wasatch Top 7,735' Wasatch Bottom
7,735' Mesaverde Top 9,885' Mesaverde Bottom (TD)
*Based on latest geological interpretation

T.O.C. @ 650'
**Based on latest interpretation of CBL

GENERAL NOTES:

- **Please note that:**
  - **All stages on this procedure may or may not be completed due to low frac gradients, timing, or other possible reasons. Total stages completed can be found in the post-job-report.**
  - **CBP depth on this procedure is only to be used as a reference. This depth is subject to change as per field operations and the discretion of the wireline supervisor and field foreman.**
- A minimum of **14** tanks (cleaned lined 500 bbl) of recycled water will be required. Note: Use biocide in tanks and the water needs to be at least 45°F at pump time.
- All perforation depths are from Baker's GR log dated **8/26/2008.**
- **7** fracturing stages required for coverage.
- Hydraulic isolation estimated at **1100'** based upon Baker's CBL dated 8/26/2008.
- Procedure calls for **8** CBP's (**8000** psi) .
- Calculate open perforations after each breakdown. If less than 60% of the perforations appear to be open, ball out with 15% HCl.
- **Pump scale inhibitor at 0.5 gpt. Remember to pre-load the casing with scale inhibitor.**

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- FR will be pumped at 0.3 gpt for this well. This concentration will be raised or lowered on the job at the discretion of the APC foreman per the well's treating pressure.
- 30/50 mesh Ottawa sand, **Slickwater frac**.
- Maximum surface pressure **6200 psi**.
- **If casing pressure test fails (pressure loss of 1.5% psi or more), retest for 15 minutes. If pressure loss of 1.5% more on second test, notify Denver engineers. Record in Openwells. MIRU with tubing and packer. Isolate leak by pressure testing above and below the packer. RIH and set appropriate casing leak remediation. Re-pressure test to 1000 and 3500 psi for 15 minutes each and to 6200 psi for 30 minutes (specific details on remediation should be documented in OpenWells).**
- Flush volumes are the sum of slick water and acid used during displacement (include scale inhibitor as mentioned above). Stage acid and scale inhibitor if necessary to cover the next perforated interval.
- Call flush at 0 PPG @ inline densiometers. Slow to 5 bbl/min over last 10-20 bbls of flush. Flush to top perf.
- Max Sand Concentration: Wasatch 2 ppg;
- If distance between plug and top perf of previous stage is less than 50', it is considered to be tight spacing – design will over flush stage by 5 bbls (from top perf)
- **TIGHT SPACING ON STAGE 2,3,4**
- **If using any chemicals for pickling tubing or H2S Scavenging, have MSDS for all chemicals prior to starting work**

Existing Perforations:

PERFORATIONS

Formation	Zone	Top	Btm	spf	Shots	Date	Reason
MESA VERDE		7846	7848	4	8	09/08/2008	PRODUCTION
MESA VERDE		7908	7912	3	12	09/08/2008	PRODUCTION
MESA VERDE		7984	7986	4	8	09/08/2008	PRODUCTION
MESA VERDE		8022	8026	3	12	09/08/2008	PRODUCTION
MESA VERDE		8496	8498	4	8	09/08/2008	PRODUCTION
MESA VERDE		8556	8558	4	8	09/08/2008	PRODUCTION
MESA VERDE		8616	8620	3	12	09/08/2008	PRODUCTION
MESA VERDE		8660	8664	3	12	09/08/2008	PRODUCTION
MESA VERDE		8776	8778	3	6	09/08/2008	PRODUCTION
MESA VERDE		8844	8846	4	8	09/08/2008	PRODUCTION
MESA VERDE		8890	8892	3	6	09/08/2008	PRODUCTION
MESA VERDE		8946	8950	3	12	09/08/2008	PRODUCTION
MESA VERDE		9006	9008	4	8	09/08/2008	PRODUCTION
MESA VERDE		9088	9090	4	8	09/08/2008	PRODUCTION
MESA VERDE		9128	9132	4	16	09/08/2008	PRODUCTION
MESA VERDE		9166	9168	4	8	09/08/2008	PRODUCTION
MESA VERDE		9204	9206	4	8	09/08/2008	PRODUCTION
MESA VERDE		9302	9306	3	12	09/08/2008	PRODUCTION
MESA VERDE		9354	9356	4	8	09/08/2008	PRODUCTION
MESA VERDE		9384	9386	4	8	09/08/2008	PRODUCTION
MESA VERDE		9420	9424	3	12	09/08/2008	PRODUCTION
MESA VERDE		9540	9544	3	12	09/05/2008	PRODUCTION
MESA VERDE		9606	9608	4	8	09/05/2008	PRODUCTION
MESA VERDE		9660	9664	3	12	09/05/2008	PRODUCTION
MESA VERDE		9692	9694	4	8	09/05/2008	PRODUCTION

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Relevant History:

9/10/2008: Originally completed in Mesaverde formation (6 stages) with ~ 547,504 gallons of Slickwater, 425,091 lbs of 30/50 Ottawa Sand and 283,336 lbs of 20/40 Resin coated sand.

4/17/2012: Last slickline report:

Could not get Plunger up w/Well. Ran w/ 1.910 Broach to Tight Spots, 3988', 7188', 7210' and could not get past. Ran w/ Up Shear Fish Tool to SN at 7666', pulled Viper Plunger. Fluid Level is 6840'. Ran w/Up Shear Fish Tool to SN, latched, sheared tool, pulled out. Ran w/1.875" Broach to SN, pulled out. Stuck spring. Dropped same Plunger. Returned Well to Production. Rigged Down.

09/11/2008: Tubing Currently Landed @~7697'

H2S History:

Location Name	WINS No. (wel...	Production Date	Gas (avg mcf/...	Water (avg bb...	Oil (avg bbl/day)	Avg. BOE/day	LGR (bbl/Mmcf)	Max H2S Sep.	Separator H2.	Tank H2S (lbs)	Pr
NBU 922-18L2CS	99148	1/31/2010	255.87	31.77	7.87	50.52	154.94	0.00	0.00	0.00	
NBU 922-18L2CS	99148	2/28/2010	292.89	27.54	5.89	54.71	114.13	0.00	0.00	0.00	
NBU 922-18L2CS	99148	3/31/2010	230.03	21.61	6.55	44.89	122.42				
NBU 922-18L2CS	99148	4/30/2010	296.97	24.77	5.03	54.53	100.35				
NBU 922-18L2CS	99148	5/31/2010	256.61	21.16	5.23	47.99	102.83				
NBU 922-18L2CS	99148	6/30/2010	252.40	20.87	4.73	46.80	101.43				
NBU 922-18L2CS	99148	7/31/2010	244.71	16.77	2.45	43.24	78.57				
NBU 922-18L2CS	99148	8/31/2010	235.26	19.00	3.23	42.44	94.47				
NBU 922-18L2CS	99148	9/30/2010	187.73	8.23	2.73	34.02	58.42				
NBU 922-18L2CS	99148	10/31/2010	211.16	11.97	4.10	39.29	76.08				
NBU 922-18L2CS	99148	11/30/2010	210.00	21.33	4.37	39.37	122.38				
NBU 922-18L2CS	99148	12/31/2010	204.45	7.68	2.42	36.49	49.38				
NBU 922-18L2CS	99148	1/31/2011	192.35	9.81	2.90	34.96	66.07				
NBU 922-18L2CS	99148	2/28/2011	177.14	12.57	3.68	33.20	91.73				
NBU 922-18L2CS	99148	3/31/2011	97.42	5.58	0.81	17.04	65.56				
NBU 922-18L2CS	99148	4/30/2011	99.43	6.60	2.53	19.11	91.85	0.00	0.00	0.00	
NBU 922-18L2CS	99148	5/31/2011	175.74	0.03	0.74	30.03	4.41				
NBU 922-18L2CS	99148	6/30/2011	198.83	0.00	0.00	33.14	0.00				
NBU 922-18L2CS	99148	7/31/2011	185.97	0.00	0.00	30.99	0.00				
NBU 922-18L2CS	99148	8/31/2011	169.26	0.00	0.00	28.21	0.00				
NBU 922-18L2CS	99148	9/30/2011	165.77	0.00	0.00	27.63	0.00				
NBU 922-18L2CS	99148	10/31/2011	158.29	0.00	9.84	36.22	62.16				
NBU 922-18L2CS	99148	11/30/2011	153.63	0.00	0.00	25.61	0.00				
NBU 922-18L2CS	99148	12/31/2011	137.68	0.00	0.00	22.95	0.00				
NBU 922-18L2CS	99148	1/31/2012	153.84	0.00	0.00	25.64	0.00				
NBU 922-18L2CS	99148	2/29/2012	168.48	0.00	0.00	28.08	0.00				
NBU 922-18L2CS	99148	3/31/2012	156.94	0.00	0.00	26.16	0.00				
NBU 922-18L2CS	99148	4/30/2012	152.03	0.00	0.00	25.34	0.00	2.00	0.03	0.00	
NBU 922-18L2CS	99148	5/31/2012	150.35	0.00	0.00	25.06	0.00				
NBU 922-18L2CS	99148	6/30/2012	150.83	0.00	0.00	25.14	0.00				
NBU 922-18L2CS	99148	7/31/2012	145.87	0.00	0.00	24.31	0.00				
NBU 922-18L2CS	99148	8/31/2012	142.61	0.00	0.00	23.77	0.00				
NBU 922-18L2CS	99148	9/30/2012	129.23	0.00	0.00	21.54	0.00	0.00	0.00	0.00	
NBU 922-18L2CS	99148	10/31/2012	111.94	0.00	0.00	18.66	0.00				
NBU 922-18L2CS	99148	11/30/2012	88.77	0.00	0.00	14.79	0.00				
NBU 922-18L2CS	99148	12/31/2012	90.48	0.00	0.00	15.08	0.00				
NBU 922-18L2CS	99148	1/31/2013	98.32	0.00	0.00	16.39	0.00				
NBU 922-18L2CS	99148	2/28/2013	64.93	0.00	0.00	10.82	0.00				
NBU 922-18L2CS	99148	3/31/2013	71.65	0.00	0.00	11.94	0.00				
NBU 922-18L2CS	99148	4/30/2013	59.23	0.00	0.00	9.87	0.00				
NBU 922-18L2CS	99148	5/31/2013	74.65	0.00	0.00	12.44	0.00				
NBU 922-18L2CS	99148	6/30/2013	140.20	0.00	0.00	23.37	0.00				
NBU 922-18L2CS	99148	7/31/2013	121.48	0.00	0.00	20.25	0.00				
NBU 922-18L2CS	99148	8/31/2013	115.84	0.00	0.00	19.31	0.00				
NBU 922-18L2CS	99148	9/30/2013	112.33	0.00	0.00	18.72	0.00				
NBU 922-18L2CS	99148	10/31/2013	112.00	0.00	0.00	18.67	0.00				
NBU 922-18L2CS	99148	11/30/2013	108.60	0.00	0.00	18.10	0.00				
NBU 922-18L2CS	99148	12/31/2013	98.52	0.00	0.00	16.42	0.00				
NBU 922-18L2CS	99148	1/31/2014	100.26	0.00	0.00	16.71	0.00	5.00	0.04	0.00	
NBU 922-18L2CS	99148	2/28/2014	100.14	0.00	0.00	16.69	0.00				

PROCEDURE: (If using any chemicals for pickling tubing or H2S Scavenging, have MSDS for all chemicals prior to starting work.)

1. MIRU. Control well with recycled water and biocide as required. ND WH, NU BOP's and test.

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2. The tubing is below the proposed CBP depth. TOOH with 2-3/8", 4.7#, J-55 tubing. Visually inspect for scale and consider replacing if needed.

3. If tbg looks ok consider running a gauge ring to 7840 (40' below proposed CBP). Otherwise P/U a mill and C/O to 7840 (40' below proposed CBP).

4. Set 8000 psi CBP at ~ 7800'. ND BOPs and NU frac valves Test frac valves and casing to to **6200 psi** for 15 minutes; if pressure test fails contact Denver engineer and see notes above. **Lock OPEN the Braden head valve**. Flow from annulus will be visually monitored throughout stimulation. If release occurs, stimulation will be shut down. Well conditions will be assessed and actions taken as necessary to secure the well. UDOGM will be notified if a release to the annulus occurs.

5. Pressure test frac lines to max surface pressure + 1000 psi for 15 minutes. Pressure loss should be less than 10% to be considered acceptable. Check and correct for existing leaks.

6. Perf the following with 3-1/8" gun, 19 gm, 0.40" hole:

Zone	From	To	spf	# of shots
WASATCH	7598	7600	3	6
WASATCH	7694	7696	3	6
WASATCH	7740	7742	3	6
WASATCH	7768	7770	3	6

7. Breakdown perfs and establish injection rate (include scale inhibitor in fluid). Spot 250 gals of 15% HCL and let soak 5-10 min. Fracture as outlined in Stage 1 on attached listing. Under-displace to ~7598' and trickle 250gal 15%HCL w/ scale inhibitor in flush .

8. Set 8000 psi CBP at ~7536'. Perf the following 3-1/8" gun, 19 gm, 0.40" hole:

Zone	From	To	spf	# of shots
WASATCH	7361	7362	3	3
WASATCH	7392	7393	3	3
WASATCH	7442	7443	3	3
WASATCH	7470	7471	3	3
WASATCH	7479	7480	3	3
WASATCH	7488	7489	3	3
WASATCH	7504	7506	3	6

9. Breakdown perfs and establish injection rate. Fracture as outlined in Stage 2 on attached listing. Under-displace to ~7361' and trickle 250gal 15%HCL w/ scale inhibitor in flush.

10. Set 8000 psi CBP at ~7322'. Perf the following with 3-1/8" gun, 19 gm, 0.40" hole:

Zone	From	To	spf	# of shots
WASATCH	7206	7207	3	3
WASATCH	7219	7220	3	3
WASATCH	7237	7238	3	3
WASATCH	7258	7259	3	3
WASATCH	7275	7276	3	3
WASATCH	7283	7284	3	3
WASATCH	7301	7302	3	3

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11. Breakdown perfs and establish injection rate. Fracture as outlined in Stage 3 on attached listing. Under-displace to ~7206' and trickle 250gal 15%HCL w/ scale inhibitor in flush.

12. Set 8000 psi CBP at ~7196'. Perf the following with 3-1/8" gun, 19 gm, 0.40" hole:

Zone	From	To	spf	# of shots
WASATCH	6971	6972	3	3
WASATCH	7063	7064	3	3
WASATCH	7106	7107	3	3
WASATCH	7127	7128	3	3
WASATCH	7164	7166	3	6
WASATCH	7181	7183	3	6

13. Breakdown perfs and establish injection rate. Fracture as outlined in Stage 4 on attached listing. Under-displace to ~6971' and trickle 250gal 15%HCL w/ scale inhibitor in flush.

14. Set 8000 psi CBP at ~6956'. Perf the following with 3-1/8" gun, 19 gm, 0.40" hole:

Zone	From	To	spf	# of shots
WASATCH	6775	6776	3	3
WASATCH	6793	6794	3	3
WASATCH	6800	6801	3	3
WASATCH	6820	6821	3	3
WASATCH	6842	6843	3	3
WASATCH	6865	6866	3	3
WASATCH	6898	6899	3	3
WASATCH	6935	6936	3	3

15. Breakdown perfs and establish injection rate. Fracture as outlined in Stage 5 on attached listing. Under-displace to ~6775' and trickle 250gal 15%HCL w/ scale inhibitor in flush.

16. Set 8000 psi CBP at ~6542'. Perf the following with 3-1/8" gun, 19 gm, 0.40" hole:

Zone	From	To	spf	# of shots
WASATCH	6254	6256	3	6
WASATCH	6326	6328	3	6
WASATCH	6482	6484	3	6
WASATCH	6510	6512	3	6

17. Breakdown perfs and establish injection rate. Fracture as outlined in Stage 6 on attached listing. Under-displace to ~6254' and trickle 250gal 15%HCL w/ scale inhibitor in flush.

18. Set 8000 psi CBP at ~6022'. Perf the following with 3-1/8" gun, 19 gm, 0.40" hole:

Zone	From	To	spf	# of shots
WASATCH	5914	5916	3	6
WASATCH	5975	5978	3	9
WASATCH	5989	5992	3	9

19. Breakdown perfs and establish injection rate. Fracture as outlined in Stage 7 on attached listing. Under-displace to ~5914' andflush only with recycled water.

20. Set 8000 psi CBP at~5864'.

21. ND Frac Valves, NU and Test BOPs.

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22. TIH with 3 7/8” bit, pump open sub, SN and tubing.

23. Drill 7 plugs and clean out to a depth of 7790’ (~ 20’ below bottom perfs). This well WILL NOT be commingled at this time.

24. Shift pump open bit sub and land tubing at 7568’. Flow back completion load. RDMO.

25. MIRU, POOH tbg and POBS. TIH with POBS.

26. Drill last plug @ 7800’ clean out to PBTD at 9833’. Shear off bit and land tubing at ±7697’. This well WILL be commingled at this time. **NOTE: If the CBP between the initial completion and the recompleted sands has been in the well for more than 30 calendar days from the beginning of flowback for the recompletion, a sundry will need to be filed with the state. Contact the Regulatory group to file the sundry prior to commencing work.**

27. Clean out well with foam and/or swabbing unit until steady flow has been established from completion.

28. **Leave surface casing valve open**. Monitor and report any flow from surface casing. RDMO

Completion Engineer

Jamie Berghorn: 303/909-3417, 720/929-6230

Production Engineer

Mickey Doherty: 406/491-7294, 435/781-9740

Ronald Trigo: 352/213-6630, 435/781-7037

Brad Laney: 435/781-7031, 435/828-5469

Boone Bajgier: 435/781/7096, 713/416/4816

Ben Smiley: 936/524-4231, 435/781-7010

Heath Pottmeyer: 740/525-3445, 435/781-9789

Anqi Yang: 435/828-6505, 435/781-7015

Completion Supervisor Foreman

Jeff Samuels: 435/828-6515, 435/781-7046

Completion Manager

Jeff Dufresne: 720/929-6281, 303/241-8428

Vernal Main Office

435/789-3342

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Emergency Contact Information—Call 911

Vernal Regional Hospital Emergency: 435-789-3342

Police: (435) 789-5835

Fire: 435-789-4222

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Acid Pickling and H2S Procedures (If Required)

**PROCEDURE FOR PUMPING ACID DOWN TBG

WHEN FINDING SCALE IN TUBING THAT IS ACID SOLUBLE, ENSURE THAT PLUNGER EQUIPMENT IS REMOVED AND ABLE TO PUMP DOWN TBG. INSTALL A 'T' IN PUMP LINE W/2" VALVE THAT NALCO CAN TIE INTO. HAVE 60 BBLS 2% KCL MIXED W/ 10-15 GAL H2S SCAVENGER IN RIG FLAT TANK. (WE USED THE RIG FLAT TANK FOR MIXING CHEMICAL SO WE DIDN'T HAVE THE CHEMICAL IN ALL FLUIDS ON LOCATION, ONLY WHAT WE NEEDED TO PUMP DOWN HOLE)

1. PUMP 5-10 BBLS 2% KCL DOWN TBG (NALCO CANNOT PUMP AGAINST PRESSURE)
2. NALCO WILL PUMP 3 DRUMS HCL (31%) INTO PUMP LINE.
3. FLUSH BEHIND ACID WITH 10-15 BBL 2% KCL
4. PUMP 2—30 BBL 2% W/ H2S SCAVENGER DOWN TBG.
5. PUMP REMAINDER OF 2% W/ H2S SCAVENGER DOWN CASING AND SHUT WELL IN FOR MINIMUM OF 2 HRS.
6. OVER DISPLACE DOWN TBG AND CSG TO FLUSH ACID AND SCAVENGER INTO FORMATION
7. MONITOR TUBING FOR FLOW AND CASING FOR H2S NOW AS POOH W/ TUBING.

** PROCEDURE FOR PUMPING H2S SCAVENGER WITHOUT ACID

PRIOR TO RIG MOVING ON OR AS RIG PULLS ONTO LOCATION. TEST CASING, TUBING AND SEPARATOR FOR H2S. IF FOUND MAKE SURE THAT PLUNGER SYSTEM IS REMOVED (IT IS POSSIBLE TO PUMP AROUND PLUNGERS BUT SOME WILL HAVE A STANDING VALVE IN SEATING NIPPLE).

1. MIX 10-15 GAL H2S SCAVENGER WITH 60-100 BBL 2% KCL IN RIG FLAT TANK.
2. PUMP 25 BBLS MIXTURE DOWN TUBING AND REST DOWN CASING. SHUT WELL IN FOR 2 HOURS.
3. IF WELL HAS PRESSURE AFTER 2 HOURS – RETEST CASING AND TUBING FOR H2S.
4. FLUSH TUBING AND CASING PUSHING H2S SCAVENGER INTO FORMATION.
5. MONITOR TUBING FOR FLOW AND CASING FOR H2S NOW AS POOH W/ TUBING.

** As per APC standard operating procedure, APC foreman will verify ALL volumes pumped and record on APC Volume Report Form

.

Service Company Supplied Chemicals - Job Totals

Friction Reducer	72	gals @	0.3	GPT
Surfactant	239	gals @	1.0	GPT
Clay Stabilizer	0	gals @	0.0	GPT
15% Hcl	1750	gals @	250	gal/stg
Iron Control for acid	9	gals @	5.0	GPT of acid
Surfactant for acid	4	gals @	2.0	GPT of acid
Corrosion Inhibitor for acid	11	gals @	6.0	GPT of acid

Third Party Supplied Chemicals Job Totals - Include Pumping Charge if Applicable

Scale Inhibitor	119	gals pumped	0.5	GPT (see schedule)
Biocide	72	gals @	0.3	GPT

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Sundry Number: 50536 API Well Number: 43047398270000

Fracturing Schedules
NBU 922-18L2CS
Slickwater Frac

Copy to new book

Casing Size	4.5
Recomplete?	Y
Pad?	Y
ACTS?	N
Days on Pad?	2
Wells on Pad?	3

Swabbing Days	3	Enter Number of swabbing days here for recompletes
Production Log	0	Enter 1 if running a Production Log
DFIT	0	Enter Number of DFITs
GR only	Y	Enter Y if only Gamma Ray log was run
Low Scale	Y	Enter Y if a LOW concentration of Scale Inhibitor will be pumped
Clay Stab.	N	Enter N if there will be NO Clay stabilizer

Stage	Zone	Perfs Top, ft.	Perfs Bot., ft	SPF	Holes	Rate BPM	Fluid Type	Initial ppg	Final ppg	Fluid	Volume gals	Cum Vol gals	Volume BBLs	Cum Vol BBLs	Fluid % of frac	Sand % of frac	Sand lbs	Cum. Sand lbs	Footage from CBP to Flush	Scale Inhib., gal.
1	WASATCH	7598	7600	3	6	Varied	Pre-Pad & Pump-in test			Slickwater	4,960	4,960	118	118						2
	WASATCH	7694	7696	3	6	0	ISIP and 5 min ISIP													
	WASATCH	7740	7742	3	6	50	Slickwater Pad			Slickwater	3,006	7,966	72	190	15.0%	0.0%	0	0		2
	WASATCH	7768	7770	3	6	50	Slickwater Ramp	0.25	1	Slickwater	10,020	17,986	239	428	50.0%	37.3%	6,263	6,263		5
	WASATCH					50	Slickwater Ramp	1	2	Slickwater	7,014	25,000	167	595	35.0%	62.7%	10,521	16,784		4
	WASATCH					50	Flush (4-1/2)			Slickwater	4,960	29,960	118	713				16,784		2
	WASATCH						ISDP and 5 min ISDP			Slickwater										0
	WASATCH																			0
	WASATCH																	16,784		0
	WASATCH											29,960	118	713						0
	WASATCH																			15
	WASATCH																			
	WASATCH																			
	WASATCH									Sand laden Volume		20,040								
			# of Perfs/stage		24									Flush depth	7,598	gal/ft	871	730	lbs sand/ft	
						14.3	<< Above pump time (min)										CBP depth	7,536	62	
2	WASATCH	7361	7362	3	3	Varied	Pump-in test			Slickwater		0	0	0						
	WASATCH	7392	7393	3	3	0	ISIP and 5 min ISIP													
	WASATCH	7442	7443	3	3	50	Slickwater Pad			Slickwater	5,040	5,040	120	120	15.0%	0.0%	0	0		3
	WASATCH	7470	7471	3	3	50	Slickwater Ramp	0.25	1	Slickwater	16,800	21,840	400	520	50.0%	37.3%	10,500	10,500		8
	WASATCH	7479	7480	3	3	50	Slickwater Ramp	1	2	Slickwater	11,760	33,600	280	800	35.0%	62.7%	17,640	28,140		6
	WASATCH	7488	7489	3	3	50	Flush (4-1/2)			Slickwater	4,805	38,405	114	914				28,140		2
	WASATCH	7504	7506	3	6		ISDP and 5 min ISDP			Slickwater										0
	WASATCH																			0
	WASATCH																	28,140		0
	WASATCH											38,405	114	914						0
	WASATCH																			19
	WASATCH																			
	WASATCH																			
	WASATCH									Sand laden Volume		33,600								
			# of Perfs/stage		24									Flush depth	7,361	gal/ft	800	670	lbs sand/ft	
						18.3	<< Above pump time (min)										CBP depth	7,322	39	
3	WASATCH	7206	7207	3	3	Varied	Pump-in test			Slickwater		0	0	0						
	WASATCH	7219	7220	3	3	0	ISIP and 5 min ISIP													
	WASATCH	7237	7238	3	3	50	Slickwater Pad			Slickwater	3,600	3,600	86	86	15.0%	0.0%	0	0		2
	WASATCH	7258	7259	3	3	50	Slickwater Ramp	0.25	1	Slickwater	12,000	15,600	286	371	50.0%	37.3%	7,500	7,500		6
	WASATCH	7275	7276	3	3	50	Slickwater Ramp	1	2	Slickwater	8,400	24,000	200	571	35.0%	62.7%	12,600	20,100		4
	WASATCH	7283	7284	3	3	50	Flush (4-1/2)			Slickwater	4,704	28,704	112	683				20,100		2
	WASATCH	7301	7302	3	3		ISDP and 5 min ISDP			Slickwater										0
	WASATCH																			0
	WASATCH																	20,100		0
	WASATCH											28,704	112	683						0
	WASATCH																			14
	WASATCH																			
	WASATCH																			
	WASATCH									Sand laden Volume		24,000								
			# of Perfs/stage		21									Flush depth	7,206	gal/ft	800	670	lbs sand/ft	
						13.7	<< Above pump time (min)										CBP depth	7,196	10	

Stage	Zone	Perfs Top, ft.	Perfs Bot., ft	SPF	Holes	Rate BPM	Fluid Type	Initial ppg	Final ppg	Fluid	Volume gals	Cum Vol gals	Volume BBLs	Cum Vol BBLs	Fluid % of frac	Sand % of frac	Sand lbs	Cum. Sand lbs	Footage from CBP to Flush	Scale Inhib., gal.
4	WASATCH	6971	6972	3	3	Varied	Pump-in test			Slickwater		0	0	0						
	WASATCH	7063	7064	3	3	0	ISIP and 5 min ISIP													
	WASATCH	7106	7107	3	3	50	Slickwater Pad			Slickwater	4,800	4,800	114	114	15.0%	0.0%	0	0		2
	WASATCH	7127	7128	3	3	50	Slickwater Ramp	0.25	1	Slickwater	16,000	20,800	381	495	50.0%	37.3%	10,000	10,000		8
	WASATCH	7164	7166	3	6	50	Slickwater Ramp	1	2	Slickwater	11,200	32,000	267	762	35.0%	62.7%	16,800	26,800		6
	WASATCH	7181	7183	3	6	50	Flush (4-1/2)			Slickwater	4,551	36,551	108	870				26,800		2
	WASATCH						ISDP and 5 min ISDP			Slickwater										0
	WASATCH																			0
	WASATCH																	26,800		0
	WASATCH											36,551	108	870						0
	WASATCH																			18
	WASATCH																			
	WASATCH																			
	WASATCH									Sand laden Volume		32,000								
			# of Perfs/stage		24									Flush depth	6,971	gal/ft	800	670	lbs sand/ft	
						17.4	<< Above pump time (min)							CBP depth	6,956				15	
5	WASATCH	6775	6776	3	3	Varied	Pump-in test			Slickwater		0	0	0						
	WASATCH	6793	6794	3	3	0	ISIP and 5 min ISIP													
	WASATCH	6800	6801	3	3	50	Slickwater Pad			Slickwater	6,780	6,780	161	161	15.0%	0.0%	0	0		3
	WASATCH	6820	6821	3	3	50	Slickwater Ramp	0.25	1	Slickwater	22,600	29,380	538	700	50.0%	37.3%	14,125	14,125		11
	WASATCH	6842	6843	3	3	50	Slickwater Ramp	1	2	Slickwater	15,820	45,200	377	1,076	35.0%	62.7%	23,730	37,855		8
	WASATCH	6865	6866	3	3	50	Flush (4-1/2)			Slickwater	4,423	49,623	105	1,181				37,855		2
	WASATCH	6898	6899	3	3		ISDP and 5 min ISDP			Slickwater										0
	WASATCH	6935	6936	3	3															0
	WASATCH																	37,855		0
	WASATCH											49,623	105	1,181						0
	WASATCH																			25
	WASATCH																			
	WASATCH																			
	WASATCH									Sand laden Volume		45,200								
			# of Perfs/stage		24									Flush depth	6,775	gal/ft	800	670	lbs sand/ft	
						23.6	<< Above pump time (min)							CBP depth	6,542				233	
6	WASATCH	6254	6256	3	6	Varied	Pump-in test			Slickwater		0	0	0						
	WASATCH	6326	6328	3	6	0	ISIP and 5 min ISIP													
	WASATCH	6482	6484	3	6	50	Slickwater Pad			Slickwater	4,560	4,560	109	109	15.0%	0.0%	0	0		2
	WASATCH	6510	6512	3	6	50	Slickwater Ramp	0.25	1	Slickwater	15,200	19,760	362	470	50.0%	37.3%	9,500	9,500		8
	WASATCH					50	Slickwater Ramp	1	2	Slickwater	10,640	30,400	253	724	35.0%	62.7%	15,960	25,460		5
	WASATCH					50	Flush (4-1/2)			Slickwater	4,083	34,483	97	821				25,460		2
	WASATCH						ISDP and 5 min ISDP			Slickwater										0
	WASATCH																			0
	WASATCH																	25,460		0
	WASATCH											34,483	97	821						0
	WASATCH																			17
	WASATCH																			
	WASATCH																			
	WASATCH									Sand laden Volume		30,400								
			# of Perfs/stage		24									Flush depth	6,254	gal/ft	800	670	lbs sand/ft	
						16.4								CBP depth	6,022				232	

Stage	Zone	Perfs Top, ft.	Perfs Bot., ft	SPF	Holes	Rate BPM	Fluid Type	Initial ppg	Final ppg	Fluid	Volume gals	Cum Vol gals	Volume BBLs	Cum Vol BBLs	Fluid % of frac	Sand % of frac	Sand lbs	Cum. Sand lbs	Footage from CBP to Flush	Scale Inhib., gal.
												0	0	0						
7	WASATCH	5914	5916	3	6	Varied	Pump-in test			Slickwater		0	0	0						
	WASATCH	5975	5978	3	9	0	ISIP and 5 min ISIP													
	WASATCH	5989	5992	3	9	50	Slickwater Pad			Slickwater	3,171	3,171	75	75	15.0%	0.0%	0	0		2
	WASATCH					50	Slickwater Ramp	0.25	1	Slickwater	10,570	13,741	252	327	50.0%	37.3%	6,606	6,606		5
	WASATCH					50	Slickwater Ramp	1	2	Slickwater	7,399	21,139	176	503	35.0%	62.7%	11,098	17,704		4
	WASATCH					50	Flush (4-1/2)			Slickwater	3,861	25,000	92	595				17,704		0
	WASATCH						ISDP and 5 min ISDP			Slickwater										0
	WASATCH																	17,704		0
	WASATCH											25,000	92	595						0
	WASATCH																			11
	WASATCH																			
	WASATCH																			
	WASATCH																			
	WASATCH									Sand laden Volume		21,139								
														Flush depth	5,914	gal/ft	1,321	1,107	lbs sand/ft	
																	CBP depth	5,864	50	
	Totals		# of Perfs/stage		24	11.9				Total Fluid	242,725	5,779	gals	5,779	bbls		Total Sand	172,843		
					165						5,779		bbls							
						1.9								12.8	tanks				Total Scale Inhib. =	119

Total Stages 7 stages
Last Stage Flush 3,861 gals

NBU 922-18L2CS
Perforation and CBP Summary

Stage	Zones	Perforations Top, ft	Perforations Bottom, ft	SPF	Holes		Fracture Coverage		
1	WASATCH	7598	7600	3	6		7598	to	7772
	WASATCH	7694	7696	3	6				
	WASATCH	7740	7742	3	6				
	WASATCH	7768	7770	3	6				
	WASATCH								
	WASATCH								
	WASATCH								
	WASATCH								
	# of Perfs/stage				24		CBP DEPTH	7,536	
2	WASATCH	7361	7362	3	3		7361	to	7508
	WASATCH	7392	7393	3	3				
	WASATCH	7442	7443	3	3				
	WASATCH	7470	7471	3	3				
	WASATCH	7479	7480	3	3				
	WASATCH	7488	7489	3	3				
	WASATCH	7504	7506	3	6				
	WASATCH								
	# of Perfs/stage				24		CBP DEPTH	7,322	
3	WASATCH	7206	7207	3	3		7203	to	7304
	WASATCH	7219	7220	3	3				
	WASATCH	7237	7238	3	3				
	WASATCH	7258	7259	3	3				
	WASATCH	7275	7276	3	3				
	WASATCH	7283	7284	3	3				
	WASATCH	7301	7302	3	3				
	WASATCH								
	# of Perfs/stage				21		CBP DEPTH	7,196	
4	WASATCH	6971	6972	3	3		6968	to	7187
	WASATCH	7063	7064	3	3				
	WASATCH	7106	7107	3	3				
	WASATCH	7127	7128	3	3				
	WASATCH	7164	7166	3	6				
	WASATCH	7181	7183	3	6				
	WASATCH								
	WASATCH								
	# of Perfs/stage				24		CBP DEPTH	6,956	
5	WASATCH	6775	6776	3	3		6773	to	6941
	WASATCH	6793	6794	3	3				
	WASATCH	6800	6801	3	3				
	WASATCH	6820	6821	3	3				
	WASATCH	6842	6843	3	3				
	WASATCH	6865	6866	3	3				
	WASATCH	6898	6899	3	3				
	WASATCH	6935	6936	3	3				
	# of Perfs/stage				24		CBP DEPTH	6,542	
6	WASATCH	6254	6256	3	6		6241	to	6514
	WASATCH	6326	6328	3	6				
	WASATCH	6482	6484	3	6				
	WASATCH	6510	6512	3	6				
	WASATCH								
	WASATCH								
	WASATCH								
	WASATCH								
	# of Perfs/stage				24		CBP DEPTH	6,022	
7	WASATCH	5914	5916	3	6		5912	to	5993
	WASATCH	5975	5978	3	9				
	WASATCH	5989	5992	3	9				
	WASATCH								
	WASATCH								
	WASATCH								
	WASATCH								
	WASATCH								
	# of Perfs/stage				24		CBP DEPTH	5,864	
	Totals				165		Total Pay		245.5