



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 922-18M2S
T9S R22E
Section 18: SWSW
NWSW, Lot 3, 1689' FSL, 284' FWL (surface)
SWSW, Lot 4, 1075' FSL, 232' 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 922-18M2S 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

A handwritten signature in black ink, appearing to read 'James C. Colligan III', written over a white rectangular area.

James C. Colligan III
Landman

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

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

1a. Type of Work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. UTU-0359
b. Type of Well: <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input type="checkbox"/> Single Zone <input checked="" type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name TRIBAL SURFACE
2. Name of Operator KERR MCGEE OIL AND GAS ONSHORE LP		7. If Unit or CA Agreement, Name and No. UNIT #891008900A
3A. Address 1368 SOUTH 1200 EAST VERNAL, UT 84078	3b. Phone No. (include area code) (435) 781-7024	8. Lease Name and Well No. NBU 922-18M2S
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface NW/SW 1689'FSL, 284'FWL (LOT 3) At proposed prod. Zone SW/SW 1075'FSL, 232'FWL (LOT 3)		9. API Well No. 43-047-39828
14. Distance in miles and direction from nearest town or post office* 27.4 +/- MILES FROM OURAY, UTAH		10. Field and Pool, or Exploratory NATURAL BUTTES
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	11. Sec., T., R., M., or Blk. and Survey or Area SEC. 18, T9S, R22E
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. REFER TO TOPO C	19. Proposed Depth 9841'	12. County or Parish UINTAH
20. BLM/BIA Bond No. on file RLB0005239	13. State UTAH	17. Spacing Unit dedicated to this well 40.00
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. | 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above). |
| 2. A Drilling Plan. | 5. Operator certification. |
| 3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office). | 6. Such other site specific information and/or plans as may be required by the authorized office. |

25. Signature 	Name (Printed/Typed) 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 ENVIRONMENTAL MANAGER		

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

Conditions of approval, if any, are attached.

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

*(Instructions on reverse)

Surf
628934X
4432345Y
40.033376
109.488858

BHL
628922X
4432157Y
40.031683
109.489835

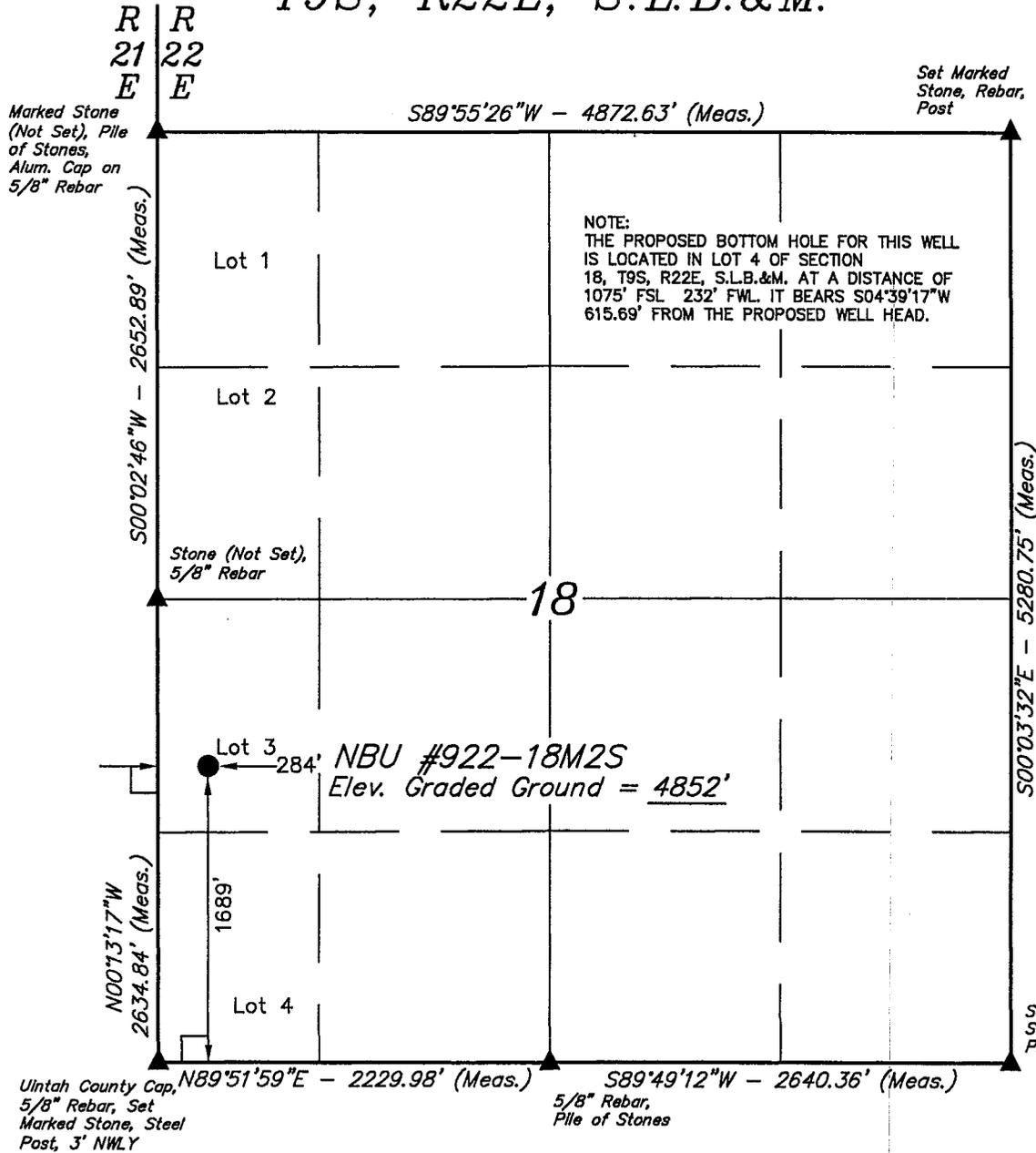
Federal Approval of this
Action is Necessary

RECEIVED

NOV 20 2007

DIV. OF OIL, GAS & MINING

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



Kerr-McGee Oil & Gas Onshore LP

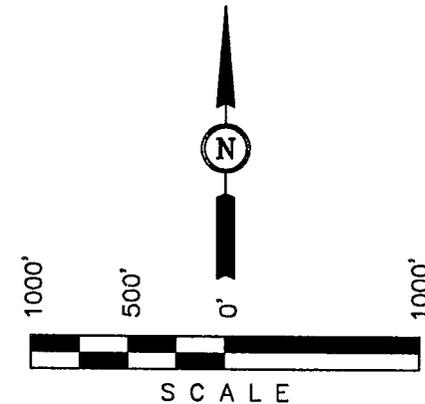
Well location, NBU #922-18M2S, located as shown in Lot 3 of Section 18, T9S, R22E, S.L.B.&M., Uintah County, Utah.

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.

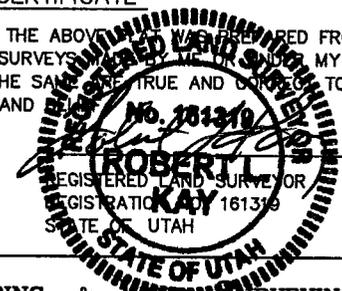
BASIS OF BEARINGS

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



CERTIFICATE

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



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

LEGEND:

└─┘ = 90° SYMBOL

● = PROPOSED WELL HEAD.

▲ = SECTION CORNERS LOCATED.

(NAD 83)

LATITUDE = 40°02'00.13" (40.033369)

LONGITUDE = 109°29'22.93" (109.489703)

(NAD 27)

LATITUDE = 40°02'00.26" (40.033406)

LONGITUDE = 109°29'20.46" (109.489017)

SCALE 1" = 1000'	DATE SURVEYED: 05-07-07	DATE DRAWN: 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 922-18M2S
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:**

<u>Formation</u>	<u>Depth</u>
Uinta	0- Surface
Green River	1667'
Top of Birds Nest Water	1967'
Mahogany	2333'
Wasatch	4948'
Mesaverde	7670'
MVU2	8618'
MVL1	9130'
TVD	9750'
TD (MD)	9841'

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

<u>Substance</u>	<u>Formation</u>	<u>Depth</u>
	Green River	1667'
	Top of Birds Nest Water	1967'
	Mahogany	2333'
Gas	Wasatch	4948'
Gas	Mesaverde	7670'
Gas	MVU2	8618'
Gas	MVL1	9130'
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 9841' TD, approximately equals 6101 psi (calculated at 0.62 psi/foot).

Maximum anticipated surface pressure equals approximately 3935 psi (bottomhole pressure minus the pressure of a partially evacuated hole calculated at 0.22 psi/foot).

8. **Anticipated Starting Dates:**

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

9. **Variations:**

Please see Natural Buttes Unit SOP.

10. **Other Information:**

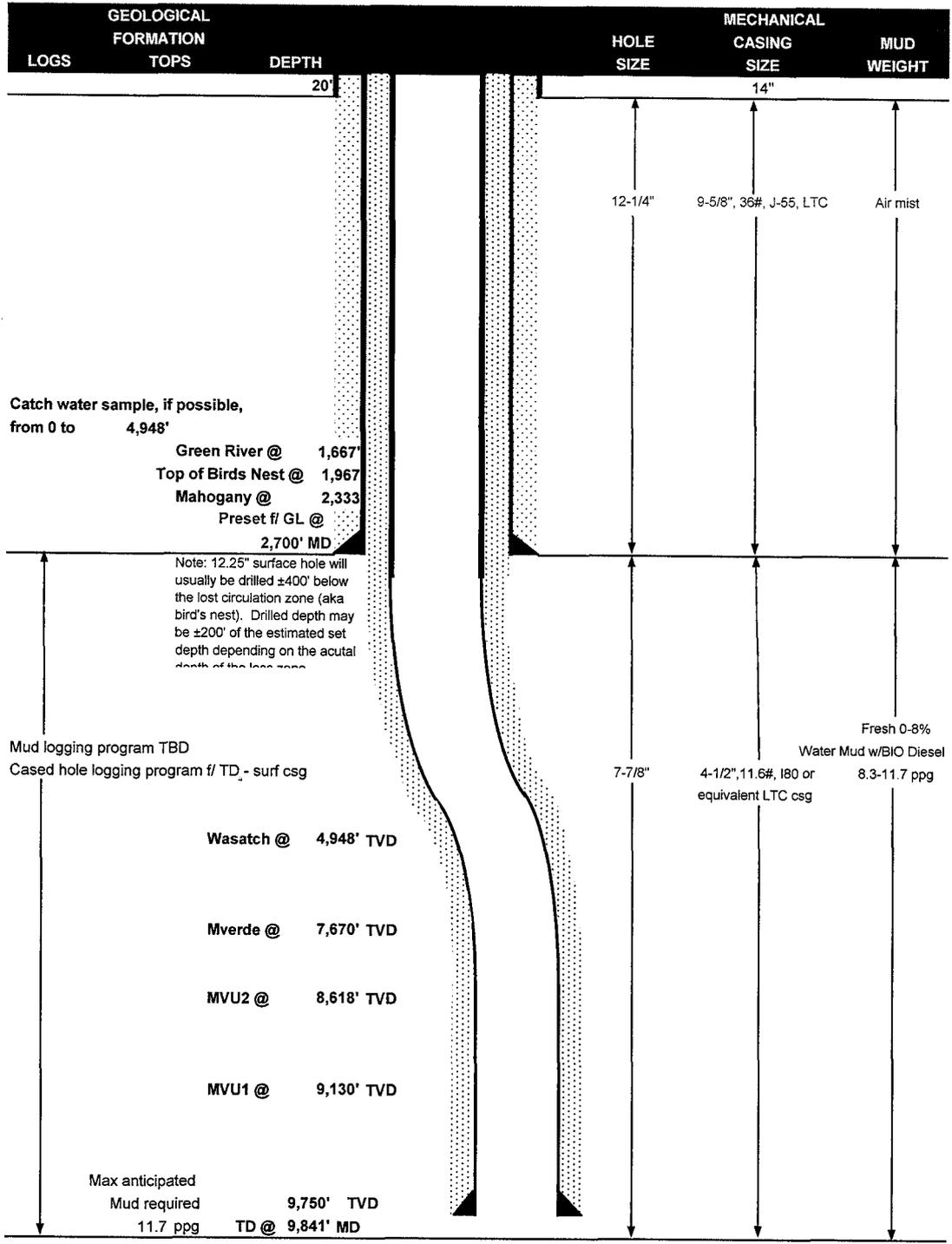
Please see Natural Buttes Unit SOP.



KERR-McGEE OIL & GAS ONSHORE LP

DRILLING PROGRAM

COMPANY NAME	KERR-McGEE OIL & GAS ONSHORE LP		DATE	November 16, 2007		
WELL NAME	NBU 922-18M2S		TD	9,841' MD	MD	9,750' 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 1689'FSL, 284'FWL					
	Latitude: 40.033369 Longitude: 109.489703					
BTM HOLE LOCATION	SW/SW LOT 4, SEC. 18, T9S, R22E 1075'FSL, 232'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'						
SURFACE	9-5/8"	.0 to 2700	36.00	J-55	LTC	3520 0.92 7780	2020 1.60 6350	453000 5.93 201000
PRODUCTION	4-1/2"	0 to 9841	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 3822 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	LEAD	1500	NOTE: If well will circulate water to surface, option 2 will be utilized 65/35 Poz + 6% Gel + 10 pps gilsonite + .25 pps Flocele + 3% salt BWOW	360	35%	12.60	1.61
Option 2	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	7,161'	Premium Lite II + 3% KCl + 0.25 pps celloflake + 5 pps gilsonite + 10% gel + 0.5% extender	780	60%	11.00	3.38
	TAIL	2,680'	50/50 Poz/G + 10% salt + 2% gel +.1% R-3	750	60%	14.30	1.31

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

FLOAT EQUIPMENT & CENTRALIZERS

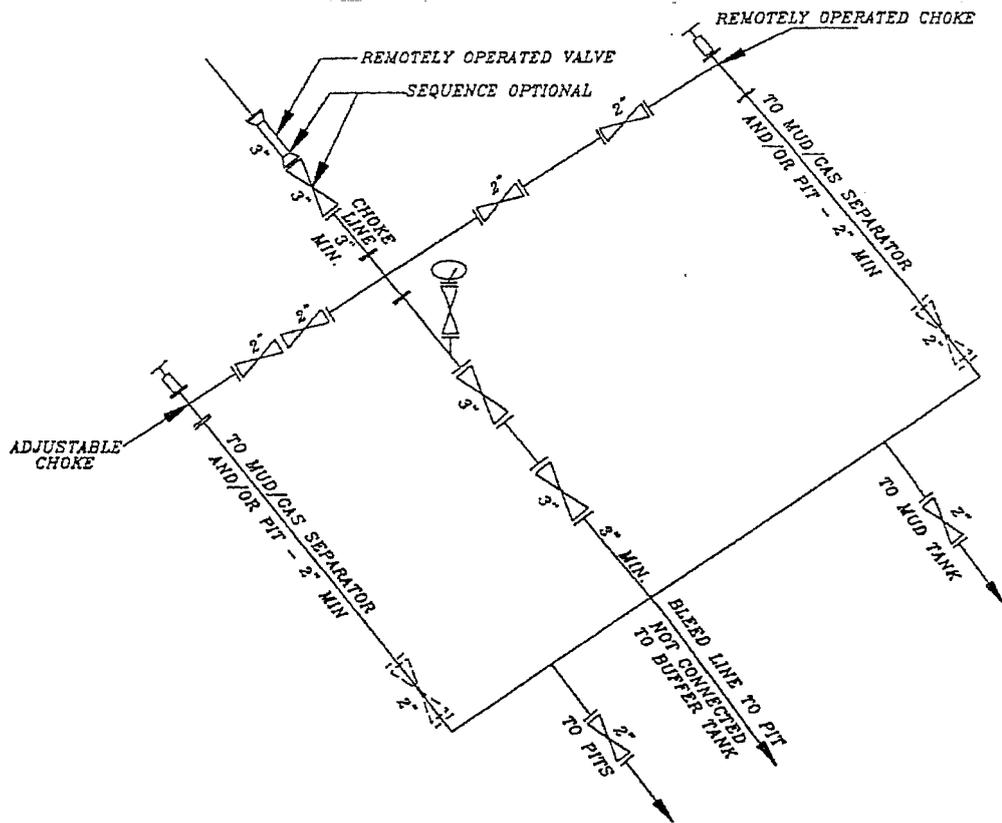
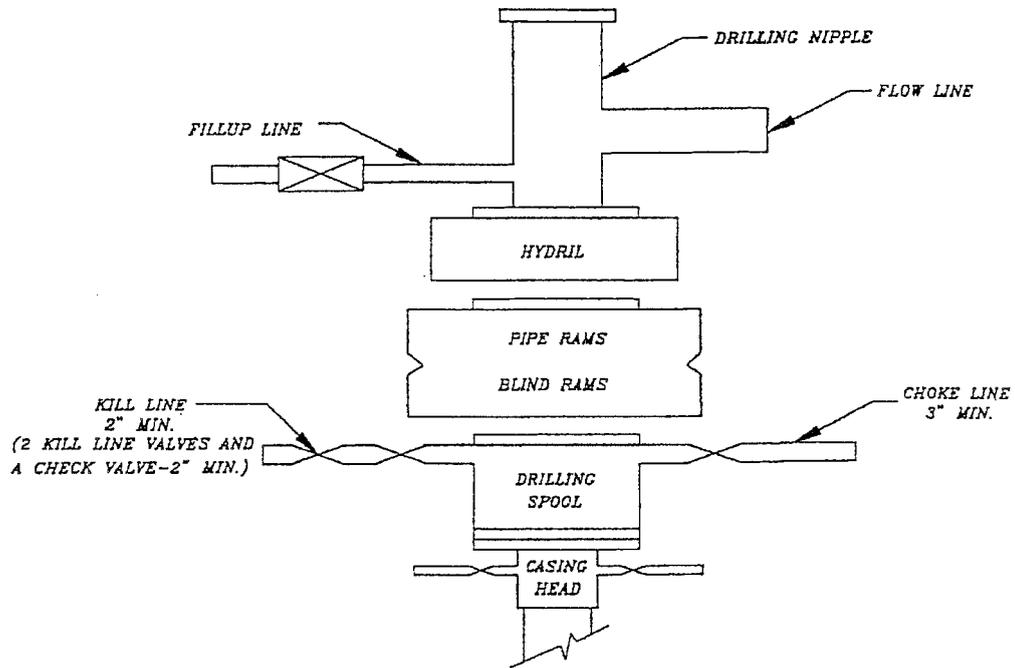
SURFACE	Guide shoe, 1 jt, insert float. Centralize first 3 joints with bow spring centralizers. Thread lock guide shoe.
PRODUCTION	Float shoe, 1 jt, float collar. Centralize first 3 joints & every third joint to top of tail cement with bow spring centralizers.

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 - KERR MCGEE

NBU 922-18M2S

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

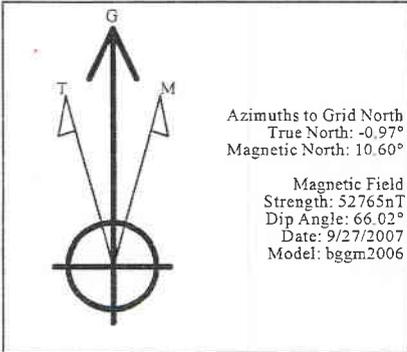
www.weatherford.com



ANADARKO KERR MCGEE OIL & GAS
 NBU 922-18M2S
 UTAH COUNTY, UTAH



Weatherford



SECTION DETAILS										
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.00	0.00	183.59	0.00	0.00	0.00	0.00	0.00	0.00	
2	2800.00	0.00	183.59	2800.00	0.00	0.00	0.00	0.00	0.00	
3	3705.95	22.65	183.59	3682.54	-176.39	-11.08	2.50	183.59	176.74	
4	4081.46	22.65	183.59	4029.09	-320.71	-20.14	0.00	0.00	321.54	
5	5591.39	0.00	183.59	5500.00	-614.70	-38.60	1.50	180.00	615.91	
6	9841.39	0.00	183.59	9750.00	-614.70	-38.60	0.00	183.59	615.91	PBHL

WELL DETAILS							
Name	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
18M2S	0.00	0.00	14541784.00	2063428.50	40°02'00.130N	109°29'19.870W	N/A

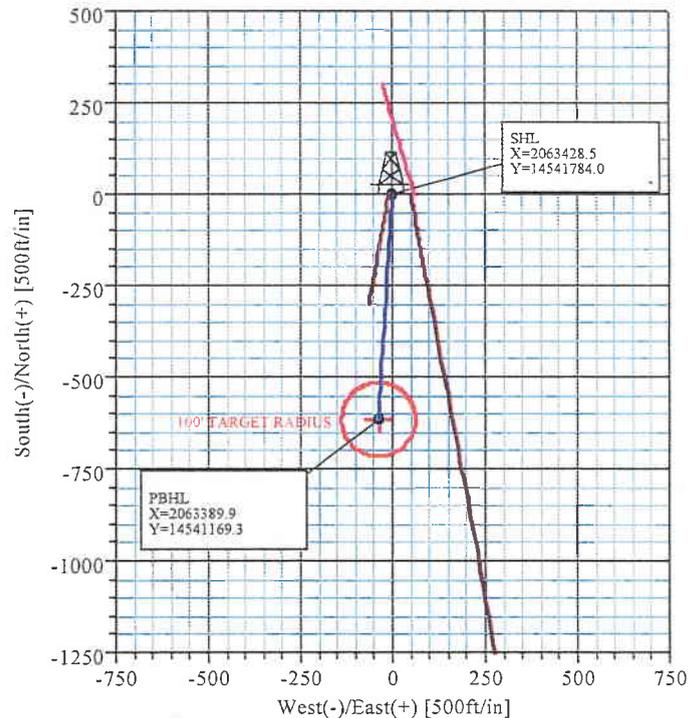
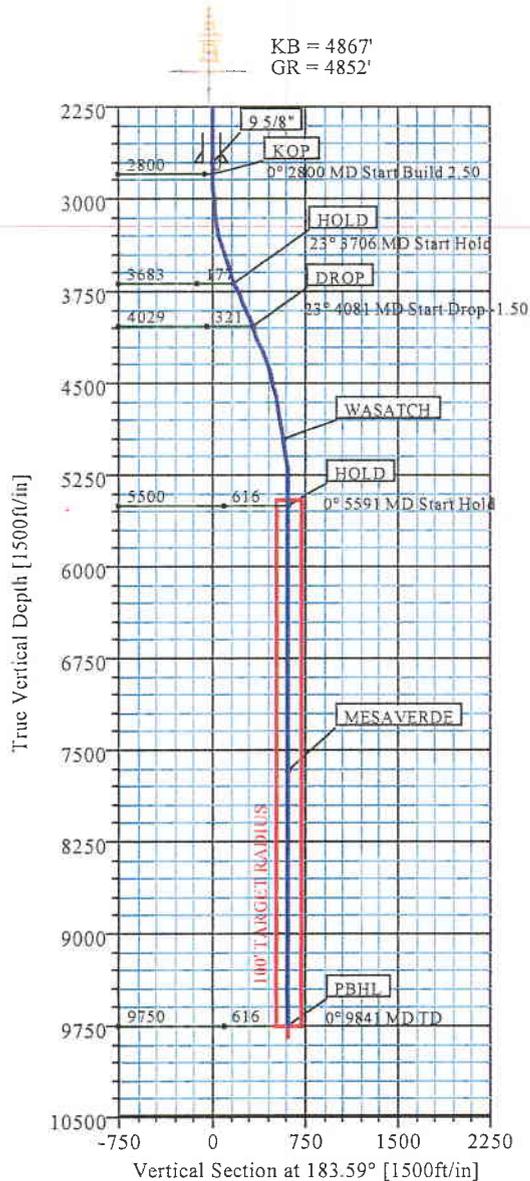
CASING DETAILS				
No.	TVD	MD	Name	Size
1	2700.00	2700.00	9 5/8"	9.62

FORMATION TOP DETAILS			
No.	TVDPath	MDPath	Formation
1	4948.00	5037.45	WASATCH
2	7670.00	7761.39	MESAVERDE

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

System Datum: Mean Sea Level
 Local North: Grid North

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



Weatherford Drilling Services

DIRECTIONAL PLAN REPORT



Company: Anadarko-Kerr-McGee	Date: 9/28/2007	Time: 10:01:19	Page: 1
Field: UINTAH COUNTY, UTAH (UTM Zone 12N-NAD 27)	Co-ordinate(NE) Reference:	Site: NBU 922-18M2S PAD LM, Grid North	
Site: NBU 922-18M2S PAD LM	Vertical (TVD) Reference:	SITE 4867.0	
Well: 18M2S	Section (VS) Reference:	Well (0.00N,0.00E,183.59Azi)	
Wellpath: 1	Survey Calculation Method:	Minimum Curvature	Db: Sybase

Plan: Plan #1 18M2S	Date Composed: 9/27/2007
Principal: Yes	Version: 1
	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 922-18M2S PAD LM

1689 FSL, 284 FWL - SEC18 T9S R22E

Site Position:	Northing: 14541784.00 ft	Latitude: 40 2 0.130 N
From: Map	Easting: 2063428.50 ft	Longitude: 109 29 19.870 W
Position Uncertainty: 0.00 ft		North Reference: Grid
Ground Level: 4852.00 ft		Grid Convergence: 0.97 deg

Well: 18M2S	Slot Name:
Well Position: +N-S 0.00 ft	Latitude: 40 2 0.130 N
+E-W 0.00 ft	Longitude: 109 29 19.870 W
Position Uncertainty: 0.00 ft	

Wellpath: 1	Drilled From: Surface
Current Datum: SITE	Tie-on Depth: 0.00 ft
Magnetic Data: 9/27/2007	Above System Datum: Mean Sea Level
Field Strength: 52765 nT	Declination: 11.57 deg
Vertical Section: Depth From (TVD)	Mag Dip Angle: 66.02 deg
ft	ft
+N-S	+E/-W
ft	ft
0.00	0.00
0.00	0.00
	Direction
	deg
	183.59

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	183.59	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2800.00	0.00	183.59	2800.00	0.00	0.00	0.00	0.00	0.00	0.00	
3705.95	22.65	183.59	3682.54	-176.39	-11.08	2.50	2.50	0.00	183.59	
4081.46	22.65	183.59	4029.09	-320.71	-20.14	0.00	0.00	0.00	0.00	
5591.39	0.00	183.59	5500.00	-614.70	-38.60	1.50	-1.50	0.00	180.00	
9841.39	0.00	183.59	9750.00	-614.70	-38.60	0.00	0.00	0.00	183.59	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	183.59	2800.00	0.00	0.00	0.00	0.00	14541784.00	2063428.50	KOP
2900.00	2.50	183.59	2899.97	-2.18	-0.14	2.18	2.50	14541781.82	2063428.36	
3000.00	5.00	183.59	2999.75	-8.70	-0.55	8.72	2.50	14541775.30	2063427.95	
3100.00	7.50	183.59	3099.14	-19.57	-1.23	19.61	2.50	14541764.43	2063427.27	
3200.00	10.00	183.59	3197.97	-34.75	-2.18	34.82	2.50	14541749.25	2063426.32	
3300.00	12.50	183.59	3296.04	-54.22	-3.40	54.33	2.50	14541729.78	2063425.10	
3400.00	15.00	183.59	3393.17	-77.94	-4.89	78.09	2.50	14541706.06	2063423.61	
3500.00	17.50	183.59	3489.17	-105.86	-6.65	106.07	2.50	14541678.14	2063421.85	
3600.00	20.00	183.59	3583.85	-137.94	-8.66	138.21	2.50	14541646.06	2063419.84	
3700.00	22.50	183.59	3677.05	-174.11	-10.93	174.46	2.50	14541609.89	2063417.57	
3705.95	22.65	183.59	3682.54	-176.39	-11.08	176.74	2.50	14541607.61	2063417.42	HOLD
3800.00	22.65	183.59	3769.34	-212.54	-13.35	212.96	0.00	14541571.46	2063415.15	
3900.00	22.65	183.59	3861.63	-250.97	-15.76	251.46	0.00	14541533.03	2063412.74	
4000.00	22.65	183.59	3953.91	-289.40	-18.17	289.97	0.00	14541494.60	2063410.33	
4081.46	22.65	183.59	4029.09	-320.71	-20.14	321.34	0.00	14541463.29	2063408.36	DROP

Weatherford Drilling Services

DIRECTIONAL PLAN REPORT



Company: Anadarko-Kerr-McGee	Date: 9/28/2007	Time: 10:01:19	Page: 2
Field: UINTAH COUNTY, UTAH (UTM Zone 12N-NAD 27)	Co-ordinate(NE) Reference:	Site: NBU 922-18M2S PAD LM, Grid North	
Site: NBU 922-18M2S PAD LM	Vertical (TVD) Reference:	SITE 4867.0	
Well: 18M2S	Section (VS) Reference:	Well (0.00N,0.00E,183.59Azi)	
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
4100.00	22.37	183.59	4046.22	-327.79	-20.58	328.44	1.50	14541456.21	2063407.92	
4200.00	20.87	183.59	4139.18	-364.57	-22.89	365.28	1.50	14541419.43	2063405.61	
4300.00	19.37	183.59	4233.07	-398.90	-25.05	399.68	1.50	14541385.10	2063403.45	
4400.00	17.87	183.59	4327.84	-430.76	-27.05	431.61	1.50	14541353.24	2063401.45	
4500.00	16.37	183.59	4423.40	-460.14	-28.89	461.05	1.50	14541323.86	2063399.61	
4600.00	14.87	183.59	4519.71	-487.02	-30.58	487.98	1.50	14541296.98	2063397.92	
4700.00	13.37	183.59	4616.68	-511.37	-32.11	512.37	1.50	14541272.63	2063396.39	
4800.00	11.87	183.59	4714.26	-533.17	-33.48	534.22	1.50	14541250.83	2063395.02	
4900.00	10.37	183.59	4812.38	-552.42	-34.69	553.51	1.50	14541231.58	2063393.81	
5000.00	8.87	183.59	4910.97	-569.10	-35.74	570.22	1.50	14541214.90	2063392.76	
5037.45	8.31	183.59	4948.00	-574.68	-36.09	575.81	1.50	14541209.32	2063392.41	WASATCH
5100.00	7.37	183.59	5009.97	-583.20	-36.62	584.35	1.50	14541200.80	2063391.88	
5200.00	5.87	183.59	5109.30	-594.71	-37.34	595.88	1.50	14541189.29	2063391.16	
5300.00	4.37	183.59	5208.90	-603.61	-37.90	604.80	1.50	14541180.39	2063390.60	
5400.00	2.87	183.59	5308.69	-609.92	-38.30	611.12	1.50	14541174.08	2063390.20	
5500.00	1.37	183.59	5408.62	-613.61	-38.53	614.82	1.50	14541170.39	2063389.97	
5591.39	0.00	183.59	5500.00	-614.70	-38.60	615.91	1.50	14541169.30	2063389.90	HOLD
5600.00	0.00	183.59	5508.61	-614.70	-38.60	615.91	0.00	14541169.30	2063389.90	
5700.00	0.00	183.59	5608.61	-614.70	-38.60	615.91	0.00	14541169.30	2063389.90	
5800.00	0.00	183.59	5708.61	-614.70	-38.60	615.91	0.00	14541169.30	2063389.90	
5900.00	0.00	183.59	5808.61	-614.70	-38.60	615.91	0.00	14541169.30	2063389.90	
6000.00	0.00	183.59	5908.61	-614.70	-38.60	615.91	0.00	14541169.30	2063389.90	
6100.00	0.00	183.59	6008.61	-614.70	-38.60	615.91	0.00	14541169.30	2063389.90	
6200.00	0.00	183.59	6108.61	-614.70	-38.60	615.91	0.00	14541169.30	2063389.90	
6300.00	0.00	183.59	6208.61	-614.70	-38.60	615.91	0.00	14541169.30	2063389.90	
6400.00	0.00	183.59	6308.61	-614.70	-38.60	615.91	0.00	14541169.30	2063389.90	
6500.00	0.00	183.59	6408.61	-614.70	-38.60	615.91	0.00	14541169.30	2063389.90	
6600.00	0.00	183.59	6508.61	-614.70	-38.60	615.91	0.00	14541169.30	2063389.90	
6700.00	0.00	183.59	6608.61	-614.70	-38.60	615.91	0.00	14541169.30	2063389.90	
6800.00	0.00	183.59	6708.61	-614.70	-38.60	615.91	0.00	14541169.30	2063389.90	
6900.00	0.00	183.59	6808.61	-614.70	-38.60	615.91	0.00	14541169.30	2063389.90	
7000.00	0.00	183.59	6908.61	-614.70	-38.60	615.91	0.00	14541169.30	2063389.90	
7100.00	0.00	183.59	7008.61	-614.70	-38.60	615.91	0.00	14541169.30	2063389.90	
7200.00	0.00	183.59	7108.61	-614.70	-38.60	615.91	0.00	14541169.30	2063389.90	
7300.00	0.00	183.59	7208.61	-614.70	-38.60	615.91	0.00	14541169.30	2063389.90	
7400.00	0.00	183.59	7308.61	-614.70	-38.60	615.91	0.00	14541169.30	2063389.90	
7500.00	0.00	183.59	7408.61	-614.70	-38.60	615.91	0.00	14541169.30	2063389.90	
7600.00	0.00	183.59	7508.61	-614.70	-38.60	615.91	0.00	14541169.30	2063389.90	
7700.00	0.00	183.59	7608.61	-614.70	-38.60	615.91	0.00	14541169.30	2063389.90	
7761.39	0.00	183.59	7670.00	-614.70	-38.60	615.91	0.00	14541169.30	2063389.90	MESAVERDE
7800.00	0.00	183.59	7708.61	-614.70	-38.60	615.91	0.00	14541169.30	2063389.90	
7900.00	0.00	183.59	7808.61	-614.70	-38.60	615.91	0.00	14541169.30	2063389.90	
8000.00	0.00	183.59	7908.61	-614.70	-38.60	615.91	0.00	14541169.30	2063389.90	
8100.00	0.00	183.59	8008.61	-614.70	-38.60	615.91	0.00	14541169.30	2063389.90	
8200.00	0.00	183.59	8108.61	-614.70	-38.60	615.91	0.00	14541169.30	2063389.90	
8300.00	0.00	183.59	8208.61	-614.70	-38.60	615.91	0.00	14541169.30	2063389.90	
8400.00	0.00	183.59	8308.61	-614.70	-38.60	615.91	0.00	14541169.30	2063389.90	
8500.00	0.00	183.59	8408.61	-614.70	-38.60	615.91	0.00	14541169.30	2063389.90	
8600.00	0.00	183.59	8508.61	-614.70	-38.60	615.91	0.00	14541169.30	2063389.90	
8700.00	0.00	183.59	8608.61	-614.70	-38.60	615.91	0.00	14541169.30	2063389.90	
8800.00	0.00	183.59	8708.61	-614.70	-38.60	615.91	0.00	14541169.30	2063389.90	
8900.00	0.00	183.59	8808.61	-614.70	-38.60	615.91	0.00	14541169.30	2063389.90	
9000.00	0.00	183.59	8908.61	-614.70	-38.60	615.91	0.00	14541169.30	2063389.90	

Weatherford Drilling Services

DIRECTIONAL PLAN REPORT



Company: Anadarko-Kerr-McGee	Date: 9/28/2007	Time: 10:01:19	Page: 3
Field: UINTAH COUNTY, UTAH (UTM Zone 12N-NAD 27)	Co-ordinate(NE) Reference: 14541169.30	Site: NBU 922-18M2S PAD LM, Grid North	
Site: NBU 922-18M2S PAD LM	Vertical (TVD) Reference: 2063389.90	SITE 4867.0	
Wejl: 18M2S	Section (VS) Reference: 615.91	Well (0.00N,0.00E,183.59Azi)	
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	183.59	9008.61	-614.70	-38.60	615.91	0.00	14541169.30	2063389.90	
9200.00	0.00	183.59	9108.61	-614.70	-38.60	615.91	0.00	14541169.30	2063389.90	
9300.00	0.00	183.59	9208.61	-614.70	-38.60	615.91	0.00	14541169.30	2063389.90	
9400.00	0.00	183.59	9308.61	-614.70	-38.60	615.91	0.00	14541169.30	2063389.90	
9500.00	0.00	183.59	9408.61	-614.70	-38.60	615.91	0.00	14541169.30	2063389.90	
9600.00	0.00	183.59	9508.61	-614.70	-38.60	615.91	0.00	14541169.30	2063389.90	
9700.00	0.00	183.59	9608.61	-614.70	-38.60	615.91	0.00	14541169.30	2063389.90	
9800.00	0.00	183.59	9708.61	-614.70	-38.60	615.91	0.00	14541169.30	2063389.90	
9841.39	0.00	183.59	9750.00	-614.70	-38.60	615.91	0.00	14541169.30	2063389.90	PBHL

Targets

Name	Description Dip.	Dir.	TVD ft	+N/-S ft	+E/-W ft	Map Northing ft	Map Easting ft	← Latitude →			← Longitude →				
								Deg	Min	Sec	Deg	Min	Sec		
PBHL			9750.00	-614.70	-38.60	14541169.30	2063389.90	40	1	54.061	N	109	29	20.500	W
-Circle (Radius: 100)															
-Plan hit target															

Casing Points

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

Annotation

MD ft	TVD ft	
2800.00	2800.00	KOP
3705.95	3682.54	HOLD
4081.46	4029.09	DROP
5591.39	5500.00	HOLD
9841.39	9750.00	PBHL

Formations

MD ft	TVD ft	Formations	Lithology	Dip Angle deg	Dip Direction deg
5037.45	4948.00	WASATCH		0.00	0.00
7761.39	7670.00	MESAVERDE		0.00	0.00



Weatherford

Weatherford Drilling Services

GeoDec v4.1.130

Report Date: September 27, 2007
 Job Number: _____
 Customer: ANADARKO-KERR McGEE
 Well Name: NBU 922-18M2S
 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 14541784.000 USFT	Latitude 40 2 0.1299748 DMS
East/West 2063428.500 USFT	Longitude -109 29 19.8699390 DMS
Grid Convergence: .97221207°	
Total Correction: +10.5975°	

Geodetic Location WGS84	Elevation = 1479.0 Meters
Latitude = 40.03337° N	40° 2 min .130 sec
Longitude = 109.48885° W	109° 29 min 19.870 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 922-18M2S
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 Uphego
Senior Land Admin Specialist
Kerr-McGee Oil & Gas Onshore LP
1368 South 1200 East
Vernal, UT 84078
(435) 781-7024

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

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

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

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

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

I hereby certify that I, or persons under my supervision, have inspected the proposed drill site and access route, that I am familiar with the conditions that currently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and the work associated with the operations proposed herein will be performed by the Operator, its contractors, and subcontractors in conformity with this plan and the terms and conditions under which it is approved.


Sheila Uphego

11/1/2007
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 PROPOSED LOCATION.

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

07/19

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.

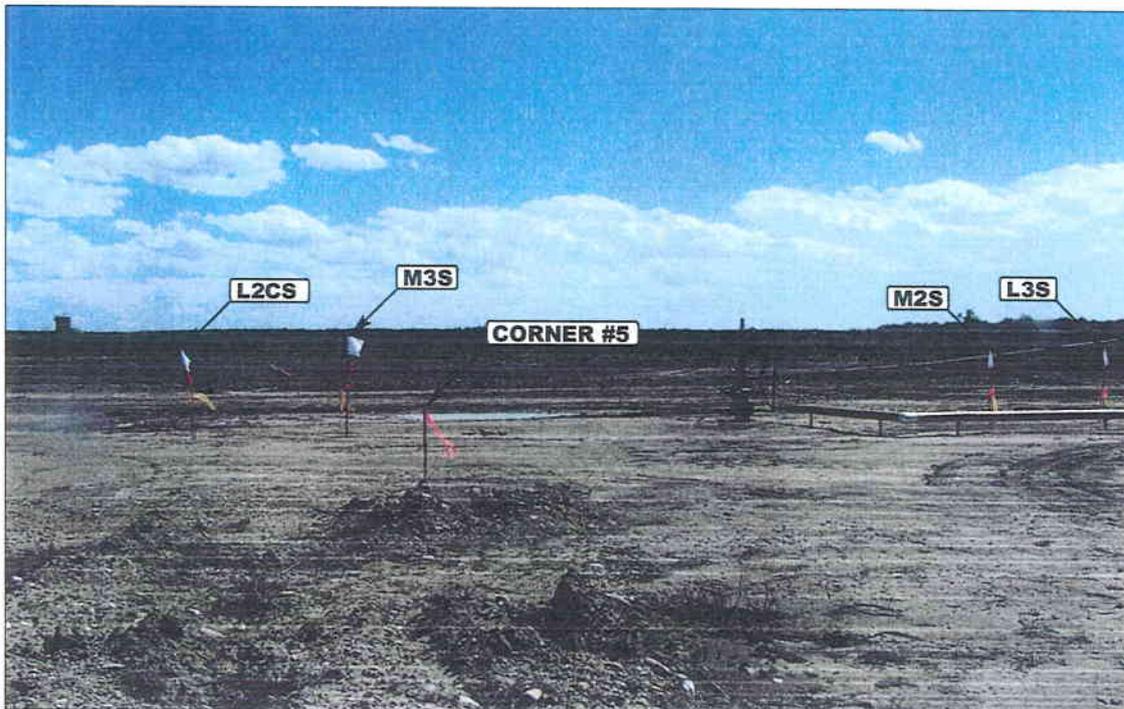


PHOTO: VIEW FROM CORNER #5 TO LOCATION STAKES

CAMERA ANGLE: SOUTHERLY



PHOTO: VIEW OF EXISTING ACCESS

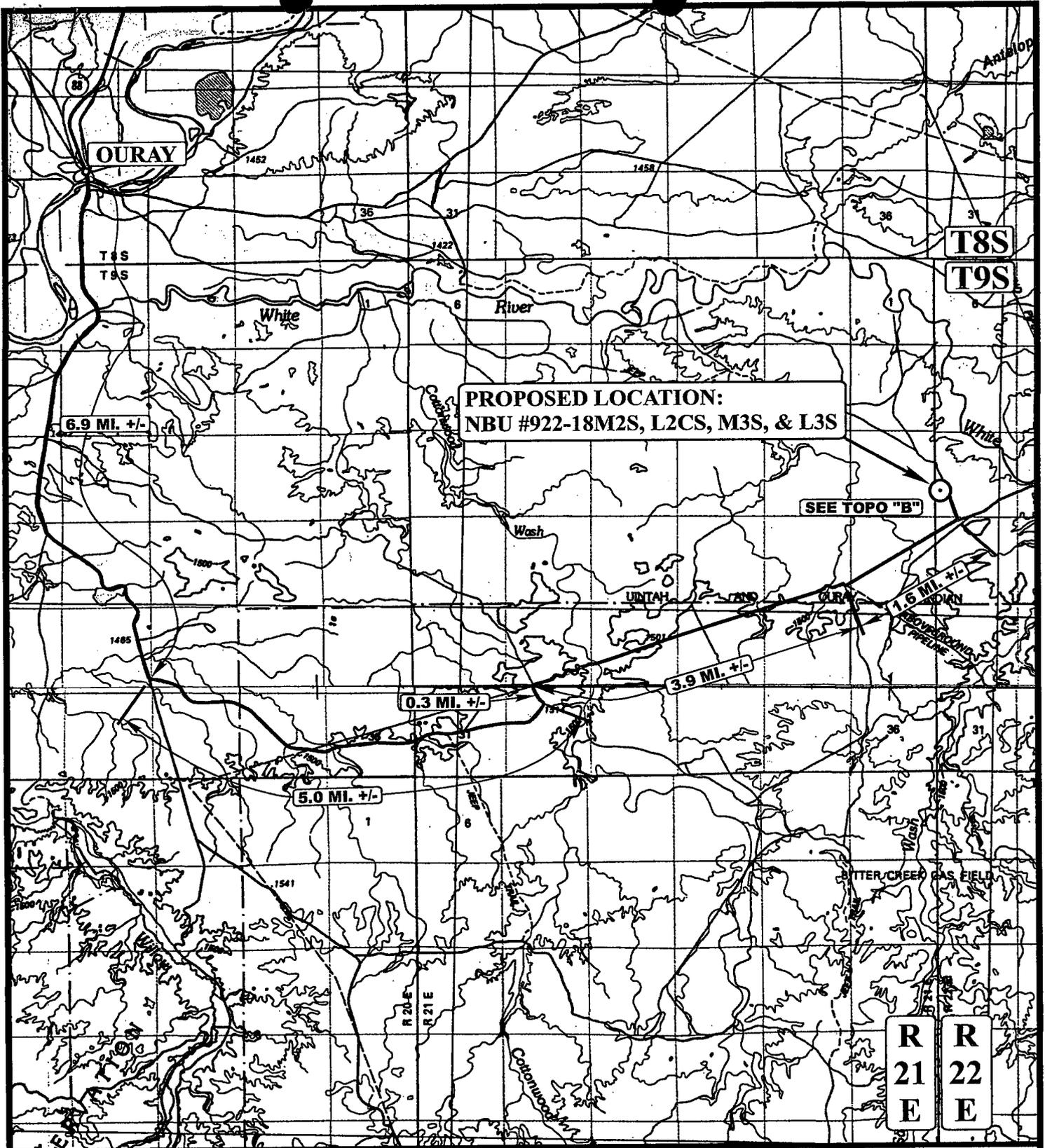
CAMERA ANGLE: WESTERLY



- Since 1964 -

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

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



**PROPOSED LOCATION:
NBU #922-18M2S, L2CS, M3S, & L3S**

SEE TOPO "B"

**R R
21 22
E E**

LEGEND:

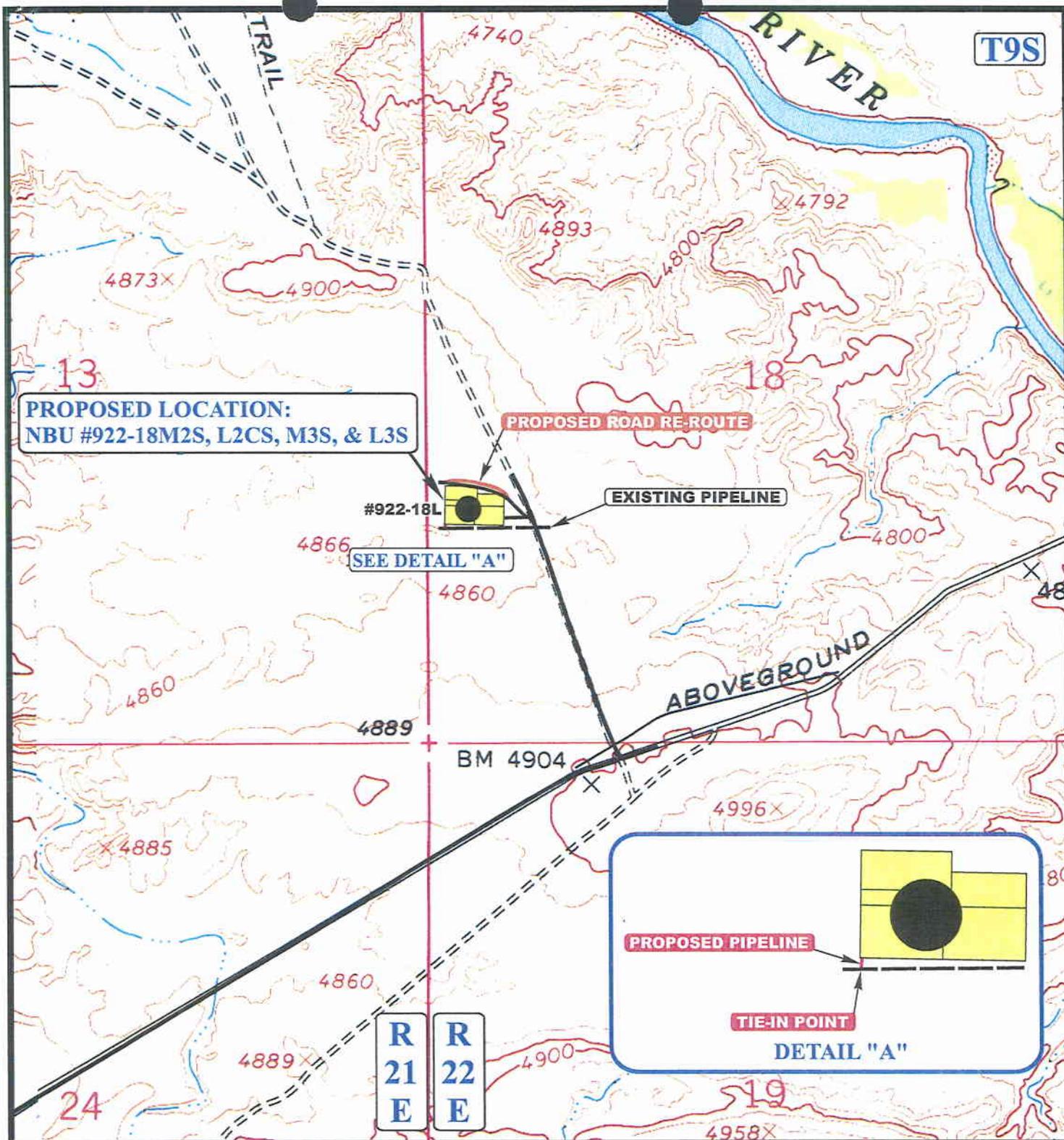
○ PROPOSED LOCATION

**Kerr-McGee Oil & Gas Onshore LP
NBU #922-18M2S, L2CS, M3S, & L3S
SECTION 18, T9S, R22E, S.L.B.&M.
LOT 3**

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

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

A
TOPO



APPROXIMATE TOTAL PIPELINE DISTANCE = 21' +/-

LEGEND:

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



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 16 07
 MONTH DAY YEAR

SCALE: 1" = 1000' DRAWN BY: B.C. REVISED: 00-00-00



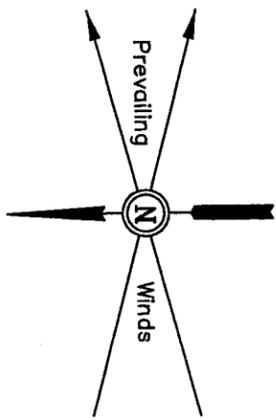
Kerr-McGee Oil & Gas Onshore LP

SITE PLAN LAYOUT FOR

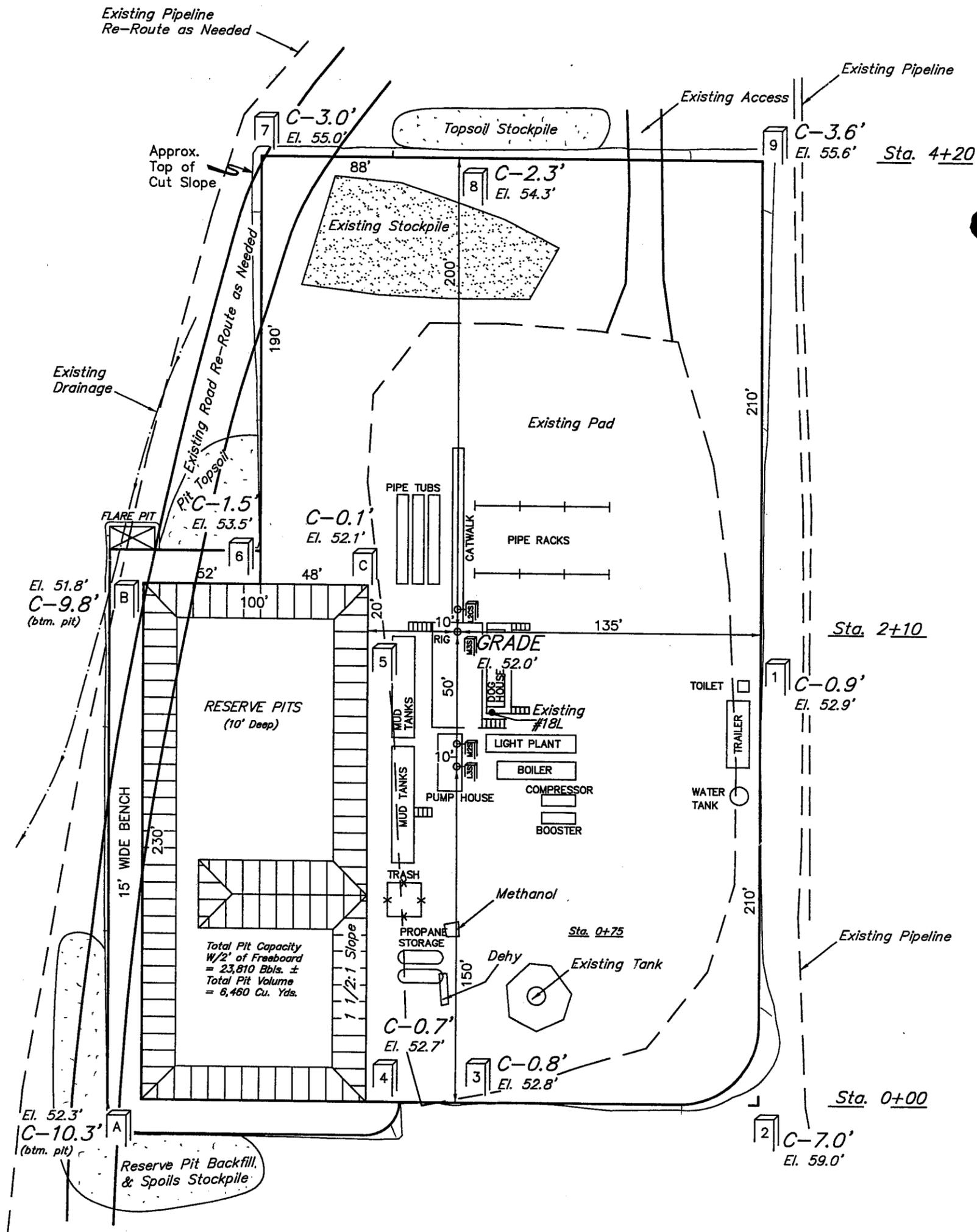
NBU #922-18M2S, L2CS, M3S, & L3S

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

LOT 3



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



NOTES:

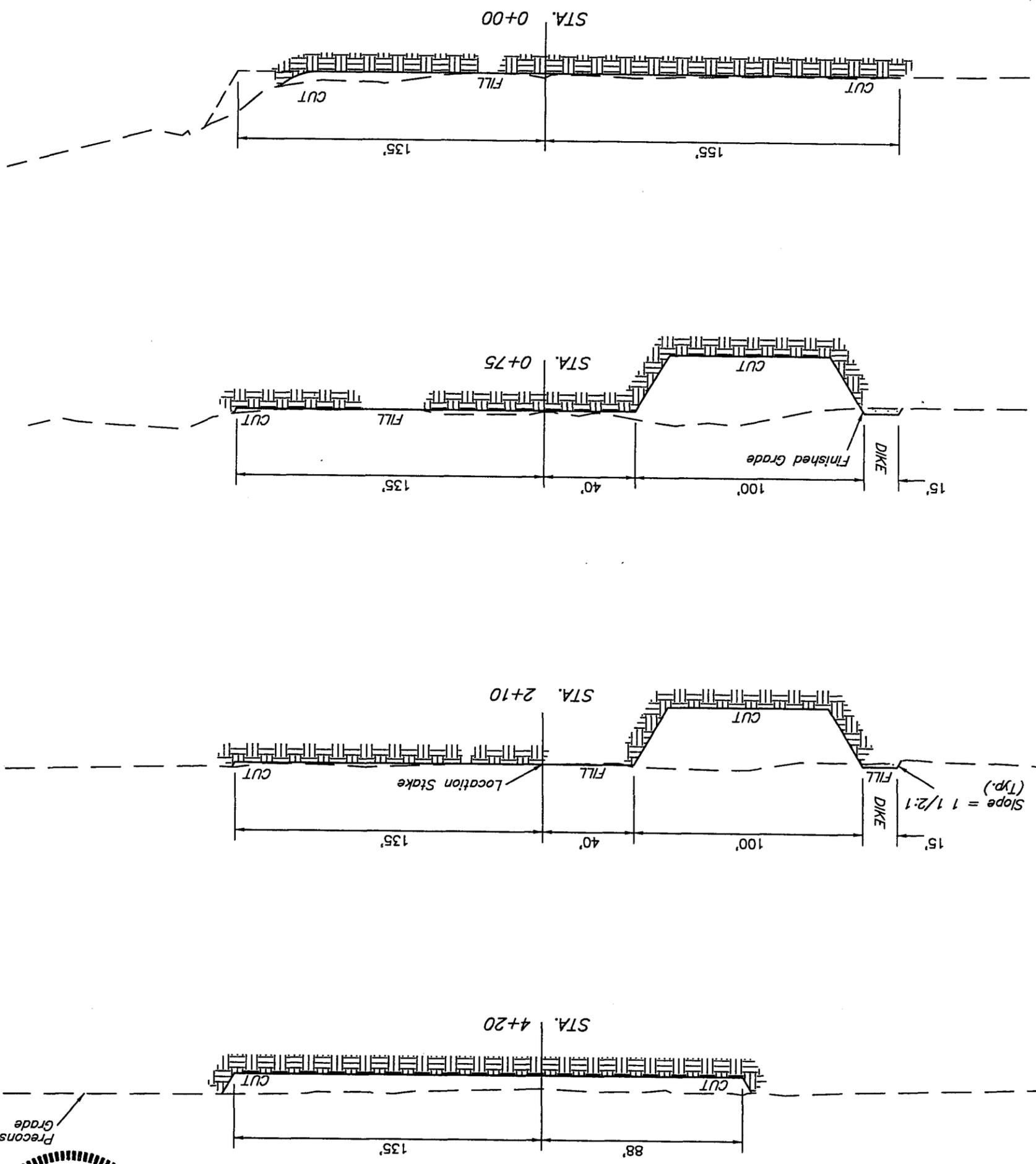
Elev. Ungraded Ground At M3S Loc. Stake = 4852.0'
FINISHED GRADE ELEV. AT M3S LOC. STAKE = 4852.0'

APPROXIMATE YARDAGES

CUT	=	2,370	Cu. Yds.
(12") Topsoil Stripping (New Construction Only)	=	8,190	Cu. Yds.
TOTAL CUT	=	10,560	Cu. Yds.
FILL	=	960	Cu. Yds.
EXCESS MATERIAL	=	9,600	Cu. Yds.
Topsoil & Pit Backfill (1/2 Pit Vol.)	=	5,600	Cu. Yds.
EXCESS UNBALANCE	=	4,000	Cu. Yds.
(After Interim Rehabilitation)			

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

* NOTE:
 FILL QUANTITY INCLUDES 5% FOR COMPACTION



DATE: 08-07-07
 Drawn By: C.H.
 X-Section Scale
 1" = 20'
 1" = 50'

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

Kerr-McGee Oil & Gas Onshore LP

SITE PLAN LAYOUT FOR

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

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

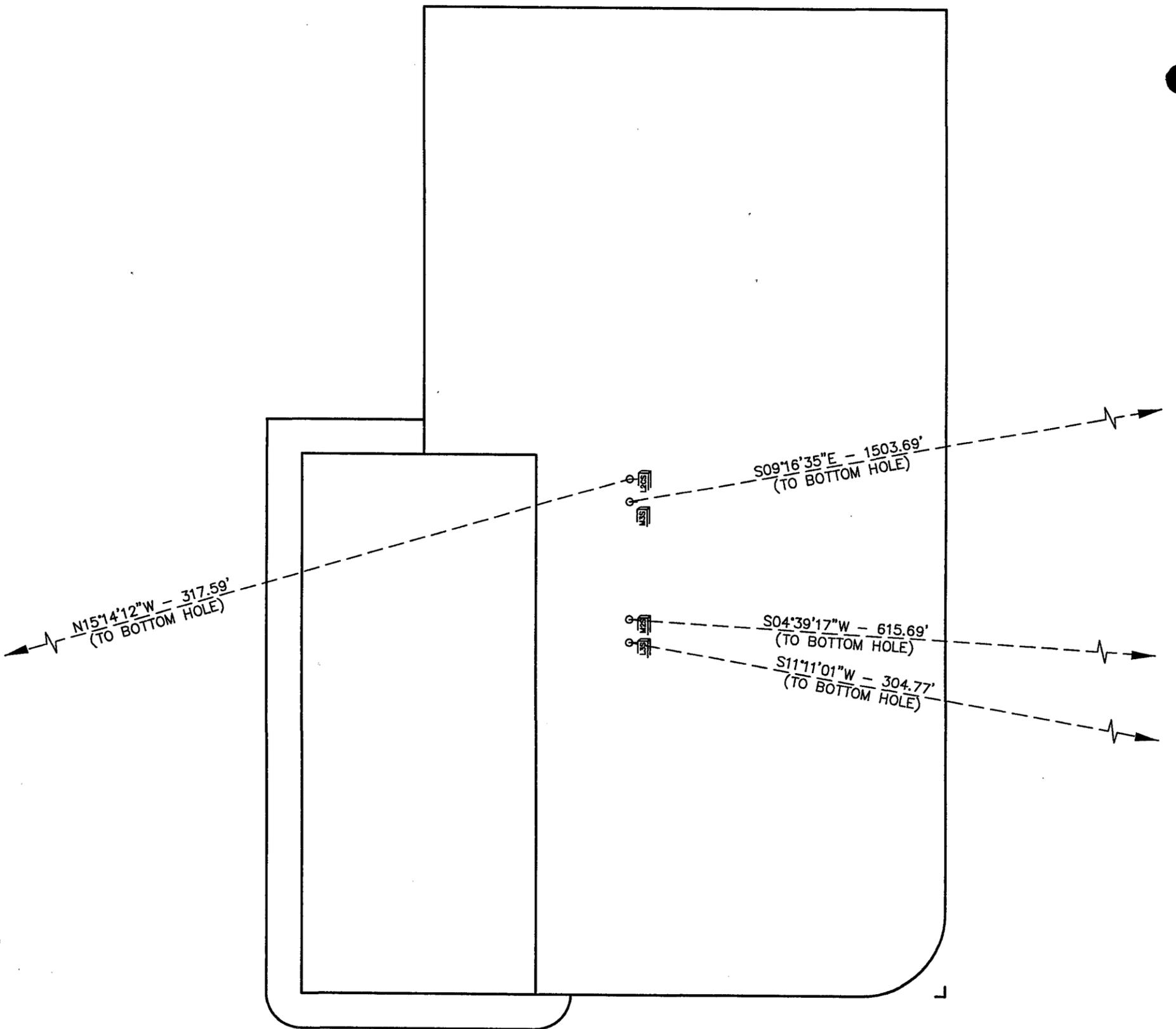
LOT 3



SCALE: 1" = 50'

DATE: 08-07-07

Drawn By: C.H.



**WORKSHEET
APPLICATION FOR PERMIT TO DRILL**

APD RECEIVED: 11/20/2007

API NO. ASSIGNED: 43-047-39828

WELL NAME: NBU 922-18M2S
 OPERATOR: KERR-MCGEE OIL & GAS (N2995)
 CONTACT: SHEILA UPCHEGO

PHONE NUMBER: 435-781-7024

PROPOSED LOCATION:

NWSW 18 090S 220E
 SURFACE: 1689 FSL 0284 FWL
 BOTTOM: 1075 FSL 0232 FWL
 COUNTY: UINTAH
 LATITUDE: 40.03338 LONGITUDE: -109.4889
 UTM SURF EASTINGS: 628934 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
 SURFACE OWNER: 2 - Indian

PROPOSED FORMATION: WSMVD
 COALBED METHANE WELL? NO

RECEIVED AND/OR REVIEWED:

- Plat
- Bond: Fed[1] Ind[] Sta[] Fee[]
(No. RLB0005239)
- Potash (Y/N)
- Oil Shale 190-5 (B) or 190-3 or 190-13
- Water Permit
(No. 43-8496)
- RDCC Review (Y/N)
(Date: _____)
- Fee Surf Agreement (Y/N)
- Intent to Commingle (Y/N)

LOCATION AND SITING:

- R649-2-3.
- Unit: NATURAL BUTTES
- R649-3-2. General
Siting: 460 From Qtr/Qtr & 920' Between Wells
- R649-3-3. Exception
- Drilling Unit
Board Cause No: 123-14
Eff Date: 12-2-1994
Siting: 460' fr u bays & uncomm. Tract
- R649-3-11. Directional Drill

COMMENTS: Sop, Spent file

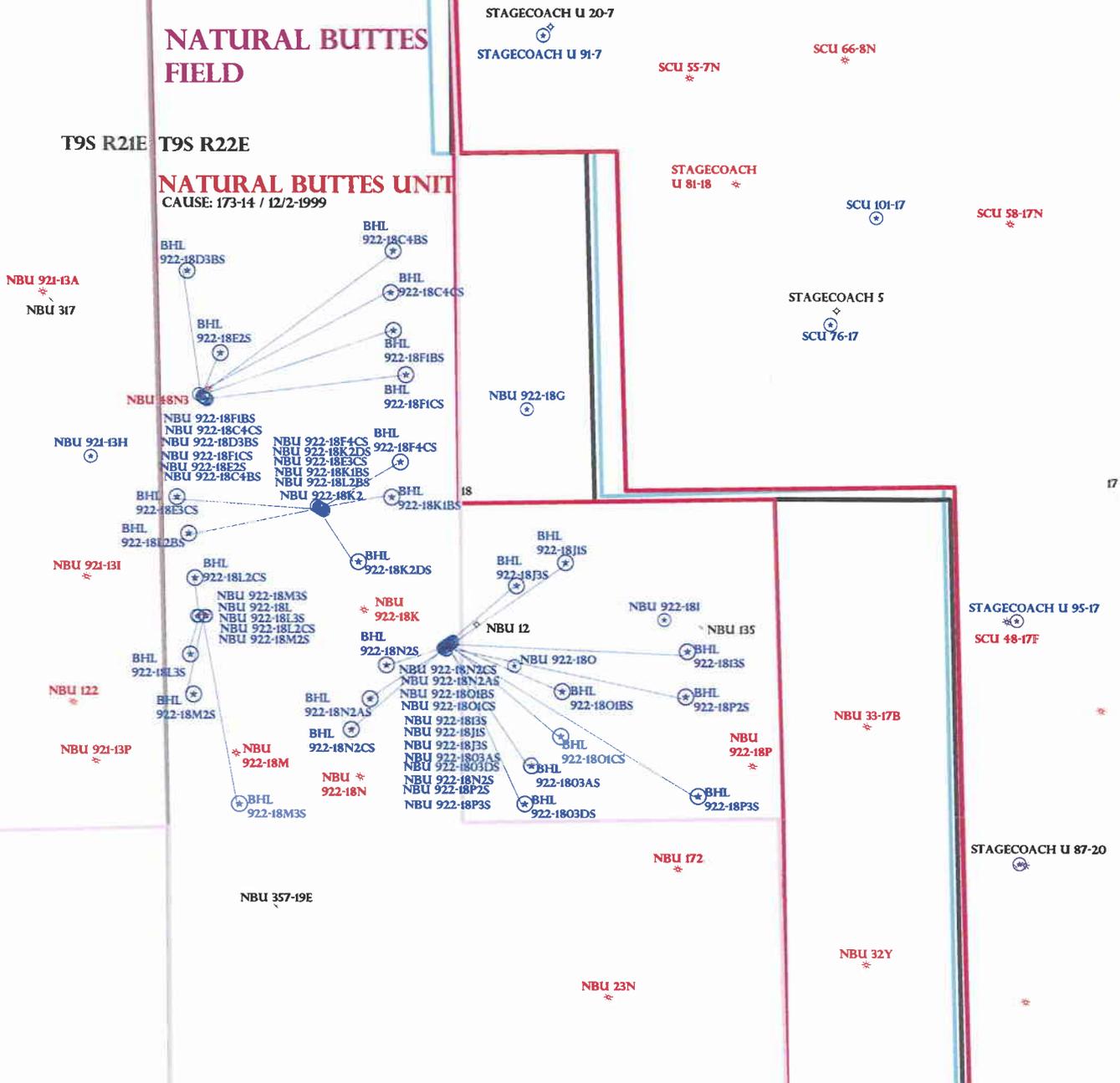
STIPULATIONS: 1- Federal Approval
2- OIL SHALE

NATURAL BUTTES FIELD

T9S R21E T9S R22E

NATURAL BUTTES UNIT

CAUSE: 173-14 / 12/2-1999



OPERATOR: KERR MCGEE O&G (N2995)

SEC: 18 T.9S R. 22E

FIELD: NATURAL BUTTES (630)

COUNTY: UINTAH

CAUSE: 173-14 / 12/2-1999

Field Status	
	ABANDONED
	ACTIVE
	COMBINED
	INACTIVE
	PROPOSED
	STORAGE
	TERMINATED

Unit Status	
	EXPLORATORY
	GAS STORAGE
	NF PP OIL
	NF SECONDARY
	PENDING
	PI OIL
	PP GAS
	PP GEOTHERML
	PP OIL
	SECONDARY
	TERMINATED

Wells Status

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



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

United States Department of the Interior

BUREAU OF LAND MANAGEMENT

Utah State Office
P.O. Box 45155
Salt Lake City, Utah 84145-0155

IN REPLY REFER TO:
3160
(UT-922)

November 30, 2007

Memorandum

To: Assistant District Manager Minerals, Vernal District
From: Michael Coulthard, Petroleum Engineer
Subject: 2007 Plan of Development Natural Buttes Unit
Uintah County, Utah.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

/s/ Michael L. Coulthard

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

MCoulthard:mc:11-30-07



JON M. HUNTSMAN, JR.
Governor

GARY R. HERBERT
Lieutenant Governor

State of Utah

DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER
Executive Director

Division of Oil Gas and Mining

JOHN R. BAZA
Division Director

December 3, 2007

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

Re: NBU 922-18M2S Well, Surface Location 1689' FSL, 284' FWL, NW SW, Sec. 18, T. 9 South, R. 22 East, Bottom Location 1075' FSL, 232' FWL, SW 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 43-047-39828.

Sincerely,

Gil Hunt
Associate Director

pab
Enclosures

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

Operator: Kerr McKee Oil and Gas Onshore LP
Well Name & Number NBU 922-18M2S
API Number: 43-047-39828
Lease: UTU-0359

Surface Location: NW SW Sec. 18 T. 9 South R. 22 East
Bottom Location: SW 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

FORM APPROVED

OMB No. 1004-0136

Expires November 30, 2000

BLM

Form 3160-3
(August 1999)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

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

5. Lease Serial No.
UTU-0359 A
6. If Indian, Allottee or Tribe Name
TRIBAL SURFACE
7. If Unit or CA Agreement, Name and No.
UNIT #891008900A

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

8. Lease Name and Well No.
NBU 922-18M2S
9. API Well No.
43 047 39828

4. Location of Well (Report location clearly and in accordance with any State requirements. *)
At surface **NW/SW 1689'FSL, 284'FWL (LOT 3)**
At proposed prod. Zone **SW/SW 1075'FSL, 232'FWL (LOT'S) 4**

10. Field and Pool, or Exploratory
NATURAL BUTTES
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
9841'

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

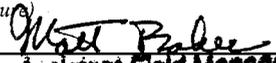
24. Attachments

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) **MATT BAKER** Date **MAY 22 2008**

Title **ACTING Assistant Field Manager** Office **VERNAL FIELD OFFICE**
Lands & Mineral Resources

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

CONDITIONS OF APPROVAL ATTACHED

Conditions of approval, if any, are attached.

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

*(Instructions on reverse)

NOTICE OF APPROVAL

RECEIVED

JUN 02 2008

DIV. OF OIL, GAS & MINING

UDOGM

No Nos
08 MICO 112A



**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, Sec 18, T9S, R22E (S)
Lot 4, Sec 18, T9S, R22E (B)
Well No: NBU 922-18M2S **Lease No:** UTU-0359 A
API No: 43-047-39828 **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 CONDITIONS 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_Wellogs@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.

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
4304737318	BONANZA 1023-5B		NWNE	5	10S	23E	UINTAH
Action Code	Current Entity Number	New Entity Number	Spud Date			Entity Assignment Effective Date	
<i>A</i>	99999	<i>16904</i>	6/6/2008			<i>6/19/08</i>	
Comments: MIRU PETE MARTIN BUCKET RIG. <i>WSMVD</i> SPUD WELL LOCATION ON 06/06/2008 AT 1000 HRS.							

Well 2

API Number	Well Name		QQ	Sec	Twp	Rng	County
4304739828	NBU 922-18M2S		NWSW	18	9S	22E	UINTAH
Action Code	Current Entity Number	New Entity Number	Spud Date			Entity Assignment Effective Date	
<i>B</i>	99999	<i>2900</i>	6/6/2008			<i>6/19/08</i>	
Comments: MIRU PETE MARTIN BUCKET RIG. <i>WSMVD</i> SPUD WELL LOCATION ON 06/06/2008 AT 0800 HRS. <i>BHL = SWSW</i>							

Well 3

API Number	Well Name		QQ	Sec	Twp	Rng	County
4304739134	STATE 1021-32I		NESE	32	10S	21E	UINTAH
Action Code	Current Entity Number	New Entity Number	Spud Date			Entity Assignment Effective Date	
<i>A</i>	99999	<i>16905</i>	6/6/2008			<i>6/19/08</i>	
Comments: MIRU PETE MARTIN BUCKET RIG. <i>WSMVD</i> SPUD WELL LOCATION ON 06/06/2008 AT 1030 HRS.							

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

Title

6/6/2008

Date

RECEIVED

JUN 10 2008

DIV. OF OIL, GAS & MINING

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

1. Type of Well

Oil Well Gas Well Other

2. Name of Operator

KERR-McGEE OIL & GAS ONSHORE LP

3a. Address

1368 SOUTH 1200 EAST VERNAL, UT 84078

3b. Phone No. (include area code)

(435) 781-7024

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

**SURFACE: NW/SW LOT 3, SEC. 18, T9S, R22E 1689'FSL, 284'FWL
BOTTOM HOLE: SW/SW LOT 4, SEC. 18, T9S, R22E 1075'FSL, 232'FWL**

5. Lease Serial No.

UTU-0359-A

6. If Indian, Allottee or Tribe Name

TRIBAL SURFACE

7. If Unit or CA/Agreement, Name and/or No.

**UNIT #891008900A
NATURAL BUTTES UNIT**

8. Well Name and No.

NBU 922-18M2S

9. API Well No.

4304739828

10. Field and Pool, or Exploratory Area

NATURAL BUTTES

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

13. Describe Proposed or Completed 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 recomplate 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 06/06/2008 AT 0800 HRS.

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

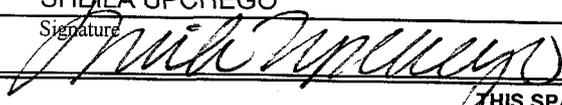
Name (Printed/Typed)

SHEILA UPCHEGO

Title

SENIOR LAND ADMIN SPECIALIST

Signature



Date

June 6, 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

JUN 17 2008

DIV. OF OIL, GAS & MINING

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.

5. Lease Serial No.
UTU-0359-A

6. If Indian, Allottee or Tribe Name
TRIBAL SURFACE

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

8. Well Name and No.
NBU 922-18M2S

9. API Well No.
4304739828

10. Field and Pool, or Exploratory Area
NATURAL BUTTES

11. County or Parish, State
UINTAH COUNTY, UTAH

SUBMIT IN TRIPLICATE - Other instructions on reverse side

1. Type of Well
 Oil Well Gas Well Other

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

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

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

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
**SURFACE: NW/SW LOT 3, SEC. 18, T9S, R22E 1689'FSL, 284'FWL
BOTTOM HOLE: SW/SW LOT 4, SEC. 18, T9S, R22E 1075'FSL, 232'FWL**

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

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

13. Describe Proposed or Completed 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 recompleat 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 recompleat 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 ENSIGN RIG 83 ON 07/13/2008. DRILLED 12 1/4" SURFACE HOLE TO 2815'. RAN 9 5/8" 36# J-55 SURFACE CSG. LEAD CMT W/260 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 5 BBLs GOOD LEAD CMT TO PIT. TOP OUT W/ 125 SX PREM CLASS G @15.8 PPG 1.15 YIELD. CMT TO SURFACE AND HOLE STAYED FULL. NIPPLE DOWN RISERE AND NIPPLE UP BOPS TEST BOPS UPPER AND LOWER KELLY VALVES FLOOR VALVES AND CHOKE M/U BHA AND DRILL AHEAD.

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

Name (Printed/Typed) SHEILA UPCHEGO	Title REGULATORY ANALYST
Signature 	Date July 17, 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

JUL 21 2008

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

1. Type of Well
 Oil Well Gas Well Other

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

3a. Address **1368 SOUTH 1200 EAST VERNAL, UT 84078**
3b. Phone No. (include area code) **(435) 781-7024**

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
SURFACE: NW/SW LOT 3, SEC. 18, T9S, R22E 1689'FSL, 284'FWL
BOTTOM HOLE: SW/SW LOT 4, SEC. 18, T9S, R22E 1075'FSL, 232'FWL

5. Lease Serial No.
UTU-0359-A

6. If Indian, Allottee or Tribe Name
TRIBAL SURFACE

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

8. Well Name and No.
NBU 922-18M2S

9. API Well No.
4304739828

10. Field and Pool, or Exploratory Area
NATURAL BUTTES

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

13. Describe Proposed or Completed 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 recomplate 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 recomplate 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 2815' TO 9885' ON 07/27/2008. RAN 4 1/2" 11.6# I-80 PRODUCTION CSG. LEAD CMT W/500 SX PREM LITE II @11.5 PPG 2.82 YIELD. TAILED CMT W/1350 SX 50/50 POZ @ 14.3 PPG 1.31 YIELD. DROP PLUG & DISPLACE W/153 BBLs WATER BUMP PLUG W/500 PSI OVER FINAL CIRC PSI OF 2695 PSI PLUG HELD. HAD FULL RETURNS @120 BBLs INTO DISPLACEMENT AND LOST RETURNS GOT BACK 60 BBLs CMT TO PIT.

RELEASED ENSIGN RIG 83 ON 07/29/2008 AT 0600 HRS.

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

Name (Printed/Typed) SHEILA UPCHEGO	Title REGULATORY ANALYST
Signature 	Date July 17, 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 11 2008

DIV. OF OIL, GAS & MINING

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

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

5. Lease Serial No.
UTU-0359-A

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

8. Lease Name and Well No.
NBU 922-18M2S

9. API Well No.
4304739828

10. Field and Pool, or Exploratory
NATURAL BUTTES

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

12. County or Parish UINTAH 13. State UTAH

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

2. Name of Operator

KERR-MCGEE OIL & GAS ONSHORE LP

3. Address

1368 SOUTH 1200 EAST, VERNAL, UTAH 84078

3a. Phone No. (include area code)

(435) 781-7024

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

At surface NW/SW 1689'FSL, 284'FWL (LOT 3)

At top prod. interval reported below

At total depth SW/SW 1075'FSL, 232'FWL (LOT 4)

14. Date Spudded

06/06/08

15. Date T.D. Reached

07/27/08

16. Date Completed

09/16/08

Ready to Prod.

18. Total Depth: MD 9885'
TVD

19. Plug Back T.D.: MD 9826'
TVD

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 Sk. & Type of Cement	Slurry Vol. (BBL)	Cement Top*	Amount Pulled
20"	14"	36.7#		40'		28 SX			
12 1/4"	9 5/8"	36#		2815'		585 SX			
7 7/8"	4 1/2"	11.6#		9885'		1850 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"	7548'							

25. Producing Intervals

Formation	Top	Bottom	Perforated Interval	Size	No. Holes	Perf. Status
A) MESAVERDE	7706'	9746'	7706'-9746'	0.36	246	OPEN
B)						
C)						
D)						

26. Perforation Record

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

Depth Interval	Amount and type of Material

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
09/16/08	09/22/08	0	→	0	2,319	840			FLOWS FROM WELL
Choke Size	Tbg. Press. Flwg. #	Csg. Press. #	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Well Status	
20/64	SI	0#	→	0	2319	840			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. #	Csg. Press. #	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Well Status	
	SI		→						

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OCT 08 2008

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 MAHOGANY WASATCH MESAVARDE	1693' 2440' 5042' 7703'	7608' 9831'			

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* 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.

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	FORM 9 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 922-18M2S
------------------------------------	--

2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.	9. API NUMBER: 43047398280000
---	---

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: 1689 FSL 0284 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		
<input checked="" type="checkbox"/> NOTICE OF INTENT Approximate date work will start: 4/1/2014 <input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion: <input type="checkbox"/> SPUD REPORT Date of Spud: <input type="checkbox"/> DRILLING REPORT Report Date:	<input type="checkbox"/> ACIDIZE <input type="checkbox"/> CHANGE TO PREVIOUS PLANS <input type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> DEEPEN <input type="checkbox"/> OPERATOR CHANGE <input type="checkbox"/> PRODUCTION START OR RESUME <input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> WATER SHUTOFF <input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> ALTER CASING <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input type="checkbox"/> FRACTURE TREAT <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> SI TA STATUS EXTENSION <input type="checkbox"/> OTHER	<input type="checkbox"/> CASING REPAIR <input type="checkbox"/> CHANGE WELL NAME <input type="checkbox"/> CONVERT WELL TYPE <input type="checkbox"/> NEW CONSTRUCTION <input type="checkbox"/> PLUG BACK <input checked="" type="checkbox"/> RECOMPLETE DIFFERENT FORMATION <input type="checkbox"/> TEMPORARY ABANDON <input type="checkbox"/> WATER DISPOSAL <input type="checkbox"/> APD EXTENSION OTHER: <input style="width: 100px;" type="text"/>

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

Kerr-McGee Oil & Gas Onshore, LP respectfully requests authorization to conduct recompletion operations on the NBU 922-18M2S well. Please see the attached procedure for details. Thank you.

**Accepted by the
 Utah Division of
 Oil, Gas and Mining**

Date: January 29, 2015
 By: *Derek Duff*

NAME (PLEASE PRINT) Kristina Geno	PHONE NUMBER 720 929-6824	TITLE Regulatory Analyst
SIGNATURE N/A	DATE 1/12/2015	



Greater Natural Buttes Unit

**NBU 922-18M2S
RE-COMPLETIONS PROCEDURE
NBU 922-18L PAD
FIELD ID: BLUE WELL**

**DATE: 3/24/2014
AFE#:
API#: 4304739828
USER ID: SNT239 (Frac Invoices Only)**

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

REMEMBER SAFETY FIRST!

Name: NBU 922-18M2S
Location: NW SW SW Sec 18 T9S R22E
LAT: 40.033413 **LONG:** -109.489702 **COORDINATE:** NAD83 (Surface Location)
Uintah County, UT

ELEVATIONS: 4,867' GL 4,884' KB *Frac Registry TVD: 9,795'*

TOTAL DEPTH: 9,885' **PBTD:** 9,828'
SURFACE CASING: 9 5/8", 36# J-55 8RD @ 2,798'
PRODUCTION CASING: 4 1/2", 11.6#, P-110 LTC @ 9,873'
 Marker Joint **5037'-5058'**

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 1/2" 11.6# I-80 (See above)	7780	6350	3.875"	0.0155	0.6528
4 1/2" 11.6# P-110	10691	7580	3.875"	0.0155	0.6528
2 3/8" by 4 1/2" Annulus				0.0101	0.4227

TOPS:

1,668' Green River Top
 1,988' Bird's Nest Top
 2,491' Mahogany Top
 5,042' Wasatch Top
 7,659' Mesaverde Top
 *Based on latest geological interpretation

BOTTOMS:

7,659' Wasatch Bottom
 9,885' Mesaverde Bottom (TD)

T.O.C. @ 295'

**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 **22** 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 Induction-Density-Neutron log dated **8/27/2008**.
- **8** fracturing stages required for coverage.
- Hydraulic isolation estimated at **1910** based upon Baker's CBL dated **8/27/2008**.
- Procedure calls for **9** 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.**

- 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 densimeters. 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 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		7706	7716	4	40	09/05/2008	PRODUCTION
MESA VERDE		7906	7910	3	12	09/05/2008	PRODUCTION
MESA VERDE		7990	7994	3	12	09/05/2008	PRODUCTION
MESA VERDE		8066	8072	3	18	09/05/2008	PRODUCTION
MESA VERDE		8326	8328	4	8	09/05/2008	PRODUCTION
MESA VERDE		8428	8432	3	12	09/05/2008	PRODUCTION
MESA VERDE		8528	8530	4	8	09/05/2008	PRODUCTION
MESA VERDE		8584	8588	3	12	09/05/2008	PRODUCTION
MESA VERDE		8826	8830	3	12	09/05/2008	PRODUCTION
MESA VERDE		8864	8866	3	6	09/05/2008	PRODUCTION
MESA VERDE		8916	8918	4	8	09/05/2008	PRODUCTION
MESA VERDE		8976	8980	4	16	09/05/2008	PRODUCTION
MESA VERDE		9188	9190	3	6	09/05/2008	PRODUCTION
MESA VERDE		9296	9298	3	6	09/05/2008	PRODUCTION
MESA VERDE		9346	9350	4	16	09/05/2008	PRODUCTION
MESA VERDE		9404	9406	3	6	09/05/2008	PRODUCTION
MESA VERDE		9444	9446	4	8	09/05/2008	PRODUCTION
MESA VERDE		9682	9690	4	32	09/05/2008	PRODUCTION
MESA VERDE		9744	9746	4	8	09/05/2008	PRODUCTION

Relevant History:

09/05/2008: Originally completed in Mesaverde formation (6 stages) with ~ 649287 gallons of Slickwater, 444293lbs of 30/50 Ottawa Sand sand and 290268 lbs of 20/40 Resin coated sand.

11/13/2013: Last slickline report:

WO2346 Tb 225 Cs 352 FL gc Got Viper Plunger up w/Well. Ran w/Scratch to SN at 8432, pulled out. Ran w/Up Shear Fish Tool to SN, latched and

pulled Steel Spring w/ R-cups, pulled out. Ran w/Spear to TD at 9421, pulled out. Dropped New Steel Spring w/Single R-cup, chased w/1.910 Broach to SN, set Spring, pulled out. Dropped Same Plunger. Returned Well to Production. Rigged Down.

09/13/2008: Tubing Currently Landed @~7548'

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)
NBU 922-18M2S	99149	1/31/2010	412.68	11.48	1.45	70.23	31.35			
NBU 922-18M2S	99149	2/28/2010	437.46	17.36	4.89	77.80	50.86	0.00	0.00	0.00
NBU 922-18M2S	99149	3/31/2010	368.74	18.29	4.13	65.59	60.80			
NBU 922-18M2S	99149	4/30/2010	401.27	19.57	5.37	72.24	62.14			
NBU 922-18M2S	99149	5/31/2010	367.29	15.68	4.45	65.67	54.80			
NBU 922-18M2S	99149	6/30/2010	314.13	16.87	4.63	56.99	68.44			
NBU 922-18M2S	99149	7/31/2010	251.84	10.77	2.48	44.46	52.65			
NBU 922-18M2S	99149	8/31/2010	340.35	22.10	3.94	60.66	76.49			
NBU 922-18M2S	99149	9/30/2010	154.90	5.80	0.83	26.65	42.82			
NBU 922-18M2S	99149	10/31/2010	257.61	10.55	4.90	47.84	59.98			
NBU 922-18M2S	99149	11/30/2010	309.77	14.60	4.53	56.16	61.77			
NBU 922-18M2S	99149	12/31/2010	287.45	16.26	4.00	51.91	70.47			
NBU 922-18M2S	99149	1/31/2011	258.10	12.16	4.23	47.24	63.49			
NBU 922-18M2S	99149	2/28/2011	275.25	15.07	3.82	49.70	68.64			
NBU 922-18M2S	99149	3/31/2011	133.61	4.71	1.65	23.91	47.56			
NBU 922-18M2S	99149	4/30/2011	63.37	4.43	0.27	10.83	74.17	0.00	0.00	0.00
NBU 922-18M2S	99149	5/31/2011	187.16	0.94	1.97	33.16	15.51			
NBU 922-18M2S	99149	6/30/2011	259.87	0.00	0.00	43.31	0.00			
NBU 922-18M2S	99149	7/31/2011	266.03	0.00	0.00	44.34	0.00			
NBU 922-18M2S	99149	8/31/2011	258.90	0.00	0.00	43.15	0.00			
NBU 922-18M2S	99149	9/30/2011	245.00	0.00	0.00	40.83	0.00			
NBU 922-18M2S	99149	10/31/2011	240.29	0.00	0.48	40.53	2.01			
NBU 922-18M2S	99149	11/30/2011	236.43	0.00	0.00	39.41	0.00			
NBU 922-18M2S	99149	12/31/2011	226.35	0.00	0.00	37.73	0.00			
NBU 922-18M2S	99149	1/31/2012	238.52	0.00	0.00	39.75	0.00			
NBU 922-18M2S	99149	2/29/2012	246.90	0.00	0.00	41.15	0.00			
NBU 922-18M2S	99149	3/31/2012	238.26	0.00	0.00	39.71	0.00			
NBU 922-18M2S	99149	4/30/2012	238.93	0.00	0.00	38.82	0.00	0.00	0.00	0.00
NBU 922-18M2S	99149	5/31/2012	233.16	0.00	0.00	38.66	0.00	6.00	0.17	0.00
NBU 922-18M2S	99149	6/30/2012	227.90	0.00	0.00	37.98	0.00			
NBU 922-18M2S	99149	7/31/2012	222.52	0.00	0.00	37.09	0.00			
NBU 922-18M2S	99149	8/31/2012	220.65	4.23	0.65	37.42	22.08			
NBU 922-18M2S	99149	9/30/2012	209.50	0.00	0.00	34.92	0.00	0.00	0.00	0.00
NBU 922-18M2S	99149	10/31/2012	194.42	0.00	0.00	32.40	0.00			
NBU 922-18M2S	99149	11/30/2012	207.20	16.27	1.80	36.33	87.19			
NBU 922-18M2S	99149	12/31/2012	195.84	0.00	0.00	32.64	0.00			
NBU 922-18M2S	99149	1/31/2013	183.48	0.00	0.00	30.58	0.00			
NBU 922-18M2S	99149	2/28/2013	204.43	0.00	0.00	34.07	0.00			
NBU 922-18M2S	99149	3/31/2013	193.06	0.00	0.00	32.18	0.00			
NBU 922-18M2S	99149	4/30/2013	184.97	0.00	0.00	30.83	0.00			
NBU 922-18M2S	99149	5/31/2013	183.42	0.29	0.23	30.80	2.81			
NBU 922-18M2S	99149	6/30/2013	175.17	0.00	0.00	29.19	0.00			
NBU 922-18M2S	99149	7/31/2013	174.29	0.00	0.00	29.05	0.00			
NBU 922-18M2S	99149	8/31/2013	175.58	0.00	0.00	29.26	0.00			
NBU 922-18M2S	99149	9/30/2013	174.43	0.00	0.00	29.07	0.00			
NBU 922-18M2S	99149	10/31/2013	165.23	0.00	0.00	27.54	0.00			
NBU 922-18M2S	99149	11/30/2013	158.30	0.00	0.00	26.38	0.00			
NBU 922-18M2S	99149	12/31/2013	148.71	0.00	0.00	24.78	0.00			
NBU 922-18M2S	99149	1/31/2014	139.74	0.00	0.00	23.29	0.00	7.00	0.09	0.00
NBU 922-18M2S	99149	2/28/2014	138.32	0.00	0.00	23.05	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.
2. The tubing is below the proposed CBP depth. TOO H 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 7705'. Otherwise P/U a mill and C/O to 7705'.

4. Set 8000 psi CBP at ~ 7695'. 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 | 7502 | 7504 | 3 | 6 |
| WASATCH | 7537 | 7538 | 3 | 3 |
| WASATCH | 7622 | 7624 | 3 | 6 |
| WASATCH | 7635 | 7636 | 3 | 3 |
| WASATCH | 7663 | 7665 | 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 ~7502' and trickle 250gal 15%HCL w/ scale inhibitor in flush .
8. Set 8000 psi CBP at ~7388'. Perf the following 3-1/8" gun, 19 gm, 0.40" hole:
- | Zone | From | To | spf | # of shots |
|---------|------|------|-----|------------|
| WASATCH | 7186 | 7187 | 3 | 3 |
| WASATCH | 7236 | 7237 | 3 | 3 |
| WASATCH | 7248 | 7249 | 3 | 3 |
| WASATCH | 7264 | 7265 | 3 | 3 |
| WASATCH | 7284 | 7285 | 3 | 3 |
| WASATCH | 7294 | 7295 | 3 | 3 |
| WASATCH | 7327 | 7328 | 3 | 3 |
| WASATCH | 7357 | 7358 | 3 | 3 |
9. Breakdown perfs and establish injection rate. Fracture as outlined in Stage 2 on attached listing. Under-displace to ~7186' and trickle 250gal 15%HCL w/ scale inhibitor in flush.
10. Set 8000 psi CBP at ~7114'. Perf the following with 3-1/8" gun, 19 gm, 0.40" hole:
- | Zone | From | To | spf | # of shots |
|---------|------|------|-----|------------|
| WASATCH | 6943 | 6944 | 3 | 3 |
| WASATCH | 6956 | 6957 | 3 | 3 |
| WASATCH | 6964 | 6965 | 3 | 3 |
| WASATCH | 6991 | 6992 | 3 | 3 |
| WASATCH | 7011 | 7012 | 3 | 3 |
| WASATCH | 7031 | 7032 | 3 | 3 |
| WASATCH | 7056 | 7057 | 3 | 3 |
| WASATCH | 7100 | 7101 | 3 | 3 |
11. Breakdown perfs and establish injection rate. Fracture as outlined in Stage 3 on attached listing. Under-displace to ~6943' and trickle 250gal 15%HCL w/ scale inhibitor in flush.
NOTE: TIGHT SPACING THIS STAGE, OVERFLUSH BY 5BBLs

12. Set 8000 psi CBP at ~6930'. Perf the following with 3-1/8" gun, 19 gm, 0.40" hole:

Zone	From	To	spf	# of shots
WASATCH	6770	6771	3	3
WASATCH	6786	6787	3	3
WASATCH	6816	6817	3	3
WASATCH	6857	6858	3	3
WASATCH	6865	6867	3	6
WASATCH	6898	6900	3	6

13. Breakdown perfs and establish injection rate. Fracture as outlined in Stage 4 on attached listing. Under-displace to ~6770' and trickle 250gal 15%HCL w/ scale inhibitor in flush.

NOTE: TIGHT SPACING THIS STAGE, OVERFLUSH BY 5BBLs

14. Set 8000 psi CBP at ~6742'. Perf the following with 3-1/8" gun, 19 gm, 0.40" hole:

Zone	From	To	spf	# of shots
WASATCH	6514	6515	3	3
WASATCH	6576	6577	3	3
WASATCH	6624	6625	3	3
WASATCH	6634	6635	3	3
WASATCH	6659	6660	3	3
WASATCH	6686	6688	3	6
WASATCH	6711	6712	3	3

15. Breakdown perfs and establish injection rate. Fracture as outlined in Stage 5 on attached listing. Under-displace to ~6514' and trickle 250gal 15%HCL w/ scale inhibitor in flush.

16. Set 8000 psi CBP at ~6459'. Perf the following with 3-1/8" gun, 19 gm, 0.40" hole:

Zone	From	To	spf	# of shots
WASATCH	6245	6246	3	3
WASATCH	6252	6253	3	3
WASATCH	6321	6322	3	3
WASATCH	6331	6332	3	3
WASATCH	6366	6367	3	3
WASATCH	6380	6381	3	3
WASATCH	6428	6429	3	3
WASATCH	6435	6436	3	3

17. Breakdown perfs and establish injection rate. Fracture as outlined in Stage 6 on attached listing. Under-displace to ~6245' and trickle 250gal 15%HCL w/ scale inhibitor in flush.

18. Set 8000 psi CBP at ~6140'. Perf the following with 3-1/8" gun, 19 gm, 0.40" hole:

Zone	From	To	spf	# of shots
WASATCH	6034	6036	3	6
WASATCH	6042	6044	3	6
WASATCH	6101	6103	3	6
WASATCH	6108	6110	3	6

19. Breakdown perfs and establish injection rate. Fracture as outlined in Stage 7 on attached listing. Under-displace to ~6034' and trickle 250gal 15%HCL w/ scale inhibitor in flush.

20. Set 8000 psi CBP at ~5350'. Perf the following with 3-1/8" gun, 19 gm, 0.40" hole:

Zone	From	To	spf	# of shots
WASATCH	5161	5162	3	3
WASATCH	5169	5170	3	3
WASATCH	5206	5207	3	3
WASATCH	5216	5217	3	3
WASATCH	5311	5313	3	6
WASATCH	5318	5320	3	6

21. Breakdown perfs and establish injection rate. Fracture as outlined in Stage 8 on attached listing. Under-displace to ~5161' and flush only with recycled water.
22. Set 8000 psi CBP at ~5111'.
23. ND Frac Valves, NU and Test BOPs.
24. TIH with 3 7/8" bit, pump open sub, SN and tubing.
25. Drill 8 plugs and clean out to a depth of 7685' (~ 20' below bottom perfs). This well WILL NOT be commingled at this time.
26. Shift pump open bit sub and land tubing at 7156'. Flow back completion load. RDMO.
27. MIRU, POOH tbg and POBS. TIH with POBS.
28. Drill last plug @ 7695' clean out to PBTD at 9828'. Shear off bit and land tubing at ±7548'. 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.**
29. Clean out well with foam and/or swabbing unit until steady flow has been established from completion.
30. **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

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

Emergency Contact Information—Call 911

Vernal Regional Hospital Emergency: 435-789-3342

Police: (435) 789-5835

Fire: 435-789-4222

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	118	gals @	0.3	GPT
Surfactant	395	gals @	1.0	GPT
Clay Stabilizer	0	gals @	0.0	GPT
15% Hcl	2000	gals @	250	gal/stg
Iron Control for acid	10	gals @	5.0	GPT of acid
Surfactant for acid	4	gals @	2.0	GPT of acid
Corrosion Inhibitor for acid	12	gals @	6.0	GPT of acid

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

Scale Inhibitor	197	gals pumped	0.5	GPT (see schedule)
Biocide	118	gals @	0.3	GPT

Fracturing Schedules
NBU 922-18M2S
Slickwater Frac

Casing Size	4.5
Recompleter?	Y
Pad?	Y
ACTIS?	N
Days on Pad?	2
Wells on Pad?	3

Swabbing Days	3
Production Log	0
DFIT	0
GR only	Y
Low Scale	Y
Clay Stab.	N

Enter Number of swabbing days here for recompletes
 Enter 1 if running a Production Log
 Enter Number of DFITs
 Enter Y if only Gamma Ray log was run
 Enter Y if a LOW concentration of Scale Inhibitor will be pumped
 Enter N if there will be NO Clay stabilizer

Copy to new book

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	7502	7504	3	6	Varied	0.25		Slickwater	4,897	4,897	117	117						2
	WASATCH	7537	7538	3	3	0 ISIP and 5 min ISIP			Slickwater	8,077	12,974	76	192	15.0%	0.0%	0	0		2
	WASATCH	7622	7624	3	6	50 Slickwater Pad	0.25	1	Slickwater	10,600	23,574	252	445	50.0%	37.3%	6,625	6,625		5
	WASATCH	7635	7636	3	3	50 Slickwater Ramp	1	2	Slickwater	7,420	31,000	177	621	35.0%	62.7%	11,130	17,755		4
	WASATCH	7663	7665	3	6	50 Slickwater Ramp			Slickwater	4,897	35,897	117	738			17,755	17,755		2
	WASATCH				50	ISDP and 5 min ISDP			Slickwater		30,995	117	738			17,755	17,755		0
	WASATCH								Slickwater		30,995	117	738			17,755	17,755		0
	WASATCH								Slickwater		30,995	117	738			17,755	17,755		0
	WASATCH								Slickwater		30,995	117	738			17,755	17,755		0
	WASATCH								Slickwater		30,995	117	738			17,755	17,755		0
									Sand laden Volume	21,200						670	670	114	15
2	WASATCH	7188	7187	3	3	14.8			Slickwater	0	0	0	0						
	WASATCH	7238	7237	3	3	Varied			Slickwater	8,880	8,880	211	211	15.0%	0.0%	0	0		4
	WASATCH	7248	7249	3	3	0 ISIP and 5 min ISIP			Slickwater	29,600	38,480	705	916	50.0%	37.3%	18,500	18,500		15
	WASATCH	7264	7265	3	3	50 Slickwater Ramp	0.25	1	Slickwater	20,720	59,200	493	1,410	35.0%	62.7%	31,080	49,580		10
	WASATCH	7284	7285	3	3	50 Slickwater Ramp	1	2	Slickwater	4,691	63,891	112	1,521			49,580	49,580		2
	WASATCH	7294	7295	3	3	50 Flush (4-1/2)			Slickwater		63,891	112	1,521			49,580	49,580		0
	WASATCH	7327	7328	3	3	ISDP and 5 min ISDP			Slickwater		63,891	112	1,521			49,580	49,580		0
	WASATCH	7357	7358	3	3				Slickwater		63,891	112	1,521			49,580	49,580		0
	WASATCH								Slickwater		63,891	112	1,521			49,580	49,580		0
	WASATCH								Slickwater		63,891	112	1,521			49,580	49,580		0
									Sand laden Volume	59,200						670	670	72	32
3	WASATCH	6943	6944	3	3	30.4			Slickwater	0	0	0	0						
	WASATCH	6956	6957	3	3	Varied			Slickwater	5,280	5,280	126	126	15.0%	0.0%	0	0		3
	WASATCH	6964	6965	3	3	0 ISIP and 5 min ISIP			Slickwater	17,600	22,880	419	545	50.0%	37.3%	11,000	11,000		9
	WASATCH	6981	6982	3	3	50 Slickwater Ramp	0.25	1	Slickwater	12,320	35,200	293	838	35.0%	62.7%	18,480	29,480		6
	WASATCH	7011	7012	3	3	50 Slickwater Ramp	1	2	Slickwater	4,532	39,732	108	946			29,480	29,480		2
	WASATCH	7031	7032	3	3	50 Flush (4-1/2)			Slickwater		39,732	108	946			29,480	29,480		0
	WASATCH	7056	7057	3	3	ISDP and 5 min ISDP			Slickwater		39,732	108	946			29,480	29,480		0
	WASATCH	7100	7101	3	3				Slickwater		39,732	108	946			29,480	29,480		0
	WASATCH								Slickwater		39,732	108	946			29,480	29,480		0
	WASATCH								Slickwater		39,732	108	946			29,480	29,480		0
									Sand laden Volume	35,200						670	670	13	20

Stage	Zone	Perfs		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.		
		Top. ft.	Bot. ft.																			
4	WASATCH	6770	6771	3	3	Varied	Pump-in test			Slickwater	0	0	0	0								
	WASATCH	6786	6787	3	3	0	ISIP and 5 min ISIP	0.25		Slickwater	5,760	5,760	137	137	15.0%	0.0%	0	0		3		
	WASATCH	6816	6817	3	3	50	Slickwater Pad	1		Slickwater	24,960	24,960	457	594	50.0%	37.3%	12,000	12,000		10		
	WASATCH	6857	6858	3	3	50	Slickwater Ramp	2		Slickwater	19,200	38,400	320	914	35.0%	62.7%	20,160	32,160		7		
	WASATCH	6865	6867	3	6	50	Slickwater Ramp			Slickwater	13,440	42,819	105	1,020				32,160		0		
	WASATCH	6898	6900	3	6	50	Flush (4-1/2) ISDP and 5 min ISDP			Slickwater	4,419	42,819	105	1,020				32,160		0		
	WASATCH																				0	
	WASATCH																					21
	WASATCH																					
	WASATCH																					
5	WASATCH	6514	6515	3	24	20.4	<< Above pump time (min)			Sand laden Volume	38,400	38,400					800	670	lbs sand/ft	28		
	WASATCH	6516	6517	3	3	Varied	Pump-in test			Slickwater	0	0	0	0								
	WASATCH	6624	6625	3	3	0	ISIP and 5 min ISIP	0.25		Slickwater	4,920	4,920	117	117	15.0%	0.0%	0	0		2		
	WASATCH	6634	6635	3	3	50	Slickwater Pad	1		Slickwater	16,400	21,320	390	508	50.0%	37.3%	10,250	10,250		8		
	WASATCH	6659	6660	3	3	50	Slickwater Ramp	2		Slickwater	11,480	32,800	273	781	35.0%	62.7%	17,220	27,470		6		
	WASATCH	6686	6688	3	6	50	Flush (4-1/2)			Slickwater	4,252	37,052	101	882				27,470		2		
	WASATCH	6711	6712	3	3	50	ISDP and 5 min ISDP			Slickwater		37,052	101	882				27,470		0		
	WASATCH																				0	
	WASATCH																				0	
	WASATCH																				19	
6	WASATCH	6245	6246	3	24	17.6	<< Above pump time (min)			Sand laden Volume	80,000	80,000					800	670	lbs sand/ft	48		
	WASATCH	6252	6253	3	3	Varied	Pump-in test			Slickwater	0	0	0	0								
	WASATCH	6321	6322	3	3	0	ISIP and 5 min ISIP	0.25		Slickwater	12,000	12,000	286	286	15.0%	0.0%	0	0		6		
	WASATCH	6331	6332	3	3	50	Slickwater Pad	1		Slickwater	40,000	52,000	952	1,238	50.0%	37.3%	25,000	25,000		20		
	WASATCH	6366	6367	3	3	50	Slickwater Ramp	2		Slickwater	28,000	80,000	667	1,905	35.0%	62.7%	42,000	67,000		14		
	WASATCH	6380	6381	3	3	50	Flush (4-1/2)			Slickwater	4,077	84,077	97	2,002				67,000		2		
	WASATCH	6428	6429	3	3	50	ISDP and 5 min ISDP			Slickwater		84,077	97	2,002				67,000		0		
	WASATCH	6435	6436	3	3																0	
	WASATCH																				0	
	WASATCH																				42	

Stage	Zone	Perfs		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.		
		Top, ft.	Bot., ft.																			
7	WASATCH	6034	6036	3	24	24.5	6 Varied			Slickwater	0	0	0	0								
	WASATCH	6042	6044	3			0 ISIP and 5 min ISIP					Slickwater	7,140	170	170	0	0.0%	0	0			4
	WASATCH	6101	6103	3			50 Slickwater Pad	0.25	1	Slickwater	23,800	30,940	567	737	170	170	15.0%	37.3%	14,875	14,875	0	12
	WASATCH	6108	6110	3			50 Slickwater Ramp	1	2	Slickwater	16,660	47,600	397	1,133	397	1,133	35.0%	62.7%	24,990	39,865	39,865	8
	WASATCH						50 Flush (4-1/2)			Slickwater	3,939	51,539	94	1,227	94	1,227				39,865		0
	WASATCH						ISDP and 5 min ISDP			Slickwater		51,539	94	1,227	94	1,227				39,865		0
	WASATCH									Sand laden Volume	47,600									670 lbs sand/ft	684	26
		# of Perfs/stage																				
8	WASATCH	5161	5162	3	24	24.5	3 Varied			Slickwater	0	0	0	0								
	WASATCH	5169	5170	3			0 ISIP and 5 min ISIP					Slickwater	6,720	160	160	0	0.0%	0	0			3
	WASATCH	5206	5207	3			50 Slickwater Pad	0.25	1	Slickwater	22,400	29,120	533	693	160	160	15.0%	37.3%	14,000	14,000	0	11
	WASATCH	5216	5217	3			50 Slickwater Ramp	1	2	Slickwater	15,680	44,800	373	1,067	373	1,067	35.0%	62.7%	23,520	37,520	37,520	8
	WASATCH	5311	5313	3			50 Slickwater Ramp			Slickwater	3,369	48,169	80	1,147	80	1,147				37,520		0
	WASATCH	5318	5320	3			50 Flush (4-1/2)			Slickwater		48,169	80	1,147	80	1,147				37,520		0
	WASATCH						ISDP and 5 min ISDP			Sand laden Volume	44,800									670 lbs sand/ft	50	0
		# of Perfs/stage																				
Totals					192	22.9					Total Fluid	398,275 gals	9,483 bbls	9,483 bbls	Flush depth 5.161	Total Sand	300,830	300,830	Total Scale Inhib. =	197		
						3.2							21.1 tanks				8 stages	3,369 gals				

NBU 922-18M2S
Perforation and CBP Summary

Stage	Zones	Perforations		SPF	Holes	Fracture Coverage		
		Top, ft	Bottom, ft					
1	WASATCH	7502	7504	3	6	7501	to	7668
	WASATCH	7537	7538	3	3			
	WASATCH	7622	7624	3	6			
	WASATCH	7635	7636	3	3			
	WASATCH	7663	7665	3	6			
	WASATCH							
	WASATCH							
	WASATCH							
	# of Perfs/stage				24	CBP DEPTH	7,388	
2	WASATCH	7186	7187	3	3	7182	to	7361
	WASATCH	7236	7237	3	3			
	WASATCH	7248	7249	3	3			
	WASATCH	7264	7265	3	3			
	WASATCH	7284	7285	3	3			
	WASATCH	7294	7295	3	3			
	WASATCH	7327	7328	3	3			
	WASATCH	7357	7358	3	3			
	# of Perfs/stage				24	CBP DEPTH	7,114	
3	WASATCH	6943	6944	3	3	6942	to	7102
	WASATCH	6956	6957	3	3			
	WASATCH	6964	6965	3	3			
	WASATCH	6991	6992	3	3			
	WASATCH	7011	7012	3	3			
	WASATCH	7031	7032	3	3			
	WASATCH	7056	7057	3	3			
	WASATCH	7100	7101	3	3			
	# of Perfs/stage				24	CBP DEPTH	6,930	
4	WASATCH	6770	6771	3	3	6769	to	6907
	WASATCH	6786	6787	3	3			
	WASATCH	6816	6817	3	3			
	WASATCH	6857	6858	3	3			
	WASATCH	6865	6867	3	6			
	WASATCH	6898	6900	3	6			
	WASATCH							
	WASATCH							
	# of Perfs/stage				24	CBP DEPTH	6,742	
5	WASATCH	6514	6515	3	3	6514	to	6715
	WASATCH	6576	6577	3	3			
	WASATCH	6624	6625	3	3			
	WASATCH	6634	6635	3	3			
	WASATCH	6659	6660	3	3			
	WASATCH	6686	6688	3	6			
	WASATCH	6711	6712	3	3			
	WASATCH							
	# of Perfs/stage				24	CBP DEPTH	6,466	
6	WASATCH	6245	6246	3	3	6238	to	6442
	WASATCH	6252	6253	3	3			
	WASATCH	6321	6322	3	3			
	WASATCH	6331	6332	3	3			
	WASATCH	6366	6367	3	3			
	WASATCH	6380	6381	3	3			
	WASATCH	6428	6429	3	3			
	WASATCH	6435	6436	3	3			
	# of Perfs/stage				24	CBP DEPTH	6,140	
7	WASATCH	6034	6036	3	6	6015	to	6113
	WASATCH	6042	6044	3	6			
	WASATCH	6101	6103	3	6			
	WASATCH	6108	6110	3	6			
	WASATCH							
	WASATCH							
	WASATCH							
	WASATCH							
	# of Perfs/stage				24	CBP DEPTH	5,350	
8	WASATCH	5161	5162	3	3	5153	to	5320
	WASATCH	5169	5170	3	3			
	WASATCH	5206	5207	3	3			
	WASATCH	5216	5217	3	3			
	WASATCH	5311	5313	3	6			
	WASATCH	5318	5320	3	6			
	WASATCH							
	WASATCH							
	# of Perfs/stage				24	CBP DEPTH	5,111	
	Totals				192	Total Pay		449.0