

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

FORM 3

AMENDED REPORT **APPLICATION FOR PERMIT TO DRILL**

2. TYPE OF WORK DRILL NEW WELL <input checked="" type="checkbox"/> REENTER P&A WELL <input type="checkbox"/> DEEPEN WELL <input type="checkbox"/>				1. WELL NAME and NUMBER NBU 922-3101AS			
4. TYPE OF WELL Gas Well Coalbed Methane Well: NO				3. FIELD OR WILDCAT NATURAL BUTTES			
6. NAME OF OPERATOR KERR-MCGEE OIL & GAS ONSHORE, L.P.				5. UNIT or COMMUNITIZATION AGREEMENT NAME NATURAL BUTTES			
8. ADDRESS OF OPERATOR P.O. Box 173779, Denver, CO, 80217				7. OPERATOR PHONE 720 929-6587			
10. MINERAL LEASE NUMBER (FEDERAL, INDIAN, OR STATE) UO 1207A		11. MINERAL OWNERSHIP FEDERAL <input type="checkbox"/> INDIAN <input type="checkbox"/> STATE <input checked="" type="checkbox"/> FEE <input type="checkbox"/>		9. OPERATOR E-MAIL mary.mondragon@anadarko.com			
13. NAME OF SURFACE OWNER (if box 12 = 'fee')				12. SURFACE OWNERSHIP FEDERAL <input type="checkbox"/> INDIAN <input type="checkbox"/> STATE <input checked="" type="checkbox"/> FEE <input type="checkbox"/>			
15. ADDRESS OF SURFACE OWNER (if box 12 = 'fee')				14. SURFACE OWNER PHONE (if box 12 = 'fee')			
17. INDIAN ALLOTTEE OR TRIBE NAME (if box 12 = 'INDIAN')		18. INTEND TO COMMINGLE PRODUCTION FROM MULTIPLE FORMATIONS YES <input checked="" type="checkbox"/> (Submit Commingling Application) NO <input type="checkbox"/>		16. SURFACE OWNER E-MAIL (if box 12 = 'fee')			
20. LOCATION OF WELL		FOOTAGES	QTR-QTR	SECTION	TOWNSHIP	RANGE	MERIDIAN
LOCATION AT SURFACE		1098 FSL 1494 FEL	SWSE	31	9.0 S	22.0 E	S
Top of Uppermost Producing Zone		2314 FSL 128 FEL	NESE	31	9.0 S	22.0 E	S
At Total Depth		1098 FSL 1494 FEL	SWSE	31	9.0 S	22.0 E	S
21. COUNTY UINTAH		22. DISTANCE TO NEAREST LEASE LINE (Feet) 1098		23. NUMBER OF ACRES IN DRILLING UNIT 203			
		25. DISTANCE TO NEAREST WELL IN SAME POOL (Applied For Drilling or Completed) 450		26. PROPOSED DEPTH MD: 9742 TVD: 9300			
27. ELEVATION - GROUND LEVEL 5035		28. BOND NUMBER		29. SOURCE OF DRILLING WATER / WATER RIGHTS APPROVAL NUMBER IF APPLICABLE Permit #43-8496			

ATTACHMENTS

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

<input checked="" type="checkbox"/> WELL PLAT OR MAP PREPARED BY LICENSED SURVEYOR OR ENGINEER	<input checked="" type="checkbox"/> COMPLETE DRILLING PLAN
<input type="checkbox"/> AFFIDAVIT OF STATUS OF SURFACE OWNER AGREEMENT (IF FEE SURFACE)	<input type="checkbox"/> FORM 5. IF OPERATOR IS OTHER THAN THE LEASE OWNER
<input checked="" type="checkbox"/> DIRECTIONAL SURVEY PLAN (IF DIRECTIONALLY OR HORIZONTALLY DRILLED)	<input checked="" type="checkbox"/> TOPOGRAPHICAL MAP

NAME Kathy Schneebeck-Dulnoan	TITLE Staff Regulatory Analyst	PHONE 720 929-6007
SIGNATURE	DATE 07/08/2009	EMAIL Kathy.SchneebeckDulnoan@anadarko.com
API NUMBER ASSIGNED 43047503950000	APPROVAL  Permit Manager	

Proposed Hole, Casing, and Cement

String	Hole Size	Casing Size	Top (MD)	Bottom (MD)		
Prod	7.875	4.5	0	9742		
Pipe	Grade	Length	Weight			
	Grade I-80 LT&C	9742	11.6			

Proposed Hole, Casing, and Cement

String	Hole Size	Casing Size	Top (MD)	Bottom (MD)		
Surf	12.25	9.625	0	2300		
Pipe	Grade	Length	Weight			
	Grade J-55 LT&C	2300	36.0			

R
21
E

R
22
E

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

S89°48'53"W - 2234.34' (Meas.) S89°49'17"W - 2629.89' (Meas.)

1977 Brass Cap,
0.5' High, Pile of
Stones, Steel
Post

1977 Brass Cap,
0.5' High, Pile of
Stones

1977 Brass Cap,
0.4' High, Pile of
Stones

Lot 1

Lot 2

1977 Brass Cap,
2.0' High, Pile of
Stones, Steel Post

Lot 3

31
NBU #922-3101AS
Elev. Ungraded Ground = 5035'

1977 Brass Cap,
1.0' High, Large
Pile of Stones

128'

Lot 4

1977 Brass Cap,
Set Stone, Pile
of Stones

52.80' (G.L.O.)

True Corner

1098'

1494'

2314'

S48°25'18"W
1826.80'

Bottom
Hole

S00°01'20"W - 2644.45' (Meas.)

T9S
T10S

S89°52'11"E - 2293.55' (Meas.) N89°51'50"W - 2579.48' (Meas.)

1977 Brass Cap,
1977 Brass Cap,
Flush w/Top of
Pile of Stones

1977 Brass Cap,
2.0' High, Pile
of Stones

Kerr-McGee Oil & Gas Onshore LP

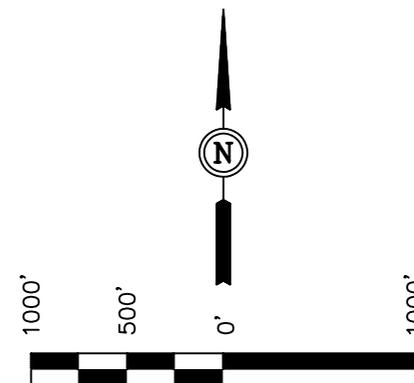
Well location, NBU #922-3101AS, located as shown in the NE 1/4 SE 1/4 of Section 31, T9S, R22E, S.L.B.&M., Uintah County, Utah.

BASIS OF ELEVATION

TWO WATER TRIANGULATION STATION LOCATED IN THE NW 1/4 OF SECTION 1, T10S, R21E, S.L.B.&M. TAKEN FROM THE BIG PACK MTN NE QUADRANGLE, UTAH, UTAH COUNTY, 7.5 MINUTE SERIES (TOPOGRAPHICAL MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. SAID ELEVATION IS MARKED AS BEING 5238 FEET.

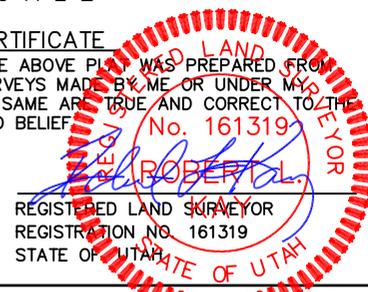
BASIS OF BEARINGS

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



CERTIFICATE

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



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

LEGEND:

- └─┘ = 90° SYMBOL
- = PROPOSED WELL HEAD.
- ▲ = SECTION CORNERS LOCATED.
- △ = SECTION CORNERS RE-ESTABLISHED. (Not Set on Ground)

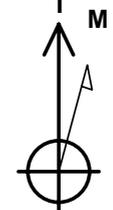
NAD 83 (TARGET BOTTOM HOLE)	NAD 83 (SURFACE LOCATION)
LATITUDE = 39°59'17.78" (39.988272)	LATITUDE = 39°59'29.76" (39.991600)
LONGITUDE = 109°28'43.00" (109.478611)	LONGITUDE = 109°28'25.45" (109.473736)
NAD 27 (TARGET BOTTOM HOLE)	NAD 27 (SURFACE LOCATION)
LATITUDE = 39°59'17.91" (39.988308)	LATITUDE = 39°59'29.89" (39.991636)
LONGITUDE = 109°28'40.53" (109.477925)	LONGITUDE = 109°28'22.98" (109.473050)

SCALE 1" = 1000'	DATE SURVEYED: 11-05-08	DATE DRAWN: 11-11-08
PARTY L.K. C.K. D.P.	REFERENCES G.L.O. PLAT	
WEATHER COOL	FILE Kerr-McGee Oil & Gas Onshore LP	

APIWellNo:43047503950000



Site: NBU 922-31I Pad
Well: NBU 922-31O1AS
Wellbore: OH
Design: Plan #1

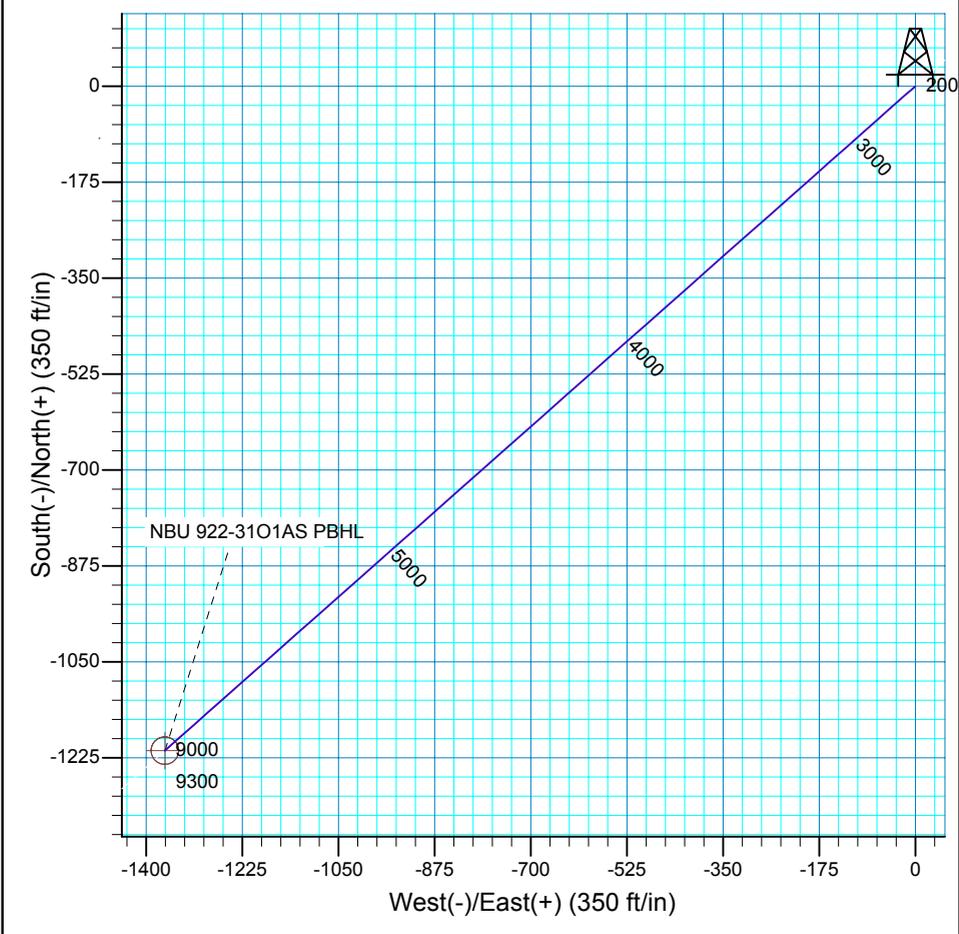
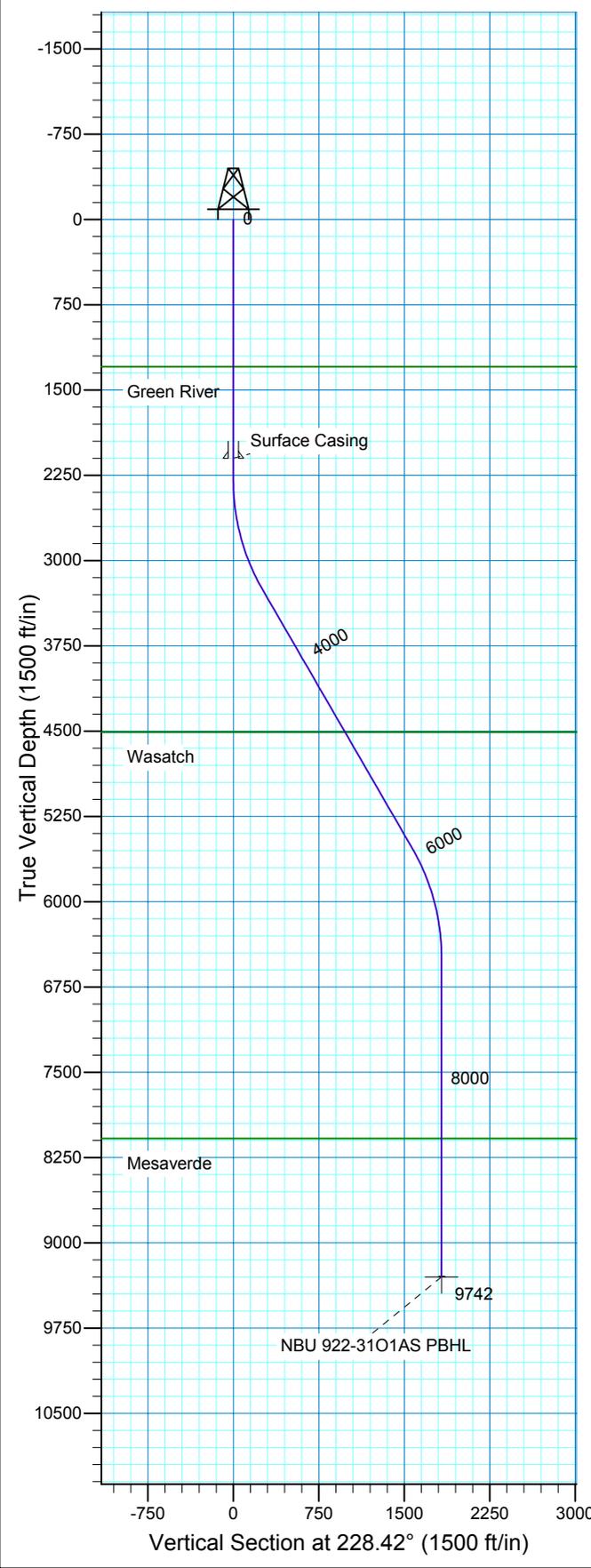

 Azimuths to True North
Magnetic North: 11.33°

 Magnetic Field
Strength: 52572.1snT
Dip Angle: 65.93°
Date: 2009-04-07
Model: IGRF200510

WELL DETAILS: NBU 922-31O1AS

GL 5034' & RKB 18' @ 5052.00ft 5034.00

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.00	0.00	610434.56	2567861.79	39° 59' 29.890 N	109° 28' 22.980 W



FORMATION TOP DETAILS

TVDPath	MDPath	Formation
1295.00	1295.00	Green River
4509.00	4748.08	Wasatch
8083.00	8525.34	Mesaverde

Plan: Plan #1 (NBU 922-31O1AS/OH)

Created By: Julie Cruse Date: 2009-04-07
 PROJECT DETAILS: Uintah County, UT NAD27
 Geodetic System: US State Plane 1927 (Exact solution)
 Datum: NAD 1927 (NADCON CONUS)
 Ellipsoid: Clarke 1866
 Zone: Utah Central 4302
 Location: Sec 31 T9S R22E
 System Datum: Mean Sea Level
 Local North: True

SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2300.00	0.00	0.00	2300.00	0.00	0.00	0.00	0.00	0.00	
3300.00	30.00	228.42	3254.93	-169.83	-191.39	3.00	228.42	255.87	
5928.87	30.00	228.42	5531.59	1042.26	-1174.55	0.00	0.00	1570.31	
6928.87	0.00	0.00	6486.52	-1212.09	-1365.93	3.00	180.00	1826.18	
9742.34	0.00	0.00	9300.00	-1212.09	-1365.93	0.00	0.00	1826.18	NBU 922-31O1AS PBHL



Scientific Drilling
Rocky Mountain Operations

Kerr McGee Oil and Gas Onshore LP

**Uintah County, UT NAD27
NBU 922-31I Pad
NBU 922-31O1AS
OH**

Plan: Plan #1

Standard Planning Report

07 April, 2009



Scientific Drilling
Planning Report

Database:	EDM 2003.16 Multi User Db	Local Co-ordinate Reference:	Well NBU 922-3101AS
Company:	Kerr McGee Oil and Gas Onshore LP	TVD Reference:	GL 5034' & RKB 18' @ 5052.00ft
Project:	Uintah County, UT NAD27	MD Reference:	GL 5034' & RKB 18' @ 5052.00ft
Site:	NBU 922-311 Pad	North Reference:	True
Well:	NBU 922-3101AS	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

Project	Uintah County, UT NAD27		
Map System:	US State Plane 1927 (Exact solution)	System Datum:	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	Utah Central 4302		

Site	NBU 922-311 Pad, Sec 31 T9S R22E				
Site Position:		Northing:	610,432.97 ft	Latitude:	39° 59' 29.879 N
From:	Lat/Long	Easting:	2,567,841.59 ft	Longitude:	109° 28' 23.240 W
Position Uncertainty:	0.00 ft	Slot Radius:	in	Grid Convergence:	1.30 °

Well	NBU 922-3101AS, 2314' FSL 128' FEL					
Well Position	+N/-S	0.00 ft	Northing:	610,434.56 ft	Latitude:	39° 59' 29.890 N
	+E/-W	0.00 ft	Easting:	2,567,861.79 ft	Longitude:	109° 28' 22.980 W
Position Uncertainty		0.00 ft	Wellhead Elevation:	ft	Ground Level:	5,034.00 ft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination	Dip Angle	Field Strength
			(°)	(°)	(nT)
	IGRF200510	2009-04-07	11.33	65.93	52,572

Design	Plan #1			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W	Direction
	(ft)	(ft)	(ft)	(°)
	0.00	0.00	0.00	228.42

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,300.00	0.00	0.00	2,300.00	0.00	0.00	0.00	0.00	0.00	0.00	
3,300.00	30.00	228.42	3,254.93	-169.83	-191.39	3.00	3.00	0.00	228.42	
5,928.87	30.00	228.42	5,531.59	-1,042.26	-1,174.55	0.00	0.00	0.00	0.00	
6,928.87	0.00	0.00	6,486.52	-1,212.09	-1,365.93	3.00	-3.00	0.00	180.00	
9,742.34	0.00	0.00	9,300.00	-1,212.09	-1,365.93	0.00	0.00	0.00	0.00	NBU 922-3101AS PE



Scientific Drilling Planning Report

Database: EDM 2003.16 Multi User Db	Local Co-ordinate Reference: Well NBU 922-3101AS
Company: Kerr McGee Oil and Gas Onshore LP	TVD Reference: GL 5034' & RKB 18' @ 5052.00ft
Project: Uintah County, UT NAD27	MD Reference: GL 5034' & RKB 18' @ 5052.00ft
Site: NBU 922-31I Pad	North Reference: True
Well: NBU 922-3101AS	Survey Calculation Method: Minimum Curvature
Wellbore: OH	
Design: Plan #1	

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00
1,000.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00
1,100.00	0.00	0.00	1,100.00	0.00	0.00	0.00	0.00	0.00	0.00
1,200.00	0.00	0.00	1,200.00	0.00	0.00	0.00	0.00	0.00	0.00
1,295.00	0.00	0.00	1,295.00	0.00	0.00	0.00	0.00	0.00	0.00
Green River									
1,300.00	0.00	0.00	1,300.00	0.00	0.00	0.00	0.00	0.00	0.00
1,400.00	0.00	0.00	1,400.00	0.00	0.00	0.00	0.00	0.00	0.00
1,500.00	0.00	0.00	1,500.00	0.00	0.00	0.00	0.00	0.00	0.00
1,600.00	0.00	0.00	1,600.00	0.00	0.00	0.00	0.00	0.00	0.00
1,700.00	0.00	0.00	1,700.00	0.00	0.00	0.00	0.00	0.00	0.00
1,800.00	0.00	0.00	1,800.00	0.00	0.00	0.00	0.00	0.00	0.00
1,900.00	0.00	0.00	1,900.00	0.00	0.00	0.00	0.00	0.00	0.00
2,000.00	0.00	0.00	2,000.00	0.00	0.00	0.00	0.00	0.00	0.00
2,100.00	0.00	0.00	2,100.00	0.00	0.00	0.00	0.00	0.00	0.00
Surface Casing									
2,200.00	0.00	0.00	2,200.00	0.00	0.00	0.00	0.00	0.00	0.00
2,300.00	0.00	0.00	2,300.00	0.00	0.00	0.00	0.00	0.00	0.00
2,400.00	3.00	228.42	2,399.95	-1.74	-1.96	2.62	3.00	3.00	0.00
2,500.00	6.00	228.42	2,499.63	-6.94	-7.83	10.46	3.00	3.00	0.00
2,600.00	9.00	228.42	2,598.77	-15.61	-17.59	23.51	3.00	3.00	0.00
2,700.00	12.00	228.42	2,697.08	-27.70	-31.22	41.74	3.00	3.00	0.00
2,800.00	15.00	228.42	2,794.31	-43.19	-48.68	65.08	3.00	3.00	0.00
2,900.00	18.00	228.42	2,890.18	-62.04	-69.92	93.48	3.00	3.00	0.00
3,000.00	21.00	228.42	2,984.43	-84.20	-94.88	126.85	3.00	3.00	0.00
3,100.00	24.00	228.42	3,076.81	-109.59	-123.50	165.12	3.00	3.00	0.00
3,200.00	27.00	228.42	3,167.06	-138.16	-155.70	208.16	3.00	3.00	0.00
3,300.00	30.00	228.42	3,254.93	-169.83	-191.39	255.87	3.00	3.00	0.00
3,400.00	30.00	228.42	3,341.53	-203.02	-228.78	305.87	0.00	0.00	0.00
3,500.00	30.00	228.42	3,428.13	-236.20	-266.18	355.87	0.00	0.00	0.00
3,600.00	30.00	228.42	3,514.74	-269.39	-303.58	405.87	0.00	0.00	0.00
3,700.00	30.00	228.42	3,601.34	-302.58	-340.98	455.87	0.00	0.00	0.00
3,800.00	30.00	228.42	3,687.94	-335.76	-378.38	505.87	0.00	0.00	0.00
3,900.00	30.00	228.42	3,774.54	-368.95	-415.78	555.87	0.00	0.00	0.00
4,000.00	30.00	228.42	3,861.15	-402.13	-453.18	605.87	0.00	0.00	0.00
4,100.00	30.00	228.42	3,947.75	-435.32	-490.58	655.87	0.00	0.00	0.00
4,200.00	30.00	228.42	4,034.35	-468.51	-527.97	705.87	0.00	0.00	0.00
4,300.00	30.00	228.42	4,120.96	-501.69	-565.37	755.87	0.00	0.00	0.00
4,400.00	30.00	228.42	4,207.56	-534.88	-602.77	805.87	0.00	0.00	0.00
4,500.00	30.00	228.42	4,294.16	-568.07	-640.17	855.87	0.00	0.00	0.00
4,600.00	30.00	228.42	4,380.76	-601.25	-677.57	905.87	0.00	0.00	0.00
4,700.00	30.00	228.42	4,467.37	-634.44	-714.97	955.87	0.00	0.00	0.00
4,748.08	30.00	228.42	4,509.00	-650.39	-732.95	979.91	0.00	0.00	0.00
Wasatch									



Scientific Drilling
Planning Report

Database:	EDM 2003.16 Multi User Db	Local Co-ordinate Reference:	Well NBU 922-3101AS
Company:	Kerr McGee Oil and Gas Onshore LP	TVD Reference:	GL 5034' & RKB 18' @ 5052.00ft
Project:	Uintah County, UT NAD27	MD Reference:	GL 5034' & RKB 18' @ 5052.00ft
Site:	NBU 922-31I Pad	North Reference:	True
Well:	NBU 922-3101AS	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

Planned Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
4,800.00	30.00	228.42	4,553.97	-667.63	-752.37	1,005.87	0.00	0.00	0.00	
4,900.00	30.00	228.42	4,640.57	-700.81	-789.76	1,055.87	0.00	0.00	0.00	
5,000.00	30.00	228.42	4,727.17	-734.00	-827.16	1,105.87	0.00	0.00	0.00	
5,100.00	30.00	228.42	4,813.78	-767.19	-864.56	1,155.87	0.00	0.00	0.00	
5,200.00	30.00	228.42	4,900.38	-800.37	-901.96	1,205.87	0.00	0.00	0.00	
5,300.00	30.00	228.42	4,986.98	-833.56	-939.36	1,255.87	0.00	0.00	0.00	
5,400.00	30.00	228.42	5,073.58	-866.74	-976.76	1,305.87	0.00	0.00	0.00	
5,500.00	30.00	228.42	5,160.19	-899.93	-1,014.16	1,355.87	0.00	0.00	0.00	
5,600.00	30.00	228.42	5,246.79	-933.12	-1,051.56	1,405.87	0.00	0.00	0.00	
5,700.00	30.00	228.42	5,333.39	-966.30	-1,088.95	1,455.87	0.00	0.00	0.00	
5,800.00	30.00	228.42	5,419.99	-999.49	-1,126.35	1,505.87	0.00	0.00	0.00	
5,900.00	30.00	228.42	5,506.60	-1,032.68	-1,163.75	1,555.87	0.00	0.00	0.00	
5,928.87	30.00	228.42	5,531.59	-1,042.26	-1,174.55	1,570.31	0.00	0.00	0.00	
6,000.00	27.87	228.42	5,593.85	-1,065.10	-1,200.29	1,604.72	3.00	-3.00	0.00	
6,100.00	24.87	228.42	5,683.43	-1,094.57	-1,233.50	1,649.12	3.00	-3.00	0.00	
6,200.00	21.87	228.42	5,775.22	-1,120.89	-1,263.16	1,688.78	3.00	-3.00	0.00	
6,300.00	18.87	228.42	5,868.96	-1,143.99	-1,289.19	1,723.58	3.00	-3.00	0.00	
6,400.00	15.87	228.42	5,964.39	-1,163.79	-1,311.51	1,753.42	3.00	-3.00	0.00	
6,500.00	12.87	228.42	6,061.25	-1,180.26	-1,330.07	1,778.23	3.00	-3.00	0.00	
6,600.00	9.87	228.42	6,159.28	-1,193.34	-1,344.81	1,797.93	3.00	-3.00	0.00	
6,700.00	6.87	228.42	6,258.21	-1,203.00	-1,355.69	1,812.48	3.00	-3.00	0.00	
6,800.00	3.87	228.42	6,357.76	-1,209.20	-1,362.68	1,821.83	3.00	-3.00	0.00	
6,900.00	0.87	228.42	6,457.66	-1,211.94	-1,365.77	1,825.96	3.00	-3.00	0.00	
6,928.87	0.00	0.00	6,486.52	-1,212.09	-1,365.93	1,826.18	3.00	-3.00	0.00	
7,000.00	0.00	0.00	6,557.66	-1,212.09	-1,365.93	1,826.18	0.00	0.00	0.00	
7,100.00	0.00	0.00	6,657.66	-1,212.09	-1,365.93	1,826.18	0.00	0.00	0.00	
7,200.00	0.00	0.00	6,757.66	-1,212.09	-1,365.93	1,826.18	0.00	0.00	0.00	
7,300.00	0.00	0.00	6,857.66	-1,212.09	-1,365.93	1,826.18	0.00	0.00	0.00	
7,400.00	0.00	0.00	6,957.66	-1,212.09	-1,365.93	1,826.18	0.00	0.00	0.00	
7,500.00	0.00	0.00	7,057.66	-1,212.09	-1,365.93	1,826.18	0.00	0.00	0.00	
7,600.00	0.00	0.00	7,157.66	-1,212.09	-1,365.93	1,826.18	0.00	0.00	0.00	
7,700.00	0.00	0.00	7,257.66	-1,212.09	-1,365.93	1,826.18	0.00	0.00	0.00	
7,800.00	0.00	0.00	7,357.66	-1,212.09	-1,365.93	1,826.18	0.00	0.00	0.00	
7,900.00	0.00	0.00	7,457.66	-1,212.09	-1,365.93	1,826.18	0.00	0.00	0.00	
8,000.00	0.00	0.00	7,557.66	-1,212.09	-1,365.93	1,826.18	0.00	0.00	0.00	
8,100.00	0.00	0.00	7,657.66	-1,212.09	-1,365.93	1,826.18	0.00	0.00	0.00	
8,200.00	0.00	0.00	7,757.66	-1,212.09	-1,365.93	1,826.18	0.00	0.00	0.00	
8,300.00	0.00	0.00	7,857.66	-1,212.09	-1,365.93	1,826.18	0.00	0.00	0.00	
8,400.00	0.00	0.00	7,957.66	-1,212.09	-1,365.93	1,826.18	0.00	0.00	0.00	
8,500.00	0.00	0.00	8,057.66	-1,212.09	-1,365.93	1,826.18	0.00	0.00	0.00	
8,525.34	0.00	0.00	8,083.00	-1,212.09	-1,365.93	1,826.18	0.00	0.00	0.00	
Mesaverde										
8,600.00	0.00	0.00	8,157.66	-1,212.09	-1,365.93	1,826.18	0.00	0.00	0.00	
8,700.00	0.00	0.00	8,257.66	-1,212.09	-1,365.93	1,826.18	0.00	0.00	0.00	
8,800.00	0.00	0.00	8,357.66	-1,212.09	-1,365.93	1,826.18	0.00	0.00	0.00	
8,900.00	0.00	0.00	8,457.66	-1,212.09	-1,365.93	1,826.18	0.00	0.00	0.00	
9,000.00	0.00	0.00	8,557.66	-1,212.09	-1,365.93	1,826.18	0.00	0.00	0.00	
9,100.00	0.00	0.00	8,657.66	-1,212.09	-1,365.93	1,826.18	0.00	0.00	0.00	
9,200.00	0.00	0.00	8,757.66	-1,212.09	-1,365.93	1,826.18	0.00	0.00	0.00	
9,300.00	0.00	0.00	8,857.66	-1,212.09	-1,365.93	1,826.18	0.00	0.00	0.00	
9,400.00	0.00	0.00	8,957.66	-1,212.09	-1,365.93	1,826.18	0.00	0.00	0.00	
9,500.00	0.00	0.00	9,057.66	-1,212.09	-1,365.93	1,826.18	0.00	0.00	0.00	
9,600.00	0.00	0.00	9,157.66	-1,212.09	-1,365.93	1,826.18	0.00	0.00	0.00	



Scientific Drilling
Planning Report

Database:	EDM 2003.16 Multi User Db	Local Co-ordinate Reference:	Well NBU 922-3101AS
Company:	Kerr McGee Oil and Gas Onshore LP	TVD Reference:	GL 5034' & RKB 18' @ 5052.00ft
Project:	Uintah County, UT NAD27	MD Reference:	GL 5034' & RKB 18' @ 5052.00ft
Site:	NBU 922-31I Pad	North Reference:	True
Well:	NBU 922-3101AS	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

Planned Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
9,700.00	0.00	0.00	9,257.66	-1,212.09	-1,365.93	1,826.18	0.00	0.00	0.00	
9,742.34	0.00	0.00	9,300.00	-1,212.09	-1,365.93	1,826.18	0.00	0.00	0.00	

Targets										
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude	
NBU 922-3101AS PBHL	0.00	0.00	9,300.00	-1,212.09	-1,365.93	609,191.84	2,566,523.68	39° 59' 17.910 N	109° 28' 40.530 W	
- hit/miss target										
- Shape										
- plan hits target center										
- Circle (radius 25.00)										

Casing Points						
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (in)	Hole Diameter (in)		
2,100.00	2,100.00	Surface Casing	9.625	13.500		

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
1,295.00	1,295.00	Green River		0.00		
4,748.08	4,509.00	Wasatch		0.00		
8,525.34	8,083.00	Mesaverde		0.00		

NBU 922-3101AS

Pad: NBU 922-31I

Surface: 2,314' FSL, 128' FEL (NE/4SE/4)

BHL: 1,098' FSL 1,494' FEL (SW/4SE/4)

Sec. 31 T9S R22E

Uintah, Utah

Mineral Lease: UO 1207A

ONSHORE ORDER NO. 1

DRILLING PROGRAM

1. – 2. **Estimated Tops of Important Geologic Markers:**
Estimated Depths of Anticipated Water, Oil, Gas, or Mineral Formations:

<u>Formation</u>	<u>Depth</u>	<u>Resource</u>
Uinta	0 – Surface	
Green River	1,296'	
Birds Nest	1,600'	Water
Mahogany	2,083'	Water
Wasatch	4,509'	Gas
Mesaverde	7,085'	Gas
MVU2	8,083'	Gas
MVL1	8,632'	Gas
TVD	9,300'	
TD	9,742'	

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

Please refer to the attached Drilling Program.

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

Please refer to the attached Drilling Program.

5. **Drilling Fluids Program:**

Please refer to the attached Drilling Program.

6. **Evaluation Program:**

Please refer to the attached Drilling Program.

7. **Abnormal Conditions:**

Maximum anticipated bottomhole pressure calculated at 9,742' TD, approximately equals 5,220 psi (calculated at 0.60 psi/foot).

Maximum anticipated surface pressure equals approximately 3,507 psi (bottomhole pressure minus the pressure of a partially evacuated hole calculated at 0.22 psi/foot).

8. Anticipated Starting Dates:

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

9. Variances:

Please refer to the attached Drilling Program.

Onshore Order #2 – Air Drilling Variance

Kerr-McGee Oil & Gas Onshore LP (KMG) respectfully requests a variance to several requirements associated with air drilling outlined in Onshore Order 2

- *Blowout Prevention Equipment (BOPE) requirements;*
- *Mud program requirements; and*
- *Special drilling operation (surface equipment placement) requirements associated with air drilling.*

This Standard Operating Practices addendum provides supporting information as to why KMG current air drilling practices for constructing the surface casing hole should be granted a variance to Onshore Order 2 air drilling requirements.

The reader should note that the air rig is used only to construct a stable surface casing hole through a historically difficult lost circulation zone. A conventional rotary rig follows the air rig, and is used to drill and construct the majority of the wellbore.

More notable, KMG has used the air rig layout and procedures outlined below to drill the surface casing hole in approximately 675 wells without incident of blow out or loss of life.

Background

In a typical well, KMG utilizes an air rig for drilling the surface casing hole, an interval from the surface to surface casing depths, which varies in depth from 1,700 to 2,800 feet. The air rig drilling operation does not drill through productive or over pressured formations in KMG field, but does penetrate the Uinta and Green River Formations. The purpose of the air drilling operation is to overcome the severe loss circulation zone in the Green River known as the Bird's Nest while creating a stable hole for the surface casing. The surface casing hole is generally drilled to approximately 500 feet below the Bird's Nest.

Before the surface air rig is mobilized, a rathole rig is utilized to set and cement conductor pipe through a competent surface formation. Generally, the conductor is set at 40 feet. In some cases, conductor may be set deeper in areas that the surface formation is not found competent. This rig also drills the rat and mouse holes in preparation for the surface casing and production string drilling operations.

The air rig is then mobilized to drill the surface casing hole by drilling a 12-1/4 inch hole to just above the Bird's Nest interval with an air hammer. The hammer is then tripped and replaced with a 12-1/4 inch tri-cone bit. The tri-cone bit is used to drill to the surface casing point, approximately 500 feet below the loss circulation zone (Bird's Nest). The 9-5/8 inch surface casing is then run and cemented in place, thereby isolating the lost circulation zone.

KMG fully appreciates Onshore Order 2 well control and safety requirements associated with a typical air drilling operations. However, the requirements of Onshore Order 2 are excessive with respect to the air rig layout and drilling operation procedures that are currently in practice to drill and control the surface casing hole in KMG Fields.

Variance for BOPE Requirements

The air rig operation utilizes a properly lubricated and maintained air bowl diverter system which diverts the drilling returns to a six-inch blooie line. The air bowl is the only piece of BOPE equipment which is installed during drilling operations and is sufficient to contain the air returns associated with this drilling operation. As was discussed earlier, the drilling of the surface hole does not encounter any over pressured or productive zones, and as a result standard BOPE equipment should not be required. In addition, standard drilling practices do not support the use of BOPE on 40 feet of conductor pipe.

Variance for Mud Material Requirements

Onshore Order 2 also states that sufficient quantities of mud materials shall be maintained or readily accessible for the purpose of assuring adequate well control. Once again, the surface hole drilling operations does not encounter over pressured or productive intervals, and as a result there is not a need to control pressure in the surface hole with a mud system. Instead of mud, the air rigs utilize water from the reserve pit for well control, if necessary. A skid pump which is located near the reserve pit (see attachment) will supply the water to the well bore.

Variance for Special Drilling Operation (surface equipment placement) Requirements

Onshore Order 2 requires specific safety distances or setbacks for the placement of associated standard air drilling equipment, wellbore, and reserve pits. The air rigs used to drill the surface holes are not typical of an air rig used to drill a producing hole in other parts of the US. These are smaller in nature and designed to fit a KMG location. The typical air rig layout for drilling surface hole in the field is attached.

Typically the blooie line discharge point is required to be 100 feet from the well bore. In the case of a KMG well, the reserve pit is only 45 feet from the rig and is used for the drill cuttings. The blooie line, which transports the drill cuttings from the well to the reserve pit, subsequently discharges only 45 feet from the well bore.

Typically the air rig compressors are required to be located in the opposite direction from the blooie line and a minimum of 100 feet from the well bore. At the KMG locations, the air rig compressors are approximately 40 feet from the well bore and approximately 60 feet from the blooie line discharge due to the unique air rig design. The air compressors (see attachment) are located on the rig (1250 cfm) and on a standby trailer (1170 cfm). A booster sits between the two compressors and boosts the output from 350 psi to 2000 psi. The design does put the booster and standby compressor opposite from the blooie line.

Lastly, Onshore Order 2 addresses the need for an automatic igniter or continuous pilot light on the blooie line. The air rig does not utilize an igniter as the surface hole drilling operation does not encounter productive formations.

Conclusion

The air rig operating procedures and the attached air rig layout have effectively maintained well control while drilling the surface holes in KMG Fields. KMG respectfully requests a variance from Onshore Order 2 with respect to air drilling well control requirements as discussed above.

10. Other Information:

Please refer to the attached Drilling Program.



KERR-McGEE OIL & GAS ONSHORE LP
DRILLING PROGRAM

CASING PROGRAM

	SIZE	INTERVAL	WT.	GR.	CPLG.	DESIGN FACTORS		
						BURST	COLLAPSE	TENSION
CONDUCTOR	14"	0-40'				3,520	2,020	453,000
SURFACE	9-5/8"	0 to 2,300	36.00	J-55	LTC	0.93	1.88	6.96
PRODUCTION	4-1/2"	0 to 9,742	11.60	I-80	LTC	2.15	1.12	2.04

- 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 - (0.22 psi/ft-partial evac gradient x TD)
 (Burst Assumptions: TD = 11.7 ppg) 0.22 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 3,507 psi
- 3) Maximum Anticipated Bottom Hole Pressure (MABHP) = Pore Pressure at TD
 (Burst Assumptions: TD = 11.7 ppg) 0.60 psi/ft = bottomhole gradient
 (Collapse Assumption: Fully Evacuated Casing, Max MW) (Tension Assumptions: Air Weight of Casing*Buoy.Fact. of water)
MABHP 5,220 psi

CEMENT PROGRAM

		FT. OF FILL	DESCRIPTION	SACKS	EXCESS	WEIGHT	YIELD
SURFACE	LEAD	500'	Premium cmt + 2% CaCl + 0.25 pps flocele	215	60%	15.60	1.18
Option 1	TOP OUT CMT (6 jobs)	1,200'	20 gals sodium silicate + Premium cmt + 2% CaCl + 0.25 pps flocele Premium cmt + 2% CaCl	380	0%	15.60	1.18
SURFACE		NOTE: If well will circulate water to surface, option 2 will be utilized					
Option 2	LEAD	1,800'	65/35 Poz + 6% Gel + 10 pps gilsonite + 0.25 pps Flocele + 3% salt BWOW	430	35%	12.60	1.81
	TAIL	500'	Premium cmt + 2% CaCl + 0.25 pps flocele	180	35%	15.60	1.18
	TOP OUT CMT	as required	Premium cmt + 2% CaCl	as req.		15.60	1.18
PRODUCTION	LEAD	4,002'	Premium Lite II + 3% KCl + 0.25 pps celloflake + 5 pps gilsonite + 10% gel + 0.5% extender	380	40%	11.00	3.38
	TAIL	5,740'	50/50 Poz/G + 10% salt + 2% gel + 0.1% R-3	1,410	40%	14.30	1.31

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

FLOAT EQUIPMENT & CENTRALIZERS

SURFACE	Guide shoe, 1 jt, insert float. Centralize first 3 joints with bow spring centralizers. Thread lock guide shoe
PRODUCTION	Float shoe, 1 jt, float collar. No centralizers will be used.

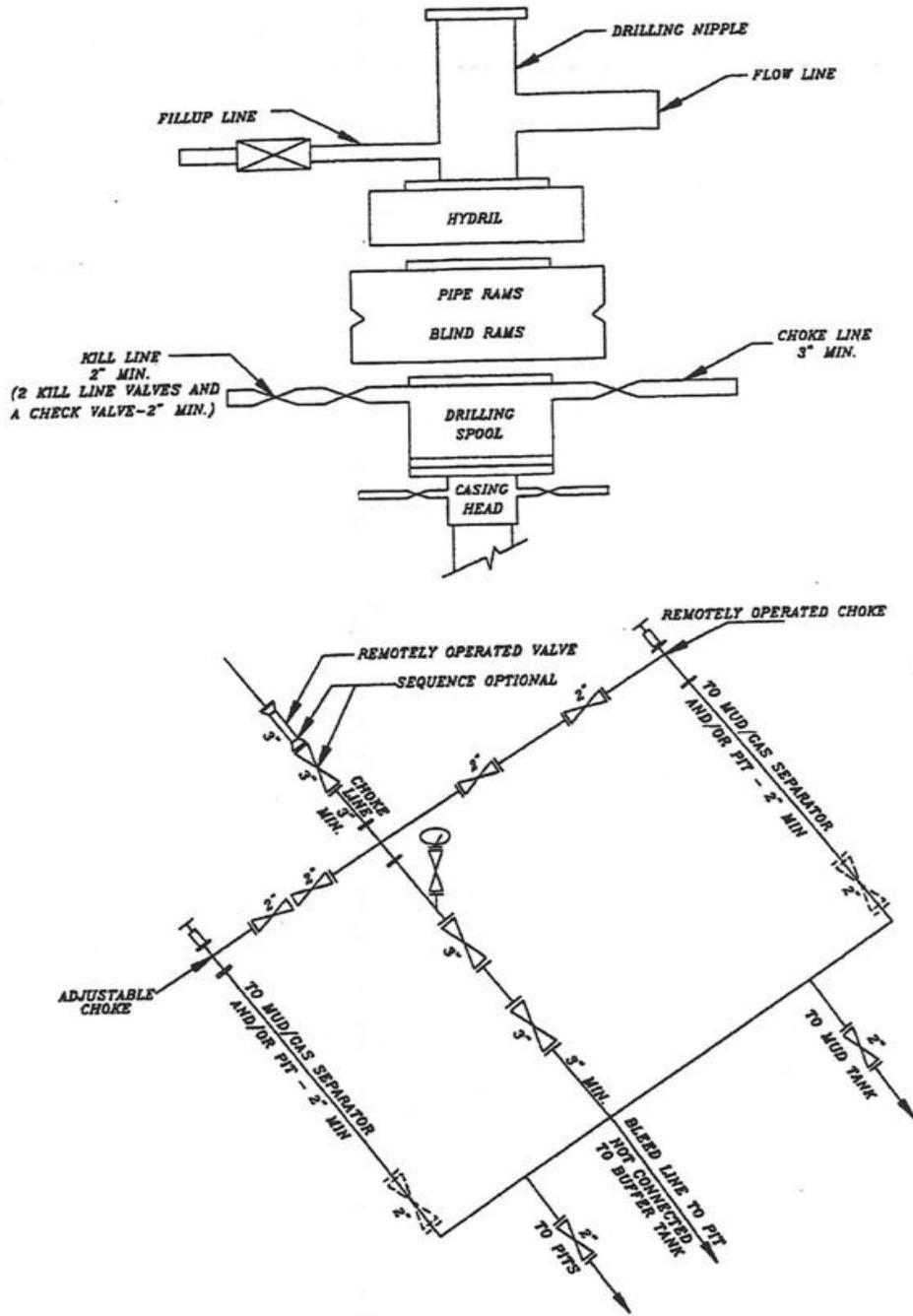
ADDITIONAL INFORMATION

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. The BOPE will be installed before the production hole is drilled and tested to 5,000 psi (annular to 2,500 psi) prior to drilling out the surface casing shoe. Record on chart recorder and tour sheet. Function test rams on each trip. Maintain safety valve and inside BOP on rig floor at all times. Most rigs have top drives; however, if used, the Kelly is to be equipped with upper and lower kelly valves.
 Surveys will be taken at 1,000' minimum intervals.
 Most rigs have PVT System for mud monitoring. If no PVT is available, visual monitoring will be utilized.

DRILLING ENGINEER: _____ **DATE:** _____
 John Huycke / Emile Goodwin

DRILLING SUPERINTENDENT: _____ **DATE:** _____
 John Merkel / Lovel Young

EXHIBIT A NBU 921-3101AS



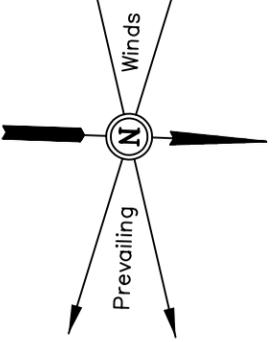
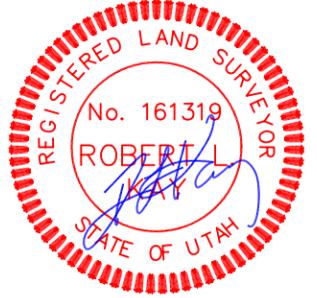
SCHEMATIC DIAGRAM OF 5,000 PSI BOP STACK

Kerr-McGee Oil & Gas Onshore LP

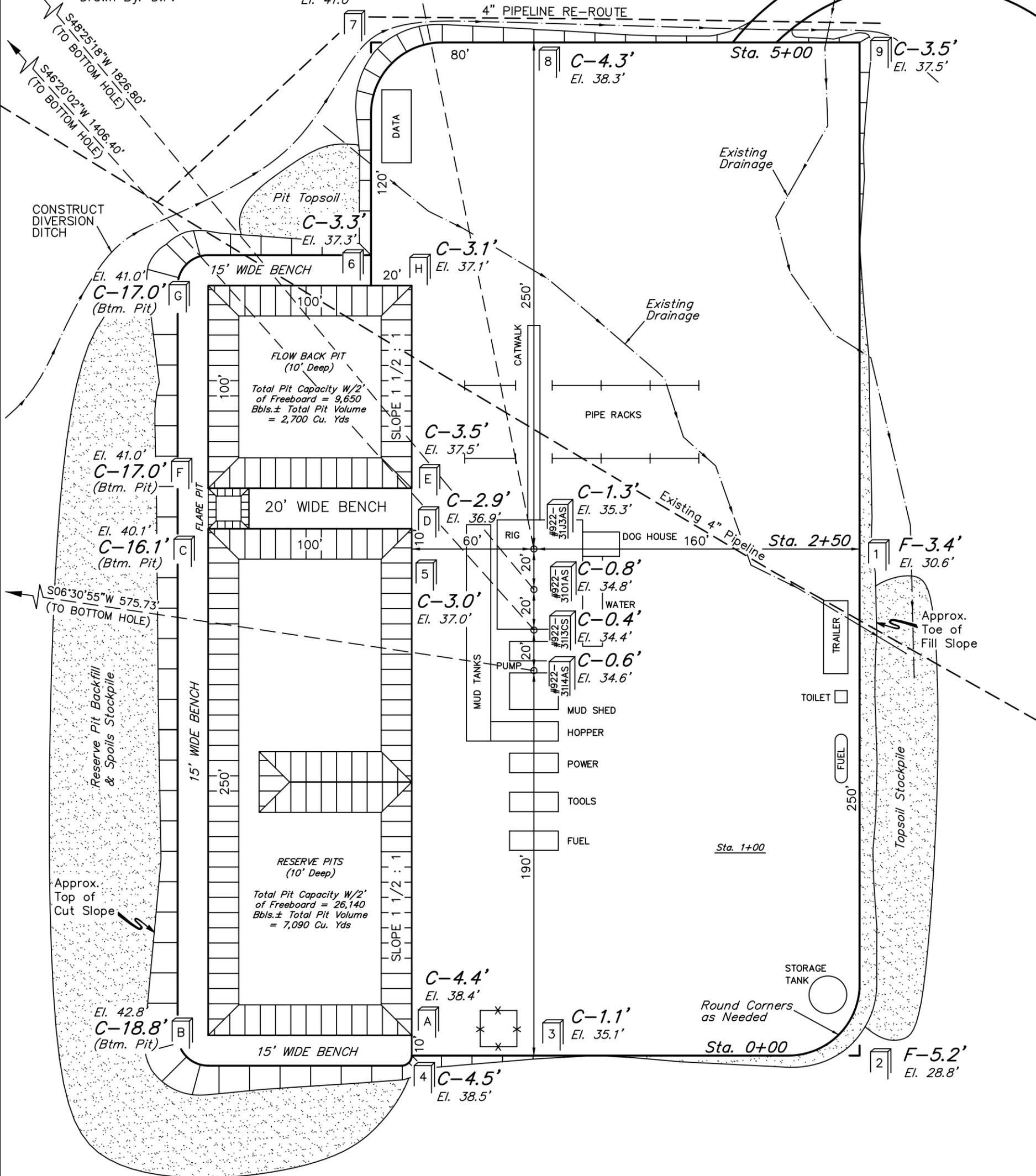
LOCATION LAYOUT FOR

NBU #922-31J3AS, #922-31I3CS, #922-31O1AS & #922-31I4AS
SECTION 31, T9S, R22E, S.L.B.&M.
NE 1/4 SE 1/4

FIGURE #1



SCALE: 1" = 50'
DATE: 11-11-08
Drawn By: D.P.



NOTES:

Elev. Ungraded Ground At #922-31J3AS At Loc. Stake = 5035.3'
FINISHED GRADE ELEV. AT #922-31J3AS LOC. STAKE = 5034.0'

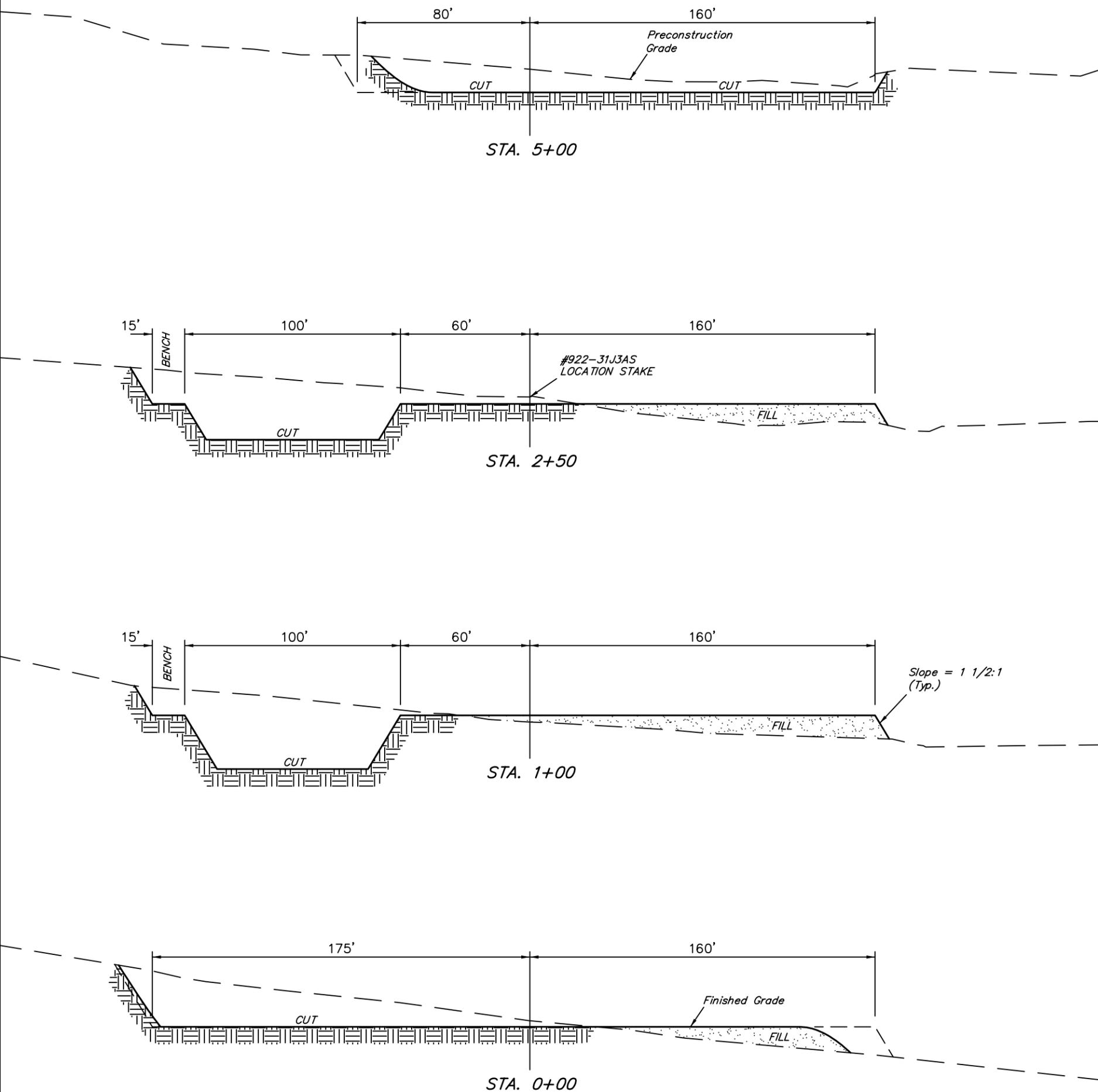
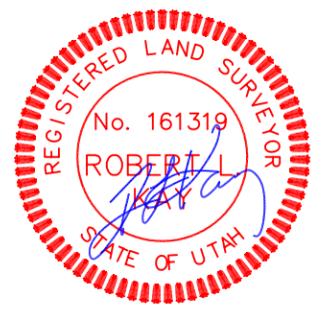
Kerr-McGee Oil & Gas Onshore LP

TYPICAL CROSS SECTIONS FOR

NBU #922-31J3AS, #922-31I3CS, #922-31O1AS & #922-31I4AS
SECTION 31, T9S, R22E, S.L.B.&M.
NE 1/4 SE 1/4

FIGURE #2

1" = 20'
X-Section Scale
1" = 50'
DATE: 11-11-08
Drawn By: D.P.



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

* NOTE:
FILL QUANTITY INCLUDES 5% FOR COMPACTION

APPROXIMATE ACREAGES

WELL SITE DISTURBANCE	= ± 4.649 ACRES
ACCESS ROAD DISTURBANCE	= ± 0.419 ACRES
PIPELINE DISTURBANCE	= ± 0.344 ACRES
TOTAL	= ± 5.412 ACRES

APPROXIMATE YARDAGES

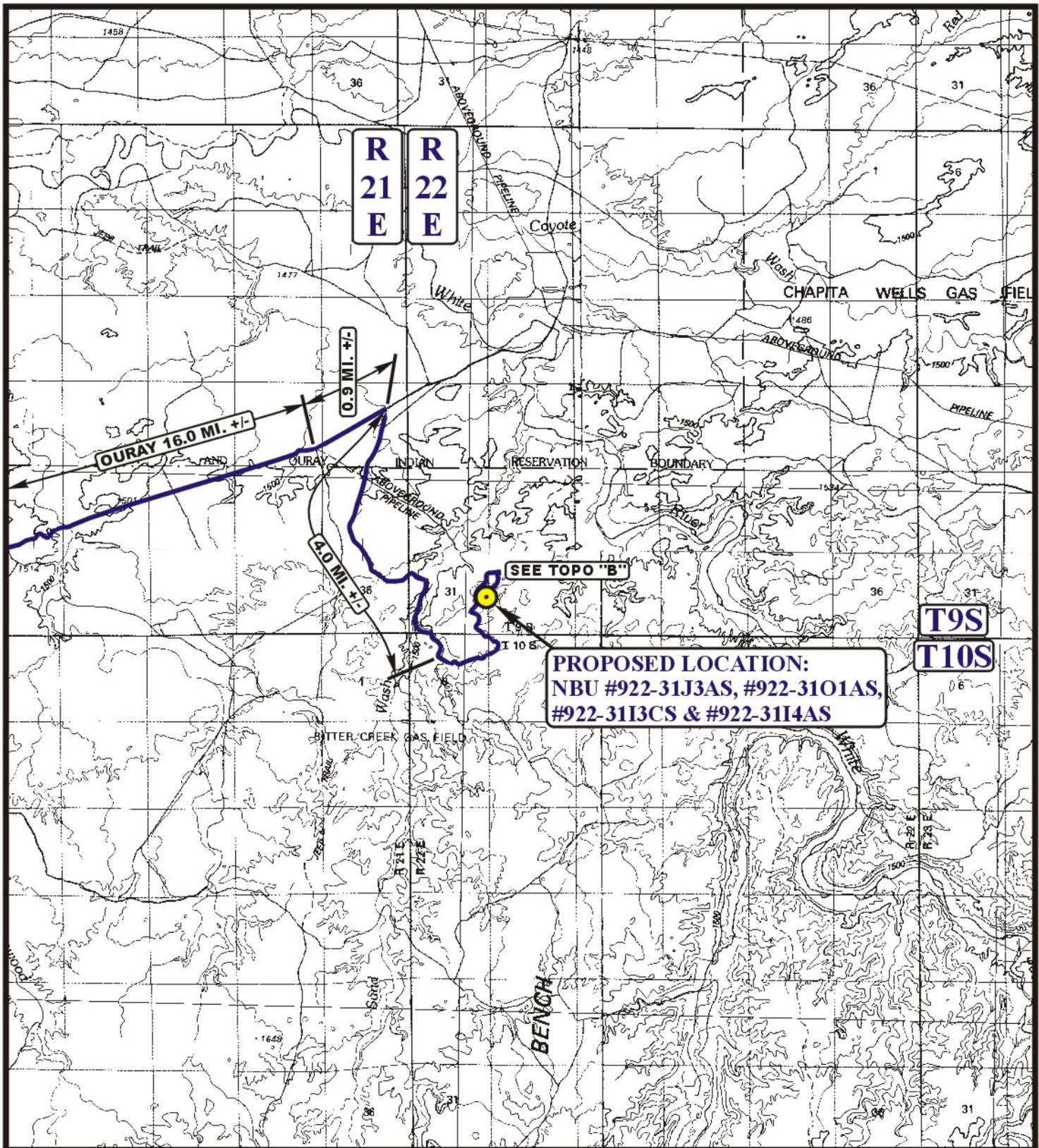
(6") Topsoil Stripping	= 3,240 Cu. Yds.
Remaining Location	= 20,190 Cu. Yds.
TOTAL CUT	= 23,430 CU.YDS.
FILL	= 6,980 CU.YDS.

EXCESS MATERIAL	= 16,450 Cu. Yds.
Topsoil & Pit Backfill (1/2 Pit Vol.)	= 8,140 Cu. Yds.
EXCESS UNBALANCE (After Interim Rehabilitation)	= 8,310 Cu. Yds.

Kerr-McGee Oil & Gas Onshore LP
NBU #922-31J3AS, #922-31O1AS, #922-31I3CS &
#922-31I4AS
SECTION 31, 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 3.8 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE NORTHEAST; PROCEED IN A NORTHEASTERLY DIRECTION APPROXIMATELY 0.9 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE SOUTHWEST; TURN RIGHT AND PROCEED IN A SOUTHWESTERLY, THEN SOUTHEASTERLY DIRECTION APPROXIMATELY 4.0 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE SOUTHEAST; TURN LEFT AND PROCEED IN A SOUTHEASTERLY, THEN EASTERLY, THEN NORTHWESTERLY DIRECTION APPROXIMATELY 1.5 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE NORTHEAST; TURN RIGHT AND PROCEED IN A NORTHEASTERLY, THEN EASTERLY DIRECTION APPROXIMATELY 0.6 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE SOUTHWEST; TURN RIGHT AND PROCEED IN A SOUTHWESTERLY DIRECTION APPROXIMATELY 250' TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE SOUTH; TURN LEFT AND PROCEED IN A SOUTHERLY, THEN SOUTHWESTERLY DIRECTION APPROXIMATELY 0.3 MILES TO THE BEGINNING OF THE PROPOSED ROAD TO THE SOUTHWEST; FOLLOW ROAD FLAGS IN A SOUTHWESTERLY DIRECTION APPROXIMATELY 0.1 TO THE PROPOSED LOCATION.

TOTAL DISTANCE FROM VERNAL, UTAH TO THE PROPOSED WELL LOCATION IS APPROXIMATELY 54.4 MILES.



**R
21
E**

**R
22
E**

T9S

T10S

**PROPOSED LOCATION:
NBU #922-31J3AS, #922-31O1AS,
#922-31I3CS & #922-31I4AS**

LEGEND:

 **PROPOSED LOCATION**

Kerr-McGee Oil & Gas Onshore LP

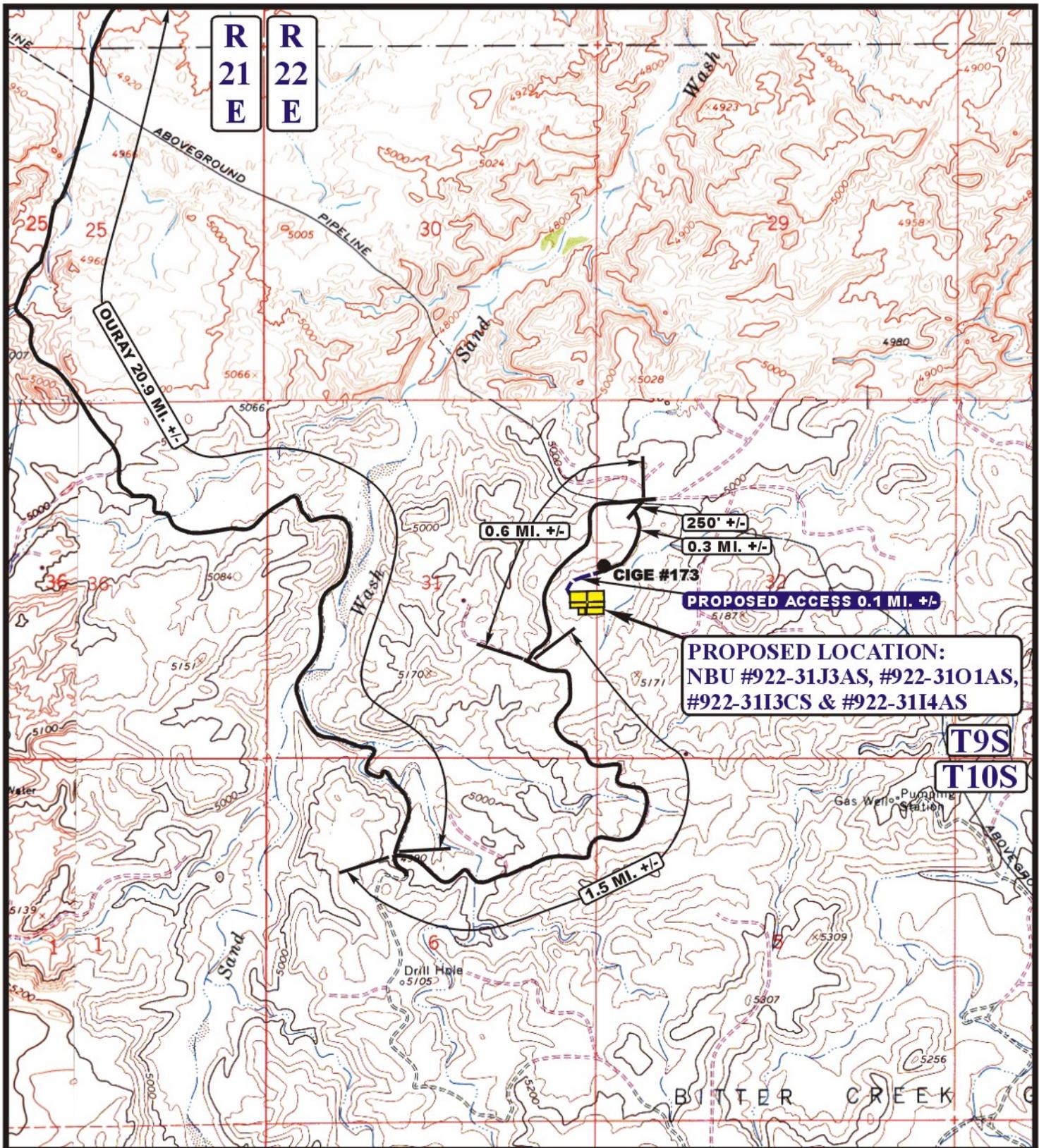
NBU #922-31J3AS, #922-31I1AS, #922-31I3CS & #922-31I4AS
SECTION 31, T9S, R22E, S.L.B.&M.
NE 1/4 SE 1/4

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

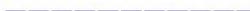


TOPOGRAPHIC **11 11 08**
MAP MONTH DAY YEAR
SCALE: 1:100,000 DRAWN BY: J.J. REVISED: 00-00-00





LEGEND:

-  EXISTING ROAD
-  PROPOSED ACCESS ROAD

Kerr-McGee Oil & Gas Onshore LP

NBU #922-31J3AS, #922-31I1AS, #922-31I3CS & #922-31I4AS
SECTION 31, T9S, R22E, S.L.B.&M.
NE 1/4 SE 1/4



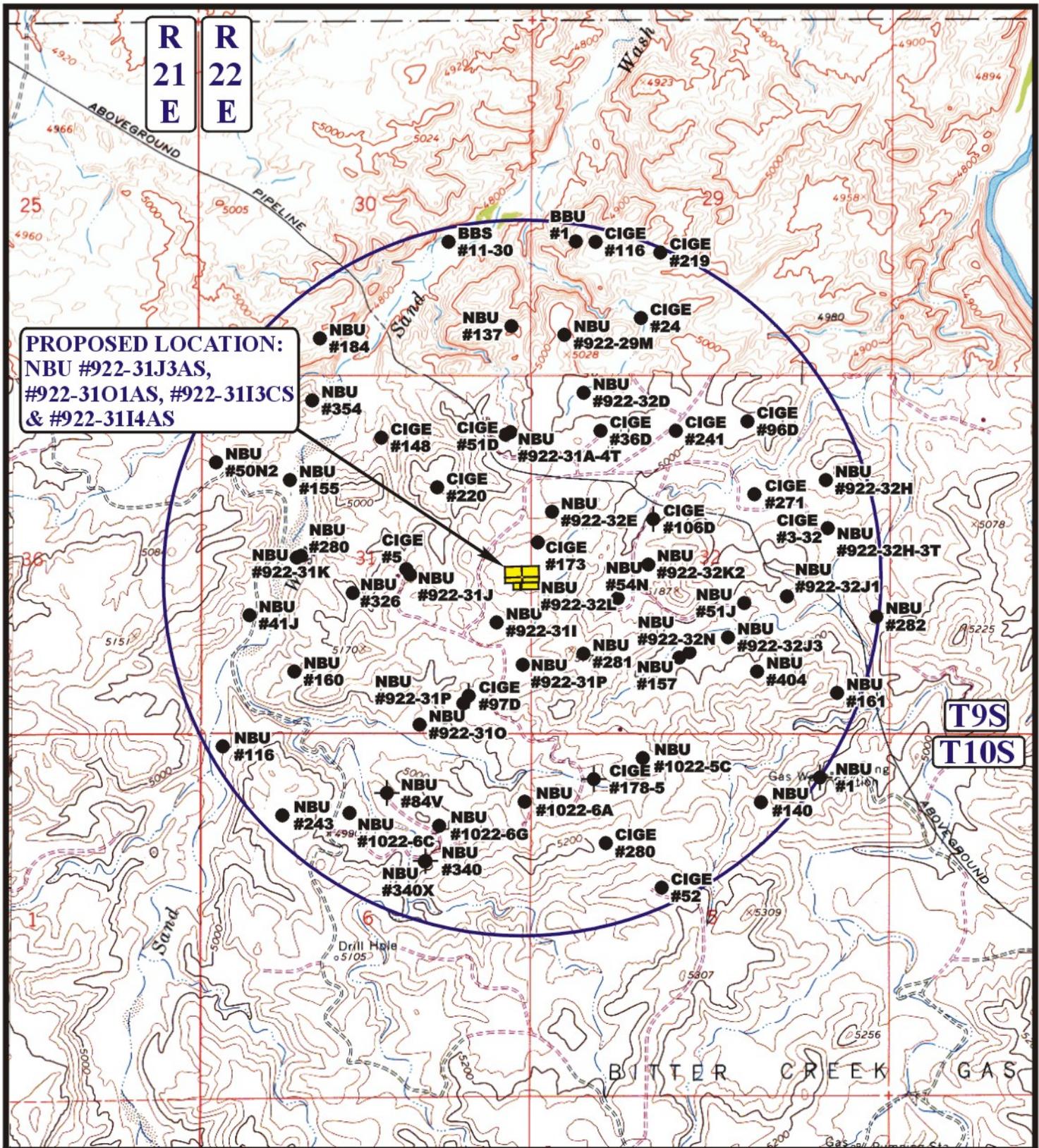
Utah Engineering & Land Surveying
85 South 200 East Vernal, Utah 84078
(435) 789-1017 * FAX (435) 789-1813



TOPOGRAPHIC MAP 11 11 08
MONTH DAY YEAR

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





**PROPOSED LOCATION:
NBU #922-31J3AS,
#922-31O1AS, #922-31I3CS
& #922-31I4AS**

LEGEND:

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

Kerr-McGee Oil & Gas Onshore LP

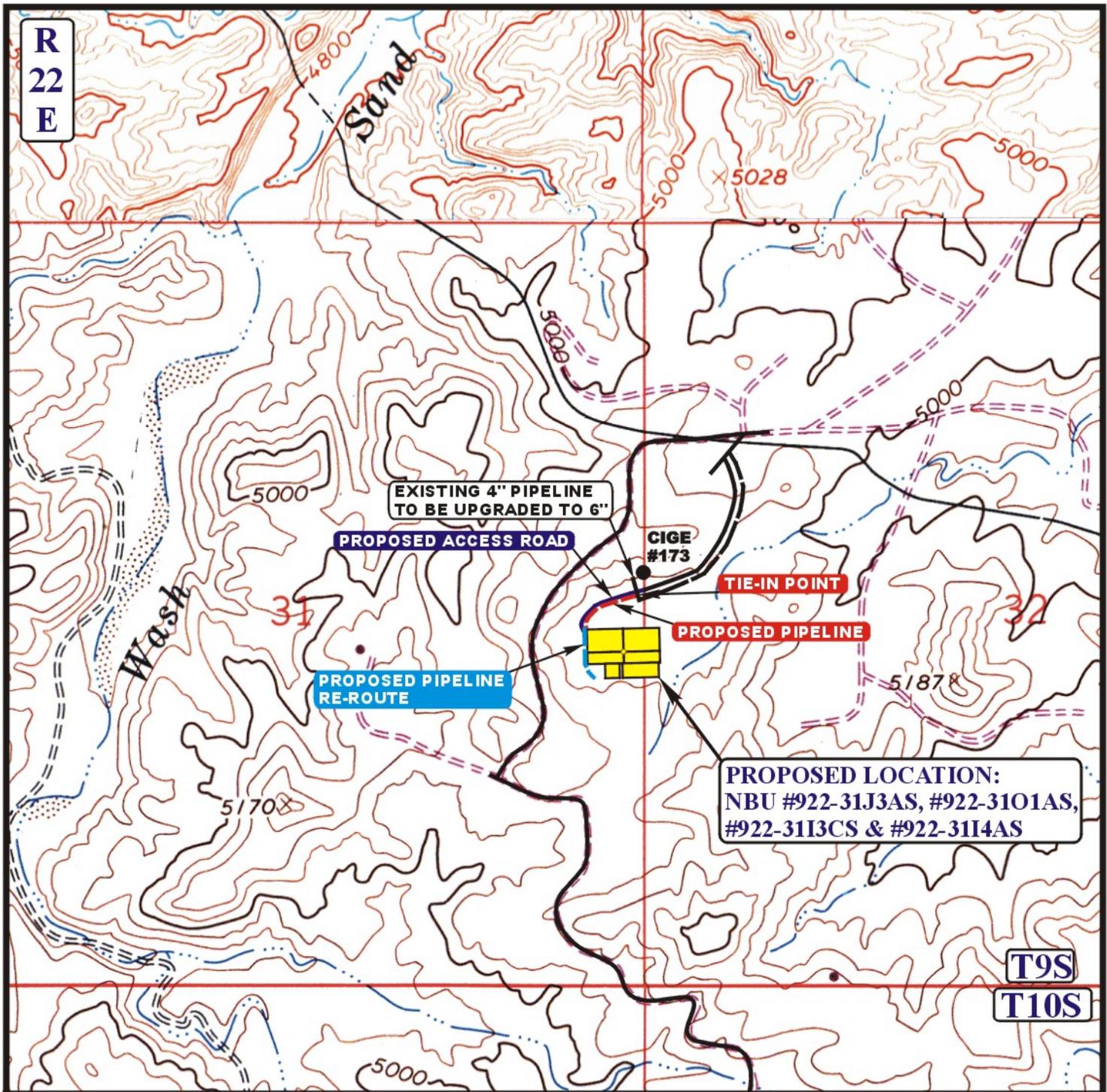
NBU #922-31J3AS, #922-31I1AS, #922-31I3CS & #922-31I4AS
SECTION 31, T9S, R22E, S.L.B.&M.
NE 1/4 SE 1/4

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



TOPOGRAPHIC MAP 11 11 08
MONTH DAY YEAR
SCALE: 1" = 2000' DRAWN BY: J.J. REVISED: 00-00-00





APPROXIMATE TOTAL PIPELINE RE-ROUTE DISTANCE = 392' +/-

APPROXIMATE TOTAL PIPELINE UPGRADE DISTANCE = 1,870' +/-

APPROXIMATE TOTAL PIPELINE DISTANCE = 500' +/-

LEGEND:

- PROPOSED ACCESS ROAD
- EXISTING PIPELINE
- PROPOSED PIPELINE
- PROPOSED PIPELINE RE-ROUTE

Kerr-McGee Oil & Gas Onshore LP

NBU #922-31J3AS, #922-31I1AS, #922-31I3CS & #922-31I4AS
SECTION 31, T9S, R22E, S.L.B.&M.
NE 1/4 SE 1/4

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



TOPOGRAPHIC 11 11 08
MAP MONTH DAY YEAR
SCALE: 1" = 1000' DRAWN BY: J.J. REVISED: 00-00-00

D
TOPO

Kerr-McGee Oil & Gas Onshore LP

NBU #922-31J3AS, #922-31O1AS, #922-31I3CS & #922-31I4AS
LOCATED IN UINTAH COUNTY, UTAH
SECTION 31, T9S, R22E, S.L.B.&M.



PHOTO: VIEW FROM CORNER #5 TO LOCATION STAKES

CAMERA ANGLE: NORTHERLY



PHOTO: VIEW FROM BEGINNING OF PROPOSED ACCESS

CAMERA ANGLE: WESTERLY



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

LOCATION PHOTOS	11	11	08	PHOTO
	MONTH	DAY	YEAR	
TAKEN BY: L.K.	DRAWN BY: J.J.		REVISED: 00-00-00	

Kerr-McGee Oil & Gas Onshore LP

NBU 922-31I3CS

Surface: 2,314' FSL, 108' FEL (NE/4SE/4)

BHL: 1,341' FSL 1,125' FEL (NE/4SE/4)

Minerals: State – UO 1530A

NBU 922-31I4AS

Surface: 2,315' FSL, 88' FEL (NE/4SE/4)

BHL: 1,743' FSL 153' FEL (NE/4SE/4)

Minerals: State – UO 1530A

NBU 922-31J3AS

Surface: 2,313' FSL, 148' FEL (NE/4SE/4)

BHL: 1,871' FSL 1,973' FEL (NW/4SE/4)

Minerals: State – UO 1207A

NBU 922-31O1AS

Surface: 2,314' FSL, 128' FEL (NE/4SE/4)

BHL: 1,098' FSL 1,494' FEL (SW/4SE/4)

Minerals: State – UO 1207A

Section 31 Township 9 South Range 22 East

Pad: NBU 922-31I

Uintah, Utah

Surface: State

ONSHORE ORDER NO. 1

MULTI-POINT SURFACE USE & OPERATIONS PLAN

Directional Drilling:

In accordance with Oil & Gas Conservation Rule R649-3-11 pertaining to Directional Drilling, this well will be directionally drilled in order to access portions of our lease which are otherwise inaccessible due to topography.

1. Existing Roads:

Refer to Topo Map A for directions to the location.

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

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

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

2. Planned Access Roads:

Approximately ± 0.1 mi. of new access road is proposed. Please refer to the attached Topo Map B.

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

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

The access road was centerline flagged during time of staking.

Surfacing material may be necessary, depending upon weather conditions.

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

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

Please refer to Topo Map C.

4. Location of Existing & Proposed Facilities:

The following guidelines will apply if the well is productive.

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

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

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

All facilities will be painted within six months of installation. Facilities required to comply with the Occupational Safety and Health Act (OSHA) will be excluded. The required color is Shadow Gray, a non-reflective earthtone.

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

5. Location and Type of Water Supply:

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

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

No water well is to be drilled on this lease.

6. Source of Construction Materials:

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

Any gravel will be obtained from a commercial source.

7. Methods of Handling Waste Materials:

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

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

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

A plastic reinforced liner and felt will be used; it will be a minimum of 20 mil thick, with sufficient bedding used to cover any rocks. The liner will overlap the pit walls and be covered with dirt and/or rocks to hold it in place. No trash or scrap that could puncture the liner will be disposed of in the pit. Any spills of oil, gas, salt water, or other noxious fluids will be immediately cleaned up and removed to an approved disposal site.

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

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

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

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

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

Any produced water from the proposed well will be contained in a water tank and will then be hauled by truck to one of the pre-approved disposal sites: RNI in Sec. 5 T9S R22E, NBU #159 in Sec. 35 T9S R21E, Ace Oilfield in Sec. 2 T6S R20E, MC&MC in Sec. 12 T6S R19E, Pipeline Facility in Sec. 36 T9S R20E, Goat Pasture Evaporation Pond in SW/4 Sec. 16 T10S R22E, Bonanza Evaporation Pond in Sec. 2 T10S R23E.

8. Ancillary Facilities:

None are anticipated.

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

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

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

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

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

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

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

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

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

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

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

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

10. Plans for Reclamation of the Surface:

Producing Location:

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

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

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

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

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

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

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

Dry Hole/Abandoned Location:

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

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

11. Surface/Mineral Ownership:

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

12. Other Information:

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

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

A Class III archaeological survey report and paleontological survey report is attached.

Kerr-McGee Oil & Gas Onshore LP
NBU 922-31I3CS/ 31I4AS/ 31J3AS/ 31O1AS

Page 7
Surface Use and Operations Plan

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

Kathy Schneebeck Dulnoan
Staff Regulatory Analyst
Kerr-McGee Oil & Gas Onshore LP
PO Box 173779
Denver, CO 80217-3779
(720) 929-6226

Tommy Thompson
General Manager, Drilling
Kerr-McGee Oil & Gas Onshore LP
PO Box 173779
Denver, CO 80217-3779
(720) 929-6724

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

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

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

Bond coverage pursuant to 43 CFR 3104 for lease activities is being provided by State Surety Bond 22013542.

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 I have full knowledge of the State and Federal laws applicable to this operation; 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 in conformity with this APD package and the terms and conditions under which it is approved. I also certify that I, or the company I represent, am responsible for operations conducted under this application. These statements are subject to the provisions of 18 U.S.C. 1001 for the filing of false statements.

Kathy Schneebeck Dulnoan

April 20, 2009
Date

Paleontological Reconnaissance Survey Report

**Survey of Kerr McGee's Proposed Directional & Multi-Well Pads,
Access Roads & Pipelines for "NBU #922-31J3AS, 31I3CS,
31O1AS & 31I4AS" (Sec. 31 & 32, T 9 S, R 22 E), "NBU
#1022-4E3, 4E2S, 5I2S & 5H4" & "NBU
#1022-7O4AS, 7O4DS, 7N1S &
7N4S" (Sec. 4, 5, 7, 17 & 18,
T 10 S, R 22 E)**

Archy Bench
Topographic Quadrangle
Uintah County, Utah

March 6, 2009

Prepared by Stephen D. Sandau
Paleontologist for
Intermountain Paleo-Consulting
P. O. Box 1125
Vernal, Utah 84078

INTRODUCTION

At the request of Raleen White of Kerr McGee Onshore LP and authorized by the BLM Vernal Field Office and James Kirkland of the Office of the State Paleontologist, a paleontological reconnaissance survey of Kerr McGee's proposed directional & multi-well pads, access roads & pipelines for "NBU #922-31J3AS, 31I3CS, 31O1AS & 31I4AS" (Sec. 31 & 32, T 9 S, R 22 E), "NBU #1022-4E3, 4E2S, 5I2S & 5H4" and "NBU #1022-7O4AS, 7O4DS, 7N1S & 7N4S" (Sec. 4, 5, 7, 17 & 18, T 10 S, R 22 E) was conducted by Stephen Sandau, Simon Masters, and Tom Temme on November 12 & 13, 2008. The reconnaissance survey was conducted under the Utah BLM Paleontological Resources Use Permit #UT08-006C and Utah Paleontological Investigations Permit #07-356. This survey to locate, identify and evaluate paleontological resources was done to meet requirements of the National Environmental Policy Act of 1969 and other State and Federal laws and regulations that protect paleontological resources.

FEDERAL AND STATE REQUIREMENTS

As mandated by the Federal and State government, paleontologically sensitive geologic formations on State lands that are considered for exchange or may be impacted due to ground disturbance require paleontological evaluation. This requirement complies with:

- 1) The National Environmental Policy Act of 1969 (NEPA) (42 U.S.C. 4321.et. Seq., P.L. 91-190);
- 2) The Federal Land Policy and Management Act (FLPMA) of 1976 (90 Stat. 2743, 43 U.S.C. § 1701-1785, et. Seq., P.L. 94-579);
- 3) The National Historic Preservation Act. 16 U.S.C. § 470-1, P.L. 102-575 in conjunction with 42 U.S.C. § 5320; and
- 4) The Utah Geological Survey. S. C. A.: 63-73-1. (1-21) and U.C.A.: 53B-17-603

BLM, 2008: BLM IM 2009-011 Assessment and Mitigation of Potential Impacts to Paleontological Resources. USDI – BLM Washington Office directive, October 29, 2008 replaces the Condition Classification System from Handbook H-8270-1. The following section outlines the new Potential Fossil Yield Classification (PFYC) System. Geologic units are classified based on the relative abundance of vertebrate fossils or scientifically significant invertebrate or plant fossils and their sensitivity to adverse impacts, with a higher class number indicating a higher potential.

- **Class 1 – Very Low.** Geologic units (igneous, metamorphic, or Precambrian) not likely to contain recognizable fossil remains.
- **Class 2 – Low.** Sedimentary geologic units not likely to contain vertebrate fossils or scientifically significant non-vertebrate fossils. (Including modern eolian, fluvial, and colluvial deposits etc...)
- **Class 3 – Moderate or Unknown.** Fossiliferous sedimentary geologic units where fossil content varies in significance, abundance, and predictable occurrence; or sedimentary units of unknown fossil potential.

- **Class 3a – Moderate Potential.** The potential for a project to be sited on or impact a significant fossil locality is low, but is somewhat higher for common fossils.
- **Class 3b – Unknown Potential.** Units exhibit geologic features and preservational conditions that suggest significant fossils could be present, but little information about the paleontological resources of the unit or the area is known.
- **Class 4 – High.** Geologic units containing a high occurrence of vertebrate fossils or scientifically significant invertebrate or plant fossils, but may vary in abundance and predictability.
 - **Class 4a** – Outcrop areas with high potential are extensive (greater than two acres) and paleontological resources may be susceptible to adverse impacts from surface disturbing actions.
 - **Class 4b** – Areas underlain by geologic units with high potential but have lowered risks of disturbance due to moderating circumstances such as a protective layer of soil or alluvial material; or outcrop areas are smaller than two contiguous acres.
- **Class 5 – Very High.** Highly fossiliferous geologic units that consistently and predictably produce vertebrate fossils or scientifically significant invertebrate or plant fossils.
 - **Class 5a** - Outcrop areas with very high potential are extensive (greater than two acres) and paleontological resources may be susceptible to adverse impacts from surface disturbing actions.
 - **Class 5b** - Areas underlain by geologic units with very high potential but have lowered risks of disturbance due to moderating circumstances such as a protective layer of soil or alluvial material; or outcrop areas are smaller than two contiguous acres.

It should be noted that many fossils, though common and unimpressive in and of themselves, can be important paleo-environmental, depositional, and chronostratigraphic indicators.

LOCATION

Kerr McGee's proposed directional & multi-well pads, access roads & pipelines for "NBU #922-31J3AS, 31I3CS, 31O1AS & 31I4AS" (Sec. 31 & 32, T 9 S, R 22 E), "NBU #1022-4E3, 4E2S, 5I2S & 5H4" and "NBU #1022-7O4AS, 7O4DS, 7N1S & 7N4S" (Sec. 4, 5, 7, 17 & 18, T 10 S, R 22 E) are on lands managed by the BLM and the State of Utah Trust Lands Administration (SITLA), in the Sand Wash area, approximately 2-3 miles west of the White River, and about 18-22 miles west of Bonanza, UT. The project area can be found on the Archy Bench 7.5 minute U. S. Geological Survey Quadrangle Map, Uintah County, Utah.

PREVIOUS WORK

The basins of western North America have long produced some of the richest fossil collections in the world. Early Cenozoic sediments are especially well represented throughout the western interior. Paleontologists started field work in Utah's Uinta Basin as early as 1870 (Betts, 1871; Marsh, 1871, 1875a, 1875b). The Uinta Basin is located in the northeastern corner of Utah and covers approximately 31,000 sq. km (12,000 sq. miles) ranging in elevation from 1,465 to 2,130 m (4,800 to 7,000 ft) (Marsell, 1964; Hamblin et al., 1987). Middle to late Eocene time marked a period of dramatic change in the climate, flora, (Stucky, 1992) and fauna (Black and Dawson, 1966) of North America.

GEOLOGICAL AND PALEONTOLOGICAL OVERVIEW

Early in the geologic history of Utah, some 1,000 to 600 Ma, an east-west trending basin developed creating accommodation for 25,000 feet of siliclastics. Uplift of that filled-basin during the early Cenozoic formed the Uinta Mountains (Rasmussen et al., 1999). With the rise of the Uinta Mountains the asymmetrical synclinal Uinta Basin is thought to have formed through the effects of down warping in connection with the uplift. Throughout the Paleozoic and Mesozoic deposition fluctuated between marine and non-marine environments laying down a thick succession of sediments in the area now occupied by the Uinta Basin. Portions of these beds crop out on the margins of the basin due to tectonic events during the late Mesozoic.

Early Tertiary Uinta Basin sediments were deposited in alternating lacustrine and fluvial environments. Large shallow lakes periodically covered most of the basin and surrounding areas during early to mid Eocene time (Abbott, 1957). These lacustrine sediments show up in the western part of the basin, dipping 2-3 degrees to the northeast and are lost in the subsurface on the east side. The increase of cross-bedded, coarse-grained sandstone and conglomerates preserved in paleo-channels indicates a transition to a fluvial environment toward the end of the epoch.

Four Eocene formations are recognized in the Uinta Basin: the Wasatch, Green River, Uinta and Duchesne River, respectively (Wood, 1941). The Uinta Formation is subdivided into two lithostratigraphic units namely: the Wagonhound Member (Wood, 1934), formerly known as Uinta A and B (Osborn, 1895, 1929) and the Myton Member previously regarded as the Uinta C.

Within the Uinta Basin in northeast Utah, the Uinta Formation in the western part of the basin is composed primarily of lacustrine sediments inter-fingering with over-bank deposits of silt and mudstone and westward flowing channel sands and fluvial clays, muds, and sands in the east (Bryant et al, 1990; Ryder et al, 1976). Stratigraphic work done by early geologists and paleontologists within the Uinta Formation focused on the definition of rock units and attempted to define a distinction between early and late Uintan faunas (Riggs, 1912; Peterson and Kay, 1931; Kay 1934). More recent work focused on magnetostratigraphy, radioscopic chronology and continental biostratigraphy (Flynn, 1986; Prothero, 1996). Well-known for its fossiliferous nature and distinctive mammalian fauna of mid-Eocene Age, the Uinta Formation is the type formation for the Uintan Land Mammal Age (Wood et al, 1941).

The Duchesne River Formation of the Uinta Basin in northeastern Utah is composed of a succession of fluvial and flood plain deposits composed of mud, silt and sandstone. The source area for these late Eocene deposits is from the Uinta Mountains indicated by paleocurrent data (Anderson and Picard, 1972). In Peterson's (1931c) paper, the name "Duchesne Formation" was applied to the formation and it was later changed to the "Duchesne River Formation" by Kay (1934). The formation is divided up into four members: the Brennan Basin, Dry Gulch Creek, LaPoint and Starr Flat (Anderson and Picard, 1972). Debates concerning the Duchesne River Formation, as to whether its age was late Eocene or early Oligocene, have surfaced throughout the literature of the last century (Wood et al., 1941; Scott 1945). Recent paleo-magnetostratigraphic work (Prothero, 1996) shows that the Duchesne River Formation is late Eocene in time.

FIELD METHODS

In order to determine if the proposed project area contained any paleontological resources, a reconnaissance survey was performed. An on-site observation of the proposed areas undergoing surficial disturbance is necessary because judgments made from topographic maps alone are often unreliable. Areas of low relief have potential to be erosional surfaces with the possibility of bearing fossil materials rather than surfaces covered by unconsolidated sediment or soils.

When found within the proposed construction areas, outcrops and erosional surfaces were checked to determine if fossils were present and to assess needs. Careful effort is made during surveys to identify and evaluate significant fossil materials or fossil horizons when they are found. Microvertebrates, although rare, are occasionally found in anthills or upon erosional surfaces and are of particular importance.

PROJECT AREA

The project area is situated in the Wagonhound Member (Uinta A & B) of the Uinta Formation. The following list provides a description of the individual wells and their associated pipelines and access roads.

NBU #922-31J3AS, 31I3CS, 31O1AS & 31I4AS

The proposed multi well pad is located in the NE/SE quarter-quarter section of Sec. 31 and the NW/SW quarter-quarter section of Sec. 32, T 9 S, R 22 E (Figure 1). The proposed access road and pipeline begin at an existing well pad in the NE/SE quarter-quarter section of Sec. 31 and travel a few hundred feet southwest to the proposed well pad.

The proposed construction site sits in a low area surrounded by hills. Green sandstone outcrops were observed along the proposed access road and pipeline. The proposed well pad consists of sandstone colluvium over green and gray siltstone/mudstone. No fossils were found.

NBU #1022-4E3, 4E2S, 5I2S & 5H4

The proposed pipeline upgrade begins in the SW/NW quarter-quarter section of Sec. 4, T 10 S, R 22 E and travels west for about a quarter of a mile to where it ties in to the proposed pipeline in the SE/NE quarter-quarter section of Sec. 5. The proposed pipeline heads southwest from the tie in for about a tenth of a mile then turns northeast and travels a few hundred feet before tying in to the proposed well pad in the SE/NE quarter-quarter section of Sec. 5. The proposed well pad is located in the SE/NE quarter-quarter section of Sec. 5 and the SW/NW quarter-quarter section of Sec. 4 (Figure 2).

The proposed pipeline and road travel through outcrops of green siltstone/mudstone. The lithology of the proposed well pad consists of a thin sandstone colluvium over a massive coarse-grained, sandstone outcrop with large (10-50 cm) dark concretions. A few unidentifiable bone fragments were found along the pipeline and access road but no other fossils were found.

NBU #1022-7O4AS, 7O4DS, 7N1S & 7N4S

The proposed multi wells are located on an existing well pad in the SW/SE quarter-quarter section of Sec. 7 and the NW/NE quarter-quarter section of Sec. 18, T 10 S, R 22 E (Figure 2). The proposed pipeline ties in to the well pad on its northeast corner in the SW/SE quarter-quarter section of Sec. 7 and heads southwest for about a mile and a half to where it ties in to an existing pipeline in the SE/SW quarter-quarter section of Sec. 17.

The proposed well pad is staked on an existing well pad and over previously disturbed sediments with some outcrops of yellow and green, medium-grained sandstone and maroon and purple mudstone/ siltstone. The proposed pipeline parallels an existing road for a majority of the way. The pipeline passes through hills and slopes over soil and tan to green siltstones and sandstones. As it continues southeast, the pipeline route traverses a thick layer of brown to tan, fluvial sandstone and coarse-grained, yellow sandstone with desert varnished concretions. Farther southeast the route is covered in a thin colluvium overlying purple, green, and gray sandstones, siltstones, and mudstones.

A possible fragmented crocodylian (limb bone?) along with scattered turtle fragments (*Echmatemys* sp. and *Apalone* sp.) were found in a red siltstone/mudstone on the slope of a prominent rise in the NE/SW quarter-quarter section of Sec. 17, T 10 S, R 22 E (Figure 2). The area where these fossils were found in was previously referred to vertebrate fossils locality "42Un1876V" (Sandau, 2005).

A few small crocodylian jaw fragments and turtle shell fragments (*Echmatemys* sp.) were found in a small knoll of gray-green mudstone/siltstone overlain by weathered tan sandstone fragments just east of the proposed pipeline corridor in the SW/NW quarter-quarter section of Sec. 17, T 10 S, R 22 E (Figure 2). Across the road in the same area, ichnofossils of burrowing mud-loving beetles (*Planolites*) were observed in the upturned boulders excavated during the construction of the existing road. The area where these fossils were discovered is designated as the new vertebrate fossils locality "42Un2527V"

Finally, a 75% complete turtle carapace and plastron (*Echmatemys?*) was discovered during the survey on the northwest end of the well pad preserved on the end of a rat-hole drilling core composed of green siltstone and medium-grained sandstone. The area where these fossils were discovered is designated as the new vertebrate fossils locality "42Un2528V"

SURVEY RESULTS

PROJECT	GEOLOGY	PALEONTOLOGY
<p>"NBU #922-31J3AS, 31I3CS, 31O1AS & 31I4AS" (Sec. 31 & 32, T 9 S, R 22 E)</p>	<p>The proposed construction site sits in a low area surrounded by hills. A green sandstone outcrops along the proposed access road and pipeline. The proposed well pad consists of sandstone colluvium over green and gray siltstone/mudstone.</p>	<p>No fossils were found. Class 3a</p>
<p>"NBU #1022-4E3, 4E2S, 5I2S & 5H4" (Sec. 4 & 5, T 10 S, R 22 E)</p>	<p>The proposed pipeline and road travel through outcrops of green siltstone/mudstone. The lithology of the proposed well pad consists of a thin sandstone colluvium over a massive coarse-grained, sandstone outcrop with large (10-50 cm) dark concretions. A few bone fragments were found along the pipeline and access road but no other fossils were found.</p>	<p>A few unidentifiable bone fragments were found along the pipeline and access road but no other fossils were found. Class 3a</p>

<p>“NBU #470, #1022-7O4AS, 7O4DS, 7N1S & 7N4S” (Sec. 7, 17 & 18, T 10 S, R 22 E)</p>	<p>The proposed staked well pad is over previously disturbed sediments with some outcrops of yellow and green, medium-grained sandstone and maroon and purple mudstone/ siltstone. For the most part the proposed pipeline parallels an existing road. The pipeline passes through some hills and slopes over soil and some tan to green siltstones and sandstones. As it continues southeast the pipeline route traverses a thick layer of brown to tan, fluvial sandstone and coarse-grained, yellow sandstone with desert varnished concretions. Farther southeast the route is covered in a thin colluvium overlying purple, green, and gray sandstones, siltstones, and mudstones.</p>	<p>A possible fragmented crocodylian (limb bone?) along with scattered turtle fragments (<i>Echmatemys</i> sp. and <i>Apalone</i> sp.) were found in a red siltstone/mudstone on the slope of a prominent rise in the NE/SW quarter-quarter section of Sec. 17, T 10 S, R 22 E (Figure 2). The area where these fossils were found in was previously referred to vertebrate fossils locality “42Un1876V” (Sandau, 2005).</p> <p>A few small crocodylian jaw fragments and turtle shell fragments (<i>Echmatemys</i> sp.) were found in a small knoll of gray-green mudstone/siltstone overlain by weathered tan sandstone fragments just east of the proposed pipeline corridor in the SW/NW quarter-quarter section of Sec. 17, T 10 S, R 22 E (Figure 2). Across the road in the same area, ichnofossils of burrowing mud-loving beetles (<i>Planolites</i>) were observed in the upturned boulders excavated during the construction of the existing road. The area where these fossils were discovered is designated as the new vertebrate fossils locality “42Un2527V”</p> <p>Finally, a 75% complete turtle carapace and plastron (<i>Echmatemys</i>?) was discovered during the survey on the northwest end of the well pad preserved on the end of a rat-hole drilling core composed of green siltstone and medium-grained sandstone. The area where these fossils were discovered is designated as the new vertebrate fossils locality “42Un2528V”</p> <p>Class 5a</p>
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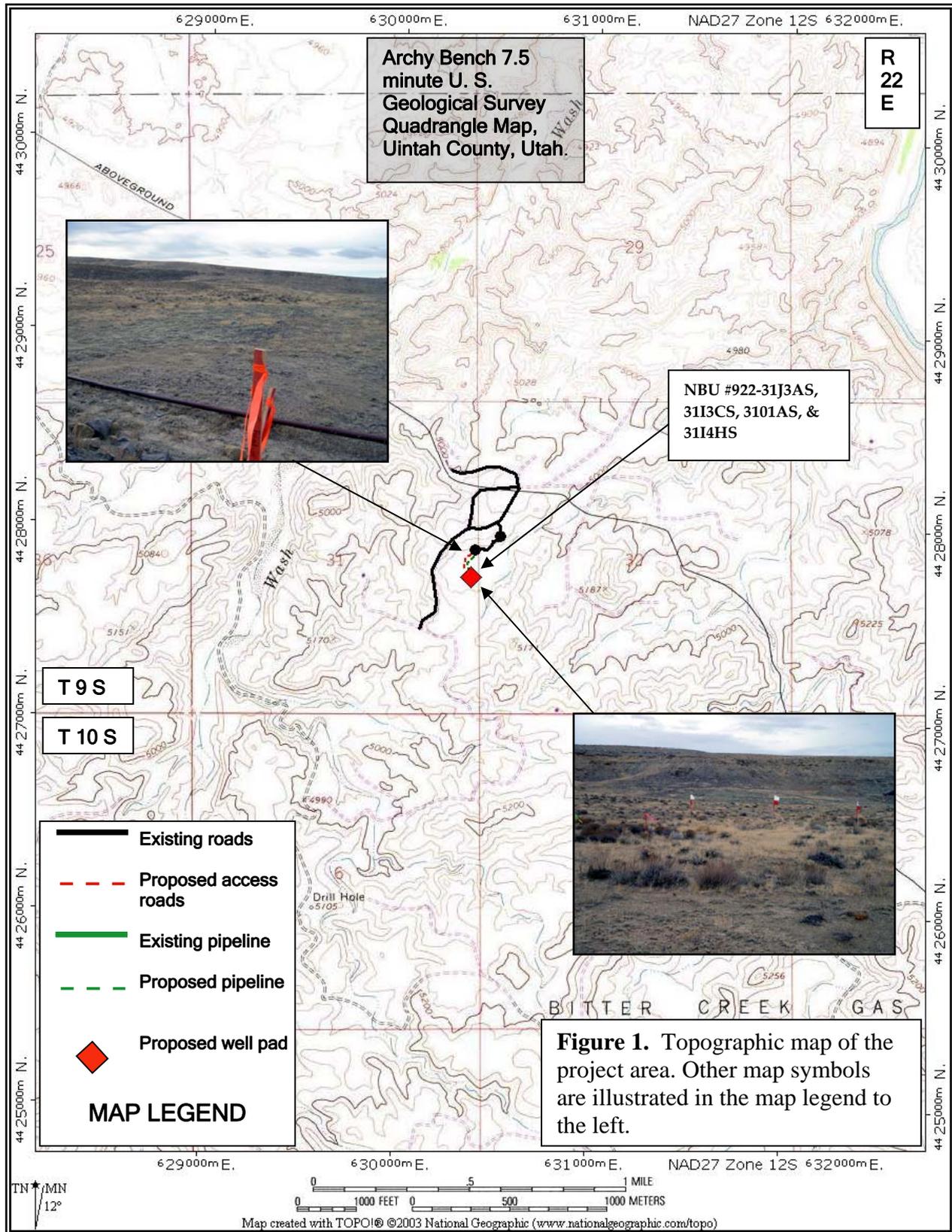
RECOMMENDATIONS

A reconnaissance survey was conducted for Kerr McGee's proposed directional & multi-well pads, access roads & pipelines for "NBU #922-31J3AS, 31I3CS, 31O1AS & 31I4AS" (Sec. 31 & 32, T 9 S, R 22 E), "NBU #1022-4E3, 4E2S, 5I2S & 5H4" and "NBU #1022-7O4AS, 7O4DS, 7N1S & 7N4S" (Sec. 4, 5, 7, 17 & 18, T 10 S, R 22 E). The directional and multi-well pads and the associated access roads and pipelines covered in this report showed some signs of vertebrate fossils, therefore, we advise the following recommendations.

Due to the amount of exposed fossiliferous Wagonhound Member of the Uinta Formation and the occurrence of vertebrate along the proposed pipeline corridor and on the well pad for "#1022-7O4AS, 7O4DS, 7N1S & 7N4S" (Sec. 4, 5, 7, 17 & 18, T 10 S, R 22 E), we recommend that a permitted paleontologist be present to monitor the construction process.

Furthermore, we recommend that no other paleontological restrictions should be placed on the development of the remaining projects included in this report.

Nevertheless, if any vertebrate fossil(s) are found during construction within the project area, Operator (Lease Holder) will report all occurrences of paleontological resources discovered to a geologist with the Vernal Field Office of the BLM and the Office of the State Paleontologist. The operator is responsible for informing all persons in the areas who are associated with this project of the requirements for protecting paleontological resources. Paleontological resources found on the public lands are recognized by the BLM and State as constituting a fragile and nonrenewable scientific record of the history of life on earth, and so represent an important and critical component of America's natural heritage. These resources are afforded protection under 43 CFR 3802 and 3809, and penalties possible for the collection of vertebrate fossils are under 43 CFR 8365.1-5.



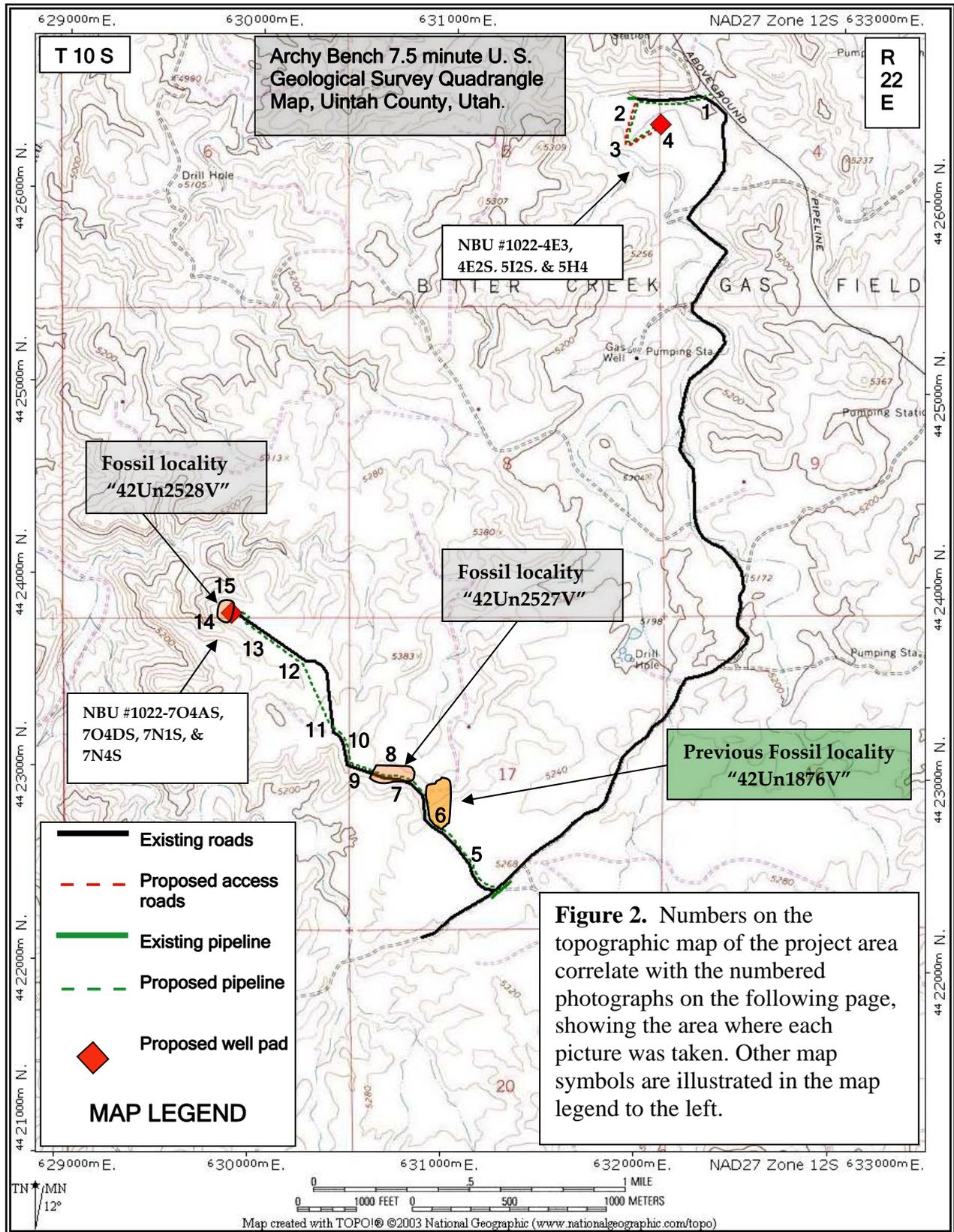


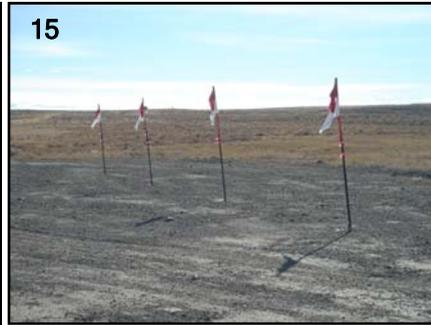
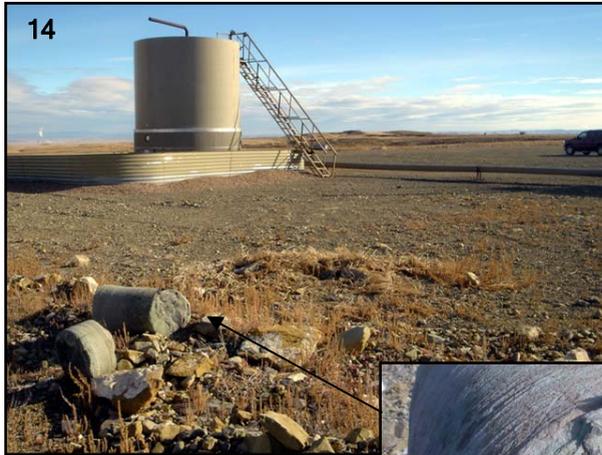
Figure 2. *continued...*



Figure 2. continued...



Figure 2. continued...



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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)

May 8, 2009

Memorandum

To: Assistant District Manager Minerals, Vernal District
From: Michael Coulthard, Petroleum Engineer
Subject: 2009 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 2009 within the Natural Buttes Unit, Uintah County, Utah.

API #	WELL NAME	LOCATION
(Proposed PZ WASATCH-MESA VERDE)		
43-047-50383	NBU 921-25M3DS Sec 25	T09S R21E 1855 FSL 0231 FWL
	BHL Sec 25	T09S R21E 0244 FSL 0587 FWL
43-047-50384	NBU 921-25M2DS Sec 25	T09S R21E 1860 FSL 0251 FWL
	BHL Sec 25	T09S R21E 0740 FSL 0623 FWL
43-047-50385	NBU 921-25M2AS Sec 25	T09S R21E 1865 FSL 0270 FWL
	BHL Sec 25	T09S R21E 1245 FSL 0643 FWL
43-047-50386	NBU 921-25L4BS Sec 25	T09S R21E 1870 FSL 0290 FWL
	BHL Sec 25	T09S R21E 1733 FSL 0677 FWL
43-047-50387	NBU 1022-14F4S Sec 14	T10S R22E 1435 FNL 1470 FWL
	BHL Sec 14	T10S R22E 2035 FNL 2255 FWL
43-047-50388	NBU 1022-14F2T Sec 14	T10S R22E 1407 FNL 1417 FWL
43-047-50389	NBU 1022-14D3S Sec 14	T10S R22E 1397 FNL 1400 FWL
	BHL Sec 14	T10S R22E 0900 FNL 0410 FWL
43-047-50390	NBU 1022-14C4S Sec 14	T10S R22E 1426 FNL 1453 FWL
	BHL Sec 14	T10S R22E 1290 FNL 1975 FWL

43-047-50391 NBU 922-36H2DS Sec 36 T09S R22E 1846 FNL 1491 FEL
BHL Sec 36 T09S R22E 1720 FNL 0795 FEL

43-047-50392 NBU 922-36H2AS Sec 36 T09S R22E 1829 FNL 1501 FEL
BHL Sec 36 T09S R22E 1360 FNL 0700 FEL

43-047-50393 NBU 922-36G1T Sec 36 T09S R22E 1812 FNL 1512 FEL

43-047-50394 NBU 922-36A4BS Sec 36 T09S R22E 1795 FNL 1522 FEL
BHL Sec 36 T09S R22E 0980 FNL 0630 FEL

43-047-50395 NBU 922-31O1AS Sec 31 T09S R22E 2314 FSL 0128 FEL
BHL Sec 31 T09S R22E 1098 FSL 1494 FEL

43-047-50396 NBU 922-31J3AS Sec 31 T09S R22E 2313 FSL 0148 FEL
BHL Sec 31 T09S R22E 1871 FSL 1973 FEL

43-047-50397 NBU 922-31I4AS Sec 31 T09S R22E 2315 FSL 0088 FEL
BHL Sec 31 T09S R22E 1743 FSL 0153 FEL

43-047-50398 NBU 922-31I3CS Sec 31 T09S R22E 2314 FSL 0108 FEL
BHL Sec 31 T09S R22E 1341 FSL 1125 FEL

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:5-8-09



Kerr-McGee Oil & Gas Onshore LP

1099 18th Street, Suite 1800
Denver, CO 80202-1918
P.O. Box 173779
Denver, CO 80217-3779
720-929-6000

May 20, 2009

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 922-3101AS
T9S-R22E
Section 31: NESE/SWSE
Surface: 2314' FSL, 128' FEL
Bottom Hole: 1098' FSL, 1494' FEL
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.

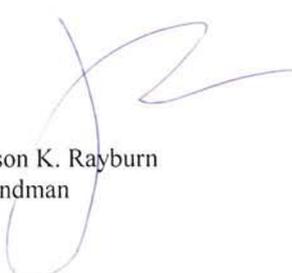
- Kerr-McGee's NBU 922-3101AS is located within the Natural Buttes Unit area.
- Kerr-McGee is permitting this well as a directional well in order to minimize surface disturbance. Locating the well at the surface location and directionally drilling from this location, Kerr-McGee will be able to utilize the existing road and pipelines in the area.
- Furthermore, Kerr-McGee certifies that it is the sole working interest owner within 460 feet of the entire directional well bore.

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

Sincerely,

KERR-MCGEE OIL & GAS ONSHORE LP

Jason K. Rayburn
Landman



From: Jim Davis
To: Bonner, Ed; Mason, Diana
Date: 6/1/2009 2:12 PM
Subject: Kerr McGee Approvals (16)

CC: Garrison, LaVonne

The following wells have been approved by SITLA including arch and paleo clearance.

NBU 922-36A4BS (4304750394)
NBU 922-36G1T (4304750393)
NBU 922-36H2AS (4304750392)
NBU 922-36H2DS (4304750391)

NBU 921-25M3DS (4304750383)
NBU 921-25M2DS (4304750384)
NBU 921-25M2AS (4304750385)
NBU 921-25L4BS (4304750386)

NBU 922-31O1AS (4304750395)
NBU 922-31J3AS (4304750396)
NBU 922-31I3CS (4304750398)
NBU 922-31I4AS (4304750397)

NBU 1022-19P1AS (4304750418)
NBU 1022-20M4CS (4304750422)
NBU 1022-20M1DS (4304750421)
NBU 1022-20M4DS (4304750423)

-Jim

Jim Davis
Utah Trust Lands Administration
jimdavis1@utah.gov
Phone: (801) 538-5156

Well Name	KERR-MCGEE OIL & GAS ONSHORE, L.P. NBU 922-3101AS 4304750395		
String	Surf	Prod	
Casing Size(")	9.625	4.500	
Setting Depth (TVD)	2300	9300	
Previous Shoe Setting Depth (TVD)	20	2300	
Max Mud Weight (ppg)	8.4	11.7	
BOPE Proposed (psi)	500	5000	
Casing Internal Yield (psi)	3520	7780	
Operators Max Anticipated Pressure (psi)	5817	12.0	

Calculations	Surf String	9.625	"
Max BPH (psi)	$.052 * \text{Setting Depth} * \text{MW} =$	1005	
			BOPE Adequate For Drilling And Setting Casing at Depth?
MASP (Gas) (psi)	$\text{Max BHP} - (0.12 * \text{Setting Depth}) =$	729	NO
MASP (Gas/Mud) (psi)	$\text{Max BHP} - (0.22 * \text{Setting Depth}) =$	499	YES OK
			*Can Full Expected Pressure Be Held At Previous Shoe?
Pressure At Previous Shoe	$\text{Max BHP} - .22 * (\text{Setting Depth} - \text{Previous Shoe Depth}) =$	503	NO Reasonable depth in area
Required Casing/BOPE Test Pressure=		2300	psi
*Max Pressure Allowed @ Previous Casing Shoe=		20	psi *Assumes 1psi/ft frac gradient

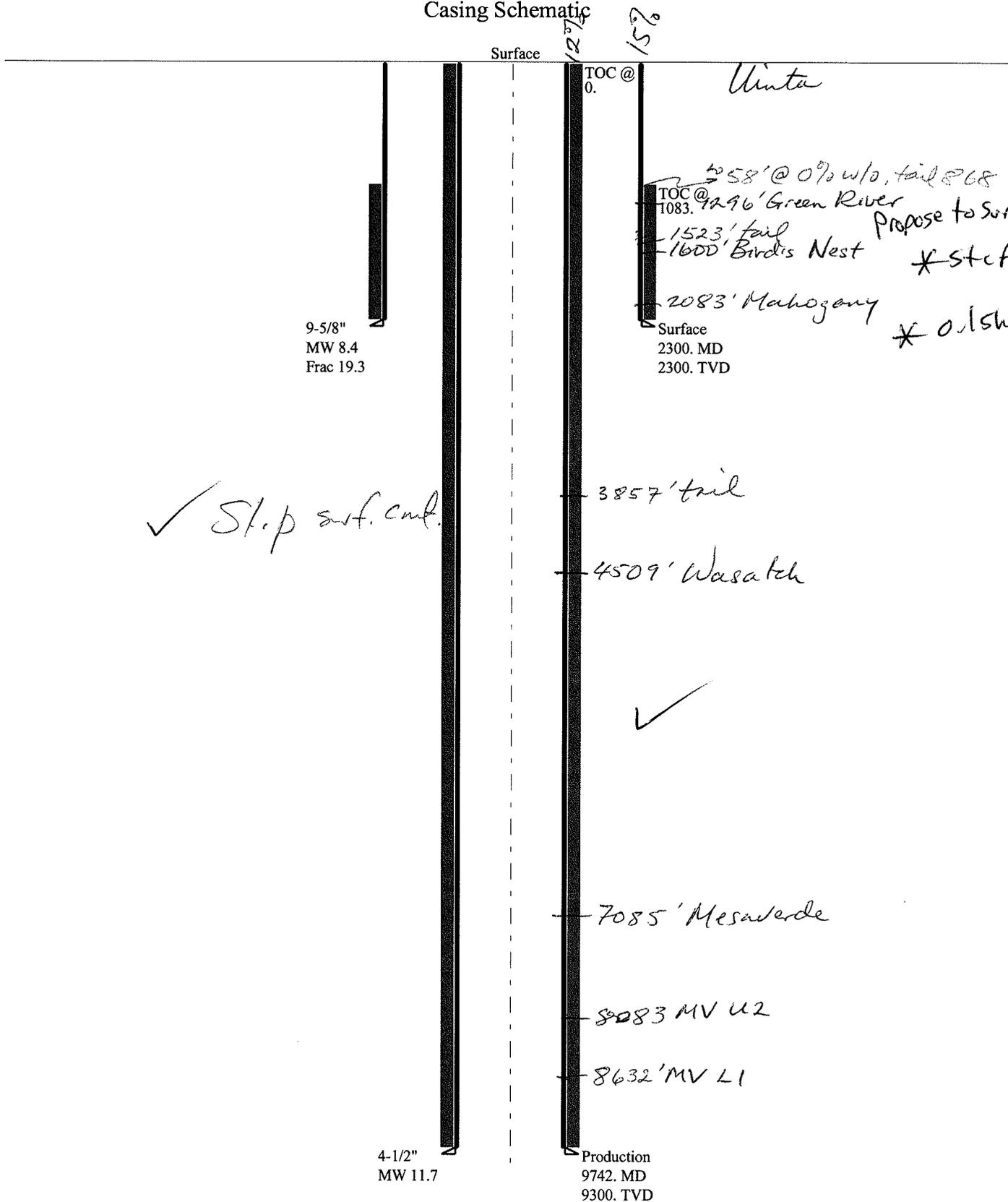
Calculations	Prod String	4.500	"
Max BPH (psi)	$.052 * \text{Setting Depth} * \text{MW} =$	5658	
			BOPE Adequate For Drilling And Setting Casing at Depth?
MASP (Gas) (psi)	$\text{Max BHP} - (0.12 * \text{Setting Depth}) =$	4542	YES
MASP (Gas/Mud) (psi)	$\text{Max BHP} - (0.22 * \text{Setting Depth}) =$	3612	YES OK
			*Can Full Expected Pressure Be Held At Previous Shoe?
Pressure At Previous Shoe	$\text{Max BHP} - .22 * (\text{Setting Depth} - \text{Previous Shoe Depth}) =$	4118	NO Reasonable, note max allowed pressure
Required Casing/BOPE Test Pressure=		5000	psi
*Max Pressure Allowed @ Previous Casing Shoe=		2300	psi *Assumes 1psi/ft frac gradient

Calculations	String		"
Max BPH (psi)	$.052 * \text{Setting Depth} * \text{MW} =$		
			BOPE Adequate For Drilling And Setting Casing at Depth?
MASP (Gas) (psi)	$\text{Max BHP} - (0.12 * \text{Setting Depth}) =$		NO
MASP (Gas/Mud) (psi)	$\text{Max BHP} - (0.22 * \text{Setting Depth}) =$		NO
			*Can Full Expected Pressure Be Held At Previous Shoe?
Pressure At Previous Shoe	$\text{Max BHP} - .22 * (\text{Setting Depth} - \text{Previous Shoe Depth}) =$		NO
Required Casing/BOPE Test Pressure=			psi
*Max Pressure Allowed @ Previous Casing Shoe=			psi *Assumes 1psi/ft frac gradient

Calculations	String		"
Max BPH (psi)	$.052 * \text{Setting Depth} * \text{MW} =$		
			BOPE Adequate For Drilling And Setting Casing at Depth?
MASP (Gas) (psi)	$\text{Max BHP} - (0.12 * \text{Setting Depth}) =$		NO
MASP (Gas/Mud) (psi)	$\text{Max BHP} - (0.22 * \text{Setting Depth}) =$		NO
			*Can Full Expected Pressure Be Held At Previous Shoe?
Pressure At Previous Shoe	$\text{Max BHP} - .22 * (\text{Setting Depth} - \text{Previous Shoe Depth}) =$		NO
Required Casing/BOPE Test Pressure=			psi
*Max Pressure Allowed @ Previous Casing Shoe=			psi *Assumes 1psi/ft frac gradient

43047503950000 NBU 922-3101AS

Casing Schematic



Well name:	43047503950000 NBU 922-31O1AS		
Operator:	KERR-MCGEE OIL & GAS ONSHORE, L.P.		
String type:	Surface	Project ID:	43-047-50395
Location:	UINTAH COUNTY		

Design parameters:

Collapse

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

Minimum design factors:

Collapse:

Design factor 1.125

Burst:

Design factor 1.00

Environment:

H2S considered? No
Surface temperature: 74 °F
Bottom hole temperature: 106 °F
Temperature gradient: 1.40 °F/100ft
Minimum section length: 100 ft

Cement top: 1,083 ft

Burst

Max anticipated surface pressure: 2,024 psi
Internal gradient: 0.120 psi/ft
Calculated BHP 2,300 psi

No backup mud specified.

Tension:

8 Round STC: 1.80 (J)
8 Round LTC: 1.70 (J)
Buttress: 1.60 (J)
Premium: 1.50 (J)
Body yield: 1.50 (B)

Tension is based on air weight.
Neutral point: 2,014 ft

Non-directional string.

Re subsequent strings:

Next setting depth: 9,300 ft
Next mud weight: 11.700 ppg
Next setting BHP: 5,652 psi
Fracture mud wt: 19.250 ppg
Fracture depth: 2,300 ft
Injection pressure: 2,300 psi

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Est. Cost (\$)
1	2300	9.625	36.00	J-55	LT&C	2300	2300	8.796	18806
Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (kips)	Tension Strength (kips)	Tension Design Factor
1	1004	2020	2.013	2300	3520	1.53	82.8	453	5.47 J

Prepared by: Helen Sadik-Macdonald
Div of Oil, Gas & Mining

Phone: 801 538-5357
FAX: 801-359-3940

Date: June 17, 2009
Salt Lake City, Utah

Remarks:

Collapse is based on a vertical depth of 2300 ft, a mud weight of 8.4 ppg. The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

Well name:	43047503950000 NBU 922-31O1AS		
Operator:	KERR-MCGEE OIL & GAS ONSHORE, L.P.		
String type:	Production	Project ID:	43-047-50395
Location:	UINTAH COUNTY		

Design parameters:

Collapse

Mud weight: 11.700 ppg
Design is based on evacuated pipe.

Minimum design factors:

Collapse:

Design factor 1.125

Environment:

H2S considered? No
Surface temperature: 74 °F
Bottom hole temperature: 204 °F
Temperature gradient: 1.40 °F/100ft
Minimum section length: 100 ft

Burst:

Design factor 1.00

Cement top: Surface

Burst

Max anticipated surface pressure: 3,606 psi
Internal gradient: 0.220 psi/ft
Calculated BHP 5,652 psi

No backup mud specified.

Tension:

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

Directional Info - Build & Drop

Kick-off point 2300 ft
Departure at shoe: 1826 ft
Maximum dogleg: 3 °/100ft
Inclination at shoe: 0 °

Tension is based on air weight.

Neutral point: 8,116 ft

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Est. Cost (\$)
1	9742	4.5	11.60	I-80	LT&C	9300	9742	3.875	128594
Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (kips)	Tension Strength (kips)	Tension Design Factor
1	5652	6360	1.125	5652	7780	1.38	107.9	212	1.97 J

Prepared by: Helen Sadik-Macdonald
Div of Oil, Gas & Mining

Phone: 801 538-5357
FAX: 801-359-3940

Date: June 17, 2009
Salt Lake City, Utah

Remarks:

Collapse is based on a vertical depth of 9300 ft, a mud weight of 11.7 ppg. The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

Collapse strength is (biaxially) derated for doglegs in directional wells by multiplying the tensile stress by the cross section area to calculate a

ON-SITE PREDRILL EVALUATION

Utah Division of Oil, Gas and Mining

Operator KERR-MCGEE OIL & GAS ONSHORE, L.P.
Well Name NBU 922-3101AS
API Number 43047503950000 **APD No** 1490 **Field/Unit** NATURAL BUTTES
Location: 1/4,1/4 NESE **Sec** 31 **Tw** 9.0S **Rng** 22.0E 2314 FSL 128 FEL
GPS Coord (UTM) **Surface Owner**

Participants

Floyd Bartlett (DOGM), Jim Davis (SITLA), Raleen White, Griz Oleen, Clay Einerson, Charles Chase and Tony Kzneck (Kerr McGee), Ben Williams (UDWR) and Kolby Kay (Timberline Engineering and Land Surveying).

Regional/Local Setting & Topography

The general area is the Natural Buttes Unit in the lower portion of the Sand Wash Drainage of Uintah, County, approximately 34 air miles and 54 road miles south of Vernal, Utah. Access is by State of Utah Highways, Uintah County and existing oilfield development roads to within 0.1 miles of the site where new construction will be required. Topography of the Sand Wash area is characterized by broad open flats dissected by numerous sub-drainages, which often become steep with ridges and draws with exposed sandstone layers. No perennial streams occur in the drainage. Individual draws or washes are ephemeral with spring runoff or flows from sometimes-intense summer rainstorms. No springs exist in the area. An occasional constructed pond occurs furnishing water for antelope or livestock.

Four directional wells will be drilled from the proposed pad. They are the NBU 922-3101AS; J3AS; I3CS; I4AS. The location is in the south side of a bowl or basin that extends north to a shallow, wide drainage. A portion of the pad will cover existing drainages on the southwest and northwest corners. A diversion ditch will be constructed beginning on the southwest corner of the reserve pit spoils stockpile extending along the west side of the location to the north. The site is surrounded by medium hills, which have exposed sandstone ledges or cliffs. The White River is approximately 3 miles down drainage. A Backflow Pit is included on the Location Layout Sheet. If it is to be constructed Kerr McGee will request it under a separate application.

Both the surface and minerals are owned by SITLA. Jim Davis represented SITLA at the pre-site investigation. Mr. Davis had no concerns pertaining to this location. The selected location appears to be a suitable site for drilling and operating additional wells.

Surface Use Plan

Current Surface Use

- Grazing
- Recreational
- Wildlife Habitat

New Road Miles	Well Pad	Src Const Material	Surface Formation
0.1	Width 335 Length 440	Onsite	UNTA

Ancillary Facilities N

Waste Management Plan Adequate?

Environmental Parameters

Affected Floodplains and/or Wetlands N

Flora / Fauna

Vegetation is a fair desert shrub type, which includes curly mesquite grass, prickly pear, black sage brush, bud sage, horsebrush, cheatgrass, shadscale, halogeton and spring annuals.

Antelope, sheep during the winter, rabbits, coyotes, and small mammals, birds and raptors.

Soil Type and Characteristics

Deep sandy loam.

Erosion Issues N

Sedimentation Issues Y

. A portion of the pad will cover existing drainages on the southwest and northwest corners

Site Stability Issues N

Drainage Diversion Required? Y

. A diversion ditch will be constructed beginning on the southwest corner of the reserve pit spoils stockpile extending along the west side of the location to the north.

Berm Required? N

Erosion Sedimentation Control Required? N

Paleo Survey Run? **Paleo Potential Observed?** N **Cultural Survey Run?** Y **Cultural Resources?**

Reserve Pit

Site-Specific Factors

Site Ranking

Distance to Groundwater (feet)	>200	0	
Distance to Surface Water (feet)	>1000	0	
Dist. Nearest Municipal Well (ft)	>5280	0	
Distance to Other Wells (feet)		20	
Native Soil Type	Mod permeability	10	
Fluid Type	Fresh Water	5	
Drill Cuttings	Normal Rock	0	
Annual Precipitation (inches)		0	
Affected Populations			
Presence Nearby Utility Conduits	Not Present	0	
	Final Score	35	1 Sensitivity Level

Characteristics / Requirements

The proposed reserve pit is 100' x 250' x 12' deep located in a cut on the southeast corner of the location. Kerr McGee plans a 30-mil liner with a double felt sub-liner. A Backflow Pit is included on the Location Layout Sheet. If it is to be constructed Kerr McGee will request it under a separate application.

Closed Loop Mud Required? N **Liner Required?** Y **Liner Thickness** 30 **Pit Underlayment Required?** Y

Other Observations / Comments

Floyd Bartlett
Evaluator

5/20/2009
Date / Time

Application for Permit to Drill Statement of Basis

7/7/2009

Utah Division of Oil, Gas and Mining

Page 1

APD No	API WellNo	Status	Well Type	Surf Owner	CBM
1490	43047503950000	LOCKED	GW	S	No
Operator	KERR-MCGEE OIL & GAS ONSHORE, L.P.		Surface Owner-APD		
Well Name	NBU 922-31O1AS	Unit		NATURAL BUTTES	
Field	NATURAL BUTTES	Type of Work		DRILL	
Location	NESE 31 9S 22E S 2314 FSL 128 FEL	GPS Coord (UTM)		630371E 4427736N	

Geologic Statement of Basis

Kerr McGee proposes to set 2,300' of surface casing at this location. The depth to the base of the moderately saline water at this location is estimated to be at a depth of 3,000'. A search of Division of Water Rights records shows no water wells within a 10,000 foot radius of the center of section 31. The surface formation at this site is the Uinta Formation. The Uinta Formation is made up of interbedded shales and sandstones. The sandstones are mostly lenticular and discontinuous and should not be a significant source of useable ground water. Production casing cement should be brought to above the base of the moderately saline groundwater in order to isolate it from fresher waters uphole.

Brad Hill
APD Evaluator

6/3/2009
Date / Time

Surface Statement of Basis

The general area is the Natural Buttes Unit in the lower portion of the Sand Wash Drainage of Uintah, County, approximately 34 air miles and 54 road miles south of Vernal, Utah. Access is by State of Utah Highways, Uintah County and existing oilfield development roads to within 0.1 miles of the site where new construction will be required. Topography of the Sand Wash area is characterized by broad open flats dissected by numerous sub-drainages, which often become steep with ridges and draws with exposed sandstone layers. No perennial streams occur in the drainage. Individual draws or washes are ephemeral with spring runoff or flows from sometimes-intense summer rainstorms. No springs exist in the area. An occasional constructed pond occurs furnishing water for antelope or livestock.

Four directional wells will be drilled from the proposed pad. They are the NBU 922-31O1AS; J3AS; I3CS; I4AS. The location is in the south side of a bowl or basin that extends north to a shallow, wide drainage. A portion of the pad will cover existing drainages on the southwest and northwest corners. A diversion ditch will be constructed beginning on the southwest corner of the reserve pit spoils stockpile extending along the west side of the location to the north. The site is surrounded by medium hills, which have exposed sandstone ledges or cliffs. The White River is approximately 3 miles down drainage. A Backflow Pit is included on the Location Layout Sheet. If it is to be constructed Kerr McGee will request it under a separate application.

Both the surface and minerals are owned by SITLA. Jim Davis represented SITLA at the pre-site investigation. Mr. Davis had no concerns pertaining to this location. The selected location appears to be a suitable site for drilling and operating additional wells.

Ben Williams of the Utah Division of Wildlife Resources also attended the pre-site. Mr. Williams stated no wildlife values would be significantly affected by drilling and operating the wells at this location.

Floyd Bartlett
Onsite Evaluator

5/20/2009
Date / Time

Application for Permit to Drill Statement of Basis

7/7/2009

Utah Division of Oil, Gas and Mining

Page 2

Category	Condition
Pits	A synthetic liner with a minimum thickness of 30 mils with a felt subliner shall be properly installed and maintained in the reserve pit.
Surface	Drainages adjacent to the proposed pad shall be diverted around the location.
Surface	The reserve pit shall be fenced upon completion of drilling operations.

WORKSHEET APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 5/3/2009

API NO. ASSIGNED: 43047503950000

WELL NAME: NBU 922-31O1AS

OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P. (N2995)

PHONE NUMBER: 720 929-6007

CONTACT: Kathy Schneebeck-Dulnoan

PROPOSED LOCATION: NESE 31 090S 220E

Permit Tech Review:

SURFACE: 2314 FSL 0128 FEL

Engineering Review:

BOTTOM: 1098 FSL 1494 FEL

Geology Review:

COUNTY: UINTAH

LATITUDE: 39.99164

LONGITUDE: -109.47294

UTM SURF EASTINGS: 630371.00

NORTHINGS: 4427736.00

FIELD NAME: NATURAL BUTTES

LEASE TYPE: 3 - State

LEASE NUMBER: UO 1207A

PROPOSED PRODUCING FORMATION(S): WASATCH-MESA VERDE

SURFACE OWNER: 3 - State

COALBED METHANE: NO

RECEIVED AND/OR REVIEWED:

- PLAT
- Bond: STATE/FEE - 22013542
- Potash
- Oil Shale 190-5
- Oil Shale 190-3
- Oil Shale 190-13
- Water Permit: Permit #43-8496
- RDCC Review:
- Fee Surface Agreement
- Intent to Commingle

Commingle Approved

LOCATION AND SITING:

- R649-2-3.
Unit: NATURAL BUTTES
- R649-3-2. General
- R649-3-3. Exception
- Drilling Unit
Board Cause No: Cause 173-14
Effective Date: 12/2/1999
Siting: 460' fr u bdry & uncomm. tract
- R649-3-11. Directional Drill

Comments: Presite Completed

Stipulations:
3 - Commingle - ddoucet
5 - Statement of Basis - bhill
15 - Directional - dmason
17 - Oil Shale 190-5(b) - dmason
25 - Surface Casing - hmacdonald



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

Permit To Drill

Well Name: NBU 922-3101AS
API Well Number: 43047503950000
Lease Number: UO 1207A
Surface Owner: STATE
Approval Date: 7/8/2009

Issued to:

KERR-MCGEE OIL & GAS ONSHORE, L.P., P.O. Box 173779, Denver, CO 80217

Authority:

Pursuant to Utah Code Ann. §40-6-1 et seq., and Utah Administrative Code R649-3-1 et seq., the Utah Division of Oil, Gas and Mining issues conditions of approval, and permit to drill the listed well. This permit is issued in accordance with the requirements of Cause 173-14 . The expected producing formation or pool is the WASATCH-MESA VERDE Formation(s), completion into any other zones will require filing a Sundry Notice (Form 9). Completion and commingling of more than one pool will require approval in accordance with R649-3-22.

Duration:

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

Commingle:

In accordance with Board Cause No. 173-14, completion into and commingling of production from the Wasatch and Mesaverde formations is allowed.

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.

Conditions of Approval:

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.

In accordance with the Order in Cause No. 190-5(b) dated October 28, 1982, the operator shall comply with the requirements of Rules R649-3-31 and R649-3-27 pertaining to Designated Oil Shale Areas. Additionally, the operators shall ensure that the surface and or production casing is properly cemented over the entire oil shale section as defined by Rule R649-3-31. The Operator shall report the actual depth the oil shale is encountered to the division.

Compliance with the Conditions of Approval/Application for Permit to Drill outlined in the Statement of Basis (copy attached).

Surface casing shall be cemented to the surface.

Additional Approvals:

The operator is required to obtain approval from the Division of Oil, Gas and mining before performing any of the following actions during the drilling of this well:

- Any changes to the approved drilling plan – contact Dustin Doucet
- Significant plug back of the well – contact Dustin Doucet
- Plug and abandonment of the well – contact Dustin Doucet

Notification Requirements:

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

- Within 24 hours following the spudding of the well – contact Carol Daniels
OR
submit an electronic sundry notice (pre-registration required) via the Utah Oil & Gas website at <http://oilgas.ogm.utah.gov>
- 24 hours prior to testing blowout prevention equipment - contact Dan Jarvis
- 24 hours prior to cementing or testing casing – contact Dan Jarvis
- Within 24 hours of making any emergency changes to the approved drilling program – contact Dustin Doucet
- 24 hours prior to commencing operations to plug and abandon the well – contact Dan Jarvis

Contact Information:

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

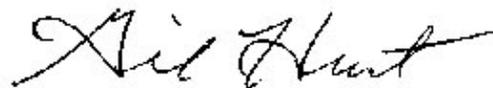
- Carol Daniels 801-538-5284 - office
- Dustin Doucet 801-538-5281 - office
801-733-0983 - after office hours
- Dan Jarvis 801-538-5338 - office
801-942-0871 - after office hours

Reporting Requirements:

All reports, forms and submittals as required by the Utah Oil and Gas Conservation General Rules will be promptly filed with the Division of Oil, Gas and Mining, including but not limited to:

- Entity Action Form (Form 6) – due within 5 days of spudding the well
- Monthly Status Report (Form 9) – due by 5th day of the following calendar month
- Requests to Change Plans (Form 9) – due prior to implementation
- Written Notice of Emergency Changes (Form 9) – due within 5 days
- Notice of Operations Suspension or Resumption (Form 9) – due prior to implementation
- Report of Water Encountered (Form 7) – due within 30 days after completion
- Well Completion Report (Form 8) – due within 30 days after completion or plugging

Approved By:



Gil Hunt
Associate Director, Oil & Gas

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	FORM 9
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.	5. LEASE DESIGNATION AND SERIAL NUMBER: UO 1207A
	6. IF INDIAN, ALLOTTEE OR TRIBE NAME: _____
	7. UNIT or CA AGREEMENT NAME: NATURAL BUTTES
1. TYPE OF WELL Gas Well	8. WELL NAME and NUMBER: NBU 922-3101AS
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.	9. API NUMBER: 43047503950000
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779	PHONE NUMBER: 720 929-6007 Ext
4. LOCATION OF WELL FOOTAGES AT SURFACE: 2314 FSL 0128 FEL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NESE Section: 31 Township: 09.0S Range: 22.0E Meridian: S	9. FIELD and POOL or WILDCAT: NATURAL BUTTES
	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: 7/31/2009	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> CASING REPAIR
<input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion:	<input checked="" type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> CHANGE WELL NAME
<input type="checkbox"/> SPUD REPORT Date of Spud:	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> CONVERT WELL TYPE
<input type="checkbox"/> DRILLING REPORT Report Date:	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> NEW CONSTRUCTION
	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> PLUG BACK
	<input type="checkbox"/> PRODUCTION START OR RESUME	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION
	<input type="checkbox"/> REPERFORATE CURRENT FORMATION	<input type="checkbox"/> SIDETRACK TO REPAIR WELL	<input type="checkbox"/> TEMPORARY ABANDON
	<input type="checkbox"/> TUBING REPAIR	<input type="checkbox"/> VENT OR FLARE	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> WATER SHUTOFF	<input type="checkbox"/> SI TA STATUS EXTENSION	<input type="checkbox"/> APD EXTENSION
	<input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> OTHER	OTHER: _____

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

Kerr-McGee Oil & Gas Onshore LP (KMG) respectfully requests to change the surface location of this well due to a new rig configuration. The surface location is changing FROM: 2314' FSL 128' FEL TO: 2318' FSL 148' FEL. All other information as originally submitted remains the same. No additional surface disturbance from that amount approved in the original APD is anticipated. If you have any questions, please contact the undersigned.
 Thank you.

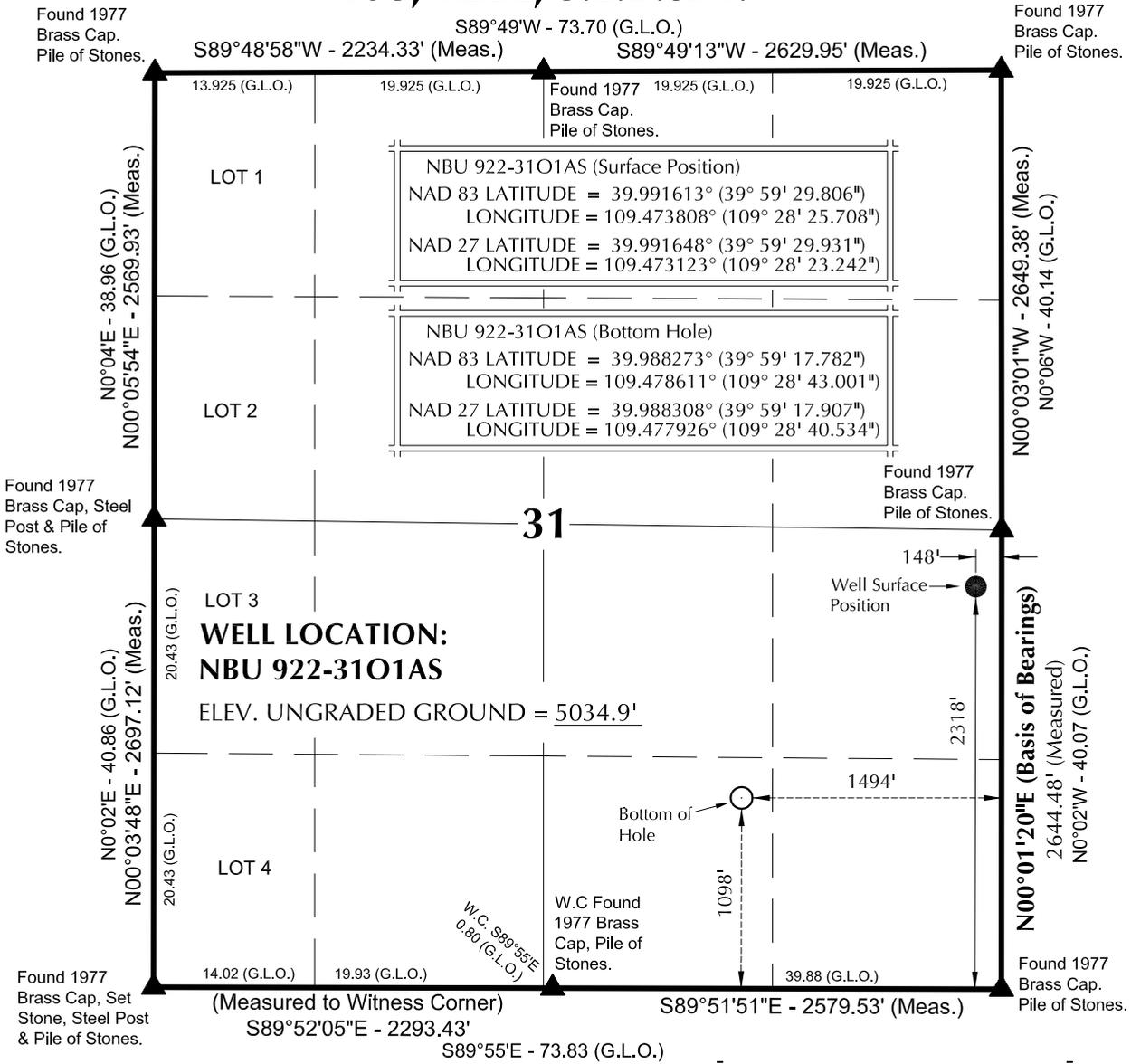
**Approved by the
Utah Division of
Oil, Gas and Mining**

Date: August 04, 2009

By: 

NAME (PLEASE PRINT) Danielle Piernot	PHONE NUMBER 720 929-6156	TITLE Regulatory Analyst
SIGNATURE N/A	DATE 7/27/2009	

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



NOTES:

- ▲ = Section Corners Located
- 1. Well footages are measured at right angles to the Section Lines.
- 2. G.L.O. distances are shown in feet or chains. 1 chain = 66 feet.
- 3. The Bottom of hole bears S47°53'39"W 1814.83' from the Surface Position.
- 4. Bearings are based on Global Positioning Satellite observations.
- 5. Basis of elevation is Tri-Sta "Two Water" located in the NW ¼ of Section 1, T10S, R21E, S.L.B.&M. The elevation of this Tri-Sta is shown on the Big Pack Mtn NE 7.5 Min. Quadrangle as being 5238'.

Approved by the Utah Division of Oil, Gas and Mining
 SCALE

Date: August 04, 2009
 SURVEYOR'S CERTIFICATE

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

By: *Kolby R. May*
 No. 362251
 KOLBY R. MAY
 REGISTERED LAND SURVEYOR
 STATE OF UTAH

Kerr-McGee Oil & Gas Onshore, LP
 1099 18th Street - Denver, Colorado 80202

WELL PAD - NBU 922-311

NBU 922-3101AS
WELL PLAT
1098' FSL, 1494' FEL (Bottom Hole)
SW ¼ SE ¼ OF SECTION 31, T9S, R22E, S.L.B.&M., UTAH COUNTY, UTAH.



CONSULTING, LLC
 371 Coffeen Avenue
 Sheridan WY 82801
 Phone 307-674-0609
 Fax 307-674-0182

TIMBERLINE (435) 789-1365
 ENGINEERING & LAND SURVEYING, INC.
 209 NORTH 300 WEST - VERNAL, UTAH 84078

DATE SURVEYED: 07-16-09	SURVEYED BY: M.S.B.	SHEET NO: 2
DATE DRAWN: 07-17-09	DRAWN BY: M.W.W.	
SCALE: 1" = 1000'		2 OF 13

RECEIVED July 27, 2009

NBU 922-3101AS

Pad: NBU 922-31I

Surface: 2,318' FSL, 148' FEL (NE/4SE/4)

BHL: 1,098' FSL 1,494' FEL (SW/4SE/4)

Sec. 31 T9S R22E

Uintah, Utah

Mineral Lease: UO 1207A

ONSHORE ORDER NO. 1

DRILLING PROGRAM REVISED

- 1. – 2. **Estimated Tops of Important Geologic Markers:**
Estimated Depths of Anticipated Water, Oil, Gas, or Mineral Formations:

<u>Formation</u>	<u>Depth</u>	<u>Resource</u>
Uinta	0 – Surface	
Green River	1,296'	
Birds Nest	1,600'	Water
Mahogany	2,083'	Water
Wasatch	4,509'	Gas
Mesaverde	7,085'	Gas
MVU2	8,083'	Gas
MVL1	8,632'	Gas
TVD	9,300'	
TD	9,695'	

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

Please refer to the attached Drilling Program.

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

Please refer to the attached Drilling Program.

- 5. **Drilling Fluids Program:**

Please refer to the attached Drilling Program.

- 6. **Evaluation Program:**

Please refer to the attached Drilling Program.

- 7. **Abnormal Conditions:**

Maximum anticipated bottomhole pressure calculated at 9,695' TD, approximately equals 5,738 psi (calculated at 0.59 psi/foot).

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

Date: August 04, 2009

By: 

Maximum anticipated surface pressure equals approximately 3,458 psi (bottomhole pressure minus the pressure of a partially evacuated hole calculated at 0.22 psi/foot).

8. Anticipated Starting Dates:

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

9. Variations:

Please refer to the attached Drilling Program.

Onshore Order #2 – Air Drilling Variance

Kerr-McGee Oil & Gas Onshore LP (KMG) respectfully requests a variance to several requirements associated with air drilling outlined in Onshore Order 2

- *Blowout Prevention Equipment (BOPE) requirements;*
- *Mud program requirements; and*
- *Special drilling operation (surface equipment placement) requirements associated with air drilling.*

This Standard Operating Practices addendum provides supporting information as to why KMG current air drilling practices for constructing the surface casing hole should be granted a variance to Onshore Order 2 air drilling requirements.

The reader should note that the air rig is used only to construct a stable surface casing hole through a historically difficult lost circulation zone. A conventional rotary rig follows the air rig, and is used to drill and construct the majority of the wellbore.

More notable, KMG has used the air rig layout and procedures outlined below to drill the surface casing hole in approximately 675 wells without incident of blow out or loss of life.

Background

In a typical well, KMG utilizes an air rig for drilling the surface casing hole, an interval from the surface to surface casing depths, which varies in depth from 1,700 to 2,800 feet. The air rig drilling operation does not drill through productive or over-pressured formations in KMG field, but does penetrate the Uinta and Green River Formations. The purpose of the air drilling operation is to overcome the severe loss circulation zone in the Green River known as the Bird's Nest while creating a stable hole for the surface casing. The surface casing hole is generally drilled to approximately 500 feet below the Bird's Nest.

Before the surface air rig is mobilized, a rathole rig is utilized to set and cement conductor pipe through a competent surface formation. Generally, the conductor is set at 40 feet. In some cases, conductor may be set deeper in areas that the surface formation is not found competent. This rig also drills the rat and mouse holes in preparation for the surface casing and production string drilling operations.

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

Date: August 04, 2009

By:

The air rig is then mobilized to drill the surface casing hole by drilling a 12-1/4 inch hole to just above the Bird's Nest interval with an air hammer. The hammer is then tripped and replaced with a 12-1/4 inch tri-cone bit. The tri-cone bit is used to drill to the surface casing point, approximately 500 feet below the loss circulation zone (Bird's Nest). The 9-5/8 inch surface casing is then run and cemented in place, thereby isolating the lost circulation zone.

KMG fully appreciates Onshore Order 2 well control and safety requirements associated with a typical air drilling operations. However, the requirements of Onshore Order 2 are excessive with respect to the air rig layout and drilling operation procedures that are currently in practice to drill and control the surface casing hole in KMG Fields.

Variance for BOPE Requirements

The air rig operation utilizes a properly lubricated and maintained air bowl diverter system which diverts the drilling returns to a six-inch blooie line. The air bowl is the only piece of BOPE equipment which is installed during drilling operations and is sufficient to contain the air returns associated with this drilling operation. As was discussed earlier, the drilling of the surface hole does not encounter any over pressured or productive zones, and as a result standard BOPE equipment should not be required. In addition, standard drilling practices do not support the use of BOPE on 40 feet of conductor pipe.

Variance for Mud Material Requirements

Onshore Order 2 also states that sufficient quantities of mud materials shall be maintained or readily accessible for the purpose of assuring adequate well control. Once again, the surface hole drilling operations does not encounter over pressured or productive intervals, and as a result there is not a need to control pressure in the surface hole with a mud system. Instead of mud, the air rigs utilize water from the reserve pit for well control, if necessary. A skid pump which is located near the reserve pit (see attachment) will supply the water to the well bore.

Variance for Special Drilling Operation (surface equipment placement) Requirements

Onshore Order 2 requires specific safety distances or setbacks associated standard air drilling equipment, wellbore, and reserve pit. The safety distances for drill the surface holes are not typical of an air rig used to drill a productive well in most parts of the US. These are smaller in nature and designed to fit a KMG location. The typical air rig layout for drilling surface hole in the field is attached. **Approved by the Utah Division of Oil, Gas and Mining**
Date: August 04, 2009

Typically the blooie line discharge point is required to be 100 feet from the well bore. In the case of a KMG well, the reserve pit is only 45 feet from the rig and is used for the drill cuttings. The blooie line, which transports the drill cuttings from the well to the reserve pit, subsequently discharges only 45 feet from the well bore.

Typically the air rig compressors are required to be located in the opposite direction from the blooie line and a minimum of 100 feet from the well bore. At the KMG locations, the air rig compressors are approximately 40 feet from the well bore and approximately 60 feet from the blooie line discharge due to the unique air rig design. The air compressors (see attachment) are located on the rig (1250 cfm) and on a standby trailer (1170 cfm). A booster sits between the two compressors and boosts the output from 350 psi to 2000 psi. The design does put the booster and standby compressor opposite from the blooie line.

Lastly, Onshore Order 2 addresses the need for an automatic igniter or continuous pilot light on the blooie line. The air rig does not utilize an igniter as the surface hole drilling operation does not encounter productive formations.

Conclusion

The air rig operating procedures and the attached air rig layout have effectively maintained well control while drilling the surface holes in KMG Fields. KMG respectfully requests a variance from Onshore Order 2 with respect to air drilling well control requirements as discussed above.

10. Other Information:

Please refer to the attached Drilling Program.

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

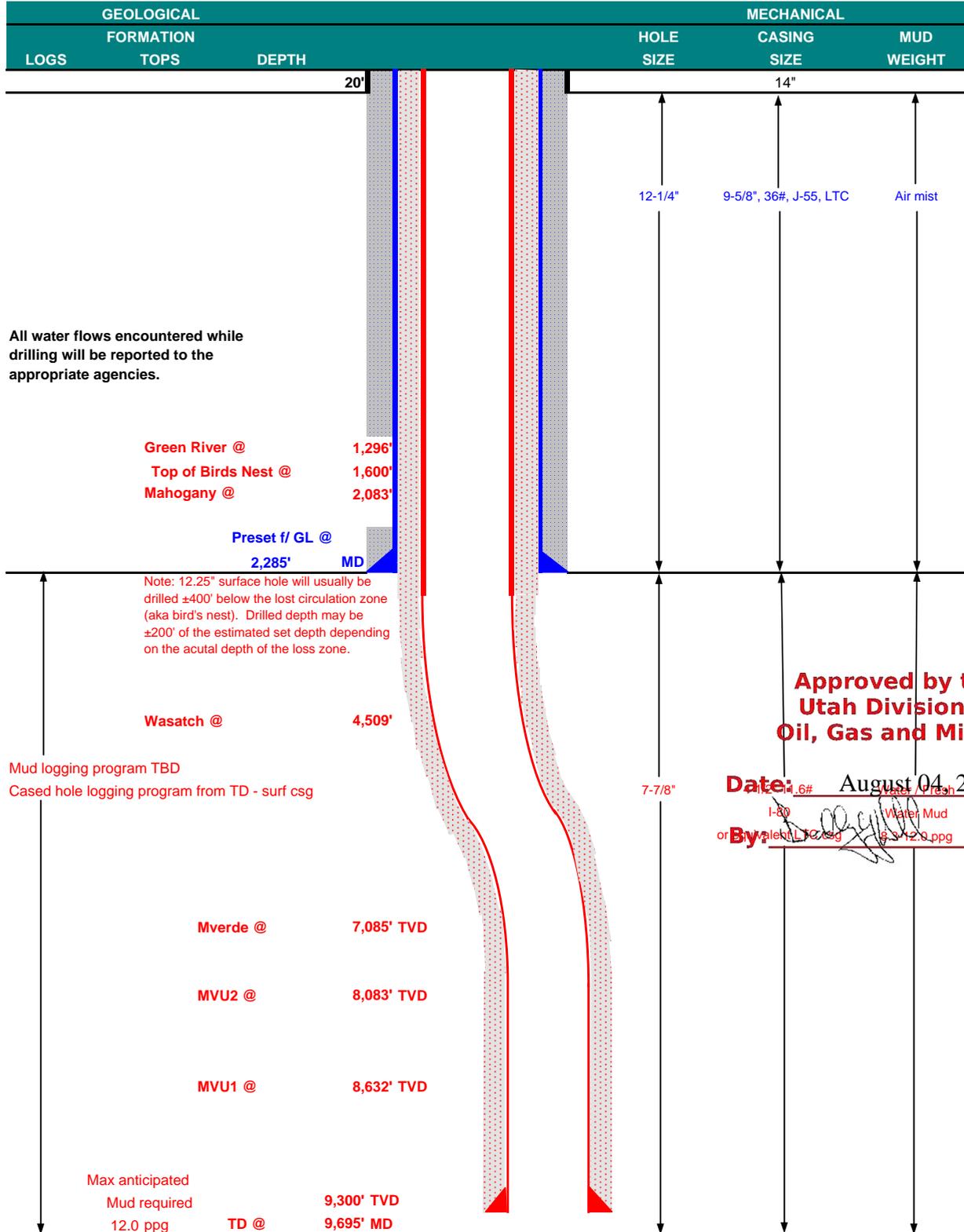
Date: August 04, 2009

By: 



KERR-McGEE OIL & GAS ONSHORE LP DRILLING PROGRAM

COMPANY NAME	KERR-McGEE OIL & GAS ONSHORE LP		DATE	July 27, 2009	
WELL NAME	NBU 922-3101AS		TD	9,300'	TVD 9,695' MD
FIELD	Natural Buttes	COUNTY	Uintah	STATE	Utah
					FINISHED ELEVATION 5,033'
SURFACE LOCATION	NE/4 SE/4	2,318' FSL	148' FEL	Sec 31 T 9S R 22E	
	Latitude:	39.991648	Longitude:	-109.473123	NAD 27
BTM HOLE LOCATION	SW/4 SE/4	1,098' FSL	1,494' FEL	Sec 31 T 9S R 22E	
	Latitude:	39.988308	Longitude:	-109.477926	NAD 27
OBJECTIVE ZONE(S)	Wasatch/Mesaverde				
ADDITIONAL INFO	Regulatory Agencies: SITLA (Minerals), UDOGM (Surface), 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'						
						3,520	2,020	453,000
SURFACE	9-5/8"	0 to 2,285	36.00	J-55	LTC	0.90	1.89	7.01
						7,780	6,350	201,000
PRODUCTION	4-1/2"	0 to 9,695	11.60	I-80	LTC	2.07	1.09	2.05

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 - (0.22 psi/ft-partial evac gradient x TD)
 (Burst Assumptions: TD = 12.0 ppg) 0.22 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 3,652 psi

3) Maximum Anticipated Bottom Hole Pressure (MABHP) = Pore Pressure at TD
 (Burst Assumptions: TD = 12.0 ppg) 0.61 psi/ft = bottomhole gradient
 (Collapse Assumption: Fully Evacuated Casing, Max MW) (Tension Assumptions: Air Weight of Casing*Buoy.Fact. of water)
MABHP 5,940 psi

CEMENT PROGRAM

		FT. OF FILL	DESCRIPTION	SACKS	EXCESS	WEIGHT	YIELD
SURFACE	LEAD	500'	Premium cmt + 2% CaCl	215	60%	15.60	1.18
			+ 0.25 pps flocele				
Option 1	TOP OUT CMT (6 jobs)	1,200'	20 gals sodium silicate + Premium cmt	380	0%	15.60	1.18
			+ 2% CaCl + 0.25 pps flocele				
			Premium cmt + 2% CaCl				
NOTE: If well will circulate water to surface, option 2 will be utilized							
SURFACE	LEAD	1,785'	65/35 Poz + 6% Gel + 10 pps gilsonite	420	35%	12.60	1.81
			+ 0.25 pps Flocele + 3% salt BWOW				
Option 2	TAIL	500'	Premium cmt + 2% CaCl	180	35%	15.60	1.18
			+ 0.25 pps flocele				
	TOP OUT CMT	as required	Premium cmt + 2% CaCl	as req.		15.60	1.18
PRODUCTION	LEAD	4,005'	Premium Lite II + 3% KCl + 0.25 pps	380	40%	11.00	3.38
			celloflake + 5 pps gilsonite + 10% gel				
			+ 0.5% extender				
	TAIL	5,690'	50/50 Poz/G + 10% salt + 2% gel	1,390	40%	14.30	1.31
			+ 0.1% R-3				

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

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

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

FLOAT EQUIPMENT & CENTRALIZERS

SURFACE	Guide shoe, 1 jt, insert float. Centralize first 3 joints with bow spring centralizers. Thread lock guide shoe	Date: August 04, 2009
PRODUCTION	Float shoe, 1 jt, float collar. No centralizers will be used.	By:

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. The BOPE will be installed before the production hole is drilled and tested to 5,000 psi (annular to 2,500 psi) prior to drilling out the surface casing shoe. Record on chart recorder and tour sheet. Function test rams on each trip. Maintain safety valve and inside BOP on rig floor at all times. Most rigs have top drives; however, if used, the Kelly is to be equipped with upper and lower kelly valves.

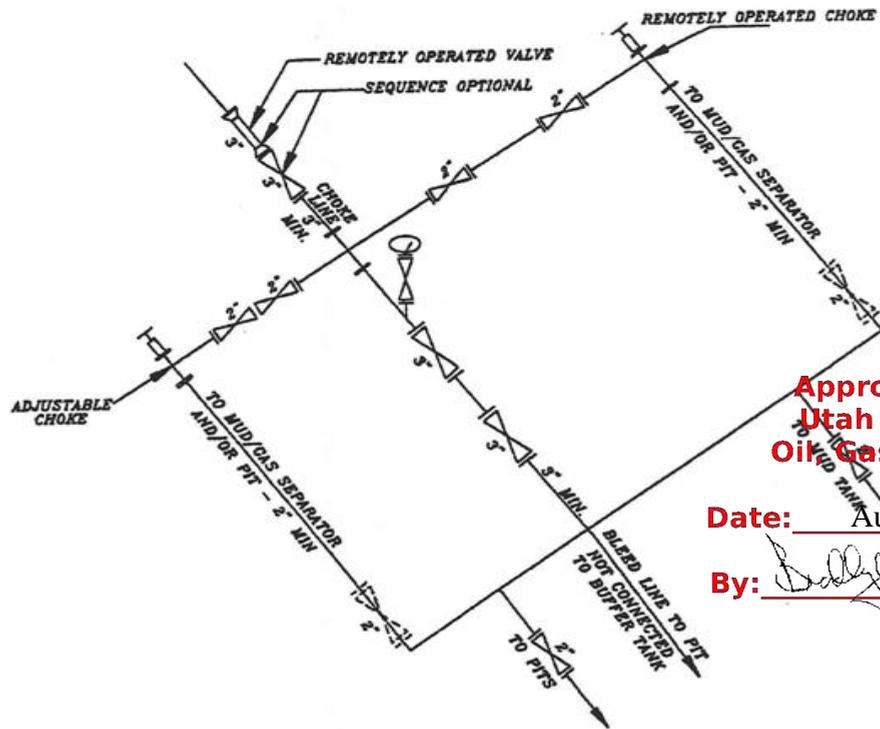
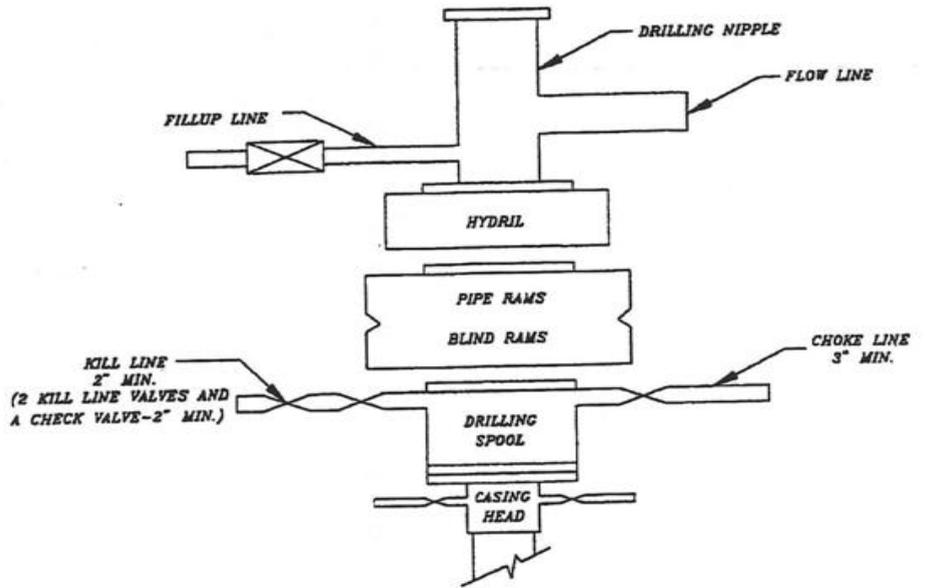
Surveys will be taken at 1,000' minimum intervals.

Most rigs have PVT System for mud monitoring. If no PVT is available, visual monitoring will be utilized.

DRILLING ENGINEER: _____ **DATE:** _____
 John Huycke / Emile Goodwin

DRILLING SUPERINTENDENT: _____ **DATE:** _____
 John Merkel / Lovel Young

**EXHIBIT A
NBU 922-3101AS**



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

Date: August 04, 2009

By: *[Signature]*

SCHEMATIC DIAGRAM OF 5,000 PSI BOP STACK

Kerr-McGee Oil & Gas Onshore LP

NBU 922-31I3CS

Surface: 2,318' FSL, 138' FEL (NE/4SE/4)
BHL: 1,341' FSL 1,125' FEL (NE/4SE/4)
Minerals: State – UO 1530A

NBU 922-31I4AS

Surface: 2,319' FSL, 128' FEL (NE/4SE/4)
BHL: 1,743' FSL 153' FEL (NE/4SE/4)
Minerals: State – UO 1530A

NBU 922-31J4BS

(FKA NBU 922-31J3AS)
Surface: 2,318' FSL, 158' FEL (NE/4SE/4)
BHL: 1,871' FSL 1,973' FEL (NW/4SE/4)
Minerals: State – UO 1207A

NBU 922-31O1AS

Surface: 2,318' FSL, 148' FEL (NE/4SE/4)
BHL: 1,098' FSL 1,494' FEL (SW/4SE/4)
Minerals: State – UO 1207A

Section 31 Township 9 South Range 22 East
Pad: NBU 922-31I
Uintah, Utah
Surface: State

ONSHORE ORDER NO. 1

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

MULTI-POINT SURFACE USE & OPERATIONS PLAN REVISED **Date:** August 04, 2009

By: 

Directional Drilling:

In accordance with Oil & Gas Conservation Rule R649-3-11 pertaining to Directional Drilling, this well will be directionally drilled in order to access portions of our lease which are otherwise inaccessible due to topography.

1. Existing Roads:

Refer to Topo Map A for directions to the location.

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

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

2. Planned Access Roads:

Approximately ±0.1 mi. of new access road is proposed. Please refer to the attached Topo Map B.

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

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

The access road was centerline flagged during time of staking.

Surfacing material may be necessary, depending upon weather conditions.

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

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

Please refer to Topo Map C.

4. Location of Existing & Proposed Facilities:

The following guidelines will apply if the well is productive.

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

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

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

Date: August 04, 2009

By: 

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

All facilities will be painted within six months of installation. Facilities required to comply with the Occupational Safety and Health Act (OSHA) will be excluded. The required color is Shadow Gray, a non-reflective earthtone.

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

5. Location and Type of Water Supply:

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

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

No water well is to be drilled on this lease.

6. Source of Construction Materials:

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

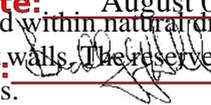
Any gravel will be obtained from a commercial source.

7. Methods of Handling Waste Materials:

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

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

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

**Approved by the
Utah Division of
Oil, Gas and Mining**
Date: August 04, 2009
By: 

A plastic reinforced liner and felt will be used; it will be a minimum of 20 mil thick, with sufficient bedding used to cover any rocks. The liner will overlap the pit walls and be covered with dirt and/or rocks to hold it in place. No trash or scrap that could puncture the liner will be disposed of in the pit. Any spills of oil, gas, salt water, or other noxious fluids will be immediately cleaned up and removed to an approved disposal site.

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

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

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

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

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

Any produced water from the proposed well will be contained in a water tank and will then be hauled By truck to one of the pre-approved disposal sites: RNI in Sec. 5 T9S R22E, NBU #159 in Sec. 35 T9S R21E, Ace Oilfield in Sec. 2 T6S R20E, MC&MC in Sec. 12 T6S R19E, Pipeline Facility in Sec. 36 T9S R20E, Goat Pasture Evaporation Pond in SW/4 Sec. 16 T10S R22E, Bonanza Evaporation Pond in Sec. 2 T10S R23E.

8. Ancillary Facilities:

None are anticipated.

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

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

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

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

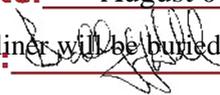
All pits will be fenced according to the following minimum standards:

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

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

Approved by the
Utah Division of
Oil, Gas and Mining

Date: August 04, 2009

By: 

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

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

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

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

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

10. Plans for Reclamation of the Surface:

Producing Location:

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

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

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

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

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

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

Date: August 04, 2009

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

By: [Signature]

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

Dry Hole/Abandoned Location:

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

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

11. Surface/Mineral Ownership:

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

12. Other Information:

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

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

A Class III archaeological survey report and paleontological survey report was attached with the originally submitted APD.

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

Date: August 04, 2009

By: 

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

Kathy Schneebeck Dulnoan
Staff Regulatory Analyst
Kerr-McGee Oil & Gas Onshore LP
PO Box 173779
Denver, CO 80217-3779
(720) 929-6226

Tommy Thompson
General Manager, Drilling
Kerr-McGee Oil & Gas Onshore LP
PO Box 173779
Denver, CO 80217-3779
(720) 929-6724

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 Lessee.

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

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

Bond coverage pursuant to 43 CFR 3104 for lease activities is being provided by State Surety Bond 22013542.

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 I have full knowledge of the State and Federal laws applicable to this operation; 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 in conformity with this APD package and the terms and conditions under which it is approved. I also certify that I, or the company I represent, am responsible for operations conducted under this application. These statements are subject to the provisions of 18 U.S.C. 1001 for the filing of false statements.


Kathy Schneebeck Dulnoan

July 27, 2009
Date

Approved by the
Utah Division of
Oil, Gas and Mining
Date: August 04, 2009
By: 

RECEIVED July 27, 2009



ANADARKO PETROLEUM CORP.

UINTAH COUNTY, UTAH (nad 27)

NBU 922-31I PAD

NBU 922-31O1AS

NBU 922-31O1AS

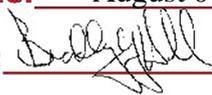
Plan: Design #1

Standard Planning Report

24 July, 2009

Approved by the
Utah Division of
Oil, Gas and Mining

Date: August 04, 2009

By: 



Weatherford[®]

RECEIVED July 27, 2009



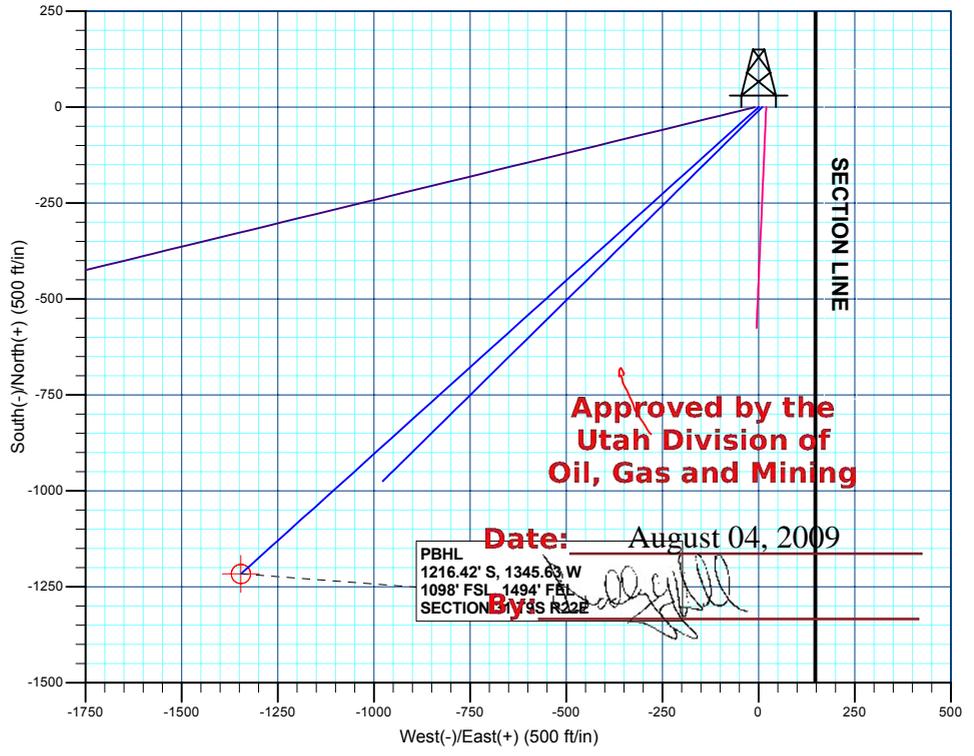
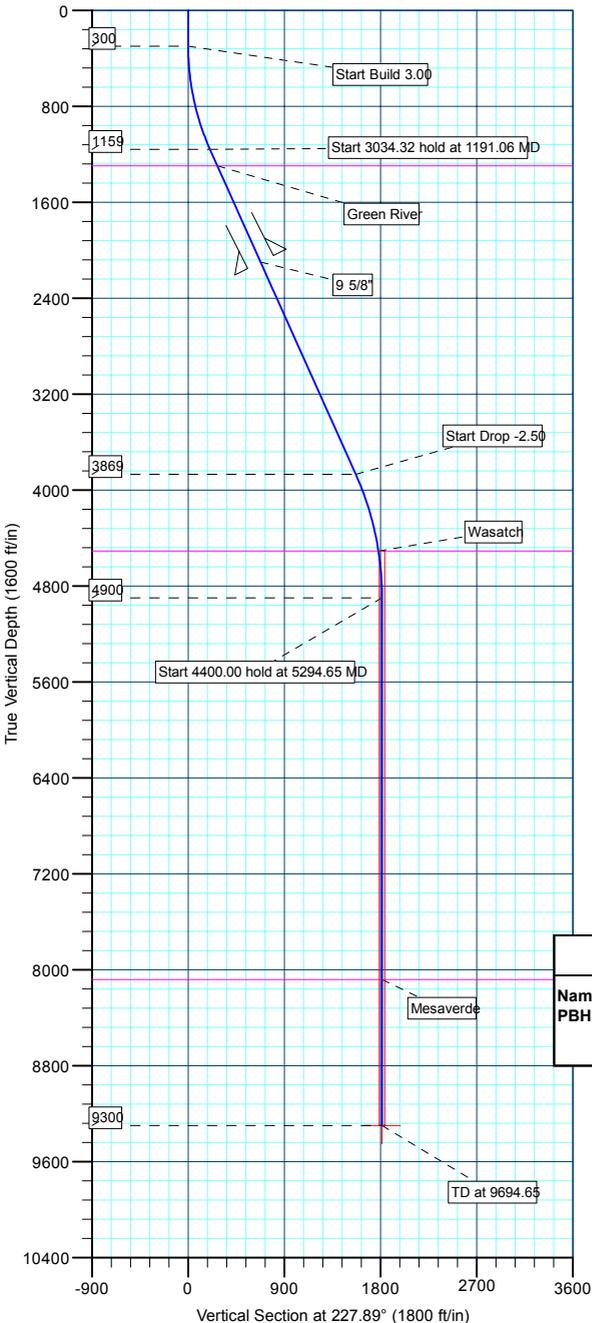
WELL DETAILS: NBU 922-3101AS							
+N/-S	+E/-W	Northing	Ground Level: Easting	5035.00 Latitude	Longitude	Slot	
0.00	0.00	14526665.94	2068092.26	39° 59' 29.933 N	109° 28' 23.243 W		

FORMATION TOP DETAILS		
TVDPath	MDPath	Formation
1296.00	1344.36	Green River
4509.00	4901.73	Wasatch
8083.00	8477.65	Mesaverde

SECTION DETAILS										
MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00		
1191.06	26.73	227.89	1159.08	-136.88	-151.42	3.00	227.89	204.12		
4225.38	26.73	227.89	3869.10	-1052.16	-1163.93	0.00	0.00	1569.00		
5294.65	0.00	0.00	4900.00	-1216.42	-1345.63	2.50	180.00	1813.95		
9694.65	0.00	0.00	9300.00	-1216.42	-1345.63	0.00	0.00	1813.95	PBHL_NBU 922-3101AS	

CASING DETAILS			
TVD	MD	Name	Size
2100.00	2244.57	9 5/8"	9.62

KB ELEV: WELL @ 5061.00ft (Original Well Elev)
 GRD ELEV: 5035.00



WELLBORE TARGET DETAILS (MAP CO-ORDINATES AND LAT/LONG)									
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape	
PBHL	9300.00	-1216.42	-1345.63	14525426.65	2066767.66	39° 59' 17.909 N	109° 28' 40.534 W	Circle (Radius: 25.00)	

Database:	EDM 2003.21 Single User Db	Local Co-ordinate Reference:	Well NBU 922-31O1AS
Company:	ANADARKO PETROLEUM CORP.	TVD Reference:	WELL @ 5061.00ft (Original Well Elev)
Project:	UINTAH COUNTY, UTAH (nad 27)	MD Reference:	WELL @ 5061.00ft (Original Well Elev)
Site:	NBU 922-31I PAD	North Reference:	True
Well:	NBU 922-31O1AS	Survey Calculation Method:	Minimum Curvature
Wellbore:	NBU 922-31O1AS		
Design:	Design #1		

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

Site	NBU 922-31I PAD, SECTION 31 T9S R22E				
Site Position:		Northing:	14,526,666.65 ft	Latitude:	39° 59' 29.936 N
From:	Lat/Long	Easting:	2,068,112.42 ft	Longitude:	109° 28' 22.984 W
Position Uncertainty:	0.00 ft	Slot Radius:	in	Grid Convergence:	0.98 °

Well	NBU 922-31O1AS					
Well Position	+N/-S	-0.36 ft	Northing:	14,526,665.94 ft	Latitude:	39° 59' 29.933 N
	+E/-W	-20.17 ft	Easting:	2,068,092.26 ft	Longitude:	109° 28' 23.243 W
Position Uncertainty		0.00 ft	Wellhead Elevation:	ft	Ground Level:	5,035.00 ft

Wellbore	NBU 922-31O1AS				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	BGGM2009	7/23/2009	11.34	65.94	52,525

Design	Design #1			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.00	0.00	0.00	227.89

Plan Sections									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO Target (°)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
1,191.06	26.73	227.89	1,159.08	-136.88	-151.42	3.00	3.00	0.00	0.00
4,225.38	26.73	227.89	3,869.10	-1,052.16	-1,163.93	0.00	0.00	0.00	0.00
5,294.65	0.00	0.00	4,900.00	-1,216.42	-1,345.63	2.50	-2.50	0.00	180.00
9,694.65	0.00	0.00	9,300.00	-1,216.42	-1,345.63	0.00	0.00	0.00	0.00

Approved by the Utah Division of Oil, Gas and Mining

Date: August 04, 2009

By: *[Signature]*

Database:	EDM 2003.21 Single User Db	Local Co-ordinate Reference:	Well NBU 922-3101AS
Company:	ANADARKO PETROLEUM CORP.	TVD Reference:	WELL @ 5061.00ft (Original Well Elev)
Project:	UINTAH COUNTY, UTAH (nad 27)	MD Reference:	WELL @ 5061.00ft (Original Well Elev)
Site:	NBU 922-311 PAD	North Reference:	True
Well:	NBU 922-3101AS	Survey Calculation Method:	Minimum Curvature
Wellbore:	NBU 922-3101AS		
Design:	Design #1		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
Start Build 3.00									
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	3.00	227.89	399.95	-1.76	-1.94	2.62	3.00	3.00	0.00
500.00	6.00	227.89	499.63	-7.02	-7.76	10.46	3.00	3.00	0.00
600.00	9.00	227.89	598.77	-15.77	-17.44	23.51	3.00	3.00	0.00
700.00	12.00	227.89	697.08	-27.99	-30.96	41.74	3.00	3.00	0.00
800.00	15.00	227.89	794.31	-43.64	-48.28	65.08	3.00	3.00	0.00
900.00	18.00	227.89	890.18	-62.68	-69.34	93.48	3.00	3.00	0.00
1,000.00	21.00	227.89	984.43	-85.07	-94.10	126.85	3.00	3.00	0.00
1,100.00	24.00	227.89	1,076.81	-110.73	-122.49	165.12	3.00	3.00	0.00
Start 3034.32 hold at 1191.06 MD									
1,191.06	26.73	227.89	1,159.08	-136.88	-151.42	204.12	3.00	3.00	0.00
1,200.00	26.73	227.89	1,167.07	-139.58	-154.41	208.14	0.00	0.00	0.00
1,300.00	26.73	227.89	1,256.38	-169.74	-187.77	253.13	0.00	0.00	0.00
Green River									
1,344.36	26.73	227.89	1,296.00	-183.13	-202.58	273.08	0.00	0.00	0.00
1,400.00	26.73	227.89	1,345.69	-199.91	-221.14	298.11	0.00	0.00	0.00
1,500.00	26.73	227.89	1,435.00	-230.07	-254.51	343.09	0.00	0.00	0.00
1,600.00	26.73	227.89	1,524.32	-260.24	-287.88	388.07	0.00	0.00	0.00
1,700.00	26.73	227.89	1,613.63	-290.40	-321.25	433.05	0.00	0.00	0.00
1,800.00	26.73	227.89	1,702.94	-320.57	-354.62	478.03	0.00	0.00	0.00
1,900.00	26.73	227.89	1,792.25	-350.73	-387.98	523.01	0.00	0.00	0.00
2,000.00	26.73	227.89	1,881.56	-380.89	-421.35	568.00	0.00	0.00	0.00
2,100.00	26.73	227.89	1,970.88	-411.06	-454.72	612.98	0.00	0.00	0.00
2,200.00	26.73	227.89	2,060.19	-441.22	-488.09	657.96	0.00	0.00	0.00
9 5/8"									
2,244.57	26.73	227.89	2,100.00	-454.67	-502.96	678.01	0.00	0.00	0.00
2,300.00	26.73	227.89	2,149.50	-471.39	-521.46	702.94	0.00	0.00	0.00
2,400.00	26.73	227.89	2,238.81	-501.55	-554.83	747.92	0.00	0.00	0.00
2,500.00	26.73	227.89	2,328.13	-531.72	-588.20	792.90	0.00	0.00	0.00
2,600.00	26.73	227.89	2,417.44	-561.88	-621.56	837.88	0.00	0.00	0.00
2,700.00	26.73	227.89	2,506.75	-592.04	-654.93	882.87	0.00	0.00	0.00
2,800.00	26.73	227.89	2,596.06	-622.21	-688.30	927.85	0.00	0.00	0.00
2,900.00	26.73	227.89	2,685.37	-652.37	-721.67	972.83	0.00	0.00	0.00
3,000.00	26.73	227.89	2,774.69	-682.54	-755.04	1,017.81	0.00	0.00	0.00
3,100.00	26.73	227.89	2,864.00	-712.70	-788.41	1,062.79	0.00	0.00	0.00
3,200.00	26.73	227.89	2,953.31	-742.87	-821.77	1,107.77	0.00	0.00	0.00
3,300.00	26.73	227.89	3,042.62	-773.03	-855.14	1,152.75	0.00	0.00	0.00
3,400.00	26.73	227.89	3,131.94	-803.19	-888.51	1,197.74	0.00	0.00	0.00
3,500.00	26.73	227.89	3,221.25	-833.36	-921.88	1,242.72	0.00	0.00	0.00
3,600.00	26.73	227.89	3,310.56	-863.52	-955.25	1,287.70	0.00	0.00	0.00
3,700.00	26.73	227.89	3,399.87	-893.69	-988.62	1,332.68	0.00	0.00	0.00
3,800.00	26.73	227.89	3,489.18	-923.85	-1,021.98	1,377.66	0.00	0.00	0.00
3,900.00	26.73	227.89	3,578.50	-954.01	-1,055.35	1,422.64	0.00	0.00	0.00
4,000.00	26.73	227.89	3,667.81	-984.18	-1,088.72	1,467.62	0.00	0.00	0.00
4,100.00	26.73	227.89	3,757.12	-1,014.34	-1,122.09	1,512.61	0.00	0.00	0.00
4,200.00	26.73	227.89	3,846.43	-1,044.51	-1,155.46	1,557.59	0.00	0.00	0.00
Start Drop -2.50									
4,225.38	26.73	227.89	3,869.10	-1,052.16	-1,163.93	1,569.00	0.00	0.00	0.00
4,300.00	24.87	227.89	3,936.28	-1,073.94	-1,188.02	1,601.48	2.50	-2.50	0.00
4,400.00	22.37	227.89	4,027.90	-1,100.80	-1,217.73	1,641.54	2.50	-2.50	0.00
4,500.00	19.87	227.89	4,121.18	-1,124.96	-1,244.46	1,677.56	2.50	-2.50	0.00
4,600.00	17.37	227.89	4,215.94	-1,146.37	-1,268.14	1,709.48	2.50	-2.50	0.00

**Approved by the
Utah Division of
Oil, Gas and Mining**
Date: August 04, 2009
By: *[Signature]*

Database:	EDM 2003.21 Single User Db	Local Co-ordinate Reference:	Well NBU 922-3101AS
Company:	ANADARKO PETROLEUM CORP.	TVD Reference:	WELL @ 5061.00ft (Original Well Elev)
Project:	UINTAH COUNTY, UTAH (nad 27)	MD Reference:	WELL @ 5061.00ft (Original Well Elev)
Site:	NBU 922-311 PAD	North Reference:	True
Well:	NBU 922-3101AS	Survey Calculation Method:	Minimum Curvature
Wellbore:	NBU 922-3101AS		
Design:	Design #1		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
4,700.00	14.87	227.89	4,312.00	-1,164.98	-1,288.73	1,737.24	2.50	-2.50	0.00
4,800.00	12.37	227.89	4,409.18	-1,180.76	-1,306.19	1,760.78	2.50	-2.50	0.00
4,900.00	9.87	227.89	4,507.30	-1,193.69	-1,320.49	1,780.06	2.50	-2.50	0.00
Wasatch									
4,901.73	9.82	227.89	4,509.00	-1,193.89	-1,320.71	1,780.35	2.50	-2.50	0.00
5,000.00	7.37	227.89	4,606.16	-1,203.74	-1,331.60	1,795.04	2.50	-2.50	0.00
5,100.00	4.87	227.89	4,705.58	-1,210.88	-1,339.51	1,805.69	2.50	-2.50	0.00
5,200.00	2.37	227.89	4,805.37	-1,215.11	-1,344.19	1,812.00	2.50	-2.50	0.00
Start 4400.00 hold at 5294.65 MD									
5,294.65	0.00	0.00	4,900.00	-1,216.42	-1,345.63	1,813.95	2.50	-2.50	139.58
5,300.00	0.00	0.00	4,905.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00
5,400.00	0.00	0.00	5,005.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00
5,500.00	0.00	0.00	5,105.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00
5,600.00	0.00	0.00	5,205.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00
5,700.00	0.00	0.00	5,305.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00
5,800.00	0.00	0.00	5,405.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00
5,900.00	0.00	0.00	5,505.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00
6,000.00	0.00	0.00	5,605.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00
6,100.00	0.00	0.00	5,705.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00
6,200.00	0.00	0.00	5,805.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00
6,300.00	0.00	0.00	5,905.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00
6,400.00	0.00	0.00	6,005.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00
6,500.00	0.00	0.00	6,105.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00
6,600.00	0.00	0.00	6,205.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00
6,700.00	0.00	0.00	6,305.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00
6,800.00	0.00	0.00	6,405.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00
6,900.00	0.00	0.00	6,505.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00
7,000.00	0.00	0.00	6,605.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00
7,100.00	0.00	0.00	6,705.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00
7,200.00	0.00	0.00	6,805.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00
7,300.00	0.00	0.00	6,905.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00
7,400.00	0.00	0.00	7,005.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00
7,500.00	0.00	0.00	7,105.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00
7,600.00	0.00	0.00	7,205.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00
7,700.00	0.00	0.00	7,305.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00
7,800.00	0.00	0.00	7,405.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00
7,900.00	0.00	0.00	7,505.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00
8,000.00	0.00	0.00	7,605.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00
8,100.00	0.00	0.00	7,705.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00
8,200.00	0.00	0.00	7,805.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00
8,300.00	0.00	0.00	7,905.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00
8,400.00	0.00	0.00	8,005.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00
Mesaverde									
8,477.65	0.00	0.00	8,083.00	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00
8,500.00	0.00	0.00	8,105.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00
8,600.00	0.00	0.00	8,205.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00
8,700.00	0.00	0.00	8,305.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00
8,800.00	0.00	0.00	8,405.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00
8,900.00	0.00	0.00	8,505.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00
9,000.00	0.00	0.00	8,605.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00
9,100.00	0.00	0.00	8,705.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00
9,200.00	0.00	0.00	8,805.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00
9,300.00	0.00	0.00	8,905.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00

Approved by the
Utah Division of
Oil, Gas and Mining
 Date: August 04, 2009
 By: *[Signature]*

Database:	EDM 2003.21 Single User Db	Local Co-ordinate Reference:	Well NBU 922-31O1AS
Company:	ANADARKO PETROLEUM CORP.	TVD Reference:	WELL @ 5061.00ft (Original Well Elev)
Project:	UINTAH COUNTY, UTAH (nad 27)	MD Reference:	WELL @ 5061.00ft (Original Well Elev)
Site:	NBU 922-31I PAD	North Reference:	True
Well:	NBU 922-31O1AS	Survey Calculation Method:	Minimum Curvature
Wellbore:	NBU 922-31O1AS		
Design:	Design #1		

Planned Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
9,400.00	0.00	0.00	9,005.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00	
9,500.00	0.00	0.00	9,105.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00	
9,600.00	0.00	0.00	9,205.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00	
PBHL_NBU 922-31O1AS										
9,694.65	0.00	0.00	9,300.00	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00	

Design Targets										
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude	
- hit/miss target										
- Shape										
PBHL_NBU 922-31O	0.00	0.00	9,300.00	-1,216.42	-1,345.63	14,525,426.65	2,066,767.66	39° 59' 17.909 N	109° 28' 40.534 W	
- plan hits target center										
- Circle (radius 25.00)										

Casing Points						
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (in)	Hole Diameter (in)		
2,244.57	2,100.00	9 5/8"	9.62	12.25		

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
1,344.36	1,296.00	Green River				
4,901.73	4,509.00	Wasatch				
8,477.65	8,083.00	Mesaverde				

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

Plan Annotations					Date: August 04, 2009
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment	By: <i>[Signature]</i>
		+N/-S (ft)	+E/-W (ft)		
300.00	300.00	0.00	0.00	Start Build 3.00	
1,191.06	1,159.08	-136.88	-151.42	Start 3034.32 hold at 1191.06 MD	
4,225.38	3,869.10	-1,052.16	-1,163.93	Start Drop -2.50	
5,294.65	4,900.00	-1,216.42	-1,345.63	Start 4400.00 hold at 5294.65 MD	
9,694.65	9,300.00	-1,216.42	-1,345.63	TD at 9694.65	



ANADARKO PETROLEUM CORP.

UINTAH COUNTY, UTAH (nad 27)

NBU 922-31I PAD

NBU 922-31O1AS

NBU 922-31O1AS

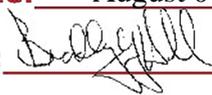
Plan: Design #1

Standard Planning Report

24 July, 2009

Approved by the
Utah Division of
Oil, Gas and Mining

Date: August 04, 2009

By: 



Weatherford[®]

RECEIVED July 27, 2009

Database:	EDM 2003.21 Single User Db	Local Co-ordinate Reference:	Well NBU 922-31O1AS
Company:	ANADARKO PETROLEUM CORP.	TVD Reference:	WELL @ 5061.00ft (Original Well Elev)
Project:	UINTAH COUNTY, UTAH (nad 27)	MD Reference:	WELL @ 5061.00ft (Original Well Elev)
Site:	NBU 922-31I PAD	North Reference:	True
Well:	NBU 922-31O1AS	Survey Calculation Method:	Minimum Curvature
Wellbore:	NBU 922-31O1AS		
Design:	Design #1		

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

Site	NBU 922-31I PAD, SECTION 31 T9S R22E				
Site Position:		Northing:	14,526,666.65 ft	Latitude:	39° 59' 29.936 N
From:	Lat/Long	Easting:	2,068,112.42 ft	Longitude:	109° 28' 22.984 W
Position Uncertainty:	0.00 ft	Slot Radius:	in	Grid Convergence:	0.98 °

Well	NBU 922-31O1AS					
Well Position	+N/-S	-0.36 ft	Northing:	14,526,665.94 ft	Latitude:	39° 59' 29.933 N
	+E/-W	-20.17 ft	Easting:	2,068,092.26 ft	Longitude:	109° 28' 23.243 W
Position Uncertainty		0.00 ft	Wellhead Elevation:	ft	Ground Level:	5,035.00 ft

Wellbore	NBU 922-31O1AS				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	BGGM2009	7/23/2009	11.34	65.94	52,525

Design	Design #1			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.00	0.00	0.00	227.89

Plan Sections									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
1,191.06	26.73	227.89	1,159.08	-136.88	-151.42	3.00	3.00	0.00	0.00
4,225.38	26.73	227.89	3,869.10	-1,052.16	-1,163.93	0.00	0.00	0.00	0.00
5,294.65	0.00	0.00	4,900.00	-1,216.42	-1,345.63	2.50	-2.50	0.00	180.00
9,694.65	0.00	0.00	9,300.00	-1,216.42	-1,345.63	0.00	0.00	0.00	0.00

Approved by the
Utah Division of
Oil, Gas and Mining

Date: August 04, 2009

By:

Database:	EDM 2003.21 Single User Db	Local Co-ordinate Reference:	Well NBU 922-3101AS
Company:	ANADARKO PETROLEUM CORP.	TVD Reference:	WELL @ 5061.00ft (Original Well Elev)
Project:	UINTAH COUNTY, UTAH (nad 27)	MD Reference:	WELL @ 5061.00ft (Original Well Elev)
Site:	NBU 922-311 PAD	North Reference:	True
Well:	NBU 922-3101AS	Survey Calculation Method:	Minimum Curvature
Wellbore:	NBU 922-3101AS		
Design:	Design #1		

Planned Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
Start Build 3.00										
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	3.00	227.89	399.95	-1.76	-1.94	2.62	3.00	3.00	3.00	0.00
500.00	6.00	227.89	499.63	-7.02	-7.76	10.46	3.00	3.00	3.00	0.00
600.00	9.00	227.89	598.77	-15.77	-17.44	23.51	3.00	3.00	3.00	0.00
700.00	12.00	227.89	697.08	-27.99	-30.96	41.74	3.00	3.00	3.00	0.00
800.00	15.00	227.89	794.31	-43.64	-48.28	65.08	3.00	3.00	3.00	0.00
900.00	18.00	227.89	890.18	-62.68	-69.34	93.48	3.00	3.00	3.00	0.00
1,000.00	21.00	227.89	984.43	-85.07	-94.10	126.85	3.00	3.00	3.00	0.00
1,100.00	24.00	227.89	1,076.81	-110.73	-122.49	165.12	3.00	3.00	3.00	0.00
Start 3034.32 hold at 1191.06 MD										
1,191.06	26.73	227.89	1,159.08	-136.88	-151.42	204.12	3.00	3.00	3.00	0.00
1,200.00	26.73	227.89	1,167.07	-139.58	-154.41	208.14	0.00	0.00	0.00	0.00
1,300.00	26.73	227.89	1,256.38	-169.74	-187.77	253.13	0.00	0.00	0.00	0.00
Green River										
1,344.36	26.73	227.89	1,296.00	-183.13	-202.58	273.08	0.00	0.00	0.00	0.00
1,400.00	26.73	227.89	1,345.69	-199.91	-221.14	298.11	0.00	0.00	0.00	0.00
1,500.00	26.73	227.89	1,435.00	-230.07	-254.51	343.09	0.00	0.00	0.00	0.00
1,600.00	26.73	227.89	1,524.32	-260.24	-287.88	388.07	0.00	0.00	0.00	0.00
1,700.00	26.73	227.89	1,613.63	-290.40	-321.25	433.05	0.00	0.00	0.00	0.00
1,800.00	26.73	227.89	1,702.94	-320.57	-354.62	478.03	0.00	0.00	0.00	0.00
1,900.00	26.73	227.89	1,792.25	-350.73	-387.98	523.01	0.00	0.00	0.00	0.00
2,000.00	26.73	227.89	1,881.56	-380.89	-421.35	568.00	0.00	0.00	0.00	0.00
2,100.00	26.73	227.89	1,970.88	-411.06	-454.72	612.98	0.00	0.00	0.00	0.00
2,200.00	26.73	227.89	2,060.19	-441.22	-488.09	657.96	0.00	0.00	0.00	0.00
9 5/8"										
2,244.57	26.73	227.89	2,100.00	-454.67	-502.96	678.01	0.00	0.00	0.00	0.00
2,300.00	26.73	227.89	2,149.50	-471.39	-521.46	702.94	0.00	0.00	0.00	0.00
2,400.00	26.73	227.89	2,238.81	-501.55	-554.83	747.92	0.00	0.00	0.00	0.00
2,500.00	26.73	227.89	2,328.13	-531.72	-588.20	792.90	0.00	0.00	0.00	0.00
2,600.00	26.73	227.89	2,417.44	-561.88	-621.56	837.88	0.00	0.00	0.00	0.00
2,700.00	26.73	227.89	2,506.75	-592.04	-654.93	882.87	0.00	0.00	0.00	0.00
2,800.00	26.73	227.89	2,596.06	-622.21	-688.30	927.85	0.00	0.00	0.00	0.00
2,900.00	26.73	227.89	2,685.37	-652.37	-721.67	972.83	0.00	0.00	0.00	0.00
3,000.00	26.73	227.89	2,774.69	-682.54	-755.04	1,017.81	0.00	0.00	0.00	0.00
3,100.00	26.73	227.89	2,864.00	-712.70	-788.41	1,062.79	0.00	0.00	0.00	0.00
3,200.00	26.73	227.89	2,953.31	-742.87	-821.77	1,107.77	0.00	0.00	0.00	0.00
3,300.00	26.73	227.89	3,042.62	-773.03	-855.14	1,152.75	0.00	0.00	0.00	0.00
3,400.00	26.73	227.89	3,131.94	-803.19	-888.51	1,197.74	0.00	0.00	0.00	0.00
3,500.00	26.73	227.89	3,221.25	-833.36	-921.88	1,242.72	0.00	0.00	0.00	0.00
3,600.00	26.73	227.89	3,310.56	-863.52	-955.25	1,287.70	0.00	0.00	0.00	0.00
3,700.00	26.73	227.89	3,399.87	-893.69	-988.62	1,332.68	0.00	0.00	0.00	0.00
3,800.00	26.73	227.89	3,489.18	-923.85	-1,021.98	1,377.66	0.00	0.00	0.00	0.00
3,900.00	26.73	227.89	3,578.50	-954.01	-1,055.35	1,422.64	0.00	0.00	0.00	0.00
4,000.00	26.73	227.89	3,667.81	-984.18	-1,088.72	1,467.62	0.00	0.00	0.00	0.00
4,100.00	26.73	227.89	3,757.12	-1,014.34	-1,122.09	1,512.61	0.00	0.00	0.00	0.00
4,200.00	26.73	227.89	3,846.43	-1,044.51	-1,155.46	1,557.59	0.00	0.00	0.00	0.00
Start Drop -2.50										
4,225.38	26.73	227.89	3,869.10	-1,052.16	-1,163.93	1,569.00	0.00	0.00	0.00	0.00
4,300.00	24.87	227.89	3,936.28	-1,073.94	-1,188.02	1,601.48	2.50	-2.50	0.00	0.00
4,400.00	22.37	227.89	4,027.90	-1,100.80	-1,217.73	1,641.54	2.50	-2.50	0.00	0.00
4,500.00	19.87	227.89	4,121.18	-1,124.96	-1,244.46	1,677.56	2.50	-2.50	0.00	0.00
4,600.00	17.37	227.89	4,215.94	-1,146.37	-1,268.14	1,709.48	2.50	-2.50	0.00	0.00

**Approved by the
Utah Division of
Oil, Gas and Mining**
Date: August 04, 2009
By: *[Signature]*

Database:	EDM 2003.21 Single User Db	Local Co-ordinate Reference:	Well NBU 922-3101AS
Company:	ANADARKO PETROLEUM CORP.	TVD Reference:	WELL @ 5061.00ft (Original Well Elev)
Project:	UINTAH COUNTY, UTAH (nad 27)	MD Reference:	WELL @ 5061.00ft (Original Well Elev)
Site:	NBU 922-311 PAD	North Reference:	True
Well:	NBU 922-3101AS	Survey Calculation Method:	Minimum Curvature
Wellbore:	NBU 922-3101AS		
Design:	Design #1		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
4,700.00	14.87	227.89	4,312.00	-1,164.98	-1,288.73	1,737.24	2.50	-2.50	0.00
4,800.00	12.37	227.89	4,409.18	-1,180.76	-1,306.19	1,760.78	2.50	-2.50	0.00
4,900.00	9.87	227.89	4,507.30	-1,193.69	-1,320.49	1,780.06	2.50	-2.50	0.00
Wasatch									
4,901.73	9.82	227.89	4,509.00	-1,193.89	-1,320.71	1,780.35	2.50	-2.50	0.00
5,000.00	7.37	227.89	4,606.16	-1,203.74	-1,331.60	1,795.04	2.50	-2.50	0.00
5,100.00	4.87	227.89	4,705.58	-1,210.88	-1,339.51	1,805.69	2.50	-2.50	0.00
5,200.00	2.37	227.89	4,805.37	-1,215.11	-1,344.19	1,812.00	2.50	-2.50	0.00
Start 4400.00 hold at 5294.65 MD									
5,294.65	0.00	0.00	4,900.00	-1,216.42	-1,345.63	1,813.95	2.50	-2.50	139.58
5,300.00	0.00	0.00	4,905.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00
5,400.00	0.00	0.00	5,005.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00
5,500.00	0.00	0.00	5,105.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00
5,600.00	0.00	0.00	5,205.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00
5,700.00	0.00	0.00	5,305.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00
5,800.00	0.00	0.00	5,405.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00
5,900.00	0.00	0.00	5,505.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00
6,000.00	0.00	0.00	5,605.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00
6,100.00	0.00	0.00	5,705.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00
6,200.00	0.00	0.00	5,805.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00
6,300.00	0.00	0.00	5,905.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00
6,400.00	0.00	0.00	6,005.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00
6,500.00	0.00	0.00	6,105.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00
6,600.00	0.00	0.00	6,205.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00
6,700.00	0.00	0.00	6,305.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00
6,800.00	0.00	0.00	6,405.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00
6,900.00	0.00	0.00	6,505.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00
7,000.00	0.00	0.00	6,605.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00
7,100.00	0.00	0.00	6,705.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00
7,200.00	0.00	0.00	6,805.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00
7,300.00	0.00	0.00	6,905.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00
7,400.00	0.00	0.00	7,005.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00
7,500.00	0.00	0.00	7,105.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00
7,600.00	0.00	0.00	7,205.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00
7,700.00	0.00	0.00	7,305.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00
7,800.00	0.00	0.00	7,405.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00
7,900.00	0.00	0.00	7,505.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00
8,000.00	0.00	0.00	7,605.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00
8,100.00	0.00	0.00	7,705.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00
8,200.00	0.00	0.00	7,805.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00
8,300.00	0.00	0.00	7,905.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00
8,400.00	0.00	0.00	8,005.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00
Mesaverde									
8,477.65	0.00	0.00	8,083.00	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00
8,500.00	0.00	0.00	8,105.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00
8,600.00	0.00	0.00	8,205.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00
8,700.00	0.00	0.00	8,305.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00
8,800.00	0.00	0.00	8,405.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00
8,900.00	0.00	0.00	8,505.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00
9,000.00	0.00	0.00	8,605.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00
9,100.00	0.00	0.00	8,705.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00
9,200.00	0.00	0.00	8,805.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00
9,300.00	0.00	0.00	8,905.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00

Approved by the
Utah Division of
Oil, Gas and Mining
 Date: August 04, 2009
 By: *[Signature]*

Database:	EDM 2003.21 Single User Db	Local Co-ordinate Reference:	Well NBU 922-31O1AS
Company:	ANADARKO PETROLEUM CORP.	TVD Reference:	WELL @ 5061.00ft (Original Well Elev)
Project:	UINTAH COUNTY, UTAH (nad 27)	MD Reference:	WELL @ 5061.00ft (Original Well Elev)
Site:	NBU 922-31I PAD	North Reference:	True
Well:	NBU 922-31O1AS	Survey Calculation Method:	Minimum Curvature
Wellbore:	NBU 922-31O1AS		
Design:	Design #1		

Planned Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
9,400.00	0.00	0.00	9,005.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00	
9,500.00	0.00	0.00	9,105.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00	
9,600.00	0.00	0.00	9,205.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00	
PBHL_NBU 922-31O1AS										
9,694.65	0.00	0.00	9,300.00	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00	

Design Targets										
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude	
PBHL_NBU 922-31O	0.00	0.00	9,300.00	-1,216.42	-1,345.63	14,525,426.65	2,066,767.66	39° 59' 17.909 N	109° 28' 40.534 W	
- hit/miss target - Shape - plan hits target center - Circle (radius 25.00)										

Casing Points							Casing Diameter (in)	Hole Diameter (in)
Measured Depth (ft)	Vertical Depth (ft)	Name						
2,244.57	2,100.00	9 5/8"					9.62	12.25

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
1,344.36	1,296.00	Green River				
4,901.73	4,509.00	Wasatch				
8,477.65	8,083.00	Mesaverde				

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

Plan Annotations						Date: August 04, 2009
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment	By:	
		+N/-S (ft)	+E/-W (ft)			
300.00	300.00	0.00	0.00	Start Build 3.00		
1,191.06	1,159.08	-136.88	-151.42	Start 3034.32 hold at 1191.06 MD		
4,225.38	3,869.10	-1,052.16	-1,163.93	Start Drop -2.50		
5,294.65	4,900.00	-1,216.42	-1,345.63	Start 4400.00 hold at 5294.65 MD		
9,694.65	9,300.00	-1,216.42	-1,345.63	TD at 9694.65		



July 27, 2009

Ms. 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 922-31O1AS
T9S-R22E
Section 31: NESE (Surf), SWSE (Bottom)
Surface: 2318' FSL, 148' FEL
Bottom Hole: 1098' FSL, 1494' FEL
Uintah County, Utah

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

Date: August 04, 2009

By:

Dear Ms. 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 922-31O1AS is located within the Natural Buttes Unit area.
- Kerr-McGee is permitting this well as a directional well in order to minimize surface disturbance. Locating the well at the surface location and directionally drilling from this location, Kerr-McGee will be able to utilize the existing road and pipelines in the area.
- Furthermore, Kerr-McGee certifies that it is the sole working interest owner within 460 feet of the entire directional well bore.

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

Sincerely,

KERR-MCGEE OIL & GAS ONSHORE LP

Jason Rayburn
Landman

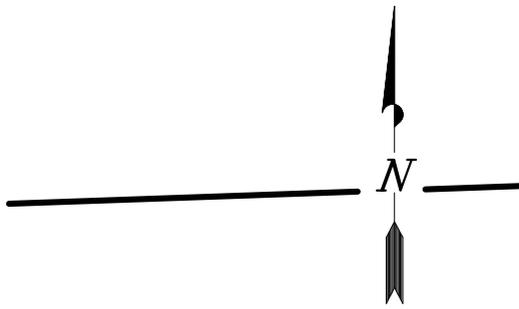
RECEIVED July 27, 2009

LATITUDE & LONGITUDE		
Surface Position - (NAD 83)		
WELL	N. LATITUDE	W. LONGITUDE
NBU 922-31J4BS	39°59'29.802" 39.991612°	109°28'25.836" 109.473843°
NBU 922-31O1AS	39°59'29.806" 39.991613°	109°28'25.708" 109.473808°
NBU 922-31I3CS	39°59'29.809" 39.991614°	109°28'25.579" 109.473772°
NBU 922-31I4AS	39°59'29.813" 39.991615°	109°28'25.451" 109.473736°

LATITUDE & LONGITUDE		
Bottom Hole - (NAD 83)		
WELL	N. LATITUDE	W. LONGITUDE
NBU 922-31J4BS	39°59'25.429" 39.990397°	109°28'49.151" 109.480320°
NBU 922-31O1AS	39°59'17.782" 39.988273°	109°28'43.001" 109.478611°
NBU 922-31I3CS	39°59'20.174" 39.988937°	109°28'38.260" 109.477295°
NBU 922-31I4AS	39°59'24.125" 39.990035°	109°28'25.774" 109.473826°

LATITUDE & LONGITUDE		
Surface Position - (NAD 27)		
WELL	N. LATITUDE	W. LONGITUDE
NBU 922-31J4BS	39°59'29.928" 39.991647°	109°28'23.370" 109.473158°
NBU 922-31O1AS	39°59'29.931" 39.991648°	109°28'23.242" 109.473123°
NBU 922-31I3CS	39°59'29.935" 39.991649°	109°28'23.113" 109.473087°
NBU 922-31I4AS	39°59'29.938" 39.991649°	109°28'22.985" 109.473051°

LATITUDE & LONGITUDE		
Bottom Hole - (NAD 27)		
WELL	N. LATITUDE	W. LONGITUDE
NBU 922-31J4BS	39°59'25.555" 39.990432°	109°28'46.684" 109.479634°
NBU 922-31O1AS	39°59'17.907" 39.988308°	109°28'40.534" 109.477926°
NBU 922-31I3CS	39°59'20.300" 39.988972°	109°28'35.794" 109.476609°
NBU 922-31I4AS	39°59'24.250" 39.990069°	109°28'23.308" 109.473141°



BASIS OF BEARINGS IS THE EAST LINE OF THE SE 1/4 OF SECTION 31, T9S, R22E, S.L.B.&M. WHICH IS TAKEN FROM GLOBAL POSITIONING SATELLITE OBSERVATIONS TO BEAR N00°01'20"E.

NBU 922-31J4BS
NBU 922-31O1AS
NBU 922-31I3CS
NBU 922-31I4AS

SURFACE POSITION FOOTAGES:

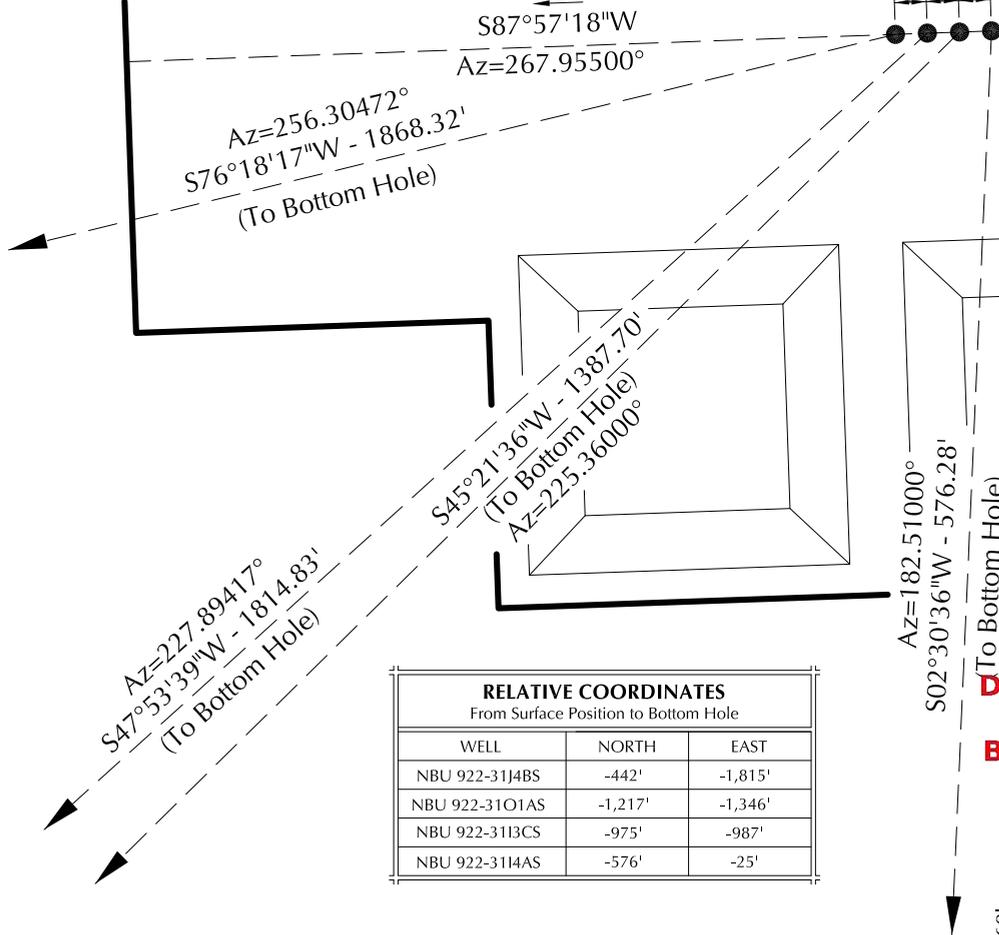
- NBU 922-31J4BS
2318' FSL & 158' FEL
- NBU 922-31O1AS
2318' FSL & 148' FEL
- NBU 922-31I3CS
2318' FSL & 138' FEL
- NBU 922-31I4AS
2319' FSL & 128' FEL

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

Date: August 04, 2009

By: [Signature]

NBU 922-31I4AS
1743' FSL & 153' FEL



RELATIVE COORDINATES		
From Surface Position to Bottom Hole		
WELL	NORTH	EAST
NBU 922-31J4BS	-442'	-1,815'
NBU 922-31O1AS	-1,217'	-1,346'
NBU 922-31I3CS	-975'	-987'
NBU 922-31I4AS	-576'	-25'



SCALE

Kerr-McGee Oil & Gas Onshore, LP
1099 18th Street - Denver, Colorado 80202

WELL PAD - NBU 922-311

WELL PAD INTERFERENCE PLAT
WELLS - NBU 922-31J4BS, NBU 922-31O1AS,
NBU 922-31I3CS & NBU 922-31I4AS
LOCATED IN SECTION 31, T9S, R22E,
S.L.B.&M., UINTAH COUNTY, UTAH.



609 CONSULTING, LLC
371 Coffeen Avenue
Sheridan WY 82801
Phone 307-674-0609
Fax 307-674-0182

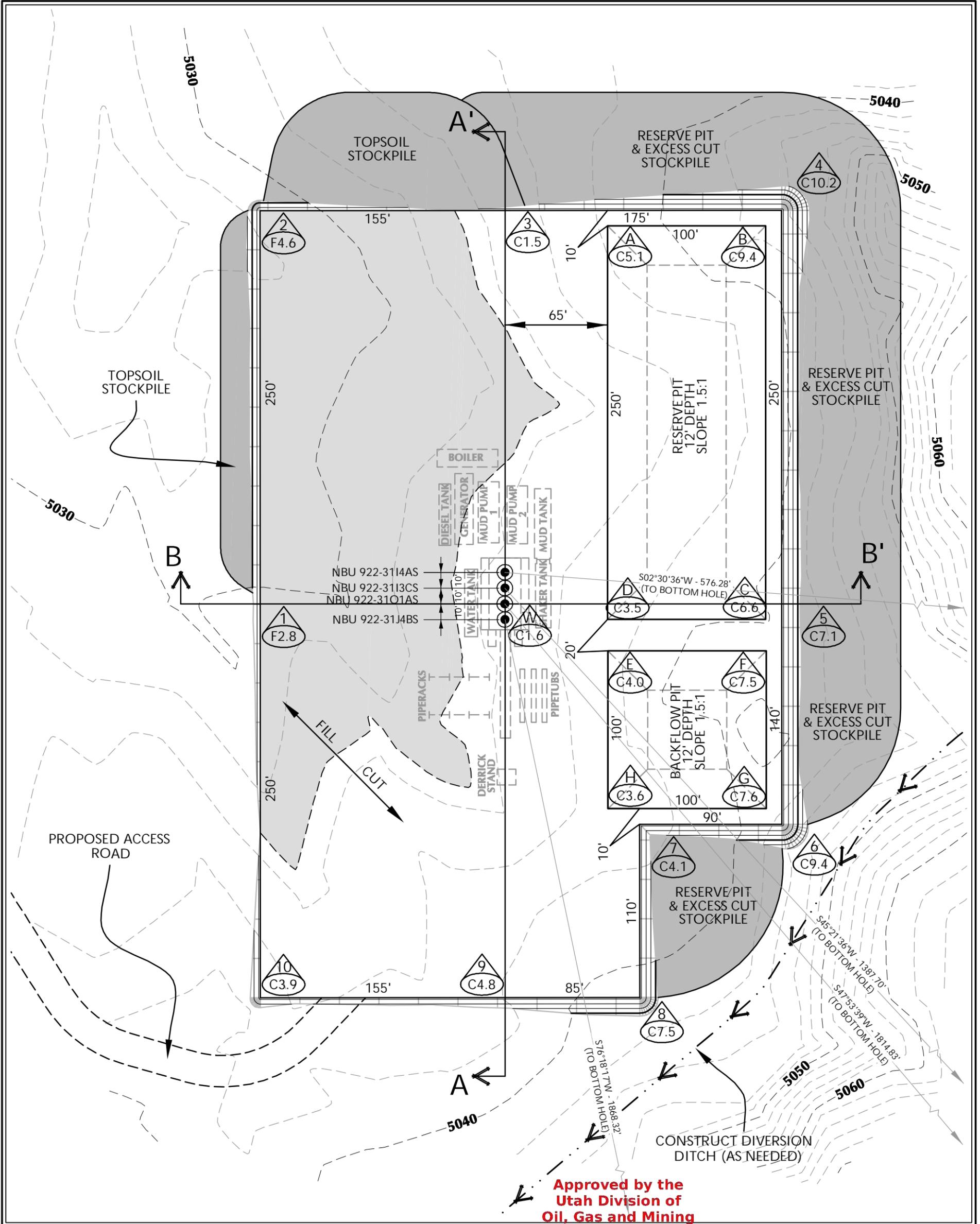
TIMBERLINE

(435) 789-1365

ENGINEERING & LAND SURVEYING, INC.
209 NORTH 300 WEST - VERNAL, UTAH 84078

DATE SURVEYED: 07-16-09	SURVEYED BY: M.S.B.	SHEET NO: 5
DATE DRAWN: 07-17-09	DRAWN BY: M.W.W.	
SCALE: 1" = 60'		5 OF 13

RECEIVED July 27, 2009



Approved by the Utah Division of Oil, Gas and Mining

WELL PAD NBU 922-311 QUANTITIES
 Date: August 04, 2009
 EXISTING GRADE @ CENTER OF WELL PAD = 5014.9
 FINISHED GRADE ELEVATION = 5013.3'
 CUT SLOPES = 1.5:1
 FILL SLOPES = 1.5:1
 By: *[Signature]*

WELL PAD LEGEND
 ○ EXISTING WELL LOCATION
 ⊙ PROPOSED WELL LOCATION
 ⊗ PROPOSED BOTTOM HOLE LOCATION
 - - - EXISTING CONTOURS (2' INTERVAL)
 ——— PROPOSED CONTOURS (2' INTERVAL)

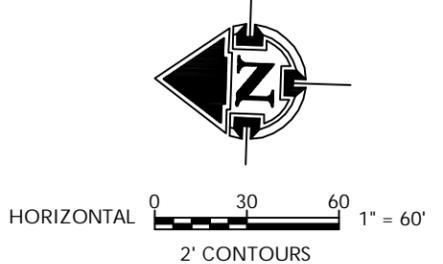
TOTAL CUT FOR WELL PAD = 12,634 C.Y.
 TOTAL FILL FOR WELL PAD = 5,537 C.Y.
 TOPSOIL @ 6" DEPTH = 3,116 C.Y.
 EXCESS MATERIAL = 7,097 C.Y.
 TOTAL DISTURBANCE = 3.86 ACRES
 SHRINKAGE FACTOR = 1.10
 SWELL FACTOR = 1.00
 RESERVE PIT CAPACITY (2' OF FREEBOARD)
 +/- 32,370 BARRELS
 RESERVE PIT VOLUME
 +/- 8,510 CY
 BACKFLOW PIT CAPACITY (2' OF FREEBOARD)
 +/- 11,260 BARRELS
 BACKFLOW PIT VOLUME
 +/- 3,040 CY

Kerr-McGee Oil & Gas Onshore, LP
 1099 18th Street - Denver, Colorado 80202



CONSULTING, LLC
 371 Coffeen Avenue
 Sheridan WY 82801
 Phone 307-674-0609
 Fax 307-674-0182

Scale: 1"=60' Date: 7/21/09 SHEET NO: 6 OF 13
 REVISED:

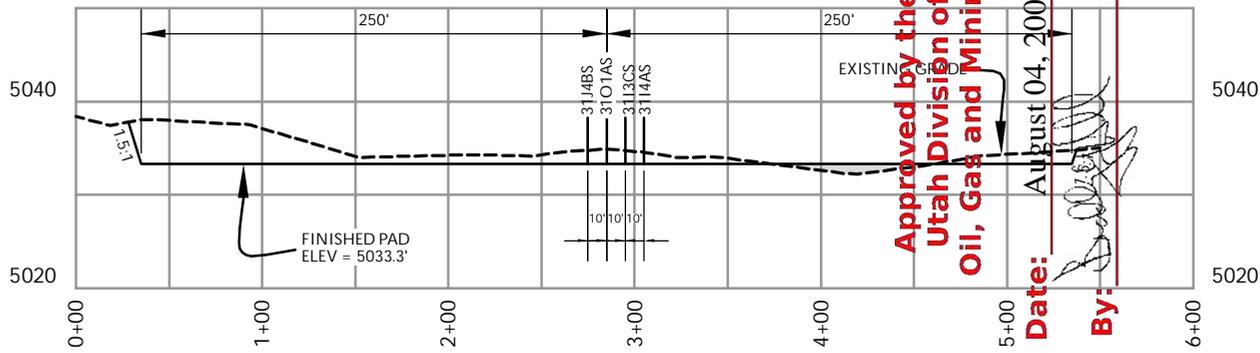


WELL PAD - NBU 922-311
 WELL PAD - LOCATION LAYOUT
 NBU 922-31J4BS, NBU 922-31O1AS,
 NBU 922-31I3CS & NBU 922-31I4AS
 LOCATED IN SECTION 31, T9S, R22E,
 S.L.B.&M., UINTAH COUNTY, UTAH

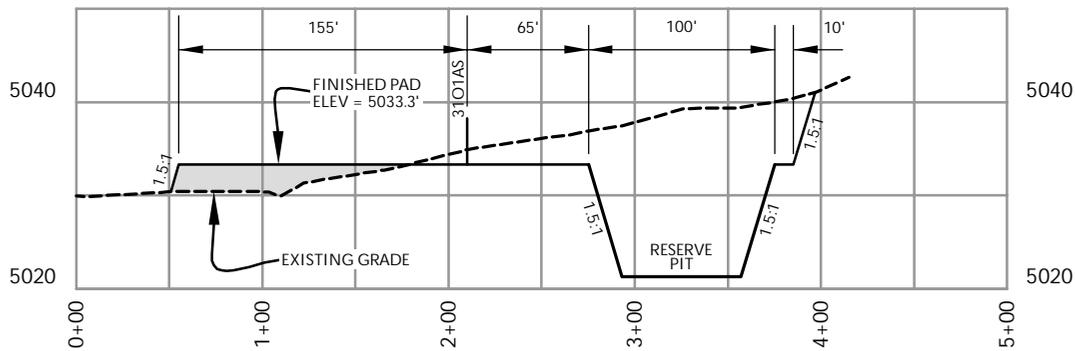
TIMBERLINE ENGINEERING & LAND SURVEYING, INC. (435) 789-1365
 209 NORTH 300 WEST - VERNAL, UTAH 84078

RECEIVED July 27, 2009

K:\ADARKOV\09_11_NBU_Directional_UELS_Edits\DWGS\NBU 922-311\922-311.dwg, 7/21/2009 5:26:07 PM, PDF-XChange for AcadPlot Pro



CROSS SECTION A-A'



CROSS SECTION B-B'

NOTE: CROSS SECTION B-B' DEPICTS
MAXIMUM RESERVE PIT DEPTH.

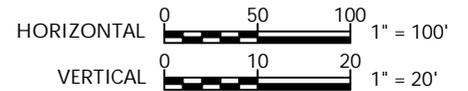
Kerr-McGee Oil & Gas Onshore, LP
1099 18th Street - Denver, Colorado 80202

WELL PAD - NBU 922-311

WELL PAD - CROSS SECTIONS
NBU 922-314BS, NBU 922-3101AS,
NBU 922-3113CS & NBU 922-3114AS
LOCATED IN SECTION 31, T9S, R22E,
S.L.B.&M., UINTAH COUNTY, UTAH



CONSULTING, LLC
371 Coffeen Avenue
Sheridan WY 82801
Phone 307-674-0609
Fax 307-674-0182



Scale: 1"=100'	Date: 7/21/09	SHEET NO:
REVISED:		7 OF 13

TIMBERLINE (435) 789-1365
ENGINEERING & LAND SURVEYING, INC.
209 NORTH 300 WEST - VERNAL, UTAH 84078

Approved by the
Utah Division of
Oil, Gas and Mining
Date: August 04, 2009
By: [Signature]

RECEIVED July 27, 2009

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

Date: August 04, 2009

By: 



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

Date: August 04, 2009

By: 



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

Date: August 04, 2009

By: 



**Approved by the
Utah Division of
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Date: August 04, 2009

By: 



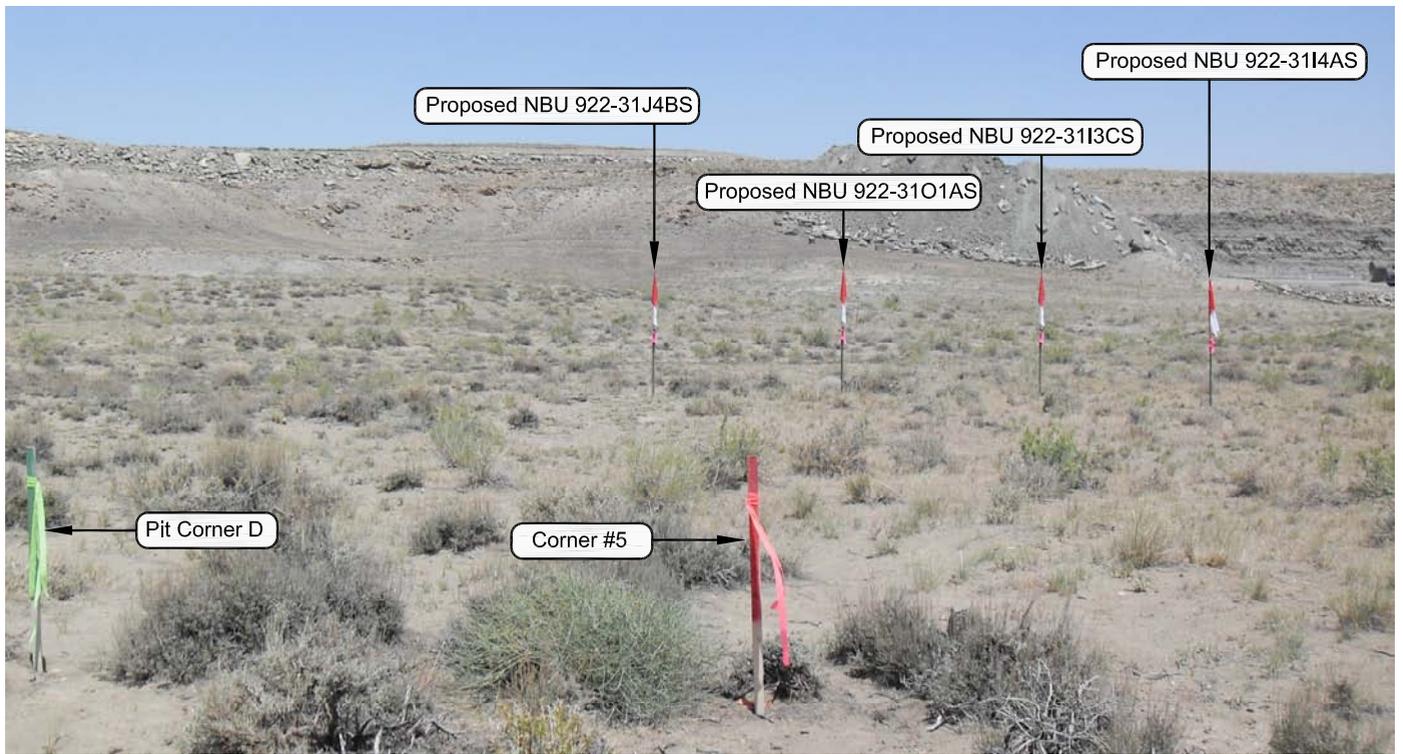


PHOTO VIEW: FROM CORNER #5 TO LOCATION STAKE

CAMERA ANGLE: NORTHERLY

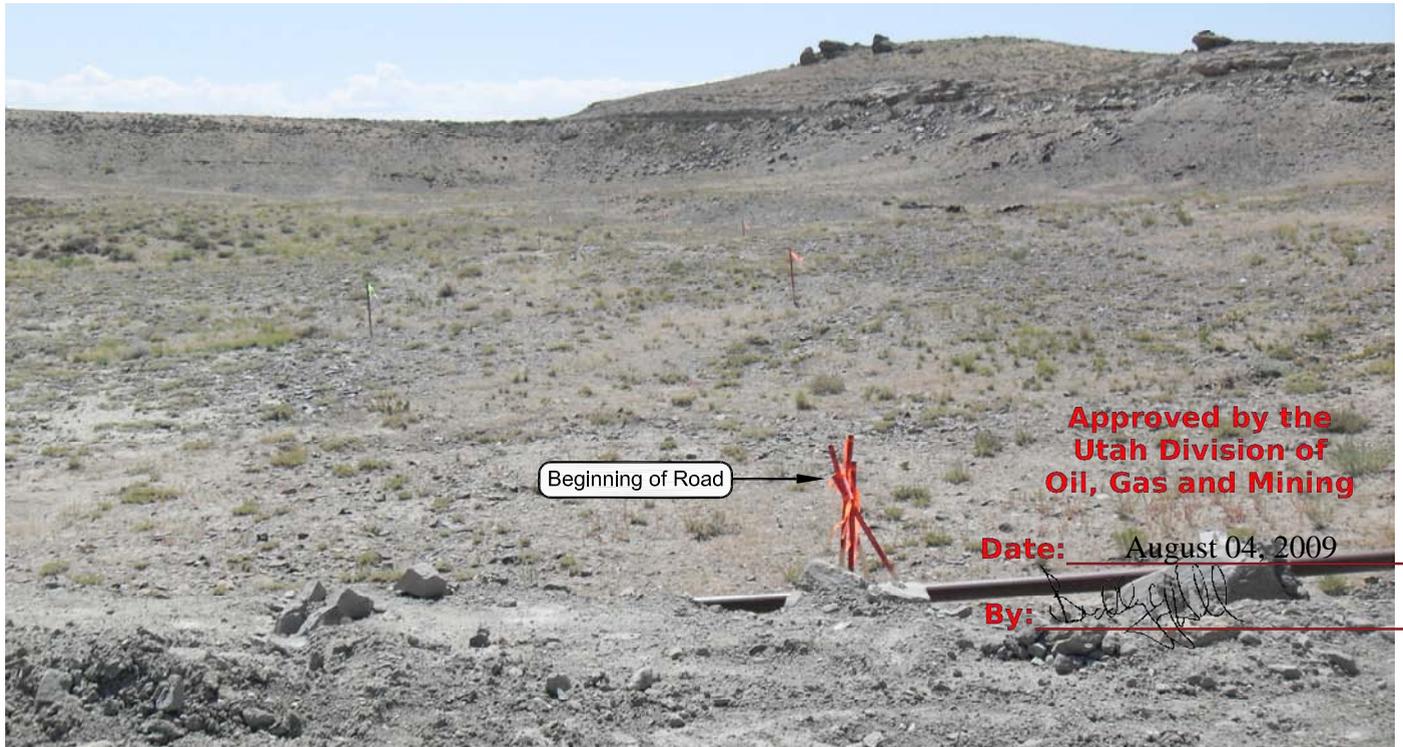


PHOTO VIEW: FROM BEGINNING OF PROPOSED ROAD

CAMERA ANGLE: WESTERLY

Approved by the
Utah Division of
Oil, Gas and Mining

Date: August 04, 2009

By: *[Signature]*

Kerr-McGee Oil & Gas Onshore, LP
1099 18th Street - Denver, Colorado 80202

Well Pad - NBU 922-311

**NBU 922-31J4BS, NBU 922-31O1AS,
NBU 922-31I3CS & NBU 922-31I4AS
LOCATION PHOTOS
LOCATED IN SECTION 31, T9S, R22E,
S.L.B.&M., UINTAH COUNTY, UTAH.**



CONSULTING, LLC
371 Coffeen Avenue
Sheridan WY 82801
Phone 307-674-0609
Fax 307-674-0182

TIMBERLINE

(435) 789-1365

ENGINEERING & LAND SURVEYING, INC.
209 NORTH 300 WEST - VERNAL, UTAH 84078

DATE PHOTOS TAKEN: 07-16-09	PHOTOS TAKEN BY: M.S.B.	SHEET NO: 8
DATE DRAWN: 07-17-09	DRAWN BY: M.W.W.	
Date Last Revised:		8 OF 13

RECEIVED July 27, 2009

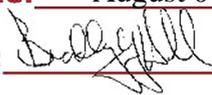
Kerr-McGee Oil & Gas Onshore, LP
WELL PAD - NBU 922-31I
WELLS – NBU 922-31J4BS, NBU 922-31O1AS, NBU 922-31I3CS
& NBU 922-31I4AS
Section 31, T9S, R22E, S.L.B.&M.

PROCEED IN A WESTERLY DIRECTION FROM VERNAL, UTAH ALONG U.S. HIGHWAY 40 APPROXIMATELY 13.9 MILES TO THE JUNCTION OF STATE HIGHWAY 88. EXIT LEFT AND PROCEED IN A SOUTHERLY DIRECTION ALONG STATE HIGHWAY 88 APPROXIMATELY 16.8 MILES TO OURAY, UTAH. FROM OURAY, PROCEED IN A SOUTHERLY DIRECTION ALONG THE SEEP RIDGE ROAD (COUNTY B ROAD 2810) APPROXIMATELY 11.2 MILES TO THE INTERSECTION OF THE GLEN BENCH ROAD (COUNTY B ROAD 3260). EXIT LEFT AND PROCEED IN AN EASTERLY, THEN SOUTHEASTERLY, THEN NORTHEASTERLY DIRECTION ALONG THE GLEN BENCH ROAD APPROXIMATELY 10.4 MILES TO A CLASS D COUNTY ROAD TO THE NORTHEAST. EXIT RIGHT AND PROCEED IN A NORTHEASTERLY DIRECTION ALONG THE CLASS D COUNTY ROAD APPROXIMATELY 0.1 MILES TO A SECOND CLASS D COUNTY ROAD TO THE SOUTHEAST. EXIT RIGHT AND PROCEED IN A SOUTHEASTERLY DIRECTION ALONG THE SECOND CLASS D COUNTY ROAD APPROXIMATELY 2.6 MILES TO A THIRD CLASS D COUNTY ROAD TO THE EAST. EXIT LEFT AND PROCEED IN AN EASTERLY, THEN NORTHWESTERLY DIRECTION ALONG THE THIRD CLASS D COUNTY ROAD APPROXIMATELY 1.8 MILES TO A SERVICE ROAD TO THE EAST. EXIT RIGHT AND PROCEED IN AN EASTERLY, THEN SOUTHWESTERLY DIRECTION ALONG THE SERVICE ROAD, CROSSING THE NBU 922-32E AND CIGE 173 WELL PADS, APPROXIMATELY 0.3 MILES TO THE PROPOSED ACCESS ROAD (AT THE WESTERN END OF THE CIGE 173 WELL PAD). FOLLOW ROAD FLAGS IN A SOUTHWESTERLY DIRECTION APPROXIMATELY 640 FEET TO THE PROPOSED WELL LOCATION

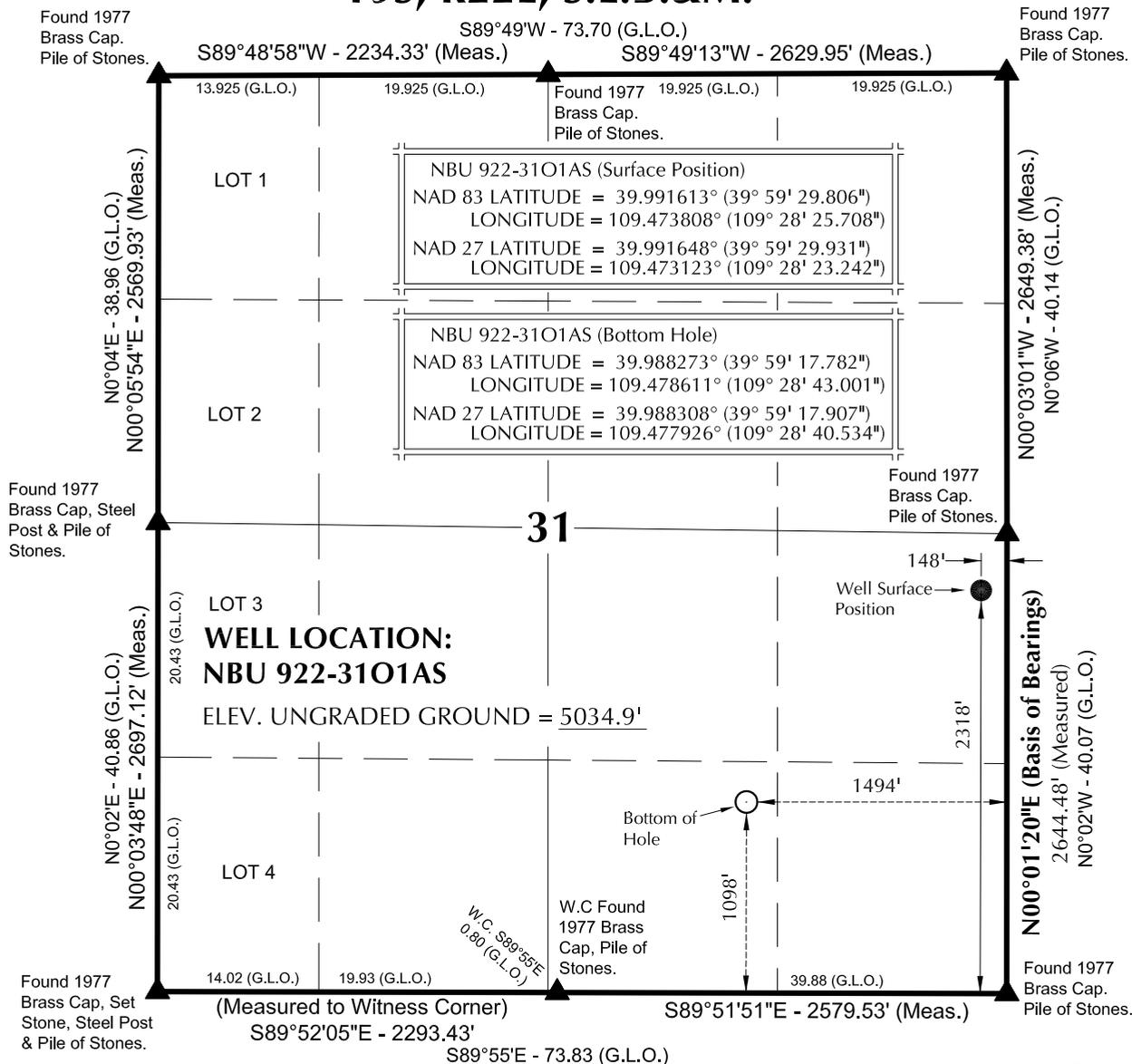
TOTAL DISTANCE FROM VERNAL, UTAH TO THE PROPOSED WELL LOCATION IS APPROXIMATELY 57.2 MILES IN A SOUTHERLY DIRECTION.

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

Date: August 04, 2009

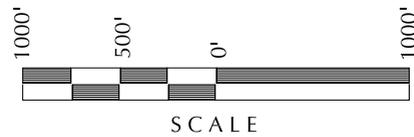
By: 

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



NOTES:

- ▲ = Section Corners Located
- 1. Well footages are measured at right angles to the Section Lines.
- 2. G.L.O. distances are shown in feet or chains. 1 chain = 66 feet.
- 3. The Bottom of hole bears S47°53'39"W 1814.83' from the Surface Position.
- 4. Bearings are based on Global Positioning Satellite observations.
- 5. Basis of elevation is Tri-Sta "Two Water" located in the NW ¼ of Section 1, T10S, R21E, S.L.B.&M. The elevation of this Tri-Sta is shown on the Big Pack Mtn NE 7.5 Min. Quadrangle as being 5238'.



SURVEYOR'S CERTIFICATE

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

REGISTERED LAND SURVEYOR
 No. 362251
 KOLBY R. KAY
 STATE OF UTAH

Kerr-McGee Oil & Gas Onshore, LP
 1099 18th Street - Denver, Colorado 80202

WELL PAD - NBU 922-311

NBU 922-3101AS
WELL PLAT
1098' FSL, 1494' FEL (Bottom Hole)
SW ¼ SE ¼ OF SECTION 31, T9S, R22E,
S.L.B.&M., UTAH COUNTY, UTAH.

609

CONSULTING, LLC
 371 Coffeen Avenue
 Sheridan WY 82801
 Phone 307-674-0609
 Fax 307-674-0182

TIMBERLINE (435) 789-1365
ENGINEERING & LAND SURVEYING, INC.
 209 NORTH 300 WEST - VERNAL, UTAH 84078

DATE SURVEYED: 07-16-09	SURVEYED BY: M.S.B.	SHEET NO: 2
DATE DRAWN: 07-17-09	DRAWN BY: M.W.W.	
SCALE: 1" = 1000'		2 OF 13

NBU 922-3101AS

Pad: NBU 922-31I

Surface: 2,318' FSL, 148' FEL (NE/4SE/4)

BHL: 1,098' FSL 1,494' FEL (SW/4SE/4)

Sec. 31 T9S R22E

Uintah, Utah

Mineral Lease: UO 1207A

ONSHORE ORDER NO. 1

DRILLING PROGRAM REVISED

- 1. – 2. **Estimated Tops of Important Geologic Markers:**
Estimated Depths of Anticipated Water, Oil, Gas, or Mineral Formations:

<u>Formation</u>	<u>Depth</u>	<u>Resource</u>
Uinta	0 – Surface	
Green River	1,296'	
Birds Nest	1,600'	Water
Mahogany	2,083'	Water
Wasatch	4,509'	Gas
Mesaverde	7,085'	Gas
MVU2	8,083'	Gas
MVL1	8,632'	Gas
TVD	9,300'	
TD	9,695'	

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

Please refer to the attached Drilling Program.

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

Please refer to the attached Drilling Program.

- 5. **Drilling Fluids Program:**

Please refer to the attached Drilling Program.

- 6. **Evaluation Program:**

Please refer to the attached Drilling Program.

- 7. **Abnormal Conditions:**

Maximum anticipated bottomhole pressure calculated at 9,695' TD, approximately equals 5,738 psi (calculated at 0.59 psi/foot).

Maximum anticipated surface pressure equals approximately 3,458 psi (bottomhole pressure minus the pressure of a partially evacuated hole calculated at 0.22 psi/foot).

8. Anticipated Starting Dates:

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

9. Variations:

Please refer to the attached Drilling Program.

Onshore Order #2 – Air Drilling Variance

Kerr-McGee Oil & Gas Onshore LP (KMG) respectfully requests a variance to several requirements associated with air drilling outlined in Onshore Order 2

- *Blowout Prevention Equipment (BOPE) requirements;*
- *Mud program requirements; and*
- *Special drilling operation (surface equipment placement) requirements associated with air drilling.*

This Standard Operating Practices addendum provides supporting information as to why KMG current air drilling practices for constructing the surface casing hole should be granted a variance to Onshore Order 2 air drilling requirements.

The reader should note that the air rig is used only to construct a stable surface casing hole through a historically difficult lost circulation zone. A conventional rotary rig follows the air rig, and is used to drill and construct the majority of the wellbore.

More notable, KMG has used the air rig layout and procedures outlined below to drill the surface casing hole in approximately 675 wells without incident of blow out or loss of life.

Background

In a typical well, KMG utilizes an air rig for drilling the surface casing hole, an interval from the surface to surface casing depths, which varies in depth from 1,700 to 2,800 feet. The air rig drilling operation does not drill through productive or over pressured formations in KMG field, but does penetrate the Uinta and Green River Formations. The purpose of the air drilling operation is to overcome the severe loss circulation zone in the Green River known as the Bird's Nest while creating a stable hole for the surface casing. The surface casing hole is generally drilled to approximately 500 feet below the Bird's Nest.

Before the surface air rig is mobilized, a rathole rig is utilized to set and cement conductor pipe through a competent surface formation. Generally, the conductor is set at 40 feet. In some cases, conductor may be set deeper in areas that the surface formation is not found competent. This rig also drills the rat and mouse holes in preparation for the surface casing and production string drilling operations.

The air rig is then mobilized to drill the surface casing hole by drilling a 12-1/4 inch hole to just above the Bird's Nest interval with an air hammer. The hammer is then tripped and replaced with a 12-1/4 inch tri-cone bit. The tri-cone bit is used to drill to the surface casing point, approximately 500 feet below the loss circulation zone (Bird's Nest). The 9-5/8 inch surface casing is then run and cemented in place, thereby isolating the lost circulation zone.

KMG fully appreciates Onshore Order 2 well control and safety requirements associated with a typical air drilling operations. However, the requirements of Onshore Order 2 are excessive with respect to the air rig layout and drilling operation procedures that are currently in practice to drill and control the surface casing hole in KMG Fields.

Variance for BOPE Requirements

The air rig operation utilizes a properly lubricated and maintained air bowl diverter system which diverts the drilling returns to a six-inch blooie line. The air bowl is the only piece of BOPE equipment which is installed during drilling operations and is sufficient to contain the air returns associated with this drilling operation. As was discussed earlier, the drilling of the surface hole does not encounter any over pressured or productive zones, and as a result standard BOPE equipment should not be required. In addition, standard drilling practices do not support the use of BOPE on 40 feet of conductor pipe.

Variance for Mud Material Requirements

Onshore Order 2 also states that sufficient quantities of mud materials shall be maintained or readily accessible for the purpose of assuring adequate well control. Once again, the surface hole drilling operations does not encounter over pressured or productive intervals, and as a result there is not a need to control pressure in the surface hole with a mud system. Instead of mud, the air rigs utilize water from the reserve pit for well control, if necessary. A skid pump which is located near the reserve pit (see attachment) will supply the water to the well bore.

Variance for Special Drilling Operation (surface equipment placement) Requirements

Onshore Order 2 requires specific safety distances or setbacks for the placement of associated standard air drilling equipment, wellbore, and reserve pits. The air rigs used to drill the surface holes are not typical of an air rig used to drill a producing hole in other parts of the US. These are smaller in nature and designed to fit a KMG location. The typical air rig layout for drilling surface hole in the field is attached.

Typically the blooie line discharge point is required to be 100 feet from the well bore. In the case of a KMG well, the reserve pit is only 45 feet from the rig and is used for the drill cuttings. The blooie line, which transports the drill cuttings from the well to the reserve pit, subsequently discharges only 45 feet from the well bore.

Typically the air rig compressors are required to be located in the opposite direction from the blooie line and a minimum of 100 feet from the well bore. At the KMG locations, the air rig compressors are approximately 40 feet from the well bore and approximately 60 feet from the blooie line discharge due to the unique air rig design. The air compressors (see attachment) are located on the rig (1250 cfm) and on a standby trailer (1170 cfm). A booster sits between the two compressors and boosts the output from 350 psi to 2000 psi. The design does put the booster and standby compressor opposite from the blooie line.

Lastly, Onshore Order 2 addresses the need for an automatic igniter or continuous pilot light on the blooie line. The air rig does not utilize an igniter as the surface hole drilling operation does not encounter productive formations.

Conclusion

The air rig operating procedures and the attached air rig layout have effectively maintained well control while drilling the surface holes in KMG Fields. KMG respectfully requests a variance from Onshore Order 2 with respect to air drilling well control requirements as discussed above.

10. Other Information:

Please refer to the attached Drilling Program.



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

CASING PROGRAM

	SIZE	INTERVAL	WT.	GR.	CPLG.	DESIGN FACTORS		
						BURST	COLLAPSE	TENSION
CONDUCTOR	14"	0-40'				3,520	2,020	453,000
SURFACE	9-5/8"	0 to 2,285	36.00	J-55	LTC	0.90	1.89	7.01
PRODUCTION	4-1/2"	0 to 9,695	11.60	I-80	LTC	2.07	1.09	2.05

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 - (0.22 psi/ft-partial evac gradient x TD)
 (Burst Assumptions: TD = 12.0 ppg) 0.22 psi/ft = gradient for partially evac wellbore
 (Collapse Assumption: Fully Evacuated Casing, Max MW) (Tension Assumptions: Air Weight of Casing*Buoys.Fact. of water)
MASP 3,652 psi

3) Maximum Anticipated Bottom Hole Pressure (MABHP) = Pore Pressure at TD
 (Burst Assumptions: TD = 12.0 ppg) 0.61 psi/ft = bottomhole gradient
 (Collapse Assumption: Fully Evacuated Casing, Max MW) (Tension Assumptions: Air Weight of Casing*Buoys.Fact. of water)
MABHP 5,940 psi

CEMENT PROGRAM

		FT. OF FILL	DESCRIPTION	SACKS	EXCESS	WEIGHT	YIELD
SURFACE	LEAD	500'	Premium cmt + 2% CaCl + 0.25 pps flocele	215	60%	15.60	1.18
Option 1	TOP OUT CMT (6 jobs)	1,200'	20 gals sodium silicate + Premium cmt + 2% CaCl + 0.25 pps flocele Premium cmt + 2% CaCl	380	0%	15.60	1.18
SURFACE	Option 2	NOTE: If well will circulate water to surface, option 2 will be utilized					
	LEAD	1,785'	65/35 Poz + 6% Gel + 10 pps gilsonite + 0.25 pps Flocele + 3% salt BWOW	420	35%	12.60	1.81
	TAIL	500'	Premium cmt + 2% CaCl + 0.25 pps flocele	180	35%	15.60	1.18
	TOP OUT CMT	as required	Premium cmt + 2% CaCl	as req.		15.60	1.18
PRODUCTION	LEAD	4,005'	Premium Lite II + 3% KCl + 0.25 pps celloflake + 5 pps gilsonite + 10% gel + 0.5% extender	380	40%	11.00	3.38
	TAIL	5,690'	50/50 Poz/G + 10% salt + 2% gel + 0.1% R-3	1,390	40%	14.30	1.31

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

FLOAT EQUIPMENT & CENTRALIZERS

SURFACE	Guide shoe, 1 jt, insert float. Centralize first 3 joints with bow spring centralizers. Thread lock guide shoe
PRODUCTION	Float shoe, 1 jt, float collar. No centralizers will be used.

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. The BOPE will be installed before the production hole is drilled and tested to 5,000 psi (annular to 2,500 psi) prior to drilling out the surface casing shoe. Record on chart recorder and tour sheet. Function test rams on each trip. Maintain safety valve and inside BOP on rig floor at all times. Most rigs have top drives; however, if used, the Kelly is to be equipped with upper and lower kelly valves.

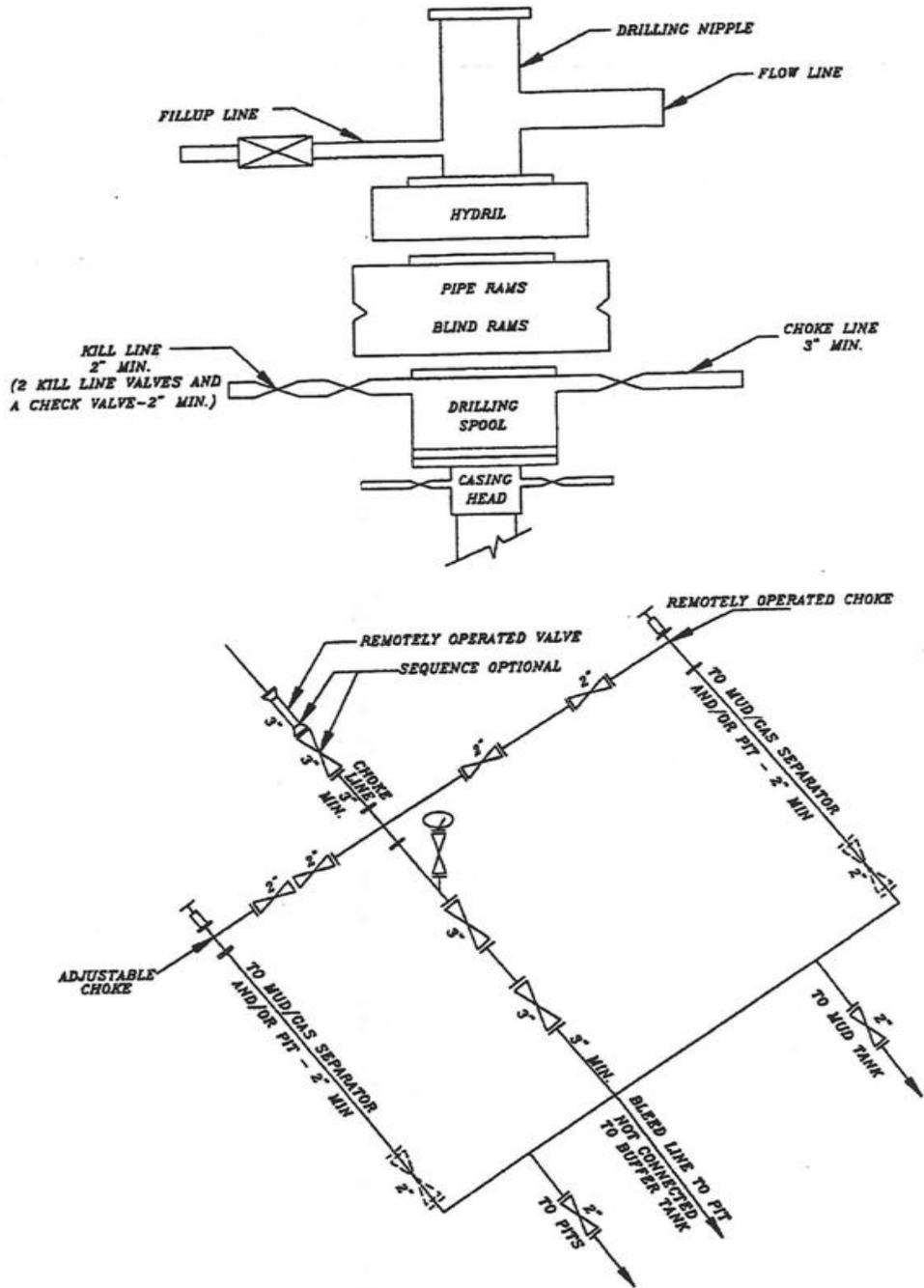
Surveys will be taken at 1,000' minimum intervals.

Most rigs have PVT System for mud monitoring. If no PVT is available, visual monitoring will be utilized.

DRILLING ENGINEER: _____ **DATE:** _____
 John Huycke / Emile Goodwin

DRILLING SUPERINTENDENT: _____ **DATE:** _____
 John Merkel / Lovel Young

EXHIBIT A
 NBU 922-3101AS



SCHMATIC DIAGRAM OF 5,000 PSI BOP STACK

Kerr-McGee Oil & Gas Onshore LP

NBU 922-31I3CS

Surface: 2,318' FSL, 138' FEL (NE/4SE/4)

BHL: 1,341' FSL 1,125' FEL (NE/4SE/4)

Minerals: State – UO 1530A

NBU 922-31I4AS

Surface: 2,319' FSL, 128' FEL (NE/4SE/4)

BHL: 1,743' FSL 153' FEL (NE/4SE/4)

Minerals: State – UO 1530A

NBU 922-31J4BS

(FKA NBU 922-31J3AS)

Surface: 2,318' FSL, 158' FEL (NE/4SE/4)

BHL: 1,871' FSL 1,973' FEL (NW/4SE/4)

Minerals: State – UO 1207A

NBU 922-31O1AS

Surface: 2,318' FSL, 148' FEL (NE/4SE/4)

BHL: 1,098' FSL 1,494' FEL (SW/4SE/4)

Minerals: State – UO 1207A

Section 31 Township 9 South Range 22 East

Pad: NBU 922-31I

Uintah, Utah

Surface: State

ONSHORE ORDER NO. 1

MULTI-POINT SURFACE USE & OPERATIONS PLAN REVISED

Directional Drilling:

In accordance with Oil & Gas Conservation Rule R649-3-11 pertaining to Directional Drilling, this well will be directionally drilled in order to access portions of our lease which are otherwise inaccessible due to topography.

1. Existing Roads:

Refer to Topo Map A for directions to the location.

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

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

2. Planned Access Roads:

Approximately ± 0.1 mi. of new access road is proposed. Please refer to the attached Topo Map B.

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

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

The access road was centerline flagged during time of staking.

Surfacing material may be necessary, depending upon weather conditions.

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

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

Please refer to Topo Map C.

4. Location of Existing & Proposed Facilities:

The following guidelines will apply if the well is productive.

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

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

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

All facilities will be painted within six months of installation. Facilities required to comply with the Occupational Safety and Health Act (OSHA) will be excluded. The required color is Shadow Gray, a non-reflective earthtone.

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

5. Location and Type of Water Supply:

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

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

No water well is to be drilled on this lease.

6. Source of Construction Materials:

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

Any gravel will be obtained from a commercial source.

7. Methods of Handling Waste Materials:

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

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

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

A plastic reinforced liner and felt will be used; it will be a minimum of 20 mil thick, with sufficient bedding used to cover any rocks. The liner will overlap the pit walls and be covered with dirt and/or rocks to hold it in place. No trash or scrap that could puncture the liner will be disposed of in the pit. Any spills of oil, gas, salt water, or other noxious fluids will be immediately cleaned up and removed to an approved disposal site.

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

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

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

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

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

Any produced water from the proposed well will be contained in a water tank and will then be hauled by truck to one of the pre-approved disposal sites: RNI in Sec. 5 T9S R22E, NBU #159 in Sec. 35 T9S R21E, Ace Oilfield in Sec. 2 T6S R20E, MC&MC in Sec. 12 T6S R19E, Pipeline Facility in Sec. 36 T9S R20E, Goat Pasture Evaporation Pond in SW/4 Sec. 16 T10S R22E, Bonanza Evaporation Pond in Sec. 2 T10S R23E.

8. Ancillary Facilities:

None are anticipated.

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

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

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

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

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

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

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

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

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

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

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

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

10. Plans for Reclamation of the Surface:

Producing Location:

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

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

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

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

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

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

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

Dry Hole/Abandoned Location:

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

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

11. Surface/Mineral Ownership:

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

12. Other Information:

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

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

A Class III archaeological survey report and paleontological survey report was attached with the originally submitted APD.

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

Kathy Schneebeck Dulnoan
Staff Regulatory Analyst
Kerr-McGee Oil & Gas Onshore LP
PO Box 173779
Denver, CO 80217-3779
(720) 929-6226

Tommy Thompson
General Manager, Drilling
Kerr-McGee Oil & Gas Onshore LP
PO Box 173779
Denver, CO 80217-3779
(720) 929-6724

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

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

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

Bond coverage pursuant to 43 CFR 3104 for lease activities is being provided by State Surety Bond 22013542.

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 I have full knowledge of the State and Federal laws applicable to this operation; 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 in conformity with this APD package and the terms and conditions under which it is approved. I also certify that I, or the company I represent, am responsible for operations conducted under this application. These statements are subject to the provisions of 18 U.S.C. 1001 for the filing of false statements.



Kathy Schneebeck Dulnoan

July 27, 2009
Date

ANADARKO PETROLEUM CORP.

UINTAH COUNTY, UTAH (nad 27)

NBU 922-31I PAD

NBU 922-31O1AS

NBU 922-31O1AS

Plan: Design #1

Standard Planning Report

24 July, 2009



Weatherford®



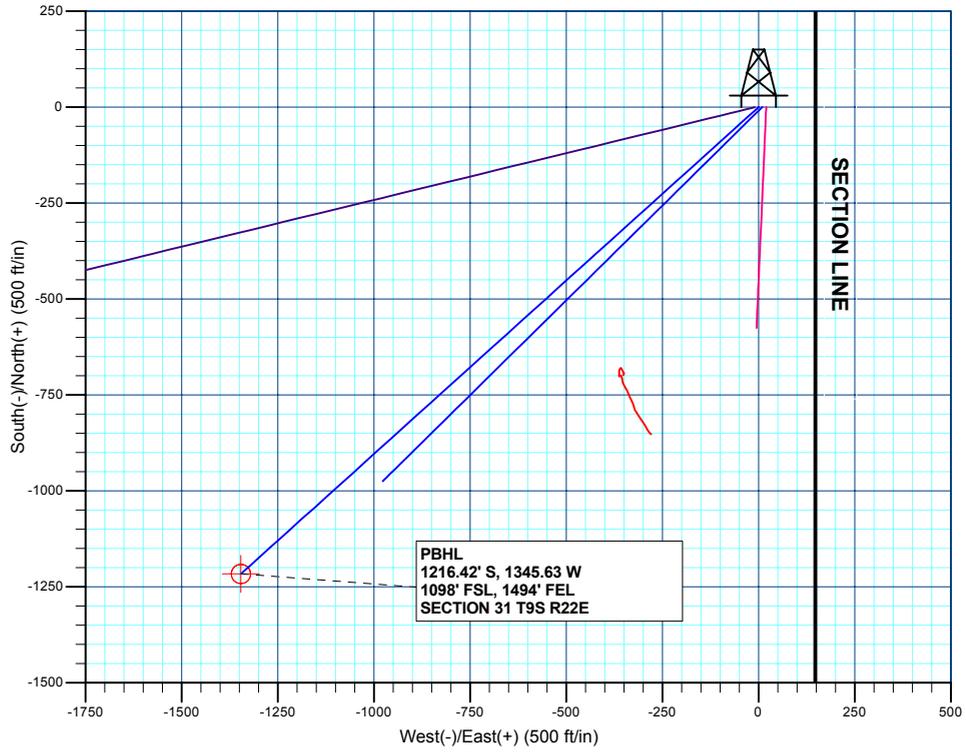
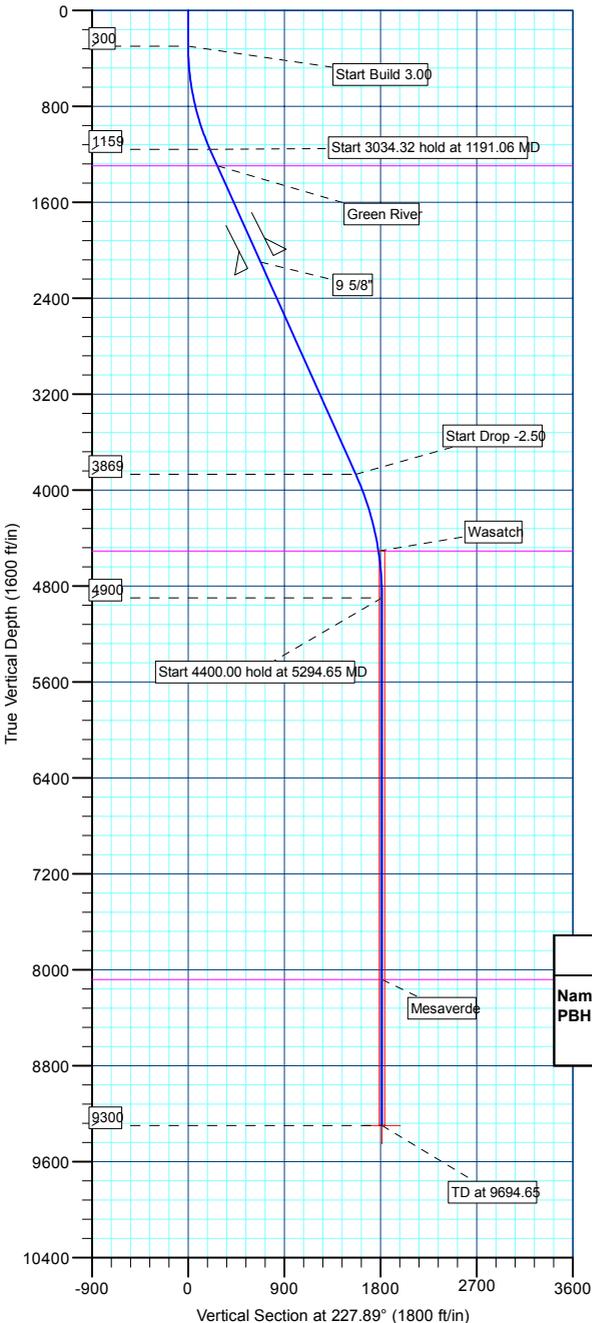
WELL DETAILS: NBU 922-3101AS							
		Ground Level:		5035.00			
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot	
0.00	0.00	14526665.94	2068092.26	39° 59' 29.933 N	109° 28' 23.243 W		

FORMATION TOP DETAILS		
TVDPath	MDPath	Formation
1296.00	1344.36	Green River
4509.00	4901.73	Wasatch
8083.00	8477.65	Mesaverde

SECTION DETAILS										
MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00		
1191.06	26.73	227.89	1159.08	-136.88	-151.42	3.00	227.89	204.12		
4225.38	26.73	227.89	3869.10	-1052.16	-1163.93	0.00	0.00	1569.00		
5294.65	0.00	0.00	4900.00	-1216.42	-1345.63	2.50	180.00	1813.95		
9694.65	0.00	0.00	9300.00	-1216.42	-1345.63	0.00	0.00	1813.95	PBHL_NBU 922-3101AS	

CASING DETAILS			
TVD	MD	Name	Size
2100.00	2244.57	9 5/8"	9.62

KB ELEV: WELL @ 5061.00ft (Original Well Elev)
 GRD ELEV: 5035.00



WELLBORE TARGET DETAILS (MAP CO-ORDINATES AND LAT/LONG)									
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape	
PBHL	9300.00	-1216.42	-1345.63	14525426.65	2066767.66	39° 59' 17.909 N	109° 28' 40.534 W	Circle (Radius: 25.00)	

Database:	EDM 2003.21 Single User Db	Local Co-ordinate Reference:	Well NBU 922-31O1AS
Company:	ANADARKO PETROLEUM CORP.	TVD Reference:	WELL @ 5061.00ft (Original Well Elev)
Project:	UINTAH COUNTY, UTAH (nad 27)	MD Reference:	WELL @ 5061.00ft (Original Well Elev)
Site:	NBU 922-31I PAD	North Reference:	True
Well:	NBU 922-31O1AS	Survey Calculation Method:	Minimum Curvature
Wellbore:	NBU 922-31O1AS		
Design:	Design #1		

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

Site	NBU 922-31I PAD, SECTION 31 T9S R22E				
Site Position:		Northing:	14,526,666.65 ft	Latitude:	39° 59' 29.936 N
From:	Lat/Long	Easting:	2,068,112.42 ft	Longitude:	109° 28' 22.984 W
Position Uncertainty:	0.00 ft	Slot Radius:	in	Grid Convergence:	0.98 °

Well	NBU 922-31O1AS					
Well Position	+N/-S	-0.36 ft	Northing:	14,526,665.94 ft	Latitude:	39° 59' 29.933 N
	+E/-W	-20.17 ft	Easting:	2,068,092.26 ft	Longitude:	109° 28' 23.243 W
Position Uncertainty		0.00 ft	Wellhead Elevation:	ft	Ground Level:	5,035.00 ft

Wellbore	NBU 922-31O1AS				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	BGGM2009	7/23/2009	11.34	65.94	52,525

Design	Design #1			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.00	0.00	0.00	227.89

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,191.06	26.73	227.89	1,159.08	-136.88	-151.42	3.00	3.00	0.00	227.89	
4,225.38	26.73	227.89	3,869.10	-1,052.16	-1,163.93	0.00	0.00	0.00	0.00	
5,294.65	0.00	0.00	4,900.00	-1,216.42	-1,345.63	2.50	-2.50	0.00	180.00	
9,694.65	0.00	0.00	9,300.00	-1,216.42	-1,345.63	0.00	0.00	0.00	0.00	PBHL_NBU 922-31

Database:	EDM 2003.21 Single User Db	Local Co-ordinate Reference:	Well NBU 922-3101AS
Company:	ANADARKO PETROLEUM CORP.	TVD Reference:	WELL @ 5061.00ft (Original Well Elev)
Project:	UINTAH COUNTY, UTAH (nad 27)	MD Reference:	WELL @ 5061.00ft (Original Well Elev)
Site:	NBU 922-311 PAD	North Reference:	True
Well:	NBU 922-3101AS	Survey Calculation Method:	Minimum Curvature
Wellbore:	NBU 922-3101AS		
Design:	Design #1		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
Start Build 3.00									
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	3.00	227.89	399.95	-1.76	-1.94	2.62	3.00	3.00	0.00
500.00	6.00	227.89	499.63	-7.02	-7.76	10.46	3.00	3.00	0.00
600.00	9.00	227.89	598.77	-15.77	-17.44	23.51	3.00	3.00	0.00
700.00	12.00	227.89	697.08	-27.99	-30.96	41.74	3.00	3.00	0.00
800.00	15.00	227.89	794.31	-43.64	-48.28	65.08	3.00	3.00	0.00
900.00	18.00	227.89	890.18	-62.68	-69.34	93.48	3.00	3.00	0.00
1,000.00	21.00	227.89	984.43	-85.07	-94.10	126.85	3.00	3.00	0.00
1,100.00	24.00	227.89	1,076.81	-110.73	-122.49	165.12	3.00	3.00	0.00
Start 3034.32 hold at 1191.06 MD									
1,191.06	26.73	227.89	1,159.08	-136.88	-151.42	204.12	3.00	3.00	0.00
1,200.00	26.73	227.89	1,167.07	-139.58	-154.41	208.14	0.00	0.00	0.00
1,300.00	26.73	227.89	1,256.38	-169.74	-187.77	253.13	0.00	0.00	0.00
Green River									
1,344.36	26.73	227.89	1,296.00	-183.13	-202.58	273.08	0.00	0.00	0.00
1,400.00	26.73	227.89	1,345.69	-199.91	-221.14	298.11	0.00	0.00	0.00
1,500.00	26.73	227.89	1,435.00	-230.07	-254.51	343.09	0.00	0.00	0.00
1,600.00	26.73	227.89	1,524.32	-260.24	-287.88	388.07	0.00	0.00	0.00
1,700.00	26.73	227.89	1,613.63	-290.40	-321.25	433.05	0.00	0.00	0.00
1,800.00	26.73	227.89	1,702.94	-320.57	-354.62	478.03	0.00	0.00	0.00
1,900.00	26.73	227.89	1,792.25	-350.73	-387.98	523.01	0.00	0.00	0.00
2,000.00	26.73	227.89	1,881.56	-380.89	-421.35	568.00	0.00	0.00	0.00
2,100.00	26.73	227.89	1,970.88	-411.06	-454.72	612.98	0.00	0.00	0.00
2,200.00	26.73	227.89	2,060.19	-441.22	-488.09	657.96	0.00	0.00	0.00
9 5/8"									
2,244.57	26.73	227.89	2,100.00	-454.67	-502.96	678.01	0.00	0.00	0.00
2,300.00	26.73	227.89	2,149.50	-471.39	-521.46	702.94	0.00	0.00	0.00
2,400.00	26.73	227.89	2,238.81	-501.55	-554.83	747.92	0.00	0.00	0.00
2,500.00	26.73	227.89	2,328.13	-531.72	-588.20	792.90	0.00	0.00	0.00
2,600.00	26.73	227.89	2,417.44	-561.88	-621.56	837.88	0.00	0.00	0.00
2,700.00	26.73	227.89	2,506.75	-592.04	-654.93	882.87	0.00	0.00	0.00
2,800.00	26.73	227.89	2,596.06	-622.21	-688.30	927.85	0.00	0.00	0.00
2,900.00	26.73	227.89	2,685.37	-652.37	-721.67	972.83	0.00	0.00	0.00
3,000.00	26.73	227.89	2,774.69	-682.54	-755.04	1,017.81	0.00	0.00	0.00
3,100.00	26.73	227.89	2,864.00	-712.70	-788.41	1,062.79	0.00	0.00	0.00
3,200.00	26.73	227.89	2,953.31	-742.87	-821.77	1,107.77	0.00	0.00	0.00
3,300.00	26.73	227.89	3,042.62	-773.03	-855.14	1,152.75	0.00	0.00	0.00
3,400.00	26.73	227.89	3,131.94	-803.19	-888.51	1,197.74	0.00	0.00	0.00
3,500.00	26.73	227.89	3,221.25	-833.36	-921.88	1,242.72	0.00	0.00	0.00
3,600.00	26.73	227.89	3,310.56	-863.52	-955.25	1,287.70	0.00	0.00	0.00
3,700.00	26.73	227.89	3,399.87	-893.69	-988.62	1,332.68	0.00	0.00	0.00
3,800.00	26.73	227.89	3,489.18	-923.85	-1,021.98	1,377.66	0.00	0.00	0.00
3,900.00	26.73	227.89	3,578.50	-954.01	-1,055.35	1,422.64	0.00	0.00	0.00
4,000.00	26.73	227.89	3,667.81	-984.18	-1,088.72	1,467.62	0.00	0.00	0.00
4,100.00	26.73	227.89	3,757.12	-1,014.34	-1,122.09	1,512.61	0.00	0.00	0.00
4,200.00	26.73	227.89	3,846.43	-1,044.51	-1,155.46	1,557.59	0.00	0.00	0.00
Start Drop -2.50									
4,225.38	26.73	227.89	3,869.10	-1,052.16	-1,163.93	1,569.00	0.00	0.00	0.00
4,300.00	24.87	227.89	3,936.28	-1,073.94	-1,188.02	1,601.48	2.50	-2.50	0.00
4,400.00	22.37	227.89	4,027.90	-1,100.80	-1,217.73	1,641.54	2.50	-2.50	0.00
4,500.00	19.87	227.89	4,121.18	-1,124.96	-1,244.46	1,677.56	2.50	-2.50	0.00
4,600.00	17.37	227.89	4,215.94	-1,146.37	-1,268.14	1,709.48	2.50	-2.50	0.00

Database:	EDM 2003.21 Single User Db	Local Co-ordinate Reference:	Well NBU 922-3101AS
Company:	ANADARKO PETROLEUM CORP.	TVD Reference:	WELL @ 5061.00ft (Original Well Elev)
Project:	UINTAH COUNTY, UTAH (nad 27)	MD Reference:	WELL @ 5061.00ft (Original Well Elev)
Site:	NBU 922-311 PAD	North Reference:	True
Well:	NBU 922-3101AS	Survey Calculation Method:	Minimum Curvature
Wellbore:	NBU 922-3101AS		
Design:	Design #1		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
4,700.00	14.87	227.89	4,312.00	-1,164.98	-1,288.73	1,737.24	2.50	-2.50	0.00
4,800.00	12.37	227.89	4,409.18	-1,180.76	-1,306.19	1,760.78	2.50	-2.50	0.00
4,900.00	9.87	227.89	4,507.30	-1,193.69	-1,320.49	1,780.06	2.50	-2.50	0.00
Wasatch									
4,901.73	9.82	227.89	4,509.00	-1,193.89	-1,320.71	1,780.35	2.50	-2.50	0.00
5,000.00	7.37	227.89	4,606.16	-1,203.74	-1,331.60	1,795.04	2.50	-2.50	0.00
5,100.00	4.87	227.89	4,705.58	-1,210.88	-1,339.51	1,805.69	2.50	-2.50	0.00
5,200.00	2.37	227.89	4,805.37	-1,215.11	-1,344.19	1,812.00	2.50	-2.50	0.00
Start 4400.00 hold at 5294.65 MD									
5,294.65	0.00	0.00	4,900.00	-1,216.42	-1,345.63	1,813.95	2.50	-2.50	139.58
5,300.00	0.00	0.00	4,905.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00
5,400.00	0.00	0.00	5,005.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00
5,500.00	0.00	0.00	5,105.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00
5,600.00	0.00	0.00	5,205.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00
5,700.00	0.00	0.00	5,305.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00
5,800.00	0.00	0.00	5,405.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00
5,900.00	0.00	0.00	5,505.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00
6,000.00	0.00	0.00	5,605.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00
6,100.00	0.00	0.00	5,705.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00
6,200.00	0.00	0.00	5,805.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00
6,300.00	0.00	0.00	5,905.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00
6,400.00	0.00	0.00	6,005.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00
6,500.00	0.00	0.00	6,105.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00
6,600.00	0.00	0.00	6,205.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00
6,700.00	0.00	0.00	6,305.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00
6,800.00	0.00	0.00	6,405.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00
6,900.00	0.00	0.00	6,505.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00
7,000.00	0.00	0.00	6,605.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00
7,100.00	0.00	0.00	6,705.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00
7,200.00	0.00	0.00	6,805.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00
7,300.00	0.00	0.00	6,905.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00
7,400.00	0.00	0.00	7,005.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00
7,500.00	0.00	0.00	7,105.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00
7,600.00	0.00	0.00	7,205.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00
7,700.00	0.00	0.00	7,305.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00
7,800.00	0.00	0.00	7,405.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00
7,900.00	0.00	0.00	7,505.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00
8,000.00	0.00	0.00	7,605.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00
8,100.00	0.00	0.00	7,705.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00
8,200.00	0.00	0.00	7,805.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00
8,300.00	0.00	0.00	7,905.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00
8,400.00	0.00	0.00	8,005.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00
Mesaverde									
8,477.65	0.00	0.00	8,083.00	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00
8,500.00	0.00	0.00	8,105.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00
8,600.00	0.00	0.00	8,205.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00
8,700.00	0.00	0.00	8,305.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00
8,800.00	0.00	0.00	8,405.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00
8,900.00	0.00	0.00	8,505.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00
9,000.00	0.00	0.00	8,605.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00
9,100.00	0.00	0.00	8,705.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00
9,200.00	0.00	0.00	8,805.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00
9,300.00	0.00	0.00	8,905.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00

Database:	EDM 2003.21 Single User Db	Local Co-ordinate Reference:	Well NBU 922-31O1AS
Company:	ANADARKO PETROLEUM CORP.	TVD Reference:	WELL @ 5061.00ft (Original Well Elev)
Project:	UINTAH COUNTY, UTAH (nad 27)	MD Reference:	WELL @ 5061.00ft (Original Well Elev)
Site:	NBU 922-31I PAD	North Reference:	True
Well:	NBU 922-31O1AS	Survey Calculation Method:	Minimum Curvature
Wellbore:	NBU 922-31O1AS		
Design:	Design #1		

Planned Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
9,400.00	0.00	0.00	9,005.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00	
9,500.00	0.00	0.00	9,105.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00	
9,600.00	0.00	0.00	9,205.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00	
PBHL_NBU 922-31O1AS										
9,694.65	0.00	0.00	9,300.00	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00	

Design Targets										
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude	
PBHL_NBU 922-31O	0.00	0.00	9,300.00	-1,216.42	-1,345.63	14,525,426.65	2,066,767.66	39° 59' 17.909 N	109° 28' 40.534 W	
- hit/miss target - Shape - plan hits target center - Circle (radius 25.00)										

Casing Points						
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (in)	Hole Diameter (in)		
2,244.57	2,100.00	9 5/8"	9.62	12.25		

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
1,344.36	1,296.00	Green River				
4,901.73	4,509.00	Wasatch				
8,477.65	8,083.00	Mesaverde				

Plan Annotations					
Measured Depth (ft)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Comment	
300.00	300.00	0.00	0.00	Start Build 3.00	
1,191.06	1,159.08	-136.88	-151.42	Start 3034.32 hold at 1191.06 MD	
4,225.38	3,869.10	-1,052.16	-1,163.93	Start Drop -2.50	
5,294.65	4,900.00	-1,216.42	-1,345.63	Start 4400.00 hold at 5294.65 MD	
9,694.65	9,300.00	-1,216.42	-1,345.63	TD at 9694.65	

ANADARKO PETROLEUM CORP.

UINTAH COUNTY, UTAH (nad 27)

NBU 922-31I PAD

NBU 922-31O1AS

NBU 922-31O1AS

Plan: Design #1

Standard Planning Report

24 July, 2009



Weatherford[®]

Database:	EDM 2003.21 Single User Db	Local Co-ordinate Reference:	Well NBU 922-31O1AS
Company:	ANADARKO PETROLEUM CORP.	TVD Reference:	WELL @ 5061.00ft (Original Well Elev)
Project:	UINTAH COUNTY, UTAH (nad 27)	MD Reference:	WELL @ 5061.00ft (Original Well Elev)
Site:	NBU 922-31I PAD	North Reference:	True
Well:	NBU 922-31O1AS	Survey Calculation Method:	Minimum Curvature
Wellbore:	NBU 922-31O1AS		
Design:	Design #1		

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

Site	NBU 922-31I PAD, SECTION 31 T9S R22E				
Site Position:		Northing:	14,526,666.65 ft	Latitude:	39° 59' 29.936 N
From:	Lat/Long	Easting:	2,068,112.42 ft	Longitude:	109° 28' 22.984 W
Position Uncertainty:	0.00 ft	Slot Radius:	in	Grid Convergence:	0.98 °

Well	NBU 922-31O1AS					
Well Position	+N/-S	-0.36 ft	Northing:	14,526,665.94 ft	Latitude:	39° 59' 29.933 N
	+E/-W	-20.17 ft	Easting:	2,068,092.26 ft	Longitude:	109° 28' 23.243 W
Position Uncertainty		0.00 ft	Wellhead Elevation:	ft	Ground Level:	5,035.00 ft

Wellbore	NBU 922-31O1AS				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	BGGM2009	7/23/2009	11.34	65.94	52,525

Design	Design #1			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.00	0.00	0.00	227.89

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,191.06	26.73	227.89	1,159.08	-136.88	-151.42	3.00	3.00	0.00	227.89	
4,225.38	26.73	227.89	3,869.10	-1,052.16	-1,163.93	0.00	0.00	0.00	0.00	
5,294.65	0.00	0.00	4,900.00	-1,216.42	-1,345.63	2.50	-2.50	0.00	180.00	
9,694.65	0.00	0.00	9,300.00	-1,216.42	-1,345.63	0.00	0.00	0.00	0.00	PBHL_NBU 922-31

Database:	EDM 2003.21 Single User Db	Local Co-ordinate Reference:	Well NBU 922-3101AS
Company:	ANADARKO PETROLEUM CORP.	TVD Reference:	WELL @ 5061.00ft (Original Well Elev)
Project:	UINTAH COUNTY, UTAH (nad 27)	MD Reference:	WELL @ 5061.00ft (Original Well Elev)
Site:	NBU 922-311 PAD	North Reference:	True
Well:	NBU 922-3101AS	Survey Calculation Method:	Minimum Curvature
Wellbore:	NBU 922-3101AS		
Design:	Design #1		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
Start Build 3.00									
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	3.00	227.89	399.95	-1.76	-1.94	2.62	3.00	3.00	0.00
500.00	6.00	227.89	499.63	-7.02	-7.76	10.46	3.00	3.00	0.00
600.00	9.00	227.89	598.77	-15.77	-17.44	23.51	3.00	3.00	0.00
700.00	12.00	227.89	697.08	-27.99	-30.96	41.74	3.00	3.00	0.00
800.00	15.00	227.89	794.31	-43.64	-48.28	65.08	3.00	3.00	0.00
900.00	18.00	227.89	890.18	-62.68	-69.34	93.48	3.00	3.00	0.00
1,000.00	21.00	227.89	984.43	-85.07	-94.10	126.85	3.00	3.00	0.00
1,100.00	24.00	227.89	1,076.81	-110.73	-122.49	165.12	3.00	3.00	0.00
Start 3034.32 hold at 1191.06 MD									
1,191.06	26.73	227.89	1,159.08	-136.88	-151.42	204.12	3.00	3.00	0.00
1,200.00	26.73	227.89	1,167.07	-139.58	-154.41	208.14	0.00	0.00	0.00
1,300.00	26.73	227.89	1,256.38	-169.74	-187.77	253.13	0.00	0.00	0.00
Green River									
1,344.36	26.73	227.89	1,296.00	-183.13	-202.58	273.08	0.00	0.00	0.00
1,400.00	26.73	227.89	1,345.69	-199.91	-221.14	298.11	0.00	0.00	0.00
1,500.00	26.73	227.89	1,435.00	-230.07	-254.51	343.09	0.00	0.00	0.00
1,600.00	26.73	227.89	1,524.32	-260.24	-287.88	388.07	0.00	0.00	0.00
1,700.00	26.73	227.89	1,613.63	-290.40	-321.25	433.05	0.00	0.00	0.00
1,800.00	26.73	227.89	1,702.94	-320.57	-354.62	478.03	0.00	0.00	0.00
1,900.00	26.73	227.89	1,792.25	-350.73	-387.98	523.01	0.00	0.00	0.00
2,000.00	26.73	227.89	1,881.56	-380.89	-421.35	568.00	0.00	0.00	0.00
2,100.00	26.73	227.89	1,970.88	-411.06	-454.72	612.98	0.00	0.00	0.00
2,200.00	26.73	227.89	2,060.19	-441.22	-488.09	657.96	0.00	0.00	0.00
9 5/8"									
2,244.57	26.73	227.89	2,100.00	-454.67	-502.96	678.01	0.00	0.00	0.00
2,300.00	26.73	227.89	2,149.50	-471.39	-521.46	702.94	0.00	0.00	0.00
2,400.00	26.73	227.89	2,238.81	-501.55	-554.83	747.92	0.00	0.00	0.00
2,500.00	26.73	227.89	2,328.13	-531.72	-588.20	792.90	0.00	0.00	0.00
2,600.00	26.73	227.89	2,417.44	-561.88	-621.56	837.88	0.00	0.00	0.00
2,700.00	26.73	227.89	2,506.75	-592.04	-654.93	882.87	0.00	0.00	0.00
2,800.00	26.73	227.89	2,596.06	-622.21	-688.30	927.85	0.00	0.00	0.00
2,900.00	26.73	227.89	2,685.37	-652.37	-721.67	972.83	0.00	0.00	0.00
3,000.00	26.73	227.89	2,774.69	-682.54	-755.04	1,017.81	0.00	0.00	0.00
3,100.00	26.73	227.89	2,864.00	-712.70	-788.41	1,062.79	0.00	0.00	0.00
3,200.00	26.73	227.89	2,953.31	-742.87	-821.77	1,107.77	0.00	0.00	0.00
3,300.00	26.73	227.89	3,042.62	-773.03	-855.14	1,152.75	0.00	0.00	0.00
3,400.00	26.73	227.89	3,131.94	-803.19	-888.51	1,197.74	0.00	0.00	0.00
3,500.00	26.73	227.89	3,221.25	-833.36	-921.88	1,242.72	0.00	0.00	0.00
3,600.00	26.73	227.89	3,310.56	-863.52	-955.25	1,287.70	0.00	0.00	0.00
3,700.00	26.73	227.89	3,399.87	-893.69	-988.62	1,332.68	0.00	0.00	0.00
3,800.00	26.73	227.89	3,489.18	-923.85	-1,021.98	1,377.66	0.00	0.00	0.00
3,900.00	26.73	227.89	3,578.50	-954.01	-1,055.35	1,422.64	0.00	0.00	0.00
4,000.00	26.73	227.89	3,667.81	-984.18	-1,088.72	1,467.62	0.00	0.00	0.00
4,100.00	26.73	227.89	3,757.12	-1,014.34	-1,122.09	1,512.61	0.00	0.00	0.00
4,200.00	26.73	227.89	3,846.43	-1,044.51	-1,155.46	1,557.59	0.00	0.00	0.00
Start Drop -2.50									
4,225.38	26.73	227.89	3,869.10	-1,052.16	-1,163.93	1,569.00	0.00	0.00	0.00
4,300.00	24.87	227.89	3,936.28	-1,073.94	-1,188.02	1,601.48	2.50	-2.50	0.00
4,400.00	22.37	227.89	4,027.90	-1,100.80	-1,217.73	1,641.54	2.50	-2.50	0.00
4,500.00	19.87	227.89	4,121.18	-1,124.96	-1,244.46	1,677.56	2.50	-2.50	0.00
4,600.00	17.37	227.89	4,215.94	-1,146.37	-1,268.14	1,709.48	2.50	-2.50	0.00

Database:	EDM 2003.21 Single User Db	Local Co-ordinate Reference:	Well NBU 922-3101AS
Company:	ANADARKO PETROLEUM CORP.	TVD Reference:	WELL @ 5061.00ft (Original Well Elev)
Project:	UINTAH COUNTY, UTAH (nad 27)	MD Reference:	WELL @ 5061.00ft (Original Well Elev)
Site:	NBU 922-311 PAD	North Reference:	True
Well:	NBU 922-3101AS	Survey Calculation Method:	Minimum Curvature
Wellbore:	NBU 922-3101AS		
Design:	Design #1		

Planned Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
4,700.00	14.87	227.89	4,312.00	-1,164.98	-1,288.73	1,737.24	2.50	-2.50	0.00	
4,800.00	12.37	227.89	4,409.18	-1,180.76	-1,306.19	1,760.78	2.50	-2.50	0.00	
4,900.00	9.87	227.89	4,507.30	-1,193.69	-1,320.49	1,780.06	2.50	-2.50	0.00	
Wasatch										
4,901.73	9.82	227.89	4,509.00	-1,193.89	-1,320.71	1,780.35	2.50	-2.50	0.00	
5,000.00	7.37	227.89	4,606.16	-1,203.74	-1,331.60	1,795.04	2.50	-2.50	0.00	
5,100.00	4.87	227.89	4,705.58	-1,210.88	-1,339.51	1,805.69	2.50	-2.50	0.00	
5,200.00	2.37	227.89	4,805.37	-1,215.11	-1,344.19	1,812.00	2.50	-2.50	0.00	
Start 4400.00 hold at 5294.65 MD										
5,294.65	0.00	0.00	4,900.00	-1,216.42	-1,345.63	1,813.95	2.50	-2.50	139.58	
5,300.00	0.00	0.00	4,905.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00	
5,400.00	0.00	0.00	5,005.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00	
5,500.00	0.00	0.00	5,105.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00	
5,600.00	0.00	0.00	5,205.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00	
5,700.00	0.00	0.00	5,305.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00	
5,800.00	0.00	0.00	5,405.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00	
5,900.00	0.00	0.00	5,505.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00	
6,000.00	0.00	0.00	5,605.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00	
6,100.00	0.00	0.00	5,705.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00	
6,200.00	0.00	0.00	5,805.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00	
6,300.00	0.00	0.00	5,905.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00	
6,400.00	0.00	0.00	6,005.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00	
6,500.00	0.00	0.00	6,105.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00	
6,600.00	0.00	0.00	6,205.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00	
6,700.00	0.00	0.00	6,305.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00	
6,800.00	0.00	0.00	6,405.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00	
6,900.00	0.00	0.00	6,505.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00	
7,000.00	0.00	0.00	6,605.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00	
7,100.00	0.00	0.00	6,705.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00	
7,200.00	0.00	0.00	6,805.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00	
7,300.00	0.00	0.00	6,905.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00	
7,400.00	0.00	0.00	7,005.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00	
7,500.00	0.00	0.00	7,105.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00	
7,600.00	0.00	0.00	7,205.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00	
7,700.00	0.00	0.00	7,305.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00	
7,800.00	0.00	0.00	7,405.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00	
7,900.00	0.00	0.00	7,505.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00	
8,000.00	0.00	0.00	7,605.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00	
8,100.00	0.00	0.00	7,705.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00	
8,200.00	0.00	0.00	7,805.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00	
8,300.00	0.00	0.00	7,905.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00	
8,400.00	0.00	0.00	8,005.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00	
Mesaverde										
8,477.65	0.00	0.00	8,083.00	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00	
8,500.00	0.00	0.00	8,105.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00	
8,600.00	0.00	0.00	8,205.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00	
8,700.00	0.00	0.00	8,305.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00	
8,800.00	0.00	0.00	8,405.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00	
8,900.00	0.00	0.00	8,505.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00	
9,000.00	0.00	0.00	8,605.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00	
9,100.00	0.00	0.00	8,705.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00	
9,200.00	0.00	0.00	8,805.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00	
9,300.00	0.00	0.00	8,905.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00	

Database:	EDM 2003.21 Single User Db	Local Co-ordinate Reference:	Well NBU 922-31O1AS
Company:	ANADARKO PETROLEUM CORP.	TVD Reference:	WELL @ 5061.00ft (Original Well Elev)
Project:	UINTAH COUNTY, UTAH (nad 27)	MD Reference:	WELL @ 5061.00ft (Original Well Elev)
Site:	NBU 922-31I PAD	North Reference:	True
Well:	NBU 922-31O1AS	Survey Calculation Method:	Minimum Curvature
Wellbore:	NBU 922-31O1AS		
Design:	Design #1		

Planned Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
9,400.00	0.00	0.00	9,005.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00	
9,500.00	0.00	0.00	9,105.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00	
9,600.00	0.00	0.00	9,205.35	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00	
PBHL_NBU 922-31O1AS										
9,694.65	0.00	0.00	9,300.00	-1,216.42	-1,345.63	1,813.95	0.00	0.00	0.00	

Design Targets										
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude	
PBHL_NBU 922-31O	0.00	0.00	9,300.00	-1,216.42	-1,345.63	14,525,426.65	2,066,767.66	39° 59' 17.909 N	109° 28' 40.534 W	
- hit/miss target - Shape - plan hits target center - Circle (radius 25.00)										

Casing Points						
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (in)	Hole Diameter (in)		
2,244.57	2,100.00	9 5/8"	9.62	12.25		

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
1,344.36	1,296.00	Green River				
4,901.73	4,509.00	Wasatch				
8,477.65	8,083.00	Mesaverde				

Plan Annotations					
Measured Depth (ft)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Comment	
300.00	300.00	0.00	0.00	Start Build 3.00	
1,191.06	1,159.08	-136.88	-151.42	Start 3034.32 hold at 1191.06 MD	
4,225.38	3,869.10	-1,052.16	-1,163.93	Start Drop -2.50	
5,294.65	4,900.00	-1,216.42	-1,345.63	Start 4400.00 hold at 5294.65 MD	
9,694.65	9,300.00	-1,216.42	-1,345.63	TD at 9694.65	



July 27, 2009

Ms. 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 922-31O1AS
T9S-R22E
Section 31: NESE (Surf), SWSE (Bottom)
Surface: 2318' FSL, 148' FEL
Bottom Hole: 1098' FSL, 1494' FEL
Uintah County, Utah

Dear Ms. 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 922-31O1AS is located within the Natural Buttes Unit area.
- Kerr-McGee is permitting this well as a directional well in order to minimize surface disturbance. Locating the well at the surface location and directionally drilling from this location, Kerr-McGee will be able to utilize the existing road and pipelines in the area.
- Furthermore, Kerr-McGee certifies that it is the sole working interest owner within 460 feet of the entire directional well bore.

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

Sincerely,

KERR-McGEE OIL & GAS ONSHORE LP

Jason Rayburn
Landman

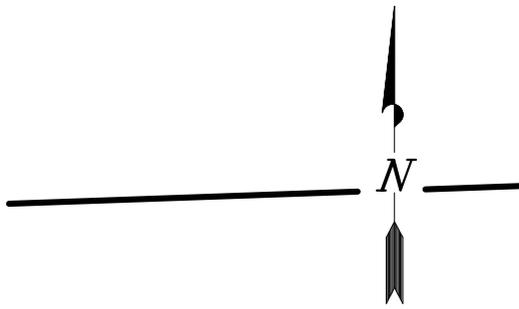
RECEIVED July 27, 2009

LATITUDE & LONGITUDE		
Surface Position - (NAD 83)		
WELL	N. LATITUDE	W. LONGITUDE
NBU 922-31J4BS	39°59'29.802" 39.991612°	109°28'25.836" 109.473843°
NBU 922-31O1AS	39°59'29.806" 39.991613°	109°28'25.708" 109.473808°
NBU 922-31I3CS	39°59'29.809" 39.991614°	109°28'25.579" 109.473772°
NBU 922-31I4AS	39°59'29.813" 39.991615°	109°28'25.451" 109.473736°

LATITUDE & LONGITUDE		
Bottom Hole - (NAD 83)		
WELL	N. LATITUDE	W. LONGITUDE
NBU 922-31J4BS	39°59'25.429" 39.990397°	109°28'49.151" 109.480320°
NBU 922-31O1AS	39°59'17.782" 39.988273°	109°28'43.001" 109.478611°
NBU 922-31I3CS	39°59'20.174" 39.988937°	109°28'38.260" 109.477295°
NBU 922-31I4AS	39°59'24.125" 39.990035°	109°28'25.774" 109.473826°

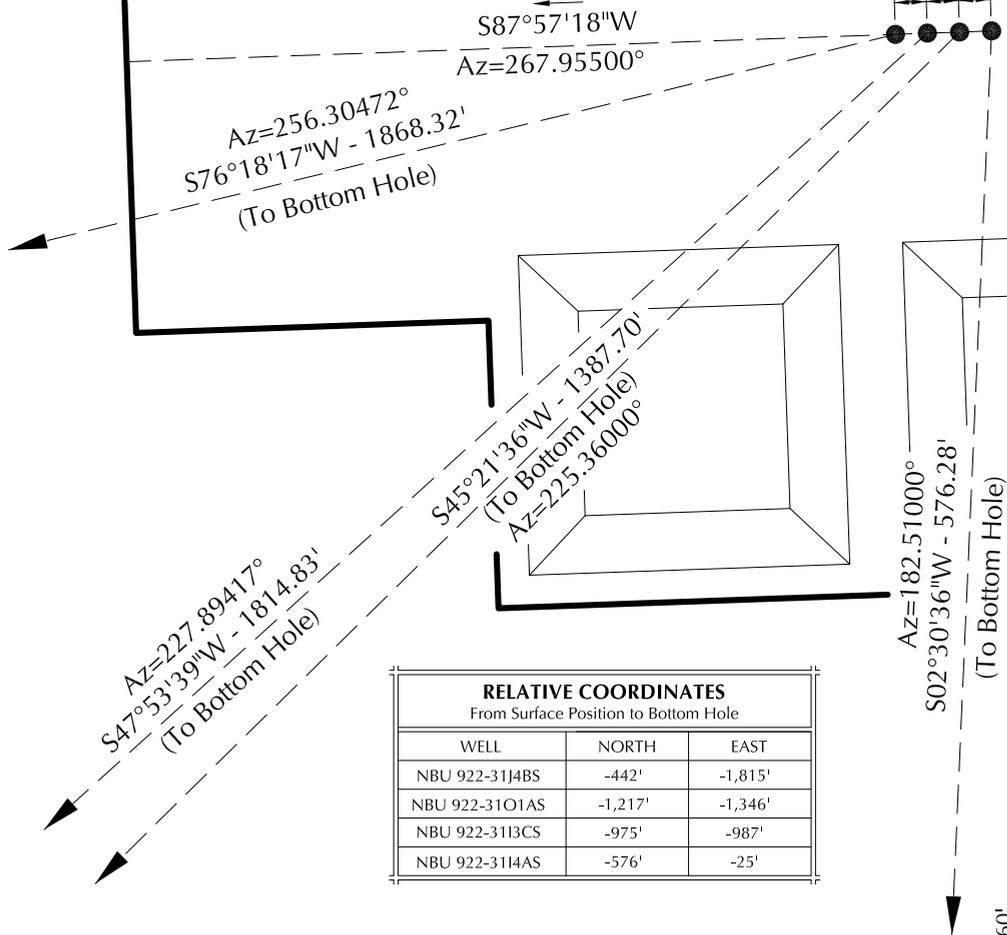
LATITUDE & LONGITUDE		
Surface Position - (NAD 27)		
WELL	N. LATITUDE	W. LONGITUDE
NBU 922-31J4BS	39°59'29.928" 39.991647°	109°28'23.370" 109.473158°
NBU 922-31O1AS	39°59'29.931" 39.991648°	109°28'23.242" 109.473123°
NBU 922-31I3CS	39°59'29.935" 39.991649°	109°28'23.113" 109.473087°
NBU 922-31I4AS	39°59'29.938" 39.991649°	109°28'22.985" 109.473051°

LATITUDE & LONGITUDE		
Bottom Hole - (NAD 27)		
WELL	N. LATITUDE	W. LONGITUDE
NBU 922-31J4BS	39°59'25.555" 39.990432°	109°28'46.684" 109.479634°
NBU 922-31O1AS	39°59'17.907" 39.988308°	109°28'40.534" 109.477926°
NBU 922-31I3CS	39°59'20.300" 39.988972°	109°28'35.794" 109.476609°
NBU 922-31I4AS	39°59'24.250" 39.990069°	109°28'23.308" 109.473141°



BASIS OF BEARINGS IS THE EAST LINE OF THE SE 1/4 OF SECTION 31, T9S, R22E, S.L.B.&M. WHICH IS TAKEN FROM GLOBAL POSITIONING SATELLITE OBSERVATIONS TO BEAR N00°01'20"E.

NBU 922-31J4BS
NBU 922-31O1AS
NBU 922-31I3CS
NBU 922-31I4AS



SURFACE POSITION FOOTAGES:

- NBU 922-31J4BS
2318' FSL & 158' FEL
- NBU 922-31O1AS
2318' FSL & 148' FEL
- NBU 922-31I3CS
2318' FSL & 138' FEL
- NBU 922-31I4AS
2319' FSL & 128' FEL

BOTTOM HOLE FOOTAGES

- NBU 922-31J4BS
1871' FSL & 1973' FEL
- NBU 922-31O1AS
1098' FSL & 1494' FEL
- NBU 922-31I3CS
1341' FSL & 1125' FEL
- NBU 922-31I4AS
1743' FSL & 153' FEL

RELATIVE COORDINATES		
From Surface Position to Bottom Hole		
WELL	NORTH	EAST
NBU 922-31J4BS	-442'	-1,815'
NBU 922-31O1AS	-1,217'	-1,346'
NBU 922-31I3CS	-975'	-987'
NBU 922-31I4AS	-576'	-25'



SCALE

Kerr-McGee Oil & Gas Onshore, LP
1099 18th Street - Denver, Colorado 80202

WELL PAD - NBU 922-311

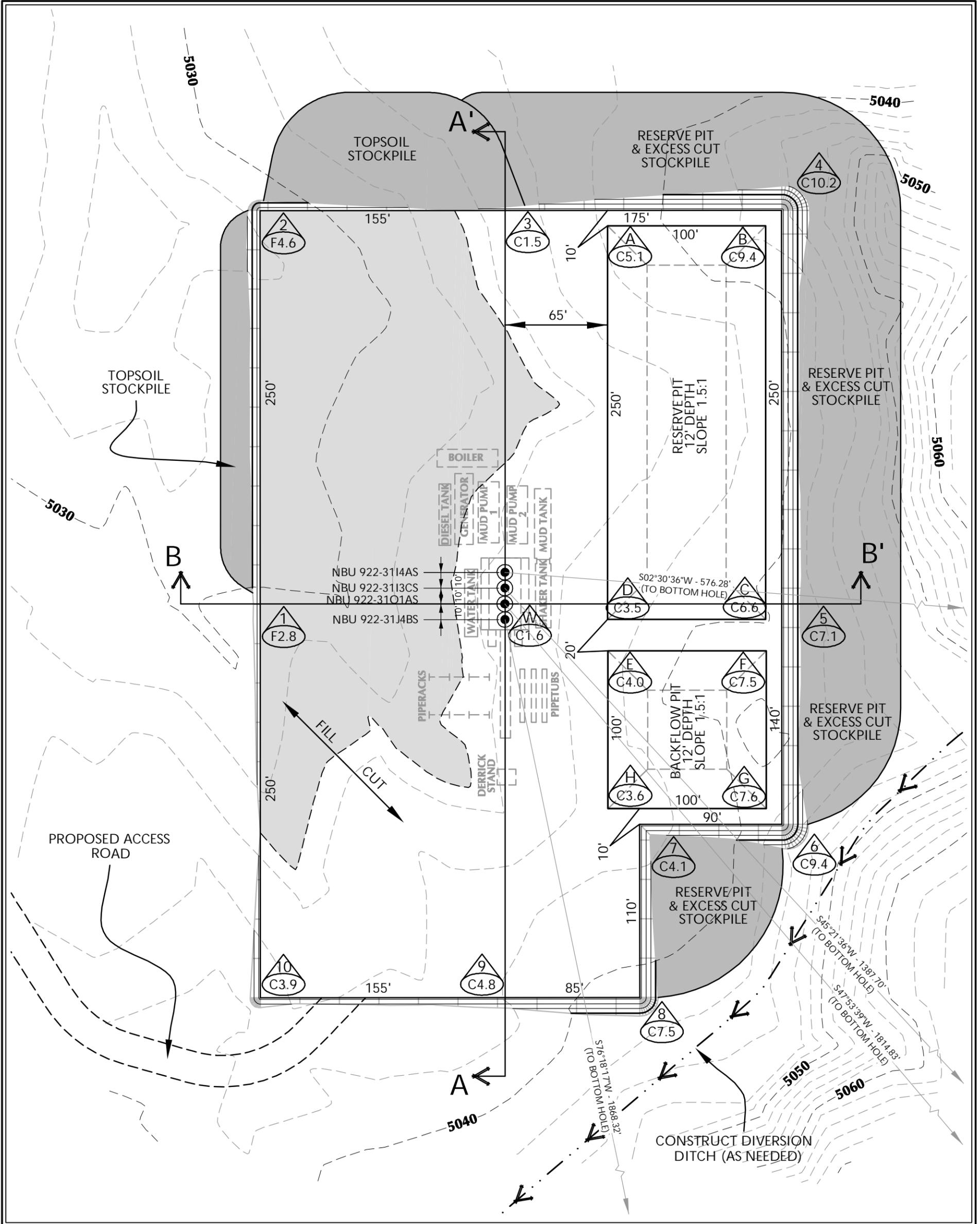
WELL PAD INTERFERENCE PLAT
WELLS - NBU 922-31J4BS, NBU 922-31O1AS,
NBU 922-31I3CS & NBU 922-31I4AS
LOCATED IN SECTION 31, T9S, R22E,
S.L.B.&M., UINTAH COUNTY, UTAH.



609 CONSULTING, LLC
371 Coffeen Avenue
Sheridan WY 82801
Phone 307-674-0609
Fax 307-674-0182

TIMBERLINE (435) 789-1365
ENGINEERING & LAND SURVEYING, INC.
209 NORTH 300 WEST - VERNAL, UTAH 84078

DATE SURVEYED: 07-16-09	SURVEYED BY: M.S.B.	SHEET NO: 5
DATE DRAWN: 07-17-09	DRAWN BY: M.W.W.	
SCALE: 1" = 60'		5 OF 13



WELL PAD NBU 922-311 QUANTITIES

EXISTING GRADE @ CENTER OF WELL PAD = 5034.9'
 FINISHED GRADE ELEVATION = 5033.3'
 CUT SLOPES = 1.5:1
 FILL SLOPES = 1.5:1

TOTAL CUT FOR WELL PAD = 12,634 C.Y.
 TOTAL FILL FOR WELL PAD = 5,537 C.Y.
 TOPSOIL @ 6" DEPTH = 3,116 C.Y.
 EXCESS MATERIAL = 7,097 C.Y.
 TOTAL DISTURBANCE = 3.86 ACRES
 SHRINKAGE FACTOR = 1.10
 SWELL FACTOR = 1.00
 RESERVE PIT CAPACITY (2' OF FREEBOARD)
 +/- 32,370 BARRELS
 RESERVE PIT VOLUME
 +/- 8,510 CY
 BACKFLOW PIT CAPACITY (2' OF FREEBOARD)
 +/- 11,260 BARRELS
 BACKFLOW PIT VOLUME
 +/- 3,040 CY

WELL PAD LEGEND

- EXISTING WELL LOCATION
- PROPOSED WELL LOCATION
- PROPOSED BOTTOM HOLE LOCATION
- EXISTING CONTOURS (2' INTERVAL)
- PROPOSED CONTOURS (2' INTERVAL)



HORIZONTAL 0 30 60 1" = 60'
 2' CONTOURS

Kerr-McGee Oil & Gas Onshore, LP
 1099 18th Street - Denver, Colorado 80202

WELL PAD - NBU 922-311

WELL PAD - LOCATION LAYOUT
 NBU 922-31J4BS, NBU 922-31O1AS,
 NBU 922-31I3CS & NBU 922-31I4AS
 LOCATED IN SECTION 31, T9S, R22E,
 S.L.B.&M., UINTAH COUNTY, UTAH



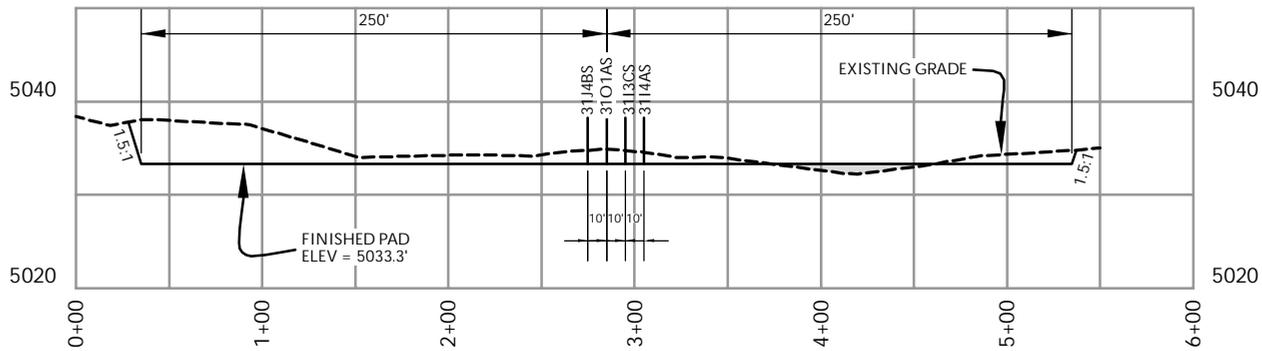
609 CONSULTING, LLC
 371 Coffeen Avenue
 Sheridan WY 82801
 Phone 307-674-0609
 Fax 307-674-0182

Scale: 1"=60'	Date: 7/21/09	SHEET NO: 6
REVISED:		6 OF 13

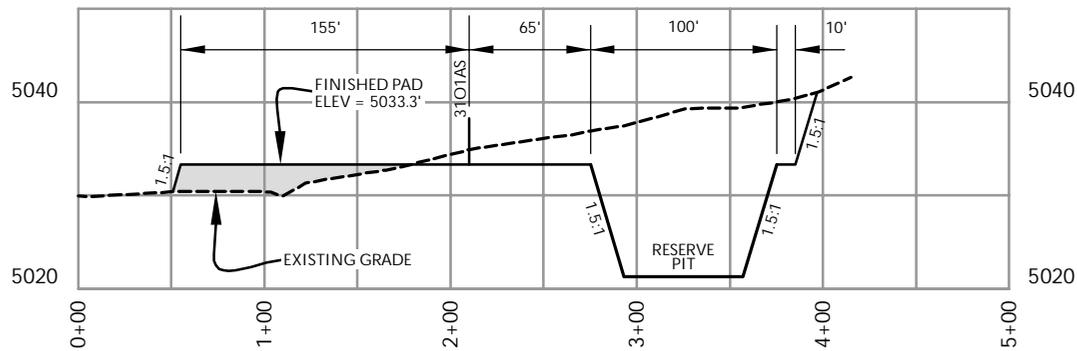
TIMBERLINE ENGINEERING & LAND SURVEYING, INC.
 209 NORTH 300 WEST - VERNAL, UTAH 84078 (435) 789-1365

RECEIVED July 27, 2009

K:\ADARKOV\09_11_NBU_Directional_UELS_Edits\DWGS\NBU 922-311\922-311.dwg, 7/21/2009 5:26:07 PM, PDF-XChange for AcadPlot Pro



CROSS SECTION A-A'



CROSS SECTION B-B'

NOTE: CROSS SECTION B-B' DEPICTS
MAXIMUM RESERVE PIT DEPTH.

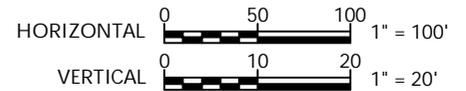
Kerr-McGee Oil & Gas Onshore, LP
1099 18th Street - Denver, Colorado 80202

WELL PAD - NBU 922-311

WELL PAD - CROSS SECTIONS
NBU 922-3114BS, NBU 922-3101AS,
NBU 922-3113CS & NBU 922-3114AS
LOCATED IN SECTION 31, T9S, R22E,
S.L.B.&M., UINTAH COUNTY, UTAH



CONSULTING, LLC
371 Coffeen Avenue
Sheridan WY 82801
Phone 307-674-0609
Fax 307-674-0182



Scale: 1"=100' Date: 7/21/09

SHEET NO: 7 OF 13

REVISED:

TIMBERLINE (435) 789-1365
ENGINEERING & LAND SURVEYING, INC.
209 NORTH 300 WEST - VERNAL, UTAH 84078

RECEIVED July 27, 2009

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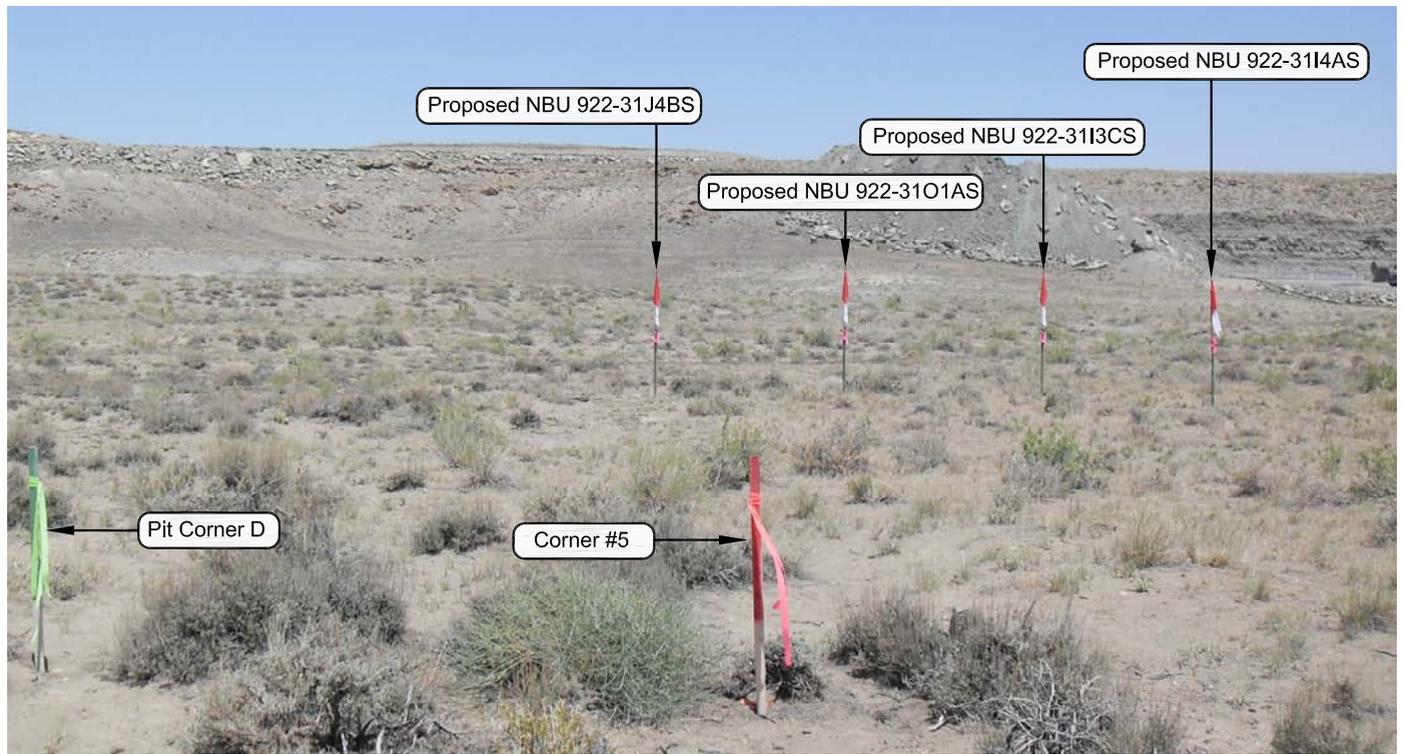


PHOTO VIEW: FROM CORNER #5 TO LOCATION STAKE

CAMERA ANGLE: NORTHERLY

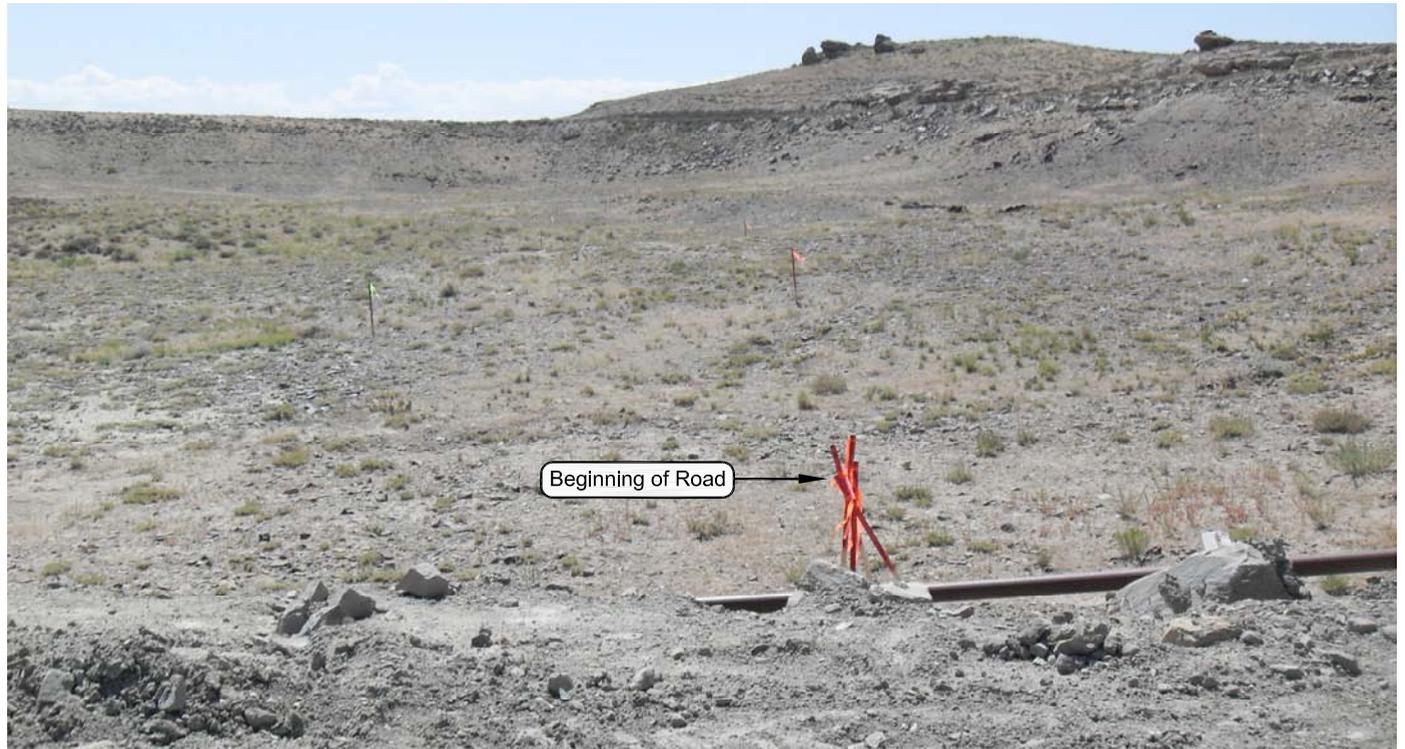


PHOTO VIEW: FROM BEGINNING OF PROPOSED ROAD

CAMERA ANGLE: WESTERLY

Kerr-McGee Oil & Gas Onshore, LP
 1099 18th Street - Denver, Colorado 80202

Well Pad - NBU 922-311

**NBU 922-31J4BS, NBU 922-31O1AS,
 NBU 922-31I3CS & NBU 922-31I4AS
 LOCATION PHOTOS
 LOCATED IN SECTION 31, T9S, R22E,
 S.L.B.&M., UINTAH COUNTY, UTAH.**



CONSULTING, LLC
 371 Coffeen Avenue
 Sheridan WY 82801
 Phone 307-674-0609
 Fax 307-674-0182

TIMBERLINE

(435) 789-1365

ENGINEERING & LAND SURVEYING, INC.
 209 NORTH 300 WEST - VERNAL, UTAH 84078

DATE PHOTOS TAKEN: 07-16-09	PHOTOS TAKEN BY: M.S.B.	SHEET NO: 8 8 OF 13
DATE DRAWN: 07-17-09	DRAWN BY: M.W.W.	
Date Last Revised:		

Kerr-McGee Oil & Gas Onshore, LP
WELL PAD - NBU 922-31I
WELLS – NBU 922-31J4BS, NBU 922-31O1AS, NBU 922-31I3CS
& NBU 922-31I4AS
Section 31, T9S, R22E, S.L.B.&M.

PROCEED IN A WESTERLY DIRECTION FROM VERNAL, UTAH ALONG U.S. HIGHWAY 40 APPROXIMATELY 13.9 MILES TO THE JUNCTION OF STATE HIGHWAY 88. EXIT LEFT AND PROCEED IN A SOUTHERLY DIRECTION ALONG STATE HIGHWAY 88 APPROXIMATELY 16.8 MILES TO OURAY, UTAH. FROM OURAY, PROCEED IN A SOUTHERLY DIRECTION ALONG THE SEEP RIDGE ROAD (COUNTY B ROAD 2810) APPROXIMATELY 11.2 MILES TO THE INTERSECTION OF THE GLEN BENCH ROAD (COUNTY B ROAD 3260). EXIT LEFT AND PROCEED IN AN EASTERLY, THEN SOUTHEASTERLY, THEN NORTHEASTERLY DIRECTION ALONG THE GLEN BENCH ROAD APPROXIMATELY 10.4 MILES TO A CLASS D COUNTY ROAD TO THE NORTHEAST. EXIT RIGHT AND PROCEED IN A NORTHEASTERLY DIRECTION ALONG THE CLASS D COUNTY ROAD APPROXIMATELY 0.1 MILES TO A SECOND CLASS D COUNTY ROAD TO THE SOUTHEAST. EXIT RIGHT AND PROCEED IN A SOUTHEASTERLY DIRECTION ALONG THE SECOND CLASS D COUNTY ROAD APPROXIMATELY 2.6 MILES TO A THIRD CLASS D COUNTY ROAD TO THE EAST. EXIT LEFT AND PROCEED IN AN EASTERLY, THEN NORTHWESTERLY DIRECTION ALONG THE THIRD CLASS D COUNTY ROAD APPROXIMATELY 1.8 MILES TO A SERVICE ROAD TO THE EAST. EXIT RIGHT AND PROCEED IN AN EASTERLY, THEN SOUTHWESTERLY DIRECTION ALONG THE SERVICE ROAD, CROSSING THE NBU 922-32E AND CIGE 173 WELL PADS, APPROXIMATELY 0.3 MILES TO THE PROPOSED ACCESS ROAD (AT THE WESTERN END OF THE CIGE 173 WELL PAD). FOLLOW ROAD FLAGS IN A SOUTHWESTERLY DIRECTION APPROXIMATELY 640 FEET TO THE PROPOSED WELL LOCATION

TOTAL DISTANCE FROM VERNAL, UTAH TO THE PROPOSED WELL LOCATION IS APPROXIMATELY 57.2 MILES IN A SOUTHERLY DIRECTION.

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	FORM 9 5. LEASE DESIGNATION AND SERIAL NUMBER: UO 1207A
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: 7. UNIT or CA AGREEMENT NAME: NATURAL BUTTES
1. TYPE OF WELL Gas Well	8. WELL NAME and NUMBER: NBU 922-3101AS
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.	9. API NUMBER: 43047503950000
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779	PHONE NUMBER: 720 929-6007 Ext
4. LOCATION OF WELL FOOTAGES AT SURFACE: 2318 FSL 0148 FEL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NESE Section: 31 Township: 09.0S Range: 22.0E Meridian: S	9. FIELD and POOL or WILDCAT: NATURAL BUTTES COUNTY: UINTAH STATE: UTAH

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

TYPE OF SUBMISSION	TYPE OF ACTION		
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start:	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> CASING REPAIR
<input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion:	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> CHANGE WELL NAME
<input checked="" type="checkbox"/> SPUD REPORT Date of Spud: 8/14/2009	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> CONVERT WELL TYPE
<input type="checkbox"/> DRILLING REPORT Report Date:	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> NEW CONSTRUCTION
	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> PLUG BACK
	<input type="checkbox"/> PRODUCTION START OR RESUME	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION
	<input type="checkbox"/> REPERFORATE CURRENT FORMATION	<input type="checkbox"/> SIDETRACK TO REPAIR WELL	<input type="checkbox"/> TEMPORARY ABANDON
	<input type="checkbox"/> TUBING REPAIR	<input type="checkbox"/> VENT OR FLARE	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> WATER SHUTOFF	<input type="checkbox"/> SI TA STATUS EXTENSION	<input type="checkbox"/> APD EXTENSION
	<input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> OTHER	OTHER:

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

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 08/14/2009 AT 11:00 HRS.

Accepted by the
Utah Division of
Oil, Gas and Mining
FOR RECORD ONLY
 August 17, 2009

NAME (PLEASE PRINT) Andy Lytle	PHONE NUMBER 720 929-6100	TITLE Regulatory Analyst
SIGNATURE N/A	DATE 8/17/2009	

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	FORM 9
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.	5. LEASE DESIGNATION AND SERIAL NUMBER: UO 1207A
	6. IF INDIAN, ALLOTTEE OR TRIBE NAME: _____
	7. UNIT or CA AGREEMENT NAME: NATURAL BUTTES
1. TYPE OF WELL Gas Well	8. WELL NAME and NUMBER: NBU 922-3101AS
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.	9. API NUMBER: 43047503950000
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779	PHONE NUMBER: 720 929-6007 Ext
4. LOCATION OF WELL FOOTAGES AT SURFACE: 2318 FSL 0148 FEL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NESE Section: 31 Township: 09.0S Range: 22.0E Meridian: S	9. FIELD and POOL or WILDCAT: NATURAL BUTTES
	COUNTY: UINTAH
	STATE: UTAH

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

TYPE OF SUBMISSION	TYPE OF ACTION		
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start:	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> CASING REPAIR
<input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion:	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> CHANGE WELL NAME
<input type="checkbox"/> SPUD REPORT Date of Spud:	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> CONVERT WELL TYPE
<input checked="" type="checkbox"/> DRILLING REPORT Report Date: 8/22/2009	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> NEW CONSTRUCTION
	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> PLUG BACK
	<input type="checkbox"/> PRODUCTION START OR RESUME	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION
	<input type="checkbox"/> REPERFORATE CURRENT FORMATION	<input type="checkbox"/> SIDETRACK TO REPAIR WELL	<input type="checkbox"/> TEMPORARY ABANDON
	<input type="checkbox"/> TUBING REPAIR	<input type="checkbox"/> VENT OR FLARE	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> WATER SHUTOFF	<input type="checkbox"/> SI TA STATUS EXTENSION	<input type="checkbox"/> APD EXTENSION
	<input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> OTHER	OTHER:

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

MIRU PROPETRO AIR RIG ON 08/19/2009. DRILLED 12 1/4" SURFACE HOLE TO 2410'. RAN 9 5/8" 40# J-55 SURFACE CSG. PMP 350 SX PREM CLASS G @15.8 PPG 1.15 YIELD. DROP PLUG ON FLY. 300 PSI OF LIFT. BUMP PLUG 800 PSI FLOAT HELD SLIGHT RETURNS TO SURFACE FLUID FELL. TOP OUT W/100 SX PREM CLASS G @15.8 PPG 1.15 YIELD. 2ND TOP OUT W/225 SX PREM CLASS G @15.8 PPG 1.15 YIELD. NO CMT TO SURFACE. WILL FINISH TOP OUT ON NEXT JOB. WORT.

Accepted by the
Utah Division of
Oil, Gas and Mining
FOR RECORD ONLY
 August 24, 2009

NAME (PLEASE PRINT) Sheila Wopsock	PHONE NUMBER 435 781-7024	TITLE Regulatory Analyst
SIGNATURE N/A	DATE 8/24/2009	

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	FORM 9
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.	5. LEASE DESIGNATION AND SERIAL NUMBER: UO 1207A
	6. IF INDIAN, ALLOTTEE OR TRIBE NAME: _____
	7. UNIT or CA AGREEMENT NAME: NATURAL BUTTES
1. TYPE OF WELL Gas Well	8. WELL NAME and NUMBER: NBU 922-3101AS
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.	9. API NUMBER: 43047503950000
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779	PHONE NUMBER: 720 929-6007 Ext
4. LOCATION OF WELL FOOTAGES AT SURFACE: 2318 FSL 0148 FEL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NESE Section: 31 Township: 09.0S Range: 22.0E Meridian: S	9. FIELD and POOL or WILDCAT: NATURAL BUTTES COUNTY: UINTAH STATE: UTAH

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

TYPE OF SUBMISSION	TYPE OF ACTION		
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start:	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> CASING REPAIR
<input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion:	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> CHANGE WELL NAME
<input type="checkbox"/> SPUD REPORT Date of Spud:	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> CONVERT WELL TYPE
<input checked="" type="checkbox"/> DRILLING REPORT Report Date: 4/9/2010	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> NEW CONSTRUCTION
	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> PLUG BACK
	<input checked="" type="checkbox"/> PRODUCTION START OR RESUME	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION
	<input type="checkbox"/> REPERFORATE CURRENT FORMATION	<input type="checkbox"/> SIDETRACK TO REPAIR WELL	<input type="checkbox"/> TEMPORARY ABANDON
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	<input type="checkbox"/> WATER SHUTOFF	<input type="checkbox"/> SI TA STATUS EXTENSION	<input type="checkbox"/> APD EXTENSION
	<input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> OTHER	OTHER:

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

THE SUBJECT WELL WAS PLACED ON PRODUCTION ON 4/9/2010 AT 1:00 P.M. THE CHRONOLOGICAL WELL HISTORY WILL BE SUBMITTED WITH THE WELL COMPLETION REPORT.

Accepted by the
Utah Division of
Oil, Gas and Mining
FOR RECORD ONLY
 April 15, 2010

NAME (PLEASE PRINT) Andy Lytle	PHONE NUMBER 720 929-6100	TITLE Regulatory Analyst
SIGNATURE N/A	DATE 4/12/2010	

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	FORM 9 5. LEASE DESIGNATION AND SERIAL NUMBER: UO 1207A
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: 7. UNIT or CA AGREEMENT NAME: NATURAL BUTTES
1. TYPE OF WELL Gas Well	8. WELL NAME and NUMBER: NBU 922-3101AS
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.	9. API NUMBER: 43047503950000
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779	PHONE NUMBER: 720 929-6007 Ext
4. LOCATION OF WELL FOOTAGES AT SURFACE: 2318 FSL 0148 FEL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NESE Section: 31 Township: 09.0S Range: 22.0E Meridian: S	9. FIELD and POOL or WILDCAT: NATURAL BUTTES COUNTY: UINTAH STATE: UTAH

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

TYPE OF SUBMISSION	TYPE OF ACTION		
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start:	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> CASING REPAIR
<input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion:	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> CHANGE WELL NAME
<input type="checkbox"/> SPUD REPORT Date of Spud:	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> CONVERT WELL TYPE
<input checked="" type="checkbox"/> DRILLING REPORT Report Date: 4/9/2010	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> NEW CONSTRUCTION
	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> PLUG BACK
	<input checked="" type="checkbox"/> PRODUCTION START OR RESUME	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION
	<input type="checkbox"/> REPERFORATE CURRENT FORMATION	<input type="checkbox"/> SIDETRACK TO REPAIR WELL	<input type="checkbox"/> TEMPORARY ABANDON
	<input type="checkbox"/> TUBING REPAIR	<input type="checkbox"/> VENT OR FLARE	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> WATER SHUTOFF	<input type="checkbox"/> SI TA STATUS EXTENSION	<input type="checkbox"/> APD EXTENSION
	<input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> OTHER	OTHER:

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

THE SUBJECT WELL WAS PLACED ON PRODUCTION ON 4/9/2010 AT 1:00 P.M. THE CHRONOLOGICAL WELL HISTORY WILL BE SUBMITTED WITH THE WELL COMPLETION REPORT.

Accepted by the
Utah Division of
Oil, Gas and Mining
FOR RECORD ONLY
 April 15, 2010

NAME (PLEASE PRINT) Andy Lytle	PHONE NUMBER 720 929-6100	TITLE Regulatory Analyst
SIGNATURE N/A	DATE 4/12/2010	

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

AMENDED REPORT FORM 8
(highlight changes)

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

1a. TYPE OF WELL: OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> DRY <input type="checkbox"/> OTHER _____		5. LEASE DESIGNATION AND SERIAL NUMBER: UO 1207A
b. TYPE OF WORK: NEW WELL <input checked="" type="checkbox"/> HORIZ. LATS. <input type="checkbox"/> DEEP-EN <input type="checkbox"/> RE-ENTRY <input type="checkbox"/> DIFF. RESVR. <input type="checkbox"/> OTHER _____		6. IF INDIAN, ALLOTTEE OR TRIBE NAME
2. NAME OF OPERATOR: KERR McGEE OIL & GAS ONSHORE LP		7. UNIT or CA AGREEMENT NAME UTU63047A
3. ADDRESS OF OPERATOR: P.O. BOX 173779 CITY DENVER STATE CO ZIP 80217		8. WELL NAME and NUMBER: NBU 922-3101AS
PHONE NUMBER: (720) 929-6100		9. API NUMBER: 4304750395
4. LOCATION OF WELL (FOOTAGES) AT SURFACE: NESE 2318 FSL & 148 FEL		10. FIELD AND POOL, OR WILDCAT NATURAL BUTTES
AT TOP PRODUCING INTERVAL REPORTED BELOW: SWSE 1098 FSL & 1494 FEL SEC.31-9S-22E		11. QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: NESE 31 9S 22E
AT TOTAL DEPTH: SWSE 1077 FSL & 1487 FEL SEC.31-9S-22E		12. COUNTY UINTAH
		13. STATE UTAH

Reviewed by HSM

14. DATE SPUNDED: 8/14/2009	15. DATE T.D. REACHED: 11/2/2009	16. DATE COMPLETED: 4/9/2010	ABANDONED <input type="checkbox"/> READY TO PRODUCE <input checked="" type="checkbox"/>	17. ELEVATIONS (DF, RKB, RT, GL): 5035' GL
18. TOTAL DEPTH: MD 9,665 TVD 9,280	19. PLUG BACK T.D.: MD 9,608 TVD 9,228	20. IF MULTIPLE COMPLETIONS, HOW MANY? *	21. DEPTH BRIDGE MD PLUG SET: TVD	
22. TYPE ELECTRIC AND OTHER MECHANICAL LOGS RUN (Submit copy of each) BHV-SDL/DSN/ACTR-CBL/GR			23. WAS WELL CORED? NO <input checked="" type="checkbox"/> YES <input type="checkbox"/> (Submit analysis) WAS DST RUN? NO <input checked="" type="checkbox"/> YES <input type="checkbox"/> (Submit report) DIRECTIONAL SURVEY? NO <input type="checkbox"/> YES <input checked="" type="checkbox"/> (Submit copy)	

24. CASING AND LINER RECORD (Report all strings set in well)

HOLE SIZE	SIZE/GRADE	WEIGHT (#/ft.)	TOP (MD)	BOTTOM (MD)	STAGE CEMENTER DEPTH	CEMENT TYPE & NO. OF SACKS	SLURRY VOLUME (BBL)	CEMENT TOP **	AMOUNT PULLED
20"	14" STL	36.7#		40		28			
12 1/4"	9 5/8 J-55	40#		2,403		675			
7 7/8"	4 1/2 I-80	11.6#		9,651		1905		386	

25. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)
2 3/8"	8,917							

26. PRODUCING INTERVALS

FORMATION NAME	TOP (MD)	BOTTOM (MD)	TOP (TVD)	BOTTOM (TVD)
(A) WASATCH	7,272	7,468		
(B) MESAVERDE	7,536	9,454		
(C)				
(D)				

27. PERFORATION RECORD

INTERVAL (Top/Bot - MD)	SIZE	NO. HOLES	PERFORATION STATUS
7,272 7,468	0.36	40	Open <input checked="" type="checkbox"/> Squeezed <input type="checkbox"/>
7,536 9,454	0.36	320	Open <input checked="" type="checkbox"/> Squeezed <input type="checkbox"/>
			Open <input type="checkbox"/> Squeezed <input type="checkbox"/>
			Open <input type="checkbox"/> Squeezed <input type="checkbox"/>

28. ACID, FRACTURE, TREATMENT, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL	AMOUNT AND TYPE OF MATERIAL
7,272-7,468	PMP 899 BBLS SLICK H2O & 47,231 LBS 30/50 SD.
7,536-9,454	PMP 10,792 BBLS SLICK H2O & 395,608 LBS 30/50 SD.

29. ENCLOSED ATTACHMENTS:

- | | | | |
|---|--|---------------------------------------|--|
| <input type="checkbox"/> ELECTRICAL/MECHANICAL LOGS | <input type="checkbox"/> GEOLOGIC REPORT | <input type="checkbox"/> DST REPORT | <input checked="" type="checkbox"/> DIRECTIONAL SURVEY |
| <input type="checkbox"/> SUNDRY NOTICE FOR PLUGGING AND CEMENT VERIFICATION | <input type="checkbox"/> CORE ANALYSIS | <input type="checkbox"/> OTHER: _____ | |

30. WELL STATUS:

PROD

RECEIVED

MAY 04 2010

31. INITIAL PRODUCTION

INTERVAL A (As shown in item #26)

DATE FIRST PRODUCED: 4/9/2010		TEST DATE: 4/22/2010		HOURS TESTED: 24		TEST PRODUCTION RATES: →		OIL – BBL: 40	GAS – MCF: 2,560	WATER – BBL: 400	PROD. METHOD: FLOWING
CHOKE SIZE: 22/64	TBG. PRESS. 1,734	CSG. PRESS. 1,538	API GRAVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL – BBL: 40	GAS – MCF: 2,560	WATER – BBL: 400	INTERVAL STATUS: PROD	

INTERVAL B (As shown in item #26)

DATE FIRST PRODUCED:		TEST DATE:		HOURS TESTED:		TEST PRODUCTION RATES: →		OIL – BBL:	GAS – MCF:	WATER – BBL:	PROD. METHOD:
CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	INTERVAL STATUS:	

INTERVAL C (As shown in item #26)

DATE FIRST PRODUCED:		TEST DATE:		HOURS TESTED:		TEST PRODUCTION RATES: →		OIL – BBL:	GAS – MCF:	WATER – BBL:	PROD. METHOD:
CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	INTERVAL STATUS:	

INTERVAL D (As shown in item #26)

DATE FIRST PRODUCED:		TEST DATE:		HOURS TESTED:		TEST PRODUCTION RATES: →		OIL – BBL:	GAS – MCF:	WATER – BBL:	PROD. METHOD:
CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	INTERVAL STATUS:	

32. DISPOSITION OF GAS (Sold, Used for Fuel, Vented, Etc.)

SOLD

33. 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.

34. FORMATION (Log) MARKERS:

Formation	Top (MD)	Bottom (MD)	Descriptions, Contents, etc.	Name	Top (Measured Depth)
GREEN RIVER	1,433				
MAHOGANY	2,259				
WASATCH	4,904	7,517			
MESAVERDE	7,517	9,665			

35. ADDITIONAL REMARKS (Include plugging procedure)

ATTACHED IS THE CHRONOLOGICAL WELL HISTORY AND FINAL SURVEY.

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

NAME (PLEASE PRINT) ANDY LYTLE

TITLE REGULATORY ANALYST

SIGNATURE 

DATE 4/29/2010

This report must be submitted within 30 days of

- completing or plugging a new well
- drilling horizontal laterals from an existing well bore
- recompleting to a different producing formation
- reentering a previously plugged and abandoned well
- significantly deepening an existing well bore below the previous bottom-hole depth
- drilling hydrocarbon exploratory holes, such as core samples and stratigraphic tests

* ITEM 20: Show the number of completions if production is measured separately from two or more formations.

** ITEM 24: Cement Top – Show how reported top(s) of cement were determined (circulated (CIR), calculated (CAL), cement bond log (CBL), temperature survey (TS)).

Send to: Utah Division of Oil, Gas and Mining
1594 West North Temple, Suite 1210
Box 145801
Salt Lake City, Utah 84114-5801

Phone: 801-538-5340
Fax: 801-359-3940

US ROCKIES REGION
Operation Summary Report

Well: NBU 922-3101AS YELLOW		Spud Conductor: 8/14/2009		Spud Date: 8/19/2009				
Project: UTAH-UINTAH			Site: NBU 922-311 PAD			Rig Name No: PROPETRO/, H&P 298/298		
Event: DRILLING			Start Date: 7/21/2009			End Date: 11/3/2009		
Active Datum: RKB @5,061.00ft (above Mean Sea Level)				UWI: NE/SE/0/9/S/22/E/31/0/0/26/PM/S/2,318.00/E/0/148.00/0/0				

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
8/19/2009	14:00 - 16:00	2.00	MIRU	01	B	P		INSTALL AIR BOWL AND BOWIE LINE, RIG UP RIG.
	16:00 - 18:30	2.50	MAINT	08	B	Z		REPAIR POWER HEAD. RE-INFORCE GOOSENECK.
	18:30 - 19:00	0.50	DRLSUR	06	A	P		P/U AIR HAMMER, READY COMPRESSOR, BOOSTER.
	19:00 - 20:30	1.50	DRLSUR	02	A	P		DRILL OUT W/ AIR HAMMER AND AIR MIST. 44'-180'
	20:30 - 22:30	2.00	DRLSUR	06	A	P		LD AIR HAMMER AND P/U 2-1/8 DEG BENT HOUSING 8" MOTOR, M/U 12-1/4" HC507Z 7-18'S SN 7014966 (2ND RUN). P/U MWD TOOLS AND SCRIBE TOOLS, SCRIB IN HOLE, TOOL FACE READING OFF.
	22:30 - 23:30	1.00	DRLSUR	22	O	Z		TRIP OUT AND RECHECK TOOL FACE. TRIP IN
8/20/2009	23:30 - 0:00	0.50	DRLSUR	02	D	P		DRILL SLIDE 180'- 210'.
	0:00 - 8:00	8.00	DRLSUR	02	D	P		DRILL SLIDE 210'-750' (540',67.5'/HR) WOB 17K, RPM 45, MOTOR RPM 112, CIRC RESERVE PIT. 700 GPM
	8:00 - 9:00	1.00	DRLSUR	08	B	Z		WORK ON PUMP. CIRC W/ 200 BLS MIN PUMP #2.
8/21/2009	9:00 - 0:00	15.00	DRLSUR	02	D	P		DRILL SLIDE 750'- 1600' (850',57'/HR) WOB 20 K, RPM 35, MOTOR 112, CIRC RESERVE PIT 700 GPM. SLIGHT LOSS. SLIDING 16%AFTER BUILD RATE WAS ACHIEVED.
	0:00 - 20:30	20.50	DRLSUR	02	D	P		DRILL SLIDE 1600'- 2410' (810',40'/HR) WOB 28K, ROT 35, GPM 700,MOTOR RPM 112, SLIGHT LOSS.
	20:30 - 21:30	1.00	CSG	05	F	P		CIRC AND COND HOLE, CLEAN HOLE W/ EZ MUD SWEEP.
8/22/2009	21:30 - 0:00	2.50	CSG	06	D	P		LD DRILL PIPE, AND BHA.
	0:00 - 2:30	2.50	CSG	06	D	P		LDDS, LD DIRECTIONAL TOOLS.
	2:30 - 6:00	3.50	CSG	12	C	P		READY TO RUN CSG, HOLD SAFETY MEETING, RUN 55 JTS OF 9-5/8, 40#, J-55, LT&C AND LAND SHOE 2381' GL, BAFFLE PLATE TOP OF FIRST COLLAR @ 2338' GL. BREAK CIRC 645' AND 1750'.
	6:00 - 6:30	0.50	RDMO	01	E	P		RIG DOWN RIG, AND MOVE OFF HOLE. HOLD SAFETY MEETING W/ CEMENTER , RIG UP
10/27/2009	6:30 - 10:30	4.00	CSG	12	E	P		CEMENTERS. RELEASE RIG 06:30 8/22/2009 PUMP 165 BBLs OF H2O, PUMP 20 BBLs OF GEL WATER, PUMP 350 SX (71.6 BBL) OF 15.8#, 1.15 YD. 5 GAL/SK, PREMIUM CEMENT 2% CALC2. DROP PLUG ON FLY, 300 PSI OF LIFT, BUMP PLUG 800 PSI FLOAT HELD. SLIGHT RETURNS TO SURFACE. FLUID FELL. TOP OUT 100 SX (20.4 BBLs) SAME CEM. WAIT 2 HRS. TOP OUT W/ 225 SX (46 BBLs) SAME CEM. NO CEMENT TO SURFACE. WILL FINISH TOP OUT ON NEXT JOB. RIG DOWN CEMENTERS.
	22:00 - 22:30	0.50	RDMO	01	A	P		RIG DOWN EQUIPMENT TO SKID
	22:30 - 23:00	0.50	RDMO	01	C	P		SKID RIG FROM NBU 922-3113CS TO THE NBU 922-3101AS
	23:00 - 23:30	0.50	RDMO	01	B	P		RIG UP EQUIPMENT TO DRILL
	23:30 - 0:00	0.50	RDMO	14	A	P		NIPPLE UP B.O.P.E. TO TEST

US ROCKIES REGION
Operation Summary Report

Well: NBU 922-3101AS YELLOW		Spud Conductor: 8/14/2009		Spud Date: 8/19/2009	
Project: UTAH-UINTAH			Site: NBU 922-311 PAD		Rig Name No: PROPETRO/, H&P 298/298
Event: DRILLING			Start Date: 7/21/2009		End Date: 11/3/2009
Active Datum: RKB @5,061.00ft (above Mean Sea Level)			UWI: NE/SE/0/9/S/22/E/31/0/0/26/PM/S/2,318.00/E/0/148.00/0/0		

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
10/28/2009	0:00 - 5:00	5.00	PRPSPD	15	A	P		PRESSURE TEST PIPE RAMS, BLIND RAMS, IBOP, FLOOR VALVE, KILL LINES & KILL LINE VALVES, BOP WING VALVES, HCR VALVE + CHOKE LINE; INNER AND OUTER CHOKE VALVES & MANIFOLD TO 250 PSI LOW @ 5 MINUTES + 5000 PSI HIGH @ 10 MINUTES / TEST ANNULAR TO 250 PSI LOW @ 5 MINUTES + 2500 PSI HIGH @ 10 MINUTES / TEST SUPER CHOKE + SURFACE CASING TO 1500 PSI @ 30 MINUTES - MAKE REPAIRS AS NEEDED / FUNCTION TEST CLOSING UNIT - PASSED
	5:00 - 5:30	0.50	PRPSPD	14	B	P		INSTALL WEAR BUSHING
	5:30 - 7:00	1.50	PRPSPD	09	A	P		SLIP & CUT DRILL LINE/ PRE SPUD INSPECTION
	7:00 - 8:00	1.00	PRPSPD	06	A	P		PICK UP MOTOR (1.83* - .22 REV/GAL), BIT #1 & DIRECTIONAL TOOLS / ORIENTATE & SURFACE TEST MWD TOOL
	8:00 - 9:30	1.50	PRPSPD	06	A	P		TIH / INSTALL ROTATING RUBBER & CORRISION RING / TAG CEMENT @ 2295' / TEST PUMPS & LINES TO 2500 PSI
	9:30 - 10:30	1.00	PRPSPD	02	F	P		DRILL FLOAT TRAC F/ 2295' - T/ 2432'
	10:30 - 16:30	6.00	DRLPRO	02	D	P		DRILL OUT UNDER SURFACE @ 1030 HRS 10/28/2009 DRILL/SURVEY F/ 2432' - T/ 3001' = 569' @ 94.8 FPH / H2O + POLYMER / WOB 15K-18K / TOP DRIVE RPM 35-40 / PUMP 110 SPM = 495 GPM / PUMP PRESSURE ON/OFF BOTTOM 1340/1080 PSI / MUD MOTOR RPM 109 / PU/SO/ROT WT118/76/92 / TORQUE ON/OFF BOTTOM 8K/5K / SLIDE 112' IN 1.5 HRS = 19.7% OF FOOTAGE DRILLED & 25% OF HOURS DRILL.
	16:30 - 17:00	0.50	DRLPRO	07	A	P		RIG SERVICE / INSPECT DRAG CHAIN
	17:00 - 0:00	7.00	DRLPRO	02	D	P		DRILL/SURVEY F/ 3001' - T/ 3908' = 907' @ 151.1 FPH / H2O + POLYMER / WOB 15K-18K / TOP DRIVE RPM 35-40 / PUMP 110 SPM = 495 GPM / PUMP PRESSURE ON/OFF BOTTOM 1650/1180 PSI / MUD MOTOR RPM 109 / PU/SO/ROT WT142/82/105 / TORQUE ON/OFF BOTTOM 8K/5K / SLIDE 130' IN 1.75 HRS = 19.7% OF FOOTAGE DRILLED & 25% OF HOURS DRILL.
10/29/2009	0:00 - 6:00	6.00	DRLPRO	02	D	P		DRILL / SURVEY F/ 3908' - T/ 4550' = 642' @ 107 FPH / H2O + POLYMER / WOB 15K-18K / TOP DRIVE RPM 30-40 / PUMP 110 SPM = 495 GPM / PUMP PRESSURE ON/OFF BOTTOM 1650/1200 PSI / MUD MOTOR RPM 109 / PU/SO/ROT WT162/85 / 112 TORQUE ON/OFF BOTTOM 8K/6K / SLIDE 127' IN 1.75 HRS = 19. % OF FOOTAGE DRILLED & 29% OF HOURS DRILLED.
	6:00 - 16:30	10.50	DRLPRO	02	D	P		DRILL / SURVEY F/ 4550' - T/ 5652' = 1002' @ 95.4 FPH / H2O + POLYMER / WOB 15K-18K / TOP DRIVE RPM 30-40 / PUMP 110 SPM = 495 GPM / PUMP PRESSURE ON/OFF BOTTOM 1650/1280 PSI / MUD MOTOR RPM 109 / PU/SO/ROT WT204/110 / 136 TORQUE ON/OFF BOTTOM 14K/10K / SLIDE 147' IN 1.75 HRS = 13.4 % OF FOOTAGE DRILLED & 16% OF HOURS DRILLED
	16:30 - 17:00	0.50	DRLPRO	07	A	P		RIG SERVICE /FUNCT TEST PIPE RAMS

US ROCKIES REGION
Operation Summary Report

Well: NBU 922-3101AS YELLOW		Spud Conductor: 8/14/2009		Spud Date: 8/19/2009	
Project: UTAH-UINTAH			Site: NBU 922-311 PAD		Rig Name No: PROPETRO/, H&P 298/298
Event: DRILLING			Start Date: 7/21/2009		End Date: 11/3/2009
Active Datum: RKB @5,061.00ft (above Mean Sea Level)			UWI: NE/SE/O/9/S/22/E/31/O/O/26/PM/S/2,318.00/E/O/148.00/O/O		

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
	17:00 - 0:00	7.00	DRLPRO	02	D	P		DRILL / SURVEY F/ 5652' - T/ 6410' = 758' @ 108.2 FPH / H2O + POLYMER / WOB 15K-18K / TOP DRIVE RPM 30-40 / PUMP 110 SPM = 495 GPM / PUMP PRESSURE ON/OFF BOTTOM 1675/1300 PSI / MUD MOTOR RPM 109 / PU/SO/ROT WT 220/110 / 136 TORQUE ON/OFF BOTTOM 16K/12K / SLIDE45' IN .5 HRS = 6 % OF FOOTAGE DRILLED & 7% OF HOURS DRILLED.CLOSE IN MUD PITS @ 6000' LIGHT MUD UP WT 8.8 VIS 29
10/30/2009	0:00 - 6:00	6.00	DRLPRO	02	D	P		DRILL / SURVEY F/ 6410' - T/ 6800' = 390' @ 65 FPH / WOB 15K-18K / TOP DRIVE RPM 30-40 / PUMP 110 SPM = 495 GPM / PUMP PRESSURE ON/OFF BOTTOM 1675/1300 PSI / MUD MOTOR RPM 109 / PU/SO/ROT WT 250/112 / 142 TORQUE ON/OFF BOTTOM 16K/12K / SLIDE15' IN .5 HRS = 4 % OF FOOTAGE DRILLED & 7% OF HOURS DRILLED MW 9.2 VIS 30.
	6:00 - 14:00	8.00	DRLPRO	02	D	P		DRILL / SURVEY F/ 6800' - T/7168' = 368' @ 46 FPH / WOB 18K-22K / TOP DRIVE RPM 30-40 / PUMP 105 SPM = 475 GPM / PUMP PRESSURE ON/OFF BOTTOM 1700/1450 PSI / MUD MOTOR RPM 104 / PU/SO/ROT WT 250/118 / 157 TORQUE ON/OFF BOTTOM 15K/16K / MW 9.5 VIS 33.
	14:00 - 14:30	0.50	DRLPRO	07	A	P		RIG SERVICE / BOP DRILL
	14:30 - 0:00	9.50	DRLPRO	02	D	P		DRILL / SURVEY F/7168' - T/7642' =474' @ 49.8 FPH / WOB 18K-22K / TOP DRIVE RPM 30-40 / PUMP 105 SPM = 475 GPM / PUMP PRESSURE ON/OFF BOTTOM 1950/1520 PSI / MUD MOTOR RPM 104 / PU/SO/ROT WT 260/120 / 160 TORQUE ON/OFF BOTTOM 19K/17K / SLIDE10' IN .5 HRS = 2 % OF FOOTAGE DRILLED &5% OF HOURS DRILLED /MW 10.0 VIS 34.
10/31/2009	0:00 - 6:00	6.00	DRLPRO	02	D	P		DRILL / SURVEY F/7642' - T/7925' =283' @ 47.1 FPH / WOB 18K-22K / TOP DRIVE RPM 30-40 / PUMP 105 SPM = 475 GPM / PUMP PRESSURE ON/OFF BOTTOM 1975/1530 PSI / MUD MOTOR RPM 104 / PU/SO/ROT WT 260/120 / 160 TORQUE ON/OFF BOTTOM 19K/17K SURVEY @ 7780' INC .25 AZM 166.43 4.7 FT N 19.4 FT WEST OF CENTER..LOST 45 BBLS MUD ,BYPASS SHAKERS @ 7710' LCM 3%,MW 10.0
	6:00 - 12:00	6.00	DRLPRO	02	D	P		DRILL / SURVEY F/7925' - T/8211' =286' @ 47.5 FPH / WOB 18K-22K / TOP DRIVE RPM 30-40 / PUMP 105 SPM = 475 GPM / PUMP PRESSURE ON/OFF BOTTOM 2000/1825 PSI / MUD MOTOR RPM 104 / PU/SO/ROT WT 270/122 / 170 TORQUE ON/OFF BOTTOM 20K/19K
	12:00 - 14:30	2.50	DRLPRO	06	E	X		20 STAND WIPER TRIP DUE TO TORQUE & DRAG
	14:30 - 17:30	3.00	DRLPRO	02	D	P		DRILL / SURVEY F/8211' - T/8305' =94' @ 31.3 FPH / WOB 18K-23K / TOP DRIVE RPM 30-40 / PUMP 105 SPM = 475 GPM / PUMP PRESSURE ON/OFF BOTTOM 2100/1920 PSI / MUD MOTOR RPM 104 / PU/SO/ROT WT 274/125/171 TORQUE ON/OFF BOTTOM 17K/19K / SLIDE15' IN .5 HRS =15 % OF FOOTAGE DRILLED &.16% OF HOURS DRILLED MW 10.8 VIS 40
	17:30 - 18:00	0.50	DRLPRO	07	A	P		RIG SERVICE

**US ROCKIES REGION
Operation Summary Report**

Well: NBU 922-3101AS YELLOW		Spud Conductor: 8/14/2009		Spud Date: 8/19/2009	
Project: UTAH-UINTAH		Site: NBU 922-311 PAD		Rig Name No: PROPETRO/, H&P 298/298	
Event: DRILLING		Start Date: 7/21/2009		End Date: 11/3/2009	
Active Datum: RKB @5,061.00ft (above Mean Sea Level)		UWI: NE/SE/O/9/S/22/E/31/O/0/26/PM/S/2,318.00/E/0/148.00/O/0			

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
	18:00 - 0:00	6.00	DRLPRO	02	D	P		DRILL / SURVEY F/8305' - T/8597' =292' @ 48.6 FPH / WOB 18K-23K / TOP DRIVE RPM 30-40 / PUMP 105 SPM = 475 GPM / PUMP PRESSURE ON/OFF BOTTOM 2230/1950 PSI / MUD MOTOR RPM 104 / PU/SO/ROT WT 280/127 / 192 TORQUE ON/OFF BOTTOM 20K/18K / SLIDE12' IN .5 HRS = 4 % OF FOOTAGE DRILLED 7% OF HOURS DRILLED MW 11.6 VIS 42
11/1/2009	0:00 - 1:30	2.50	DRLPRO	02	D	P		DRILL/ SURVEY F/8597' - T/8640' =43' @ 28.6 FPH / WOB 18K-23K / TOP DRIVE RPM 30-40 / PUMP 105 SPM = 475 GPM / PUMP PRESSURE ON/OFF BOTTOM 2250/1975 PSI / MUD MOTOR RPM 104 / PU/SO/ROT WT 280/127 / 185 TORQUE ON/OFF BOTTOM 20K/18K . MW 11.6
	1:30 - 3:30	2.00	DRLPRO	05	B	P		CCH F/ BIT TRIP RAISE MUD WT TO 11.9, BGG 1759 UNITS W/ 8-10' FLARE
	3:30 - 9:00	5.50	DRLPRO	06	A	P		TOH/ BACK REAM OUT TO 7265' PULLED 305K OFF BTM,STRAIGHT PULL @ 7158 252K,PUMP SLUG ,TOH,WORK THRU TIGHT SPOTS 5128 / 4869,FLOW CHECK @ SHOE,TOH
	9:00 - 10:00	1.00	DRLPRO	06	A	P		FUNCT TEST PIPE RAMS,BREAK BIT, LAY DOWN M.W.D. TOOLS & MOTOR .
	10:00 - 11:30	1.50	DRLPRO	06	A	P		PU .16 STRAIGHT MUD MTR & BIT,RUN SURFACE TEST ON MTR,TRIP IN HOLE TO CSG SHOE
	11:30 - 12:00	0.50	DRLPRO	07	A	P		INSTALL ROTATING RUBBER,BREAK CIRC RIG SERVICE
	12:00 - 14:00	2.00	DRLPRO	06	A	P		TIH ,BREAK CIRC @ 6000',CIH TO 8560
	14:00 - 14:30	0.50	DRLPRO	03	D	P		WASH & REAM TO BTM 8' FILL
	14:30 - 0:00	9.50	DRLPRO	02	D	P		DRILL F8640' - T/9130' =533' @ 56.1 FPH / WOB 18K-22K / TOP DRIVE RPM 30-40 / PUMP 105 SPM = 475 GPM / PUMP PRESSURE ON/OFF BOTTOM 2680/2410 PSI / MUD MOTOR RPM 104 / PU/SO/ROT WT 274/128 / 178 TORQUE ON/OFF BOTTOM 19K/17K . MW 12.1 VIS 43
11/2/2009	0:00 - 4:00	4.00	DRLPRO	02	D	P		DRILL F9130' - T/9360' =230' @ 57.5 FPH / WOB 18K-22K / TOP DRIVE RPM 30-40 / PUMP 105 SPM = 475 GPM / PUMP PRESSURE ON/OFF BOTTOM 2680/2410 PSI / MUD MOTOR RPM 104 / PU/SO/ROT WT 274/128 / 178 TORQUE ON/OFF BOTTOM 21K/20K . MW 12.2 VIS 43. (UNABLE TO DRILL EXCESSIVE TORQUE STALLING TOP DRIVE)
	4:00 - 6:30	2.50	DRLPRO	06	E	X		WIPER TRIP TO 8000' DUE TO EXCESSIVE TORQUE STALLING TD 21K. W&R TO BTM
	6:30 - 17:00	10.50	DRLPRO	02	D	P		DRILL F9360' - T/9665' TD=305' @ 29 FPH / WOB 18K-22K / TOP DRIVE RPM 30-40 / PUMP 105 SPM = 475 GPM / PUMP PRESSURE ON/OFF BOTTOM 2780/2550 PSI / MUD MOTOR RPM 104 / PU/SO/ROT WT 280/1138 / 183 TORQUE ON/OFF BOTTOM 20K/20K . MW 12.4 VIS 46
	17:00 - 18:00	1.00	DRLPRO	05	C	P		CCH F/ WIPER TRIP / PUMP HI VIS SWEEP
	18:00 - 20:00	2.00	DRLPRO	06	E	P		WIPER TRIP 15 STDS
	20:00 - 21:30	1.50	DRLPRO	05	C	P		CCH F/ LOGS,PUMP SWEEP TRIP GAS 1600 U NO FLARE
	21:30 - 22:00	0.50	DRLPRO	10	B	P		DROP SINGLE SHOT SURVEY
	22:00 - 0:00	2.00	EVALPR	06	B	P		TRIP OUT FOR LOGS /BACK REAM TO 8390, 290K OFF BTM.
11/3/2009	0:00 - 3:00	3.00	EVALPR	06	B	P		TOH F/ LOGS LD M MTR
	3:00 - 3:30	0.50	EVALPR	14	B	P		PULL WEAR BUSHING

US ROCKIES REGION
Operation Summary Report

Well: NBU 922-3101AS YELLOW		Spud Conductor: 8/14/2009	Spud Date: 8/19/2009
Project: UTAH-UINTAH		Site: NBU 922-311 PAD	Rig Name No: PROPETRO/, H&P 298/298
Event: DRILLING		Start Date: 7/21/2009	End Date: 11/3/2009
Active Datum: RKB @5,061.00ft (above Mean Sea Level)		UWI: NE/SE/0/9/S/22/E/31/0/0/26/PM/S/2,318.00/E/0/148.00/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
	3:30 - 10:00	6.50	EVALPR	11	E	P		HSM RU & RUN TRIPLE COMBO LOG OUT FROM 9280', RD SAME
	10:00 - 11:30	1.50	CSG	12	A	P		CHANGE OUT DRILLING BAILS TO CSG BAILS
	11:30 - 18:00	6.50	CSG	12	C	P		HSM / MIRU WEATHERFORD TRS CSG EQUIP RUN 230 JOINTS OF 4 1/2 #11.6, I-80 BT&C CASING + RELATED TOOLS TO 9650 BREAKING CIRCULATION AT SELECTED INTERVALS,PU LANDING JT INSTALL ROT HEAD
	18:00 - 19:00	1.00	CSG	05	D	P		RU & CIRC CSG W/ RIG PUMP,LOST RETURNS AFTER CIRCULATING 1 HR
	19:00 - 22:00	3.00	CSG	12	E	P		HSM M.I.R.U. BJ EQUIPMENT / TEST PUMPS & LINES TO 5k PSI / PUMP 40 BBLS H2O + 630 SX LEAD CEMENT @ 12.4 ppg (PREM LITE II + .25 pps CELLO FLAKE + 5 pps KOL SEAL + .05 lb/sx STATIC FREE + 10% bwoc BENTONITE + .2% bwoc SODIUM META SILICATE + .4 % R-3 + 149.48 BBLS FRESH WATER / (10.81 gal/sx, 2.03 yield) + 1275 SX TAIL @ 14.3 ppg (CLS G 50/50 POZ + 10% SALT + .05lbs/sx STATIC FREE + .2% R3 + .002 GPS FP-6L + 2% BENTONITE + 182.65 BBLS H2O / (5.90 gal/sx, 1.31 yield) WASH PUMP & LINES, DROP PLUG & DISPLACE W/ 149 BBLS H2O + ADDITIVES /BUMP PLUG W/ 2850 PSI LIFT PRESSURE @ 2405 PSI ,HELD 5 MIN W/ NO LOSS,FLOATS HELD W/1 BBL BACK- TO INVENTORY START CMT JOB W/ NO RETURNS REGAINED CIRC AFTER 57 BBLS LEAD CMT PUMPED, LOST RETURNS AGAIN @ 65 BBLS INTO DISPLACEMENT REDUCE RATE TO 4 BBLS MIN @102 BBLS INTO DISPLACEMENT REDUCED RATE TO 3 BBLS MIN (CALC TOP OF TAIL @ 3472') R.D.M.O. CMT EQUIP
	22:00 - 22:30	0.50	CSG	12	E	P		LAND CSG W/ 70K,SHOE @ 9651 FC@ 9608 L/D LANDING JT ,CHANGE OUT CSG BAILS
	22:30 - 0:00	1.50	RDMO	14	A	P		ND BOP,CLEAN MUD TANKS,PREP RIG FOR SKID,RIG RELEASED TO NBU 922-31J4BS @ 23:59 HRS 11/3/2009

US ROCKIES REGION
Operation Summary Report

Well: NBU 922-3101AS YELLOW	Spud Conductor: 8/14/2009	Spud Date: 8/19/2009
Project: UTAH-UINTAH	Site: NBU 922-311 PAD	Rig Name No: LEED 733/733
Event: COMPLETION	Start Date: 3/18/2010	End Date: 4/8/2010
Active Datum: RKB @5,061.00ft (above Mean Sea Level)		
UWI: NE/SE/0/9/S/22/E/31/0/0/26/PM/S/2,318.00/E/0/148.00/0/0		

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
3/19/2010	7:00 - 7:15	0.25	COMP	48		P		HSM
	7:15 - 17:00	9.75	COMP	37		P		MIRU CUTTERS WIRE LINE, RIH PERF MESAVERDE USING 3-3/8 EXPEND, 23 GRM, 0.36" HOLE, 9450'-9454' 4 SPF, 90* PH, 16 HOLES. 9378'-9382' 4 SPF, 90* PH, 16 HOLES. 9288' 9290' 4 SPF, 90* PH, 8 HOLES. [40HOLES] SWIFN.
3/22/2010	6:30 - 7:00	0.50	COMP	48		P		HSM
	7:00 - 17:00	10.00	COMP	36	E	P		R/U FRAC TECH AND CUTTER WIRELINE, PRESSURE TEST SURFACE LINE TO 8000#, WHP = 1625 # (STG #1) BRK DN PERF @ 3738 # @ 12.4 B/M, INJ-RT = 52 B/M, INJ-P = 6060 #, ISIP = 2808 #, F.G.= 0.73 , PUMP 5 BBL 15% HCL AHEAD OF INJ, CALC 75% PERF OPEN, PUMP 829 BBL SLK WTR & 21918 # OTTAWA SAND, ISIP = 2737 #, F.G= 0.73 , NPI = -71 #, MP = 6476 #, MR = 52 B/M, AP = 5239 #, AR = 49.9 B/M, 16918 # 30/50 OTAWA SAND, 5000# TLC SAND, COMMENTS= GOOD JOB (STG #2) COULD NOT GET CBP PASS LOWER VALVE, RIG WIRELINE OFF WELL, WORK W/ VALVE WASH SAND OUT OFF VALVE, GOT VALVE OPEN, RIH W/ HALLIBURTON 8K CBP AND PERF GUNS, SET CBP @ 9203 ', PERF THE MEASVERDE @ 9171' - 9173' , 9074' - 9076' , 9014' - 9016' , 8994' - 8996' , 8952' - 8954' , 4-SPF, USING 3 3/8" SCALOP GUNS, 23 gm, 0.36 HOLE, 90* PHS, 40 HOLES,
3/23/2010	7:00 - 8:00	1.00	COMP	33	C	P		HSM, HOOK UP FRAC TECH TO WELL, PRESSURE TEST SURFACE LINES TO 8000#, PRESSURE TEST CSG AND FRAC VALVE TO 7000#,

**US ROCKIES REGION
Operation Summary Report**

Well: NBU 922-3101AS YELLOW		Spud Conductor: 8/14/2009		Spud Date: 8/19/2009	
Project: UTAH-UINTAH		Site: NBU 922-311 PAD		Rig Name No: LEED 733/733	
Event: COMPLETION		Start Date: 3/18/2010		End Date: 4/8/2010	
Active Datum: RKB @5,061.00ft (above Mean Sea Level)		UWI: NE/SE/0/9/S/22/E/31/0/0/26/PM/S/2,318.00/E/0/148.00/0/0			

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
	10:00 - 17:00	7.00	COMP	36	E	P		<p>(STG # 2) WHP = 665 #, BRK DN PERF @ 3756 # @ 5.1 B/M, INJ-RT = 50 B/M, INJ-P = 5400 #, ISIP = 2684 #, F.G.= 0.73 , CALC 85% PERF OPEN, PUMP 878 BBLS SLK WTR AND 31868 # OTTAWA SAND, ISIP = 2714 #, F.G.= 0.73 , NPI = 30 #, MP = 6175 #, MR = 50.1 B/M, AP = 5030 #, AR = 49.8 B/M, 26868 # 30/50 SAND, 5000 # TLC SAND, COMMENTS = GOOD JOB</p> <p>(STG #3) RIH W/ HALLIBURTON 8K CBP AND PERF GUNS, SET CBP @ 8926', PERF THE MESAVERDE @ 8890' - 8896', 8798' - 8802', 4-SPF, USING 3 3/8" SCALOP GUNS, 23 gm, 0.36 HOLE, 90* PHS, 40 HOLES, WHP = 1125 #, BRK DN PERF @ 3344 # @ 4.7 B/M, INJ-RT = 51 B/M, INJ-P = 5025 #, ISIP = 2461 #, F.G. = 0.71, CALC ALL PERF OPEN, PUMP 1133 BBLS SLK WTR & 42874 # OTTAWA SAND, ISIP = 2573 #, F.G. = 0.72, NPI = 112 #, MP = 6158 #, MR = 50.3 B/M, AP = 5080 #, AR = 49.9 B/M, 37874 # 30/50 SAND, 5000 # TLC SAND, COMMENTS = GOOD JOB</p> <p>(STG #4) RIH W/ HALLIBURTON 8K CBP AND PERF GUNS, SET CBP @ 8776 ', PERF THE MESAVERDE @ 8744' - 8746', 8714' - 8716', 8654' - 8656', 8628' - 8630', 8606' - 8608 ', 4-SPF, USING 3 3/8" SCALOP GUNS, 23 gm, 0.36 HOLE 90* PHS, 40 HOLES, WHP = 1200 #, BRK DN PERF @ 2343 # @ 4.5 B/M, INJ-RT = 51 B/M, INJ-P = 5075 #, ISIP = 1996 #, F.G= 0.66, CALC 73% PERF OPEN, PUMP 1286 BBLS SLK WTR & 50096 # OTTAWA SAND, ISIP = 2214 #, F.G= 0.69, NPI = 218 #, MP = 6000 #, MR = 50.4 B/M, AP = 5092 #, AR = 49.9 B/M, 45096# 30/50 SAND, 5000 # TLC SAND, COMMENTS = GOOD JOB</p>

**US ROCKIES REGION
Operation Summary Report**

Well: NBU 922-3101AS YELLOW		Spud Conductor: 8/14/2009	Spud Date: 8/19/2009
Project: UTAH-UINTAH		Site: NBU 922-311 PAD	Rig Name No: LEED 733/733
Event: COMPLETION		Start Date: 3/18/2010	End Date: 4/8/2010
Active Datum: RKB @5,061.00ft (above Mean Sea Level)		UWI: NE/SE/O/S/22/E/31/O/O/26/PM/S/2,318.00/E/O/148.00/O/O	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
3/24/2010	7:00 - 17:00	10.00	COMP	36	E	P		<p>(STG #5) WHP = 1750 #, BRK DN PERF @ 2549 # @ 4.9 B/M, INJ-RT = 50 B/M, INJ-P = 5500 #, ISIP = 2072 #, F.G.= 0.68, CALC 60% PERF OPEN, PUMP 1053 BBLS SLK WTR & 39521 # OTTAWA SAND, ISIP = 2361 #, F.G.= 0.71 , NPI = 289 #, MP = 6070 #, MR = 51.8 B/M, AP = 5170 #, AR = 50 B/M, 34521 # 30/50 SAND, 5000 # TLC SAND, COMMENTS = GOOD JOB</p> <p>(STG #6) RIH W/ HALLIBURTON 8K CBP AND PERF GUNS, SET THE CBP @ 8298 ', PERF THE MESAVERDE @ 8266' - 8268', 8251' - 8253', 8134' - 8138', 8070' - 8072', 4-SPF, USING 3 3/8" SCALOP GUNS, 23gm, 0.36 HOLE, 90* PHS, 40 HOLES, WHP = 1650 #, BRK DN PERF @ 2820 # @ 5.5 B/M, INJ-RT = 50 B/M, INJ-P = 5700 #, ISIP = 2214 #, F.G. = 0.70, CALC 60% PERF OPEN, PUMP 1190 BBLS SLK WTR & 46171# OTTAWA SAND, ISIP = 2478 #, F.G. = 0.74 , NPI = 264 #, MP = 6165 #, MR = 50.4 B/M, AP = 4975 #, AR = 49.7 B/M, 41171# 30/50 SAND, 5000 # TLC SAND, COMMENTS = GOOD JOB</p> <p>(STG #7) RIH W/ HALLIBURTON 8K CBP AND PERF GUNS, SET THE CBP @ 8027 ', PERF THE MESAVERDE @ 7995' - 7997', 7909' - 7914', 7776' - 7779 ', 4-SPF, USING 3 3/8" SCALOP GUNS, 23 gm, 0.36 HOLE, 90* PHS, 40 HOLES, WHP = 800 #, BRK DN PERF @ 3167 # @ 4.8 B/M, INJ-RT = 51 B/M, INJ-P = 5070 #, ISIP = 2231 #, F.G.= 0.70, CALC 75% PERF OPEN, PUMP 669 BBLS SLK WTR & 23014 # OTTAWA SAND, ISIP = 2202 #, F.G.= 0.71 , NPI = -29 #, MP = 5675 #, MR = 50.4 B/M, AP = 4963 #, AR = 49.6 B/M, 17014 # 30/50 SAND, 5000 # TLC SAND, COMMENTS = GOOD JOB</p> <p>(STG #8) RIH W/ HALLIBURTON 8K CBP AND PERF GUNS, SET THE CBP @ 7697 ', PERF THE MESAVERDE @ 7664' - 7667', 7608' - 7610', 7578' - 7580', 7536' - 7539 ', USING 3 3/8" SCALOP GUNS, 23 gm, 0.36 HOLE, 90* PHS, 40 HOLES, WHP = 465 #, BRK DN PERF @ 1996 # @ 3.6 B/M, INJ-RT = 50 B/M, INJ-P = 4200 #, ISIP = 1478 #, F.G.= 0.63, CALC 73% PERF OPEN, PUMP 3754 BBLS SLK WTR & 140146 # OTTAWA SAND, ISIP = 2166 #, F.G.= 0.72, NPI = 688 #, MP = 4950 #, MR = 51.2 B/M, AP = 3750 #, AR = 50.5 B/M, 135146 # 30/50 SAND, 5000 # TLC SAND, COMMENTS = GOOD JOB,</p> <p>(STG #9) RIH W/ HALLIBURTON 8K CBP AND PERF GUNS, SET THE CBP @ 7498 ', PERF THE WASATCH @ 7462' - 7468', 7272' - 7276 ', USING 3 3/8" SCALOP GUNS, 23 gm, 0.36 HOLE, 90* PHS, 40 HOLES, WHP = 1840 #, BRK DN PERF @ 2161# @ 4.2 B/M, INJ-RT = 50 B/M, INJ-P = 5150 #, ISIP = 1960 #, F.G.= 0.70,</p>

**US ROCKIES REGION
Operation Summary Report**

Well: NBU 922-3101AS YELLOW		Spud Conductor: 8/14/2009		Spud Date: 8/19/2009	
Project: UTAH-UINTAH			Site: NBU 922-311 PAD		Rig Name No: LEED 733/733
Event: COMPLETION			Start Date: 3/18/2010		End Date: 4/8/2010
Active Datum: RKB @5,061.00ft (above Mean Sea Level)			UWI: NE/SE/O/9/S/22/E/31/O/O/26/PM/S/2,318.00/E/O/148.00/O/O		

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
								<p>CALC 60% PERF OPEN, PUMP 899 BBLS SLK WTR & 47231 # OTTAWA SAND, ISIP = 2514 #, F.G.= 0.77, NPI = 554 #, MP = 5716 #, MR = 50.4 B/M, AP = 4215 #, AR = 50.2 B/M, 42231 # 30/50 SAND, 5000 # TLC SAND, COMMENTS = GOOD JOB,</p> <p>(KILL PLUG) RIH W/ HALLIBURTON 8K CBP, SET CBP @ 7222', R/D WIRELINE AND FRAC TECH, SHUT WELL IN,</p> <p>TOTAL FLUID = 11691 BBLS, TOTAL SAND = 442839 #</p>
4/7/2010	7:00 - 7:15	0.25	COMP	48		P		JSA-SAFETY MEETING
	7:15 - 10:30	3.25	COMP	30	A	P		MIRU, N/U BOPS, R/U TBG EQUIP,
	10:30 - 17:00	6.50	COMP	31	I	P		TALLY TBG ON TRAILER, P/U TIH W/ 3 78" MILL, POBS, 2 3/8" TBG, RIH W/ 227 JTS TBG TAG FILL @ 7185', R/U POWER SWIVEL, PRESSURE TEST TO 3000#, OK, PREPARE TO DRILL IN AM, SDFN JSA- D/O PLUGS.
4/8/2010	7:00 - 7:15	0.25	COMP	48		P		EST CIRC AND D/O PLUGS.
	7:15 - 17:30	10.25	COMP	44	C	P		<p>#1- C/O 30' SAND TO CBP AT 7222'. D/O IN 15 MIN. 25# INC. RIH. #2- C/O 35' SAND TO CBP AT 7498'. D/O IN 10 MIN. 100# INC. RIH. #3- C/O 30' SAND TO CBP AT 7697'. D/O IN 30 MIN. 100# INC. RIH. #4- C/O 20' SAND TO CBP AT 8027'. D/O IN 20 MIN. 250# INC. RIH. #5- C/O 30' SAND TO CBP AT 8298'. D/O IN 20 MIN. 300# INC. RIH. #6- C/O 35' SAND TO CBP AT 8574'. D/O IN 20 MIN. 350# INC. RIH. #7- C/O 25' SAND TO CBP AT 8776'. D/O IN 15 MIN. 200# INC. RIH. #8- C/O 30' SAND TO CBP AT 8926'. D/O IN 40 MIN. 500# INC. RIH. #9- C/O 25' SAND TO CBP AT 9203'. D/O IN 15 MIN. 150# INC. RIH. PBTD- C/O 52' SAND TO PBTD AT 9552' W/ 302-JTS IN (98' RATHOLE)</p> <p>CIRC CLEAN. RD PWR SWIVEL. POOH AS LD 21-JTS TBG. PU 7" 5K CAMERON HANGER. LUB IN AND LAND 281-JTS 2-3/8" L-80 TBG W/ EOT AT 8917.51'. DROP BALL. RD FLOOR. ND BOP. NU WH. PMP OFF BIT AT 1600#. HOOK UP LINE TO FBT AND TURN OVER TO FLOW BACK CREW. RDSU. SICP 2200, FTP 50 (NO CHOKE)</p> <p>TBG DETAIL KB 26.00 7" 5K HANGER 1.00 281-JTS 2-3/8" L-80 8888.31 1.87" XN (FE POBS) 2.20 EOT 8917.51</p> <p>PMP 11,691 / RCVR 2700 / LTR 8991</p> <p>315-JTS DELIVERED / 34 JTS RETURNED</p>

**US ROCKIES REGION
Operation Summary Report**

Well: NBU 922-3101AS YELLOW		Spud Conductor: 8/14/2009		Spud Date: 8/19/2009	
Project: UTAH-UINTAH		Site: NBU 922-311 PAD		Rig Name No: LEED 733/733	
Event: COMPLETION		Start Date: 3/18/2010		End Date: 4/8/2010	
Active Datum: RKB @5,061.00ft (above Mean Sea Level)		UWI: NE/SE/O/9/S/22/E/31/O/O/26/PM/S/2,318.00/E/O/148.00/O/O			

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
4/9/2010	7:00 -			33	A			7 AM FLBK REPORT: CP 2950#, TP 2100#, 20/64" CK, 37 BWPH, HEAVY SAND, MED GAS TTL BBLS RECOVERED: 3383 BBLS LEFT TO RECOVER: 8308
	13:00 -		PROD	50				WELL TURNED TO SALES @ 13:00 ON 4/9/10 - 2000 MCF, 936BWPD, CP 3100#, FTP 2100#, CK 20/64"
4/10/2010	7:00 -			33	A			7 AM FLBK REPORT: CP 2925#, TP 2025#, 20/64" CK, 30 BWPH, MED SAND, - GAS TTL BBLS RECOVERED: 4223 BBLS LEFT TO RECOVER: 7468
4/11/2010	7:00 -			33	A			7 AM FLBK REPORT: CP 2775#, TP 1900#, 20/64" CK, 30 BWPH, MED SAND, - GAS TTL BBLS RECOVERED: 4953 BBLS LEFT TO RECOVER: 6738
4/12/2010	7:00 -			33	A			7 AM FLBK REPORT: CP 2650#, TP 1825#, 20/64" CK, 30 BWPH, LIGHT SAND, - GAS TTL BBLS RECOVERED: 5673 BBLS LEFT TO RECOVER: 6018
4/13/2010	7:00 -			33	A			7 AM FLBK REPORT: CP 2550#, TP 1750#, 20/64" CK, 25 BWPH, TRACE SAND, - GAS TTL BBLS RECOVERED: 6343 BBLS LEFT TO RECOVER: 5348
4/22/2010	7:00 -		PROD	50				WELL IP'D ON 4/22/10 - 2560 MCFD, 40 BOPD, 400 BWPD, CP 1538#, FTP 1734#, CK 22/64", LP 137#, 24 HRS

1 General

1.1 Customer Information

Company	US ROCKIES REGION
Representative	
Address	

1.2 Well Information

Well	NBU 922-31O1AS YELLOW	Wellbore No.	OH
Well Name	NBU 922-31O1AS	Common Name	NBU 922-31O1AS
Project	UTAH-UINTAH	Site	NBU 922-31I PAD
Vertical Section Azimuth	227.89 (°)	North Reference	True
Origin N/S		Origin E/W	
Spud Date	8/19/2009	UWI	NE/SE/0/9/S/22/E/31/0/0/26/PM/S/2,318.00/E/0/148.00/0/0
Active Datum	RKB @5,061.00ft (above Mean Sea Level)		

2 Survey Name

2.1 Survey Name: Survey #1

Survey Name	Survey #1	Company	WEATHERFORD
Started	8/19/2009	Ended	
Tool Name	MWD	Engineer	Anadarko

2.1.1 Tie On Point

MD (ft)	Inc (°)	Azi (°)	TVD (ft)	N/S (ft)	E/W (ft)
22.00	0.00	0.00	22.00	0.00	0.00

2.1.2 Survey Stations

Date	Type	MD (ft)	Inc (°)	Azi (°)	TVD (ft)	N/S (ft)	E/W (ft)	V. Sec (ft)	DLeg (°/100ft)	Build (°/100ft)	Turn (°/100ft)	TFace (°)
8/19/2009	Tie On	22.00	0.00	0.00	22.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/19/2009	NORMAL	187.00	0.26	125.60	187.00	-0.22	0.30	-0.08	0.16	0.16	0.00	125.60
8/20/2009	NORMAL	277.00	2.22	239.45	276.98	-1.22	-1.03	1.58	2.60	2.18	126.50	119.69
	NORMAL	367.00	4.90	232.56	366.80	-4.45	-5.58	7.12	3.01	2.98	-7.66	-12.52
	NORMAL	457.00	8.19	229.08	456.20	-10.98	-13.48	17.37	3.68	3.66	-3.87	-8.61
	NORMAL	547.00	11.31	226.96	544.89	-21.21	-24.78	32.60	3.49	3.47	-2.36	-7.61
	NORMAL	637.00	14.13	227.21	632.67	-34.70	-39.29	52.42	3.13	3.13	0.28	1.24
	NORMAL	727.00	16.63	225.83	719.44	-51.14	-56.60	76.28	2.81	2.78	-1.53	-9.00
	NORMAL	817.00	19.69	226.33	804.95	-70.58	-76.81	104.31	3.40	3.40	0.56	3.15
	NORMAL	907.00	22.19	225.33	889.00	-93.01	-99.86	136.45	2.81	2.78	-1.11	-8.60
	NORMAL	997.00	24.44	225.71	971.64	-117.96	-125.28	172.04	2.51	2.50	0.42	4.00
	NORMAL	1,087.00	24.88	223.46	1,053.44	-144.70	-151.63	209.52	1.15	0.49	-2.50	-65.91
	NORMAL	1,177.00	25.81	222.71	1,134.77	-172.84	-177.94	247.91	1.09	1.03	-0.83	-19.38
	NORMAL	1,267.00	26.00	221.58	1,215.73	-201.99	-204.33	287.03	0.59	0.21	-1.26	-69.46
	NORMAL	1,357.00	26.31	222.33	1,296.51	-231.49	-230.85	326.49	0.50	0.34	0.83	47.18
	NORMAL	1,447.00	26.56	223.08	1,377.10	-260.94	-258.02	366.39	0.46	0.28	0.83	53.51
	NORMAL	1,537.00	27.00	225.83	1,457.45	-289.87	-286.42	406.86	1.46	0.49	3.06	71.68
8/21/2009	NORMAL	1,627.00	28.00	228.83	1,537.29	-318.01	-316.98	448.40	1.90	1.11	3.33	55.51
	NORMAL	1,717.00	27.88	227.21	1,616.80	-346.22	-348.33	490.57	0.85	-0.13	-1.80	-99.70
	NORMAL	1,807.00	26.88	225.96	1,696.72	-374.66	-378.39	531.94	1.28	-1.11	-1.39	-150.66

2.1.2 Survey Stations (Continued)

Date	Type	MD (ft)	Inc (°)	Azi (°)	TVD (ft)	N/S (ft)	E/W (ft)	V. Sec (ft)	DLeg (°/100ft)	Build (°/100ft)	Turn (°/100ft)	TFace (°)
8/21/2009	NORMAL	1,897.00	27.88	226.38	1,776.63	-403.32	-408.25	573.31	1.13	1.11	0.47	11.12
	NORMAL	1,987.00	28.06	228.58	1,856.12	-431.84	-439.36	615.52	1.16	0.20	2.44	81.08
	NORMAL	2,077.00	27.50	227.95	1,935.75	-459.76	-470.67	657.46	0.70	-0.62	-0.70	-152.61
	NORMAL	2,167.00	26.75	226.83	2,015.85	-487.54	-500.87	698.49	1.01	-0.83	-1.24	-146.25
	NORMAL	2,257.00	26.81	226.83	2,096.20	-515.28	-530.44	739.04	0.07	0.07	0.00	0.00
	NORMAL	2,377.00	26.88	223.46	2,203.27	-553.49	-568.84	793.14	1.27	0.06	-2.81	-88.87

2.2 Survey Name: Survey #2

Survey Name	Survey #2	Company	WEATHERFORD
Started	10/28/2009	Ended	
Tool Name	MWD	Engineer	Anadarko

2.2.1 Tie On Point

MD (ft)	Inc (°)	Azi (°)	TVD (ft)	N/S (ft)	E/W (ft)
2,377.00	28.66	223.46	2,203.27	-553.52	-568.80

2.2.2 Survey Stations

Date	Type	MD (ft)	Inc (°)	Azi (°)	TVD (ft)	N/S (ft)	E/W (ft)	V. Sec (ft)	DLeg (°/100ft)	Build (°/100ft)	Turn (°/100ft)	TFace (°)
10/28/2009	Tie On	2,377.00	28.66	223.46	2,203.27	-553.52	-568.80	793.14	0.00	0.00	0.00	0.00
10/28/2009	NORMAL	2,412.00	27.00	221.57	2,234.22	-565.56	-579.85	809.40	5.37	-4.74	-5.40	-152.84
	NORMAL	2,465.00	27.23	221.19	2,281.40	-583.68	-595.81	833.40	0.54	0.43	-0.72	-37.15
	NORMAL	2,570.00	26.27	222.41	2,375.16	-618.92	-627.31	880.39	1.05	-0.91	1.16	150.77
	NORMAL	2,665.00	25.29	225.13	2,460.71	-648.76	-655.87	921.59	1.62	-1.03	2.86	130.86
	NORMAL	2,759.00	25.87	230.93	2,545.51	-675.85	-686.02	962.13	2.73	0.62	6.17	79.59
	NORMAL	2,854.00	26.62	234.41	2,630.72	-701.30	-719.43	1,003.98	1.80	0.79	3.66	65.58
	NORMAL	2,949.00	27.66	237.42	2,715.26	-725.57	-755.32	1,046.87	1.81	1.09	3.17	54.20
	NORMAL	3,044.00	26.00	234.30	2,800.03	-749.59	-790.81	1,089.32	2.29	-1.75	-3.28	-141.08
	NORMAL	3,138.00	26.19	236.55	2,884.45	-773.05	-824.85	1,130.30	1.07	0.20	2.39	80.14
	NORMAL	3,233.00	27.38	236.55	2,969.26	-796.65	-860.57	1,172.62	1.25	1.25	0.00	0.00
	NORMAL	3,328.00	26.00	234.68	3,054.14	-820.73	-895.79	1,214.90	1.70	-1.45	-1.97	-149.51
	NORMAL	3,423.00	26.06	233.30	3,139.50	-845.24	-929.51	1,256.35	0.64	0.06	-1.45	-84.96
	NORMAL	3,517.00	25.75	232.30	3,224.06	-870.07	-962.22	1,297.26	0.57	-0.33	-1.06	-125.81
	NORMAL	3,611.00	24.94	232.43	3,309.01	-894.64	-994.09	1,337.38	0.86	-0.86	0.14	176.13
	NORMAL	3,706.00	24.75	234.68	3,395.22	-918.35	-1,026.19	1,377.09	1.01	-0.20	2.37	102.38
	NORMAL	3,801.00	25.00	232.93	3,481.40	-941.95	-1,058.43	1,416.84	0.82	0.26	-1.84	-72.04
10/29/2009	NORMAL	3,896.00	24.13	230.30	3,567.81	-966.45	-1,089.39	1,456.24	1.47	-0.92	-2.77	-129.70
	NORMAL	3,991.00	23.38	231.18	3,654.76	-990.67	-1,119.02	1,494.46	0.87	-0.79	0.93	155.10
	NORMAL	4,085.00	21.13	232.05	3,741.75	-1,012.79	-1,146.91	1,529.98	2.42	-2.39	0.93	172.07
	NORMAL	4,180.00	19.69	226.43	3,830.79	-1,034.35	-1,172.02	1,563.06	2.56	-1.52	-5.92	-128.92
	NORMAL	4,275.00	17.88	223.05	3,920.73	-1,056.04	-1,193.57	1,593.59	2.22	-1.91	-3.56	-150.57
	NORMAL	4,370.00	18.50	227.30	4,010.99	-1,076.92	-1,214.60	1,623.20	1.54	0.65	4.47	66.98
	NORMAL	4,464.00	17.88	225.80	4,100.29	-1,097.09	-1,235.91	1,652.53	0.83	-0.66	-1.60	-143.65
	NORMAL	4,558.00	18.19	225.80	4,189.67	-1,117.38	-1,256.77	1,681.61	0.33	0.33	0.00	0.00
	NORMAL	4,652.00	17.31	228.30	4,279.20	-1,136.91	-1,277.73	1,710.26	1.24	-0.94	2.66	140.29
	NORMAL	4,747.00	15.10	223.41	4,370.42	-1,155.31	-1,296.79	1,736.74	2.73	-2.33	-5.15	-150.64
	NORMAL	4,842.00	12.69	224.80	4,462.64	-1,171.70	-1,312.65	1,759.49	2.56	-2.54	1.46	172.79
	NORMAL	4,936.00	11.13	229.68	4,554.61	-1,184.90	-1,326.84	1,778.87	1.97	-1.66	5.19	149.53
	NORMAL	5,031.00	8.31	230.30	4,648.24	-1,195.22	-1,339.12	1,794.90	2.97	-2.97	0.65	178.18
	NORMAL	5,126.00	6.19	236.43	4,742.47	-1,202.44	-1,348.67	1,806.83	2.37	-2.23	6.45	162.98
	NORMAL	5,220.00	4.13	254.18	4,836.09	-1,206.17	-1,356.15	1,814.87	2.75	-2.19	18.88	150.84
	NORMAL	5,316.00	2.13	243.68	4,931.95	-1,207.90	-1,361.08	1,819.69	2.16	-2.08	-10.94	-169.20

2.2.2 Survey Stations (Continued)

Date	Type	MD (ft)	Inc (°)	Azi (°)	TVD (ft)	N/S (ft)	E/W (ft)	V. Sec (ft)	DLeg (°/100ft)	Build (°/100ft)	Turn (°/100ft)	TFace (°)
10/29/2009	NORMAL	5,410.00	1.75	11.03	5,025.92	-1,207.27	-1,362.37	1,820.22	3.70	-0.40	135.48	156.44
	NORMAL	5,505.00	1.88	4.55	5,120.87	-1,204.29	-1,361.97	1,817.93	0.26	0.14	-6.82	-60.92
	NORMAL	5,600.00	1.25	2.18	5,215.84	-1,201.70	-1,361.80	1,816.07	0.67	-0.66	-2.49	-175.32
	NORMAL	5,695.00	1.31	355.93	5,310.81	-1,199.58	-1,361.84	1,814.68	0.16	0.06	-6.58	-69.89
	NORMAL	5,790.00	2.00	41.93	5,405.78	-1,197.26	-1,360.81	1,812.36	1.52	0.73	48.42	86.83
	NORMAL	5,884.00	1.50	120.80	5,499.75	-1,196.67	-1,358.66	1,810.37	2.40	-0.53	83.90	139.28
	NORMAL	5,979.00	1.56	133.30	5,594.71	-1,198.20	-1,356.65	1,809.90	0.36	0.06	13.16	86.10
	NORMAL	6,074.00	1.88	137.43	5,689.67	-1,200.23	-1,354.65	1,809.78	0.36	0.34	4.35	23.25
	NORMAL	6,169.00	1.88	140.30	5,784.62	-1,202.58	-1,352.60	1,809.84	0.10	0.00	3.02	91.43
	NORMAL	6,263.00	2.00	139.18	5,878.56	-1,205.01	-1,350.55	1,809.94	0.13	0.13	-1.19	-18.09
10/30/2009	NORMAL	6,358.00	0.94	181.43	5,973.53	-1,207.04	-1,349.48	1,810.51	1.53	-1.12	44.47	154.14
	NORMAL	6,453.00	1.31	287.93	6,068.52	-1,207.48	-1,350.53	1,811.59	1.91	0.39	112.11	136.24
	NORMAL	6,548.00	1.00	283.05	6,163.50	-1,206.96	-1,352.38	1,812.61	0.34	-0.33	-5.14	-164.82
	NORMAL	6,642.00	0.94	258.68	6,257.49	-1,206.93	-1,353.93	1,813.74	0.44	-0.06	-25.93	-110.33
	NORMAL	6,736.00	0.94	253.80	6,351.48	-1,207.30	-1,355.43	1,815.10	0.09	0.00	-5.19	-92.44
	NORMAL	6,831.00	0.77	224.20	6,446.47	-1,207.97	-1,356.62	1,816.43	0.49	-0.18	-31.16	-125.42
	NORMAL	6,926.00	0.56	217.68	6,541.46	-1,208.80	-1,357.35	1,817.53	0.23	-0.22	-6.86	-163.42
	NORMAL	7,021.00	0.50	214.30	6,636.46	-1,209.51	-1,357.87	1,818.39	0.07	-0.06	-3.56	-154.16
	NORMAL	7,116.00	0.81	211.05	6,731.45	-1,210.42	-1,358.45	1,819.43	0.33	0.33	-3.42	-8.46
	NORMAL	7,211.00	0.94	266.18	6,826.44	-1,211.05	-1,359.57	1,820.69	0.86	0.14	58.03	109.46
10/31/2009	NORMAL	7,305.00	0.94	251.30	6,920.43	-1,211.35	-1,361.07	1,822.00	0.26	0.00	-15.83	-97.44
	NORMAL	7,400.00	0.69	257.18	7,015.42	-1,211.73	-1,362.37	1,823.21	0.28	-0.26	6.19	164.43
	NORMAL	7,495.00	0.50	254.80	7,110.41	-1,211.96	-1,363.32	1,824.08	0.20	-0.20	-2.51	-173.78
	NORMAL	7,590.00	0.44	212.93	7,205.41	-1,212.38	-1,363.92	1,824.80	0.36	-0.06	-44.07	-120.41
	NORMAL	7,685.00	0.31	197.05	7,300.41	-1,212.93	-1,364.20	1,825.38	0.17	-0.14	-16.72	-149.12
	NORMAL	7,780.00	0.25	166.43	7,395.41	-1,213.38	-1,364.22	1,825.70	0.17	-0.06	-32.23	-126.68
	NORMAL	7,874.00	0.25	150.55	7,489.41	-1,213.75	-1,364.07	1,825.84	0.07	0.00	-16.89	-97.94
	NORMAL	7,969.00	0.44	117.05	7,584.41	-1,214.10	-1,363.65	1,825.76	0.28	0.20	-35.26	-64.29
	NORMAL	8,064.00	0.56	147.43	7,679.40	-1,214.66	-1,363.07	1,825.70	0.30	0.13	31.98	81.34
	NORMAL	8,159.00	0.94	137.30	7,774.39	-1,215.62	-1,362.29	1,825.77	0.42	0.40	-10.66	-24.35
11/3/2009	NORMAL	8,253.00	1.13	159.18	7,868.38	-1,217.05	-1,361.44	1,826.10	0.46	0.20	23.28	75.54
	NORMAL	8,348.00	0.63	138.93	7,963.37	-1,218.32	-1,360.77	1,826.45	0.61	-0.53	-21.32	-157.97
	NORMAL	8,442.00	0.56	128.30	8,057.36	-1,219.00	-1,360.07	1,826.38	0.14	-0.07	-11.31	-127.62
	NORMAL	8,537.00	0.56	143.05	8,152.36	-1,219.66	-1,359.42	1,826.35	0.15	0.00	15.53	97.37
	NORMAL	8,588.00	0.75	132.30	8,203.35	-1,220.08	-1,359.03	1,826.34	0.44	0.37	-21.08	-38.35
	NORMAL	9,630.00	2.30	138.60	9,244.95	-1,240.36	-1,340.15	1,825.93	0.15	0.15	0.60	9.33
	NORMAL	9,665.00	2.30	138.60	9,279.93	-1,241.41	-1,339.22	1,825.95	0.00	0.00	0.00	0.00

9217

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

FORM 9

5. LEASE DESIGNATION AND SERIAL NUMBER:
UO 1207A

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:

7. UNIT or CA AGREEMENT NAME:
NATURAL BUTTES

1. TYPE OF WELL
Gas Well

8. WELL NAME and NUMBER:
NBU 922-3101AS

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

9. API NUMBER:
43047503950000

3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779
PHONE NUMBER: 720 929-6515 Ext

9. FIELD and POOL or WILDCAT:
NATURAL BUTTES

4. LOCATION OF WELL
FOOTAGES AT SURFACE:
2318 FSL 0148 FEL
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:
Qtr/Qtr: NESE Section: 31 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: 3/17/2011	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> ALTER CASING	<input checked="" type="checkbox"/> CASING REPAIR
<input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion:	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> CHANGE WELL NAME
<input type="checkbox"/> SPUD REPORT Date of Spud:	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> CONVERT WELL TYPE
<input type="checkbox"/> DRILLING REPORT Report Date:	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> NEW CONSTRUCTION
	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> PLUG BACK
	<input type="checkbox"/> PRODUCTION START OR RESUME	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION
	<input type="checkbox"/> REPERFORATE CURRENT FORMATION	<input type="checkbox"/> SIDETRACK TO REPAIR WELL	<input type="checkbox"/> TEMPORARY ABANDON
	<input type="checkbox"/> TUBING REPAIR	<input type="checkbox"/> VENT OR FLARE	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> WATER SHUTOFF	<input type="checkbox"/> SI TA STATUS EXTENSION	<input type="checkbox"/> APD EXTENSION
	<input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> OTHER	OTHER: <input type="text"/>

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

The operator requests approval to conduct wellhead/casing repair operations on the subject well location. Please find the attached procedures for the proposed repair work on the subject well location.

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

Date: 03/21/2011
By: *Dark K. Quist*

NAME (PLEASE PRINT) Gina Becker	PHONE NUMBER 720 929-6086	TITLE Regulatory Analyst II
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SIGNATURE N/A	DATE 3/17/2011
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WORKORDER #: 88122146

3/3/11

Name: NBU 922-3101AS - 922-31I PAD
Surface Location: NESE SEC.31, T9S, R22E
Uintah County, UT

API: 4304750395 **LEASE#:** UO-1207A

ELEVATIONS: 5034' GL 5060' KB

TOTAL DEPTH: 9665' **PBTD:** 9608'

SURFACE CASING: 9 5/8", 40# J-55 @ 2403'

PRODUCTION CASING: 4 1/2", 11.6#, I-80 @ 9651'
TOC @ 386' per CBL

PERFORATIONS: Wasatch 7272' - 7468'
Mesaverde 7536' - 9454'

Tubular/Borehole	Drift inches	Collapse psi	Burst psi	Capacities		
				Gal./ft.	Cuft/ft.	Bbl./ft.
2.375" 4.7# J-55 tbg.	1.901	8100	7700	0.1624	0.02173	0.00387
4.5" 11.6# I-80	3.875	6350	7780	0.6528	0.0872	0.01554
9.625" 40# J-55	8.679	2570	3950	3.1847	0.4257	0.0758
Annular Capacities						
2.375" tbg. X 4 1/2" 11.6# csg				0.4227	0.0565	0.01006

GEOLOGICAL MARKERS, TOPS:

1433' Green River
2259' Mahogany
4904' Wasatch
7517' Mesaverde

NBU 922-3101AS – WELLHEAD REPLACEMENT PROCEDURE

PREP-WORK PRIOR TO MIRU:

1. Dig out down to the 2” surface casing valve or to the valve on the riser off the surface casing.
2. Install a tee with 2 valves, with a pressure gauge and sensor on one valve.
3. Open casing valve and record pressures.
4. Install nipple and steel hose on the other valve, the relief valve,. Do not use hammer unions. No impact equipment or tools to be used for any of this installation. Extend hose and hard piping to a downwind location at least 100’ from the wellhead. Consider installing a manifold so that vent area could be in two locations approx. 90 degrees apart from the wellhead.
5. Open the relief valve and blow well down to the atmosphere.
6. Make a determination of amount of gas flow, either by installation of a choke nipple, bucket test or other.
7. Shut well in. Observe for rate of build-up by utilizing sensor data. Do not build-up for more than 24 hours. Vent gas through the vent line and leave open to the atmosphere.

WORKOVER PROCEDURE:

1. MIRU workover rig.
2. Kill well with 10# brine / KCL (dictated by well pressure).
3. Remove tree, install double BOP with blind and 2 3/8” pipe rams, with accumulator closing unit and manual back-ups. Function test BOP system.
4. POOH w/ tubing laying down extra tubing.
5. Rig up wireline service. RIH and set CBP @ ~7222’. Dump bail 4 sx cement on top of plug. POOH and RD wireline service. TIH w/ tubing and seating nipple. Land tubing ±60’ above cement. RDMO.
6. Monitor well pressures. If surface casing is dead. MIRU. ND WH and NU BOP. POOH w/ tubing.
7. Depending on conditions at wellsite, continue with either CUT/PATCH Procedure or BACK-OFF Procedure.

CUT/PATCH PROCEDURE:

1. PU internal casing cutters and RIH. Cut casing at +/- 30' from surface.
2. POOH, LD cutters and casing.
3. PU 7 3/8" overshoot with 4 1/2" right hand standard wicker grapple, 1 - 4 3/4" drill collar with 3 1/2" IF threads, pup joint, manual bumper sub, and crossovers. If casing cut is deeper than ±30' utilize >7000 ft-lb torque pipe as needed. Pull a minimum of 10,000# to keep grapple engaged if cement top is high (<~900'). If cement top is low (>~900'), more weight will be required to put casing in neutral. Torque casing string to ±7000 ft-lbs, count number of turns to make-up, and document in the daily report. Ensure that tongs are safely anchored to rig and that all personnel are at a safe working distance from the tongs during torque-up and torque release. After initial make-up, place pipe torque to neutral and mark pipe. Place ±7000 ft-lbs on casing a second time, count turns, then return pipe torque to neutral and count turns. Repeat if torque-up turns do not equal torque release turns. Once torque-in equals torque-out, release overshoot, POOH, and lay down.
4. TIH w/ skirted mill and dress off the fish top for approximately 1/2 hour. TOO H.
5. PU & RIH w/ 4 1/2" 10k external casing patch on 4 1/2" P-110 casing. Ensure that sliding sleeve assembly shifts ±3' and casing tags no-go portion of patch. NOTE: Shear pins will shear at 3500 to 4500 lbs.
6. Latch fish, PU to 100,000# tension. RU B&C. Cycle pressure test to 7,000# / 9,000# psi.
7. Install slips. Land casing w/ 80,000# tension.
8. Cut-off and dress 4 1/2" casing stub.
9. NUWH. PU 3 7/8" bit, POBS and RIH. D/O cement and plug ~7172'. Clean out to PBSD (9608').
10. POOH, land tbg and pump off POBS.
11. NUWH, RDMO. Turn well over to production ops.

BACK-OFF PROCEDURE:

1. PU internal casing cutters and RIH. Cut casing at +/- 6' from surface.
2. POOH, LD cutters and casing.
3. PU 4 1/2" overshoot. RIH, latch fish. Pick string weight to neutral.
4. MIRU casing crew and wireline services. RIH and shoot string shot at casing collar @ ± 46'.
5. Back-off casing, POOH.

6. PU new casing joint with buttress threads and entry guide and RIH. Tag casing top. Thread into casing and torque up to ± 7000 ft-lbs, count number of additional turns to make-up, and document in the daily report. Ensure that tongs are safely anchored to rig and that all personnel are at a safe working distance from the tongs during torque-up and torque release. After initial make-up, place pipe torque to neutral and mark pipe. Place ± 7000 ft-lbs on casing a second time, count turns, then return pipe torque to neutral and count turns. Repeat if torque-up turns do not equal torque release turns. Once torque-in equals torque-out go to step 7.
7. PU 100,000# tension string weight. RU B&C. Cycle pressure test to 7,000# / 9,000# psi.
8. Install slips. Land casing w/ 80,000# tension.
9. Cut-off and dress 4 1/2" casing stub.
10. NUWH. PU 3 7/8" bit, POBS and RIH. D/O cement and plug ~7172'. Clean out to PBTD (9608').
11. POOH, land tbg and pump off POBS.
12. NUWH, RDMO. Turn well over to production ops.



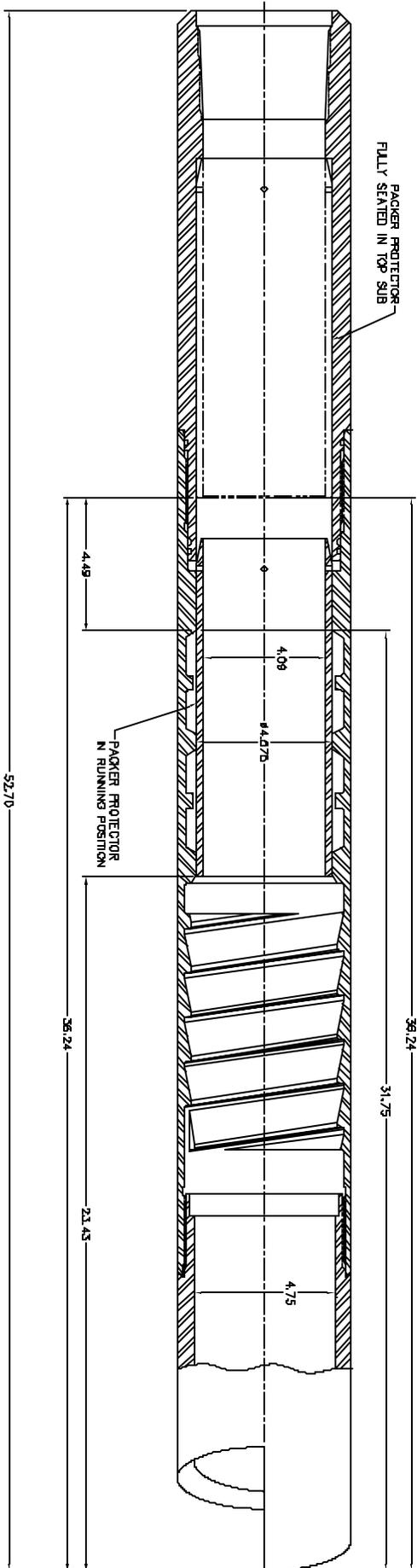
Logan High Pressure Casing Patches Assembly Procedure

All parts should be thoroughly greased before being assembled.

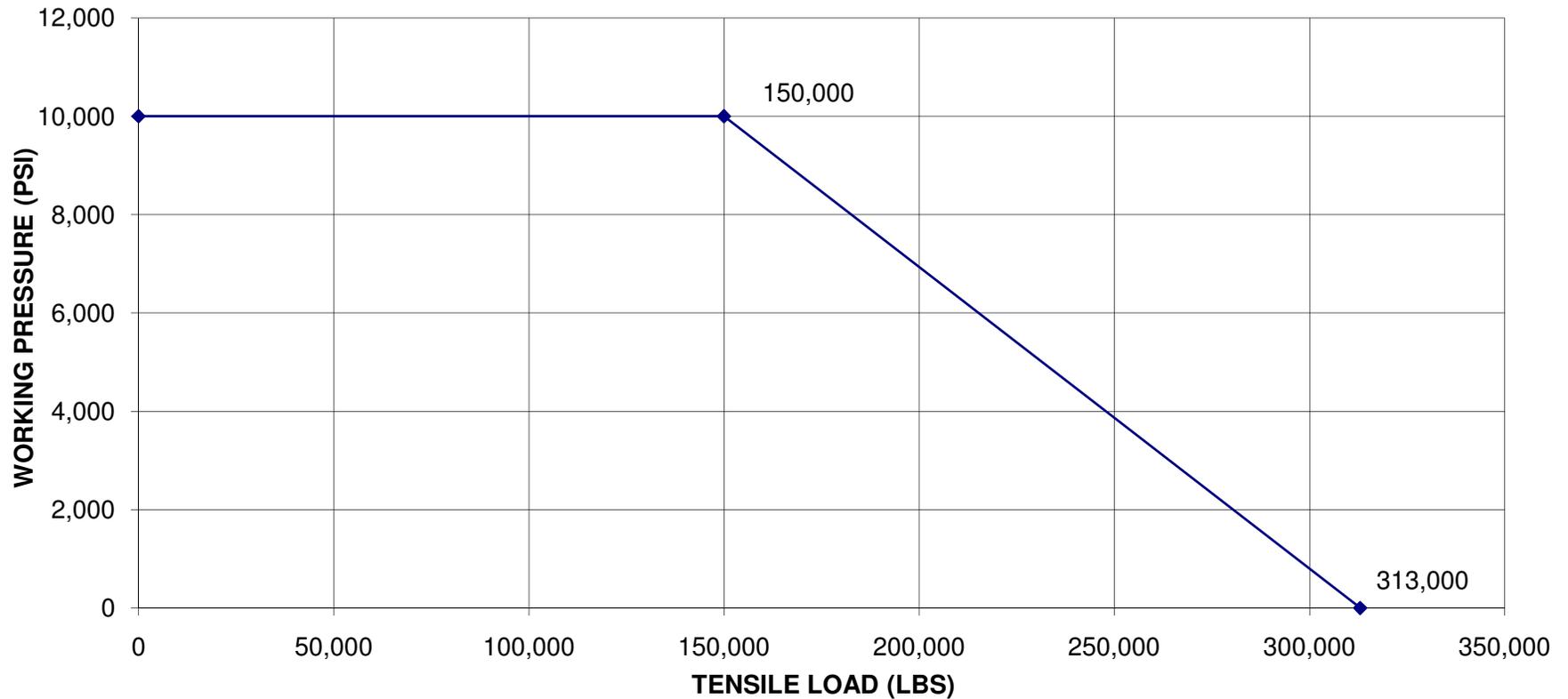
1. Install all four Logan Type "L" Packers in the spaces provided in the Casing Patch Bowl. Refer to diagram provided for proper installation.
2. Install Packer Protector from the Basket Grapple end of the Bowl. The beveled end of the Packer Protector goes in first. Carefully push the Packer Protector through the four Type "L" Packers.
3. Align Shear Pin Holes in Packer Protector so that the holes have just passed into the counter bore at the Top Sub end, refer to diagram. The Packer Protector is provided with four Shear Pin Holes. Use only two holes, 180 degrees apart and install the pins.
4. Screw the Basket Grapple in from the lower end of the Bowl, using left-hand rotation. The Tang Slot in the Basket Grapple must land in line with the slot in the Bowl.
5. Insert the Basket Grapple Control into the end of the Bowl. Align Tang on the Basket Grapple Control with the Tang Slot of the Bowl and Basket Grapple. This secures the Bowl and the Basket Grapple together.
6. Install the Cutlipped Guide into the lower end of the Bowl.
7. Install O-Rings on the two five-foot long Extensions. Screw the first Extension into the top end of the Bowl. Screw the second Extension into the top end of the first Extension.
8. Install O-Ring on Top Sub. Screw Top Sub into top end of second Extension.

Follow recommended Make-Up Torque as provided in chart.

510L-005-001 4-1/2" LOGAN HP CASING PATCH



**STRENGTH DATA FOR LOGAN 5.88" OD "L" TYPE CSG PATCH
4-1/2 CASING, 10K PSI MAX WP 125K YIELD MAT'L
LOGAN ASSEMBLY NO. 510L-005 -000**



COLLAPSE PRESSURE:
11,222 PSI @ 0 TENSILE
8,634 PSI @ 220K TENSILE

Tensile Strength @ Yield:
Tensile Strength w/ 0 Int. Press.= 472,791lbs.
Tensile Strength w/ 10K Int. Press.= 313,748lbs.

DATA BY SLS 11/16/2009

DIVISION OF OIL, GAS AND MINING

SPUDDING INFORMATION

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

Well Name: NBU 922-3101AS

Api No: 43-047-50395 Lease Type: STATE

Section 31 Township 09S Range 22E County UINTAH

Drilling Contractor PETE MARTIN DRLG RIG # BUCKET

SPUDDED:

Date 08/14/2009

Time 12:00 NOON

How DRY

Drilling will Commence: _____

Reported by KENNY MORRIS

Telephone # (435) 828-1691

Date 08/17/2009 Signed CHD

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

FORM 6

ENTITY ACTION FORM

Operator: KERR McGEE OIL & GAS ONSHORE LP Operator Account Number: N 2995
 Address: P.O. Box 173779
city DENVER
state CO zip 80217 Phone Number: (720) 929-6100

Well 1

API Number	Well Name		QQ	Sec	Twp	Rng	County
4304750397	NBU 922-3114AS		NESE	31	9S	22E	UINTAH
Action Code	Current Entity Number	New Entity Number	Spud Date		Entity Assignment Effective Date		
B	99999	2900	8/14/2009		8/25/09		
Comments: MIRU PETE MARTIN BUCKET RIG. <i>W5MVD</i> SPUD WELL LOCATION ON 08/14/2009 AT 07:00 HRS. <i>BHL = NESE</i>							

Well 2

API Number	Well Name		QQ	Sec	Twp	Rng	County
4304750398	NBU 922-3113CS		NESE	31	9S	22E	UINTAH
Action Code	Current Entity Number	New Entity Number	Spud Date		Entity Assignment Effective Date		
B	99999	2900	8/14/2009		8/25/09		
Comments: MIRU PETE MARTIN BUCKET RIG. <i>W5MVD</i> SPUD WELL LOCATION ON 08/14/2009 AT 09:00 HRS. <i>BHL = NESE</i>							

Well 3

API Number	Well Name		QQ	Sec	Twp	Rng	County
4304750395	NBU 922-3101AS		NESE	31	9S	22E	UINTAH
Action Code	Current Entity Number	New Entity Number	Spud Date		Entity Assignment Effective Date		
B	99999	2900	8/14/2009		8/25/09		
Comments: MIRU PETE MARTIN BUCKET RIG. <i>W5MVD</i> SPUD WELL LOCATION ON 08/14/2009 AT 11:00 HRS. <i>BHL = NWNW</i>							

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)

ANDY LYTLE

Name (Please Print)

[Signature]
Signature

REGULATORY ANALYST

Title

8/17/2009

Date

RECEIVED

AUG 17 2009